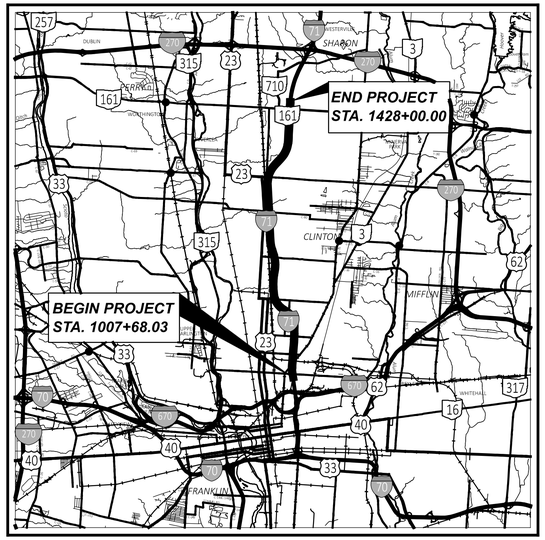
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FRA-71-19.10

CITY OF COLUMBUS
CLINTON TOWNSHIP
FRANKLIN COUNTY



LOCATION MAP

LATITUDE: 42°02'45" LONGITUDE: 82°59'50"

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

SEE SHEET 2

DESIGN EXCEPTIONS

SEE SHEET 2

ADA DESIGN WAIVERS

NONE REQUIRED

INDEX OF SHEETS:

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STORM SEWER PROFILES	*P.302 - P.309*		
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RETAINING WALL	*P.311 - P.312*		
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LANDSCAPING	*P.380 - P.381*		

FEDERAL PROJECT NUMBER

E191777

RAILROAD INVOLVEMENT

NORFOLK SOUTHERN

PROJECT DESCRIPTION

I-71 BRIDGE REPLACEMENT AND MAINLINE PROFILE ADJUSTMENT OVER MORSE ROAD & S.R. 161. I-71 BRIDGE REHABILITATION AT 2ND AVENUE, 17TH AVENUE, HIAWATHA PARK DRIVE, AND COOKE ROAD. ADDITIONAL PROJECT IMPROVEMENTS INCLUDE ITS AND LIGHTING.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	*30.7 ACRES*
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	*1.0 ACRES*
NOTICE OF INTENT EARTH DISTURBED AREA:	*31.7 ACRES*

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET P.36 , AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Anthony C. Turowski, P.E.
District 06 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STAGE 2 SUBMITTAL
03/31/2026

STANDARD CONSTRUCTION DRAWINGS	*SUPPLEMENTAL SPECIFICATIONS*	*SPECIAL PROVISIONS*

ENGINEER'S SEAL:	*ENGINEER'S SEAL:*
SIGNED:	*SIGNED:*
DATE:	*DATE:*

3961-E

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
Jacobs
2 EASTON OVAL, SUITE 500
COLUMBUS, OH 43219

TITLE SHEET

DESIGN AGENCY: Jacobs
DESIGNER: CGL
REVIEWER: MCK 03/20/26
PROJECT ID: 109164
SHEET: P.1 TOTAL: 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 2:15:00 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Roadway\Sheets\109164_GT001.dgn

DESIGN DESIGNATION: I-71 (NORTH OF I-670)

CURRENT ADT (2030)	162,618
DESIGN YEAR ADT (2050)	192,838
DESIGN HOURLY VOLUME (2050)	17,355
DIRECTIONAL DISTRIBUTION	0.53 (SB)
TRUCKS (24 HOUR B&C)	16,438
DESIGN SPEED	65 MPH (SB) / 55 MPH (NB)
LEGAL SPEED	65 MPH (SB) / 55 MPH (NB)
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF 5TH AVE)

CURRENT ADT (2030)	164,708
DESIGN YEAR ADT (2050)	192,149
DESIGN HOURLY VOLUME (2050)	17,293
DIRECTIONAL DISTRIBUTION	0.51 (SB)
TRUCKS (24 HOUR B&C)	23,555
DESIGN SPEED	65 MPH (SB) / 55 MPH (NB)
LEGAL SPEED	65 MPH (SB) / 55 MPH (NB)
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF 11TH AVE)

CURRENT ADT (2030)	156,362
DESIGN YEAR ADT (2050)	181,755
DESIGN HOURLY VOLUME (2050)	16,358
DIRECTIONAL DISTRIBUTION	0.52 (SB)
TRUCKS (24 HOUR B&C)	22,297
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF 17TH AVE)

CURRENT ADT (2030)	152,007
DESIGN YEAR ADT (2050)	173,400
DESIGN HOURLY VOLUME (2050)	15,606
DIRECTIONAL DISTRIBUTION	0.50 (NB)
TRUCKS (24 HOUR B&C)	21,242
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF HUDSON ST)

CURRENT ADT (2030)	152,914
DESIGN YEAR ADT (2050)	172,156
DESIGN HOURLY VOLUME (2050)	15,494
DIRECTIONAL DISTRIBUTION	0.51 (NB)
TRUCKS (24 HOUR B&C)	20,987
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF WEBER RD)

CURRENT ADT (2030)	152,344
DESIGN YEAR ADT (2050)	172,502
DESIGN HOURLY VOLUME (2050)	15,525
DIRECTIONAL DISTRIBUTION	0.52 (NB)
TRUCKS (24 HOUR B&C)	20,657
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF NORTH BROADWAY)

CURRENT ADT (2030)	146,392
DESIGN YEAR ADT (2050)	165,125
DESIGN HOURLY VOLUME (2050)	14,861
DIRECTIONAL DISTRIBUTION	0.52 (NB)
TRUCKS (24 HOUR B&C)	19,717
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF COOKE RD)

CURRENT ADT (2030)	142,056
DESIGN YEAR ADT (2050)	159,943
DESIGN HOURLY VOLUME (2050)	14,395
DIRECTIONAL DISTRIBUTION	0.53 (NB)
TRUCKS (24 HOUR B&C)	19,190
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF MORSE RD)

CURRENT ADT (2030)	134,014
DESIGN YEAR ADT (2050)	151,444
DESIGN HOURLY VOLUME (2050)	13,630
DIRECTIONAL DISTRIBUTION	0.53 (NB)
TRUCKS (24 HOUR B&C)	17,746
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF SR 161)

CURRENT ADT (2030)	129,542
DESIGN YEAR ADT (2050)	151,092
DESIGN HOURLY VOLUME (2050)	13,598
DIRECTIONAL DISTRIBUTION	0.53 (NB)
TRUCKS (24 HOUR B&C)	16,709
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: I-71 (NORTH OF I-270)

CURRENT ADT (2030)	173,490
DESIGN YEAR ADT (2050)	207,077
DESIGN HOURLY VOLUME (2050)	18,637
DIRECTIONAL DISTRIBUTION	0.52 (NB)
TRUCKS (24 HOUR B&C)	22,937
DESIGN SPEED	65 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 INTERSTATE (URBAN)

DESIGN DESIGNATION: SR 161

CURRENT ADT (2030)	46,692
DESIGN YEAR ADT (2050)	49,990
DESIGN HOURLY VOLUME (2050)	4,499
DIRECTIONAL DISTRIBUTION	0.51 (WB)
TRUCKS (24 HOUR B&C)	1,661
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	03 OTHER PRINCIPAL ARTERIAL (URBAN)

DESIGN DESIGNATION: MORSE RD

CURRENT ADT (2030)	33,754
DESIGN YEAR ADT (2050)	36,794
DESIGN HOURLY VOLUME (2050)	3,311
DIRECTIONAL DISTRIBUTION	0.52 (EB)
TRUCKS (24 HOUR B&C)	553
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	03 OTHER PRINCIPAL ARTERIAL (URBAN)

DESIGN EXCEPTIONS

SHOULDER WIDTHS: SHEETS P.14, P.15, P.17, P.18, P.20
PAVEMENT CROSS SLOPES: SHEETS P.17, P.18, P.19

DESIGN DESIGNATIONS

DESIGN AGENCY
Jacobs

DESIGNER JOH
REVIEWER MCK 03/20/26
PROJECT ID 109164
SHEET P.2 TOTAL 618

FRA-71-19.10

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FRA-71-19.10

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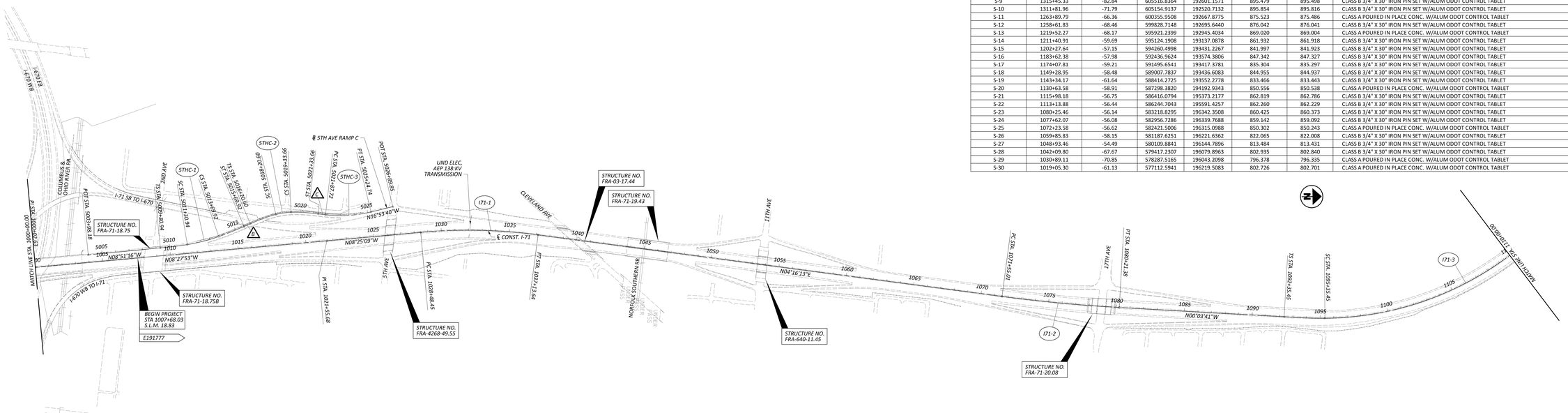
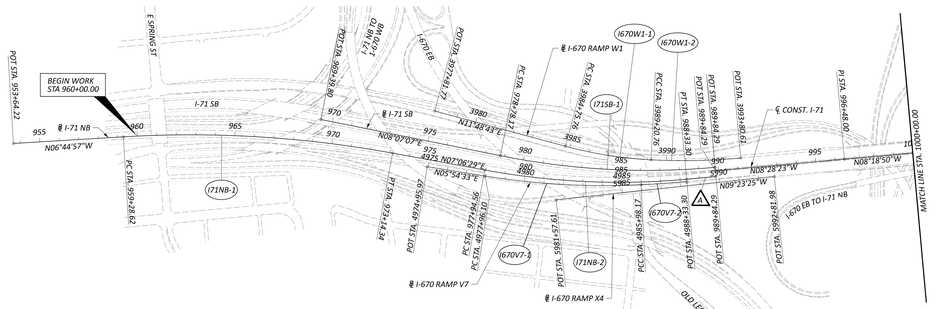
PRIMARY CONTROL POINTS SET ALONG PROPOSED I-71

POINT NUMBER	I-71 CL STATION	I-71 CL OFFSET	GROUND COORDINATES		GPS ELEV.	LEVELED ELEV.	DESCRIPTION
			NORTHING	EASTING			
S-0	1490+99.88	-823.89	622221.5675	196909.7014	924.010	924.044	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-1	1487+85.14	-89.70	621603.4591	197415.7089	914.214	914.233	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-2	1478+27.40	-94.81	620756.2212	196969.0865	916.534	916.520	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-3	1418+93.63	-81.12	615021.0357	195515.9365	930.943	930.933	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-4	1415+27.64	-488.63	614675.0201	195091.3314	914.357	914.360	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-5	1411+79.28	-82.29	614307.5617	195480.4841	929.745	929.731	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-6	1384+35.65	-80.39	611567.0040	195350.7229	910.054	910.076	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-7	1372+10.25	-79.66	610343.2497	195292.5681	906.103	906.099	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-8	1323+33.53	-74.78	606253.6083	192920.6813	891.060	891.069	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-9	1315+45.33	-82.84	605516.8364	192601.1571	895.479	895.498	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-10	1311+81.96	-71.79	605154.9137	192520.7132	895.854	895.816	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-11	1263+89.79	-66.36	600355.9508	192667.8775	875.523	875.486	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-12	1258+61.83	-68.46	599828.7148	192695.6440	876.042	876.041	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-13	1219+52.27	-68.17	595921.2399	192945.4034	869.020	869.004	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-14	1211+40.91	-59.69	595124.1908	193137.0878	861.932	861.918	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-15	1202+27.64	-57.15	594260.4998	193431.2267	841.997	841.923	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-16	1183+62.38	-57.98	592436.9624	193574.3806	847.342	847.327	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-17	1174+07.81	-59.21	591495.6541	193417.3781	835.304	835.297	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-18	1149+28.95	-58.48	589007.7837	193436.6083	844.955	844.937	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-19	1143+34.17	-61.64	588414.2725	193552.2778	833.466	833.443	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-20	1130+63.58	-58.91	587298.3820	194192.9343	850.556	850.538	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-21	1115+98.18	-56.75	586416.0794	195373.2177	862.819	862.786	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-22	1113+13.88	-56.44	586244.7043	195591.4257	862.260	862.229	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-23	1080+25.46	-56.14	583218.8295	196342.3508	860.425	860.373	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-24	1077+62.07	-56.08	582956.7286	196339.7688	859.142	859.092	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-25	1072+23.58	-56.62	582421.5006	196315.0988	850.302	850.243	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-26	1059+85.83	-58.15	581187.6251	196221.6362	822.065	822.008	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-27	1048+93.46	-54.49	580109.8841	196144.7896	813.484	813.431	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-28	1042+09.80	-67.67	579417.2307	196079.8963	802.935	802.840	CLASS B 3/4" X 30" IRON PIN SET W/ALUM ODOT CONTROL TABLET
S-29	1030+89.11	-70.85	578287.5165	196043.2098	796.378	796.335	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET
S-30	1019+05.30	-61.13	577112.5941	196219.5083	802.726	802.701	CLASS A POURED IN PLACE CONC. W/ALUM ODOT CONTROL TABLET





CURVE DATA: I71NB-1
P.I. = STA. 966+24.88
Δ = 13°51'26" RT
Dc = 01°00'00"
R = 5,729.58'
T = 696.25'
L = 1,385.71'
E = 42.15'
Emax = EXISTING

CURVE DATA: I71NB-2
P.I. = STA. 983+17.15
Δ = 15°34'52" LT
Dc = 01°30'00"
R = 3,819.72'
T = 522.59'
L = 1,038.74'
E = 35.58'
Emax = EXISTING

CURVE DATA: I71SB-1
P.I. = STA. 984+35.13
Δ = 16°35'30" LT
Dc = 01°30'00"
R = 3,819.72'
T = 556.96'
L = 1,106.12'
E = 40.39'
Emax = EXISTING

CURVE DATA: I670W1-1
P.I. = STA. 3986+99.11
Δ = 12°14'15" LT
Dc = 02°45'00"
R = 2,083.48'
T = 223.35'
L = 445.00'
E = 11.94'
Emax = EXISTING

CURVE DATA: I670W1-2
P.I. = STA. 3991+51.07
Δ = 08°02'50" LT
Dc = 01°45'00"
R = 3,274.05'
T = 230.30'
L = 459.85'
E = 8.09'
Emax = EXISTING

CURVE DATA: I670V7-1
P.I. = STA. 4987+15.75
Δ = 02°21'52" LT
Dc = 01°30'00"
R = 3,819.72'
T = 402.52'
L = 802.07'
E = 21.15'
Emax = EXISTING

CURVE DATA: I670V7-2
P.I. = STA. 4984+33.30
Δ = 02°21'04" LT
Dc = 01°00'00"
R = 5,729.58'
T = 117.58'
L = 235.12'
E = 1.21'
Emax = EXISTING

CURVE DATA: I71-1
P.I. = STA. 1032+82.82
Δ = 12°41'23" RT
Dc = 01°28'00"
R = 3,906.53'
T = 434.38'
L = 865.2'
E = 24.08'
Emax = EXISTING

CURVE DATA: I71-2
P.I. = STA. 1075+88.40
Δ = 04°19'55" LT
Dc = 00°30'00"
R = 11,459.16'
T = 433.39'
L = 866.37'
E = 8.19'
Emax = EXISTING

CURVE DATA: I71-3
P.I. = STA. 1106+24.16
Δ = 56°44'53" LT
Dc = 02°30'00"
R = 2,291.83'
Ls = 300.00
Θs = 03°45'00"
LT = 200.04'
ST = 100.04'
Lc = 1,969.93'
Ts = 1,388.71'
Es = 314.79'
Emax = EXISTING
S.C. = 1095+35.45
C.S. = 1115+05.37

CURVE DATA: STHC-1
P.I. = STA. 5012+52.32
Δ = 17°33'33" LT
Dc = 04°00'00"
R = 1,432.40'
Ls = 200.00'
Θs = 04°00'00"
LT = 133.37'
ST = 66.70'
Lc = 238.98'
Ts = 321.39'
Es = 18.16'
Emax = EXISTING
S.C. = 5011+30.94
C.S. = 5013+69.92

CURVE DATA: STHC-2
P.I. = STA. 5018+81.38
Δ = 29°44'24" RT
Dc = 09°30'00"
R = 603.11'
Ls = 200.00'
Θs = 09°30'00"
LT = 133.53'
ST = 66.84'
Lc = 113.05'
Ts = 260.78'
Es = 23.75'
Emax = EXISTING
S.C. = 5018+20.60
C.S. = 5019+33.66

CURVE DATA: STHC-3
P.I. = STA. 5023+58.00
Δ = 20°13'15" LT
Dc = 06°00'00"
R = 954.93'
T = 170.28'
L = 337.01'
E = 15.06'
Emax = EXISTING

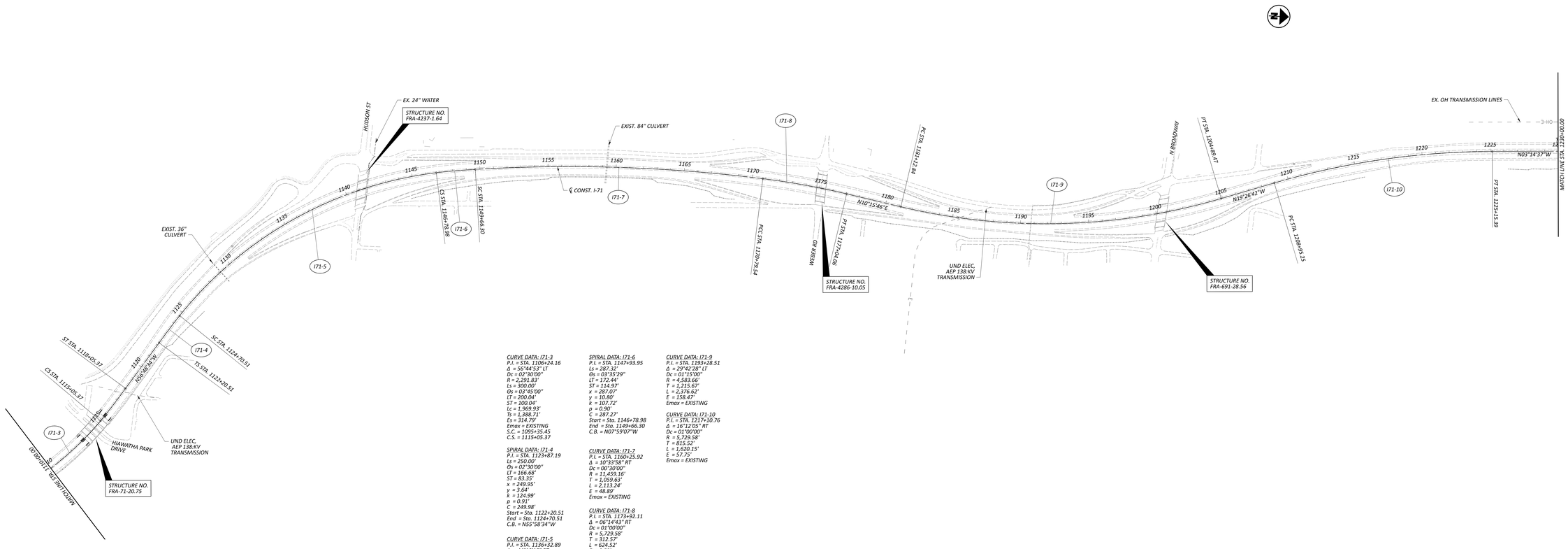
N08°28'23"W
N26°24'49"W
N03°19'35"E

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN
BEGIN WORK TO STA. 1110+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT ID
109164
SHEET P.3 TOTAL 618



CURVE DATA: I71-3
P.I. = STA. 1106+24.16
Δ = 56°44'53" LT
Dc = 02°30'00"
R = 2,291.83'
Ls = 300.00'
Θs = 03°45'00"
LT = 200.04'
ST = 100.04'
Lc = 1,969.93'
Ts = 1,388.71'
Es = 314.79'
Emax = EXISTING
S.C. = 1095+35.45
C.S. = 1115+05.37

SPIRAL DATA: I71-4
P.I. = STA. 1123+87.19
Ls = 250.00'
Θs = 02°30'00"
LT = 166.68'
ST = 83.35'
x = 249.95'
y = 3.64'
k = 124.99'
p = 0.91'
C = 249.98'
Start = Sta. 1122+20.51
End = Sta. 1124+70.51
C.B. = N55°58'34"W

CURVE DATA: I71-5
P.I. = STA. 1136+32.89
Δ = 44°10'10" RT
Dc = 02°00'00"
R = 2,864.79'
T = 1,162.38'
L = 2,208.47'
E = 226.84'
Emax = EXISTING

SPIRAL DATA: I71-6
P.I. = STA. 1147+93.95
Ls = 287.32'
Θs = 03°35'29"
LT = 172.44'
ST = 114.97'
x = 287.07'
y = 10.80'
k = 107.72'
p = 0.90'
C = 287.27'
Start = Sta. 1146+78.98
End = Sta. 1149+66.30
C.B. = N07°59'07"W

CURVE DATA: I71-7
P.I. = STA. 1160+25.92
Δ = 10°33'58" RT
Dc = 00°30'00"
R = 11,459.16'
T = 1,059.63'
L = 2,113.24'
E = 48.89'
Emax = EXISTING

CURVE DATA: I71-8
P.I. = STA. 1173+92.11
Δ = 06°14'43" RT
Dc = 01°00'00"
R = 5,729.58'
T = 312.57'
L = 624.52'
E = 8.52'
Emax = EXISTING

CURVE DATA: I71-9
P.I. = STA. 1193+28.51
Δ = 29°42'28" LT
Dc = 01°15'00"
R = 4,583.66'
T = 1,215.67'
L = 2,376.62'
E = 158.47'
Emax = EXISTING

CURVE DATA: I71-10
P.I. = STA. 1217+10.76
Δ = 16°12'05" RT
Dc = 01°00'00"
R = 5,729.58'
T = 815.52'
L = 1,620.15'
E = 57.75'
Emax = EXISTING

HORIZONTAL SCALE IN FEET
0 100 200 400

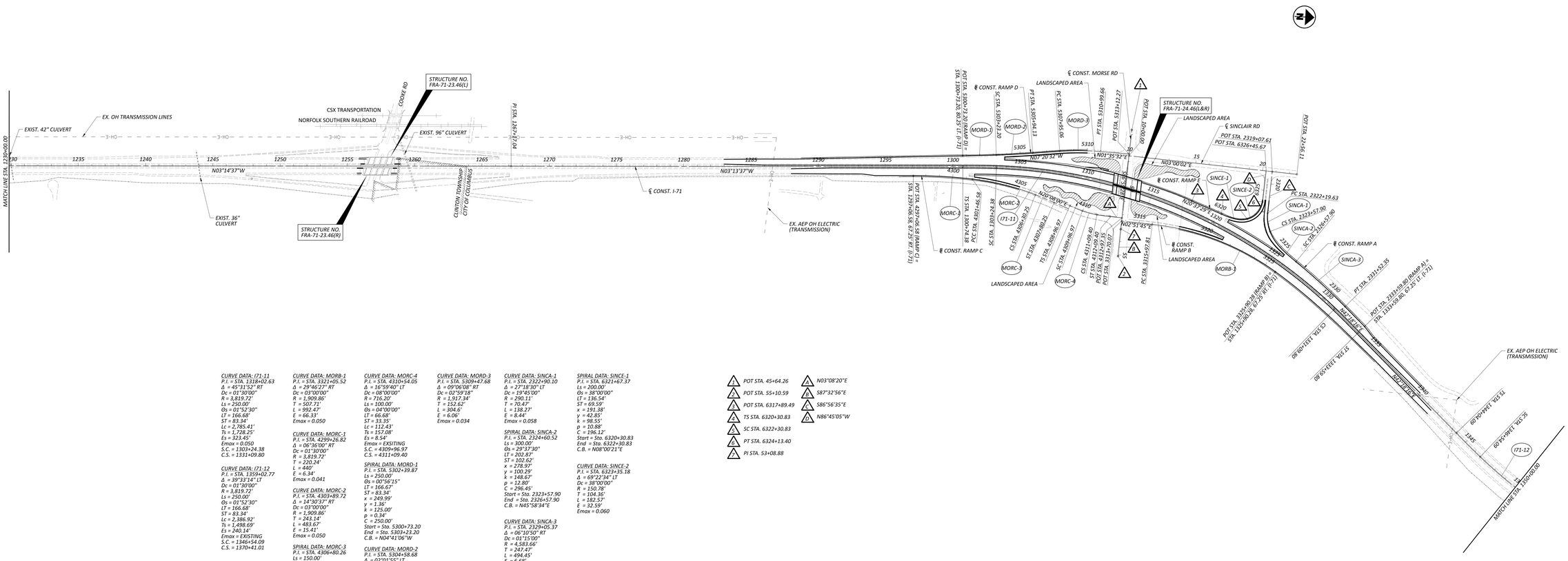
SCHEMATIC PLAN
STA. 1110+00.00 TO STA. 1230+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT ID: 109164
SHEET: P-4 TOTAL: 618

FRA-71-19.10

MODEL: Schematic Plan - GB20 MAPSHEET: 66x34 (in.) DATE: 2/17/2026 TIME: 7:23:07 AM PITDRV: DHDOT_PDF_V1.prtdat PITSTBL: DHDOT_Plot.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVIL3D WORKSET: DEFAULT PRODUCT: OpenRoadsDesigner 24.00.0.25
FILE: N:\Projects\Transportation\Highway\Colorado\Fairplay\109164_Hwy 285 at CR 71 & CR 5 Intersection Improvements\Design\Roadway\Plan Sheets\FRA-71-19.10.dwg



CURVE DATA: I71-11
P.I. = STA. 1318+02.63
Δ = 45°31'52" RT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,785.41'
Ts = 1,728.25'
Es = 323.45'
Emax = 0.050
S.C. = 1303+24.38
C.S. = 1331+09.80

CURVE DATA: I71-12
P.I. = STA. 1359+02.77
Δ = 39°33'14" LT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,386.92'
Ts = 1,498.69'
Es = 240.14'
Emax = EXISTING
S.C. = 1346+54.09
C.S. = 1370+41.01

CURVE DATA: MORB-1
P.I. = STA. 3321+05.52
Δ = 29°46'27" RT
Dc = 03°00'00"
R = 1,909.86'
T = 507.71'
L = 992.47'
E = 66.33'
Emax = 0.050

CURVE DATA: MORC-1
P.I. = STA. 4299+26.82
Δ = 06°36'00" RT
Dc = 01°30'00"
R = 3,819.72'
T = 220.24'
L = 440'
E = 6.34'
Emax = 0.041

CURVE DATA: MORC-2
P.I. = STA. 4303+89.72
Δ = 14°30'37" RT
Dc = 03°00'00"
R = 1,909.86'
T = 243.14'
L = 483.67'
E = 15.41'
Emax = 0.050

SPIRAL DATA: MORC-3
P.I. = STA. 4306+80.26
Ls = 150.00'
Θs = 02°15'00"
LT = 100.01'
ST = 50.01'
x = 149.94'
y = 3.93'
k = 75.00'
p = 0.49'
C = 149.99'
Start = Sta. 4306+30.25
End = Sta. 4307+80.25
C.B. = N19°23'00"E

CURVE DATA: MORC-4
P.I. = STA. 4310+54.05
Δ = 16°59'40" LT
Dc = 08°00'00"
R = 716.20'
Ls = 100.00'
Θs = 04°00'00"
LT = 66.68'
ST = 33.35'
Lc = 112.43'
Ts = 157.08'
Es = 8.54'
Emax = EXSITING
S.C. = 4309+96.97
C.S. = 4311+09.40

SPIRAL DATA: MORD-1
P.I. = STA. 5302+39.87
Ls = 250.00'
Θs = 00°56'15"
LT = 166.67'
ST = 83.34'
x = 249.99'
y = 1.36'
k = 125.00'
p = 0.34'
C = 250.00'
Start = Sta. 5300+73.20
End = Sta. 5303+23.20
C.B. = N04°41'06"W

CURVE DATA: MORD-2
P.I. = STA. 5304+58.68
Δ = 02°01'55" LT
Dc = 00°45'00"
R = 7,639.44'
T = 135.48'
L = 270.93'
E = 1.20'
Emax = 0.018

CURVE DATA: MORD-3
P.I. = STA. 5309+47.68
Δ = 09°06'08" RT
Dc = 02°59'18"
R = 1,917.34'
T = 152.62'
L = 304.6'
E = 6.06'
Emax = 0.034

CURVE DATA: SINCA-1
P.I. = STA. 2322+90.10
Δ = 27°18'30" LT
Dc = 19°45'00"
R = 290.11'
T = 70.47'
L = 138.27'
E = 8.44'
Emax = 0.058

SPIRAL DATA: SINCA-2
P.I. = STA. 2324+60.52
Ls = 300.00'
Θs = 29°37'30"
LT = 202.87'
ST = 102.62'
x = 278.97'
y = 100.29'
k = 148.67'
p = 12.80'
C = 296.45'
Start = Sta. 2323+57.90
End = Sta. 2326+57.90
C.B. = N45°58'34"E

CURVE DATA: SINCA-3
P.I. = STA. 2329+05.37
Δ = 06°10'50" RT
Dc = 01°15'00"
R = 4,583.66'
T = 247.47'
L = 494.45'
E = 6.68'
Emax = 0.028

SPIRAL DATA: SINCE-1
P.I. = STA. 6321+67.37
Ls = 200.00'
Θs = 38°00'00"
LT = 136.54'
ST = 69.59'
x = 191.38'
y = 42.85'
k = 98.55'
p = 10.88'
C = 196.12'
Start = Sta. 6320+30.83
End = Sta. 6322+30.83
C.B. = N08°00'21"E

CURVE DATA: SINCE-2
P.I. = STA. 6323+35.18
Δ = 69°22'34" LT
Dc = 38°00'00"
R = 150.78'
T = 104.36'
L = 182.57'
E = 32.59'
Emax = 0.060

1 POT STA. 45+64.26
2 POT STA. 55+10.59
3 POT STA. 6317+89.49
4 TS STA. 6320+30.83
5 SC STA. 6322+30.83
6 PT STA. 6324+13.40
7 PI STA. 53+08.88

A1 N03°08'20"E
B1 S87°32'56"E
A2 S86°56'35"E
B2 N86°45'05"W

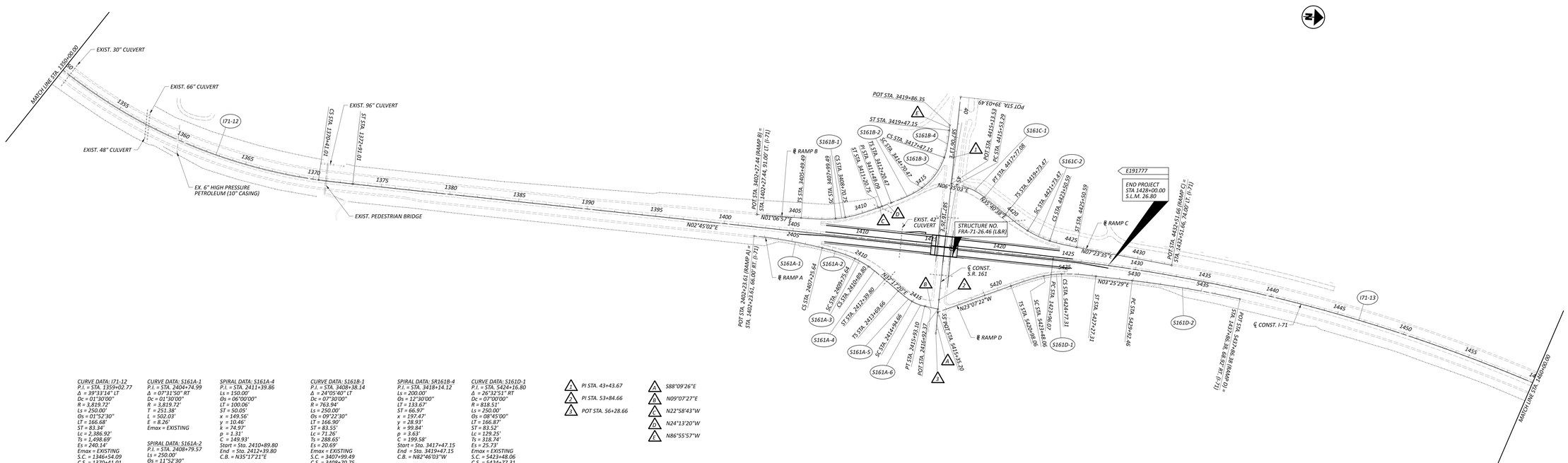
HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN
STA. 1230+00.00 TO STA. 1350+00.00

DESIGN AGENCY
Jacobs
DESIGNER CGL
REVIEWER MCK 02/19/26
PROJECT ID 109164
SHEET P.5 TOTAL 618

FRA-71-19.10

MODEL: Schematic Plan - GB03 PAPERSIZE: 66x34 (in.) DATE: 2/11/2026 TIME: 7:23:14 AM PITDRV: DWGT_PDF_IF_LAYOUT_PITDRV_DWGT_PDF_IF_LAYOUT_PITDRV_DWGT_PDF_IF_LAYOUT_PITDRV_



PI STA. 43+43.67
PI STA. 53+84.66
POT STA. 56+28.66

S88°09'26"E
N09°07'27"E
N22°58'43"W
N24°13'20"W
N86°55'57"W

CURVE DATA: I71-12
P.I. = STA. 1359+02.77
Δ = 39°33'14" LT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,386.92'
Ts = 1,498.69'
Es = 240.14'
Emax = EXISTING
S.C. = 1346+54.09
C.S. = 1370+41.01

CURVE DATA: I71-13
P.I. = STA. 1450+88.71
Δ = 24°44'23" RT
Dc = 00°28'00"
R = 12,277.67'
T = 2,692.64'
L = 5,301.35'
E = 291.8'
Emax = EXISTING

CURVE DATA: S161A-1
P.I. = STA. 2404+74.99
Δ = 07°31'50" RT
Dc = 01°30'00"
R = 3,819.72'
T = 251.38'
L = 502.03'
E = 8.26'
Emax = EXISTING

SPIRAL DATA: S161A-2
P.I. = STA. 2408+79.57
Ls = 250.00'
Θs = 11°52'30"
LT = 153.93'
ST = 96.88'
x = 248.74'
y = 19.94'
k = 101.36'
p = 2.95'
C = 249.54'
Start = Sta. 2407+25.64
End = Sta. 2409+75.64
C.B. = N14°51'48"E

CURVE DATA: S161A-3
P.I. = STA. 2410+32.84
Δ = 09°07'59" RT
Dc = 08°00'00"
R = 716.20'
T = 57.2'
L = 114.16'
E = 2.28'
Emax = EXISTING

SPIRAL DATA: S161A-4
P.I. = STA. 2411+39.86
Ls = 150.00'
Θs = 06°00'00"
LT = 100.06'
ST = 50.05'
x = 149.56'
y = 10.46'
k = 74.97'
p = 1.31'
C = 149.93'
Start = Sta. 2410+89.80
End = Sta. 2412+39.80
C.B. = N35°17'21"E

SPIRAL DATA: S161A-5
P.I. = STA. 2414+53.16
Ls = 125.00'
Θs = 10°56'15"
LT = 83.49'
ST = 41.81'
x = 124.55'
y = 7.93'
k = 62.42'
p = 1.99'
C = 124.80'
Start = Sta. 2413+69.66
End = Sta. 2414+94.66
C.B. = N33°38'39"E

CURVE DATA: S161A-6
P.I. = STA. 2415+44.26
Δ = 17°13'38" LT
Dc = 17°30'00"
R = 327.40'
T = 49.60'
L = 98.44'
E = 3.74'
Emax = EXISTING

CURVE DATA: S161B-1
P.I. = STA. 3408+38.14
Δ = 24°05'40" LT
Dc = 07°30'00"
R = 763.94'
Ls = 250.00'
Θs = 09°22'30"
LT = 166.90'
ST = 83.55'
Lc = 71.26'
Ts = 288.65'
Es = 20.69'
Emax = EXISTING
S.C. = 3407+99.49
C.S. = 3408+70.75

SPIRAL DATA: SR161B-2
P.I. = STA. 3413+87.79
Ls = 250.00'
Θs = 15°37'30"
LT = 167.32'
ST = 83.93'
x = 248.15'
y = 22.61'
k = 124.69'
p = 5.67'
C = 249.17'
Start = Sta. 3412+20.47
End = Sta. 3414+70.47
C.B. = N29°25'39"W

CURVE DATA: SR161B-3
P.I. = STA. 3416+13.17
Δ = 34°35'06" LT
Dc = 12°30'00"
R = 458.37'
T = 142.70'
L = 276.68'
E = 21.70'
Emax = EXISTING

SPIRAL DATA: SR161B-4
P.I. = STA. 3418+14.12
Ls = 200.00'
Θs = 12°30'00"
LT = 133.67'
ST = 66.97'
x = 197.47'
y = 28.93'
k = 99.84'
p = 3.63'
C = 199.58'
Start = Sta. 3417+47.15
End = Sta. 3419+47.15
C.B. = N82°46'03"W

CURVE DATA: SR161C-1
P.I. = STA. 4416+67.65
Δ = 29°05'35" RT
Dc = 13°00'00"
R = 440.74'
T = 114.36'
L = 223.79'
E = 14.6'
Emax = EXISTING

CURVE DATA: S161C-2
P.I. = STA. 4422+66.45
Δ = 28°17'03" LT
Dc = 07°30'00"
R = 763.94'
Ls = 200.00'
Θs = 07°30'00"
LT = 133.45'
ST = 66.78'
Lc = 177.12'
Ts = 292.98'
Es = 26.13'
Emax = EXISTING
S.C. = 4421+73.47
C.S. = 4423+50.59

CURVE DATA: S161D-1
P.I. = STA. 5424+16.80
Δ = 26°32'51" RT
Dc = 07°00'00"
R = 818.51'
Ls = 250.00'
Θs = 08°45'00"
LT = 166.87'
ST = 83.52'
Lc = 129.25'
Ts = 318.74'
Es = 25.73'
Emax = EXISTING
S.C. = 5423+48.06
C.S. = 5424+77.31

CURVE DATA: S161D-2
P.I. = STA. 5433+89.78
Δ = 05°57'16" RT
Dc = 00°45'00"
R = 7,639.44'
T = 397.32'
L = 793.92'
E = 10.32'
Emax = EXISTING

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN
STA. 1350+00.00 TO STA. 1460+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT ID: 109164
SHEET: P.6 TOTAL: 618

FRA-71-19.10

MODEL: Schematic Plan - GB004 PAGESIZE: 66x34 (in.) DATE: 2/11/2026 TIME: 7:23:21 AM PTDRV: DHDOT_PDF_11 pltbl: PSTBL: DHDOT_Plot.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DHDOTD01 WORKSET: 00154 PRODUCT: OpenRoadsDesigner 24.00.02.25
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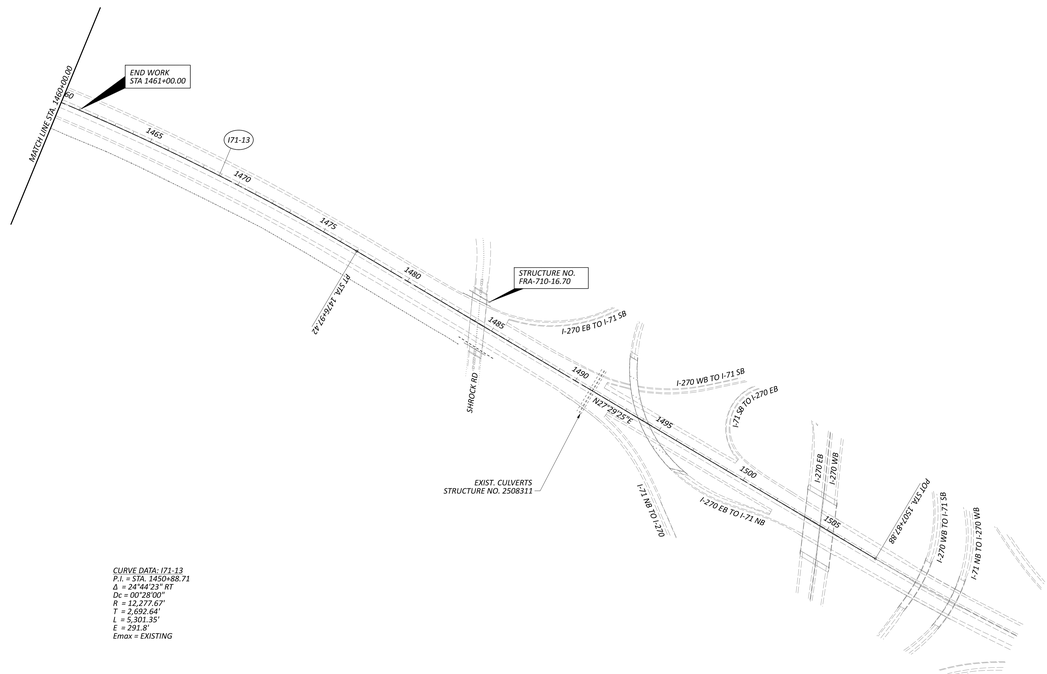

CURVE DATA: I71-13
P.I. = STA. 1450+88.71
Δ = 24°44'23" RT
Dc = 00°28'00"
R = 12,277.67'
T = 2,692.64'
L = 5,301.35'
E = 291.8'
Emax = EXISTING

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN
STA. 1460+00.00 TO END WORK

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

SHEET P.7 TOTAL 618

FRA-71-19.10

MODEL: Schematic Plan - GB05 MATERIAL: 6in14.5in | DATE: 2/17/2026 TIME: 7:23:27 AM PITDRV: DHDOT_PDF_V-14.tbl& PENTBL: DHDOT_Plan.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DHDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.0.25
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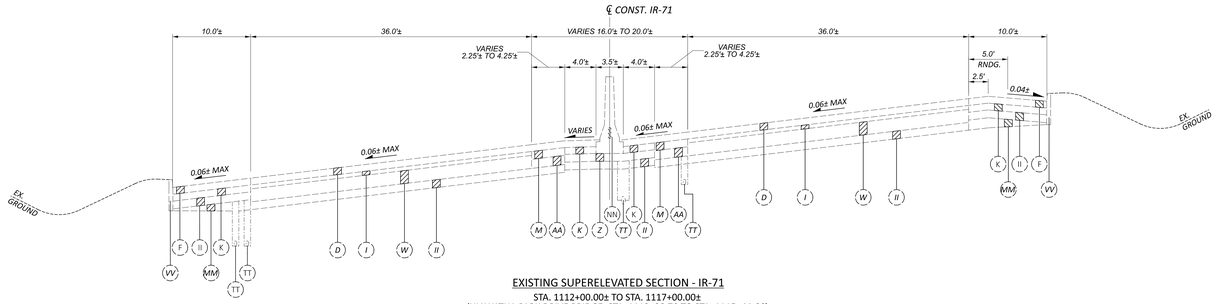
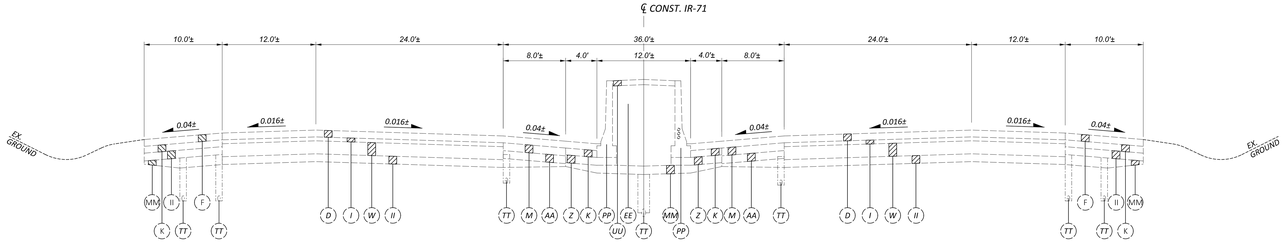


EXISTING SUPERELEVATED SECTION - IR-71

STA. 1112+00.00± TO STA. 1117+00.00±

(HIAWATHA PARK DRIVE BRIDGE: STA. 1113+28.70 TO STA. 1115+44.66)



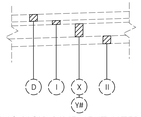
EXISTING NORMAL SECTION - IR-71

STA. 1250+00.00± TO STA. 1300+75.00±

(COOKE ROAD BRIDGE: STA. 1256+21.72 TO STA. 1258+46.27)

EXISTING LEGEND

- (A) 2"± ASPHALT CONCRETE COURSE
- (B) 2½"± ASPHALT CONCRETE COURSE
- (B+) 3"± ASPHALT CONCRETE COURSE
- (C) 4½"± ASPHALT CONCRETE COURSES
- (D) 5¼"± ASPHALT CONCRETE COURSES
- (E) 3" - 4½"± ASPHALT CONCRETE COURSES
- (E+) 3" - 6¾"± ASPHALT CONCRETE COURSES
- (F) 3¾" - 5¼"± ASPHALT CONCRETE COURSES
- (G) 5¾" - 7"± ASPHALT CONCRETE COURSES
- (H) 2¾"± BITUMINOUS AGGREGATE BASE
- (I) 3"± BITUMINOUS AGGREGATE BASE
- (J) 4"± BITUMINOUS AGGREGATE BASE
- (K) 5¼"± BITUMINOUS AGGREGATE BASE
- (L) 5½"± BITUMINOUS AGGREGATE BASE
- (M) 6"± BITUMINOUS AGGREGATE BASE
- (N) 7"± BITUMINOUS AGGREGATE BASE
- (O) 10"± BITUMINOUS AGGREGATE BASE
- (P) 11"± BITUMINOUS AGGREGATE BASE
- (Q) 13"± BITUMINOUS AGGREGATE BASE
- (R) 15½"± ASPHALT CONCRETE BASE
- (S) 8"± MACADAM BASE
- (T) 3"± WATERPROOFED AGGREGATE BASE COURSE
- (T+) 6" - 10½" PLAIN CONCRETE PAVEMENT
- (U) 8"± PORTLAND CEMENT CONCRETE BASE
- (V) 9"± PORTLAND CEMENT CONCRETE BASE
- (V+) 10" CONCRETE BASE
- (W) 10"± REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (X) 12"± REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (Y) 12¾"± REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (Z) 6"± AGGREGATE BASE
- (AA) 7"± AGGREGATE BASE
- (BB) 8"± AGGREGATE BASE
- (CC) 9"± AGGREGATE BASE
- (DD) 12½"± AGGREGATE BASE
- (EE) VARIABLE DEPTH AGGREGATE BASE
- (FF) 3" - 7"± STABILIZED CRUSHED AGGREGATE
- (GG) 5"± STABILIZED CRUSHED AGGREGATE
- (HH) 7"± STABILIZED CRUSHED AGGREGATE
- (II) 6"± SUBBASE
- (JJ) 7"± SUBBASE
- (KK) 9"± SUBBASE
- (LL) 10"± SUBBASE
- (MM) VARIABLE DEPTH SUBBASE
- (NN) CONCRETE BARRIER, TYPE B-50
- (OO) CONCRETE BARRIER, TYPE C-50
- (PP) CONCRETE BARRIER, TYPE D-50
- (QQ) CONCRETE BARRIER
- (RR) CONCRETE BARRIER, TYPE B
- (SS) CONCRETE BARRIER, TYPE D
- (TT) EXISTING UNDERDRAINS
- (UU) 4"± CONCRETE CAP
- (VV) CONCRETE CURB
- (VW) 9"± PLAIN CONCRETE PAVEMENT
- (XX) CONCRETE CURB AND GUTTER
- (YY) CONCRETE MEDIAN
- (ZZ) CONCRETE SIDEWALK

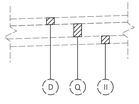


EXISTING RIGID PAVEMENT ALTERNATE #1

IR-71: MAINLINE PAVEMENT

STA. 1309+05.00± TO STA. 1317+25.00±

(INCLUDES RAMP AND GORE AREAS)



EXISTING FLEXIBLE PAVEMENT ALTERNATE #2

IR-71: NOSE REPLACEMENT

(EXACT LIMITS UNKNOWN - USED TO REPLACE ORIGINAL CONCRETE NOSES IN EXISTING GORE AREAS VARYING FROM 2' TO 10' WIDE.)

MORSE RD, RAMP C

EXISTING TYPICAL SECTIONS
I-71

DESIGN AGENCY
Jacobs

DESIGNER MCK
REVIEWER BAP 03/24/26
PROJECT ID 109164
SHEET P.8 TOTAL 618

FRA-71-19.10

MODEL: Cx_Typ_Sections - Sheet: 1 PWPREQD: 66x44 in | DATE: 3/17/2026 TIME: 7:23:55 AM PCTBW: ON|OFF: |PSF: |LAYER: |PENTBL: ON|OFF: |PSF: |LAYER: |PENTBL: ON|OFF: |PSF: |LAYER: |PENTBL: USER: Chris.Lawrence1@jacobs.com WORKSPACE: ON|OFF|SAVE WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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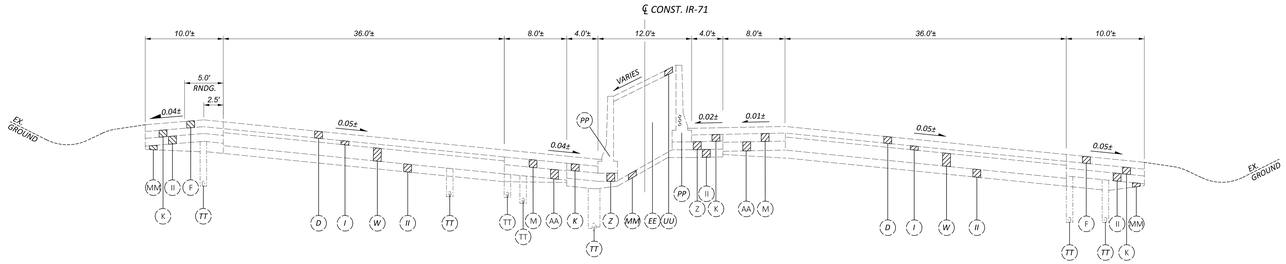
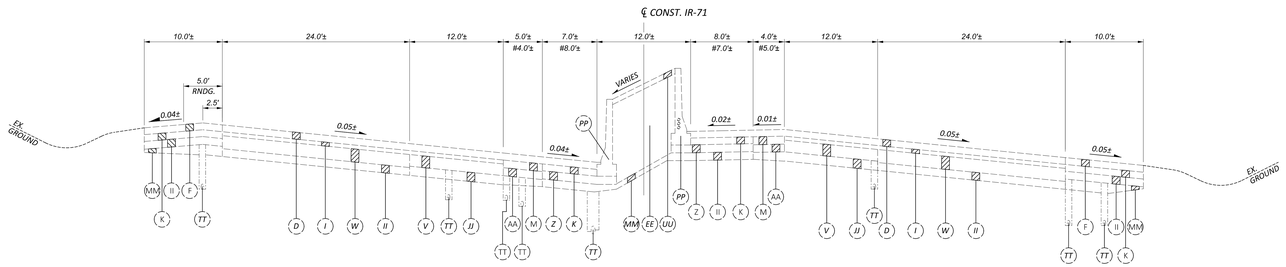


EXISTING SUPERELEVATED SECTION - IR-71

STA. 1300+75.00± TO STA. 1313+00.00±

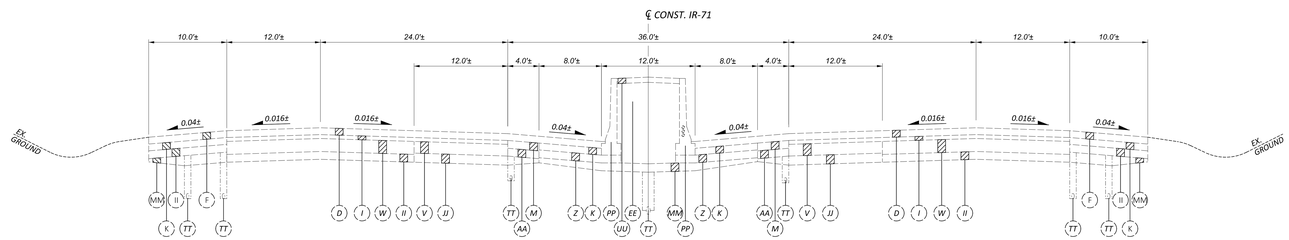
(MORSE ROAD BRIDGE: STA. 1311+84.64 TO STA. 1313+00.00)



EXISTING SUPERELEVATED SECTION - IR-71

STA. 1313+00.00± TO STA. 1333+55.00±

(MORSE ROAD BRIDGE: STA. 1313+00.00 TO STA. 1314+10.10)



EXISTING NORMAL SECTION - IR-71

STA. 1333+55.00± TO STA. 1344+05.00±

EXISTING TYPICAL SECTIONS
I-71

DESIGN AGENCY
Jacobs

DESIGNER
MCK

REVIEWER
BAP 03/24/26

PROJECT ID
109164

SHEET P-9 TOTAL 618

FRA-71-19.10

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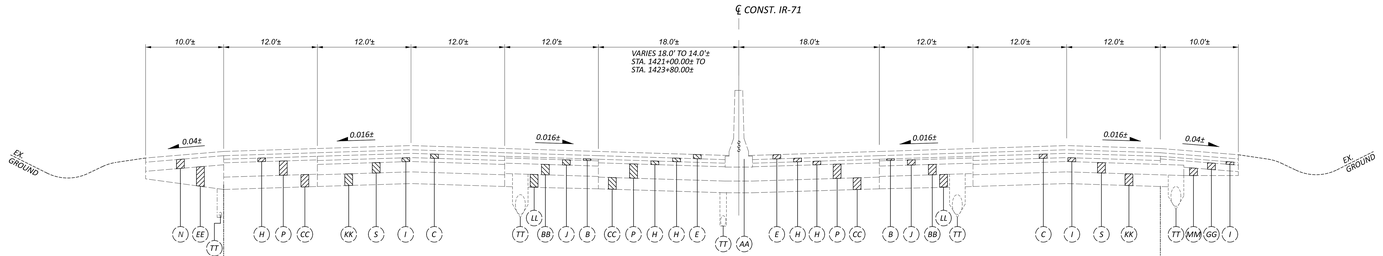
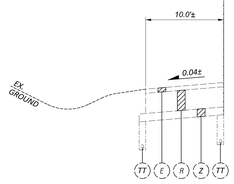


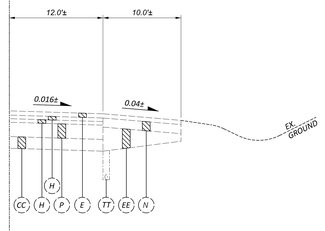
EXISTING NORMAL SECTION - I-71

STA. 1402+00.00± TO STA. 1423+85.00±
(SR 161 BRIDGE: STA. 1414+93.80 TO STA. 1417+16.30)



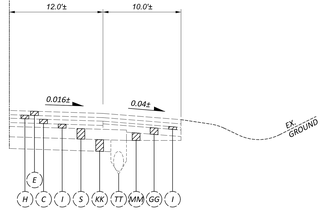
EXISTING SHOULDER SECTION

STA. 1421+10.00± TO STA. 1423+85.00±



EXISTING DECELERATION SECTION

STA. 1377+00.00± TO STA. 1395+10.00±



EXISTING DECELERATION SECTION

STA. 1395+10.00± TO STA. 1402+25.00±

EXISTING TYPICAL SECTIONS
I-71

DESIGN AGENCY
Jacobs

DESIGNER
MCK

REVIEWER
BAP 03/24/26

PROJECT ID
109164

SHEET P.10 TOTAL 618

FRA-71-19.10

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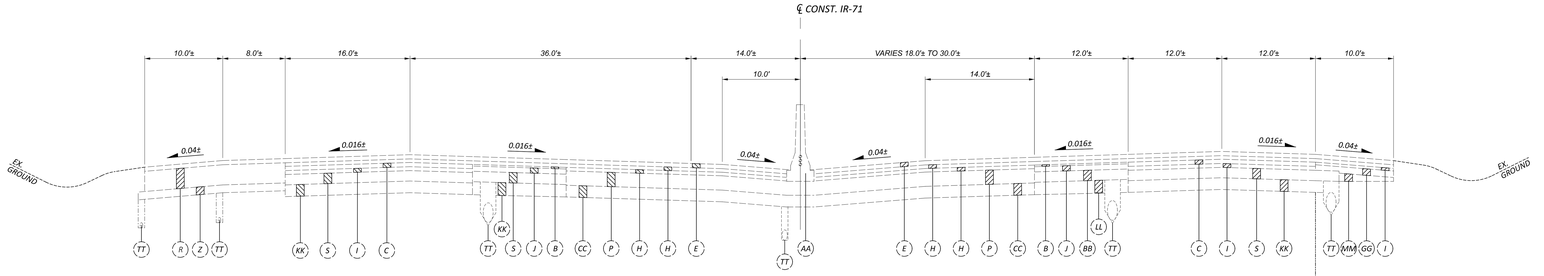
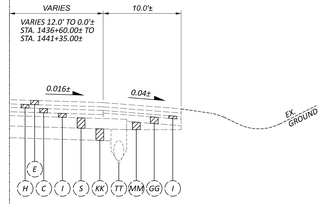
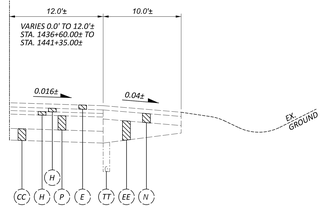


EXISTING NORMAL SECTION - I-71
STA. 1423+85.00± TO STA. 1450+00.00±



EXISTING ACCELERATION SECTION - I-71
STA. 1430+35.00± TO STA. 1436+60.00±



EXISTING SHOULDER SECTION - I-71
STA. 1436+60.00± TO STA. 1450+00.00±

EXISTING TYPICAL SECTIONS
I-71

DESIGN AGENCY
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DESIGNER
MCK
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BAP 03/24/26
PROJECT ID
109164
SHEET P.11
TOTAL 618

FRA-71-19.10

MODEL: Ex_Typ_Sections - Sheet 4 - PWP8028 - 66x44 in. | DATE: 3/17/2026 - TIME: 7:23:03 AM - PCTDEV: DWGPT_PW.ctb - PCTBL: DWGPT_Pen.tbl - USER: Chris.Lawrence1@jacobs.com - WORKSPACE: D:\ROOTS\x0 - WORKSET: 109164 - PRODUCT: OpenRoadsDesigner 24.00.0.25
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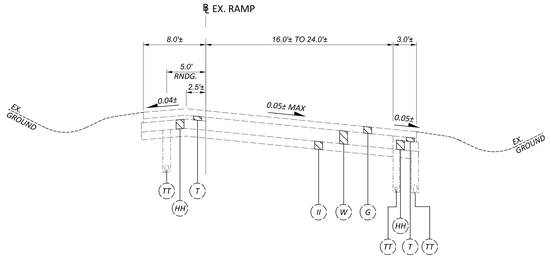
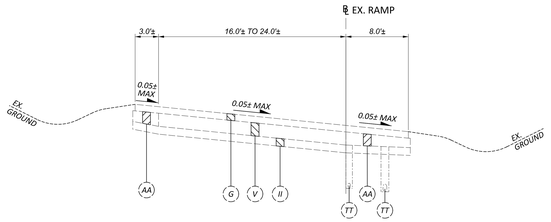


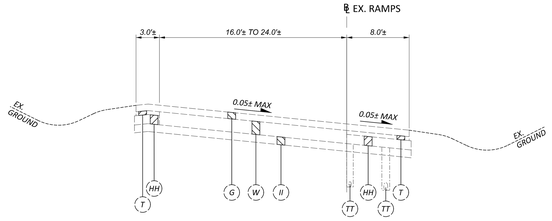
EXISTING SUPERELEVATED SECTION - RAMP

MORSE RD, RAMP D - STA. 5303+88.00± TO STA. 5310+00.00±



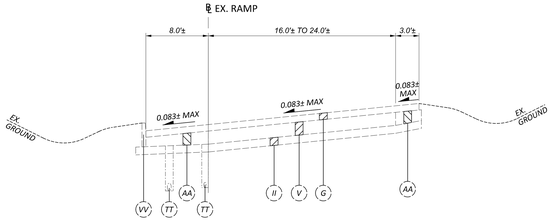
EXISTING SUPERELEVATED SECTION - RAMP

SINCLAIR RD, RAMP A - STA. 2322+13.00± TO STA. 2325+63.00±



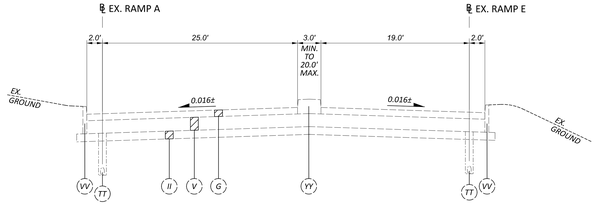
EXISTING SUPERELEVATED SECTION - RAMP

MORSE RD, RAMP B - STA. 3318+00.00± TO STA. 3320+87.00±
MORSE RD, RAMP C - STA. 4301+20.00± TO STA. 4305+00.00±



EXISTING SUPERELEVATED SECTION - RAMP

SINCLAIR RD, RAMP E - STA. 6320+74.00± TO STA. 6323+47.00±



EXISTING TWO-WAY RAMP SECTION

SINCLAIR RD, RAMP A - STA. 2319+08.00± TO STA. 2322+13.00±
SINCLAIR RD, RAMP E - STA. 6323+47.00± TO STA. 6326+46.00±

EXISTING TYPICAL SECTIONS
RAMPS

FRA-71-19.10

MODEL: Ex. Typ. Sections - Sheet 5 PWPREQD: 66x44 in | DATE: 3/17/2026 TIME: 7:23:03 AM PITCHY: DHDOT_PSI_1-pltcfg PENTBL: DHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: DHDOTGIS02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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PROJECT ID
109164

SHEET P.12 | TOTAL 618

FRA-71-19.10
MODEL: Cs_Typ_Section - Sheet: RMPR028_66x44 in | DATE: 3/17/2026 TIME: 7:23:03 AM PCTOPI: DWGPT_PSI_31.pltcfg, PENTBL: DWGPT_Print.ctb USER: ChrisLawrence1@jacobs.com WORKSPACE: DWGOUT0x03 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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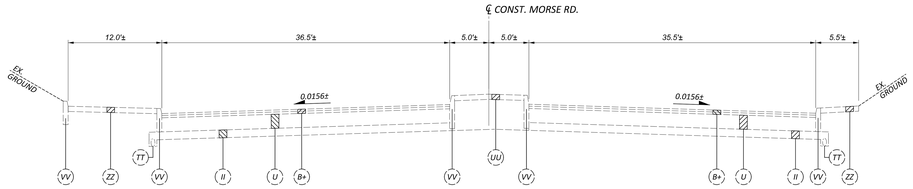
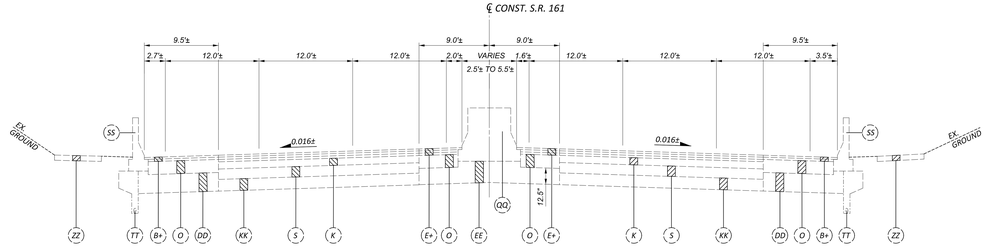


EXISTING NORMAL SECTION - MORSE RD.
STA. 48+45.00 TO STA. 51+40.00



EXISTING NORMAL SECTION - S.R. 161
STA. 48+50.00 TO STA. 51+50.00

EXISTING TYPICAL SECTIONS
SIDE STREETS

DESIGN AGENCY
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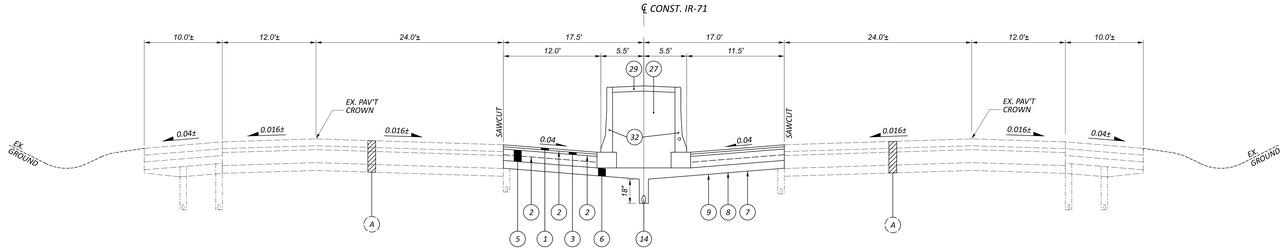
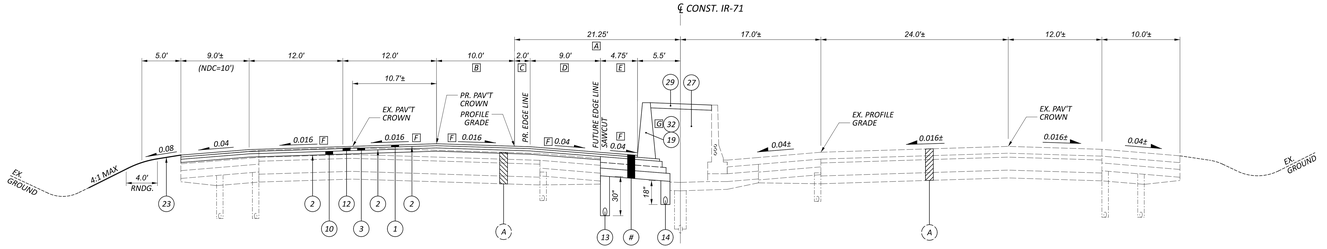
DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.13 | TOTAL: 618



I-71 - NORMAL SECTION

STA. 1269+00.00 TO STA. 1276+50.00



EXISTING NORMAL SECTION - IR-71

STA. 1283+00.00 TO STA. 1288+00.00

A VARIES 17.0' TO 21.25'
STA. 1283+00.00 TO STA. 1286+00.00

B VARIES 12.0' TO 10.0'
STA. 1283+00.00 TO STA. 1286+00.00

C VARIES 0.0' TO 2.0'
STA. 1283+00.00 TO STA. 1286+00.00

D VARIES 0.0' TO 9.0'
STA. 1283+00.00 TO STA. 1286+00.00

E VARIES 11.5' TO 4.5'
STA. 1283+00.00 TO STA. 1286+00.00

C SAWCUT LINE OFFSET CONSTANT 10.25' FROM ℄

F SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS

G NJ BARRIER, TYPE D-50 FROM
STA. 1283+00.00 TO STA. 1283+40.00

PROPOSED LEGEND

A SEE EXISTING TYPICAL SECTIONS FOR PAV'T BUILDUP WITHIN SPECIFICED STATION LIMITS
1 ITEM 442 - 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
2 ITEM 407 - NON-TRACKING TACK COAT
3 ITEM 442 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
4 ITEM 301 - 9" ASPHALT CONCRETE BASE, PG 64-22, (449) - (PLACE IN 2 EQUAL LIFTS)
5 ITEM 302 - 9" ASPHALT CONCRETE BASE, PG 64-22, (449) - (PLACE IN 2 EQUAL LIFTS)
6 ITEM 304 - 6" AGGREGATE BASE
7 ITEM 204 - SUBGRADE COMPACTION
8 ITEM 204 - PROOF ROLLING
9 ITEM 204 - SUBGRADE REPAIR/STABILIZATION
10 ITEM 442 - 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
11 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1½")
12 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1½" MIN. - 5½" MAX.)
13 ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS
14 ITEM 605 - 6" BASE PIPE UNDERDRAINS
15 ITEM 609 - CURB, TYPE 4-C
16 ITEM 609 - CONCRETE MEDIAN
17 ITEM 606 - GUARDRAIL, TYPE MGS
18 ITEM 606 - GUARDRAIL, TYPE MGS HALF/QUARTER POST SPACING
19 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1
20 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1
21 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
22 ITEM 304 - 8" AGGREGATE BASE
23 ITEM 659 - SEEDING AND MULCHING
24 ITEM 601 - CONCRETE SLOPE PROTECTION
25 ITEM 253 - PAVEMENT REPAIR
26 ITEM 609 - MEDIAN, MISC.: 4" STAMPED AND COLORED CONCRETE
27 ITEM 204 - GRANULAR MATERIAL, TYPE B
28 ITEM 608 - 4" CONCRETE WALK
29 ITEM 511 - CONCRETE, MISC.: 4" CONCRETE CAP
30 ITEM 511 - CLASS Q2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)
31 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")
32 ITEM 622 - BARRIER, MISC.: NJ BARRIER, TYPE D-50
33 ITEM 622 - BARRIER, MISC.: NJ BARRIER, TYPE B-50
34 ITEM 411 - STABILIZED CRUSHED AGGREGATE

PROPOSED TYPICAL SECTIONS
I-71

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 1 IMPERIOUS: 66x34 (in.) DATE: 3/31/2026 TIME: 1:02:05 PM PITDW: ONDP_PDF_P-LetterTB_PWIDE_ONDP_Pwide USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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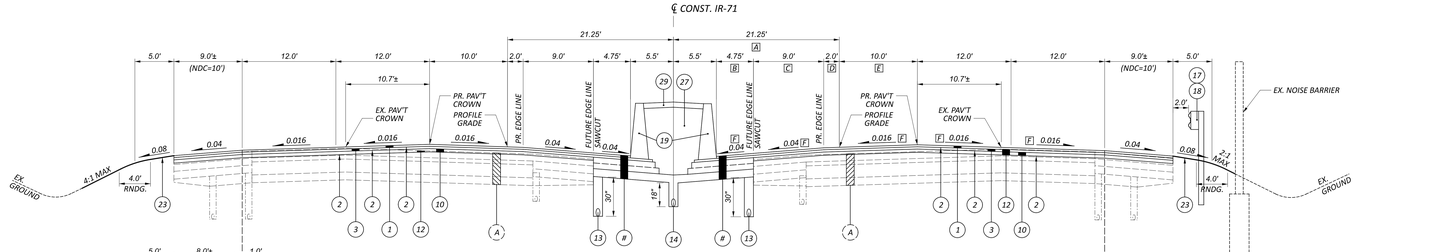
Jacobs

DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET
P.14
TOTAL
618

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - NORMAL SECTION
STA. 1288+00.00 TO STA. 1296+00.00

[A] VARIES 17.0' TO 21.25'
STA. 1288+00.00 TO STA. 1291+00.00

[B] VARIES 11.5'± TO 4.5'±
STA. 1288+00.00 TO STA. 1291+00.00

[B] SAWCUT LINE OFFSET CONSTANT 10.25' FROM ℄

[C] VARIES 0.0' TO 9.0'
STA. 1288+00.00 TO STA. 1291+00.00

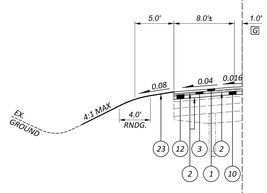
[D] VARIES 0.0' TO 2.0'
STA. 1288+00.00 TO STA. 1291+00.00

[F] VARIES 12.0' TO 10.0'
STA. 1288+00.00 TO STA. 1291+00.00

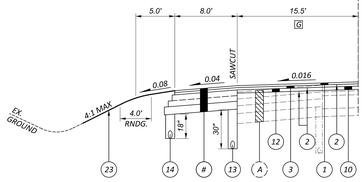
[F] SEE PAVEMENT DETAILS SHEETS FOR CROSS SLOPE TRANSITIONS

[G] VARIES 0.0' TO 15.5'
STA. 1288+23.20 TO STA. 1296+00.00

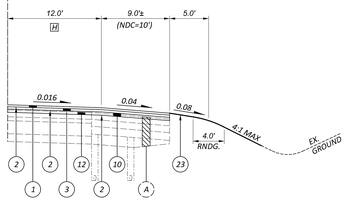
[H] VARIES 0.0' TO 12.0'
STA. 1293+25.00 TO STA. 1294+25.00



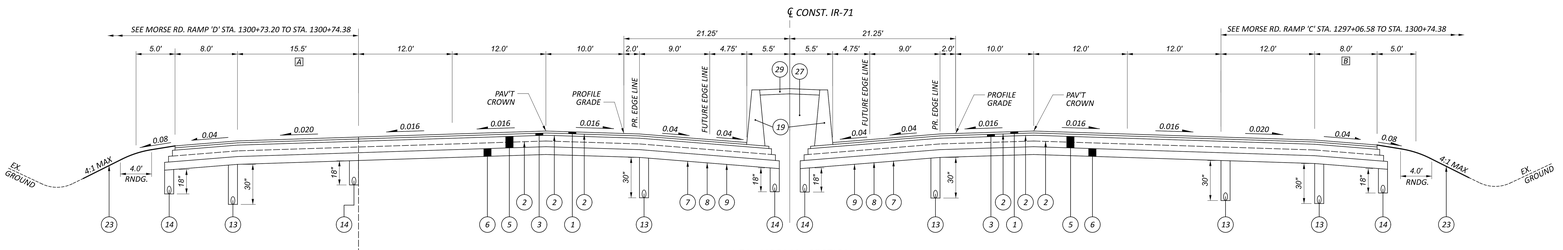
ACCELERATION LANE SECTION
STA. 1288+23.20 TO STA. 1288+73.12



ACCELERATION LANE SECTION
STA. 1288+73.12 TO STA. 1296+00.00



ACCELERATION LANE SECTION
STA. 1293+25.00 TO STA. 1296+00.00

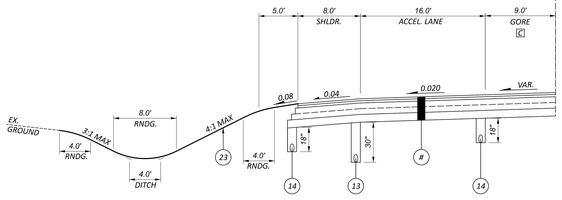


I-71 - NORMAL SECTION
STA. 1296+00.00 TO STA. 1300+74.38

[A] VARIES 15.5' TO 16.0'
STA. 1296+00.00 TO STA. 1296+23.36

[B] VARIES 9.4' TO 8.0'
STA. 1296+00.00 TO STA. 1296+35.00

[C] VARIES 0.0' TO 9.0'
STA. 1296+23.36 TO STA. 1300+73.20



ACCEL. LANE SECTION
STA. 1296+23.36 TO STA. 1300+73.20

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

DESIGN AGENCY
Jacobs

DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.15 TOTAL: 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 2 IMPERIOUS: 66x34 (in.) DATE: 3/31/2026 TIME: 1:02:07 PM USER: CHRISTOPHER.J.LAWRENCE@JACOBS.COM WORKSPACE: OHDOT_PROJECT_STATE: OHDOT_Presta USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
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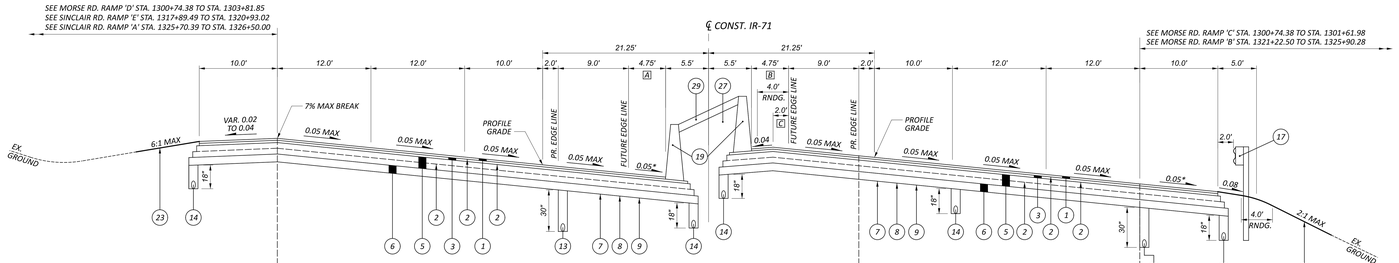
NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - SUPERELEVATED SECTION
STA. 1300+74.38 TO STA. 1326+50.00
STA. 1312+03.05 TO STA. 1314+15.11 (MORSE RD. BRIDGE)

A VARIES FROM 4.75' TO 4.0'
STA. 1311+00.00 TO STA. 1312+01.95

A VARIES FROM 4.0' TO 4.75'
STA. 1314+13.67 TO STA. 1315+50.00

B VARIES FROM 4.75' TO 6.7'
STA. 1311+00.00 TO STA. 1312+03.45

B VARIES FROM 6.7' TO 4.75'
STA. 1314+15.71 TO STA. 1315+50.00

C VARIES FROM 2.0' TO 4.7'
STA. 1311+00.00 TO STA. 1312+03.45

C VARIES FROM 4.7' TO 2.0'
STA. 1314+15.71 TO STA. 1315+50.00

D VARIES FROM 10.0' TO 8.0'
STA. 1304+13.48 TO STA. 1305+12.85

D VARIES FROM 8.0' TO 12.0'
STA. 1307+46.76 TO STA. 1308+45.00

D 12.0' FROM STA. 1308+45.00 TO STA. 1309+77.19

E VARIES FROM 0.0' TO 11.3'
STA. 1304+13.48 TO STA. 1309+77.19

F VARIES FROM 0.0' TO 13.7'
STA. 1309+77.19 TO STA. 1310+97.26

G VARIES FROM 12.0' TO 15.8'
STA. 1309+77.19 TO STA. 1310+97.26

G VARIES FROM 15.8' TO 15.6'
STA. 1310+97.26 TO STA. 1311+07.00

H VARIES FROM 11.3' TO 13.9'
STA. 1309+77.19 TO STA. 1311+07.00

J VARIES FROM 2.5' TO 9.1'
STA. 1309+77.19 TO STA. 1311+07.00

J VARIES FROM 15.6' TO 15.1'
STA. 1311+07.00 TO STA. 1311+41.24

K VARIES FROM 13.9' TO 14.6'
STA. 1311+07.00 TO STA. 1311+41.24

L VARIES FROM 17.0' TO 5.0'
STA. 1311+70.00 TO STA. 1311+90.14

M VARIES FROM 15.1' TO 14.9'
STA. 1311+41.24 TO STA. 1311+70.00

M VARIES FROM 14.9' TO 14.1'
STA. 1311+70.00 TO STA. 1311+90.14

N VARIES FROM 14.6' TO 15.5'
STA. 1311+41.24 TO STA. 1311+90.14

O VARIES FROM 9.1' TO 8.7'
STA. 1313+97.61 TO STA. 1314+16.20

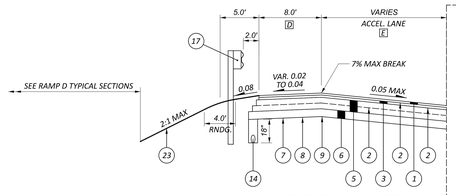
P VARIES FROM 3.7' TO 4.1'
STA. 1313+97.61 TO STA. 1314+16.20

Q VARIES FROM 8.7' TO 8.0'
STA. 1314+16.20 TO STA. 1314+88.42

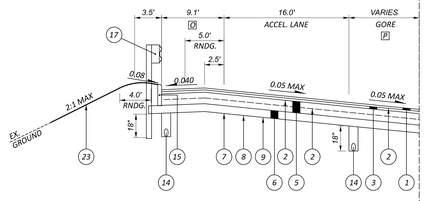
R VARIES FROM 4.1' TO 9.0'
STA. 1314+16.20 TO STA. 1316+63.48

S VARIES FROM 10.0' TO 10.7'
STA. 1311+87.18 TO STA. 1312+13.24

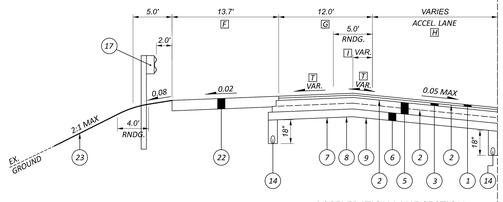
T SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS



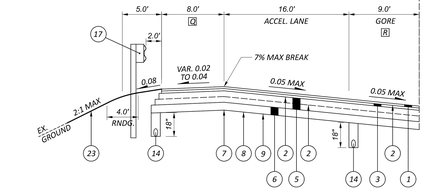
ACCELERATION LANE SECTION
STA. 1304+13.48 TO STA. 1309+77.19



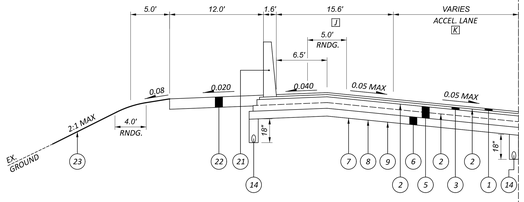
GORE SECTION
STA. 1313+97.61 TO STA. 1314+16.20



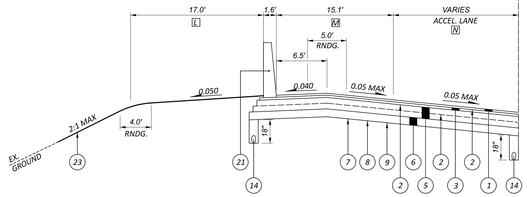
ACCELERATION LANE SECTION
STA. 1309+77.19 TO STA. 1311+07.00



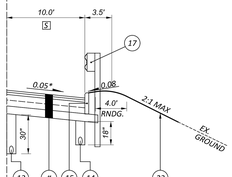
GORE SECTION
STA. 1314+16.20 TO STA. 1317+89.49



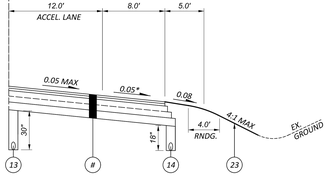
ACCELERATION LANE SECTION
STA. 1311+07.00 TO STA. 1311+41.24



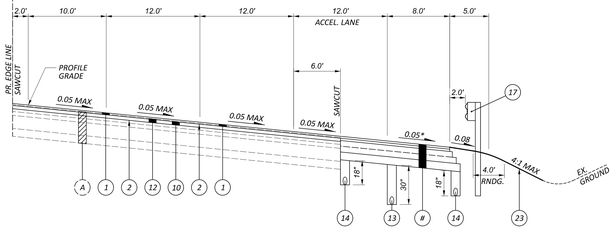
ACCELERATION LANE SECTION
STA. 1311+41.24 TO STA. 1311+90.14



CURBED SECTION
STA. 1310+00.00 TO STA. 1312+13.24
STA. 1314+29.01 TO STA. 1315+00.00



ACCELERATION LANE SECTION
STA. 1325+90.28 TO STA. 1326+00.00



MILL & RESURFACE SECTION
STA. 1326+00.00 TO STA. 1326+50.00

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 3 IMPERIOUS: 66x34 (in.) DATE: 3/31/2026 TIME: 1:03:07 PM XREFDWG: DWGREF_PDF_P_v.dwg PENTBL: DWGREF_Penbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DWGOTOLXD WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
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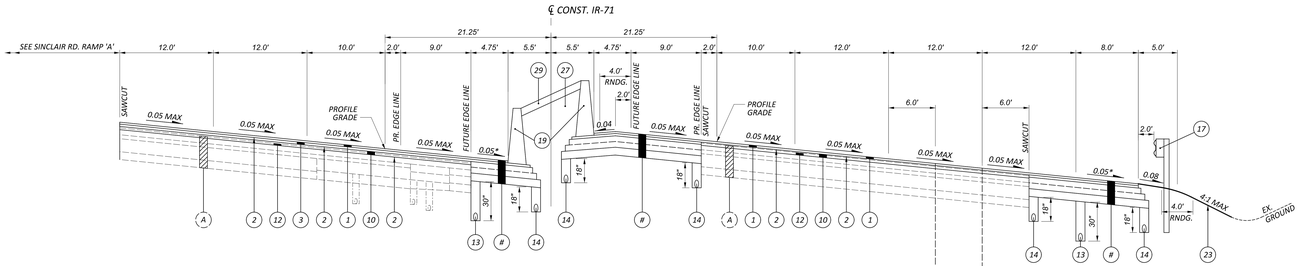
DESIGN AGENCY
Jacobs
DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.16 TOTAL 618

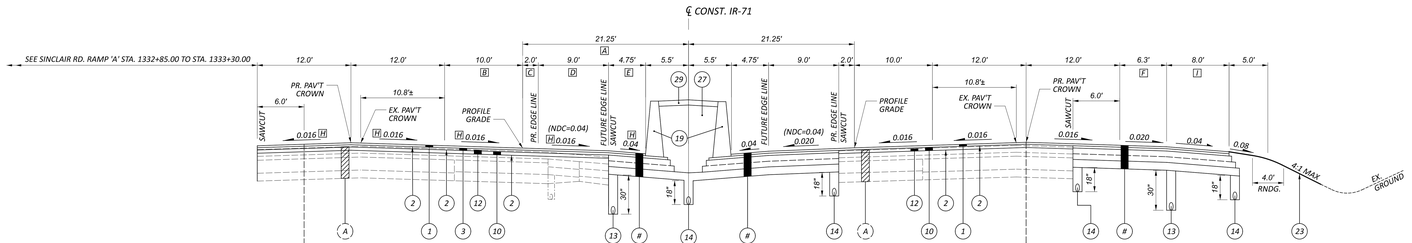
NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - SUPERELEVATED SECTION
STA. 1326+50.00 TO STA. 1332+85.00

[A] VARIES FROM 12.0' TO 8.2'
STA. 1330+00.00 TO STA. 1331+90.00

[B] VARIES FROM 8.2' TO 6.3'
STA. 1331+90.00 TO STA. 1332+85.00



I-71 - NORMAL SECTION
STA. 1332+85.00 TO STA. 1337+45.00

[A] VARIES 21.25' TO 19.4'
STA. 1336+00.00 TO STA. 1337+45.00

[B] VARIES 10.0' TO 10.7'
STA. 1336+00.00 TO STA. 1337+45.00

[C] VARIES 2.0' TO 1.3'
STA. 1336+00.00 TO STA. 1337+45.00

[D] VARIES 9.0' TO 5.7'
STA. 1336+00.00 TO STA. 1337+45.00

[E] VARIES 4.75' TO 6.8'
STA. 1336+00.00 TO STA. 1337+45.00

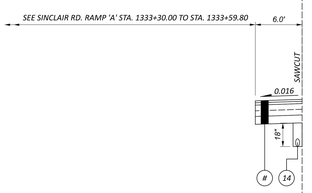
[E] SAWCUT LINE OFFSET CONSTANT 10.25' FROM ℄

[F] VARIES FROM 6.3' TO 0.0'
STA. 1332+85.00 TO STA. 1336+00.00

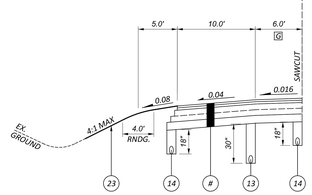
[G] VARIES FROM 18.0' TO 6.0'
STA. 1333+59.80 TO STA. 1334+59.80

[H] SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS

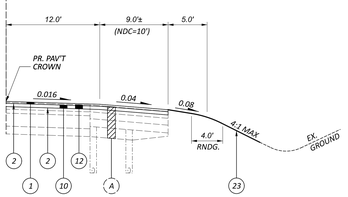
[I] VARIES FROM 8.0' TO 8.8'
STA. 1335+50.00 TO STA. 1336+00.00



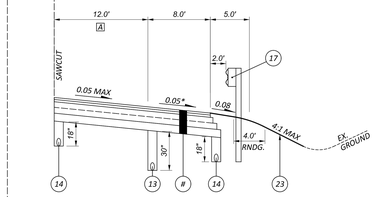
FULL DEPTH SECTION
STA. 1333+30.00 TO STA. 1333+59.80



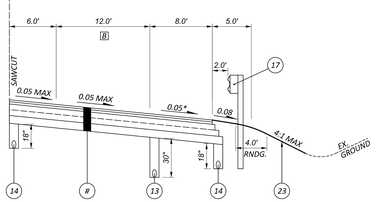
SHOULDER SECTION
STA. 1333+59.80 TO STA. 1337+45.00



SHOULDER SECTION
STA. 1336+00.00 TO STA. 1337+45.00



ACCELERATION LANE SECTION
STA. 1330+00.00 TO STA. 1331+90.00



ACCELERATION LANE SECTION
STA. 1331+90.00 TO STA. 1332+85.00

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

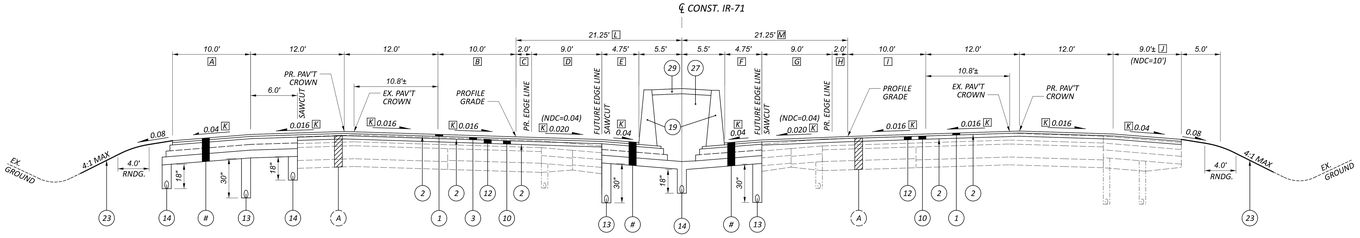
DESIGN AGENCY
Jacobs

DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.17
TOTAL 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 4 IMPERIOUS: 66x34 (in.) DATE: 3/31/2026 TIME: 10:08 AM USER: CHRISTOPHER_PAUL.LEAR File: C:\Users\christopher.lear\Jacobs\Desktop\Working Files\FRA-71-19.10 Typical Sections Proposed.dgn WORKSPACE: C:\Users\christopher.lear\Jacobs\Desktop\Working Files\OpenRoads Standards\OpenRoads Standards.cwspace WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - NORMAL SECTION
STA. 1337+45.00 TO STA. 1340+00.00

[A] VARIES FROM 10.0' TO 11.4'
STA. 1338+25.51 TO STA. 1340+00.00

[B] VARIES FROM 10.7' TO 12.0'
STA. 1337+45.00 TO STA. 1340+00.00

[C] VARIES FROM 1.3' TO 0.0'
STA. 1337+45.00 TO STA. 1340+00.00

[D] VARIES FROM 5.7' TO 0.0'
STA. 1337+45.00 TO STA. 1340+00.00

[E] VARIES FROM 6.8' TO 10.0'
STA. 1337+45.00 TO STA. 1340+00.00

[F] SAWCUT LINE OFFSET CONSTANT 10.25' FROM ℄

[F] VARIES FROM 4.75' TO 8.3'
STA. 1338+00.00 TO STA. 1340+00.00

[G] VARIES FROM 9.0' TO 3.9'
STA. 1338+00.00 TO STA. 1340+00.00

[H] VARIES FROM 2.0' TO 0.9'
STA. 1338+00.00 TO STA. 1340+00.00

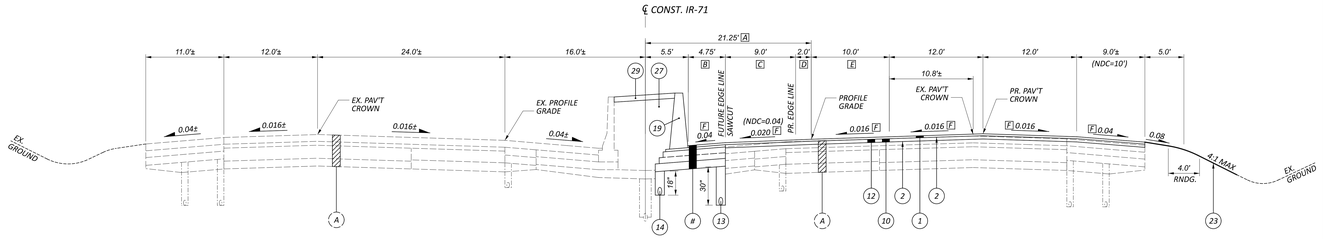
[I] VARIES FROM 10.0' TO 11.1'
STA. 1338+00.00 TO STA. 1340+00.00

[J] VARIES FROM 9.0'± TO 10.6'±
STA. 1338+00.00 TO STA. 1340+00.00

[K] SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS

[L] VARIES FROM 19.4' TO 16.0'
STA. 1336+00.00 TO STA. 1340+00.00

[M] VARIES FROM 21.25' TO 18.5'
STA. 1338+00.00 TO STA. 1340+00.00



I-71 - NORMAL SECTION
STA. 1340+00.00 TO STA. 1341+50.00

[A] VARIES FROM 18.5' TO 16.5'
STA. 1340+00.00 TO STA. 1341+50.00

[B] VARIES FROM 8.3' TO 11.0'
STA. 1340+00.00 TO STA. 1341+50.00

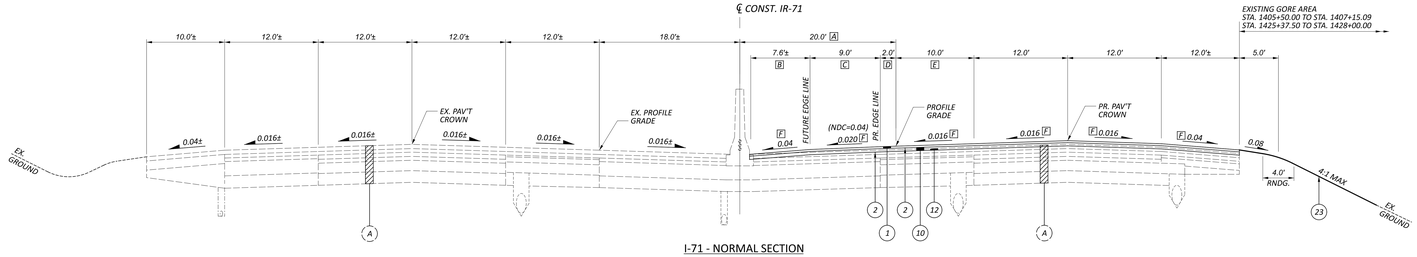
[B] SAWCUT LINE OFFSET CONSTANT 10.25' FROM ℄

[C] VARIES FROM 3.9' TO 0.0'
STA. 1340+00.00 TO STA. 1341+50.00

[D] VARIES FROM 0.9' TO 0.0'
STA. 1340+00.00 TO STA. 1341+50.00

[E] VARIES FROM 11.1' TO 12.0'
STA. 1340+00.00 TO STA. 1341+50.00

[F] SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS



I-71 - NORMAL SECTION
STA. 1405+50.00 TO STA. 1407+37.00
STA. 1425+37.50 TO STA. 1428+00.00

[A] VARIES FROM 18.0' TO 20.0'
STA. 1405+50.00 TO STA. 1407+37.00

[A] VARIES FROM 20.0' TO 19.0'
STA. 1426+00.00 TO STA. 1428+00.00

[B] VARIES FROM 18.0' TO 7.6'
STA. 1405+50.00 TO STA. 1407+37.00

[B] VARIES FROM 7.6' TO 16.4'
STA. 1426+00.00 TO STA. 1428+00.00

[C] VARIES FROM 0.0' TO 9.0'
STA. 1405+50.00 TO STA. 1407+37.00

[C] VARIES FROM 9.0' TO 0.0'
STA. 1426+00.00 TO STA. 1428+00.00

[D] VARIES FROM 0.0' TO 2.0'
STA. 1405+50.00 TO STA. 1407+37.00

[D] VARIES FROM 2.0' TO 0.0'
STA. 1426+00.00 TO STA. 1428+00.00

[E] VARIES FROM 12.0' TO 10.0'
STA. 1405+50.00 TO STA. 1407+37.00

[E] VARIES FROM 10.0' TO 12.0'
STA. 1426+00.00 TO STA. 1428+00.00

[F] SEE PAVEMENT DETAIL SHEETS FOR CROSS SLOPE TRANSITIONS

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 5 IMPERIOUS: 66x34 (in.) DATE: 1/31/2026 TIME: 1:03:09 PM XREFDWG: DWGPT_PSF_P-LAYOUT_PAVTBL.DWGPT_Pavtbl USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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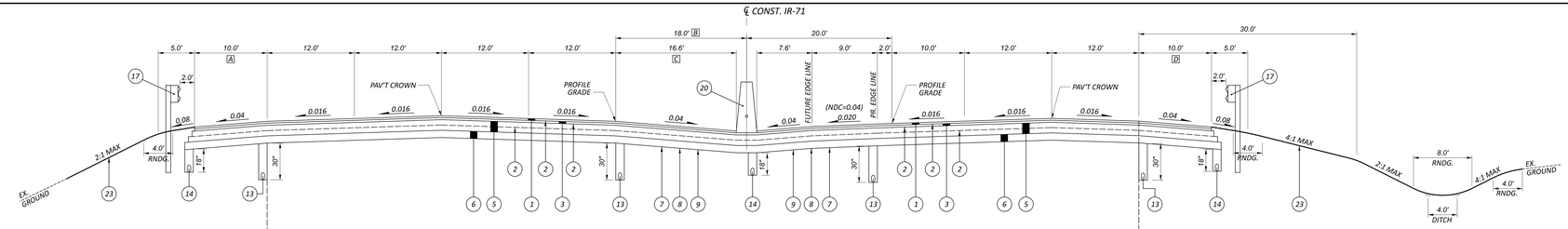
DESIGN AGENCY
Jacobs

DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.18 TOTAL 618

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - NORMAL SECTION
STA. 1407+37.00 TO STA. 1425+37.50
STA. 1415+09.00 TO STA. 1417+01.00 (S.R. 161 BRIDGE)

A VARIES FROM 10.8' TO 10.0'
STA. 1407+37.00 TO STA. 1408+00.00

A VARIES FROM 10.0' TO 12.0'
STA. 1411+14.04 TO STA. 1411+64.04

A VARIES FROM 12.6' TO 10.0'
STA. 1417+68.95 TO STA. 1418+00.81

B VARIES FROM 18.0' TO 14.0'
STA. 1421+00.00 TO STA. 1423+96.07

C VARIES FROM 16.6' TO 12.6'
STA. 1421+00.00 TO STA. 1423+96.07

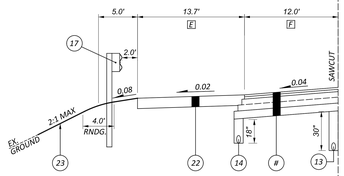
D VARIES FROM 11.7' TO 10.0'
STA. 1407+37.00 TO STA. 1407+80.64

E VARIES FROM 0.0' TO 13.7'
STA. 1413+14.29 TO STA. 1414+14.04

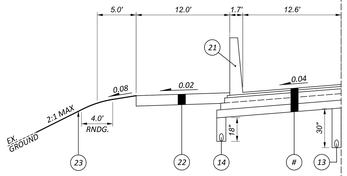
F VARIES FROM 12.0' TO 12.6'
STA. 1413+14.29 TO STA. 1414+24.04

G VARIES FROM 17.0' TO 5.0'
STA. 1414+90.00 TO STA. 1415+09.04

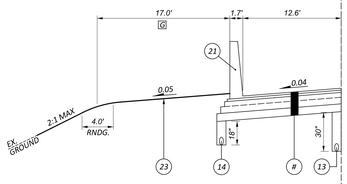
G 5.0' FROM STA. 1417+00.95 TO STA. 1417+49.95



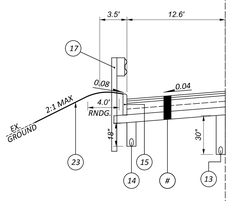
PULLOFF SECTION
STA. 1413+14.29 TO STA. 1414+24.04



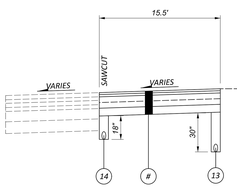
PULLOFF SECTION
STA. 1414+24.04 TO STA. 1414+59.04



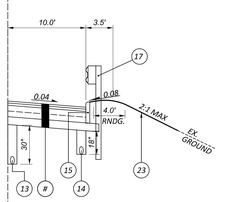
BARRIER SECTION
STA. 1414+59.04 TO STA. 1415+09.04
STA. 1417+00.95 TO STA. 1417+49.95



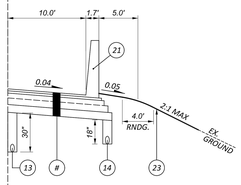
CURB SECTION
STA. 1417+49.95 TO STA. 1417+68.95



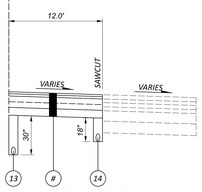
GORE SECTION
STA. 1424+35.70 TO STA. 1425+37.50



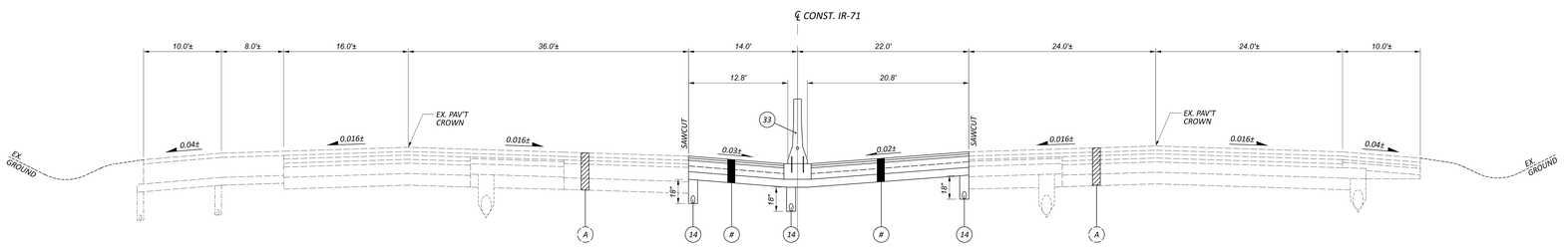
CURB SECTION
STA. 1414+41.04 TO STA. 1414+60.04



BARRIER SECTION
STA. 1414+60.04 TO STA. 1415+09.04
STA. 1417+00.95 TO STA. 1417+49.95



GORE SECTION
STA. 1425+09.50 TO STA. 1425+37.50



I-71 - NORMAL SECTION
STA. 1442+00.00 TO STA. 1447+00.00

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

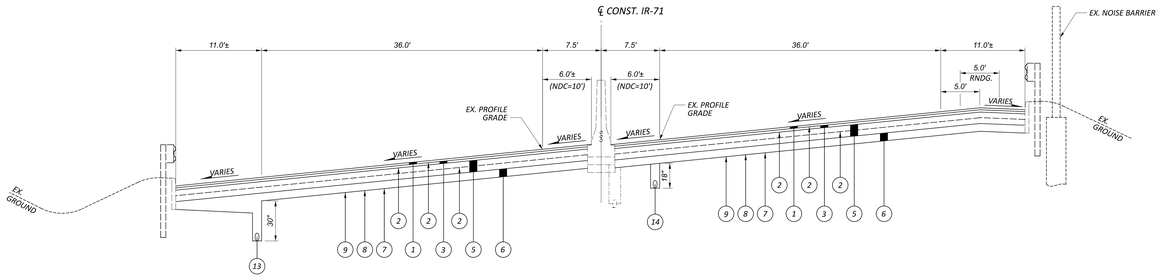
DESIGN AGENCY
Jacobs

DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.19 TOTAL 618

FRA-71-19.10

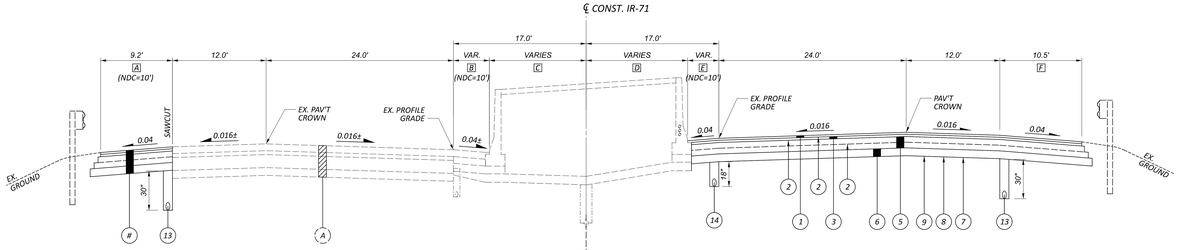
MODEL: Proposed Typical Sections - Sheet 6 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 1:03:19 PM JOTDW: DWGP_PDF_P-LetterTB_PENTBL: DWGP_Penlist USER: Chris.Lawrence@jacobs.com WORKSPACE: DWGOTCX01 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Ohio\109164_I-71 Widening Phase 1\Design\Roadway\Typical Sections\Proposed Typical Sections - Sheet 6.dgn

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



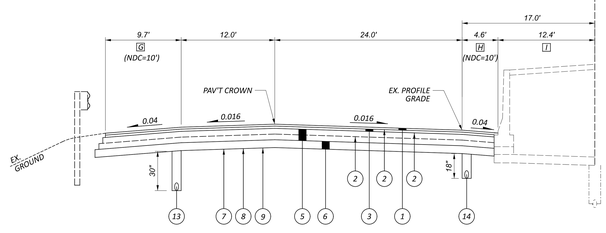
I-71 - SUPERELEVATED SECTION

STA. 1113+00.00 TO STA. 1113+28.70 (LEFT)
STA. 1113+03.00 TO STA. 1113+28.70 (RIGHT)
(HIAWATHA PARK DRIVE BRIDGE: STA. 1113+28.70 TO STA. 1115+44.85)
STA. 1115+44.85 TO STA. 1115+73.00 (LEFT)
STA. 1115+44.85 TO STA. 1115+70.00 (RIGHT)



I-71 - NORMAL SECTION

STA. 1255+73.00 TO STA. 1256+21.72 (RIGHT)
STA. 1256+00.00 TO STA. 1256+21.72 (LEFT)
(COOKE ROAD BRIDGE: STA. 1256+21.72 TO STA. 1258+46.27)
STA. 1258+46.27 TO STA. 1258+67.00 (RIGHT)
STA. 1258+46.27 TO STA. 1258+94.00 (LEFT)



FULL DEPTH SECTION

STA. 1256+00.00 TO STA. 1256+21.72
STA. 1258+46.27 TO STA. 1258+94.00

A VARIES FROM 9.2' TO 9.8'
STA. 1255+86.40 TO STA. 1256+00.00

B VARIES FROM 5.6' TO 5.4'
STA. 1255+86.40 TO STA. 1256+00.00

C VARIES FROM 11.4' TO 11.6'
STA. 1255+86.40 TO STA. 1256+00.00

D VARIES FROM 11.9' TO 12.8'
STA. 1255+73.00 TO STA. 1256+16.83

D VARIES FROM 12.8' TO 12.1'
STA. 1258+41.88 TO STA. 1258+67.00

E VARIES FROM 5.1' TO 4.2'
STA. 1255+73.00 TO STA. 1256+16.83

E VARIES FROM 4.2' TO 4.9'
STA. 1258+41.88 TO STA. 1258+67.00

F VARIES FROM 10.5' TO 10.7'
STA. 1255+73.00 TO STA. 1255+99.38

F VARIES FROM 12.0' TO 10.3'
STA. 1258+23.90 TO STA. 1258+67.00

G VARIES FROM 9.8' TO 11.5'
STA. 1256+00.00 TO STA. 1256+44.41

G VARIES FROM 10.7' TO 10.1'
STA. 1258+68.21 TO STA. 1258+94.00

H VARIES FROM 5.4' TO 4.6'
STA. 1256+00.00 TO STA. 1256+26.46

H VARIES FROM 4.6' TO 5.7'
STA. 1258+50.54 TO STA. 1258+94.00

I VARIES FROM 11.6' TO 12.4'
STA. 1256+00.00 TO STA. 1256+26.46

I VARIES FROM 12.4' TO 11.3'
STA. 1258+50.54 TO STA. 1258+94.00

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
I-71

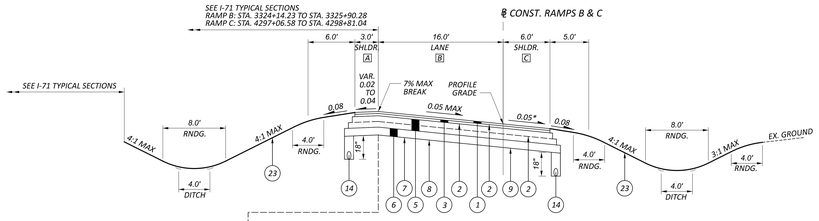
DESIGN AGENCY
Jacobs

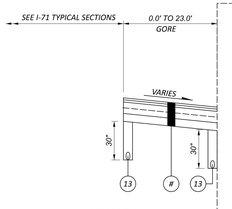
DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.20 TOTAL 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 7 IMPERIOUS: 66x34 (in.) DATE: 3/31/2026 TIME: 10:21:13 AM JOTDW: ONDOT_PDF_P_v4.ctb PENTBL: ONDOT_Pen.tbl USER: Chris.Lawwood@jacobs.com WORKSPACE: OHDOTCAD1 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Columbus\Ohio Rail Connect\Roadway\Sheets\Typical Sections\FRA-71-19.10.dgn

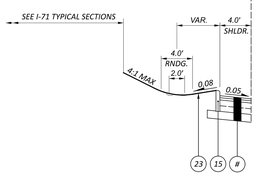
NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.





GORE SECTION

RAMP B: STA. 3321+32.65 TO STA. 3324+14.23
RAMP C: STA. 4298+81.04 TO STA. 4301+60.79



CURBED SECTION

RAMP B: STA. 3319+50.00 TO STA. 3321+32.65

SUPERELEVATED SECTION: MORSE RD. RAMPS B & C

MORSE RD. RAMP B: STA. 3318+00.00 TO STA. 3325+90.28

[A] VARIES FROM 3.0' TO 4.0'
STA. 3319+25.00 TO STA. 3319+50.00

[B] VARIES FROM 16.0' TO 12.0'
STA. 3324+14.23 TO STA. 3325+90.28

[C] VARIES FROM 8.2' TO 6.0'
STA. 3318+00.00 TO STA. 3318+56.06

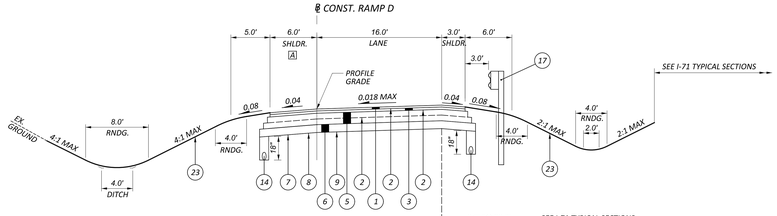
[C] VARIES FROM 6.0' TO 8.0'
STA. 3324+65.45 TO STA. 3325+90.28

MORSE RD. RAMP C: STA. 4297+06.58 TO STA. 4305+00.00

[A] VARIES FROM 3.0' TO 3.5'
STA. 4304+50.00 TO STA. 4305+00.00

[B] VARIES FROM 12.0' TO 16.0'
STA. 4297+06.58 TO STA. 4298+81.04

[C] 8.0' FROM STA. 4297+14.95 TO STA. 4305+00.00



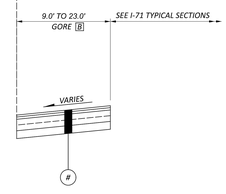
SUPERELEVATED SECTION: MORSE RD. RAMP D

STA. 5300+73.20 TO STA. 5307+00.00

[A] VARIES FROM 8.0' TO 6.0'
STA. 5300+73.20 TO STA. 5301+23.21

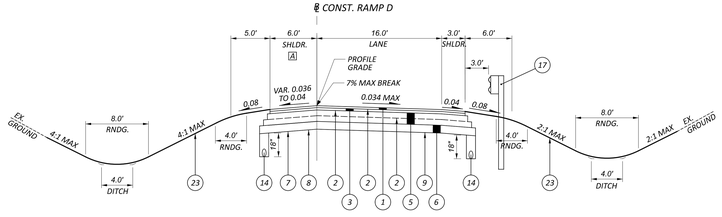
[A] VARIES FROM 6.0' TO 8.3'
STA. 5308+40.00 TO STA. 5309+00.00

[B] SEE PAVEMENT DETAIL SHEETS FOR GRADE BREAK DETAILS WITHIN THE GORE AREA.



GORE SECTION

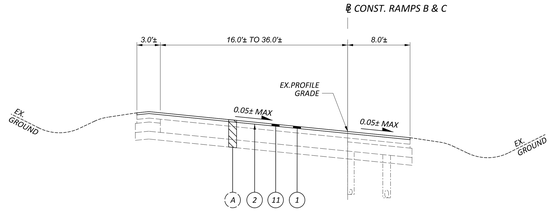
STA. 5300+73.20 TO STA. 5303+84.94



SUPERELEVATED SECTION: MORSE RD. RAMP D

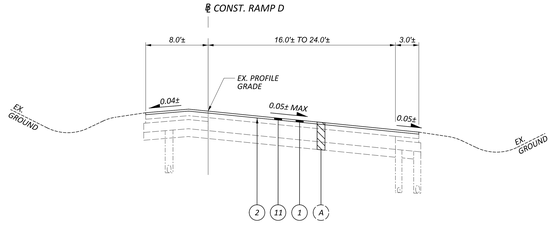
STA. 5307+00.00 TO STA. 5310+00.00

[A] VARIES FROM 6.0' TO 8.4'
STA. 5309+35.00 TO STA. 5310+00.00



MILL & RESURFACE RAMP SECTION

MORSE RD, RAMP B - STA. 3314+54.15 TO STA. 3318+00.00
MORSE RD, RAMP C - STA. 4305+00.00 TO STA. 4311+61.13



MILL & RESURFACE RAMP SECTION

MORSE RD, RAMP D - STA. 5310+00.00 TO STA. 5312+74.96

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
MORSE ROAD RAMPS

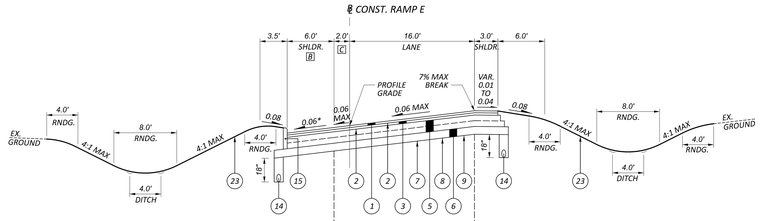
DESIGN AGENCY
Jacobs

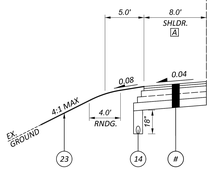
DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.21 TOTAL: 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 8 REFERSETS: 66x34 (in.) DATE: 3/31/2026 TIME: 10:21:28 AM XREFDWG: DWGREF_PDF_P-LAYOUT_PXHTBL: DWGREF_PXHTBL: USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\Projects\Morse Road Interchange\Roadway\Typical Sections\Proposed Typical Sections.dgn

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.





SHOULDER SECTION
STA. 6317+89.49 TO STA. 6320+93.86

SUPERELEVATED SECTION: SINCLAIR RD. RAMP E
STA. 6317+89.49 TO STA. 6324+28.39

A VARIES FROM 8.0' TO 6.0'
STA. 6320+30.83 TO STA. 6320+93.86

B VARIES FROM 6.0' TO 3.0'
STA. 6323+63.40 TO STA. 6324+13.40

B 3.0' FROM STA. 6324+13.40 TO STA. 6324+28.39

C 0.0' FROM STA. 6317+89.49 TO STA. 6320+30.83

C VARIES FROM 0.0' TO 2.0'
STA. 6320+30.83 TO STA. 6322+30.83

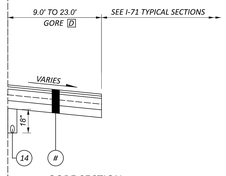
C VARIES FROM 2.0' TO 0.0'
STA. 6323+63.40 TO STA. 6324+13.40

C 0.0' FROM STA. 6324+13.40 TO STA. 6324+28.39

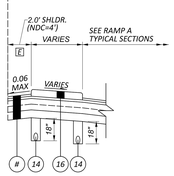
D SEE PAVEMENT DETAIL SHEETS FOR GRADE BREAK DETAILS WITHIN THE GORE AREA

F 3.0' FROM STA. 6323+50.93 TO STA. 6323+53.35

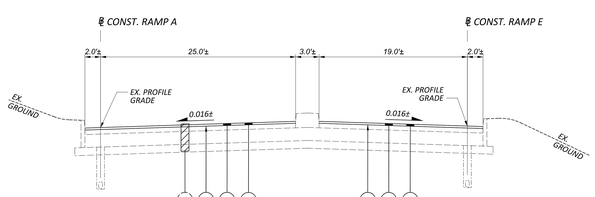
F VARIES FROM 3.0' TO 2.0'
STA. 6323+53.35 TO STA. 6324+08.97



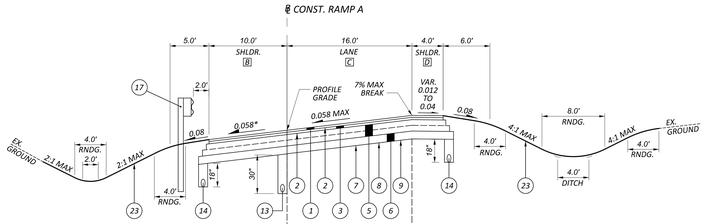
GORE SECTION
STA. 6317+89.49 TO STA. 6320+97.75

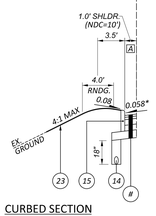


TRAFFIC ISLAND SECTION
STA. 6323+50.93 TO STA. 6324+28.39



MILL & RESURFACE TWO-WAY RAMP SECTION
SINCLAIR RD, RAMP A - STA. 2319+50.00 TO STA. 2321+25.00
SINCLAIR RD, RAMP E - STA. 6326+03.32 TO STA. 6324+28.39





CURBED SECTION
STA. 2321+12.50 TO STA. 2322+40.00

SUPERELEVATED SECTION: SINCLAIR RD. RAMP A
STA. 2321+12.50 TO STA. 2326+57.90

A VARIES FROM 1.0' TO 1.7'
STA. 2322+19.63 TO STA. 2322+40.00

B VARIES FROM 1.7' TO 10.0'
STA. 2322+40.00 TO STA. 2325+00.00

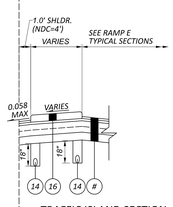
C 24.0' FROM STA. 2321+12.50 TO STA. 2323+57.90

C VARIES FROM 24.0' TO 16.0'
STA. 2323+57.90 TO STA. 2325+33.93

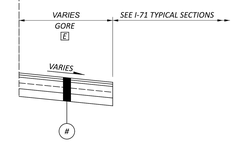
D 1.0' FROM STA. 2322+09.50 TO STA. 2322+19.63

D VARIES FROM 1.0' TO 4.0'
STA. 2322+19.63 TO STA. 2322+88.90

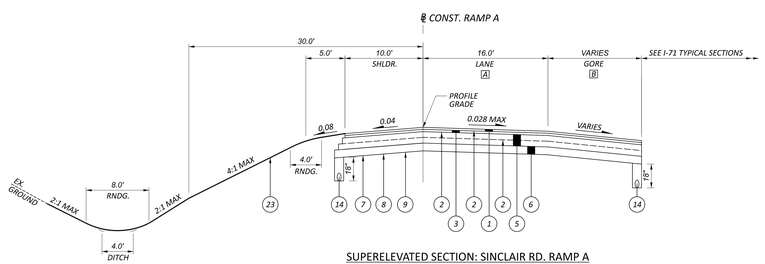
E VARIES FROM 20.0' TO 12.8'
STA. 2325+58.53 TO STA. 2326+57.90



TRAFFIC ISLAND SECTION
STA. 2321+12.50 TO STA. 2322+09.50



GORE SECTION
STA. 2325+58.53 TO STA. 2326+57.90



SUPERELEVATED SECTION: SINCLAIR RD. RAMP A
STA. 2326+57.90 TO STA. 2333+59.80

A VARIES FROM 16.0' TO 12.0'
STA. 2330+47.42 TO STA. 2333+59.80

B VARIES FROM 12.8' TO 0.0'
STA. 2326+57.90 TO STA. 2330+47.42

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
SINCLAIR ROAD RAMPS

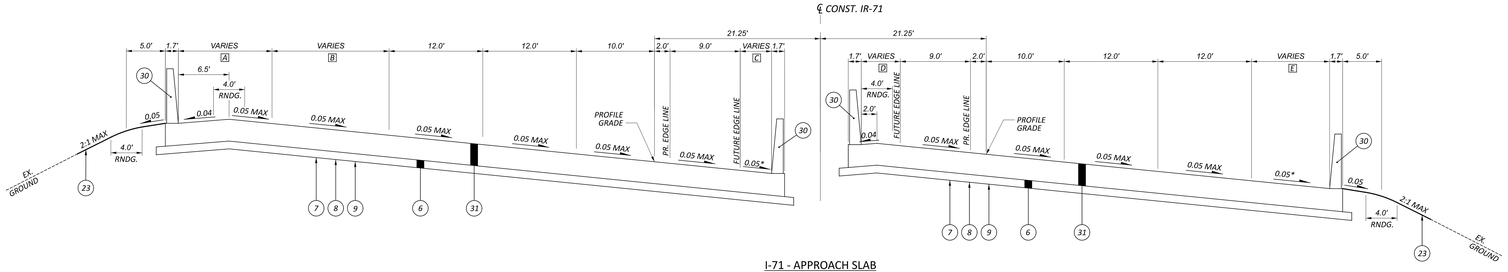
DESIGN AGENCY
Jacobs

DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.22 TOTAL: 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 9 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 1:03:31 PM USERNAME: cmlawrence DESIGN: ORIGIN_PRT_P_v.dwg PRINTED BY: Chris Lawrence@jacobs.com WORKSPACE: OHDOTCAD WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
ACTIVE: Z:\Projects\Sinclair Road Ramps\Roadway\Typical Sections\Sheet 9 - Proposed Typical Sections.dgn

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



I-71 - APPROACH SLAB
SUPERELEVATED SECTION

STA. 1312+02.91 TO STA. 1312+32.79 (MORSE RD BRIDGE)
STA. 1313+84.83 TO STA. 1314+14.97 (MORSE RD BRIDGE)

A VARIES FROM 14.1' TO 12.7'
STA. 1311+90.14 TO STA. 1312+19.48

A VARIES FROM 9.1' TO 9.1'
STA. 1313+68.26 TO STA. 1313+97.61

B VARIES FROM 15.6' TO 16.2'
STA. 1311+92.22 TO STA. 1312+21.45

B VARIES FROM 19.1' TO 19.7'
STA. 1313+70.03 TO STA. 1313+99.45

C VARIES FROM 4.0' TO 4.7'
STA. 1312+01.34 TO STA. 1312+31.13

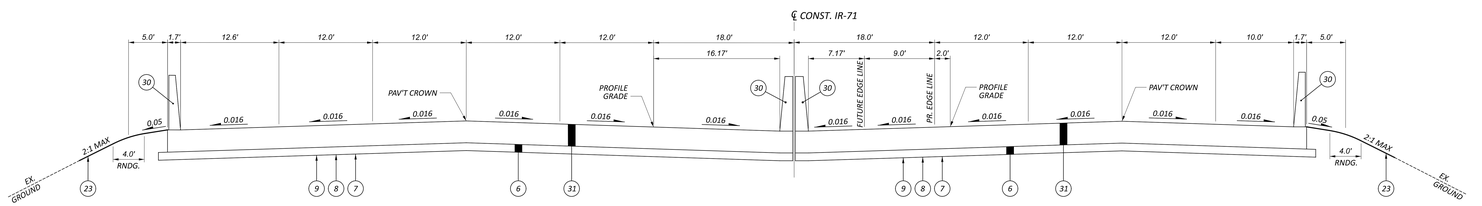
C VARIES FROM 4.8' TO 4.1'
STA. 1313+82.76 TO STA. 1314+12.81

D VARIES FROM 6.7' TO 6.0'
STA. 1312+03.45 TO STA. 1312+33+.48

D VARIES FROM 6.0' TO 6.8'
STA. 1313+85.69 TO STA. 1314+15.71

E VARIES FROM 10.7' TO 11.4'
STA. 1312+13.24 TO STA. 1312+43.76

E VARIES FROM 10.9' TO 10.0'
STA. 1313+98.49 TO STA. 1314+29.01



I-71 - APPROACH SLAB

STA. 1415+09.04 TO STA. 1415+39.04 (SR 161 BRIDGE)
STA. 1416+70.95 TO STA. 1417+00.95 (SR 161 BRIDGE)

* 0.04 OR RATE OF SUPER IF GREATER

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
APPROACH SLABS

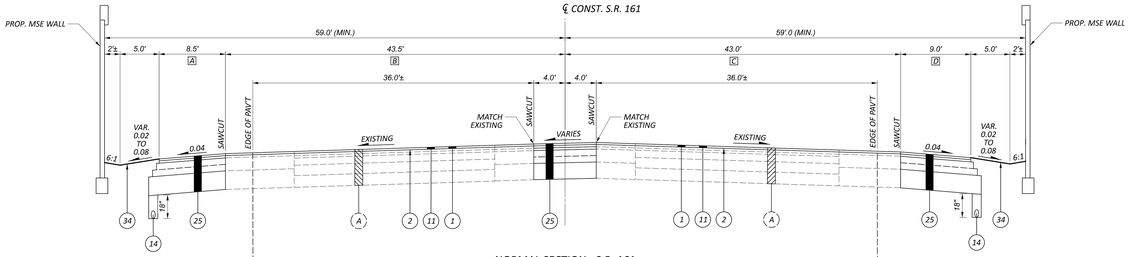
FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 23 (MARKER25 46x44 in.) DATE: 3/27/2026 7:44E: 7:23:13 PM JEFFREY.CHADY_PW.SM USER: Chris.Lawrence1@jacobs.com WORKSPACE: ORIGITOUCH WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\Projects\Transportation\Fra-71-19.10\Roadway\Typical Sections\Proposed Typical Sections.dgn

DESIGN AGENCY
Jacobs

DESIGNER
MCK
REVIEWER
BAP 03/24/26
PROJECT ID
109164
SHEET P.23 TOTAL 618

NOTE:
SEE SHEET P.14 FOR PROPOSED TYPICAL SECTION LEGEND.



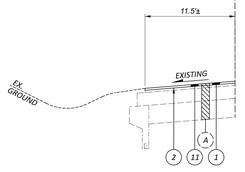
NORMAL SECTION - S.R. 161
STA. 48+56.00 TO STA. 51+43.00

A VARIES FROM 8.0' TO 7.4'
STA. 50+75.00 TO STA. 51+43.00

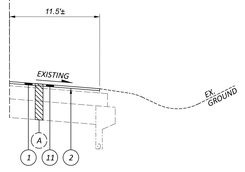
B VARIES FROM 43.5' TO 44.6'
STA. 50+75.00 TO STA. 51+43.00

C VARIES FROM 44.5' TO 43.0'
STA. 48+56.00 TO STA. 49+25.00

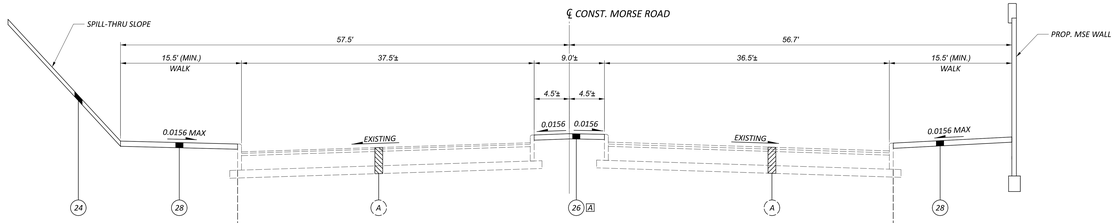
D VARIES FROM 7.5' TO 9.0'
STA. 50+75.00 TO STA. 51+43.00



EXISTING SHOULDER SECTION
STA. 48+56.00 TO STA. 48+75.00



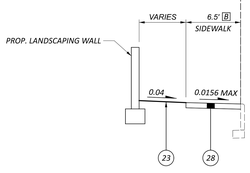
EXISTING SHOULDER SECTION
STA. 51+11.21 TO STA. 51+43.00



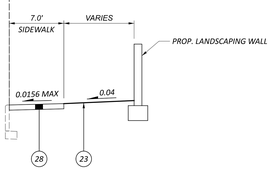
NORMAL SECTION - MORSE RD.
STA. 48+45.00 TO STA. 51+40.00

A FROM STA. 49+15.00 TO STA. 50+78.00

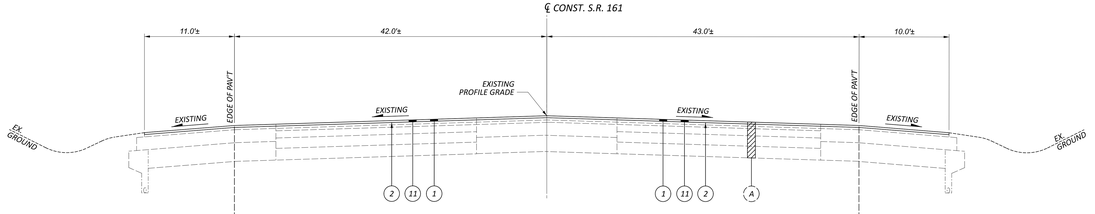
B 10.0' FROM STA. 51+14.17 TO STA. 51+40.00



SIDEWALK SECTION
STA. 48+45.00 TO STA. 48+86.02
STA. 51+14.17 TO STA. 51+40.00



SIDEWALK SECTION
STA. 48+45.00 TO STA. 48+64.00
STA. 50+96.17 TO STA. 51+40.00



NORMAL SECTION - S.R. 161
STA. 46+18.00 TO STA. 48+56.00
STA. 51+43.00 TO STA. 53+62.00

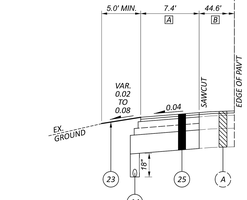
A VARIES FROM 7.4' TO 5.3'
STA. 51+43.00 TO STA. 52+67.01

A VARIES FROM 5.3' TO 4.2'
STA. 52+67.01 TO STA. 53+62.00

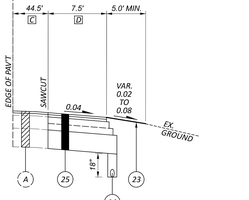
B VARIES FROM 44.6' TO 47.0'
STA. 51+43.00 TO STA. 53+62.00

C VARIES FROM 47.5' TO 44.5'
STA. 47+19.00 TO STA. 48+56.00

D VARIES FROM 4.5' TO 7.5'
STA. 47+19.00 TO STA. 48+56.00



EXISTING SHOULDER SECTION
STA. 51+43.00 TO STA. 52+87.00



EXISTING SHOULDER SECTION
STA. 47+19.00 TO STA. 48+56.00

(#) SEE SHEET P.25 FOR PROPOSED PAVEMENT BUILDUP DETAILS

PROPOSED TYPICAL SECTIONS
SR 161

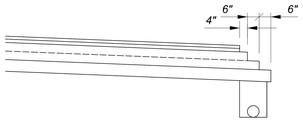
DESIGN AGENCY
Jacobs

DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.24 TOTAL: 618

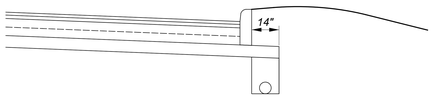
FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 11 PAPERSIZE: 66x44 in | DATE: 3/17/2026 7:44:11 PM BY: PETERS, CHRISTOPHER J. (CPETERS) FILENAME: C:\Users\cpeters\ODOT\Jacobs\Projects - Documents\Active\109164 - SR 161 Roundabout\Roadway\Typical Sections\Typical Sections.dgn
ACTIVE: Proposed Typical Sections - Sheet 11 | REFERENCES: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOPHER J. (CPETERS) WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

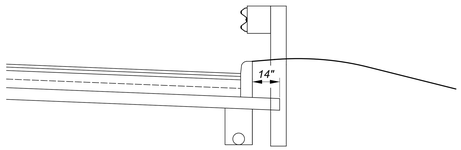
NOTE:
SEE SHEET 14 FOR PROPOSED TYPICAL SECTION LEGEND.



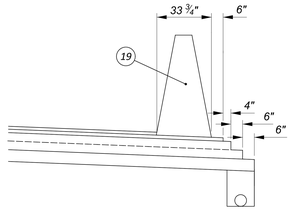
SHOULDER EDGE
STEP DETAIL



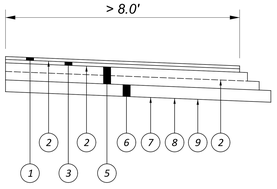
CURBED EDGE
STEP DETAIL



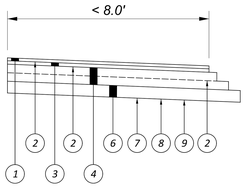
CURBED EDGE STEP
DETAIL WITH GUARDRAIL



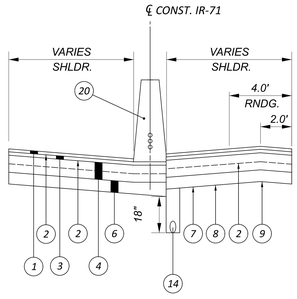
SINGLE SLOPE, TYPE B1 EDGE
STEP DETAIL



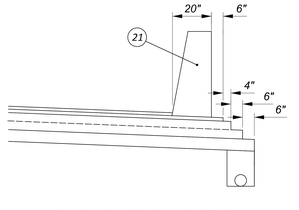
FULL DEPTH PAVEMENT - GREATER THAN OR EQUAL TO 8' WIDTH
BUILDUP DETAIL



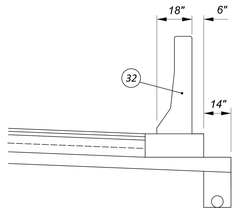
FULL DEPTH PAVEMENT - WIDENING LESS THAN 8' WIDTH
BUILDUP DETAIL



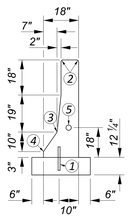
MEDIAN BARRIER REPLACEMENT DETAIL
SUPERELEVATION SECTION



SINGLE SLOPE, TYPE D EDGE
STEP DETAIL



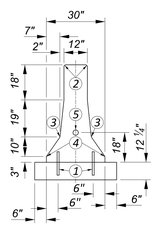
NJ BARRIER, TYPE D-50 EDGE
STEP DETAIL



NOTES:

1. NO. 8 DEFORMED STEEL BARS, 12" LONG @ 4' CENTERS. OMIT DOWELS WHEN TOP IS CONSTRUCTED INTEGRAL WITH THE BASE.
2. 1" RADIUS OR 3/4" CHAMFER
3. PERMISSIBLE 10" RADIUS
4. PERMISSIBLE 1" RADIUS
5. RACEWAY: THE CONTRACTOR SHALL ENSURE THAT THE ELECTRICAL RACEWAY IS CLEAR OF INTERNAL OBSTRUCTIONS. COST OF THE 4" PVC RACWAY FOR LIGHTING SHALL BE INCLUDED IN THE UNIT COST PER FOOT FOR ITEM 622 - BARRIER MISC.: NJ BARRIER, TYPE D-50

ITEM 622 - BARRIER MISC.: NJ BARRIER, TYPE D-50
DETAIL



NOTES:

1. NO. 8 DEFORMED STEEL BARS, 12" LONG @ 4' CENTERS. OMIT DOWELS WHEN TOP IS CONSTRUCTED INTEGRAL WITH THE BASE.
2. 1" RADIUS OR 3/4" CHAMFER
3. PERMISSIBLE 10" RADIUS
4. PERMISSIBLE 1" RADIUS
5. RACEWAY: THE CONTRACTOR SHALL ENSURE THAT THE ELECTRICAL RACEWAY IS CLEAR OF INTERNAL OBSTRUCTIONS. COST OF THE 4" PVC RACWAY FOR LIGHTING SHALL BE INCLUDED IN THE UNIT COST PER FOOT FOR ITEM 622 - BARRIER MISC.: NJ BARRIER, TYPE B-50

ITEM 622 - BARRIER MISC.: NJ BARRIER, TYPE B-50
DETAIL

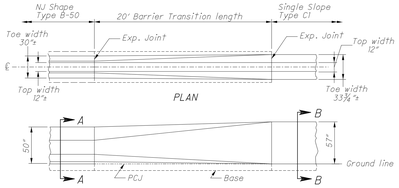
PROPOSED TYPICAL SECTIONS
DETAILS

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 12 PAPERSIZE: 66x44 in | DATE: 3/31/2026 7:46:13 PM BY:ERIC.CHADY_PW | 2-plot_PENTBL: CHADY_PW.ctb | USER: Chris.Lawrence1@jacobs.com WORKSPACE: D:\ROUTE\71\FRA-71-19.10\Roadway\Typical Sections\Sheet 12.dgn | WORKSET: 109164 | PRODUCT: OpenRoadDesigner 24.00.02.25
ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF JACOBS AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF JACOBS.

DESIGN AGENCY
Jacobs

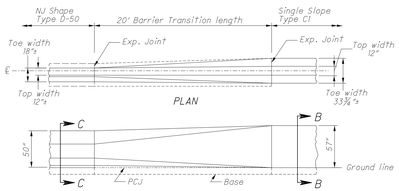
DESIGNED: MCK
REVIEWED: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.25 TOTAL: 618



Standard tall barrier connection

ELEVATION

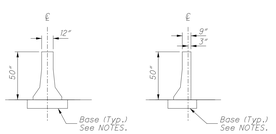
NJ, B-50 TO SS, C1 TRANSITION



Standard tall barrier connection

ELEVATION

NJ, D-50 TO SS, B1 TRANSITION

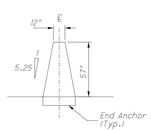


A-A
Types B-50

C-C
Type D-50

NJ SHAPE SECTIONS

See Plan Insert sheets for specific NJ Shape Concrete barrier details.



B-B
Types B1 & C1

SINGLE SLOPE SECTIONS

See SCD RM-4.3 and RM-4.5 for specific Single Slope concrete barrier details.

NOTES

GENERAL: This Insert details the Barrier Transition, to connect existing NJ Concrete Barrier (safety shape) To a new run of Single Slope Concrete Barrier at locations shown on the plans. For NJ barrier shape and other details see the respective plan insert sheets. For Single Slope barrier details, see SCD RM-4.3 (RM-4.5 for Type D).

ADJACENT CONCRETE BARRIER RUNS: Remove any tapered end sections, impact attenuators, or other guardrail hardware from existing barrier end. The barrier to barrier transition is not intended to be used at transition sections (those shown on SCD RM-4.4), inlets, or on Type C or C1 Barrier. If proposed adjacent single slope barrier is Type A or A1, the Barrier Transiton should contain horizontal reinforcing steel similar to that required in the respective single slope barrier. Reinforcement is not shown and should be detailed separately. The adjacent single slope end should be Terminated with a reinforced End Anchor as detailed on The SCDs.

BARRIER FACE TRANSITION: To prevent vehicle snagging, a smooth transition from the safety shape face To the single slope face is made over a 20' length. The actual shape of the transition is dependent on both the adjacent NJ barrier and the single slope barrier Types, as detailed on the plans. The contractor and Engineer will agree on a construction method to ensure a smooth barrier face.

MATERIALS: Materials are same for those shown on RM-4.3 and RM-4.5, except that cast-in-place is the only acceptable method. Edges may be chamfered or radiused as shown on those drawings.

CONCRETE BASE: Construct base as shown on the NJ shape insert sheets, including the methods detailing the footing joint, Permissible Construction Joint (PCJ), and Doweling requirements. The width of the base matches the existing NJ barrier.

JOINTS: Construct joints as shown on respective barrier drawings.

RACEWAYS: When specified, place raceway(s) to match raceway elevation in adjoining segments. Place to obtain maximum concrete cover.

METRIC UNITS: Refer to respective barrier drawings or inserts for metric dimensions.

PAYMENT: This Barrier Transiton shall include all material and labor needed to construct this 20' section, including any raceways, reinforcing steel, dowels and other necessary incidentals. Payment shall be made at the unit price for Item 622 - Barrier Transition, Each.

PROPOSED TYPICAL SECTIONS
BARRIER DETAILS

DESIGN AGENCY
Jacobs

DESIGNER: MCK
REVIEWER: BAP 03/24/26
PROJECT ID: 109164
SHEET: P.26 TOTAL: 618

FRA-71-19.10

MODEL: Proposed Typical Sections - Sheet 13 PAPERSIZE: 66x44 in LAST: 7/17/2025 7:46:13 PM EDITED: CHADS.PSC_2 plot by: PENTEL CHADS.PSC_2 on disk: USER: Chris.Lawrence1@jacobs.com WORKSPACE: D:\ROOT\OUO WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Transportation\Fraser\FRA-71-19.10\Roadway\Design\Typical Sections\Barrier Details.dgn

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC:
AEP OHIO (DISTRIBUTION)
ATTEN: ROBERT MATTHEWS
700 MORRISON RD.
GAHANNA, OHIO 43230
rematthews@aep.com
(740) 647-2080

ELECTRIC:
AEP (TRANSMISSION)
ATTEN: MICHAEL CARR
8600 SMITHS MILL ROAD
NEW ALBANY, OHIO 43054
mdcarr@aep.com
(380) 205-5072

ELECTRIC:
CITY OF COLUMBUS DEPARTMENT OF UTILITIES
DIVISION OF POWER
3500 INDIANOLA AVE.
COLUMBUS, OHIO 43230
(614) 645-7294

GAS:
COLUMBIA GAS OF OHIO
ATTEN: ROB CALDWELL
3550 JOHNNY APPLESEED CT.
COLUMBUS, OHIO 43231
rcaldwell@nisource.com
(614) 818-2104

OIL:
MARATHON PIPELINE LLC
ATTEN: LANDON MORRIS
1900 WEST AVENUE H
GRIFFITH, IN 46319
lrmorris@marathonpetroleum.com
(419) 957-7792

WATER:
CITY OF COLUMBUS DEPARTMENT OF UTILITIES
DIVISION OF WATER
910 DUBLIN RD.
COLUMBUS, OHIO 43215
(614) 645-7788

SANITARY SEWER:
CITY OF COLUMBUS DEPARTMENT OF UTILITIES
DIVISION OF SEWERAGE & DRAINAGE
1250 FAIRWOOD AVE.
COLUMBUS, OHIO 43206
(614) 645-7102

TELECOMMUNICATIONS:
TELEPHONE/FIBER OPTIC:
AT&T (SBC)
ATTEN: ERIC EMORY SR.
111 N. 4TH ST. RM 802
COLUMBUS, OHIO 43215
G01553@att.com
(614) 397-8096

TELEPHONE/FIBER OPTIC:
AT&T TRANSMISSION
ATTEN: WILLIAM TAGGART
8372 E. BROAD ST.
REYNOLDSBURG, OHIO 43068
WT2462@att.com
(614) 370-5414

UTILITIES (CON'T)

TELEPHONE/FIBER OPTIC:
AT&T (TRANSMISSION) - MCG UTILITIES
ATTEN: JAMES SCHNEIDER
450 W. WILSON BRIDGE RD., SUITE 180
WORTHINGTON, OHIO 43085
james.schneider@mcgfiber.com
(440) 525-4322

TELEPHONE/CABLE:
BREEZELINE (FORMERLY WOW)
ATTEN: JEREMY BORRESON
3675 CORPORATE DRIVE
COLUMBUS, OHIO 43231
jborreson@breezeline.com

FIBER OPTIC:
COLUMBUS FIBERNET
ATTEN: MATT BLACKSTONE
1600 WALCUTT RD.
COLUMBUS, OHIO 43228
(614) 921-8524

FIBER OPTIC:
CROWN CASTLE
ATTEN: JON TARNOWSKI
2 EASTON OVAL - SUITE 425
COLUMBUS, OHIO 43219
(585) 445-5813

FIBER OPTIC:
EVERSTREAM SOLUTIONS
ATTEN: SCOTT LANCIA
240 N. 5TH ST., SUITE 168
COLUMBUS, OHIO 43215
slancia@everstream.net
(380) 204-5465

CABLE:
CHARTER COMMUNICATIONS (SPECTRUM/TIME WARNER)
ATTEN: JOSEPH VLOCK
3760 INTERCHANGE RD.
COLUMBUS, OHIO 43204
joseph.vlock@charter.com
(614) 402-1979

TELEPHONE:
LUMEN (LEVEL 3 COMMUNICATIONS/CENTURY LINK)
250 W. OLD WILSON BRIDGE RD, SUITE 130
WORTHINGTON, OHIO 43085
(614) 324-4444

TELEPHONE:
MCI (VERIZON)
ATTEN: JOHN DEERE
757 COMMERCE CT.
LEWIS CENTER, OH 43035
(614) 809-8866

COMMUNICATIONS:
CITY OF COLUMBUS DEPARTMENT OF UTILITIES
SUPPORT SERVICES DIVISION
ATTEN: JOHN GREMBOWSKI
4211 GROVES ROAD
COLUMBUS, OHIO 43232
(614) 645-7344

TRAFFIC:
CITY OF COLUMBUS (TRAFFIC SIGNALS)
ATTEN: BRAD HEGWOOD
1820 E. 17TH AVE.
COLUMBUS, OHIO 43219
bdhegwood@columbus.gov
(614) 560-0839

ITS - OHIO DEPARTMENT OF TRANSPORTATION:
ODOT CENTRAL ITS
ATTEN: PAUL BECK
1606 W. BROAD ST.
COLUMBUS, OHIO 43223
(614) 387-0695

UTILITIES (CON'T)

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 3 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: STATIC GNSS AND DIFFERENTIAL LEVELING
MONUMENT TYPE: 12 TYPE A, 19 TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011 ADJ, 2010.0)
ELLIPSOID: GRS 80

OHIO COUNTY COORDINATE SYSTEM: FRANKLIN
FRANKLIN LDP PROJECTION PARAMETERS:
PROJECTION: TRANSVERSE MERCATOR
CENTRAL LATITUDE: N 38°24'00"
CENTRAL LONGITUDE: W 276°54'00"
FALSE NORTHING: 0 METERS
FALSE EASTING: 50,000 METERS
PROJECTION SCALE FACTOR: 1.000037

*THE LOW DISTORTION PROJECTION (LDP) IS A LOCAL COUNTY PROJECTION DEVELOPED BY O.D.O.T. THE DISTORTION BETWEEN GROUND AND GRID IS SO MINIMAL THAT THEREIS NO NEED FOR A SCALE FACTOR TO ADJUST BETWEEN GRID AND GROUND COORDINATES. CONTACT THE DISTRICT SURVEY DEPARTMENT FOR FURTHER INFORMATION OR QUESTIONS.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

BASIS OF BEARINGS:

BEARINGS ARE BASED ON GRID NORTH OF THE O.D.O.T. LOW DISTORTION PROJECTION FRANKLIN COUNTY USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

UNITS ARE IN U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST ____ EACH
659, TOPSOIL ____ CU. YD.
659, SEEDING AND MULCHING ____ SQ. YD.
659, REPAIR SEEDING AND MULCHING ____ SQ. YD.
659, INTER-SEEDING ____ SQ. YD.
659, COMMERCIAL FERTILIZER ____ TON
659, LIME ____ ACRES
659, WATER ____ M. GAL.
659, MOWING ____ M. SQ.FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER MCK 03/23/26
PROJECT ID 109164
SHEET P.27 TOTAL 618

FRA-71-19.10

MODEL: General Notes - GN001 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 7:23:52 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-uls-va-pw.bentley.com:jacobs-uls-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Roadway\Sheets\109164_GN001.dgn

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE MASH 2016 TYPE E TANGENTIAL END TREATMENTS FOR TYPE MGS GUARDRAIL AS LISTED UNDER "PRODUCTS ACCEPTED FOR NEW INSTALLATIONS" ON THE ROADWAY APPROVED PRODUCTS LIST POSTED ON ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH SOLID FLUORESCENT YELLOW REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, AND PERMITTING SITE CONDITIONS EXIST: THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED AT A CONSISTENT FLARE RATE THROUGH THE FULL LENGTH OF THE SYSTEM. THE FLARE RATE SHALL BE A MAXIMUM OF 25:1 (RESULTING IN A 2' OFFSET). THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE SHOP DRAWINGS, PRODUCT INSTALLATION MANUAL/GUIDANCE, AND AS DIRECTED BY THE ENGINEER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1 ____ SY
ITEM 605, AGGREGATE DRAINS ____ FT
ITEM 611, ____" CONDUIT, TYPE F ____ FT
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET ____ EACH
ITEM 605, ____" UNCLASSIFIED PIPE UNDERDRAINS ____ FT

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT

RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 ____ CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF ___ INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 _____ CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF ____ INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING ____ INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE TYPICAL SECTION SHEETS FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING __ HOUR

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.

4. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN PROVIDED FOR USE, AS DIRECTED BY THE ENGINEER, TO REMOVE AND REPLACE UNSUITABLE/UNSTABLE SUBGRADE AS DESCRIBED ABOVE:

ITEM 204, EXCAVATION OF SUBGRADE ___ CU. YD.
ITEM 204, GRANULAR MATERIAL, TYPE B ___ CU. YD.
ITEM 204, GEOGRID ___SQ. YD.

GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER MCK 03/23/26
PROJECT ID 109164
SHEET P.28 TOTAL 618

FRA-71-19.10

MODEL: General Notes - GN002 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 7:23:58 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A201000 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Roadway\Sheets\109164_GN001.dgn

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 190 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
OBSTRUCTION EVALUATION GROUP
10101 HILLWOOD PARKWAY
FORT WORTH, TX 76177
FAX: (817) 222-5920
HTTP://CEAAA.FAA.GOV

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL _____ POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

ITEM 511 - CONCRETE, MISC.: 4" CONCRETE CAP

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF A 4" CONCRETE CAP IN ACCORDANCE WITH THE LOCATIONS SHOWN ON THE PLAN SHEETS AND TYPICAL SECTIONS. THE CAP SHALL BE CONSTRUCTED OF CONCRETE MIXED AND PLACED IN ACCORDANCE WITH ITEMS 499 AND 511 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. CLASS C CONCRETE SHALL BE USED. TRANSVERSE IMPRESSED CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 20 FOOT INTERVALS. INCLUDED IN THE COST OF THIS ITEM SHALL BE THE SUPPLY AND PLACEMENT OF ITEM 516, 3/4" MINIMUM PREFORMED EXPANSION JOINT FILLER. THE ABOVE WORK INCLUDING LABOR, MATERIALS AND CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 511 - CONCRETE, MISC.: 4" CONCRETE CAP.

ITEM 609 - MEDIAN, MISC.: 4" STAMPED AND COLORED CONCRETE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS
- A. DRAWINGS

1.2 SUMMARY
- A. THIS SECTION INCLUDES: ALL EXTERIOR SPECIALTY CONCRETE PAVING REQUIRED OR SHOWN ON THE ROADWAY PLAN, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
  1. COLORED AND TEXTURED CONCRETE.
- B. KEEP FIELD RECORDS OF TIME AND DATE OF PLACING, CURING, AND REMOVAL OF CONCRETE IN EACH PORTION OF THE WORK.

1.3 REFERENCES
- A. CITY OF COLUMBUS (COC): CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2026 EDITION.
- B. ASTM C171-92 SHEET MATERIALS FOR CURING CONCRETE.
- C. ASTM D1751-83 (1991) PREFORMED EXPANSION JOINT FILLER FOR CONCRETE PAVING AND STRUCTURAL CONSTRUCTION (NON-EXTRUDING AND RESILIENT BITUMINOUS TYPES).

1.4 SUBMITTALS
- A. PRODUCT DATA: SUBMIT FOR COLOR ADMIXTURE. SUBMIT COLOR CHIPS NOT LESS THAN 2" × 4" FOR PRELIMINARY SELECTION FROM MANUFACTURER'S FULL RANGE.
- B. DESIGN DATA, TEST REPORTS: CONCRETE MIXES DESIGN AND TEST REPORTS AS PER CITY OF COLUMBUS STANDARDS.
- C. INSTALLER UNDER QUALITY ASSURANCE BELOW: APPROVAL OF LICENSED BOMANITE INSTALLER BY COLOR ADDITIVE MANUFACTURER OR APPROVED EQUAL.
- D. SUBMIT MANUFACTURER'S INSTALLATION, FINISHING, PROTECTION, AND MAINTENANCE INSTRUCTIONS.

1.5 QUALITY ASSURANCE
- A. BASIC SPECIFICATION: PERFORM ALL WORK OF THIS SECTION ACCORDING TO COC ITEM – RIGID PAVEMENT.
- B. COLORED CONCRETE INSTALLER: LICENSED BOMANITE CONTRACTOR OR APPROVED EQUAL WITH NO LESS THAN 5 YEARS SUCCESSFUL EXPERIENCE WITH INSTALLATION OF WORK OF THE TYPE REQUIRED BY THIS PROJECT.
- C. MOCK-UP: PROVIDE MINIMUM 24 INCH SQUARE MOCK-UP OF EACH TYPE OF COLORED AND TEXTURED CONCRETE PAVED AREA.
  1. MOCK-UP TO HAVE JOINT PATTERN SIMILAR TO THAT REQUIRED BY ACTUAL PAVING.
  2. TEXTURE AND COLOR TO BE REPRESENTATIVE OF PERMANENT PAVING.
  3. OWNER'S REPRESENTATIVE'S APPROVAL REQUIRED BEFORE PLACING PERMANENT COLORED PAVING.
  4. REPEAT PROCESS UNTIL MOCK-UP IS APPROVED BY OWNER'S REPRESENTATIVE.
- D. MANUFACTURER'S REPRESENTATIVE: MANUFACTURER'S REPRESENTATIVE TO BE PRESENT PRIOR TO AND AT BEGINNING OF INSTALLATION OF COLORED CONCRETE PAVING WORK, INCLUDING MOCK-UP, TO ASSURE PROPER, INSTRUCTION MIXES INSTALLATION, AND CURING PROCEDURES. IN ADDITION, MANUFACTURER'S REPRESENTATIVE TO BE PRESENT AT SUFFICIENT INTERVALS DURING PROGRESS OF WORK TO ASSURE PROPER USE OF THEIR MATERIALS.

PART 2 – PRODUCTS

2.1 AGGREGATE BASE
- A. COC ITEM #304.

2.2 CONCRETE
- A. CONCRETE:
  1. AGGREGATE: LIMESTONE (COLOR TO MATCH APPROVED SAMPLE).
  2. AIR CONTENT: 5% ± 1% ENTRAINED AIR.
  3. STRENGTH: 4000 PSI, MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS WITH WATER REDUCER AND AIR ENTRAINMENT.
  4. CEMENT CONTENT: 600 LBS PER CUBIC YARD MINIMUM.
- B. COLOR ADMIXTURE: INTEGRAL COLOR BY BOMANITE CORPORATION OR APPROVED EQUAL. COLOR: MORSE ROAD BLEND.
- C. BOMANITE COLOR HARDENER: DRY SHAKE MATERIAL BY BOMANITE CORPORATION OR APPROVED EQUAL. COLOR AND FINISH TO MATCH SAMPLE APPROVED BY OWNER'S REPRESENTATIVE. COLOR: SAND, CH-00214-60 AND COQUINA, CH-00068-60.
- D. BOMANITE RELEASE AGENT: DRY BLEND OF POWDER AND PIGMENTS FOR USE IN THE IMPRINTING PROCESS TO ALLOW A CLEAN RELEASE FROM THE IMPRINTING TOOLS. COLOR: SAND RELEASE AGENT CH-000214-60.
- E. BOMANITE COLORWASH SYSTEM IN SHALE GRAY, FOR ACCENTING PURPOSES.

2.3 FORMWORK
- A. SIDEWALK AND MEDIANS: APPLY TO ALL CITY OF COLUMBUS STANDARDS FOR CONCRETE WORK.

2.4 ACCESSORIES
- A. CURING MATERIALS: INTEGRAL COLORED CONCRETE AREAS:
  1. LIQUID COMPOUNDS: V-SEAL BY TARA DISTRIBUTIONS GROUP OR APPROVED EQUAL.
  2. SHEET MATERIALS: "ORANGE LABEL SISALKRAFT" BY FORTAFIBER CORPORATION OR EQUAL MATERIAL: A SHEET MATERIAL CONFORMING TO ASTM C 171 FOR SURFACES RECEIVING WATER REPELLENT COATING. WATERPROOFING, OR OTHER MORTAT-SET MATERIALS.
- B. HIGH GLOSS SEALER COMPOUND: UCLID, SUPER DIAMOND CLEAR, V-SEAL 102 DPS BY TARA DISTRIBUTIONS GROUP, OR APPROVED EQUAL.
- C. EXPANSION JOINTS:
  1. FILLER: MEET OR EXCEED REQUIREMENTS OF ASTM D 1751, WIDTH AS NOTED UNDER CONCRETE JOINT SEALANTS OR AS SHOWN ON DRAWINGS.
  2. JOINT CAP: TWO-PIECE VINYL DEVICE WITH UPPER 1/2 INCH REMOVABLE AFTER CURING PERIOD: WIDTH CORRESPONDING TO JOINT FILLER; PRODUCTS BY GREENSTRECK PLASTIC PRODUCTS. VINYLES CORPORATION, OR VALCON METAL PRODUCTS, OR APPROVED EQUAL .
  3. SEALANT:
     - a. AS SPECIFIED FOR COLORED CONCRETE AREAS.

PART 3 – EXECUTION

3.1 PLACING
- A. PLACE CONCRETE FOR FULL THICKNESS IN ONE OPERATION WITHOUT CHANGE IN PROPORTIONS; SCREED TO PROPER ELEVATIONS: FINISH AND CURE AS SPECIFIED. DUSTING OF SURFACES WITH CEMENT IS PROHIBITED.
- B. CONSTRUCT CONCRETE PAVING ON COMPACTED BASE ACCURATELY FORMED FOR REQUIRED SLAB THICKNESS AND BASE.
- C. CONSTRUCTION: UNLESS OTHERWISE SHOWN. PROVIDE THE FOLLOWING:
  1. SIDEWALKS.
  2. MEDIANS.

3.2 JOINTS
- A. LOCATION: LOCATE AS SHOWN ON DRAWINGS. IN ABSENCE OF INFORMATION ON DRAWINGS, PROVIDE JOINTS AS SPECIFIED.
- B. CONTRACTION JOINTS: SAWED OR FORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT.
  1. SLABS:
     - a. SPACE 30 TIMES THE THICKNESS IN BOTH DIRECTIONS.
     - b. GRID OF CONTROL JOINTS TO BE APPROXIMATELY SQUARE WITH LONGEST SIDE TO BE NOT LONGER THAN 1-1/2 TIMES THE SHORTEST SIDE. I.E. 4 FOOT WIDE SIDEWALK - SPACE JOINTS 4 FEET TO 6 FEET MAXIMUM OR WHERE SPECIFICALLY SHOWN.
     - c. MINIMUM DEPTH OF JOINT: 1/4 SLAB THICKNESS.
- C. CONSTRUCTION JOINTS: PROVIDE FORMED EDGE COLD JOINT WHERE SHOWN OR REQUIRED WITH TOOLED EDGE. CONSTRUCTION JOINTS NOT TO OCCUR CLOSER THAN CONTRACTION JOINT SPACING. PROVIDE 1/2" X 18" DOWEL BAR AT 24" O.C.
- D. EXPANSION JOINTS: FORMED BEFORE CONCRETE PLACEMENT. PROVIDE AT BUILDING WALLS AND WHERE SPECIFICALLY SHOWN ON PLAN.
  1. JOINT: FULL DEPTH OF SLAB OR CURB: 1/2 -INCH JOINT FILLER WITH 3/8-INCH - FILLED WITH SEALANT. PROVIDE REMOVABLE JOINT CAP FOR ALL SLABS; SET TOP OF CAP TO FINISH ELEVATIONS.
- E. SEALANT: ALL EXPANSION, CONTRACTION AND CONSTRUCTION JOINTS TO BE CAULKED. COLORED SEALANTS SPECIFIED ABOVE TO BE APPLIED PRIOR TO APPLICATION OF WATER REPELLENT / CHLORIDE PROTECTOR AND SPECIAL SEALER COAT. COLOR TO BE DETERMINED BY OWNER'S REPRESENTATIVE.

3.3 FINISHING
- A. TOLERANCES:
  1. CLASS 'B', 1/4 -INCH IN 10 FEET, OR BETTER (11.92.2).
  2. PORTIONS OF SLABS TO RECEIVE ADDITIONAL PAVING MATERIALS TO BE CLASS 3/32 C 5/32, 57/64 -INCH IN 2 FEET, OR BETTER (11.9.3).
- B. PAVING: STAMPED COLORED CONCRETE
  1. SIDEWALK: BOMANITE PATTERN. ASHLAR SLATE, TOOL, A- INDIVIDUAL STONE VARY IN SIZE FROM 9" BY 9" TO 15" BY 14-1/2" OR APPROVED EQUAL.
  2. MEDIAN: BOMANITE PATTERN, RUNNING BOND BELGIAN BLOCK 14-1/2" INDIVIDUAL STONE VARY IN SIZE FROM 5 -1/2" BY 6 -1/2" TO 5 -1/2" BY 10-1/2" OR APPROVED EQUAL.

3.4 CURING AND SEALING
- A. SHEET CURING (COLORED CONCRETE FINISH): PROVIDE SHEET MATERIALS MEETING REQUIREMENTS OF ASTM C 171 FOR CURING CONCRETE ON THOSE PORTIONS OF SLABS SCHEDULED OR SHOWN TO RECEIVE WATER REPELLANT TREATMENT OF ADDITIONAL MORTAR-SET PAVING MATERIALS. DO NOT USE LIQUID CURING OR SEALING COMPOUNDS.
  1. COVER SLABS WITH IMPERVIOUS MEMBRANE SHEET APPLIED AS SOON AS THE CONCRETE HAS SET SUFFICIENTLY HARD TO PERMIT APPLICATION WITHOUT MARRING THE SURFACE. SHEET MATERIAL SHALL FORM EFFECTIVE SEAL, WHICH WILL PREVENT EVAPORATION OF MOISTURE FROM CONCRETE FOR FULL CURING PERIOD.
     - a. LAP EDGES 4 INCHES
     - b. WEIGHT WITH SAND OR OTHER SUITABLE MATERIALS TO MAINTAIN PLACEMENT.
  2. IF LIQUID CURING COMPOUND IS APPLIED, THROUGH ERROR, THE TRADE CONTRACTOR MAY BE REQUIRED TO REMOVE COMPOUNDS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
     - a. COLORED CONCRETE AREAS TO BE CLEANED BY EXTRACTION SYSTEM PRIOR TO APPLICATION OF SEALERS AND AFTER PROPER CURE PERIOD.

GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER MCK 03/23/26
PROJECT ID 109164
SHEET P.29 TOTAL 618

FRA-71-19.10

MODEL: General Notes - GN003 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 7:24:00 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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DIVISION OF POWER

THE DIVISION OF POWER (DOP) MAY HAVE UNDERGROUND OR OVERHEAD PRIMARY POWER, SECONDARY POWER, CONDUIT SYSTEMS AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OUPS AT 811 OR 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHTING LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-01, COPIES OF WHICH ARE AVAILABLE FROM DOP.

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.

RECREATION AND PARKS

IF THIS PROJECT IMPACTS THE CITY OF COLUMBUS PARKS AND THEREFORE REQUIRES COORDINATION WITH DEPARTMENTS NON PARK USE POLICY (NPUP). THE NPUP REQUIRES THAT AN MOU BE IN PLACE PRIOR TO WORK WITHIN A CITY PARK AND ON SITE DURING CONSTRUCTION. PLEASE CONTACT MOHN, TINA M. TMMOHN@COLUMBUS.GOV TO COORDINATE EFFORTS.

ENTRY INTO A CITY PARK OR PARKLAND FOR CONSTRUCTION OR ANY OTHER NON-DESIGN USE IS PROHIBITED UNLESS A MOU/NPUP IS IN PLACE. UNLESS SPECIFIC PERMISSIONS ARE GRANTED BY CRPD ACCESS TO, FROM, ON, OVER, UNDER, THOUGH, ACROSS OR OTHER RELATED NON-PARK OR NON-TRAIL USE OF THE TRAIL CORRIDOR/PARKLAND IS NOT GRANTED OR IMPLIED.

PERMITS

WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CITY OF COLUMBUS, DEPARTMENT OF PUBLIC SERVICE- PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE (614) 645-7497; FAX: (614) 645-1876; EMAIL: colspermits@columbus.gov

FLOODPLAIN

FEMA FIRM MAP LIST:
39049C0176K
39049C0178K
39049C0186K
39049C0188K
39049C0326K

REFERENCE LOCATION SIGNS

THE LOCATION OF REFERENCE LOCATION SIGNS ON THE PLANS ARE APPROXIMATE AND A MORE PRECISE LOCATION WILL BE PROVIDED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF THE PLANNED DATE OF REFERENCE LOCATION SIGN INSTALLATION. THE ENGINEER WILL CONTACT THE OFFICE OF TECHNICAL SERVICES WHICH WILL LOCATE THE LONGITUDINAL POSITION OF REFERENCE LOCATION SIGNS BY MEANS OF A PAINT MARK ON THE PAVEMENT EDGE. ALTERNATE MARKS WILL NOT BE PROVIDED ON DIVIDED HIGHWAYS AND THE CONTRACTOR SHALL SET REFERENCE LOCATION SIGNS FOR THE OPPOSITE ROADWAY ACROSS FROM THE PROVIDED MARK. DELINEATORS WHOSE NORMAL POSITION FALLS WITHIN 50 FEET OF A REFERENCE LOCATION SIGN SHALL BE OMITTED.

INLET, NO. 3B50, AS PER PLAN

THIS WORK SHALL CONSIST OF CONSTRUCTING INLETS IN THE TYPE D50 CAPPED BARRIER AS SHOWN IN THE PLANS. THESE INLETS SHALL BE CONSTRUCTED PER ITEM 611 OF THE CMS, EXCEPT THAT THE INSIDE WINDOW SHALL BE PERMANENTLY SEALED USING A STEEL PLATE, CONCRETE, OR OTHER SUITABLE MEANS SATISFACTORY TO THE ENGINEER TO PREVENT INFILTRATION OF THE GRANULAR FILL MATERIAL. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 611, INLET, NO. 3B50, AS PER PLAN.

INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN

THIS WORK SHALL CONSIST OF CONSTRUCTING INLETS IN THE SINGLE SLOPE, TYPE B1 CAPPED BARRIER AS SHOWN IN THE PLANS. THESE INLETS SHALL BE CONSTRUCTED PER ITEM 611 OF THE CMS AND ODOT SCD "I-3B, 3B1", EXCEPT THAT THE INSIDE WINDOW SHALL BE PERMANENTLY SEALED USING A STEEL PLATE, CONCRETE, OR OTHER SUITABLE MEANS SATISFACTORY TO THE ENGINEER TO PREVENT INFILTRATION OF THE GRANULAR FILL MATERIAL. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 611, INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN.

INLET RECONSTRUCTED TO GRADE, AS PER PLAN

THIS WORK SHALL CONSIST OF RECONSTRUCTING EXISTING JERSEY BARRIER INLETS PER CMS 611 AND RESTORING THEM BACK TO GRADE WITH A SINGLE SLOPE, TYPE B1 INLET TOP CASTING AND BARRIER CONFIGURATION. THESE INLETS CASTING TOPS AND SINGLE SLOPE BARRIER CONFIGURATIONS SHALL BE CONSTRUCTED PER ODOT SCD "I-3B, 3B1", EXCEPT THAT THE INSIDE WINDOW SHALL BE PERMANENTLY SEALED USING A STEEL PLATE, CONCRETE, OR OTHER SUITABLE MEANS SATISFACTORY TO THE ENGINEER TO PREVENT INFILTRATION OF THE GRANULAR FILL MATERIAL. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 611, INLET RECONSTRUCTED TO GRADE, AS PER PLAN

GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER MCK 03/23/26
PROJECT ID 109164
SHEET P.30 TOTAL 618

FRA-71-19.10

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ITEM 614, MAINTAINING TRAFFIC (AT ALL TIMES)

UNLESS NOTED OTHERWISE, A MINIMUM OF 3 LANE(S) OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN EACH DIRECTION BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, AND ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC.

LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)
MEMORIAL DAY
FOURTH OF JULY (OBSERVED)
THE OHIO STATE FAIR
OHIO STATE FOOTBALL HOME GAMES
LABOR DAY
ALL AMERICAN QUARTERHORSE CONGRESS
GENERAL/REGULAR ELECTION DAY (NOV)
THANKSGIVING
CHRISTMAS (OBSERVED)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY	(GEN./REG. ELECTION) 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY	(THANKSGIVING ONLY) 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS,
THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE

LANE CLOSURE/REDUCTION REQUIRED

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLAT SHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP &	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
ROAD	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ESTIMATED QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B _____ CU. YD.
ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C _____ CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC _____ CU. YD.
ITEM 616, WATER

ROAD CLOSED SIGN

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE LOCATIONS SHOWN IN THE PLANS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

SIGNS AND BARRICADES

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

ITEM 614, MAINTAINING TRAFFIC CONT'D

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DRUM REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED.

PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

PERMITTED LANE CLOSURE SCHEDULE (PLCS)

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE. LANE CLOSURE(S) SHALL NOT BE PERMITTED ON THE FOLLOWING HIGHWAYS WHEN AN APPLICABLE SCHEDULE IS NOT PUBLISHED: INTERSTATES (FUNCTIONAL CLASSIFICATION 1), OTHER FREEWAYS AND EXPRESSWAYS (FUNCTIONAL CLASSIFICATION 2), MULTILANE MAINLINE RAMPS, AND MULTILANE SYSTEM RAMPS.

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE PLCS MONTH.

(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE PLCS SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE PLCS SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

PERMITTED LANE CLOSURE SCHEDULE (PLCS) CONT'D

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER ODOT AUTHORITY. [EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.]

EXCEPT AS DIRECTED IN THE FIRST PARAGRAPH OF THIS PLAN NOTE, ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES AND/OR LANE CLOSURE SCENARIOS NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER _____ M. GAL.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS, SEE SCD RM-4.1.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN.

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.31 TOTAL 618

FRA-71-19.10

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pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\MOT\Sheets\109164_MN001.dgn

ITEM 614, REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF _____ EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF _____ EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER(S) COUNTY-ROUTE-SECTION(S) DIRECTION(S)
WZ-
WZ-
WZ-

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

***WORK ZONES SPEED ZONES (WZSZS)** CONT'D*

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

[WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.]

[WZSZS USING TEMPORARY FLAT SHEET SPEED LIMIT SIGNS SHALL BE IN ACCORDANCE WITH THIS NOTE AND SCD MT-104.10. ADDITIONALLY PAYMENT MAY BE REMOVED, OR A DISINCENTIVE APPLIED, FOR WZSZS USING TEMPORARY FLAT SHEET SPEED LIMIT SIGNS THE SAME AS DESCRIBED IN THE MOST RECENT PUBLICATION OF SS 808 IN REGARDS TO WZSZS USING DSL SIGN ASSEMBLIES (SEE SS 808.06 PARAGRAPHS 4 THROUGH 7, INCLUDING TABLE 1).]

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

***WORK ZONES SPEED ZONES (WZSZS)** CONT'D*

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH)
FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION WORKERS PRESENT	WITHOUT POSITIVE PROTECTION WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

[ITEM 614, WORK ZONE SPEED LIMIT SIGN
_____ EACH]
[ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
_____ SIGN MNTH]
[ASSUMING _____ DSL SIGN ASSEMBLY(IES) FOR
_____ MONTH(S)]

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

(THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.)

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS.

***WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)** CONT'D*

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN____ EACH WORK ZONE INCREASED PENALTIES SIGNS WILL BE PLACED AT THE LOCATIONS SHOWN IN THE PLANS.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.32 TOTAL 618

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APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:
PHASE 3A - MAINTAIN THREE (3) SOUTHBOUND LANES AT SR 161 EXTENDING TO THE SOUTH.

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF [_30_] CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED [__/__/____] FOR PID 109164" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.06, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES WHICH ARE NOT PROTECTED BY GUARDRAIL OR PORTABLE BARRIER SHALL BE LOCATED OUTSIDE THE CLEAR ZONE, AND SHOULD BE LOCATED AT LEAST 30 FEET (PREFERABLY 40 FEET) FROM THE EDGE OF PAVEMENT WHEN POSSIBLE. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN IN THE MAINTENANCE OF TRAFFIC PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN _____ HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE

***ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN** CONT'D*

PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN _____ SIGN MONTH ASSUMING _____ PCMS SIGN(S) FOR _____ MONTH(S)

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER, THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES.

THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.

***WORKSITE TRAFFIC SUPERVISOR** CONT'D*

2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.

3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.

4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.

5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.

6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.

7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.

8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.

9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.

11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).

B. DAILY TTC SETUP AND REMOVAL.

C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.

D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.

E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.

F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED (CA-D-8) WITHIN GOFORMZ AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER BY THE END OF THE WORKDAY IN WHICH THE INSPECTION OCCURRED. THE CA-D-8 INCLUDES A

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.33 TOTAL 618

FRA-71-19.10

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***WORKSITE TRAFFIC SUPERVISOR** CONT'D*

CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. CONTACT GOFORMZ.HELP@DOT.OHIO.GOV TO OBTAIN A USER ACCOUNT. ANY DEFICIENCIES OBSERVED SHALL BE NOTED ON THE CA-D-8, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.

B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A FAILURE TO PERFORM WTS DUTIES REOCCURS OR A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.

C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS (AND ANY ALTERNATE WTS, IF APPLICABLE) SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AT THE PROJECT LEVEL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS (AND ALTERNATE WTS, IF APPLICABLE). ACCUMULATION OF THREE PROJECT LEVEL REMOVALS (FROM ANY PROJECTS STATEWIDE) SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY FORMERLY PREQUALIFIED WTS. A WTS (AND ALTERNATE WTS, IF APPLICABLE) MAY BE IMMEDIATELY AND CONCURRENTLY REMOVED FROM THE WORK AT THE PROJECT LEVEL IN ACCORDANCE WITH C&MS 108.05 AND DISQUALIFIED STATEWIDE FROM THE ODOT PREQUALIFIED WTS ROSTER (REGARDLESS OF THE NUMBER OF PROJECT LEVEL REMOVALS), AS WELL AS BEING SUBJECT TO OTHER POTENTIAL CONSEQUENCES, IN CASES OF FALSIFIED, DISHONEST OR OTHERWISE UNETHICAL ACTIVITY OR DOCUMENTATION.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6O, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. *SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.*

2. *SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.*

3. *PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.*

4. *SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:*

   A. COLLABORATE WITH ODOT AND SAFETY FORCES;

   B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND

   C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. *CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC.), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.*

6. *CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:*

   A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:

***TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT** CONT'D*

I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL

II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN

III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN

IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

B. FOLLOWING AN INCIDENT/CRASH:

I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

II. RECOMMEND ROADWAY REPAIR NEEDS.

III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT

***ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN** CONT'D*

MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY THE ENGINEER.

THE FOLLOWING BID ITEMS SHOULD BE INCLUDED IN THE PLANS:

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE _____ SQUARE YARDS

ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN _____ EACH

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEMS FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

ITEM 614, WORK ZONE RAISED PAVEMENT MARKERS ON PERMANENT CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON PERMANENT CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

AN ESTIMATED QUANTITY OF _____ EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY

Jacobs

DESIGNER SRH

REVIEWER BAP 03/20/26

PROJECT ID 109164

SHEET P.34 TOTAL 618

FRA-71-19.10

MODEL: Sheet 4 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:54:22 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB OR PERMANENT BARRIER (INCLUDING BRIDGE PARAPETS) CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

[INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.]

[THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.]

[DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.]

[TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY OR BI-DIRECTIONAL) _____ EACH

ITEM 614, OBJECT MARKER, _____-WAY _____ EACH

[ITEM 614, INCREASED BARRIER DELINEATION _____FEET]

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

[ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.]

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

[OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE (2, 3, 4, OR 5) (ONE-WAY OR BIDIRECTIONAL) _____ EACH

[ITEM 614, OBJECT MARKER, _____-WAY _____ EACH]

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- *DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.*
- *DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).*
- *DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC.], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.*

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

***ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS** CONT'D*

- *FOR LANE CLOSURES THAT MEET ALL OF THE CRITERIA LISTED BELOW: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).*

  - *CRITERIA*
    - *ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND,*
    - *AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,*
    - *AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)*

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICES IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

***ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS** CONT'D*

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE____ HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY

Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.35
TOTAL	618

FRA-71-19.10

MODEL: Sheet 5 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:54:24 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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THE MAINTENANCE OF TRAFFIC (MOT) PLAN COMBINES PART WIDTH CONSTRUCTION WITH CONTRAFLOW. EXCEPT AS NOTED, MAINTAIN A MINIMUM OF THREE (3) LANES IN EACH DIRECTION THROUGHOUT THE PROJECT.

SEQUENCE OF WORK

WEEKEND CLOSURE PERIOD
AT VARIOUS STEPS THROUGHOUT THE PROJECT, WORK MUST BE COMPLETED DURING A WEEKEND LANE CLOSURE PERIOD. EACH WEEKEND LANE CLOSURE PERIOD BEGINS ON FRIDAY AT 9 PM AND ENDS ON MONDAY AT 5 AM. SUBMIT A REQUEST FOR A WEEKEND LANE CLOSURE PERIOD 15 DAYS IN ADVANCE OF THE CLOSURE DATE. ALL WEEKEND LANE CLOSURES MUST BE APPROVED IN WRITING.

PHASES 1A & 1B
WITH A SERIES OF 8 WEEKEND LANE CLOSURES, COMPLETE THE BRIDGE REHABILIATION WORK AT THE I-71 MAINLINE CROSSING OVER COOKE ROAD. COMPLETE EACH STEP WITHIN ONE WEEKEND LANE CLOSURE PERIOD.

PRIOR TO THE FIRST WEEKEND CLOSURE, UTILIZE SCD MT-95.30 (PER THE PLCS) FOR SINGLE NIGHTTIME LANE CLOSURES TO COMPLETE THE PAVEMENT FOR MAINTAINING TRAFFIC.

PHASE 1A STEP 1: REPLACE THE APPROACH SLAB ALONG THE SOUTHBOUND INSIDE LANES

PHASE 1A STEP 2: REPLACE THE APPROACH SLAB ALONG THE SOUTHBOUND OUTSIDE LANES

PHASE 1A STEP 3: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND INSIDE LANES

PHASE 1A STEP 4: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND OUTSIDE LANES

PHASE 1B STEP 1: REPLACE THE APPROACH SLAB ALONG THE NORTHBOUND INSIDE LANES

PHASE 1B STEP 2: REPLACE THE APPROACH SLAB ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 1B STEP 3: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND INSIDE LANES

PHASE 1B STEP 4: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 2
SHIFT EXISTING LANES OF TRAFFIC TO THE OUTSIDE SHOULDER AT EACH CROSSOVER LOCATION
INSTALL THE TEMPORARY CROSSOVERS

ADDITIONAL WORK TO BE COMPLETED PRIOR TO THE COMPLETION OF PHASE 2:
- WATERLINE RELOCATION AT SR 161
- TEMPORARY LIGHTING
- RELOCATE THE CITY OF COLUMBUS CTSS 144 STRAND FIBER OPTIC CABLE ACROSS I-71 AT SR 161

PHASE 3A
PHASE 3A STEP 1: DURING A WEEKEND LANE CLOSURE PERIOD, INSTALL PROPOSED DRAINAGE CONDUIT ACROSS THE I-71 SOUTHBOUND LANES AND THE I-71 SOUTHBOUND EXIT RAMP TO SINCLAIR RD.

PHASE 3A STEP 2: DURING A WEEKEND LANE CLOSURE PERIOD, INSTALL PROPOSED DRAINAGE CONDUIT ACROSS I-71 SOUTHBOUND LANES AND THE I-71 SB ENTRANCE RAMP FROM MORSE RD.

PHASE 3A STEP 3: WITH TRAFFIC IN THE PHASE 3A POSITION, AND WITH DETOUR IN PLACE, CLOSE MORSE ROAD AND SR 161 FOR BRIDGE DEMOLITION ACTIVITES. REMOVE EXISTING PIERS AND INSTALL TEMPORARY SIDEWALK WITHIN THE PHASE LIMITS PRIOR TO REOPENING. DO NOT CLOSE MORSE ROAD AND SR 161 SIMULTANEOUSLY.

COMPLETE THE I-71 SOUTHBOUND INSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE MAINLINE CROSSINGS OVER MORSE ROAD AND SR 161.

PHASE 3B
FOR THE TRANSITION FROM PHASE 3A STEP 3 TO 3B STEP 1:

1. SCHEDULE THE TRANSITION TO OCCUR DURING A WEEKEND LANE CLOSURE PERIOD.
2. CLOSE THE PHASE 3A INSIDE SOUTHBOUND LANE AT MORSE ROAD PER SCD MT-95.30 WHILE MAINTAINING THE SOUTHBOUND CONTRAFLOW LANE AND THE PHASE 3A OUTSIDE SOUTHBOUND LANE.
3. COMPLETE THE REMAINING SOUTHBOUND VARIABLE DEPTH MILLING AND INTERMEDIATE ASPHALT PAVING ALONG THE PHASE 3B STEP 1 TRAFFIC LANES.
4. CLOSE THE I-71 SOUTHBOUND ENTRANCE RAMP FROM MORSE RD.
5. REMOVE THE INSIDE LANE CLOSURE AND SHIFT THE PHASE 3A INSIDE LANE TO THE PHASE 3B INSIDE LANE POSITION. CLOSE THE OUTSIDE PHASE 3B LANE PER SCD MT-95.30. REMOVE/COVER CONFLICTING DEVICES. CONTINUE TO MAINTAIN THE SOUTHBOUND CONTRAFLOW LANE.
6. COMPLETE THE REMAINING VARIABLE DEPTH MILLING/INTERMEDIATE ASPHALT PAVING AND PHASE 3B STEP 1 TEMPORARY TRAFFIC CONTROL DEVICES.
7. REMOVE THE LANE CLOSURE AND RAMP CLOSURE. BEGIN PHASE 3B STEP 1 WORK ACTIVITIES.

SEQUENCE OF WORK CONT'D

PHASE 3B STEP 1: WITH TRAFFIC IN THE PHASE 3B POSITION, AND WITH DETOUR IN PLACE, CLOSE MORSE ROAD AND SR 161 FOR BRIDGE DEMOLITION ACTIVITES. REMOVE EXISTING PIERS AND INSTALL TEMPORARY SIDEWALK WITHIN THE PHASE LIMITS PRIOR TO REOPENING. DO NOT CLOSE MORSE ROAD AND SR 161 SIMULTANEOUSLY.

CONSTRUCT THE I-71 SOUTHBOUND OUTSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE MAINLINE CROSSINGS OVER MORSE ROAD AND SR 161.

COMPLETE THE I-71 SOUTHBOUND EXIT RAMP TO SINCLAIR RD AND THE I-71 SOUTHBOUND ENTRANCE RAMP FROM MORSE RD.

PHASE 3B STEP 2: RE-OPEN THE I-71 SOUTHBOUND EXIT RAMP TO SINCLAIR RD AND THE I-71 SOUTHBOUND ENTRANCE RAMP FROM MORSE RD. COMPLETE THE I-71 SOUTHBOUND OUTSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE MAINLINE CROSSINGS OVER MORSE ROAD AND SR 161.

BY THE END OF PHASE 3B STEP 2, COMPLETE THE PROPOSED ITS IMPROVEMENTS AND ABANDON THE EXISTING ITS INFRASTRUCTURE IN THE MEDIAN BARRIER.

PHASE 4A
REMOVE THE SOUTHBOUND CONTRAFLOW LANE AND INSTALL THE NORTHBOUND CONTRAFLOW LANE.

WITH TRAFFIC IN PHASE 4A POSITION, AND WITH DETOUR IN PLACE, CLOSE MORSE ROAD AND SR 161 FOR BRIDGE DEMOLITION ACTIVITES. REMOVE EXISTING PIERS AND INSTALL TEMPORARY SIDEWALK WITHIN THE PHASE LIMITS PRIOR TO REOPENING. DO NOT CLOSE MORSE RD AND SR 161 SIMULTANEOUSLY.

COMPLETE THE I-71 NORTHBOUND INSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE MAINLINE CROSSINGS OVER MORSE ROAD AND SR 161

PHASE 4B
FOR TRANSITION FROM PHASE 4A TO 4B STEP 1:

1. SCHEDULE THE TRANSITION TO OCCUR DURING A WEEKEND LANE CLOSURE PERIOD.
2. CLOSE THE PHASE 4A INSIDE NORTHBOUND LANE PER SCD MT-95.30 WHILE MAINTAINING THE NORTHBOUND CONTRAFLOW LANE AND THE PHASE 4A OUTSIDE NORTHBOUND LANE.
3. COMPLETE THE REMAINING NORTHBOUND VARIABLE DEPTH MILLING AND INTERMEDIATE ASPHALT PAVING ALONG THE NORTHBOUND PHASE 4B STEP 1 TRAFFIC LANES.
4. CLOSE THE I-71 NORTHBOUND ENTRANCE RAMP FROM COOKE RD.
5. REMOVE THE INSIDE LANE CLOSURE AND SHIFT THE PHASE 4A INSIDE LANE TO THE PHASE 4B INSIDE LANE POSITION. CLOSE THE OUTSIDE PHASE 4B LANE PER SCD MT-95.30. REMOVE/COVER CONFLICTING DEVICES. CONTINUE TO MAINTAIN THE NORTHBOUND CONTRAFLOW LANE. MAINTAIN ACCESS TO THE I-71 NORTHBOUND EXIT RAMP TO SR 161 PER SCD MT-98.20.
6. COMPLETE THE REMAINING NORTHBOUND VARIABLE DEPTH MILLING/ INTERMEDIATE ASPHALT PAVING AND PHASE 4B TEMPORARY TRAFFIC CONTROL DEVICES.
7. REMOVE THE LANE CLOSURE AND RAMP CLOSURE. BEGIN PHASE 4B STEP 1 WORK ACTIVITIES.

PHASE 4B STEP 1: WITH TRAFFIC IN THE PHASE 4B POSITION, AND WITH DETOUR IN PLACE, CLOSE MORSE ROAD AND SR 161 FOR BRIDGE DEMOLITION ACTIVITES. REMOVE EXISTING PIERS AND INSTALL TEMPORARY SIDEWALK WITHIN THE PHASE LIMIT PRIOR TO REOPENING. DO NOT CLOSE MORSE ROAD AND SR 161 SIMULTANEOUSLY.

CONSTRUCT THE I-71 NORTHBOUND OUTSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE MAINLINE CROSSINGS OVER MORSE ROAD AND SR 161.

COMPLETE THE I-71 NORTHBOUND EXIT RAMP TO MORSE ROAD AND THE I-71 NORTHBOUND ENTRANCE RAMP FROM MORSE ROAD.

PHASE 4B STEP 2: REOPEN THE I-71 NORTHBOUND EXIT AND ENTRANCE RAMPS AT MORSE ROAD.

COMPLETE THE I-71 NORTHBOUND OUTSIDE LANES ALONG THE NEW STRUCTURES AND CONNECTING PAVEMENT AT THE CROSSINGS OVER MORSE ROAD AND SR 161.

UPON COMPLETION OF PHASE 4B STEP 2, REMOVE THE NORTHBOUND CONTRAFLOW LANE AND SHIFT TRAFFIC TO FINAL CONFIGURATION.

INSTALL MOT DEVICES PER PHASE 2 AT THE CROSSOVER LOCATIONS AND RESTORE THE CROSSOVERS TO THE ORIGINAL CONFIGURATION.

PHASE 5
NOTE: PHASES 5, 6, AND 7 HAVE BEEN ASSIGNED PHASE LABELS FOR REFERENCE PURPOSES ONLY. THE I-71 BRIDGE REHABILIATION WORK AT 2ND AVENUE, 17TH AVENUE, AND HIAWATHA PARK DRIVE IS NOT REQUIRED TO BE COMPLETED IN A PARTICULAR ORDER. INCLUDE THE PROPOSED SEQUENCE OF WORK IN THE PROJECT SCHEDULE FOR ENGINEER'S APPROVAL.

WITH A SERIES OF 4 WEEKEND LANE CLOSURE PERIODS, COMPLETE THE BRIDGE REHABILIATION WORK AT THE I-71 MAINLINE CROSSING OVER 2ND AVENUE. COMPLETE EACH STEP WITHIN ONE WEEKEND LANE CLOSURE PERIOD.

SEQUENCE OF WORK CONT'D

PHASE 5A STEP 1: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND INSIDE LANES

PHASE 5A STEP 2: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 5B STEP 1: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHGBOUND INSIDE LANES

PHASE 5B STEP 2: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND OUTSIDE LANES

PHASE 6
WITH A SERIES OF 4 WEEKEND LANE CLOSURE PERIODS, COMPLETE THE BRIDGE REHABILIATION WORK AT THE I-71 MAINLINE CROSSING OVER 17TH AVENUE. COMPLETE EACH STEP WITHIN ONE WEEKEND LANE CLOSURE PERIOD.

PHASE 6A STEP 1: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND INSIDE LANES

PHASE 6A STEP 2: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 6B STEP 1: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHGBOUND INSIDE LANES

PHASE 6B STEP 2: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND OUTSIDE LANES

PHASES 7A & 7B
WITH A SERIES OF 8 WEEKEND LANE CLOSURE PERIODS, COMPLETE THE BRIDGE REHABILIATION WORK AT THE I-71 MAINLINE CROSSING OVER HIAWATHA PARK DR. COMPLETE EACH STEP WITHIN ONE WEEKEND LANE CLOSURE PERIOD.

PHASE 7A STEP 1: REPLACE THE APPROACH SLAB ALONG THE NORTHBOUND INSIDE LANES

PHASE 7A STEP 2: REPLACE THE APPROACH SLAB ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 7A STEP 3: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND INSIDE LANES

PHASE 7A STEP 4: INSTALL THE BRIDGE DECK OVERLAY ALONG THE NORTHBOUND OUTSIDE LANES

PHASE 7B STEP 1: REPLACE THE APPROACH SLAB ALONG THE SOUTHBOUND INSIDE LANES

PHASE 7B STEP 2: REPLACE THE APPROACH SLAB ALONG THE SOUTHBOUND OUTSIDE LANES

PHASE 7B STEP 3: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND INSIDE LANES

PHASE 7B STEP 4: INSTALL THE BRIDGE DECK OVERLAY ALONG THE SOUTHBOUND OUTSIDE LANES

PHASE 8
UPON COMPLETION OF PHASES 1 THROUGH 7, COMPLETE ALL REMAINING WORK ITEMS, INCLUDING THE SURFACE STREET WORK ALONG MORSE RD AND SR 161.

REMOVE TEMPORARY LIGHTING.

COMPLETE ALL PUNCH LIST ITEMS

MAINTENANCE OF TRAFFIC - GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.36 TOTAL 618

FRA-71-19.10

MODEL: Sheet 6 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:54:25 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com
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A

MORSE ROAD
(60"x18")
DETOUR
M4-9R-30
(MOD)

B

MORSE ROAD
(48"x18")
DETOUR
M4-9R-30

C

MORSE ROAD
(48"x18")
DETOUR
M4-9S-30

D

RAMP WILL BE CLOSED FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

E

END DETOUR
M4-8a-24

F

R11-2 ROAD CLOSED
R11-2 ROAD CLOSED

TYPE III BARRICADES PER MT-101.60

HIGH STREET
INDIANOLA AVENUE
SINCLAIR ROAD
HUNTLEY RO
BUSCH BLVD.
COOKE ROAD
COOKE ROAD
MORSE ROAD
MORSE ROAD
23
71
161

NOT TO SCALE

LEGEND:

XX ROAD CLOSURE

MORSE RD. DETOUR DIRECTION OF TRAFFIC

TYPE III BARRICADE

MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 3A STEP 1 - MORSE RD./SINCLAIR RD. SB EXIT RAMP CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.37 | TOTAL 618

FRA-71-19.10

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A

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E

END DETOUR
M4-8a-24

F

R11-2 ROAD CLOSED
R11-2 ROAD CLOSED

TYPE III BARRICADES PER MT-101.60

G

I-71 SOUTH RAMP CLOSED FOLLOW DETOUR

SPECIAL (48" x 48")

H

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

I

ROAD CLOSED
R11-2-48

DETOUR
M4-10R-48

J

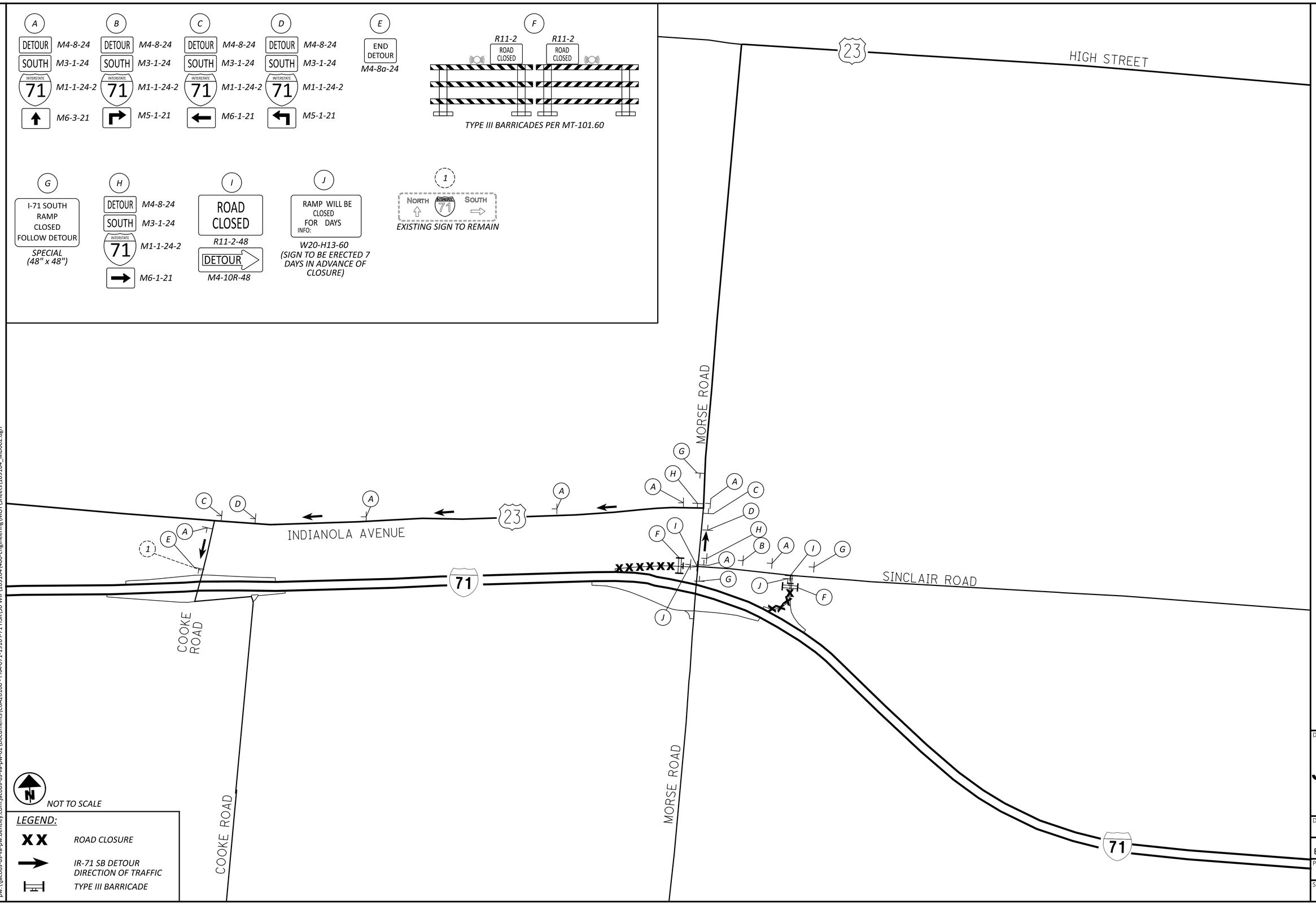
RAMP WILL BE CLOSED FOR DAYS
INFO:

W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

1

NORTH 71 SOUTH

EXISTING SIGN TO REMAIN



MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 3A STEP 2 - MORSE RD. SB ENTRANCE RAMP CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.38 TOTAL 618

FRA-71-19.10

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A
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E
END DETOUR
M4-8a-24

F
ROAD CLOSED
R11-2-48
DETOUR
M4-10R-48
MOUNTED ON TYPE III BARRICADE

G
MORSE ROAD
(60"x18")
DETOUR
M4-9R-30
(MOD)

H
EXIT CLOSED
E5-2a-48

I
NOT USED

J
MORSE ROAD
(48"x18")
DETOUR
M4-9R-30

K
DETOUR M4-8-24
MORSE ROAD
(48"x18")
DETOUR
M4-9S-30

L
DETOUR M4-8-24
MORSE ROAD
(48"x18")
M5-1-21

M
I-71 SOUTH
RAMP
CLOSED
FOLLOW DETOUR
SPECIAL
(48" x 48")

N
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

O
NOT USED

P
R11-2 ROAD CLOSED
R11-2 ROAD CLOSED
TYPE III BARRICADES PER MT-101.60

Q
RAMP WILL BE CLOSED
FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

1
NORTH INTERSTATE 71 SOUTH

2
EXIT 116
Morse Rd
Sinclair Rd
CLOSED
OVERLAY WITH W20-H-15a

3
EXIT 116
Morse Rd
Sinclair Rd
CLOSED
OVERLAY WITH W20-H-15a

4
Morse Rd CLOSED
Cooke Rd 1 3/4
N Broadway 2 3/4
OVERLAY WITH W20-H-15a

5
EXIT 116
Sinclair Rd
Morse Rd
EXIT CLOSED
W20-H-15

6
EXIT 115
Cooke Rd
1/4 MILE
EXIT 116
Morse Rd
Sinclair Rd
EXIT CLOSED
W20-H-15
COVER ARROW WITH BLANK OVERLAY

7
INTERSTATE 71 SOUTH
Cincinnati
CLOSED
OVERLAY WITH W20-H-15a

8
SOUTH
INTERSTATE 71
CLOSED
OVERLAY WITH W20-H-15a

HIGH STREET

INDIANOLA AVENUE

INDIANOLA AVENUE

SINCLAIR ROAD

HUNTLEY ROA

BUSCH BLVD.

COOKE ROAD

COOKE ROAD

MORSE ROAD

23

71

161

NOT TO SCALE

LEGEND:
- XX ROAD CLOSURE
- IR-71 SB DETOUR DIRECTION OF TRAFFIC
- MORSE RD. DETOUR DIRECTION OF TRAFFIC
- TYPE III BARRICADE

MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 3B STEP 1 - MORSE RD. EXIT AND ENTRANCE CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.39 TOTAL 618

FRA-71-19.10

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MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 4B STEP 1 - MORSE RD. EXIT AND ENTRANCE CLOSURE

A
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E
END DETOUR
M4-8a-24

F
ROAD CLOSED
R11-2-48
DETOUR
M4-10L-48
MOUNTED ON TYPE III BARRICADE

G
MORSE ROAD (60"x18")
DETOUR
M4-9R-30 (MOD)

H
EXIT CLOSED
E5-2a-48

I
MORSE ROAD (48"x18")
DETOUR
M4-9R-30

J
DETOUR M4-8-24
MORSE ROAD (48"x18")
DETOUR
M4-9S-30

K
DETOUR M4-8-24
MORSE ROAD (48"x18")
M5-1-21

R
MORSE ROAD
NORTHBOUND EXIT
CLOSED
FOLLOW DETOUR
SPECIAL (48" x 48")

P
R11-2 ROAD CLOSED
R11-2 ROAD CLOSED
TYPE III BARRICADES PER MT-101.60

L
I-71 NORTH
RAMP
CLOSED
FOLLOW DETOUR
SPECIAL (48" x 48")

M
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

N
MORSE ROAD (48"x18")
DETOUR
M4-9L-30

O
RAMP WILL BE
CLOSED
FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

1
INTERSTATE 71 NORTH
Cleveland
CLOSED
OVERLAY WITH W20-H-15a

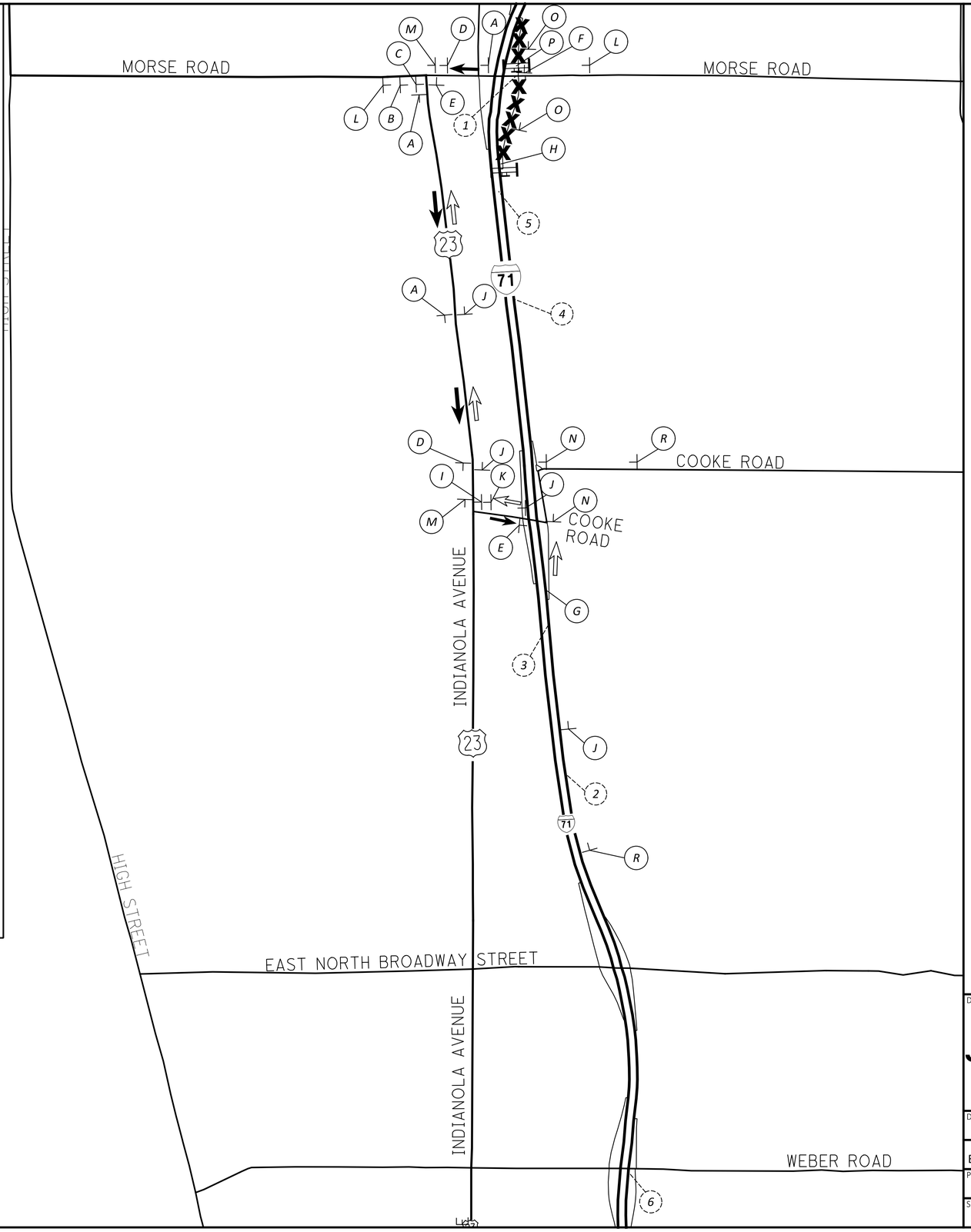
2
Cooke Rd 1/4
Morse Rd CLOSED
161 3 1/4
OVERLAY WITH W20-H-15a

3
EXIT 116
Morse Rd
Sinclair Rd
CLOSED
OVERLAY WITH W20-H-15a
EXIT 115
Cooke Rd

4
Morse Rd CLOSED
161 2 1/4
670 4
OVERLAY WITH W20-H-15a

5
EXIT 116
Morse Rd
Sinclair Rd
EXIT CLOSED
W20-H-15
COVER ARROW WITH BLANK OVERLAY

6
N Broadway 1/4
Cooke Rd 1 1/4
Morse Rd CLOSED



NOT TO SCALE

LEGEND:
- XX ROAD CLOSURE
- IR-71 NB DETOUR DIRECTION OF TRAFFIC
- MORSE RD. DETOUR DIRECTION OF TRAFFIC
- TYPE III BARRICADE

DESIGN AGENCY: Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.40
TOTAL	618

FRA-71-19.10

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MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 5B STEPS 1 & 2 - 5TH AVENUE TO I-71 SB ENTRANCE RAMP CLOSURE

A
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E
END DETOUR
M4-8a-24

F
ROAD CLOSED
R11-2-48
DETOUR
M4-10R-48
MOUNTED ON TYPE III BARRICADE

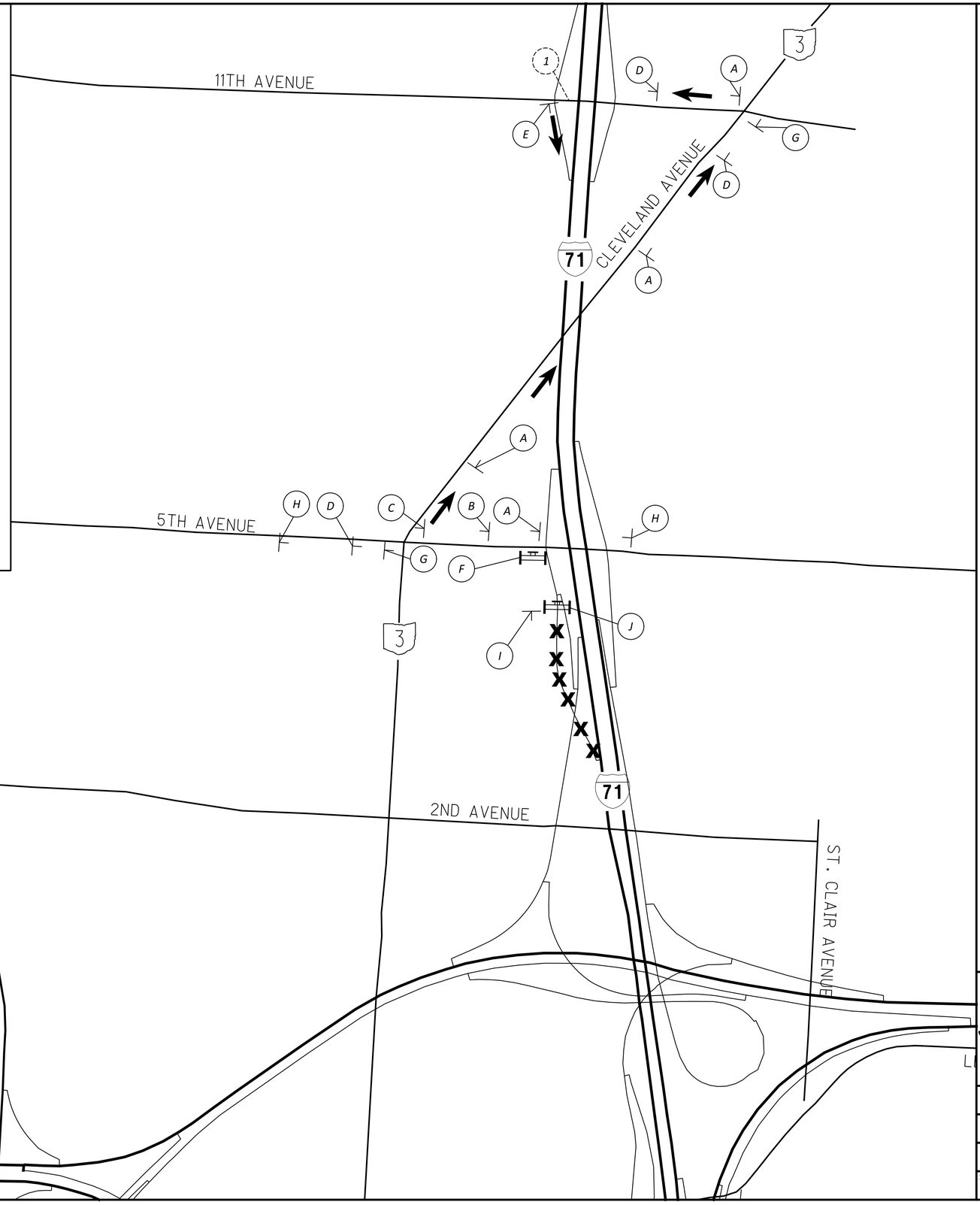
G
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

H
I-71 SOUTHBOUND RAMP CLOSED FOLLOW DETOUR
SPECIAL (48" x 48")

I
RAMP WILL BE CLOSED FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

J
R11-2 ROAD CLOSED
R11-2 ROAD CLOSED
TYPE III BARRICADES PER MT-101.60

1
INTERSTATE 71 SOUTH
Cincinnati
EXISTING SIGN TO REMAIN



NOT TO SCALE

LEGEND:
- XX ROAD CLOSURE
- → IR-71 SB DETOUR DIRECTION OF TRAFFIC
- TYPE III BARRICADE

DESIGN AGENCY: Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.41
TOTAL	618

FRA-71-19.10

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A

DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B

DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C

DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D

DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E

DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71

M6-1-21

F

END DETOUR
M4-8a-24

G

ROAD CLOSED
R11-2-48
DETOUR
M4-10L-48
MOUNTED ON TYPE III BARRICADE

H

I-71
NORTHBOUND
RAMP CLOSED
FOLLOW DETOUR

SPECIAL
(48" x 48")

I

RAMP WILL BE CLOSED
FOR DAYS
INFO:

W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

J

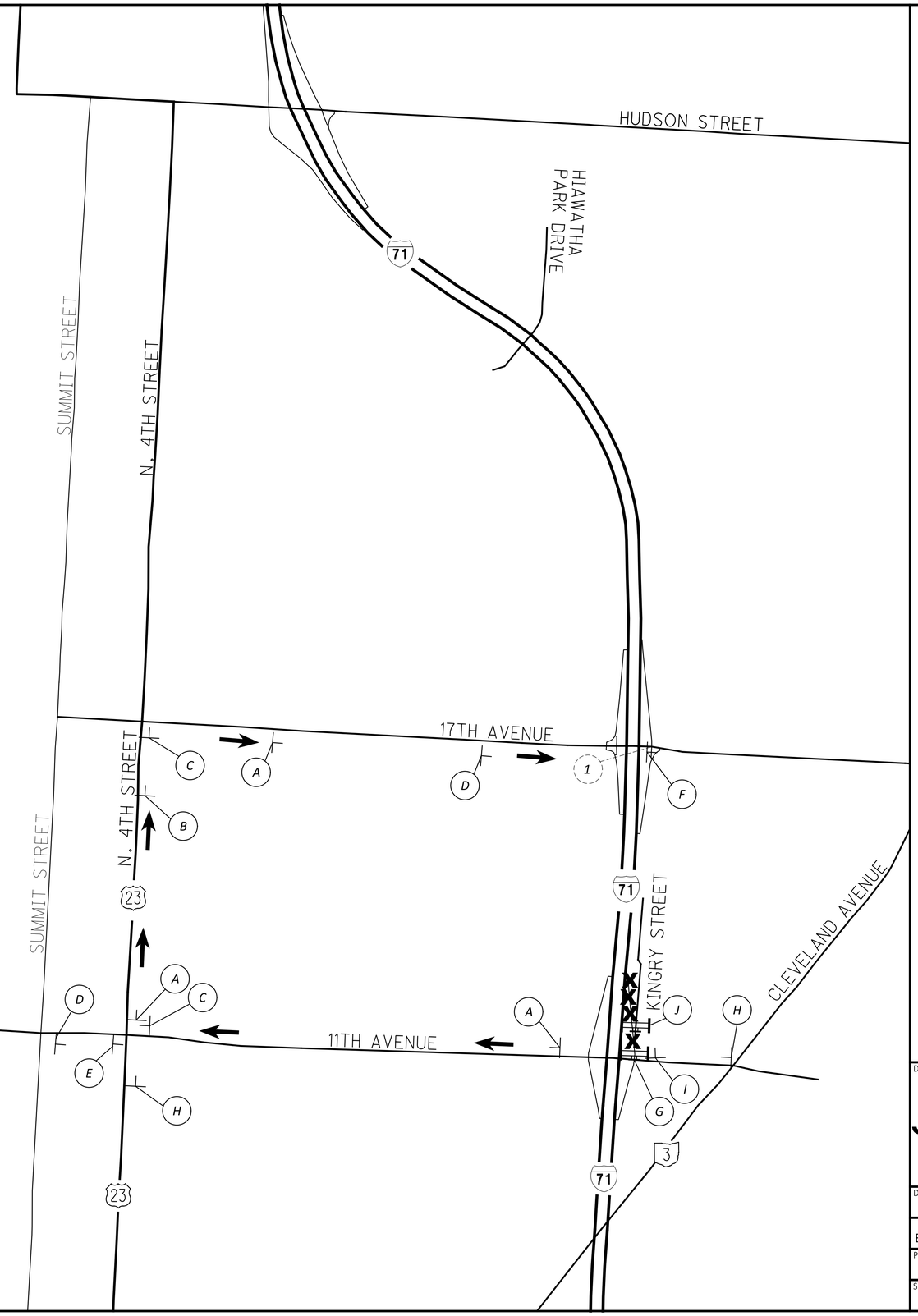
R11-2 ROAD CLOSED
R11-2 ROAD CLOSED

TYPE III BARRICADES PER MT-101.60

1

INTERSTATE 71 NORTH
Cleveland

EXISTING SIGN TO REMAIN



NOT TO SCALE

LEGEND:

XX ROAD CLOSURE

IR-71 NB DETOUR DIRECTION OF TRAFFIC

TYPE III BARRICADE

MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 6A STEP 2 - NORTHBOUND 11TH AVE. ENTRANCE RAMP CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.42 TOTAL 618

FRA-71-19.10

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FRA-71-19.10

A
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E
END DETOUR
M4-8a-24

F
ROAD CLOSED
R11-2-48
DETOUR
M4-10L-48
MOUNTED ON TYPE III BARRICADE

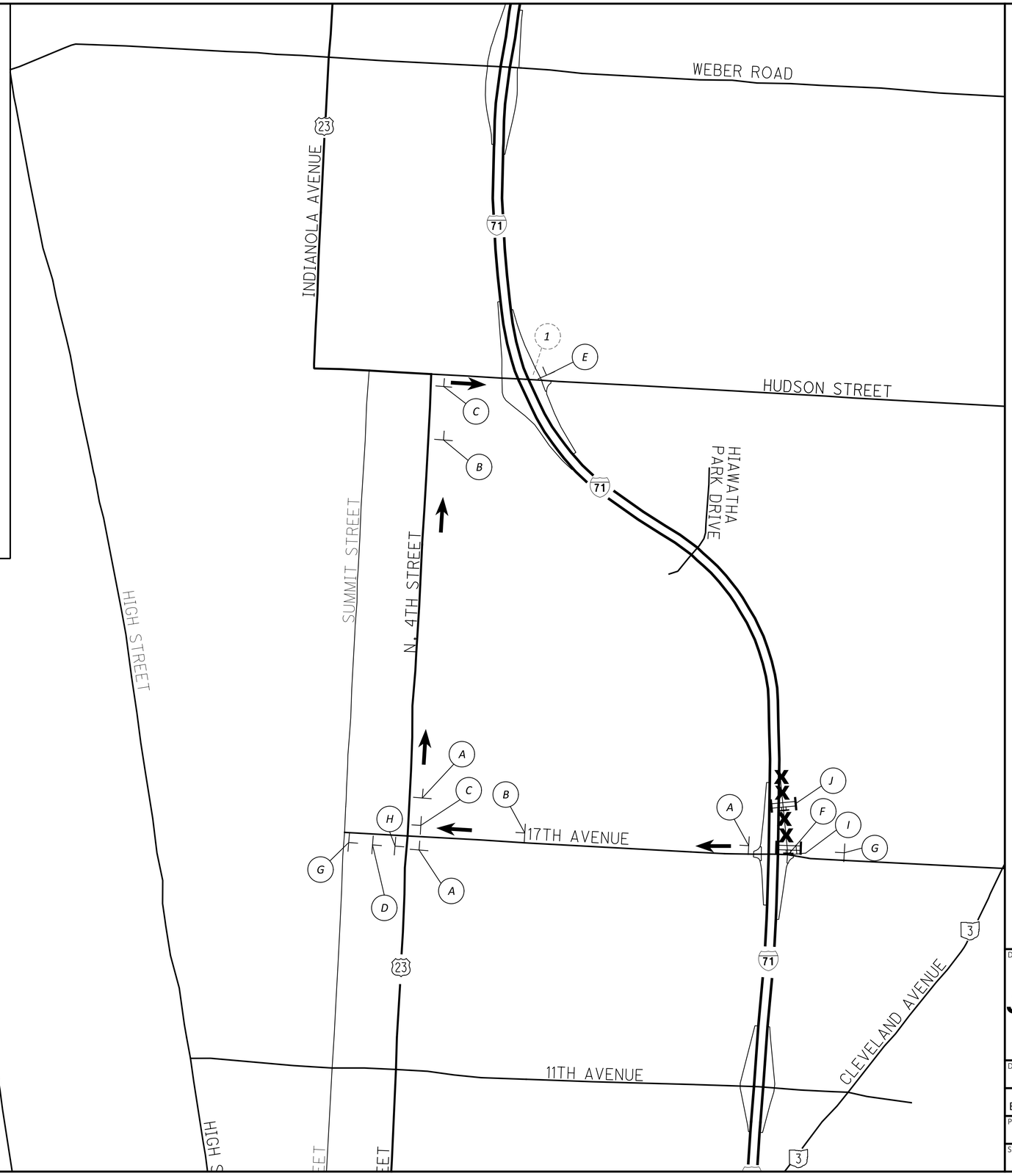
G
I-71 NORTHBOUND RAMP CLOSED FOLLOW DETOUR
SPECIAL (48" x 48")

H
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

I
RAMP WILL BE CLOSED FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

J
R11-2 ROAD CLOSED
R11-2 ROAD CLOSED
TYPE III BARRICADES PER MT-101.60

1
INTERSTATE 71 NORTH
Cleveland
EXISTING SIGN TO REMAIN



NOT TO SCALE

LEGEND:
- XX ROAD CLOSURE
- IR-71 NB DETOUR DIRECTION OF TRAFFIC
- TYPE III BARRICADE

MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 7A STEPS 1/3 & 2/4 - NORTHBOUND 17TH AVE. ENTRANCE CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.43 TOTAL 618

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:56:28 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10

A

DETOUR M4-8-24
SOUTH M3-3-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B

DETOUR M4-8-24
SOUTH M3-3-24
INTERSTATE 71 M1-1-24-2
M5-1-21

C

DETOUR M4-8-24
SOUTH M3-3-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D

DETOUR M4-8-24
SOUTH M3-3-24
INTERSTATE 71 M1-1-24-2
M5-1-21

E

END DETOUR
M4-8a-24

F

ROAD CLOSED
R11-2-48

DETOUR
M4-10R-48
MOUNTED ON TYPE III BARRICADE

G

I-71 SOUTHBOUND RAMP CLOSED FOLLOW DETOUR
SPECIAL (48" x 48")

H

DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

I

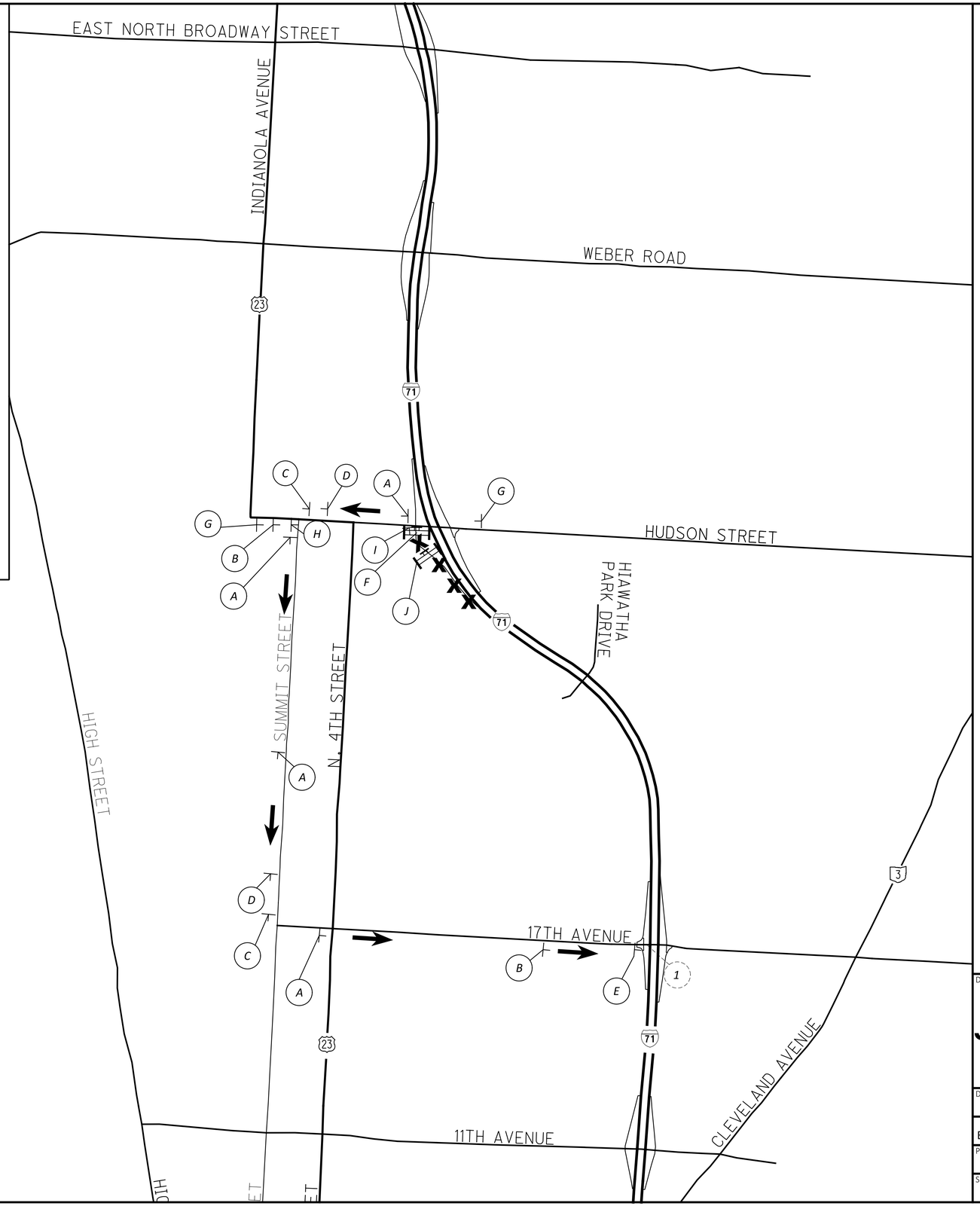
RAMP WILL BE CLOSED FOR DAYS
INFO:
W20-H13-60
(SIGN TO BE ERECTED 7 DAYS IN ADVANCE OF CLOSURE)

J

R11-2 ROAD CLOSED
R11-2 ROAD CLOSED
TYPE III BARRICADES PER MT-101.60

1

INTERSTATE 71 SOUTH
Cincinnati
EXISTING SIGN TO REMAIN



NOT TO SCALE

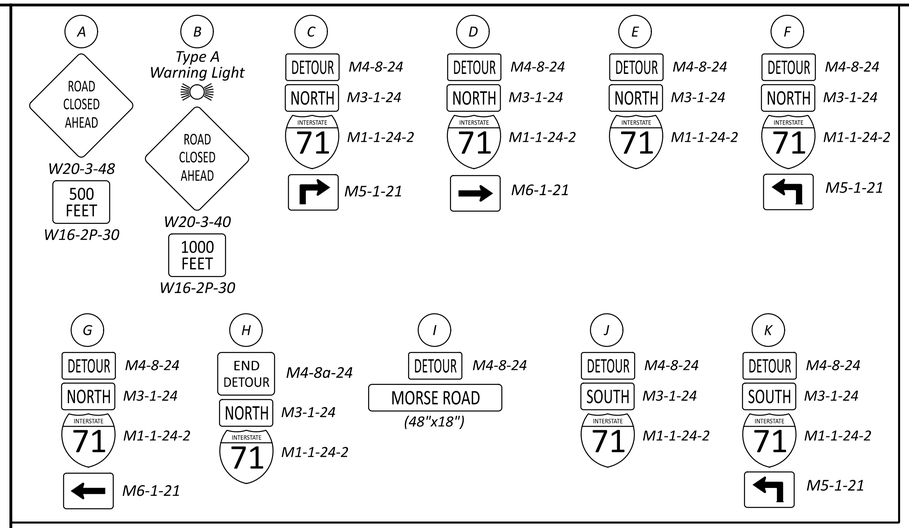
LEGEND:

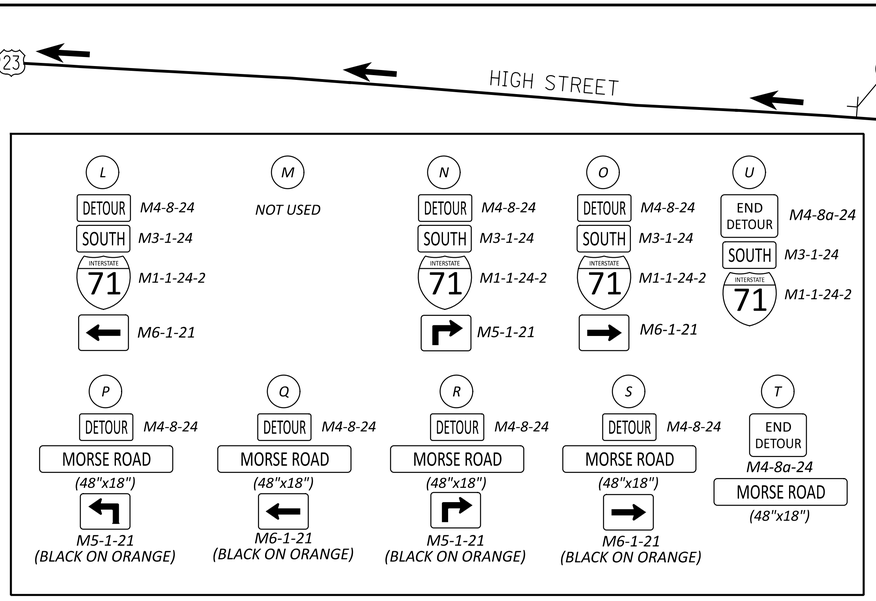
- XX — *ROAD CLOSURE*
- → — *IR-71 SB DETOUR DIRECTION OF TRAFFIC*
- *TYPE III BARRICADE*

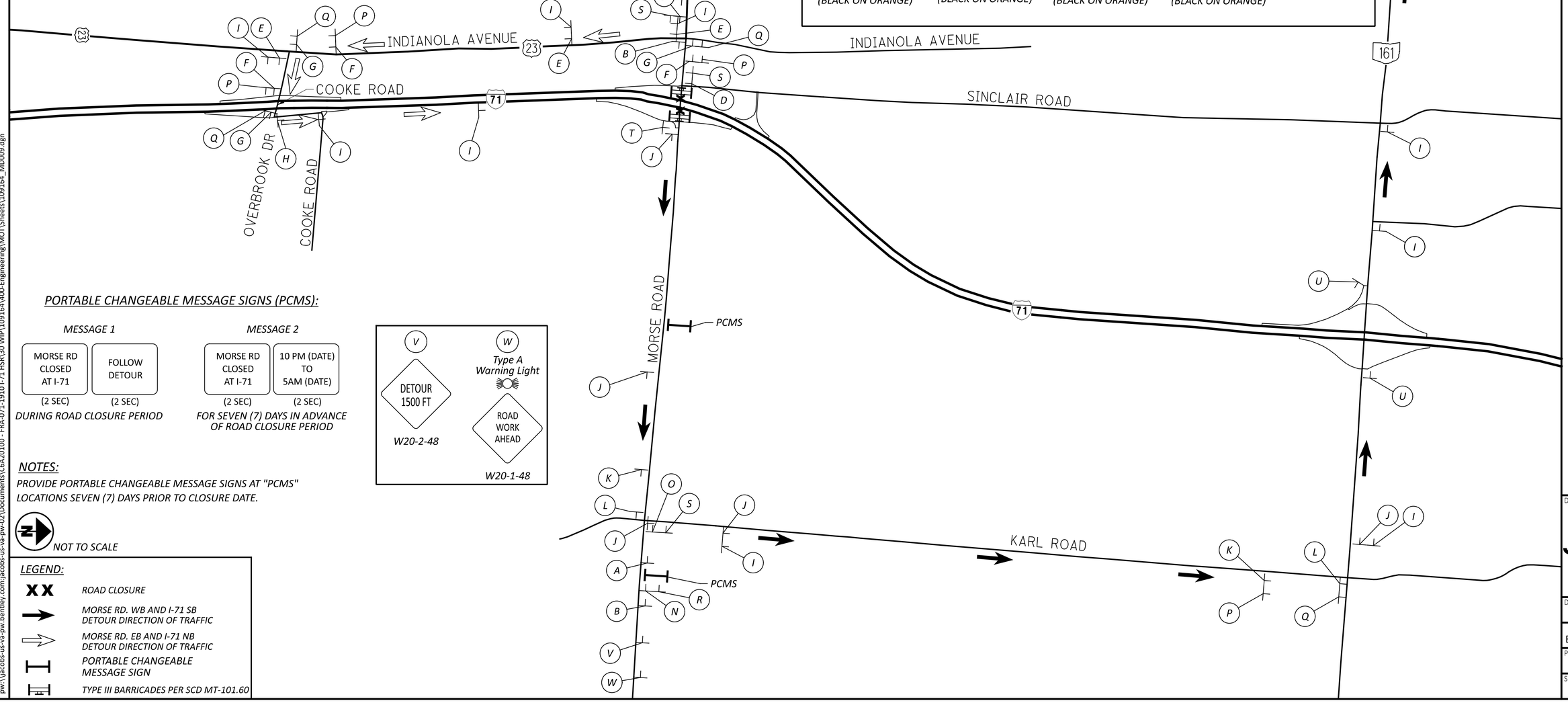
MAINTENANCE OF TRAFFIC - DETOUR MAP
PHASE 7B STEPS 1/3 & 2/4 - SOUTHBOUND HUDSON ST. ENTRANCE RAMP CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.44 TOTAL 618







PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS):

MESSAGE 1		MESSAGE 2	
MORSE RD CLOSED AT I-71	FOLLOW DETOUR	MORSE RD CLOSED AT I-71	10 PM (DATE) TO 5AM (DATE)
(2 SEC)	(2 SEC)	(2 SEC)	(2 SEC)
DURING ROAD CLOSURE PERIOD		FOR SEVEN (7) DAYS IN ADVANCE OF ROAD CLOSURE PERIOD	

NOTES:

PROVIDE PORTABLE CHANGEABLE MESSAGE SIGNS AT "PCMS" LOCATIONS SEVEN (7) DAYS PRIOR TO CLOSURE DATE.

NOT TO SCALE

LEGEND:

- XX — ROAD CLOSURE
- MORSE RD. WB AND I-71 SB DETOUR DIRECTION OF TRAFFIC
- MORSE RD. EB AND I-71 NB DETOUR DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADES PER SCD MT-101.60

MAINTENANCE OF TRAFFIC - DETOUR MAP
MORSE ROAD BRIDGE CLOSURE

DESIGN AGENCY: Jacobs

DESIGNER: SRH

REVIEWER: BAP 03/20/26

PROJECT ID: 109164

SHEET P.45 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:56:43 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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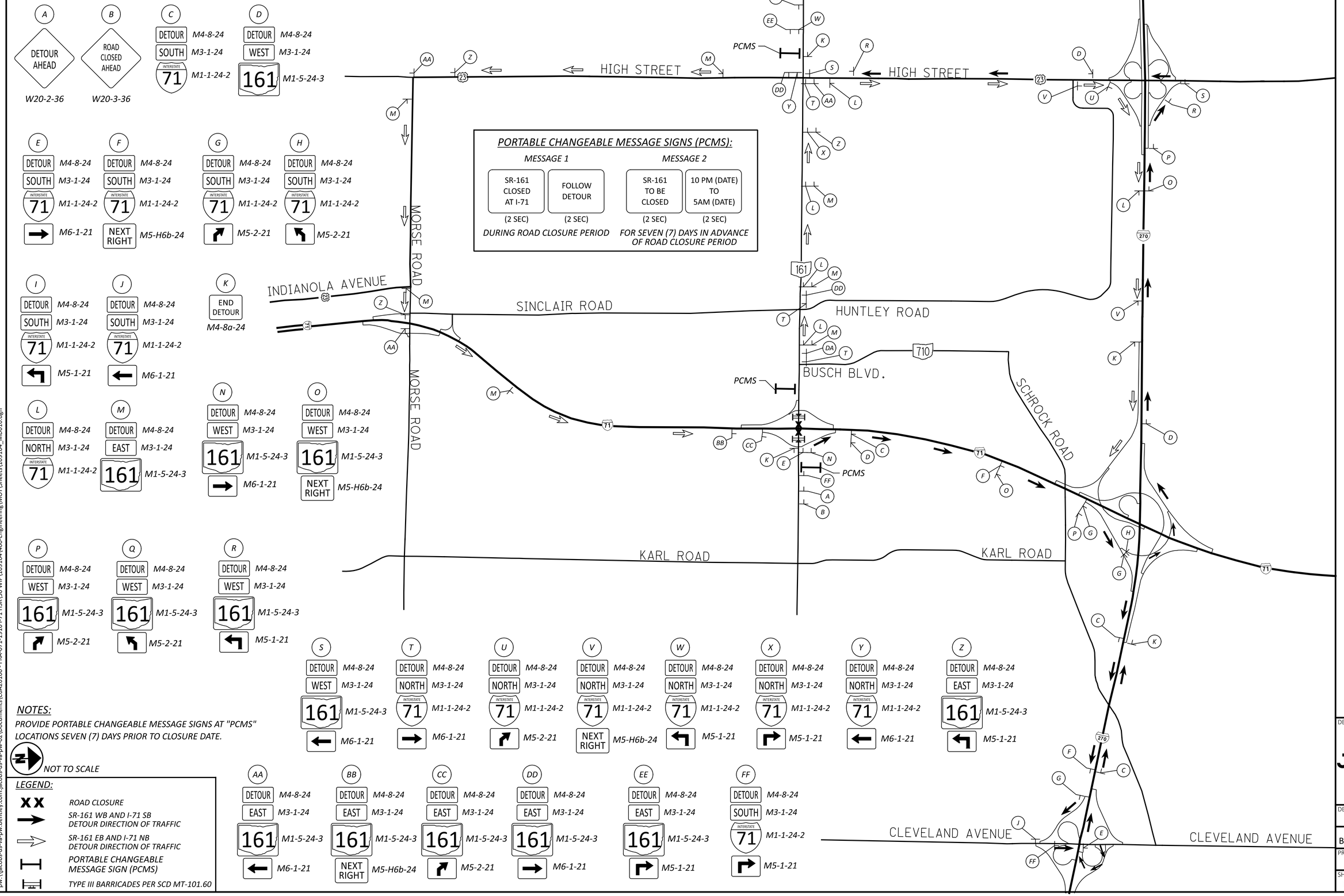

MAINTENANCE OF TRAFFIC - DETOUR MAP
SR 161 BRIDGE CLOSURE DETOUR

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.46 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:57:00 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MAINTENANCE OF TRAFFIC - DETOUR MAP
SR 161 BRIDGE CLOSURE WESTBOUND DETOUR

A
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

B
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

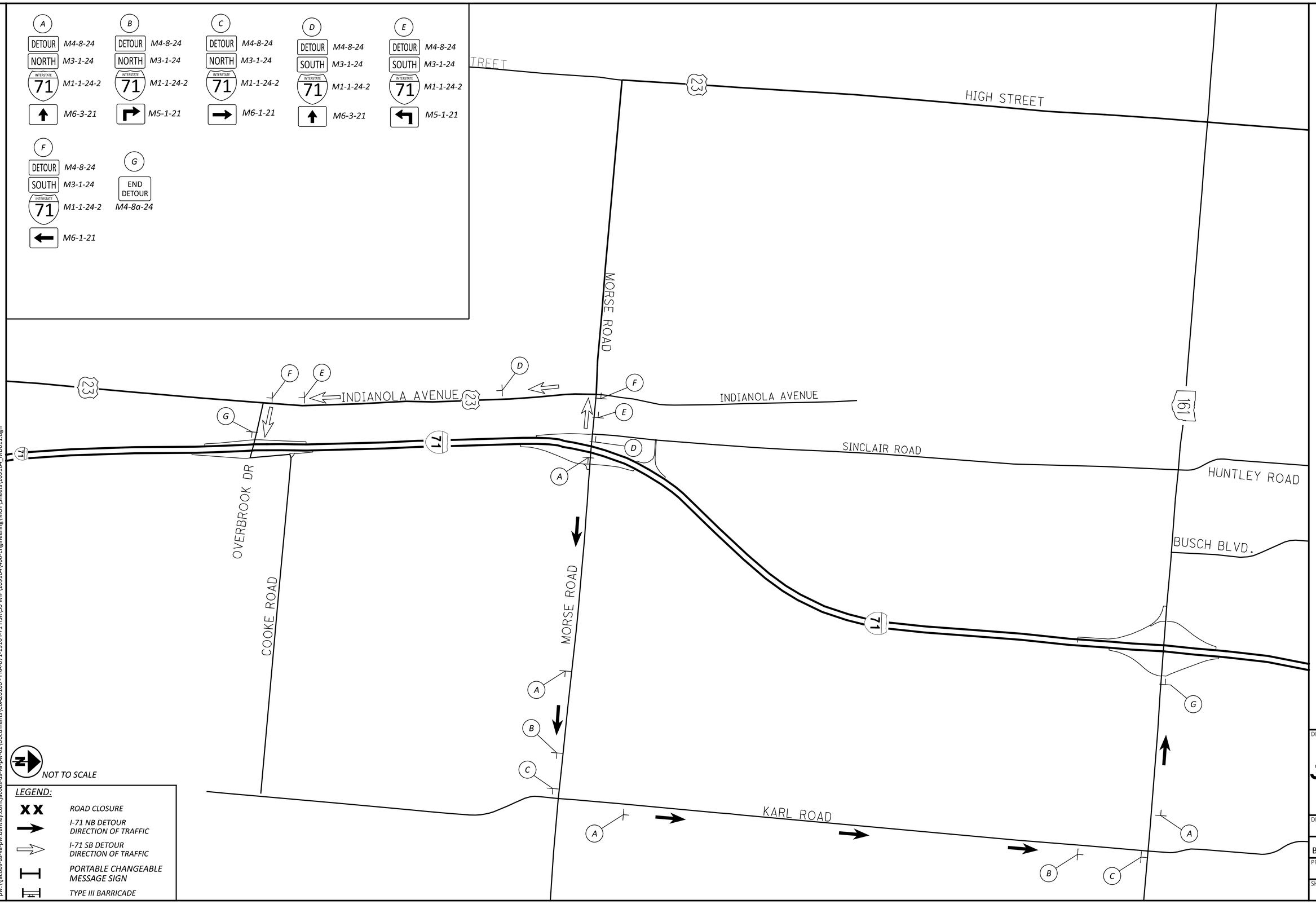
C
DETOUR M4-8-24
NORTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

D
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-3-21

E
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M5-1-21

F
DETOUR M4-8-24
SOUTH M3-1-24
INTERSTATE 71 M1-1-24-2
M6-1-21

G
END DETOUR
M4-8a-24



DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.47 TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:57:16 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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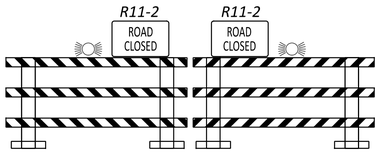
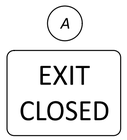


TYPE III BARRICADES PER MT-101.60



E5-2a-48

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS:

P1		P2		P3	
I-71 NB CLOSED AT I-670	USE SR-315	I-71 NB CLOSED AT I-670	USE I-270	I-71 NB CLOSED AT I-670	10 PM FRI TO 5AM MON
(2 SEC)	(2 SEC)	(2 SEC)	(2 SEC)	(2 SEC)	(2 SEC)

NOTES:

PORTABLE CHANGEABLE MESSAGE SIGNS AT LOCATIONS WITH (P3) SHALL BE PLACED SEVEN (7) DAYS PROIR TO CLOSURE.
ON THE DAY OF THE CLOSURE, USE MESSAGES ON PORTABLE CHANGEABLE MESSAGE SIGNS (P1) & (P2) AS SHOWN.



NOT TO SCALE

LEGEND:

- XX — *ROAD CLOSURE*
- — *PORTABLE CHANGEABLE MESSAGE SIGN*
- H — *TYPE III BARRICADE*

MAINTENANCE OF TRAFFIC - DETOUR MAP
BRIDGE NO. FRA-0071-18.750B OVERLAY - I-670 TO I-71 NB RAMP CLOSURE

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.48 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:57:33 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light



W20-1-48

B



R11-H5a

C



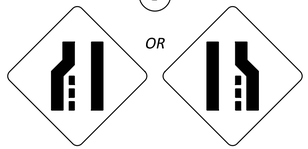
W3-H5b

D



Digital Speed Limit (DSL) Sign Assembly

E



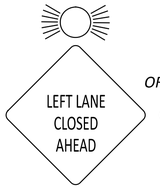
W4-2L-48 STEPS 1 & 3

OR

W4-2R-48 STEPS 2 & 4

F

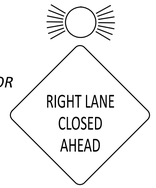
Type A Warning Light



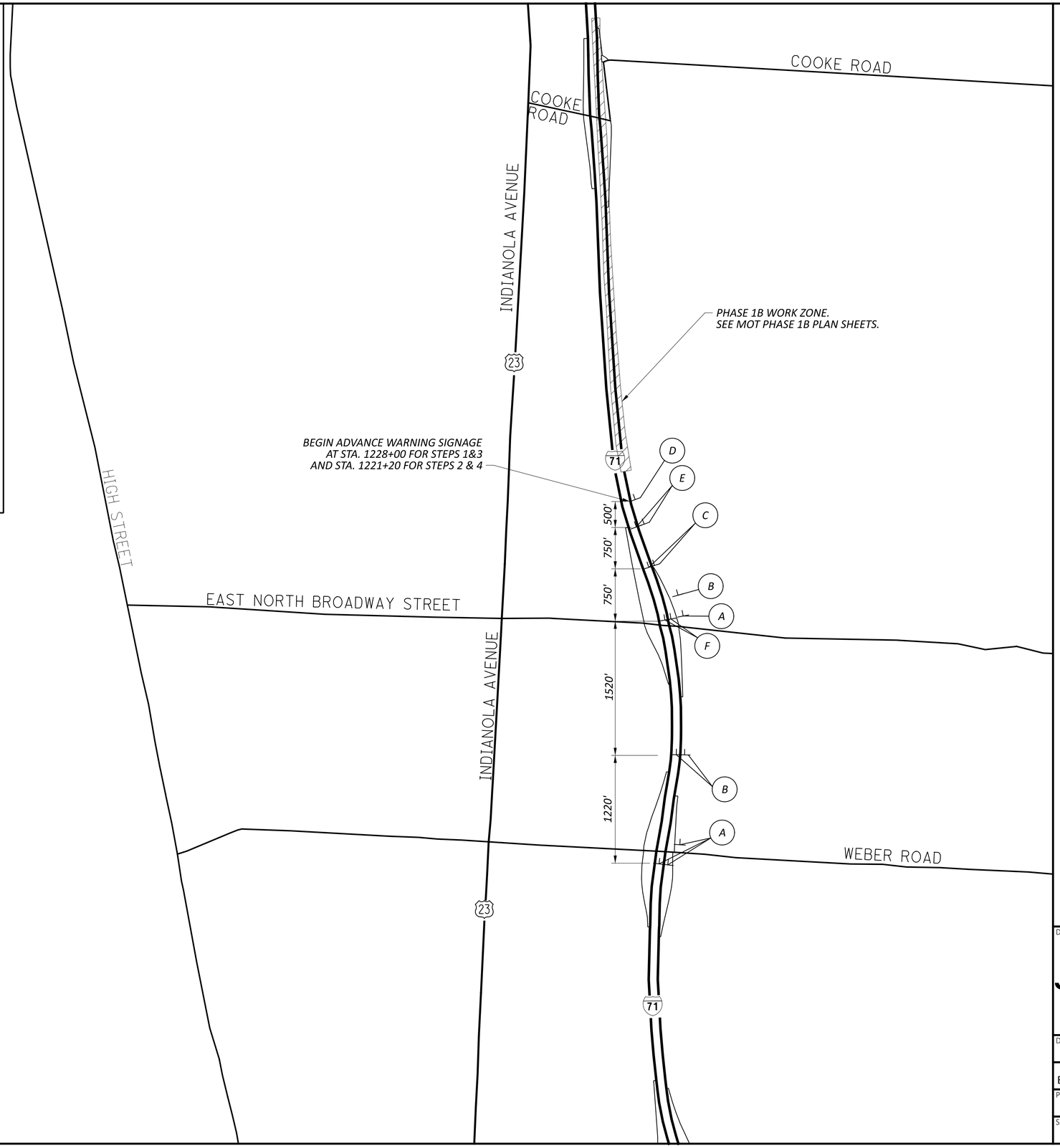
W20-5-48 STEPS 1 & 3

OR

Type A Warning Light



W20-5-48 STEPS 2 & 4



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 1B STEPS 1/3 & 2/4

FRA-71-19.10

DESIGN AGENCY: Jacobs

DESIGNER: SRH

REVIEWER: BAP 03/20/26

PROJECT ID: 109164

SHEET: P.49 | TOTAL: 618

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:57:48 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light



W20-1-48

B



R11-H5a

C



R4-H5a-36

D



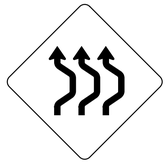
R4-9-36

E



W3-H5b

F

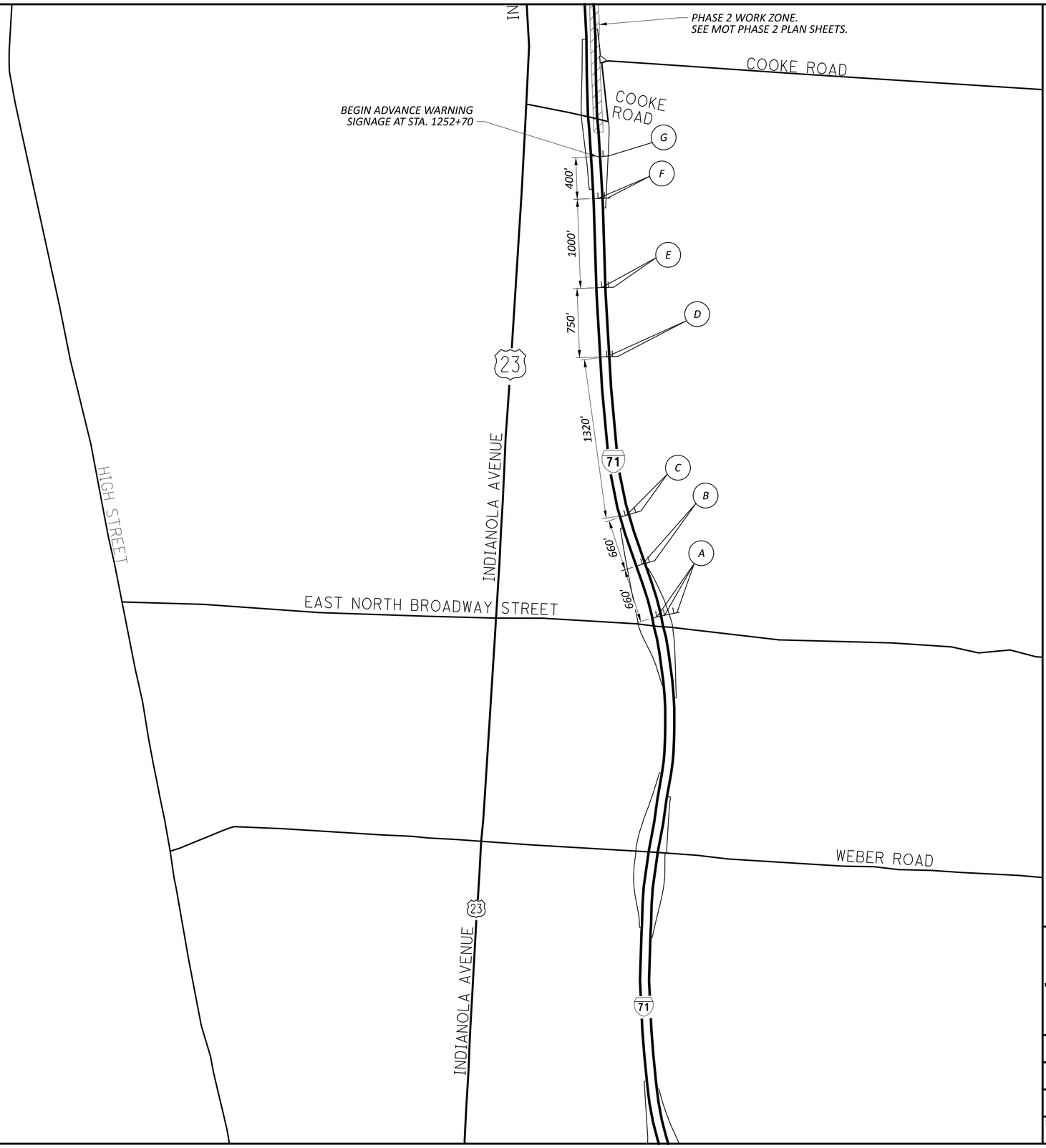


W24-1bR-48

G



Digital Speed Limit (DSL) Sign Assembly



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 2(SOUTH OF MORSE RD)

DESIGN AGENCY

Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.50
TOTAL	618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:58:04 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 3A STEP 3 & PHASE 3B

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.51 | TOTAL 618

FRA-71-19.10

NOT TO SCALE

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:58:19 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE RIGHT LANE

R4-5R

D

VARIABLE SPEED LIMIT AHEAD

W3-H5b

E

Type A Warning Light

W9-3a-48

1/2 MILE

W16-3aP-30

F

Type A Warning Light

W9-3a-48

1 MILE

W16-3aP-30

G

MORSE ROAD
SR 161
KEEP RIGHT

H

INTERSTATE 71 NORTH
ALL LANES

I

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

1 MILE

W16-3aP-30

J

Type A Warning Light

W9-3a-48

2 MILES

W16-3aP-30

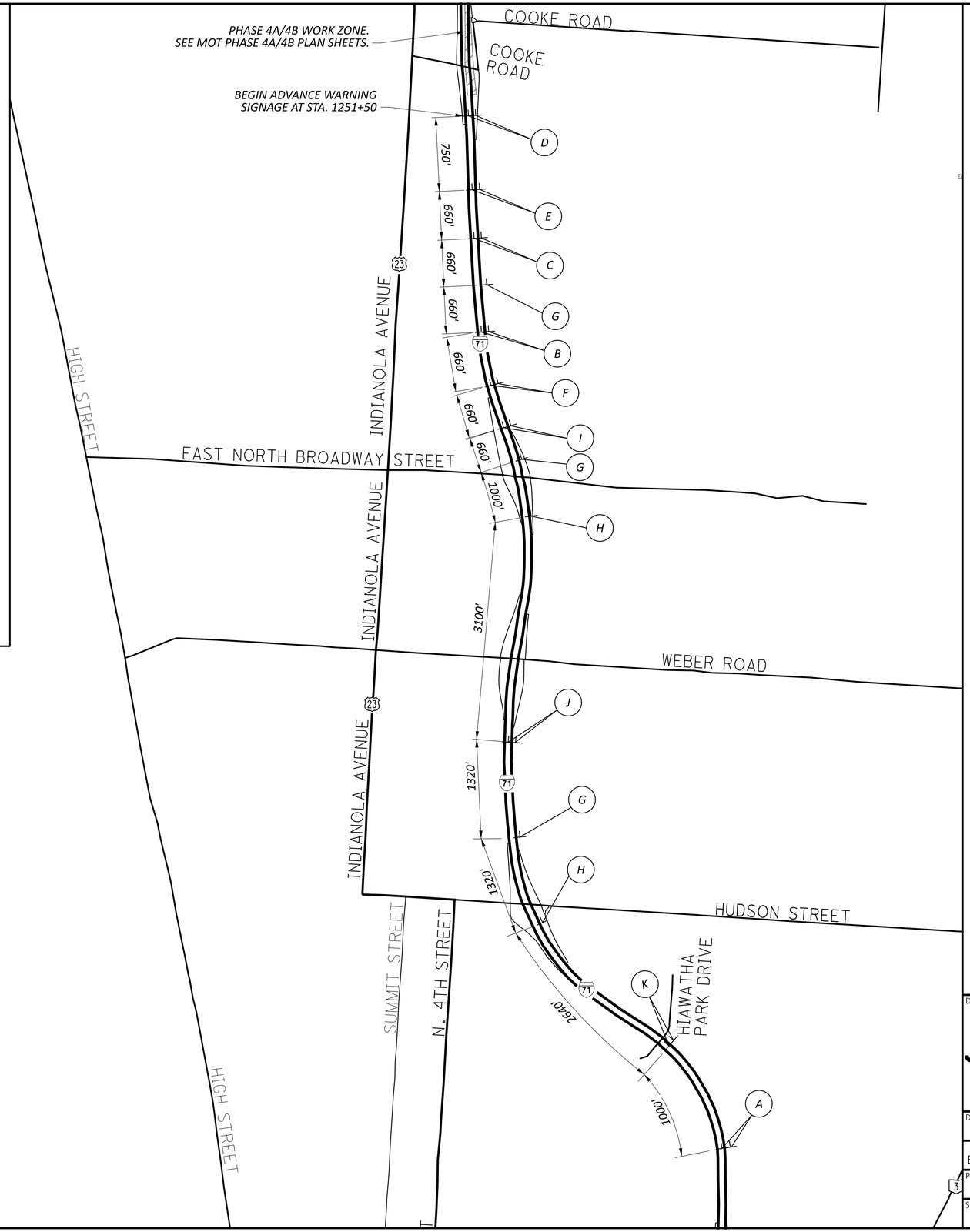
K

Type A Warning Light

W9-3a-48

3 MILES

W16-3aP-30



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASES 4A & 4B

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.52 TOTAL 618

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:58:36 AM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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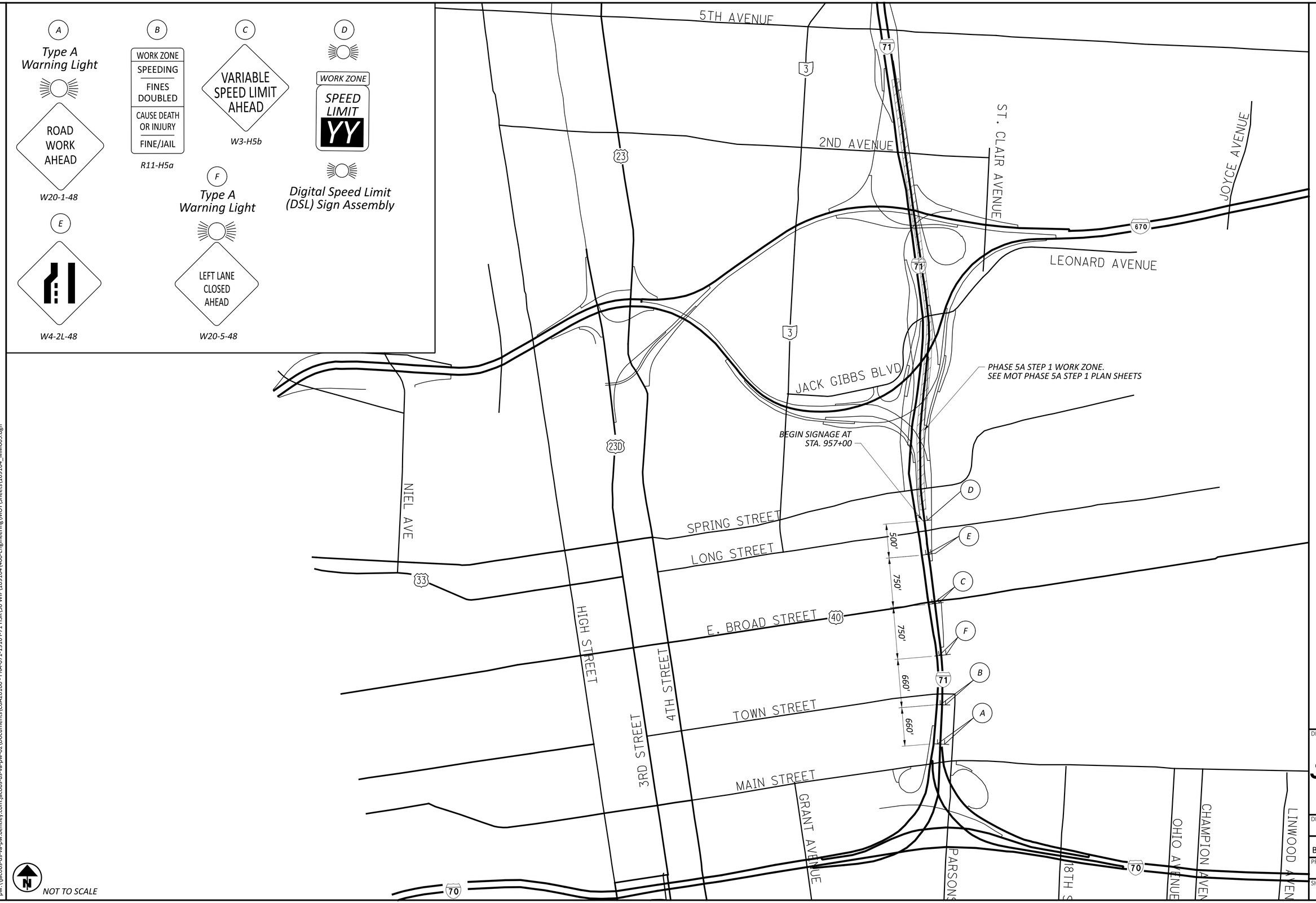
MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 5A STEP 1



DESIGN AGENCY	Jacobs
DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.53
TOTAL	618

FRA-71-19.10

MODEL: MM006 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:58:51 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 5A STEP 2



DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.54 | TOTAL 618

FRA-71-19.10

MODEL: MM006 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:59:06 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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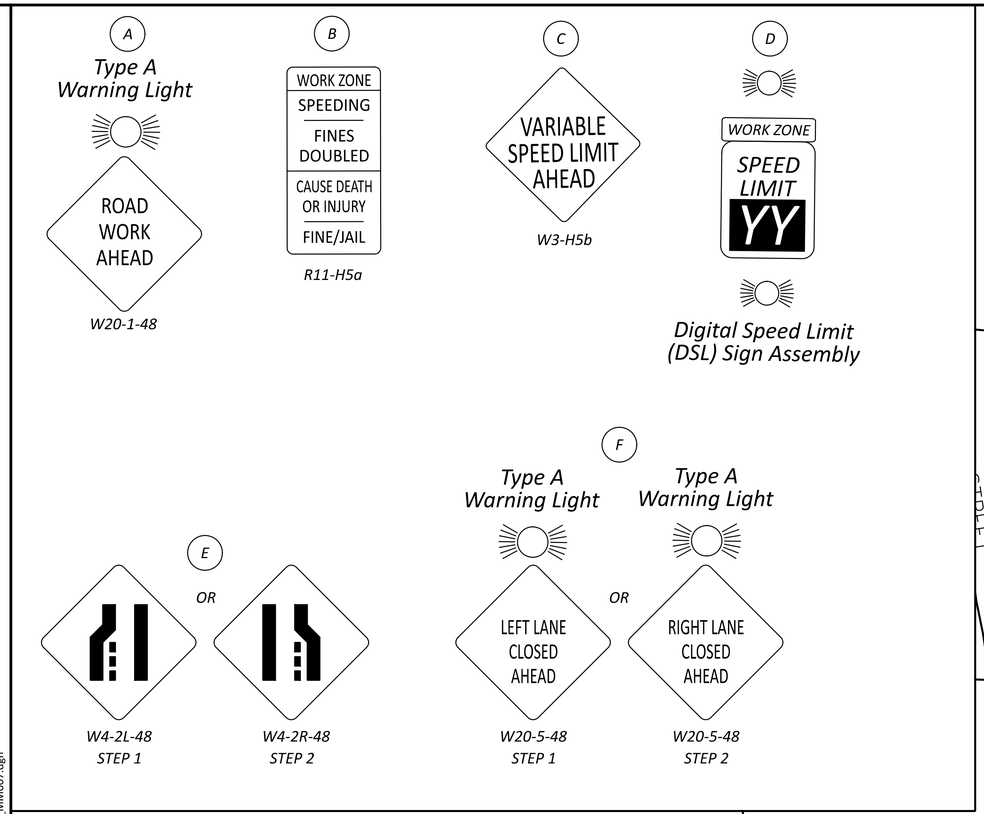
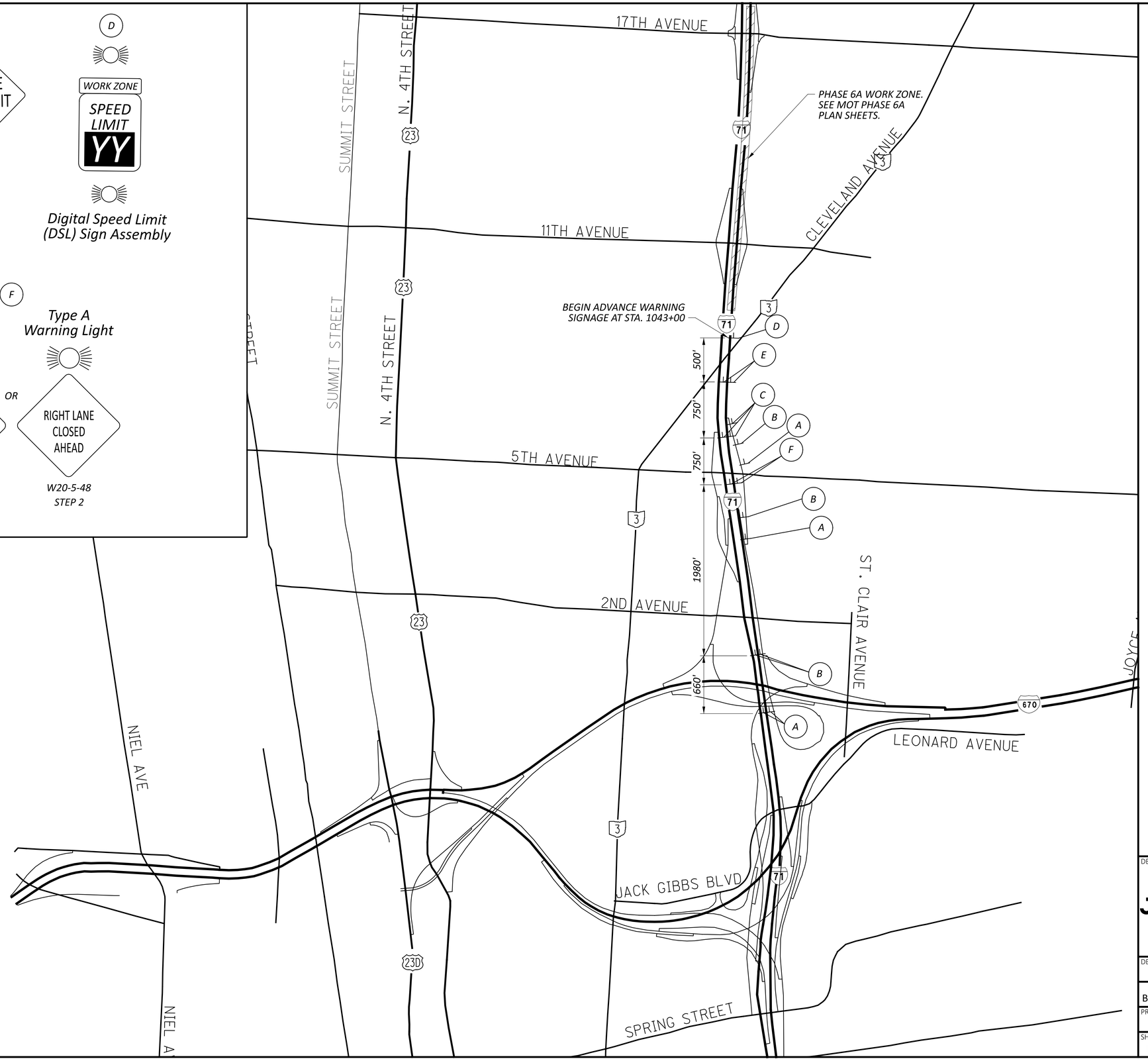
MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 6A STEPS 1 & 2





NOT TO SCALE

DESIGN AGENCY	Jacobs
DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.55
TOTAL	618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:59:21 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

VARIABLE SPEED LIMIT AHEAD

W3-H5b

D

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly

E

OR

W4-2L-48
STEPS 1 & 3

W4-2R-48
STEPS 2 & 4

F

Type A Warning Light

LEFT LANE CLOSED AHEAD

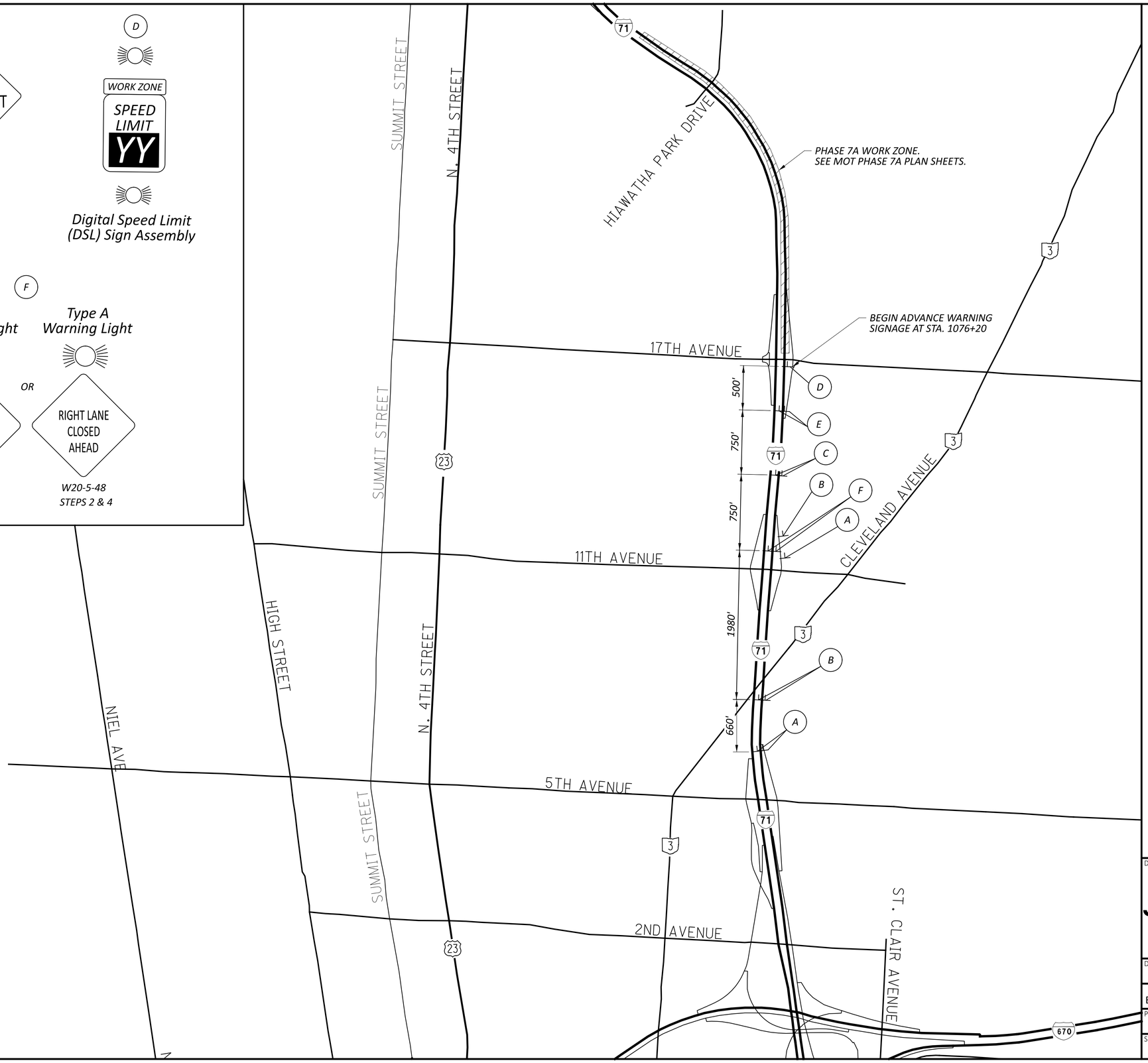
W20-5-48
STEPS 1 & 3

OR

Type A Warning Light

RIGHT LANE CLOSED AHEAD

W20-5-48
STEPS 2 & 4



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 7A STEPS 1/3 & 2/4

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.56 | TOTAL 618

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:59:40 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE LEFT 2 LANES

R4-H5a-36

D

STAY IN LANE

R4-9-36

E

VARIABLE SPEED LIMIT AHEAD

W3-H5b

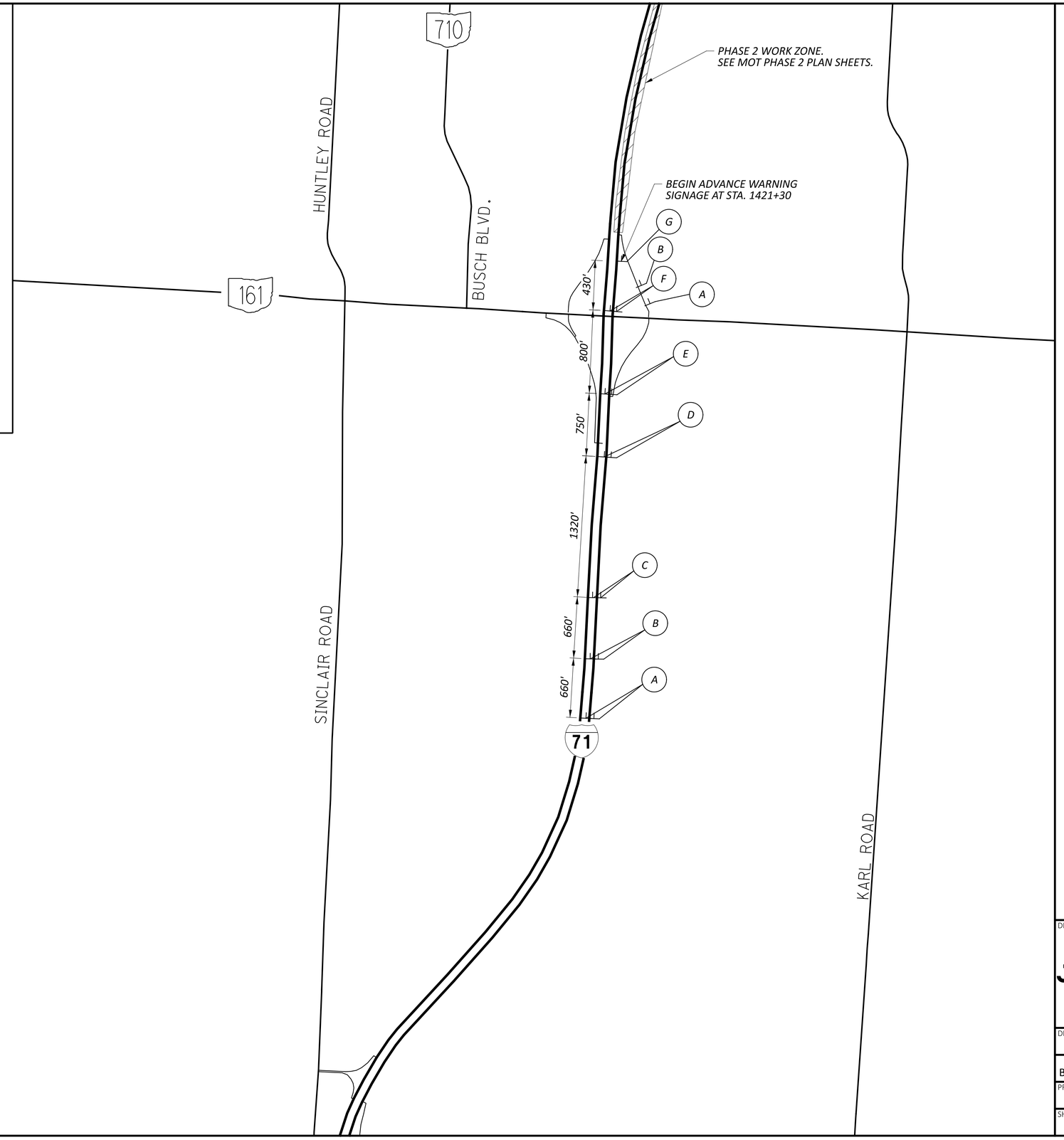
F

W24-1bR-48

G

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 NORTHBOUND - PHASE 2(NORTH OF SR 161)

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.57 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:33:10 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\V00-Engineering\MOT\Sheets\109164_MM009.dgn

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:00:11 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10

A

Type A Warning Light



W20-1-48

B



R11-H5a

C



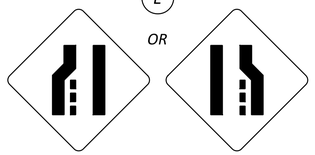
W3-H5b

D



Digital Speed Limit (DSL) Sign Assembly

E



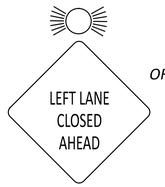
OR

W4-2L-48
STEPS 1 & 3

W4-2R-48
STEPS 2 & 4

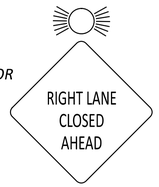
F

Type A Warning Light



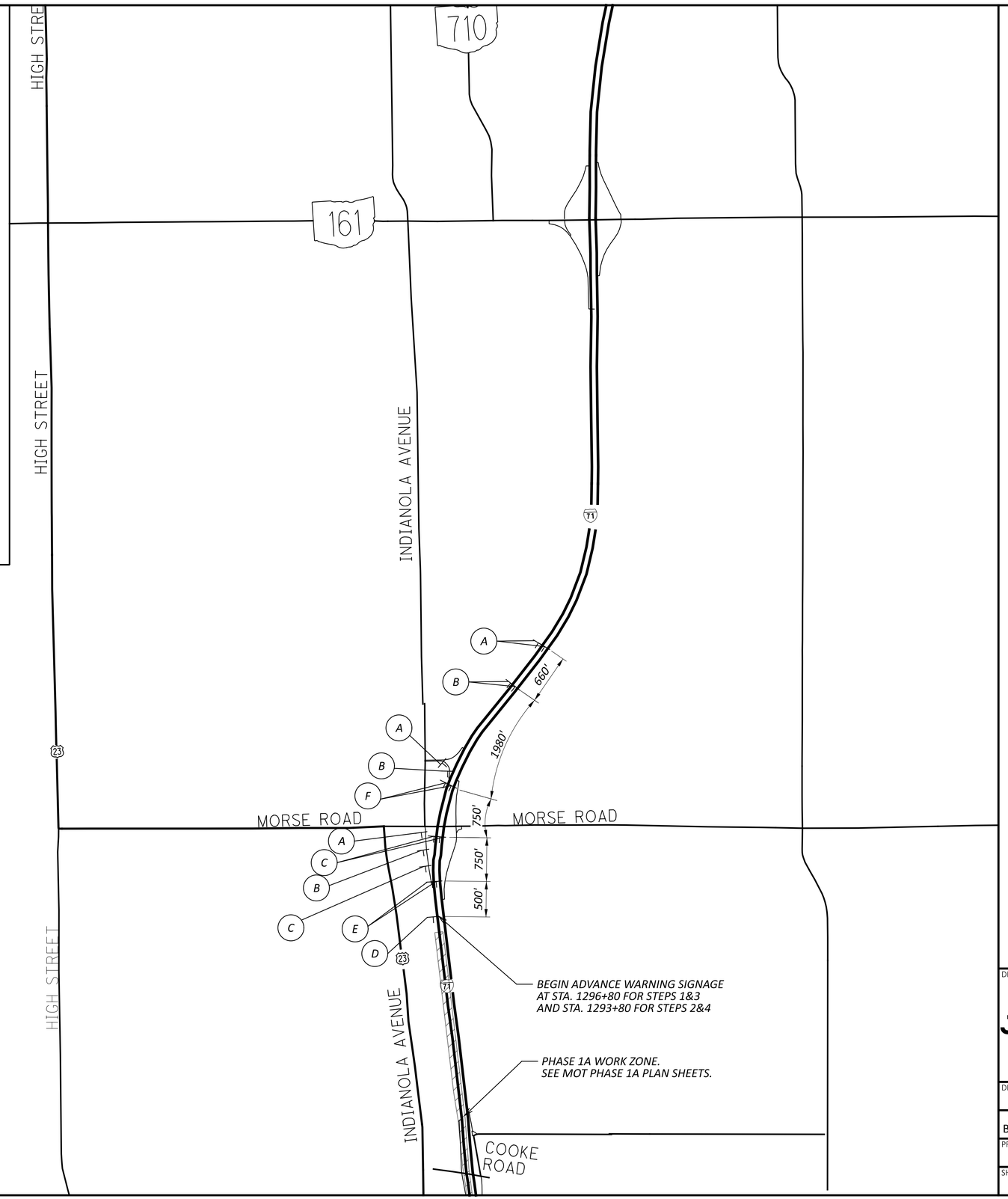
OR

Type A Warning Light



W20-5-48
STEPS 1 & 3

W20-5-48
STEPS 2 & 4



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 1A STEPS 1/3 & 2/4

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.58 | TOTAL 618

A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE LEFT 2 LANES

R4-H5a-36

D

STAY IN LANE

R4-9-36

E

VARIABLE SPEED LIMIT AHEAD

W3-H5b

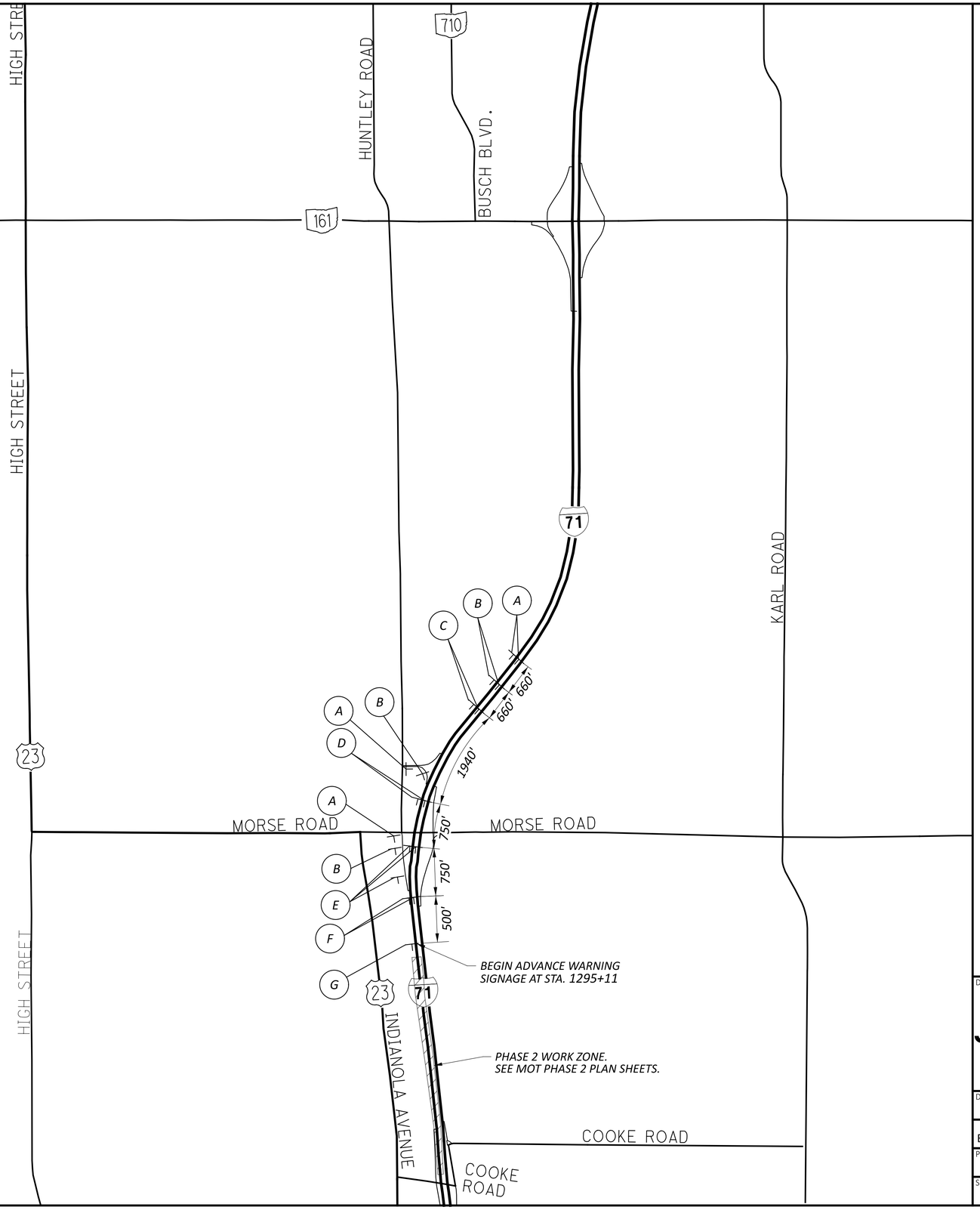
F

W24-1bR-48

G

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 2(SOUTH OF MORSE RD)

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.59 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:00:26 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE RIGHT LANE

R4-5R

D

Type A Warning Light

W9-3a-48

1/2 MILE

W16-3aP-30

E

Type A Warning Light

W9-3a-48

1 MILE

W16-3aP-30

F

MORSE ROAD
SR 161
KEEP RIGHT

G

71 SOUTH
ALL LANES

H

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

1 MILE

W16-3aP-30

I

Type A Warning Light

W9-3a-48

2 MILES

W16-3aP-30

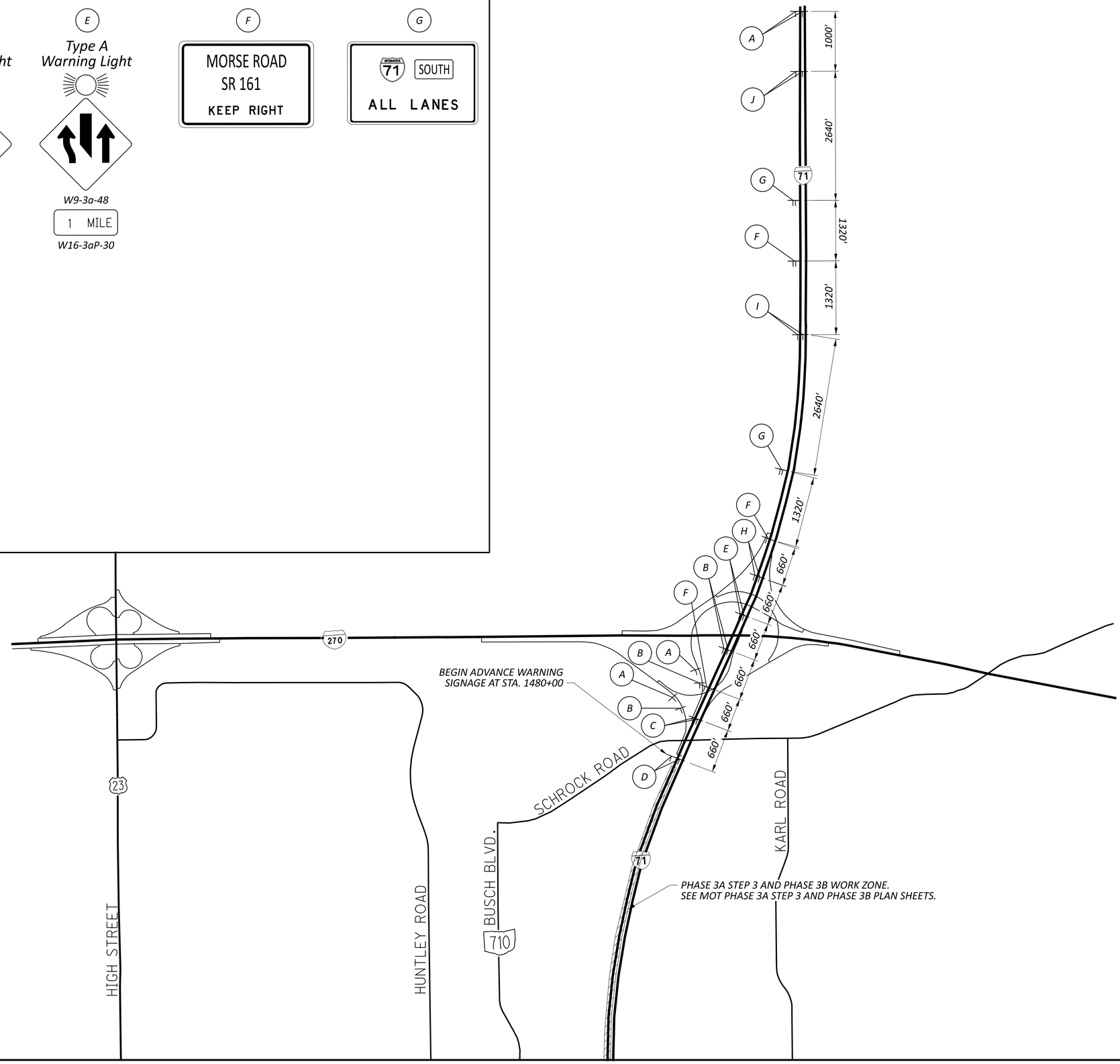
J

Type A Warning Light

W9-3a-48

3 MILES

W16-3aP-30



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 3A STEP 3 & PHASE 3B

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.60 TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:00:45 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE LEFT 2 LANES

R4-H5aL

D

STAY IN LANE

R4-9-36

E

VARIABLE SPEED LIMIT AHEAD

W3-H5b

71

270

HUNTLEY ROAD

SCHROCK ROAD

KARL ROAD

71

A

B

660'

C

A

B

1200'

A

B

1320'

BEGIN ADVANCE WARNING SIGNAGE AT STA. 1481+00

E

D

PHASE 4A/4B WORK ZONE. SEE MOT PHASE 4A/4B PLAN SHEETS.

N

NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASES 4A & 4B

DESIGN AGENCY

Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.61
TOTAL	618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:01:08 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

Type A Warning Light

LEFT LANE CLOSED AHEAD

W20-5-48

D

VARIABLE SPEED LIMIT AHEAD

W3-H5b

E

W4-2L-48

F

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly

NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 5B STEP 1

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.62 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:01:31 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light



W20-1-48

B



R11-H5a

C



R4-H5aL

D



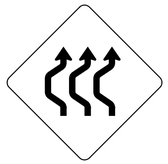
R4-9-36

E

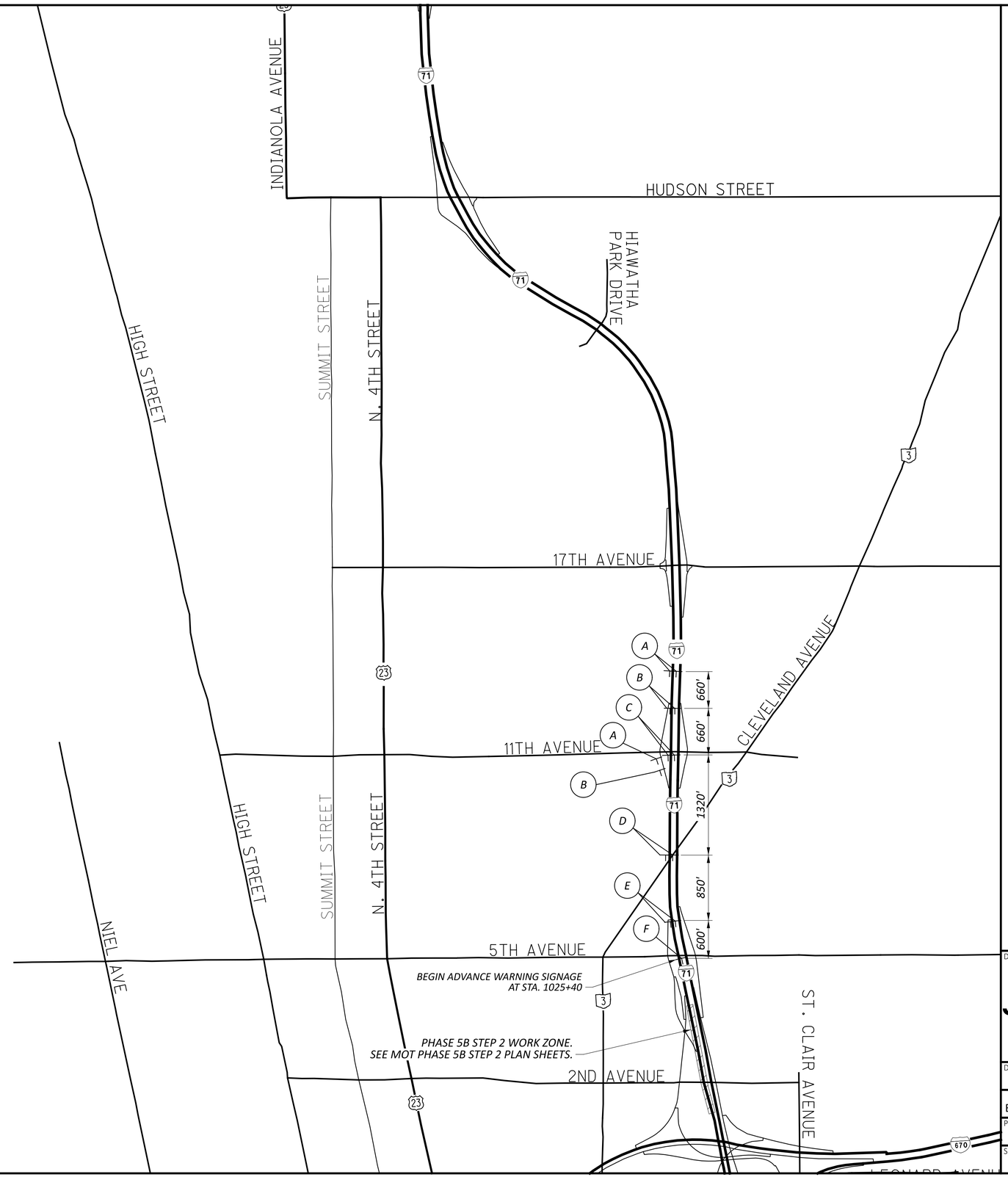


W3-H5b

F



W24-1bL-48
INSIDE SHOULDER ONLY



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 5B STEP 2

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.63 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:02:14 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

VARIABLE SPEED LIMIT AHEAD

W3-H5b

D

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly

E

OR

W4-2L-48
STEP 1

W4-2R-48
STEP 2

F

Type A Warning Light

LEFT LANE CLOSED AHEAD

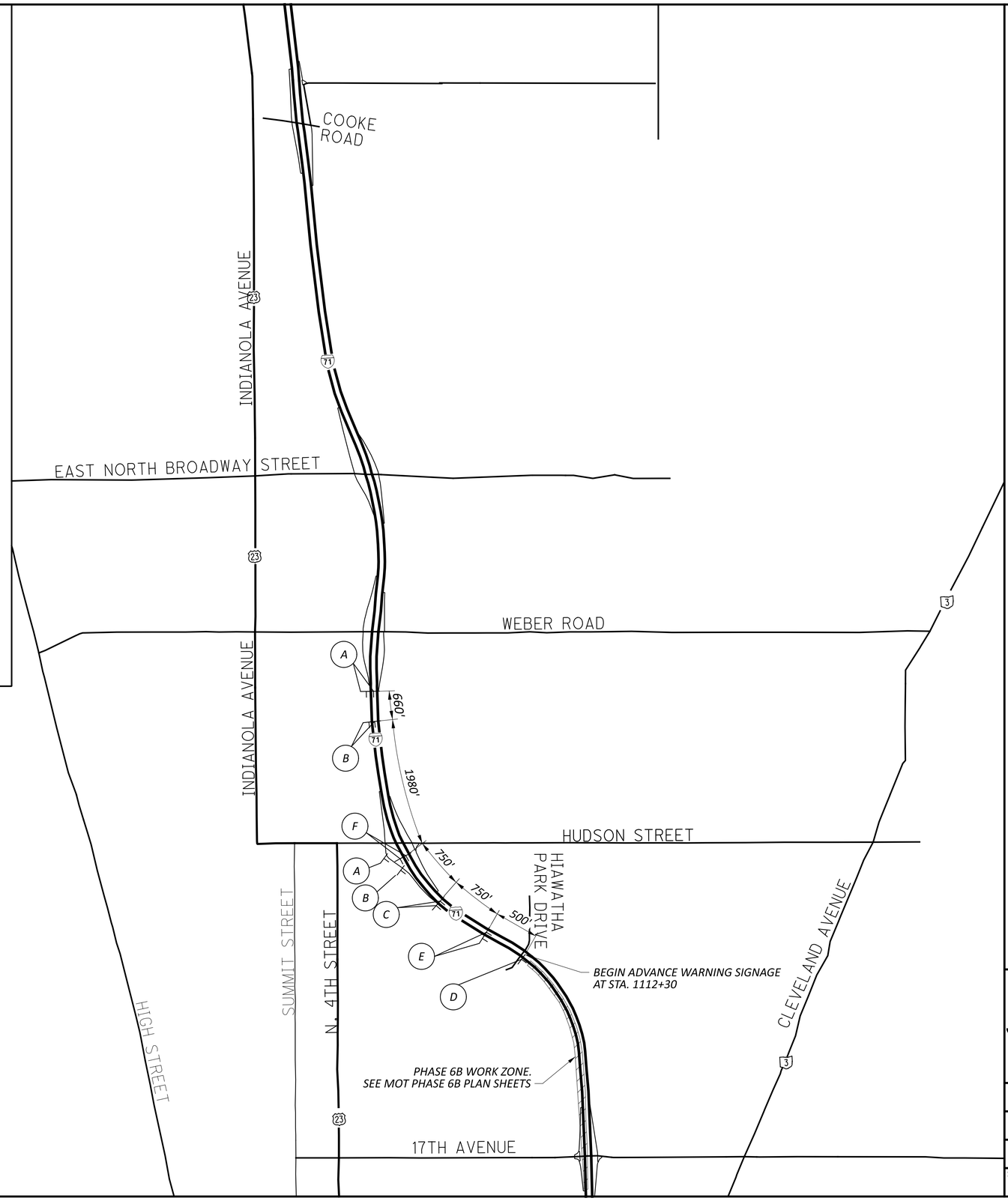
W20-5-48
STEP 1

OR

Type A Warning Light

RIGHT LANE CLOSED AHEAD

W20-5-48
STEP 2



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 6B STEPS 1 & 2

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.64 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:02:30 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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A

Type A Warning Light



W20-1-48

B



R11-H5a

C



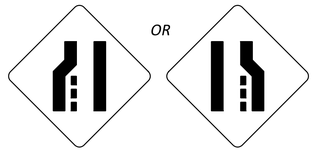
W3-H5b

D



Digital Speed Limit (DSL) Sign Assembly

E



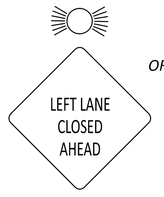
OR

W4-2L-48 STEPS 1 & 3

W4-2R-48 STEPS 2 & 4

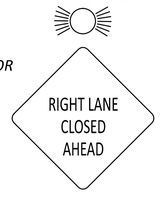
F

Type A Warning Light



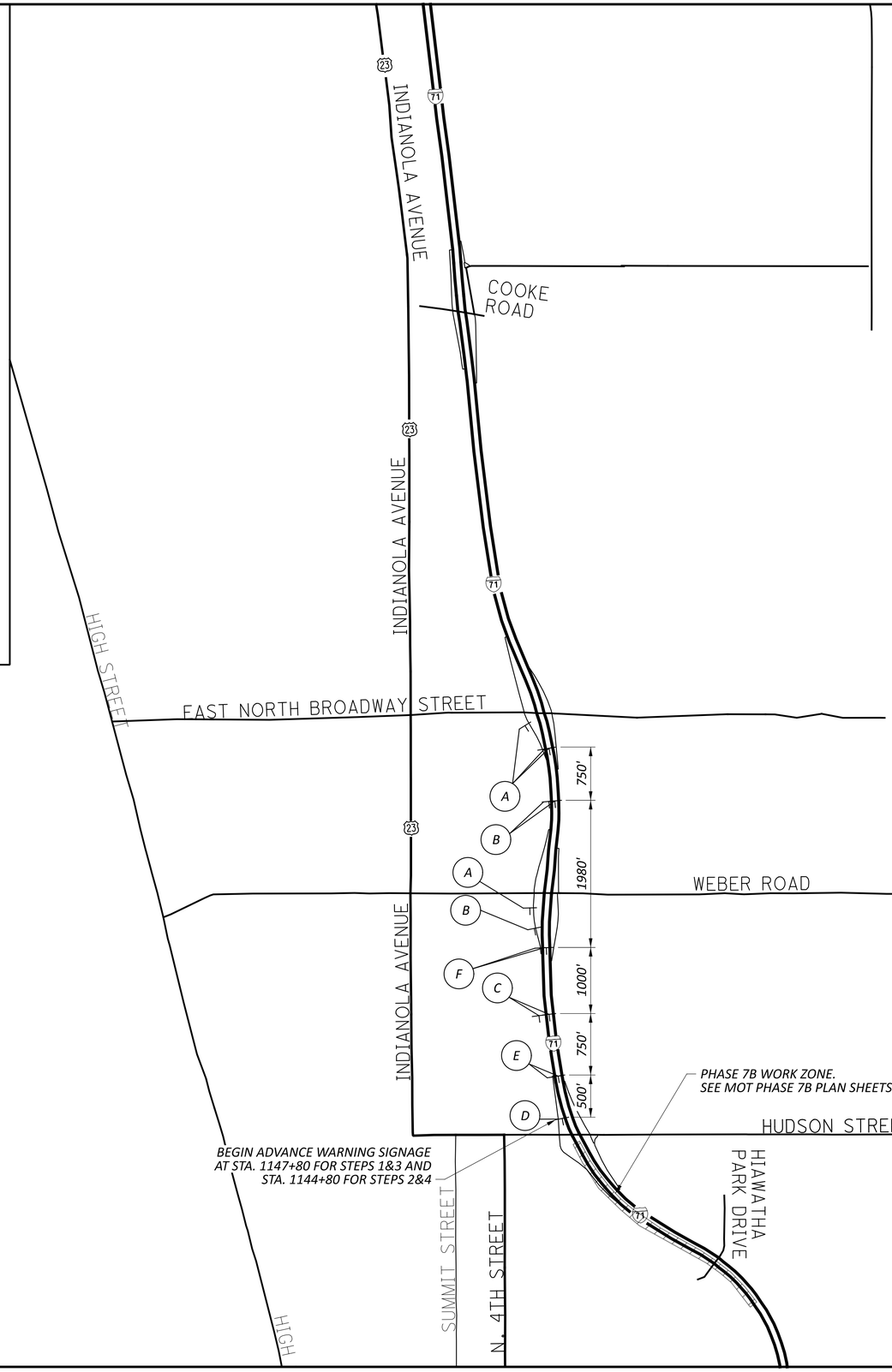
OR

Type A Warning Light



W20-5-48 STEPS 1 & 3

W20-5-48 STEPS 2 & 4



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN I-71 NORTHBOUND - PHASE 7B STEPS 1/3 & 2/4

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:03:27 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\MOT\Sheets\109164_MM108.dgn

DESIGN AGENCY: Jacobs

DESIGNER: SRH

REVIEWER: BAP 03/20/26

PROJECT ID: 109164

SHEET: P.65 TOTAL: 618

A

Type A Warning Light



W20-1-48

B



R11-H5a

C



W3-H5b

D



Digital Speed Limit (DSL) Sign Assembly

E



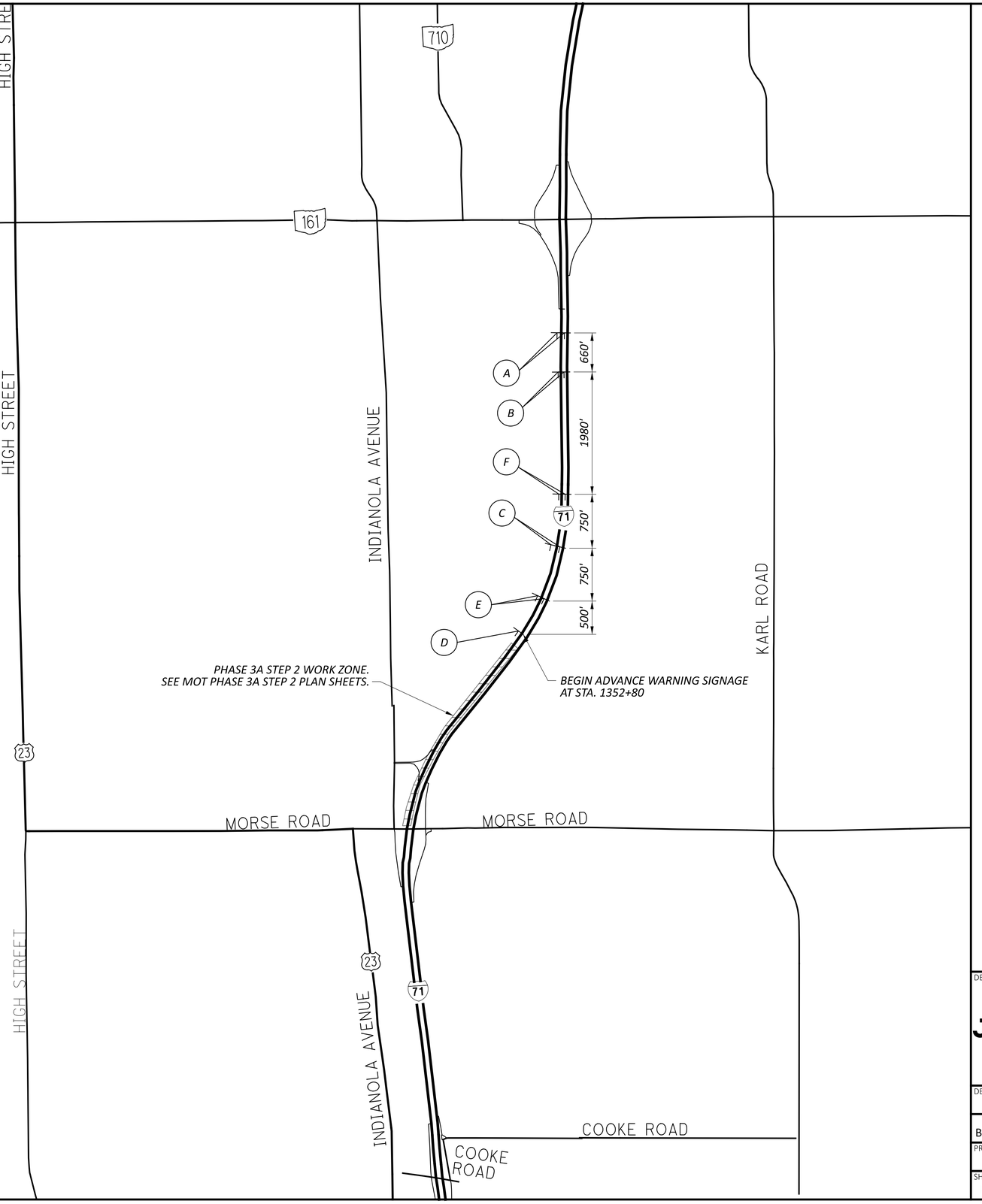
W4-2R-48

F

Type A Warning Light



W20-5-48



NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 3A STEP 2

DESIGN AGENCY

Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.66
TOTAL	618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:04:30 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\MOT\Sheets\109164_MM109.dgn

A

Type A Warning Light

ROAD WORK AHEAD

W20-1-48

B

WORK ZONE
SPEEDING
FINES DOUBLED
CAUSE DEATH OR INJURY
FINE/JAIL

R11-H5a

C

TRUCKS USE LEFT 2 LANES

R4-H5a-36

D

STAY IN LANE

R4-9-36

E

VARIABLE SPEED LIMIT AHEAD

W3-H5b

F

W24-1bR-48

G

WORK ZONE
SPEED LIMIT
YY

Digital Speed Limit (DSL) Sign Assembly

NOT TO SCALE

MAINTENANCE OF TRAFFIC - ADVANCE WARNING SIGN PLAN
I-71 SOUTHBOUND - PHASE 2(NORTH OF SR161)

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.67 | TOTAL 618

FRA-71-19.10

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:04:46 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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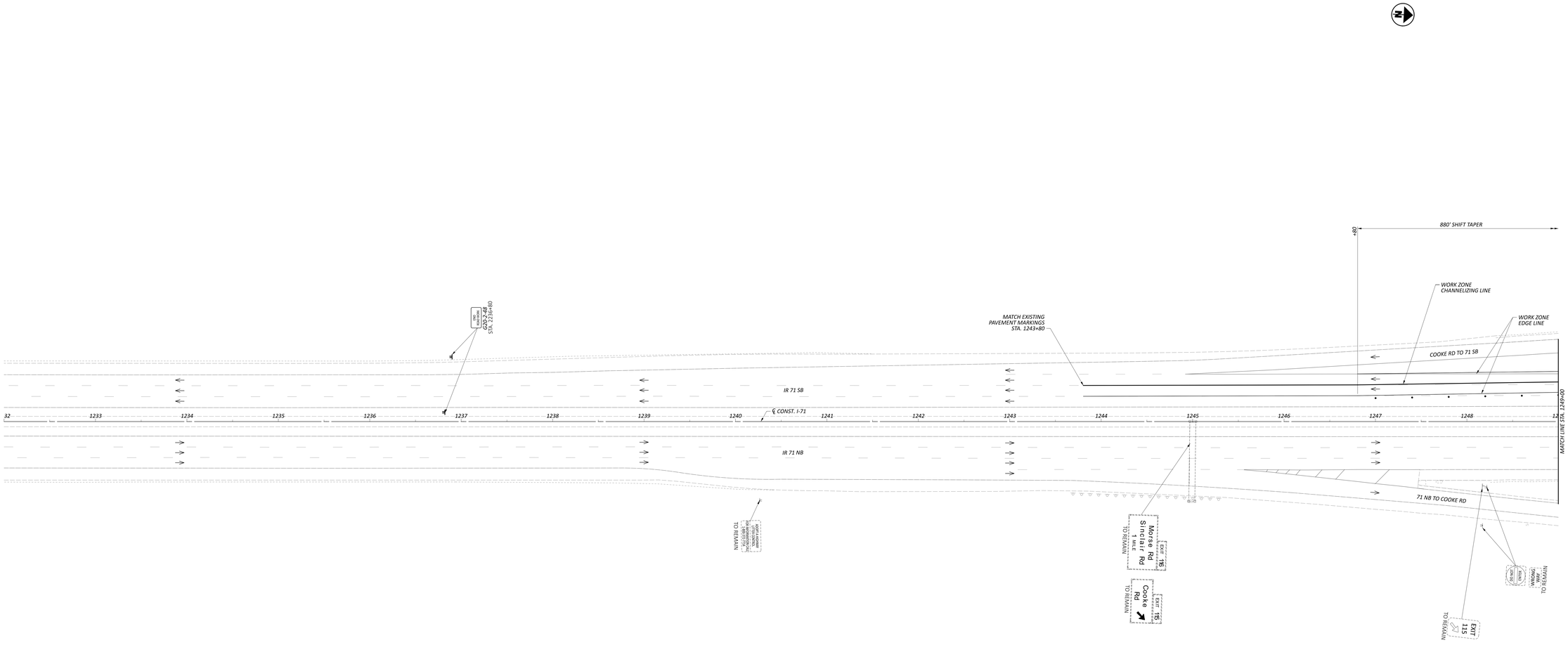
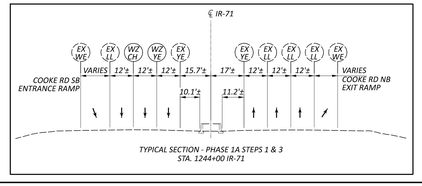
FRA-71-19.10

MODEL: Phase 2A - Plan 2 PAPERSIZE: ISO A0 (1189.0 mm x 841.0 mm) DATE: 3/31/2026 TIME: 11:05:14 AM PSTDRV: DWGPT_PDF_V1.pltCfg PENTBL: DWGPT_Print.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL USERS ARE RESPONSIBLE FOR ENSURING THAT THE MOST CURRENT VERSION OF THIS FILE IS USED. THIS FILE IS PROVIDED AS AN ELECTRONIC REPRODUCTION FOR CONVENIENCE AND INFORMATIONAL PURPOSES ONLY.





TYPICAL SECTION - PHASE 1A STEPS 1 & 3
STA. 1244+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

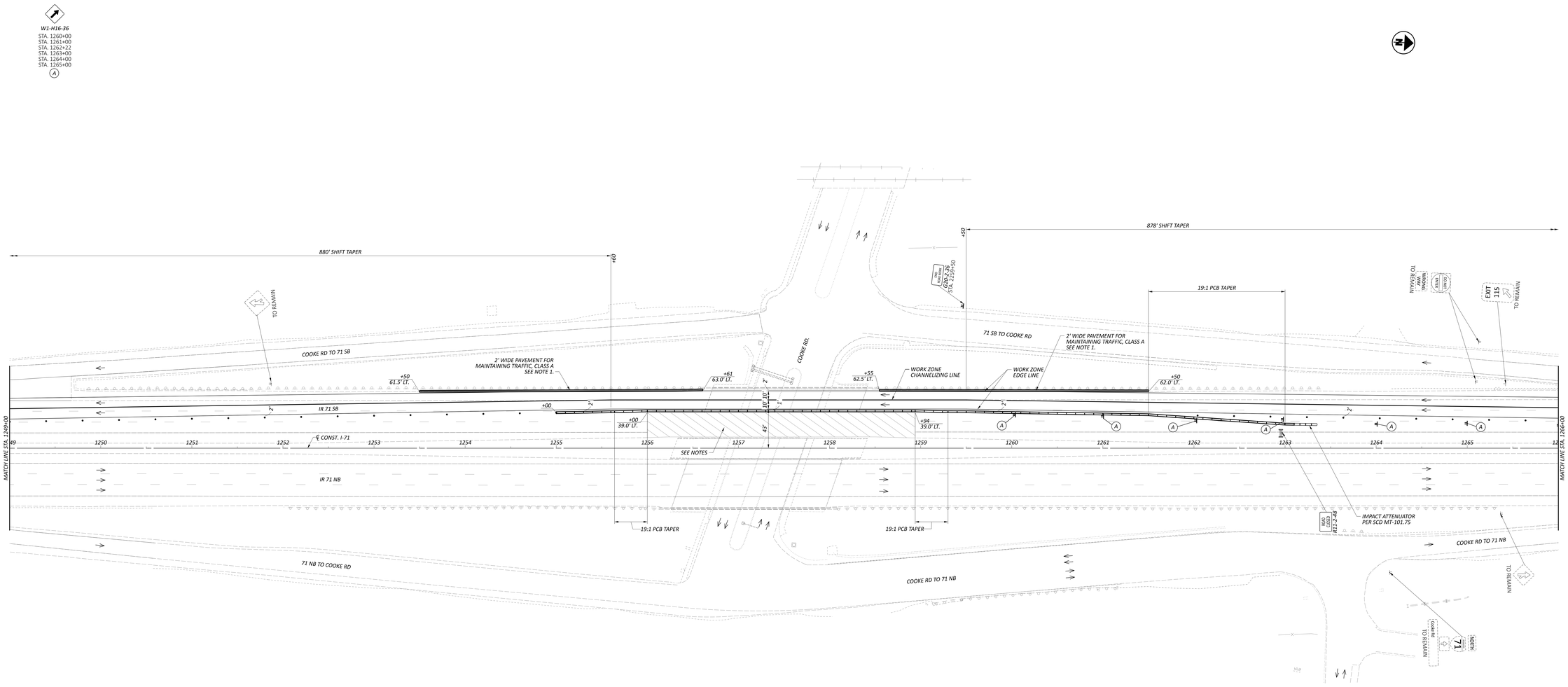
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 1 & 3
STA. 1232+00.00 TO STA. 1249+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.68 TOTAL 618



NOTES
1. UTILIZE SCD MT-95.30 FOR SINGLE NIGHTTIME LANE LANE CLOSURES PER THE PERMITED LANE CLOSURE SCHEDULE TO INSTALL PAVEMENT FOR MAINTAINING TRAFFIC.
2. REPLACE APPROACH SLABS (AND SLEEPER SLAB/ASPHALT PAVEMENT) IN STEP 1.
3. INSTALL SDC OVERLAY IN STEP 3.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 1 & 3
STA. 1249+00.00 TO STA. 1266+00.00

DESIGN AGENCY
Jacobs

DESIGNED SRH
REVIEWED BAP 03/20/26
PROJECT ID 109164
SHEET P.69 TOTAL 618

FRA-71-19.10

MODEL: Phase 2A - Plan | PAPERSIZE: ISO A1 | DATE: 3/31/2026 TIME: 11:05:35 AM | FSTDIV: CMDOT_PDF_V | LAYER_FSTYPE: CMDOT_Plan.tbl | USER: Chris.Lawrence1@jacobs.com | WORKSPACE: CMDOTCIVIL02 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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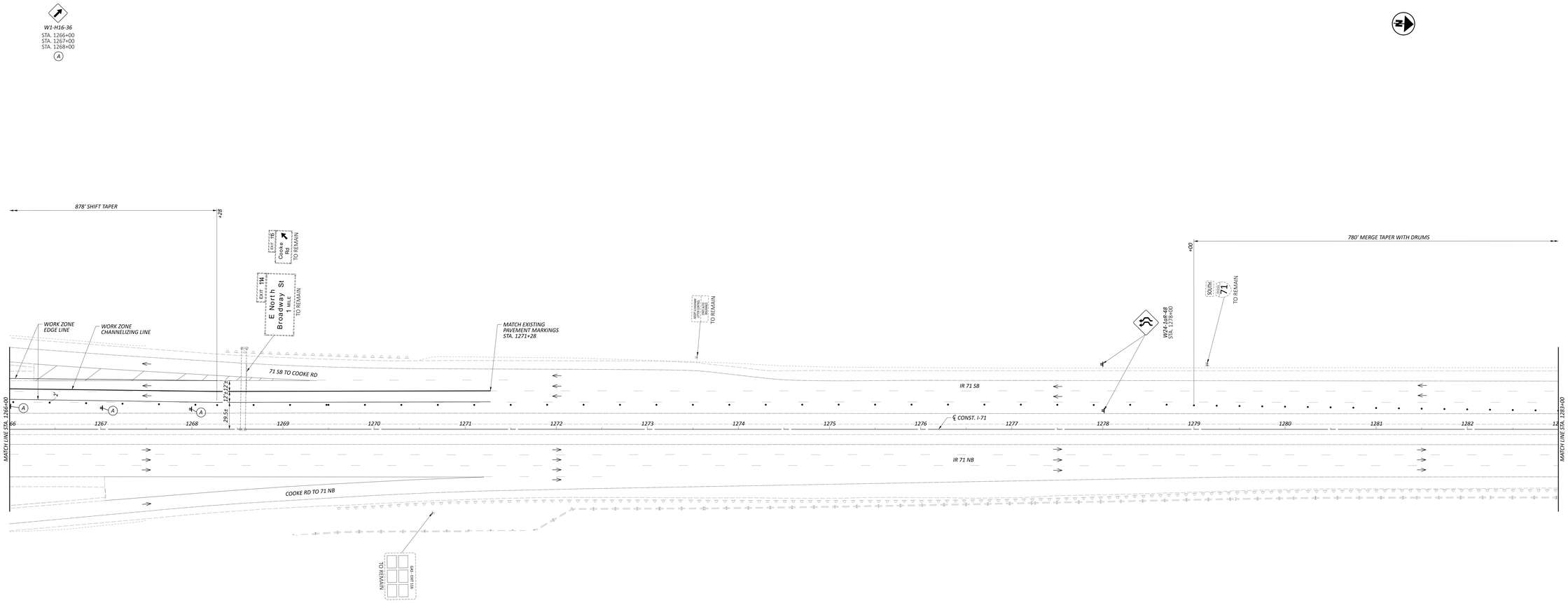

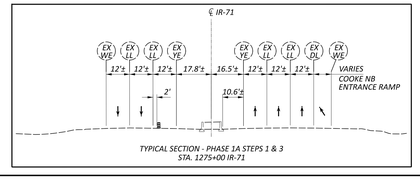

TYPICAL SECTION - PHASE 1A STEPS 1 & 3
STA. 1275+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 1 & 3
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.70 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan # PAPERSIZE: ANSI-B (in.) DATE: 3/31/2026 TIME: 11:03:11 AM PLTDRV: CTBDRV_PDF_V1.ctb PENTBL: CTBDRV_PMS.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOT1X02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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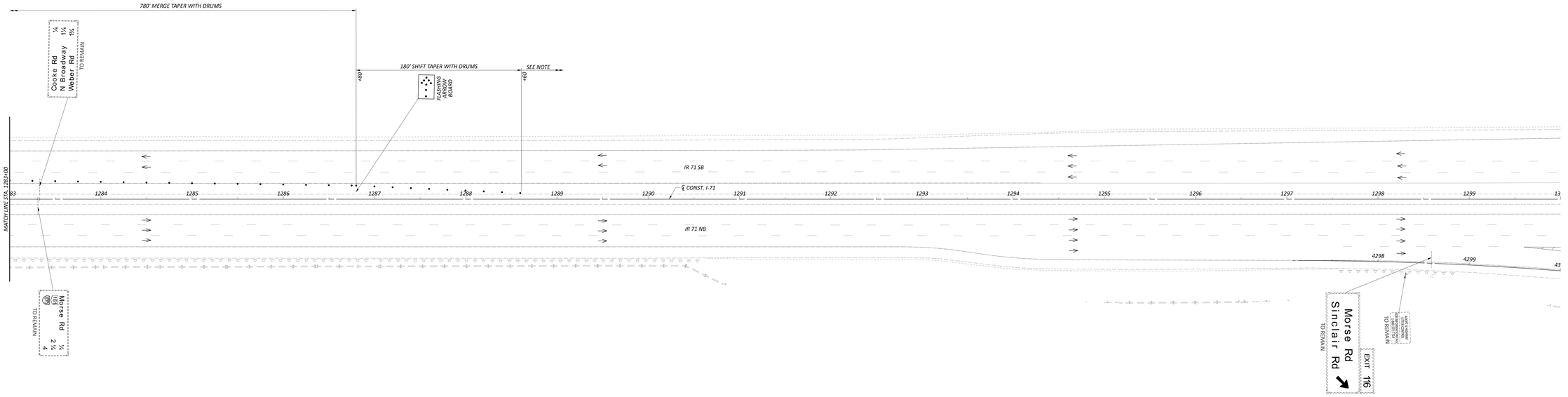

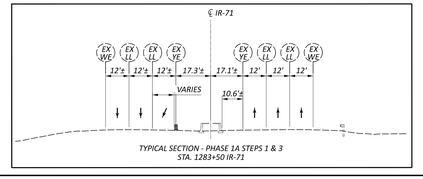

NOTE: SEE SHEET P.58 FOR PHASE 1A ADVANCED SIGNING PLAN

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 1 & 3
STA. 1283+00.00 TO STA. 1300+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT NO: 109164
SHEET: P.71 TOTAL: 618

FRA-71-19.10

MODEL: Phase 2A - Plan | PAPERSIZE: ISO A1 | DATE: 3/31/2026 TIME: 11:03:23 AM | XSTORY: ON|OFF | XREF_FI: LAYER: ON|OFF|FREEZE | XREF_PAVE: LAYER: ON|OFF|FREEZE | XREF_PAVE_CHKOUT: LAYER: ON|OFF|FREEZE | XREF_PAVE_CHKOUT_PDF_FI

FRA-71-19.10

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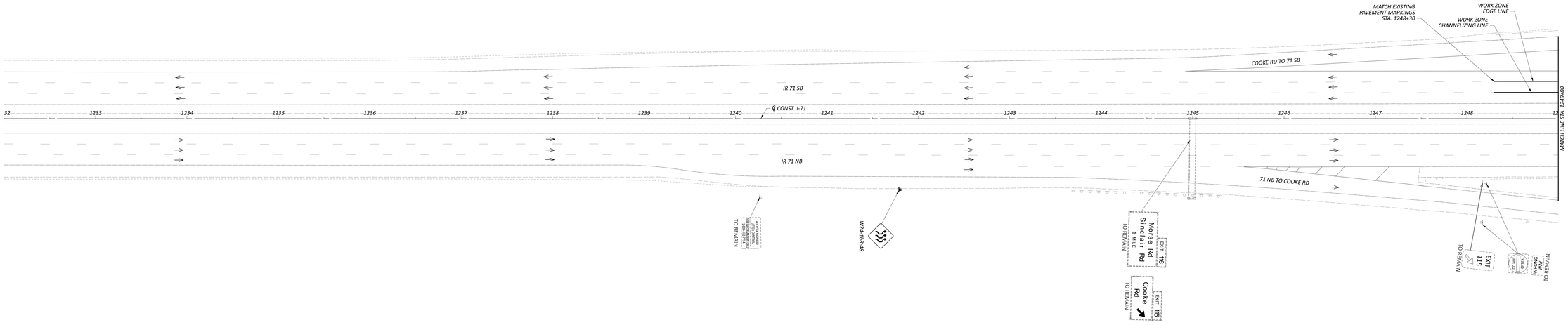
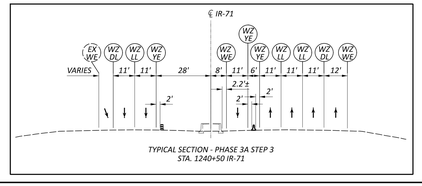




TYPICAL SECTION - PHASE 3A STEP 3
STA. 1240+50 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 2 & 4
STA. 1232+00.00 TO STA. 1249+00.00

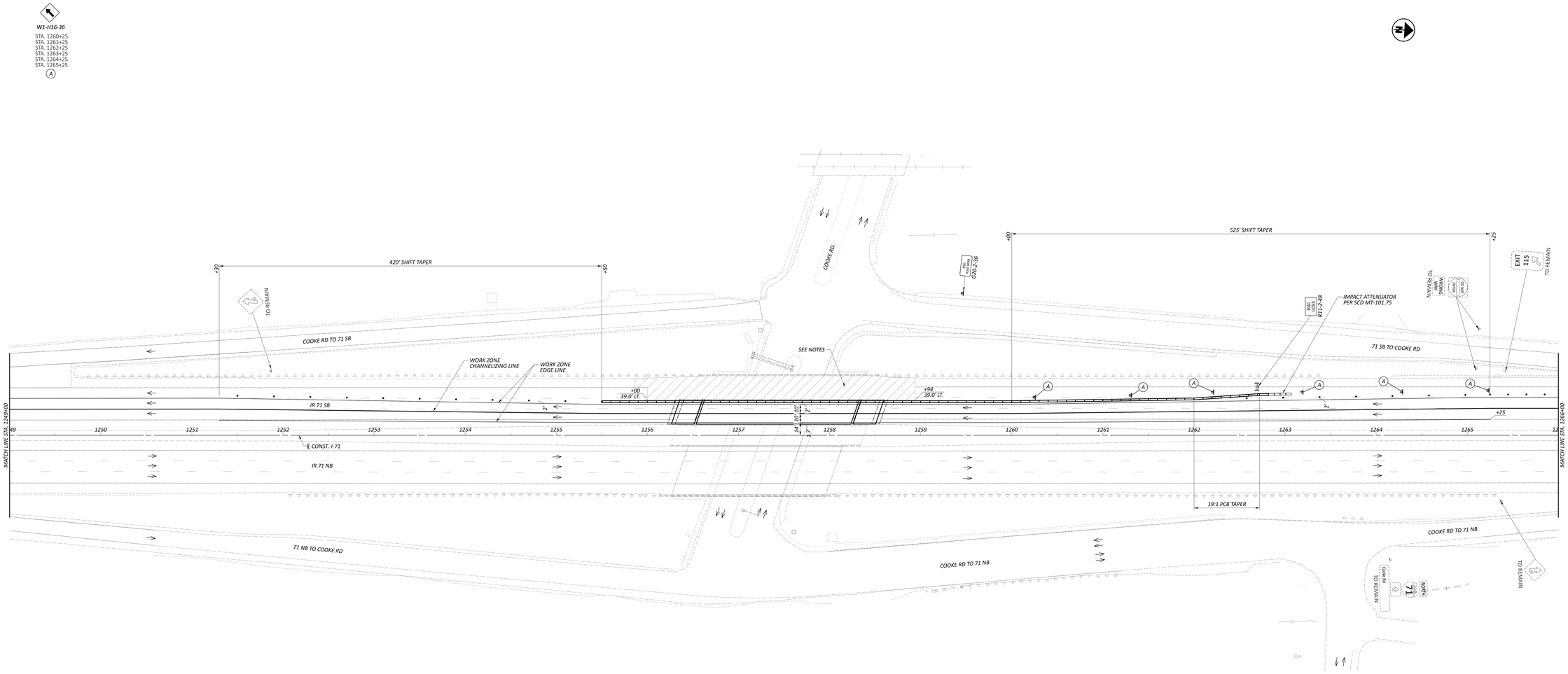
DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.72 TOTAL 618



NOTES:
1. REPLACE APPROACH SLABS (AND SLEEPER SLAB/ASPHALT PAVEMENT) IN STEP 2.
2. INSTALL SDC OVERLAY IN STEP 4.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

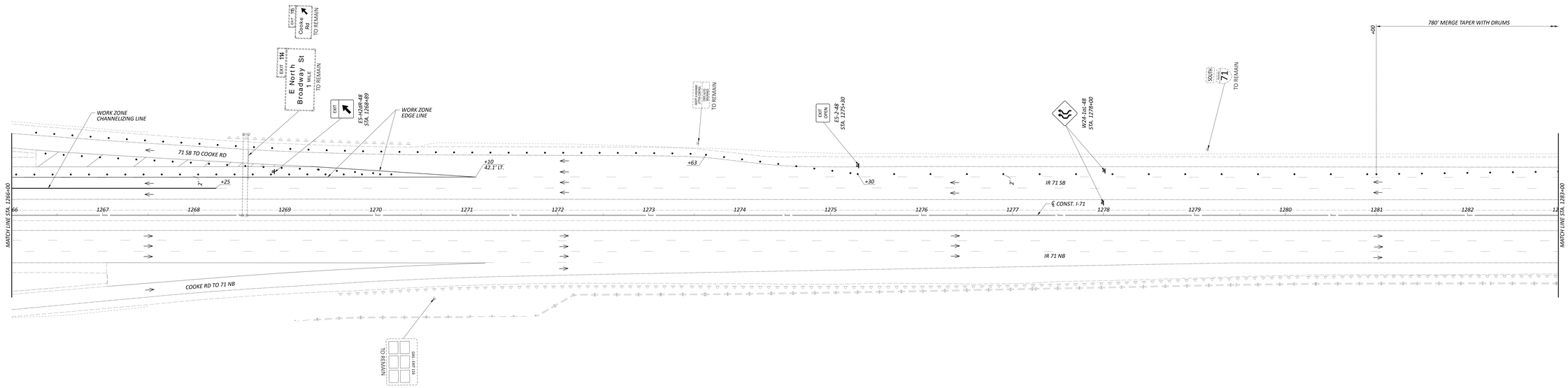
MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 2 & 4
STA. 1249+00.00 TO STA. 1266+00.00

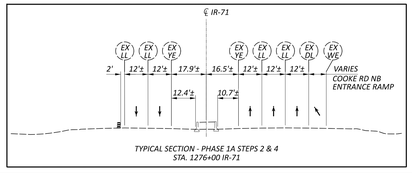
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.73 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan 3 PAPERSIZE: ISO A3 (+) DATE: 3/31/2026 TIME: 11:05:54 AM FITDWG: ON DEPT_PDF_FI: off DEPT_PDF_FI: off DEPT_PDF_FI: off





TYPICAL SECTION - PHASE 1A STEPS 2 & 4
STA. 1276+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 2 & 4
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.74 TOTAL: 618

FRA-71-19.10

MODEL: Phase 2A - Plan # PAPERSIZE: ISO A3 (in) | DATE: 3/31/2026 TIME: 11:05:59 AM FSTORY: CHSOT_ITSP_1+1#SB_FSHTEL: CHSOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOTTCMD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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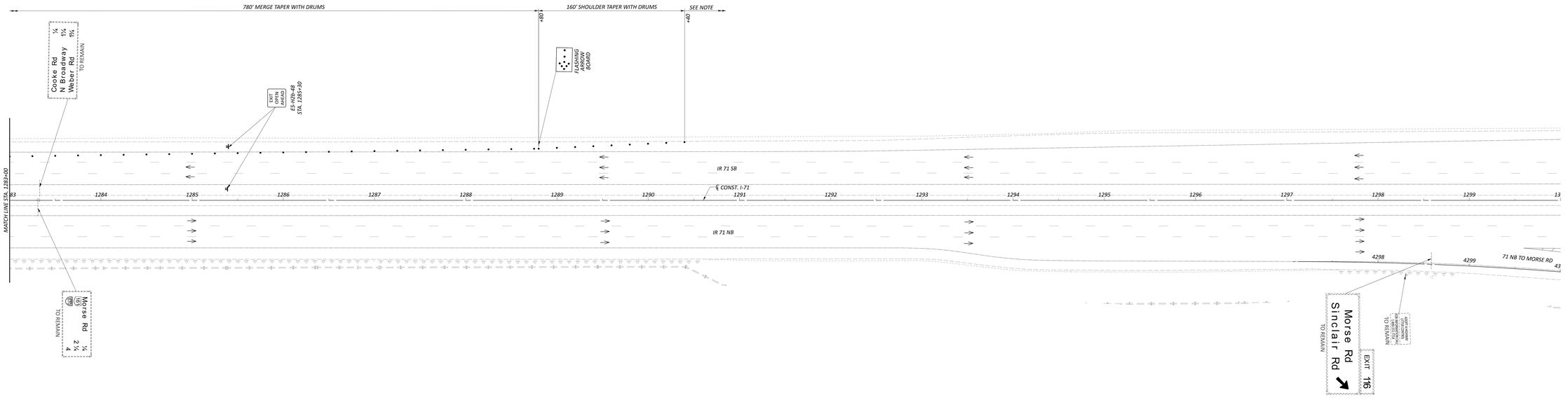

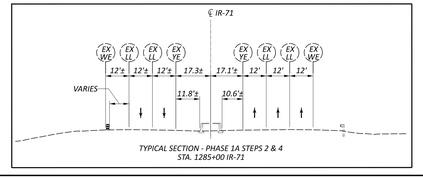

TYPICAL SECTION - PHASE 1A STEPS 2 & 4
STA. 1285+00 IR-71

NOTE: SEE SHEET P.58 FOR PHASE 1A ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1A STEPS 2 & 4
STA. 1283+00.00 TO STA. 1300+00.00

FRA-71-19.10

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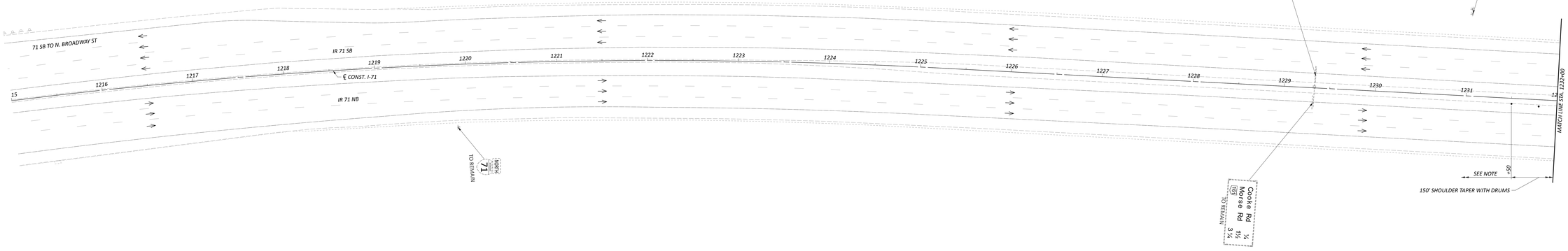
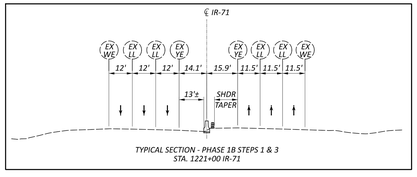
DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.75 TOTAL: 618





TYPICAL SECTION - PHASE 1B STEPS 1 & 3
STA. 1221+00 IR-71

NOTE: SEE SHEET P.49 FOR PHASE 1B NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 1 & 3
STA. 1215+00.00 TO STA. 1232+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan | PAPERSIZE: ANSI-D | DATE: 3/31/2026 TIME: 11:06:15 AM | FSTDIV: OHDOT_ITSP_V1.prfdg | FSTITEL: OHDOT_Pen.tbl | USER: Chris.Lawrence1@jacobs.com | WORKSPACE: OHDOTCAD2 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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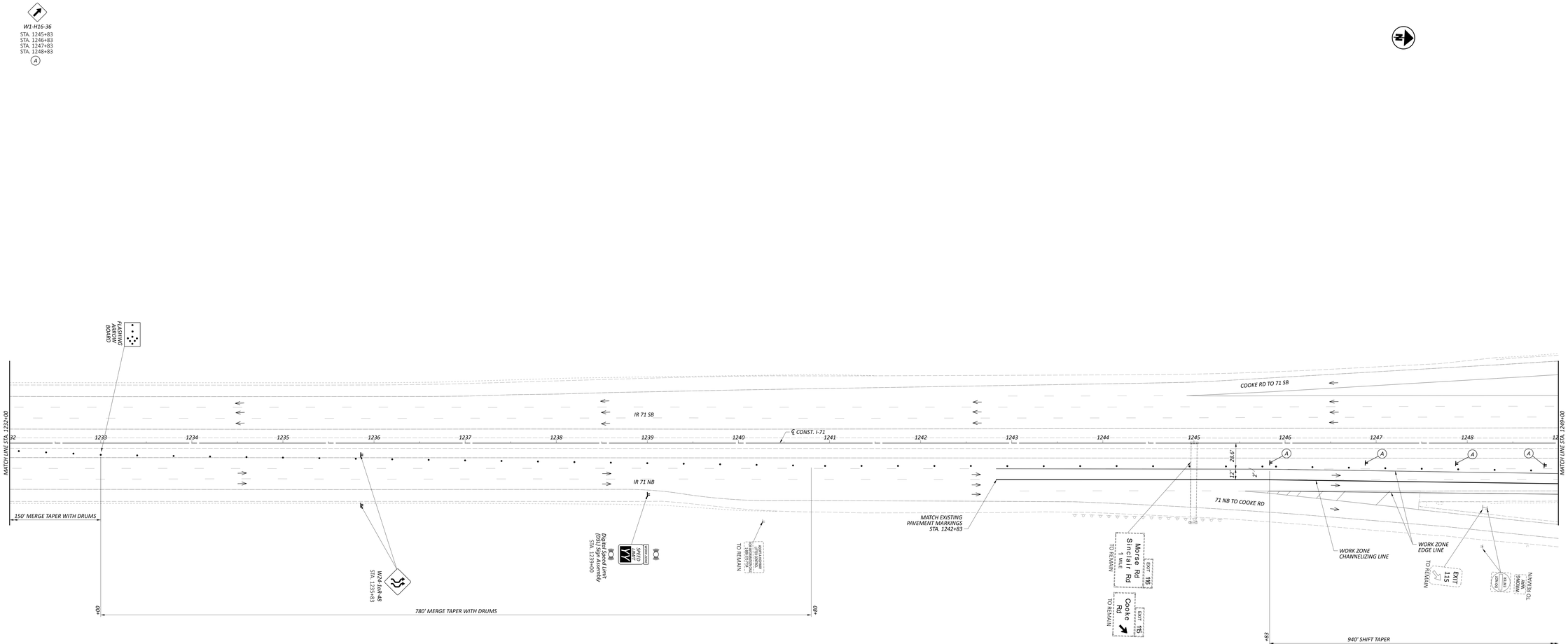
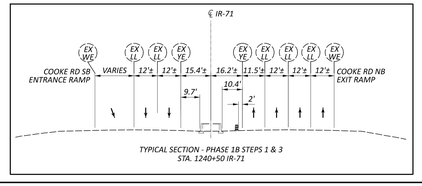
DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.76 TOTAL: 618





DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 1 & 3
STA. 1232+00.00 TO STA. 1249+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan 2 PAPERSIZE: 864.00x1 DATE: 3/31/2026 TIME: 11:06:35 AM FSTORY: CHDOT_PDF_V-1.dmdg FSTITEL: CHDOT_Pln.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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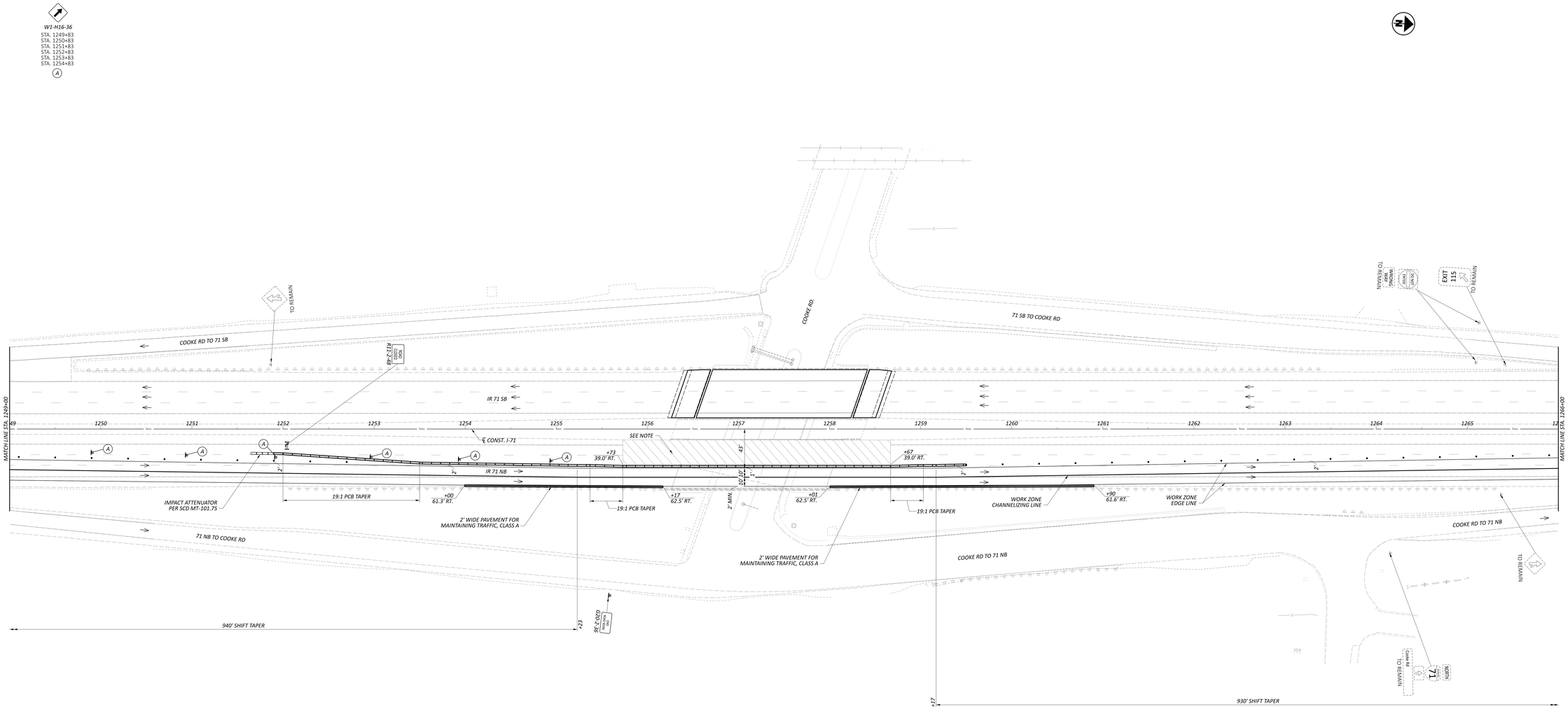
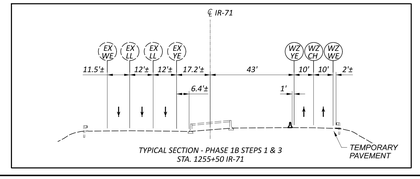
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.77 TOTAL 618





TYPICAL SECTION - PHASE 1B STEPS 1 & 3
STA. 1255+50 IR-71

NOTE: APPROACH SLABS AND FULL DEPTH ASPHALT TO BE REPLACED DURING STEP 1. SDC OVERLAY TO BE INSTALLED DURING STEP 3.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 1 & 3
STA. 1249+00.00 TO STA. 1266+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan 3 PAPERSIZE: ISO A3 (L) DATE: 3/31/2026 TIME: 11:06:21 AM FSTDIV: CMDOT_PDF_V1.pltcfg FSTBL: CMDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CMDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.78 TOTAL 618

FRA-71-19.10
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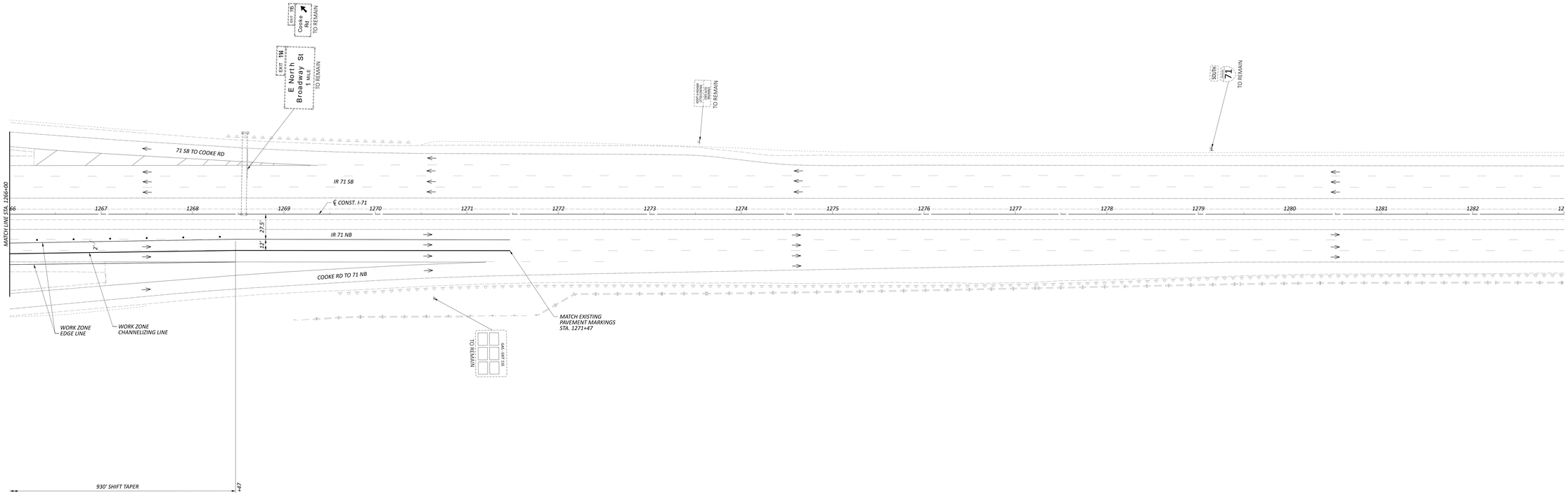
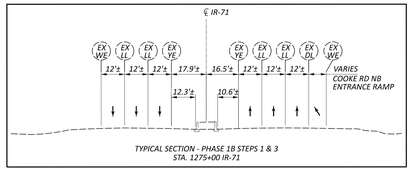




TYPICAL SECTION - PHASE 1B STEPS 1 & 3
STA. 1275+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

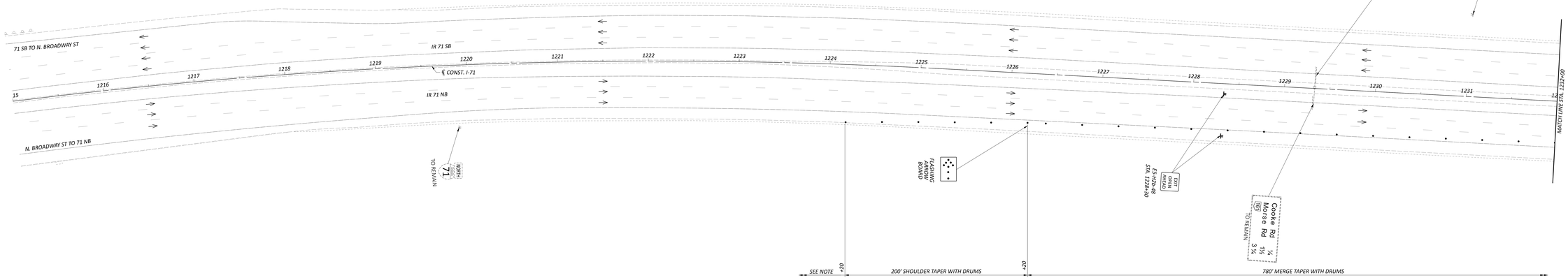
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

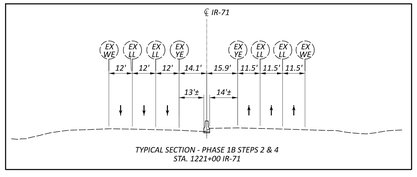
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 1 & 3
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.79 TOTAL: 618





TYPICAL SECTION - PHASE 1B STEPS 2 & 4
STA. 1221+00 IR-71

NOTE: SEE SHEET P.49 FOR PHASE 1B NB ADVANCED SIGNING PLAN

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

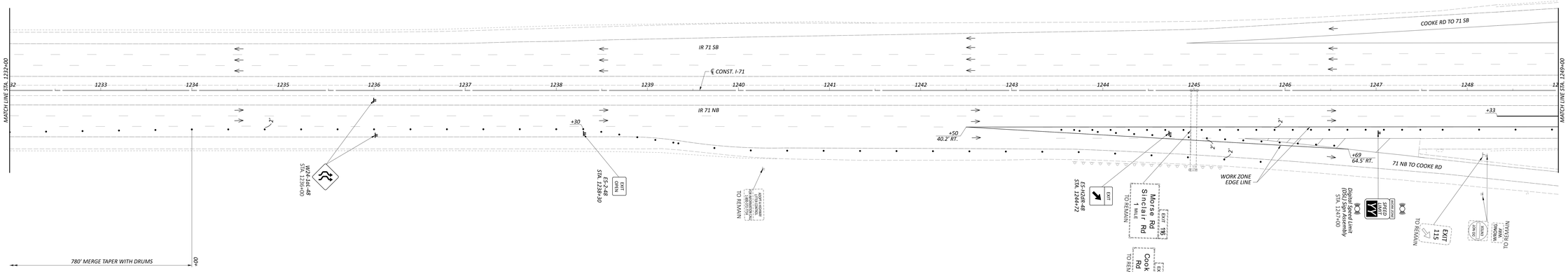
HORIZONTAL SCALE IN FEET
0 15 30 60

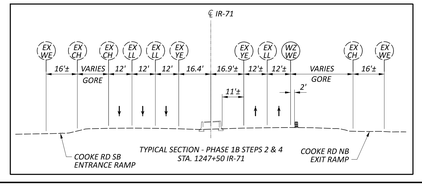
MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 2 & 4
STA. 1215+00.00 TO STA. 1232+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan | PAPERSIZE: ANSI A4 (in) | DATE: 3/31/2026 TIME: 11:06:55 AM FSTORY: CHDOT_ITSP_V1.prtSTB; FSTBL: CHDOT_Print.stb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\Projects\FRA\71\109164\Design\Roadway\Plans\MOT\FRA-71-19.10_MOT_Phase 1B Steps 2 & 4.dgn

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.80 TOTAL: 618





TYPICAL SECTION - PHASE 1B STEPS 2 & 4
STA. 1247+50 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 2 & 4
STA. 1232+00.00 TO STA. 1249+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan 2 PAPERSIZE: ISO A3 (L) DATE: 3/31/2026 TIME: 11:06:45 AM FSTDIR: CHDOT_PDF_V1-pltcfg FSTFIL: CHDOT_Pen.stb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

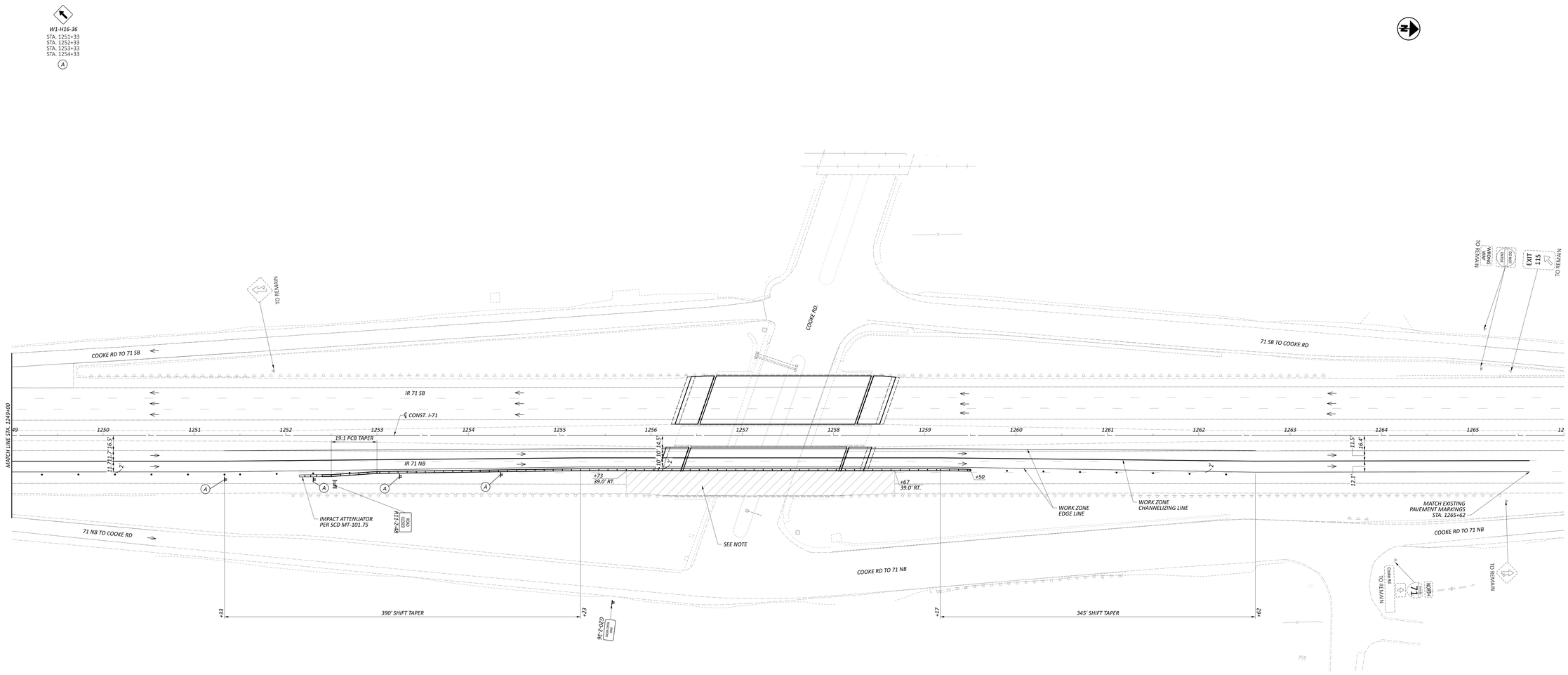
DESIGN AGENCY
Jacobs

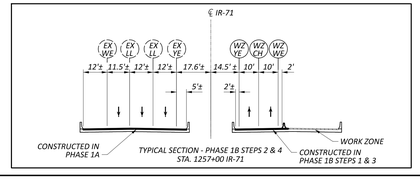
DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.81 TOTAL 618





NOTE: APPROACH SLABS AND FULL DEPTH ASPHALT TO BE REPLACED DURING STEP 2. SDC OVERLAY TO BE INSTALLED DURING STEP 4.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

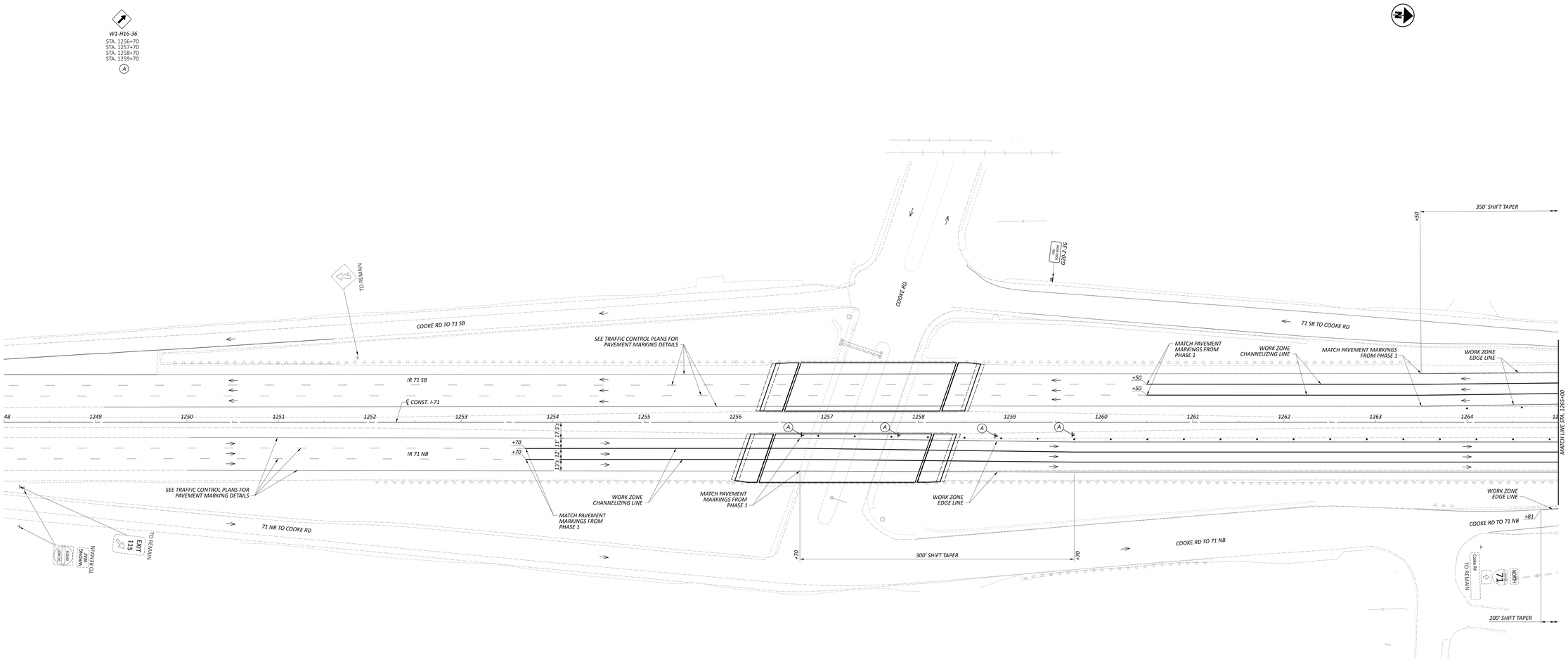
HORIZONTAL SCALE IN FEET
0 15 30 60

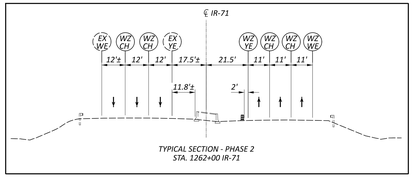
MAINTENANCE OF TRAFFIC - PHASE 1B STEPS 2 & 4
STA. 1249+00.00 TO STA. 1266+00.00

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P-82
TOTAL: 618

FRA-71-19.10

MODEL: Phase 2A - Plan | PAPERSIZE: ISO A3 (ID) | DATE: 3/31/2026 TIME: 11:06:41 AM | FILTER: ON|OFF_ON|OFF_ON | LAYER: ON|OFF_ON|OFF_ON|OFF_





NOTE: SEE SHEET P.50 FOR PHASE 2 NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1248+00.00 TO STA. 1265+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

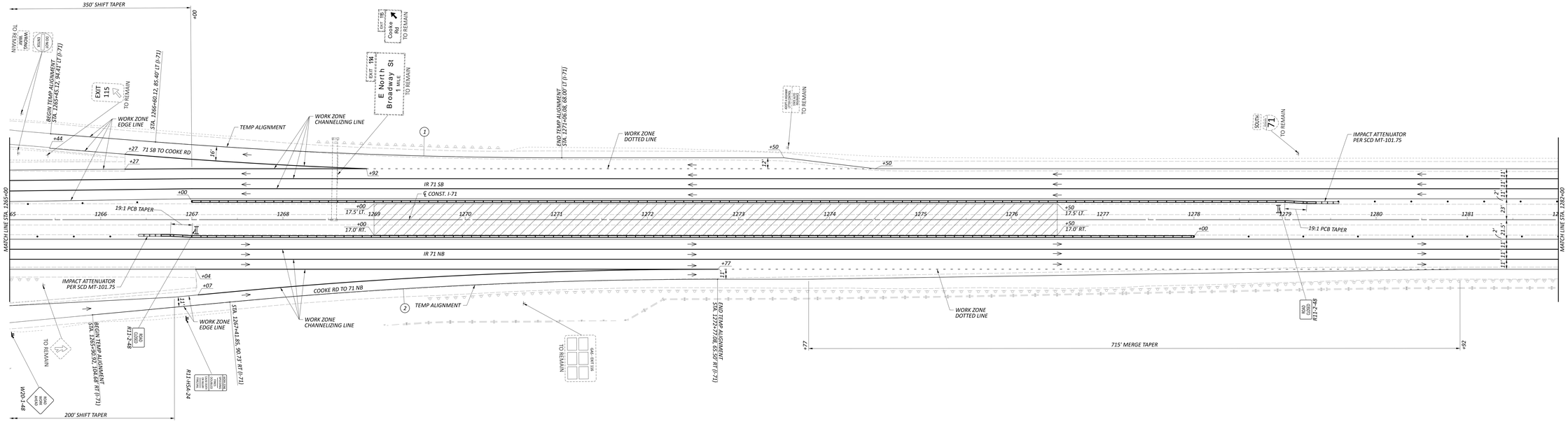
REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.83 TOTAL 618

FRA-71-19.10

MODEL: Phase 2 Sheet 1 PAPERSIZE: ISO A3 DATE: 3/31/2026 TIME: 11:06:57 AM USER: CHRISTOPHER_H LAYER: PAVEMENTMARKING,PAVEMENTMARKING_TEMP,PAVEMENTMARKING_TEMP_TEXT,PAVEMENTMARKING_TEXT,PAVEMENTMARKING_TEXT_TEMP



CURVE DATA - 1
Δ = 04°27'52" LT
Dc = 01°00'00"
R = 5,729.58'
T = 223.33'
L = 446.44'
E = 4.35'

CURVE DATA - 2
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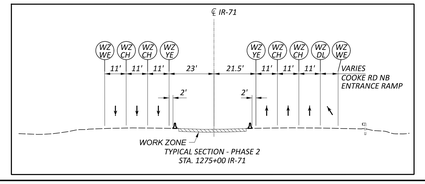
Dc = 01°00'00"
R = 5,729.58'
T = 268.23'
L = 536.08'
E = 6.28'



DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1265+00.00 TO STA. 1282+00.00

FRA-71-19.10

MODEL: Phase 2 Sheet 2 PAYPRDES: 66x34.0in | DATE: 3/31/2026 TIME: 11:07:03 AM FCDW: CHDOT_PDF_V-14PSB_PSTBL: CHDOT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCAD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\109164\Roadway\Traffic\Work Zone\FRA-71-19.10_MOT_PH2_Sht2.dgn

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.84 TOTAL 618

MODEL: Phase 2 Sheet 3 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:07:54 AM PLTDRV: CHIDOT_PDF_V-1.pltdg PLTBTBL: CHIDOT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHIDOTCLI02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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W1-H16-36
STA. 1287+11
STA. 1288+11
STA. 1289+11
STA. 1290+11
A

Cooke Rd
N Broadway
Weber Rd
1¼
1¼
1¼
TO REMAIN

350' SHIFT TAPER
+61
+11

WORK ZONE SPEED LIMIT AHEAD
Digital Speed Limit (DSL) Sign Assembly STA. 1295+11

WORK ZONE EDGE LINE
WORK ZONE CHANNELIZING LINE
MATCH PAVEMENT MARKINGS FROM PHASE 1
SEE TRAFFIC CONTROL PLANS PAVEMENT MARKINGS DETAILS

MATCH LINE STA. 1282+00
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
12

IR 71 SB
℄ CONST. I-71
IR 71 NB
+11
+11
18'± 12'± 12'±
+00
+00
+00
+00

71 NB TO MORSE RD
4298
42
℄ CONST. MORSE RD RAMP C

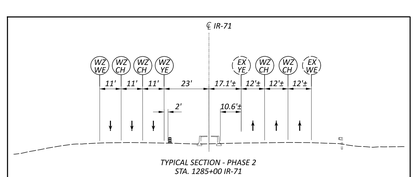
Morse Rd
2
¼
4
TO REMAIN

Morse Rd
Sinclair Rd
TO REMAIN
EXIT 116

NOTE: SEE SHEET P.59 FOR PHASE 2 SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

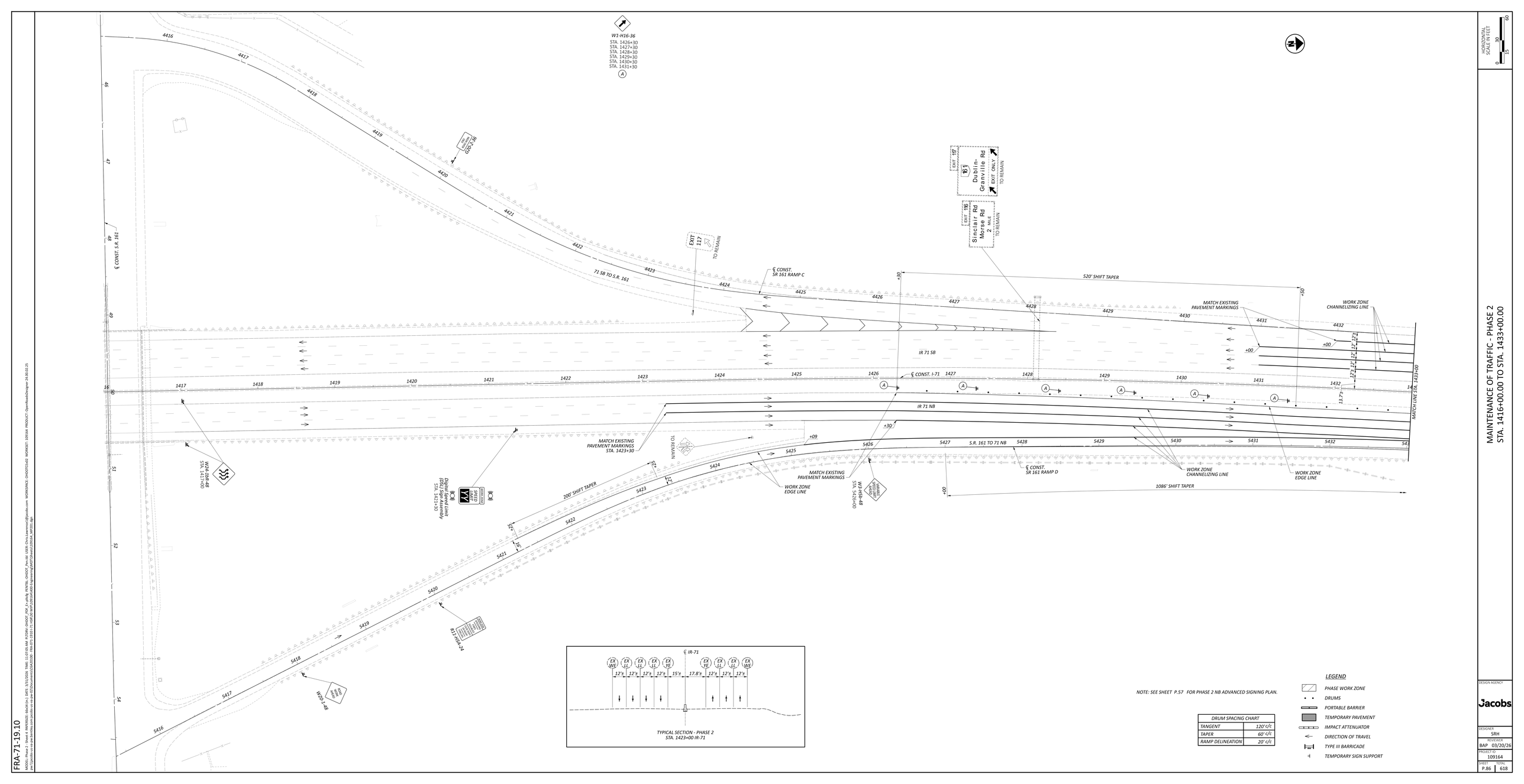


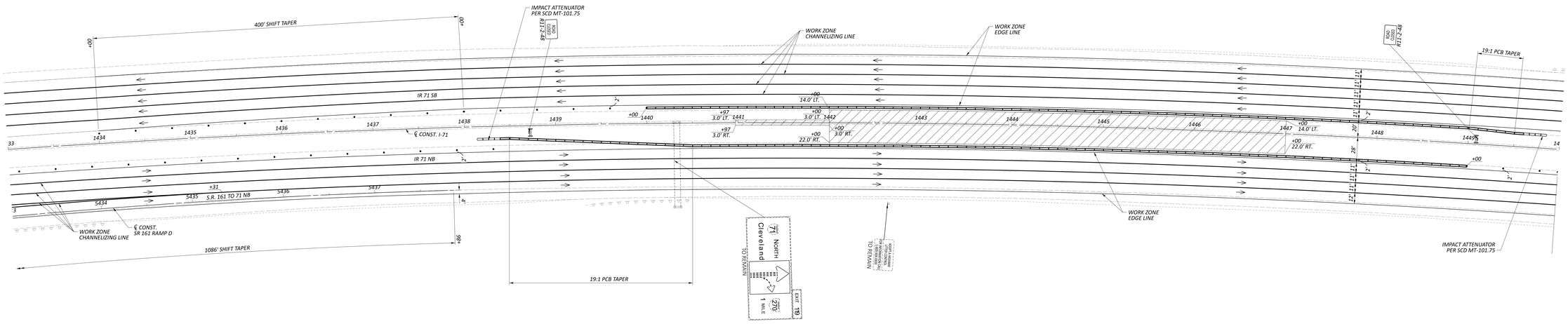
TYPICAL SECTION - PHASE 2
STA. 1285+00 IR-71

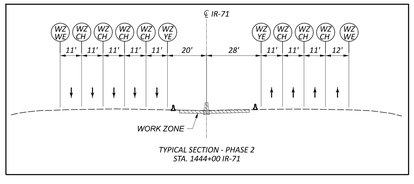
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1282+00.00 TO 1299+00.00

DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.85
TOTAL 618


W1-H16-36
STA. 1426+30
STA. 1427+30
STA. 1428+30
STA. 1429+30
STA. 1430+30
STA. 1431+30
EXIT 117
TO REMAIN
EXIT 117
Dublin-Granville Rd
EXIT ONLY
TO REMAIN
EXIT 116
Sinclair Rd
1 MILE
TO REMAIN
℄ CONST. SR 161 RAMP C
71 SB TO S.R. 161
520' SHIFT TAPER
MATCH EXISTING PAVEMENT MARKINGS
WORK ZONE CHANNELIZING LINE
IR 71 SB
℄ CONST. I-71
IR 71 NB
MATCH EXISTING PAVEMENT MARKINGS STA. 1423+30
TO BEHLMAN
MATCH EXISTING PAVEMENT MARKINGS
WORK ZONE EDGE LINE
S.R. 161 TO 71 NB
℄ CONST. SR 161 RAMP D
WORK ZONE CHANNELIZING LINE
WORK ZONE EDGE LINE
MATCH LINE STA. 1433+00
1086' SHIFT TAPER
200' SHIFT TAPER
W24-1(48)-48
STA. 1417+00
Digital Speed Limit (DSL) Sign Assembly
STA. 1421+30
W20-1-48
R11-1(48)-24
℄ CONST. S.R. 161
℄ IR-71
EX WE
EX LL
EX YE
12'±
15'±
17.8'±
TYPICAL SECTION - PHASE 2
STA. 1423+00 IR-71
NOTE: SEE SHEET P.57 FOR PHASE 2 NB ADVANCED SIGNING PLAN.
DRUM SPACING CHART
TANGENT 120' c/c
TAPER 60' c/c
RAMP DELINEATION 20' c/c
LEGEND
PHASE WORK ZONE
DRUMS
PORTABLE BARRIER
TEMPORARY PAVEMENT
IMPACT ATTENUATOR
DIRECTION OF TRAVEL
TYPE III BARRICADE
TEMPORARY SIGN SUPPORT
HORIZONTAL SCALE IN FEET
0 15 30 60
MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1416+00.00 TO STA. 1433+00.00
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.86
TOTAL 618
FRA-71-19.10





TYPICAL SECTION - PHASE 2
STA. 1444+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1433+00.00 TO STA.1450+00.00

FRA-71-19.10

MODEL: Phase 2 Sheet1 PAINTBOOTS: RGB.48 | DATE: 3/31/2026 TIME: 11:03:10 AM FSTORY: CHDOT_ITSP_V1.prf FSTYLE: CHDOT_Print.stb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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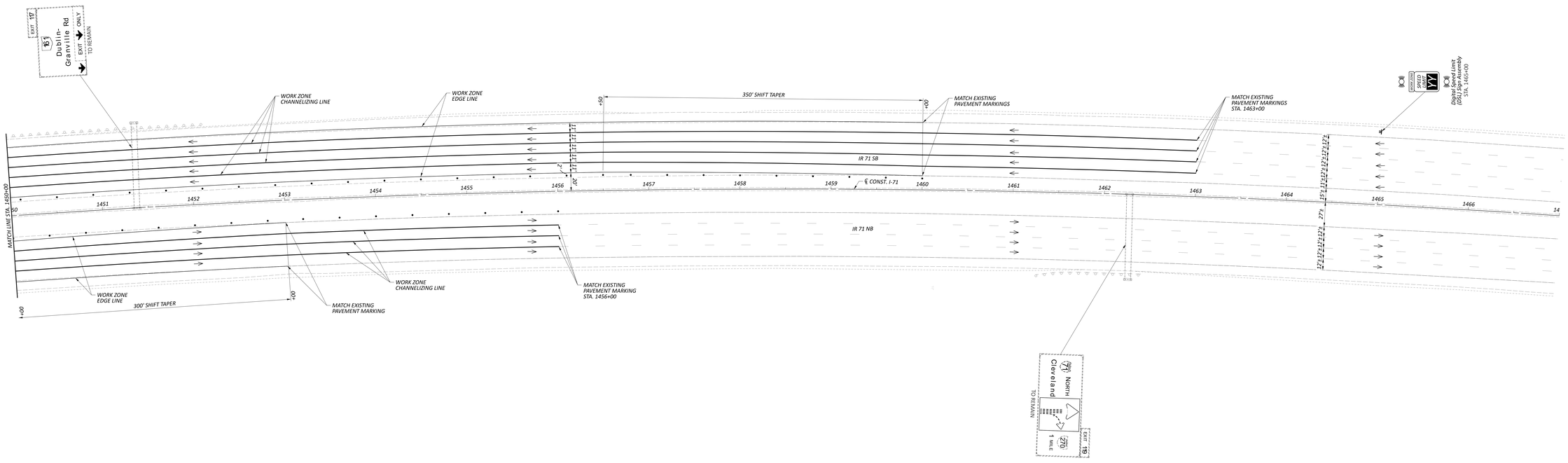
DESIGN AGENCY
Jacobs

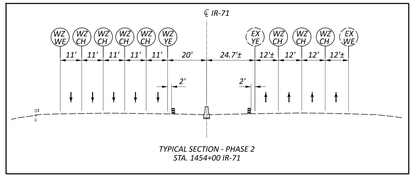
DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.87 TOTAL 618





TYPICAL SECTION - PHASE 2
STA. 1454+00 IR-71

NOTE: SEE SHEET P.67 FOR PHASE 2 SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 1450+00.00 TO STA.1467+00.00

FRA-71-19.10

MODEL: Phase 2 Sheet1 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:07:11 AM FILTERS: ON/OFF_ITEM_IN LAYER_FILTERS: ON/OFF_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CH2OPTC02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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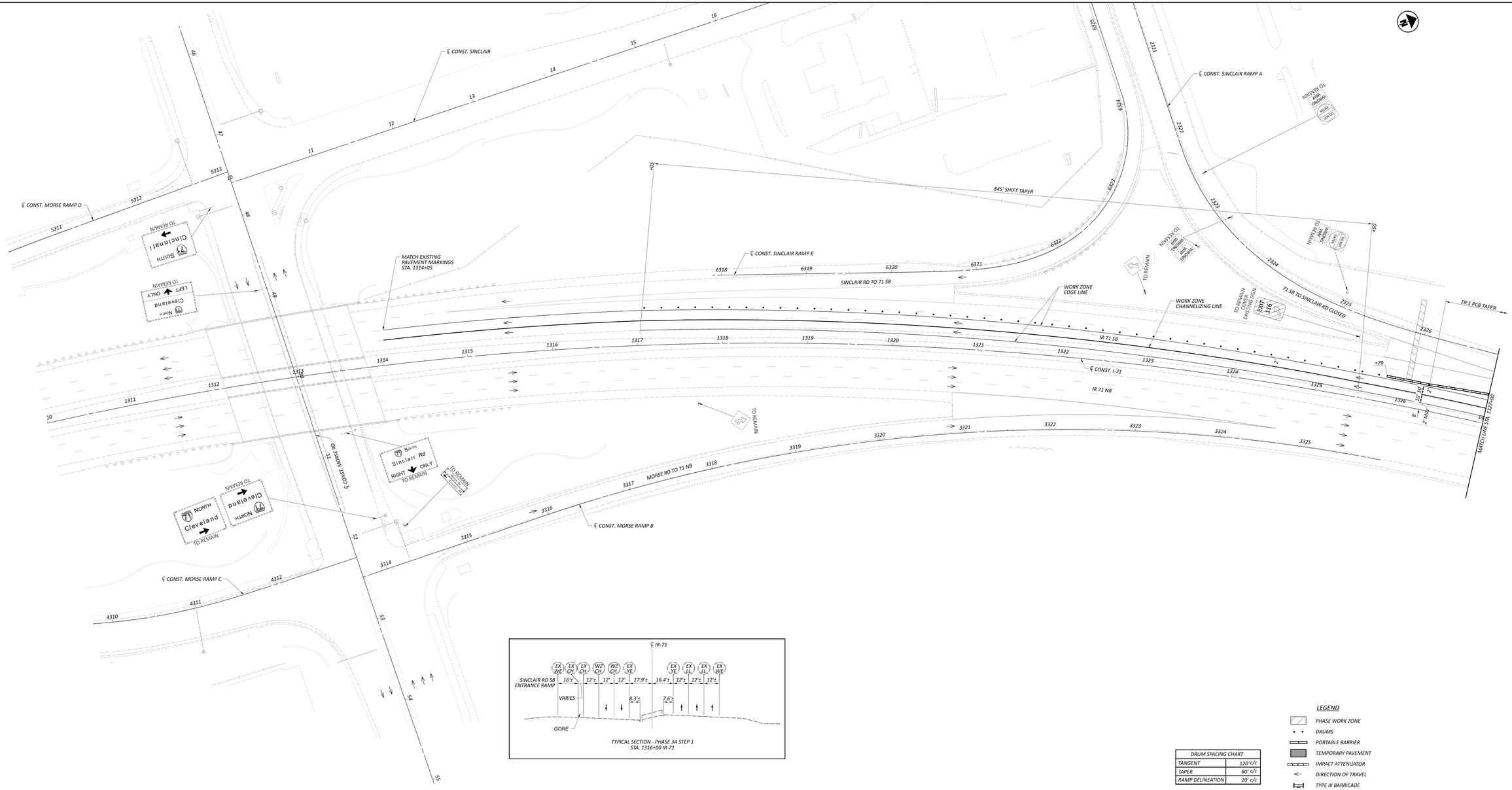
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.88 TOTAL 618



TYPICAL SECTION - PHASE 3A STEP 1
STA. 1316+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

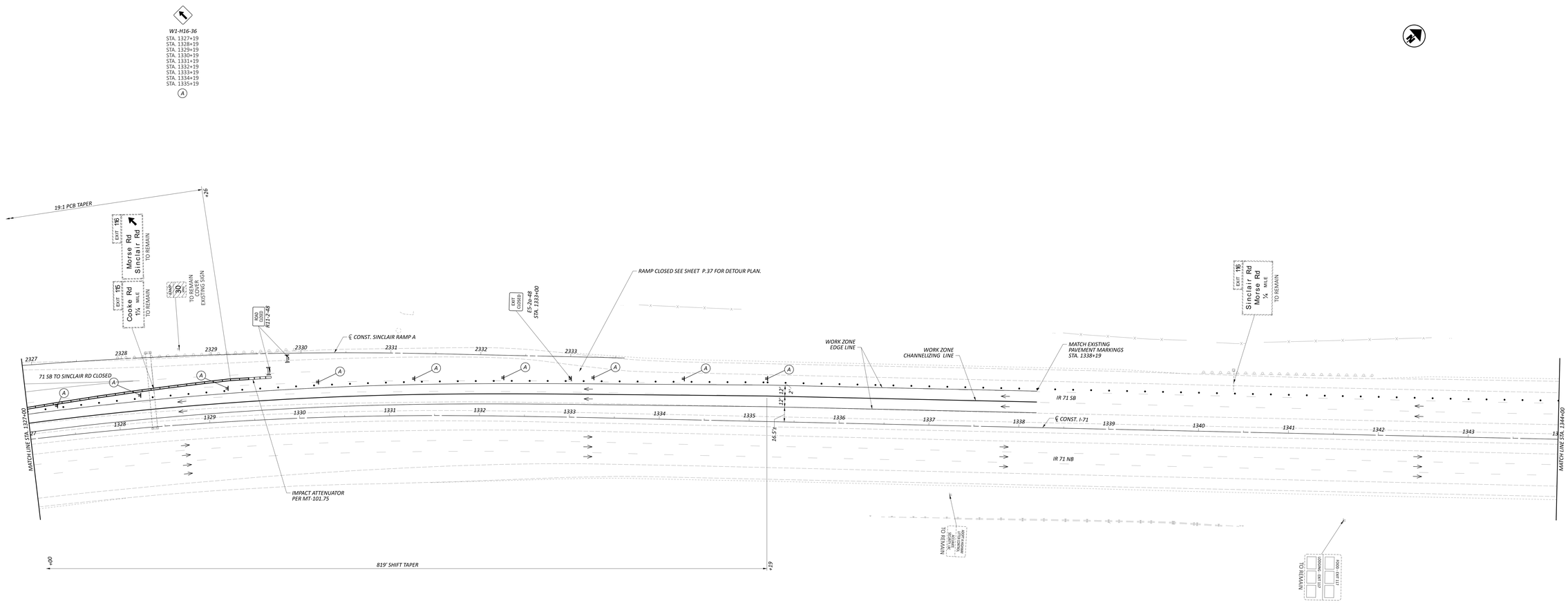
MAINTENANCE OF TRAFFIC - PHASE 3A STEP 1
STA. 1310+00.00 TO STA. 1327+00.00

FRA-71-19.10

MODEL: Phase 3A Step 1 - Sheet 1 MARKER: 66x48 (in) UNIT: 37/120IN TIME: 1:15:07 PM PITSIRI ORNDIT .PSI_A.ctb PENTBL ORNDIT .PEN ISE USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTCVDS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\109164\Highway\Roadway\Sheets\FRA-71-19.10_MOT_Phase 3A Step 1 - Sheet 1.dgn

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.89 TOTAL: 618



DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60'c/c
RAMP DELINEATION	20'c/c

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 1
STA. 1327+00.00 TO STA. 1344+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.90 TOTAL 618

FRA-71-19.10

MODEL: Phase 3A Step 1 - Sheet 2 WARNING: 66x48 (in.) DATE: 3/31/2026 TIME: 1:51:13 PM PITSRV ORHDOT.PSF_F.ctb FNTBL ORHDOT.fnt USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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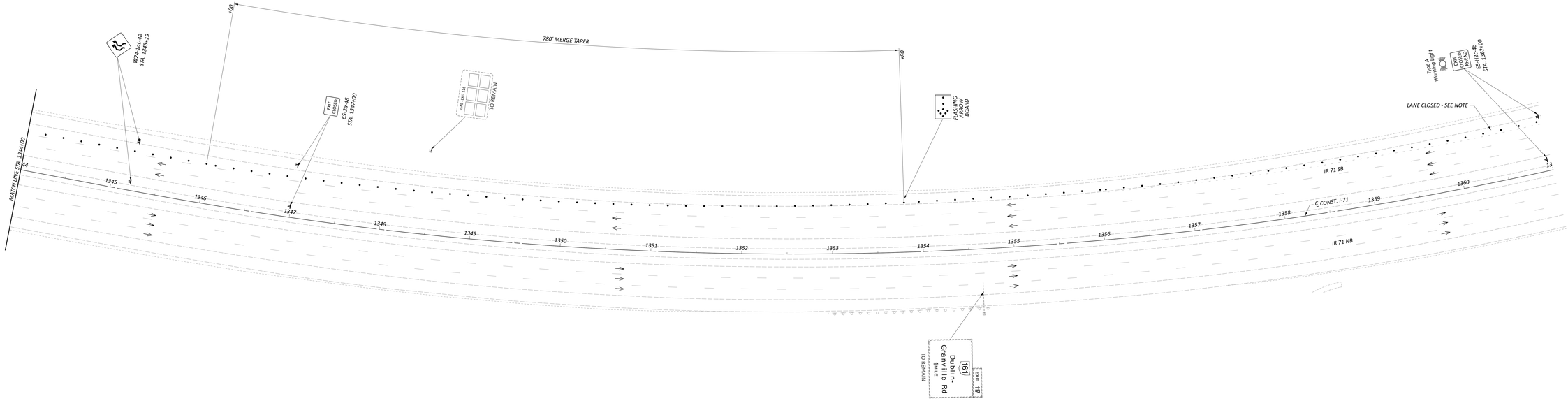
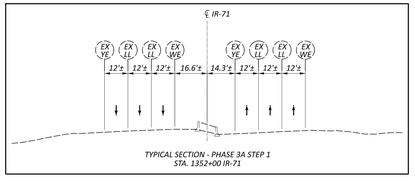




TYPICAL SECTION - PHASE 3A STEP 1
STA. 1352+00 IR-71

NOTE: INSTALL THE OUTSIDE LANE CLOSURE PER SCD MT-95.30 USING A 780' MERGE TAPER FROM STA. 1369+40 TO 1377+20. INCORPORATE A WORK ZONE SPEED ZONE STARTING NORTH OF STA. 1377+20 USING DIGITAL SPEED LIMIT(DSL) SIGN ASSEMBLIES PER SCD MT-104.10.

DRUM SPACING CHART	
TANGENT	120'-c/c
TAPER	60'-c/c
RAMP DELINEATION	20'-c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

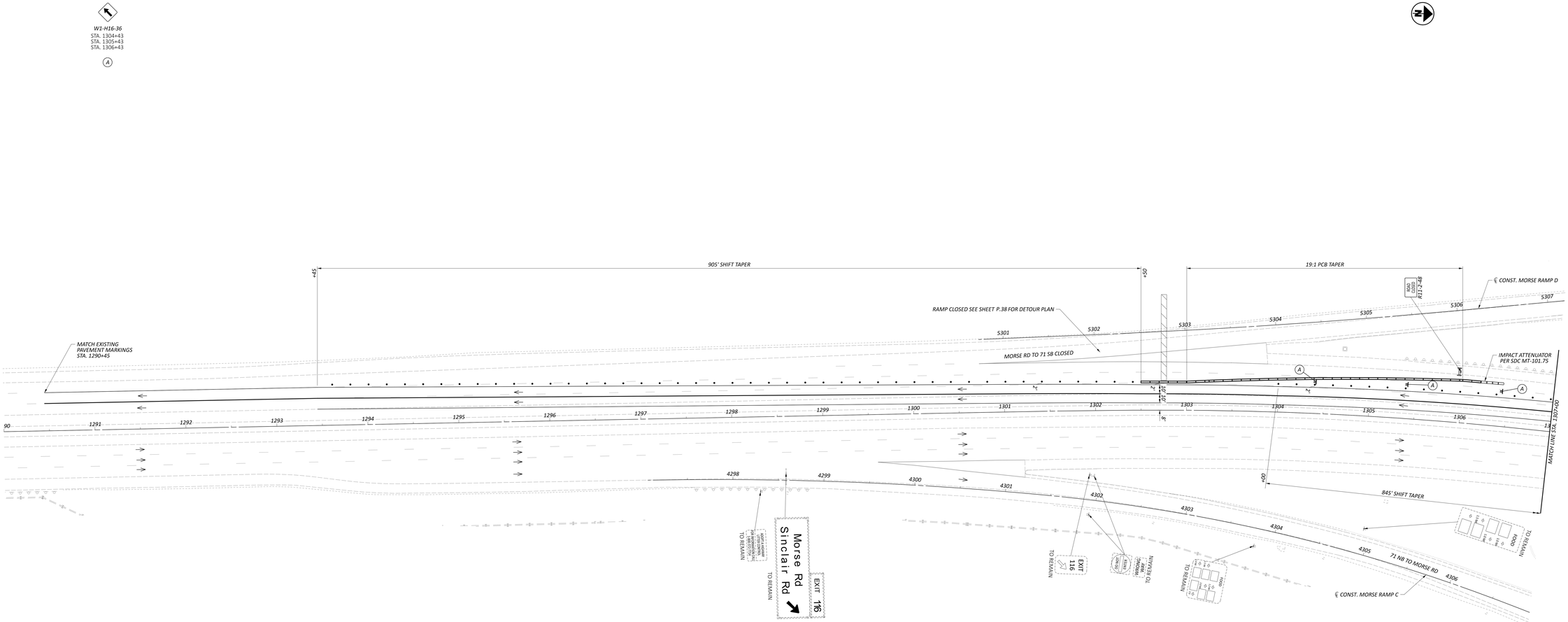
HORIZONTAL SCALE IN FEET
0 15 30 60

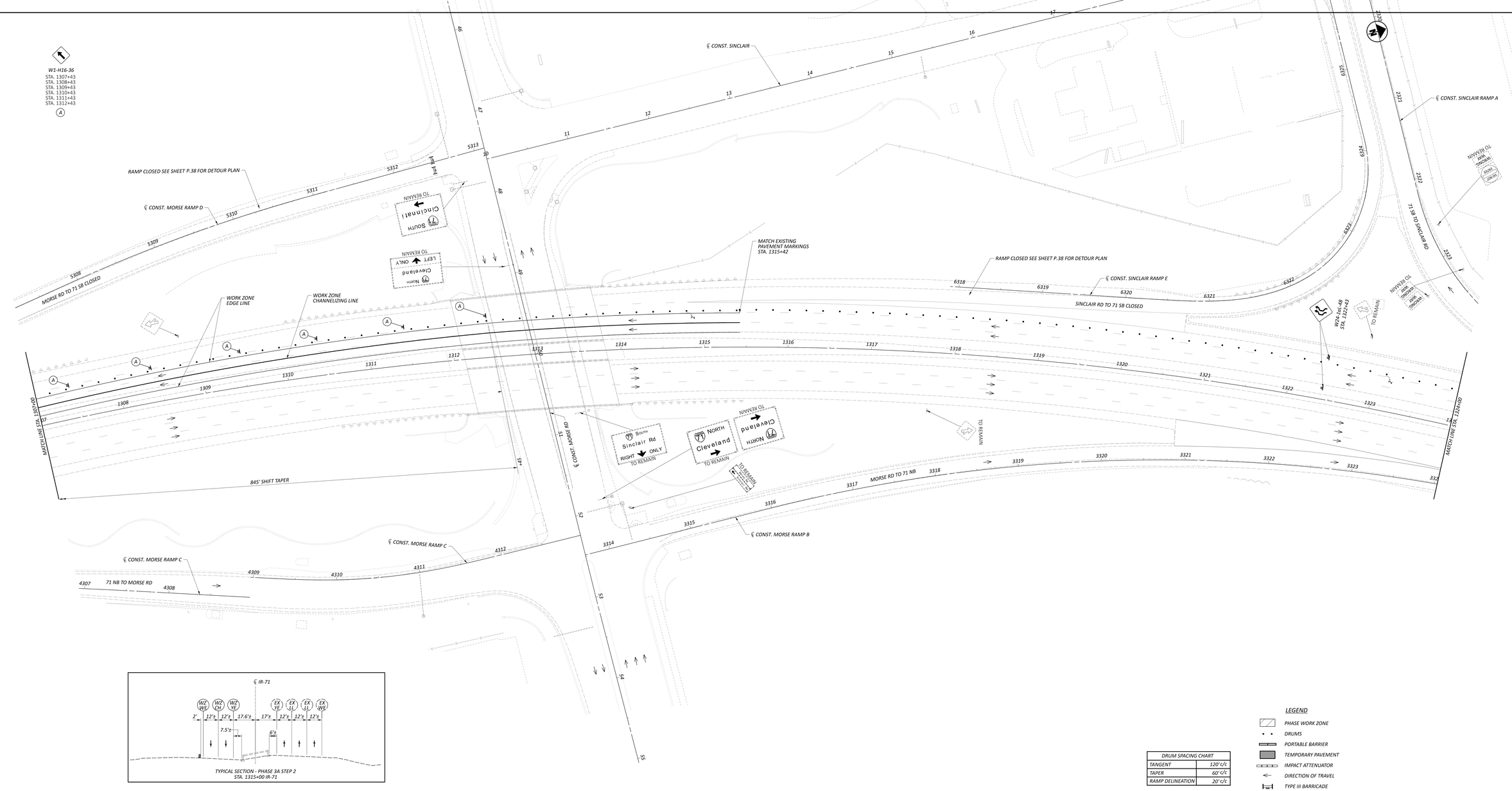
MAINTENANCE OF TRAFFIC - PHASE 3A STEP 1
STA. 1344+00.00 TO STA. 1361+00.00

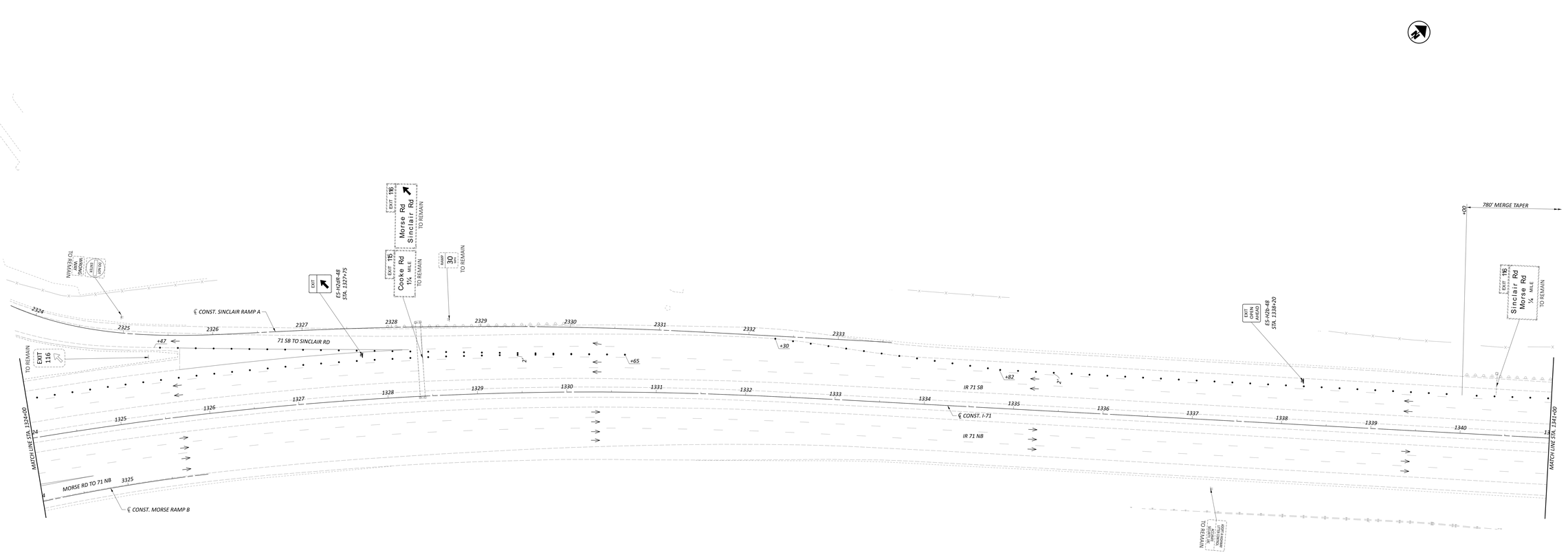
FRA-71-19.10

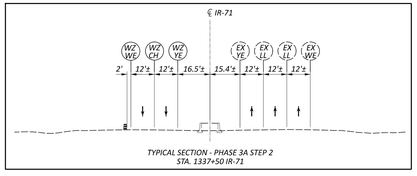
MODEL: Phase 3A Step 1 - Sheet 9 MARKER: 66x48 (in) UNIT: 37/12ISO TIME: 1:15:14 PM PITSMY ON:DOT .PSF_P.ptelg PENTBL ON:DOT .Pen.tbl USER: Chris.Lawrence@jacobs.com WORKINGS: ON:DOT/CVDS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\109164\Highway\Traffic\Maintenance of Traffic\Phase 3A\Step 1\FRA-71-19.10_MOT_Phase 3A Step 1 - Sheet 9.dgn

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.91
TOTAL: 618


W1-H16-36
STA. 1304+43
STA. 1305+43
STA. 1306+43
A
905' SHIFT TAPER
19:1 PCB TAPER
RAMP CLOSED SEE SHEET P.38 FOR DETOUR PLAN
MORSE RD TO 71 SB CLOSED
MATCH EXISTING PAVEMENT MARKINGS STA. 1290+45
℄ CONST. MORSE RAMP D
IMPACT ATTENUATOR PER SDC MT-101.75
MATCH LINE STA. 1307+00
845' SHIFT TAPER
71 NB TO MORSE RD
℄ CONST. MORSE RAMP C
Morse Rd
Sinclair Rd
EXIT 116
TO REMAIN
TO REMOVE
TO REMAIN
TO REMAIN
TO REMAIN


W1-H16-36
STA. 1307+43
STA. 1308+43
STA. 1309+43
STA. 1310+43
STA. 1311+43
STA. 1312+43
℄ CONST. SINCLAIR
℄ CONST. SINCLAIR RAMP A
RAMP CLOSED SEE SHEET P.38 FOR DETOUR PLAN
℄ CONST. MORSE RAMP D
MORSE RD TO 71 SB CLOSED
MATCH EXISTING PAVEMENT MARKINGS STA. 1315+42
WORK ZONE EDGE LINE
WORK ZONE CHANNELIZING LINE
SINCLAIR RD TO 71 SB CLOSED
℄ CONST. SINCLAIR RAMP E
71 SB TO SINCLAIR RD
W24.1a(-48 STA. 1322+43
MATCH LINE STA. 1307+00
MATCH LINE STA. 1324+00
845' SHIFT TAPER
℄ CONST. MORSE RD
MORSE RD TO 71 NB
℄ CONST. MORSE RAMP B
℄ CONST. MORSE RAMP C
71 NB TO MORSE RD
SOUTH Cincinnati TO REMAIN
NORTH Cleveland LEFT ONLY TO REMAIN
SOUTH Sinclair Rd RIGHT ONLY TO REMAIN
NORTH Cleveland TO REMAIN
NORTH Cleveland TO REMAIN
TO REMAIN
TO REMAIN





TYPICAL SECTION - PHASE 3A STEP 2
STA. 1337+50 IR-71

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 2
STA. 1324+00.00 TO STA. 1341+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.94 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A Step 2 - Sheet 9 MARKERS 66x44 (in.) DATE: 3/11/2026 TIME: 1:21:16 PM PLOTBY: CHRISTOPHER JAY, P.E. (PE/ME) CHRISTOPHER.JAY@JACOBS.COM WORKSPACE: CHRISTOPHER JAY, P.E. (PE/ME) CHRISTOPHER.JAY@JACOBS.COM WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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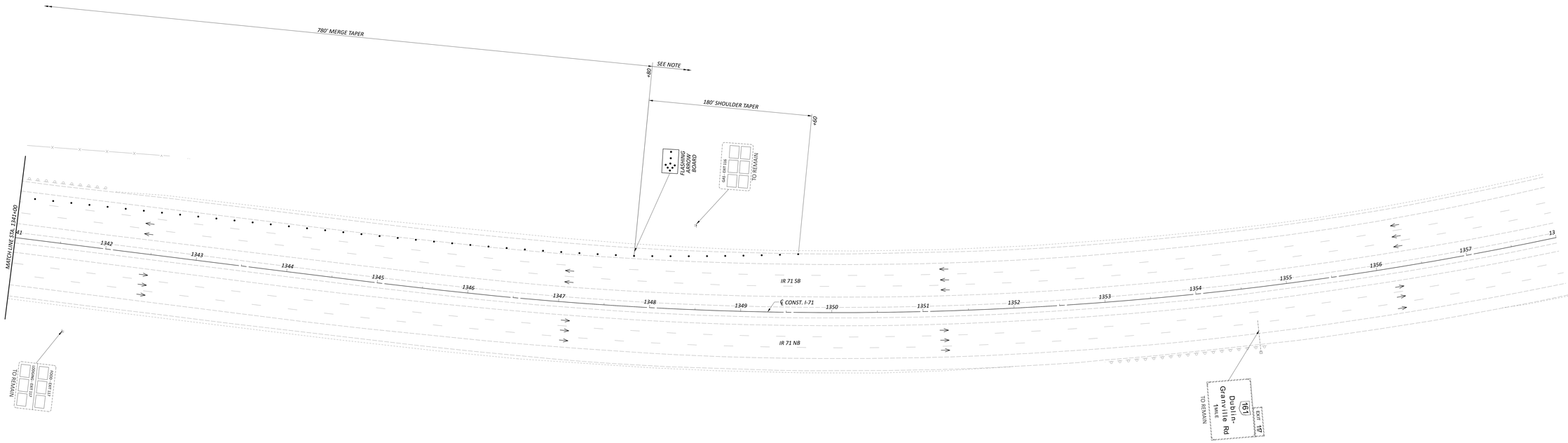

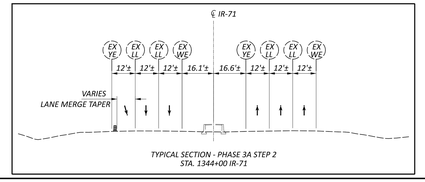

TYPICAL SECTION - PHASE 3A STEP 2
STA. 1344+00 IR-71

NOTE: SEE SHEET P.66 FOR PHASE 3A STEP 2 SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 2
STA. 1341+00.00 TO STA. 1358+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.55 TOTAL 618

FRA-71-19.10

MODEL: Phase 3A Step 2 - Sheet 4 MARKERS: 66x48 (in.) DATE: 3/11/2026 TIME: 1:15:16 PM PLOTBY: CHRISTOPHER JAMES PAYNEL CHKDPT: Pen-tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHKDOTCVDS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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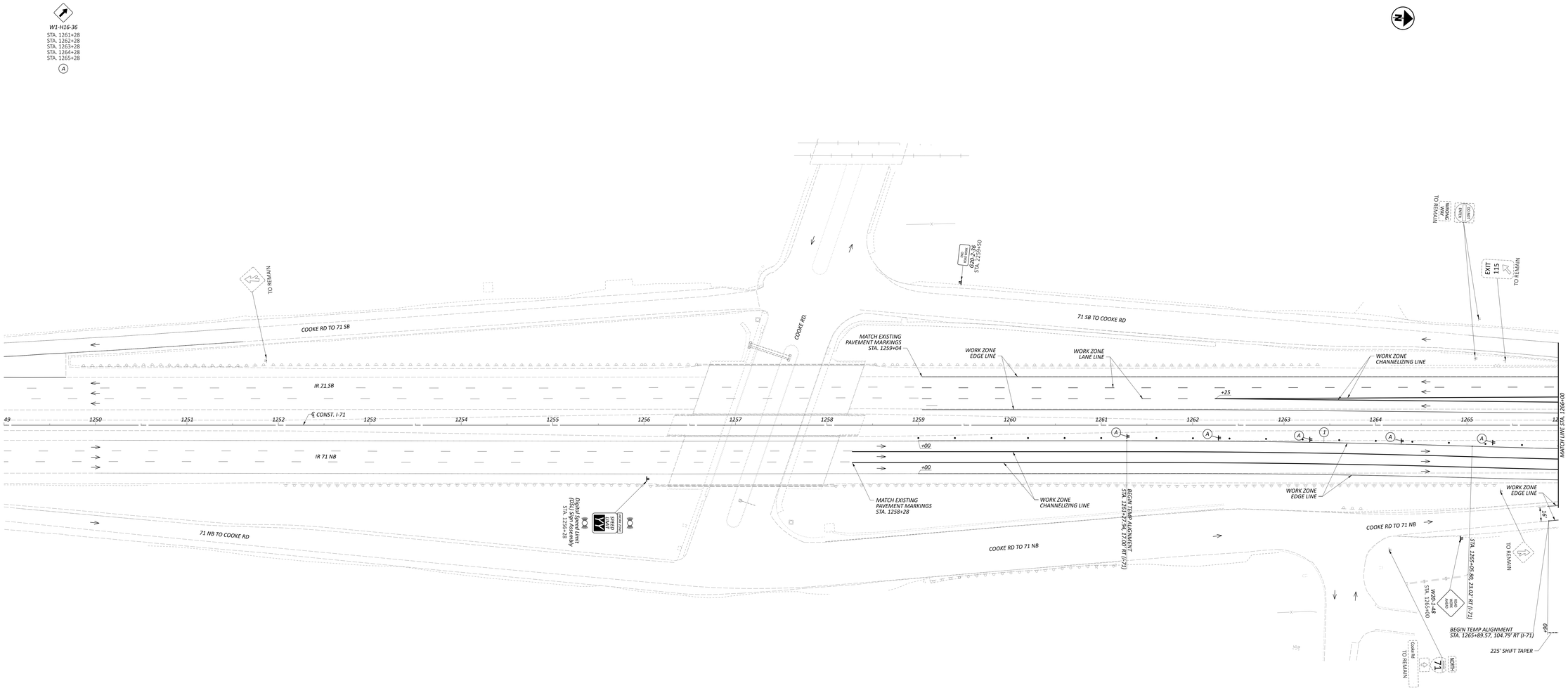

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Dc = 00°29'00"
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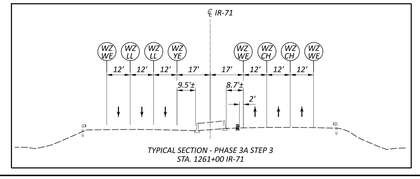
T = 188.98'
L = 377.93'
E = 1.51'



TYPICAL SECTION - PHASE 3A STEP 3
STA. 1261+00 IR-71

NOTE: SEE SHEET P.51 FOR PHASE 3A ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	*120' c/c*
TAPER	*60' c/c*
RAMP DELINEATION	*20' c/c*

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1249+00.00 TO STA. 1266+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.96 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A - Plan 3 PAPERSIZE: ISO A3 (L) DATE: 3/31/2026 TIME: 12:51:12 PM FILENAME: C:\TEMP_CHEOPT_PDF_P-Lot50_TEMP\TEL_CHEOPT_Plan.tbl USER: Chris.Lawmaster@jacobs.com WORKSPACE: CHEOPTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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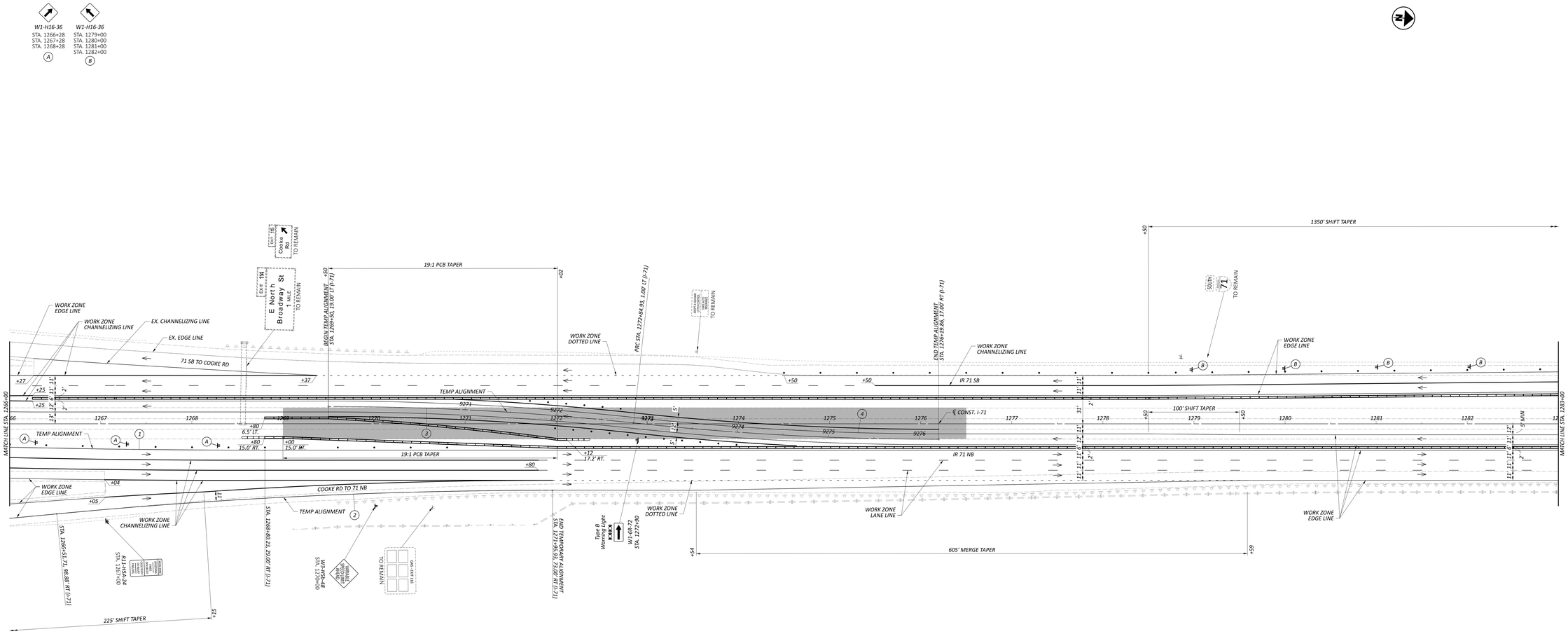

CURVE DATA - 1
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Dc = 00°29'00"
R = 11,854.31'
T = 187.26'
L = 374.48'
E = 1.48'

CURVE DATA - 2
Δ = 05°27'00" RT
Dc = 01°00'00"
R = 5,729.58'
T = 272.71'
L = 545.01'
E = 6.49'

CURVE DATA - 3
P.I. = STA. 9271+17.95
Δ = 06°09'08" RT
Dc = 01°50'00"
R = 3,125.23'
T = 167.95'
L = 335.58'
E = 4.51'

CURVE DATA - 4
P.I. = STA. 9274+53.53
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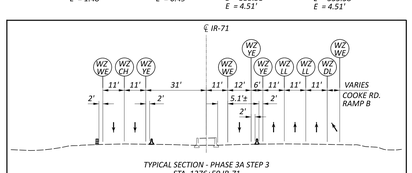
Dc = 01°50'00"
R = 3,125.23'
T = 167.95'
L = 335.58'
E = 4.51'



TYPICAL SECTION - PHASE 3A STEP 3
STA. 1276+50 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1266+00.00 TO STA. 1283+00.00

FRA-71-19.10

MODEL: Phase 3A - Plan # PAVEMENT MARKING # SHEET: 3/31/2026 TIME: 12:53:57 PM FILTOW: CHRIST_PDF_U: pdf58_PENTBL: CHRIST_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTTC02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Indiana\109164\Roadway\Design\Microstation\Plan Sheets\Phase 3A\Phase 3A Step 3\FRA-71-19.10 Phase 3A Step 3 MOT.dgn

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P-97
TOTAL 618

FRA-71-19.10

MODEL: Phase 3A - Plan 5 PAREDES: RM140.rvt DATE: 3/31/2026A TIME: 12:51:58 PM FITDW: DWDT_PDF_V1.pltCB_FITDTEL: DWDT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: DWDOTCLOD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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W1-H16-36
STA. 1283+00
STA. 1284+00
STA. 1285+00
STA. 1286+00
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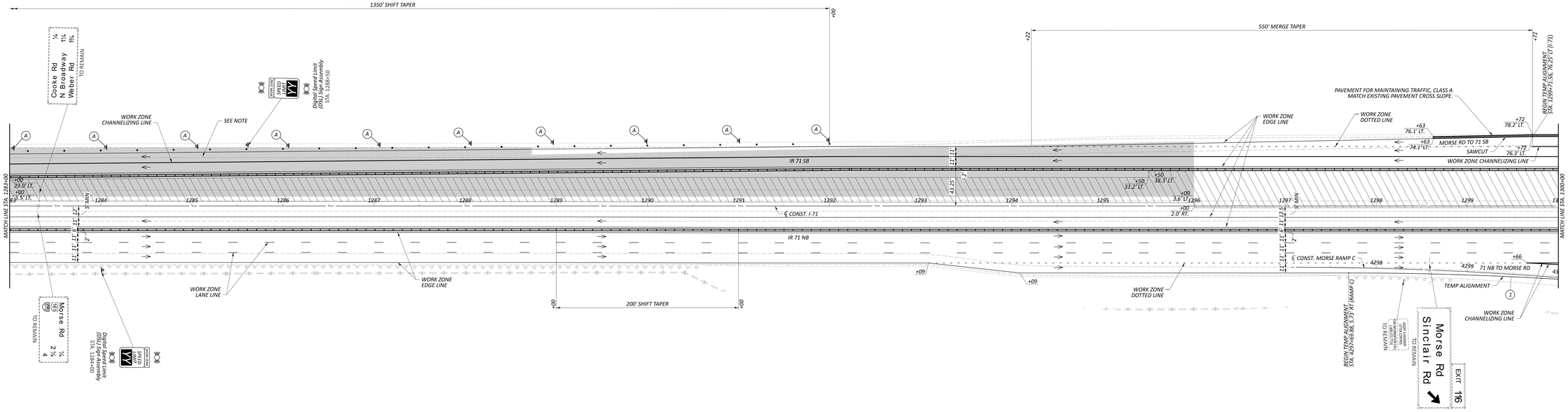
STA. 1289+00
STA. 1290+00
STA. 1291+00
STA. 1292+00



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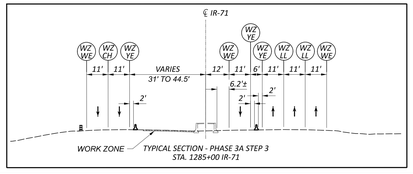
T = 156.57'
L = 312.97'
E = 3.21'



NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 3A TO PHASE 3B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETAILS.

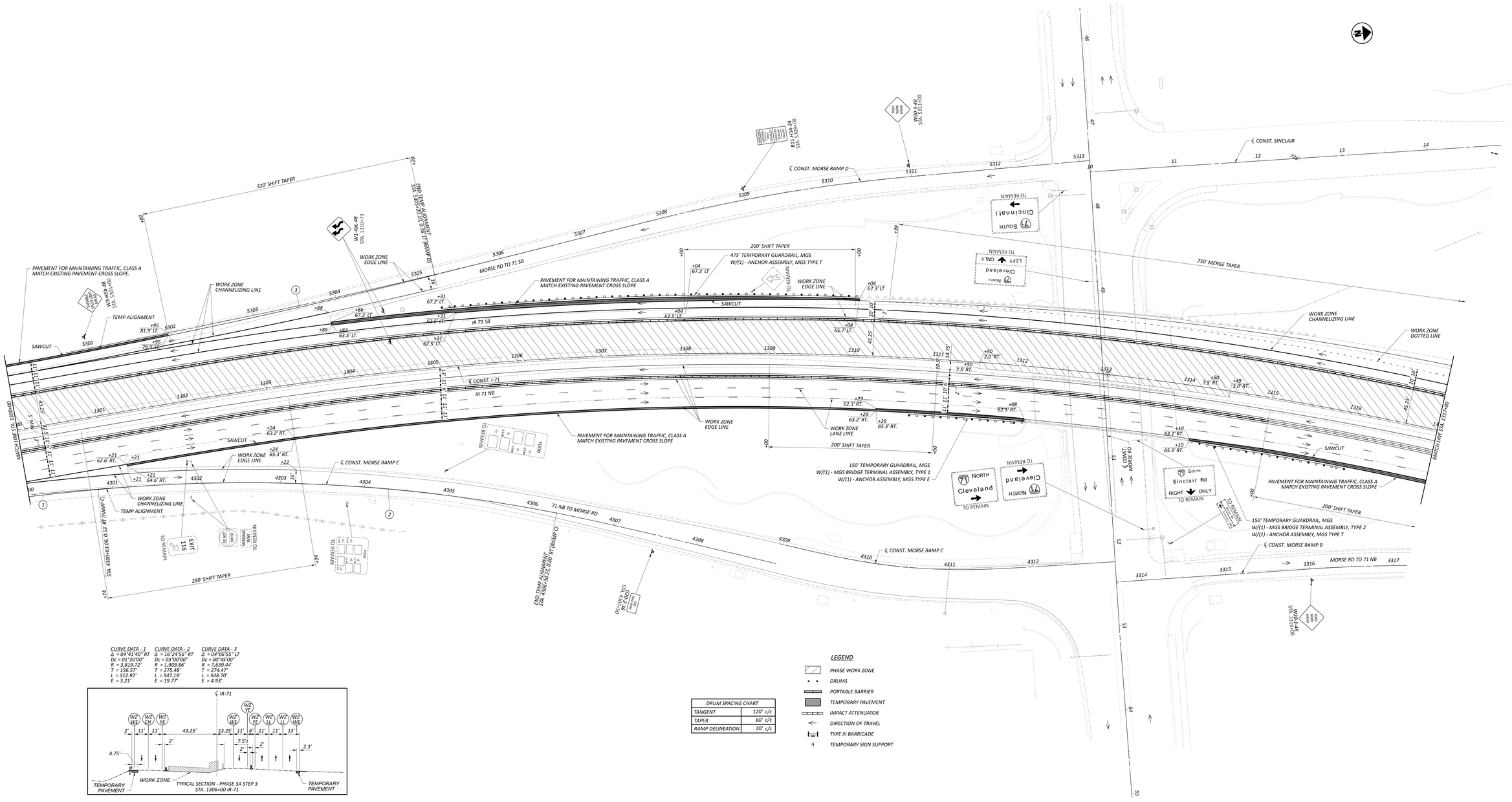
DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1283+00.00 TO STA. 1300+00.00

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.98 TOTAL 618



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Dc = 01°30'00"
R = 3,819.72'
T = 156.57'
L = 312.97'
E = 3.21'

CURVE DATA - 2
Δ = 16°24'56" RT
Dc = 03°00'00"
R = 1,909.86'
T = 275.48'
L = 547.19'
E = 19.77'

CURVE DATA - 3
Δ = 04°06'55" LT
Dc = 00°45'00"
R = 7,639.44'
T = 274.47'
L = 548.70'
E = 4.93'

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1306+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

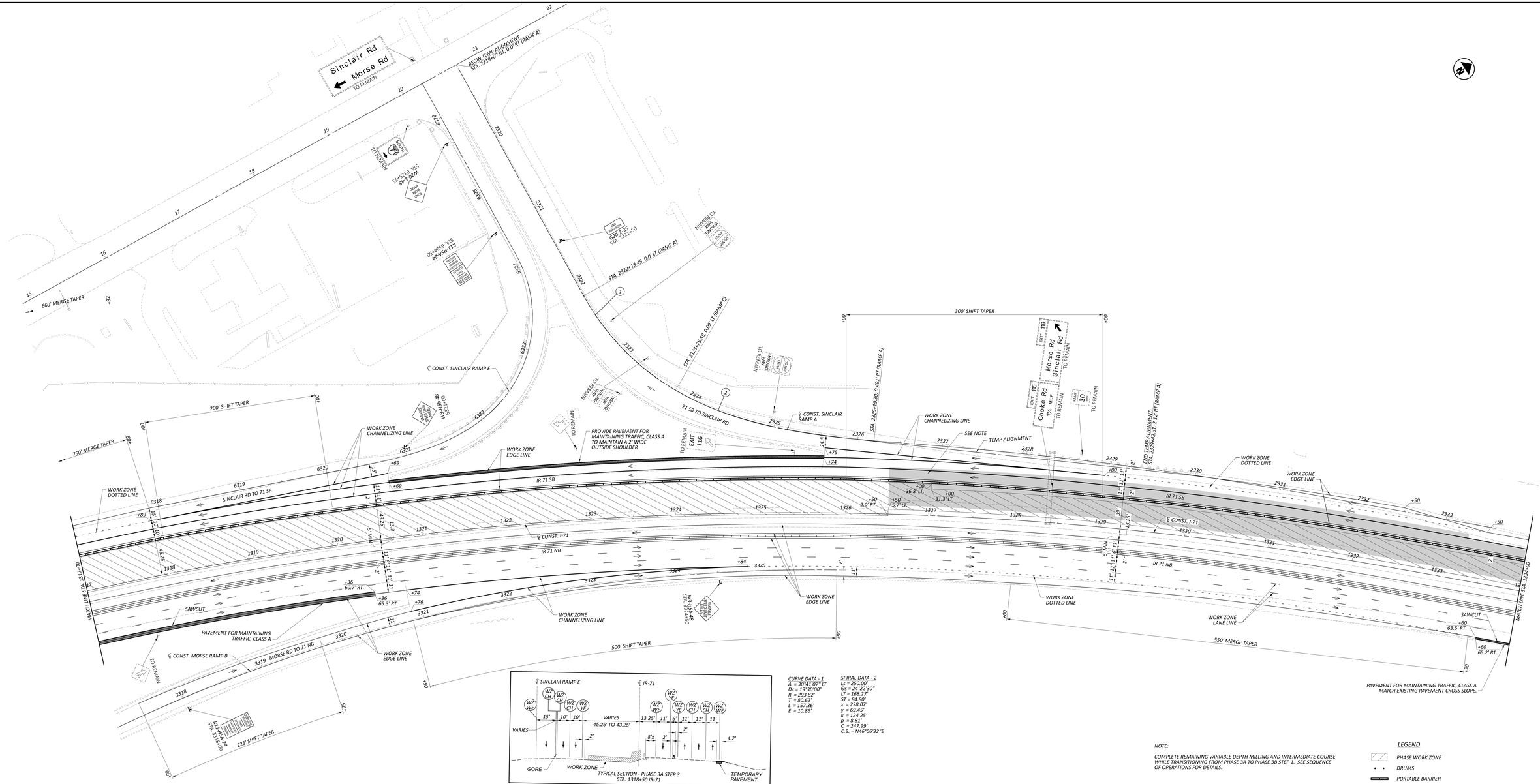
MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1300+00.00 TO STA. 1317+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.99 TOTAL 618

FRA-71-19.10

MODEL: Phase 3A - Plan.dgn PREFACES: 4to14.dgn | DATE: 3/31/2026 TIME: 12:55:59 PM PSTDRV: CHROT_PDF_V1.prtSS PSTBL: CHROT_Print.stb USER: Chris.Lawmaster@jacobs.com WORKSPACE: CHROTT0202 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25



FRA-71-19.10

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1317+00.00 TO STA. 1334+00.00

HORIZONTAL SCALE IN FEET
0 15 30 60

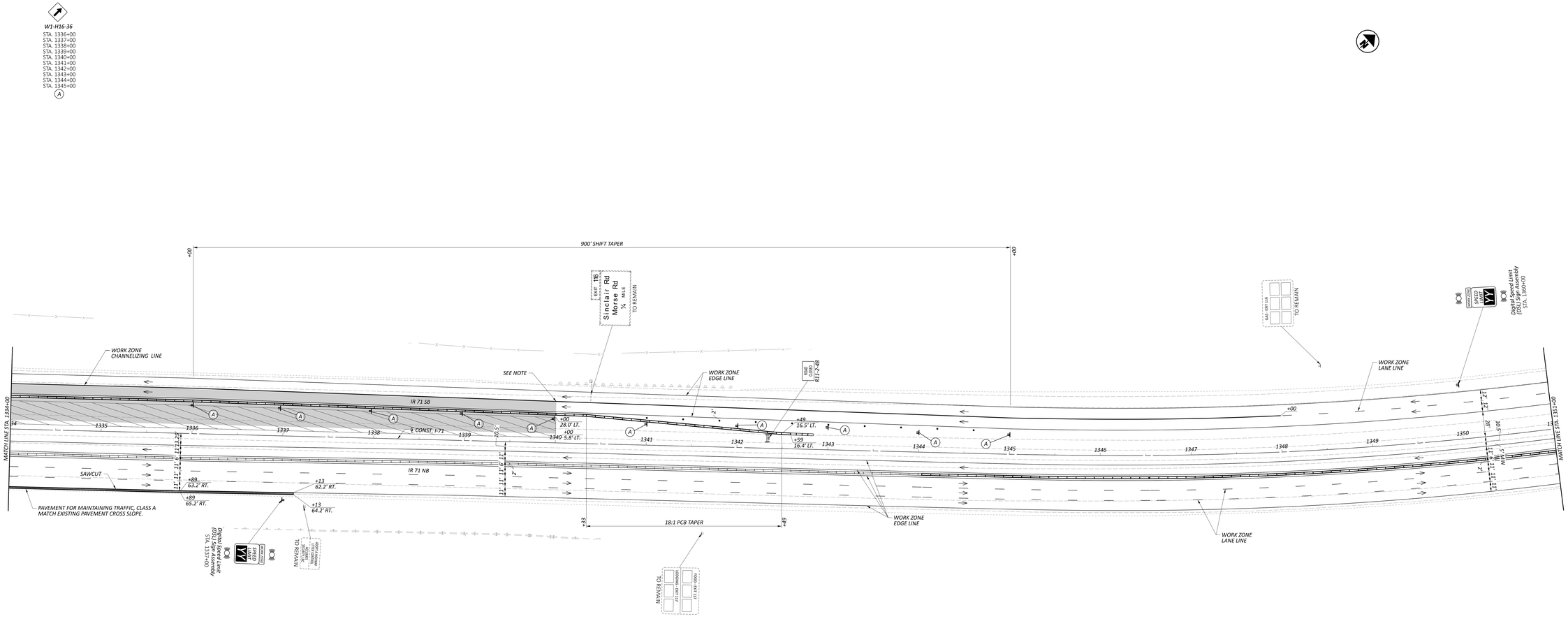
DESIGN AGENCY
Jacobs

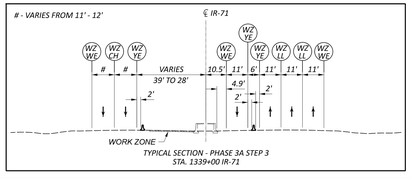
DESIGNED SRH
REVIEWED BAP 03/20/26
PROJECT ID 109164
SHEET P.100 TOTAL 618

MODEL: Phase 3A - Plan | PAPERSIZE: ANSI-A4 | DATE: 3/31/2026 TIME: 12:20:55 PM | FCDIR: C:\MDOT_CHDOT_PDF_V1-pe\dgn_FCNTRL\ | CHDOT_Plot.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: C:\MDOT\CHDOT\ WORKSET: 109164_PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DRAWINGS ARE THE PROPERTY OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION. THEY ARE NOT TO BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION.

FRA-71-19.10

MODEL: Phase 3A - Place 3 PAVEMENT - 09x14.dgn | DATE: 3/31/2026 TIME: 12:53:03 PM | PLTDRV: CHDOT_PDF_V1.ctb|S_PSHTBL: CHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALIGNMENT: Phase 3A - Place 3 PAVEMENT - 09x14.dgn | DATE: 3/31/2026 TIME: 12:53:03 PM | PLTDRV: CHDOT_PDF_V1.ctb|S_PSHTBL: CHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 3A STEP 3
STA. 1339+00 IR-71

NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 3A TO PHASE 3B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETAILS.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1334+00.00 TO STA. 1351+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.101 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A - Phase 3 PAPERSIZE: ANSI-B (in.) DATE: 3/31/2026 TIME: 12:33:33 PM PSTORM: CHKDP_PSP_V-Lane.tbl PSHTBL: CHKDP_Pmt.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHKDOTC102 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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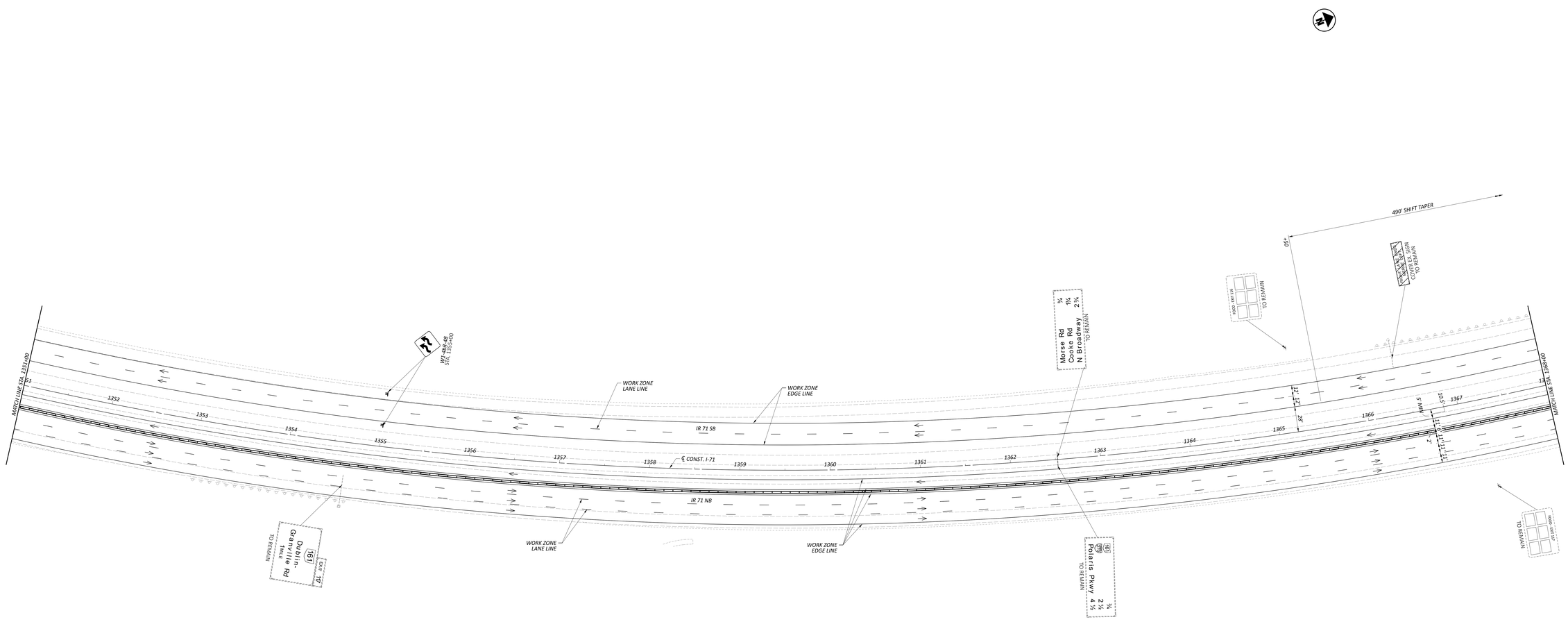
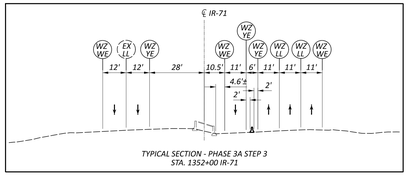




TYPICAL SECTION - PHASE 3A STEP 3
STA. 1352+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

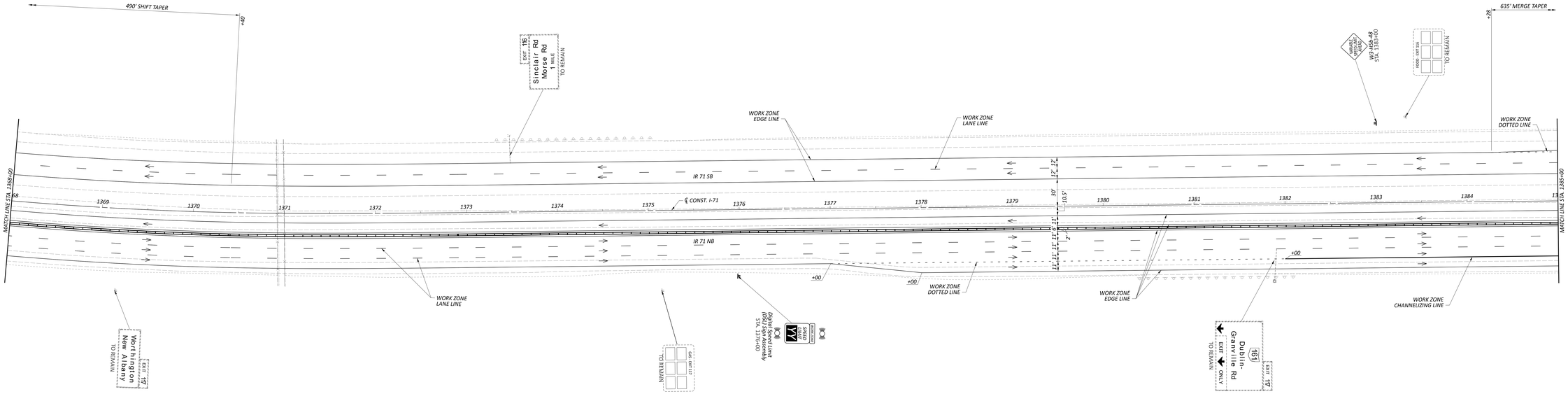
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

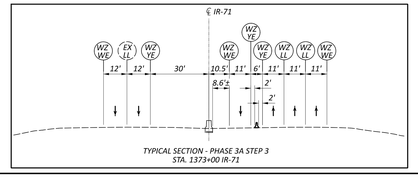
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1351+00.00 TO STA. 1368+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.102 TOTAL: 618





DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

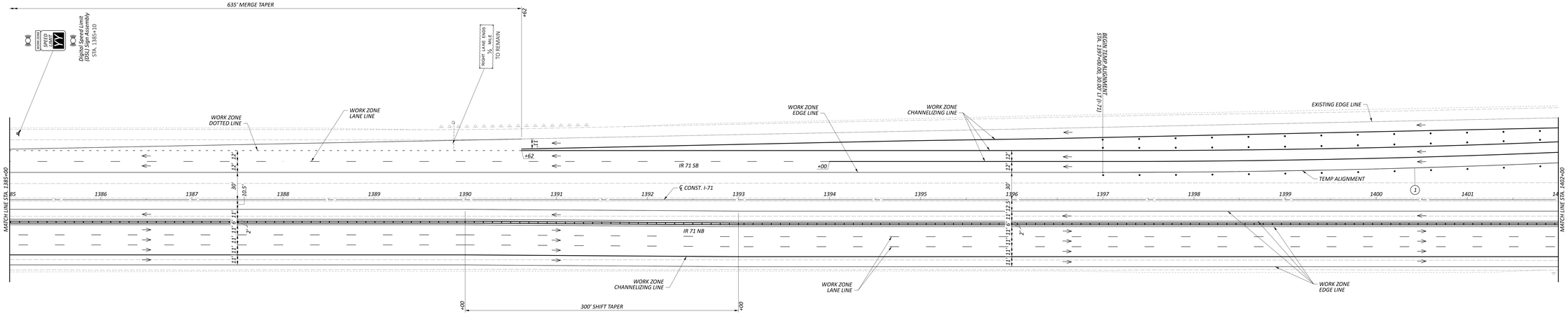
MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1368+00.00 TO STA. 1385+00.00

FRA-71-19.10

MODEL: Phase 3A - Plan 10 MARKERS: 66x34.0=1 DATE: 3/31/2026 TIME: 12:15:04 PM STORY: OHIOT; PSF_1-24x36_PENTEL OHIOT; Plot Bill: USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHIOTSIG02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\109164\Highway\Roadway\Maintenance of Traffic\Phase 3\Phase 3A\Step 3\FRA-71-19.10_MOT_Phase 3A_Step 3.dgn

DESIGN AGENCY
Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.103
TOTAL	618



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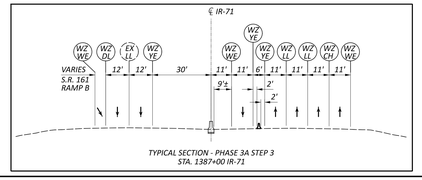

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1387+00 IR-71

DRUM SPACING CHART	
TANGENT	*120' c/c*
TAPER	*60' c/c*
RAMP DELINEATION	*20' c/c*

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1385+00.00 TO STA. 1402+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.104 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A - Plan 11 MARKERS: 66x34.0+1 DATE: 3/31/2026 TIME: 12:15:05 PM SYSTEM: CHXDT_PSF_1-24NB_PENTBL_CHXDT_Plot.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHXDTSUS2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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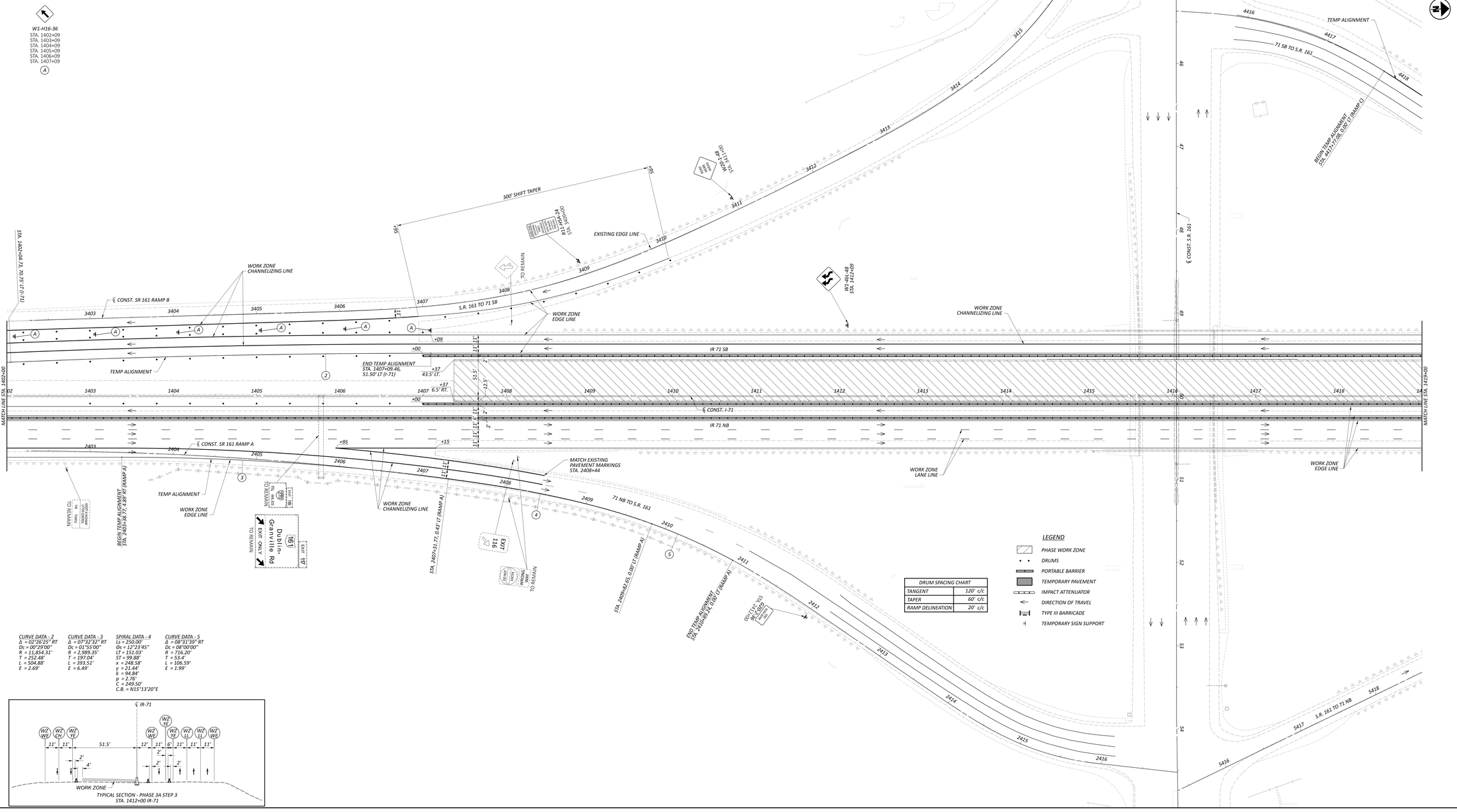


HORIZONTAL SCALE IN FEET
0 15 30 60

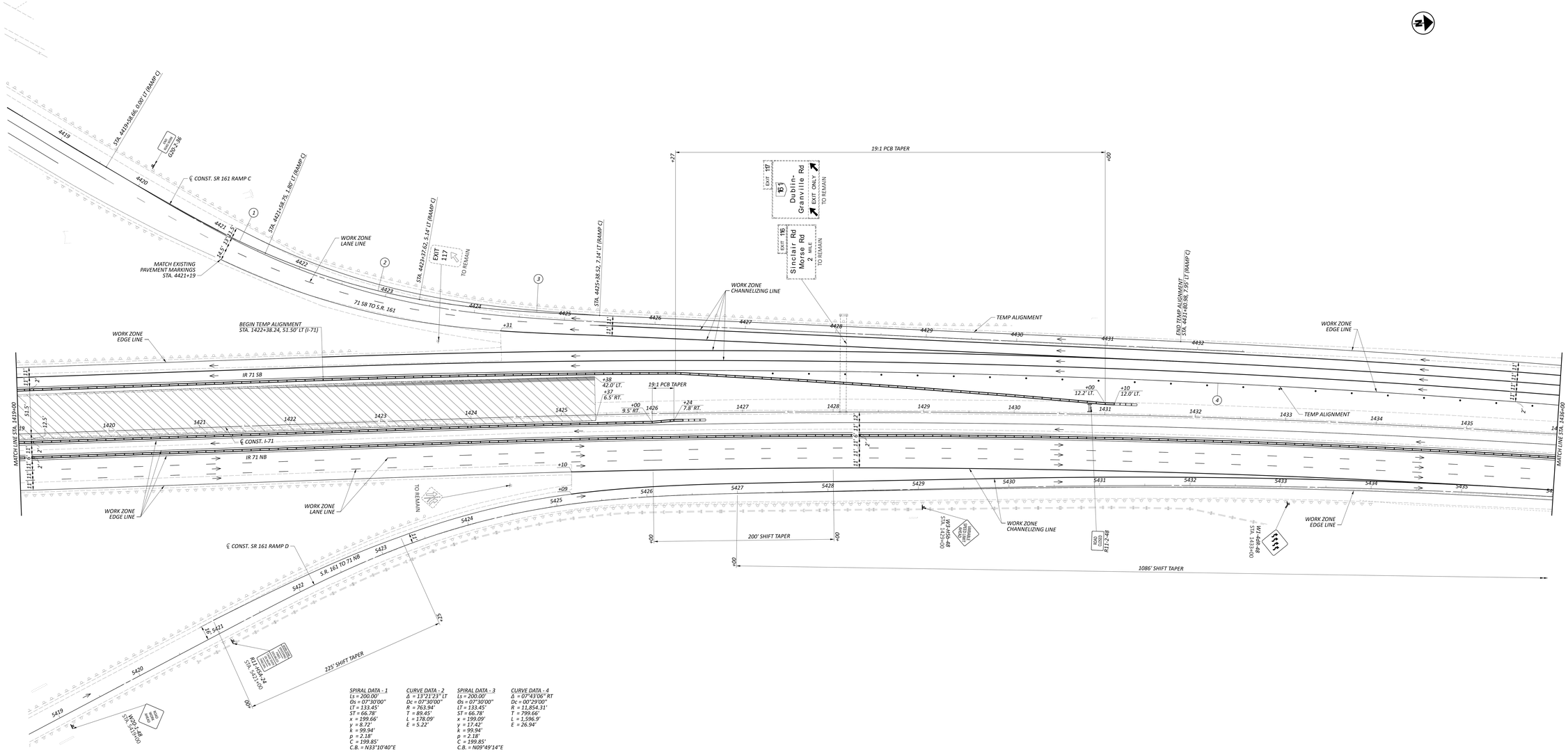
MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1402+00.00 TO STA. 1419+00.00

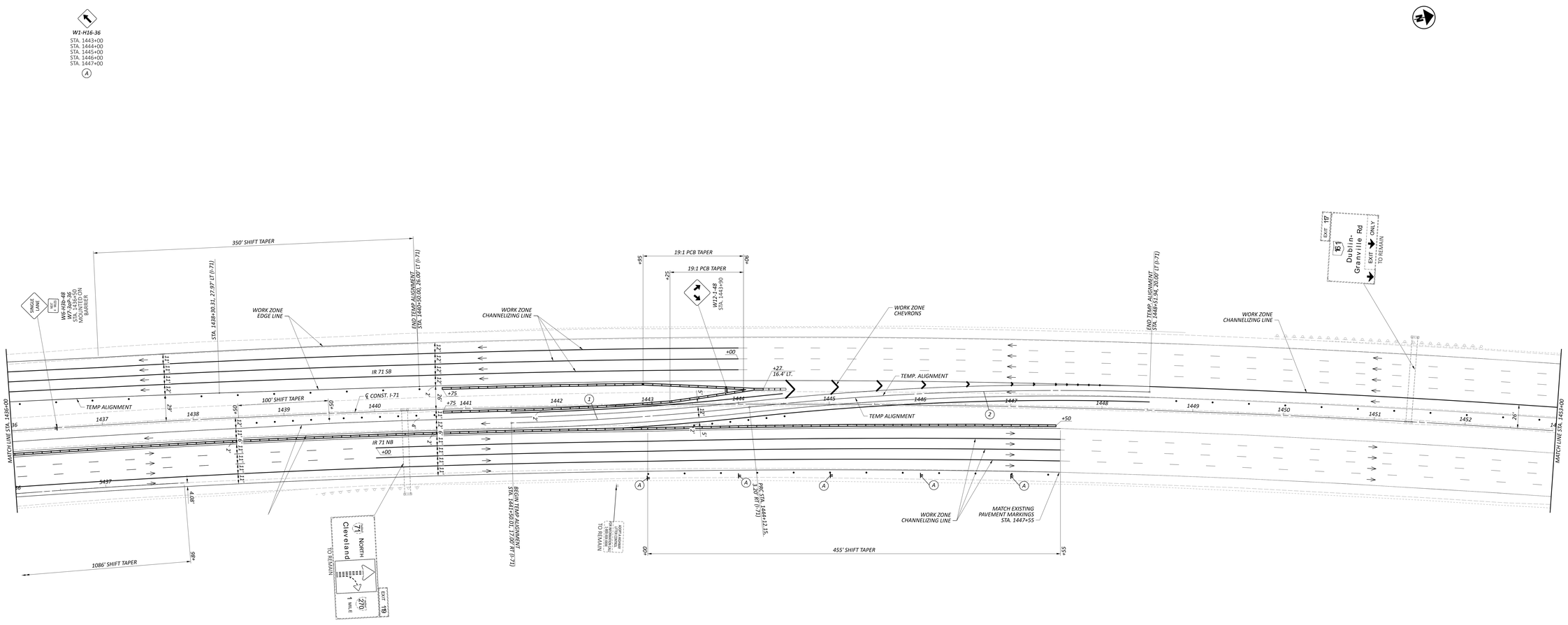
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.105 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A - Plan 12 MARKERS: 66x34.0+1 DATE: 3/31/2026 TIME: 12:15:04 PM USER: CHRIST, JOSE J. (JJC6) PENTEL: CHRIST_PEN.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOJJC6 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACCESS TO THIS DRAWING IS RESTRICTED TO AUTHORIZED USERS. ANY UNAUTHORIZED ACCESS, USE, OR DISTRIBUTION IS STRICTLY PROHIBITED.


19:1 PCB TAPER
EXIT 117
Dublin-Granville Rd
EXIT ONLY
TO REMAIN
EXIT 116
Sinclair Rd
Worthington
2 MILE
TO REMAIN
EXIT 117
TO REMAIN
WORK ZONE CHANNELIZING LINE
TEMP ALIGNMENT
END TEMP ALIGNMENT
STA. 4431+80.98, 7.95' LT (RAMP C)
BEGIN TEMP ALIGNMENT
STA. 1422+38.24, 51.50' LT (I-71)
WORK ZONE EDGE LINE
WORK ZONE LANE LINE
MATCH EXISTING PAVEMENT MARKINGS STA. 4421+19
71.58 TO S.R. 161
IR 71 SB
IR 71 NB
℄ CONST. I-71
℄ CONST. SR 161 RAMP C
℄ CONST. SR 161 RAMP D
S.R. 161 TO 71 NB
MATCH LINE STA. 1419+00
MATCH LINE STA. 1436+00
TO REMAIN
200' SHIFT TAPER
1086' SHIFT TAPER
225' SHIFT TAPER
STA. 1434+48
STA. 1434+00
STA. 4421+00
STA. 4419+66.66, 0.00' LT (RAMP C)
STA. 4421+58.75, 1.90' LT (RAMP C)
STA. 4423+27.62, 5.14' LT (RAMP C)
STA. 4425+58.52, 7.14' LT (RAMP C)
IR 71 SB
IR 71 NB
S.R. 161 TO 71 NB
S.R. 161
WORK ZONE EDGE LINE
WORK ZONE LANE LINE
WORK ZONE CHANNELIZING LINE
TEMP ALIGNMENT
MAINTAIN TRAFFIC PATTERN
MAINTAIN TRAFFIC PATTERN
ROAD CLOSED
R11-2-48
SPEED LIMIT
R2-1-60
SPEED LIMIT
R2-1-60
WORK ZONE EDGE LINE
WORK ZONE EDGE LINE
WORK ZONE EDGE LINE



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E = 2.76'

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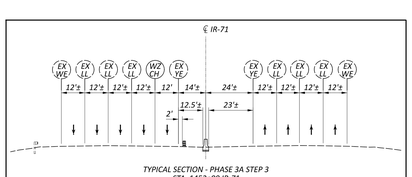

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1452+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1436+00.00 TO STA. 1453+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.107 TOTAL 618

FRA-71-19.10

MODEL: Phase 3A - Plan 14 MARKERS: 66x34.0=1 DATE: 3/31/2026 TIME: 12:31:21 PM SYSTEM: CHSOFT_PSF_C-249GB_PENTEL CHSOFT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOFTSVR2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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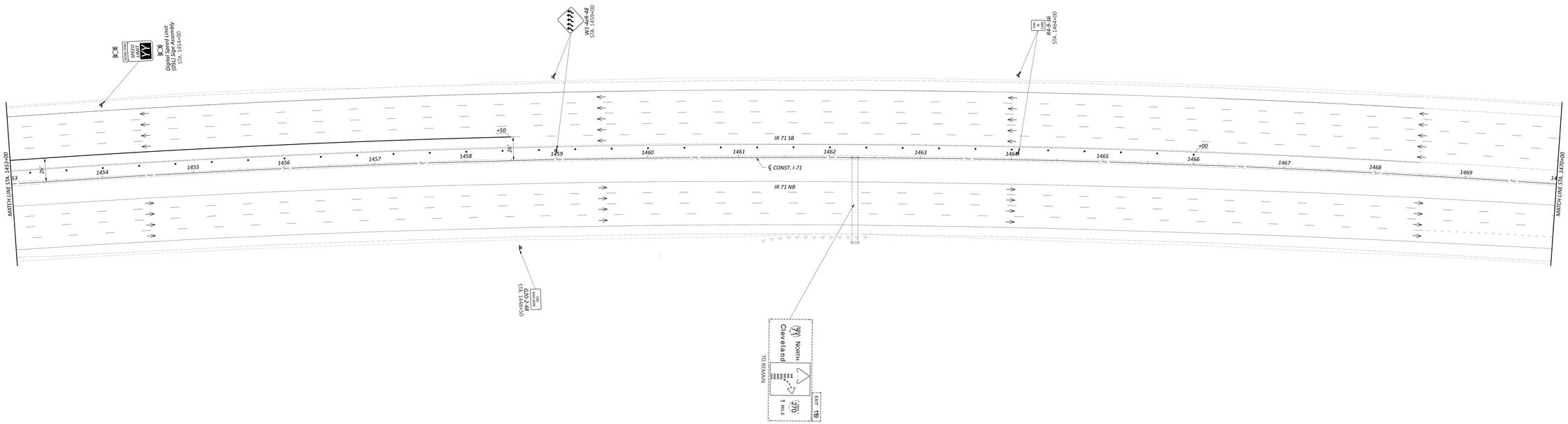

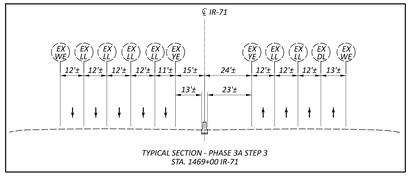

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1469+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1453+00.00 TO STA. 1470+00.00

FRA-71-19.10

MODEL: Phase 3A - Plan 15 MARKERS: 66x34.0=1 DATE: 3/31/2026 TIME: 12:31:19 PM SYSTEM: CHRISTI_PSE_I-LARGE_PRINTER_CHRISTI_Plan.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTIS420 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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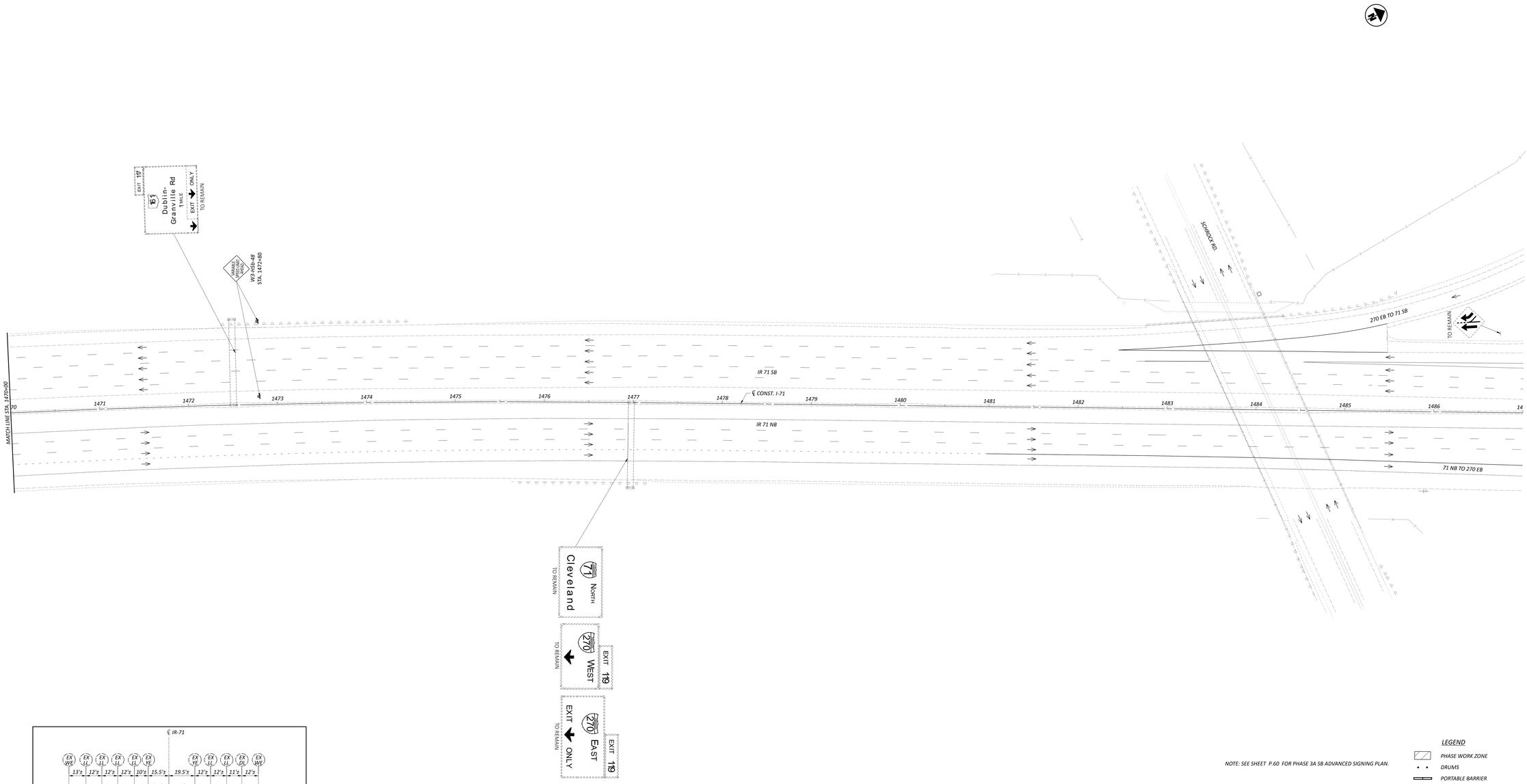
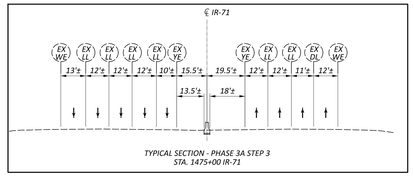
DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.108
TOTAL 618

FRA-71-19.10

MODEL: Phase 3A - Plan 16 MARKERS: 66x34.8in | DATE: 3/31/2026 TIME: 12:31:14 PM SYSTEM: CHRISTI_PSR_E-LARGE_PRINTER, CHRISTI_Plan Set USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTIS420 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 3A STEP 3
STA. 1475+00 IR-71

NOTE: SEE SHEET P.60 FOR PHASE 3A SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A STEP 3
STA. 1470+00.00 TO STA. 1487+00.00

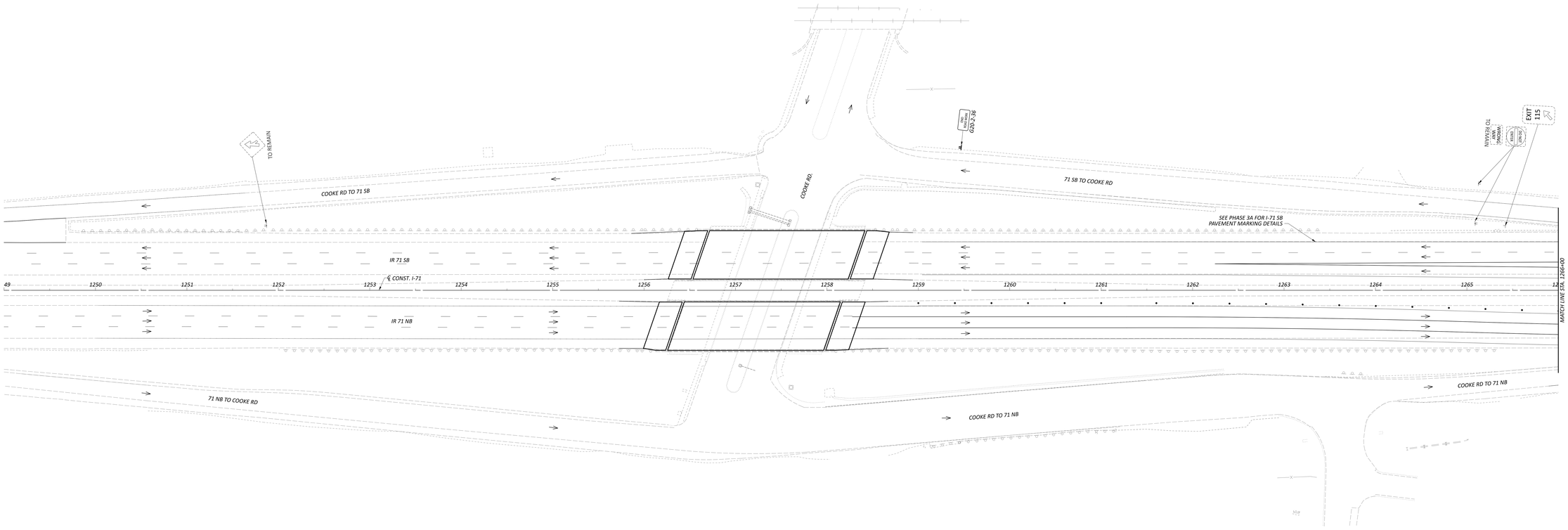
DESIGN AGENCY
Jacobs

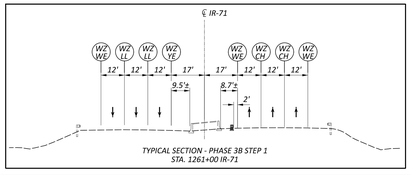
DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.109 TOTAL 618





TYPICAL SECTION - PHASE 3B STEP 1
STA. 1261+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE SHEET P.51 FOR PHASE 3B ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1249+00.00 TO STA. 1266+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.110 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan 3 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:08:45 AM PITDW: CHDOT_PDF_V-Letter.tbl PENTBL: CHDOT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10
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DGN: C:\Projects\CHDOT\109164\Civil\Roadway\Plans\FRA-71-19.10_MOT_Phase 3B - Plan 4.dgn

W1-H16-36
STA. 1282+00
STA. 1283+00
A

EXIT 116
Cooke Rd
TO REMAIN

EXIT 114
E North St
Broadway
TO REMAIN

SEE PHASE 3A FOR I-71 SB PAVEMENT MARKING DETAILS

EXIT 113
GRAY HORSE BURIAL GROUNDS
TO REMAIN

SOUTH
71
TO REMAIN

1463' SHIFT TAPER

18:1 PCB TAPER

MATCH EXISTING PAVEMENT MARKINGS FROM PHASE 3A AT STA. 1278+00

WORK ZONE EDGE LINE

WORK ZONE CHANNELIZING LINE

71 SB TO COOKE RD

IR 71 SB

℄ CONST. I-71

IR 71 NB

COOKE RD TO 71 NB

SEE PHASE 3A STEP 3 FOR CROSSOVER DETAILS

MATCH LINE STA. 1266+00

MATCH LINE STA. 1283+00

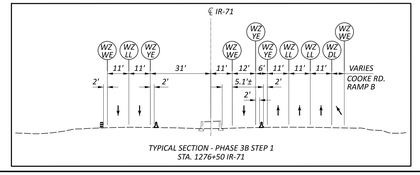
1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283

+50 +70 +37 +41

11' 11' 5'1' 2'

NOS R11-2-48

CURVE DATA - 1
Δ = 04°26'48" LT
Dc = 01°00'00"
R = 5,729.58'
T = 222.44'
L = 444.66'
E = 4.32'



TYPICAL SECTION - PHASE 3B STEP 1
STA. 1276+50 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.111 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan 1 PAPERSIZE: 864.00 x 1 DATE: 3/31/2026 TIME: 11:08:3 AM PSTDRV: CHDOT_PDF_V-1.ctb PSTBL: CHDOT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

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W1-H16-36

STA. 1284+00
STA. 1285+00
STA. 1286+00
STA. 1287+00
STA. 1288+00
STA. 1289+00
STA. 1290+00
STA. 1291+00
STA. 1292+00
STA. 1293+00
STA. 1294+00
STA. 1295+00
STA. 1296+00

Ⓐ

1463' SHIFT TAPER

Cooke Rd
No Exit Roadway
Weber Rd
TO REMAIN

WORK ZONE EDGE LINE

SPEED LIMIT 55

PCMS

Distance Speed Limit (DSL) Sign Assembly
STA. 1288+50

+73
56.2' LT.

+50

+00
38.2' LT.

WORK ZONE CHANNELIZING LINE

IR 71 SB

MATCH LINE STA. 1283+00

MATCH LINE STA. 1300+00

1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299

11' 11' 2.5' 8.5' 3'

℄ CONST. I-71

IR 71 NB

4298 4299 71 NB TO MORSE RD

℄ CONST.
MORSE RD RAMP C

℄ IR-71

WZ YE WZ WE WZ CH WZ YE WZ WE WZ YE WZ LL WZ LL WZ OL WZ WE

2.5' 11' 11' 8.5' 12.5' 11' 6' 11' 11' 11' 11'

6.7'± 2' 2' 3'

WORK ZONE
CONSTRUCTED IN PHASE 3A

TYPICAL SECTION - PHASE 3B STEP 1
STA. 1296+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

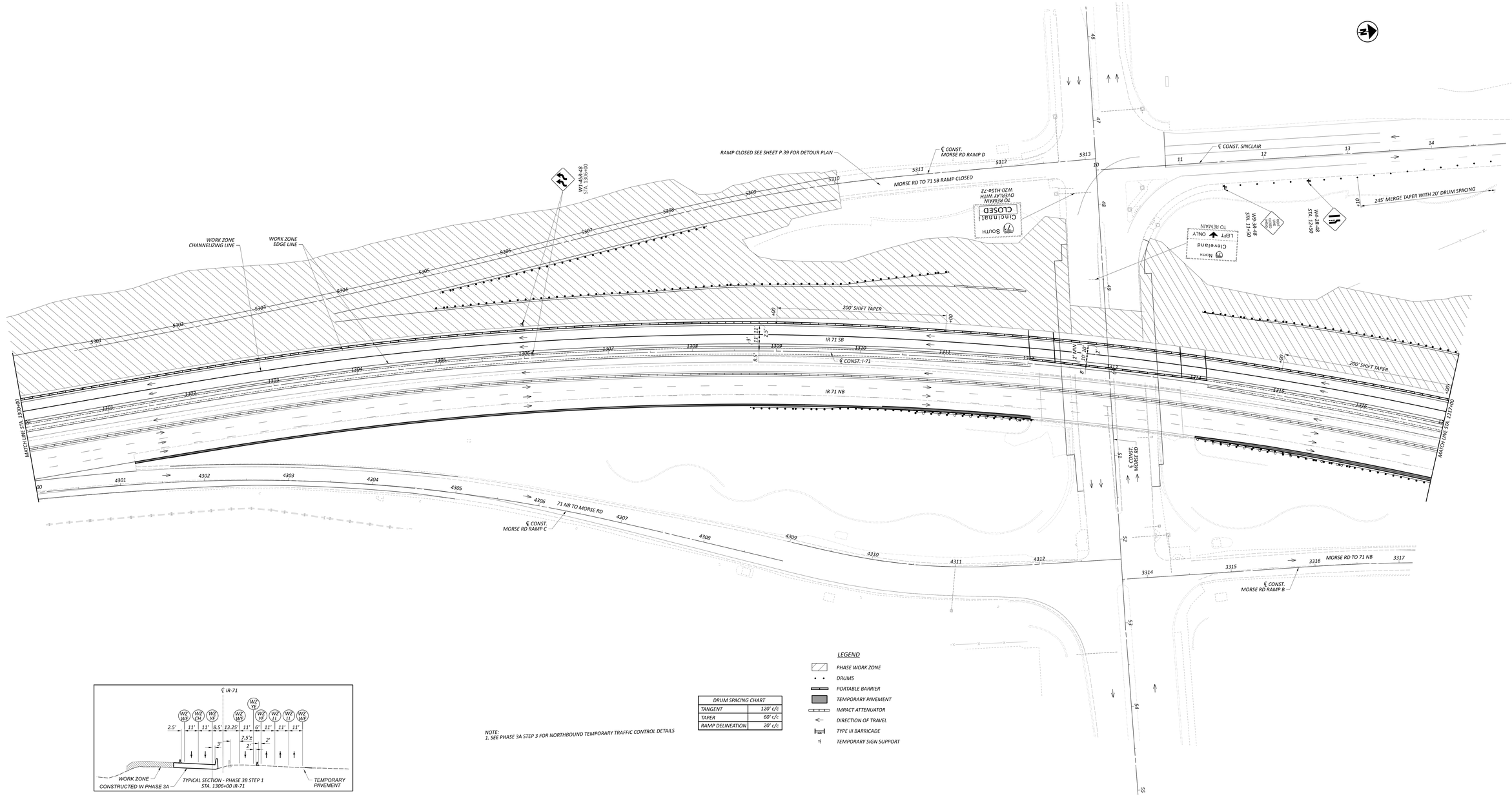
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1283+00.00 TO STA. 1300+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.112 TOTAL 618



DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1300+00.00 TO STA. 1317+00.00

DESIGN AGENCY
Jacobs

DESIGNED SRH
REVIEWED BAP 03/20/26
PROJECT ID 109164
SHEET P.113 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan PREFIXES: RM-FA-SU-I DATE: 3/31/2026 TIME: 1:05:58 PM USERNAME: CHRISTOPHER.PAT.LEWIS DESIGN_PREF_FILE: DESIGN_PrefLib.dgnlib PENTBL: DESIGN_PenTab USER: ChrisLewis4321@gmail.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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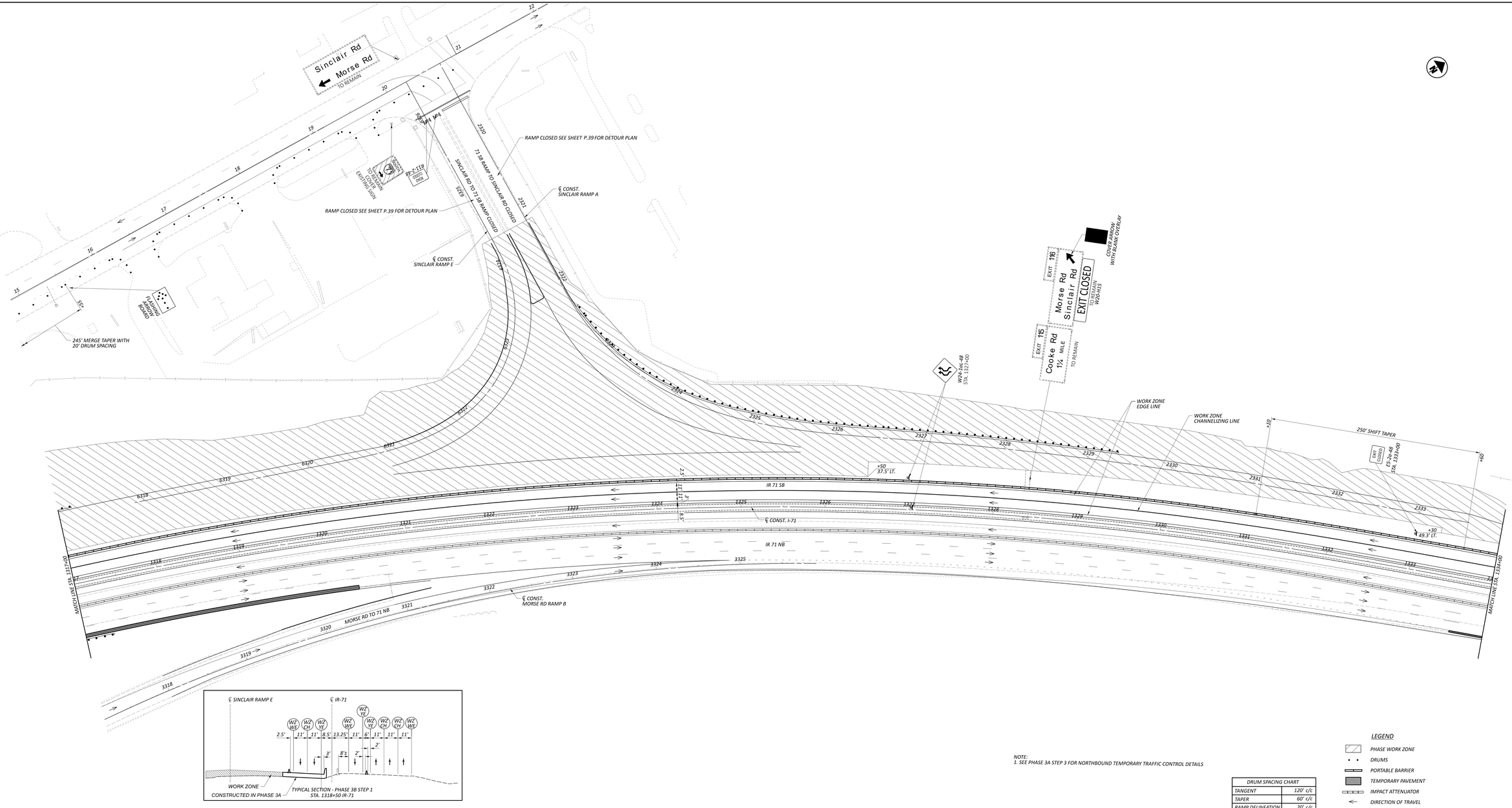


NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

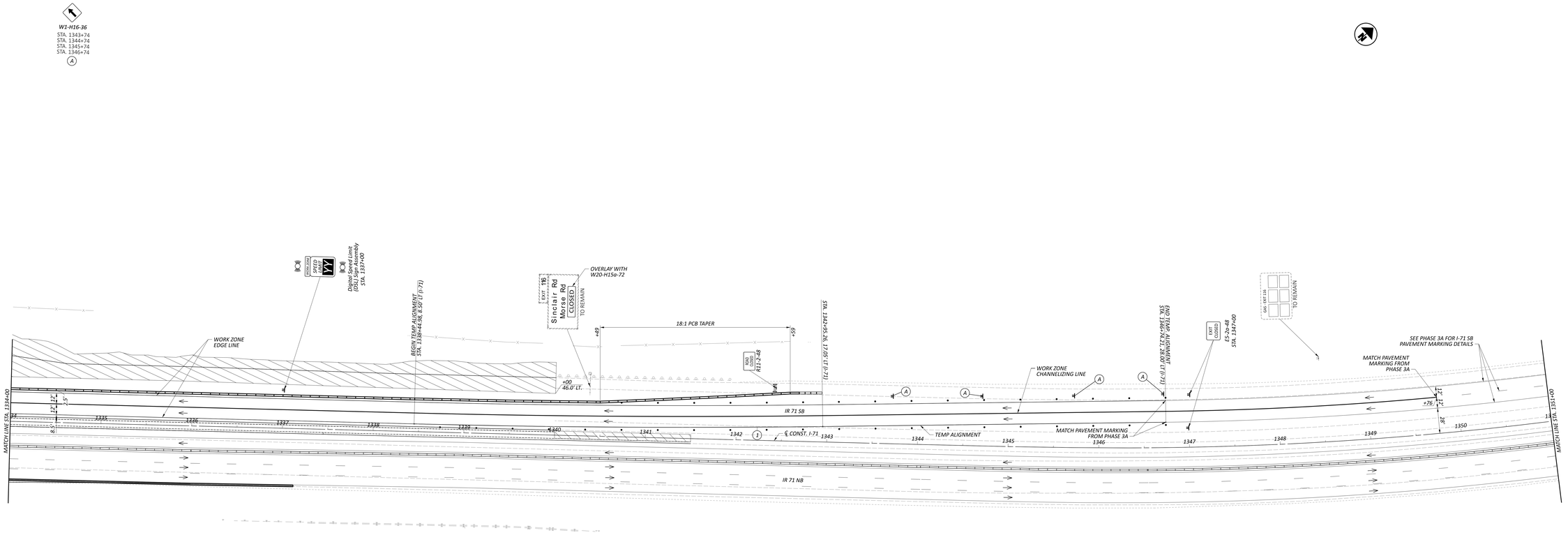
MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1317+00.00 TO STA. 1334+00.00

DESIGN AGENCY: Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.114
TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan 7 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 1:08:03 PM USERNAME: CHRISTOPHER.PAPE_FHWA@DOT.GOV DGN: Z:\Projects\FRA-71-19.10\Design\Roadway\Maintenance of Traffic\Phase 3B\Step 1\FRA-71-19.10_MOT_Phase3B_Step1.dgn



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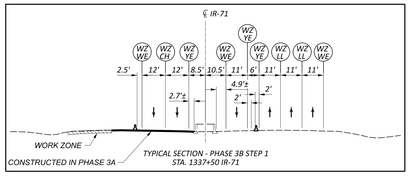
L = 450.40'
E = 2.14'



DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1334+00.00 TO STA. 1351+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.115 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Phase 3B PAVEMENT MARKING.dgn | DATE: 3/31/2026 TIME: 11:08:55 AM | PLTDRV: CHDOT_PDF_V1.pltdrv PLTBTBL: CHDOT_Plot.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCE02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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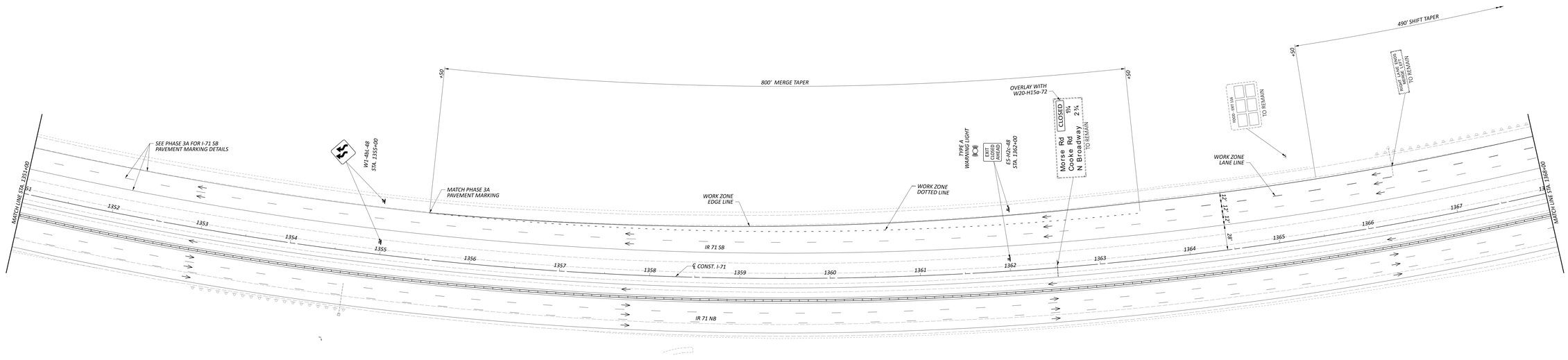
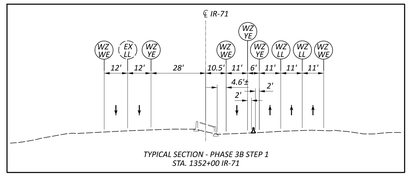




TYPICAL SECTION - PHASE 3B STEP 1
STA. 1352+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

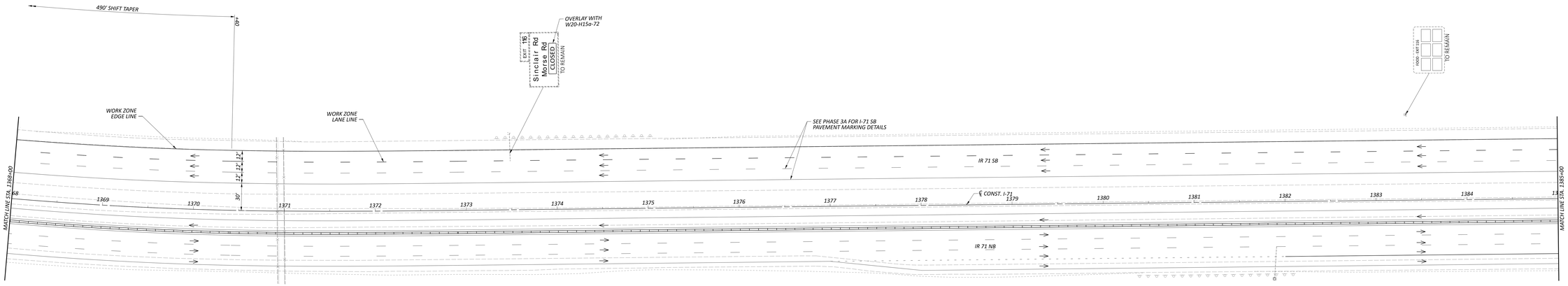
MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1351+00.00 TO STA. 1368+00.00

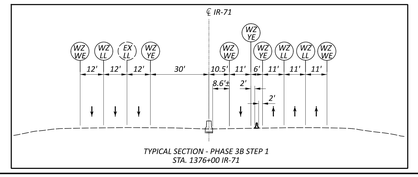
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.116 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan PREPARED: 06x24.0 x 1 DATE: 3/31/2026 TIME: 11:08:56 AM FILENAME: P:\109164\Design\Roadway\Plans\Maintenance of Traffic\Phase 3B\109164_MOT_Phase3B_Step1.dgn USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOT2020 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 3B STEP 1
STA. 1376+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1368+00.00 TO STA. 1385+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.117 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan 10 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:08:57 AM USER: CHRIST, PSP, E-mail: PENTEL CHRIST, Pen tool: USER, Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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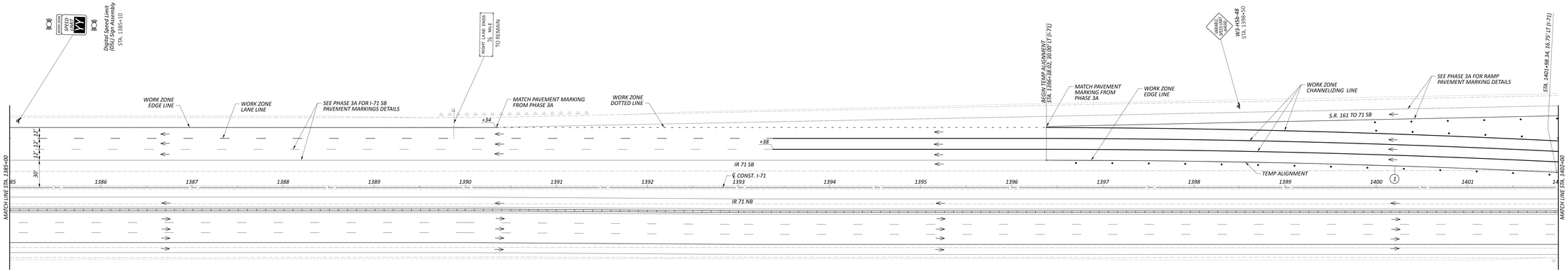

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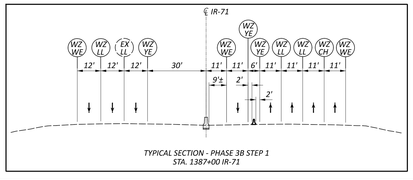
L = 560.53'
E = 3.31'



TYPICAL SECTION - PHASE 3B STEP 1
STA. 1387+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1385+00.00 TO STA. 1402+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.118 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan 11 REFRESH: 04/24/26 DATE: 3/31/2026 TIME: 11:08:54 AM USER: CHROY, PDF: C:\JHSB_PENTEL CHROY_Plan.ctb USER: Chris.Lawrence1@jacobs.com WORKPACK: CHROY0426 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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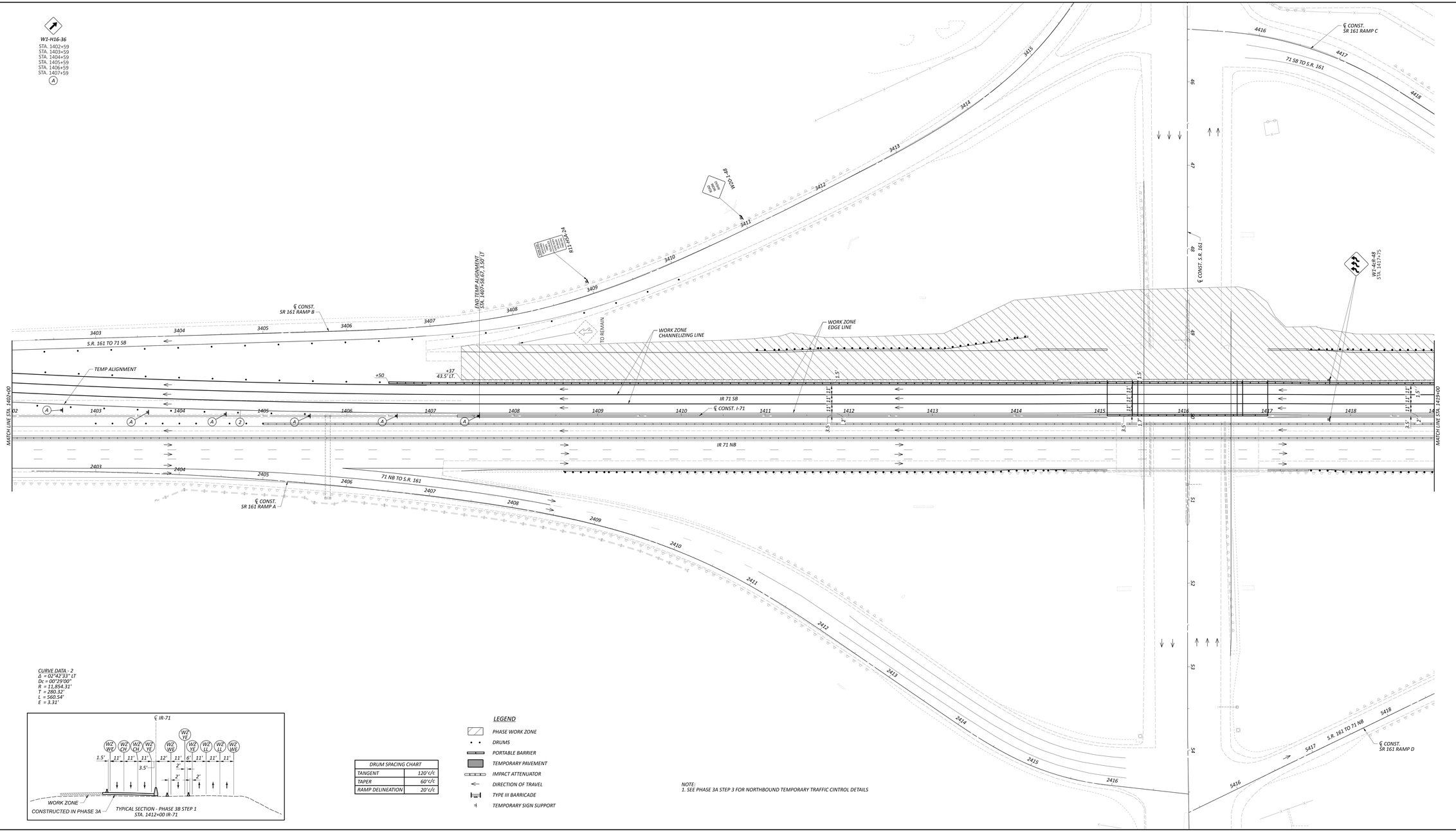

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L = 560.54'
E = 3.31'

TYPICAL SECTION - PHASE 3B STEP 1
STA. 1412+00 IR-71

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60'c/c
RAMP DELINEATION	20'c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CINTROL DETAILS

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1402+00.00 TO STA. 1419+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.119 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan 12 REFRESH: 03/19/2026 DATE: 3/31/2026 TIME: 11:08:59 AM USER: CHRIST, JOE_C PENTEL: CHRIST_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKPACK: CHRISTOJ02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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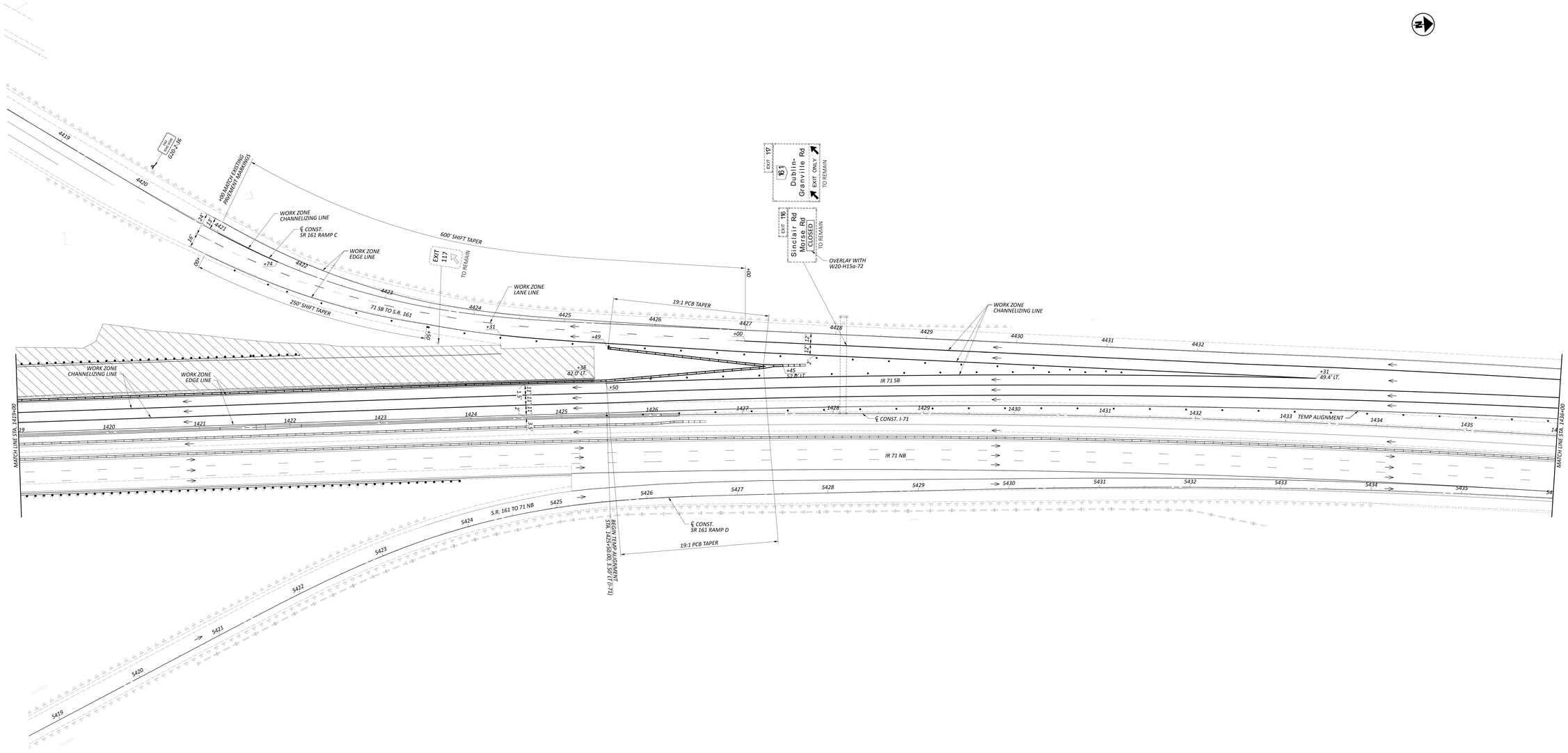

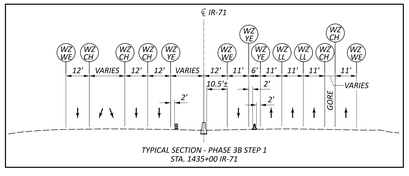

TYPICAL SECTION - PHASE 3B STEP 1
STA. 1435+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1419+00.00 TO STA. 1436+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.120 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan 13 REFRESHED: 04/24/26 DATE: 3/31/2026 TIME: 11:09:55 AM SYCOM1 CHRDT_PDF_C-24SQL PENTBL CHRDT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRDTDS4D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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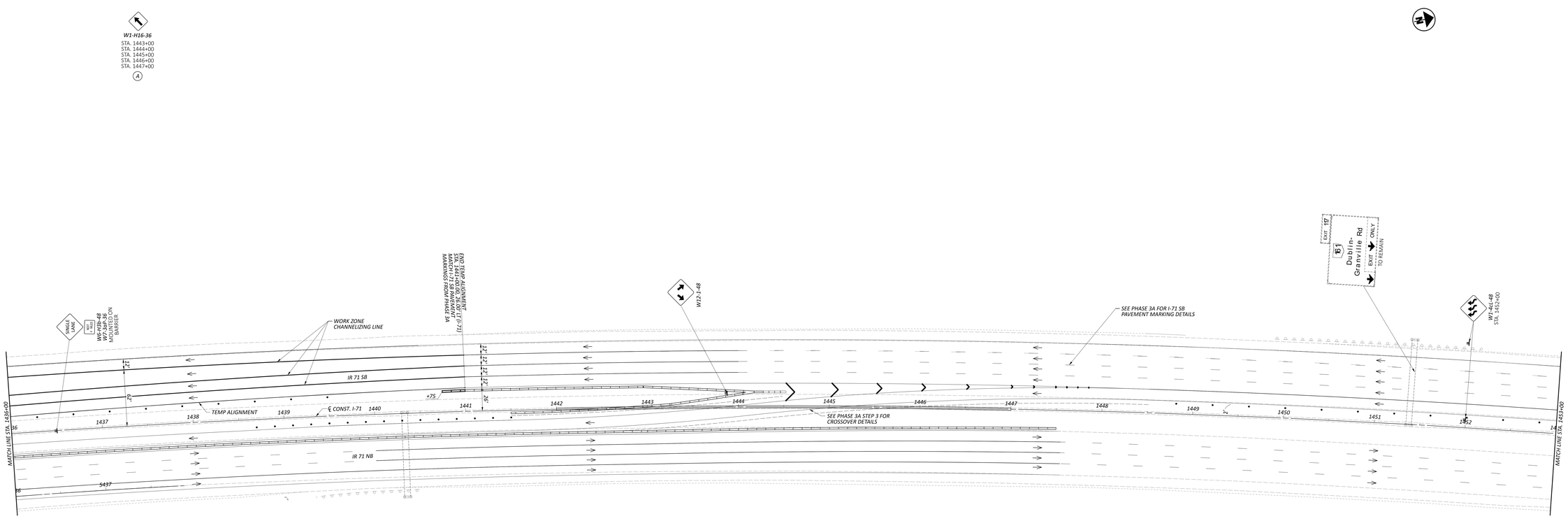

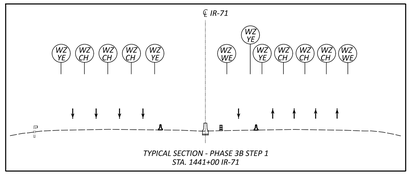

NOTE:
1. SEE PHASE 3A STEP FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1436+00.00 TO STA. 1453+00.00

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.121 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan 14 MAPSHEET: 66x34 (in.) DATE: 3/31/2026 TIME: 11:09:04 AM USER: DWDT_PW_E-J-HALB_PENTEL DWDT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: DWDOTSHEET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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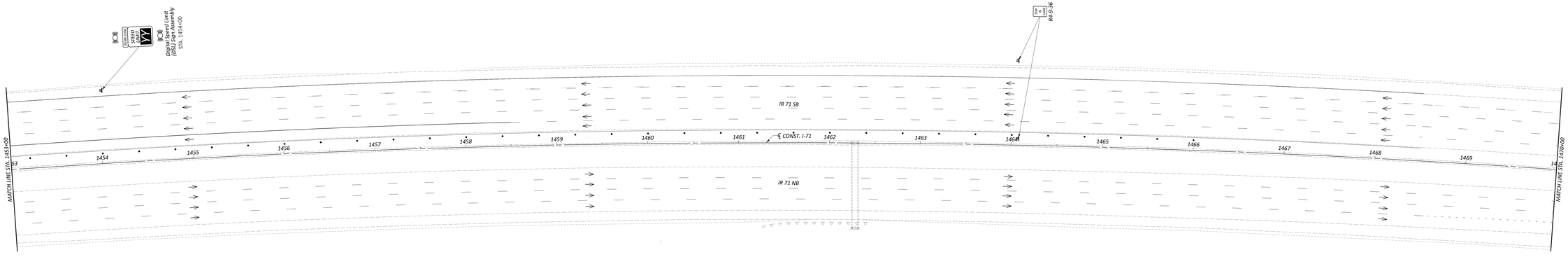

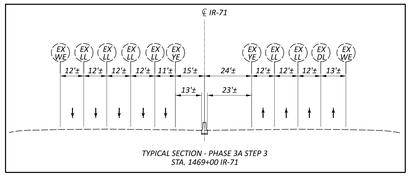

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1469+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1453+00.00 TO STA. 1470+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.122 TOTAL: 618

FRA-71-19.10

MODEL: Phase 3B - Plan 15 MAPFOLDER: E:\e3d\Jobs\ SAVED: 3/31/2026 7:56:11 AM BY:CHRIS.CHRIST_PW: U:\e3d\$_PENTEL.CHRIST_PW.txt USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOUD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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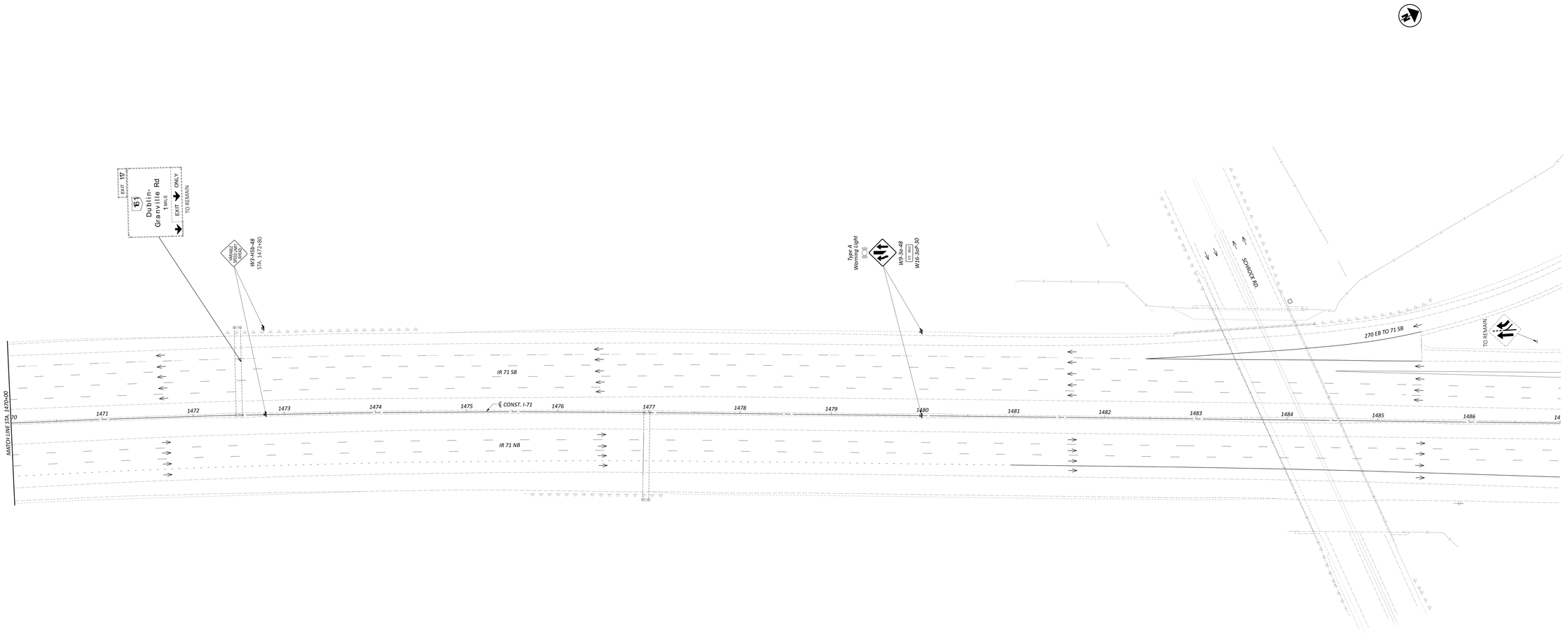

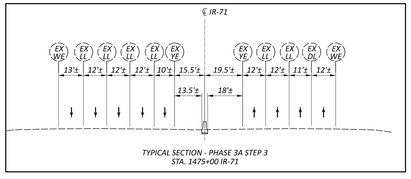

TYPICAL SECTION - PHASE 3A STEP 3
STA. 1475+00 IR-71

NOTE:
1. SEE PHASE 3A STEP 3 FOR NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE SHEET P.60 FOR PHASE 3B ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 1
STA. 1470+00.00 TO STA. 1487+00.00

FRA-71-19.10

MODEL: Phase 3B - Plan 1b PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 11:09:04 AM SYCOM1 CMSDT_PW_E-J-HSR_PENTBL: CMSDT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CMSDTSUS2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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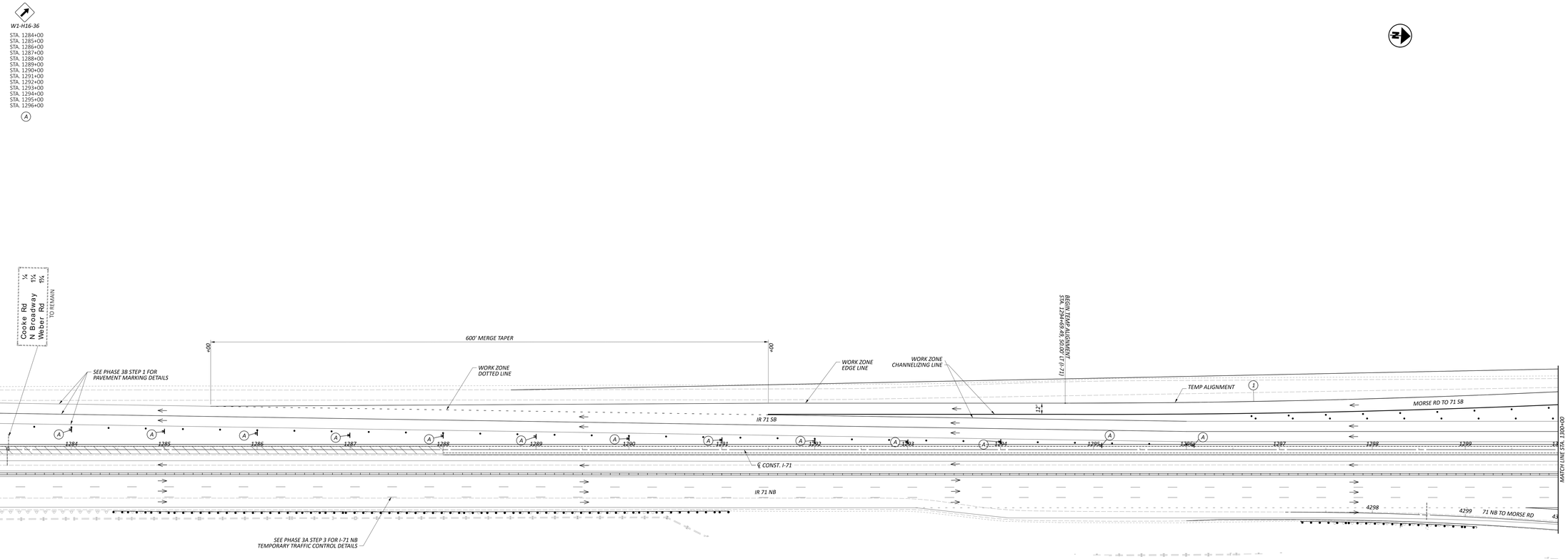
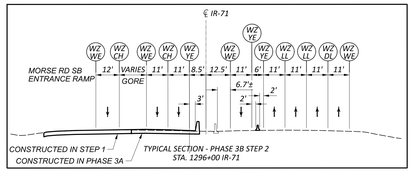
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.123 TOTAL 618





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T = 411.70'
L = 823.04'
E = 7.39'

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 2
STA. 1283+00.00 TO STA. 1300+00.00

FRA-71-19.10

MODEL: Phase 3B - Plan 5 PAPERSIZE: ISO A3 (ID:) DATE: 3/31/2026 TIME: 11:09:13 AM PSTDRV: CHDOT_PDF_V-Lam5g PSTBL: CHDOT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTC02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE FILE: P:\Projects\FRA\FRA-71-19.10\Design\Roadway\Plan Sheets\Phase 3B\FRA-71-19.10 Phase 3B Plan 5.dgn

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.124 TOTAL 618

FRA-71-19.10

MODEL: Phase 3B - Plan | PAPERSIZE: ANSI A4 (in) | DATE: 3/31/2026 TIME: 11:09:28 AM | FCDW: CHDOT_PDF_V-1.ctb | PSTBL: CHDOT_Print.ctb | USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
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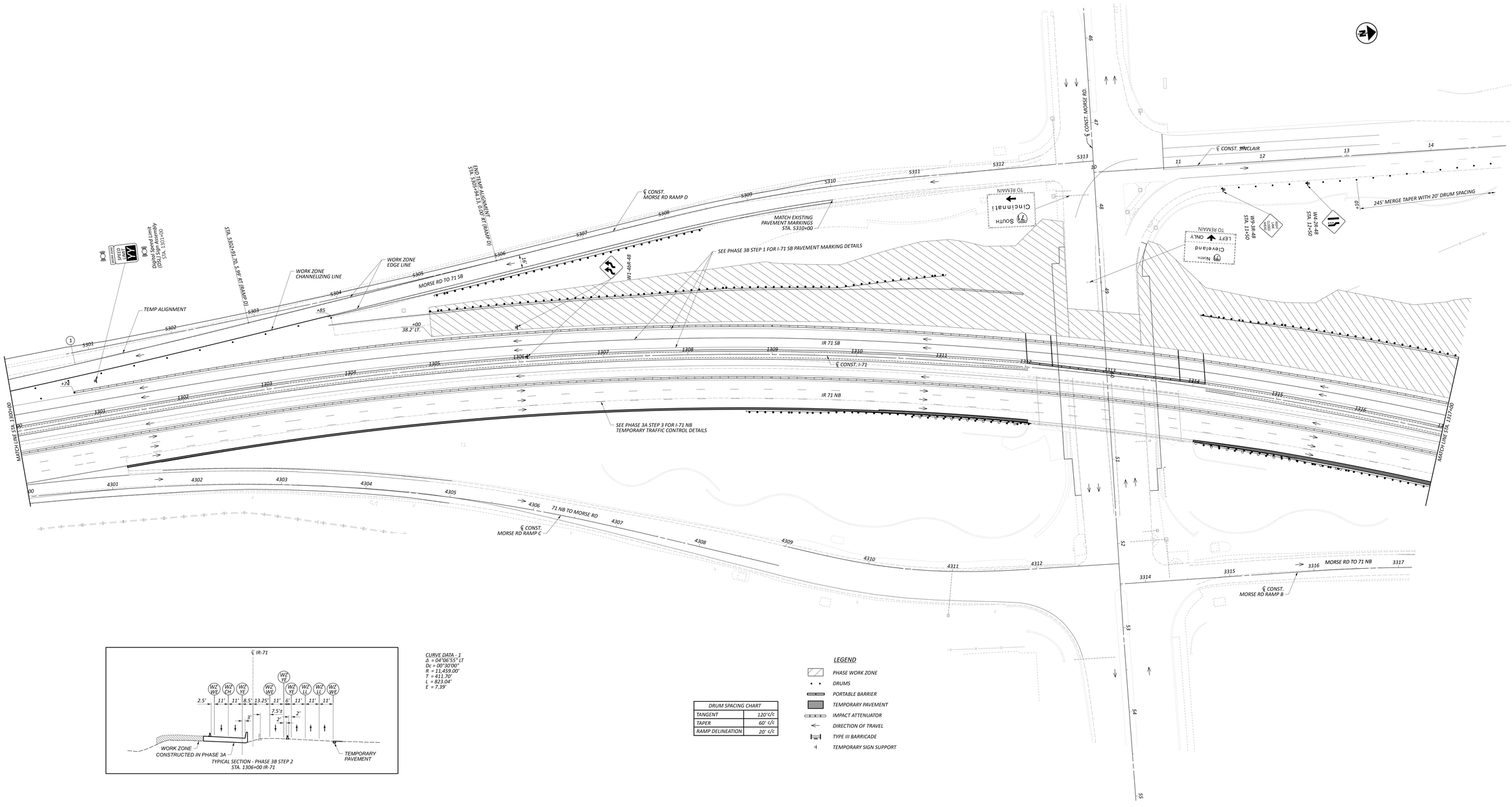


TYPICAL SECTION - PHASE 3B STEP 2
STA. 1306+00 IR-71

CURVE DATA - 1
Δ = 04°06'55" LT
Dc = 00°30'00"
R = 11,459.00'
T = 411.70'
L = 823.04'
E = 7.39'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

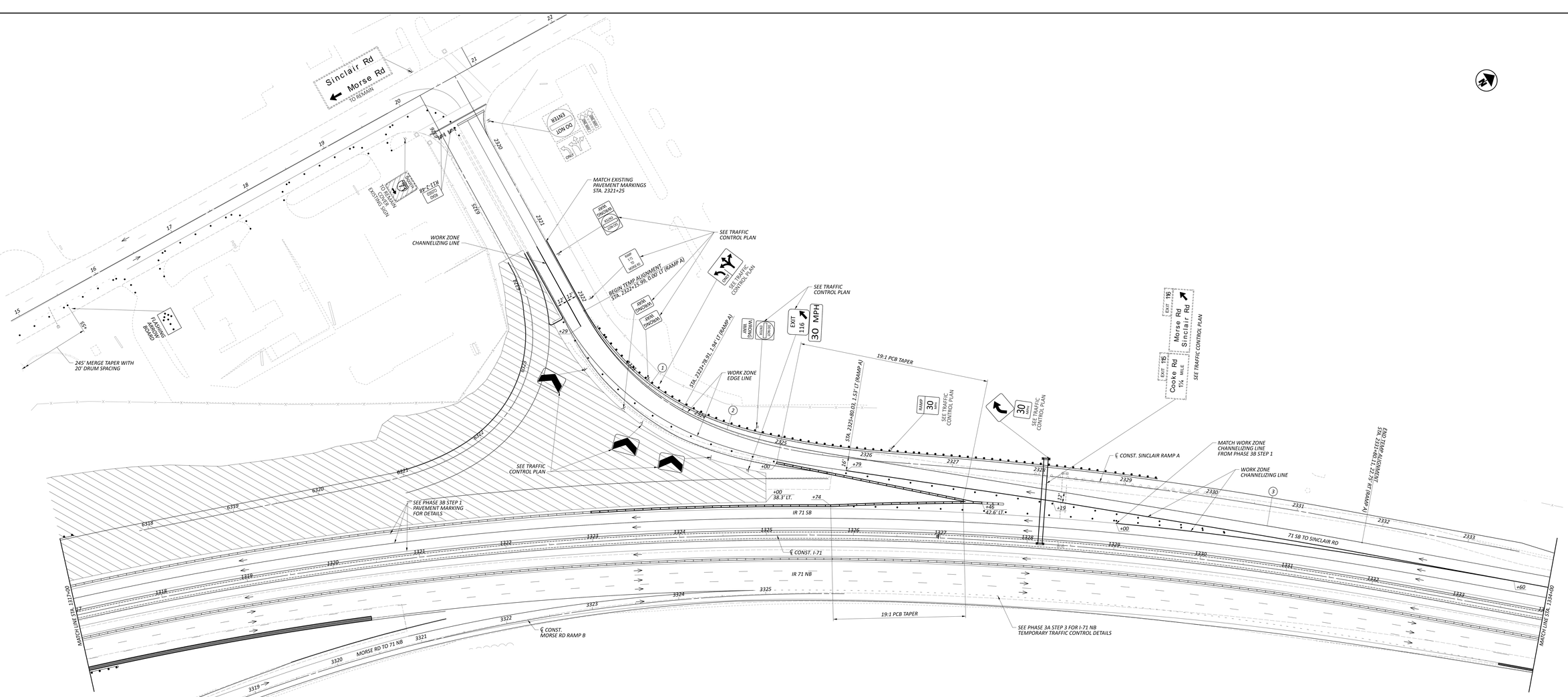
LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 2
STA. 1300+00.00 TO STA. 1317+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.125 TOTAL: 618



CURVE DATA - 1
Δ = 32°04'18" LT
Dc = 19°45'00"
R = 290.11'
T = 83.38'
L = 162.39'
E = 11.75'

SPIRAL DATA - 2
Ls = 200.00'
Θs = 19°45'00"
LT = 134.17'
ST = 67.43'
x = 193.71'
y = 45.34'
k = 99.61'
p = 5.72'
C = 198.95'
C.B. = N47°48'43"E

CURVE DATA - 3
Δ = 01°04'09" RT
Dc = 00°45'00"
R = 7,639.44'
T = 71.28'
L = 142.56'
E = .33'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

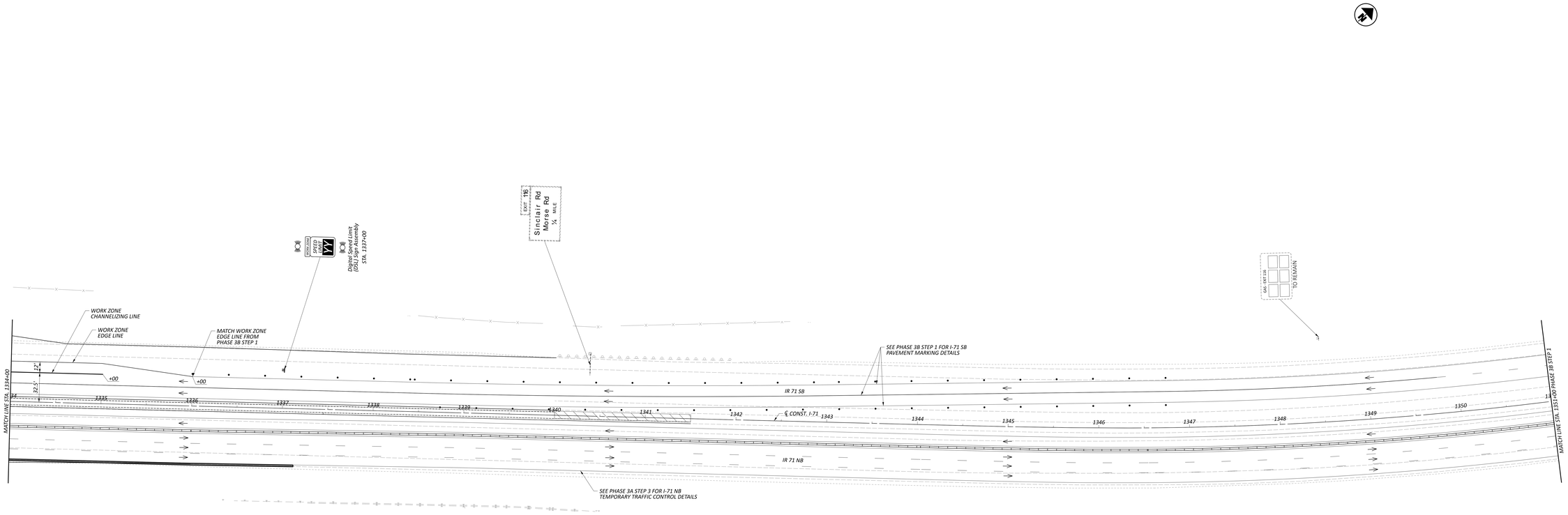
HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

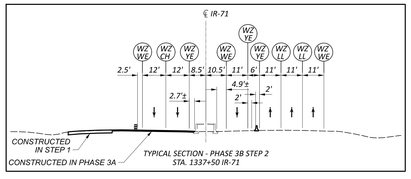
MAINTENANCE OF TRAFFIC - PHASE 3B STEP 2
STA. 1317+00.00 TO STA. 1334+00.00

FRA-71-19.10

MODEL: Phase 3B - Plan | PAPERSIZE: ANSI-D | DATE: 3/31/2026 7:56:41 AM | FITDWG: ORIENT_FOR_FITDWG_TRUE | FITDWG: ORIENT_FOR_FITDWG_FALSE | PENTBL: ORIENT_FOR_PLT.tbl | PENTBL: ORIENT_FOR_PLT.tbl | USER: Chris.Lawrence1@jacobs.com | WORKSPACE: CHIDOT1202 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.126 TOTAL: 618





DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3B STEP 2
STA. 1334+00.00 TO STA. 1351+00.00

FRA-71-19.10

MODEL: Phase 3B - Plan B PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:09:39 AM PITDIR: C:\MDOT_CHDOT_PDF_Fix\MDOT_CHDOT_Plots\ SAVE: Chris.Lawrence1@jacobs.com WORKSPACE: C:\MDOT\CHDOT\02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE PROJECT: C:\MDOT\CHDOT\02 PROJECTS\109164 - FRA-71-19.10 PHASE 3B\109164 - Maintenance of Traffic - Phase 3B.dgnlib

DESIGN AGENCY: Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.127 TOTAL: 618

FRA-71-19.10
MODEL: Phase 3A - Plan 14 MARKERS: 66x34.0=1 DATE: 3/31/2026 TIME: 11:09:43 AM PLTDRV: DWG.PLT PLTPEN: DWG.PLT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOT15v02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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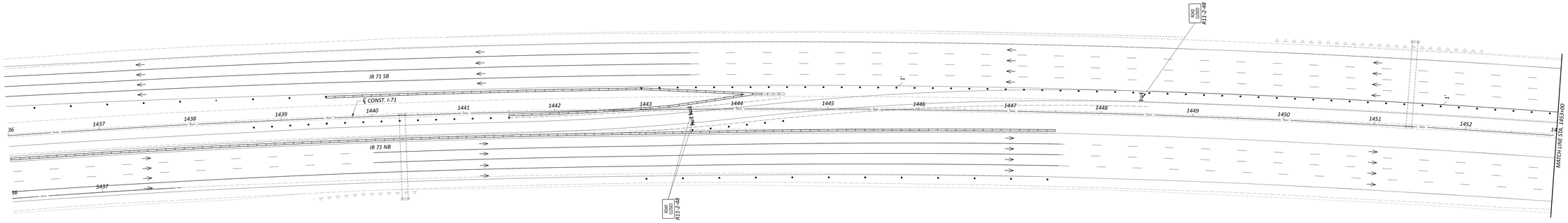


NOTES:
1. *AT THE DEPARTMENT'S DISCETION, THE CONTRAFLOW LANE MAY BE CLOSED FOR REASONS SUCH AS, BUT NOT LIMITED TO, AN EMERGENCY OR WEATHER EVENT. WHEN DIRECTED, CLOSE THE CONTRAFLOW LANE AS SHOWN.*
2. *INSTAL ADVANCE WARNING SIGNS FOR LANE CLOSURE PER SCD MT-95.30.*
3. *THE INTENT OF THIS DRAWING IS TO SHOW ONLY THOSE DEVICES NEEDED TO CLOSE THE CONTRAFLOW LANE. PHASE 3A/3B TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY.*

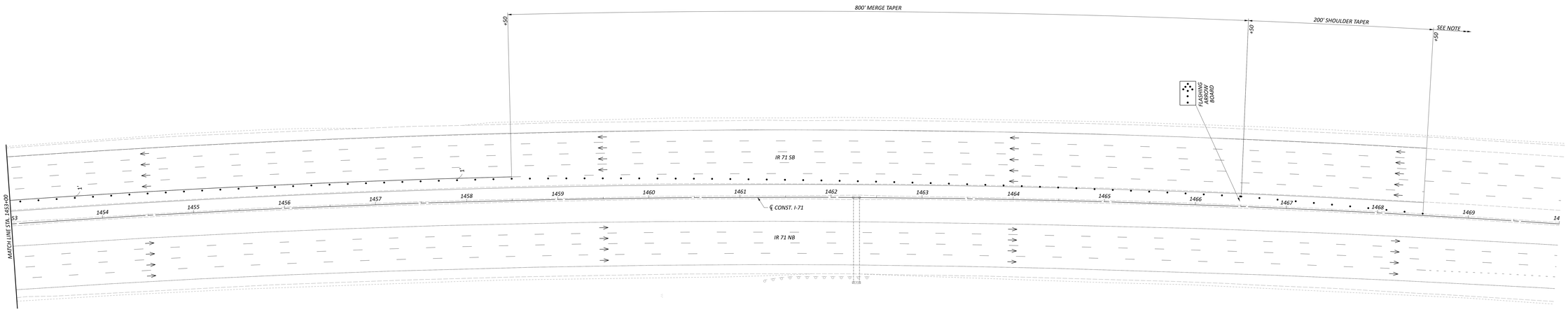
DRUM SPACING CHART	
TANGENT	*120' c/c*
TAPER	*60' c/c*
RAMP DELINEATION	*20' c/c*

LEGEND
- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A/3B CONTRAFLOW LANE CLOSURE STA. 1436+00.00 TO STA. 1453+00.00

DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.128 TOTAL 618



NOTES:
1. *AT THE DEPARTMENT'S DISCETION, THE CONTRAFLOW LANE MAY BE CLOSED FOR REASONS SUCH AS, BUT NOT LIMITED TO, AN EMERGENCY OR WEATHER EVENT. WHEN DIRECTED, CLOSE THE CONTRAFLOW LANE AS SHOWN.*
2. *INSTAL ADVANCE WARNING SIGNS FOR LANE CLOSURE PER SCD MT-95.30.*
3. *THE INTENT OF THIS DRAWING IS TO SHOW ONLY THOSE DEVICES NEEDED TO CLOSE THE CONTRAFLOW LANE. PHASE 3A/3B TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY.*

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 3A/3B CONTRAFLOW LANE CLOSURE
STA. 1453+00.00 TO STA. 1470+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.129 | TOTAL: 618

FRA-71-19.10

MODEL: Phase 3A - Plan 15 MARKED: 6x3.5 in | DATE: 3/31/2026 TIME: 11:09:44 AM BY/DBY: DHOFF, PM: JF-LHSB, PENTBL: DHOFF, Pen Set USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOT/OHD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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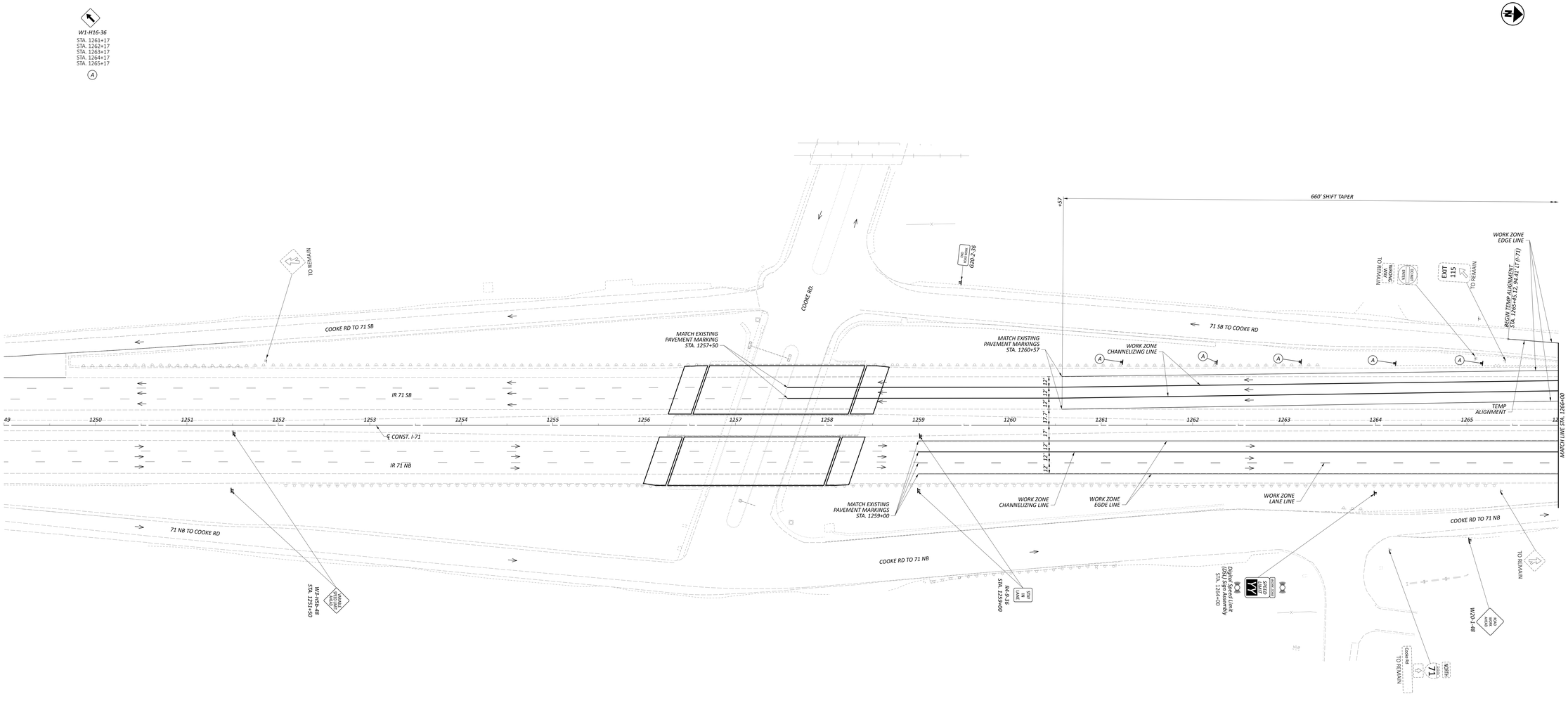

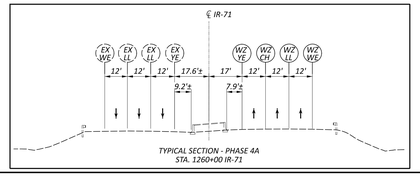

NOTE: SEE SHEET P.52 FOR PHASE 4A ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1249+00.00 TO STA. 1266+00.00

FRA-71-19.10

MODEL: Phase 1A - Plan 3 PAPERSIZE: ISO A3 (+) DATE: 3/31/2026 TIME: 11:10:03 AM FILTERS: CHKDT_PDF_V1.prtbl, FSTITEL: CHKDT_Pmt.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHKDTCL002 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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DESIGN AGENCY
Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.130
TOTAL	618

FRA-71-19.10

MODEL: Phase 1A - Plan # PAVEMENTS - RM-4A-0-1 DATE: 3/31/2026A TIME: 11:03:08 AM FSTORY: CHRDT_PDF_U=1.pltSB_FSHTEL: CHRDT_PHA.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRDTFL002 WORKSET: DEFAULT PRODUCT: OpenRoadsDesigner 24.00.02.25
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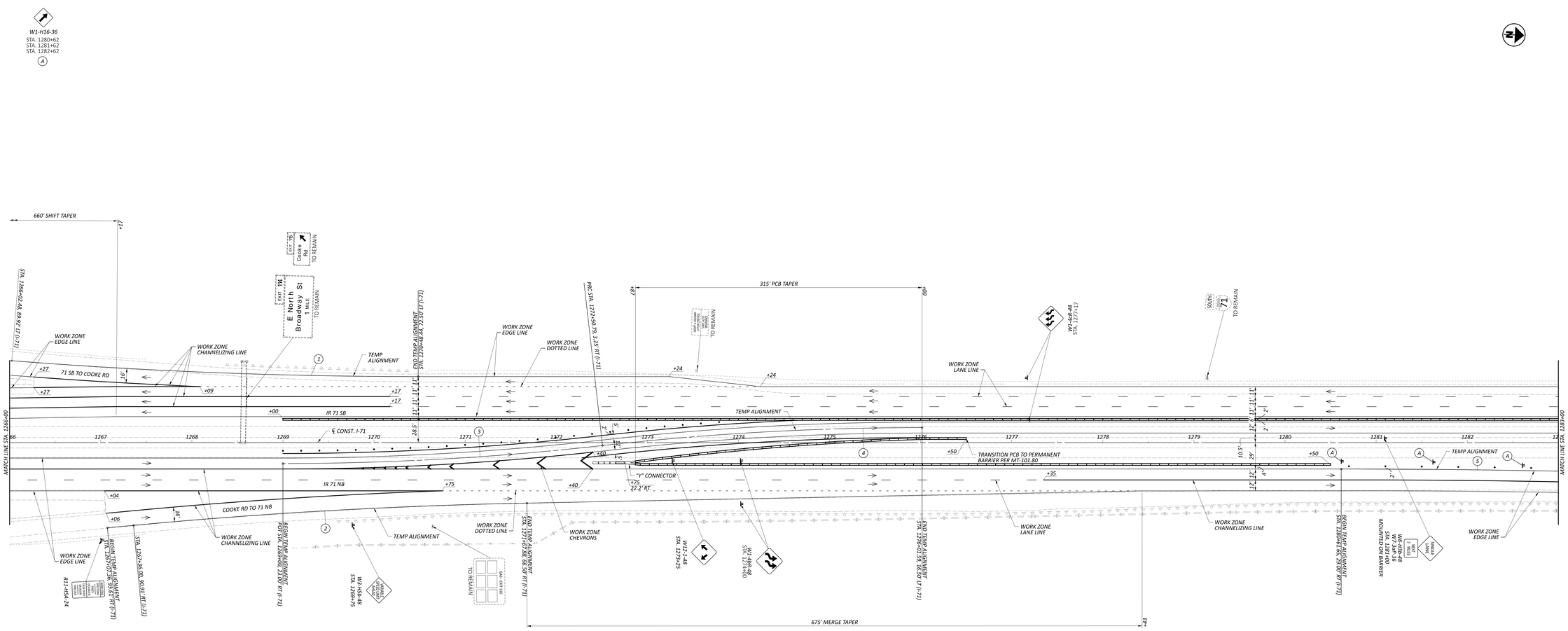
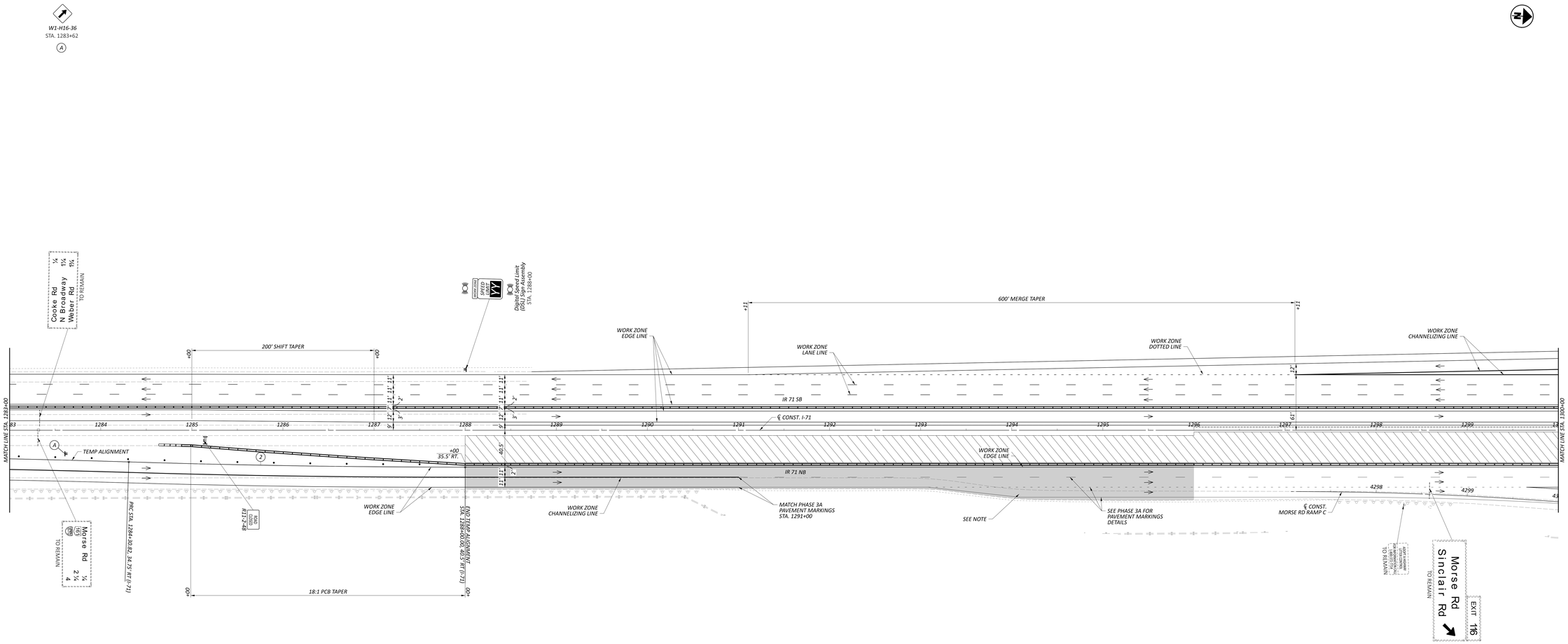


MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.131 TOTAL 618



NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 4A TO PHASE 4B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETAILS.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1283+00.00 TO STA. 1300+00.00

FRA-71-19.10

MODEL: Phase 3A - Plan | RWP/RDS: 06x14.0x1 | DATE: 3/31/2026 TIME: 11:03:09 AM FSTDIR: OHDOT_PDF_V1-pltSB_FSTBL.DWGT_Print.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCAD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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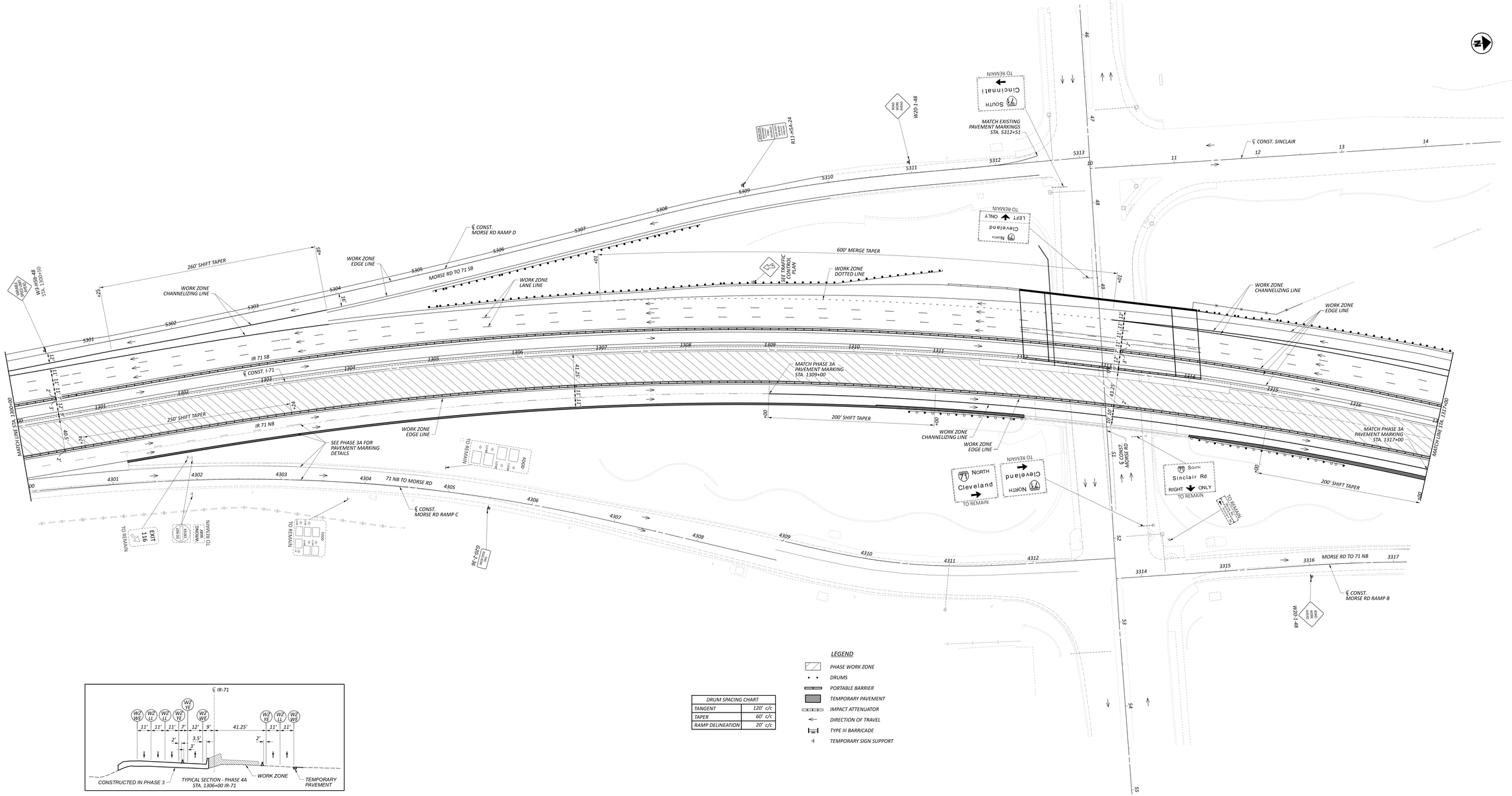
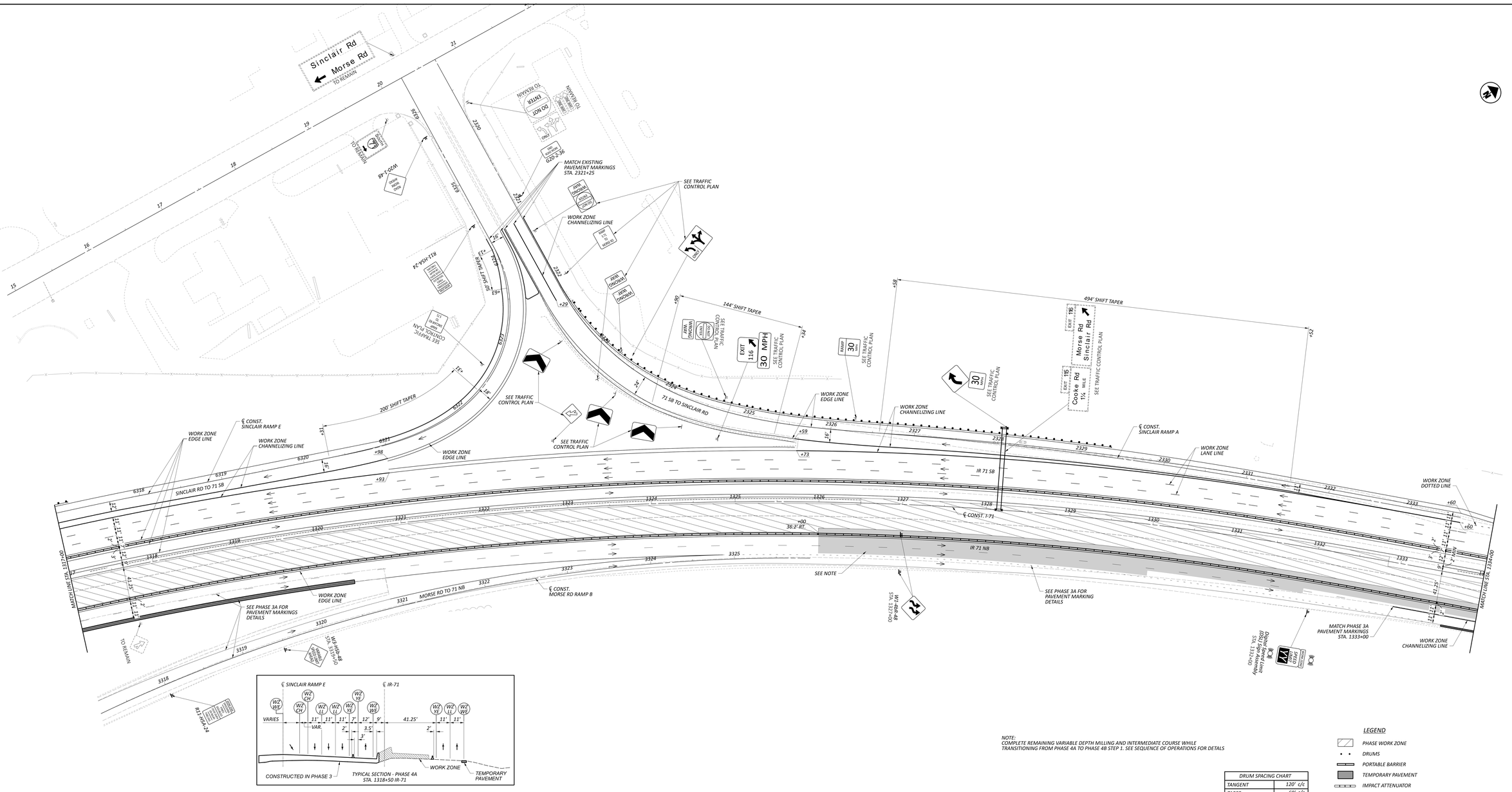
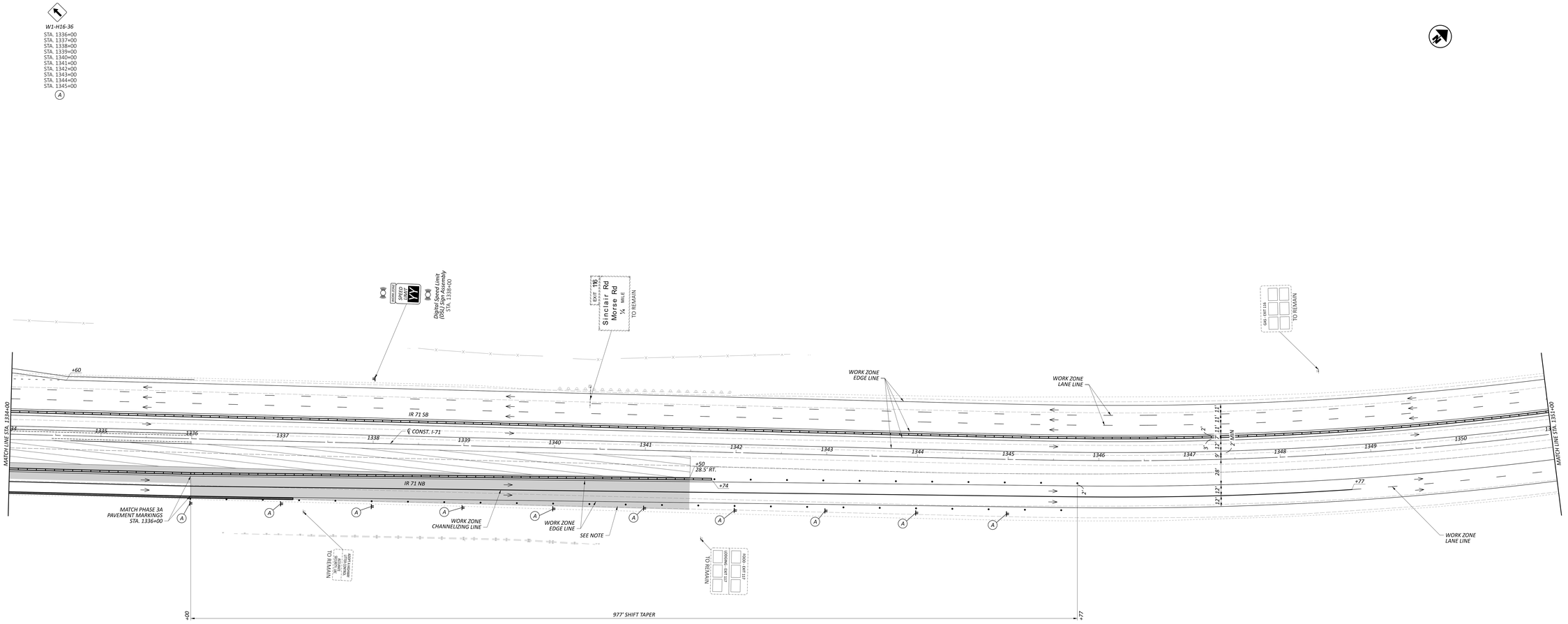
DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.132 | TOTAL: 618


MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1300+00.00 TO STA. 1317+00.00
HORIZONTAL SCALE IN FEET
0 15 30 60
MATCH LINE STA. 1300+00
MATCH LINE STA. 1317+00
260' SHIFT TAPER
250' SHIFT TAPER
200' SHIFT TAPER
600' MERGE TAPER
WORK ZONE CHANNELIZING LINE
WORK ZONE EDGE LINE
WORK ZONE LANE LINE
WORK ZONE DOTTED LINE
IR 71 SB
IR 71 NB
℄ CONST. I-71
MORSE RD TO 71 SB
71 NB TO MORSE RD
MORSE RD TO 71 NB
℄ CONST. MORSE RD RAMP D
℄ CONST. MORSE RD RAMP C
℄ CONST. MORSE RD RAMP B
℄ CONST. MORSE RD
℄ CONST. SINCLAIR
SEE TRAFFIC CONTROL PLAN
SEE PHASE 3A FOR PAVEMENT MARKING DETAILS
MATCH EXISTING PAVEMENT MARKINGS STA. 5312+51
MATCH PHASE 3A PAVEMENT MARKING STA. 1309+00
MATCH PHASE 3A PAVEMENT MARKING STA. 1317+00
TO REMAIN
TO BE REMOVED
W20.1-48
W3-4SH-48
W4-4SH-24
W4-4SH-48
41.25'
W20.1-48 SIDE WORK AHEAD
W20.1-48 ROAD WORK AHEAD
W3-4SH-48 ROAD WORK AHEAD
W4-4SH-24 LEFT LANE ENDS MERGE RIGHT
W4-4SH-48 LEFT LANE ENDS MERGE RIGHT
W3-4SH-48 ROAD WORK AHEAD
W20.1-48 SIDE WORK AHEAD
EXIT 116
WRONG WAY
DO NOT ENTER
SOUTH Cincinnati 71
NORTH Cleveland 71
LEFT ONLY
NORTH Cleveland 71
NORTH Cleveland 71
South Sinclair Rd
RIGHT ONLY
TO REMAIN
TO REMAIN
TO REMAIN


Sinclair Rd
Morse Rd
TO REMAIN
SEE TRAFFIC CONTROL PLAN
MATCH EXISTING PAVEMENT MARKINGS STA. 2321+25
WORK ZONE CHANNELIZING LINE
144' SHIFT TAPER
494' SHIFT TAPER
200' SHIFT TAPER
50' SHIFT TAPER
71 SB TO SINCLAIR RD
SINCLAIR RD TO 71 SB
MORSE RD TO 71 NB
WORK ZONE EDGE LINE
WORK ZONE CHANNELIZING LINE
WORK ZONE LANE LINE
WORK ZONE DOTTED LINE
℄ CONST. SINCLAIR RAMP E
℄ CONST. SINCLAIR RAMP A
℄ CONST. MORSE RD RAMP B
℄ CONST. I-71
IR 71 SB
IR 71 NB
MATCH LINE STA. 1317+00
MATCH LINE STA. 1334+00
SEE PHASE 3A FOR PAVEMENT MARKINGS DETAILS
SEE NOTE
MATCH PHASE 3A PAVEMENT MARKINGS STA. 1333+00
EXIT 116 30 MPH
RAMP 30 MPH
EXIT 116 Morse Rd Sinclair Rd
EXIT 115 Cooke Rd 1¼ MILE
W3-3R30-48 STA. 1315+50
W20.1-48
R11-H5A-24
R11-H5A-24
W20.1-48
W3-3R30-48 STA. 1315+50
TO REMAIN
DO NOT ENTER
ONE WAY
NON-DIVERGING CRASH CUSHION
W2-2-36
W2-2-36
W2-2-36



NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 4A TO PHASE 4B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETALS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

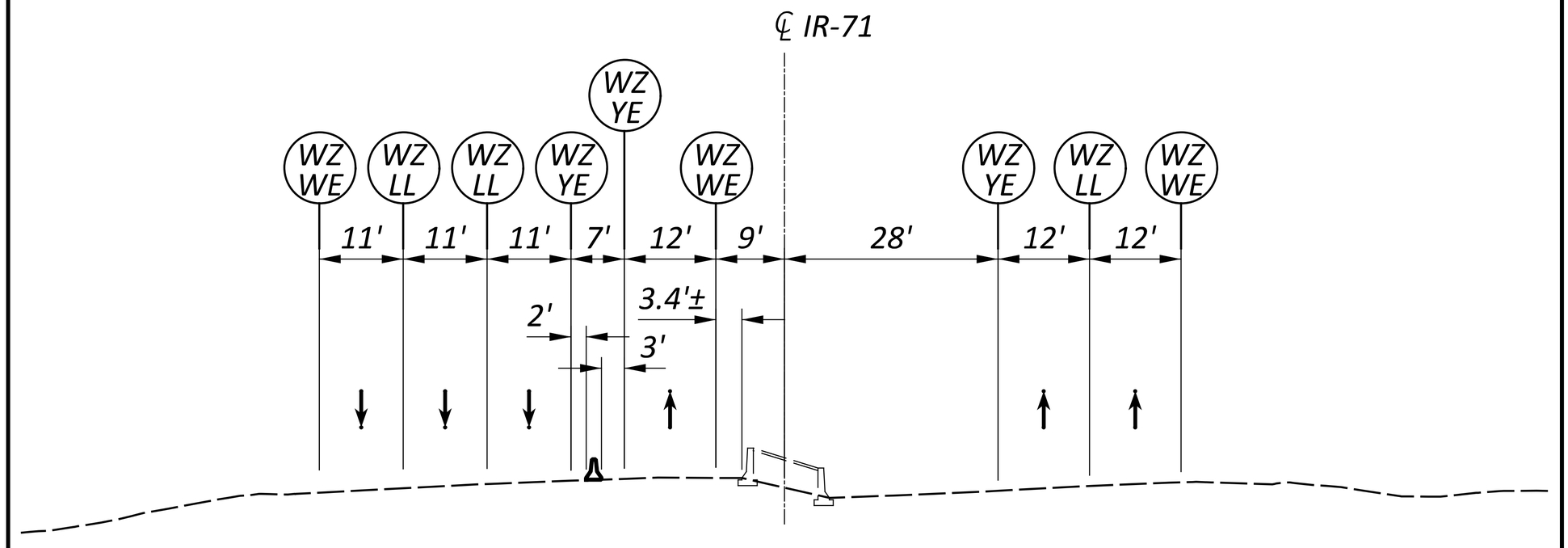
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1334+00.00 TO STA. 1351+00.00

FRA-71-19.10

MODEL: Phase 3A - Phase 4A PROPOSED - 60x144 in | DATE: 3/31/2026 7:56:1 11:03:13 AM | FOTOM: CHDOT_ITP_V1.pmtg | PSMTEL: CHDOT_PM.tbl | USER: Chris.Lawrence1@jacobs.com | WORKSPACE: CHDOTCIVIL02 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE: C:\Users\chris.lawrence1\Jacobs\Documents - FRA-071-19.10 Phase 4A Traffic Control Plans\Working\Phase 4A\FRA-071-19.10 Phase 4A MOT.dgn

DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.135 TOTAL: 618



TYPICAL SECTION - PHASE 4A
STA. 1352+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1351+00.00 TO STA. 1368+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.136 TOTAL 618

FRA-71-19.10

MODEL: Phase 1A - Plan 9 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:10:14 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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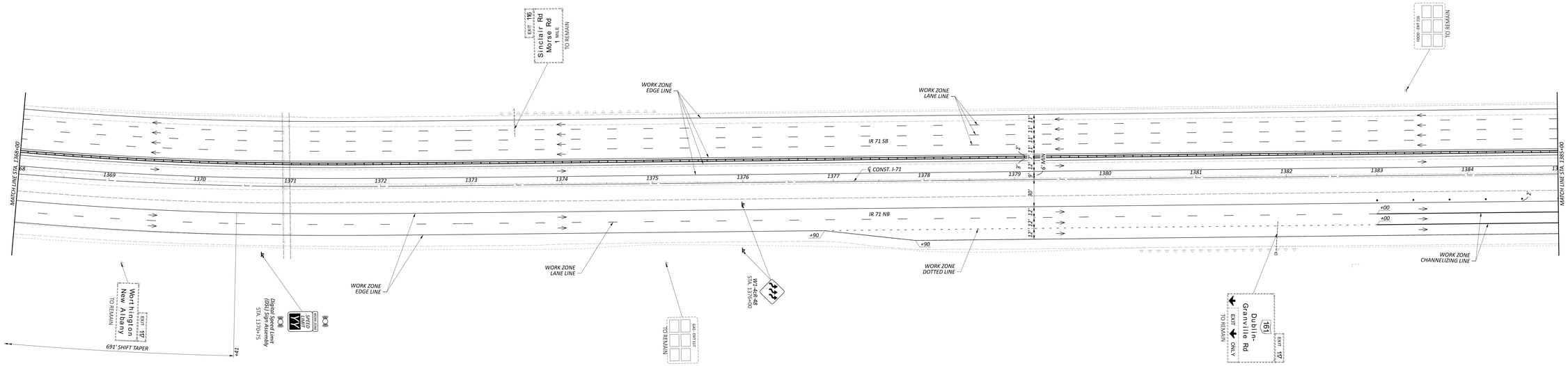

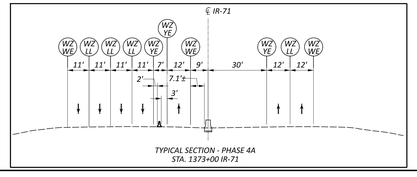

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1368+00.00 TO STA. 1385+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.137 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan 10 MARKINGS: 66x34.0in | DATE: 3/31/2026 TIME: 11:10:15 AM BY/DBY: DHOFF, PM: JF-JHM, PENTRL: DHOFF, Plot Set: USER: Chris.Lawrence@jacobs.com WORKPACE: DHOFF0145 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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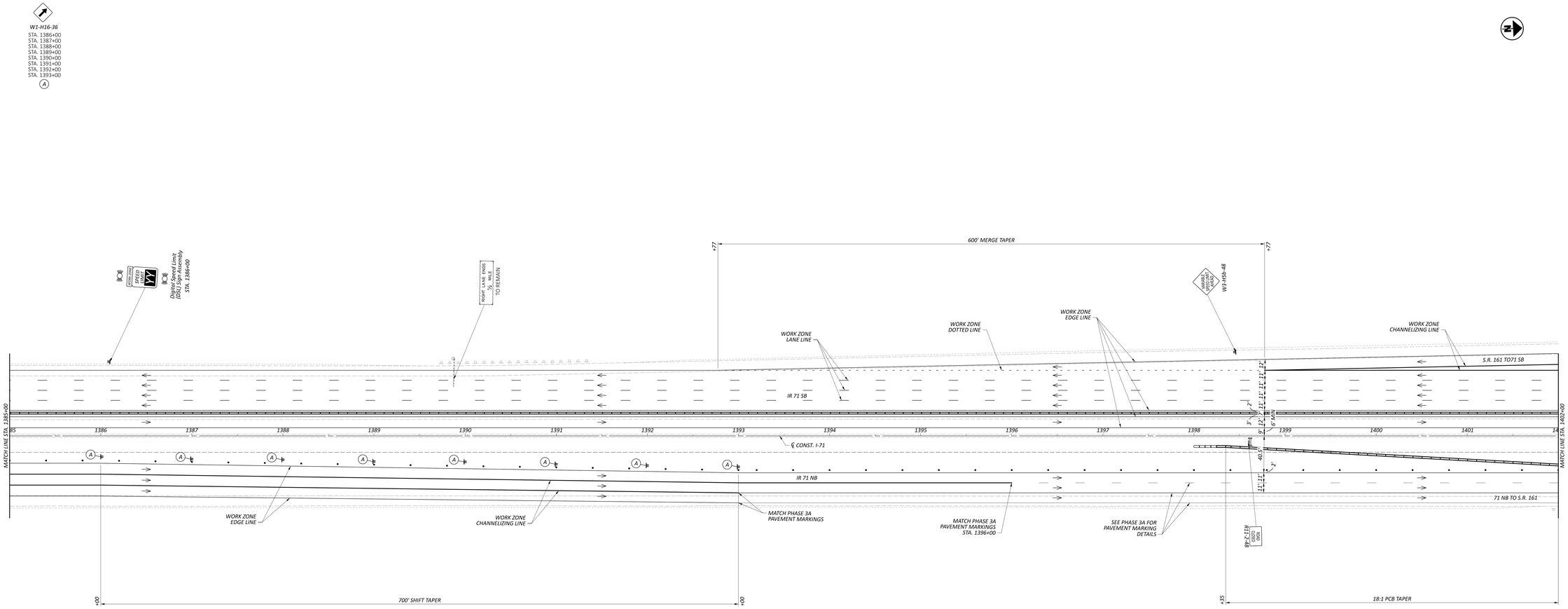

FRA-71-19.10

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1385+00.00 TO STA. 1402+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.138 TOTAL 618

MODEL: Phase 3A - Plan 11 MARKINGS: 66x34 (H=) DATE: 3/31/2026 TIME: 11:10:14 AM BY/DRY: DHOFF, PSF, D-J-HSB, PENTEL DHOFF, Pen Set USER: Chris.Lawrence@jacobs.com WORKSPACE: DHOFFD4D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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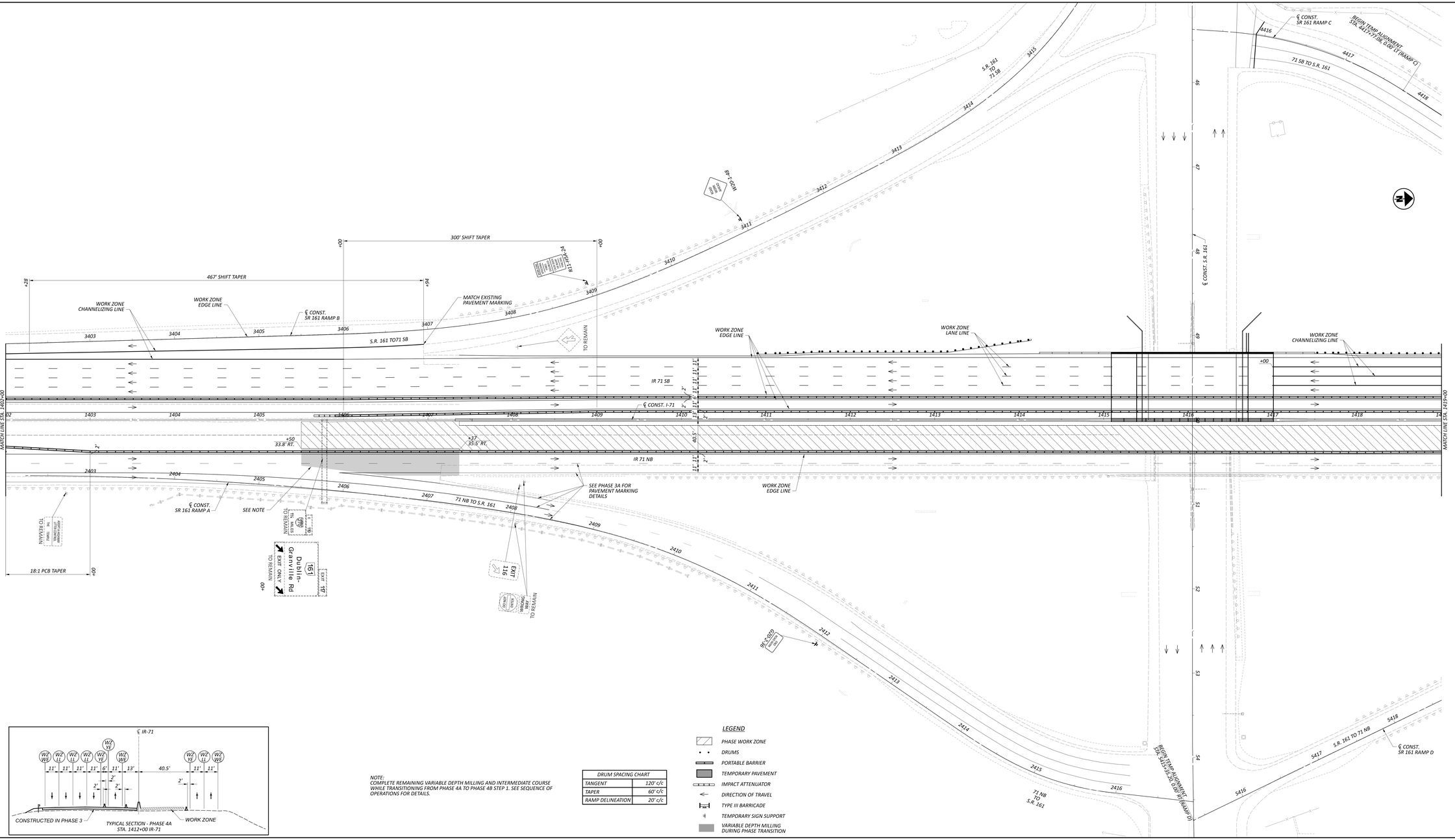


NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 4A TO PHASE 4B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETAILS.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

HORIZONTAL SCALE IN FEET
0 15 30 60

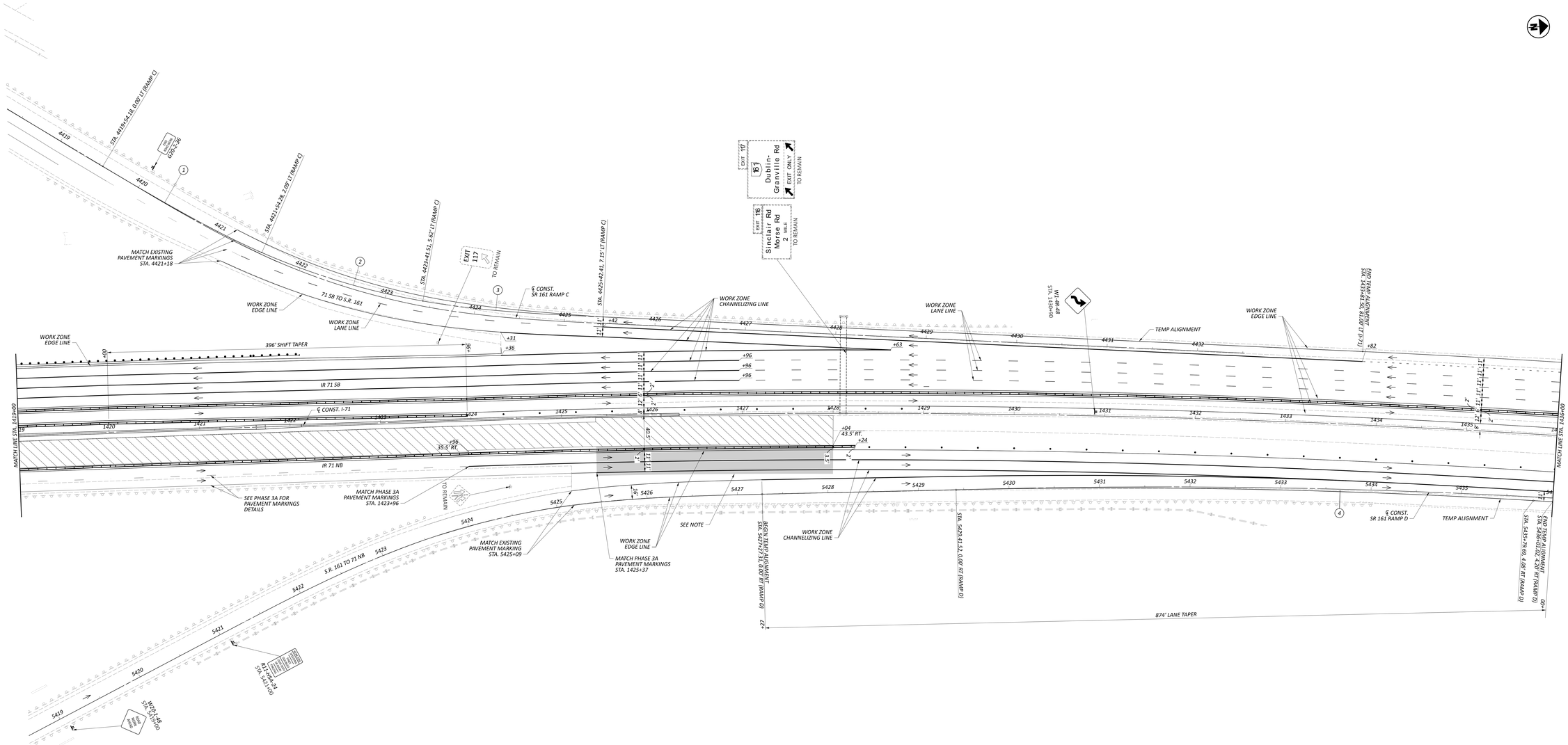
MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1402+00.00 TO STA. 1419+00.00

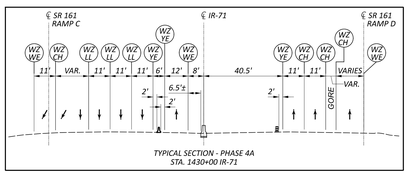
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.139 TOTAL: 618

FRA-71-19.10

BENTLEY SYSTEMS, INC. | Plot: 12 PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 12:58:19 PM USER: CHOUDT_PW | C:\JACOBS_PROJECTS\...\CHOUDT_PW.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHOUDT0420 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 4A
STA. 1430+00 IR-71

NOTE:
COMPLETE REMAINING VARIABLE DEPTH MILLING AND INTERMEDIATE COURSE WHILE TRANSITIONING FROM PHASE 4A TO PHASE 4B STEP 1. SEE SEQUENCE OF OPERATIONS FOR DETAILS.

SPIRAL DATA - 1
Ls = 200.00'
Gs = 07°20'00"
LT = 133.45'
ST = 66.77'
x = 199.67'
y = 8.52'
k = 99.95'
p = 2.13'
C = 199.85'
C.B. = N33°13'59"E

CURVE DATA - 2
Δ = 13°39'41" LT
Dc = 07°20'00"
R = 781.31'
T = 93.59'
L = 186.29'
E = 5.59'

SPIRAL DATA - 3
Ls = 200.00'
Gs = 07°20'00"
LT = 133.45'
ST = 66.77'
x = 199.13'
y = 17.03'
k = 99.95'
p = 2.13'
C = 199.85'
C.B. = N09°47'36"E

CURVE DATA - 4
Δ = 04°47'08" RT
Dc = 00°45'00"
R = 7,639.00'
T = 319.2'
L = 638.02'
E = 6.67'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT
- VARIABLE DEPTH MILLING DURING PHASE TRANSITION

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1419+00.00 TO STA. 1436+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.140 TOTAL 618

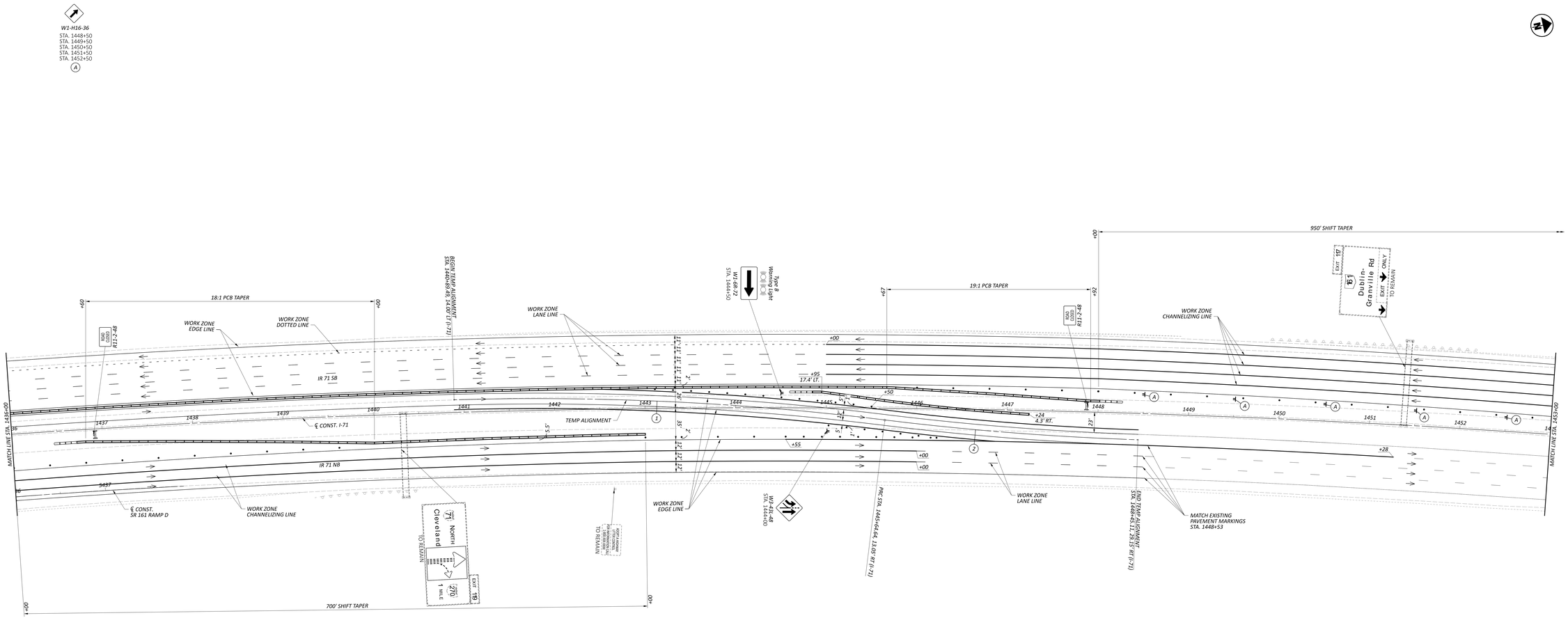
FRA-71-19.10

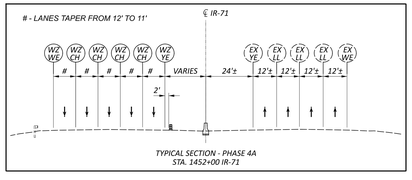
MODEL: Phase 3A - Plan 13 MARKINGS: 6in,4in,1 DATE: 3/31/2026 TIME: 12:39:07 PM USER: CHRIST, JOSE J. (JJ4GJ6, PENTEL, CHRIST, JOSE J.) File Name: USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOJ42 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACCESS TO THIS DRAWING IS RESTRICTED TO AUTHORIZED USERS. ANY USE OF THIS DRAWING FOR PURPOSES OTHER THAN THOSE AUTHORIZED BY THE OWNER IS PROHIBITED.

FRA-71-19.10

MODEL: Phase 1A - Plan 14 MARKERS: 66x34.0+1 DATE: 3/31/2026 TIME: 11:10:19 AM FSTORY: DWGFT_PSF_C-LHSB_PENTBL: DWGFT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DWGFT0U02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25

FILE NAME: P:\Projects\Ohio\Columbus\FRA-71-19.10\Design\Roadway\Plan\Phase 4A\FRA-71-19.10_Phase 4A_Plan 14.dgn





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Dc = 01°50'00"
R = 3,125.23'
T = 238.65'
L = 476.37'
E = 9.1'

CURVE DATA - 2
P.I. = STA. 9447+06.22
Δ = 05°08'36" LT
Dc = 01°50'00"
R = 3,125.23'
T = 140.36'
L = 280.54'
E = 3.15'

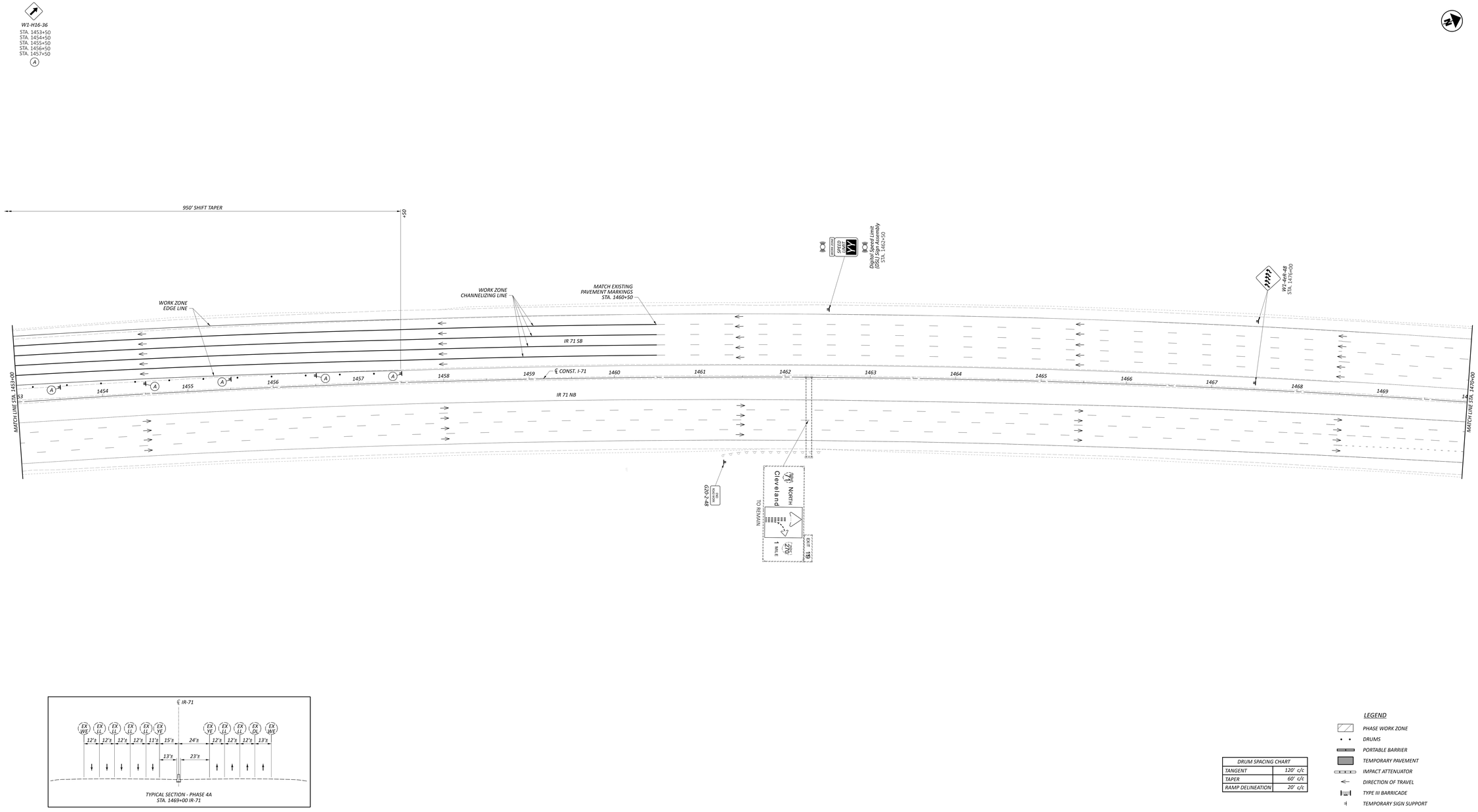
DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1436+00.00 TO STA. 1453+00.00

DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.141 TOTAL: 618



DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

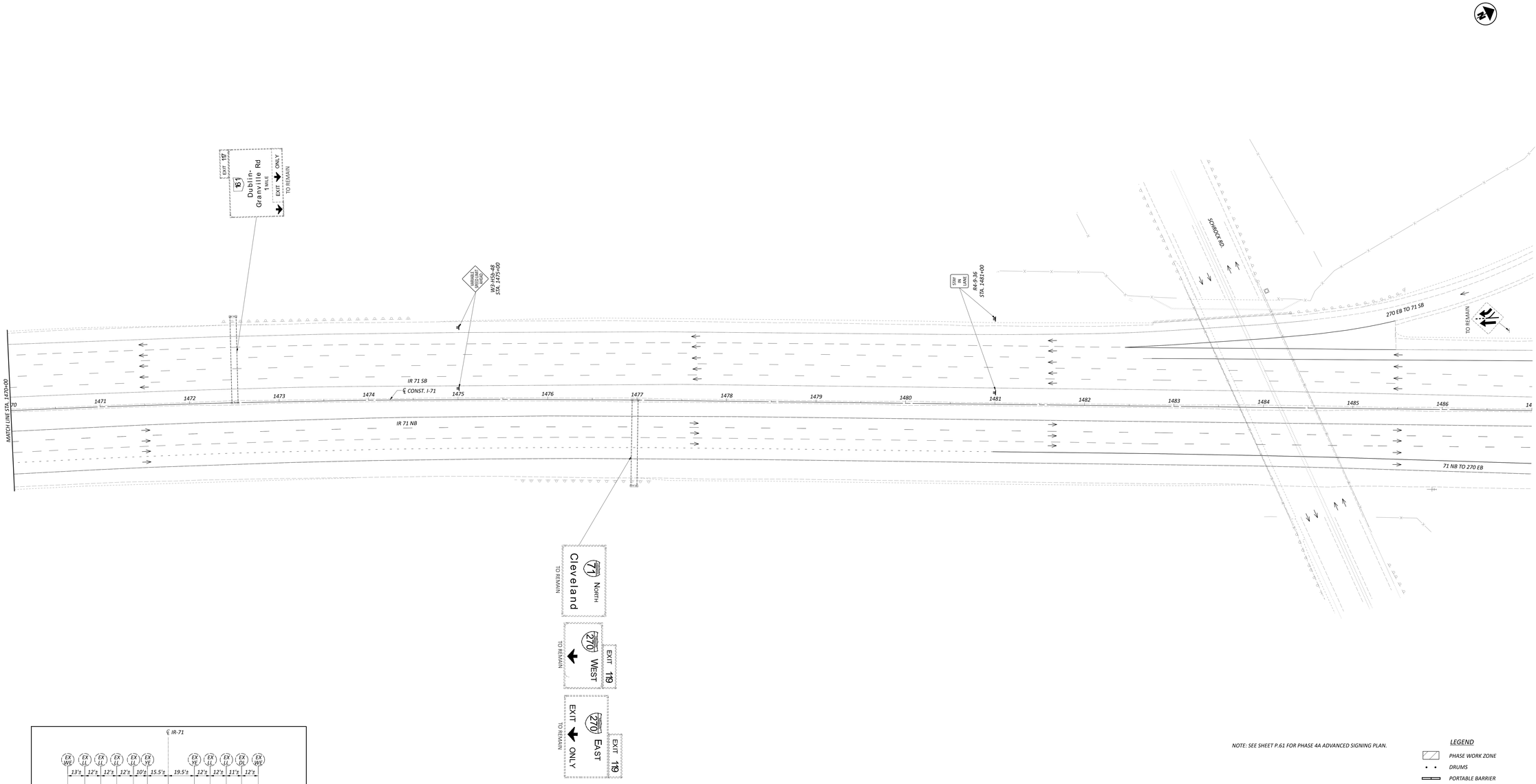
MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1453+00.00 TO STA. 1470+00.00

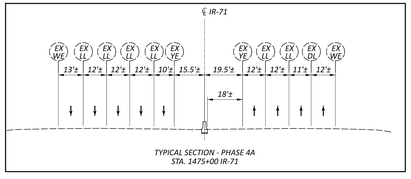
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.142 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan 15 MARKERS: 66x34-6in-1 DATE: 3/31/2026 TIME: 11:10:21 AM PLOTBY: CHRISTOPHER J LANG, PE/PS, CHRISTOPHER.LANG@JACOBS.COM WORKSPACE: CHRISTOLKO2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
PLOTSCALE: 1.000 FILE: C:\Users\christopher.lang\Jacobs\Desktop\Working Files\FRA-71-19.10 Maintenance of Traffic - Phase 4A.dgn





TYPICAL SECTION - PHASE 4A
STA. 1475+00 IR-71

NOTE: SEE SHEET P.61 FOR PHASE 4A ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A
STA. 1470+00.00 TO STA. 1487+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.143 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan 1A MARKERS: 66x34.0in | DATE: 3/31/2026 TIME: 12:39:44 PM STORM: ONEOT_PSF_C.shtdg PRINTED: ONEOT_Plan.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: ONEOTSHEET WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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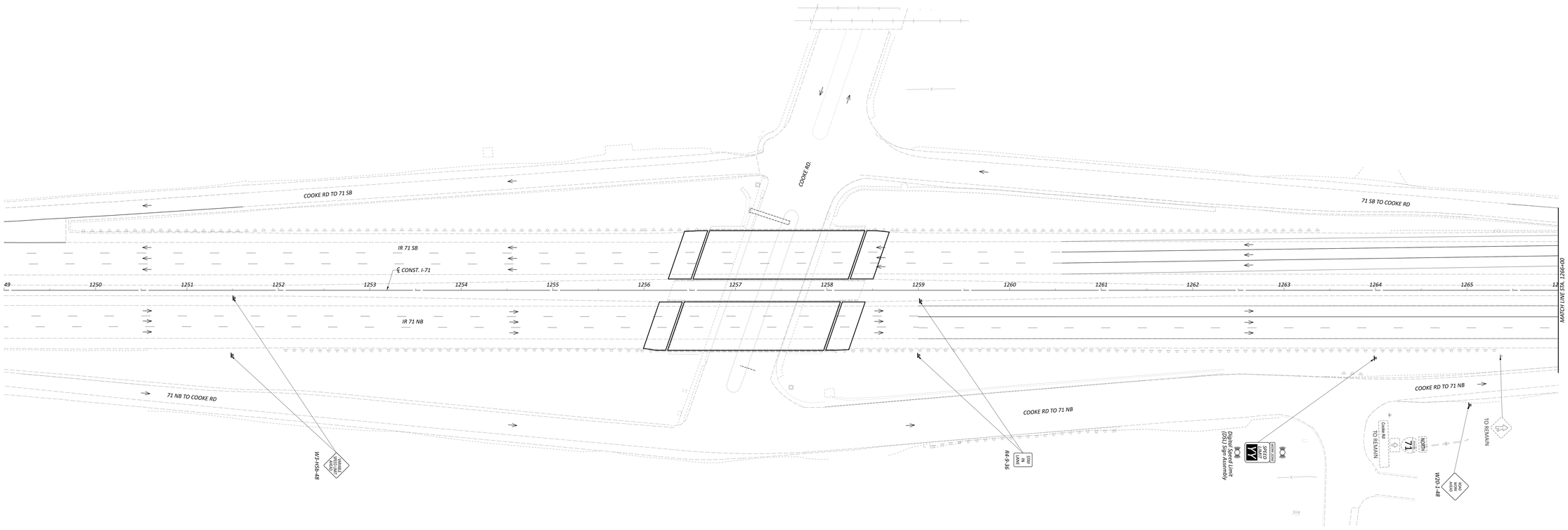

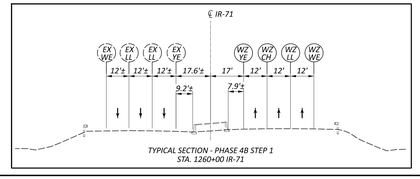

TYPICAL SECTION - PHASE 4B STEP 1
STA. 1260+00 IR-71

NOTES:
1. SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE SHEET P.52 FOR PHASE 4B NB ADVANCED SIGNING PLAN
3. SEE PHASE 4A FOR I-71 NORTHBOUND TEMPORARY PAVEMENT MARKING DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1249+00.00 TO STA. 1266+00.00

FRA-71-19.10

MODEL: Phase 1B - Plan 3 PAPERSIZE: ISO-A3 (ro) DATE: 3/31/2026 TIME: 11:03:18 AM FILENAME: C:\OOT_CHDOT_PDF_Files\FRA-71-19.10_109164_P1MTB1_CHDOT_Plan.dgn USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTCE02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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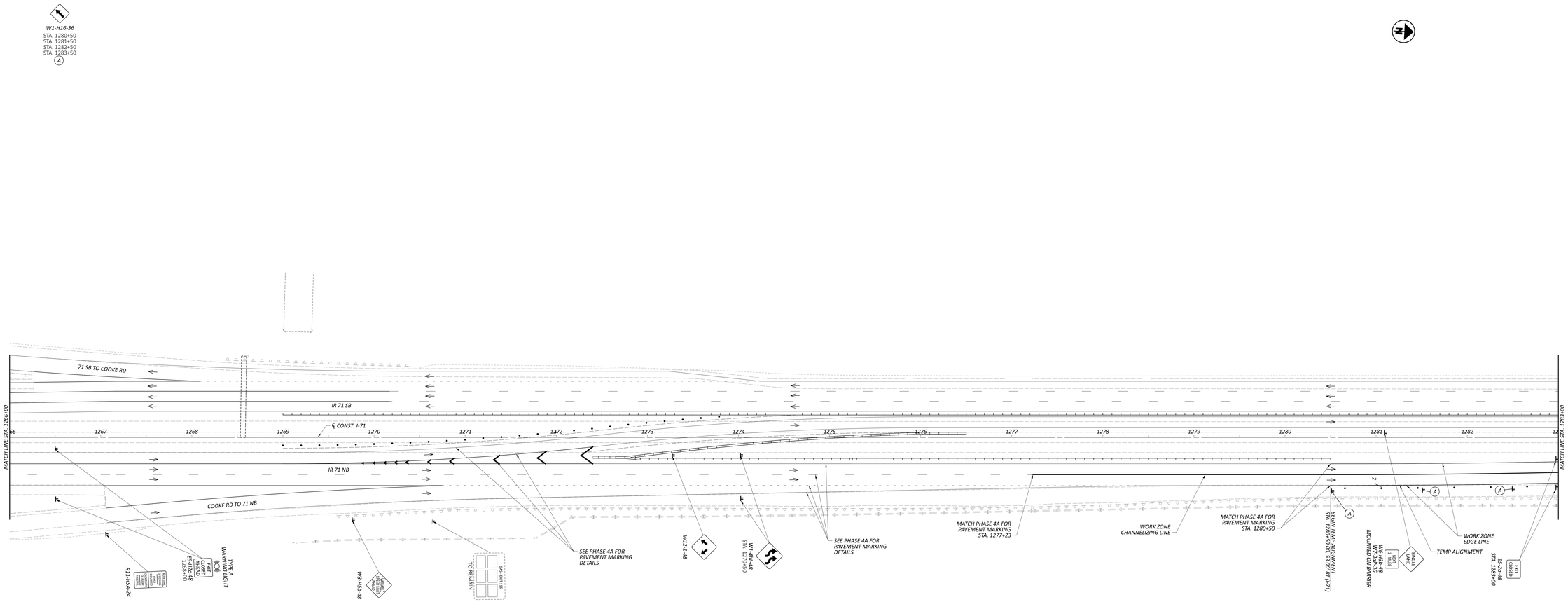
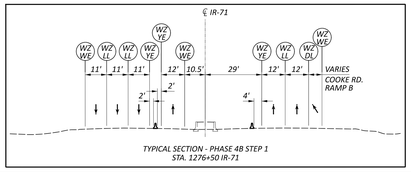
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.144 TOTAL 618





TYPICAL SECTION - PHASE 4B STEP 1
STA. 1276+50 IR-71

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1266+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.145 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan • PAPERSIZE: ISO A1 (L) • DATE: 3/31/2026 TIME: 11:10:43 AM • FILTER: ON|OFF_ITEM_LY-URSB_PSHTEL: ON|OFF_Print Edit: USER: Chris.Lawrence1@jacobs.com WORKSPACE: ON|OFF|D:\02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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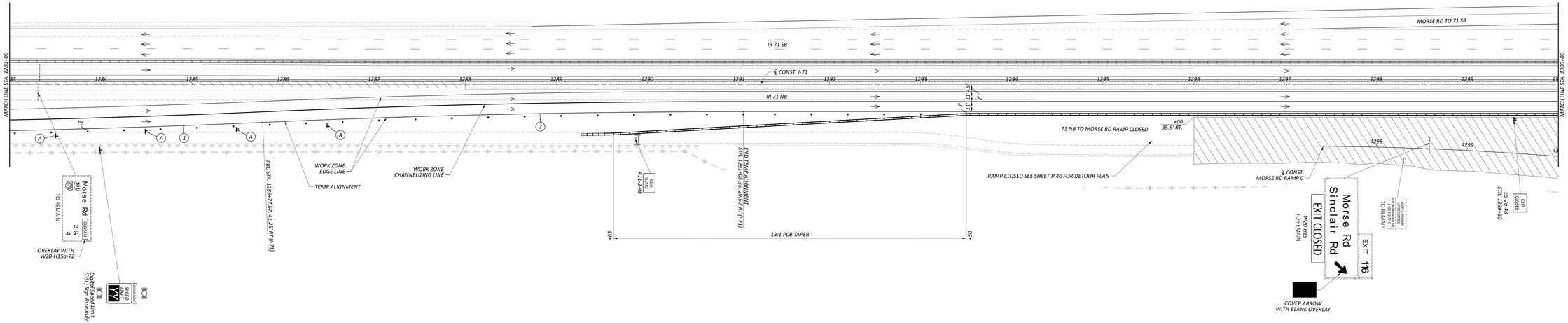
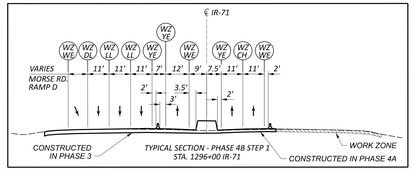
FRA-71-19.10

MODEL: Phase 1B - Plan 5 PAPERSIZE: 36x24 in | DATE: 3/31/2026 TIME: 11:56:48 PM SYSTEM: CHDOT_PW | PLOTBY: CHDOT_PW.bit USER: ChrisLawrence1@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

DATA: C:\Projects\109164\Roadway\Design\Phase 1\Maintenance of Traffic\Phase 1B\Plan 5\FRA-71-19.10 MOT Phase 1B Plan 5.dgn

W1-H16-36
STA. 1283+50
STA. 1284+50
STA. 1285+50
A





CURVE DATA - 1
Δ = 02°33'04" LT
Dc = 00°29'00"
R = 11,854.39'
T = 263.97'
L = 527.85'
E = 2.94'

CURVE DATA - 2
Δ = 02°33'04" RT
Dc = 00°29'00"
R = 11,854.39'
T = 263.97'
L = 527.85'
E = 2.94'

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

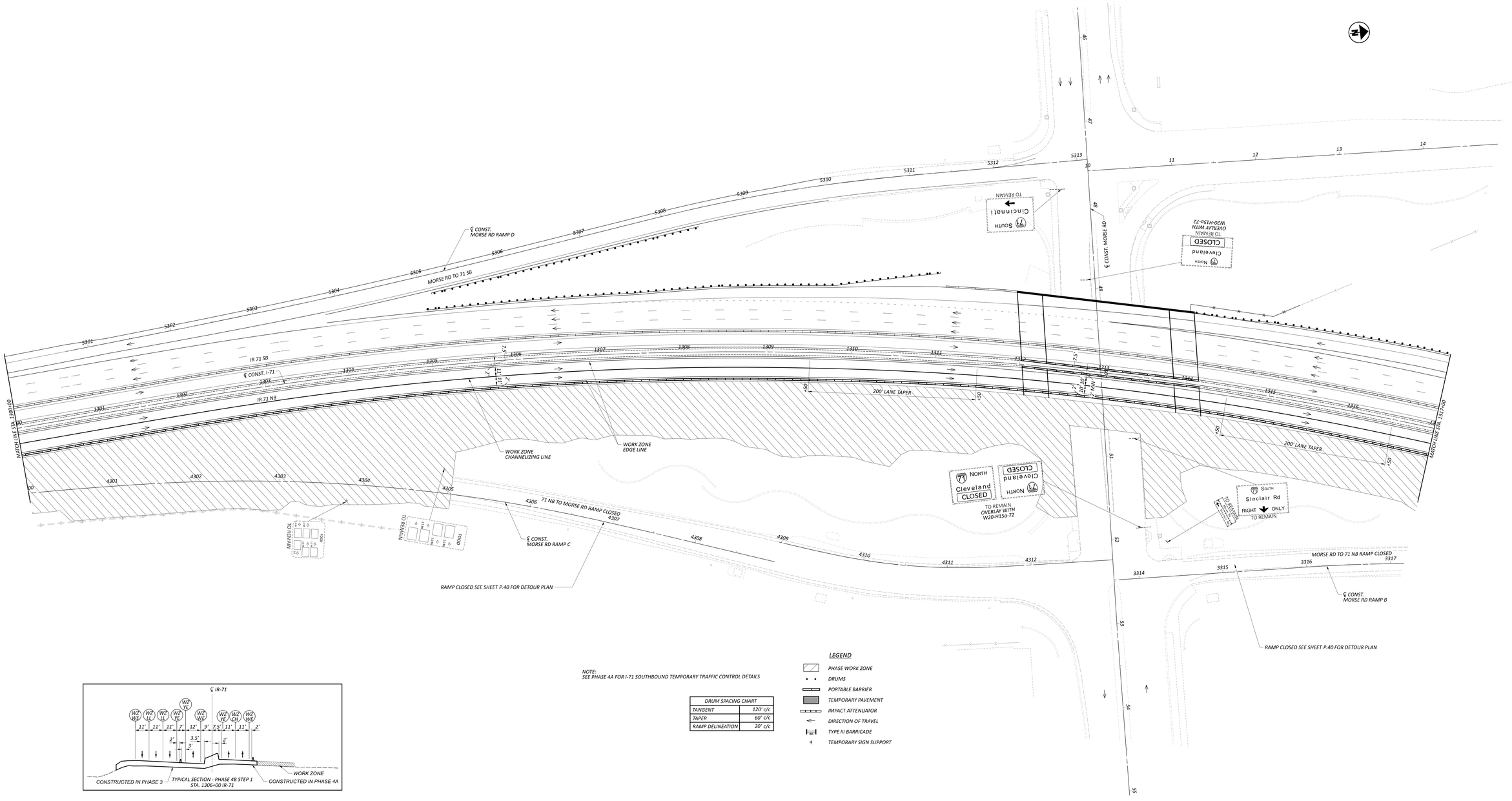
LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1283+00.00 TO STA. 1300+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET
P.146
TOTAL
618



NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

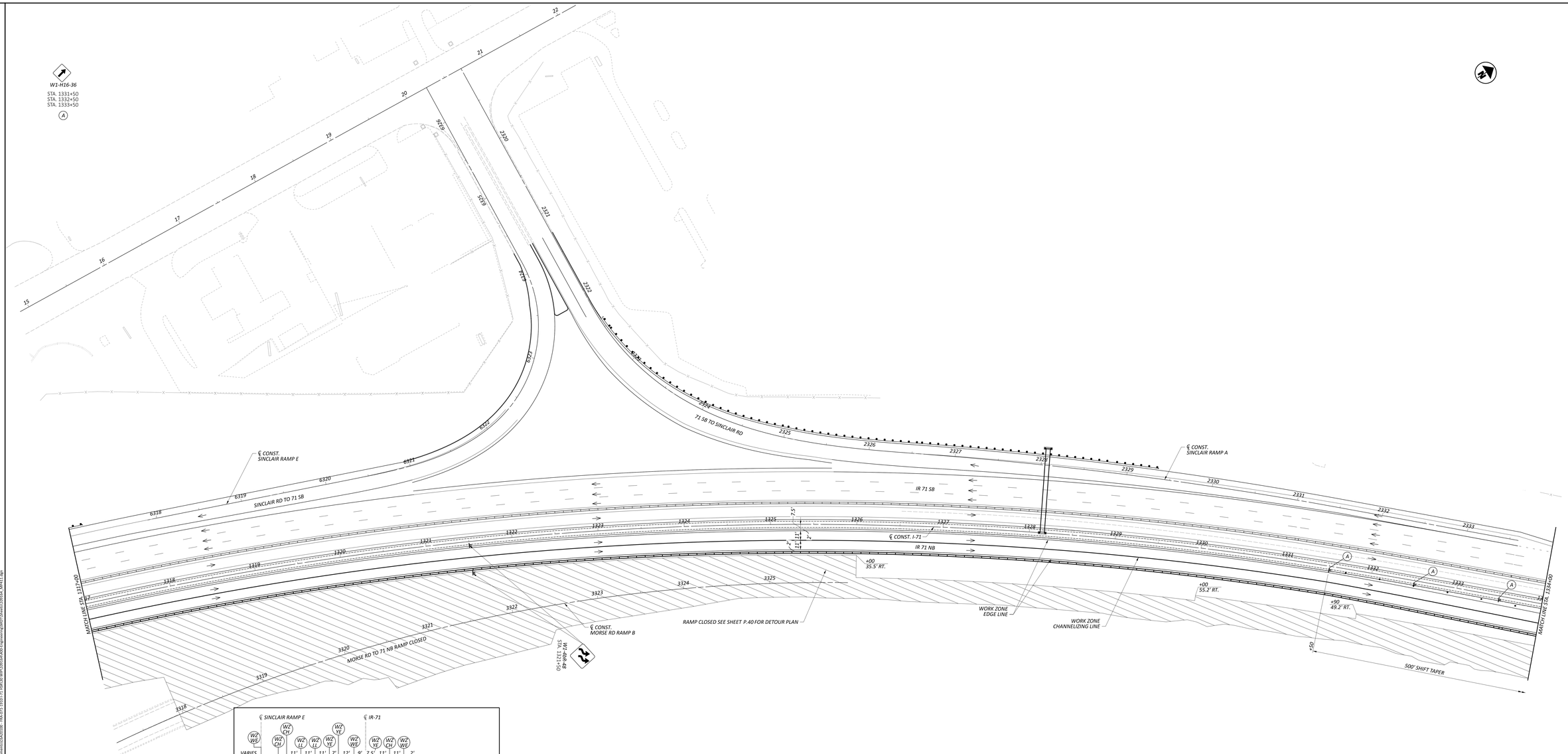
MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1300+00.00 TO STA. 1317+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.147 TOTAL 618

FRA-71-19.10

MODEL: Phase 1B - Plan # PAYPERIOD: 06/24 (+) | DATE: 3/31/2026 TIME: 1:10:15 PM | FILENAME: C:\PROJECTS\FRA-71-19.10\Design\Roadway\Phase 1B\Maintenance of Traffic\Phase 4B\FRA-71-19.10 MOT Phase 4B Step 1.dgn | USER: ChrisLawrence1@jacobs.com | WORKSPACE: c:\projects\fra-71-19.10\design\roadway\phase 1b\maintenance of traffic\phase 4b\ | WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25



TYPICAL SECTION - PHASE 4B STEP 1
STA. 1318+50 IR-71

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1317+00.00 TO STA. 1334+00.00

DESIGN AGENCY
Jacobs

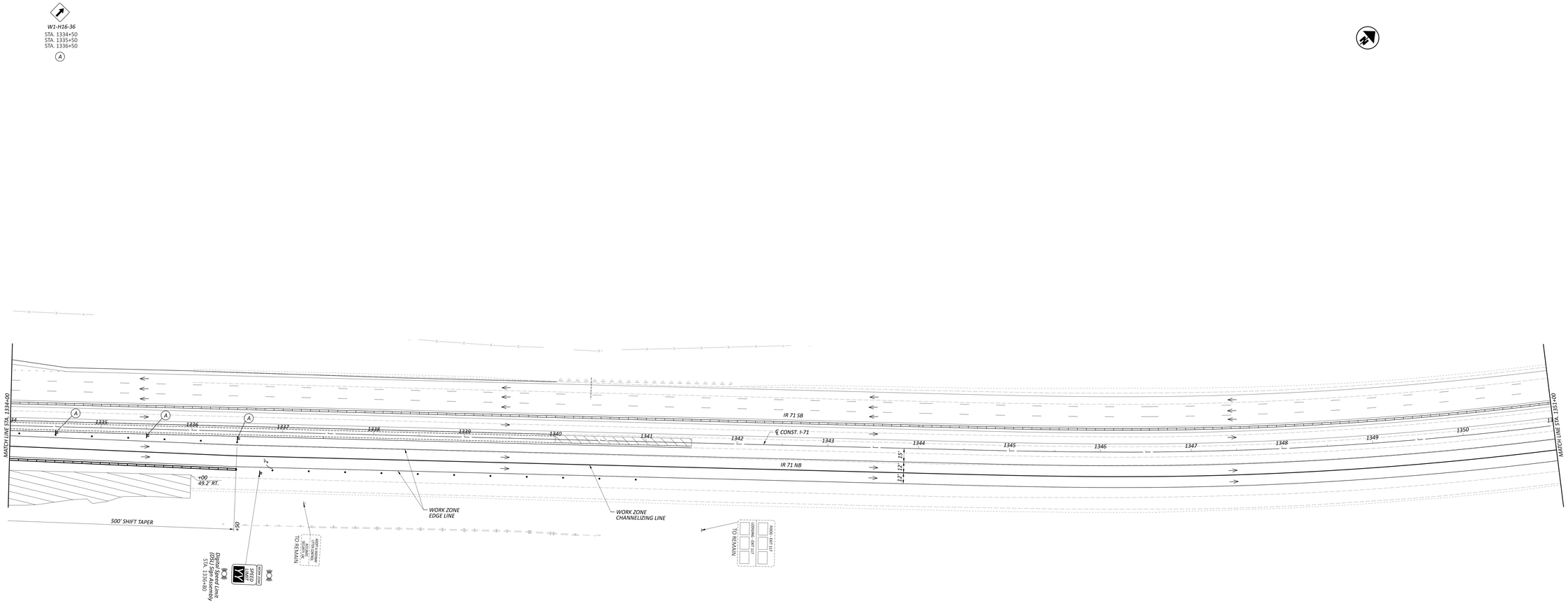
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.148 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan 7 PAYPERIOD: 4to14 DATE: 3/31/2026 TIME: 1:10:57 PM USERNAME: CHRISTOPHER.PAYNE@JACOBS.COM DESIGN FILE: C:\Users\christopher.payne\Jacobs\Desktop\Projects\FRA-71-19.10\Design\Phase 1B\Plan 7\Maintenance of Traffic - Phase 4B Step 1.dgn WORKSPACE: CHRISTOPHER_PAYNE_CONNECT_Default WORKSET: 109164 PRODUCT: OpenRoadDesigner 24.00.02.25

FRA-71-19.10

MODEL: Phase 1B - Plan B PAPERIZE: ANSI-A4 (-) DATE: 3/31/2026 TIME: 11:10:57 AM FILTER: CHKDT_PDF_V = pass$ PENTBL: CHKDT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHKDTT1202 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACCESS: Project Team - Internal PROJECTWISE FOLDER: I:\FRA-71\19.10\Traffic\Maintenance of Traffic\Phase 4\Phase 4B\Step 1\Sheets\MOT-Phase 4B Step 1.dgn



NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1334+00.00 TO STA. 1351+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.149 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan PAPERSIZE: ANSI-A4 | DATE: 3/31/2026 TIME: 11:10:48 AM FSTORY: CHKDT_PDF_V-Lan5B_FSHTEL: CHKDT_Print Edit USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHKDTTC02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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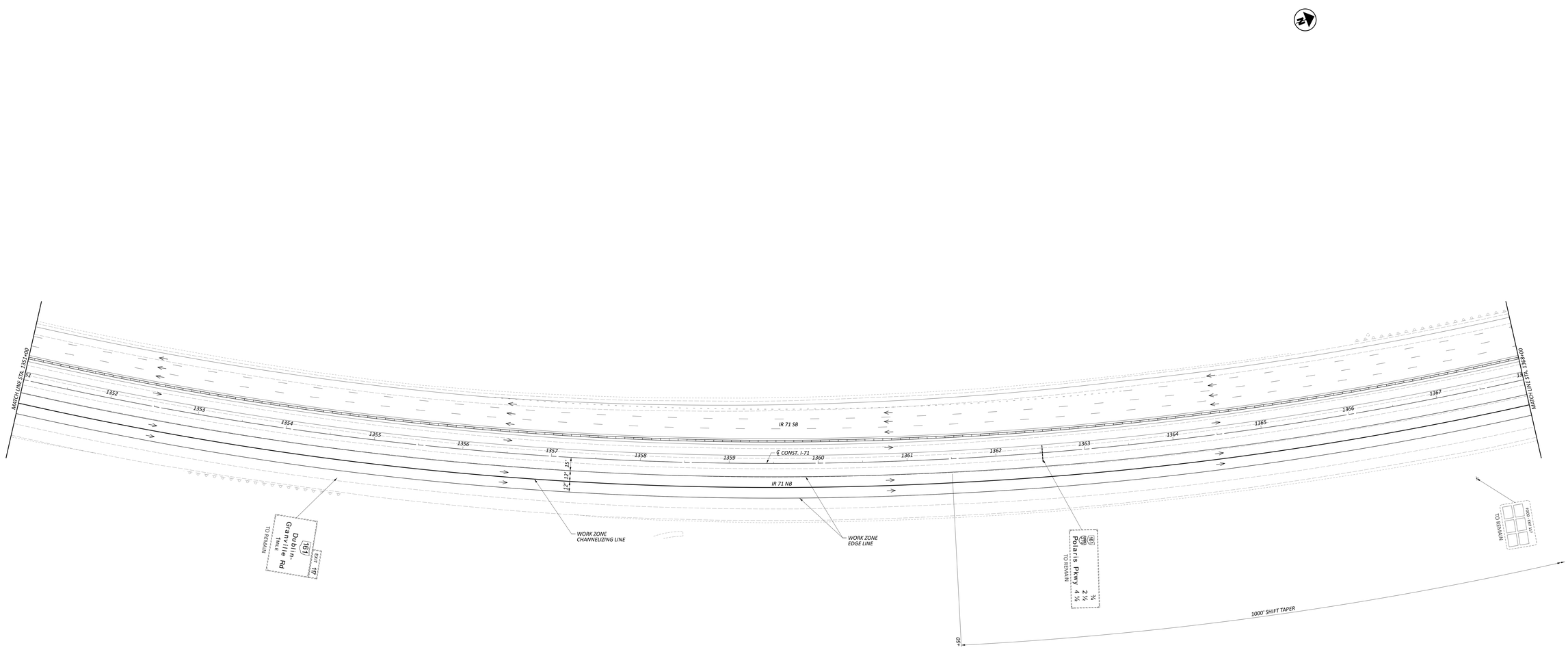

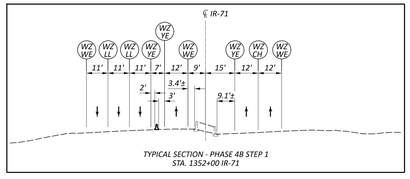

TYPICAL SECTION - PHASE 4B STEP 1
STA. 1352+00 IR-71

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1351+00.00 TO STA. 1368+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.150 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan 1B PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 11:18:49 AM BYCOM: CHRISTY, PSK, E | eFILE: PENTEL CHRISTY, Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTY.dgn WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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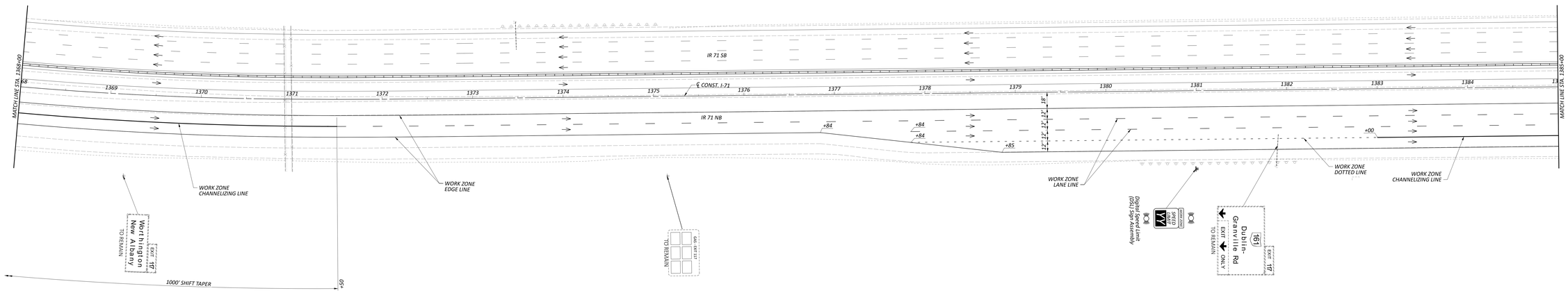
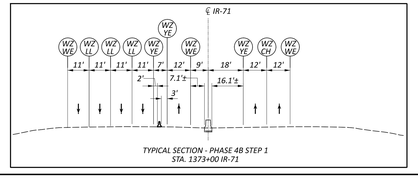
W1-H16-36
STA. 1369+00
STA. 1370+00
STA. 1371+00
STA. 1372+00
STA. 1373+00
(A)





NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1368+00.00 TO STA. 1385+00.00

DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.151 TOTAL 618

FRA-71-19.10
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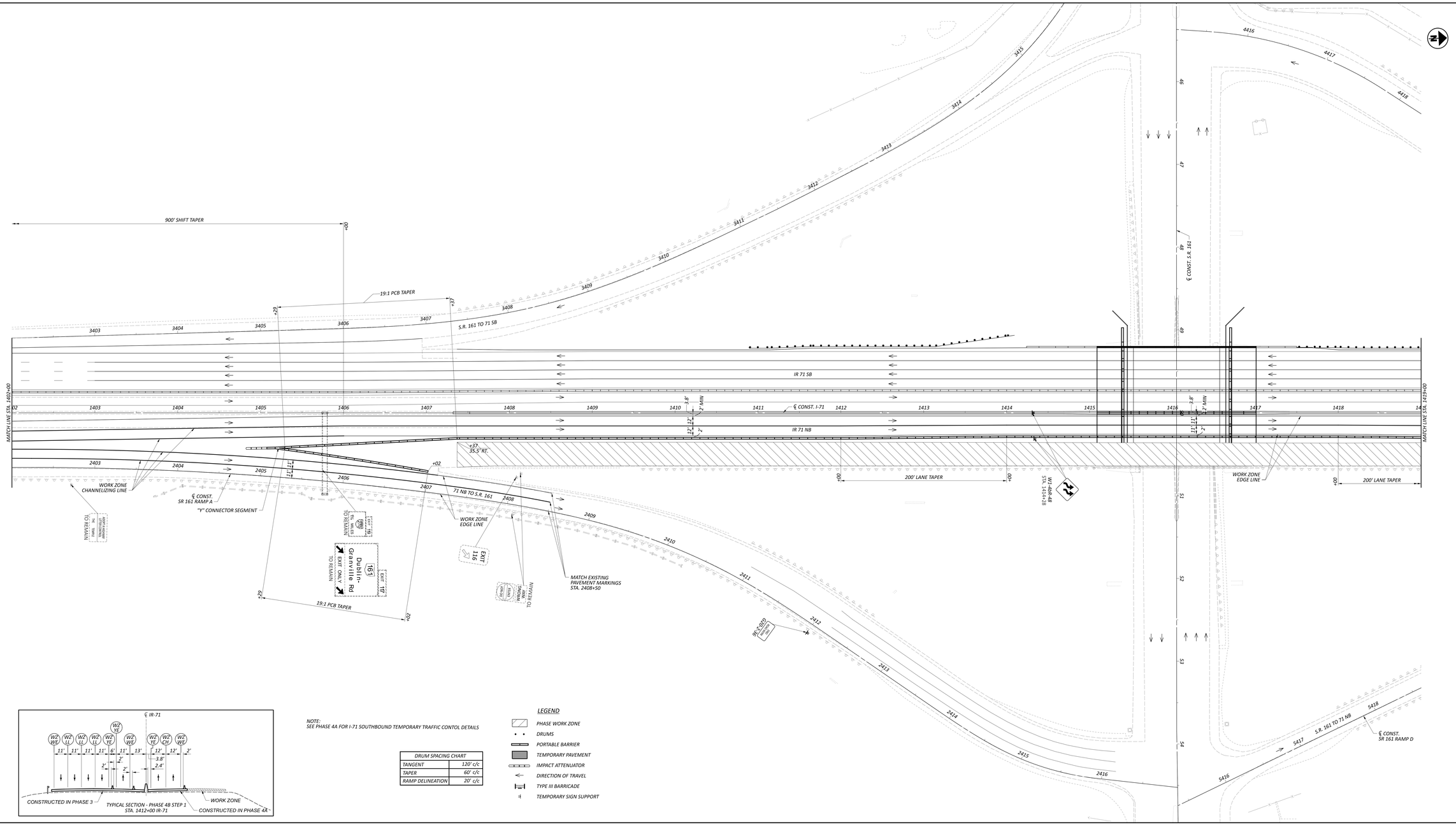

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1402+00.00 TO STA. 1419+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.153 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan 12 REFRESH: 04/24/25 DATE: 3/31/2026 TIME: 11:10:51 AM USER: DWORT, PW_ID: p4h6j, PENTEL: DWORT, Pen list: USER: Chris.Lawrence1@jacobs.com WORKSPACE: DWORT-DGN-02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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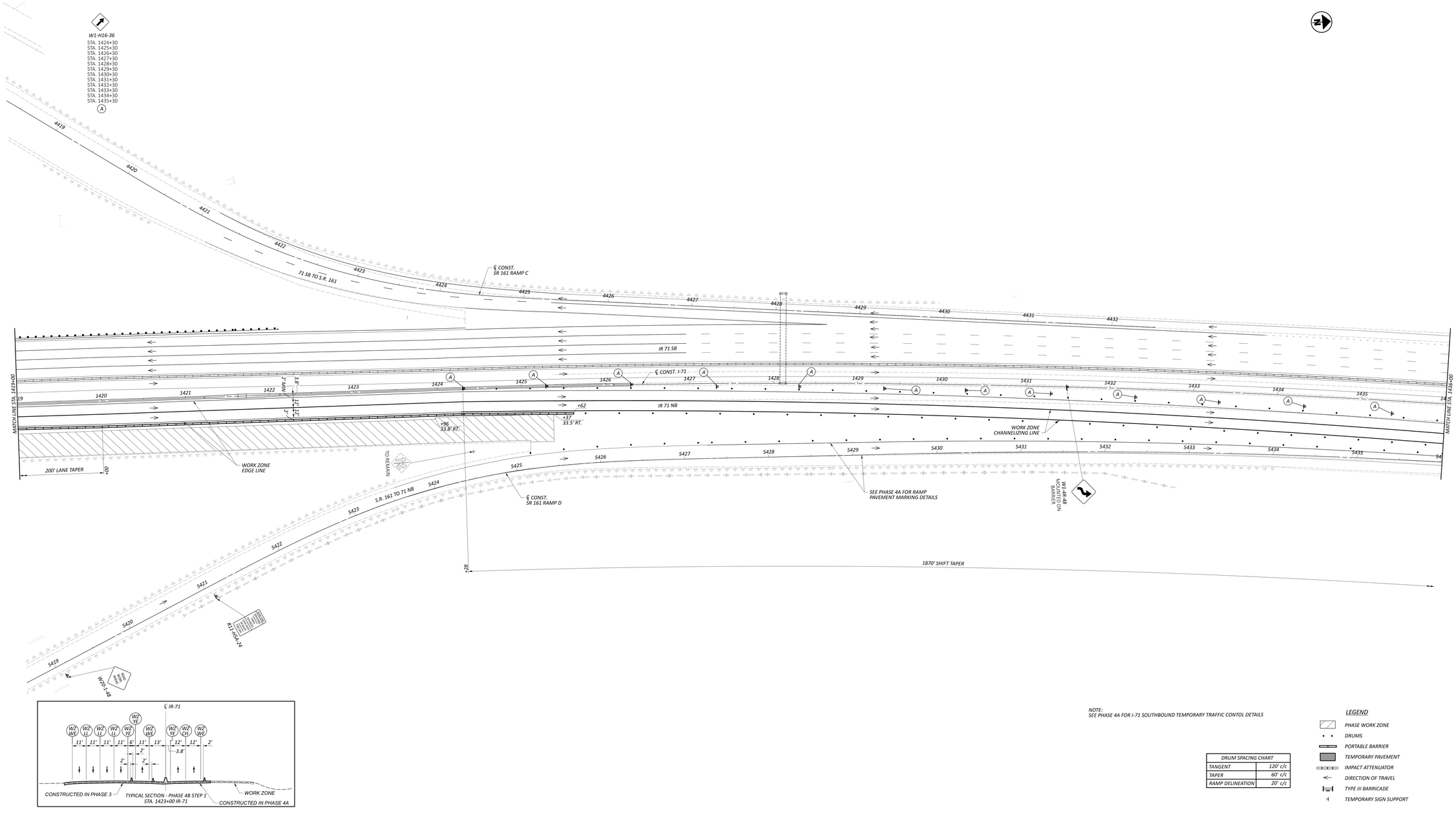

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1419+00.00 TO STA. 1436+00.00

DESIGN AGENCY: Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.154 | TOTAL: 618

FRA-71-19.10

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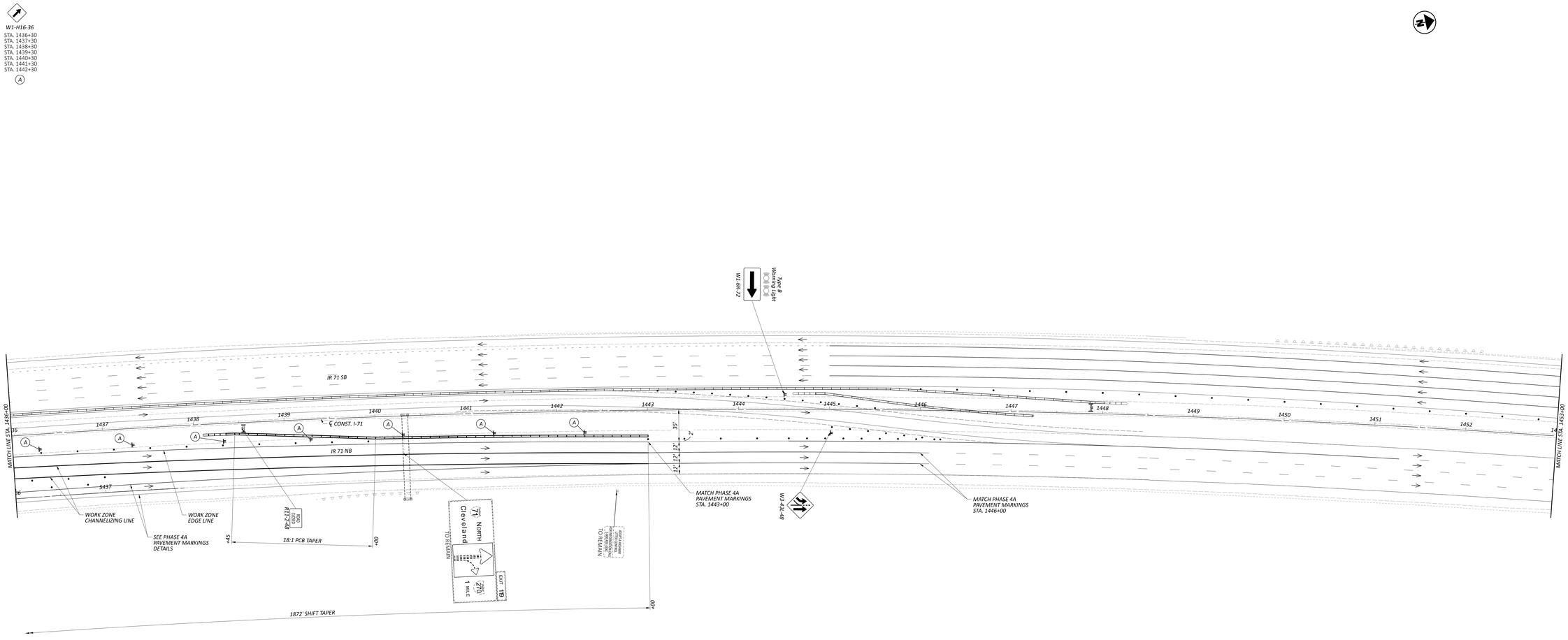

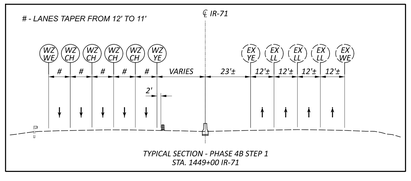

TYPICAL SECTION - PHASE 4B STEP 1
STA. 1449+00 IR-71

NOTE:
SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1436+00.00 TO STA. 1453+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.155 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1B - Plan 14 MAPSHEET: 66x34 (in) DATE: 3/31/2026 TIME: 11:35:54 AM SYCOM1: CHKDT: PSF_E-24NB_PENTBL: CHKDT: Pen tbl USER: Chris.Lawrence1@jacobs.com WORKPACK: CHKDTSUI2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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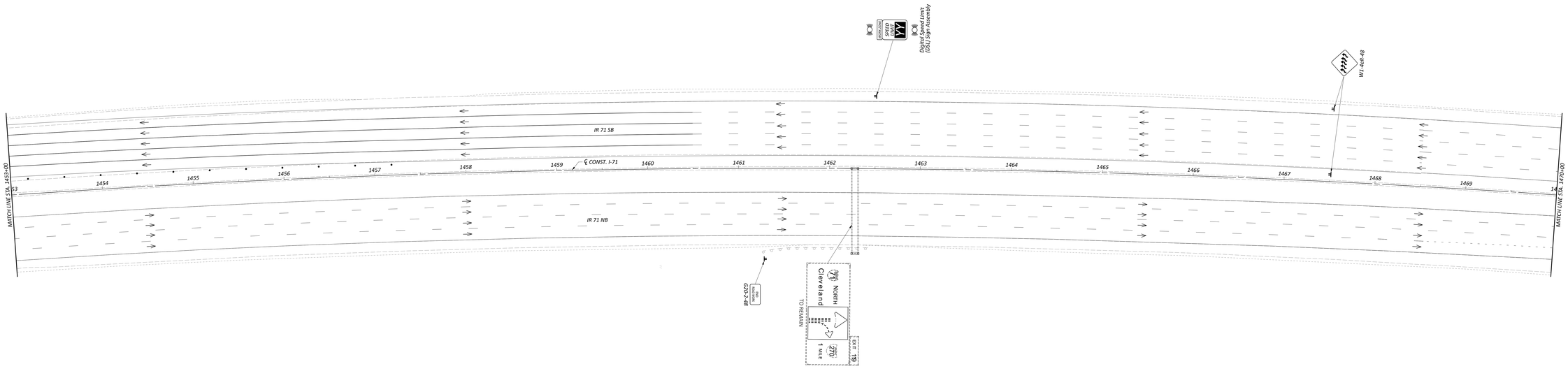

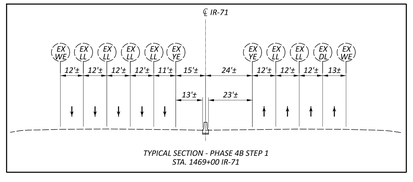

TYPICAL SECTION - PHASE 4B STEP 1
STA. 1469+00 IR-71

NOTE:
SEE PHASE 4A FOR I-71 NORTHBOUND AND SOUTHBOUND TEMPORARY TRAFFIC CONTOL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1453+00.00 TO STA. 1470+00.00

FRA-71-19.10

MODEL: Phase 1B - Plan 15 MAPSHEET: 66x34 (in) DATE: 3/31/2026 TIME: 11:10:55 AM EDITOR: CHRIST, PSK, D CAMUS, PENTEL CHRIST, Pen Set USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOUD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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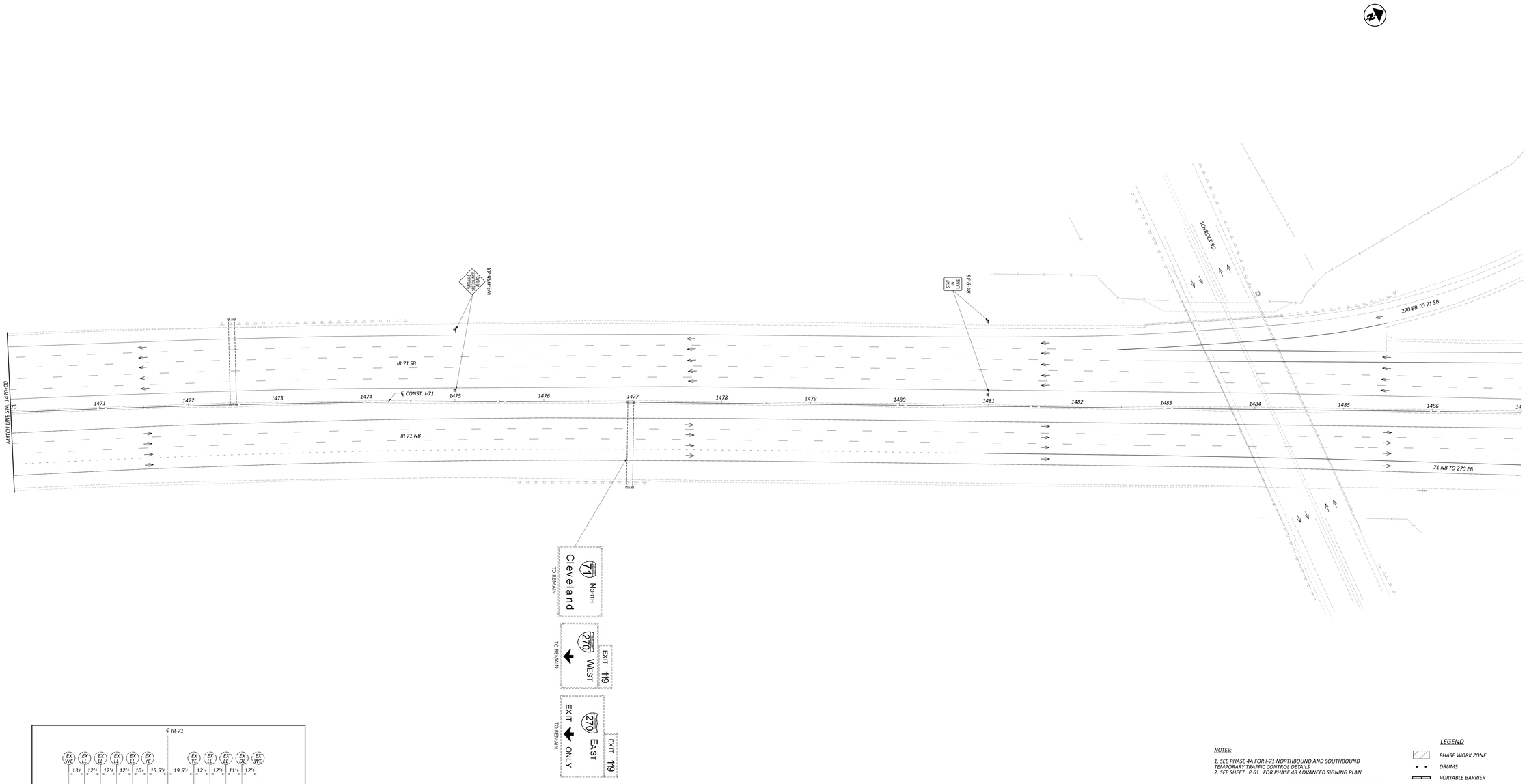
DESIGN AGENCY
Jacobs

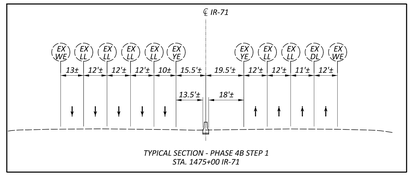
DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.156 TOTAL 618





TYPICAL SECTION - PHASE 4B STEP 1
STA. 1475+00 IR-71

NOTES:

1. SEE PHASE 4A FOR I-71 NORTHBOUND AND SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE SHEET P.61 FOR PHASE 4B ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 1
STA. 1470+00.00 TO STA. 1487+00.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.157 TOTAL 618

FRA-71-19.10

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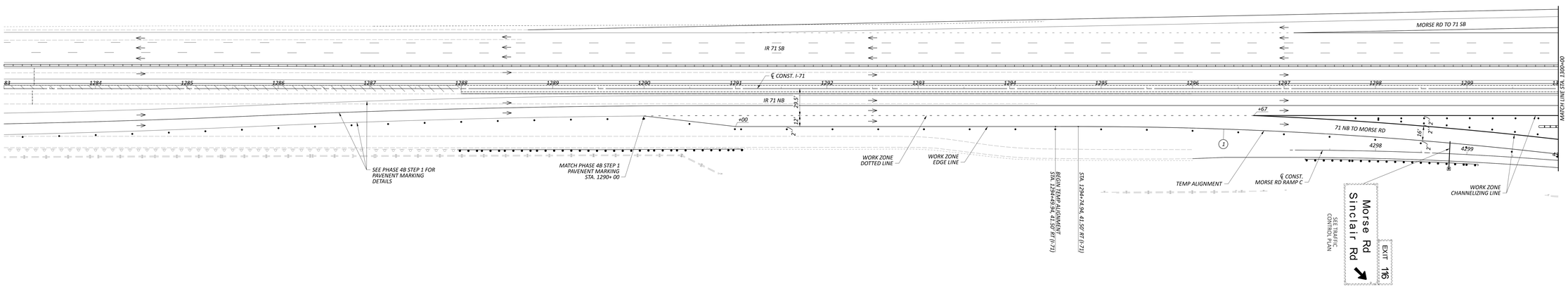

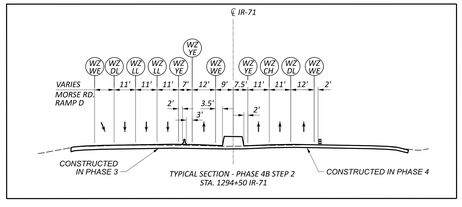

NOTES:

1. SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE PHASE 4B STEP 1 FOR ADDITIONAL I-71 NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

CURVE DATA - 1
Δ = 09°05'03" RT
Dc = 01°15'00"
R = 4,583.66'
T = 364.14'
L = 726.74'
E = 14.44'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 2
STA. 1283+00.00 TO STA. 1300+00.00

FRA-71-19.10

MODEL: Phase 1B - Plan 5 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:11:11 AM FILENAME: CHKDGT_PDF_V-Letter_PSHTEL.CHKDGT_Plan.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHKDGTCLIO2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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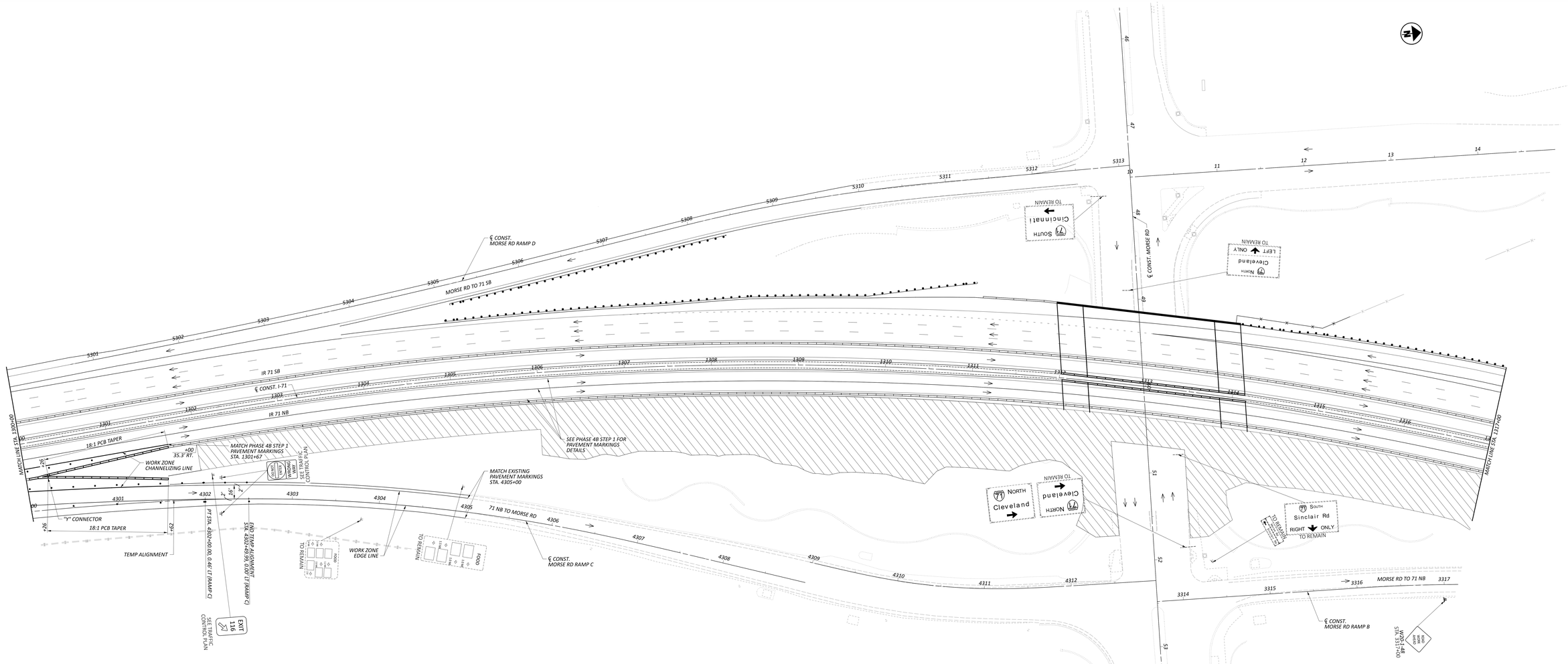
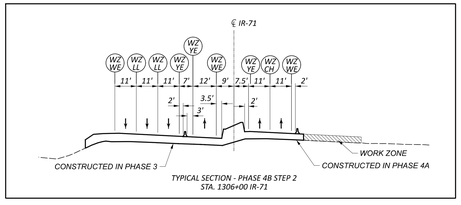
DESIGN AGENCY
Jacobs
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.158 TOTAL 618





TYPICAL SECTION - PHASE 4B STEP 2
STA. 1306+00 IR-71

NOTES:

1. SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE PHASE 4B STEP 1 FOR ADDITIONAL I-71 NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 2
STA. 1300+00.00 TO STA. 1317+00.00

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.159 TOTAL 618

MODEL: Phase 1B - Plan | PAPERSIZE: ANSI-D | DATE: 3/31/2026 TIME: 11:11:16 AM | FCDW: CHRISTOPHER_H | e-SEAL: PSYFEL CHRISTOPHER HUGH | Plot Set: USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOPHER HUGH WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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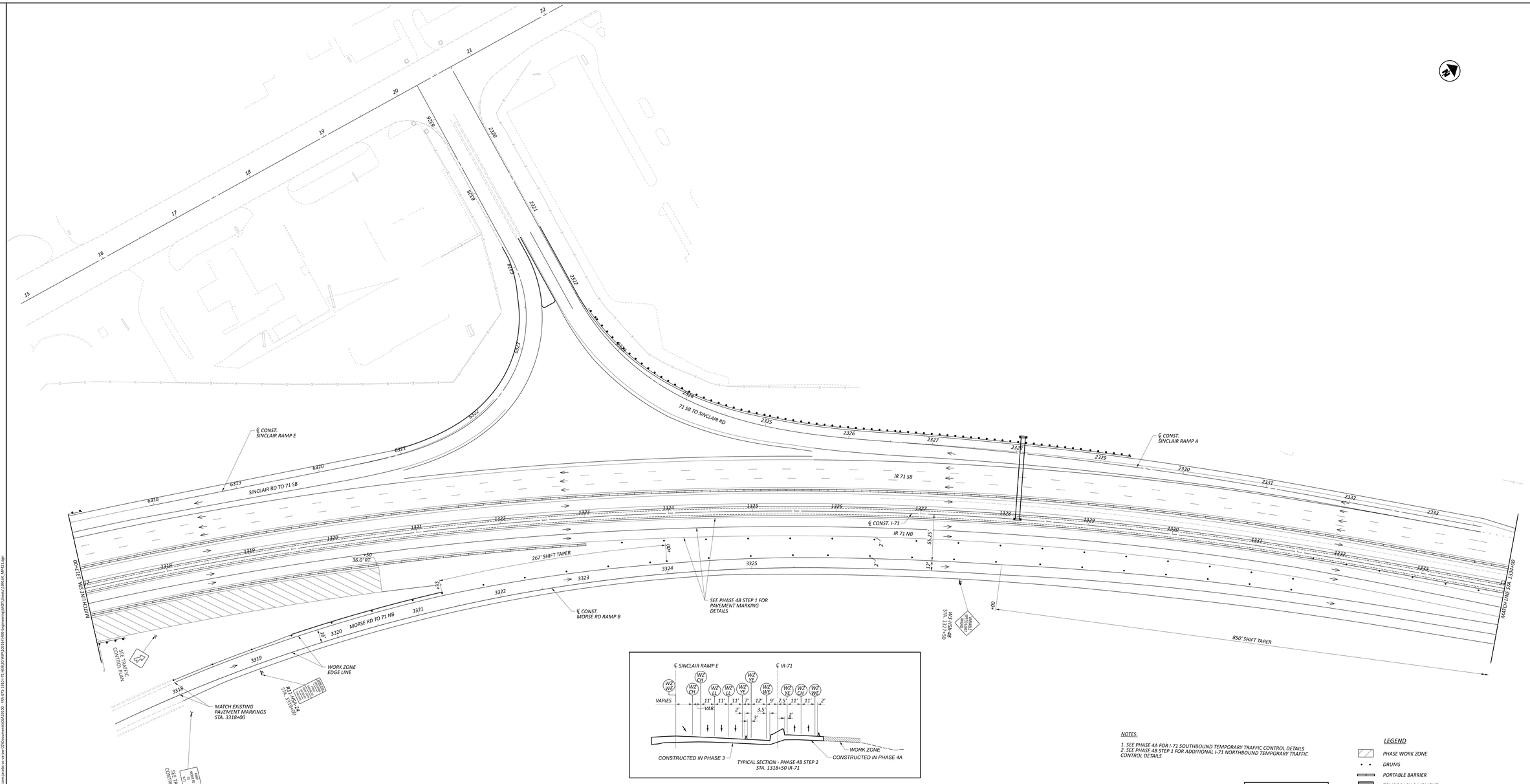


NOTES:

1. SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE PHASE 4B STEP 1 FOR ADDITIONAL I-71 NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

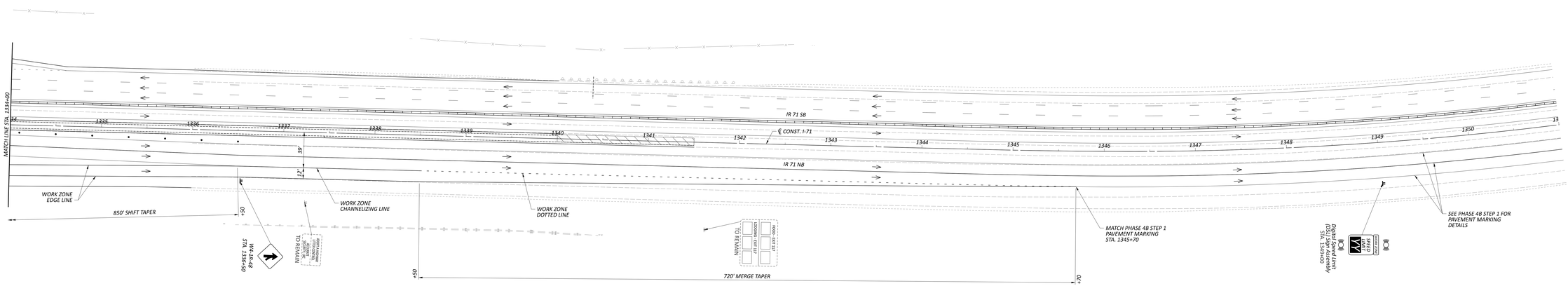
HORIZONTAL SCALE IN FEET: 0, 15, 30, 60

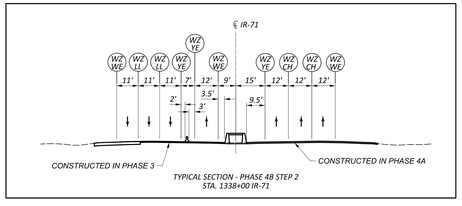
MAINTENANCE OF TRAFFIC - PHASE 4B STEP 2
STA. 1317+00.00 TO STA. 1334+00.00

FRA-71-19.10

DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.160 TOTAL: 618

MODEL: Phase 1B - Plan 7 PAPERSIZE: ANSI A4 (in) DATE: 3/31/2026 TIME: 11:11:17 AM FCDW: CHDOT_PDF_V1.pltcfg PSTBL: CHDOT_Plot.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHDOTC02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 4B STEP 2
STA. 1338+00 IR-71

NOTES:

1. SEE PHASE 4A FOR I-71 SOUTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS
2. SEE PHASE 4B STEP 1 FOR ADDITIONAL I-71 NORTHBOUND TEMPORARY TRAFFIC CONTROL DETAILS

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

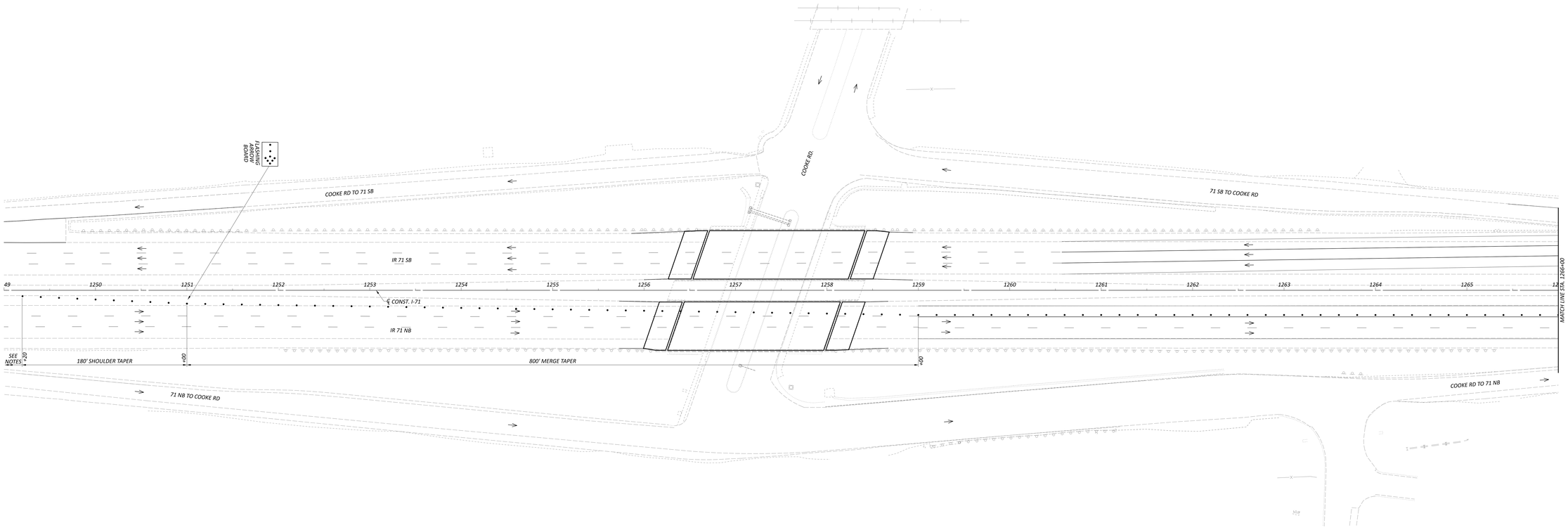
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4B STEP 2
STA. 1334+00.00 TO STA. 1351+00.00

FRA-71-19.10

MODEL: Phase 1B - Plan B PAPERSIZE: ANSI A4 (in.) DATE: 3/31/2026 TIME: 11:11:19 AM FILENAME: C:\USERS\CLAWRENCE\DESKTOP\FRA-71-19.10_PHASE 4B STEP 2_PLAN B_CLAWRENCE.DGN WORKSPACE: C:\USERS\CLAWRENCE\APPDATA\LOCAL\BENTLEY\OPENROADS CONNECT EDITION\WORKSPACES\DEFAULT.CWS

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.161 TOTAL: 618



NOTES:
1. AT THE DEPARTMENT'S DISCRETION, THE CONTRAFLOW LANE MAY BE CLOSED FOR REASONS SUCH AS, BUT NOT LIMITED TO, AN EMERGENCY OR WEATHER EVENT. WHEN DIRECTED, CLOSE THE CONTRAFLOW LANE AS SHOWN.
2. INSTALL ADVANCE WARNING SIGNS FOR LANE CLOSURE PER SCD MT-95.30.
3. THE INTENT OF THIS DRAWING IS TO SHOW ONLY THOSE DEVICES NEEDED TO CLOSE THE CONTRAFLOW LANE. PHASE 4A/4B TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 4A/4B CONTRAFLOW LANE CLOSURE
STA. 1249+00.00 TO STA. 1266+00.00

FRA-71-19.10

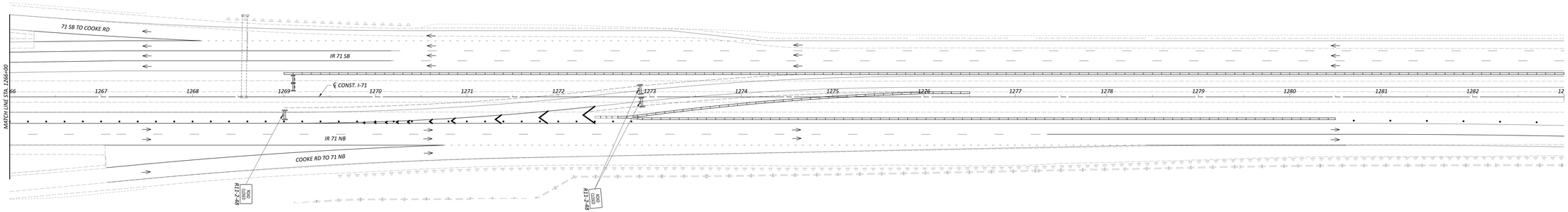
MODEL: Phase 1A - Plan | PAPERSIZE: ISO A1 | DATE: 3/31/2026 TIME: 11:11:11 AM | FCDW: CMDOT_PDF_V-LatSQ_FIXTEL.CMDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CMDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ELEMENTS: Plan Sheet Graphics | Area Fill | Dynamic Fill | Text | Text Nodes | Dimensions | Multi-line Text | Tables | Markups | Civil Cells

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164



NOTES:
1. AT THE DEPARTMENT'S DISCRETION, THE CONTRAFLOW LANE MAY BE CLOSED FOR REASONS SUCH AS, BUT NOT LIMITED TO, AN EMERGENCY OR WEATHER EVENT. WHEN DIRECTED, CLOSE THE CONTRAFLOW LANE AS SHOWN.
2. INSTALL ADVANCE WARNING SIGNS FOR LANE CLOSURE PER SCD MT-95.30.
3. THE INTENT OF THIS DRAWING IS TO SHOW ONLY THOSE DEVICES NEEDED TO CLOSE THE CONTRAFLOW LANE. PHASE 4A/4B TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY

DRUM SPACING CHART	
TANGENT	*120' c/c*
TAPER	*60' c/c*
RAMP DELINEATION	*20' c/c*

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

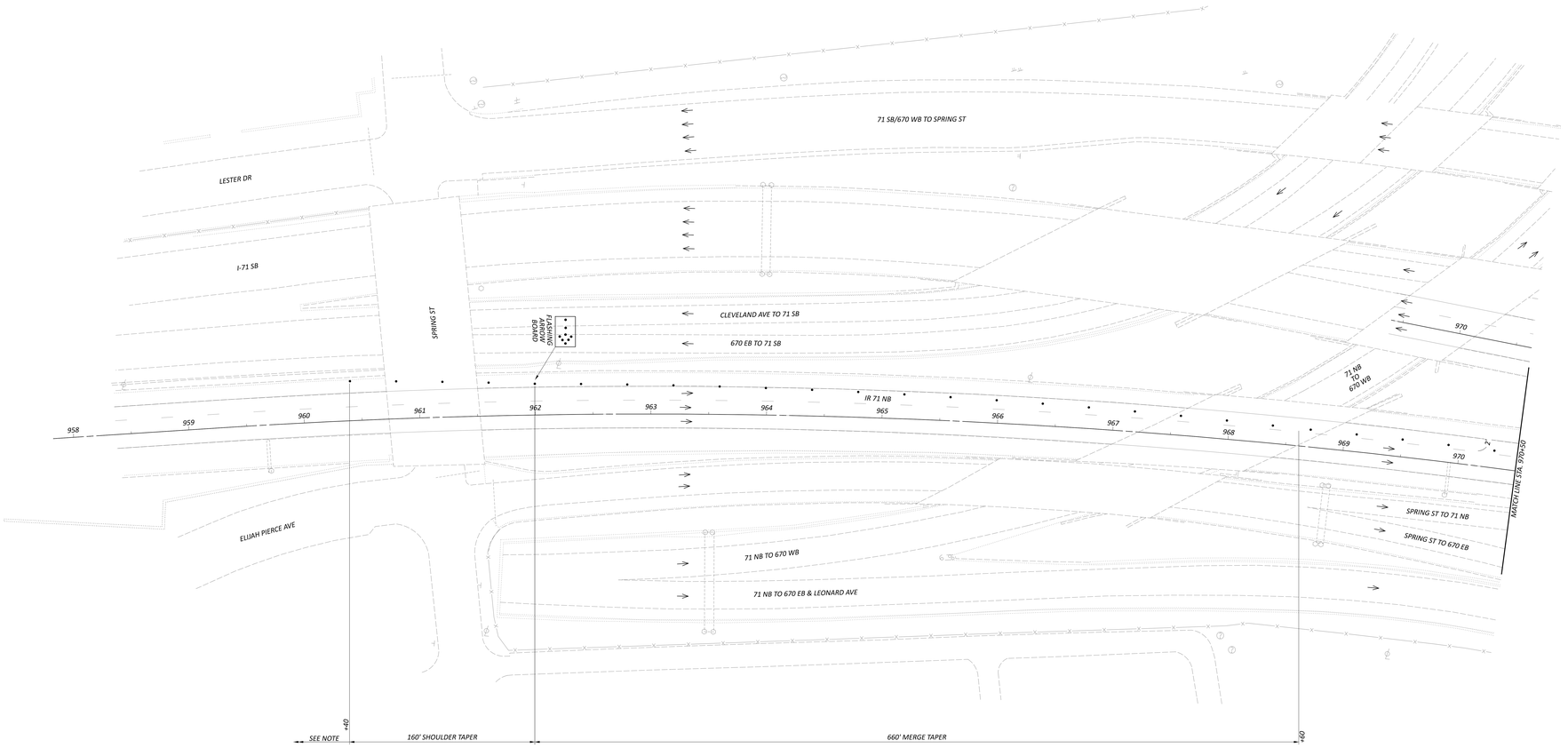
MAINTENANCE OF TRAFFIC - PHASE 4A/4B CONTRAFLOW LANE CLOSURE
STA. 1266+00.00 TO STA. 1283+00.00

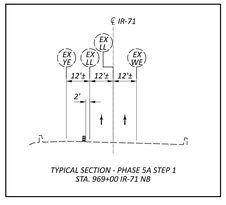
DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.163 TOTAL: 618

FRA-71-19.10

MODEL: Phase 1A - Plan # PAYSHEETS: 66x34 (in) | DATE: 3/31/2026 TIME: 11:11:17 AM FSTORY: CHSOT_PSP_1A.pltcfg PSTBL: CHSOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOTCIVD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\Projects\Columbus\FRA-71-19.10\Design\Roadway\Plans\Maintenance of Traffic\Phase 4A-4B\MOT_Phase 4A-4B_Contraflow Lane Closure.dgn





TYPICAL SECTION - PHASE 5A STEP 1
STA. 969+00 IR-71 NB

NOTE: SEE SHEET P.53 FOR PHASE 5A STEP 1 NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	80' c/c
TAPER	55' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 5A STEP 1
STA. 953+50.00 TO STA. 970+50.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.164 TOTAL: 618

FRA-71-19.10

MODEL: CLV_OTI_NB | Plot: 1 PAPERSIZE: 66x34 in | DATE: 3/12/2026 TIME: 11:11:56 AM | USER: CMOOT_PKD | LAYER: CMOOT_PKD_5-phase_PENTEL CMOOT_Pencil | USER: Chris.Lawrence3@jacobs.com WORKSPACE: CHIDOTSVA2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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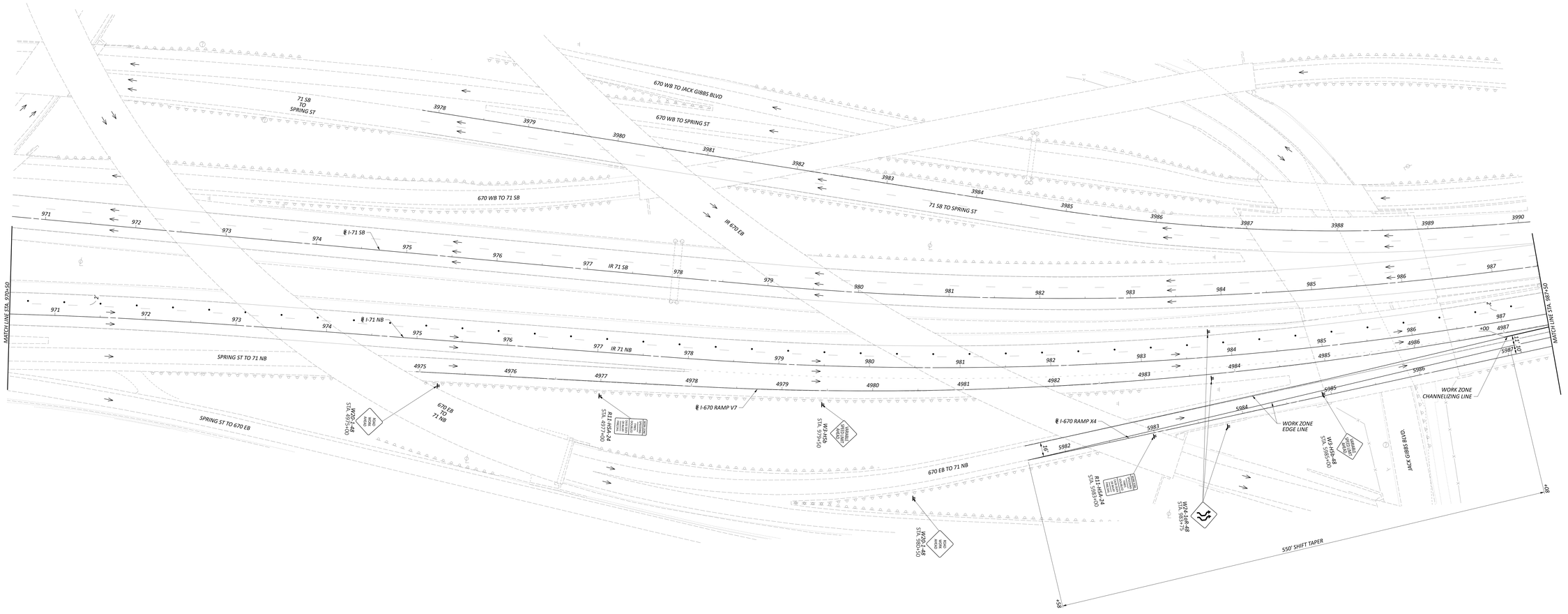
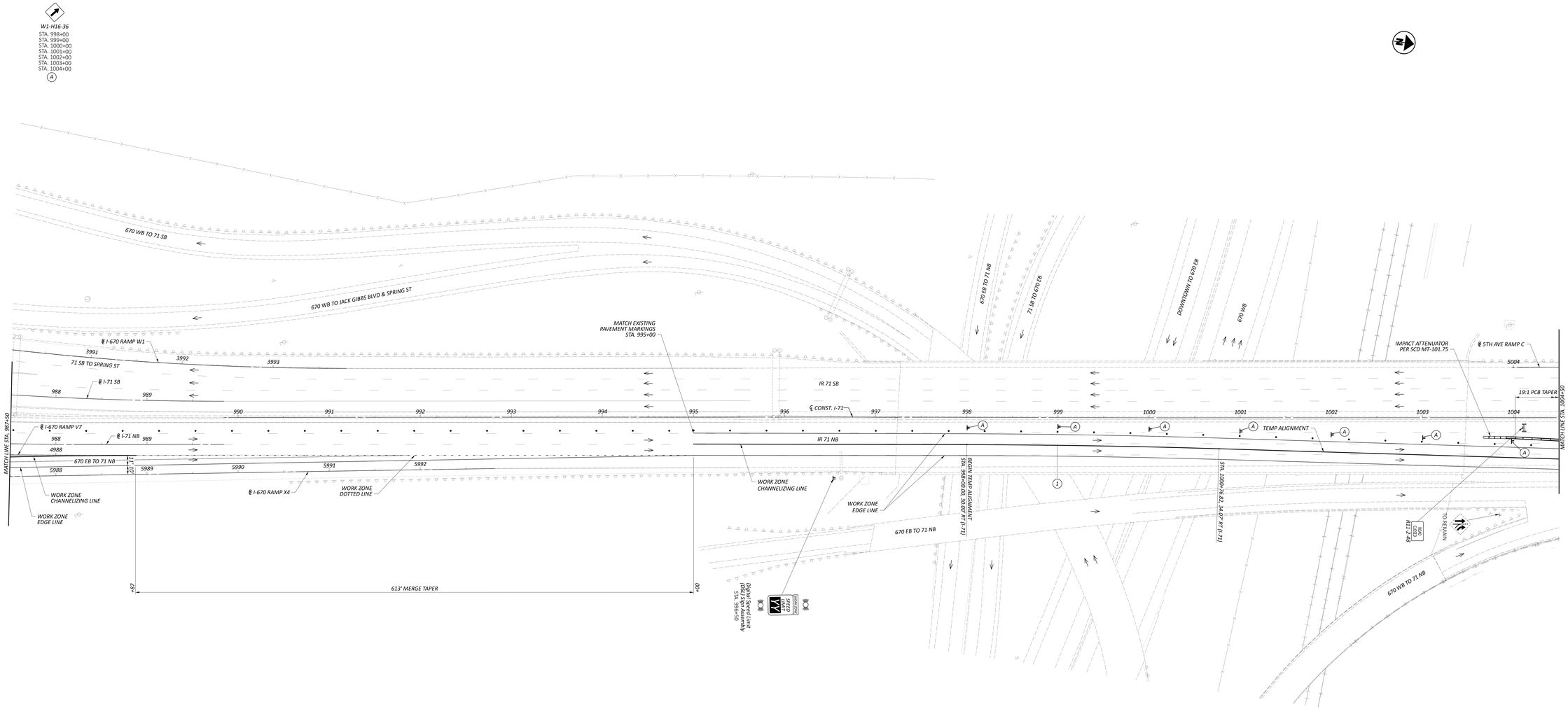

71 SB TO SPRING ST
670 WB TO JACK GIBBS BLVD
670 WB TO SPRING ST
670 WB TO 71 SB
71 SB TO SPRING ST
IR 670 EB
℄ I-71 SB
IR 71 SB
℄ I-71 NB
IR 71 NB
SPRING ST TO 71 NB
SPRING ST TO 670 EB
℄ I-670 RAMP V7
℄ I-670 RAMP X4
670 EB TO 71 NB
MATCH LINE STA. 970+50
MATCH LINE STA. 987+50
WORK ZONE CHANNELIZING LINE
WORK ZONE EDGE LINE
JACK GIBBS BLVD
550' SHIFT TAPER
WORK AHEAD
WORK ZONE AHEAD
WORK ZONE AHEAD
WORK ZONE

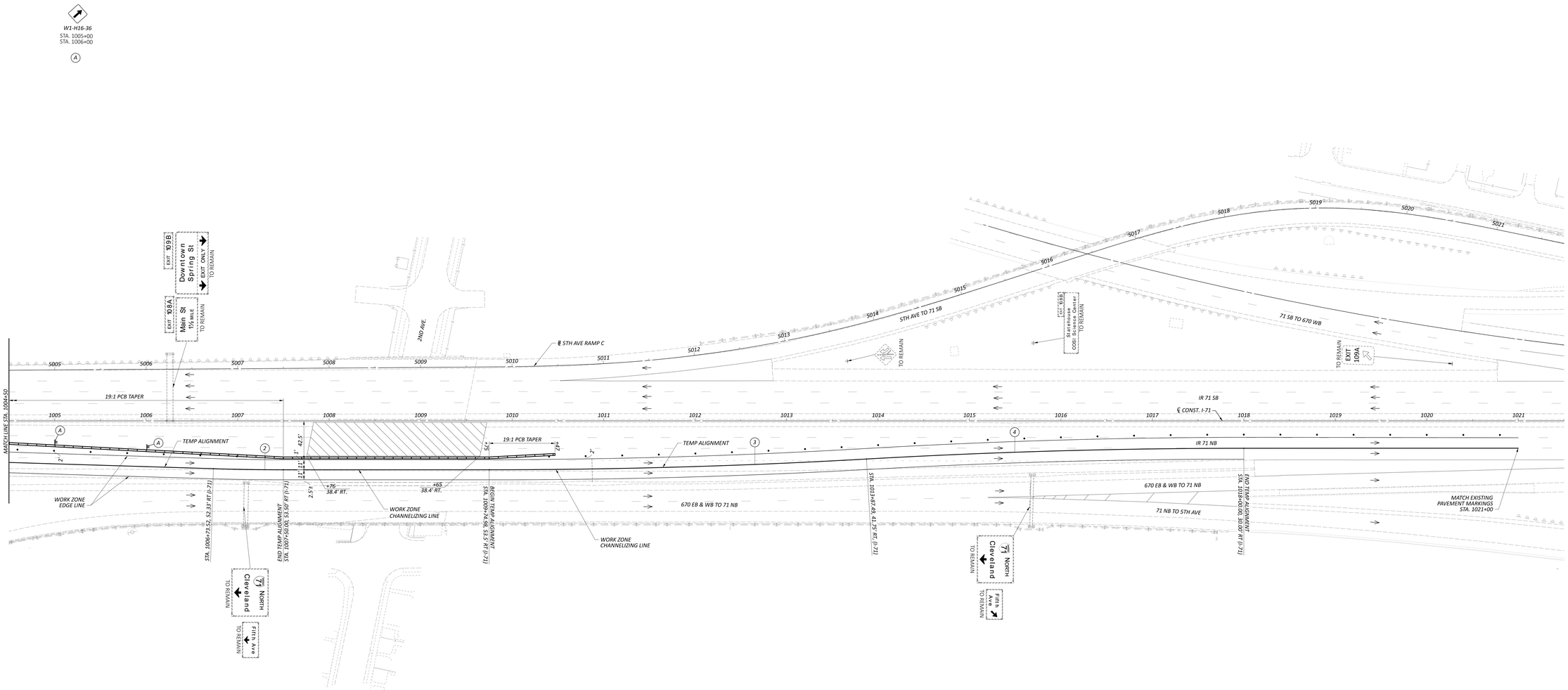


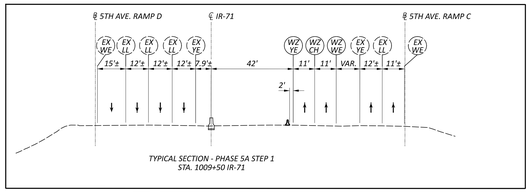
MAINTENANCE OF TRAFFIC - PHASE 5A STEP 1
STA. 987+50.00 TO STA. 1004+50.00

FRA-71-19.10

MODEL: CLV_OT1_MB Plan 3 PAYFIXED: 66x34 in | DATE: 3/12/2026 TIME: 11:12:33 AM | FILEIN: C:\PROJECTS\FRA-71-19.10\ROADWAY\SHEETS\FRA-71-19.10_MOT_PH5A_PENTEL.DWG | PLOTTED: C:\PROJECTS\FRA-71-19.10\ROADWAY\PLOTS\FRA-71-19.10_MOT_PH5A_PENTEL.DWG | PLOT_PH5A | USER: Chris.Lawrence@jacobs.com WORKSPACE: CHIDOTSEXCI WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.166
TOTAL 618





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Dc = 02°17'31"
R = 2,500.00'
T = 38.25'
L = 76.49'
E = .29'

CURVE DATA - 3
Δ = 03°15'47" LT
Dc = 00°47'26"
R = 7,246.91'
T = 206.42'
L = 412.73'
E = 2.94'

CURVE DATA - 4
Δ = 03°15'47" RT
Dc = 00°47'26"
R = 7,246.91'
T = 206.42'
L = 412.73'
E = 2.94'

DRUM SPACING CHART	
TANGENT	80' c/c
TAPER	55' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 5A STEP 1
STA. 1004+50.00 TO STA. 1021+50.00

FRA-71-19.10

DESIGN AGENCY
Jacobs

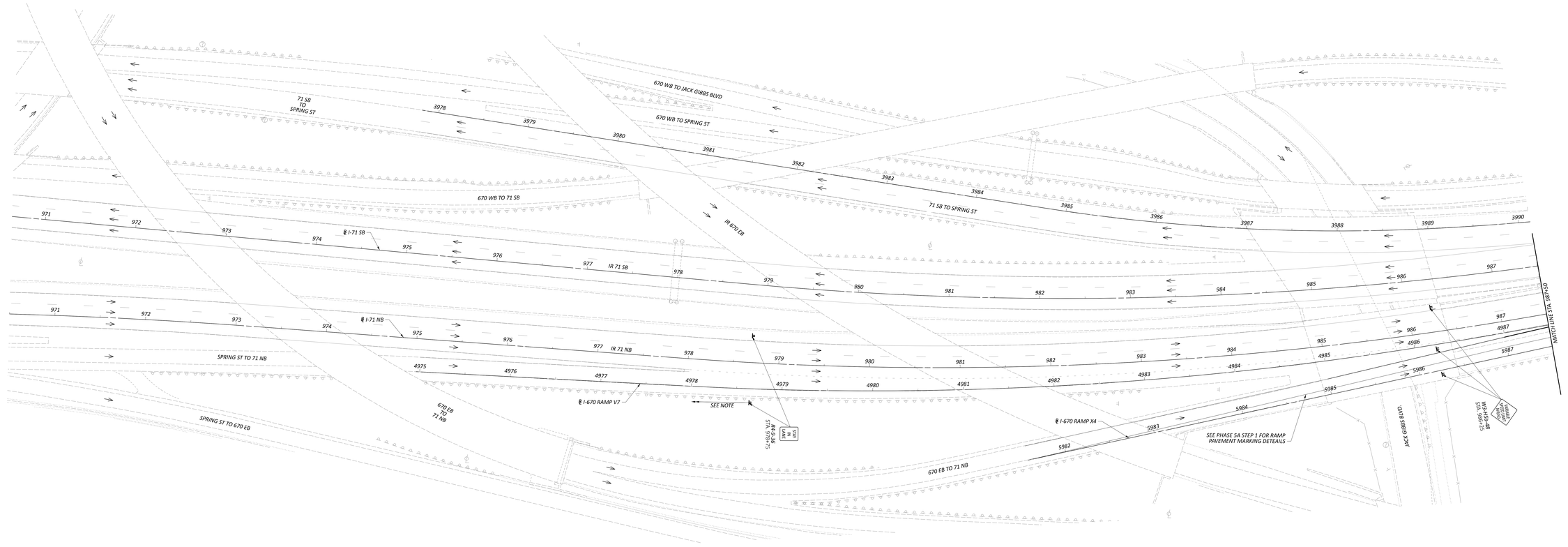
DESIGNER
SRH

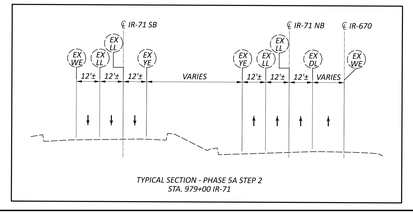
REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.167 TOTAL 618

MODEL: CU_071_NB - Plan # 3WFDSEE1 08/4/19 | DATE: 3/31/2026 TIME: 11:23:33 AM | SYSTEM: DWG97_PKE_5 | xPHB_PENTBL: DWG97_PKE.ctb | USER: Chris.Lawrence@jacobs.com | WORKSPACE: D:\WORKSPACE\ | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL RIGHTS RESERVED. USE PURSUANT TO COMPANY INSTRUCTIONS. THIS FILE AND ITS CONTENTS ARE PROPRIETARY TO BENTLEY SYSTEMS, INCORPORATED.





NOTE: SEE SHEET P.54 FOR PHASE 5A STEP 2 NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	80' c/c
TAPER	55' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

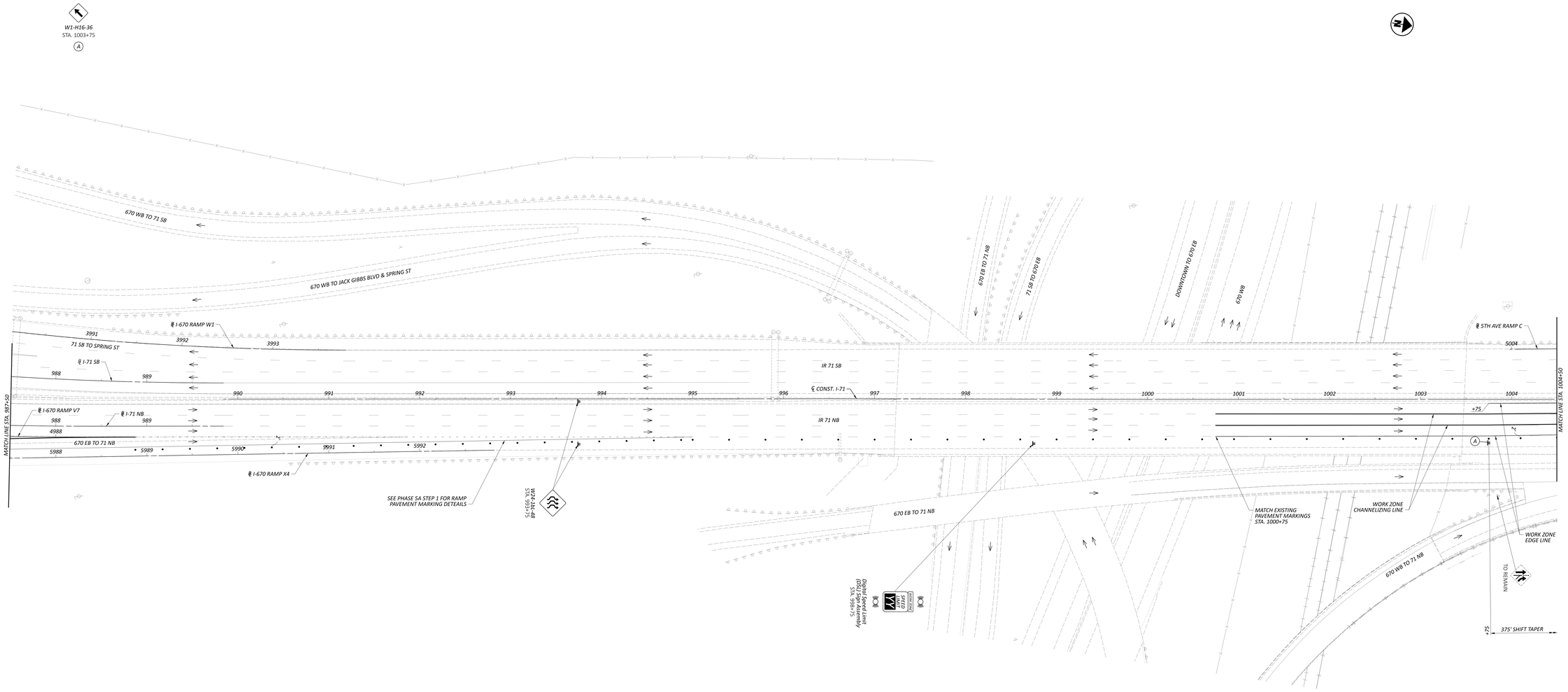
HORIZONTAL SCALE IN FEET
0 15 30 60

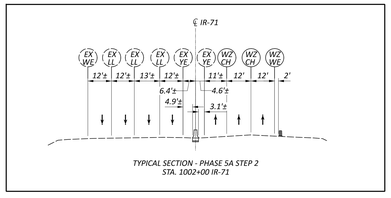
MAINTENANCE OF TRAFFIC - PHASE 5A STEP 2
STA. 970+50.00 TO STA. 987+50.00

FRA-71-19.10

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.168 TOTAL: 618

MODEL: CLV_OT1_MB Plan: 3 PAPERSIZE: 66x34 in | DATE: 3/12/2026 TIME: 11:23:17 AM USERN: DMOOT_PRD FILENAME: C:\DOT_Projects\FRA\71\FRA-71-19.10\Design\Roadway\Sheets\FRA-71-19.10_MOT_Phase 5A Step 2.dgn PENTBL: DMOOT_Pen.tbl CLIENT: ODOT_PRD_V1.pltcfg USERNAME: Shannon.Hamilton@jacobs.com WORKSPACE: OHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 5A STEP 2
STA. 1002+00 IR-71

DRUM SPACING CHART	
TANGENT	80' c/c
TAPER	55' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 5A STEP 2
STA. 987+50.00 TO STA. 1004+50.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.169 TOTAL 618

FRA-71-19.10

MODEL: CLV_OT1_NB - Plan 2 PAPERSIZE: 66x34 in | DATE: 3/12/2026 TIME: 11:55:58 PM | PCTBW: GROUT_PW_F-SHEAL_PATTEL: GROUT_Pen.tbl USER: Chris.Sizemore@jacobs.com WORKSPACE: CHOOUTCIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.03.25
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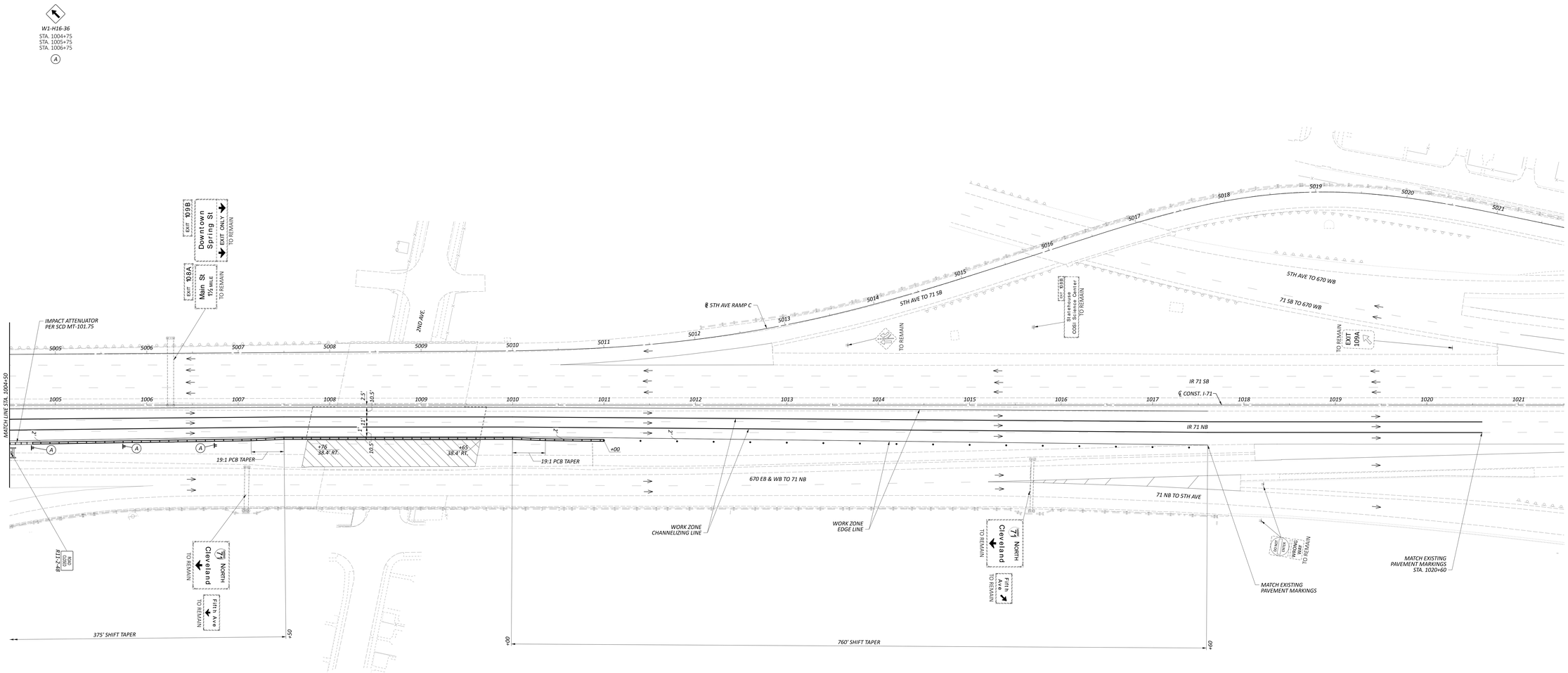

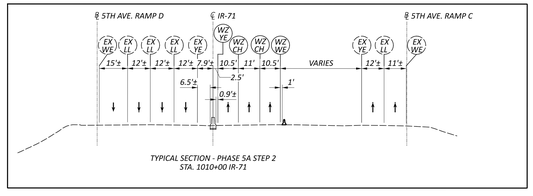

TYPICAL SECTION - PHASE 5A STEP 2
STA. 1010+00 IR-71

DRUM SPACING CHART	
TANGENT	80' c/c
TAPER	55' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 5A STEP 2
STA. 1004+50.00 TO STA. 1021+50.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.170 TOTAL 618

FRA-71-19.10

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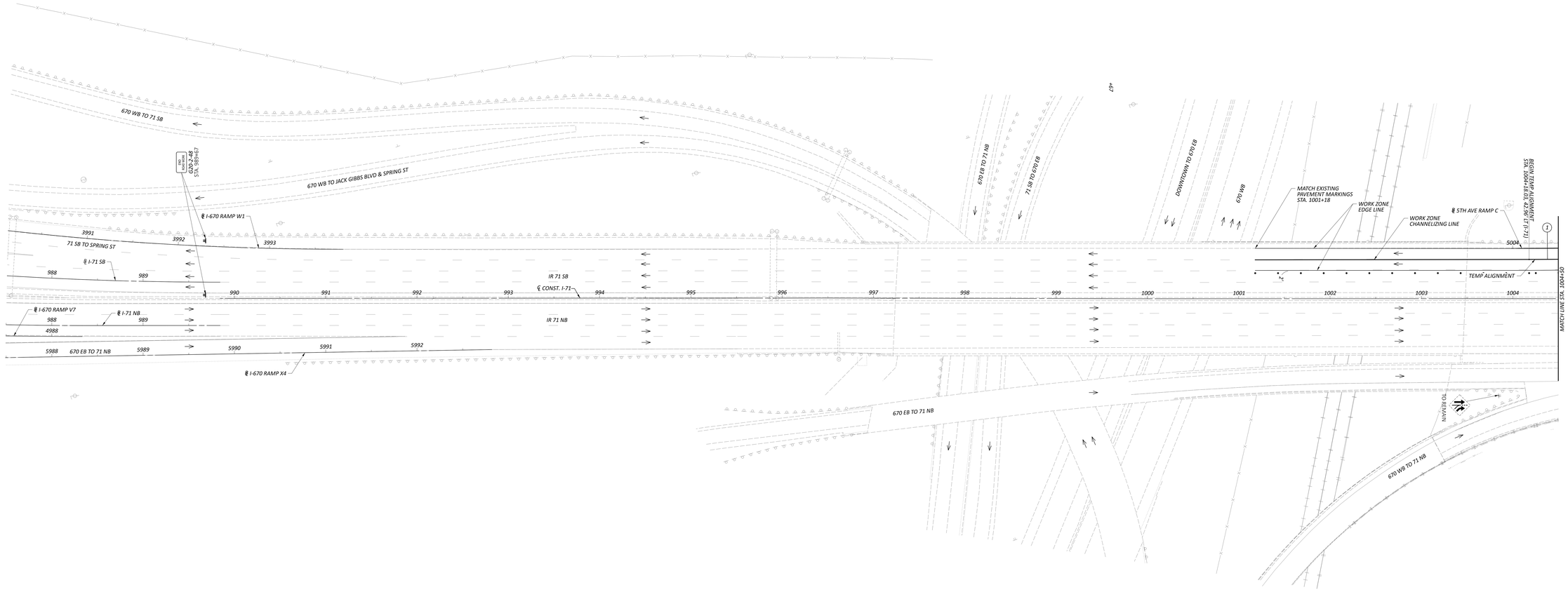
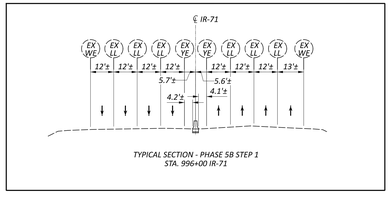




TYPICAL SECTION - PHASE 5B STEP 1
STA. 996+00 IR-71

CURVE DATA - 1
Δ = 03°20'14" LT
Dc = 01°50'00"
R = 3,125.22'
T = 91.04'
L = 182.03'
E = 1.33'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

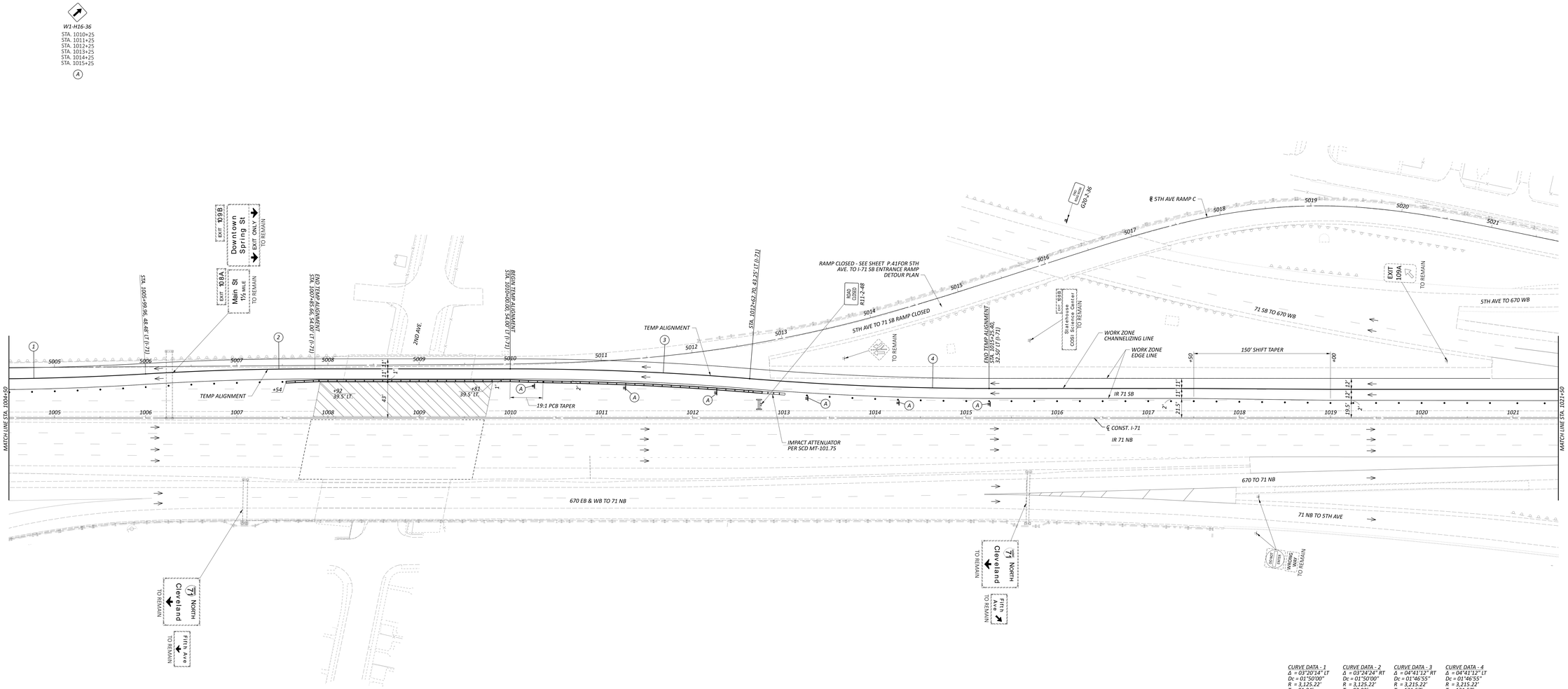
HORIZONTAL SCALE IN FEET
0 15 30 60

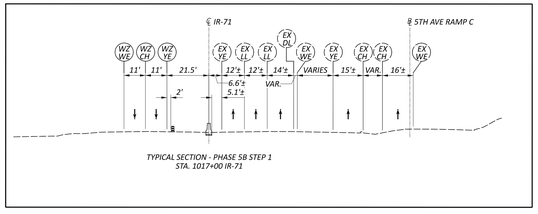
MAINTENANCE OF TRAFFIC - PHASE 5B STEP 1
STA. 987+50.00 TO STA. 1004+50.00

FRA-71-19.10

DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.171
TOTAL: 618

MODEL: C:\DT_MB - Plan 3 PAPERSIZE: 66x34 in | DATE: 3/12/2026 TIME: 11:23:37 AM | FILENAME: C:\DOT_PKG_1-pl\MB_PENTBL: C:\DOT_Pkg\1-pl\MB_Pen.tbl | USER: Chris.Lawrence@jacobs.com WORKSPACE: C:\HIGHWAY_DESIGN_WORKSPACE\ WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





TYPICAL SECTION - PHASE 5B STEP 1
STA. 1017+00 IR-71

CURVE DATA - 1	CURVE DATA - 2	CURVE DATA - 3	CURVE DATA - 4
Δ = 03°20'14" LT	Δ = 03°24'24" RT	Δ = 04°41'12" RT	Δ = 04°41'12" LT
Dc = 01°50'00"	Dc = 01°50'00"	Dc = 01°46'55"	Dc = 01°46'55"
R = 3,125.22'	R = 3,125.22'	R = 3,215.22'	R = 3,215.22'
T = 91.04'	T = 92.93'	T = 131.57'	T = 131.57'
L = 182.03'	L = 185.81'	L = 262.99'	L = 262.99'
E = 1.33'	E = 1.38'	E = 2.69'	E = 2.69'

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 5B STEP 1
STA. 1004+50.00 TO STA. 1021+50.00

DESIGN AGENCY
Jacobs

DESIGNED SRH
REVIEWED BAP 03/20/26
PROJECT ID 109164
SHEET P.172 TOTAL 618

FRA-71-19.10

MODEL: CLV_071_MB - Plan # 3WP03601 (664.84 ft) | DATE: 3/17/2026 TIME: 11:23:42 AM | SYSTEM: DWG97_PKT_H | APHQ6 | PENTBL: DWG97_Pen.tbl | USR: Chris.Lawrence@jacobs.com WORKSPACE: DWG97DEVKIT WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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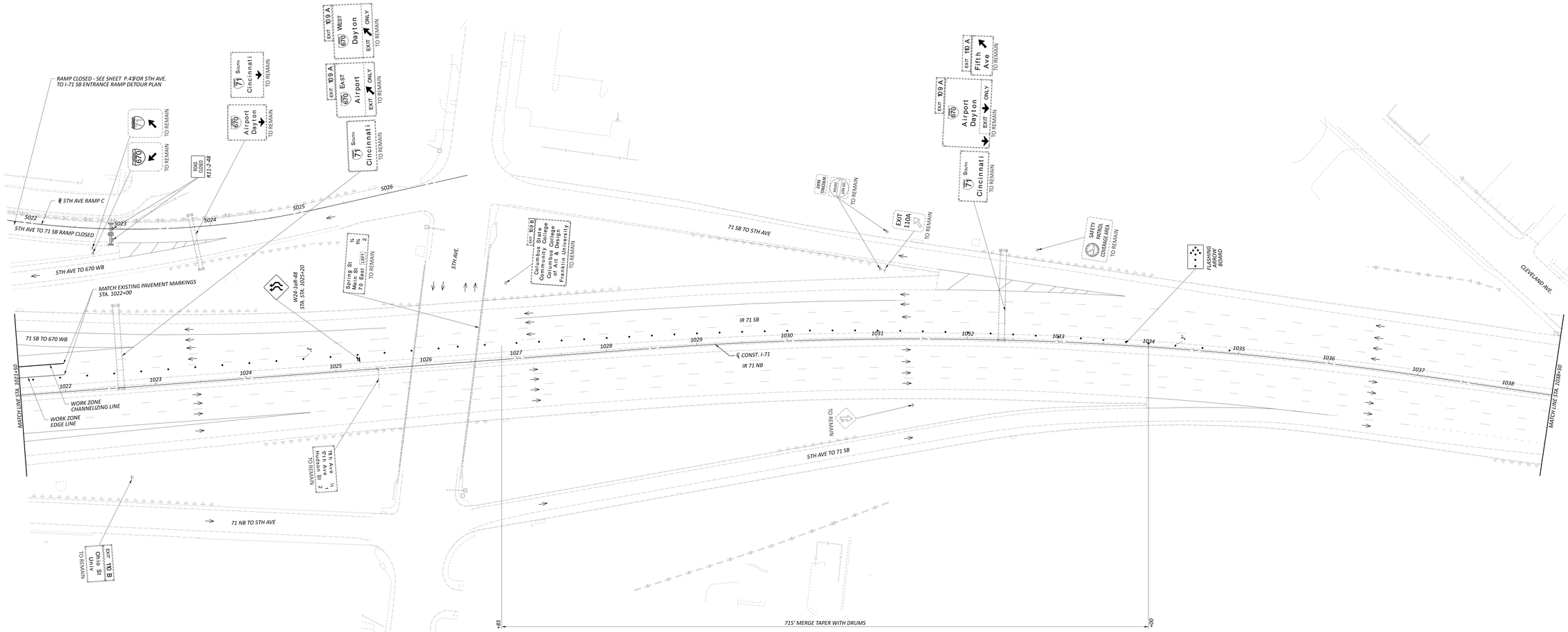
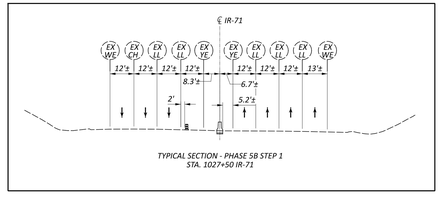




TYPICAL SECTION - PHASE 5B STEP 1
STA. 1027+50 IR-71

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

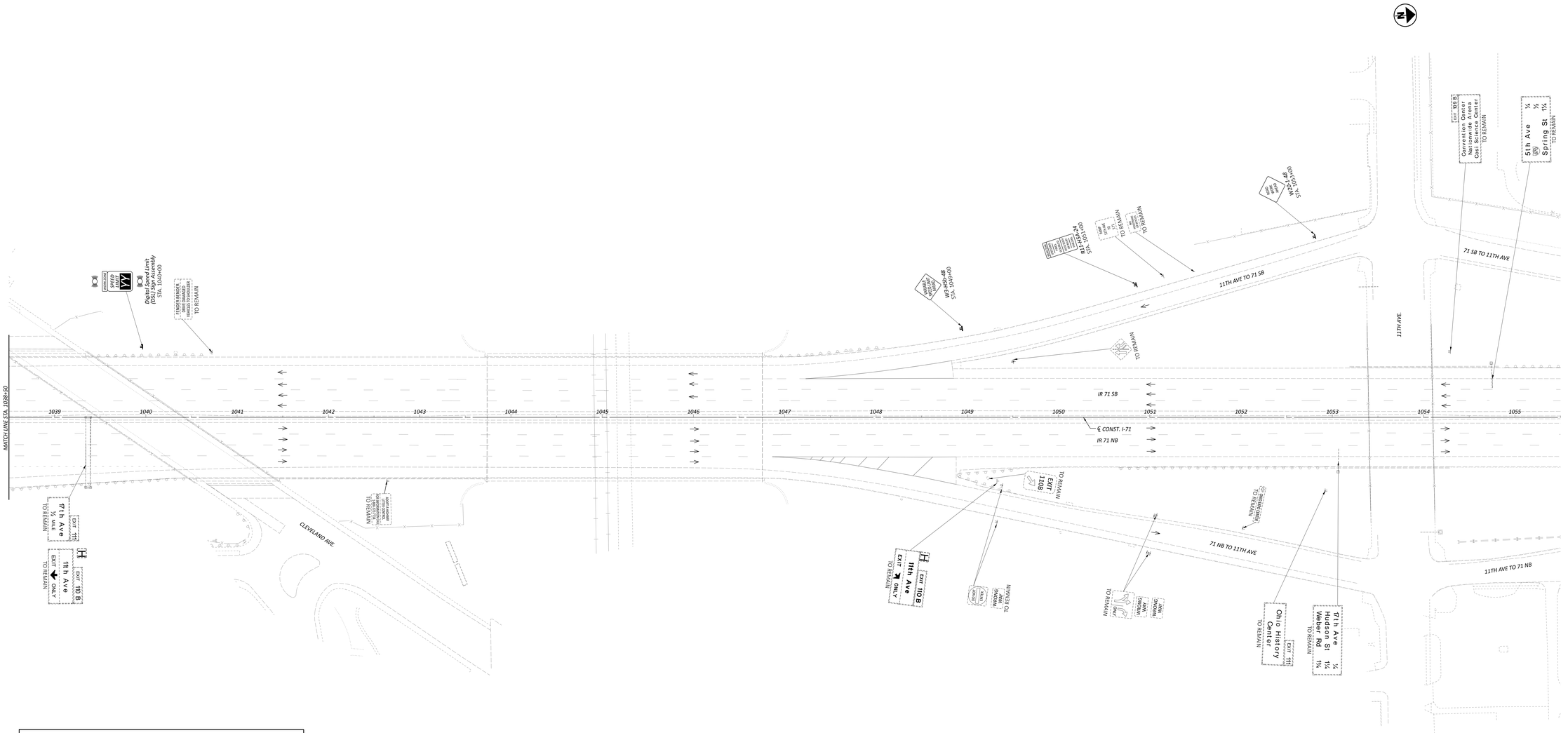
MAINTENANCE OF TRAFFIC - PHASE 5B STEP 1
STA. 1021+50.00 TO STA. 1038+50.00

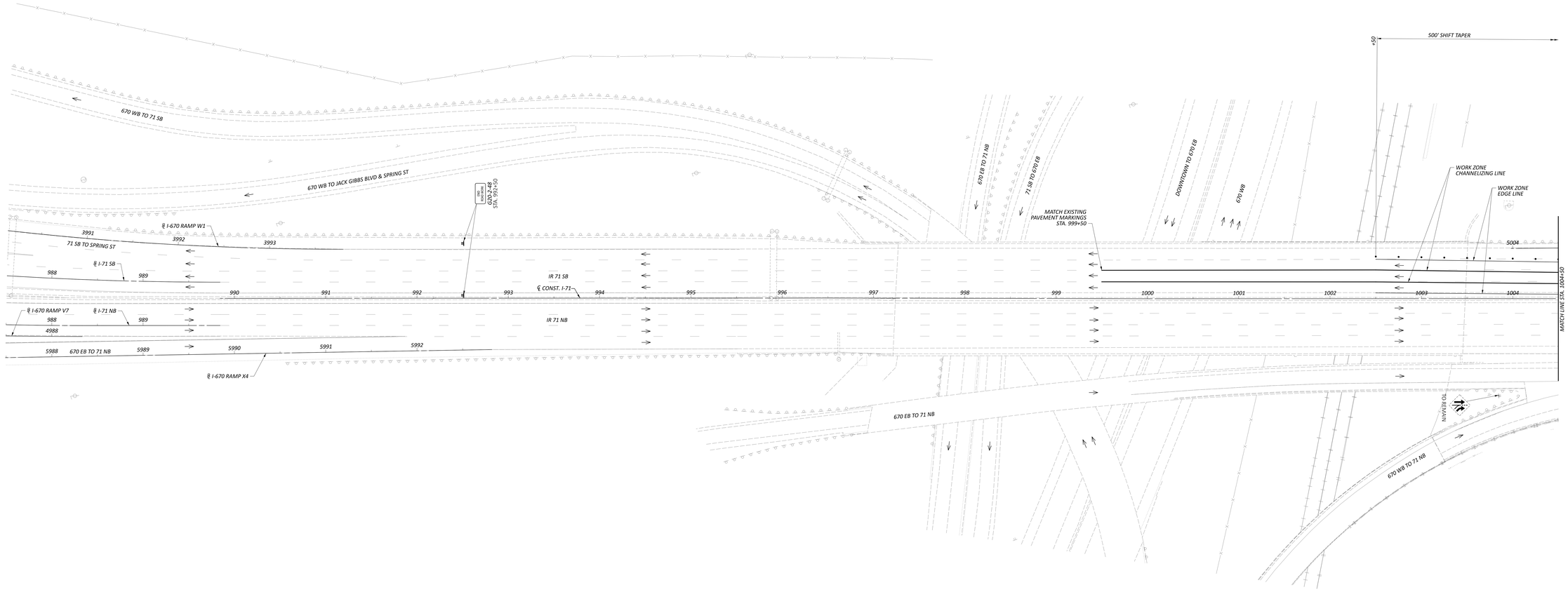
DESIGN AGENCY
Jacobs

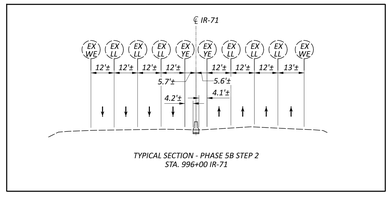
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.173 TOTAL: 618

FRA-71-19.10

MODEL: CLV_DT1_MB Plan:5 XREFSIZE: 66x34 in | DATE: 3/12/2026 TIME: 11:23:43 AM SYSTEM: ON DGN: DGN_PRE_5 xPHA: PENTBL: ON DGN: DGN_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadDesigner 24.00.02.25
DO NOT USE PRINTED COPIES OF ELECTRONIC FILES | ALL PRINTED COPIES ARE UNCONTROLLED | FOR CURRENT INFORMATION, REFER TO ODOT'S MANUAL OF ELECTRONIC PROJECT DELIVERY


MATCH LINE STA. 1038+50
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
IR 71 SB
℄ CONST. I-71
IR 71 NB
11TH AVE. TO 71 SB
71 SB TO 11TH AVE
11TH AVE TO 71 NB
71 NB TO 11TH AVE
CLEVELAND AVE.
11th Ave
EXIT ONLY
EXIT 110B
EXIT 110
EXIT 109B
EXIT 109
TO REMAIN
TO REMAIN
TO REMAIN





TYPICAL SECTION - PHASE 5B STEP 2
STA. 996+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

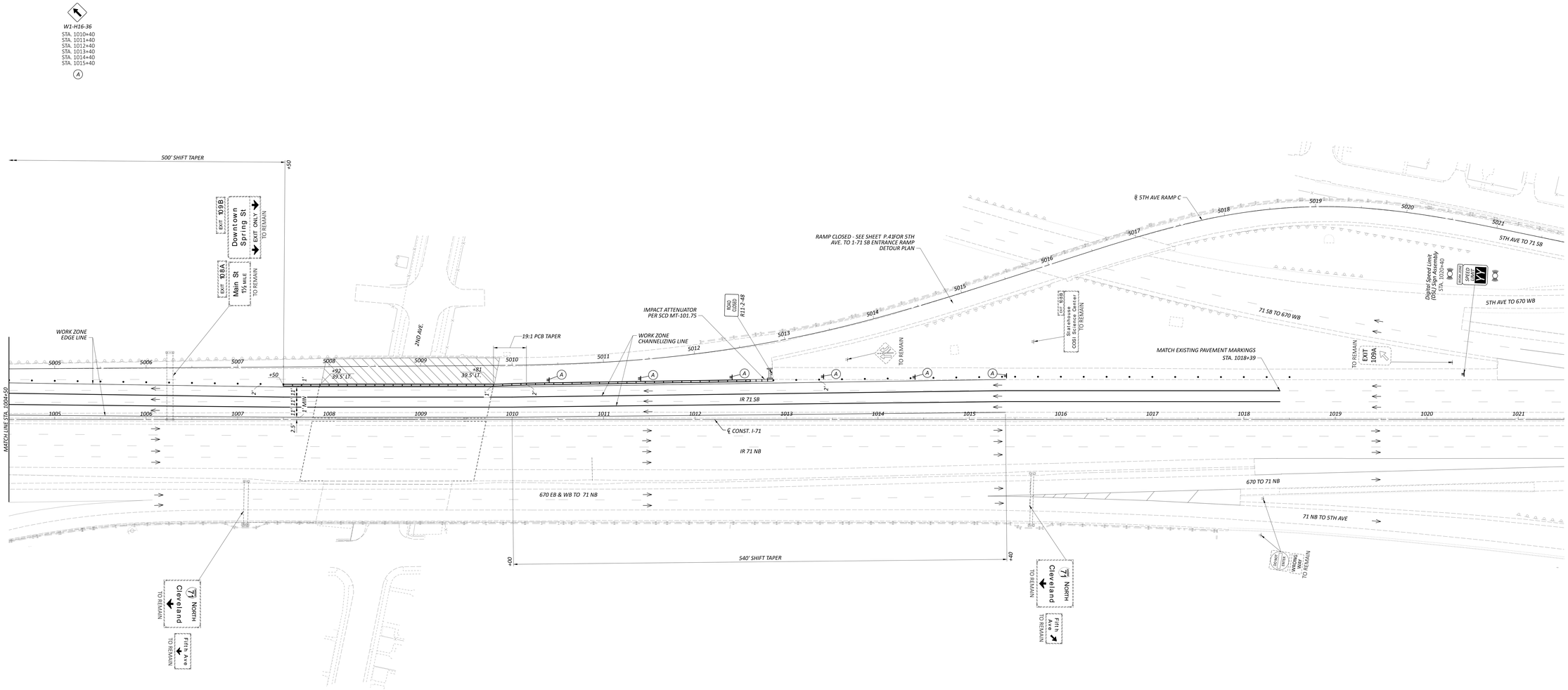
MAINTENANCE OF TRAFFIC - PHASE 5B STEP 2
STA. 987+50.00 TO STA. 1004+50.00

DESIGN AGENCY: Jacobs

DESIGNER	SRH
REVIEWER	BAP 03/20/26
PROJECT ID	109164
SHEET	P.175
TOTAL	618

FRA-71-19.10

MODEL: CLV_OTI_MB Plot: 1:1 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:13:59 AM EDITING CHKOPT_PSF_1=Locks PENTBL: CHKOPT_PSF_1=Locks PENTBL: CHKOPT_PSF_1=Locks USER: Chris.Lawrence@jacobs.com WORKSPACE: CHKOPTDGN02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE PLAN REFERENCE ATTACHMENTS: PLAN SET: E:\CADD\Projects\109164\Design\Roadway\Sheets\Maintenance of Traffic\FRA-71-19.10_MOT_Phase 5B Step 2.dgn



NOTE: SEE SHEET P.63 FOR PHASE 5B STEP 2 5B ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

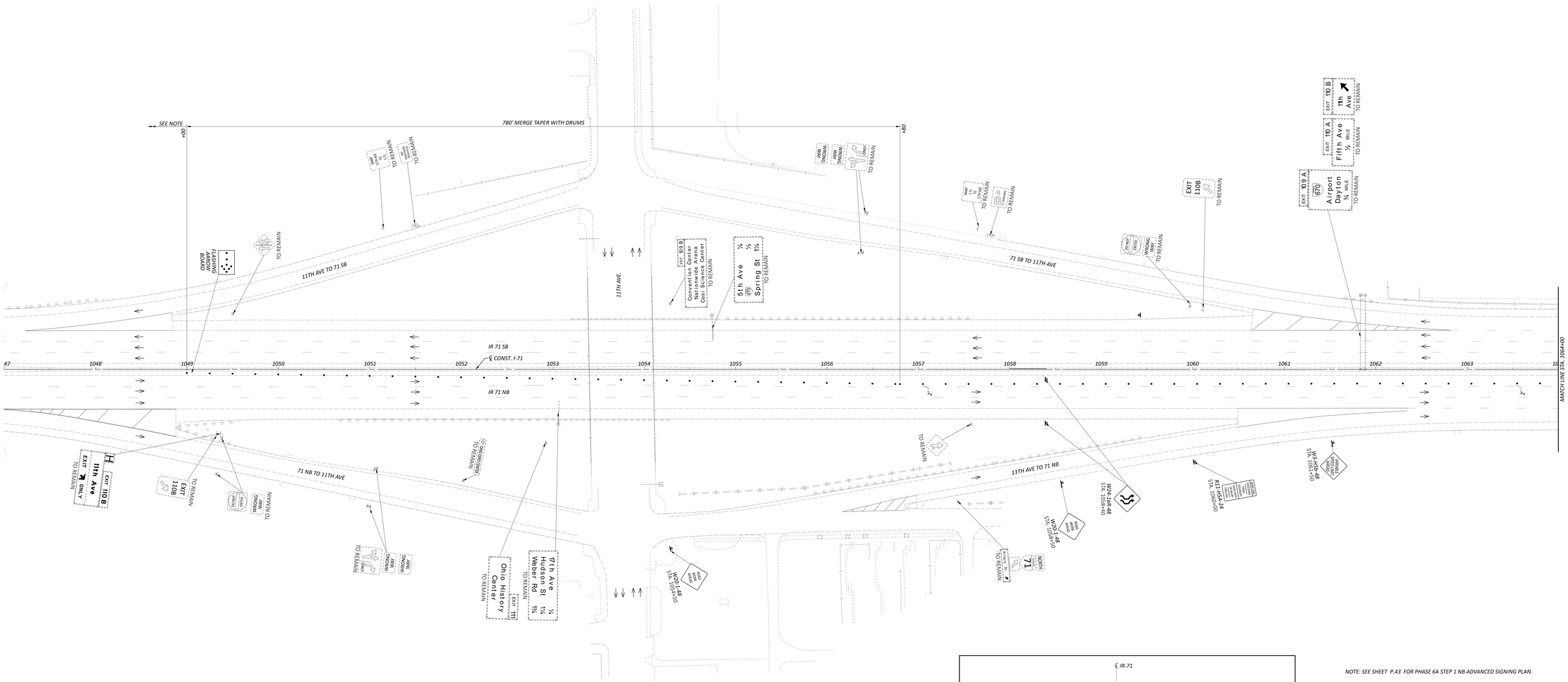
MAINTENANCE OF TRAFFIC - PHASE 5 STEP 2
STA. 1004+50.00 TO STA. 1021+50.00

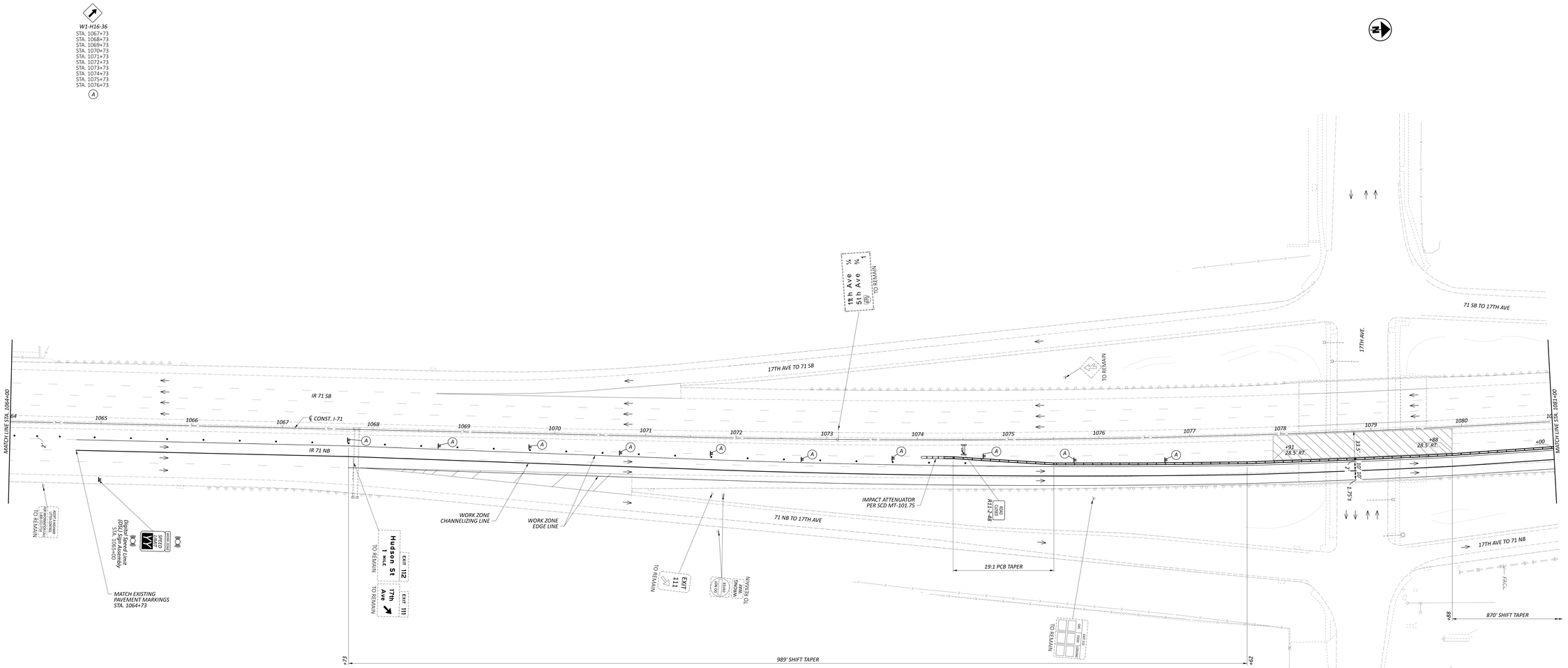
DESIGN AGENCY
Jacobs

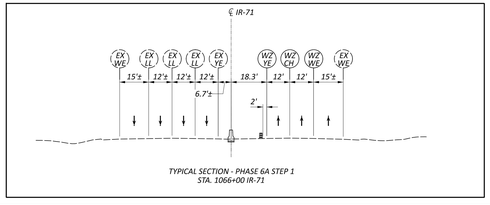
DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.176 TOTAL 618

FRA-71-19.10

MODEL: CLV_071_MI - Plan 4.1 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:13:05 AM XREFRV: CHKOPT_PSF_1=1.pltcfg, PENTBL: CHKOPT_PSF_1=1.pltcfg, PENTBL: CHKOPT_PSF_1=1.pltcfg, PENTBL


SEE NOTE
40'
780' MERGE TAPER WITH DRUMS
+80
11TH AVE TO 71 SB
11TH AVE.
71 SB TO 11TH AVE
IR 71 SB
℄ CONST. I-71
IR 71 NB
71 NB TO 11TH AVE
11TH AVE TO 71 NB
MATCH LINE STA. 1064+00
47
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
EXIT 110 B
Convention Center
Nationwide Arena
Cost Science Center
TO REMAIN
EXIT 109 B
5th Ave
Spring St
TO REMAIN
EXIT 110 B
11th Ave
TO REMAIN
EXIT 110 A
Fifth Ave
½ MILE
TO REMAIN
EXIT 109 A
670
Airport
Dayton
3 MILES
TO REMAIN
EXIT 110B
TO REMAIN
EXIT 110B
11th Ave
ONLY
TO REMAIN
EXIT 110B
TO REMAIN
EXIT 111
Ohio History
Center
TO REMAIN
EXIT 111
11th Ave
Hudson St
Weber Rd
TO REMAIN
WB 71
NORTH
TO REMAIN
WB 71
SOUTH
TO REMAIN
WB 71
TO REMAIN
WB 71
TO REMAIN
WB 71





DRUM SPACING CHART	
TANGENT	120'-c/c
TAPER	60'-c/c
RAMP DELINEATION	20'-c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6A STEP 1
STA. 1064+00.00 TO STA. 1081+00.00

DESIGN AGENCY
Jacobs

DESIGNED SRH
REVIEWED BAP 03/20/26
PROJECT ID 109164
SHEET P.178 TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Plan 2 PAPERSIZE: ISO A3 (+) DATE: 3/31/2026 TIME: 11:13:24 AM FSTORY: CHSOT_PDF_U-LARGE_FSTITEL: CHSOT_Plan.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOTCIVD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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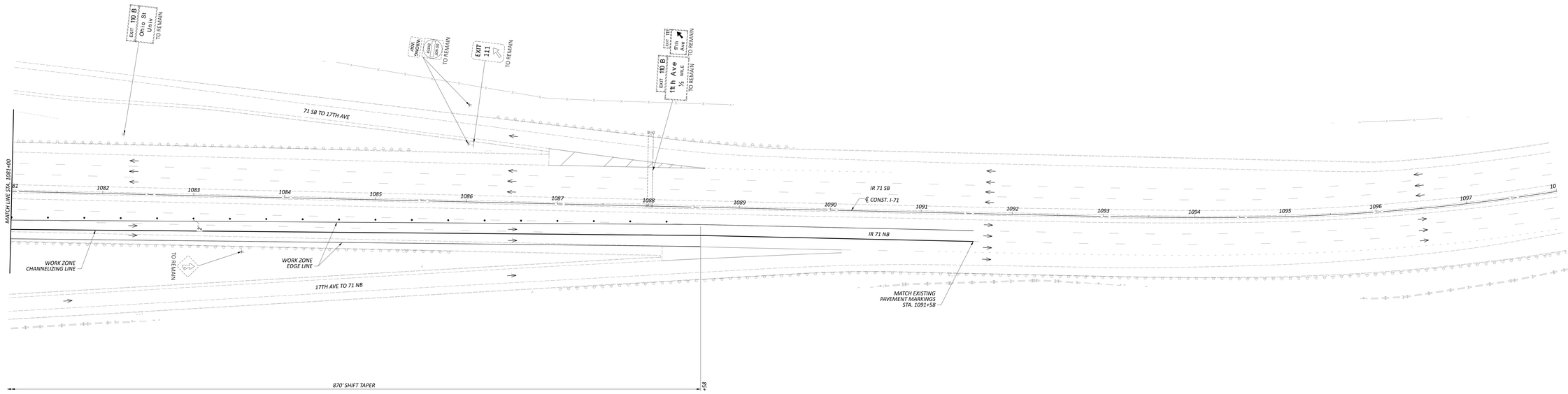

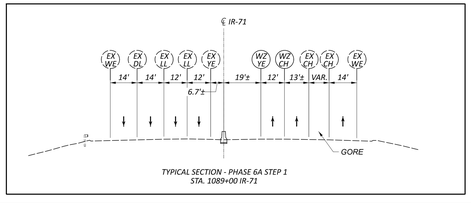

TYPICAL SECTION - PHASE 6A STEP 1
STA. 1089+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6A STEP 1
STA. 1081+00.00 TO STA. 1098+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.179 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Plan | PAINTSIZE: 36x24in | DATE: 3/31/2026 TIME: 11:13:15 AM FITDIM: ONEOFF_PDF_FI-LatSQ_FITSTYL: ONEOFF_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHICOTTLV02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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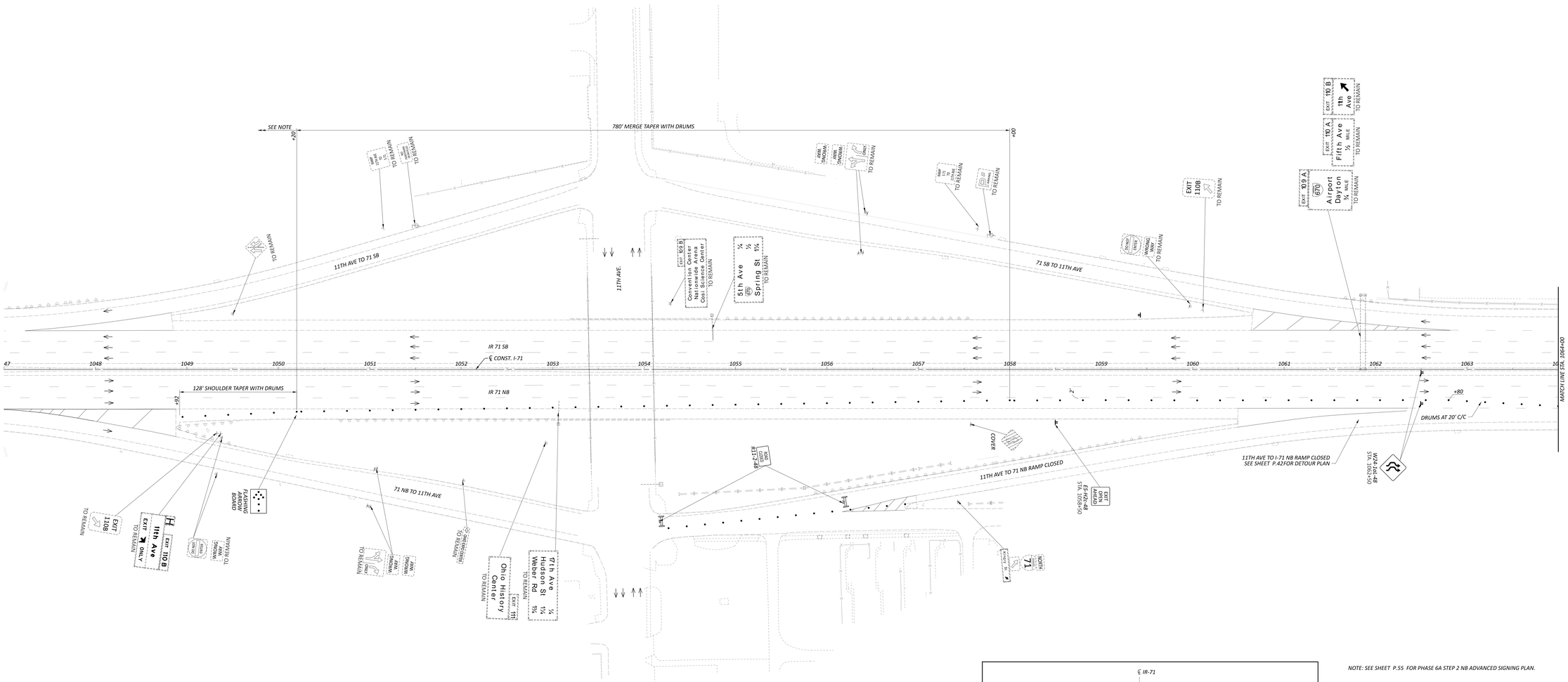

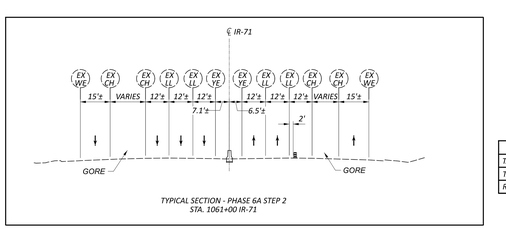

TYPICAL SECTION - PHASE 6A STEP 2
STA. 1061+00 IR-71

NOTE: SEE SHEET P.5S FOR PHASE 6A STEP 2 NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6A STEP 2
STA. 1047+00.00 TO STA. 1064+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.180 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Plan | RWYMODEL: FRA-71-19.10 | DATE: 3/31/2026 TIME: 11:13:43 AM FEATURE_ON:OFF_OFF_P-LAYER_PSHTEL_ON:OFF_OFF_P-LAYER_PSHTEL_ON:OFF | USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Ohio\FRA\71-19.10\Design\Roadway\Plan and Profile\Maintenance of Traffic\Phase 6A\FRA-71-19.10_MOT_PH6A_STEP2.dgn

FRA-71-19.10

MODEL: CU_071 - Plot 2 PAPERSIZE: ISO A1 (841.0 x 594.0 mm) DATE: 3/31/2026 TIME: 11:13:49 AM FSTORY: CHSOT_PDF_U-LARGE_PENTBL: CHSOT_Pen.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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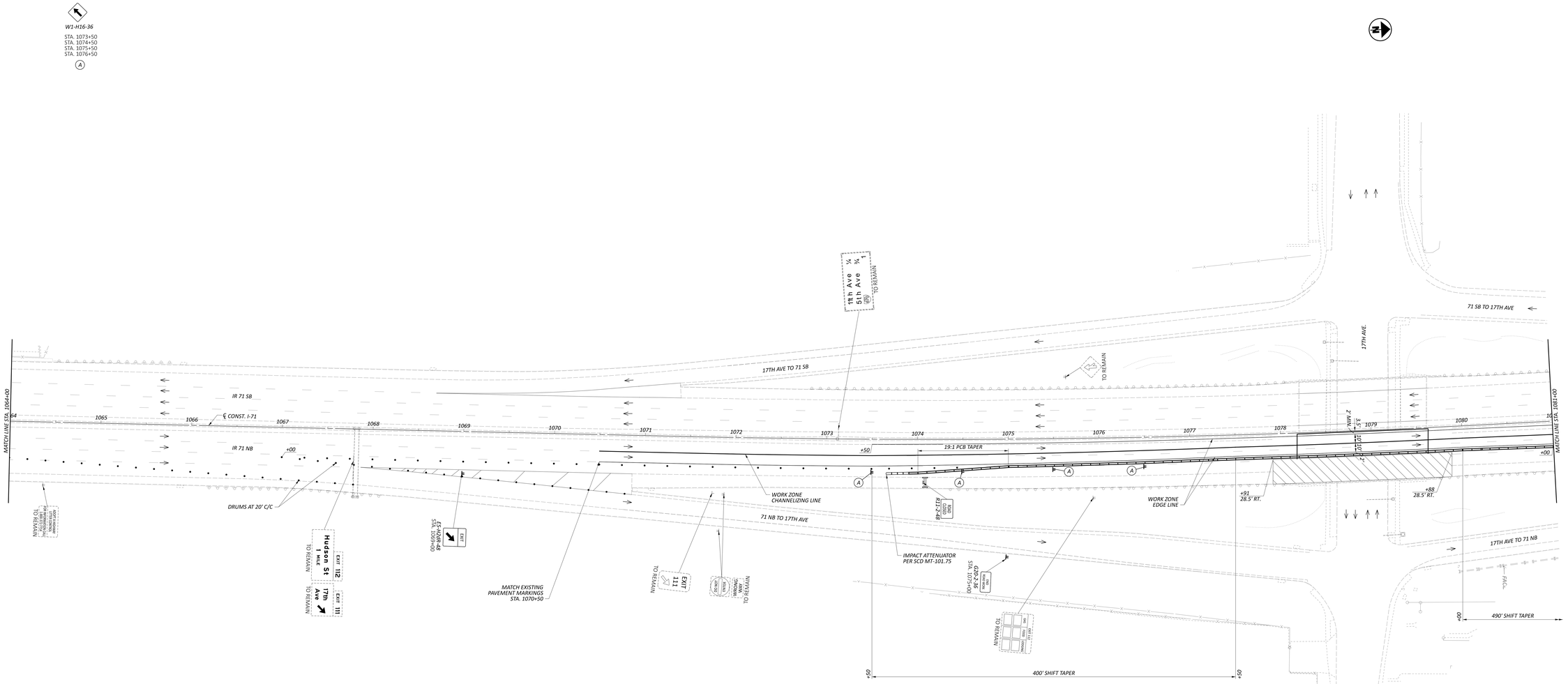
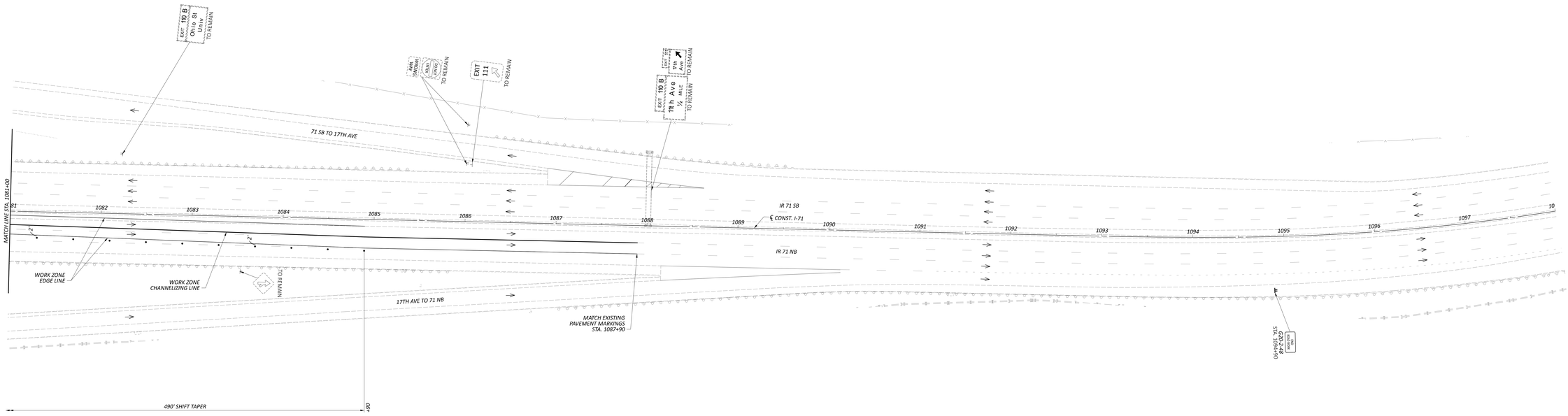
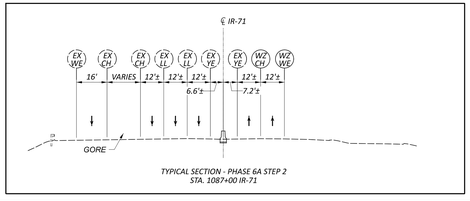

W1-H16-36
STA. 1073+50
STA. 1074+50
STA. 1075+50
STA. 1076+50
MATCH LINE STA. 1064+00
MATCH LINE STA. 1081+00
IR 71 SB
℄ CONST. I-71
IR 71 NB
17TH AVE TO 71 SB
71 NB TO 17TH AVE
71 SB TO 17TH AVE
17TH AVE TO 71 NB
17TH AVE.
11th Ave
51th Ave
TO REMAIN
19:1 PCB TAPER
WORK ZONE CHANNELIZING LINE
WORK ZONE EDGE LINE
DRUMS AT 20' C/C
IMPACT ATTENUATOR PER SCD MT-101.75
MATCH EXISTING PAVEMENT MARKINGS STA. 1070+50
400' SHIFT TAPER
490' SHIFT TAPER
+91 28.5' RT.
+88 28.5' RT.
Hudson St
EXIT 112
17th Ave
EXIT 111
EXIT 111
TO REMAIN
TO REMAIN
TO REMAIN





DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6A STEP 2
STA. 1081+00.00 TO STA. 1098+00.00

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.182
TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Plan | PAYSHEETS: 60x24 in | SHEET: 3/31/2026 TIME: 11:11:55 AM FSTORY: CHSOT_PDF_U = pltSB_FSHTEL: CHSOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHSOTTEXAS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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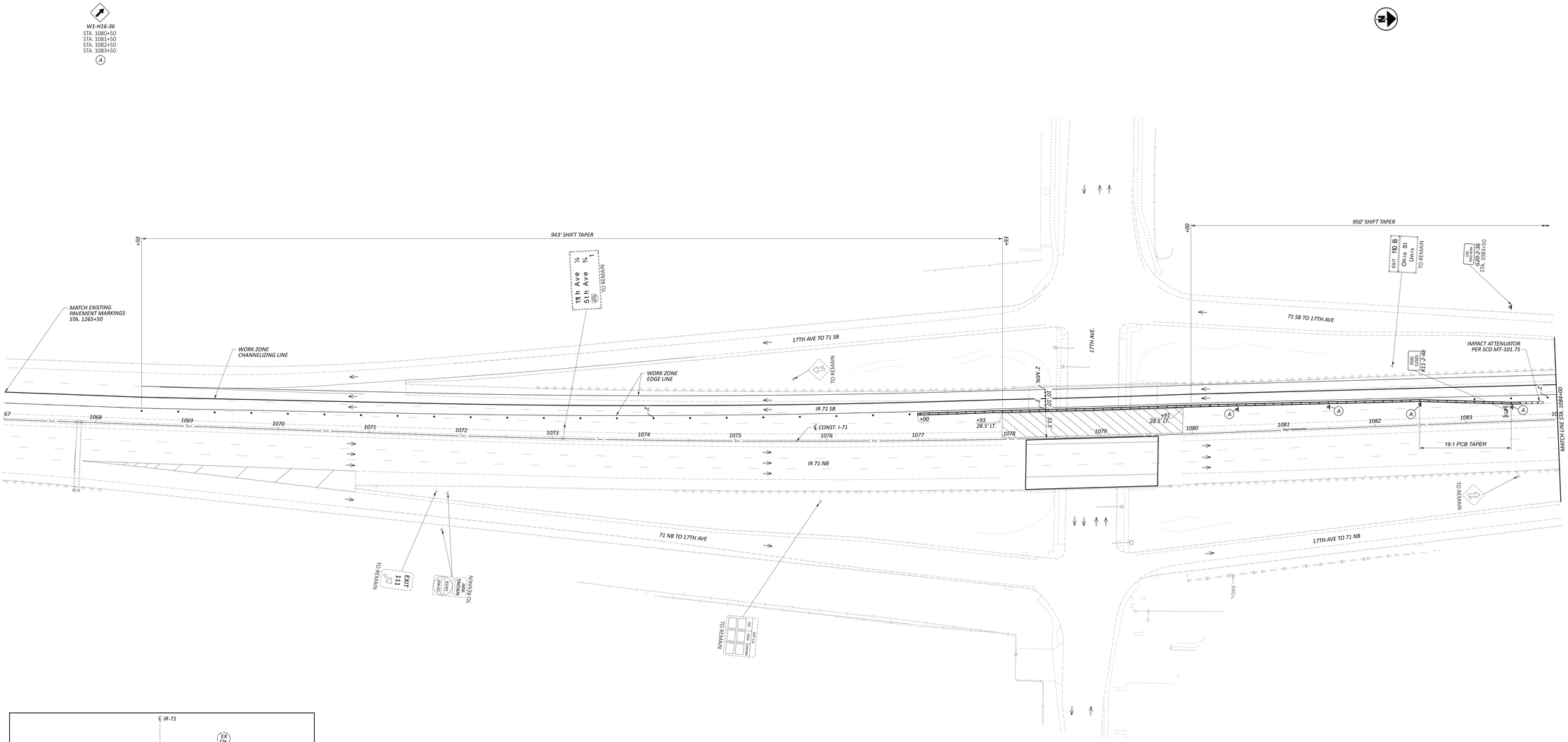

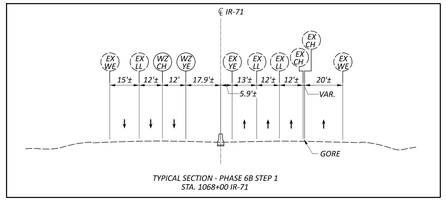

TYPICAL SECTION - PHASE 6B STEP 1
STA. 1068+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6B STEP 1
STA. 1067+00.00 TO 1084+00.00

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET
P.183

TOTAL
618

FRA-71-19.10

MODEL: Phase 6B Step 1 - Sheet 1 MARKER: 66x48 (in.) DATE: 3/17/2026 TIME: 11:14:13 AM PLOTBY: CHHOFF PSF: 24 plotSg PENTBL: CHHOFF_Penn50 USER: Chris.Lawrence@jacobs.com WORKSPACE: CHHOFF/CAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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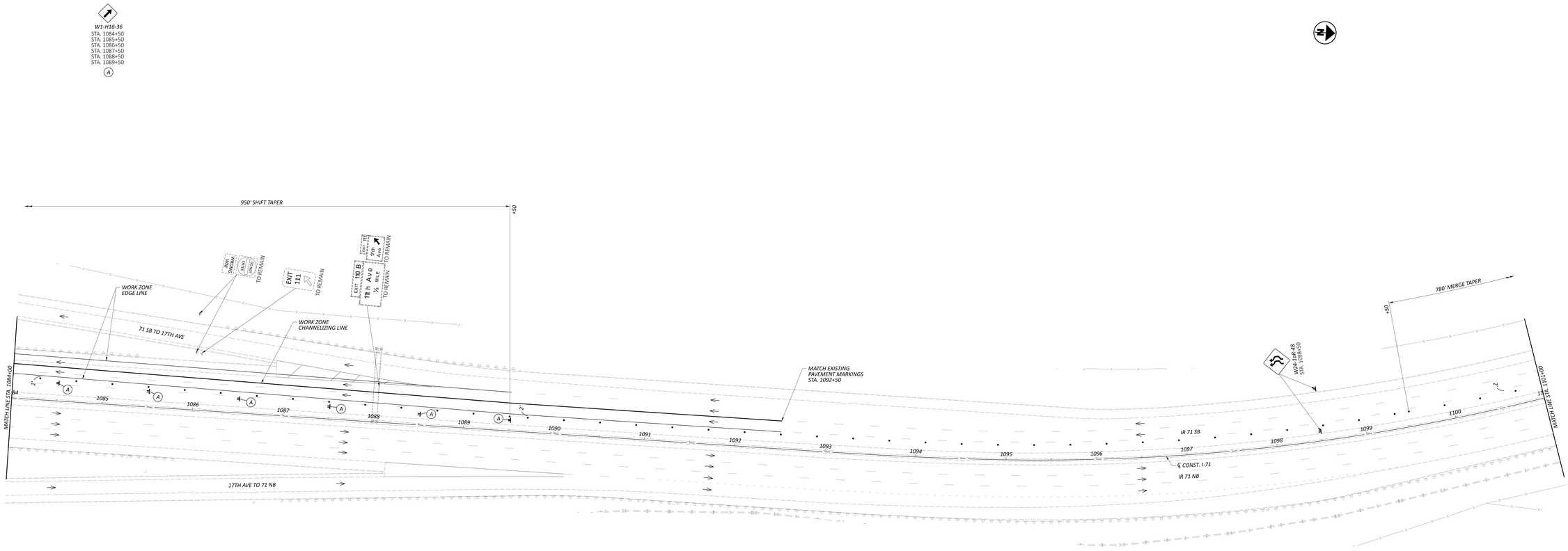

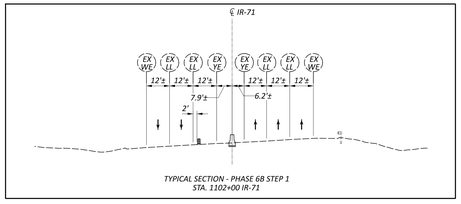

TYPICAL SECTION - PHASE 6B STEP 1
STA. 1102+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6B STEP 1
STA. 1084+00.00 TO STA. 1101+00.00

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.184
TOTAL: 618

FRA-71-19.10

MODEL: Phase 6B Step 1 - Sheet 2 MARKER: 66x48 (in.) UNIT: 3/1/2026 TIME: 11:14:17 AM PITSPA ON/OFF: ZPP_P_1.shtg PENTBL ON/OFF: Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ON/OFF/CKVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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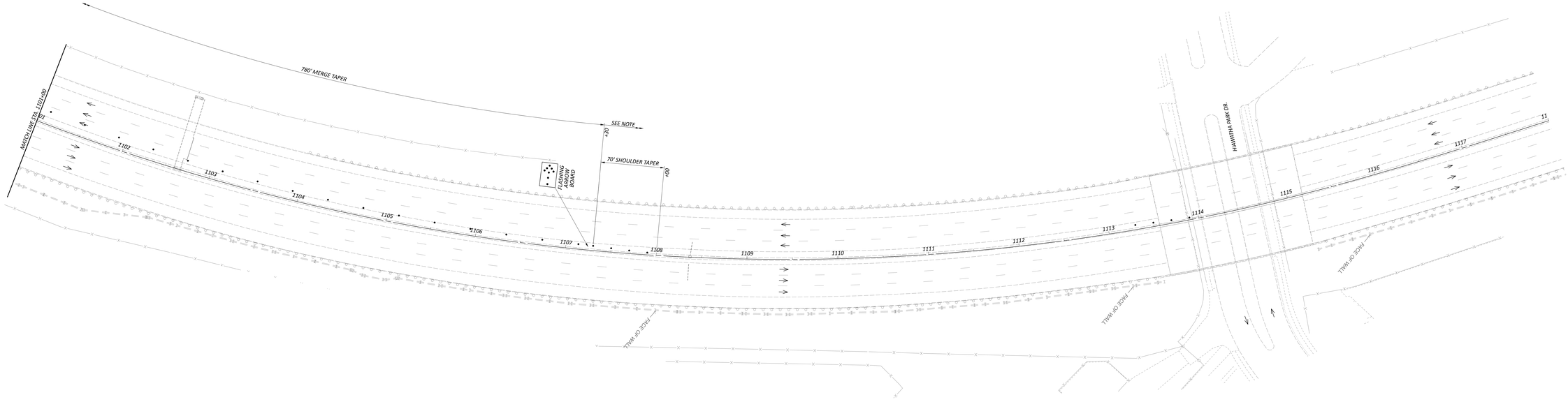

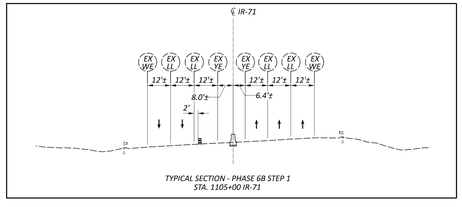

TYPICAL SECTION - PHASE 6B STEP 1
STA. 1105+00 IR-71

NOTE: SEE SHEET P.64 FOR PHASE 6B STEP 1 SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6B STEP 1
STA. 1101+00.00 TO STA. 1118+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.185 TOTAL: 618

FRA-71-19.10

MODEL: Phase 6B Step 1 - Sheet 9 MAINFILE: 66x48.tbl DATE: 3/11/2026 TIME: 11:14:18 AM PLTDRV: DWGDIF.PSF_P-A.pltcfg PENTBL: DWGDIF_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTCKAS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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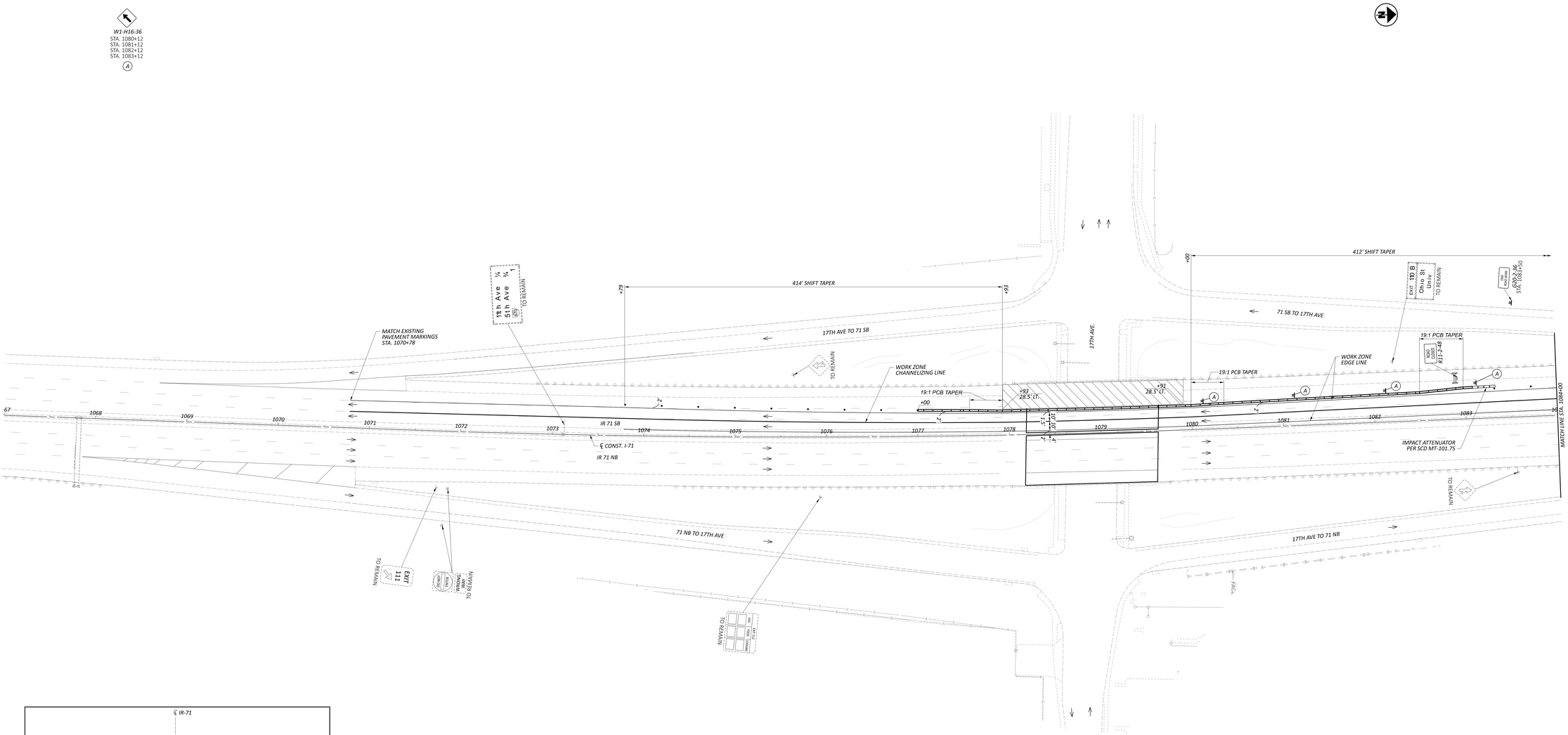
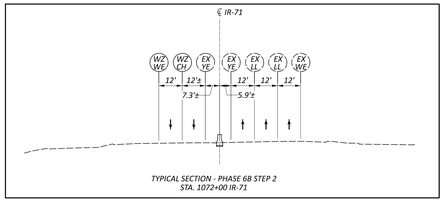




TYPICAL SECTION - PHASE 6B STEP 2
STA. 1072+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

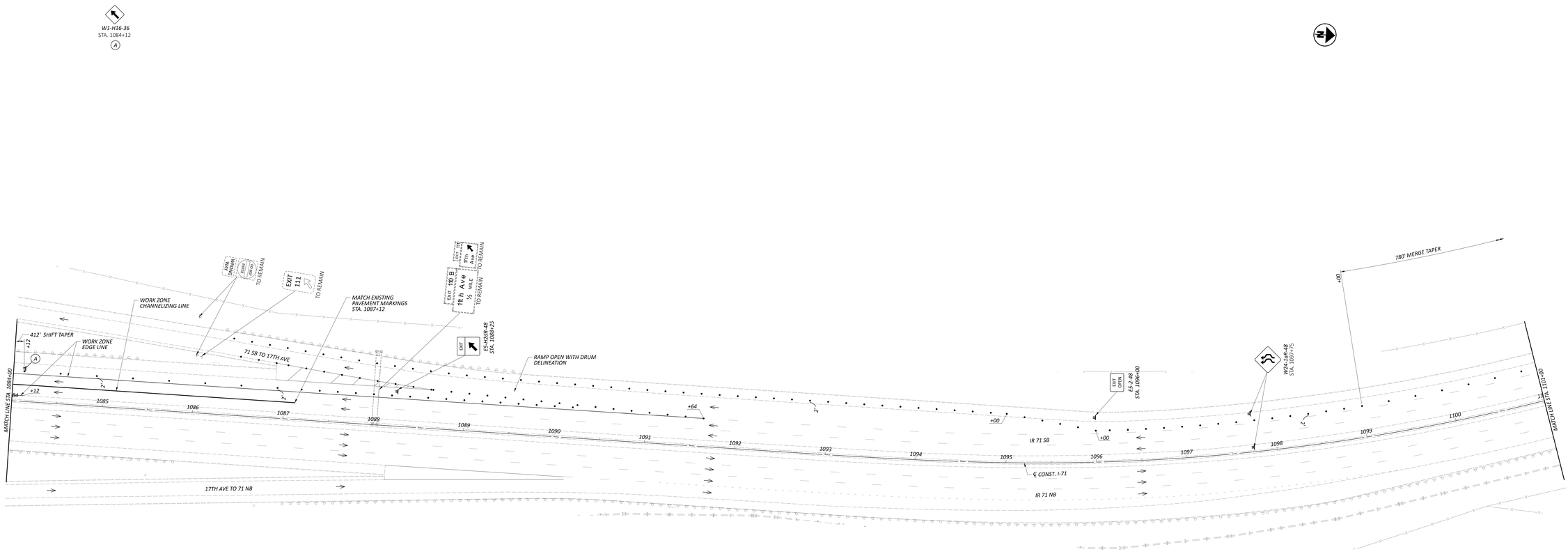
HORIZONTAL SCALE IN FEET
0 15 30 60

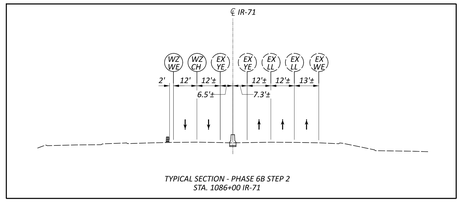
MAINTENANCE OF TRAFFIC - PHASE 6B STEP 2
STA. 1067+00.00 TO STA. 1084+00.00

FRA-71-19.10

MODEL: Phase 6B Step 2 - Sheet 1 MARKER: 66x44 (in.) DATE: 3/11/2026 TIME: 11:14:53 AM PETERS DROOPT_ZPP_F.ipmlg PENTEL DROOPT_Pen.ctb USER: Chris.Lawrence@jacobs.com WORKSPACE: DROOTCK65 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE FILE: P:\Projects\Ohio\Franklin\FRA-71-19.10\Design\Roadway\Plan Sheets\FRA-71-19.10 MOT Phase 6B Step 2.dgn

DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.186 TOTAL 618





TYPICAL SECTION - PHASE 6B STEP 2
STA. 1086+00 IR-71

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6B STEP 2
STA. 1084+00.00 TO STA. 1101+00.00

DESIGN AGENCY: Jacobs
DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.187
TOTAL: 618

FRA-71-19.10

MODEL: Phase 6B Step 2 - Sheet 7 MARKER: 66x48 (in.) DATE: 3/17/2026 TIME: 11:14:37 AM PETERS CHRISTOPHER PLOTTED BY: CHRISTOPHER.PETERS@JACOBS.COM WORKSPACE: CHRISTOPHER.PETERS@JACOBS.COM WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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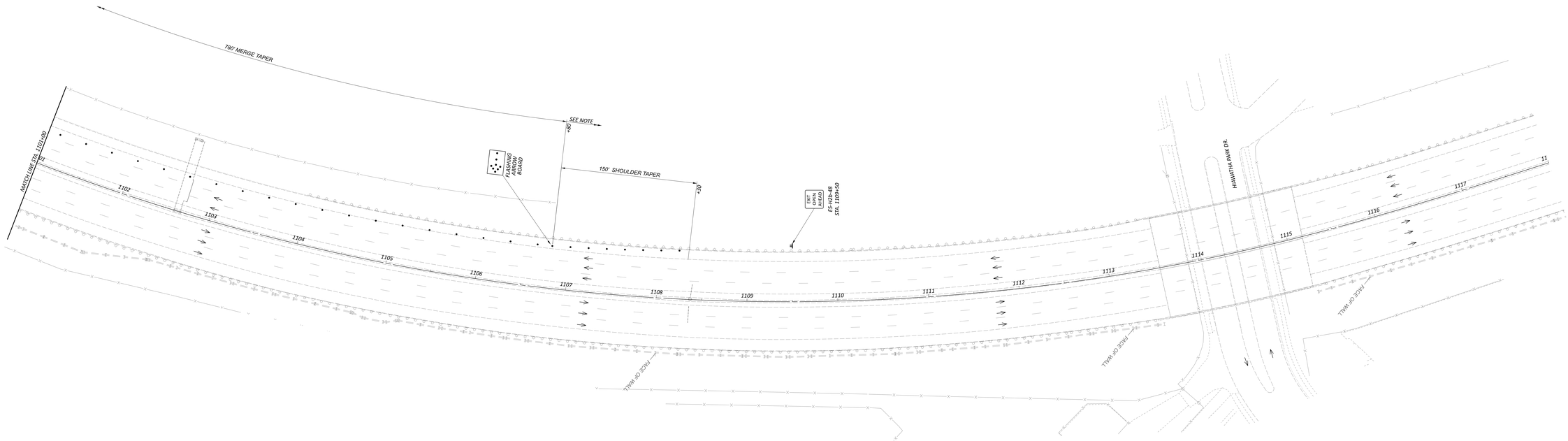

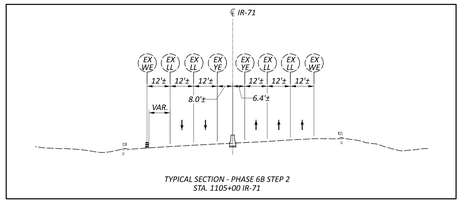

TYPICAL SECTION - PHASE 6B STEP 2
STA. 1105+00 IR-71

NOTE: SEE SHEET P.64 FOR PHASE 6B STEP 2 SB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 6B STEP 2
STA. 1101+00.00 TO STA. 1118+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.188 TOTAL: 618

FRA-71-19.10

MODEL: Phase 6B Step 2 - Sheet 9 MARKER: 66x48 (in.) DATE: 3/11/2026 TIME: 11:14:38 AM PEN/DRV: CMYOPT.CPP_FY.ctb/fig PENTBL: CMYOPT_Pen.tbl USER: CHris.Lawrence@jacobs.com WORKSPACE: CMYOPT/CMYOPT WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\Projects\FRA\71\109164\Design\Roadway\Traffic\Phase 6B\Step 2\Sheet 9 - Phase 6B Step 2.dgn

FRA-71-19.10

MODEL: Phase 7A Step 1 - Sheet 1 MARKER: 66x48 (in.) DATE: 3/11/2026 TIME: 3:29:03 PM PLTDRV: DWG.PC (LaserJet PCL6) PLOTTED: DWG.PC (LaserJet 1018) CivilLawrence1@jacobs.com WORKSPACE: C:\ROOT\SUD WORKSET: 109164 PRODUCT: OpenRoad Designer 24.00.02.25
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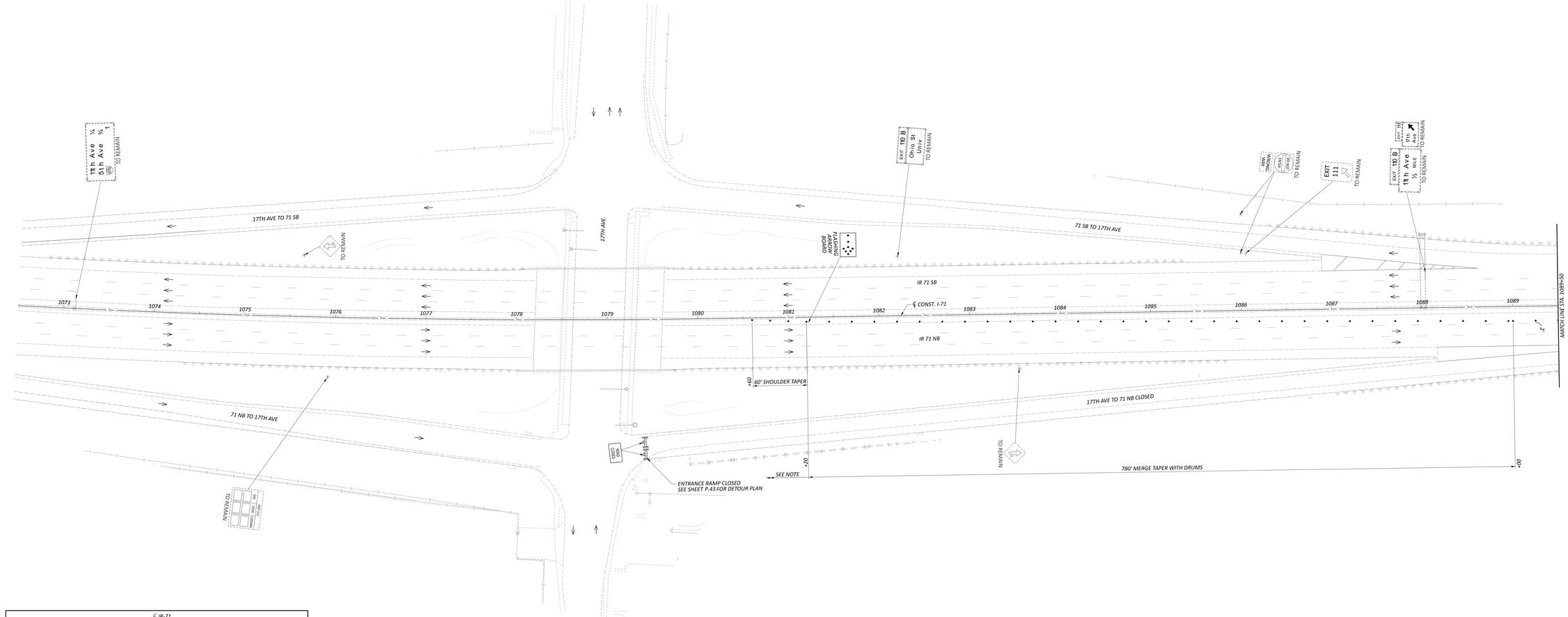
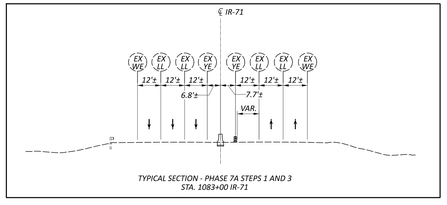




NOTE: SEE SHEET P.56 FOR PHASE 7A STEPS 1 AND 3 NB ADVANCED SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

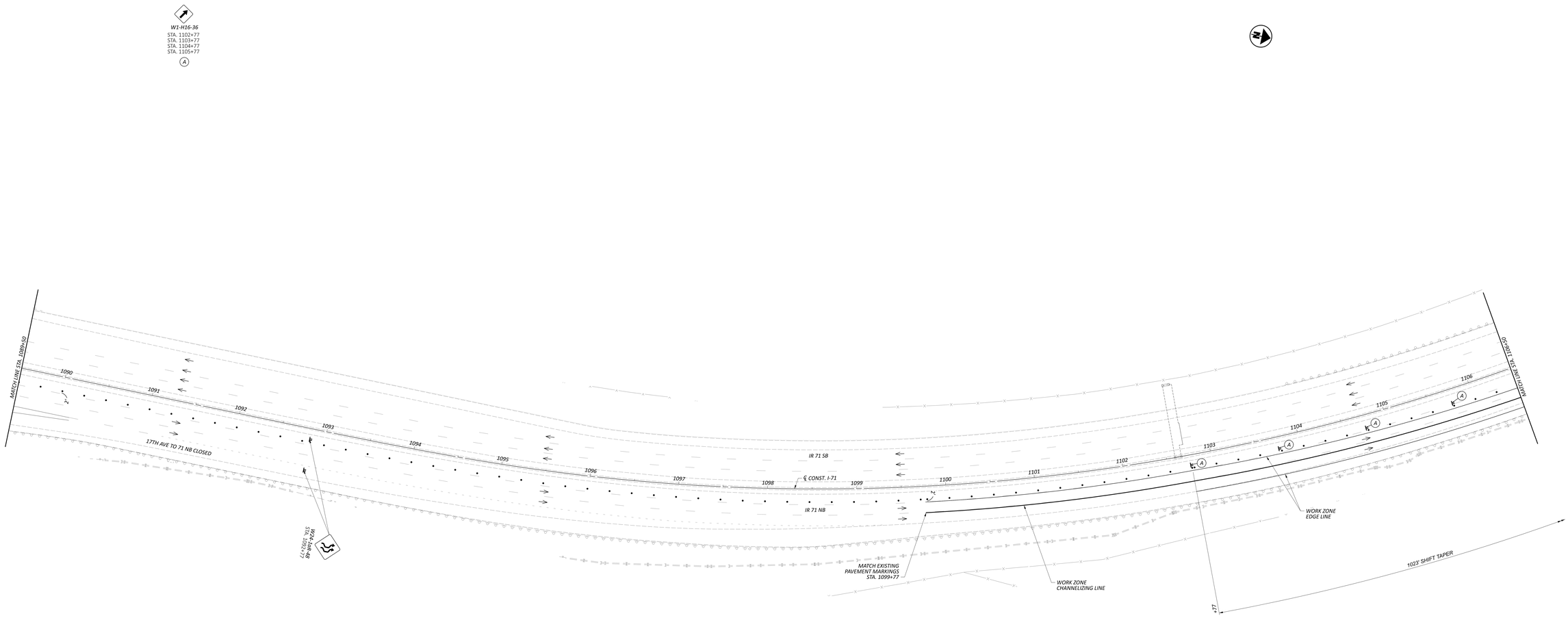
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

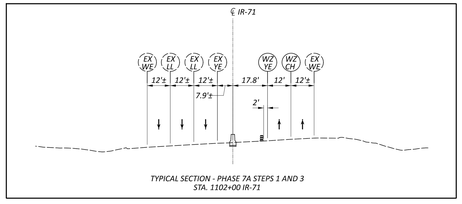
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 7A STEPS 1 & 3
STA. 1072+50.00 TO STA. 1089+50.00

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.189 TOTAL 618





DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 7A STEPS 1 & 3
STA. 1089+50.00 TO STA. 1106+50.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.190 TOTAL: 618

FRA-71-19.10

MODEL: Phase 7A Step 1 - Sheet 2 MARKER: 66x48 (in.) UNIT: 317/2503 TIME: 11:15:55 AM PTOPR ONDOT .PSF_P.config PENTBL ONDOT .Pen.tbl USER: CHris.Lawrence@jacobs.com WORKSPACE: ONDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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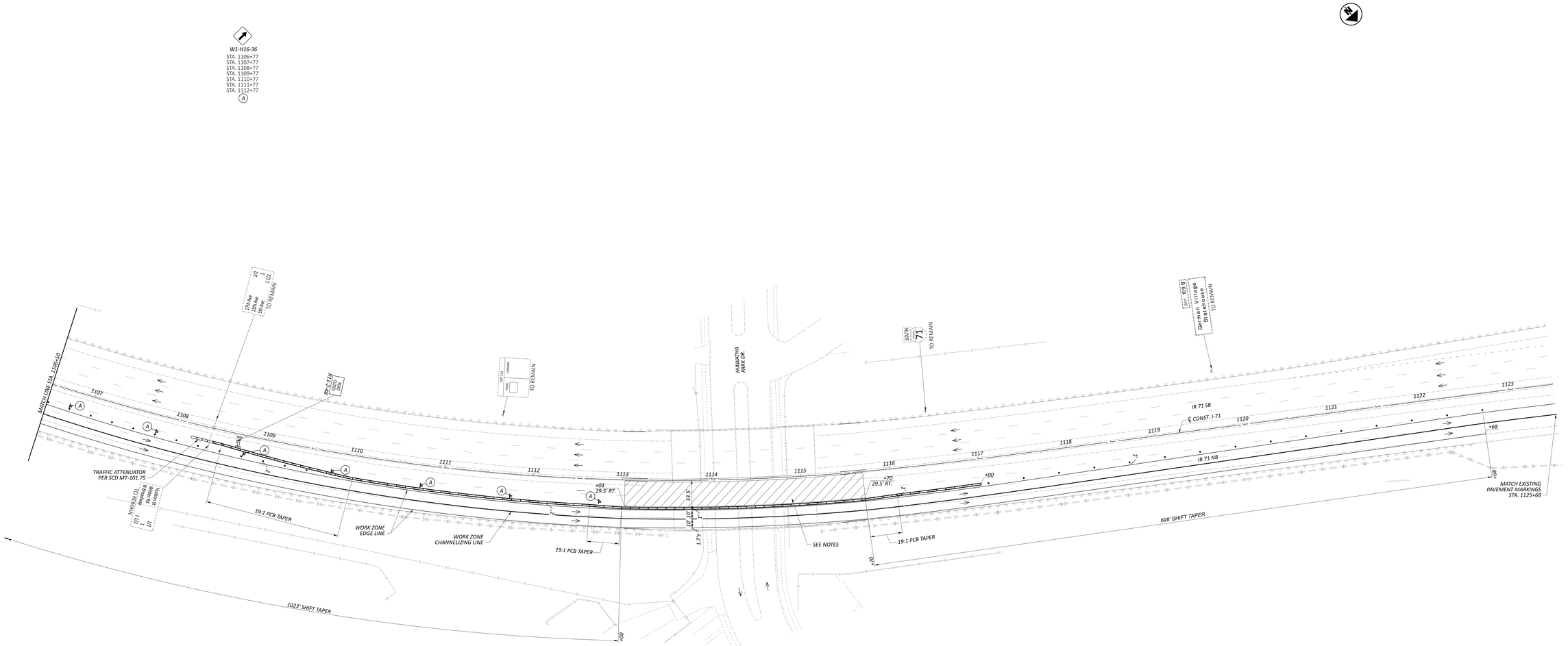
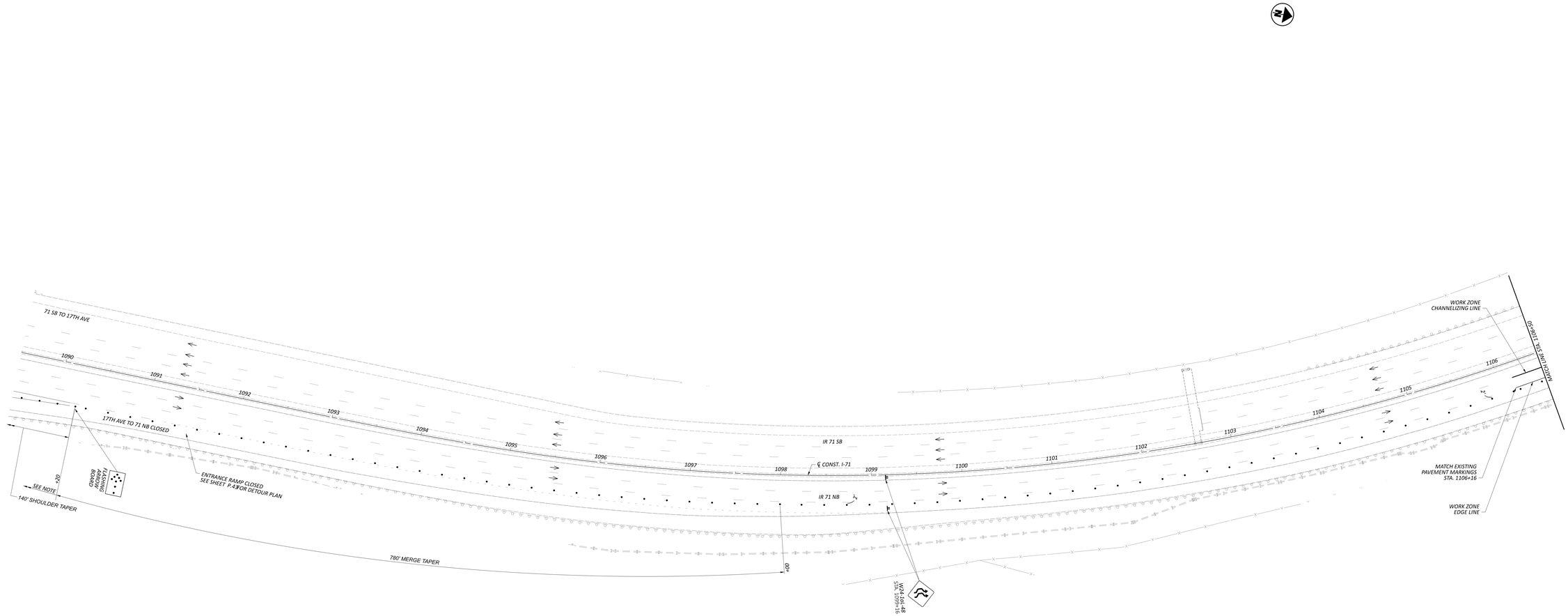
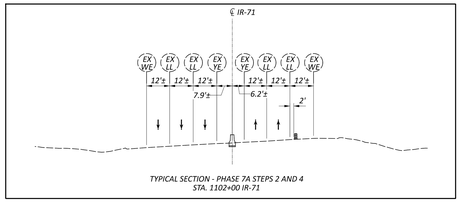

W1-H16-36
STA. 1106+77
STA. 1107+77
STA. 1108+77
STA. 1109+77
STA. 1110+77
STA. 1111+77
STA. 1112+77
A
MATCH LINE STA. 1106+50
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
TRAFFIC ATTENUATOR PER SCD MT-101.75
19:1 PCB TAPER
WORK ZONE EDGE LINE
WORK ZONE CHANNELIZING LINE
19:1 PCB TAPER
+03 29.5' RT.
33.5'
12'
17'±
SEE NOTES
+70 29.5' RT.
19:1 PCB TAPER
70'
1023' SHIFT TAPER
698' SHIFT TAPER
+00
+68
168'
MATCH EXISTING PAVEMENT MARKINGS STA. 1125+68
℄ CONST. I-71
IR 71 SB
IR 71 NB
HAMPTON PARK DR.
TO REMAIN
SOUTH
71
EXIT 99 B
German Village
SOUTH
TO REMAIN
TO REMAIN
TO REMAIN





TYPICAL SECTION - PHASE 7A STEPS 2 AND 4
STA. 1102+00 IR-71

NOTE: SEE SHEET P.56 FOR PHASE 7A STEPS 2 AND 4 ADVANCE WARNING SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

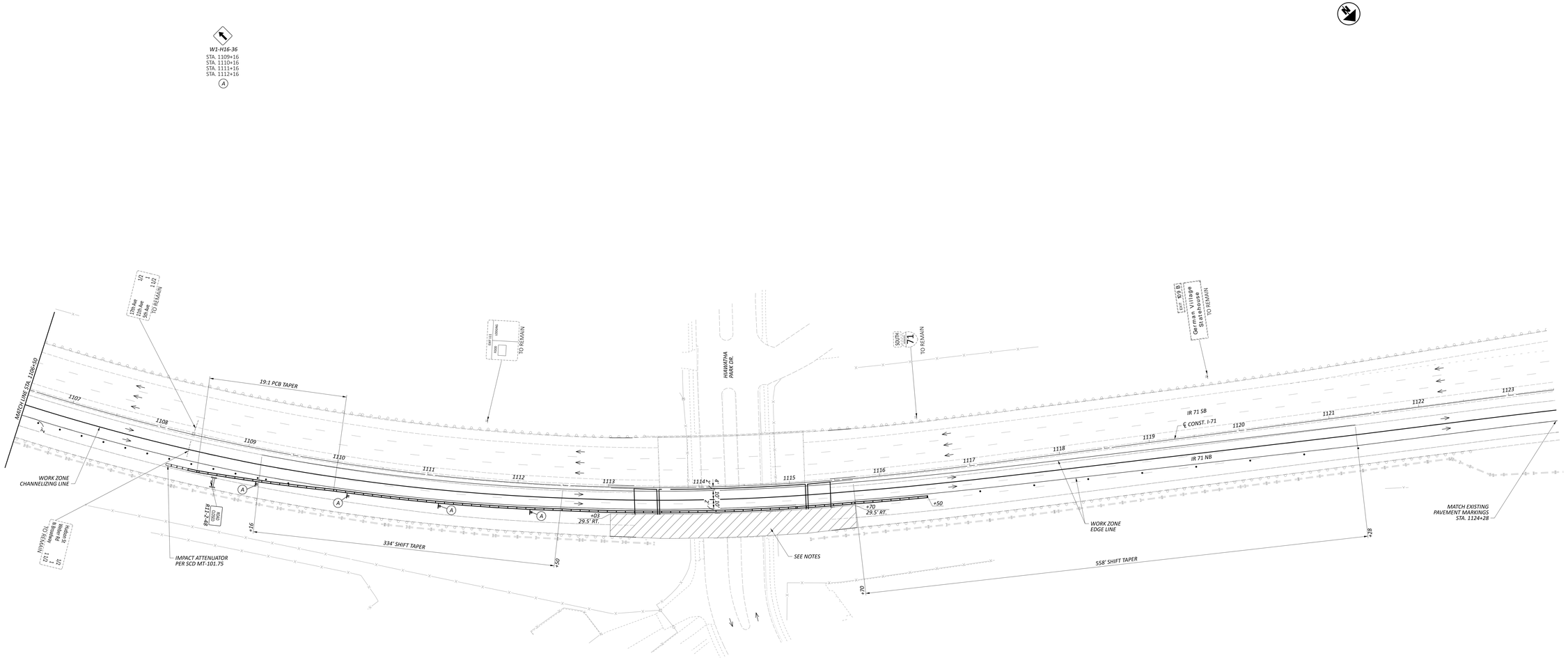
HORIZONTAL SCALE IN FEET
0 15 30 60

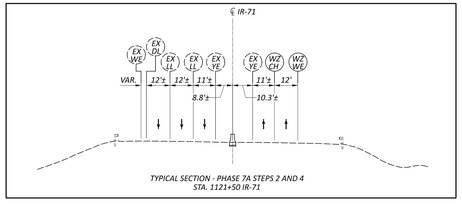
MAINTENANCE OF TRAFFIC - PHASE 7A STEPS 2 & 4
STA. 1089+50.00 TO STA. 1106+50.00

FRA-71-19.10

MODEL: Phase 7A Step 2 - Sheet 2 MARKER: 66x48 (in.) DATE: 3/31/2026 TIME: 11:15:13 AM PTDWN ONDOT_CPD_F.ctb FILENAME: ONDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTCivil3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.192
TOTAL: 618





TYPICAL SECTION - PHASE 7A STEPS 2 AND 4
STA. 1121+50 IR-71

NOTES:
1. REPLACE APPROACH SLABS IN STEP 2.
2. INSTALL SDC OVERLAY IN STEP 4.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 7A STEPS 2 & 4
STA. 1106+50.00 TO STA. 1123+50.00

FRA-71-19.10

MODEL: Phase 7A Step 2 - Sheet 9 MARKER: 66x48 (in.) DATE: 3/11/2026 TIME: 11:15:18 AM PTDWG GROUP: CPP_F.ctb[Pg PENTBL GROUP: Pen-USE USER: Chris.Lawrence@jacobs.com WORKSPACE: 0HDOTCVS0 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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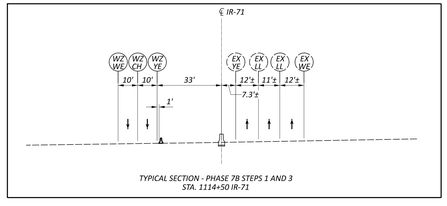
DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.193 TOTAL: 618





TYPICAL SECTION - PHASE 7B STEPS 1 AND 3
STA. 1114+50 IR-71

NOTES:
1. REPLACE APPROACH SLABS IN STEP 1.
2. INSTALL SDC OVERLAY IN STEP 3.

DRUM SPACING CHART	
TANGENT	120'-c/c
TAPER	60'-c/c
RAMP DELINEATION	20'-c/c

LEGEND
- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 7B STEPS 1 & 3
STA. 1103+00.00 TO STA. 1120+00.00

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.194 TOTAL: 618

FRA-71-19.10

MODEL: Phase 5 Step 1 - Sheet 1 IMPERIOUS: 66x34 (in.) DATE: 3/17/2026 TIME: 11:55:46 AM PLOTBY: CHRISTOPHER.JOY.JP-LEGAL PENTBL: CHRIST_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHRISTOS43 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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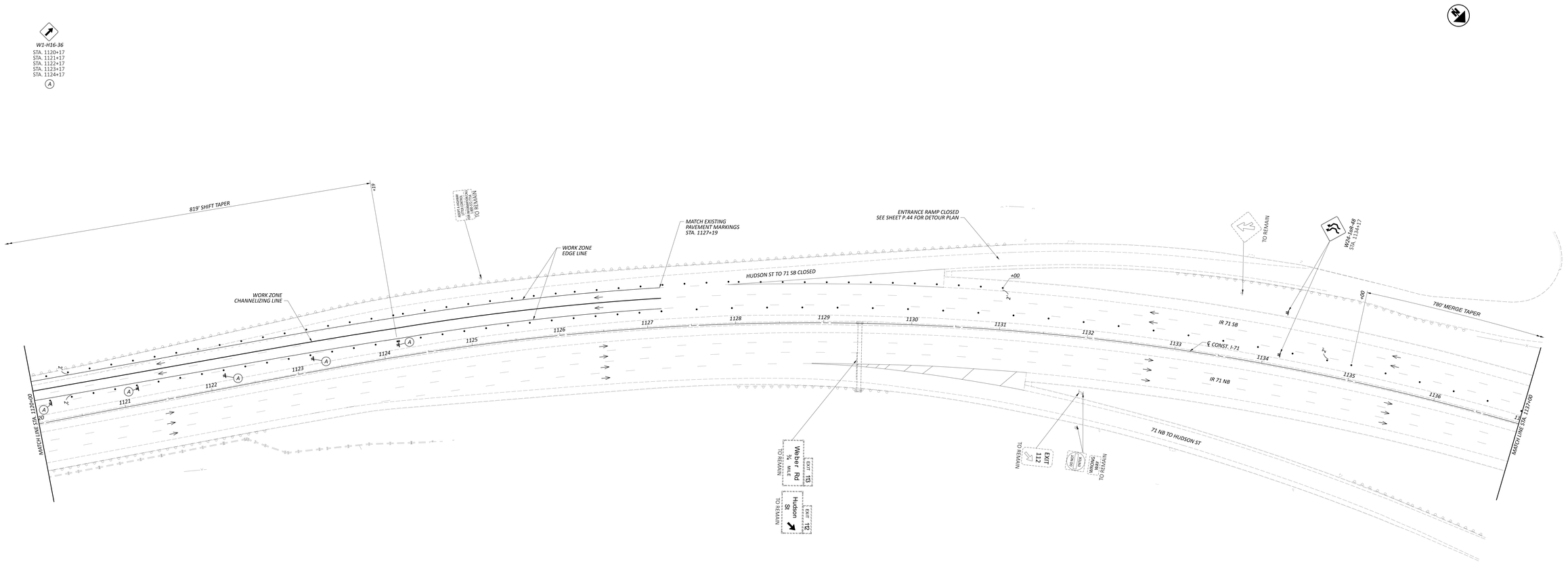

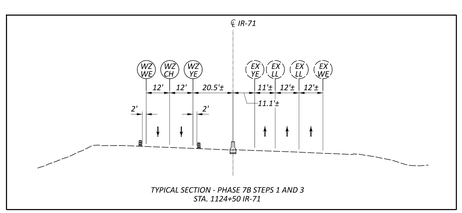

TYPICAL SECTION - PHASE 7B STEPS 1 AND 3
STA. 1124+50 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 7B STEPS 1 & 3
STA. 1120+00.00 TO STA. 1137+00.00

DESIGN AGENCY: Jacobs
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.195
TOTAL: 618

FRA-71-19.10

MODEL: Phase 5 Steps 1 - Sheet 2 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:25:46 PM PITDRV_CHDOT_PDF_P-Letter.tbl PITPEN_CHDOT_PDF_P-Letter.tbl PITTBL: CHDOT_Pencil 100% Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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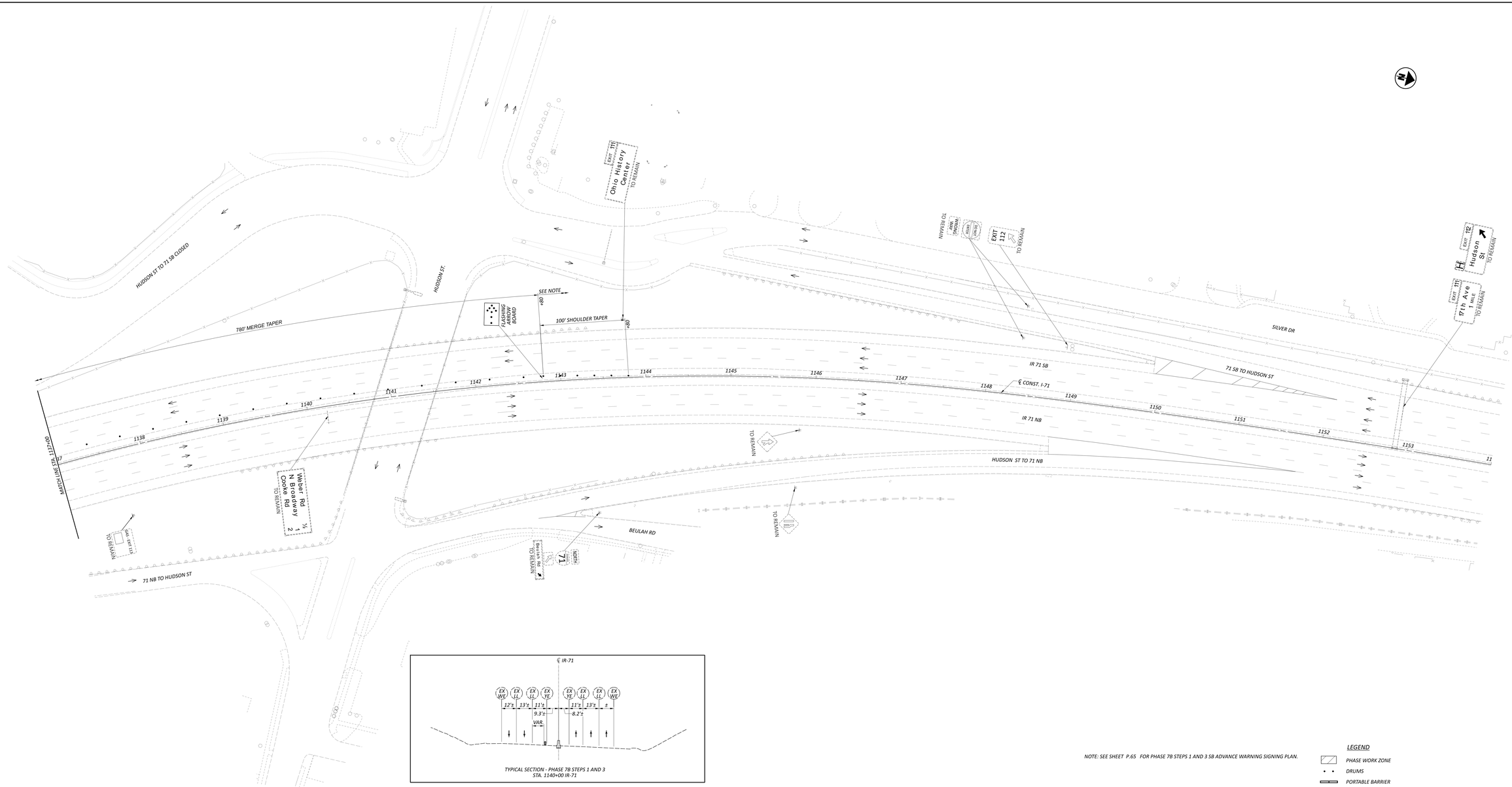


TYPICAL SECTION - PHASE 7B STEPS 1 AND 3
STA. 1140+00 IR-71

NOTE: SEE SHEET P.65 FOR PHASE 7B STEPS 1 AND 3 SB ADVANCE WARNING SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120'c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

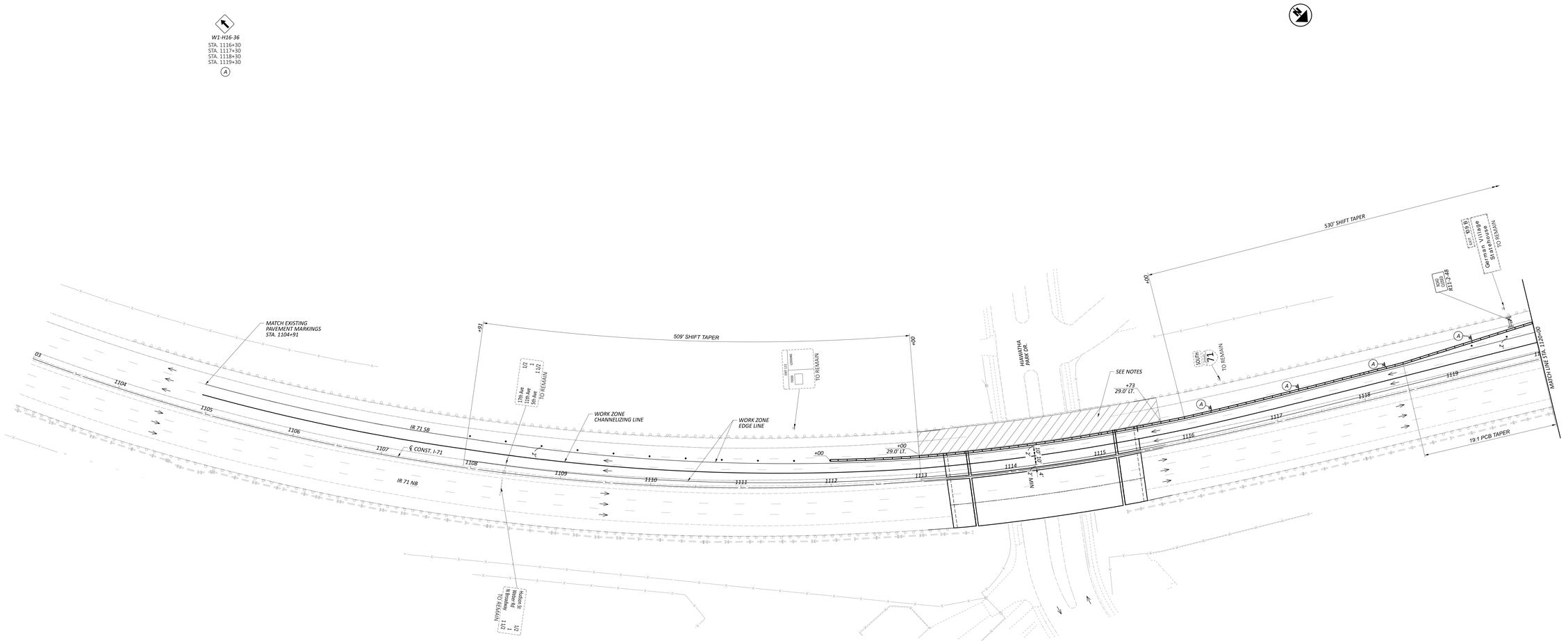
MAINTENANCE OF TRAFFIC - PHASE 7B STEPS 1 & 3
STA. 1137+00.00 TO STA. 1154+00.00

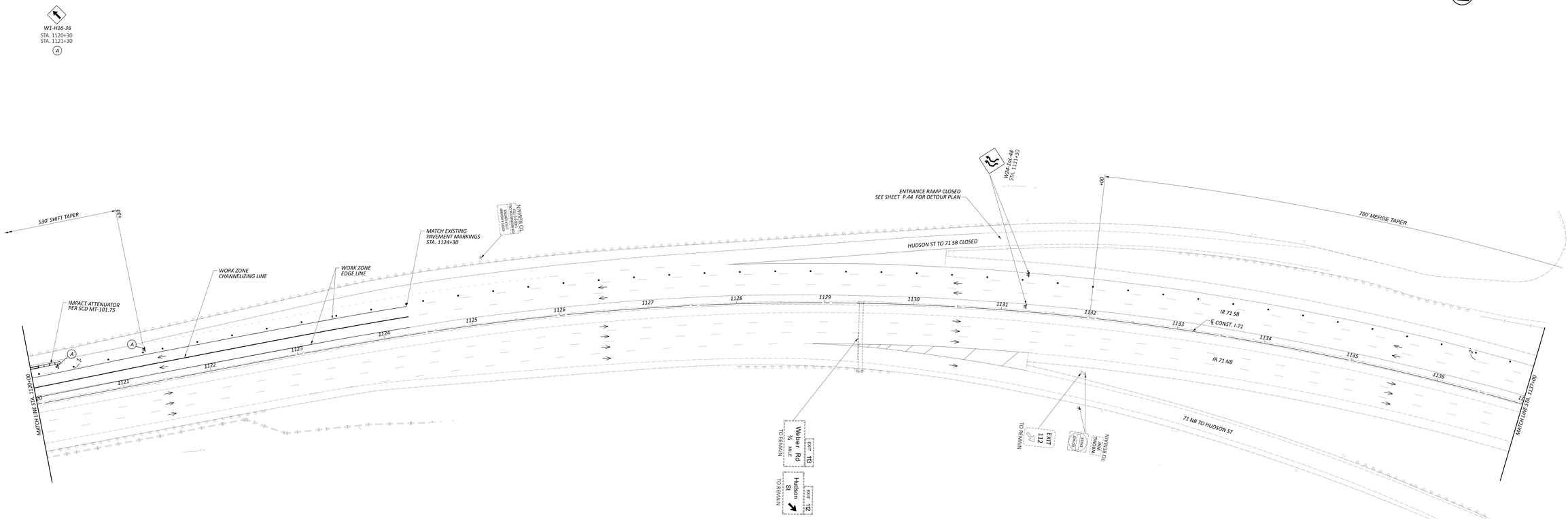
DESIGN AGENCY
Jacobs

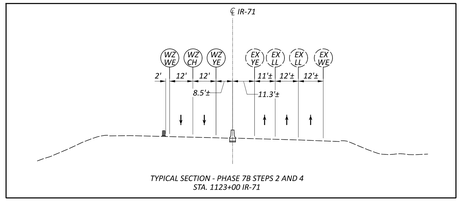
DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.196 TOTAL: 618

FRA-71-19.10

MODEL: Phase 5 Steps 1 - Sheet 3 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:15:54 AM PITDAY: ONDOT_PSI_E-ARCH_PENTBL: ONDOT_PSI_E-ARCH_PITDAY: ONDOT_PSI_E-ARCH_PENTBL: ONDOT_PSI_E-ARCH_PLOTSTYLE: Full color USER: ChrisLawrence1@jacobs.com WORKSPACE: ONDOTSIGS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE: Phase 5 Steps 1 - Sheet 3 REFERENCES: C:\Users\ChrisLawrence1\Jacobs\Ohio DOT - Documents\Projects\FRA-71-19.10\Design\Roadway\Signing\FRA-71-19.10_MOT_Phase 5 Steps 1 - Sheet 3.dgn


W1-H16-36
STA. 1116+30
STA. 1117+30
STA. 1118+30
STA. 1119+30
A
MATCH EXISTING PAVEMENT MARKINGS STA. 1104+91
509' SHIFT TAPER
530' SHIFT TAPER
WORK ZONE CHANNELIZING LINE
WORK ZONE EDGE LINE
TO REMAIN
TO REMOVE
SEE NOTES
+72 29.0' LT.
+00 29.0' LT.
HIAWATHA PARK DR.
SOUTH 71
IR 71 SB
IR 71 NB
℄ CONST. I-71
MATCH LINE STA. 1120+00
19:1 PCB TAPER
03
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
NBX 7.4" 10.5"
2'
12'
Radius 5'
Radius 10'
Radius 20'
Radius 30'
Radius 40'
Radius 50'
Radius 60'
Radius 70'
Radius 80'
Radius 90'
Radius 100'
Radius 110'
Radius 120'
Radius 130'
Radius 140'
Radius 150'
Radius 160'
Radius 170'
Radius 180'
Radius 190'
Radius 200'
Radius





TYPICAL SECTION - PHASE 7B STEPS 2 AND 4
STA. 1123+00 IR-71

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60 c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

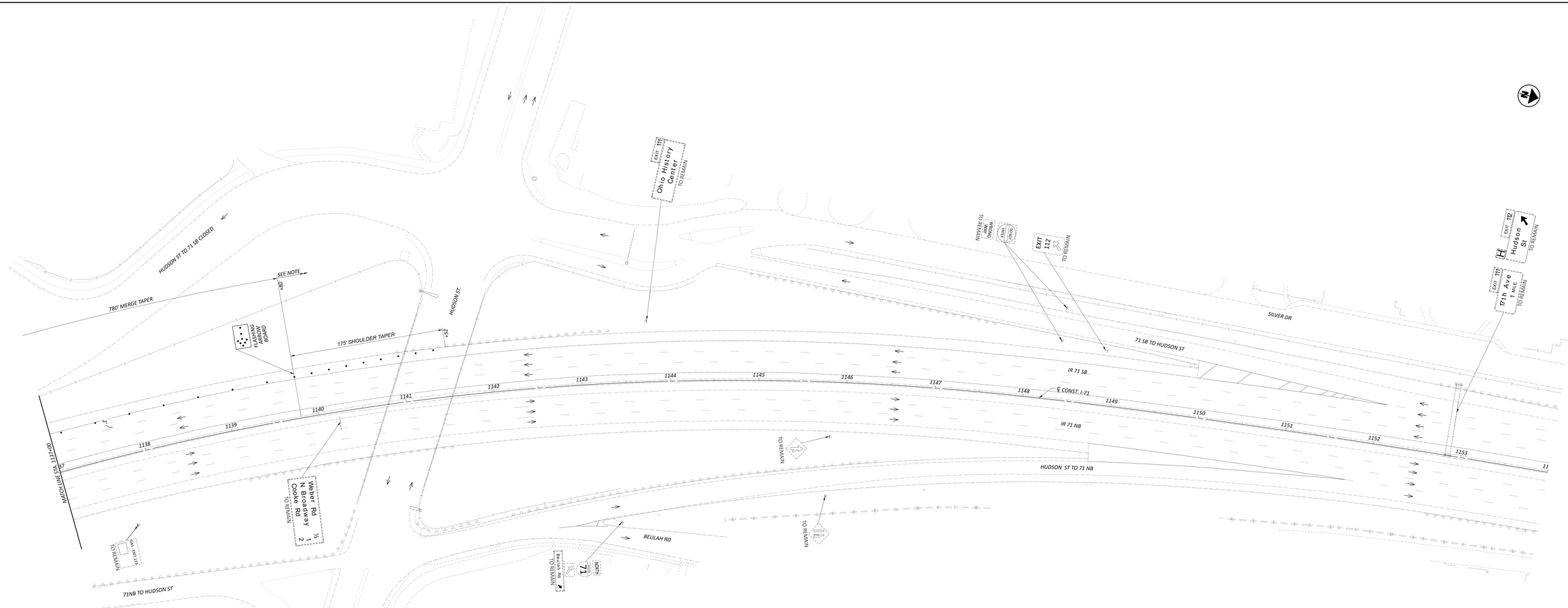
HORIZONTAL SCALE IN FEET
0 15 30 60

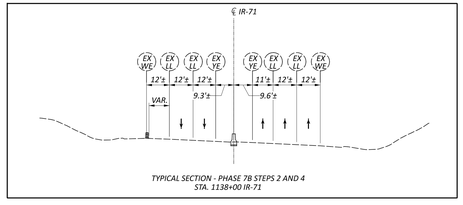
MAINTENANCE OF TRAFFIC - PHASE 7B STEPS 2 & 4
STA. 1120+00.00 TO STA. 1137+00.00

FRA-71-19.10

MODEL: CU_I71 | Plan: 2 PHASE7B STEP2 AND 4.dgn | DATE: 3/31/2026 TIME: 1:33:19 PM | USER: CROOT_PW | Path: C:\Users\croot_pw\Desktop\Projects\109164 PHASE 7B\Design\Roadway\MOT\PHASE 7B STEP 2 AND 4.dgn
ELEMENTS FROM REFERENCE FILES: Plan: P:\109164 PHASE 7B\Design\Roadway\MOT\PHASE 7B STEP 2 AND 4.dgn | Level: All | Color: All | Font: All | Dimension: All | Text: All | Multi-line Text: All | Point: All | Cell: All | Line Style: All | Line Weight: All

DESIGN AGENCY
Jacobs
DESIGNER
SRH
REVIEWER
BAP 03/20/26
PROJECT ID
109164
SHEET P.198 TOTAL 618





TYPICAL SECTION - PHASE 7B STEPS 2 AND 4
STA. 1138+00 IR-71

NOTE: SEE SHEET P.65 FOR PHASE 7B STEPS 2 AND 4 SB ADVANCE WARNING SIGNING PLAN.

DRUM SPACING CHART	
TANGENT	120' c/c
TAPER	60' c/c
RAMP DELINEATION	20' c/c

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

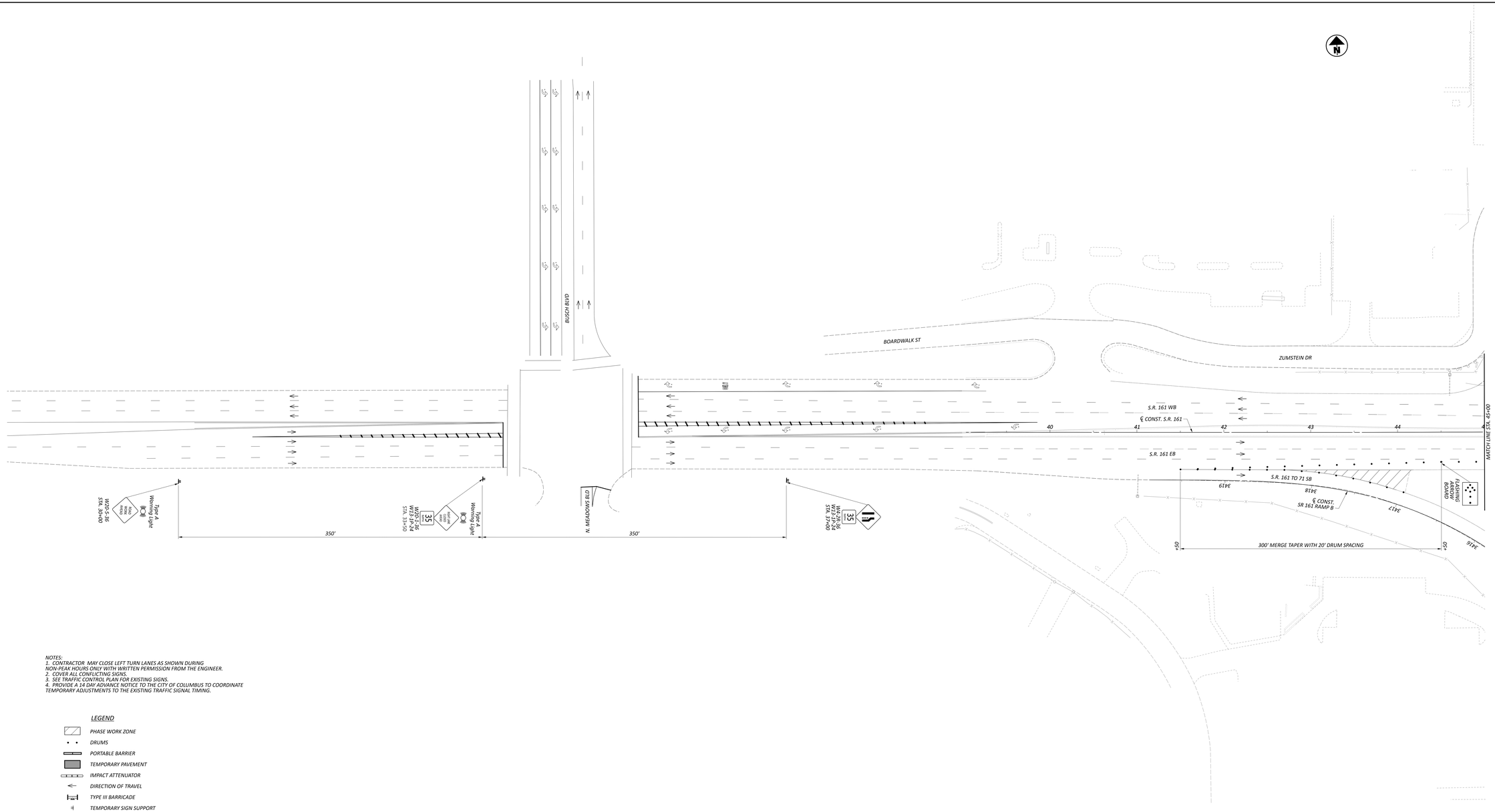
MAINTENANCE OF TRAFFIC - PHASE 7B STEPS 2 & 4
STA. 1137+00.00 TO STA. 1154+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.199 TOTAL: 618

FRA-71-19.10

MODEL: C0 / P3 | Plan 3 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:16:16 AM PLTDRV: DHDOT_PDF_V1.drv PLTSTYL: DHDOT_Plot.ctb USER: ChrisLawrence3@jacobs.com WORKSPACE: DHDOTCAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DRAWINGS ARE THE PROPERTY OF THE OHIO DEPARTMENT OF TRANSPORTATION. THEY ARE NOT TO BE USED FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF THE OHIO DEPARTMENT OF TRANSPORTATION.



NOTES:
1. CONTRACTOR MAY CLOSE LEFT TURN LANES AS SHOWN DURING NON-PEAK HOURS ONLY WITH WRITTEN PERMISSION FROM THE ENGINEER.
2. COVER ALL CONFLICTING SIGNS.
3. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
4. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8B STEP 1
SR 161 OUTSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.200 TOTAL: 618

FRA-71-19.10

MODEL: 161 Phase 1 Sheet 1 PAYPSHEET: 66x34 IN | DATE: 3/12/2026 TIME: 11:14:33 AM | USER: CKirk | FILEPATH: C:\PROJECTS\FRA-71-19.10\CADD\MAINTENANCE OF TRAFFIC\MOT_PHS 1\MOT_PHS1B_STEP01_CMOT.dgn | USER: CKirk.bakerwood@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: DEV14 PRODUCT: OpenRoadsDesigner 24.00.02.25
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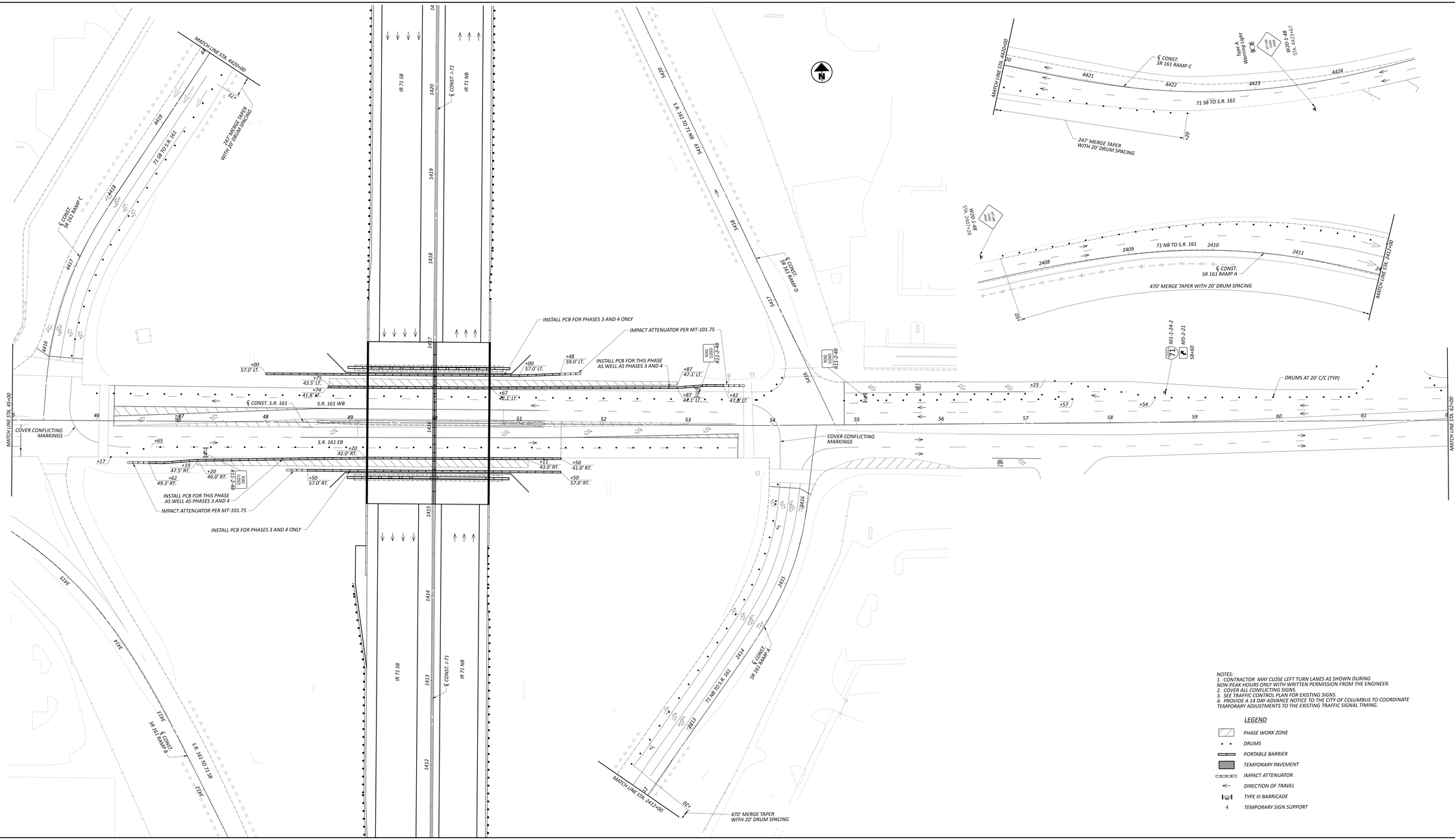

FRA-71-19.10

MODEL: 161 Phase 1 Sheet 2 PAPERSIZE: 66x34 IN | DATE: 3/12/2026 TIME: 11:16:39 AM | FILTERV: ON OFF_PRE_14.pltcfg PENTBL: ON OFF_Pen.ctb USER: Chris.Isaiewicz@jacobs.com WORKSPACE: CHIDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

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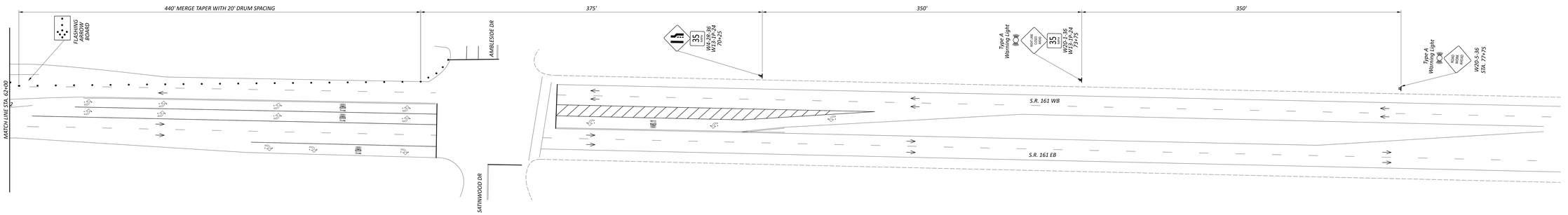
HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8B STEP 1
SR 161 OUTSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER SRH
REVIEWER BAP 03/20/26
PROJECT ID 109164
SHEET P.201 TOTAL 618



NOTES:
1. CONTRACTOR MAY CLOSE LEFT TURN LANES AS SHOWN DURING NON-PEAK HOURS ONLY WITH WRITTEN PERMISSION FROM THE ENGINEER.
2. COVER ALL CONFLICTING SIGNS.
3. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
4. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8B STEP 1
SR 161 OUTSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.202 TOTAL: 618

FRA-71-19.10

MODEL: 161 Phase 1 Sheet 1 XREFSDEC 6kx14 in 1 DATE: 3/12/2026 TIME: 11:14:44 AM SYSTEM: DHOOT_PRF_1-pltcfg PENTBL: DHOOT_Pen1st USER: Chris.Isaenhood@jacobs.com WORKSPACE: DHOOTSTAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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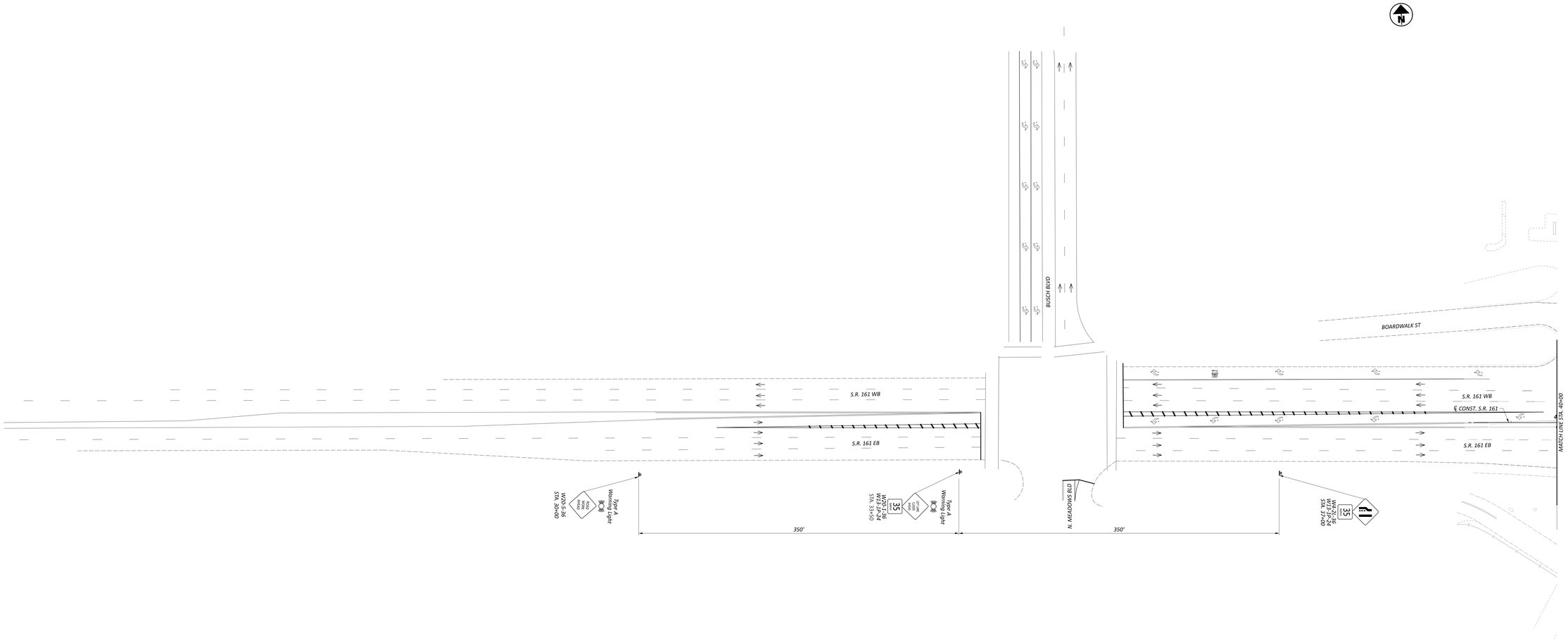

NOTES:
1. CONTRACTOR MAY CLOSE LEFT TURN LANES AS SHOWN DURING NON-PEAK HOURS ONLY WITH WRITTEN PERMISSION FROM THE ENGINEER.
2. COVER ALL CONFLICTING SIGNS.
3. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
4. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8B STEP 2
SR 161 INSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.203 TOTAL: 618

FRA-71-19.10

MODEL: 161 Phase 2 Sheet 1 PAYFILE01 DGN 8 file 1 DATE: 3/12/2026 TIME: 11:16:45 AM USER: CHOOT_PID: 54 pPAGE PENTBL: CHOOT_Pen.tbl USER: Chris.Isaenko@jacobs.com WORKSPACE: CHOOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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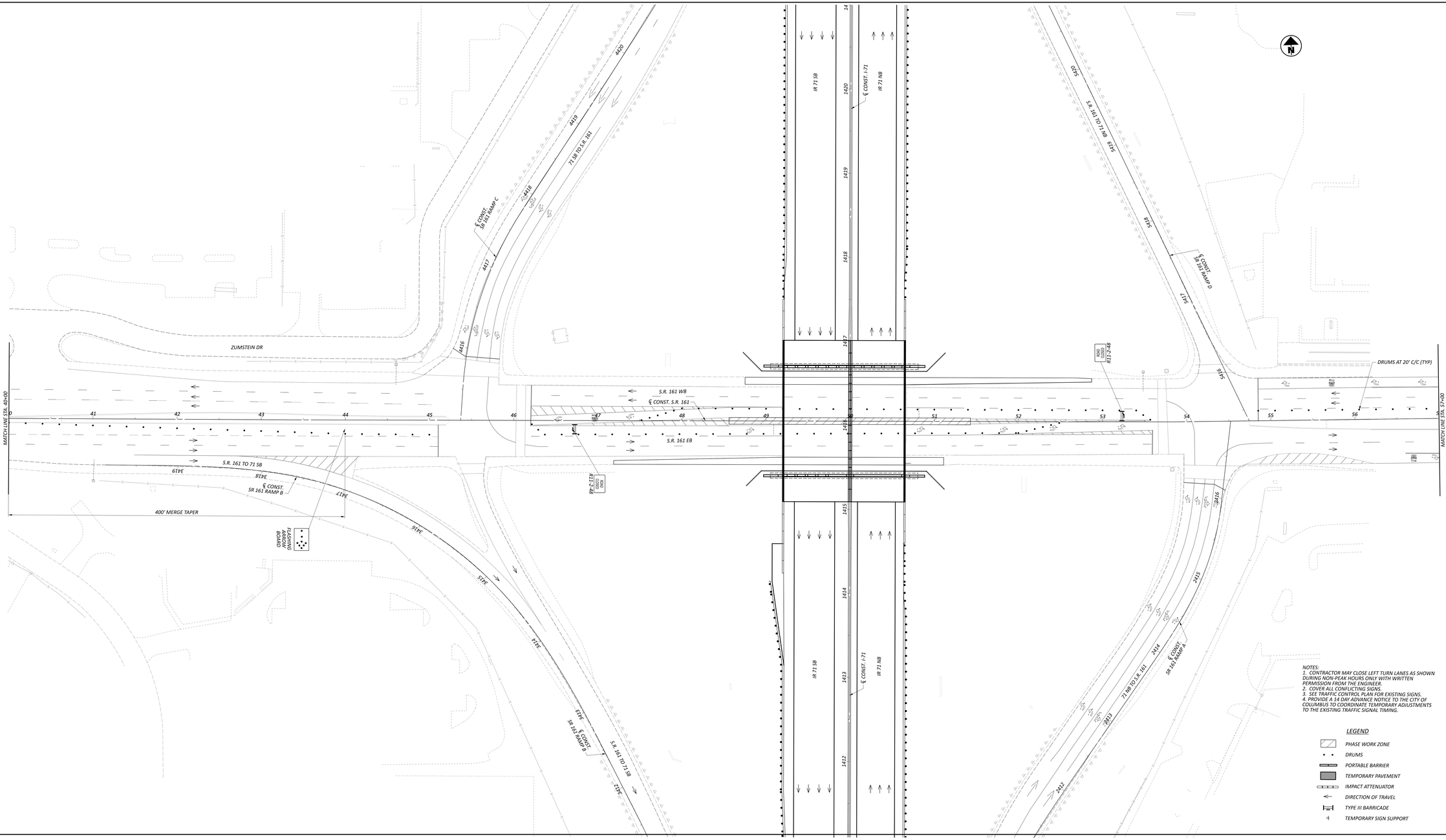


NOTES:
1. CONTRACTOR MAY CLOSE LEFT TURN LANES AS SHOWN DURING NON-PEAK HOURS ONLY WITH WRITTEN PERMISSION FROM THE ENGINEER.
2. COVER ALL CONFLICTING SIGNS.
3. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
4. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

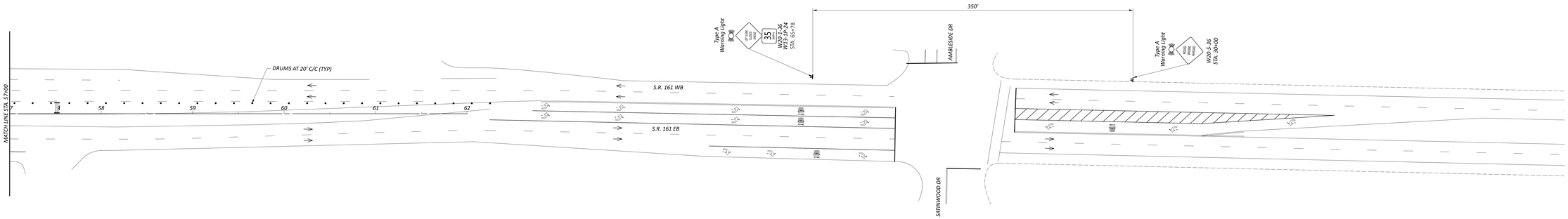
MAINTENANCE OF TRAFFIC - PHASE 8B STEP 2
SR 161 INSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.204 TOTAL: 618

FRA-71-19.10

MODEL: 161 Phase 2 Sheet 2 (MAYERS) 66x34 in | DATE: 3/12/2026 TIME: 11:16:59 AM | FILTER: ON:OFF_PRE_14 xPHASE_ENTITIES: ON:OFF_Pre14 USER: Chris.Isaenhood@jacobs.com WORKSPACE: CHIDOTDist2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DRAWINGS ARE THE PROPERTY OF THE DEPARTMENT AND MAY NOT BE REPRODUCED OR USED WITHOUT THE DEPARTMENT'S PERMISSION



NOTES:
1. CONTRACTOR MAY CLOSE LEFT TURN LANES AS SHOWN DURING NON-PEAK HOURS ONLY WITH WRITTEN PERMISSION FROM THE ENGINEER.
2. COVER ALL CONFLICTING SIGNS.
3. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
4. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

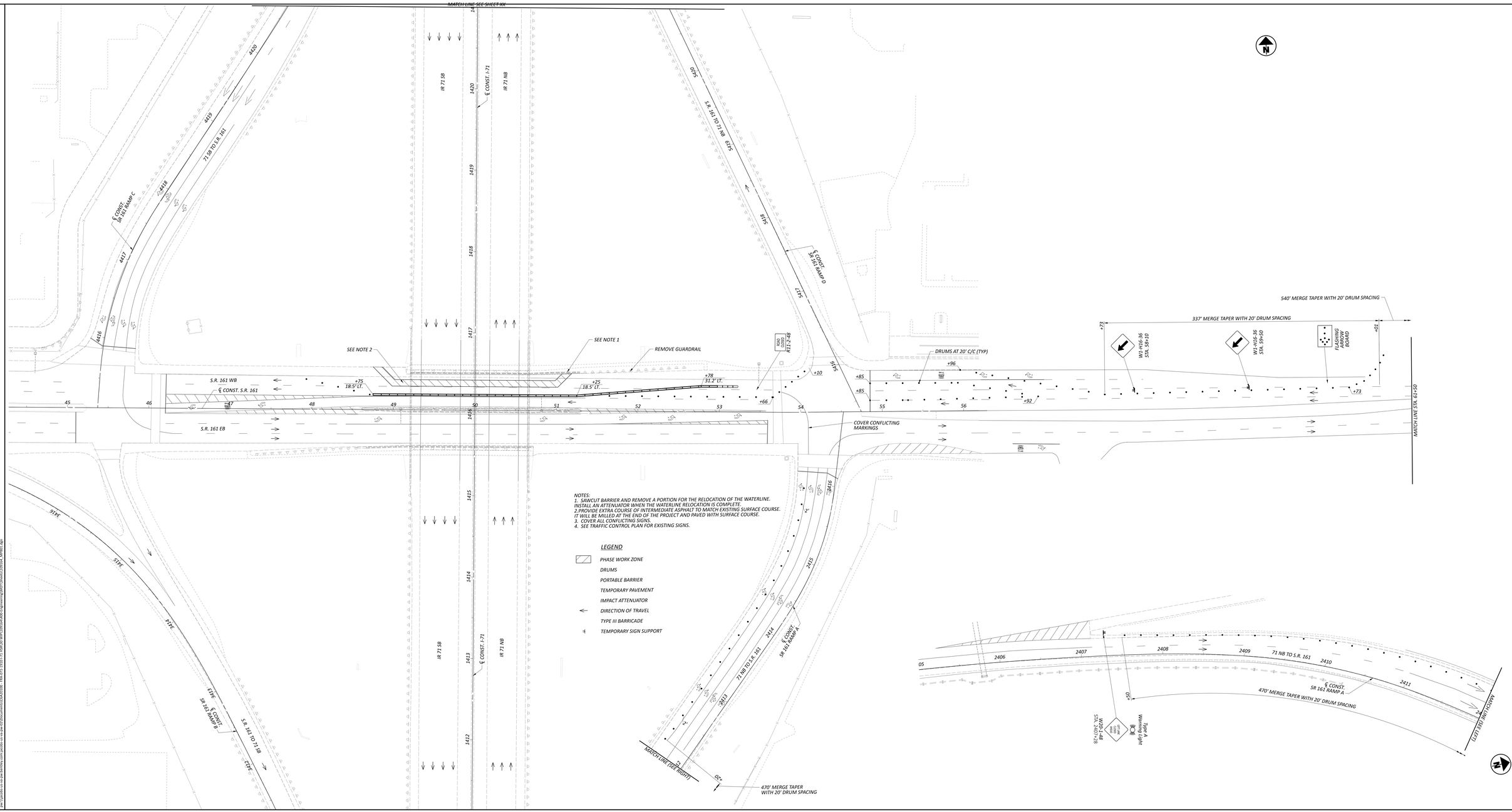
MAINTENANCE OF TRAFFIC - PHASE 8B STEP 2
SR 161 INSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.205 TOTAL: 618

FRA-71-19.10

MODEL: 161 Phase 2 Sheet 3 XREFMODEL: 66x34 in. DATE: 3/12/2026 TIME: 11:14:51 AM XREFs: DATUM: DATUM_PRE_14.dgnlib XREFBL: DATUM_PRE_14.dgn DGN: DATUM_PRE_14.dgn USER: Chris.Isaenko@jacobs.com WORKSPACE: CHIDOTCIVIL3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DRAWINGS ARE THE PROPERTY OF THE DEPARTMENT AND MAY NOT BE REPRODUCED OR USED WITHOUT THE PERMISSION OF THE DEPARTMENT



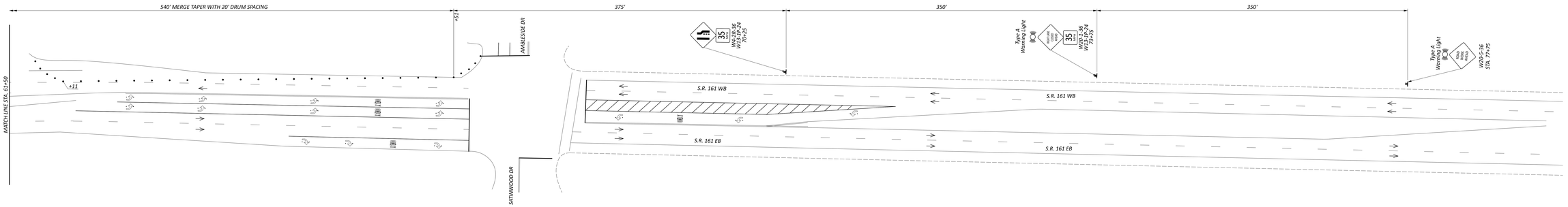
FRA-71-19.10

MAINTENANCE OF TRAFFIC - PHASE 1
SR 161 WATERLINE RELOCATION

DESIGN AGENCY
Jacobs

DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.206 TOTAL: 618

MODEL: 161 Phase 3 | SHEET: 661x419 in | DATE: 3/12/2026 TIME: 11:16:53 AM | USER: DHOUT_PID_14.pltcfg | PENTBL: DHOUT_PID_14.ctb | USER: DNickbarnes4@jacobs.com WORKSPACE: DHOUT(Civil) WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: C:\Users\dnickbarnes4\Jacobs\Documents - FRA-71-19.10 Waterline Relocation\Working\Phase 3\161 Phase 3.dgn



NOTES:
1. COVER ALL CONFLICTING SIGNS.
2. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 1
SR 161 WATERLINE RELOCATION

DESIGN AGENCY
Jacobs

DESIGNER
SRH

REVIEWER
BAP 03/20/26

PROJECT ID
109164

SHEET P.207 TOTAL 618

FRA-71-19.10

MODEL: 161 Phase 2 SHEET: 66x34 in. DATE: 3/12/2026 TIME: 11:16:57 AM SYSTEM: OHDOT_PID_24.dgnlib ENTITY: OHDOT_PID_24 USER: Chris.Isaenko@jacobs.com WORKSPACE: CHDOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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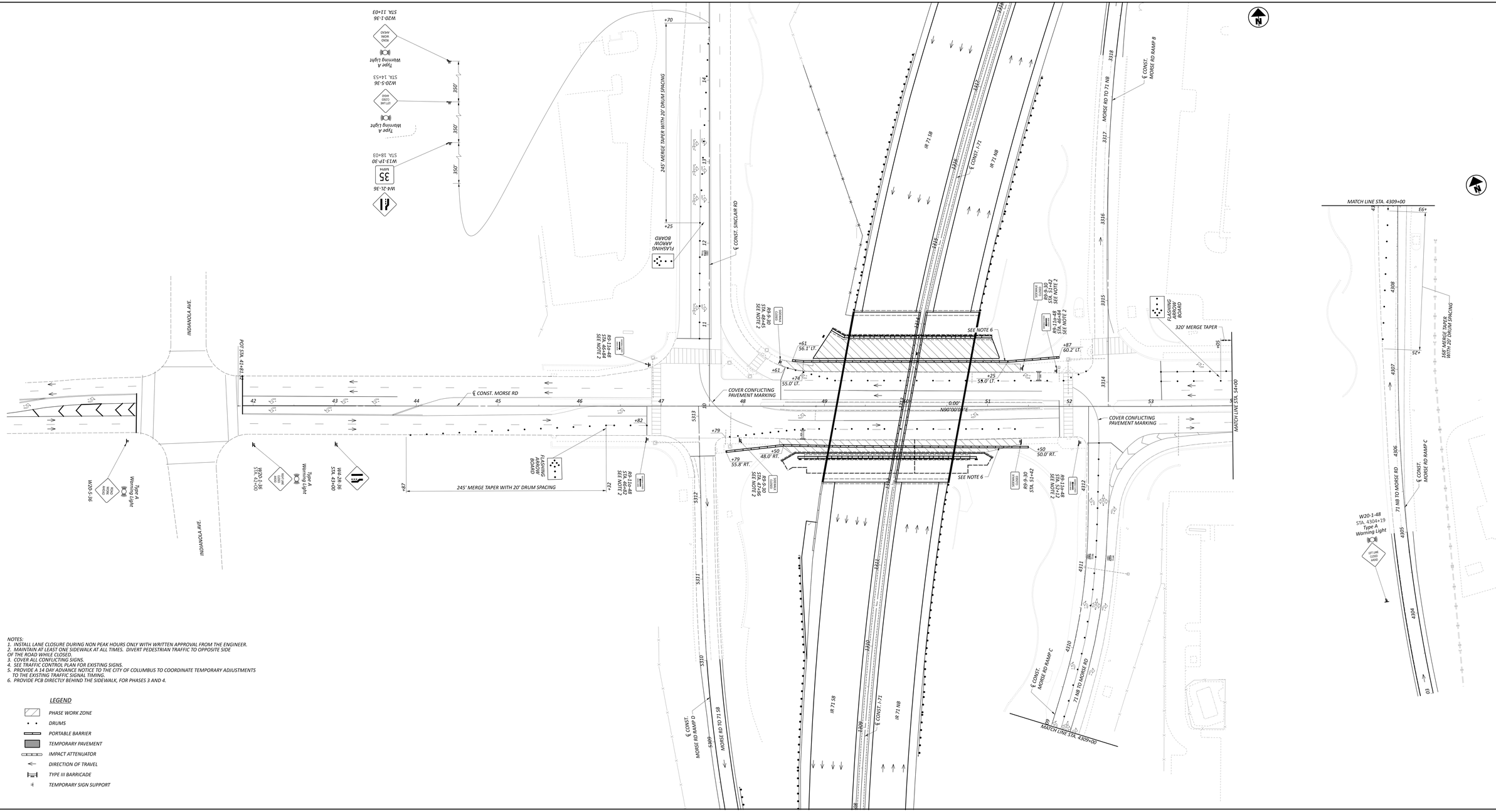

NOTES:
1. INSTALL LANE CLOSURE DURING NON PEAK HOURS ONLY WITH WRITTEN APPROVAL FROM THE ENGINEER.
2. MAINTAIN AT LEAST ONE SIDEWALK AT ALL TIMES. DIVERT PEDESTRIAN TRAFFIC TO OPPOSITE SIDE OF THE ROAD WHILE CLOSED.
3. COVER ALL CONFLICTING SIGNS.
4. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
5. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.
6. PROVIDE PCB DIRECTLY BEHIND THE SIDEWALK, FOR PHASES 3 AND 4.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8A STEP 1
MORSE ROAD OUTSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNED: SRH
REVIEWED: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.208 TOTAL: 618

FRA-71-19.10

MODEL: Morse Phase 1 - Sheet 1 PAPERSIZE: 66x34 (in.) DATE: 3/17/2026 TIME: 11:16:54 AM PLOTBY: DHOOT_PW PLOTSTYLE: DHOOT_PW.ctb USER: ChrisLawrence1@jacobs.com WORKSPACE: DHOOTD4D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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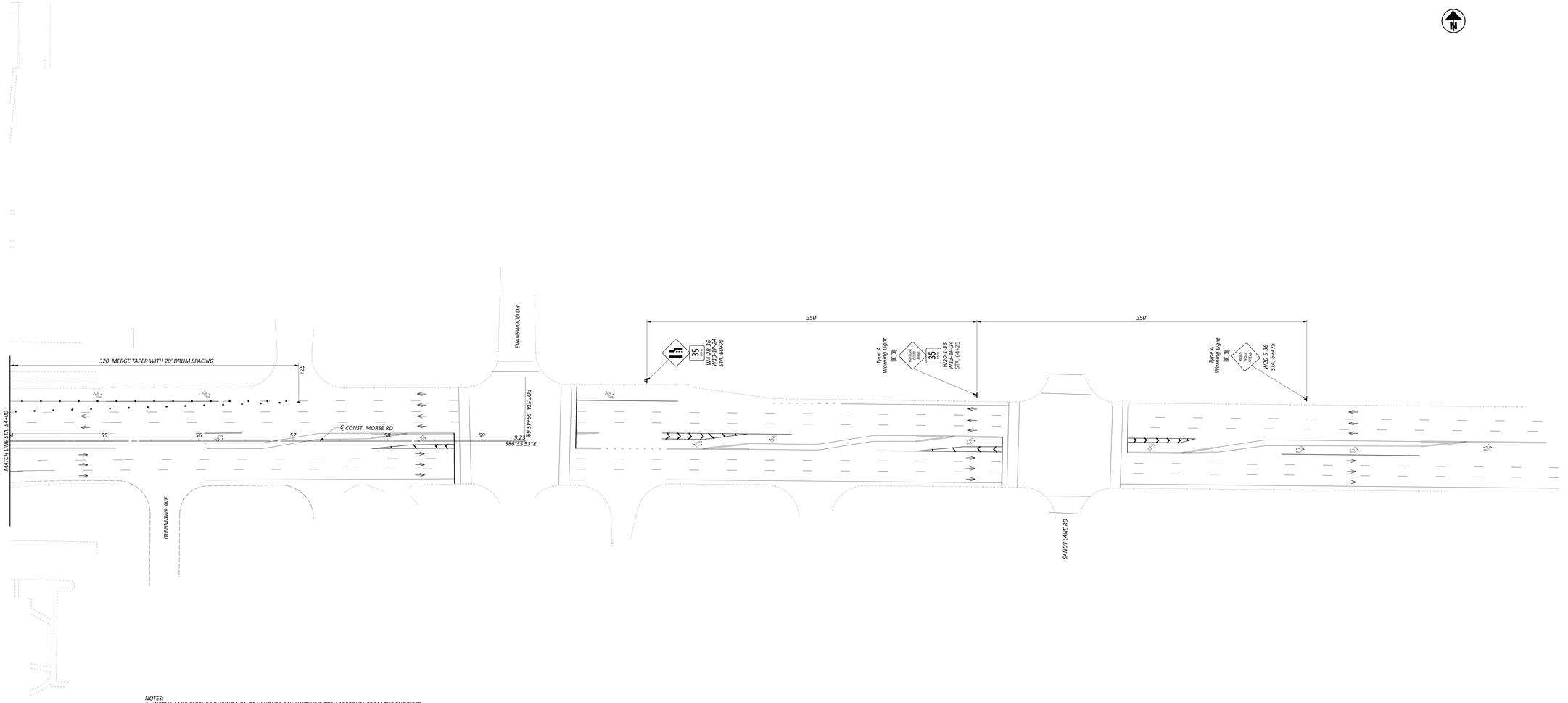


NOTES:
1. INSTALL LANE CLOSURE DURING NON PEAK HOURS ONLY WITH WRITTEN APPROVAL FROM THE ENGINEER.
2. MAINTAIN AT LEAST ONE SIDEWALK AT ALL TIMES. DIVERT PEDESTRIAN TRAFFIC TO OPPOSITE SIDE OF THE ROAD WHILE CLOSED.
3. COVER ALL CONFLICTING SIGNS.
4. SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.
5. PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.

LEGEND

- PHASE WORK ZONE
- DRUMS
- PORTABLE BARRIER
- TEMPORARY PAVEMENT
- IMPACT ATTENUATOR
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TEMPORARY SIGN SUPPORT

HORIZONTAL SCALE IN FEET
0 15 30 60

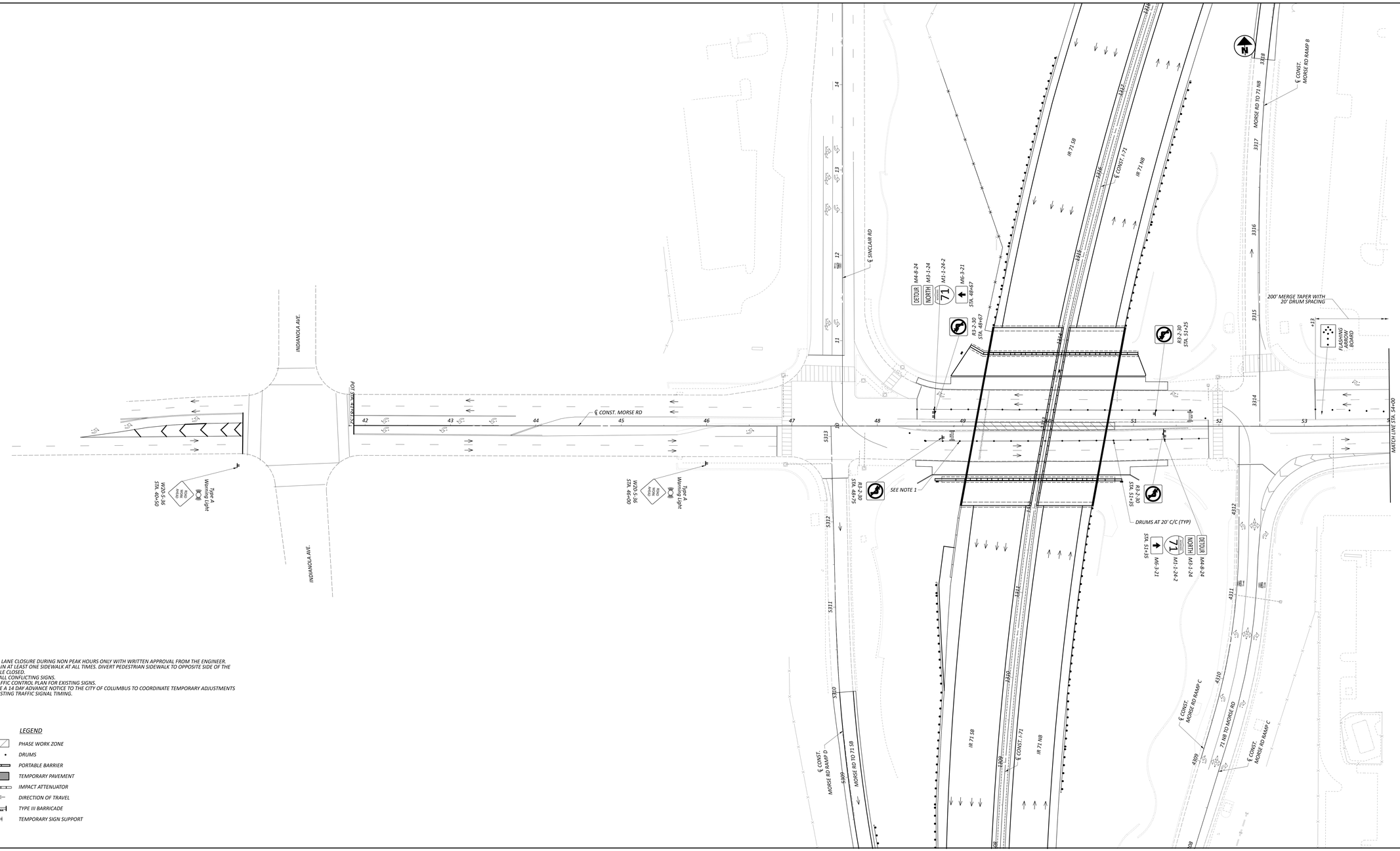
MAINTENANCE OF TRAFFIC - PHASE 8A STEP 1
MORSE ROAD OUTSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.209 TOTAL: 618

FRA-71-19.10

MODEL: Morse Phase 1 - Sheet 2 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 11:17:04 AM USER: CHRIS PORTAL: C:\HOST_dm.dat USER: ChrisLawrence1@jacobs.com WORKSPACE: C:\HOST\OUO WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE: C:\Users\chrislawrence1\Jacobs\Desktop\Morse Phase 1 - Sheet 2.dgn


INDIANOLA AVE.
PORT WILLIAM ST.
€ CONST. MORSE RD
€ SINCLAIR RD
INDIANOLA AVE.
W20.5-36
STA. 40+00
Type A
Warning Light
W20.5-36
STA. 46+00
Type A
Warning Light
R3-2-30
STA. 48+75
SEE NOTE 1
M4-8-24
M3-1-24
M1-1-24-2
M6-3-21
STA. 48+67
R3-2-30
STA. 49+67
R3-2-30
STA. 51+25
R3-2-30
STA. 51+35
DRUMS AT 20' C/C (TYP)
M6-3-21
STA. 51+45
M1-1-24-2
M3-1-24
M4-8-24
DETOUR
NORTH
71
IR 71 SB
IR 71 NB
€ CONST. I-71
€ CONST. MORSE RD RAMP B
MORSE RD TO 71 NB
200' MERGE TAPER WITH 20' DRUM SPACING
FLASHING ARROW BOARD
MATCH LINE STA. 54+00
€ CONST. MORSE RD RAMP C
71 NB TO MORSE RD
€ CONST. MORSE RD RAMP D
MORSE RD TO 71 SB
42
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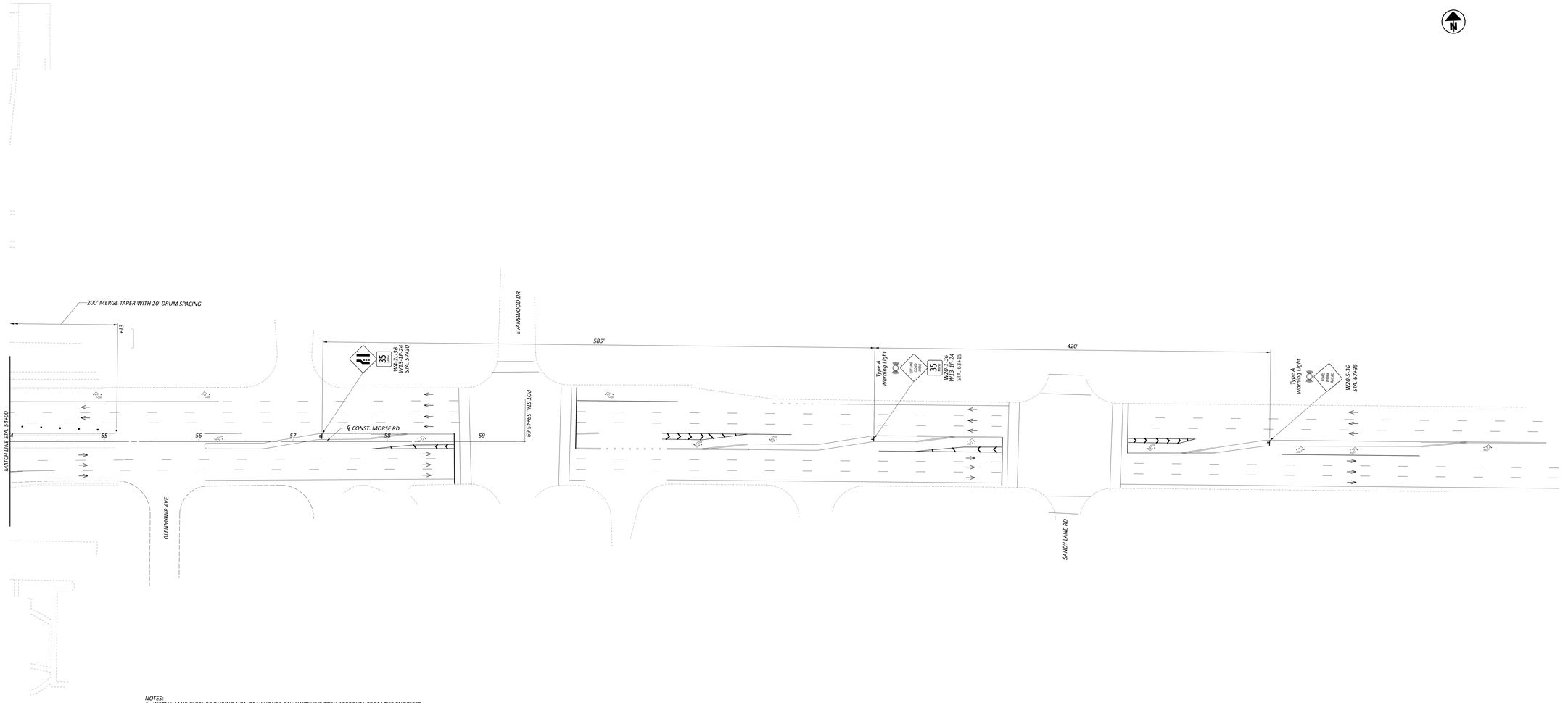

NOTES:
1. *INSTALL LANE CLOSURE DURING NON PEAK HOURS ONLY WITH WRITTEN APPROVAL FROM THE ENGINEER.*
2. *MAINTAIN AT LEAST ONE SIDEWALK AT ALL TIMES. DIVERT PEDESTRIAN SIDEWALK TO OPPOSITE SIDE OF THE ROAD WHILE CLOSED.*
3. *COVER ALL CONFLICTING SIGNS.*
4. *SEE TRAFFIC CONTROL PLAN FOR EXISTING SIGNS.*
5. *PROVIDE A 14 DAY ADVANCE NOTICE TO THE CITY OF COLUMBUS TO COORDINATE TEMPORARY ADJUSTMENTS TO THE EXISTING TRAFFIC SIGNAL TIMING.*

LEGEND

- *PHASE WORK ZONE*
- *DRUMS*
- *PORTABLE BARRIER*
- *TEMPORARY PAVEMENT*
- *IMPACT ATTENUATOR*
- *DIRECTION OF TRAVEL*
- *TYPE III BARRICADE*
- *TEMPORARY SIGN SUPPORT*

HORIZONTAL SCALE IN FEET
0 15 30 60

MAINTENANCE OF TRAFFIC - PHASE 8A STEP 2
MORSE ROAD INSIDE RECONSTRUCTION

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.211 TOTAL: 618

FRA-71-19.10

MODEL: Morse Phase 1 - Plan 2 PAPERSIZE: 66x34 in | DATE: 3/31/2026 TIME: 11:17:56 AM PITDIV: ORDOT_PDP_P-LetSq_PENTBL: ORDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTD2O WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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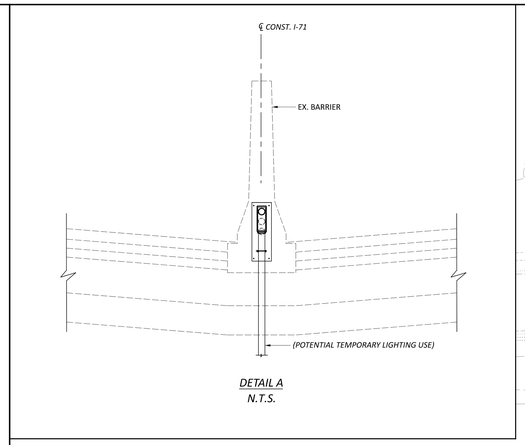

DETAIL A
N.T.S.

NOTES:
1. PROVIDE WORK ZONE CROSSOVER LIGHTING SYSTEM PER SCD MT-100.00. SEE LIGHTING PLAN NOTES.
2. CAREFULLY REMOVE AND STORE EXISTING LIGHT POLES FOR RE-INSTALLATION.

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - CROSSOVER DETAILS
STA. 1439+00.00 TO STA. 1450+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.217 TOTAL: 618

FRA-71-19.10

MODEL: North Crossover Sheet PAPERSIZE: 48x24 in | DATE: 3/31/2026 TIME: 11:18:02 AM |FITDW_CHSDT_PDF_IT.pltcfg, FITBTBL_CHSDT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHSDTCIV2D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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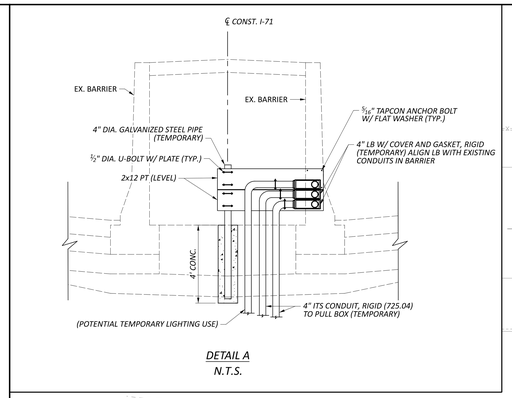
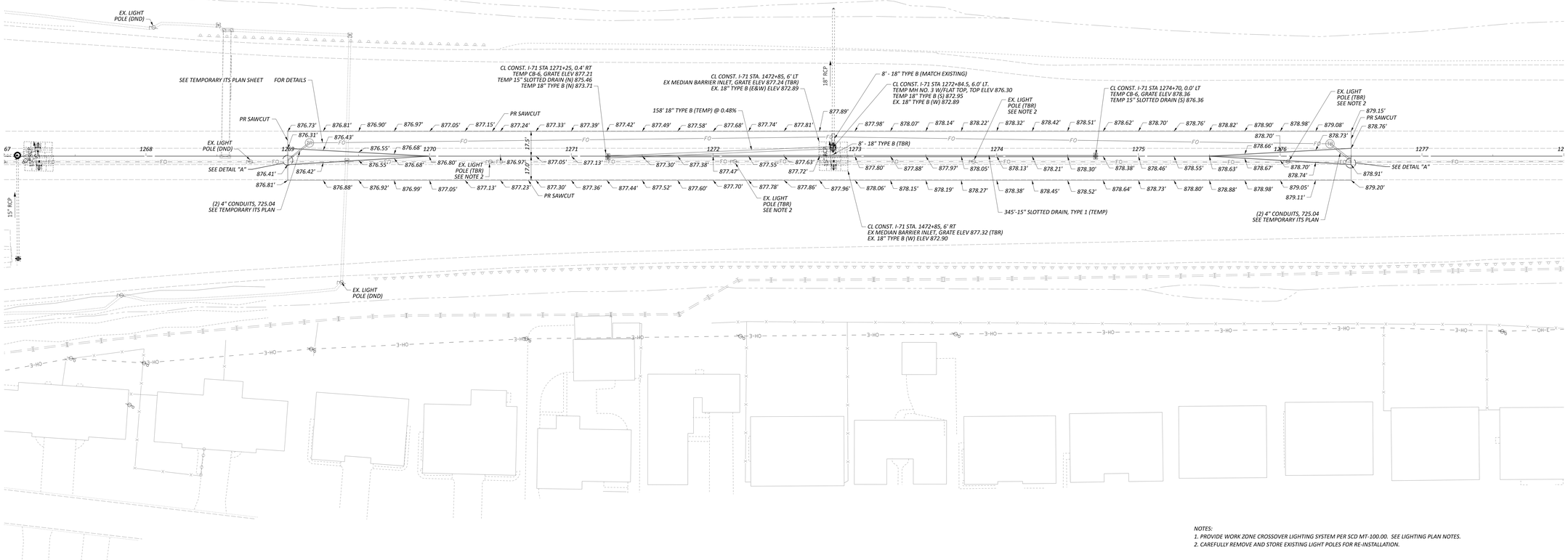


DETAIL A
N.T.S.



NOTES:
1. PROVIDE WORK ZONE CROSSOVER LIGHTING SYSTEM PER SCD MT-100.00. SEE LIGHTING PLAN NOTES.
2. CAREFULLY REMOVE AND STORE EXISTING LIGHT POLES FOR RE-INSTALLATION.

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - CROSSOVER DETAILS
STA. 1267+00.00 TO 1278+00.00

DESIGN AGENCY
Jacobs

DESIGNER: SRH
REVIEWER: BAP 03/20/26
PROJECT ID: 109164
SHEET: P.218 TOTAL: 618

FRA-71-19.10

MODEL: South Crossover Sheet PAPERSIZE: ANSI-B (in.) DATE: 3/31/2026 TIME: 11:18:07 AM PITDRV_ONDOT_PDP_IT-pltcfg PENTBL: ONDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.22.25
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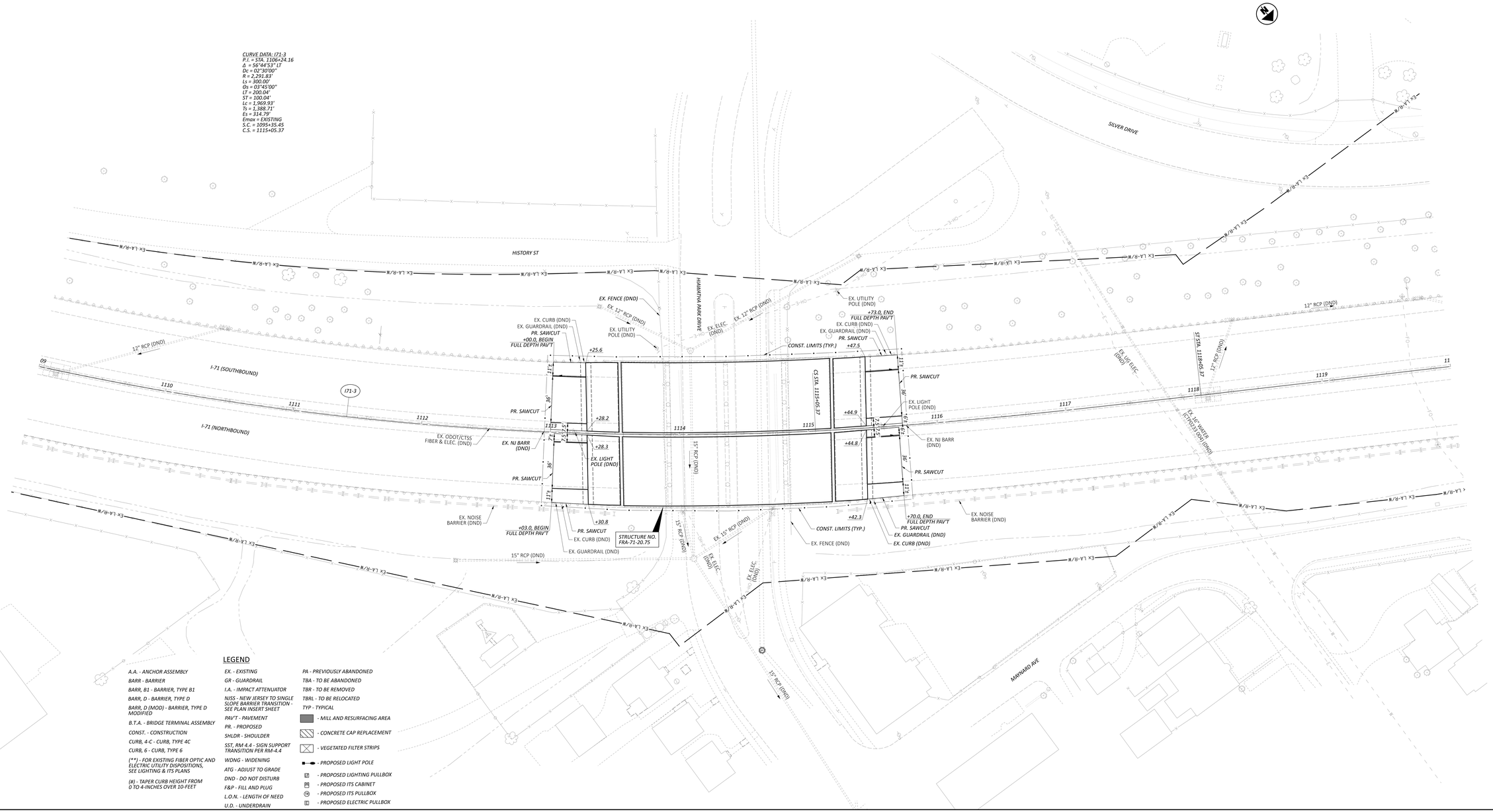

LEGEND

A.A. - ANCHOR ASSEMBLY	EX. - EXISTING	PA - PREVIOUSLY ABANDONED
BARR - BARRIER	GR - GUARDRAIL	TBA - TO BE ABANDONED
BARR, B1 - BARRIER, TYPE B1	I.A. - IMPACT ATTENUATOR	TBR - TO BE REMOVED
BARR, D - BARRIER, TYPE D	NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET	TBRL - TO BE RELOCATED
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	PAV'T - PAVEMENT	TYP - TYPICAL
B.T.A. - BRIDGE TERMINAL ASSEMBLY	PR. - PROPOSED	- MILL AND RESURFACING AREA
CONST. - CONSTRUCTION	SHLDR - SHOULDER	- CONCRETE CAP REPLACEMENT
CURB, 4-C - CURB, TYPE 4C	SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM4-4.4	- VEGETATED FILTER STRIPS
CURB, 6 - CURB, TYPE 6	WDNG - WIDENING	- PROPOSED LIGHT POLE
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	ATG - ADJUST TO GRADE	- PROPOSED LIGHTING PULLBOX
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	DND - DO NOT DISTURB	- PROPOSED ITS CABINET
	F&P - FILL AND PLUG	- PROPOSED ITS PULLBOX
	L.O.N. - LENGTH OF NEED	- PROPOSED ELECTRIC PULLBOX
	U.D. - UNDERDRAIN	

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

PLAN - I-71
STA. 1109+00.00 TO STA. 1120+00.00

DESIGN AGENCY: Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.219 | TOTAL: 618

FRA-71-19.10

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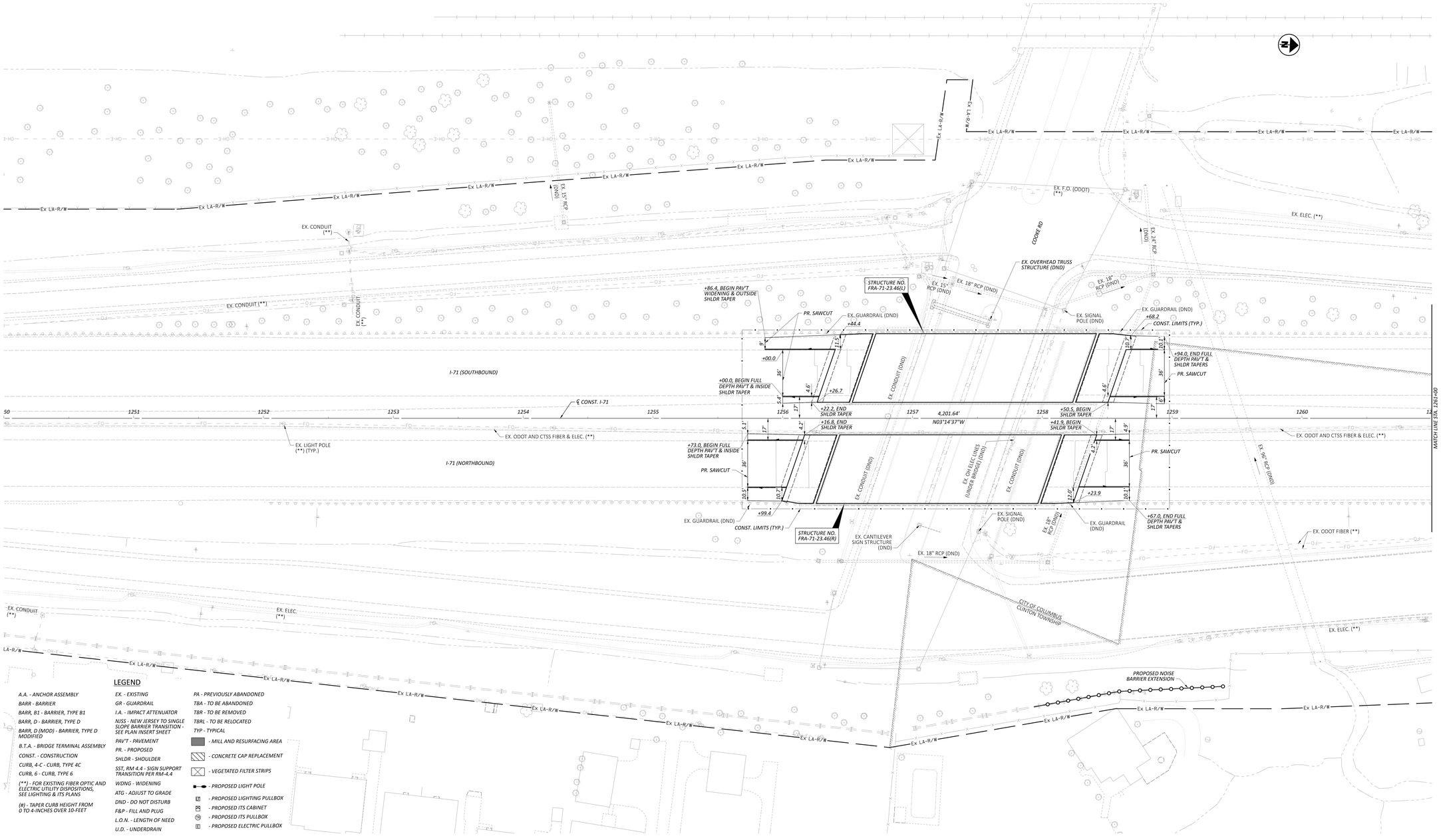


LEGEND

A.A. - ANCHOR ASSEMBLY	*EX. - EXISTING*	*PA - PREVIOUSLY ABANDONED*
BARR - BARRIER	*GR - GUARDRAIL*	*TBA - TO BE ABANDONED*
BARR, B1 - BARRIER, TYPE B1	*I.A. - IMPACT ATTENUATOR*	*TBR - TO BE REMOVED*
BARR, D - BARRIER, TYPE D	*NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*	*TBRL - TO BE RELOCATED*
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	*PAV'T - PAVEMENT*	*TYP - TYPICAL*
B.T.A. - BRIDGE TERMINAL ASSEMBLY	*PR. - PROPOSED*	*- MILL AND RESURFACING AREA*
CONST. - CONSTRUCTION	*SHLDR - SHOULDER*	*- CONCRETE CAP REPLACEMENT*
CURB, 4-C - CURB, TYPE 4C	*SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*	*- VEGETATED FILTER STRIPS*
CURB, 6 - CURB, TYPE 6	*WDNG - WIDENING*	*- PROPOSED LIGHT POLE*
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	*ATG - ADJUST TO GRADE*	*- PROPOSED LIGHTING PULLBOX*
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	*DND - DO NOT DISTURB*	*- PROPOSED ITS CABINET*
	F&P - FILL AND PLUG	*- PROPOSED ITS PULLBOX*
	L.O.N. - LENGTH OF NEED	*- PROPOSED ELECTRIC PULLBOX*
	U.D. - UNDERDRAIN	

HORIZONTAL SCALE IN FEET
0 10 20 40

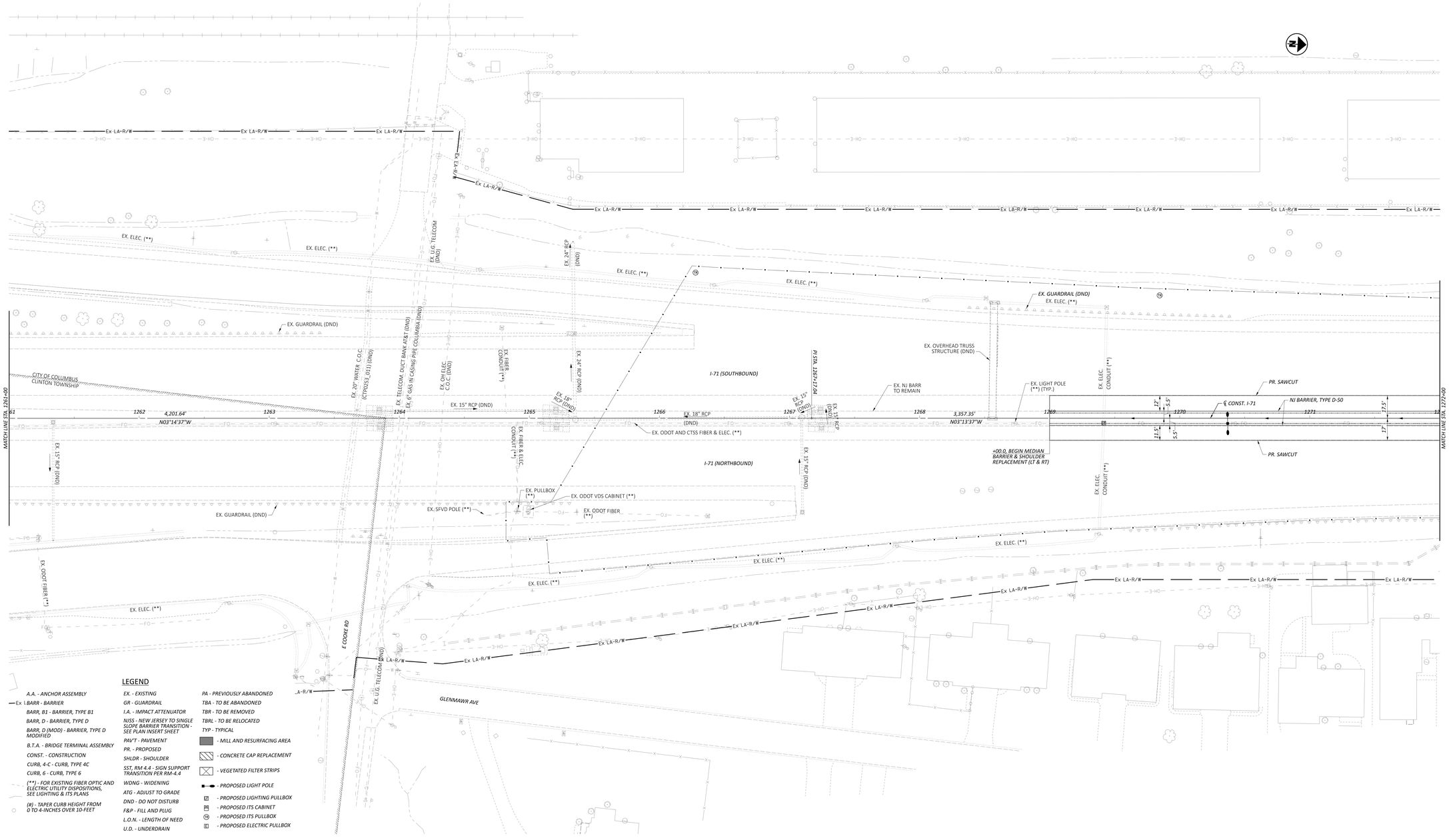
PLAN - I-71
STA. 1250+00.00 TO STA. 1261+00.00

FRA-71-19.10

MODEL: CU_071 - Sheet 2 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 2:52:42 PM PCTBW: CMDOT_PDF_U-LARGE_PSTBL.CMDOT_PDF_U-LARGE_PSTBL.CMDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ROUTE: Fra-71-19.10 Plan and Profile Sheets | Fra-071-19.10 Plan and Profile Sheets | Plan and Profile Sheets

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.220 TOTAL: 618



LEGEND

- *A.A. - ANCHOR ASSEMBLY*
- *BARR - BARRIER*
- *BARR, B1 - BARRIER, TYPE B1*
- *BARR, D - BARRIER, TYPE D*
- *BARR, D (MOD) - BARRIER, TYPE D MODIFIED*
- *B.T.A. - BRIDGE TERMINAL ASSEMBLY*
- *CONST. - CONSTRUCTION*
- *CURB, 4-C - CURB, TYPE 4C*
- *CURB, 6 - CURB, TYPE 6*
- *(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS*
- *(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET*

- *EX. - EXISTING*
- *GR - GUARDRAIL*
- *I.A. - IMPACT ATTENUATOR*
- *NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*
- *PAV'T - PAVEMENT*
- *PR. - PROPOSED*
- *SHLDR - SHOULDER*
- *SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*
- *WDNG - WIDENING*
- *ATG - ADJUST TO GRADE*
- *DND - DO NOT DISTURB*
- *F&P - FILL AND PLUG*
- *L.O.N. - LENGTH OF NEED*
- *U.D. - UNDERDRAIN*

- *PA - PREVIOUSLY ABANDONED*
- *TBA - TO BE ABANDONED*
- *TBR - TO BE REMOVED*
- *TBRL - TO BE RELOCATED*
- *TYP - TYPICAL*
- *- MILL AND RESURFACING AREA*
- *- CONCRETE CAP REPLACEMENT*
- *- VEGETATED FILTER STRIPS*
- *- PROPOSED LIGHT POLE*
- *- PROPOSED LIGHTING PULLBOX*
- *- PROPOSED ITS CABINET*
- *- PROPOSED ITS PULLBOX*
- *- PROPOSED ELECTRIC PULLBOX*

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

PLAN - I-71
STA. 1261+00.00 TO STA. 1272+00.00

FRA-71-19.10

MODEL: CU_071 - Sheet 3 PAYREQ01 66x34 (in) SKTS: 37/1/2026 TIME: 2:53:47 PM PCTBW: CMDOT_PDF_U-LARGE_PSTBL.CTB/CMDOT_PDF_U-LARGE_PSTBL.CMDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALIGNMENT NAME: I-71 NB PROFILE NAME: I-71 NB SURFACE NAME: Proposed Roadway Surface_CONCRETE

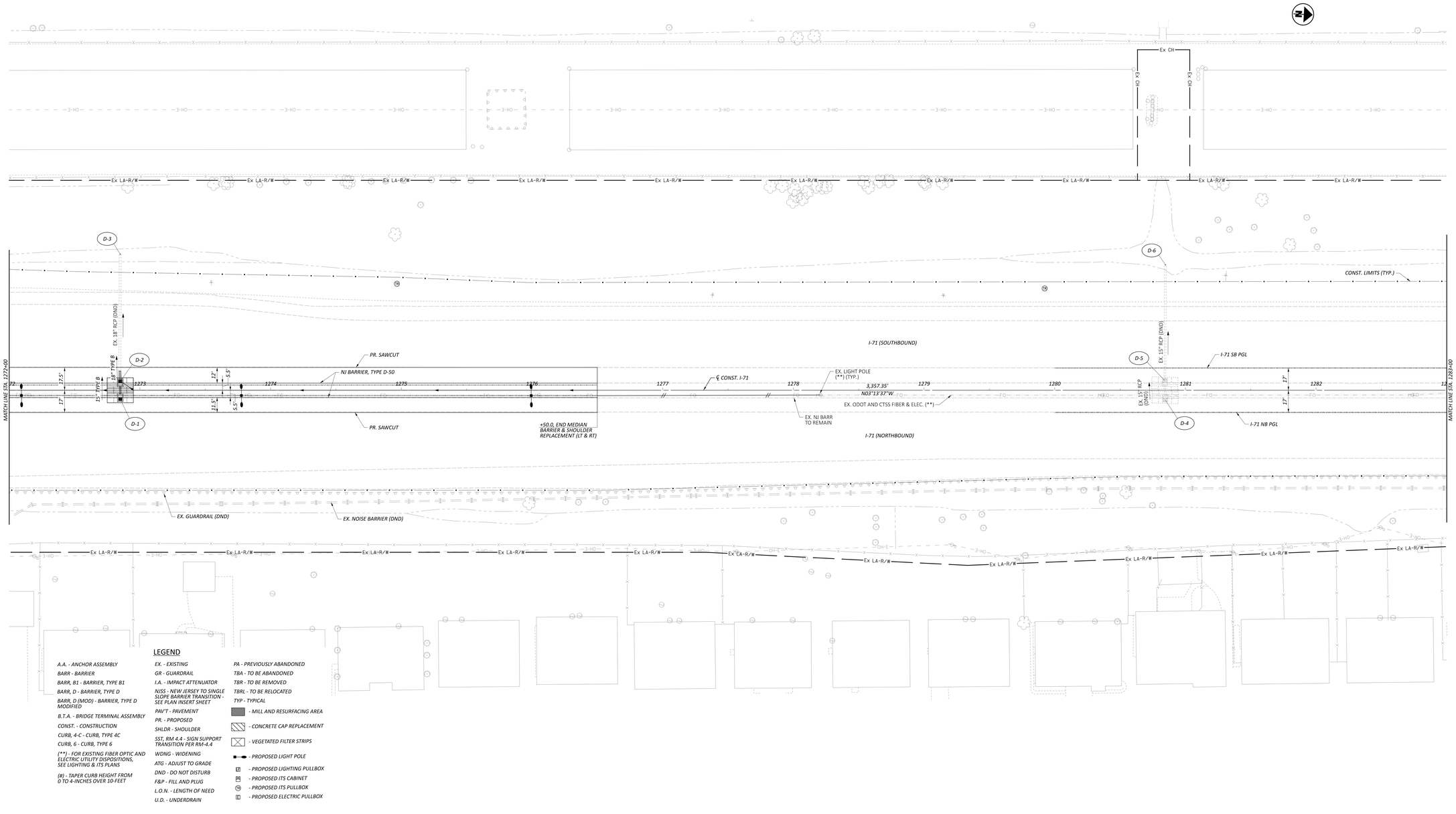
DESIGN AGENCY: Jacobs

DESIGNER: CNR

REVIEWER: MCK 03/11/26

PROJECT ID: 109164

SHEET: P.221 TOTAL: 618



LEGEND

A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET

EX. - EXISTING
GR - GUARDRAIL
I.A. - IMPACT ATTENUATOR
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
PAV'T - PAVEMENT
PR. - PROPOSED
SHLDR - SHOULDER
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
WDNG - WIDENING
ATG - ADJUST TO GRADE
DND - DO NOT DISTURB
F&P - FILL AND PLUG
L.O.N. - LENGTH OF NEED
U.D. - UNDERDRAIN

PA - PREVIOUSLY ABANDONED
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBRL - TO BE RELOCATED
TYP - TYPICAL
- MILL AND RESURFACING AREA
- CONCRETE CAP REPLACEMENT
- VEGETATED FILTER STRIPS
- PROPOSED LIGHT POLE
- PROPOSED LIGHTING PULLBOX
- PROPOSED ITS CABINET
- PROPOSED ITS PULLBOX
- PROPOSED ELECTRIC PULLBOX

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - I-71
STA. 1272+00.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs
DESIGNER
CNR
REVIEWER
MCK 03/11/26
PROJECT ID
109164
SHEET
P.222
TOTAL
618

FRA-71-19.10

MODEL: CLP_071 - Sheet 4 PAYREQD1 66x34 (in) SHTS: 37/122(In TAB: 21/121 PM: PCONY, CHDOT_PDP_LP LAYER: PSHTEL, CHDOT_Pen.tbl USER: ChrisLawrence@jacobs.com WORKSPACE: CHDOTCLX02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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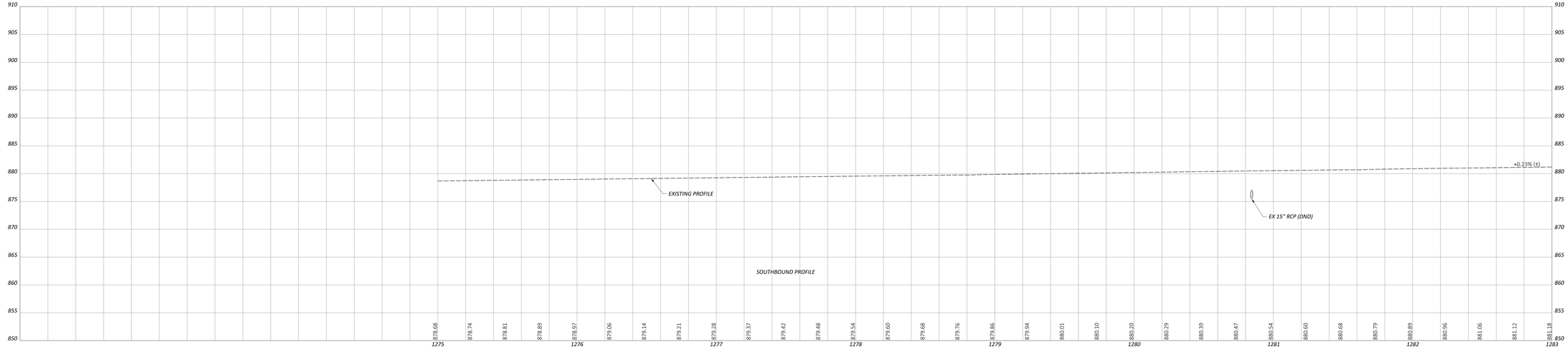
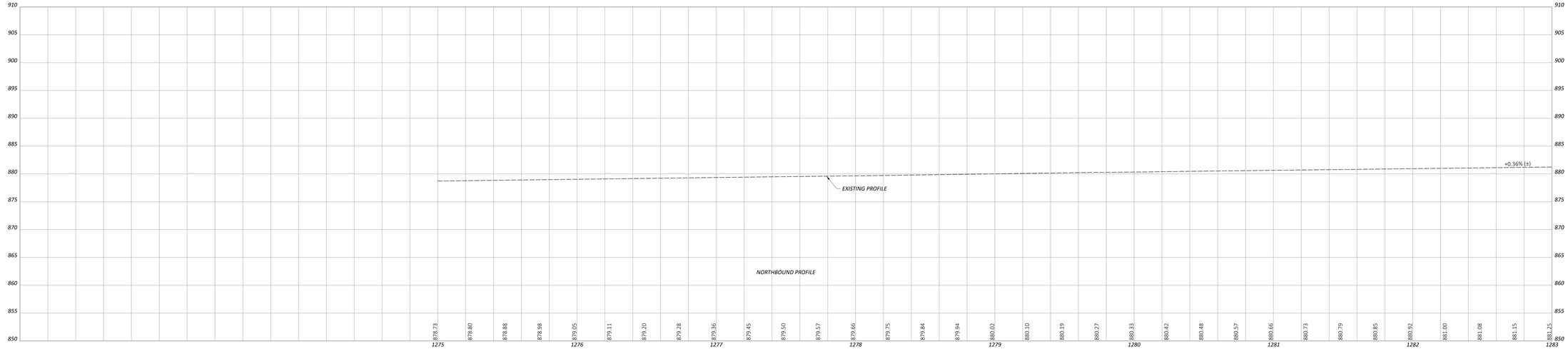
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





PROFILE - I-71
STA. 1275+00.00 TO STA. 1283+00.00

FRA-71-19.10

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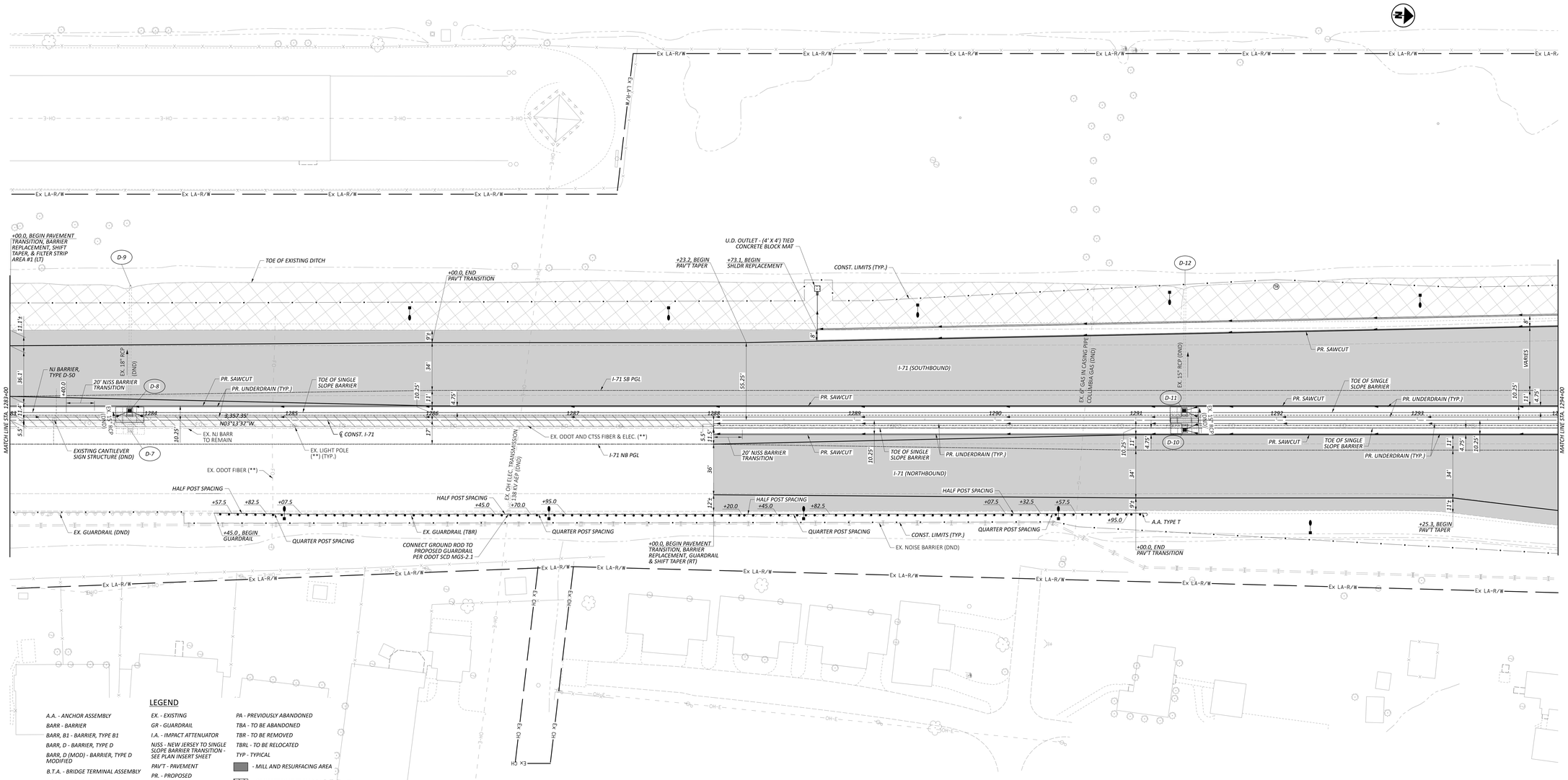
DESIGN AGENCY
Jacobs
DESIGNER
CNR
REVIEWER
MCK 03/11/26
PROJECT ID
109164
SHEET
P.223
TOTAL
618



HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

PLAN - I-71
STA. 1283+00.00 TO STA. 1294+00.00

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.224 | TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet: S PAYREQD1 66x34 (in) DATE: 3/31/2026 TIME: 2:33:11 PM PLTDRV: DWG.pltcfg PENTBL: DWG.tbl USER: ChrisLawrence@jacobs.com WORKSPACE: CHCOTC1V2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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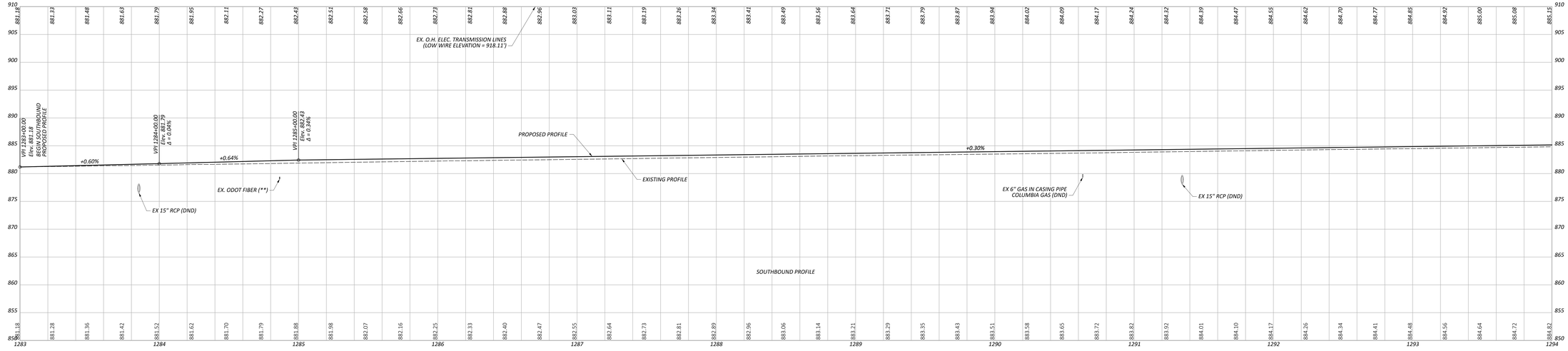
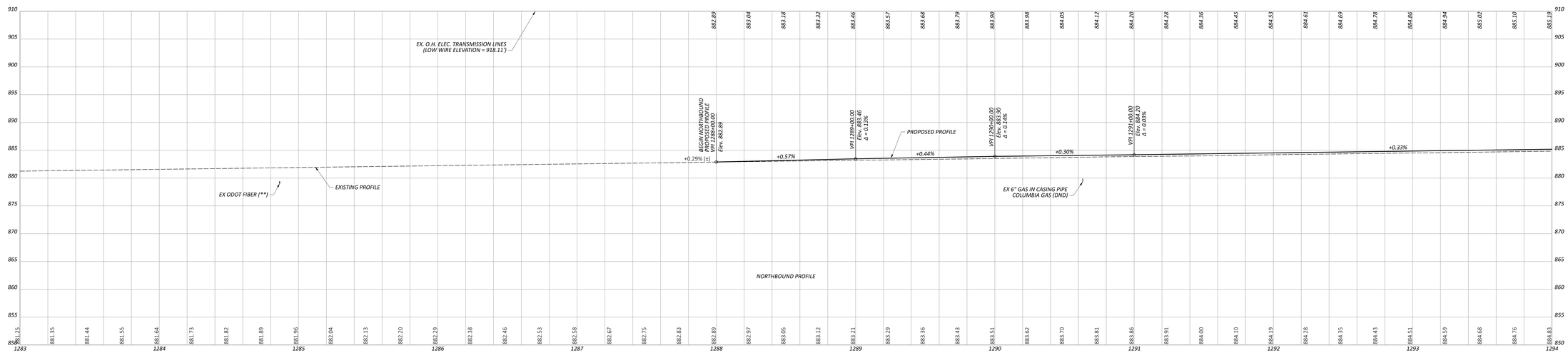
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS



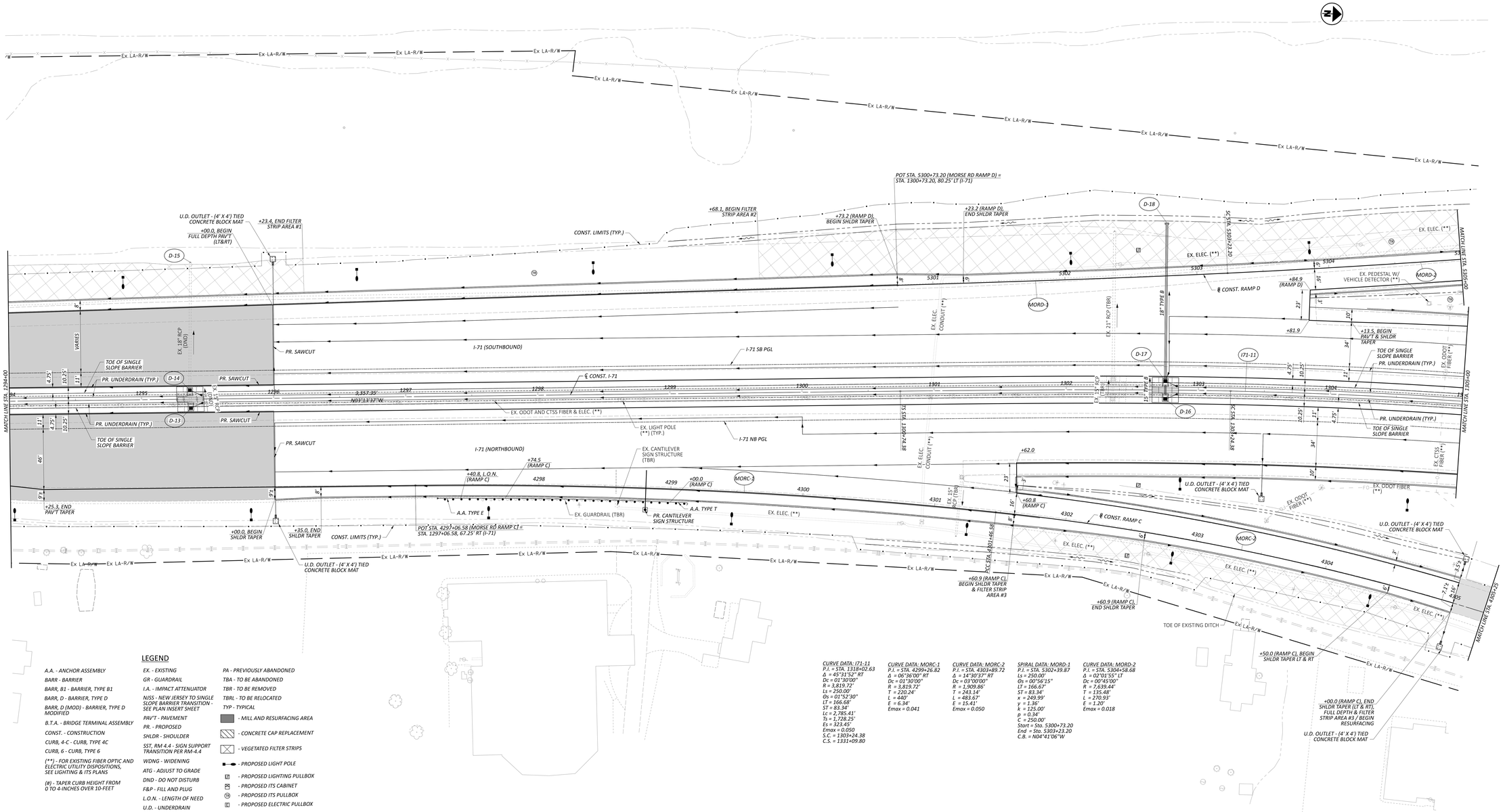


PROFILE - I-71
STA. 1283+00.00 TO STA. 1294+00.00

FRA-71-19.10

MODEL: 71 Profiles 2 PARTIALS: 04x24 (no) DATE: 3/30/2026 TIME: 11:59:44 AM PLTSTBL: ON-OFF_PSR_LV.stb PLOTTED ON-OFF_PSR_LV DESIGN: WORKSPACE: OHDOTCIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
FILE: C:\Projects\109164\Roadway\Profiles\Profiles\FRA71-19.10_PROFILE-I-71-NORTHBOUND-SOUTHBOUND.dgn

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.225 TOTAL: 618



LEGEND

A.A. - ANCHOR ASSEMBLY	*EX. - EXISTING*	*PA - PREVIOUSLY ABANDONED*
BARR - BARRIER	*GR - GUARDRAIL*	*TBA - TO BE ABANDONED*
BARR, B1 - BARRIER, TYPE B1	*I.A. - IMPACT ATTENUATOR*	*TBR - TO BE REMOVED*
BARR, D - BARRIER, TYPE D	*NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*	*TBRL - TO BE RELOCATED*
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	*PAV'T - PAVEMENT*	*TYP - TYPICAL*
B.T.A. - BRIDGE TERMINAL ASSEMBLY	*PR. - PROPOSED*	*- MILL AND RESURFACING AREA*
CONST. - CONSTRUCTION	*SHLDR - SHOULDER*	*- CONCRETE CAP REPLACEMENT*
CURB, 4-C - CURB, TYPE 4C	*SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*	*- VEGETATED FILTER STRIPS*
CURB, 6 - CURB, TYPE 6	*WDNG - WIDENING*	*- PROPOSED LIGHT POLE*
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	*ATG - ADJUST TO GRADE*	*- PROPOSED LIGHTING PULLBOX*
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	*DND - DO NOT DISTURB*	*- PROPOSED ITS CABINET*
	F&P - FILL AND PLUG	*- PROPOSED ITS PULLBOX*
	L.O.N. - LENGTH OF NEED	*- PROPOSED ELECTRIC PULLBOX*
	U.D. - UNDERDRAIN	

CURVE DATA: I71-11
P.I. = STA. 1318+02.63
Δ = 45°31'52" RT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,785.41'
Ts = 1,728.25'
Es = 323.45'
Emax = 0.050
S.C. = 1303+24.38
C.S. = 1331+09.80

CURVE DATA: MORC-1
P.I. = STA. 4299+26.82
Δ = 06°36'00" RT
Dc = 01°30'00"
R = 3,819.72'
T = 220.24'
L = 440'
E = 6.34'
Emax = 0.041

CURVE DATA: MORC-2
P.I. = STA. 4303+89.72
Δ = 14°30'37" RT
Dc = 03°00'00"
R = 1,909.86'
T = 243.14'
L = 483.67'
E = 15.41'
Emax = 0.050

SPIRAL DATA: MORD-1
P.I. = STA. 5302+39.87
Ls = 250.00'
Θs = 00°56'15"
LT = 166.67'
ST = 83.34'
x = 249.99'
y = 1.36'
k = 125.00'
p = 0.34'
C = 250.00'
Start = Sta. 5300+73.20
End = Sta. 5303+23.20
C.B. = N04°41'06"W

CURVE DATA: MORD-2
P.I. = STA. 5304+58.68
Δ = 02°01'55" LT
Dc = 00°45'00"
R = 7,639.44'
T = 135.48'
L = 270.93'
E = 1.20'
Emax = 0.018

FRA-71-19.10

MODEL: CLP_OPT1 - Sheet 6 PAVEMENT 66x34 (Ps) SHTS: 37/122(M) TIME: 2:51:13 PM PLTDRV: CMDOT_PDF_FI-LatSB_PSTBL CMDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCLOUD WORKSET: DEFAULT PRODUCT: OpenRoadsDesigner 24.00.02.25

DESIGN AGENCY: Jacobs

DESIGNER: CNR

REVIEWER: MCK 03/11/26

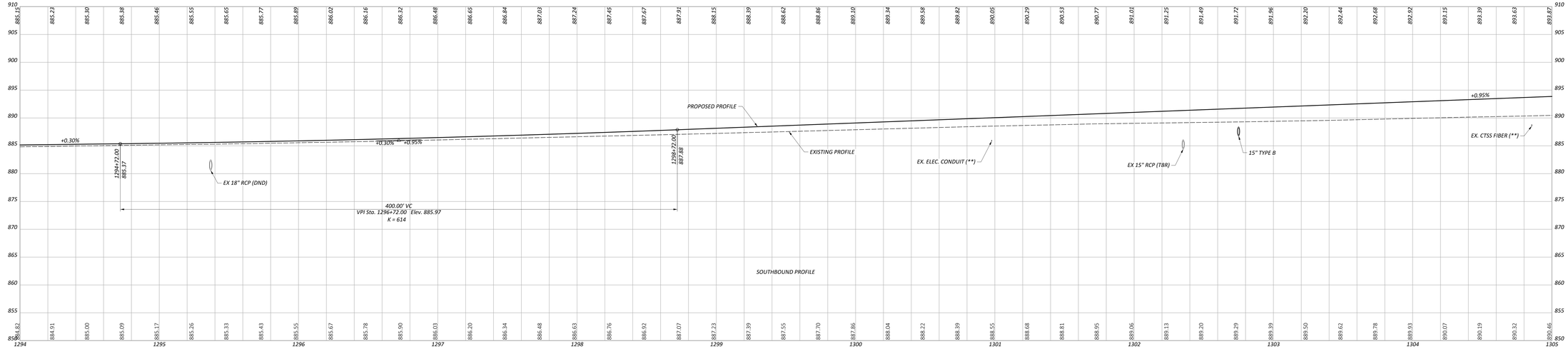
PROJECT ID: 109164

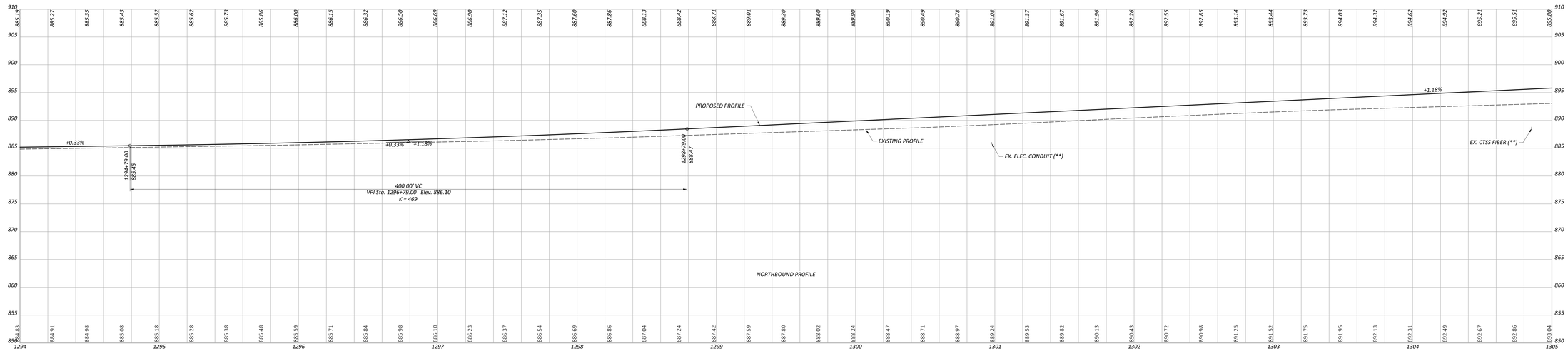
SHEET: P.226 TOTAL: 618

HORIZONTAL SCALE IN FEET: 0 10 20 40

PLAN - I-71
STA. 1294+00.00 TO STA. 1305+00.00

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS



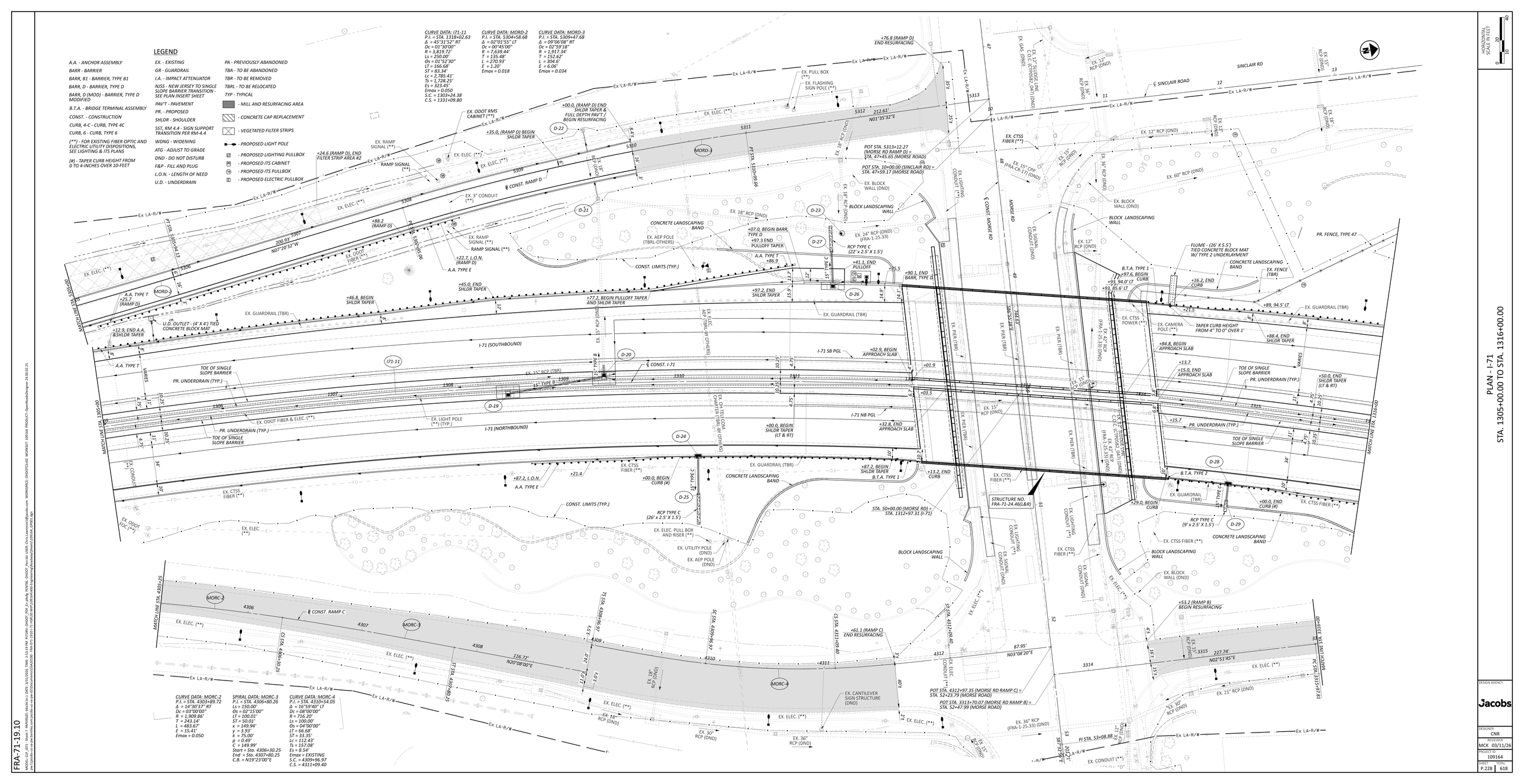


PROFILE - I-71
STA. 1294+00.00 TO STA. 1305+00.00

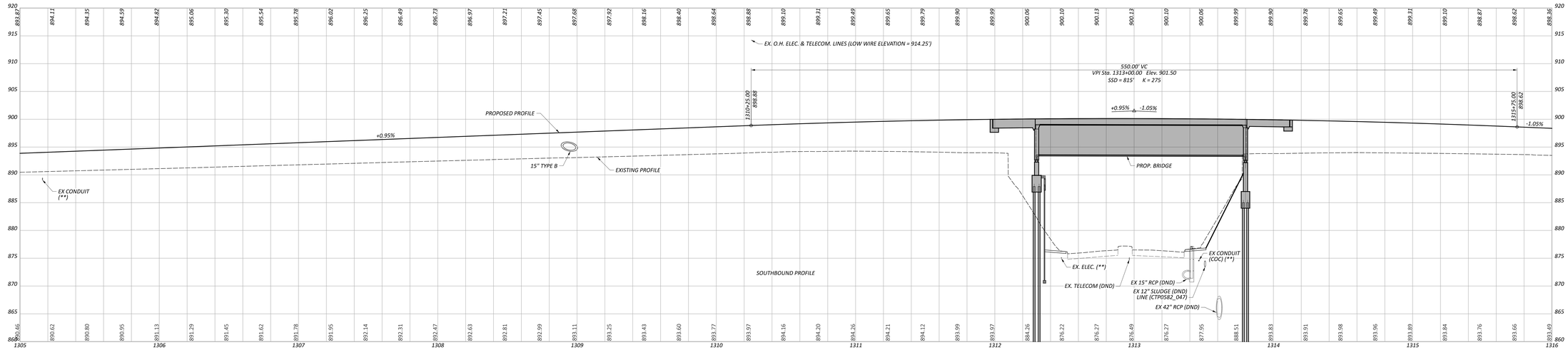
FRA-71-19.10

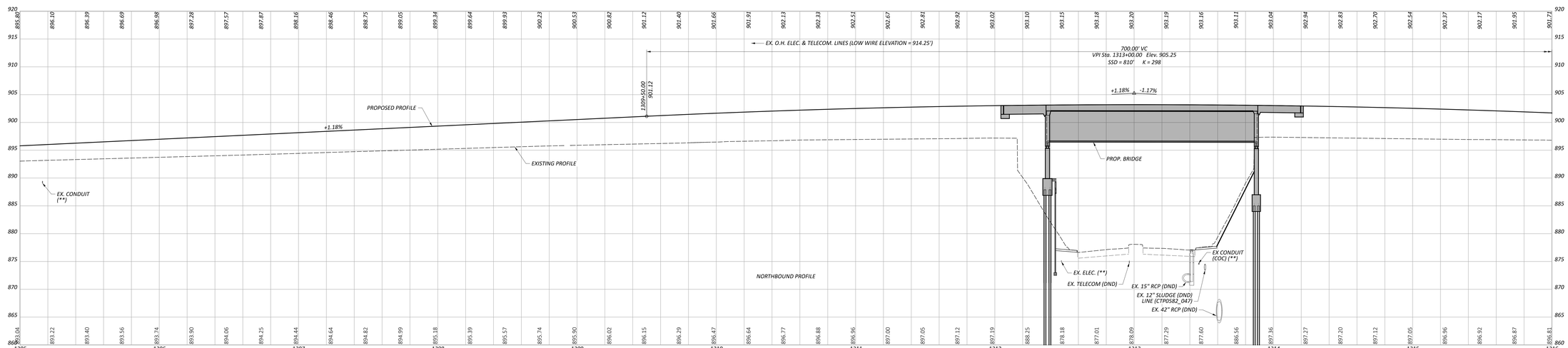
MODEL: 71 Profiles 3 PARTIDAS: 04x24 (no) DATE: 3/30/2026 TIME: 11:56:47 PM PITDW: DHDOT_PDP_LV profile_PRINTBL DHDOT_Pen.tbl USER: Chris.Lawwood@jacobs.com WORKSPACE: OHDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.03.25
FILE: C:\Users\chris.lawwood\Jacobs\Documents - Ohio DOT Projects\109164 - FRA-71-19.10 - I-71 Profiles\Microstation\Sheets\Alignment\FRA-71-19.10_Profile_Sheet.dgn

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.227 TOTAL: 618


LEGEND
A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET
EX. - EXISTING
GR - GUARDRAIL
I.A. - IMPACT ATTENUATOR
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
PAV'T - PAVEMENT
PR. - PROPOSED
SHLDR - SHOULDER
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
WDNG - WIDENING
ATG - ADJUST TO GRADE
DND - DO NOT DISTURB
F&P - FILL AND PLUG
L.O.N. - LENGTH OF NEED
U.D. - UNDERDRAIN
PA - PREVIOUSLY ABANDONED
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBRL - TO BE RELOCATED
TYP - TYPICAL
- MILL AND RESURFACING AREA
- CONCRETE CAP REPLACEMENT
- VEGETATED FILTER STRIPS
- PROPOSED LIGHT POLE
- PROPOSED LIGHTING PULLBOX
- PROPOSED ITS CABINET
- PROPOSED ITS PULLBOX
- PROPOSED ELECTRIC PULLBOX
CURVE DATA: I71-11
P.I. = STA. 1318+02.63
Δ = 45°31'52" RT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,785.41'
Ts = 1,728.25'
Es = 323.45'
Emax = 0.050
S.C. = 1303+24.38
C.S. = 1331+09.80
CURVE DATA: MORD-2
P.I. = STA. 5304+58.68
Δ = 02°01'55" LT
Dc = 00°45'00"
R = 7,639.44'
T = 135.48'
L = 270.93'
E = 1.20'
Emax = 0.018
CURVE DATA: MORD-3
P.I. = STA. 5309+47.68
Δ = 09°06'08" RT
Dc = 02°59'18"
R = 1,917.34'
T = 152.62'
L = 304.6'
E = 6.06'
Emax = 0.034
CURVE DATA: MORC-2
P.I. = STA. 4303+89.72
Δ = 14°30'37" RT
Dc = 03°00'00"
R = 1,909.86'
T = 243.14'
L = 483.67'
E = 15.41'
Emax = 0.050
SPIRAL DATA: MORC-3
P.I. = STA. 4306+80.26
Ls = 150.00'
Θs = 02°15'00"
LT = 100.01'
ST = 50.01'
x = 149.94'
y = 3.93'
k = 75.00'
p = 0.49'
C = 149.99'
Start = Sta. 4306+30.25
End = Sta. 4307+80.25
C.B. = N19°23'00"E
CURVE DATA: MORC-4
P.I. = STA. 4310+54.05
Δ = 16°59'40" LT
Dc = 08°00'00"
R = 716.20'
Ls = 100.00'
Θs = 04°00'00"
LT = 66.68'
ST = 33.35'
Lc = 112.43'
Ts = 157.08'
Es = 8.54'
Emax = EXISTING
S.C. = 4309+96.97
C.S. = 4311+09.40
+76.8 (RAMP D) END RESURFACING
+00.0, (RAMP D) END SHLDR TAPER & FULL DEPTH PAV'T / BEGIN RESURFACING
+35.0, (RAMP D) BEGIN SHLDR TAPER
+24.6 (RAMP D), END FILTER STRIP AREA #2
+88.2 (RAMP D)
+45.0, END SHLDR TAPER
+46.8, BEGIN SHLDR TAPER
+12.9, END A.A. & SHLDR TAPER
+45.7 (RAMP D)
+22.7, L.O.N. (RAMP D)
+87.2, L.O.N.
+21.4
+00.0, BEGIN CURB (#)
+61.1 (RAMP C) END RESURFACING
+53.2 (RAMP B) BEGIN RESURFACING
+77.2, BEGIN PULLOFF TAPER AND SHLDR TAPER
+97.2, END SHLDR TAPER
+07.0, BEGIN BARR, TYPE D
+97.3 END PULLOFF TAPER
+41.1, END PULLOFF
+90.1, END BARR, TYPE D
+02.9, BEGIN APPROACH SLAB
+32.8, END APPROACH SLAB
+00.0, BEGIN SHLDR TAPER (LT & RT)
+87.2, BEGIN / SHLDR TAPER
+13.2, END CURB
+29.0, BEGIN CURB
+00.0, END CURB (#)
+97.6, BEGIN CURB
+16.2, END CURB
+84.8, BEGIN APPROACH SLAB
+15.0, END APPROACH SLAB
+88.4, END SHLDR TAPER
+50.0, END SHLDR TAPER (LT & RT)
POT STA. 5313+12.27 (MORSE RD RAMP D) = STA. 47+45.65 (MORSE ROAD)
POT STA. 10+00.00 (SINCLAIR RD) = STA. 47+59.17 (MORSE ROAD)
POT STA. 4312+97.35 (MORSE RD RAMP C) = STA. 52+23.79 (MORSE ROAD)
POT STA. 3313+70.07 (MORSE RD RAMP B) = STA. 52+47.99 (MORSE ROAD)
STA. 50+00.00 (MORSE RD) = STA. 1312+97.31 (I-71)
PI STA. 5309+99.66
PI STA. 5310+06.06
PI STA. 5305+84.13
PI STA. 53+08.88
MATCH LINE STA. 1305+00
MATCH LINE STA. 1316+00
MATCH LINE STA. 4305+25
MATCH LINE STA. 4315+91.91
STRUCTURE NO. FRA-71-24.46(L&R)
I-71 (SOUTHBOUND)
I-71 (NORTHBOUND)
I-71 SB PGL
I-71 NB PGL
℄ CONST. I-71
℄ CONST. RAMP D
℄ CONST. RAMP C
℄ CONST. MORSE RD
SINCLAIR RD
℄ SINCLAIR ROAD
MORSE RD
MORD-2
MORD-3
MORC-2
MORC-3
MORC-4
I71-11
D-19
D-20
D-21
D-22
D-23
D-24
D-25
D-26
D-27
D-28
D-29
A.A. TYPE E
A.A. TYPE T
B.T.A. TYPE 1
B.T.A. TYPE 2
RCP TYPE C (22' x 2.5' X 1.5')
RCP TYPE C (26' x 2.5' X 1.5')
RCP TYPE C (9' x 2.5' X 1.5')
15" TYPE C
15" TYPE B
CONST. LIMITS (TYP.)
CONCRETE LANDSCAPING BAND
BLOCK LANDSCAPING WALL
TOE OF SINGLE SLOPE BARRIER
PR. UNDERDRAIN (TYP.)
TAPER CURB HEIGHT FROM 4" TO 0" OVER 1'
FLUME - (26' X 5.5') TIED CONCRETE BLOCK MAT W/ TYPE 2 UNDERLAYMENT
PR. FENCE, TYPE 47
EX. FENCE (TBR)
U.D. OUTLET - (4' X 4') TIED CONCRETE BLOCK MAT
EX. GUARDRAIL (TBR)
EX. ELEC. (**)
EX. ODOT FIBER & ELEC. (**)
EX. ODOT FIBER (**)
EX. CTSS FIBER (**)
EX. ELEC. PULL BOX AND RISER (**)
EX. UTILITY POLE (DND)
EX. AEP POLE (DND)
EX. AEP POLE (TBRL-OTHERS)
EX. ELEC. AEP (TBRL-BY OTHERS)
EX. CH TELECOM. CHARTER (TBRL-BY OTHERS)
EX. LIGHT POLE (**) (TYP.)
EX. RAMP SIGNAL (**)
RAMP SIGNAL (**)
EX. 3" CONDUIT (**)
EX. 4" CONDUIT (**)
EX. FLASHING SIGN POLE (**)
EX. PULL BOX (**)
EX. CAMERA POLE (**)
EX. CTSS POWER (**)
EX. LIGHTING CONDUIT (**)
EX. SIGNAL CONDUIT (DND)
EX. SIGNAL CONDUIT (TBR)
EX. CONDUIT (**)
EX. CANTILEVER SIGN STRUCTURE (DND)
EX. BLOCK WALL (DND)
EX. GAS (DND)
EX. 12" SLUDGE LINE C.O.C. (CTOSS82-047) (DND)
EX. 42" RCP (FRA-1-25.33) (DND)
EX. 36" RCP (FRA-1-25.33) (DND)
EX. 30" RCP (FRA-1-25.33) (DND)
EX. 24" RCP (FRA-1-25.33)
EX. 18" RCP (DND)
EX. 15" RCP (DND)
EX. 12" RCP (DND)
EX. 60" RCP (DND)
EX. 36" RCP (DND)
EX. 30" RCP (DND)
EX. 18" RCP (DND)
EX. 15" CPP (FRA-CN-17) (DND)
EX. 12" CPP (DND)
EX. CTSS FIBER (**)
EX. 42" RCP (FRA-1-25.33) (DND)
EX. 12" RCP (DND)
EX. 15" RCP (DND)
EX. 36" RCP (DND)
EX. 21" RCP (DND)
EX. 30" RCP (DND)
EX. 18" RCP (DND)
EX. 15" RCP (DND)
EX. 12" RCP (DND)
EX. 36" RCP (DND)
EX. 60" RCP (DND)
EX. 18" RCP (DND)
EX. 15" RCP (DND)
EX. 12" RCP (DND)
EX. 36" RCP (DND)
EX. 30

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





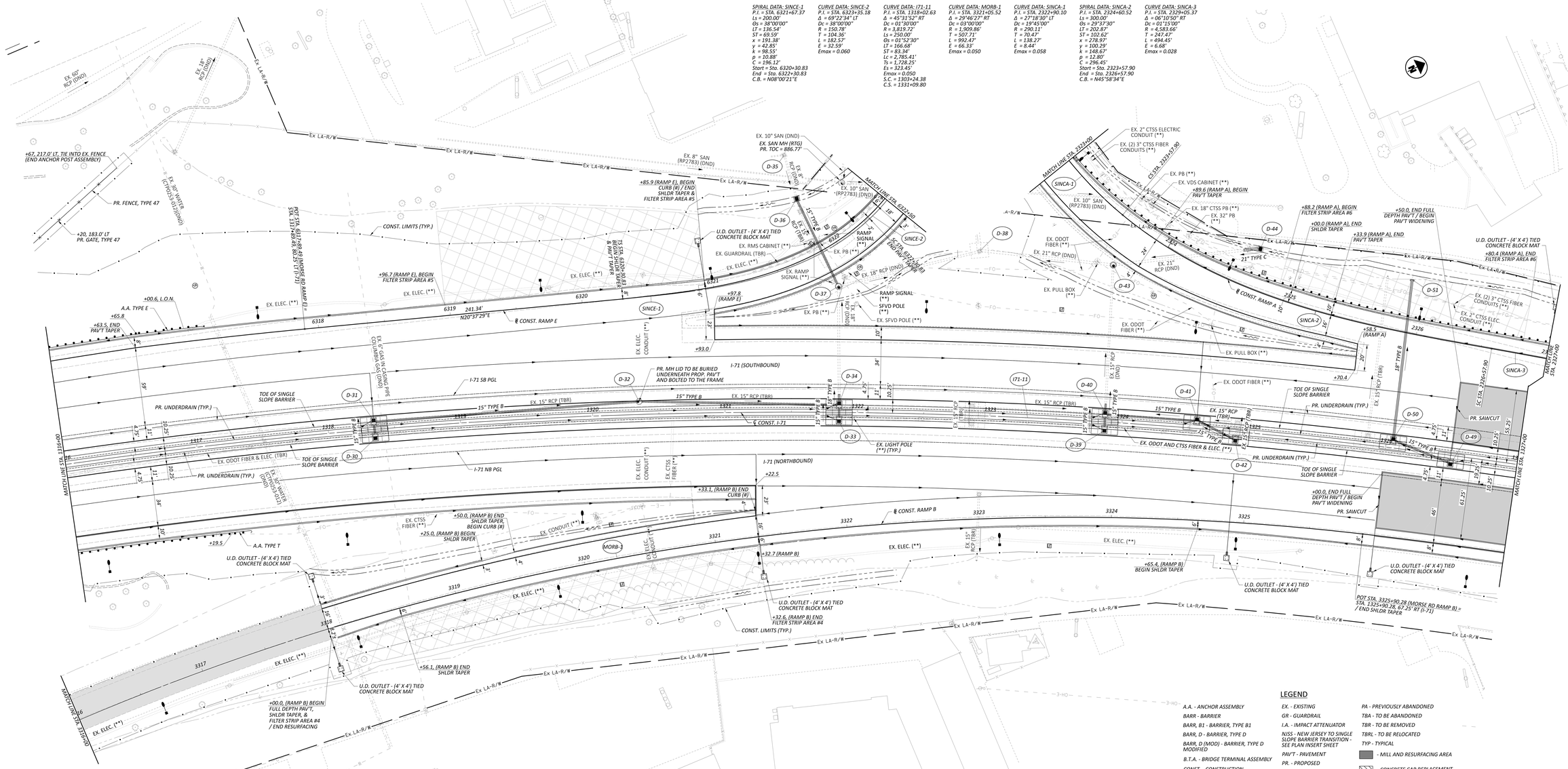
PROFILE - I-71
STA. 1305+00.00 TO STA. 1316+00.00

DESIGN AGENCY
Jacobs

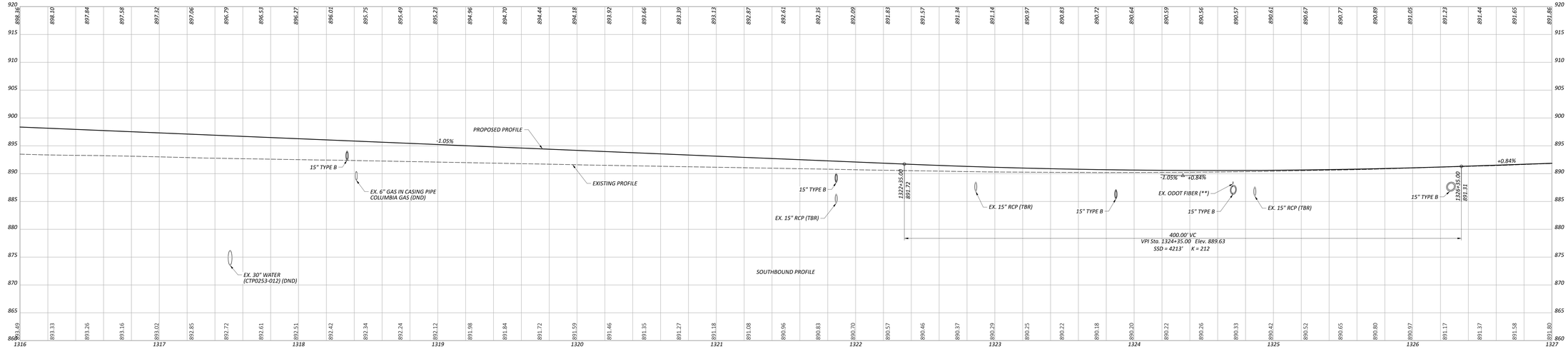
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.229 TOTAL: 618

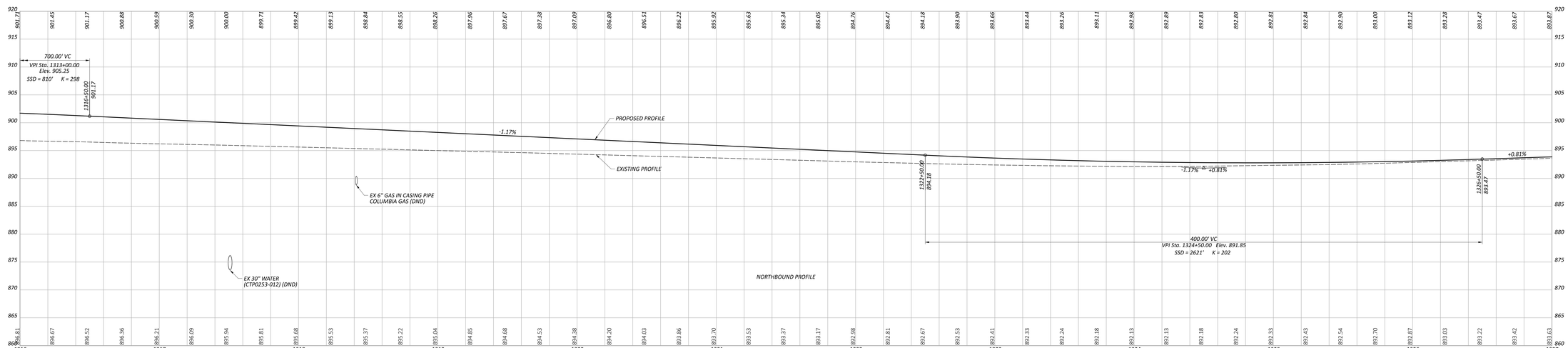
FRA-71-19.10

MODEL: 71 Profile 4 PARTIDGE: 04x14 En1 DATE: 3/30/2026 TIME: 11:07:54 AM PITDIM: ON DIDT_PW_LA prEdg PWTEL: ON DIDT_Pen.tbl USER: Chris.Lawwood@jacobs.com WORKSPACE: OH DOT/CO DOT WORKSET: DISTRICT PRODUCT: OpenRoadsDesigner 14.00.02.25
FILE: C:\Projects\Fra-71-19.10\Design\Roadway\Profiles\Fra-71-19.10 Profile 4.dgn


SPIRAL DATA: SINCE-1
P.I. = STA. 6321+67.37
Ls = 200.00'
Θs = 38°00'00"
LT = 136.54'
ST = 69.59'
x = 191.38'
y = 42.85'
k = 98.55'
p = 10.88'
C = 196.12'
Start = Sta. 6320+30.83
End = Sta. 6322+30.83
C.B. = N08°00'21"E
CURVE DATA: SINCE-2
P.I. = STA. 6323+35.18
Δ = 69°22'34" LT
Dc = 38°00'00"
R = 150.78'
T = 104.36'
L = 182.57'
E = 32.59'
Emax = 0.060
CURVE DATA: I71-11
P.I. = STA. 1318+02.63
Δ = 45°31'52" RT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,785.41'
Ts = 1,728.25'
Es = 323.45'
Emax = 0.050
S.C. = 1303+24.38
C.S. = 1331+09.80
CURVE DATA: MORB-1
P.I. = STA. 3321+05.52
Δ = 29°46'27" RT
Dc = 03°00'00"
R = 1,909.86'
T = 507.71'
L = 992.47'
E = 66.33'
Emax = 0.050
CURVE DATA: SINCA-1
P.I. = STA. 2322+90.10
Δ = 27°18'30" LT
Dc = 19°45'00"
R = 290.11'
T = 70.47'
L = 138.27'
E = 8.44'
Emax = 0.058
SPIRAL DATA: SINCA-2
P.I. = STA. 2324+60.52
Ls = 300.00'
Θs = 29°37'30"
LT = 202.87'
ST = 102.62'
x = 278.97'
y = 100.29'
k = 148.67'
p = 12.80'
C = 296.45'
Start = Sta. 2323+57.90
End = Sta. 2326+57.90
C.B. = N45°58'34"E
CURVE DATA: SINCA-3
P.I. = STA. 2329+05.37
Δ = 06°10'50" RT
Dc = 01°15'00"
R = 4,583.66'
T = 247.47'
L = 494.45'
E = 6.68'
Emax = 0.028
HORIZONTAL SCALE IN FEET
0 10 20 40
PLAN - I-71
STA. 1316+00.00 TO STA. 1327+00.00
LEGEND
A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET
EX. - EXISTING
GR - GUARDRAIL
I.A. - IMPACT ATTENUATOR
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
PAV'T - PAVEMENT
PR. - PROPOSED
SHLDR - SHOULDER
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
WDNG - WIDENING
ATG - ADJUST TO GRADE
DND - DO NOT DISTURB
F&P - FILL AND PLUG
L.O.N. - LENGTH OF NEED
U.D. - UNDERDRAIN
PA - PREVIOUSLY ABANDONED
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBRL - TO BE RELOCATED
TYP - TYPICAL
- MILL AND RESURFACING AREA
- CONCRETE CAP REPLACEMENT
- VEGETATED FILTER STRIPS
- PROPOSED LIGHT POLE
- PROPOSED LIGHTING PULLBOX
- PROPOSED ITS CABINET
- PROPOSED ITS PULLBOX
- PROPOSED ELECTRIC PULLBOX
DESIGN AGENCY
Jacobs
DESIGNER CNR
REVIEWER MCK 03/11/26
PROJECT ID 109164
SHEET P.230
TOTAL 618
FRA-71-19.10
MODEL: CU_071 - Sheet 8 PAYRIDGE: 66x34 (in) SKITS: 37/1/2026 TIME: 23:15:54 PM PITDIR: DWDT_PDF_U LaYdSt: PSTBL: DWDT_Pen.tbl USER: ChrisJLawrence@jacobs.com WORKSPACE: DWDTFILES WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





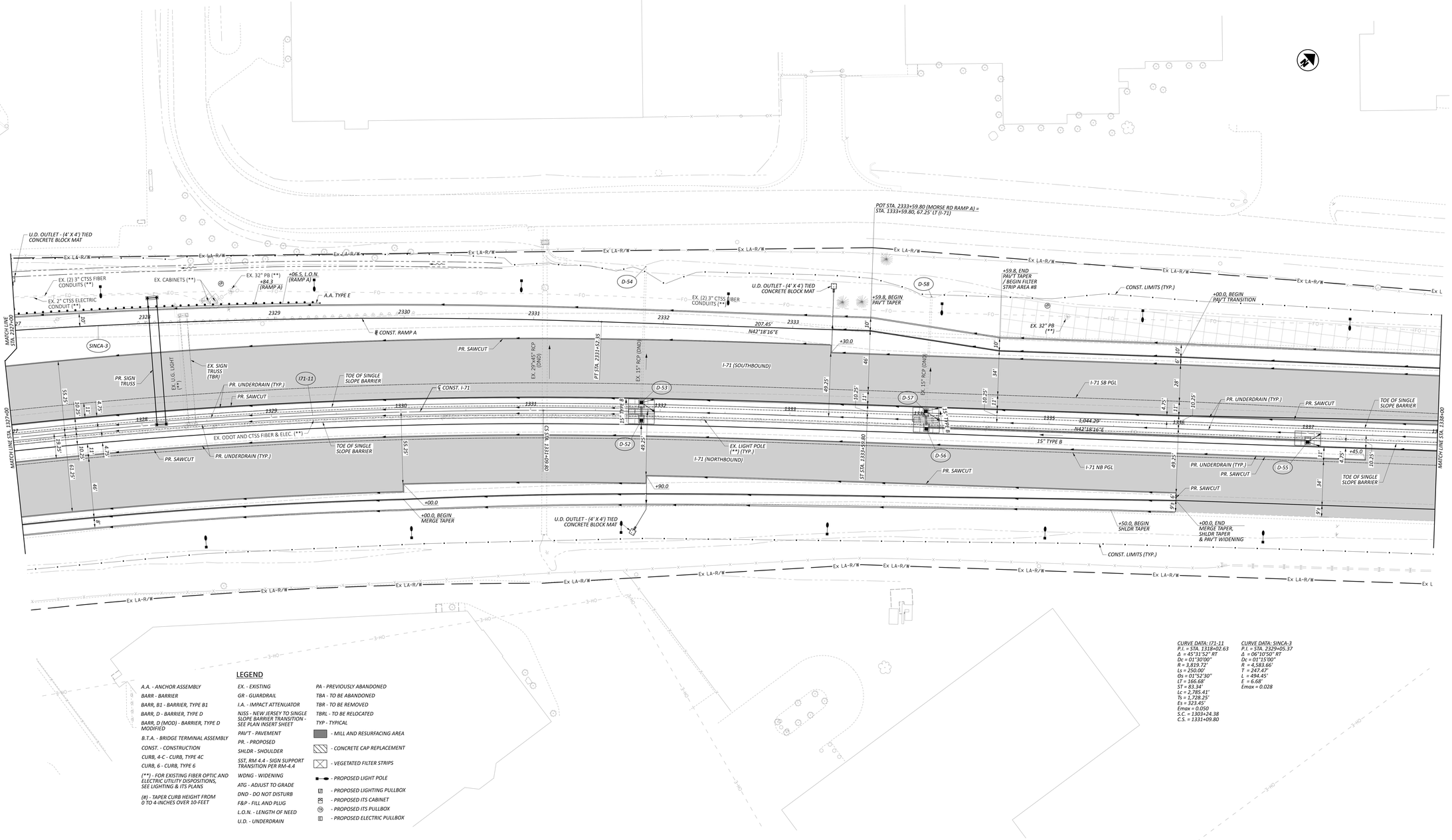
PROFILE - I-71
STA. 1316+00.00 TO STA. 1327+00.00

FRA-71-19.10

MODEL: 71 Profiles 5 PARTIALS: 04x24 (no) DATE: 3/30/2026 TIME: 11:59:45 PM PLTDRV: DHDOT_PSP_LV.pltcfg PSHTBL: DHDOT_Pen.tbl USER: Chris.Lawwood@jacobs.com WORKSPACE: OHDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
FILE: C:\Users\chris.lawwood\Jacobs\Documents - OHDOT Cloud Workspace\Projects\109164\Roadway\Alignments\FRA-71-19.10.dgn

DESIGN AGENCY
Jacobs

DESIGNER
CNR
REVIEWER
MCK 03/11/26
PROJECT ID
109164
SHEET P.231
TOTAL 618



LEGEND

EX. - EXISTING	PA - PREVIOUSLY ABANDONED
GR - GUARDRAIL	TBA - TO BE ABANDONED
I.A. - IMPACT ATTENUATOR	TBR - TO BE REMOVED
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET	TBRL - TO BE RELOCATED
PAV'T - PAVEMENT	TYP - TYPICAL
PR. - PROPOSED	- MILL AND RESURFACING AREA
SHLDR - SHOULDER	- CONCRETE CAP REPLACEMENT
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4	- VEGETATED FILTER STRIPS
WDNG - WIDENING	- PROPOSED LIGHT POLE
ATG - ADJUST TO GRADE	- PROPOSED LIGHTING PULLBOX
DND - DO NOT DISTURB	- PROPOSED ITS CABINET
F&P - FILL AND PLUG	- PROPOSED ITS PULLBOX
L.O.N. - LENGTH OF NEED	- PROPOSED ELECTRIC PULLBOX
U.D. - UNDERDRAIN	

A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET

CURVE DATA: I71-11
P.I. = STA. 1318+02.63
Δ = 45°31'52" RT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,785.41'
Ts = 1,728.25'
Es = 323.45'
Emax = 0.059
S.C. = 1303+24.38
C.S. = 1331+09.80

CURVE DATA: SINCA-3
P.I. = STA. 2329+05.37
Δ = 06°10'50" RT
Dc = 01°15'00"
R = 4,583.66'
T = 247.47'
L = 494.45'
E = 6.68'
Emax = 0.028

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

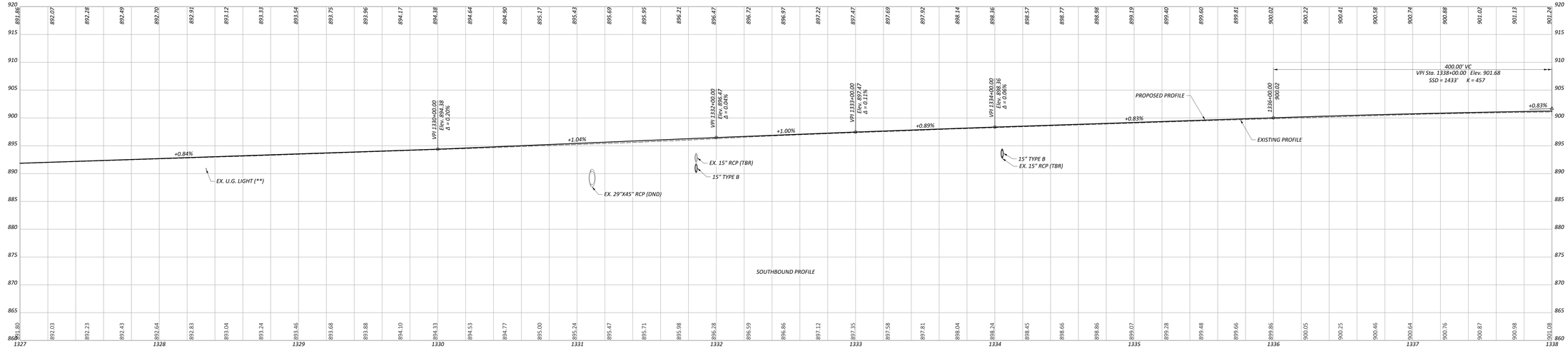
PLAN - I-71
STA. 1327+00.00 TO STA. 1338+00.00

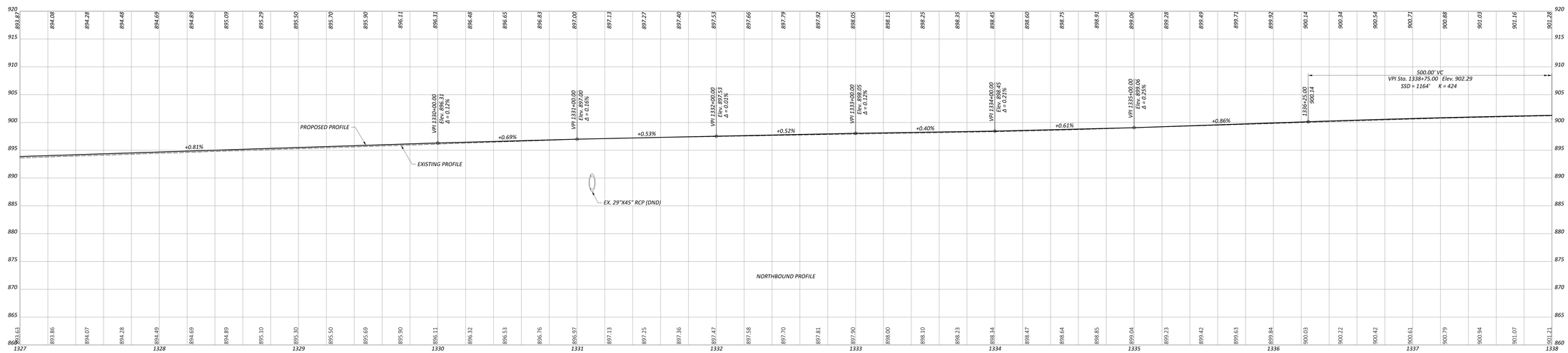
DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.232
TOTAL: 618

FRA-71-19.10

MODEL: CLP_I071 - Sheet: 9 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 2:33:33 PM PSTORE: CMDOT_PDF_V1.stb|@_PSTBL: CMDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Interstate\I-70\Floyd Hill\Roadway\Sheets\Plan\FRA-71-19.10_I-71 SB PGL to I-71 NB PGL.dgn

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





PROFILE - I-71
STA. 1327+00.00 TO STA. 1338+00.00

FRA-71-19.10

MODEL: 71 Profiles & PLMTHDS | SHEET: 3/30/2026 TIME: 11:10:50 AM PITDW: DHOFF_PSP_LH_prfl.dgn PITPEN: DHOFF_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: OHIOTOLL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
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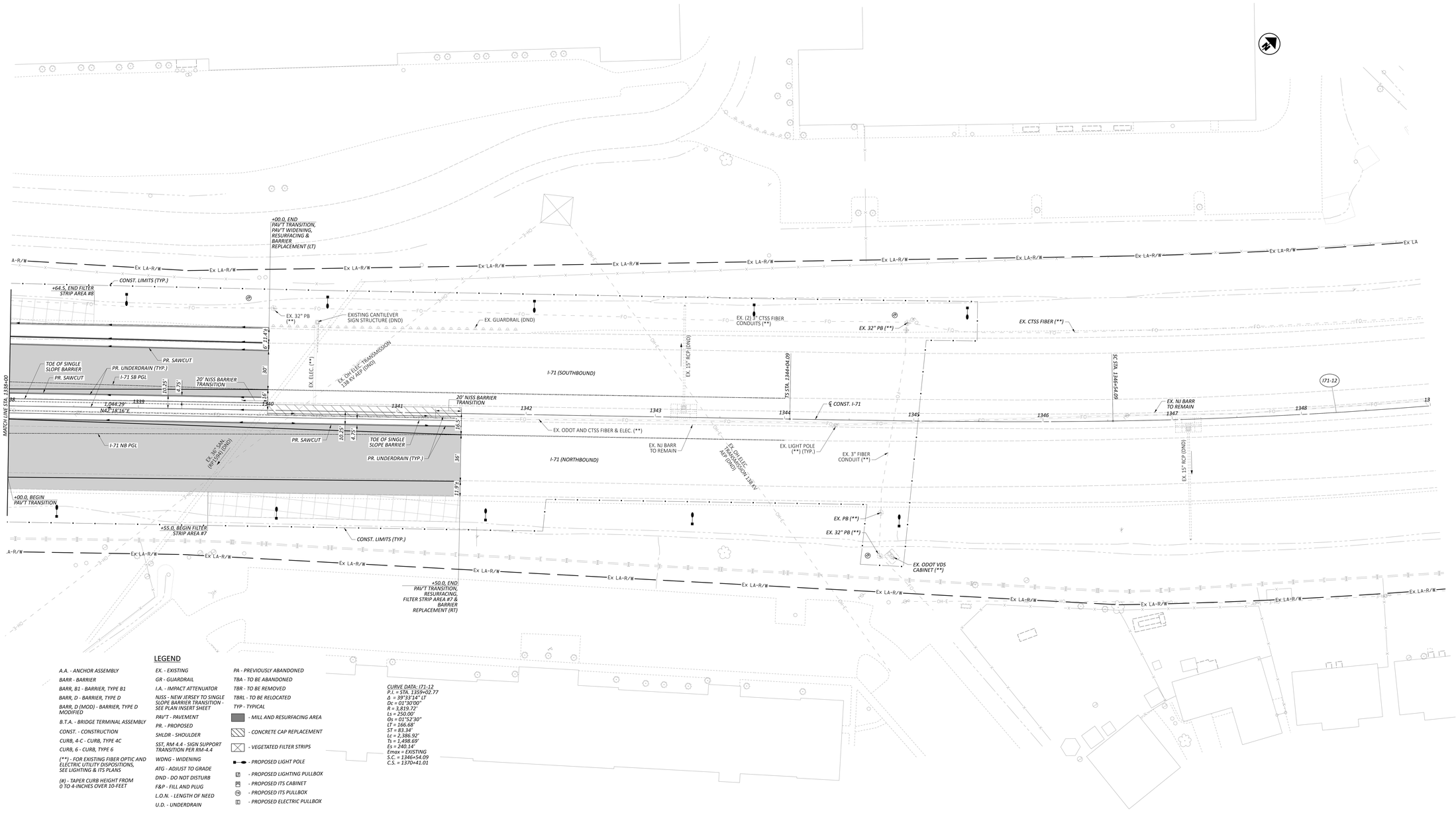
DESIGN AGENCY
Jacobs
DESIGNER
CNR
REVIEWER
MCK 03/11/26
PROJECT ID
109164
SHEET P.233
TOTAL 618



LEGEND

A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET

EX. - EXISTING
GR - GUARDRAIL
I.A. - IMPACT ATTENUATOR
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
PAV'T - PAVEMENT
PR. - PROPOSED
SHLDR - SHOULDER
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
WDNG - WIDENING
ATG - ADJUST TO GRADE
DND - DO NOT DISTURB
F&P - FILL AND PLUG
L.O.N. - LENGTH OF NEED
U.D. - UNDERDRAIN

PA - PREVIOUSLY ABANDONED
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBRL - TO BE RELOCATED
TYP - TYPICAL

- MILL AND RESURFACING AREA
- CONCRETE CAP REPLACEMENT
- VEGETATED FILTER STRIPS
- PROPOSED LIGHT POLE
- PROPOSED LIGHTING PULLBOX
- PROPOSED ITS CABINET
- PROPOSED ITS PULLBOX
- PROPOSED ELECTRIC PULLBOX

CURVE DATA: I71-12
P.I. = STA. 1359+02.77
Δ = 39°33'14" LT
Dc = 01°30'00"
R = 3,819.72'
Ls = 250.00'
Θs = 01°52'30"
LT = 166.68'
ST = 83.34'
Lc = 2,386.92'
Ts = 1,498.69'
Es = 240.14'
Emax = EXISTING
S.C. = 1346+54.09
C.S. = 1370+41.01

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

PLAN - I-71
STA. 1338+00.00 TO STA. 1349+00.00

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.234
TOTAL: 618

FRA-71-19.10

MODEL: CLP_I071 - Sheet 10 WARNING: 66.66 IN | DATE: 2/12/2026 7:56:41 PM BY/DBY: DHOFF, PM: JJ HAN, PENTRL: DHOFF_Pen.tbl USER: ChrisLawrence@jacobs.com WORKSPACE: DHOFF/D40 WORKSET: 199164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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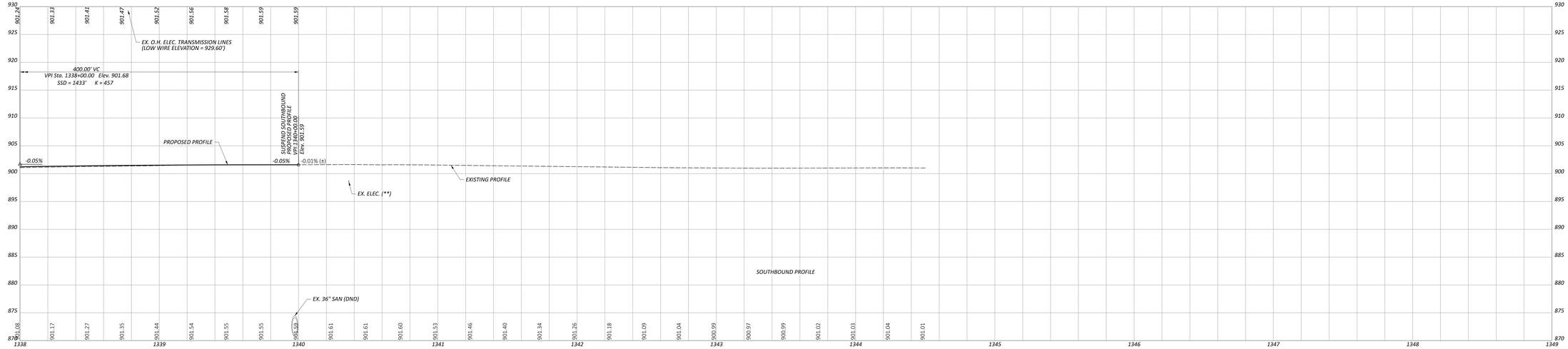
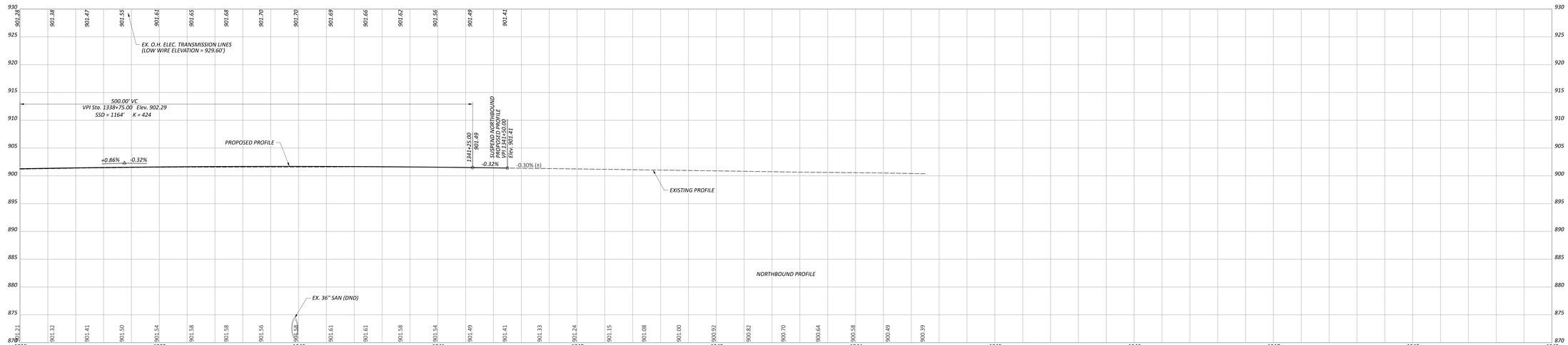
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





PROFILE - I-71
STA. 1338+00.00 TO STA. 1349+00.00

FRA-71-19.10

DESIGN AGENCY
Jacobs

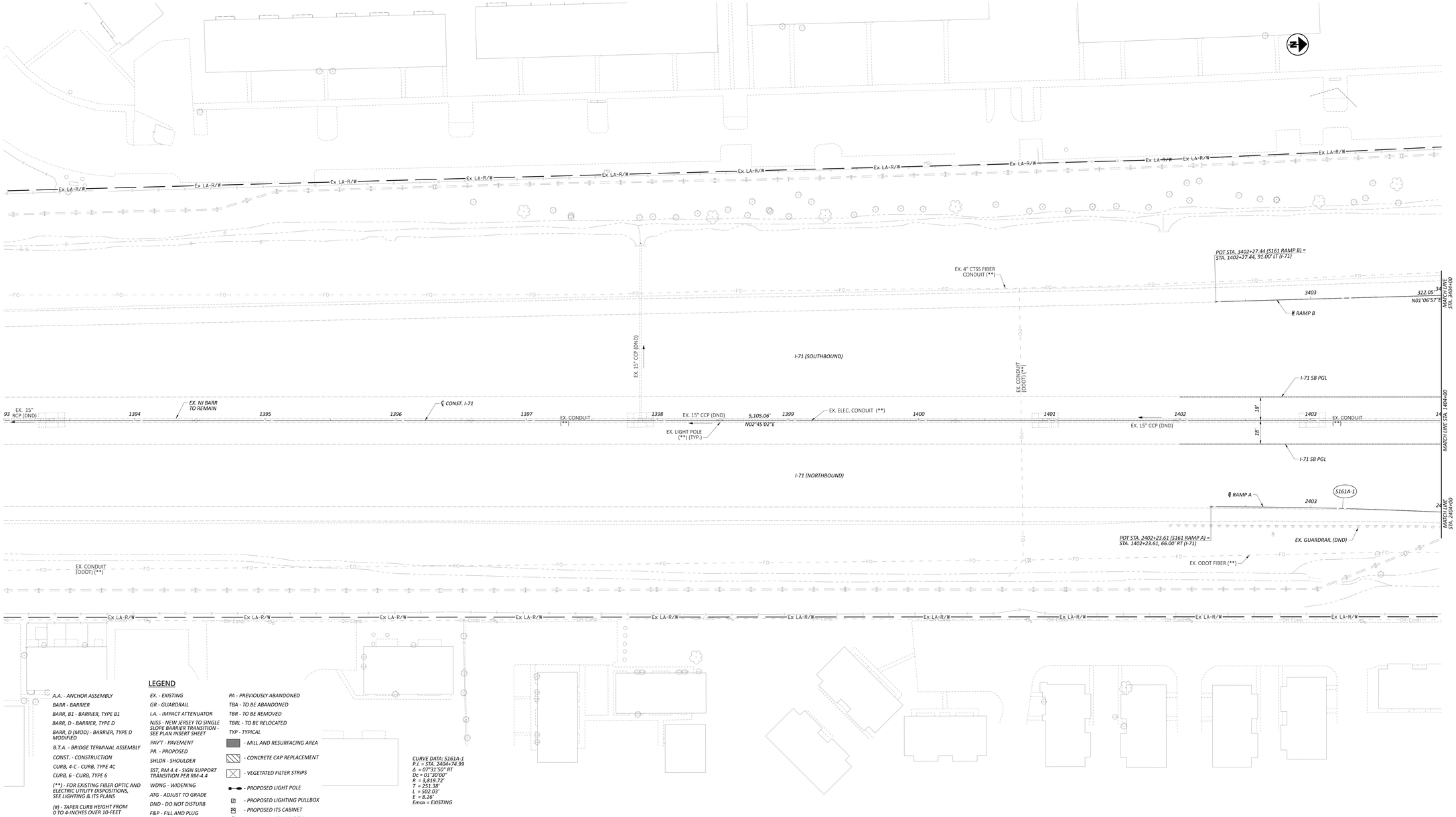
DESIGNER
CNR

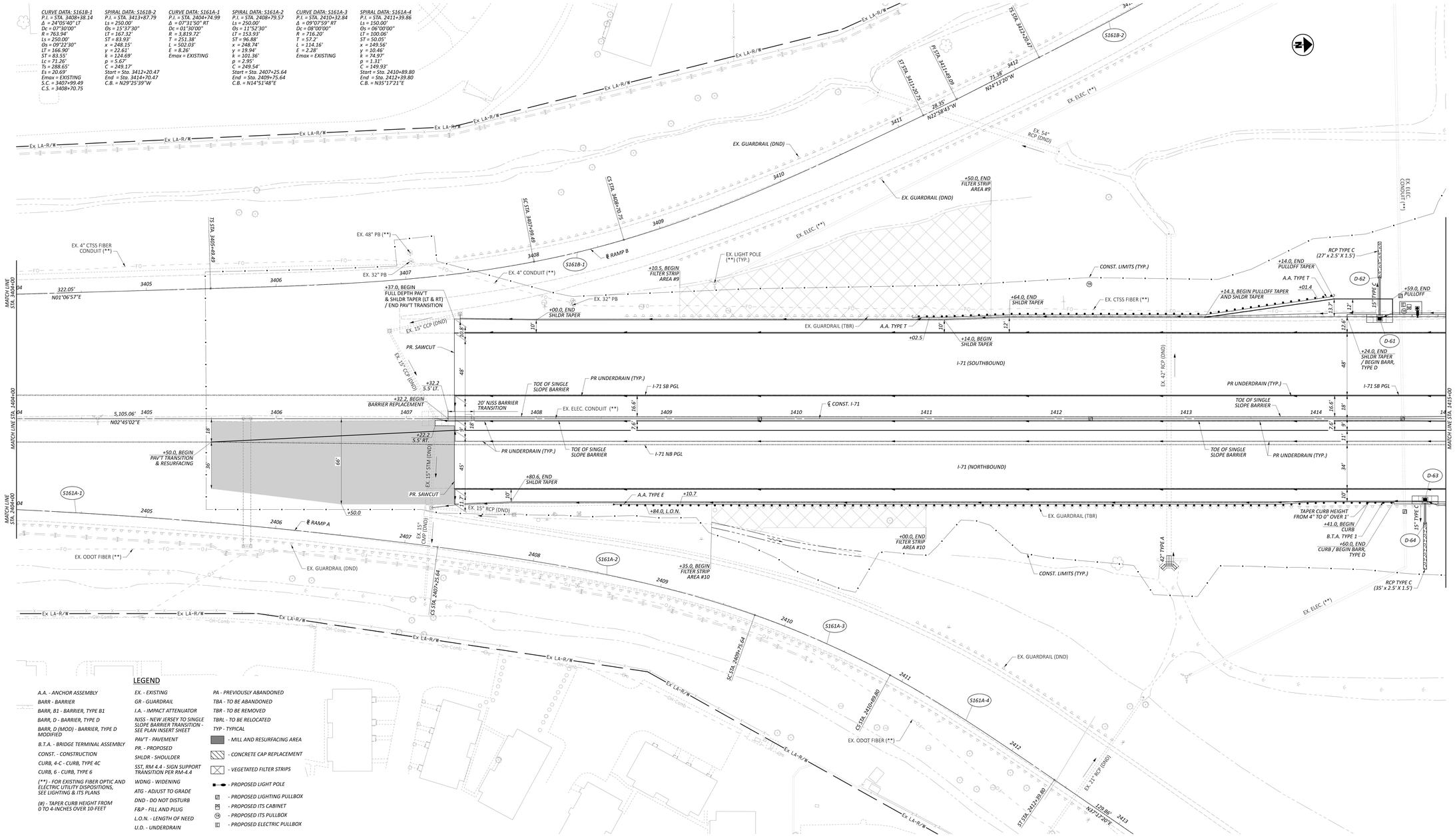
REVIEWER
MCK 03/11/26

PROJECT ID
109164

SHEET P.235 TOTAL 618

MODEL: 71 Profiles 7 PARTIZIO: 66x34 in | DATE: 3/30/2026 TIME: 11:13:21 PM PITDW: DHDOT_PSP_LV.pltcfg PENTBL: DHDOT_Pen.tbl USER: Chris.Lawwood@jacobs.com WORKSPACE: DHDOTCLOUD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
FILE: C:\Users\chris.lawwood\Jacobs\Desktop\Projects\FRA-71-19.10\Roadway\Profiles\FRA-71-19.10 Profiles.dgn


Ex LA-R/W
EX. 15" RCP (END)
93
1394
EX. NJ BARR TO REMAIN
1395
1396
℄ CONST. I-71
1397
EX. CONDUIT (**)
1398
EX. 15" CCP (END)
5,105.06'
N02°45'02"E
1399
EX. ELEC. CONDUIT (**)
1400
1401
1402
EX. 15" CCP (END)
18'
1403
EX. CONDUIT (**)
EX. LIGHT POLE (**) (TYP.)
EX. 15" CCP (END)
EX. CONDUIT (ODOT) (**)
I-71 (SOUTHBOUND)
I-71 (NORTHBOUND)
I-71 SB PGL
MATCH LINE STA. 1404+00
POT STA. 3402+27.44 (S161 RAMP B) = STA. 1402+27.44, 91.00' LT (I-71)
EX. 4" CTSS FIBER CONDUIT (**)
3403
322.05'
N01°06'57"E
℄ RAMP B
℄ RAMP A
2403
S161A-1
MATCH LINE STA. 2404+00
POT STA. 2402+23.61 (S161 RAMP A) = STA. 1402+23.61, 66.00' RT (I-71)
EX. GUARDRAIL (DND)
EX. ODOT FIBER (**)
EX. CONDUIT (ODOT) (**)
EX. CONDUIT (ODOT) (**)
EX. CONDUIT (ODOT)



LEGEND

A.A. - ANCHOR ASSEMBLY	*EX. - EXISTING*
BARR - BARRIER	*GR - GUARDRAIL*
BARR, B1 - BARRIER, TYPE B1	*I.A. - IMPACT ATTENUATOR*
BARR, D - BARRIER, TYPE D	*NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	*PAV'T - PAVEMENT*
B.T.A. - BRIDGE TERMINAL ASSEMBLY	*PR. - PROPOSED*
CONST. - CONSTRUCTION	*SHLDR - SHOULDER*
CURB, 4-C - CURB, TYPE 4C	*SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*
CURB, 6 - CURB, TYPE 6	*WDNG - WIDENING*
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	*ATG - ADJUST TO GRADE*
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	*DND - DO NOT DISTURB*
	F&P - FILL AND PLUG
	L.O.N. - LENGTH OF NEED
	U.D. - UNDERDRAIN

PA - PREVIOUSLY ABANDONED	
TBA - TO BE ABANDONED	
TBR - TO BE REMOVED	
TBRL - TO BE RELOCATED	
TYP - TYPICAL	
- MILL AND RESURFACING AREA	
- CONCRETE CAP REPLACEMENT	
- VEGETATED FILTER STRIPS	
- PROPOSED LIGHT POLE	
- PROPOSED LIGHTING PULLBOX	
- PROPOSED ITS CABINET	
- PROPOSED ITS PULLBOX	
- PROPOSED ELECTRIC PULLBOX	

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - I-71
STA. 1404+00.00 TO STA. 1415+00.00

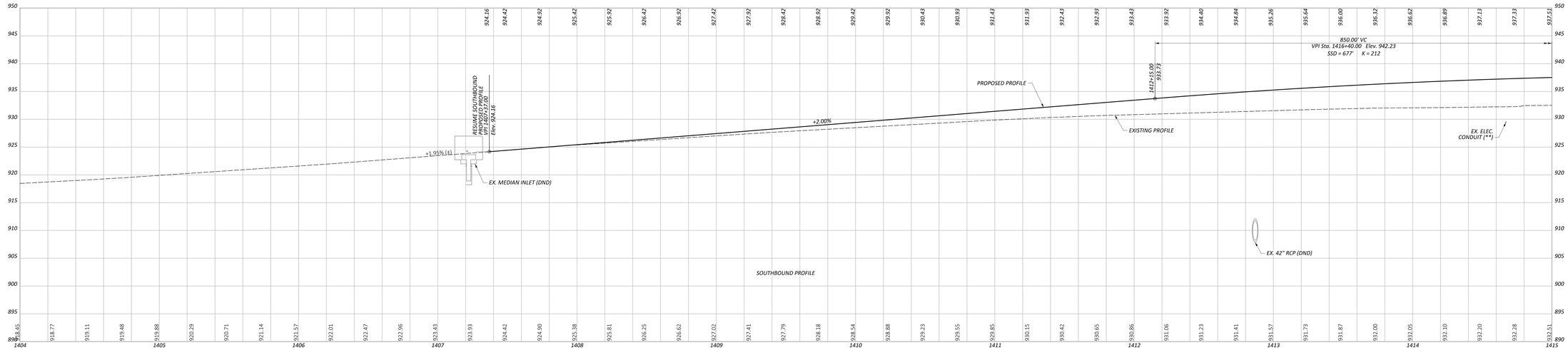
DESIGN AGENCY
Jacobs

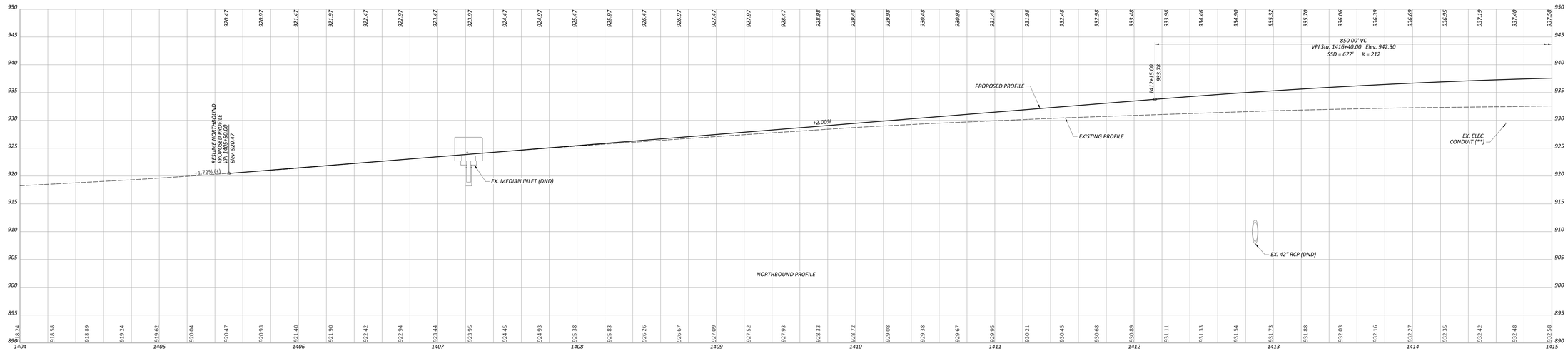
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.237 TOTAL: 618

FRA-71-19.10

MODEL: CLP_STL - Sheet: 12 PAPERSIZE: 66x44 (in.) DATE: 2/12/2026 TIME: 2:31:34 PM USER: DHOFF_PW: Z:\JHQ_PENTRL_DHOFF_Plan.ctb USER: Chris.Lawrence@jacobs.com WORKSPACE: DHOFF-5420 WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.12.25
ELECTRONIC FILE ATTRIBUTES: FRA-71-19.10 FILE NAME: Z:\JHQ\Design\Roadway\Plan and Profile\FRA-71-19.10_Plan and Profile.dgn

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS





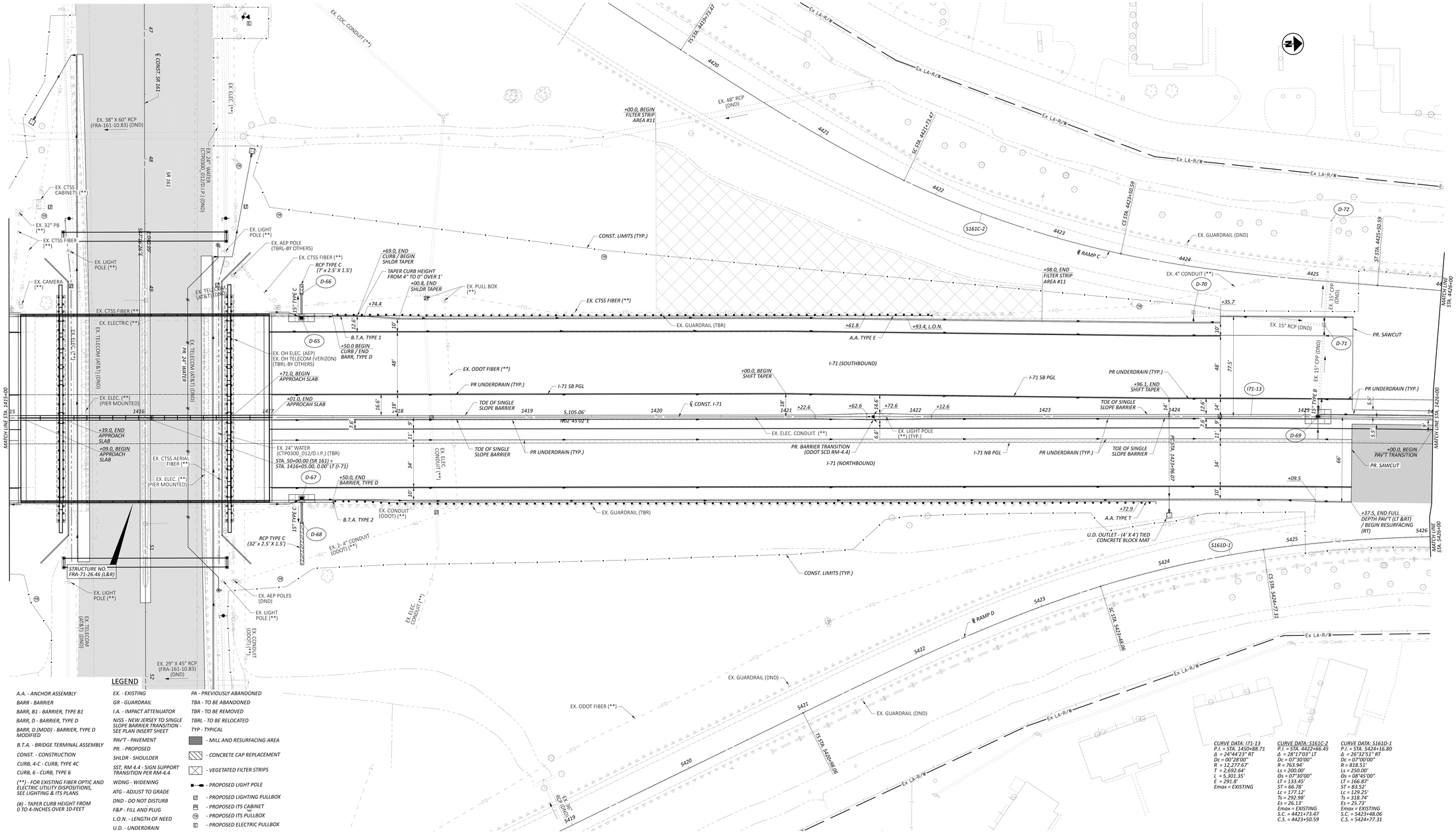
PROFILE - I-71
STA. 1404+00.00 TO STA. 1415+00.00

FRA-71-19.10

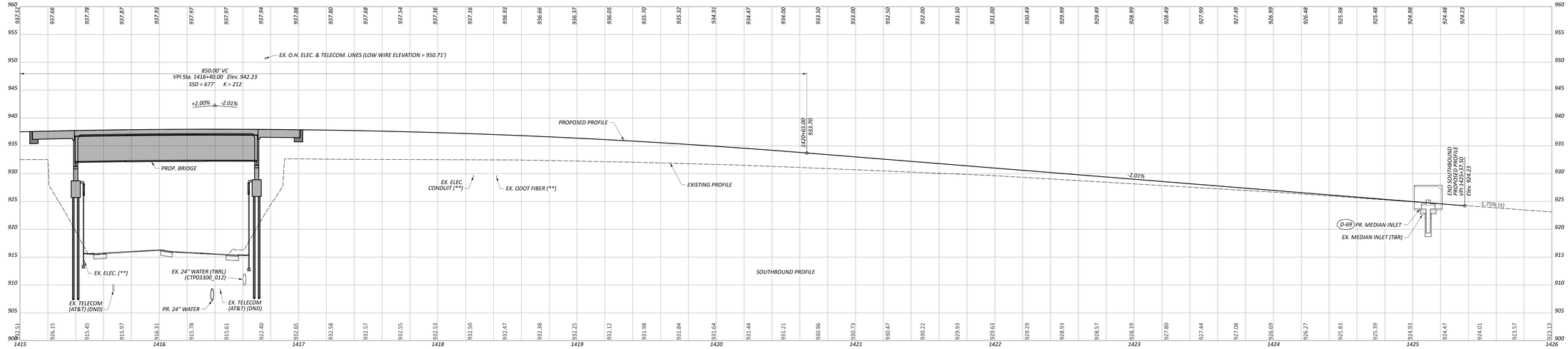
MODEL: 71 Profiles 3 PARTIDAS: 66434 En | DATE: 3/30/2026 TIME: 11:13:10 PM PITDW: DHOFF_PW_LP-APSB_PWTEL: DHOFF_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: OHIOTOLL01 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
FILES: C:\Projects\FRA-71-19.10\Roadway\Alignments\FRA-71-19.10 Profiles 3.dgn

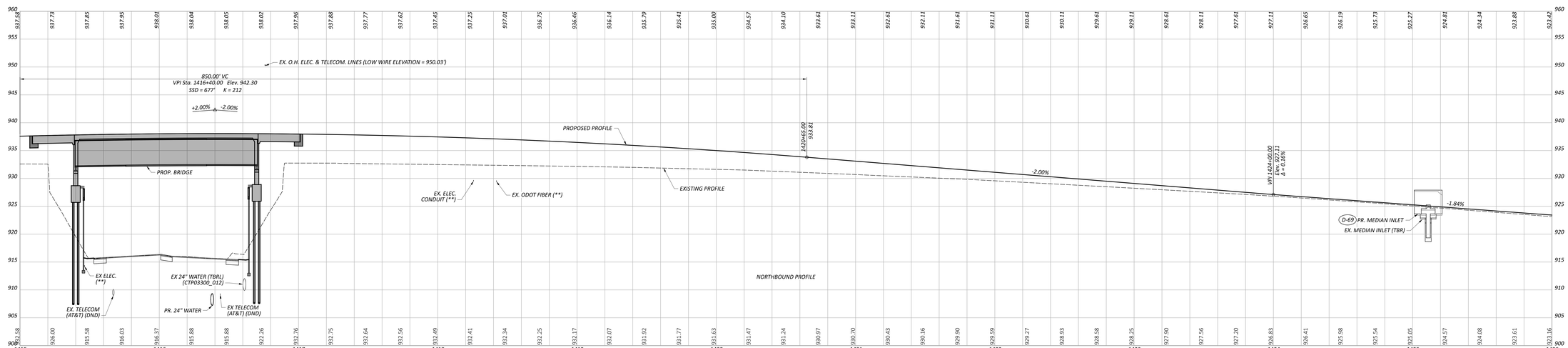
DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.238 TOTAL: 618


EX. CDC CONDUIT (**)
EX. 38" X 60" RCP (FRA-161-10.83) (DND)
EX. CTSS CABINETS (**)
EX. 32" PB (**)
EX. CTSS FIBER (**)
EX. LIGHT POLE (**)
EX. CAMERA (**)
EX. CTSS FIBER (**)
EX. ELECTRIC (**)
EX. TELECOM (AT&T) (DND)
EX. ELEC. (**) (PIER MOUNTED)
EX. CTSS AERIAL FIBER (**)
EX. ELEC. (**) (PIER MOUNTED)
STRUCTURE NO. FRA-71-26.46 (L&R)
EX. LIGHT POLE (**)
EX. TELECOM (AT&T) (DND)
EX. AEP POLES (DND)
EX. LIGHT POLE (**)
EX. CONDUIT (ODOT) (**)
EX. 29" X 45" RCP (FRA-161-10.83) (DND)
EX. ELEC. CONDUIT (**)
EX. 24" WATER (CTP0300_012/D.I.P.) (TBR)
EX. 24" WATER (CTP0300_012/D.I.P.) (DND)
EX. TELECOM (AT&T) (DND)
EX. ELEC. CONDUIT (**)
EX. LIGHT POLE (**)
EX. AEP POLE (TBRL-BY OTHERS)
EX. CTSS FIBER (**)
EX. OH ELEC. (AEP)
EX. OH TELECOM (VERIZON) (TBRL-BY OTHERS)
EX. ODOT FIBER (**)
EX. PULL BOX (**)
EX. CONDUIT (ODOT) (**)
EX. 3-4" CONDUIT (ODOT) (**)
EX. 48" RCP (DND)
EX. 4" CONDUIT (**)
EX. 15" CPP (DND)
EX. 15" RCP (DND)
EX. GUARDRAIL (DND)
EX. GUARDRAIL (TBR)
EX. ELEC. CONDUIT (**) (TYP.)
EX. LIGHT POLE (**) (TYP.)
EX. 4" CONDUIT (**)
EX. 2" CONDUIT (**)
EX. 3" CONDUIT (**)
EX. 1" CONDUIT (**)
EX. 2" CONDUIT (**)
EX. 1" CONDUIT (**)
EX. 2" CONDUIT (**)
EX. 3

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS



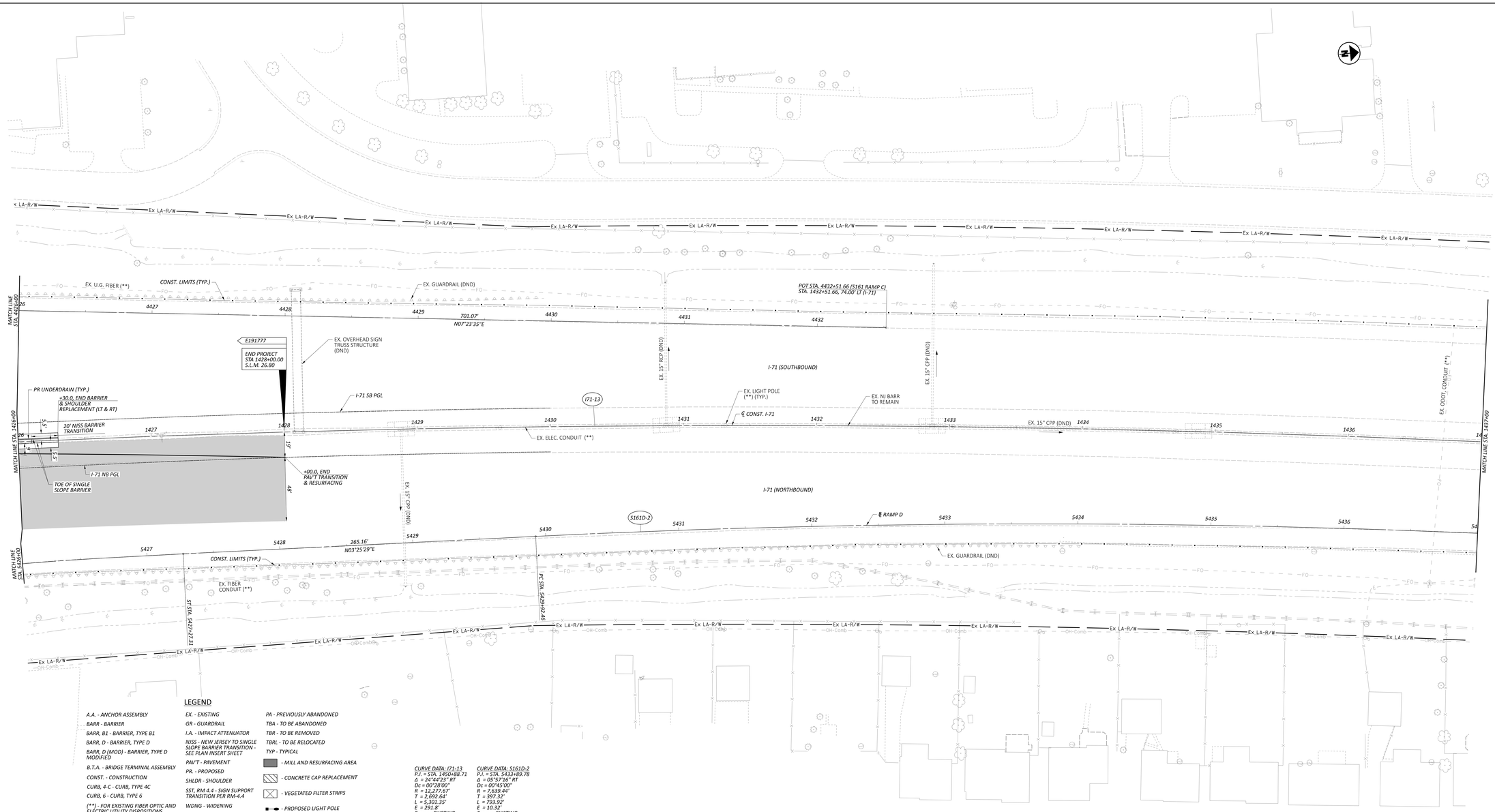


PROFILE - I-71
STA. 1415+00.00 TO STA. 1426+00.00

FRA-71-19.10

MODEL: 71 Profile 10 PAYNE2021 dw:sk3 [+/-] DATE: 3/31/2026 TIME: 2:54:09 PM PSTORE: ONDOT_PSP_LP.stb[] PSTYTBL: ONDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 14.00.02.25
DGN: [Profiles and Miscellaneous Plan and Profile Sheets]FRA71-19.10_PROFILE_I-71_SOUTHBOUND_AND_NORTHBOUND_PROFILES_1415+00_TO_1426+00.dgn

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.240 TOTAL: 618



LEGEND

A.A. - ANCHOR ASSEMBLY	*EX. - EXISTING*	*PA - PREVIOUSLY ABANDONED*
BARR - BARRIER	*GR - GUARDRAIL*	*TBA - TO BE ABANDONED*
BARR, B1 - BARRIER, TYPE B1	*I.A. - IMPACT ATTENUATOR*	*TBR - TO BE REMOVED*
BARR, D - BARRIER, TYPE D	*NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*	*TBRL - TO BE RELOCATED*
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	*PAV'T - PAVEMENT*	*TYP - TYPICAL*
B.T.A. - BRIDGE TERMINAL ASSEMBLY	*PR. - PROPOSED*	*- MILL AND RESURFACING AREA*
CONST. - CONSTRUCTION	*SHLDR - SHOULDER*	*- CONCRETE CAP REPLACEMENT*
CURB, 4-C - CURB, TYPE 4C	*SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*	*- VEGETATED FILTER STRIPS*
CURB, 6 - CURB, TYPE 6	*WDNG - WIDENING*	*- PROPOSED LIGHT POLE*
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	*ATG - ADJUST TO GRADE*	*- PROPOSED LIGHTING PULLBOX*
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	*DND - DO NOT DISTURB*	*- PROPOSED ITS CABINET*
	F&P - FILL AND PLUG	*- PROPOSED ITS PULLBOX*
	L.O.N. - LENGTH OF NEED	*- PROPOSED ELECTRIC PULLBOX*
	U.D. - UNDERDRAIN	

CURVE DATA: I71-13
P.I. = STA. 1450+88.71
Δ = 24°44'23" RT
Dc = 00°28'00"
R = 12,277.67'
T = 2,692.64'
L = 5,301.35'
E = 291.8'
Emax = EXISTING

CURVE DATA: S161D-2
P.I. = STA. 5433+89.78
Δ = 05°57'16" RT
Dc = 00°45'00"
R = 7,639.44'
T = 397.32'
L = 793.92'
E = 10.32'
Emax = EXISTING

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - I-71
STA. 1426+00.00 TO STA. 1437+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.241 TOTAL: 618

FRA-71-19.10

MODEL: CLP_I071 - Sheet:14 WARNING: 66.66 IN | DATE: 2/12/2026 7:56:1 | 2:54:48 PM BY:CNR | DWGS: CNR.DGN | PE: | LEVEL: [PENTEL DWGS]_Pen.tbl USER: ChrisLawrence@jacobs.com WORKSPACE: CNRDOTS.ws3 WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.12.25
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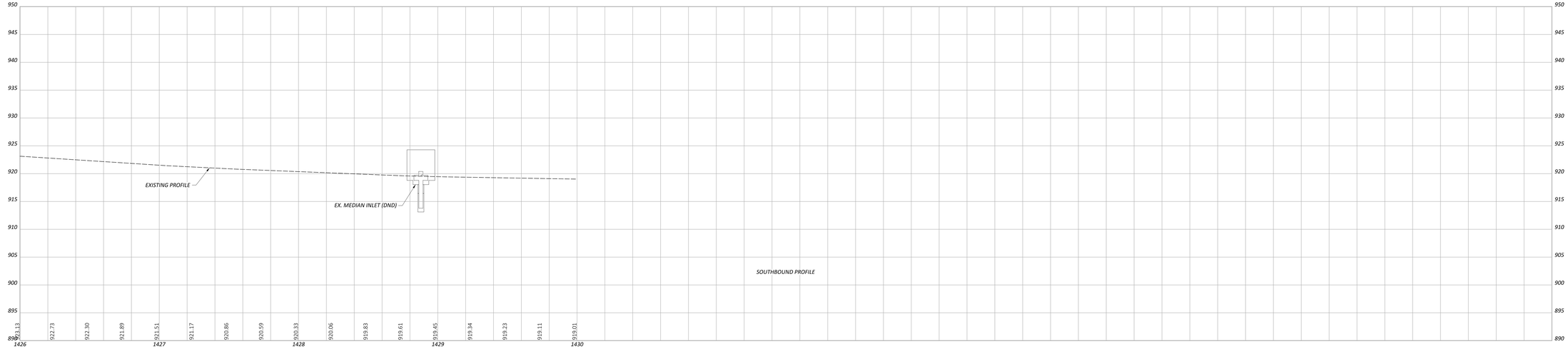
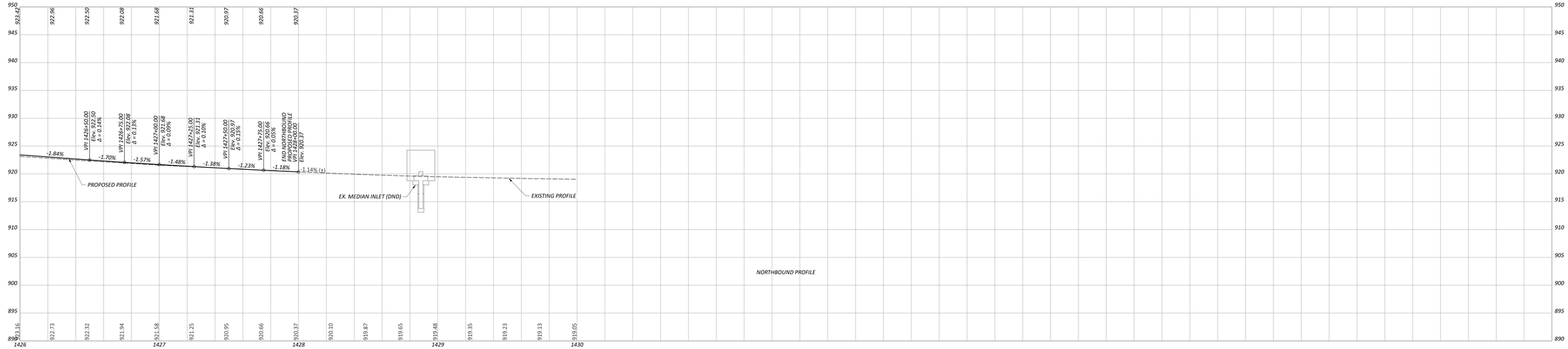
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS



SOUTHBOUND PROFILE



NORTHBOUND PROFILE

PROFILE - I-71
STA. 1426+00.00 TO STA. 1430+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

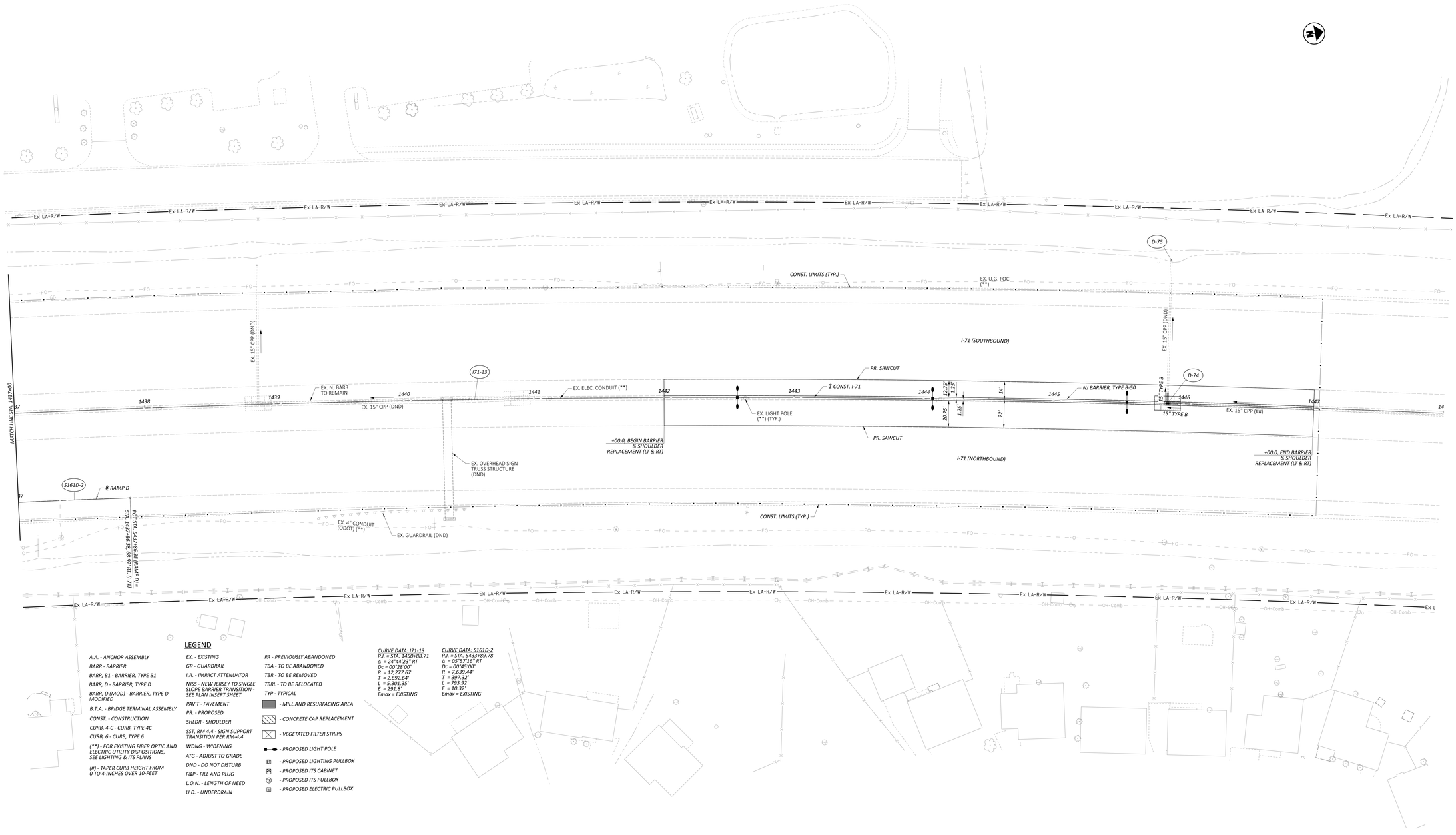
REVIEWER
MCK 03/11/26

PROJECT ID
109164

SHEET P.242 TOTAL 618

FRA-71-19.10

MODEL: 71 Profile 11 REFRESH: 04:43 PM DATE: 3/30/2026 TIME: 11:14:44 PM PITDIR: DHOFF_PW DHOFF_P-I.dgnlib, PENTBL, DHOFF_PW.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: DHOOTOLS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\109164\Highway\Roadway\Profiles\FRA-71-19.10_PROFILE I-71 NORTHBOUND SOUTHBOUND.dgn



LEGEND

- A.A. - ANCHOR ASSEMBLY
- BARR - BARRIER
- BARR, B1 - BARRIER, TYPE B1
- BARR, D - BARRIER, TYPE D
- BARR, D (MOD) - BARRIER, TYPE D MODIFIED
- B.T.A. - BRIDGE TERMINAL ASSEMBLY
- CONST. - CONSTRUCTION
- CURB, 4-C - CURB, TYPE 4C
- CURB, 6 - CURB, TYPE 6
- (**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
- (#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET

- EX. - EXISTING
- GR - GUARDRAIL
- I.A. - IMPACT ATTENUATOR
- NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
- PAV'T - PAVEMENT
- PR. - PROPOSED
- SHLDR - SHOULDER
- SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
- WDNG - WIDENING
- ATG - ADJUST TO GRADE
- DND - DO NOT DISTURB
- F&P - FILL AND PLUG
- L.O.N. - LENGTH OF NEED
- U.D. - UNDERDRAIN

- PA - PREVIOUSLY ABANDONED
- TBA - TO BE ABANDONED
- TBR - TO BE REMOVED
- TBRL - TO BE RELOCATED
- TYP - TYPICAL

- - MILL AND RESURFACING AREA
- - CONCRETE CAP REPLACEMENT
- - VEGETATED FILTER STRIPS
- - PROPOSED LIGHT POLE
- PB - PROPOSED LIGHTING PULLBOX
- ITS - PROPOSED ITS CABINET
- ITS - PROPOSED ITS PULLBOX
- EP - PROPOSED ELECTRIC PULLBOX

CURVE DATA: I71-13
P.I. = STA. 1450+88.71
Δ = 24°44'23" RT
Dc = 00°28'00"
R = 12,277.67'
T = 2,692.64'
L = 5,301.35'
E = 291.8'
Emax = EXISTING

CURVE DATA: S161D-2
P.I. = STA. 5433+89.78
Δ = 05°57'16" RT
Dc = 00°45'00"
R = 7,639.44'
T = 397.32'
L = 793.92'
E = 10.32'
Emax = EXISTING

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

PLAN - I-71
STA. 1437+00.00 TO STA. 1448+00.00

DESIGN AGENCY: Jacobs
DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.243 TOTAL: 618

FRA-71-19.10

MODEL: CLP_DT1 - Sheet: 15 WARNER: 66-64 PM | DATE: 2/12/2026 7AM | 2:54:44 PM EST/DST | PSF: C:\HNTB_PENTRI_CMSDT_PSF_C-HNTB_PENTRI_CMSDT_Pen.tbl USER: ChrisLawrence@jacobs.com WORKSPACE: CMSDTDS4D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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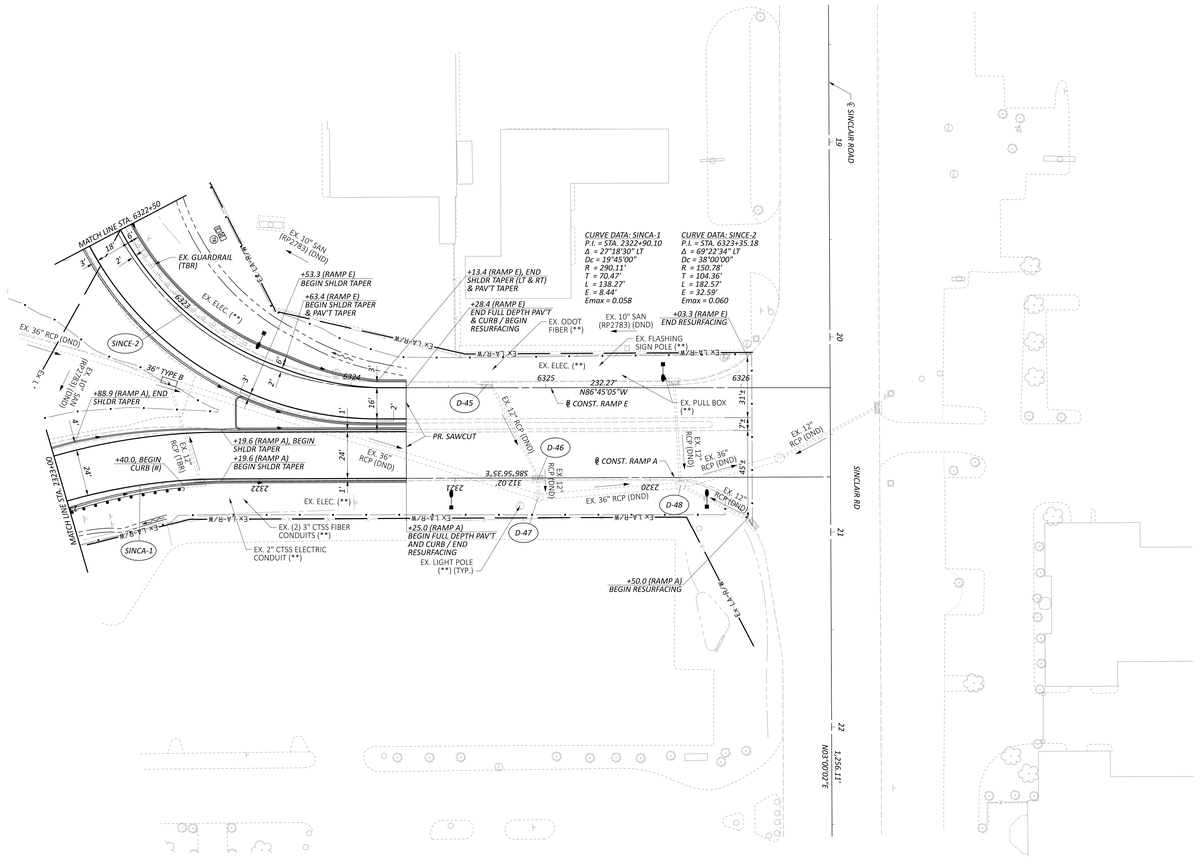


LEGEND

A.A. - ANCHOR ASSEMBLY	*EX - EXISTING*	*PA - PREVIOUSLY ABANDONED*
BARR - BARRIER	*GR - GUARDRAIL*	*TBA - TO BE ABANDONED*
BARR, B1 - BARRIER, TYPE B1	*I.A. - IMPACT ATTENUATOR*	*TBR - TO BE REMOVED*
BARR, D - BARRIER, TYPE D	*NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET*	*TBRL - TO BE RELOCATED*
BARR, D (MOD) - BARRIER, TYPE D MODIFIED	*PAV'T - PAVEMENT*	*TYP - TYPICAL*
B.T.A. - BRIDGE TERMINAL ASSEMBLY	*PR - PROPOSED*	*- MILL AND RESURFACING AREA*
CONST. - CONSTRUCTION	*SHLDR - SHOULDER*	*- CONCRETE CAP REPLACEMENT*
CURB, 4-C - CURB, TYPE 4C	*SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4*	*- VEGETATED FILTER STRIPS*
CURB, 6 - CURB, TYPE 6	*WDNG - WIDENING*	*- PROPOSED LIGHT POLE*
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS	*ATG - ADJUST TO GRADE*	*- PROPOSED LIGHTING PULLBOX*
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET	*DND - DO NOT DISTURB*	*- PROPOSED ITS CABINET*
	F&P - FILL AND PLUG	*- PROPOSED ITS PULLBOX*
	L.O.N. - LENGTH OF NEED	*- PROPOSED ELECTRIC PULLBOX*
	U.D. - UNDERDRAIN	

HORIZONTAL SCALE (IN FEET) 0 10 20 40

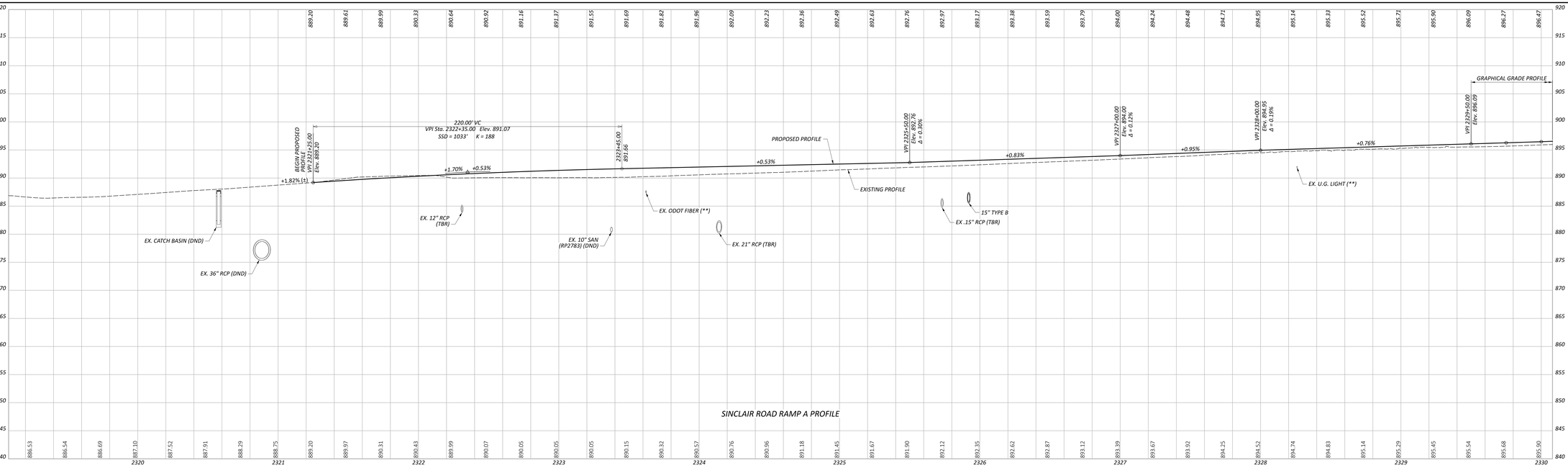
PLAN AND PROFILE
SINCLAIR ROAD RAMPS A & E

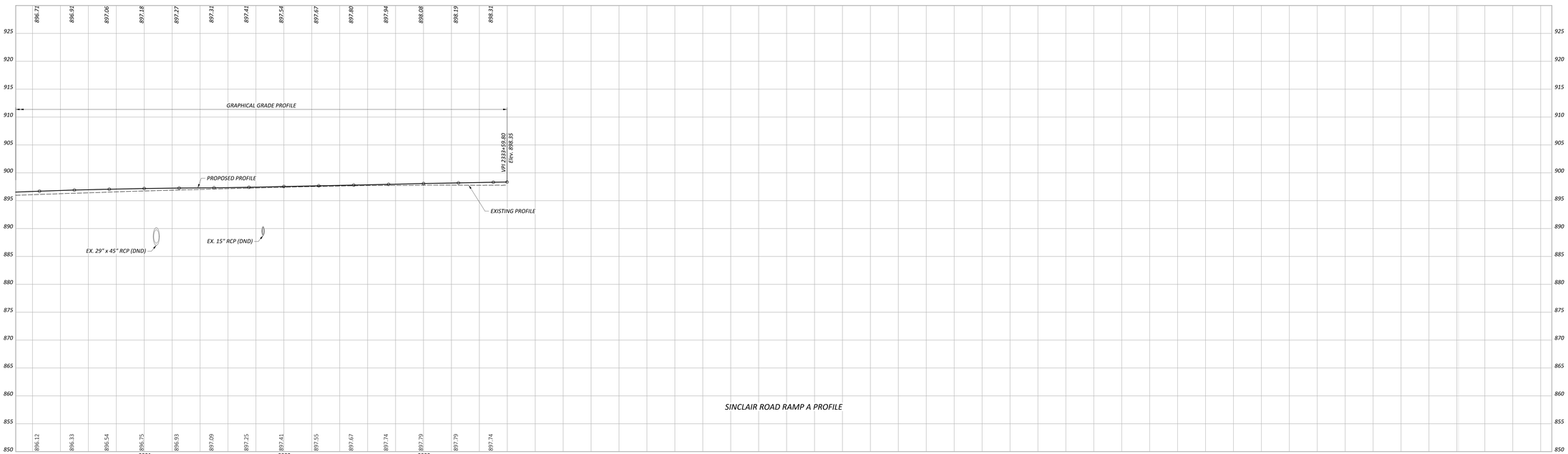
DESIGN AGENCY: Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/11/26
PROJECT ID: 109164
SHEET: P.244 TOTAL: 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: ANSI-B (in) DATE: 3/31/2026 TIME: 2:33:41 PM USERNAME: CNR DGN: FRA-71-19.10_SHEETS_P&P_E.dgn PENTBL: CMYOPT_Pen.tbl USER: Caitlyn.Ridgeway@jacobs.com WORKSPACE: CMYOPT.XWS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25





PROFILE - SINCLAIR ROAD
RAMP A

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS

FRA-71-19.10

MODEL: Design A Sheet PWPBSHEET 64x24 IN | DATE: 2/20/2026 TIME: 11:18:03 PM JPOSEN | DGNSET: PDF_Full.dgnlib PENTBL: DMOOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: DMOOTCivil WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVITY: Design Plans PURPOSE: Design Plans FILE: C:\Users\CLawrence1\Desktop\109164_Sheets\109164_Sheets_Ramp A Profile.dgn

DESIGN AGENCY	Jacobs
DESIGNER	CNR
REVIEWER	MCK 03/11/26
PROJECT ID	109164
SHEET	P.245
TOTAL	618

MODEL: Morse Road Scheet (NAVIGOS) DATE: 3/30/2026 TIME: 11:18:09 PM USER: CHRISTOPHER_PUTT_(A_ohio.transmod@jacobs.com) WORKSPACE: (SHEETS.DGN) WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
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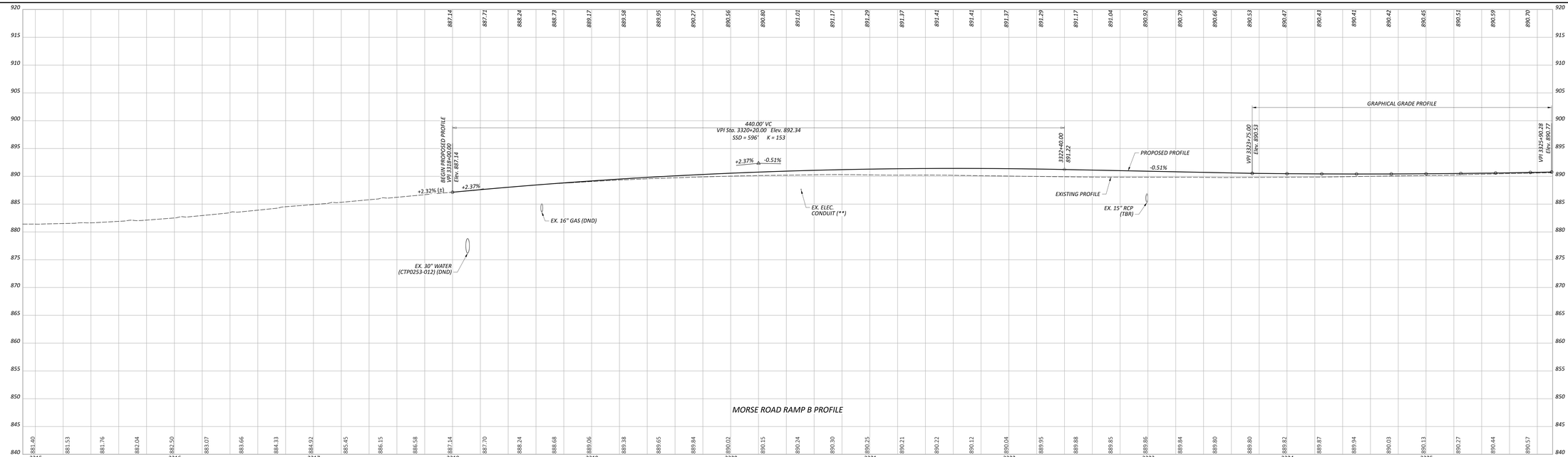
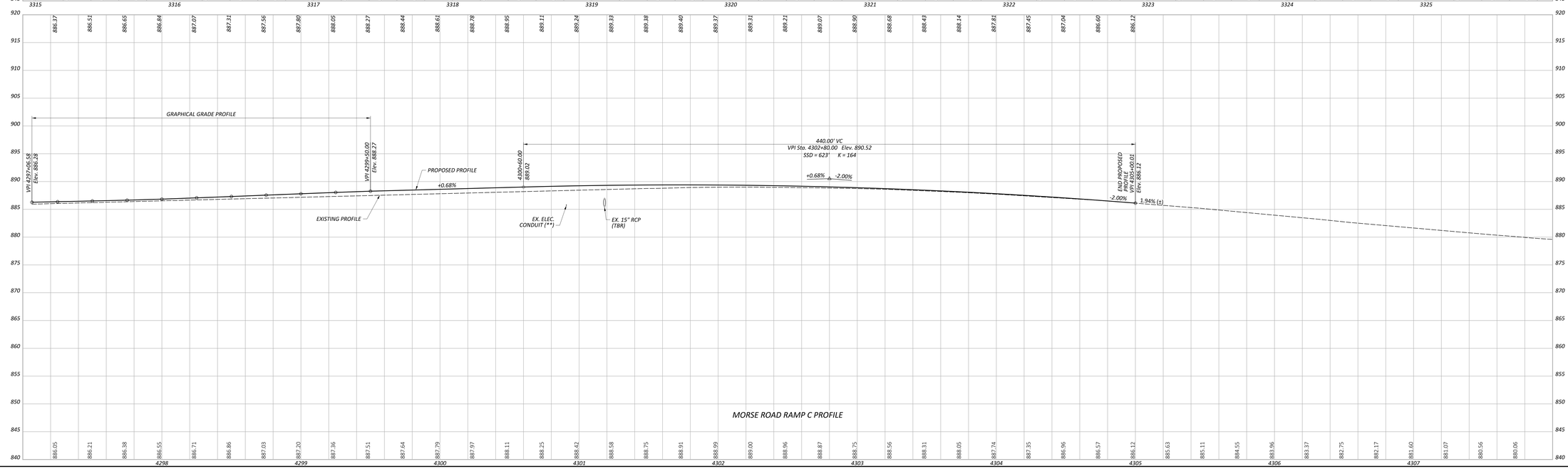




(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS

PROFILE - MORSE ROAD
RAMPS B & C

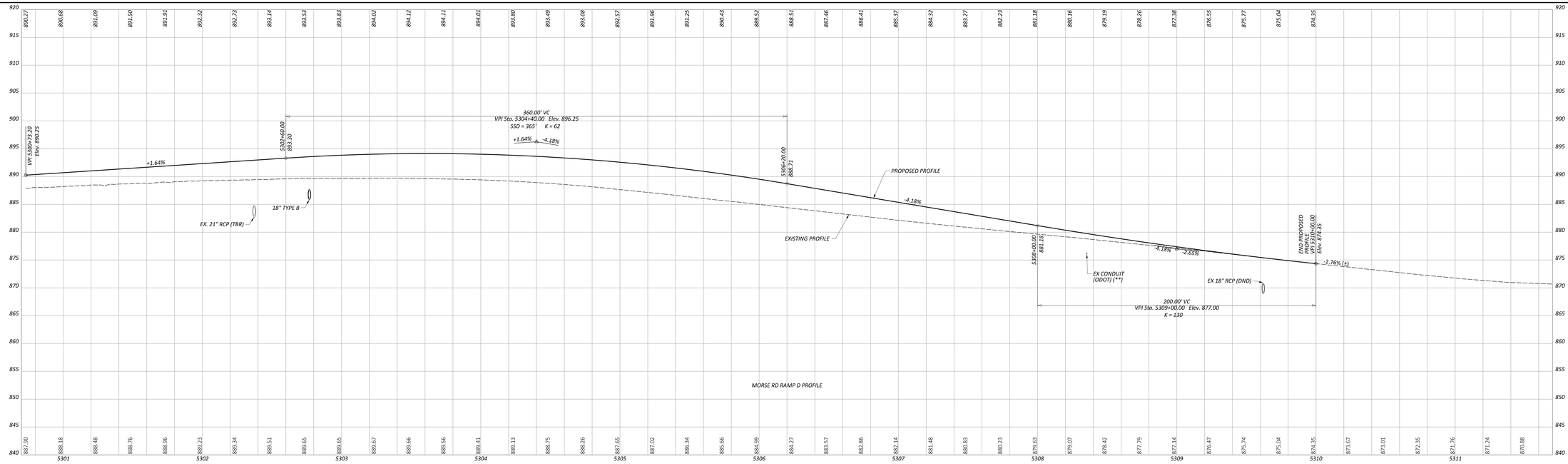
DESIGN AGENCY
Jacobs

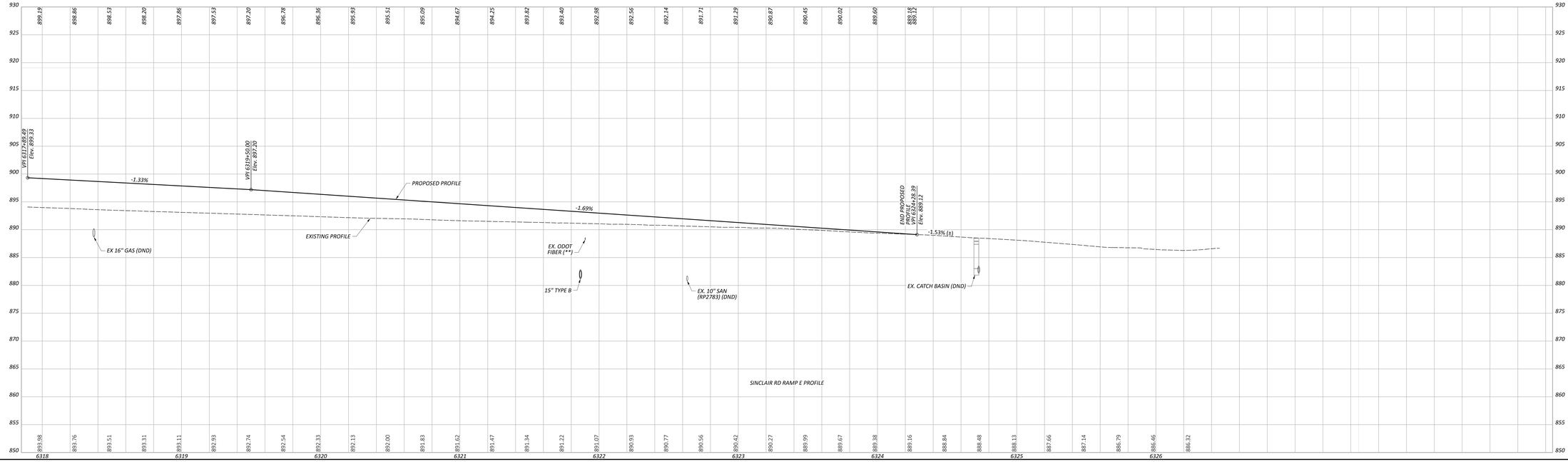
DESIGNER
CNR

REVIEWER
MCK 03/11/26

PROJECT ID
109164

SHEET P.246 TOTAL 618





PROFILE - MORSE ROAD RAMP D
& SINCLAIR ROAD RAMP E

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING AND ITS PLANS

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/11/26

PROJECT ID
109164

SHEET P.247 TOTAL 618

FRA-71-19.10

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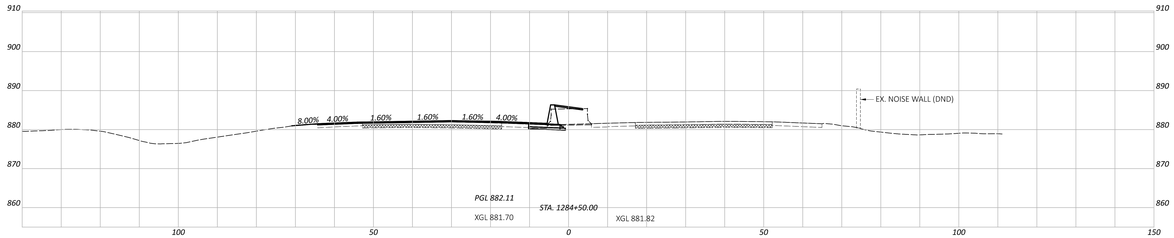

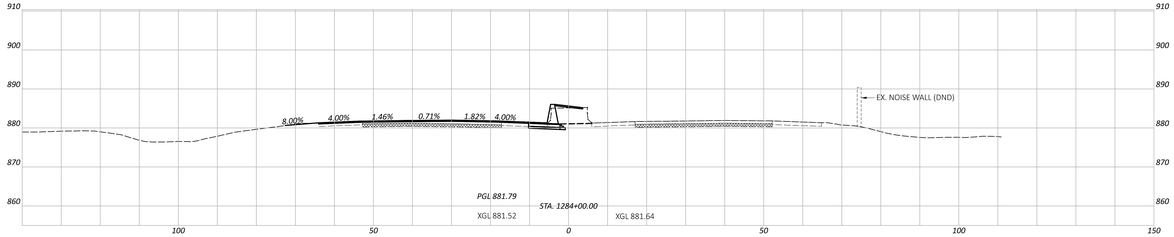

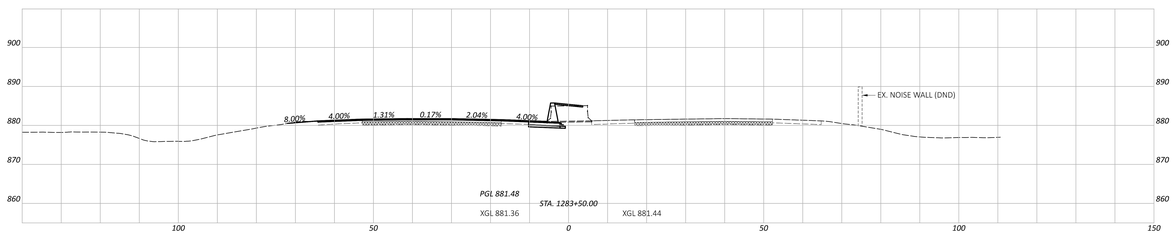

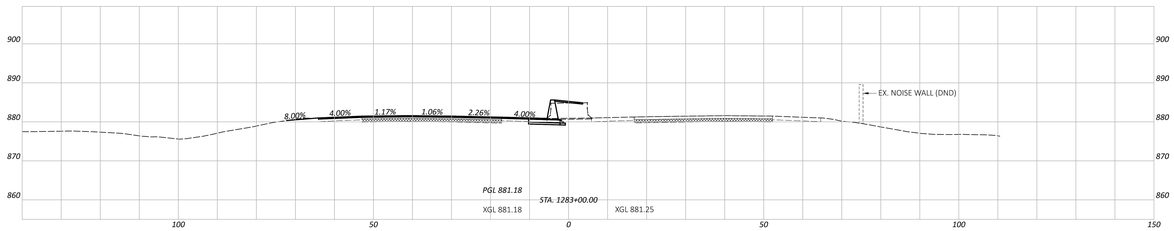

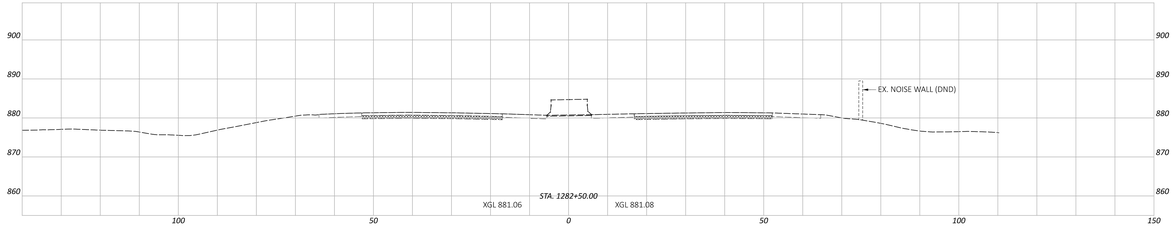

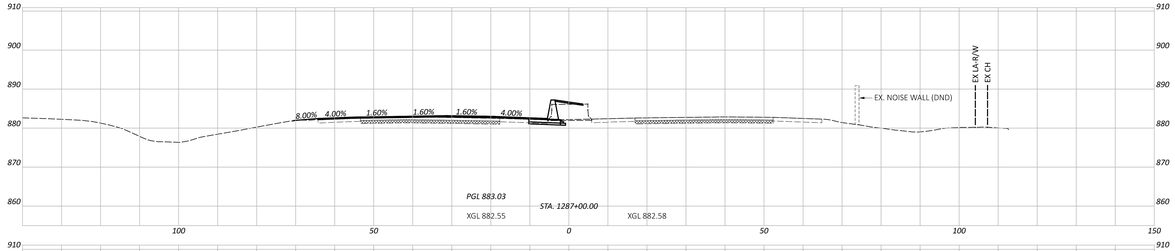

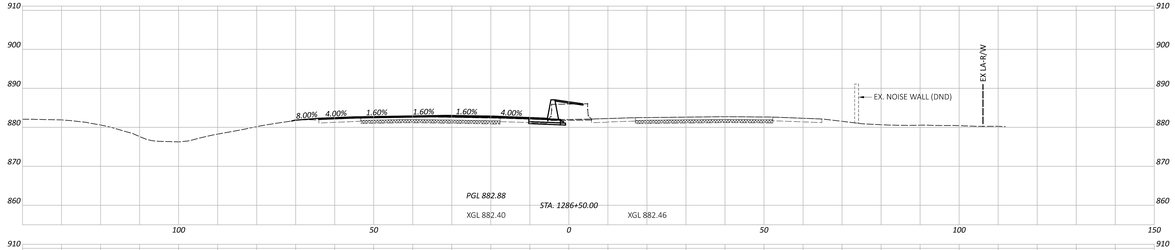

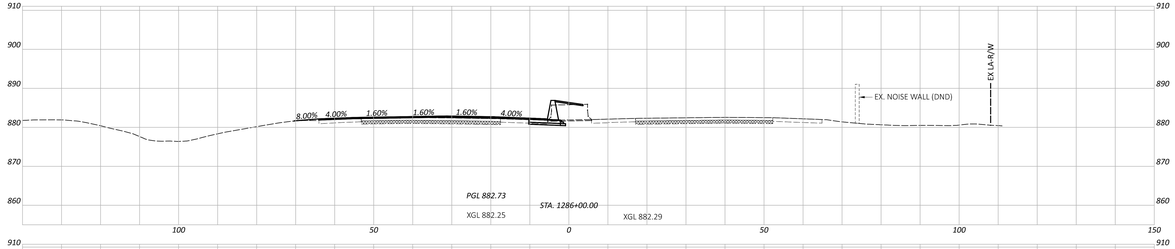

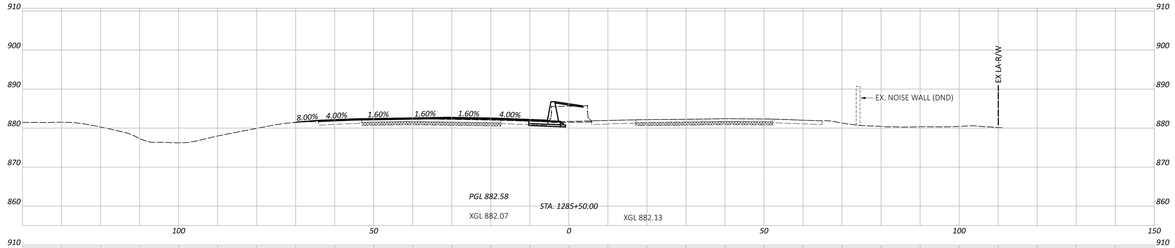

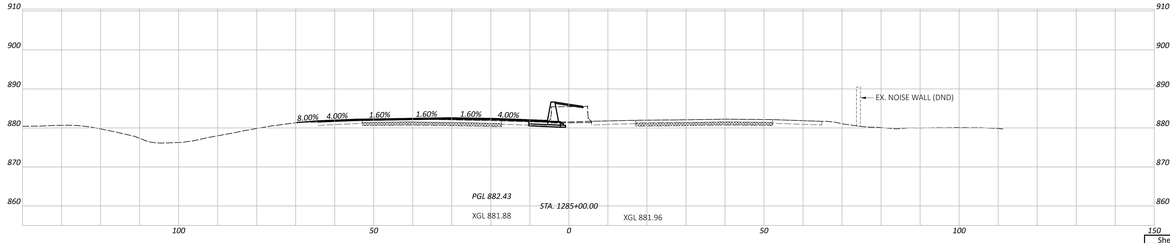

CROSS SECTIONS - I-71
STA. 1282+50.00 TO STA. 1287+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.248	618

FRA-71-19.10

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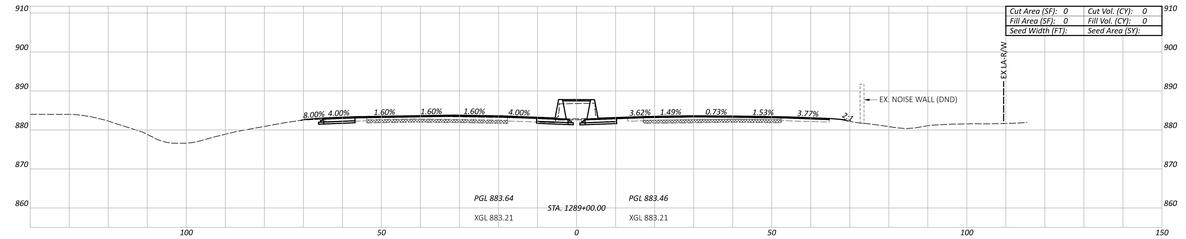

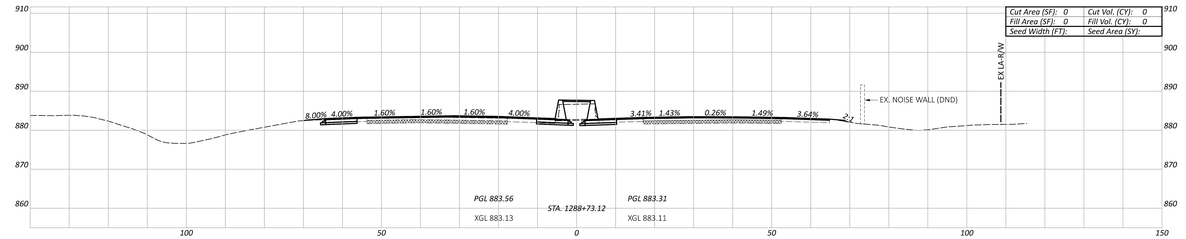

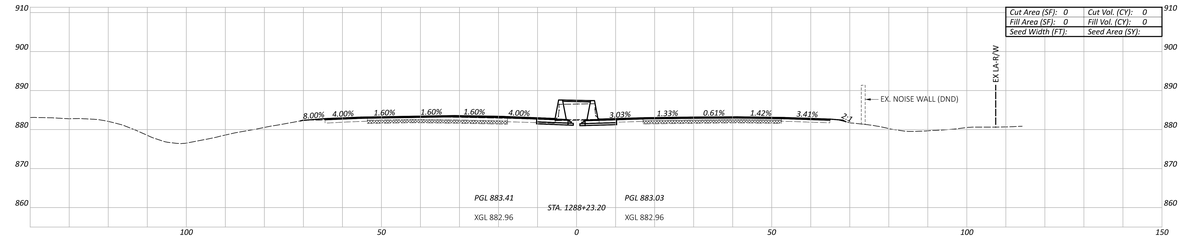

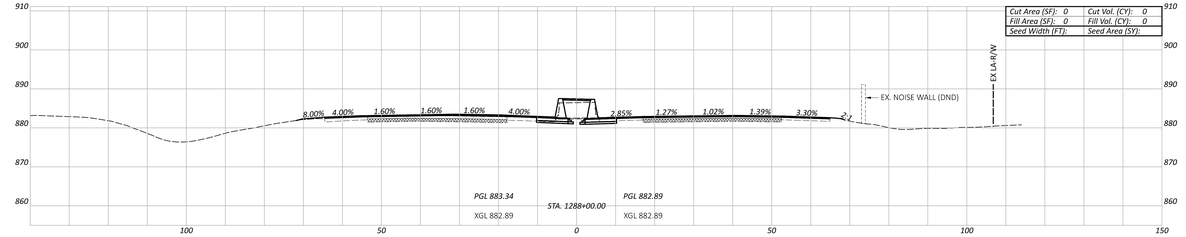

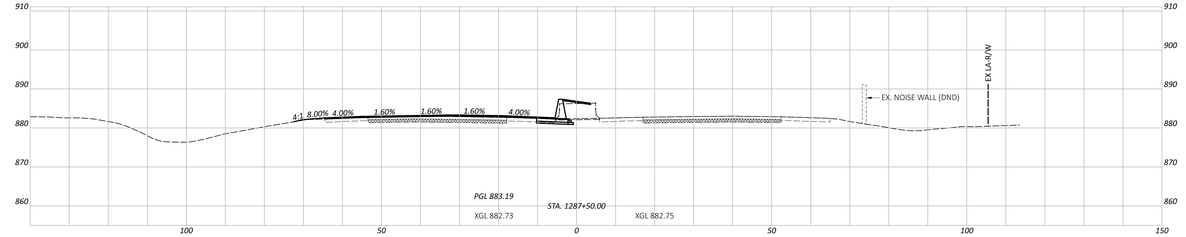

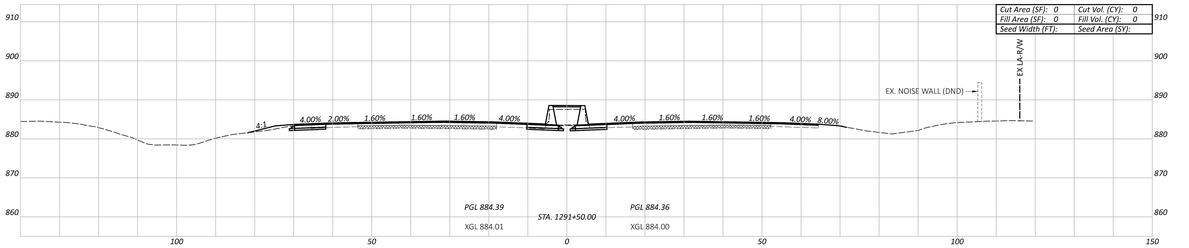

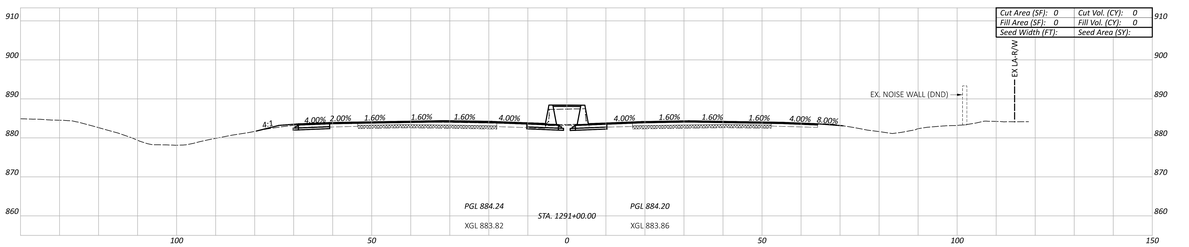

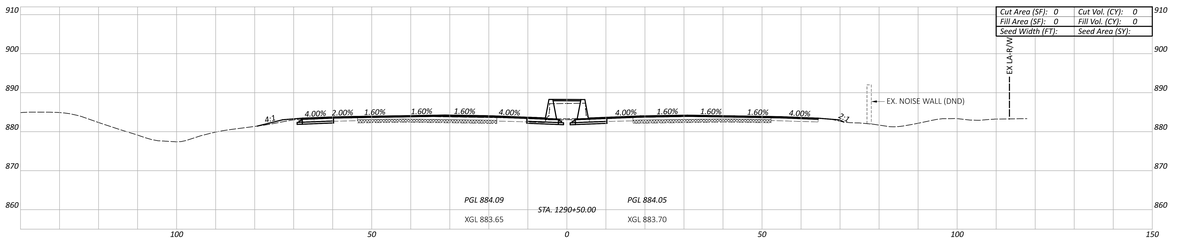

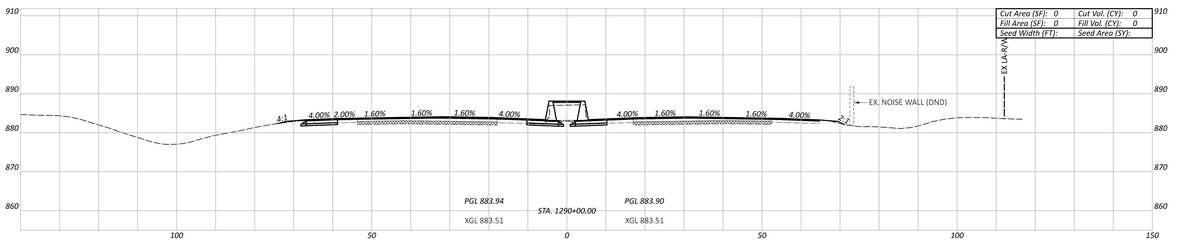

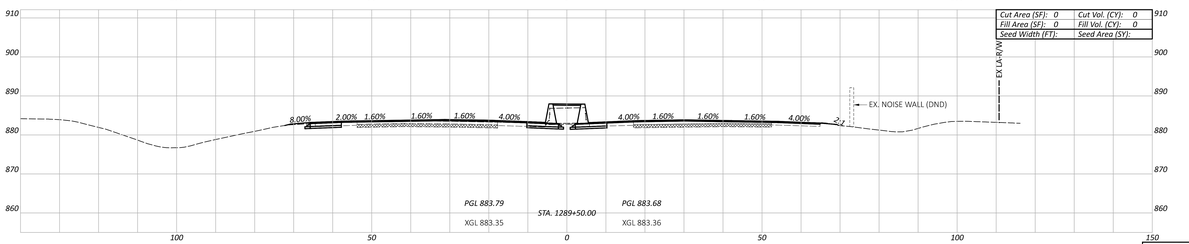

CROSS SECTIONS - I-71
STA. 1287+50.00 TO STA. 1291+50.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals			
Seeding	Cut	Fill	SHEET
			P.249

TOTAL
618

FRA-71-19.10

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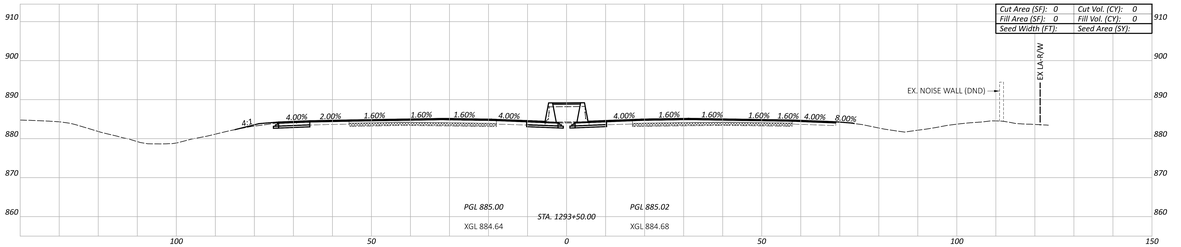
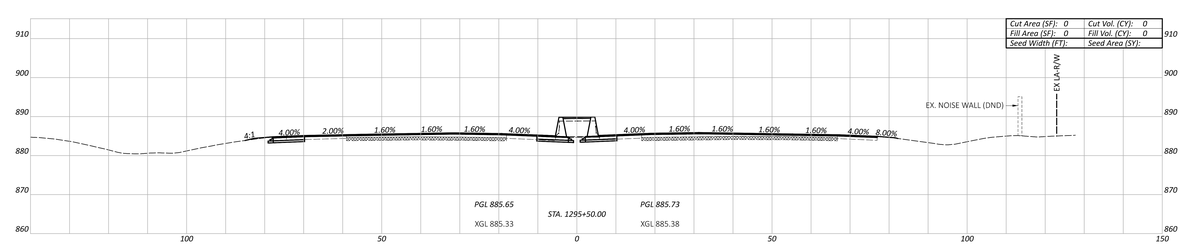
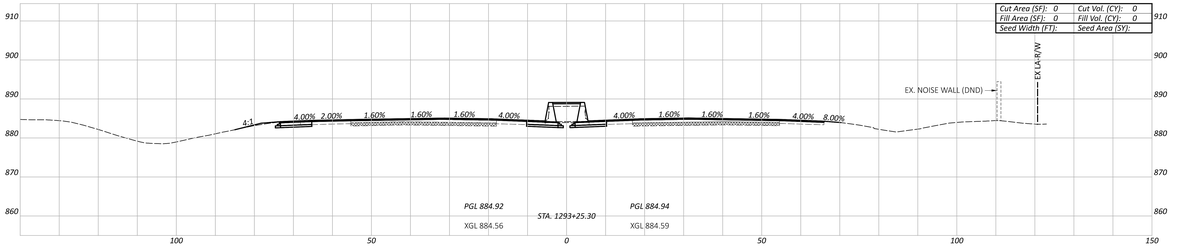
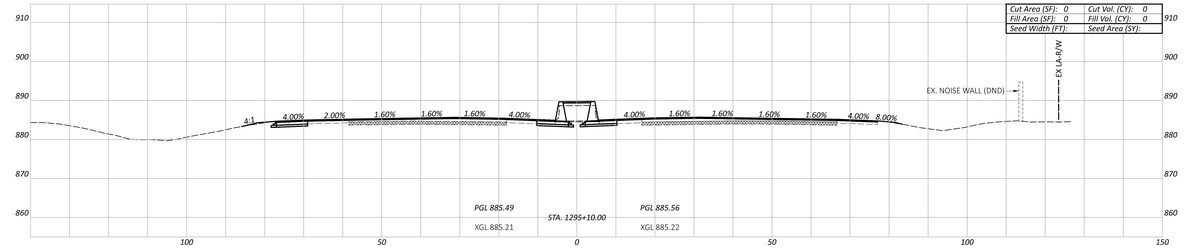
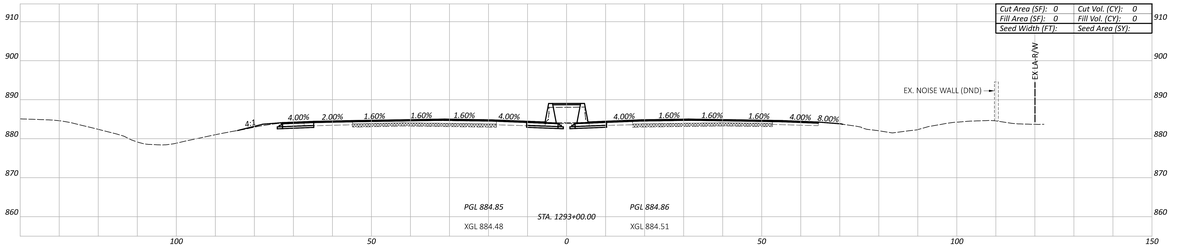
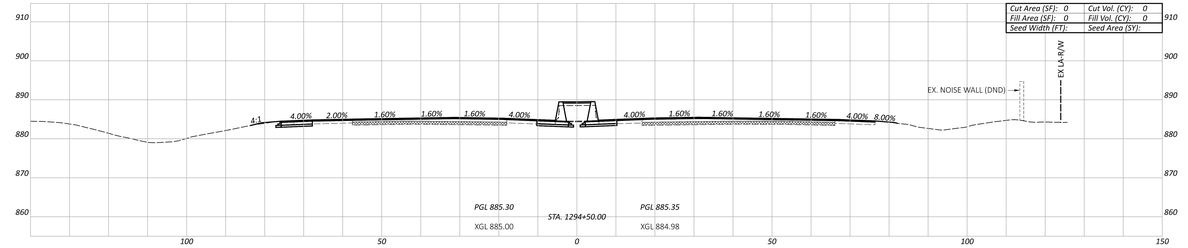


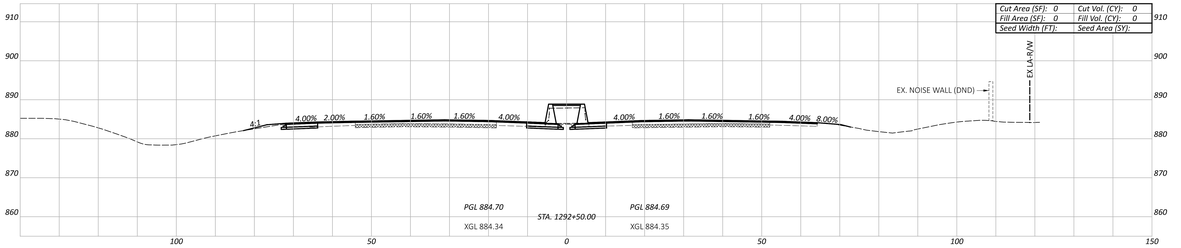


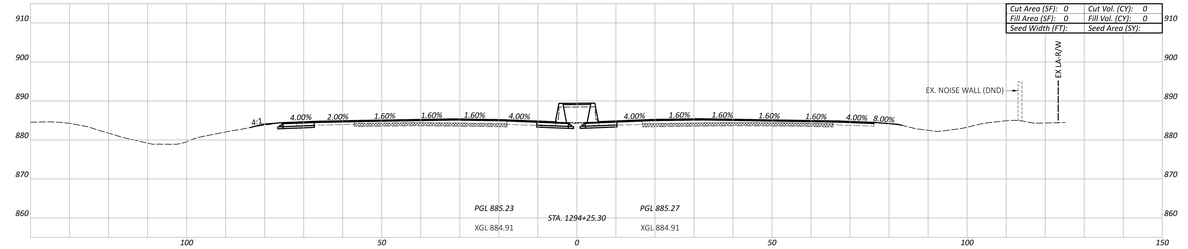


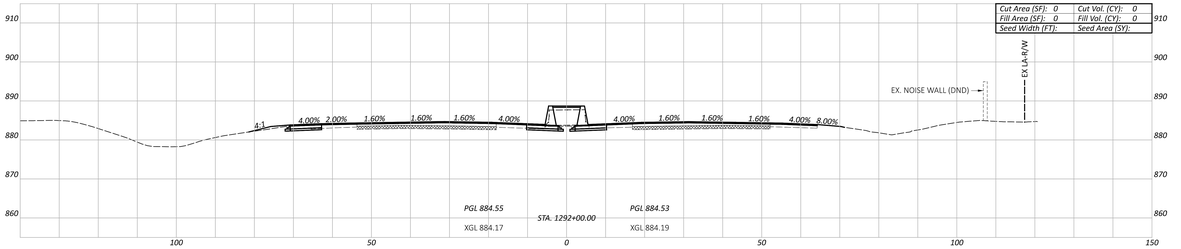


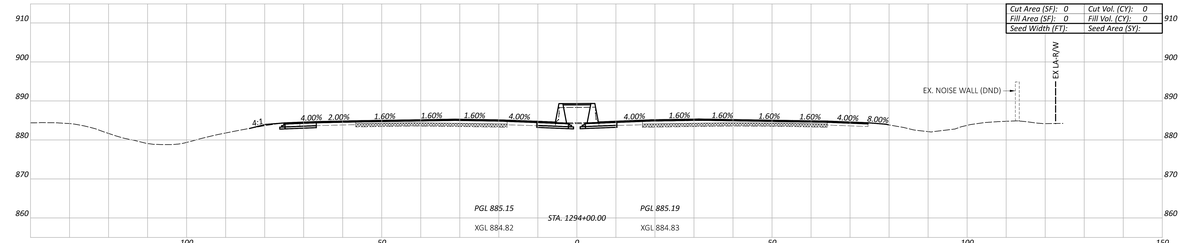












CROSS SECTIONS - I-71
STA. 1292+00.00 TO STA. 1295+50.00

DESIGN AGENCY
Jacobs

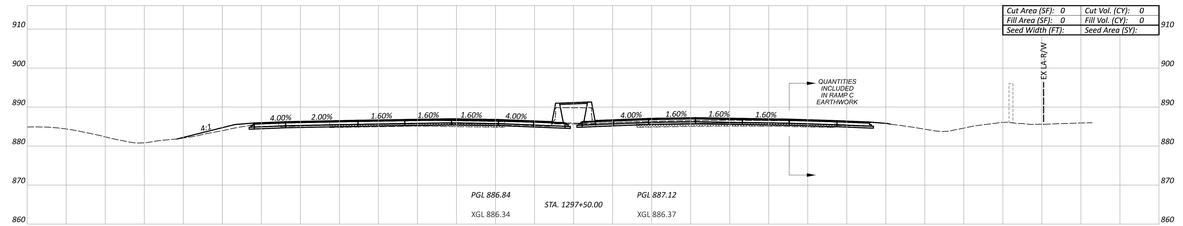
DESIGNER
CGL

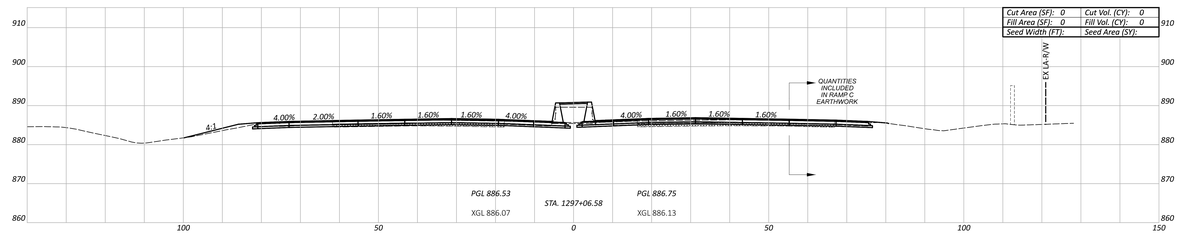
REVIEWER
MCK 02/19/26

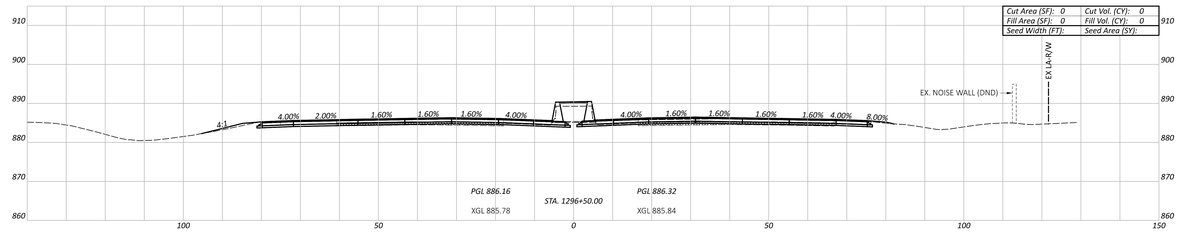
PROJECT ID
109164

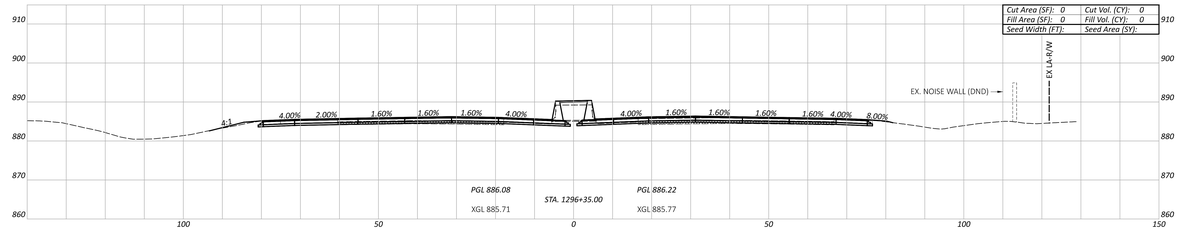
Sheet Totals			
Seeding	Cut	Fill	SHEET
			P.250

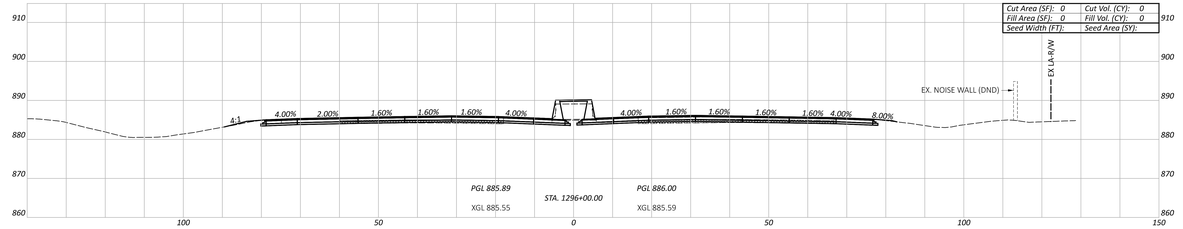
TOTAL
618

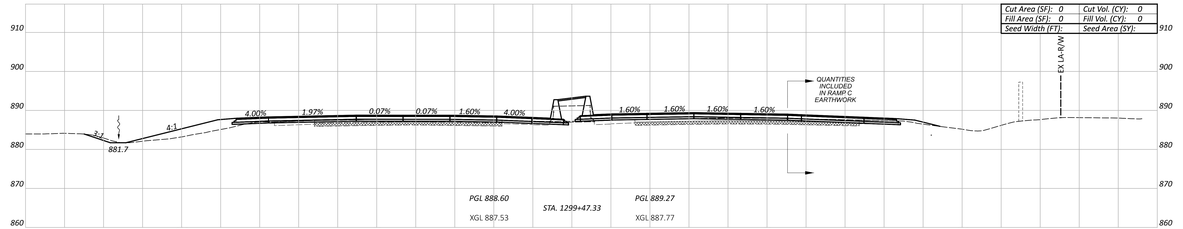


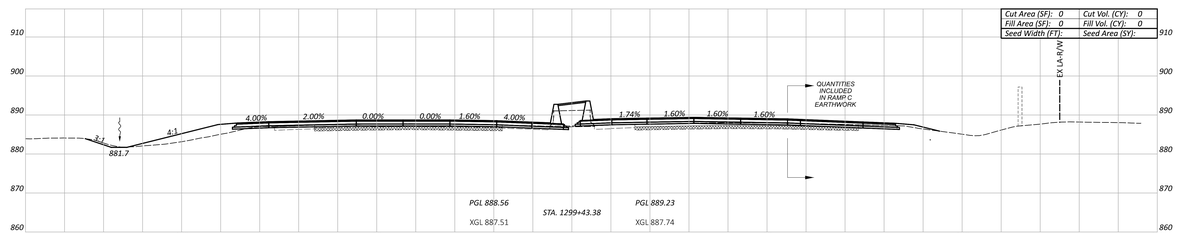


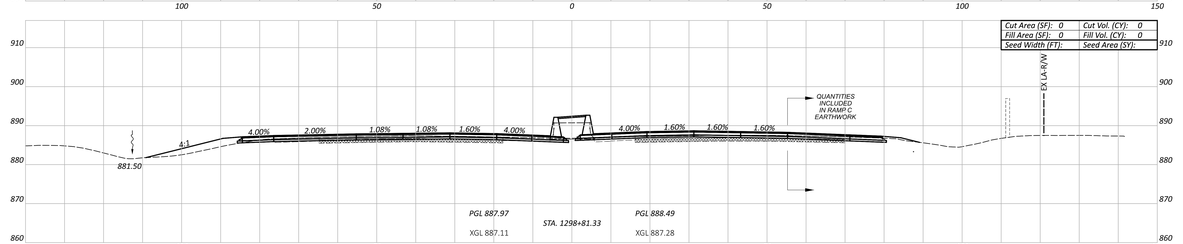


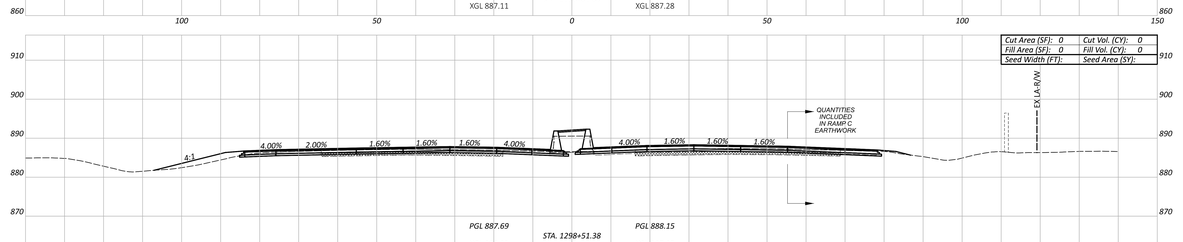


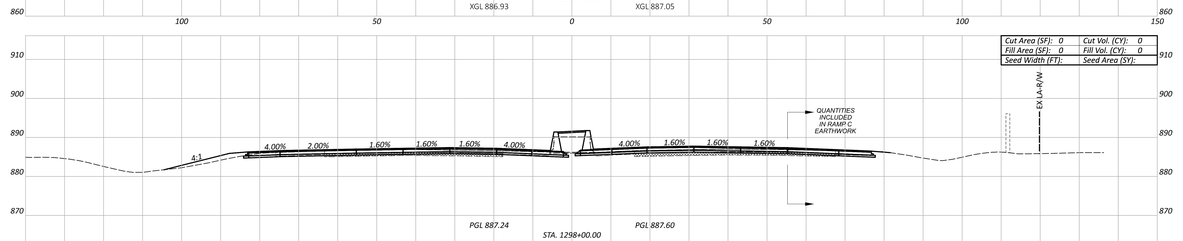












CROSS SECTIONS - I-71
STA. 1296+00.00 TO STA. 1299+47.33

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals			
Seeding	Cut	Fill	SHEET P.251 / TOTAL 618

FRA-71-19.10

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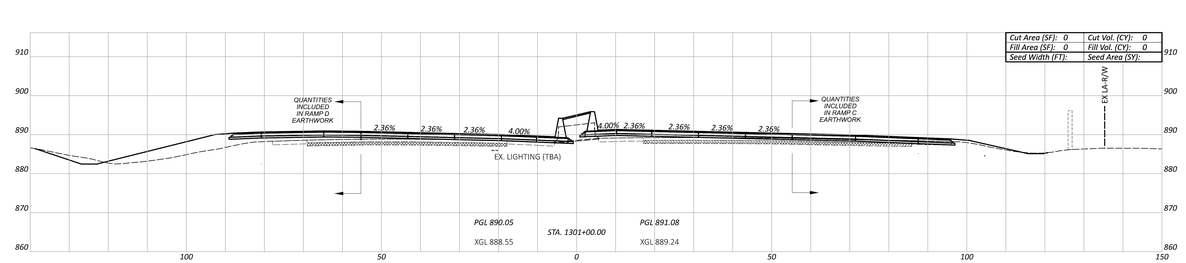

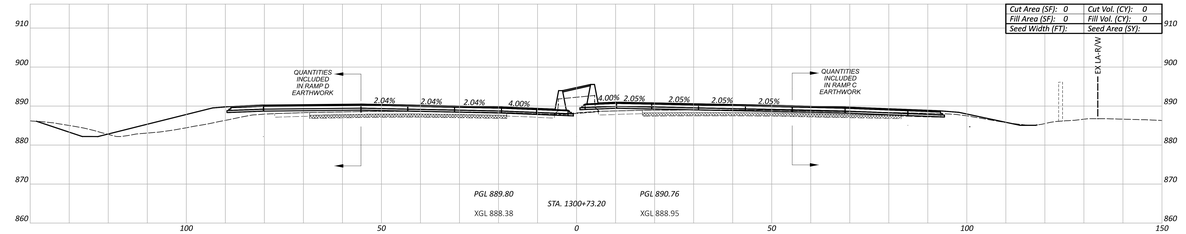

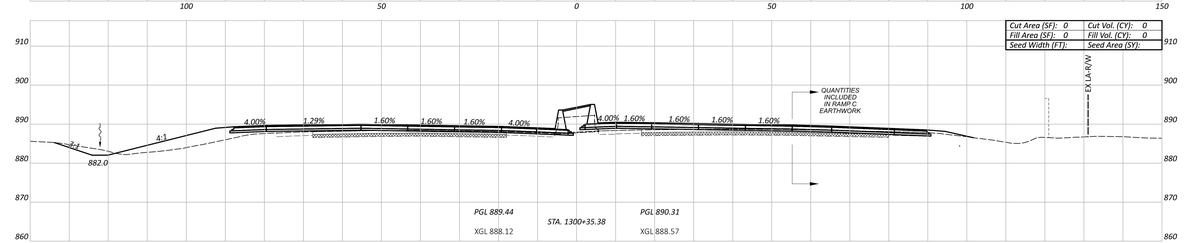

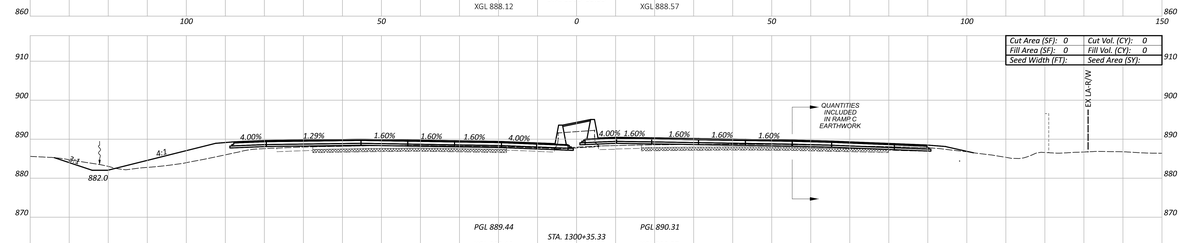

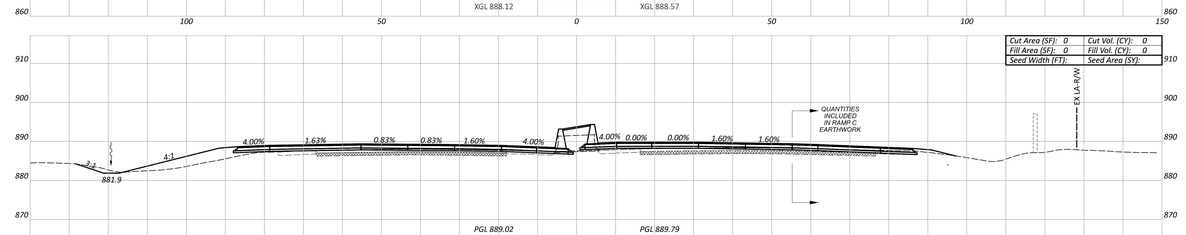

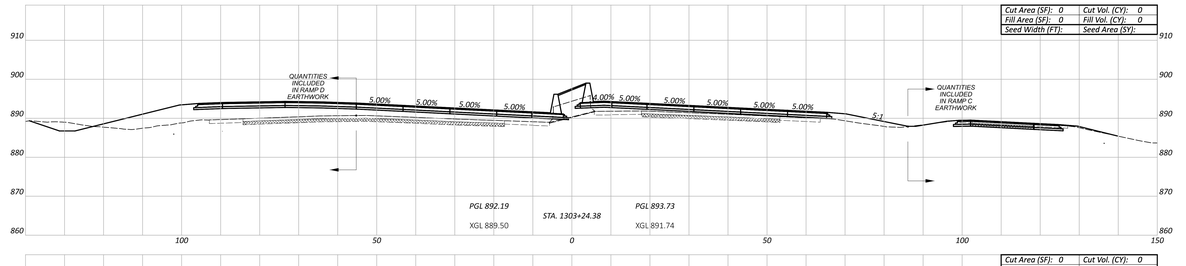

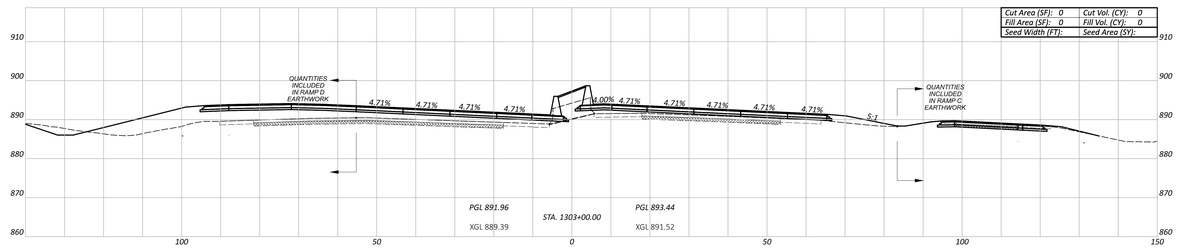

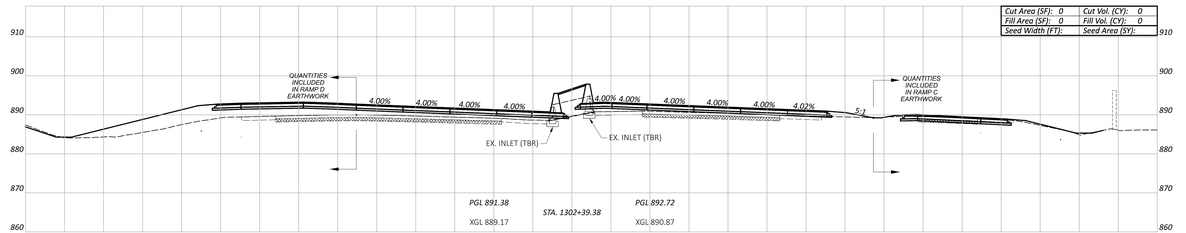

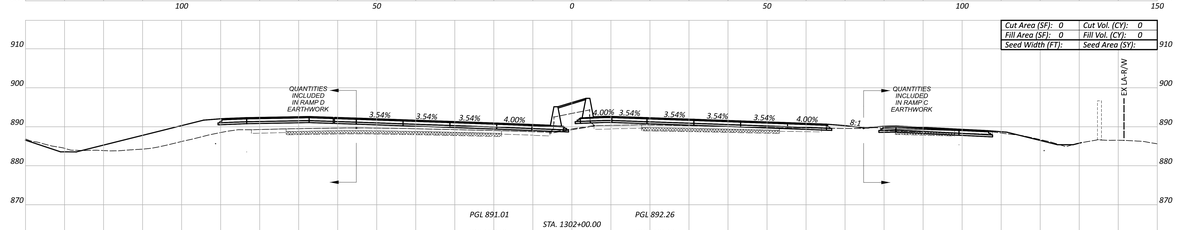

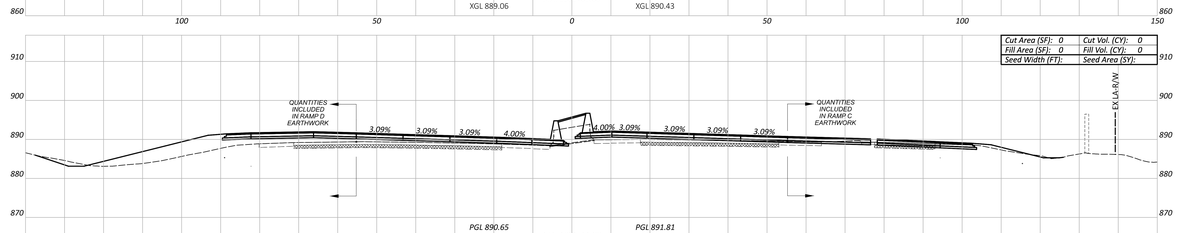

CROSS SECTIONS - I-71
STA. 1299+91.33 TO STA. 1303+24.38

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.252	618

FRA-71-19.10

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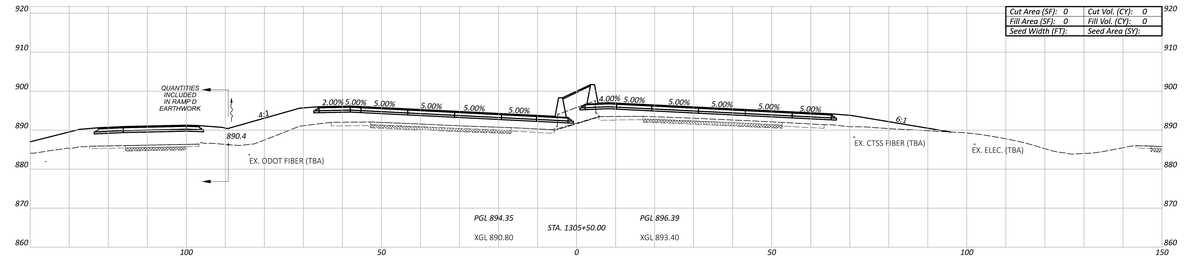
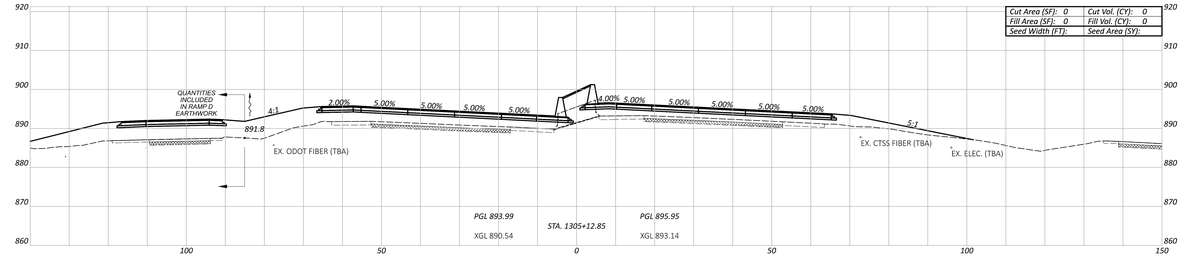
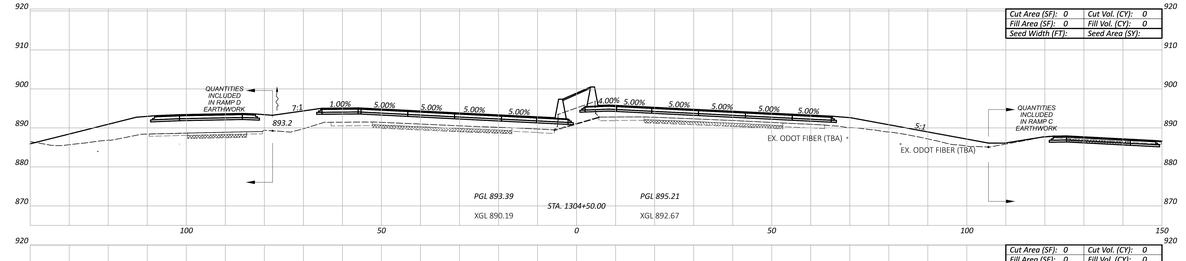
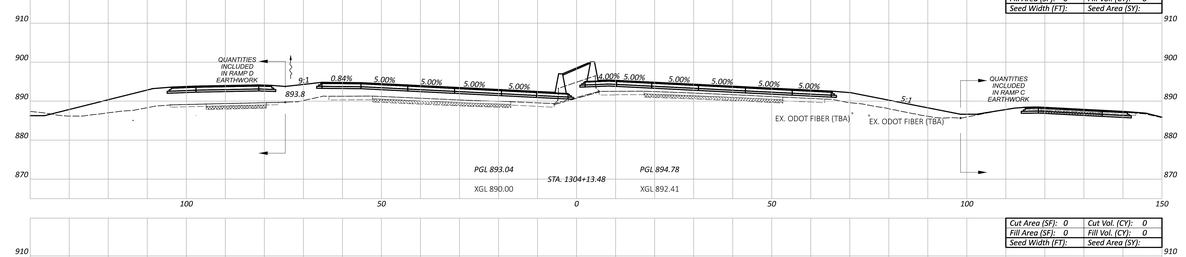
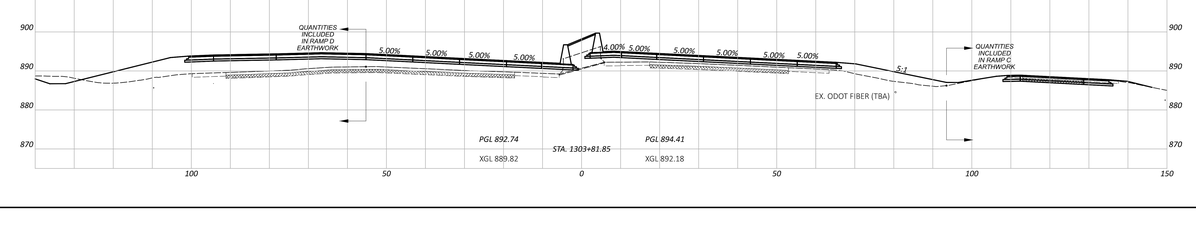
ALL DATA SHOWN IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES.

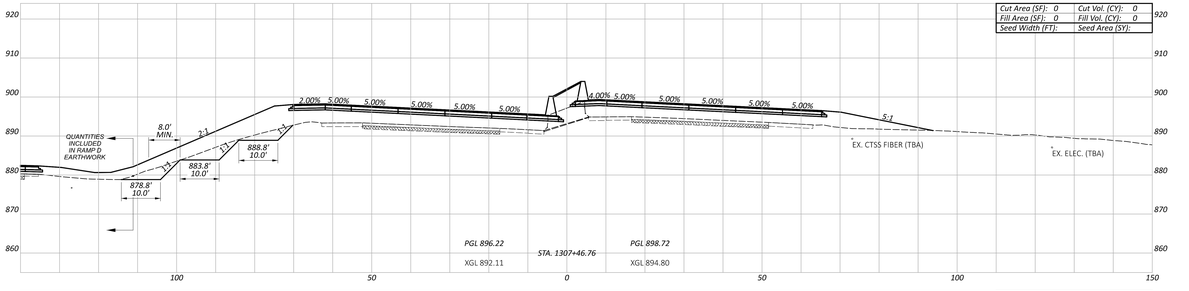


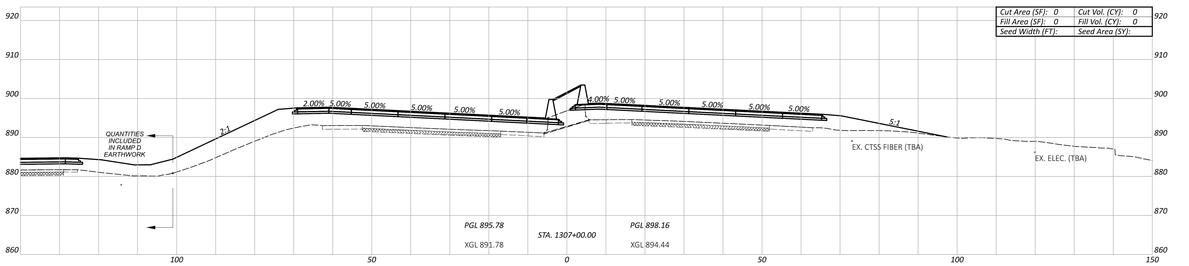


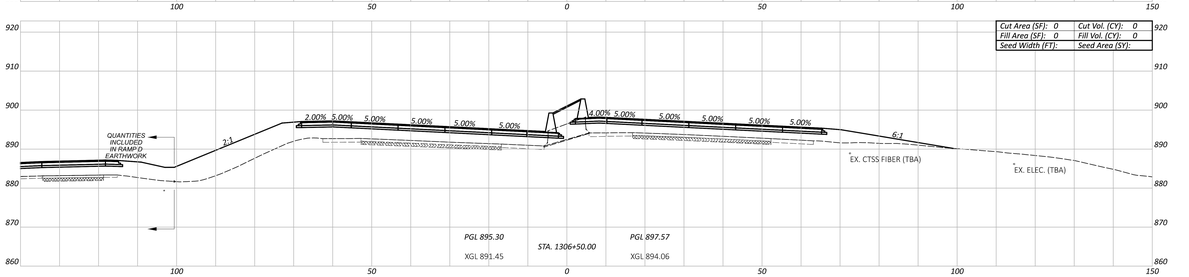


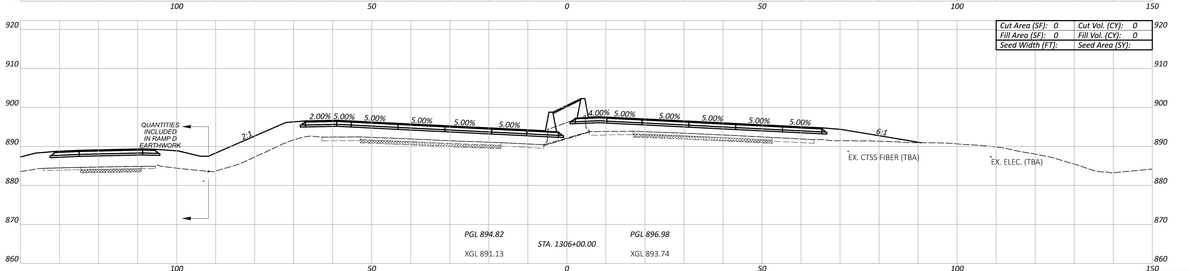












CROSS SECTIONS - I-71
STA. 1303+81.85 TO STA. 1307+46.76

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.253	618

FRA-71-19.10

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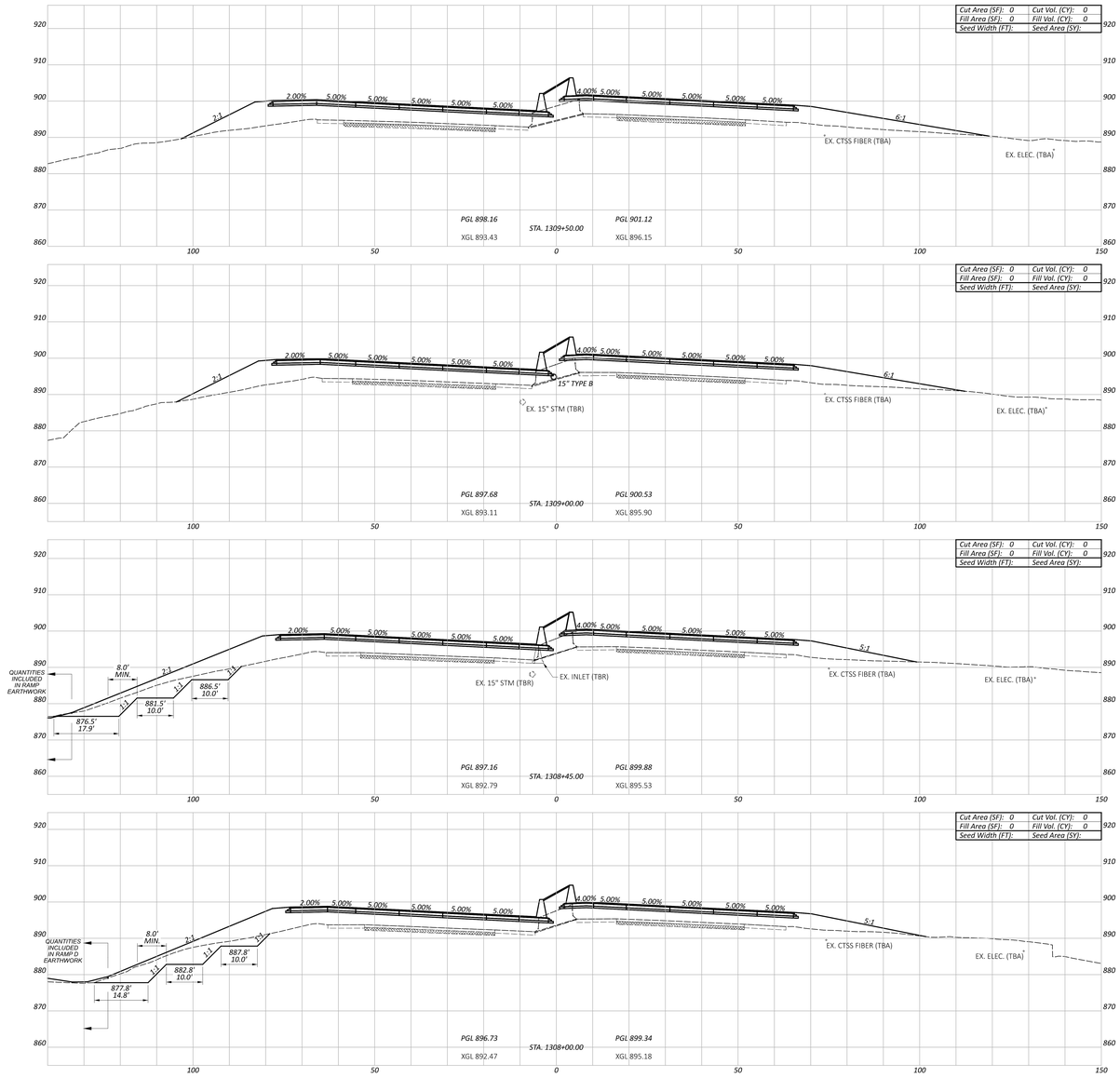

CROSS SECTIONS - I-71
STA. 1308+00.00 TO STA. 1311+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT ID
109164

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL	
			P.254	618	

FRA-71-19.10

MODEL: CU_071 - 19&I-670 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 3/30/2026 TIME: 11:25:13 PM STORM: ONDOT_PSF_F+.ctb SCALE: Print Scale=1:1 USER: Dhn.Lawrence@jacobs.com WORKSPACE: ONDOTCAD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MODEL: C3F_RTI - 1311+50.00 | Sheet: PAPERSPACE - 66x44 (in) | DATE: 3/27/2026 TIME: 11:26:17 PM | STORE: ONDOT_PW_F:\dot\g PENTRE, ONDOT_Pw.ctb | USER: Chris.Lawrence@dot.ohio.gov | WORKSPACE: ONDOTCIVIL3 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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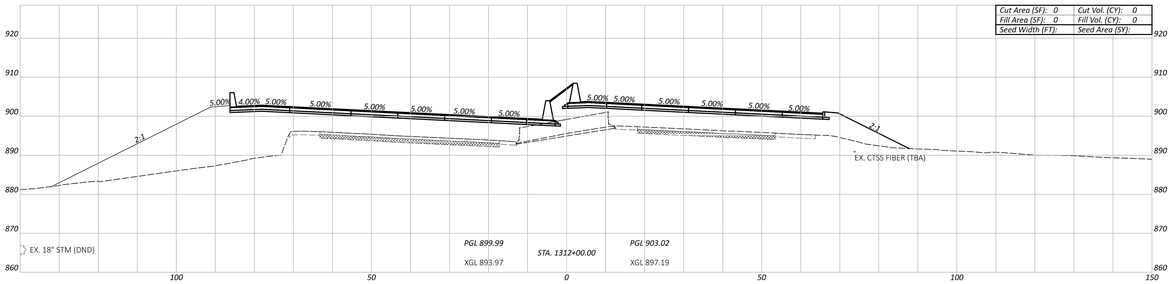

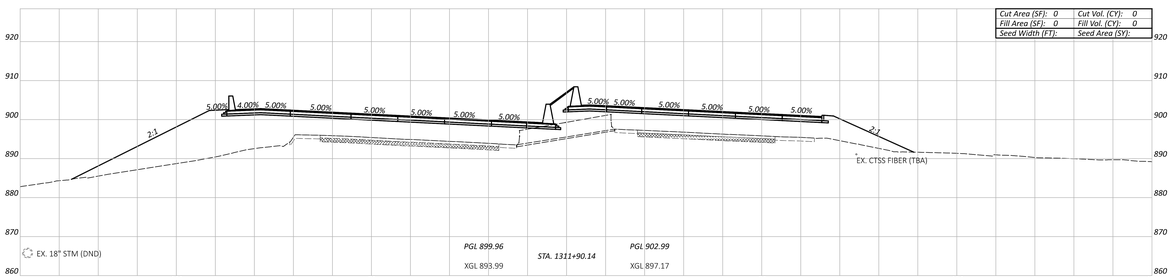

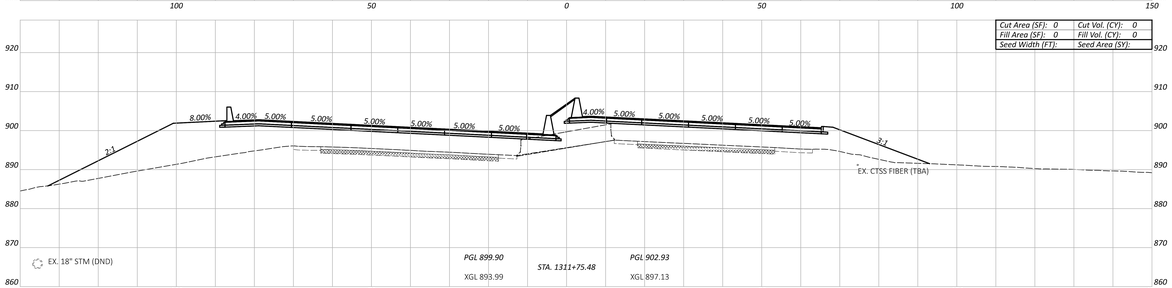

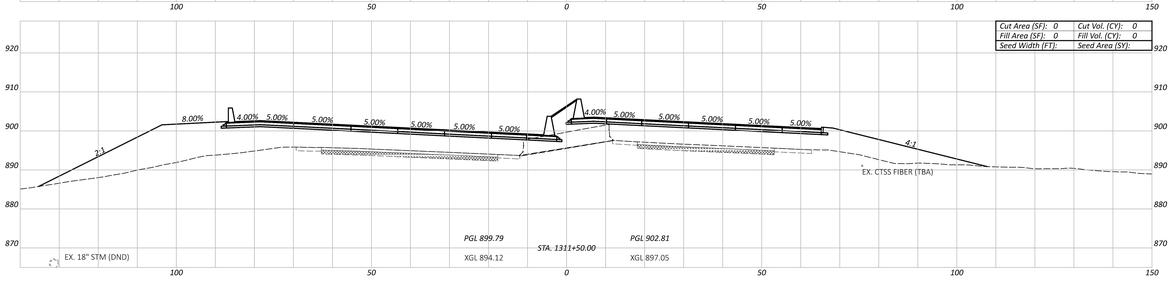

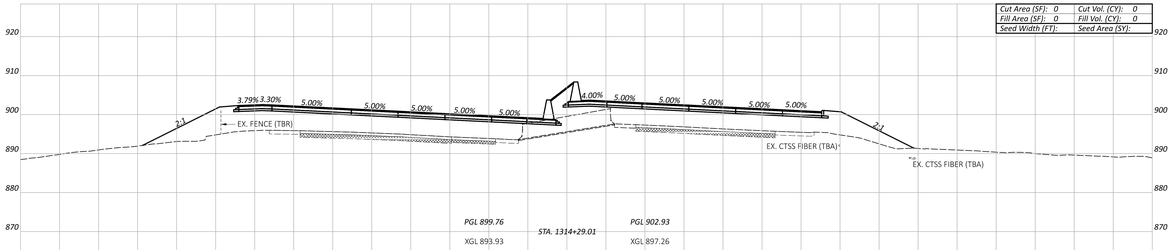

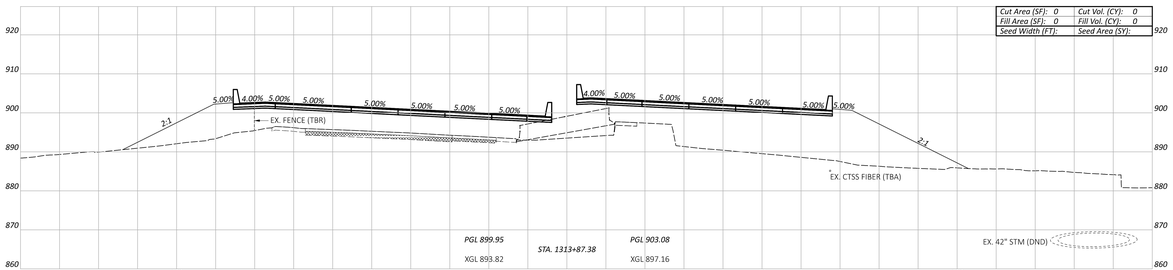

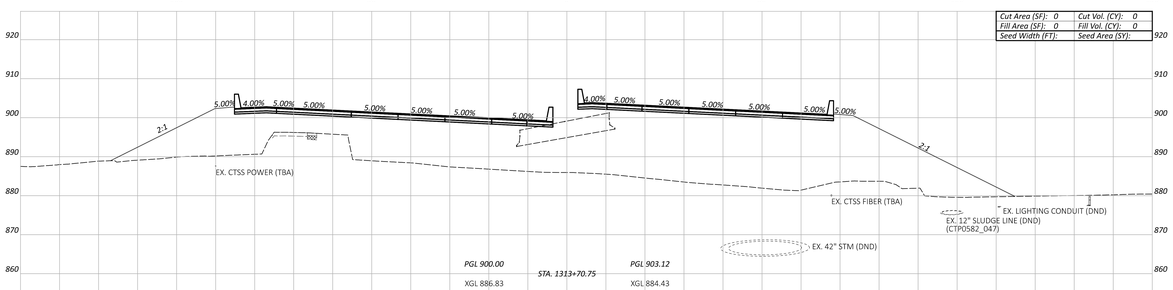

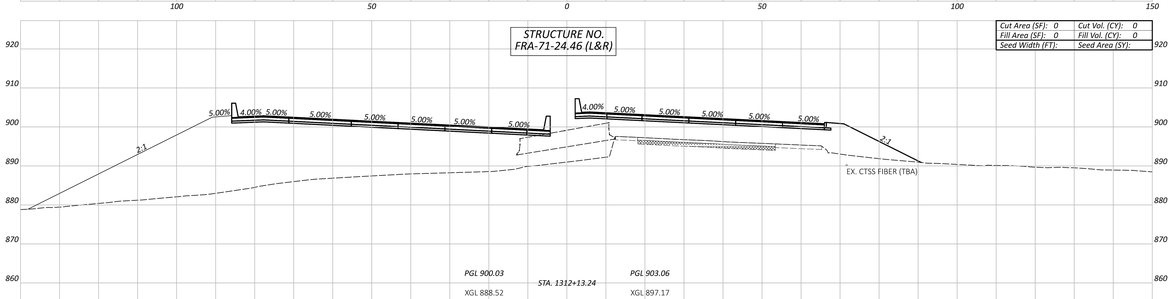

CROSS SECTIONS - I-71
STA. 1311+50.00 TO STA. 1314+29.01

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals			
Seeding	Cut	Fill	SHEET TOTAL
			P.255 618

MODEL: CLF_RTI - 1314+50.00 | SHEET: PAPERSIZE_66x44 (in) | DATE: 3/27/2026 7:48:11 PM | STORY: CHOOSY_PSR_F | config: PENTEL CHOOSY_Pen.ctb | USER: Chris.Lawrence@jacobs.com | WORKSPACE: CHOOSY.dc5 | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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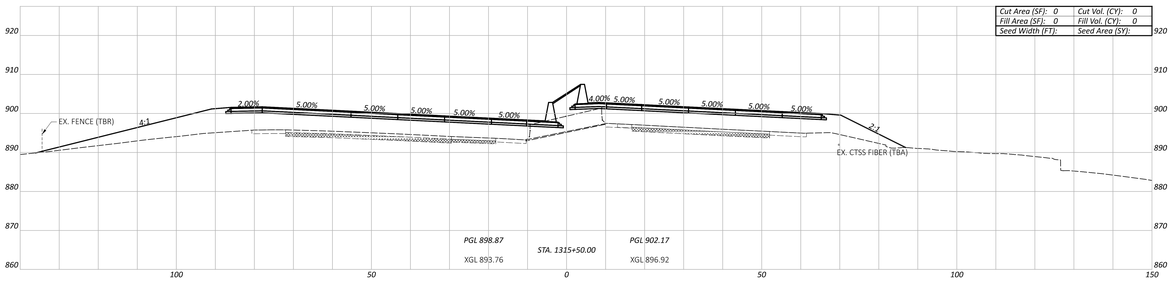

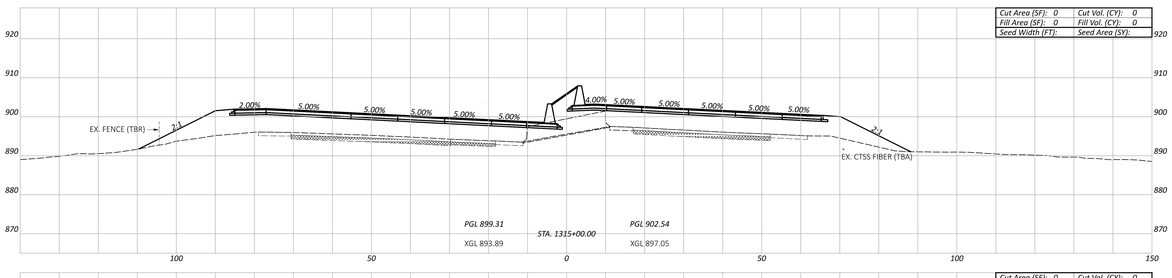

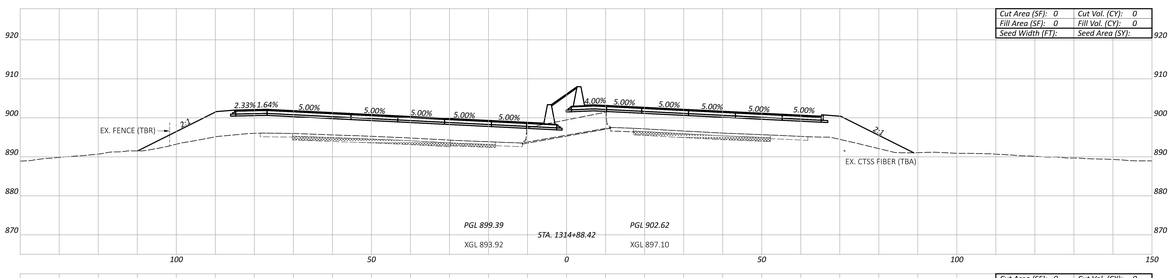

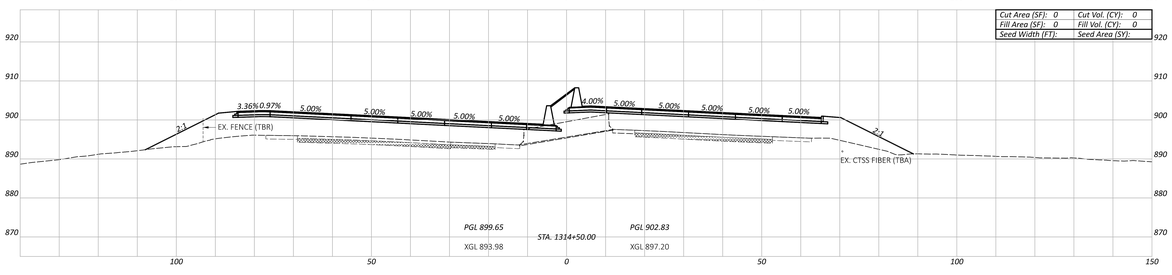

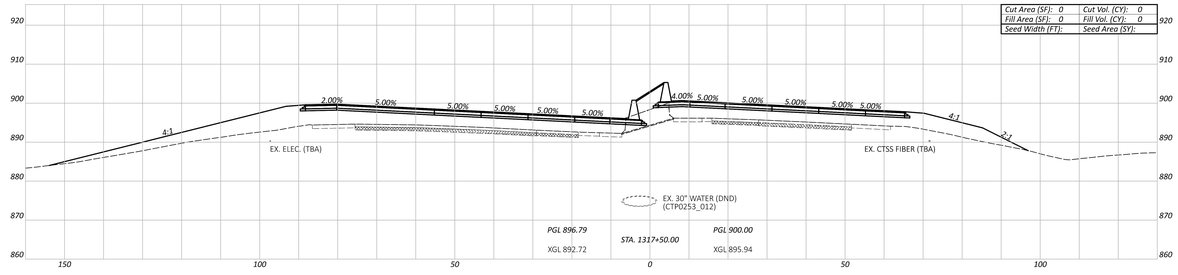

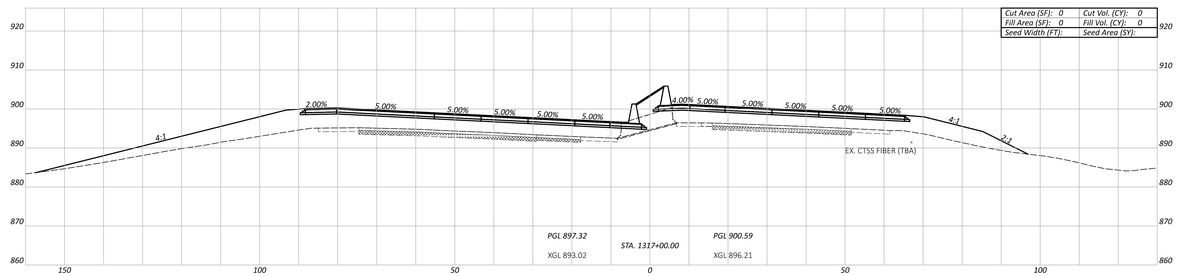

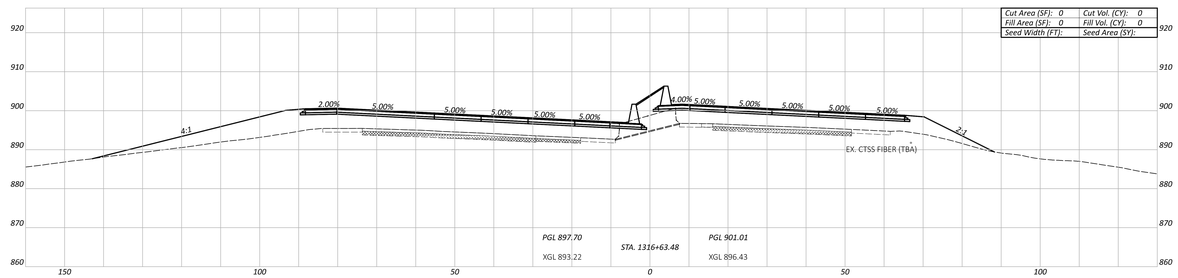

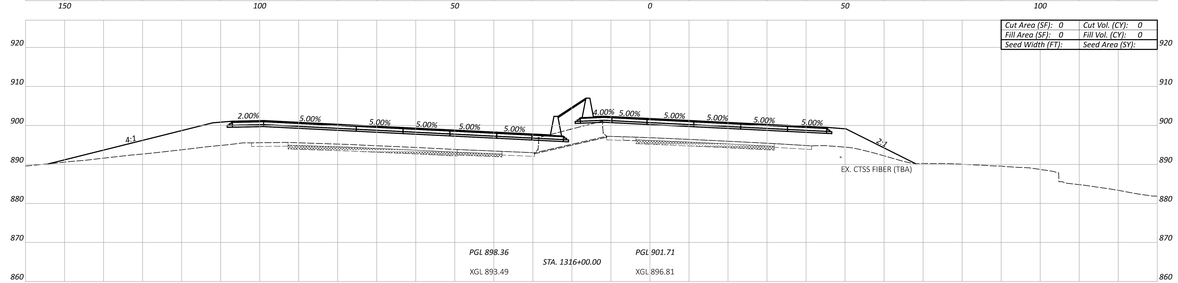

CROSS SECTIONS - I-71
STA. 1314+50.00 TO STA. 1317+50.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.256	618

MODEL: C:\PT1 - 1317+89.49 (Sheet) INPROGRS 64x44 (in) DATE: 1/27/2026 TIME: 11:28:13 PM SYSTEM: ONDOT_PW_F+ config: PENTEL ONDOT_Pen.ctb USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTCIVIL9 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACCESS: Use of this software is governed by the Bentley Subscription Services Agreement (SSA) and you are authorized to use this software only if you are subscribed to it.

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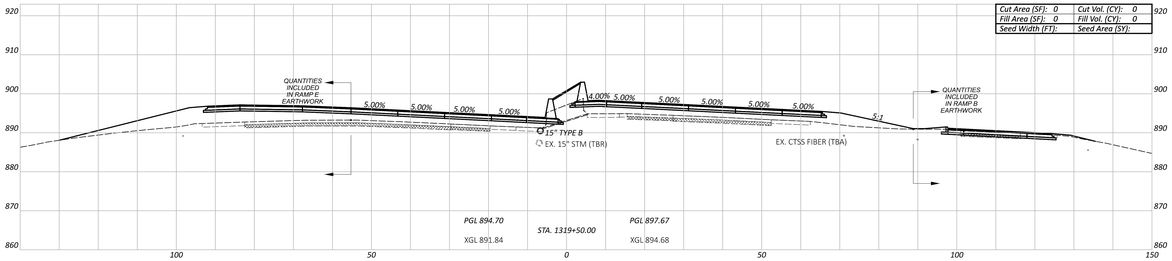
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT):	Seed Area (SY):



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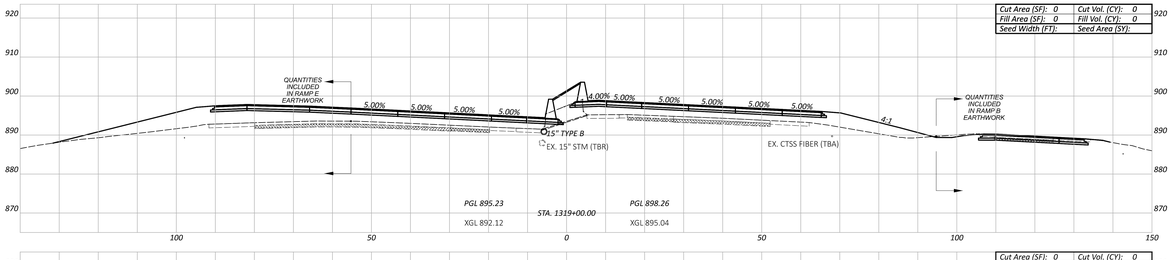

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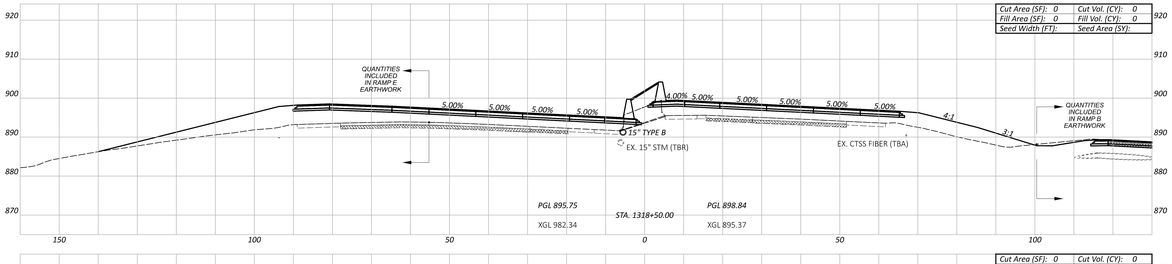

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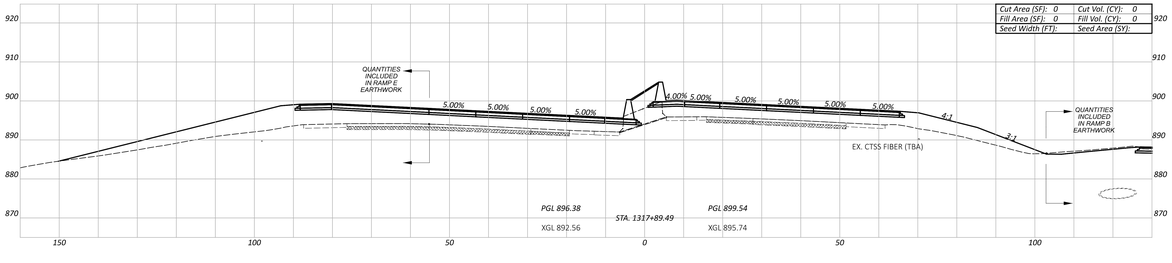

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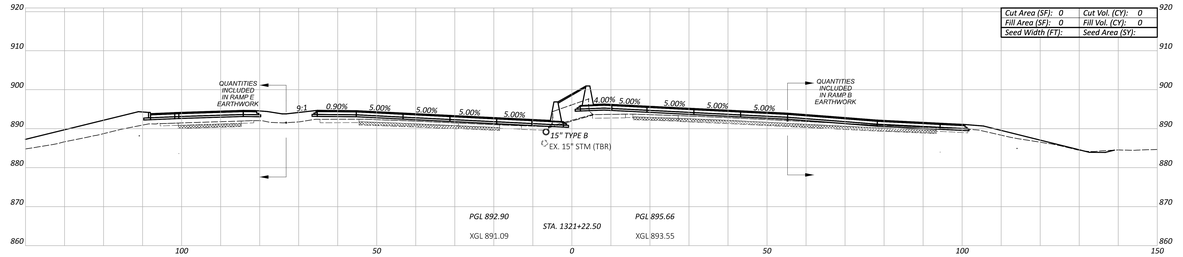
Seed Width (FT):	Seed Area (SY):



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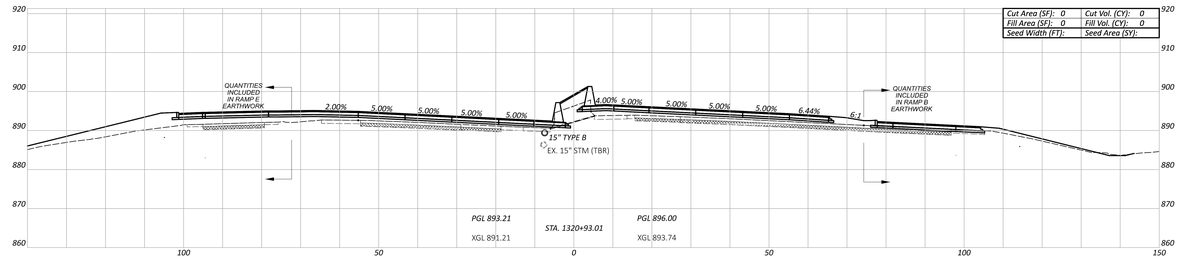

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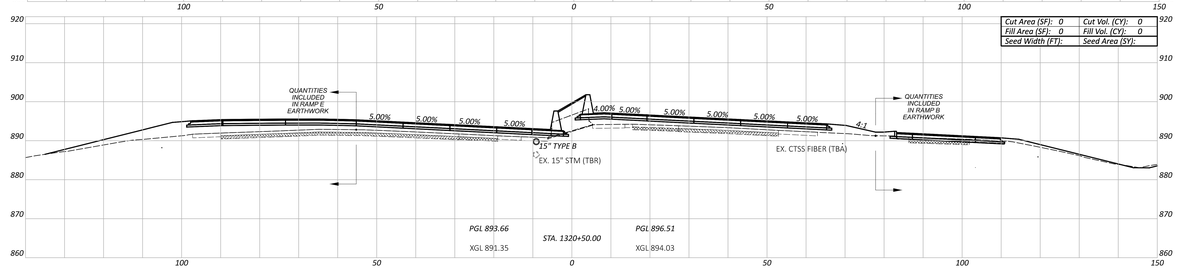

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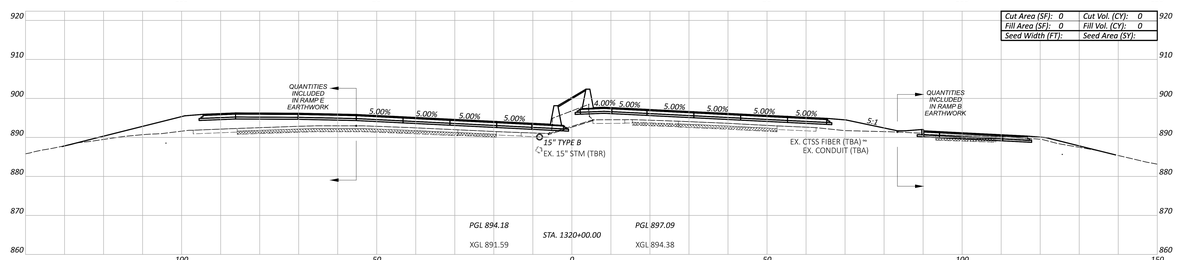
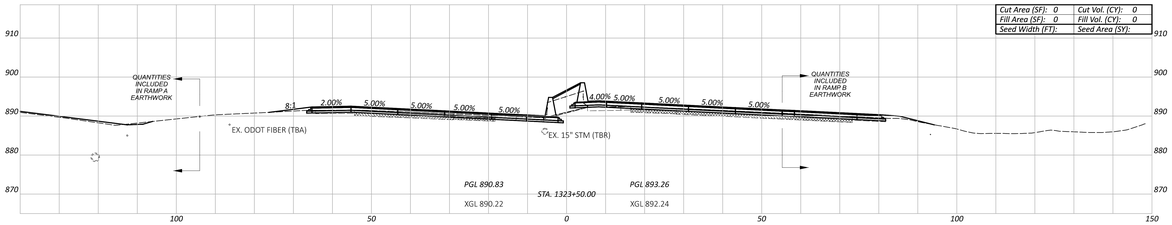


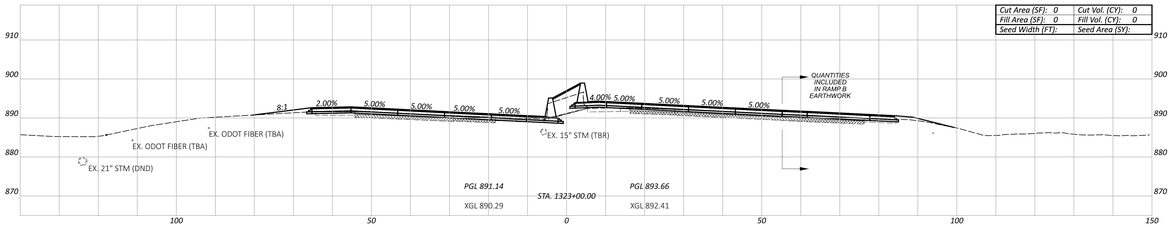
CROSS SECTIONS - I-71
STA. 1317+89.49 TO STA. 1321+22.50

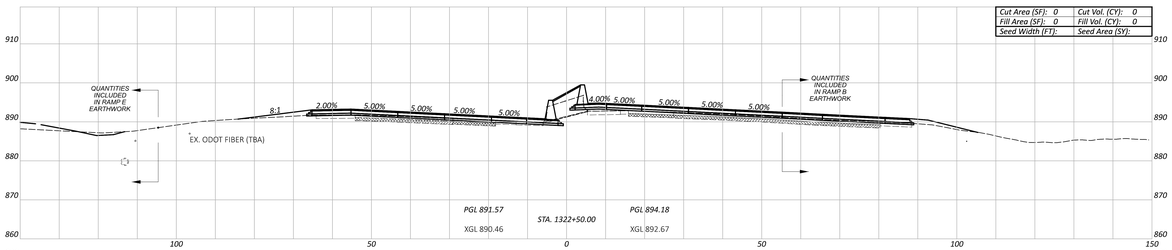
DESIGN AGENCY
Jacobs

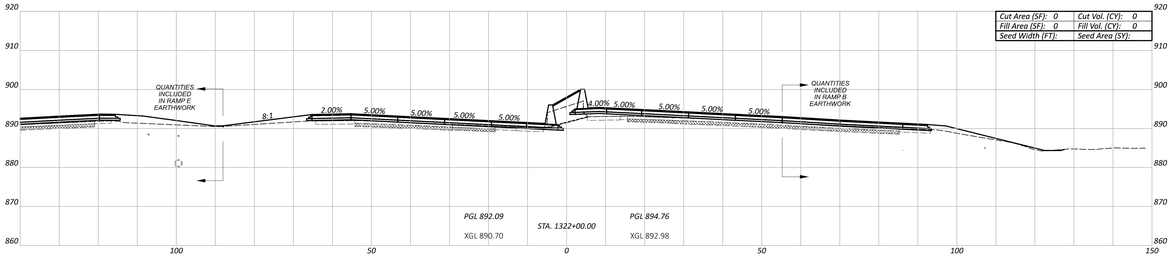
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

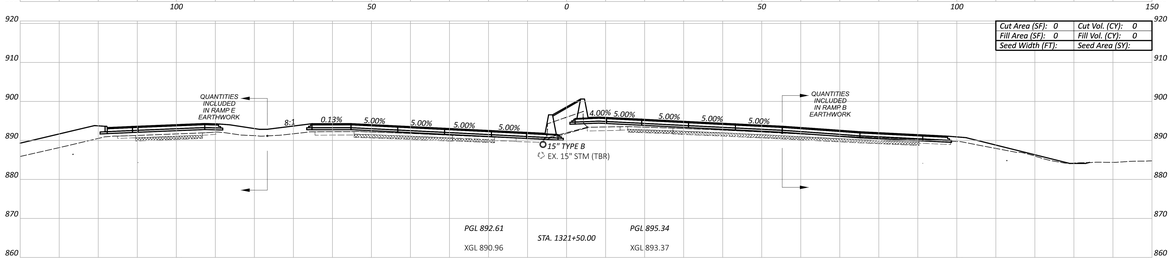
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.257	618

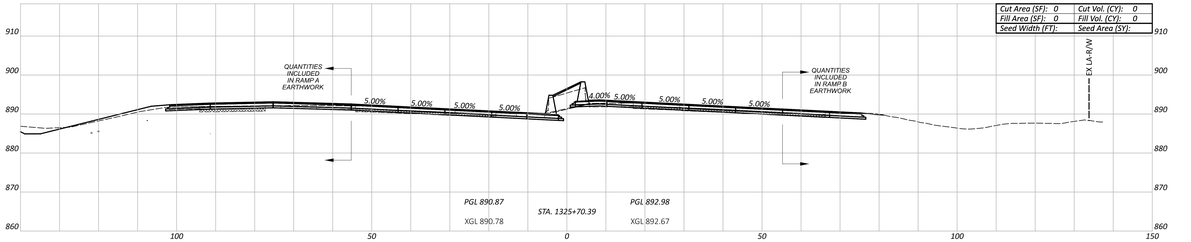


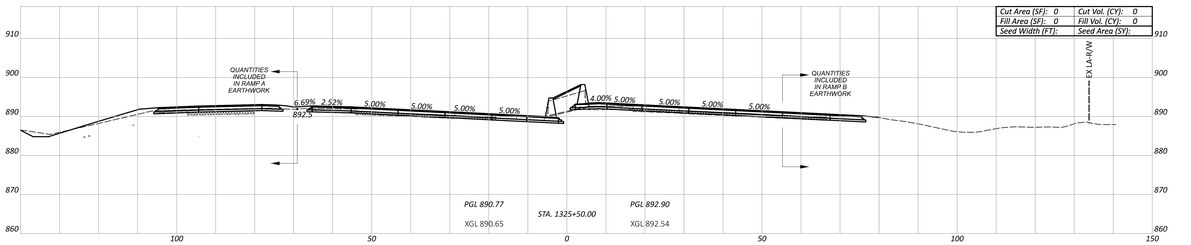


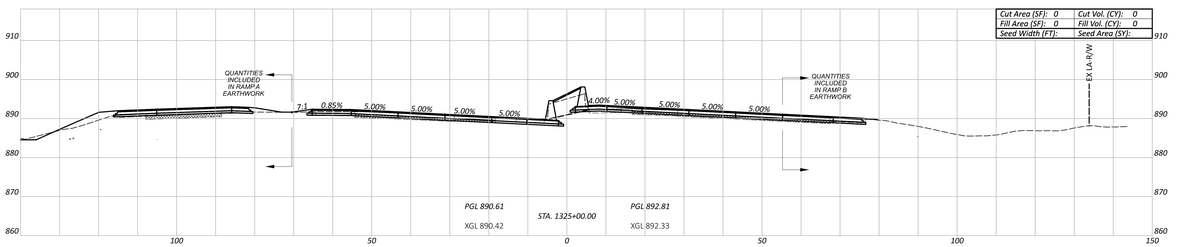


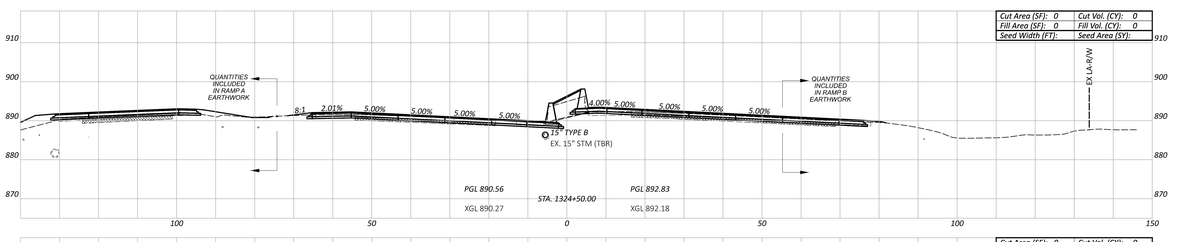


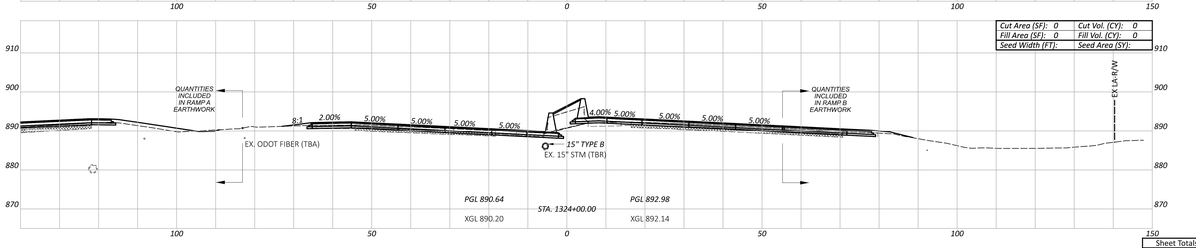












CROSS SECTIONS - I-71
STA. 1321+50.00 TO STA. 1325+70.39

Sheet Totals			
Seeding	Cut	Fill	

SHEET P.258
TOTAL 618

DESIGN AGENCY: Jacobs
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT ID: 109164

FRA-71-19.10

MODEL: CU_ATT - 1321-50.00 | SHEET: PAPERSIZE: 66x44 (in) | DATE: 3/27/2026 TIME: 11:29:09 PM SYSTEM: CHXDOT_PW_F+ config: PENTEL: CHXDOT_Pen.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHXDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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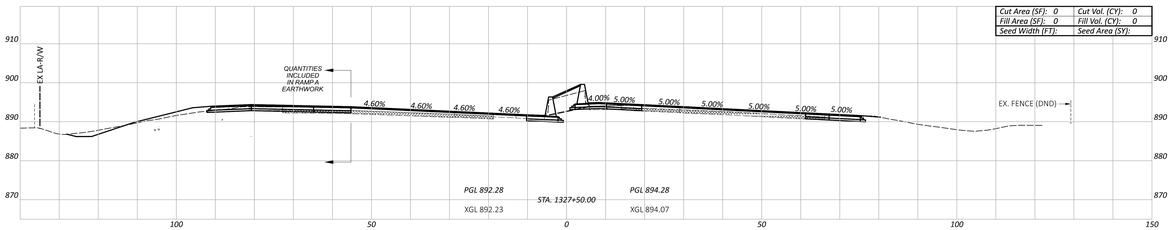

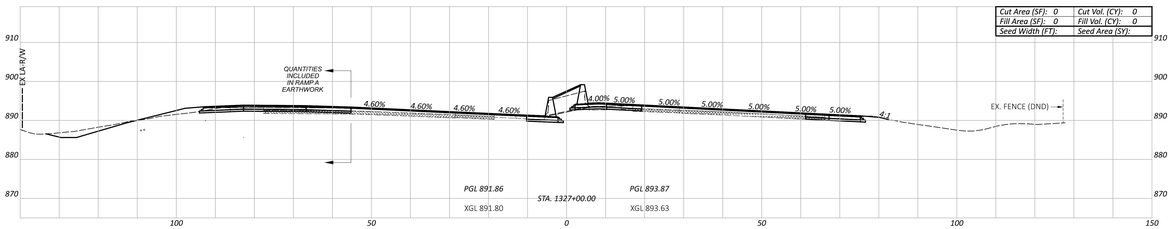

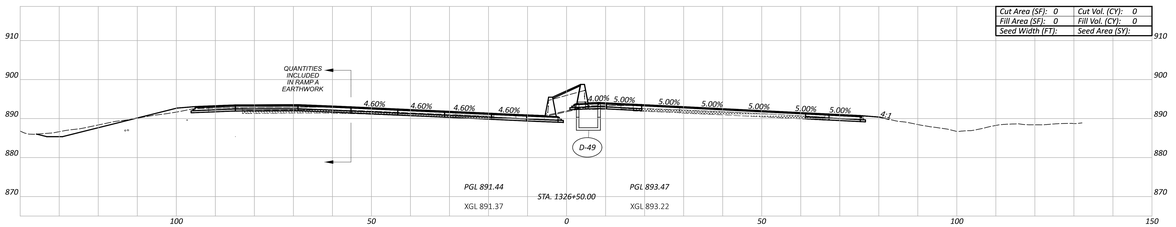

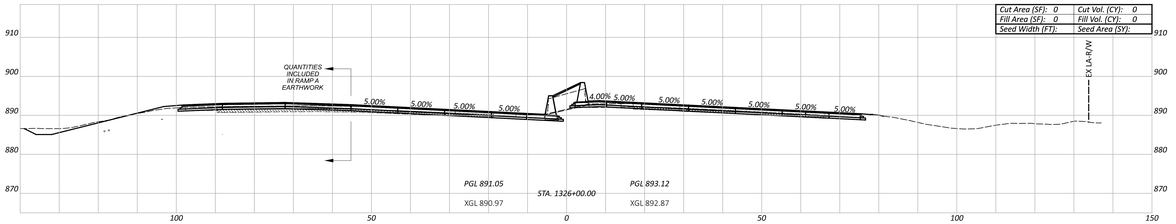

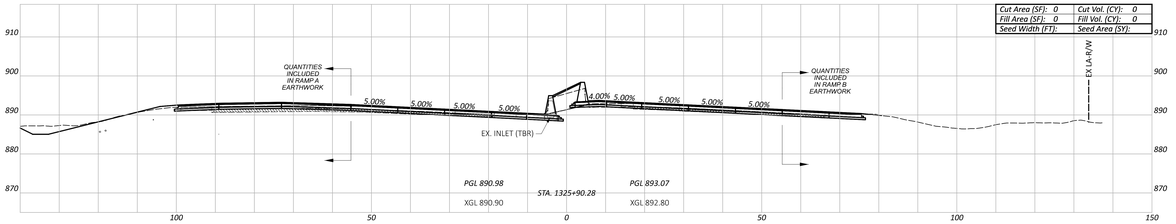

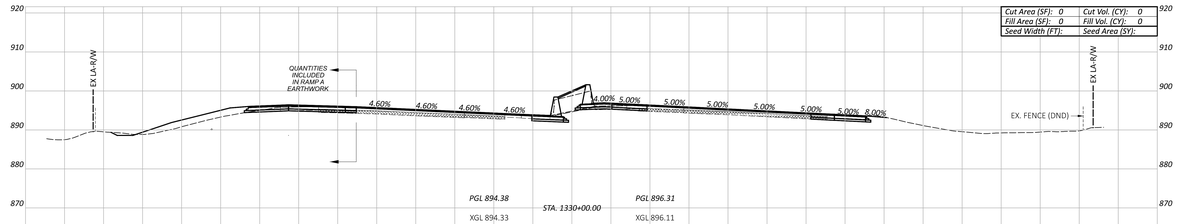

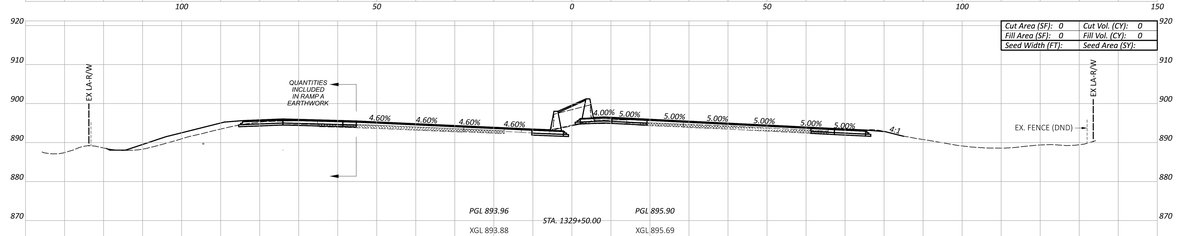

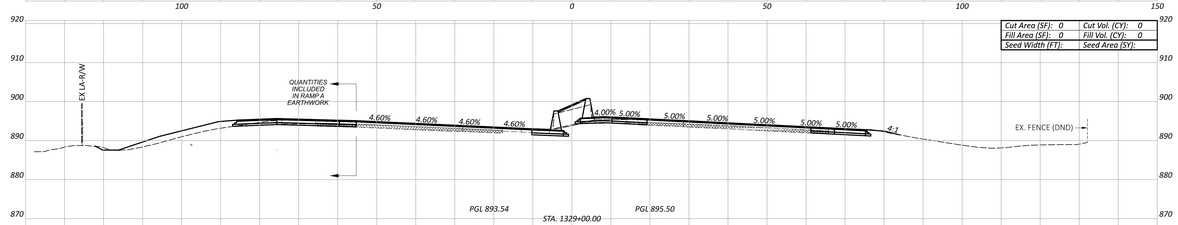

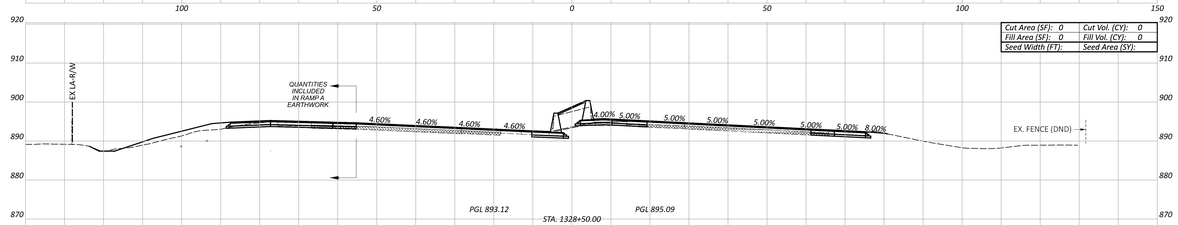

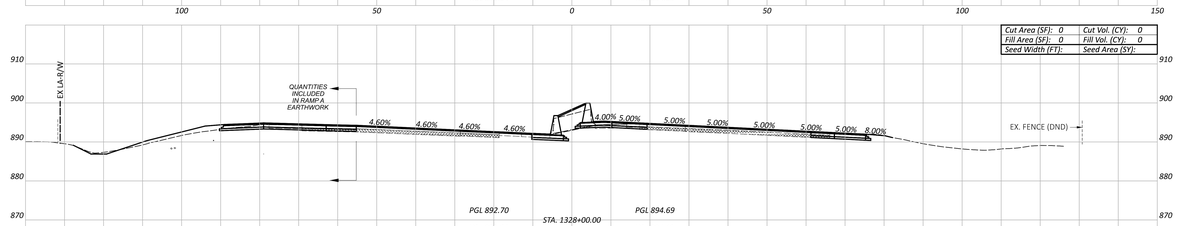

CROSS SECTIONS - I-71
STA. 1325+90.28 TO STA. 1330+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals			
Seeding	Cut	Fill	SHEET P.259
			TOTAL 618

FRA-71-19.10

MODEL: CU_ATT - 1325+90.28 Sheet] PAPERSIZE: 66x44 (in) DATE: 2/27/2026 TIME: 11:30:20 PM STORM: ONDOT_PSI_F+.ctb PENTBL: ONDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: ONDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MODEL: CU_ATT - 11Dx36 sht | Sheet: PAPERSPACE - 66x44 (in) | DATE: 3/27/2025 TIME: 11:31:27 PM | STORY: ONEOFF_PW | F-plot: PENTEL ONEOFF_Pen.ctb | USER: Chris.Lawrence@jacobs.com | WORKSPACE: ONEOFFCVS | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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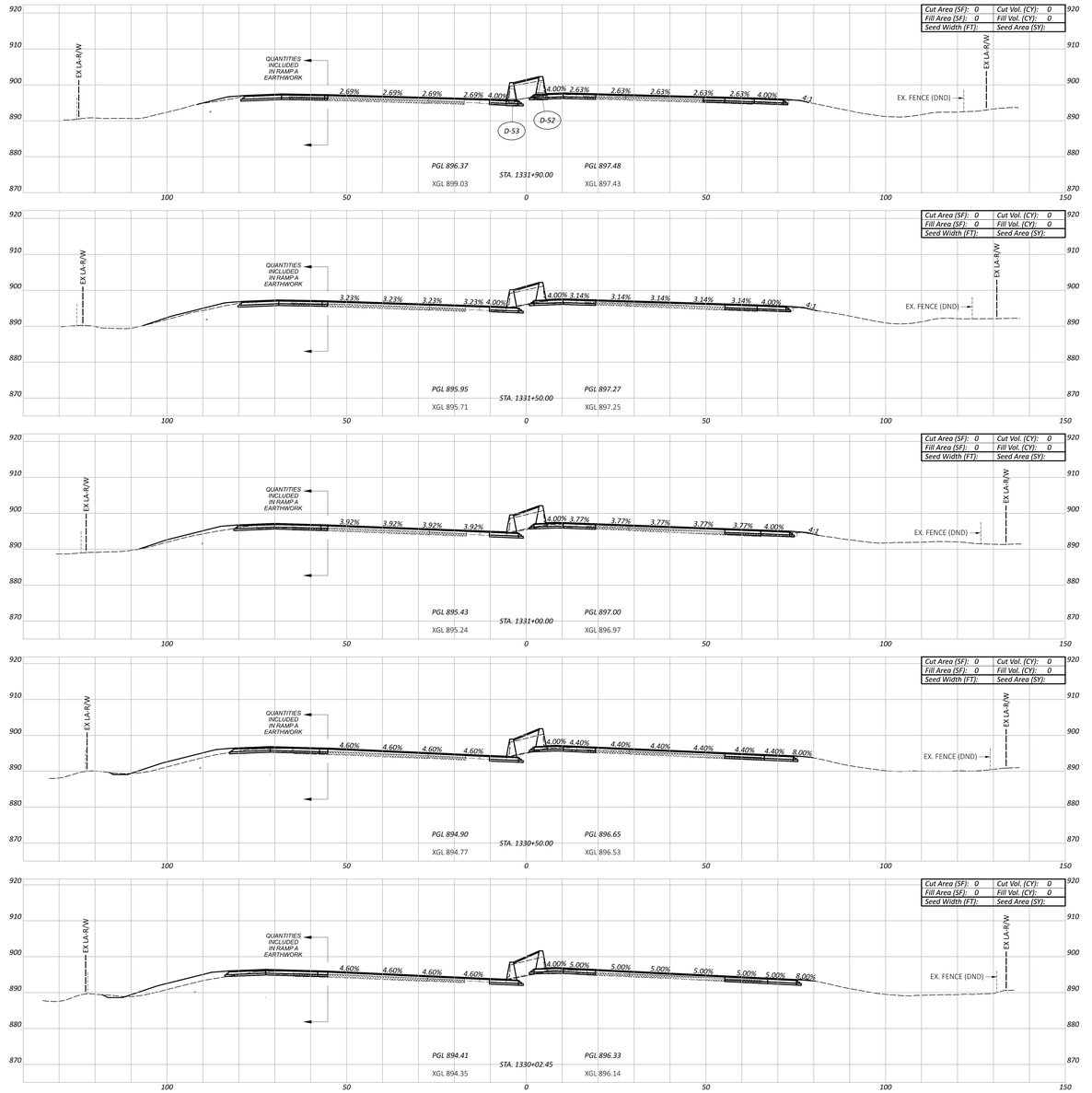
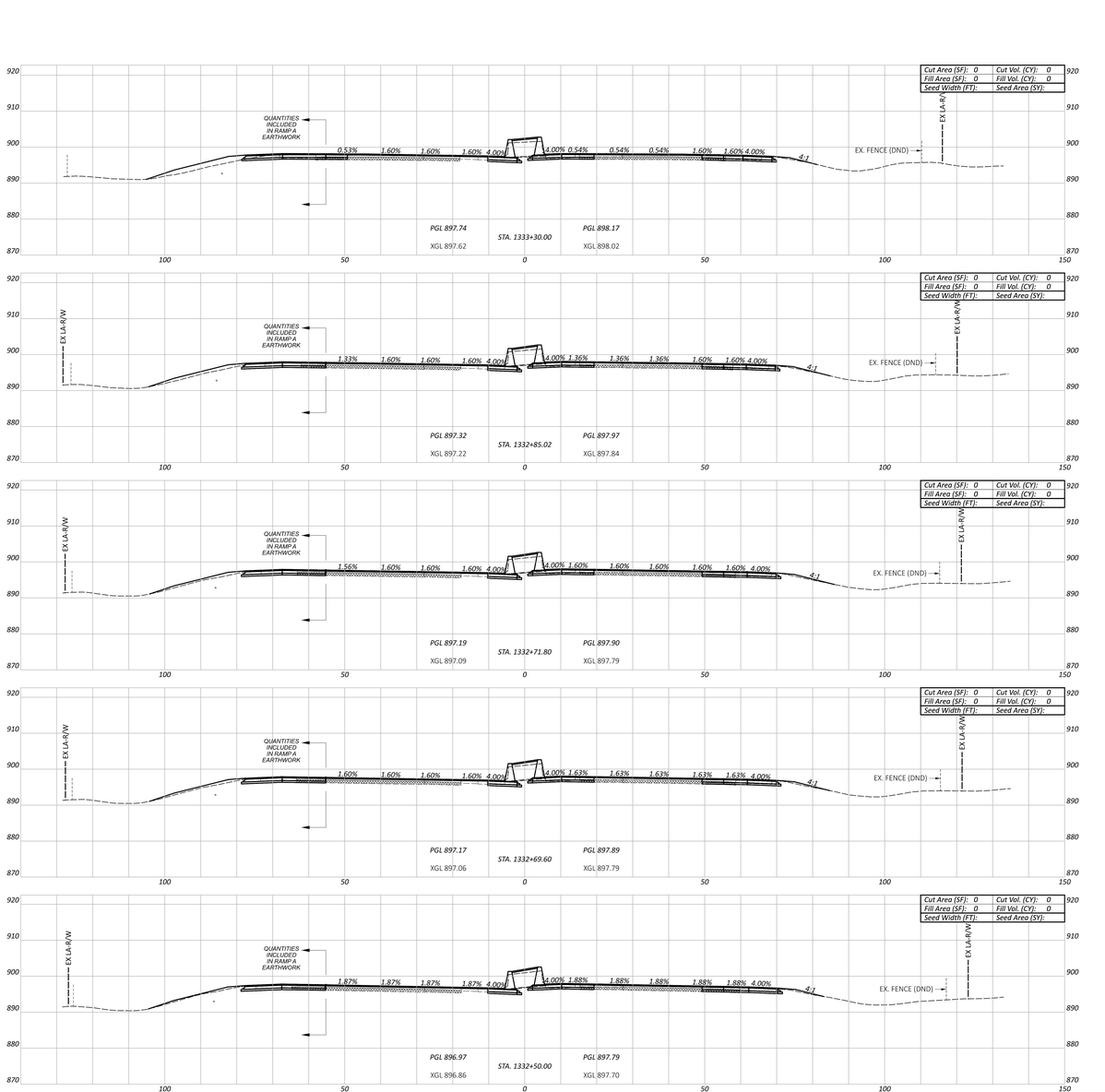


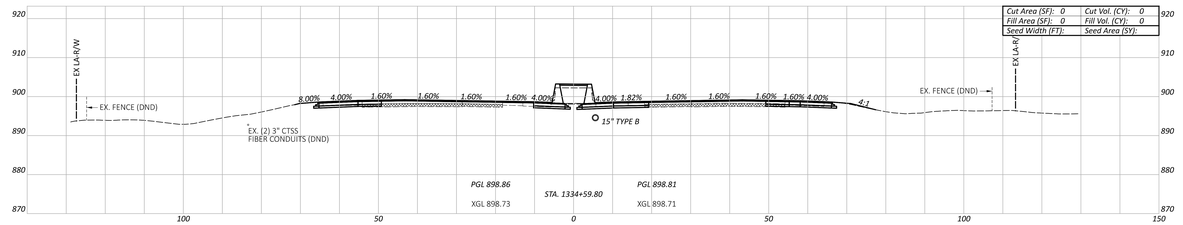


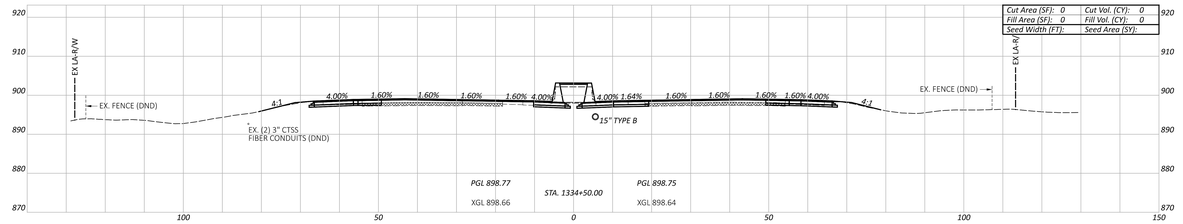
CROSS SECTIONS - I-71
STA. 1330+02.45 TO STA. 1333+30.00

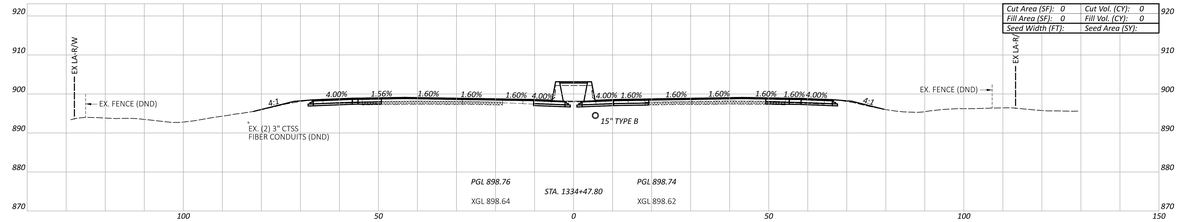
DESIGN AGENCY
Jacobs

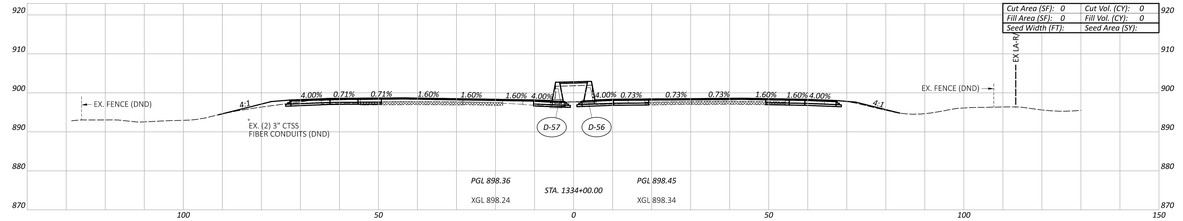
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

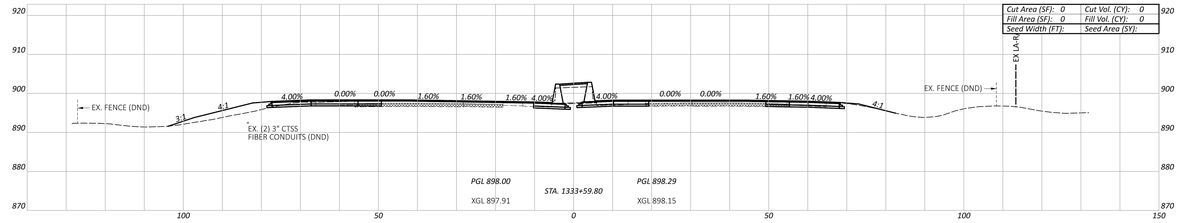
Sheet Totals				SHEET	TOTAL
Seeding	Cut		Fill	P.260	618

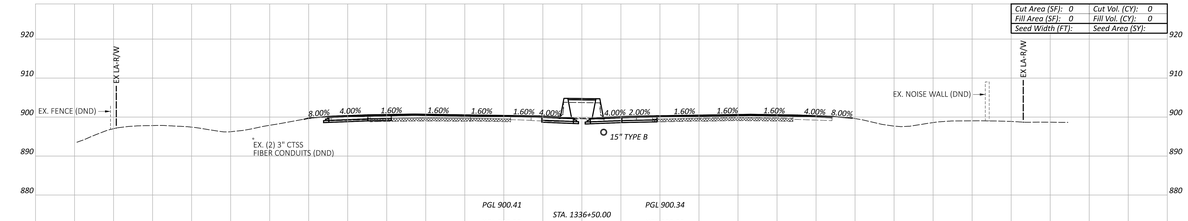


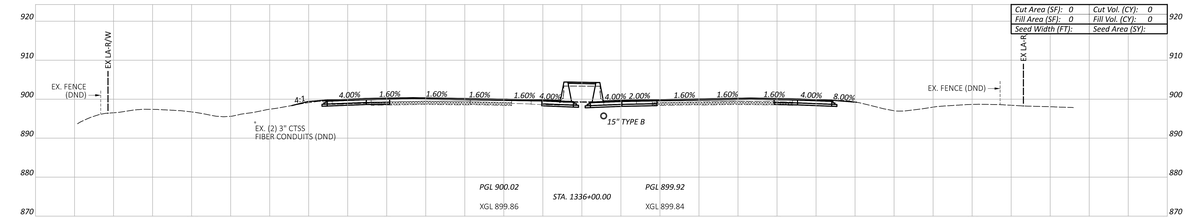


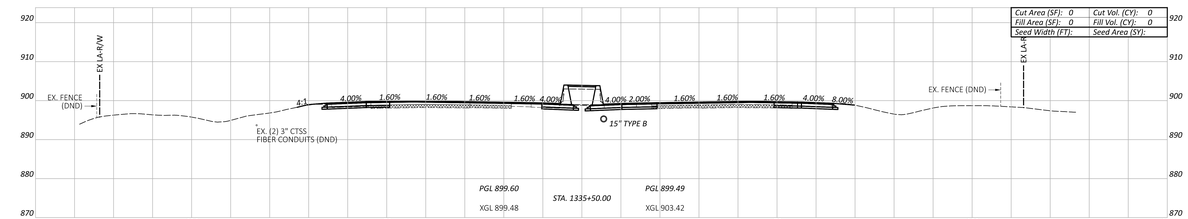


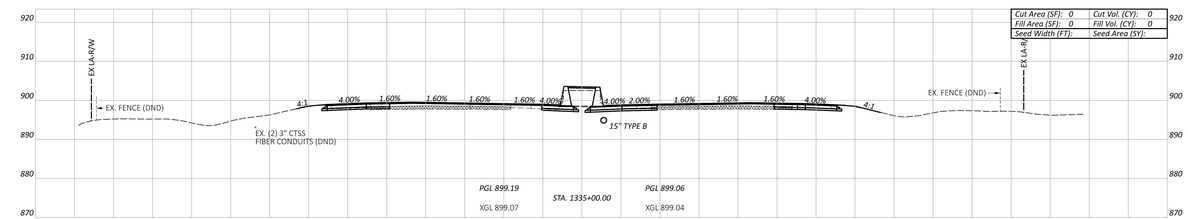


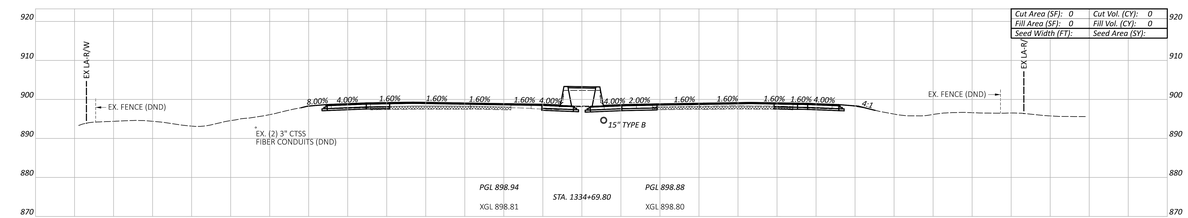












CROSS SECTIONS - I-71
STA. 1333+59.80 TO STA. 1336+50.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals

Seeding	Cut	Fill	SHEET	TOTAL
			P.261	618

FRA-71-19.10

MODEL: CU_ATT - 1333+59.80 [Sheet] PAPERSIZE: 66x44 (in) DATE: 3/27/2026 TIME: 11:33:17 PM STORM: ONDOT_PSF_F+.ctb(g) PENTBL: ONDOT_Pen.tbl USER: Chris.Lawrence3@jacobs.com WORKSPACE: ONDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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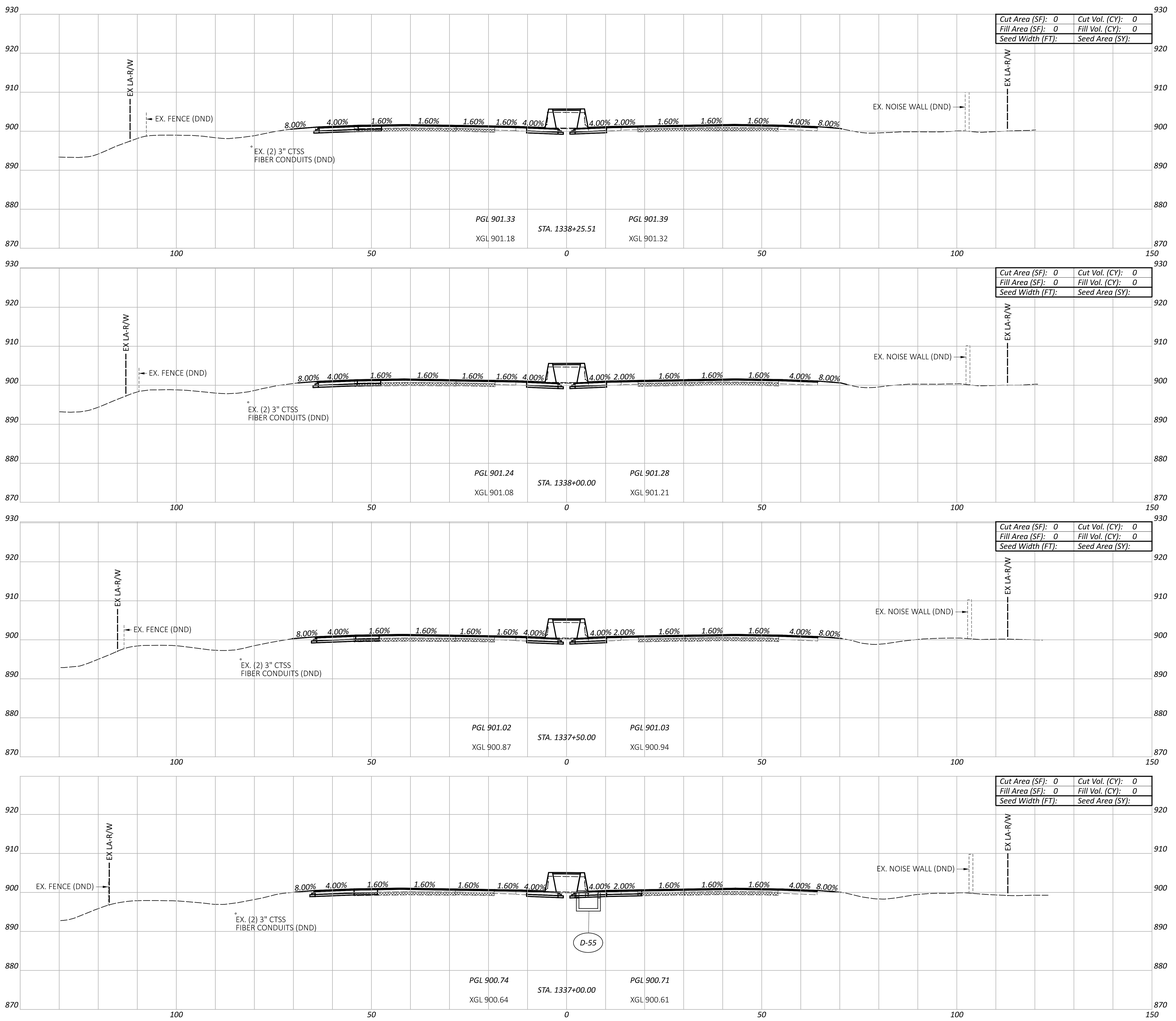

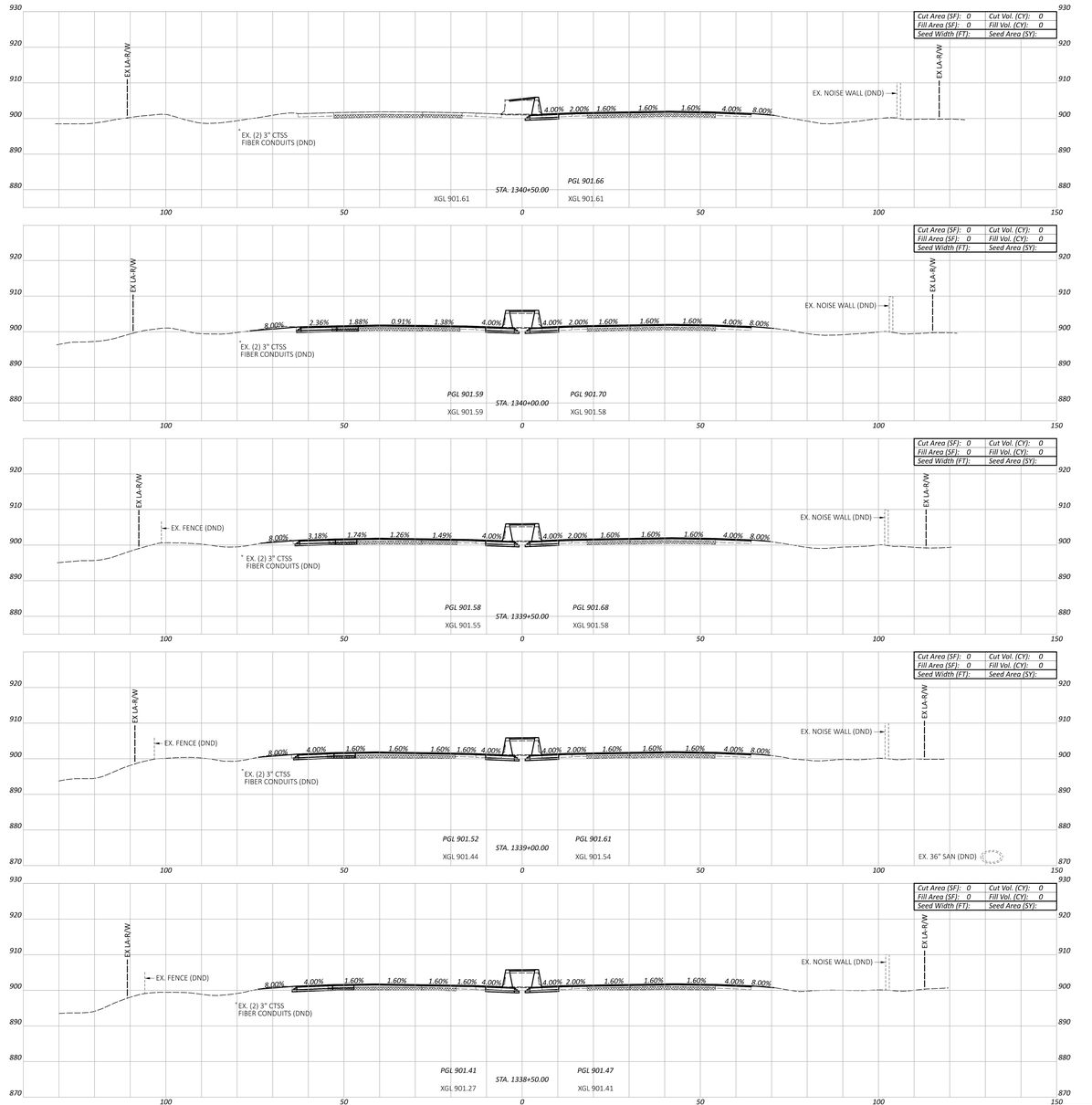

CROSS SECTIONS - I-71
STA. 1337+00.00 TO STA. 1340+50.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals			
Seeding	Cut	Fill	SHEET: P.262
			TOTAL: 618

FRA-71-19.10

MODEL: CLF_RTI - 1317+00.00 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 2/27/2026 TIME: 11:18:44 PM SYSTEM: CH007F_PW-1 config: PENTEL CH007F_Pen.ctb USER: Chris.Lawrence3@jacobs.com WORKSPACE: CH007STCVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10
MODEL: CU_OT1 - 1341-00.00 | Sheet: PAPER2ER - 66x44 (in) | DATE: 2/20/2026 | TIME: 11:14:44 PM | STORY: CHOOSE_PSR_1 | config: PAVING_CHOOSE_Sheet3D_USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHOOSTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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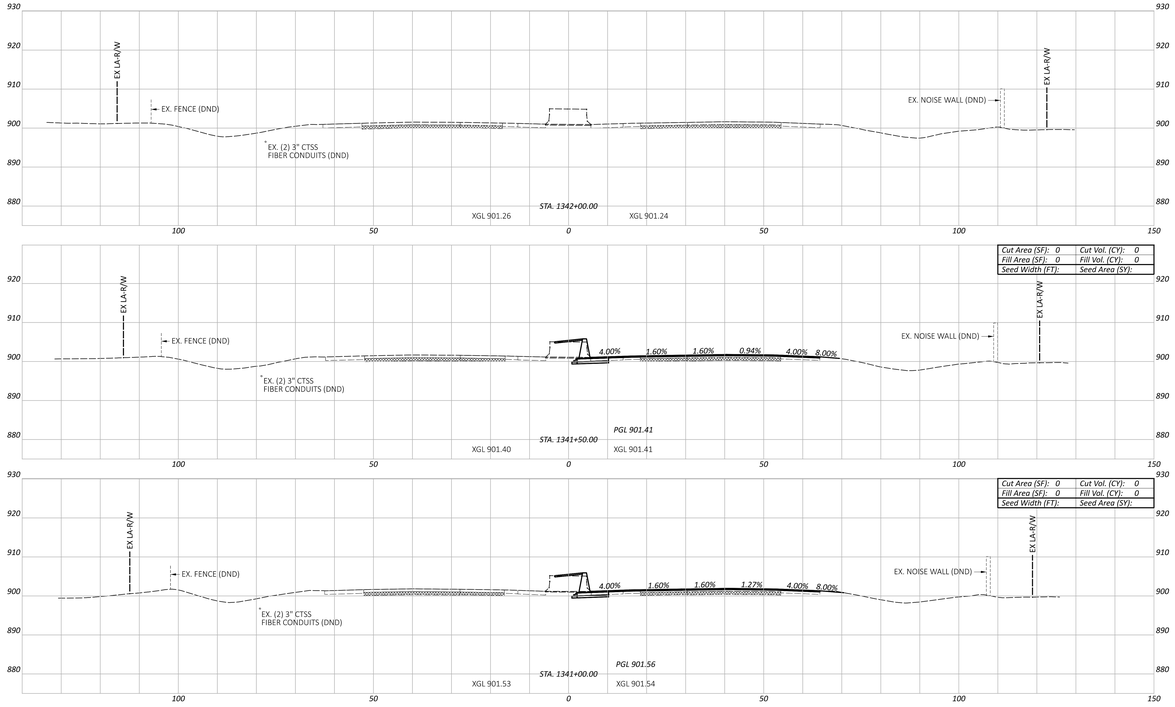
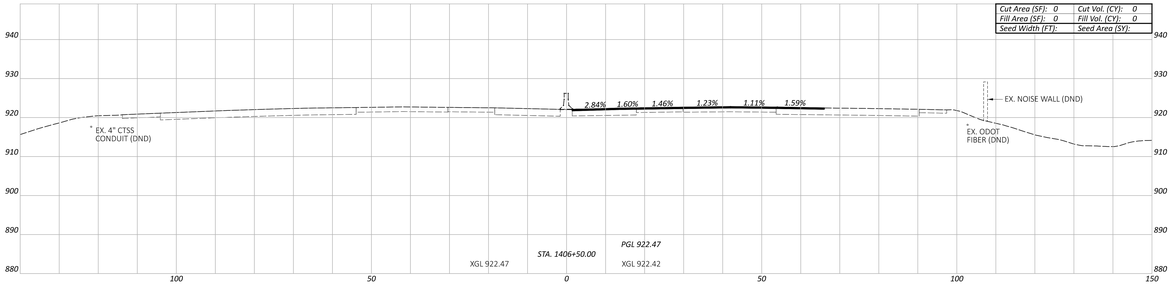
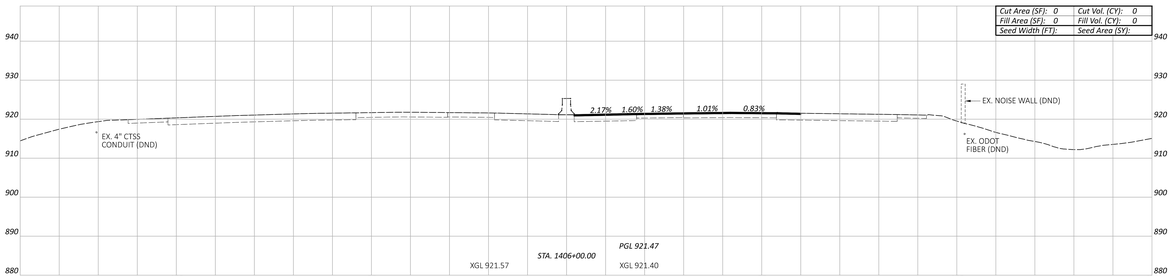


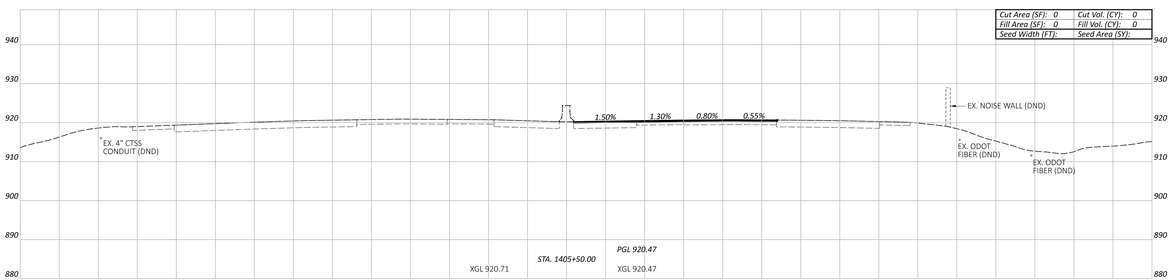
CROSS SECTIONS - I-71
STA. 1341+00.00 TO STA. 1342+00.00

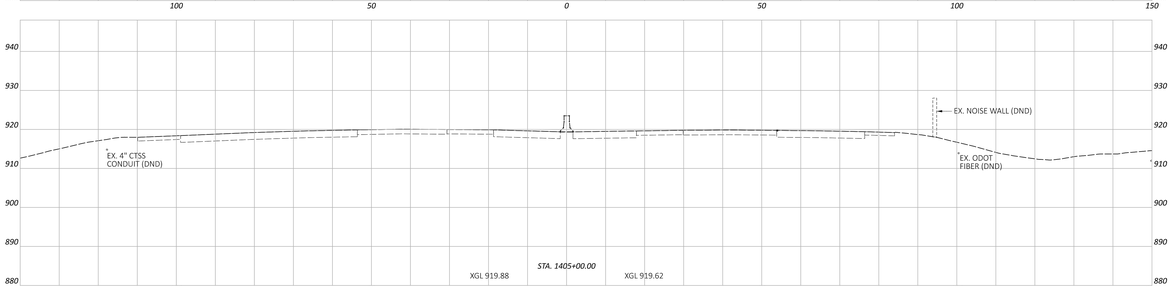
DESIGN AGENCY
Jacobs
DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT ID
109164

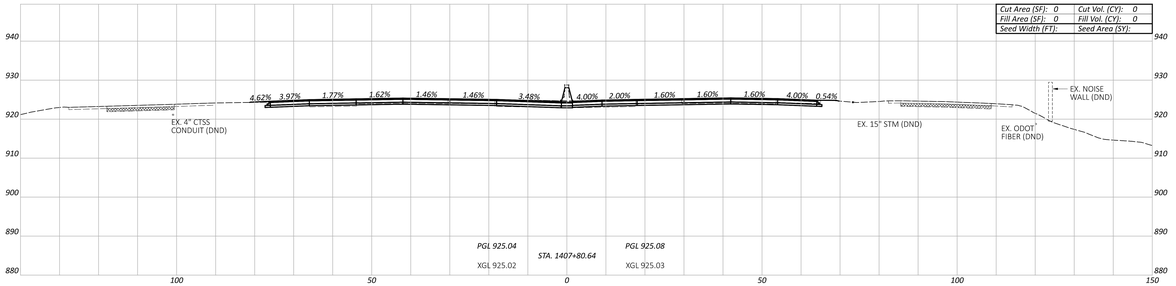
Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.263	618

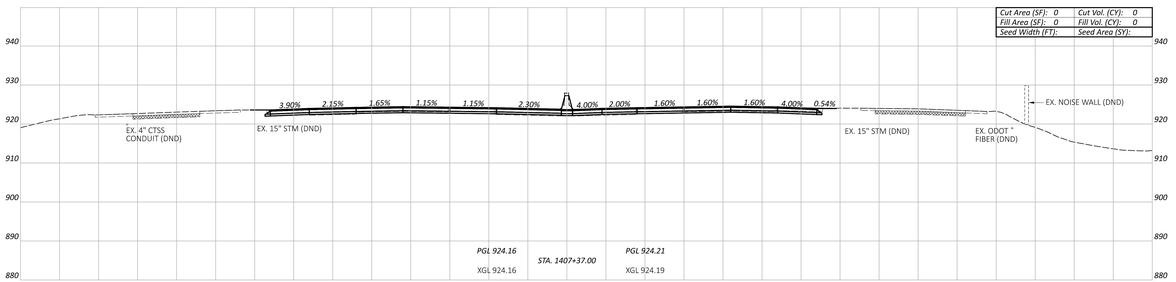


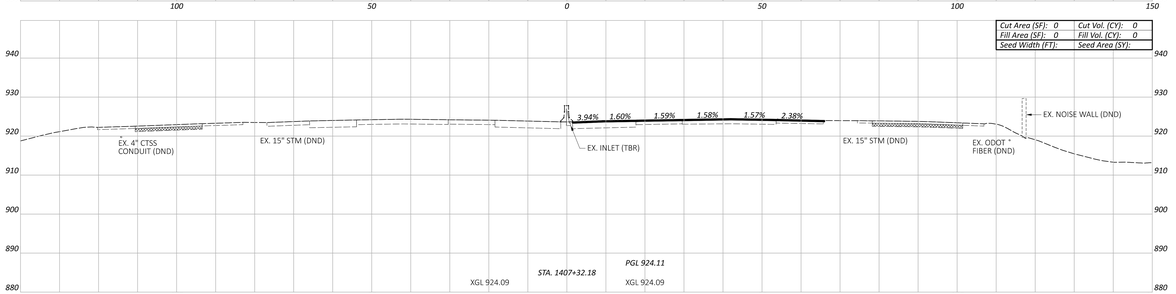


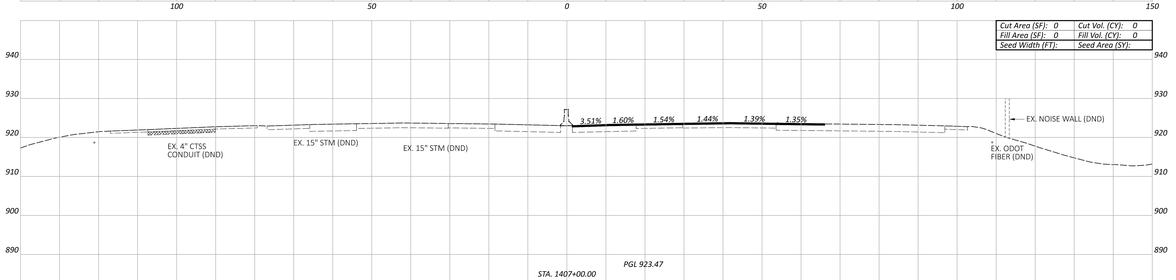












CROSS SECTIONS - I-71
STA. 1405+00.00 TO STA. 1407+80.64

DESIGN AGENCY
Jacobs

DESIGNER
CGL

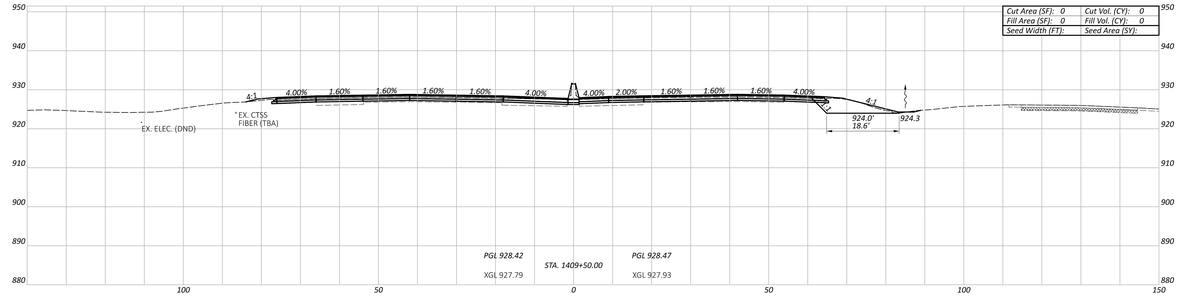
REVIEWER
MCK 02/19/26

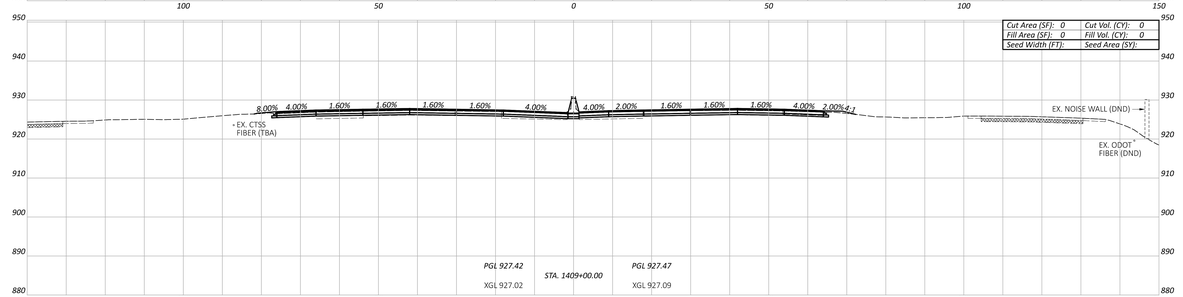
PROJECT ID
109164

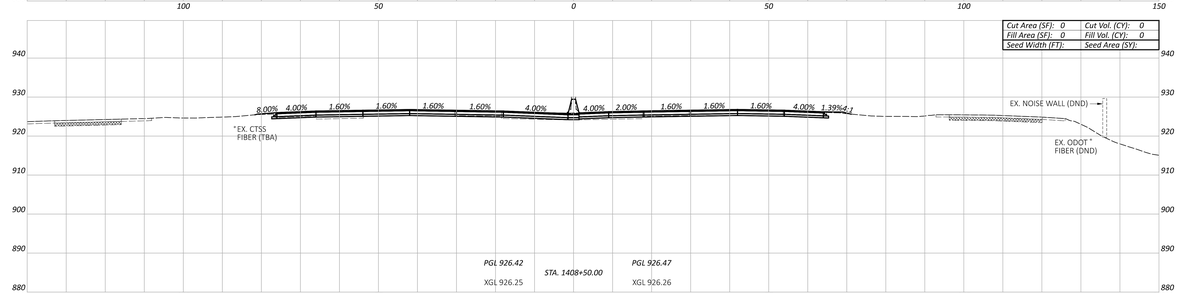
Sheet Totals				SHEET	TOTAL
Seeding	Cut		Fill	P.264	618

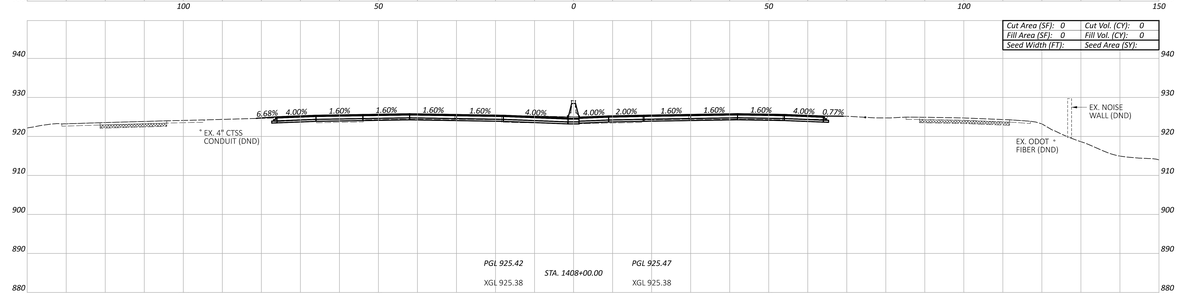
FRA-71-19.10

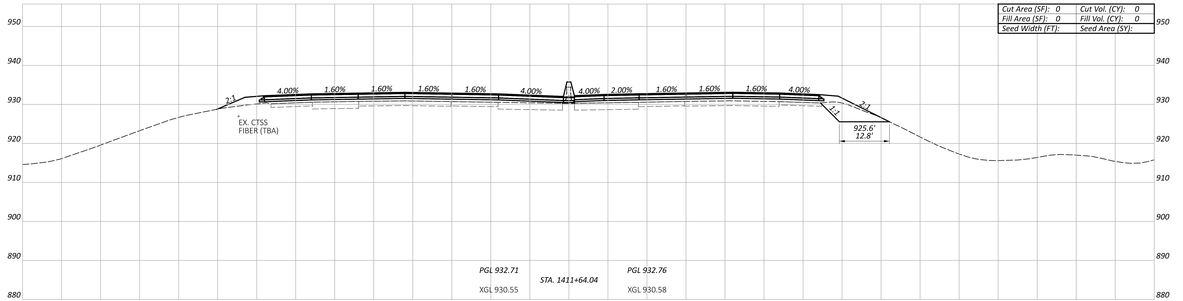
MODEL: CU_OT1 - 1405-0630 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 3/3/2026 TIME: 11:16:04 PM STORY: CHOOT_PSF_F+ pltcfg: FINITEL CHOOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHOOTSTVDS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE FILE: P:\Projects\FRA\71\109164\Highway\Roadway\Sheets\FRA-71-19.10_CROSS SECTIONS - I-71 STA. 1405+00.00 TO STA. 1407+80.64.dgn

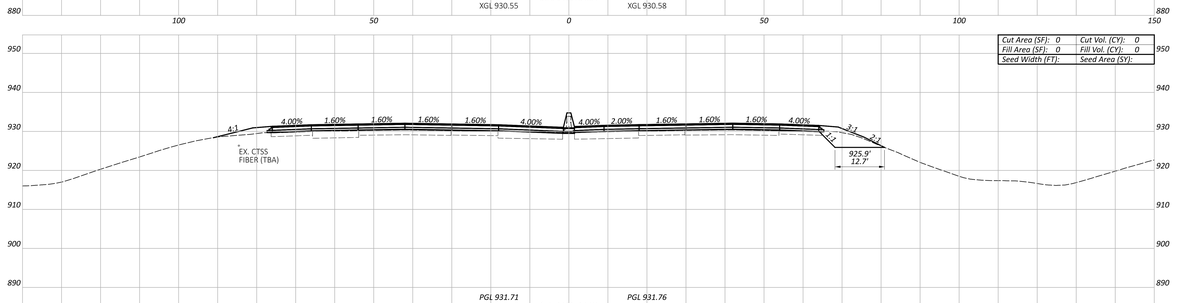


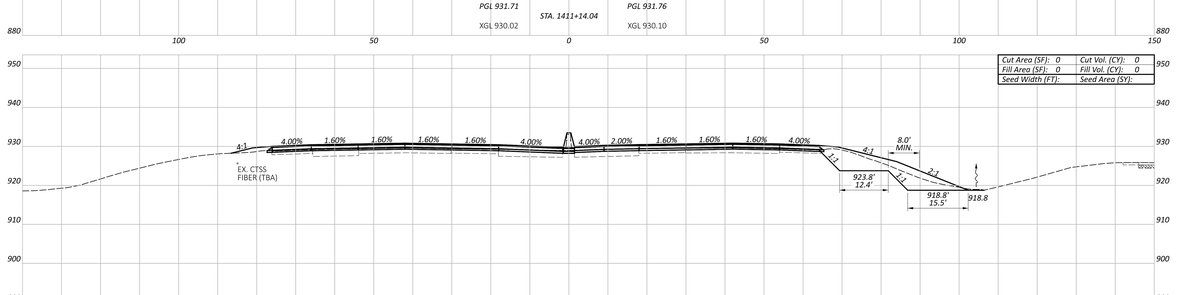


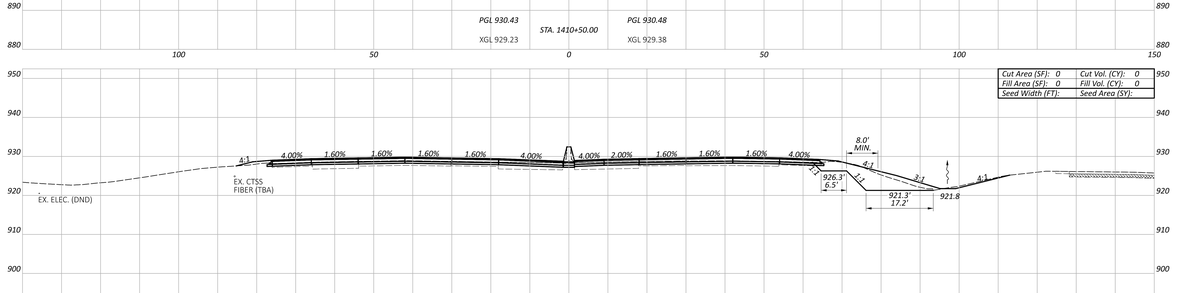












CROSS SECTIONS - I-71
STA. 1408+00.00 TO STA. 1411+64.04

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT ID: 109164

Sheet Totals			
Seeding	Cut	Fill	SHEET TOTAL
			P.265 618

FRA-71-19.10

MODEL: CU_071 - 1408-0630 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 2/27/2026 TIME: 11:16:43 PM USER: CHOOT_PW X-refs: PAVING: CHOOT_Pav.dgn LEVEL: CHOOT_PW_F-Lighting FEATURE: CHOOT_Pav.dgn USER: Dirk.Lawrence1@jacobs.com WORKSPACE: CHOOTCVDS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MODEL: CLV_OT1 - 1412+00.00 [Sheet] PAPERSPACE 44x34 (in.) DATE: 3/27/2025 TIME: 11:36:23 PM SYSTEM: CHROOT_PW_F+ config: PENTEL CHROOT_Pen.ctb USER: Chris.Lawrence3@jacobs.com WORKSPACE: CHROOT\CVLS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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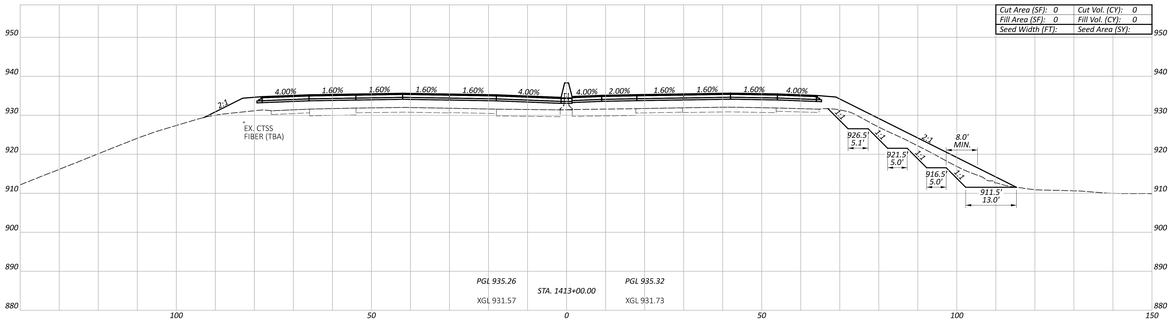

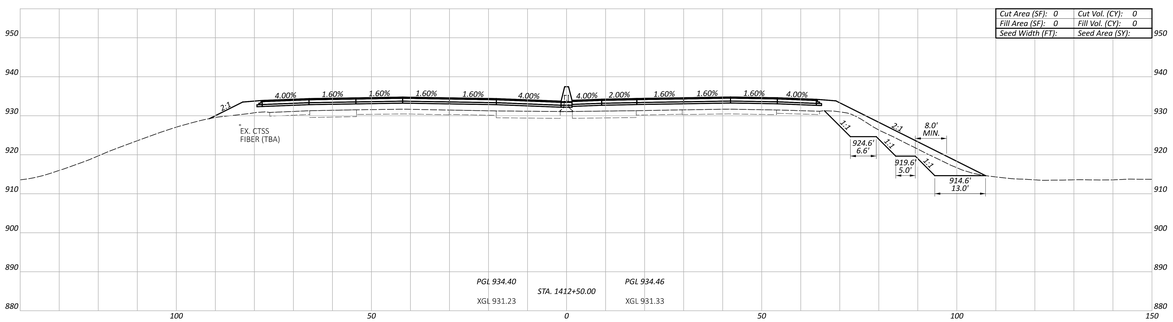

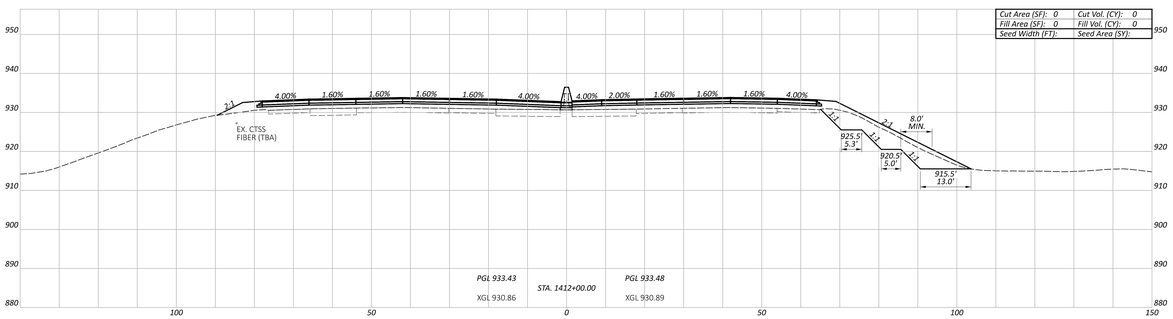

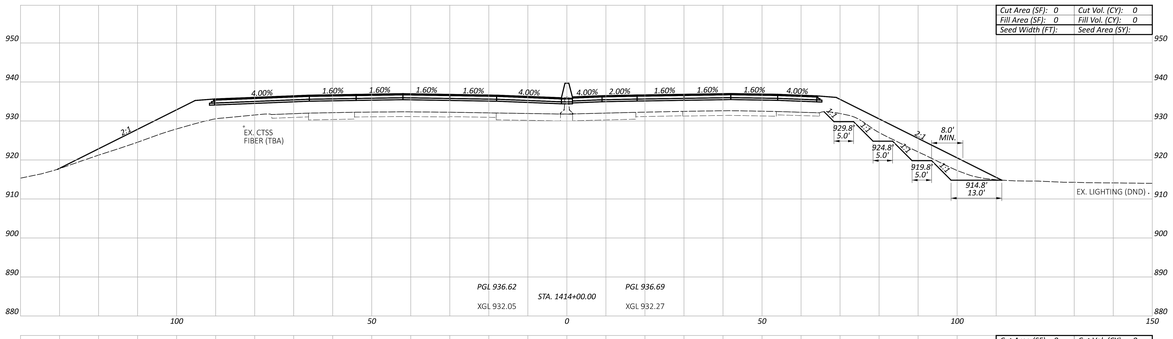

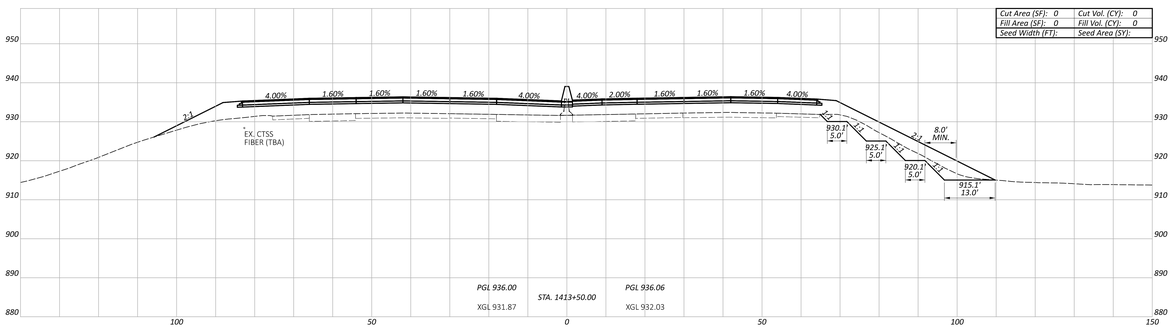

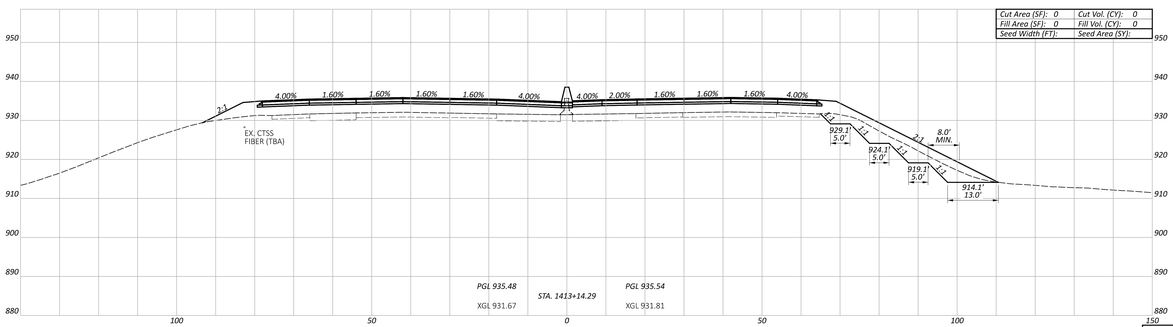

CROSS SECTIONS - I-71
STA. 1412+00.00 TO STA. 1414+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT ID
109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut		Fill	P.266	618

MODEL: CLV_OT1 - 1414+14.04 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 2/27/2026 TIME: 11:16:03 PM SYSTEM: CHXOT_PW_1 [chxg] PENTBL: CHXOT_Pen.ctb USER: Chris.Lawrence3@jacobs.com WORKPACE: CHXOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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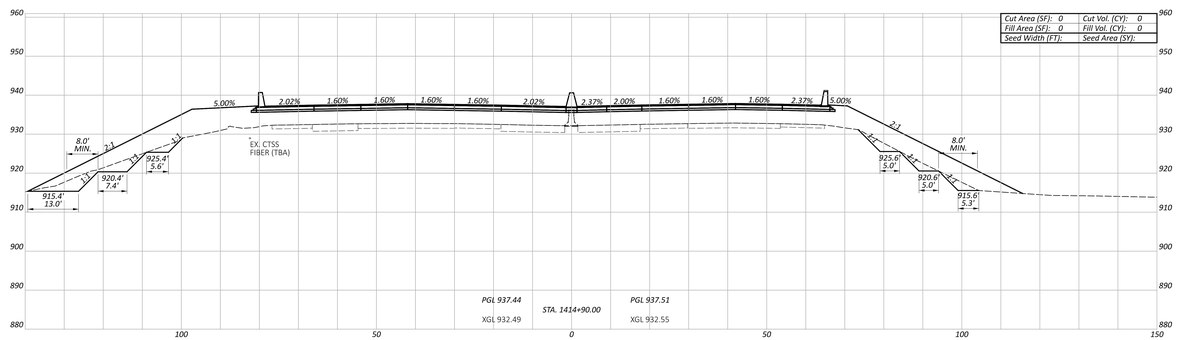

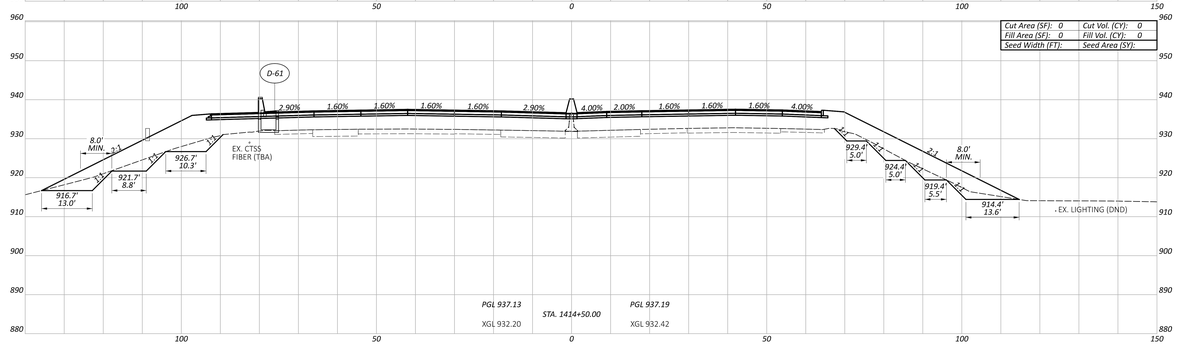

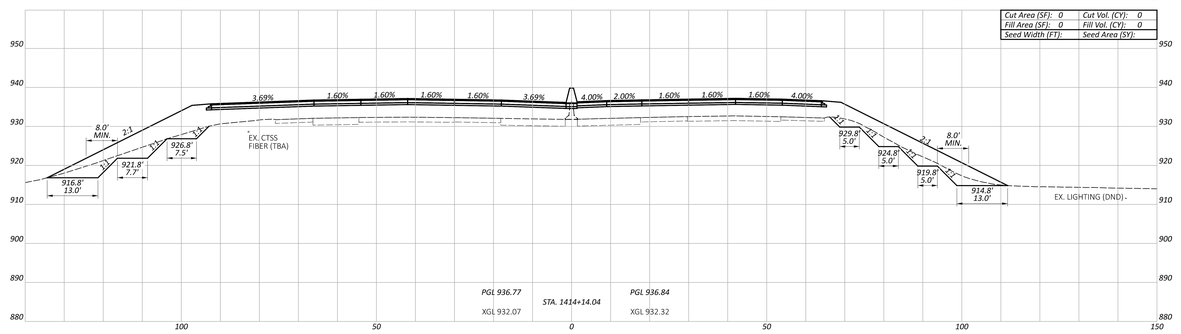

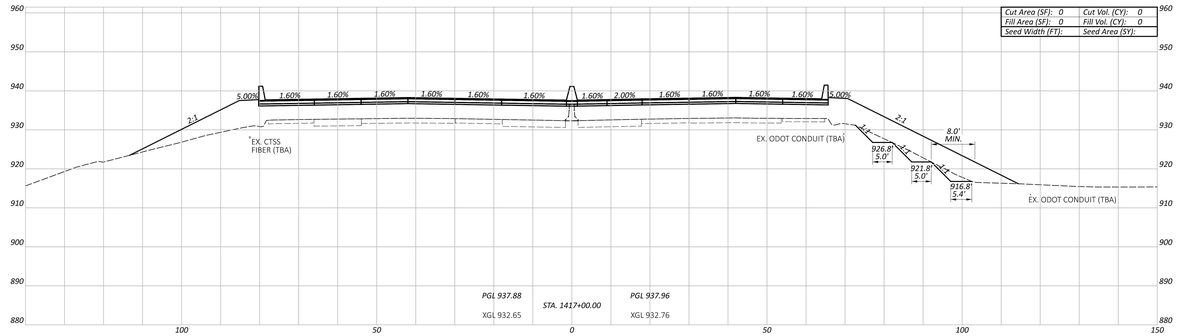

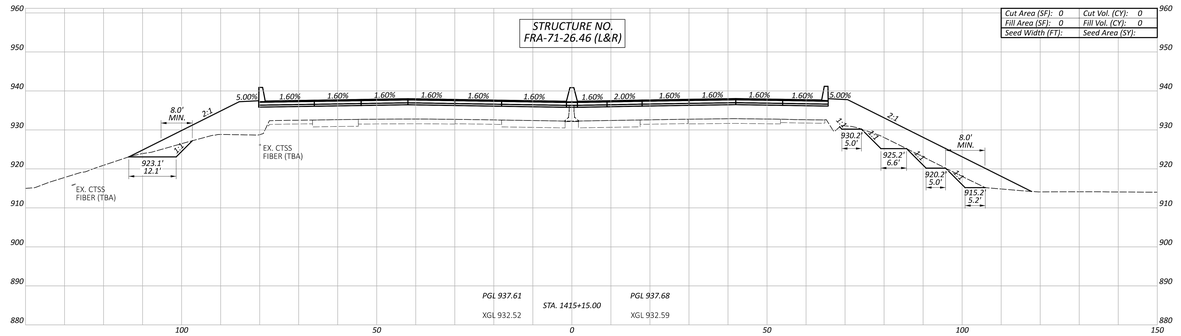

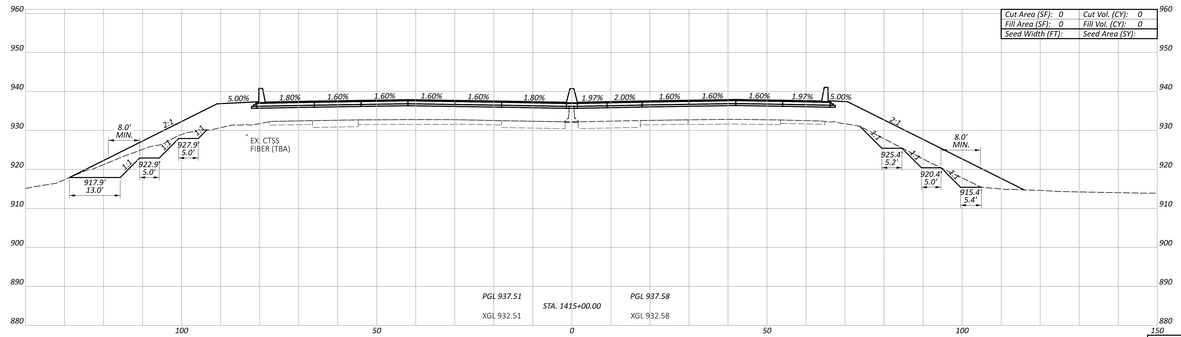

CROSS SECTIONS - I-71
STA. 1414+14.04 TO STA. 1417+00.00

DESIGN AGENCY
Jacobs

DESIGNED: CGL
REVIEWED: MCK 02/19/26
PROJECT #: 109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.267	618

MODEL: CU_OT1 - 1417+60.00 | Sheet: PAPER2ER - 66x44 (in) | DATE: 3/27/2026 7:14:13 PM | STORY: CHOOT_PSF_F | config: FINITEL: CHOOT_Pen.ctb | USER: Chris.Lawrence3@jacobs.com | WORKSPACE: CHOOTCVDS | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.02.25
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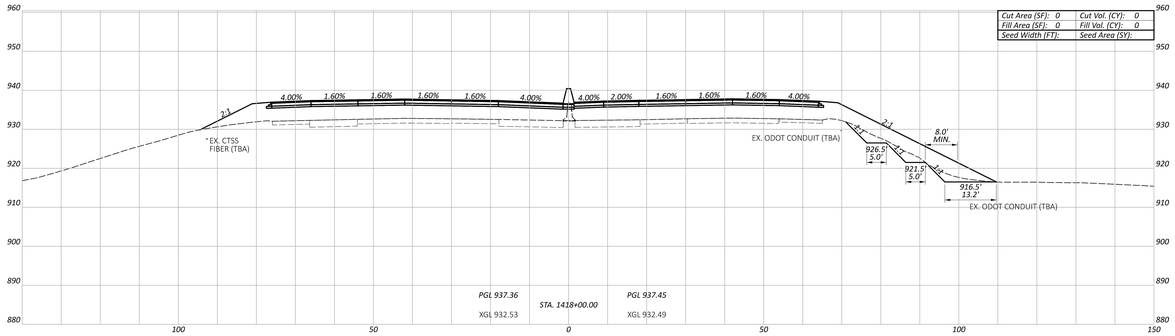

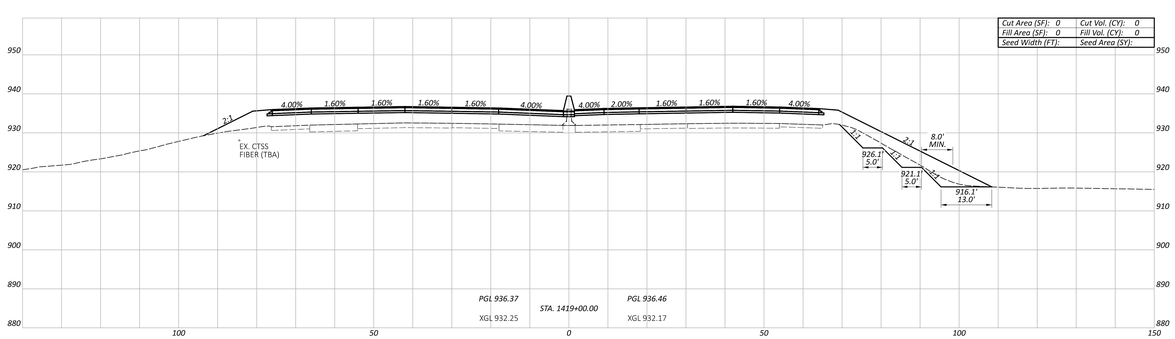

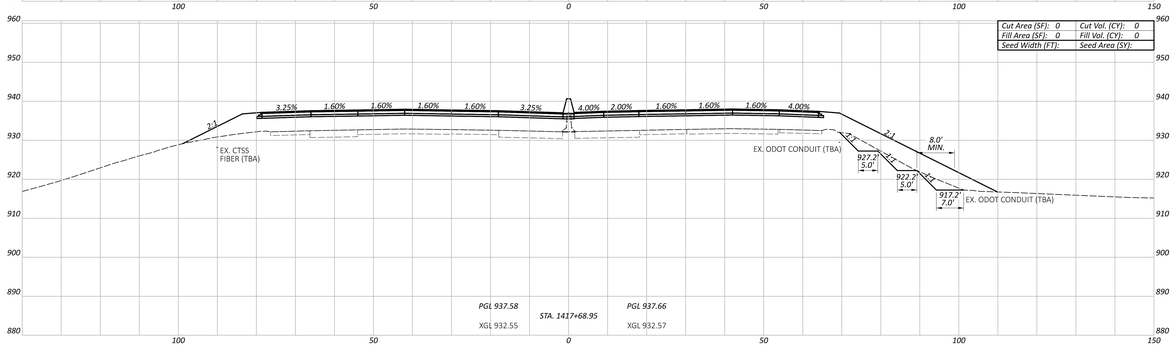

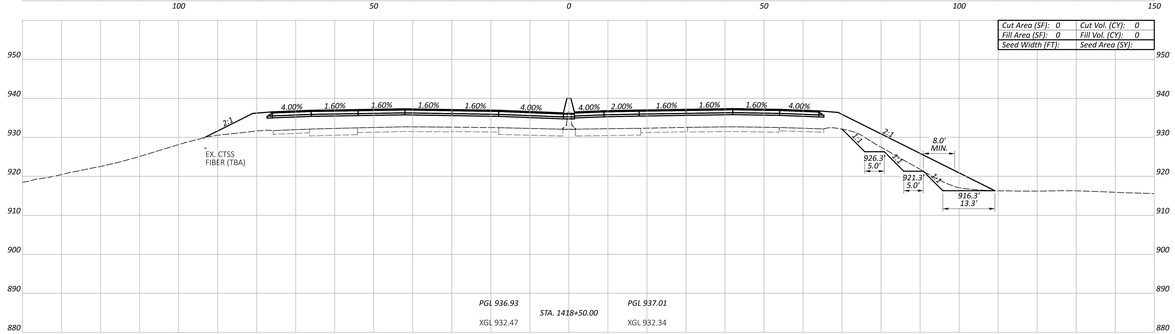

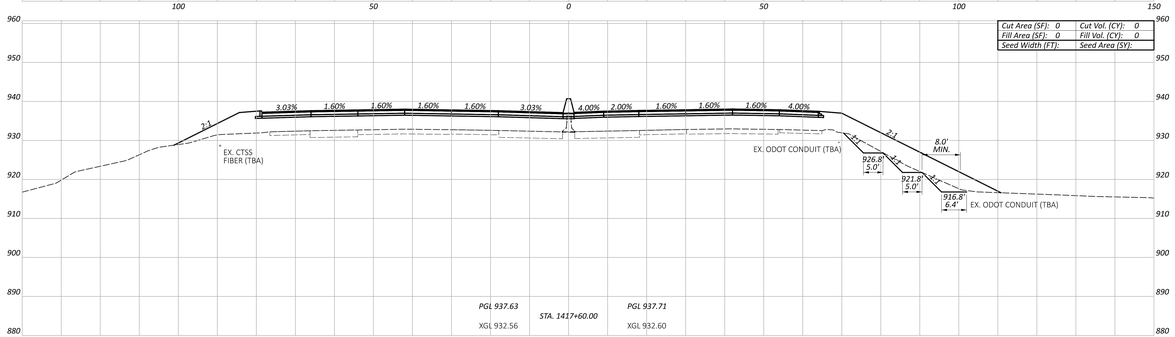

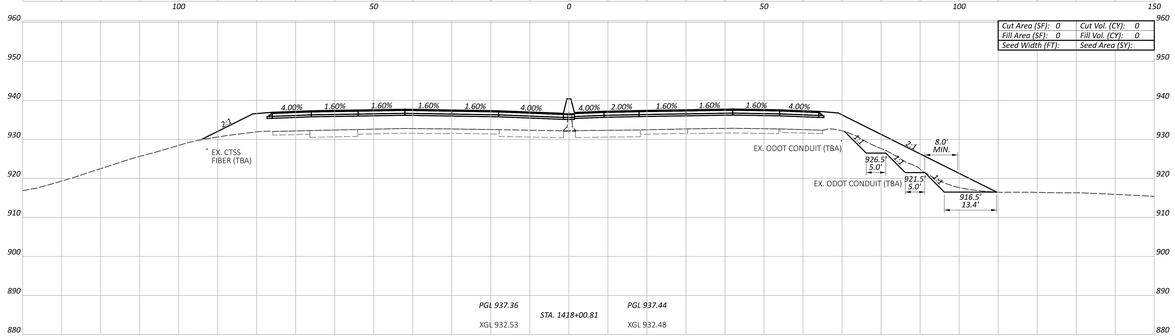

CROSS SECTIONS - I-71
STA. 1417+60.00 TO STA. 1419+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut		Fill	P.268	618

MODEL: CU_071 - 1419+50.00 | SHEET: PAPERSIZE 66x44 in | DATE: 3/20/2026 7:14:11 PM | STORY: CHOOT_PSY_F | config: PENTEL CHOOT_Pen.ctb USER: Chris.Lawrence3@jacobs.com WORKSPACE: CHOOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadDesigner 24.00.02.25
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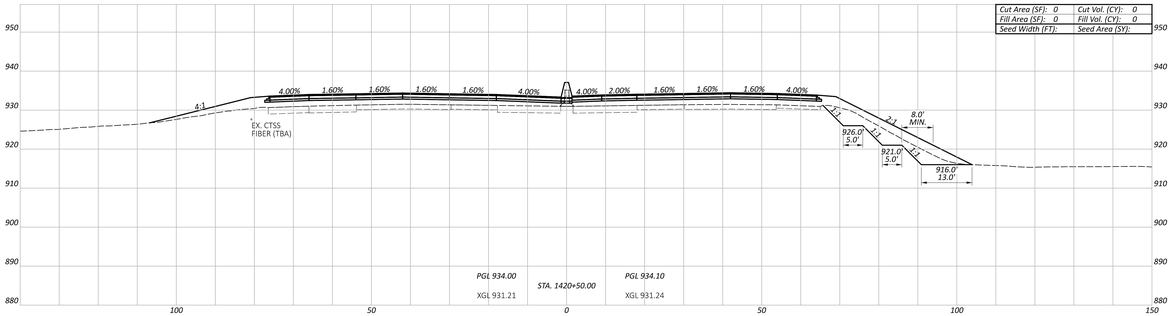
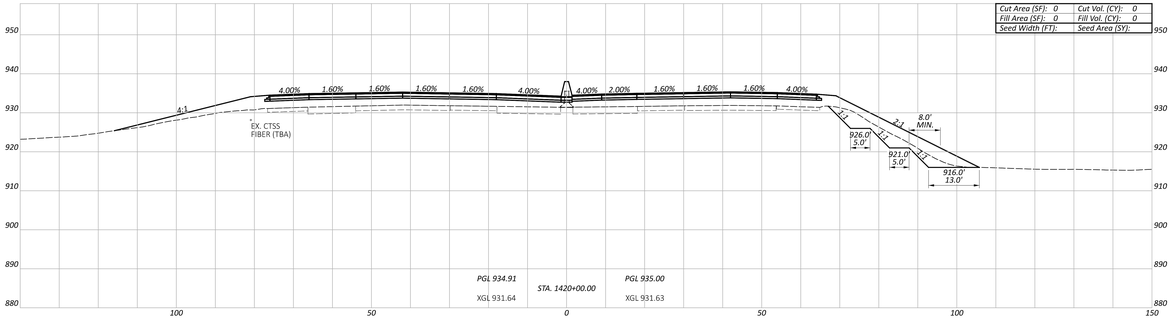
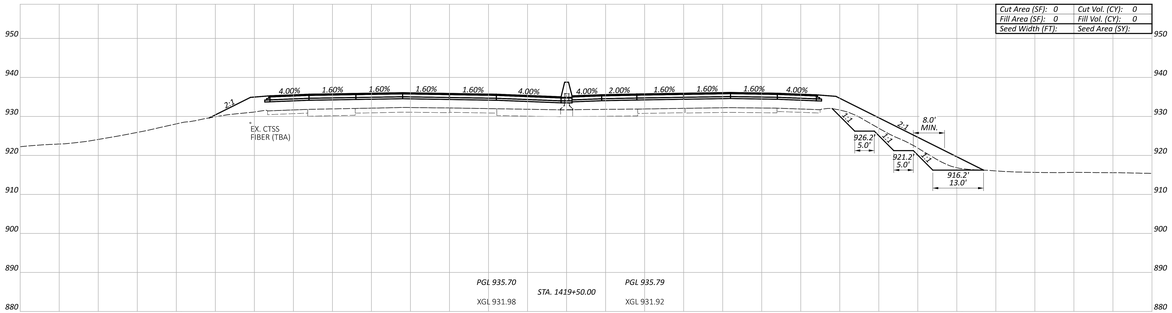
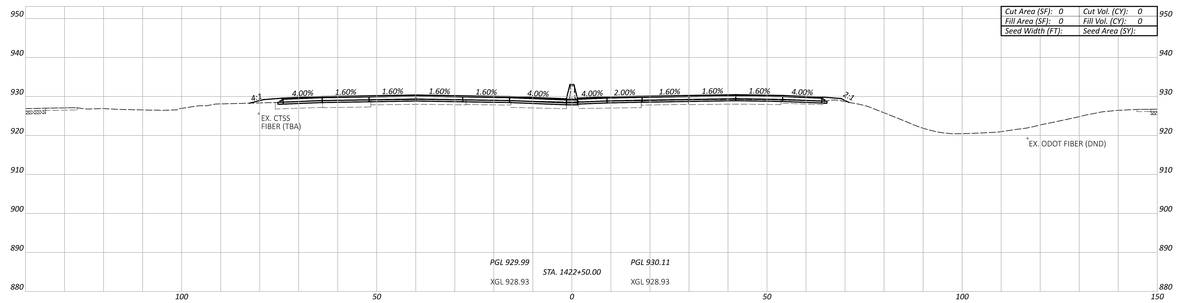
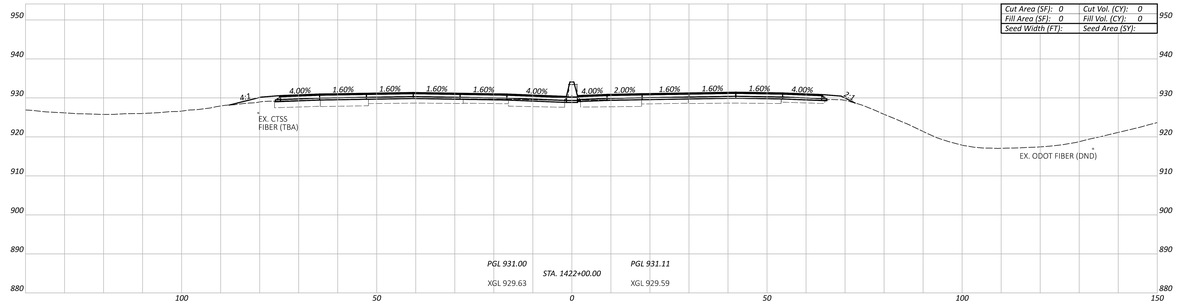
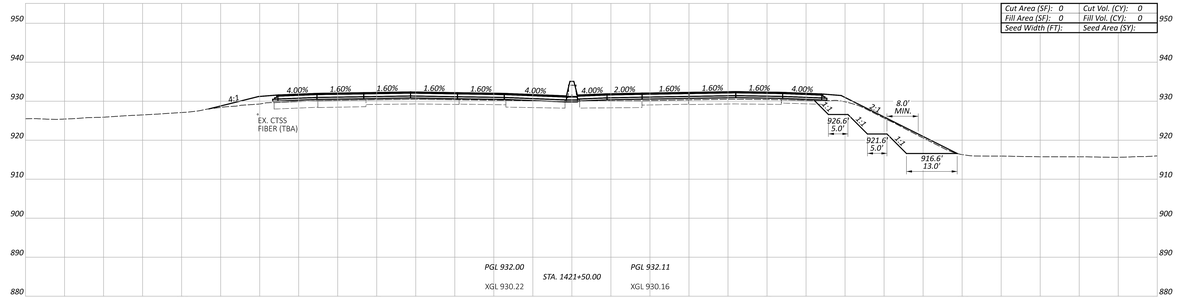


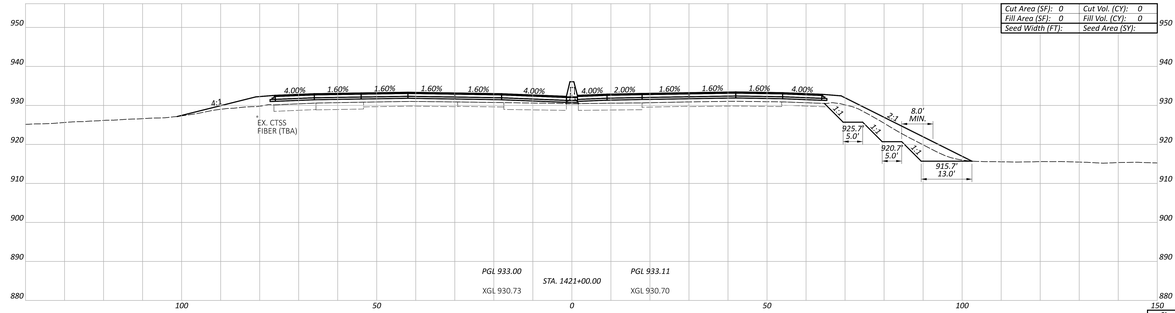










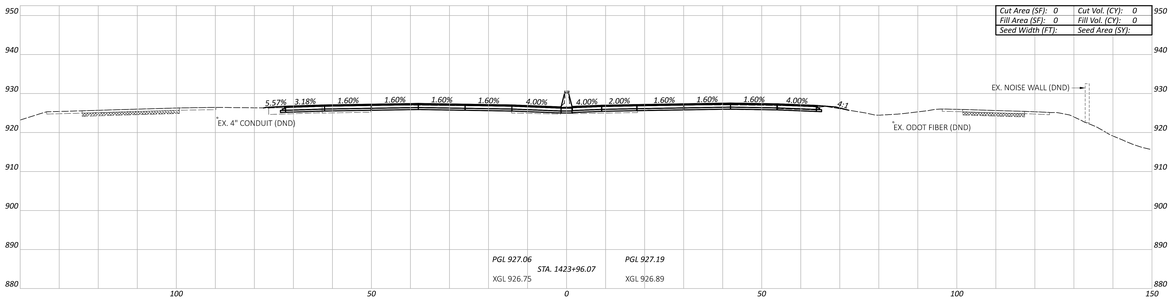


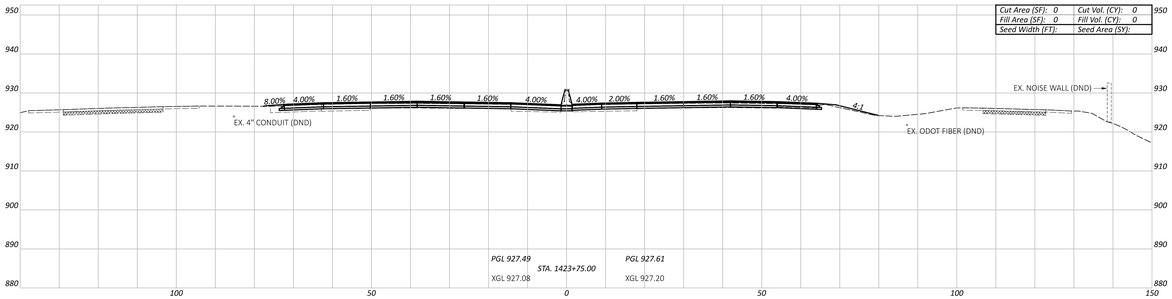
CROSS SECTIONS - I-71
STA. 1419+50.00 TO STA. 1422+50.00

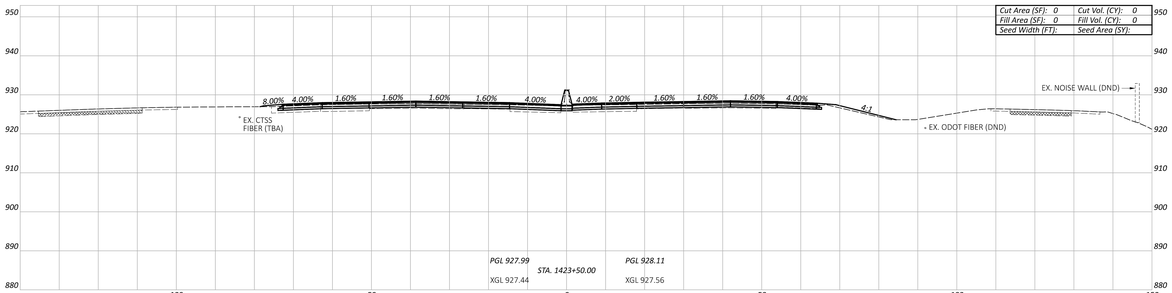
DESIGN AGENCY
Jacobs

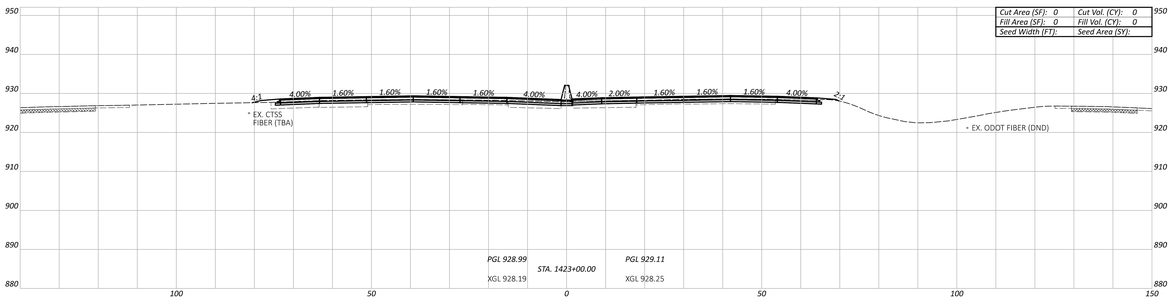
DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT #
109164

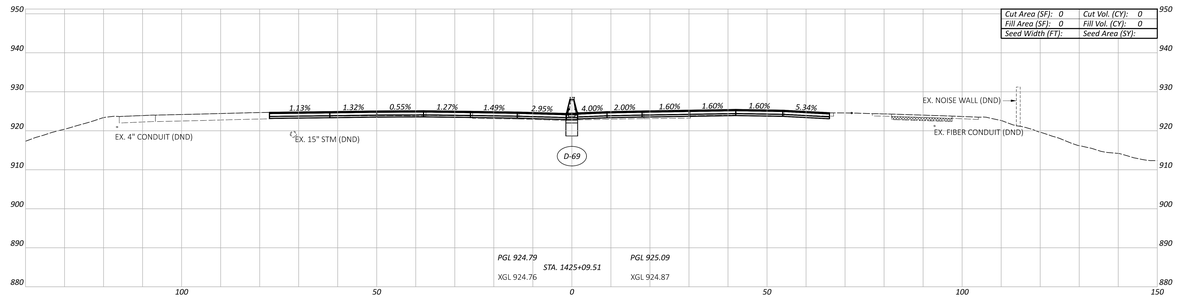
Sheet Totals					
Seeding	Cut		Fill	SHEET	TOTAL
				P.269	618

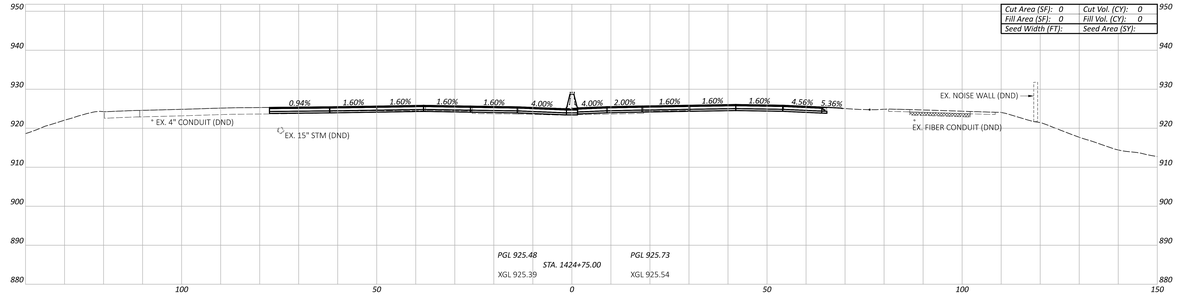


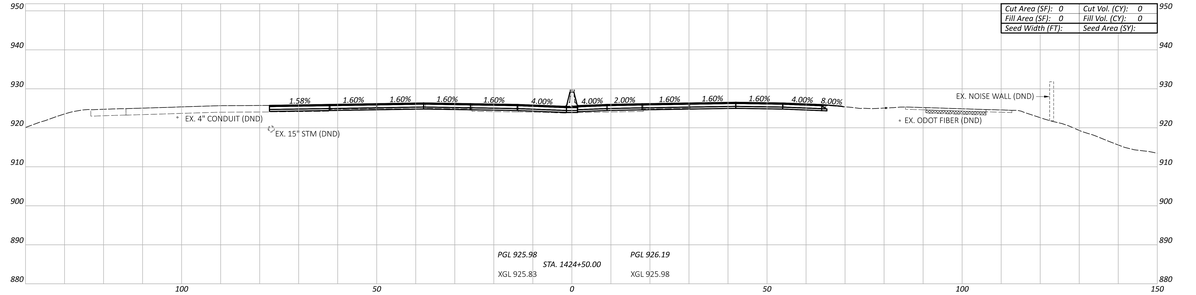


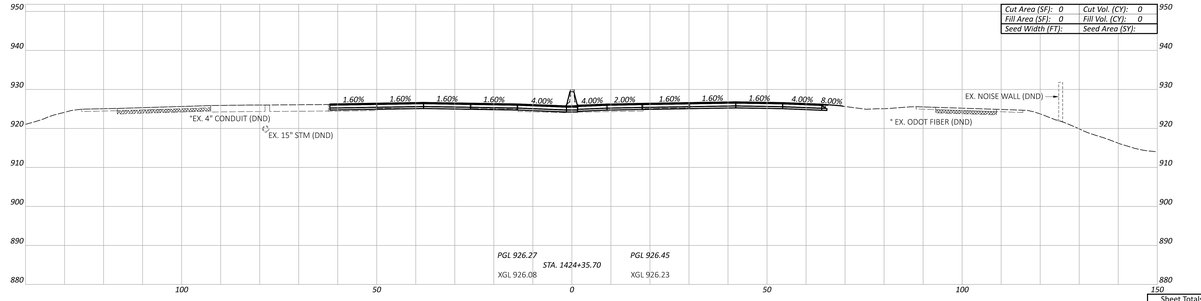












CROSS SECTIONS - I-71
STA. 1423+00.00 TO STA. 1425+09.51

DESIGN AGENCY	Jacobs
DESIGNER	CGL
REVIEWER	MCK 02/19/26
PROJECT ID	109164

Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.270	618

FRA-71-19.10

MODEL: CU_ATT - 141-0630 [Sheet] PAPERSIZE: 66x44 (in.) DATE: 3/30/2026 TIME: 11:38:18 PM STORM: ONDOT_PSF_F+.ctb/g PENTBL: ONDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: ONDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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MODEL: CU_071 - 1425+37.50 [Sheet] PAPERSPACE 66x44 (in.) DATE: 3/20/2026 TIME: 11:39:15 PM SYSTEM: CH0OSY_PW_F+ config: PENTEL CH0OSY_Pen.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CH0OSY1V03 WORKSET: 109164 PRODUCT: OpenRoadDesigner 24.00.02.25
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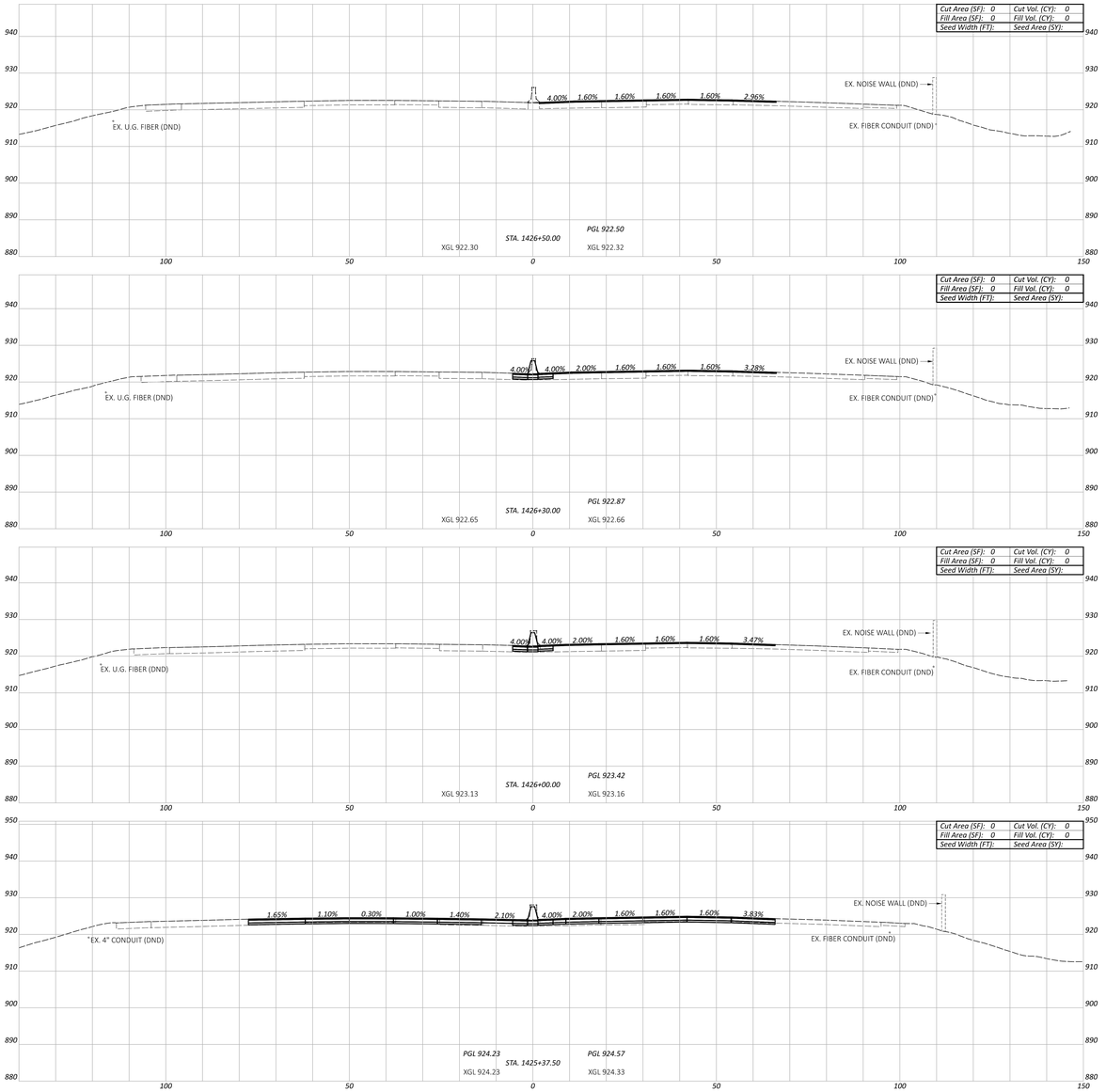
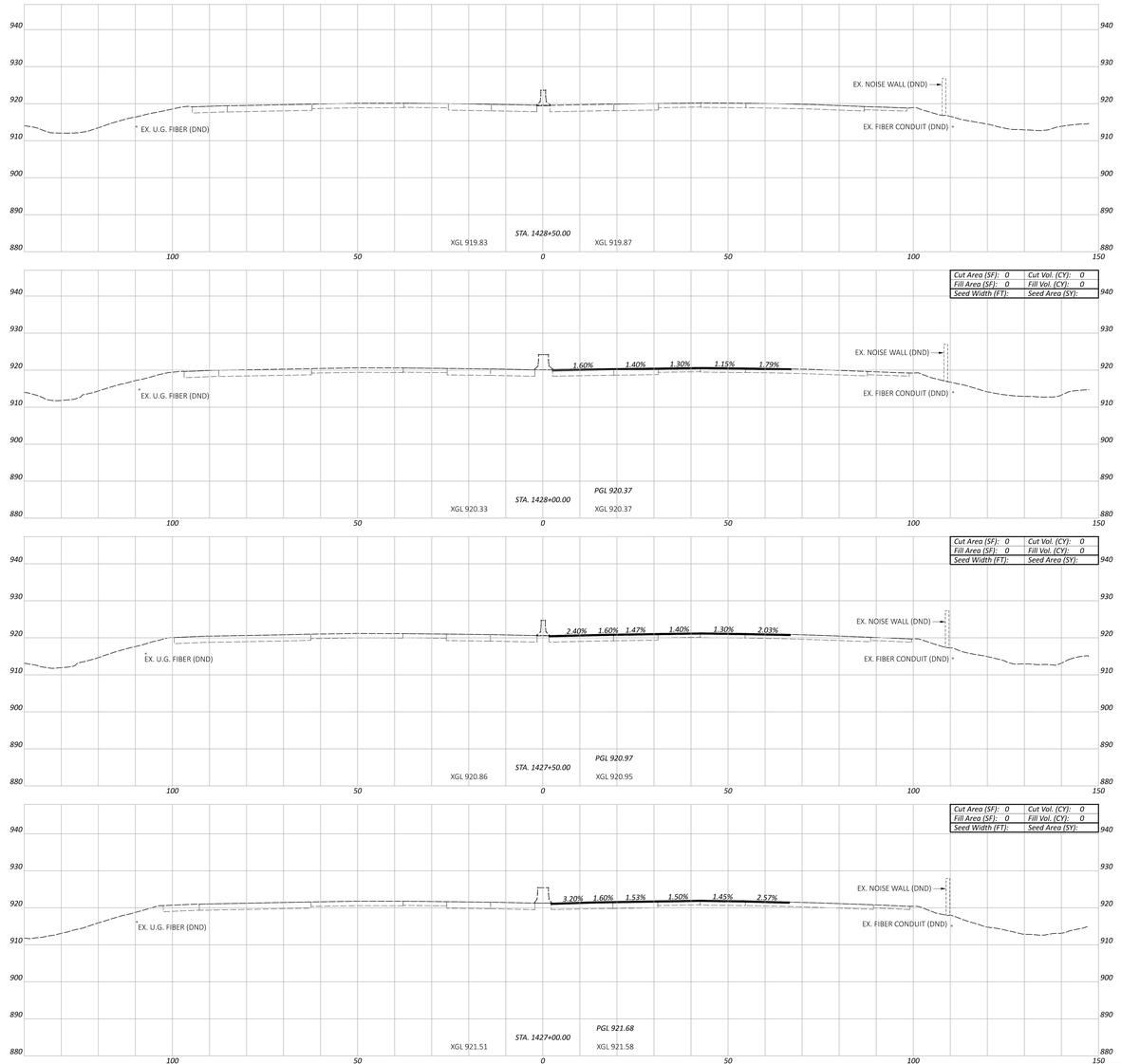




CROSS SECTIONS - I-71
STA. 1425+37.50 TO STA. 1428+50.00

DESIGN AGENCY
Jacobs

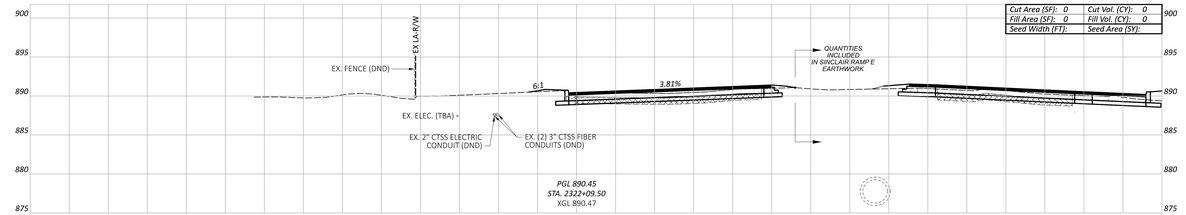
DESIGNER
CGL

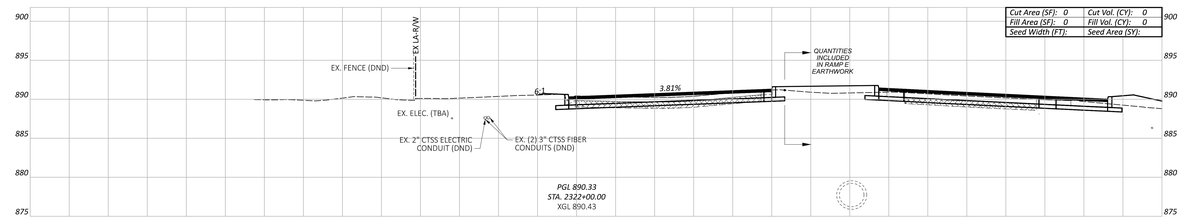
REVIEWER
MCK 02/19/26

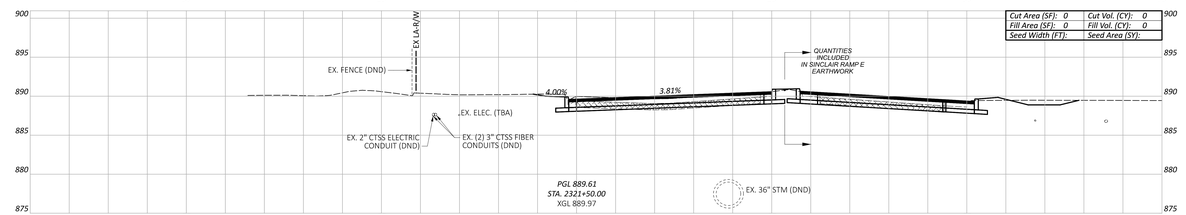
PROJECT ID
109164

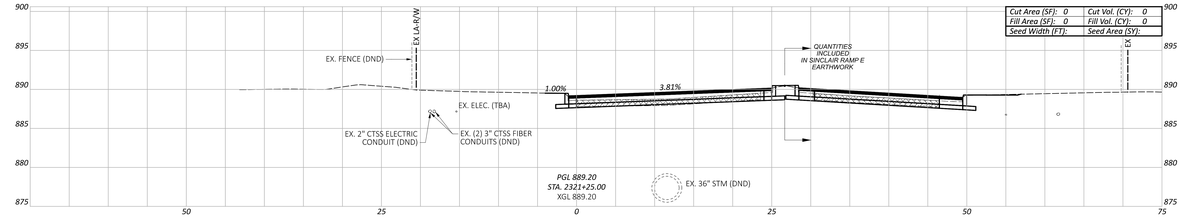
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.271	618

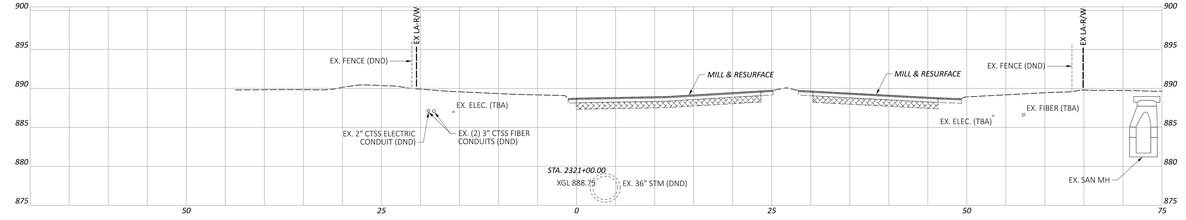
CROSS SECTIONS - SINCLAIR ROAD RAMP A
STA. 2321+00.00 TO STA. 2323+89.58

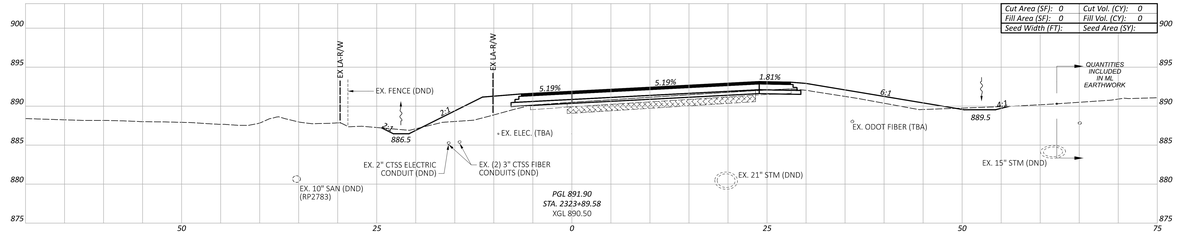


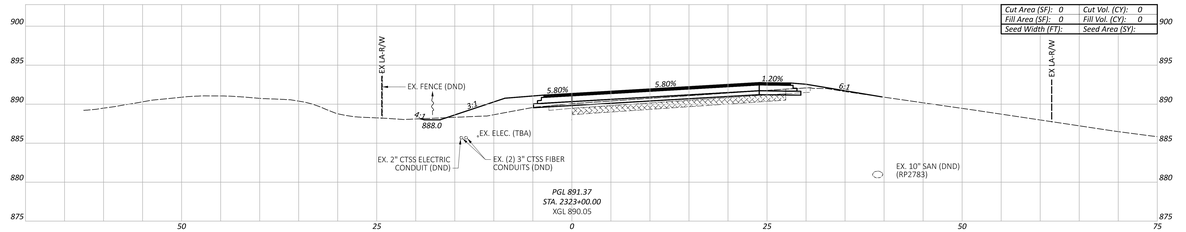


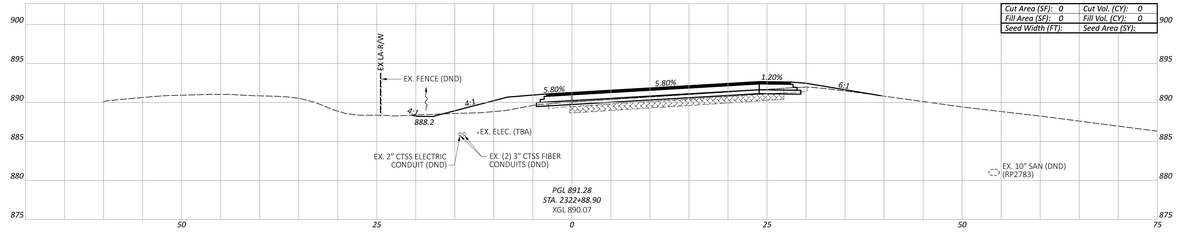


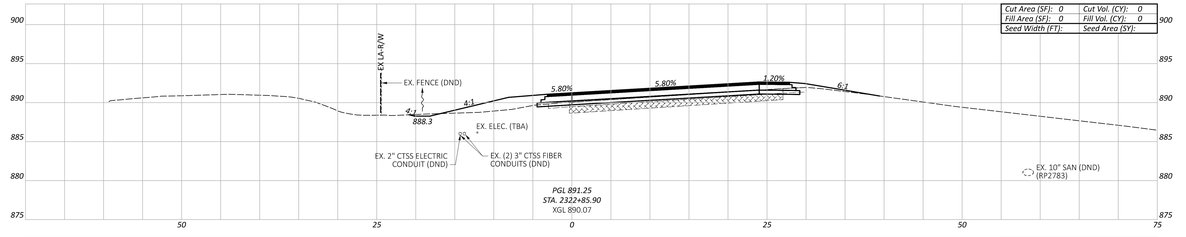


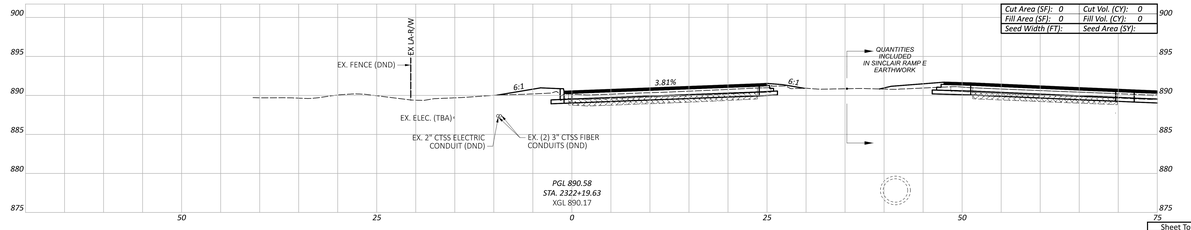












FRA-71-19.10

MODEL: BU_ROADWAYS_2321+00.00 | Sheet: PWTRSEC 66x34 in | DATE: 2/20/2026 TIME: 11:46:29 PM PLTDRV: DWG.PDF_FV.xfrm$ PENTBL: DWG.PT | User Id: CGIEB | Chris.Lawrence3@jacobs.com WORKSPACE: CHDOT(TEAM) WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
ACTIVE FILE PATH: C:\Projects\FRA-71-19.10\Roadway\Alignments\FRA-71-19.10_Alignments.dgn

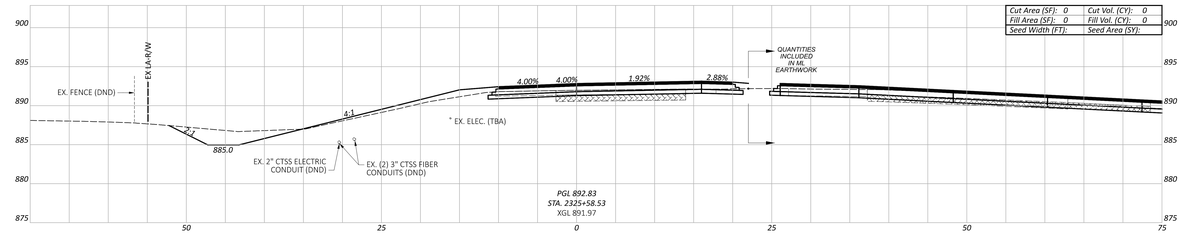
DESIGN AGENCY
Jacobs

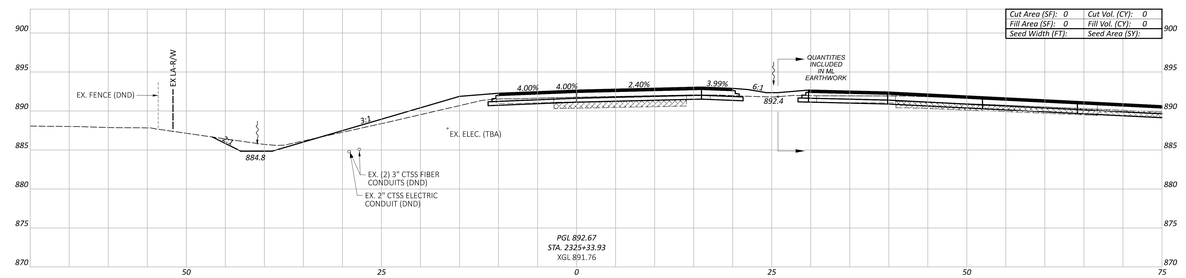
DESIGNER	
CGL	
REVIEWER	
MCK 02/19/26	
PROJECT #	
109164	

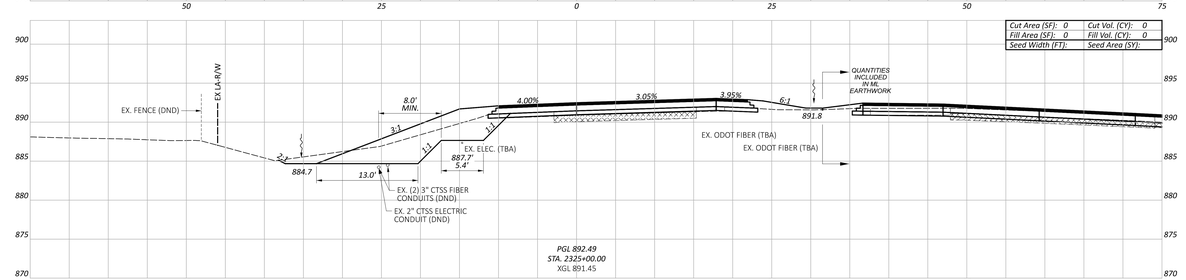
Sheet Totals					
Seeding	Cut		Fill	SHEET	TOTAL
				P.272	618

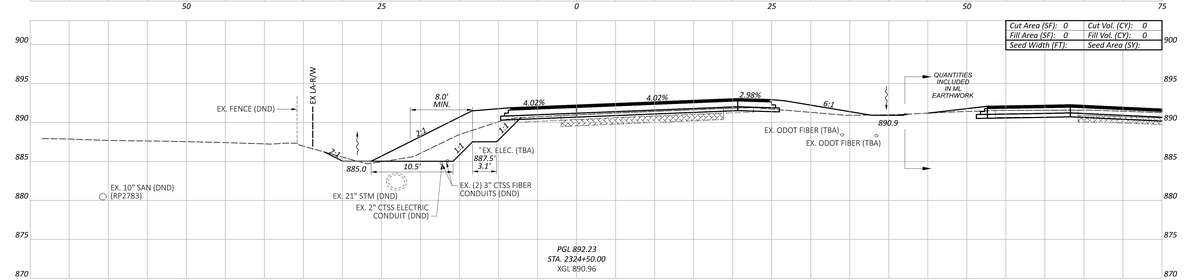
MODEL: BLF_ROADWAY - 2324+50.00 [Sheet] PAPERSIZE: 66x34 IN | DATE: 2/20/2026 TIME: 11:43:04 PM PLTDRV: DWG2PDF_PSF_FX.dPlt@ PENTBL: DWG2PDF_PNT.tbl USER: ChrisLawrence1@jacobs.com WORKSPACE: CHDOTDEV02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE PROJECT: C:\Projects\FRA-71-19.10\Roadway\Corridors\FRA-71-19.10_Ramp A.dgn

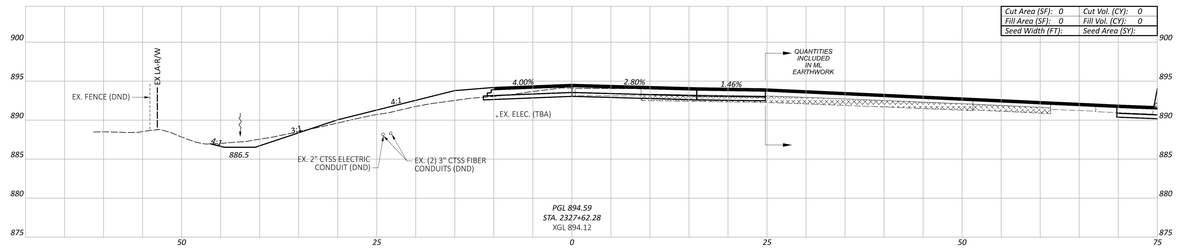
FRA-71-19.10

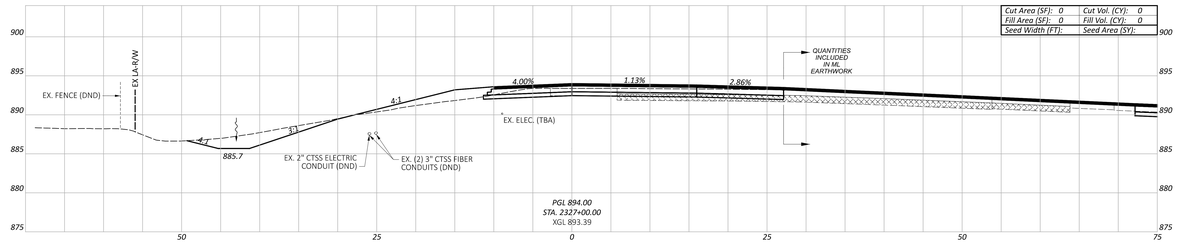


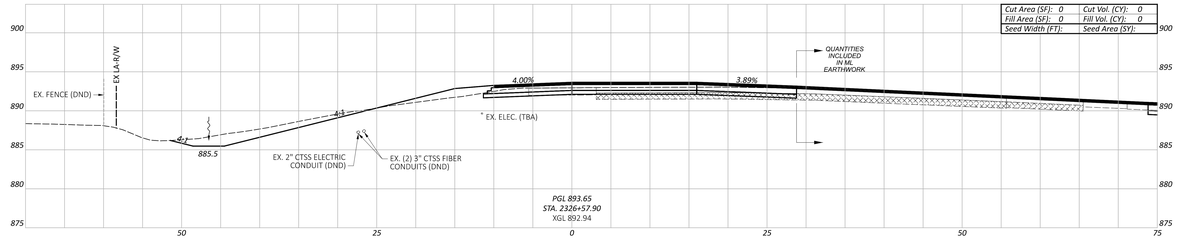


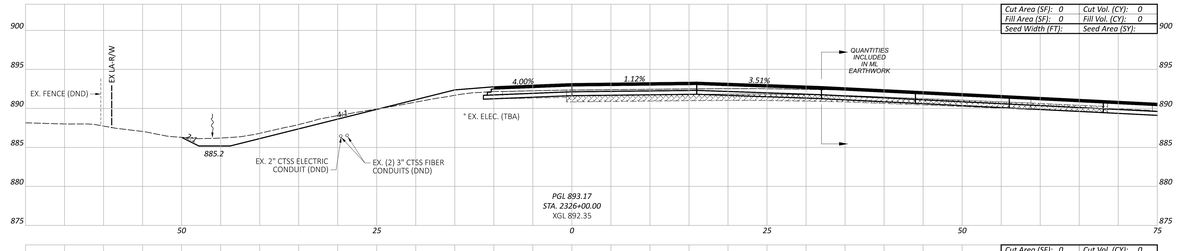


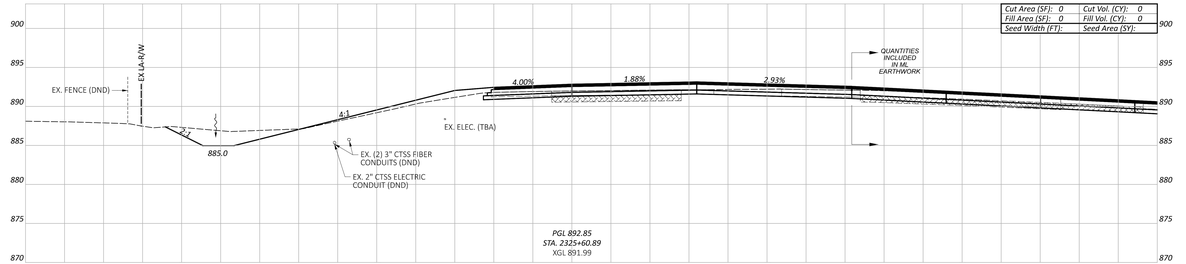












CROSS SECTIONS - SINCLAIR ROAD RAMP A
STA. 2324+50.00 TO STA. 2327+62.28

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT #
109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.273	618

MODEL: BLF_ROADCLASS - 2328+00.00 [Sheet] PAPERSIZE: ISO (A1) UNITS: 2/20/2026 TIME: 11:43:15 PM PLOTBY: DROOT_PW_F1.dwg PENTBL: DROOT_PW.ctb USER: ChrisLawrence3@jacobs.com WORKSPACE: CHDOTCIVIL3D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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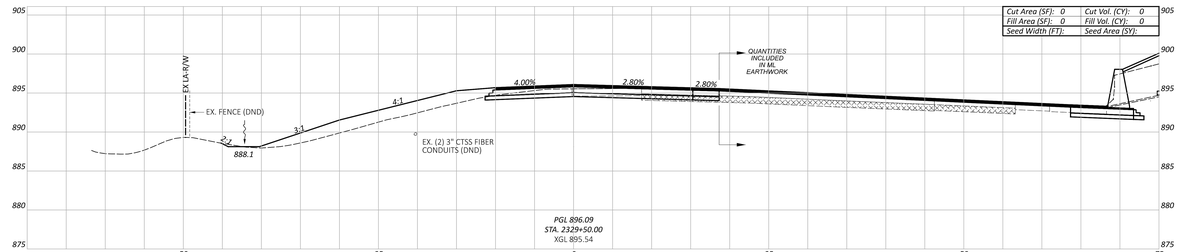
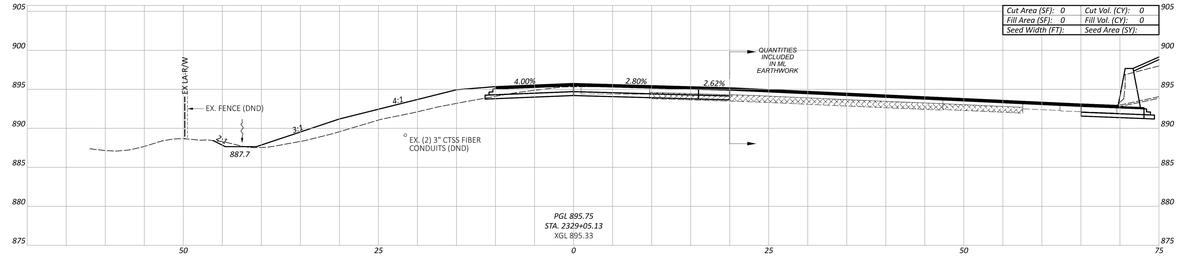
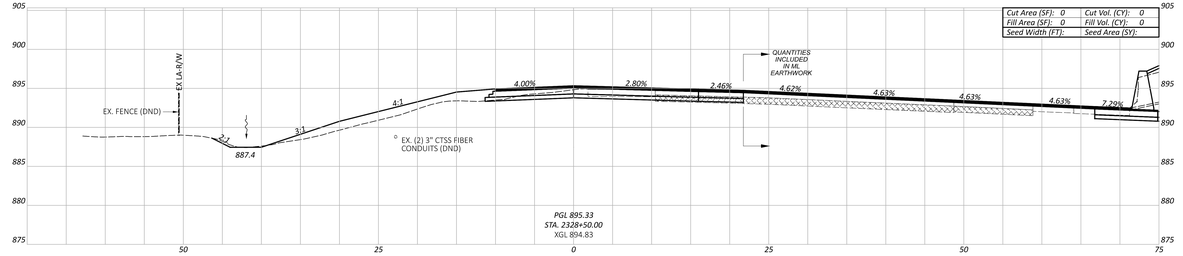
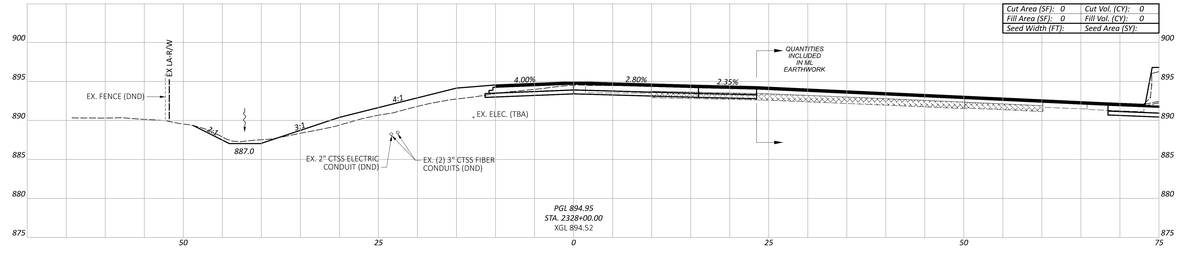
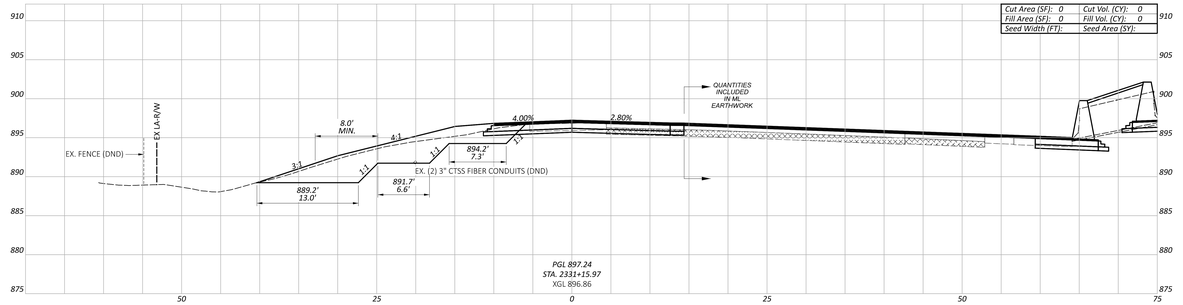
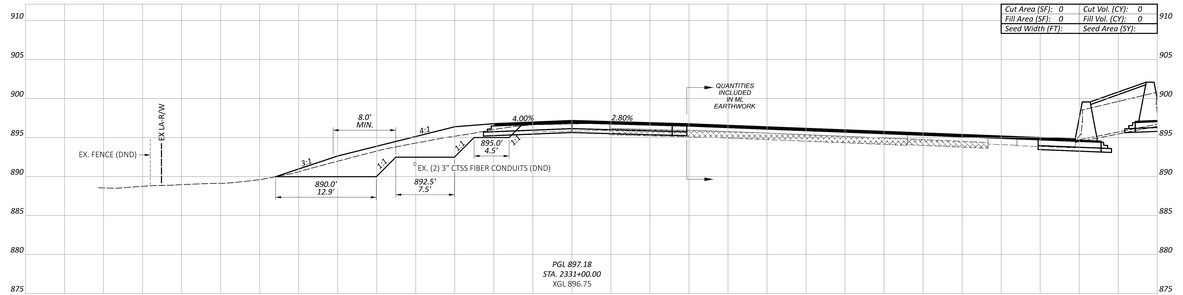


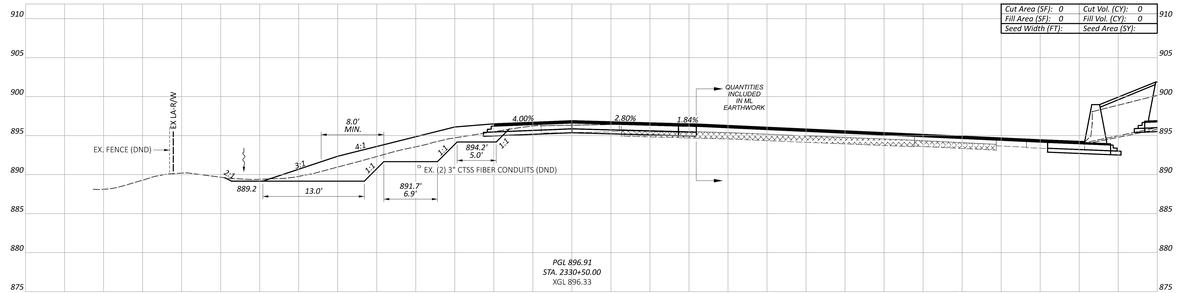


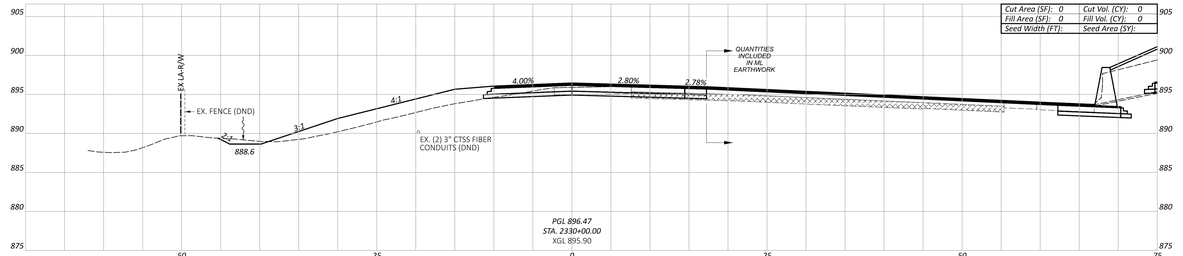












CROSS SECTIONS - SINCLAIR ROAD RAMP A
STA. 2328+00.00 TO STA. 2331+15.97

DESIGN AGENCY
Jacobs

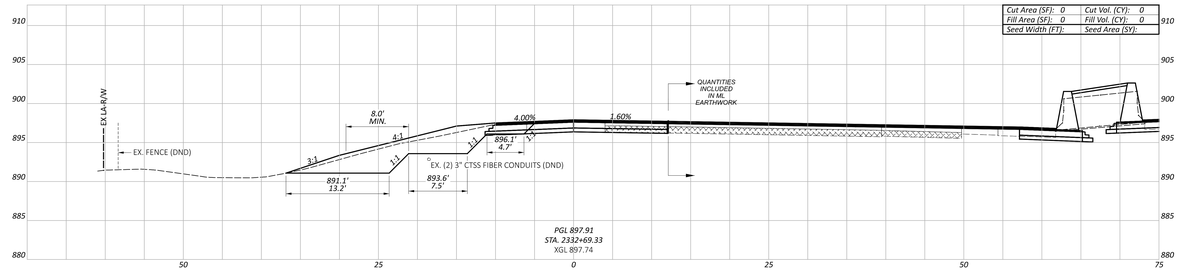
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

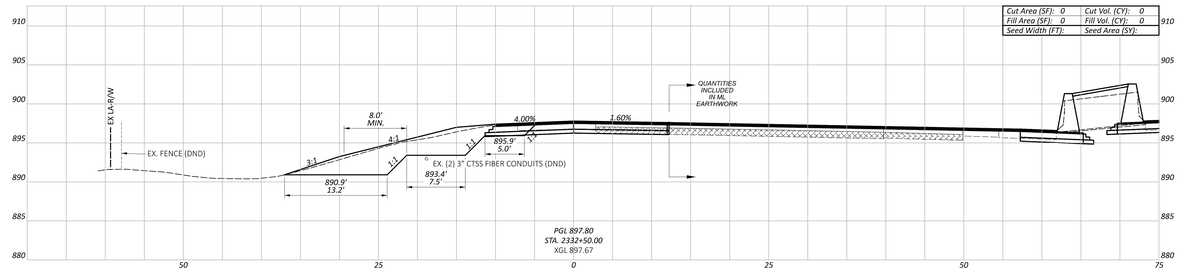
Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.274	618

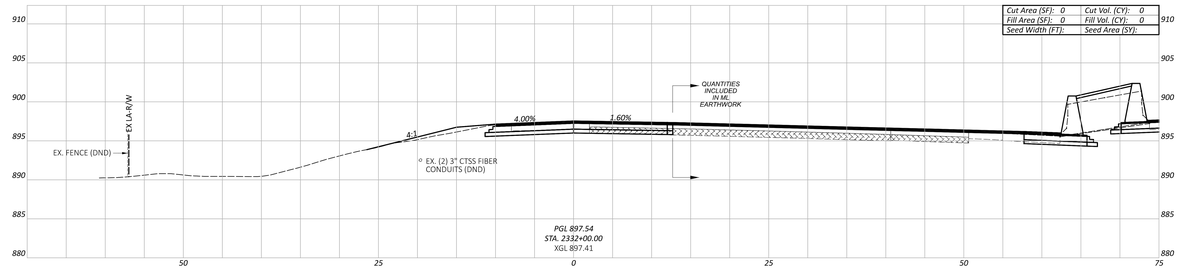
MODEL: BIF_ROADWAY - 2331+52.35 [Sheet] PAPERSIZE: ISO A1 (841 x 594mm) DATE: 2/20/2026 TIME: 11:44:23 PM PLTDRV: DWGOUT_PSP_FX.ctb PENTBL: DWGOUT_PSP_FX.ctb USER: ChrisLawrence3@outlook.com WORKSPACE: CHDOTDEVSS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVITY: 0 FILE: C:\Users\ChrisLawrence3\Jacobs\CHDOT Devs - Documents\Projects\FRA-71-19.10\Roadway\Sheets\FRA-71-19.10_Sheets.dgn

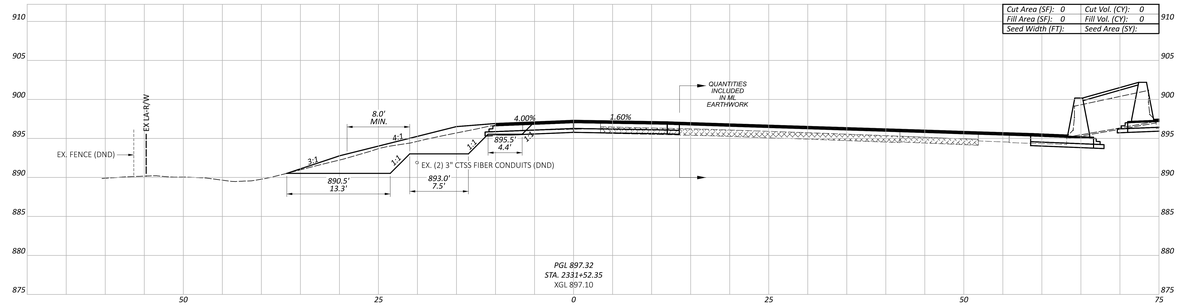
FRA-71-19.10

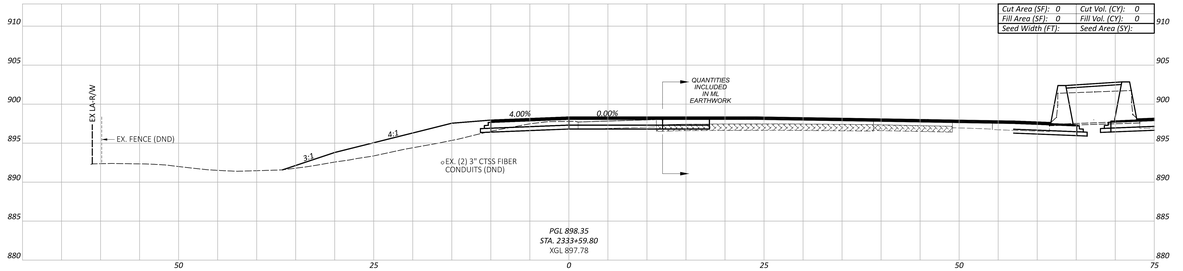
CROSS SECTIONS - SINCLAIR ROAD RAMP A
STA. 2331+52.35 TO STA. 2333+59.80

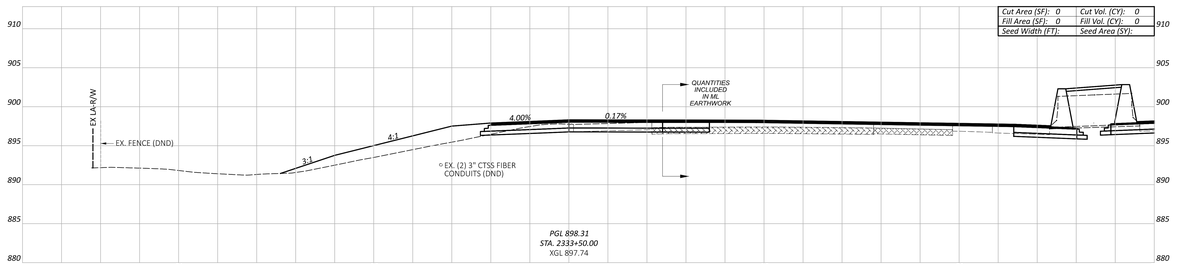


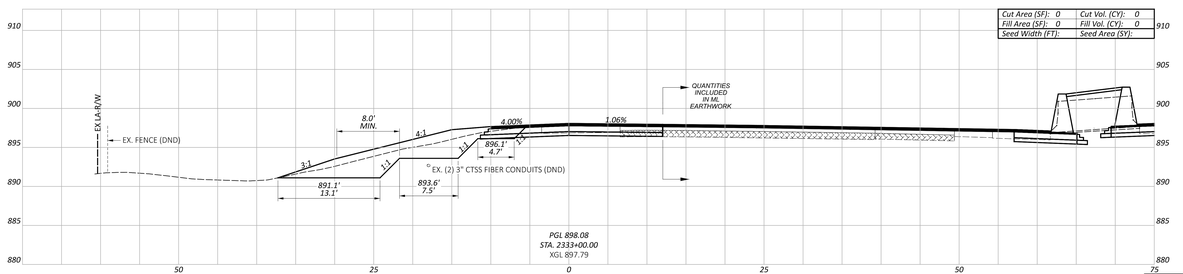










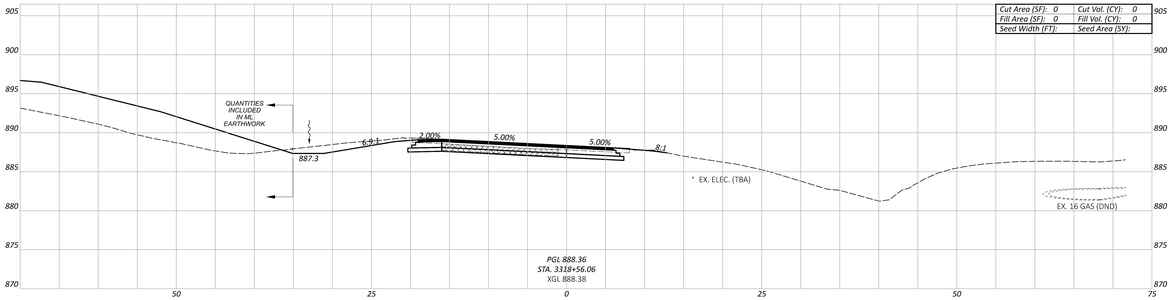


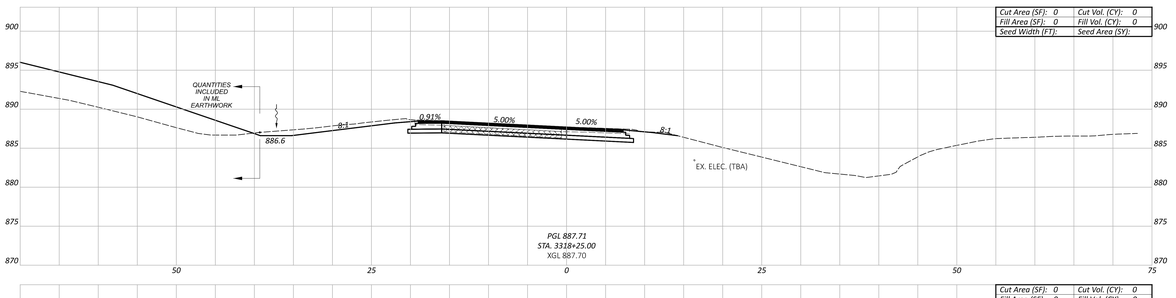
DESIGN AGENCY
Jacobs

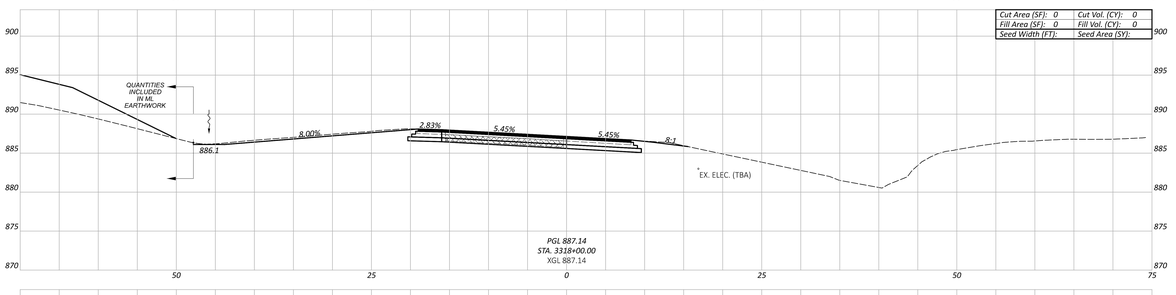
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

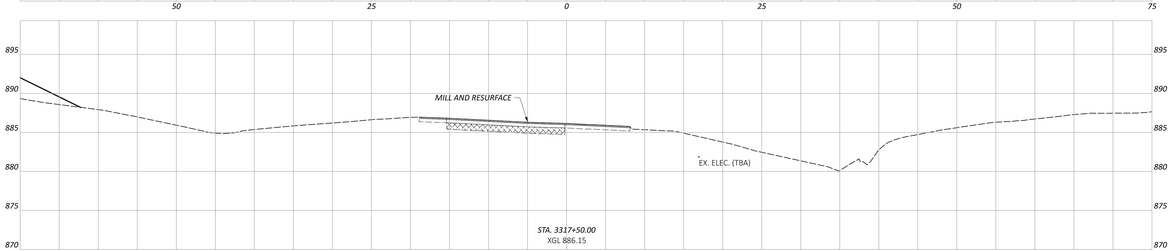
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.275	618

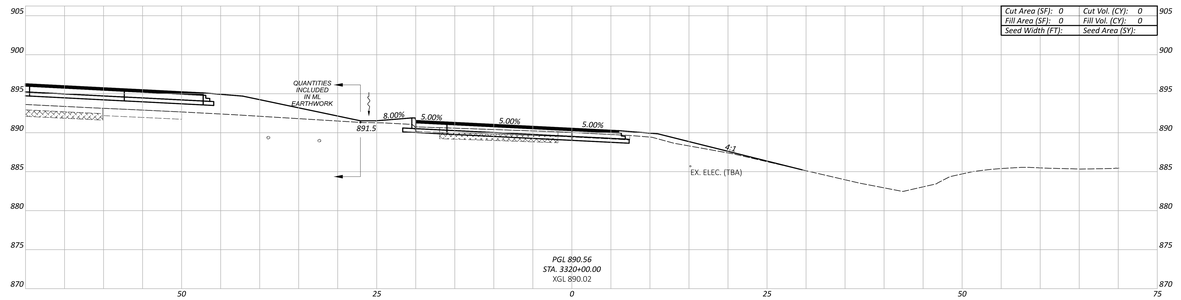
CROSS SECTIONS - MORSE ROAD RAMP B
STA. 3317+50.00 TO STA. 3320+00.00

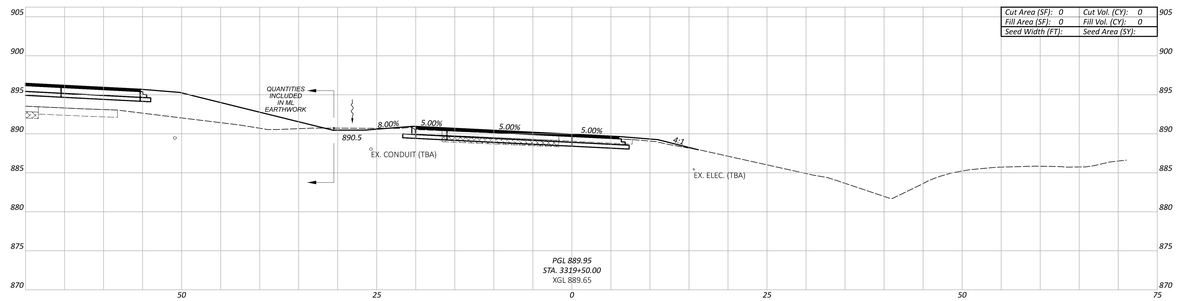


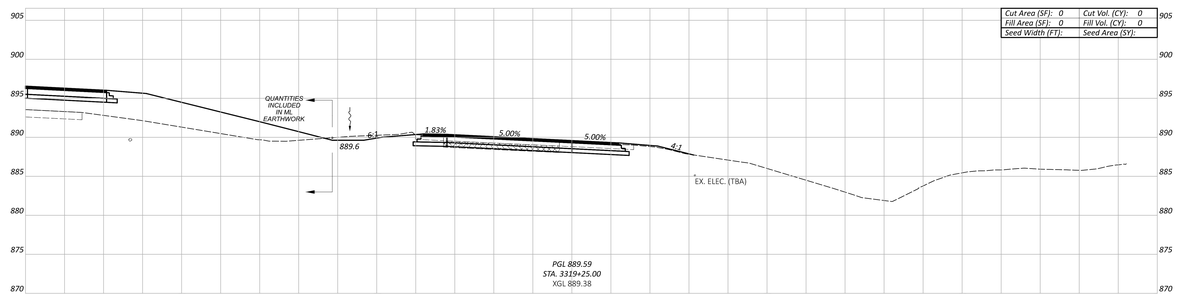


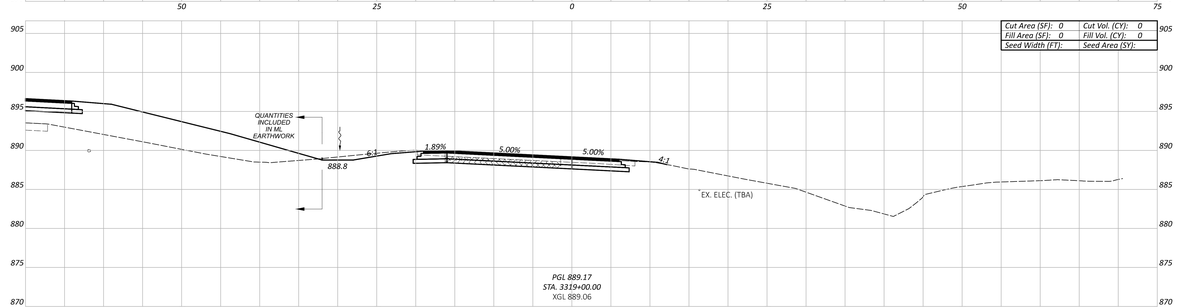












DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT #
109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.276	618

FRA-71-19.10

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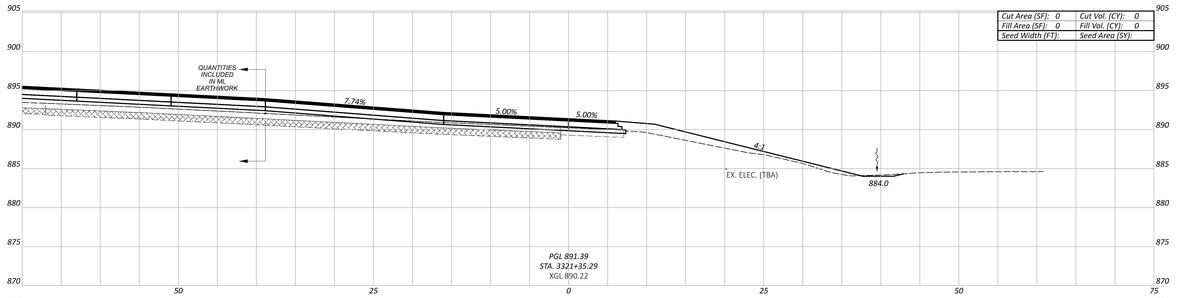
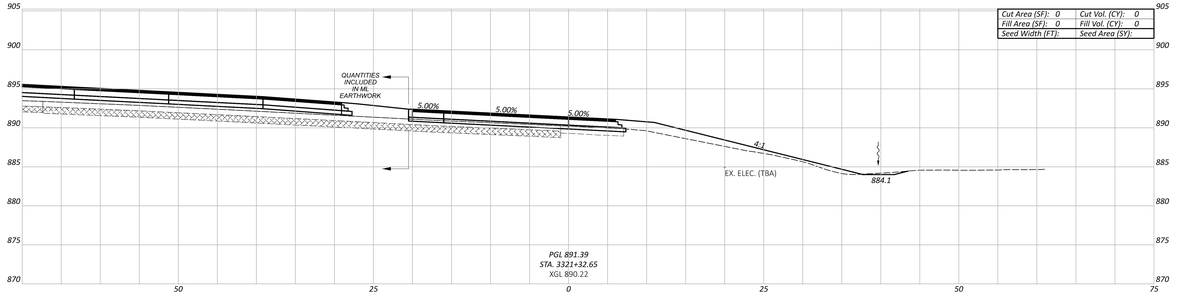
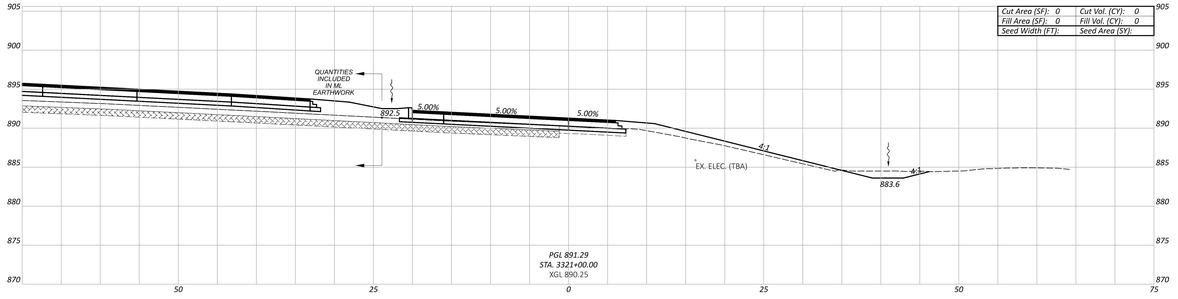
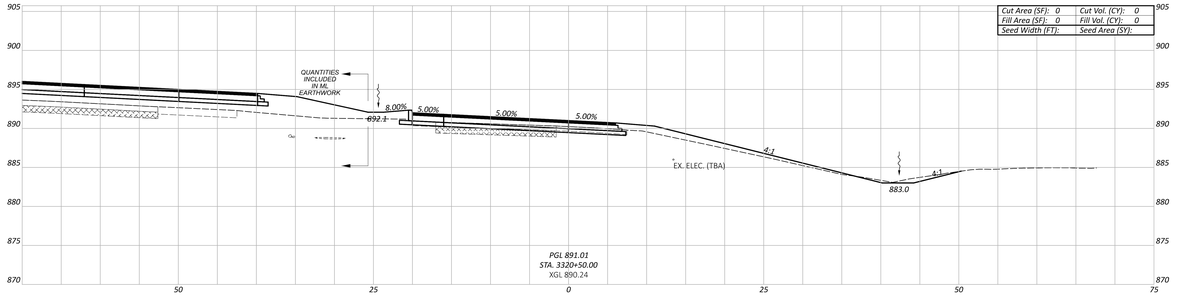
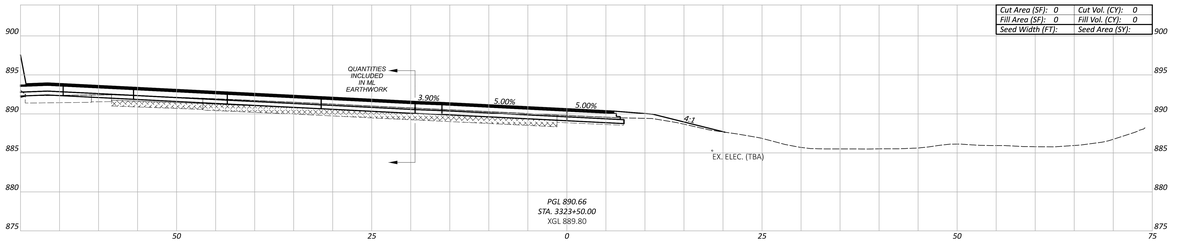
ALL DATA CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL PER CDOT POLICY DIRECTIVE 1210.0 AND SHALL NOT BE DISCLOSED OUTSIDE OF CDOT WITHOUT PRIOR WRITTEN CONSENT.

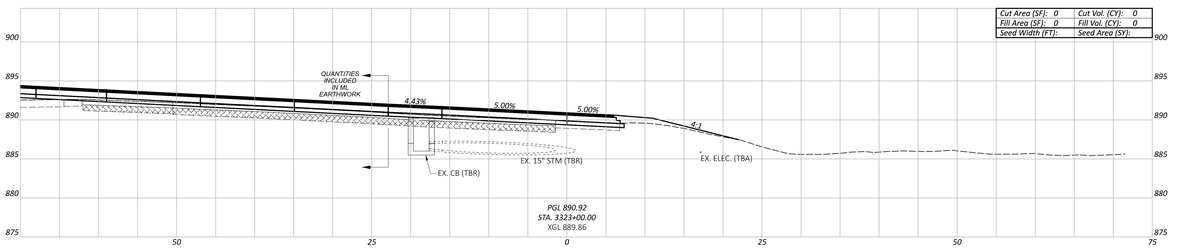


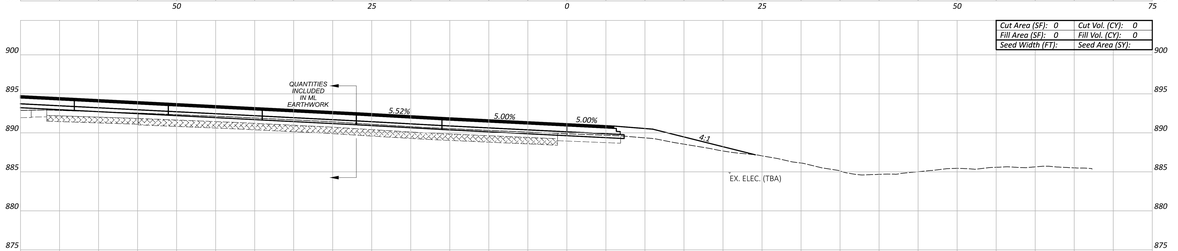


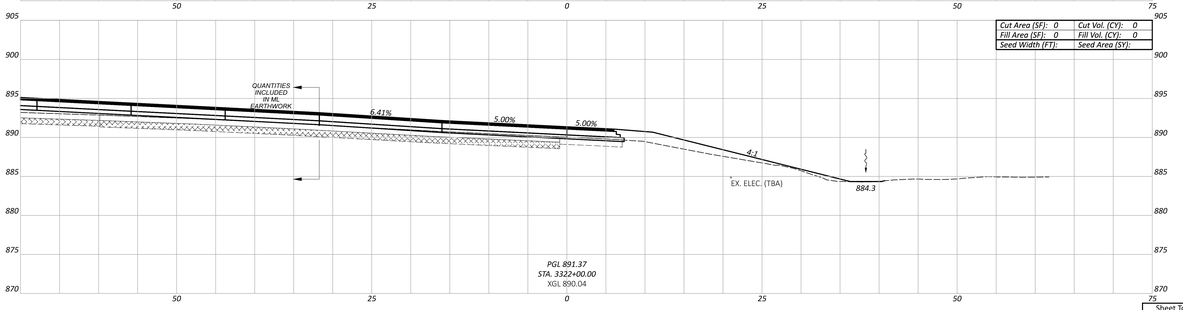












CROSS SECTIONS - MORSE ROAD RAMP B
STA. 3320+50.00 TO STA. 3323+50.00

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.277	618

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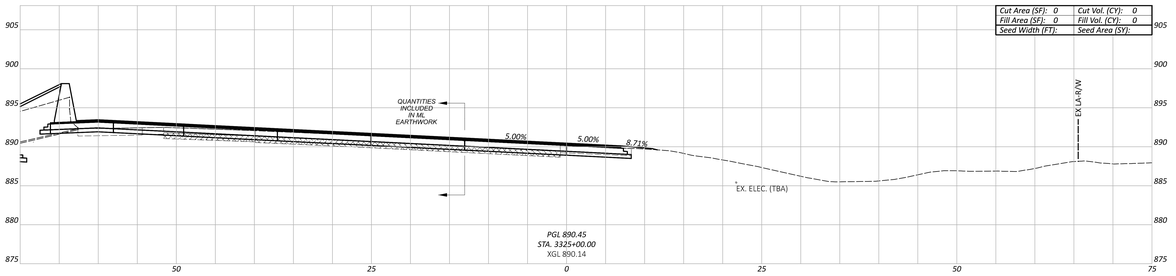
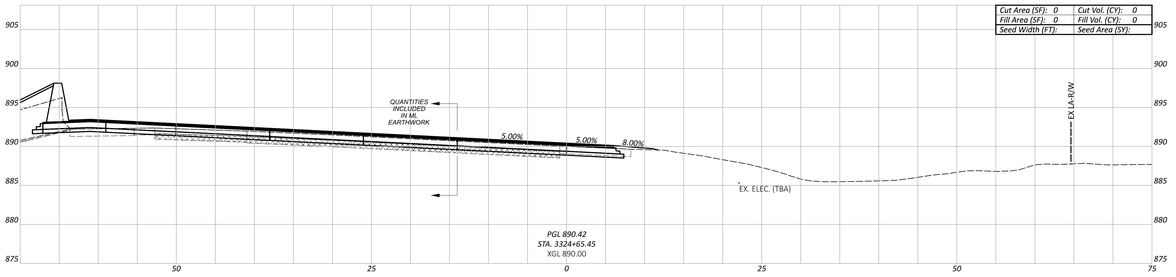
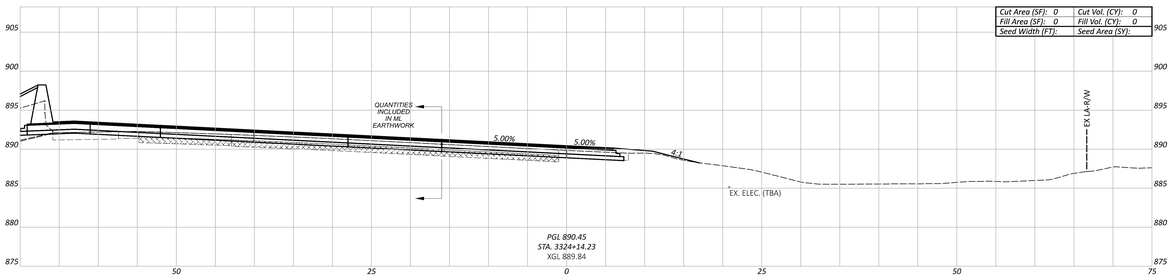
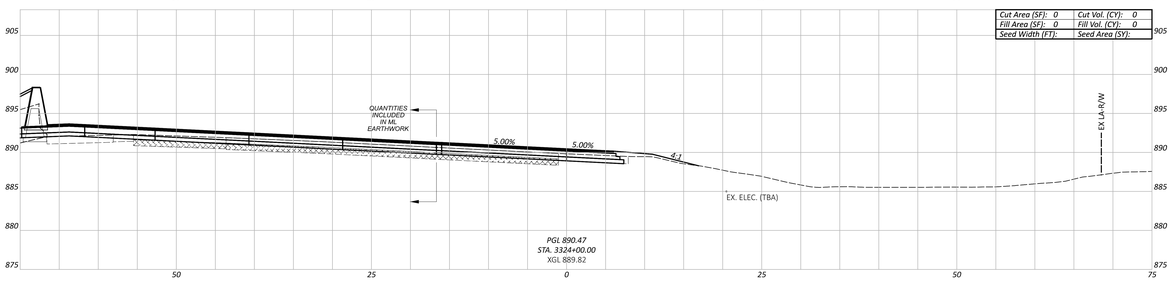
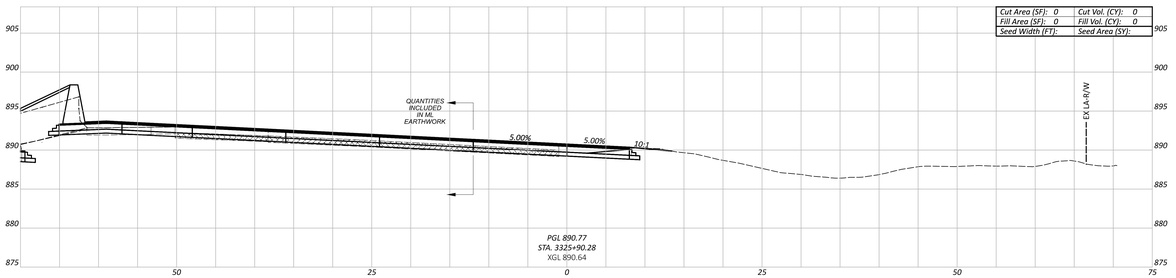
FILE NAME: C:\Users\chris.lawrence1\Jacobs\Desktop\Morse Road Ramp B\Morse Road Ramp B Cross Sections.dgn

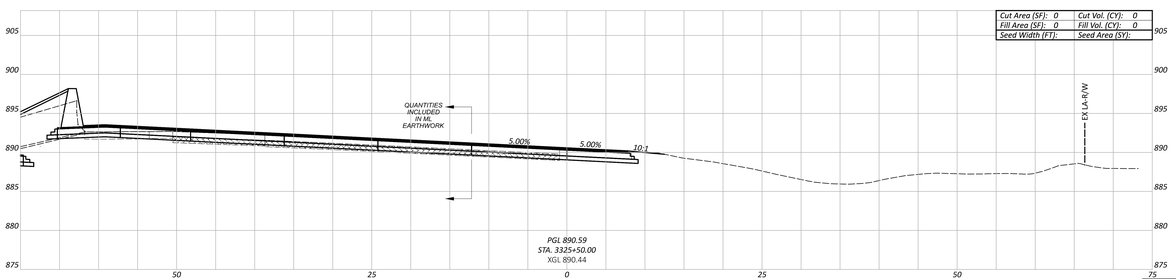












CROSS SECTIONS - MORSE ROAD RAMP B
STA. 3324+00.00 TO STA. 3325+90.28

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut		Fill	P.278	618

FRA-71-19.10

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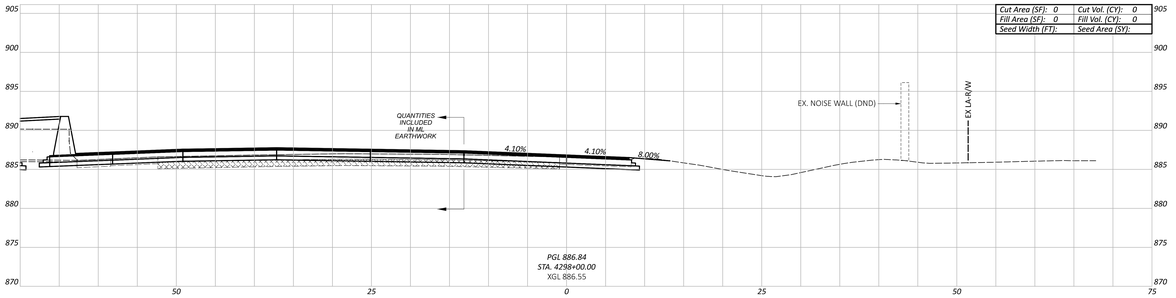

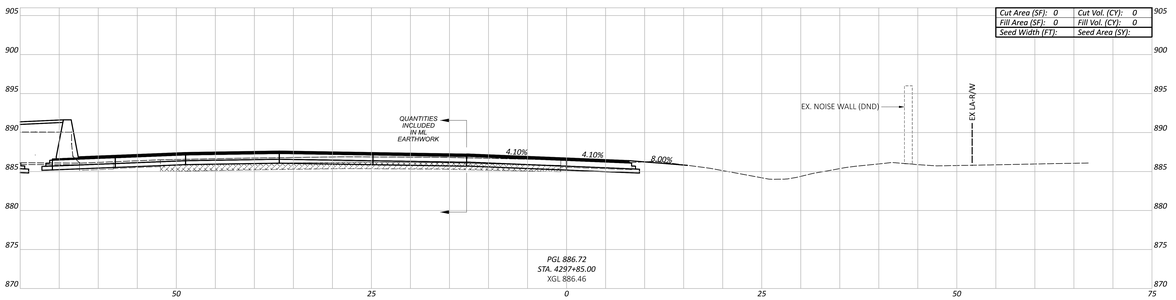

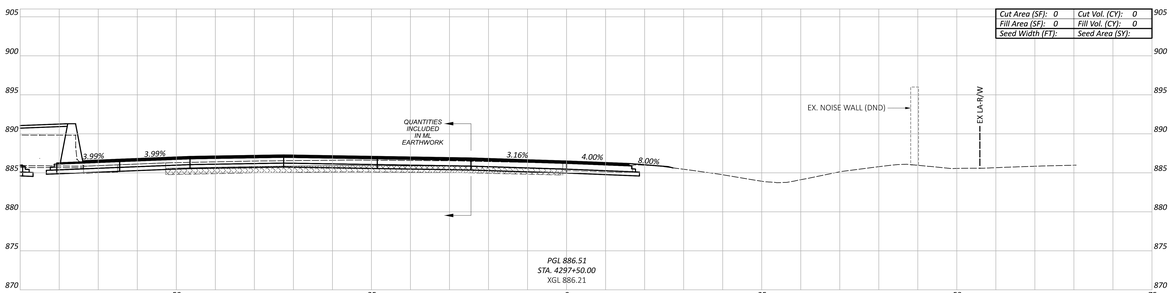

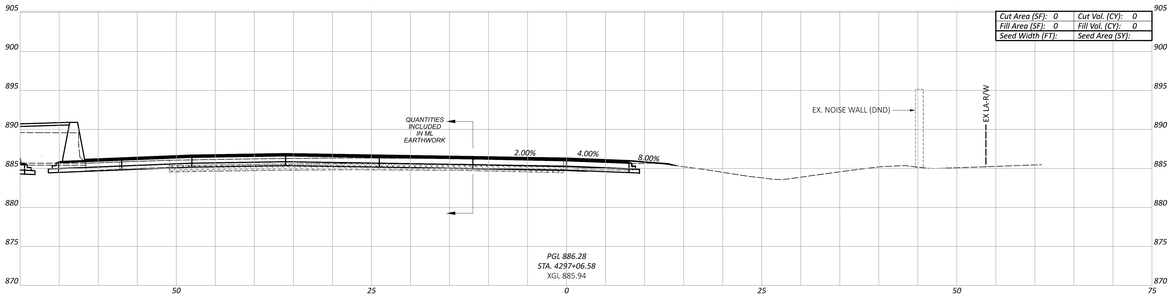

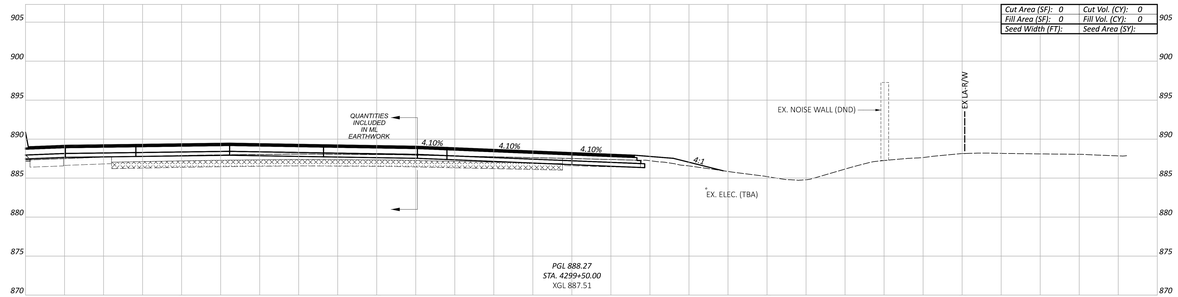

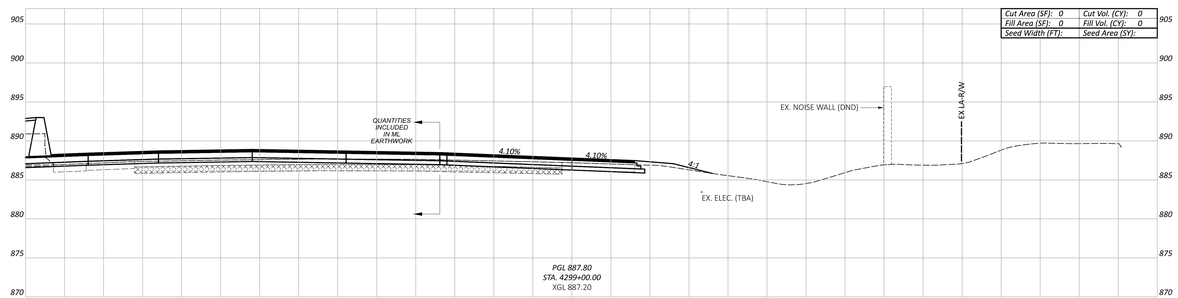

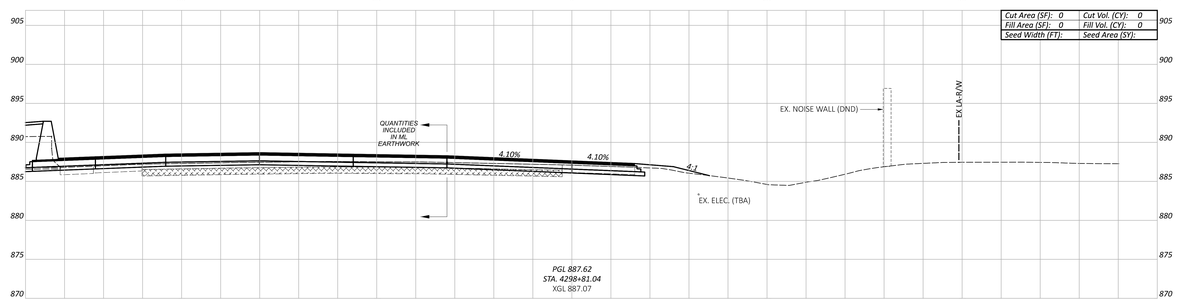

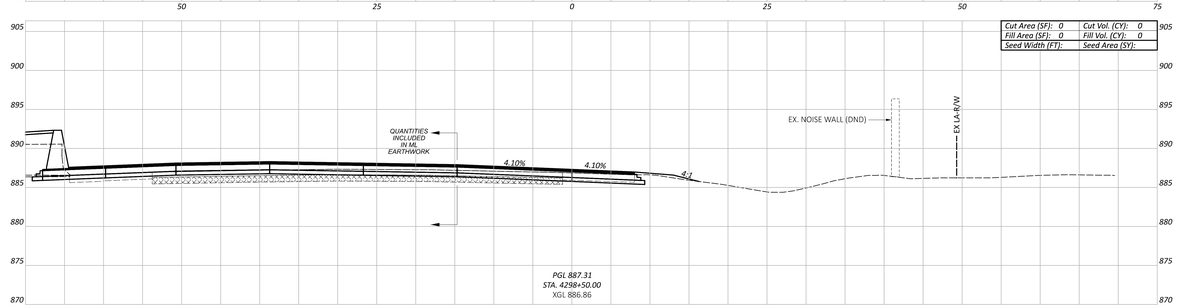

CROSS SECTIONS - MORSE ROAD RAMP C
STA. 4297+06.58 TO STA. 4299+50.00

DESIGN AGENCY	Jacobs		
DESIGNER	CGL		
REVIEWER	MCK 02/19/26		
PROJECT ID	109164		
Sheet Totals			
Seeding	Cut	Fill	
SHEET	P.279	TOTAL	618

FRA-71-19.10

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FILENAME: P:\280\Projects\109164\Design\Roadway\Sheets\FRA-71-19.10_CROSS SECTIONS - MORSE ROAD RAMP C STA. 4300+00.00 TO STA. 4302+00.00.dgn

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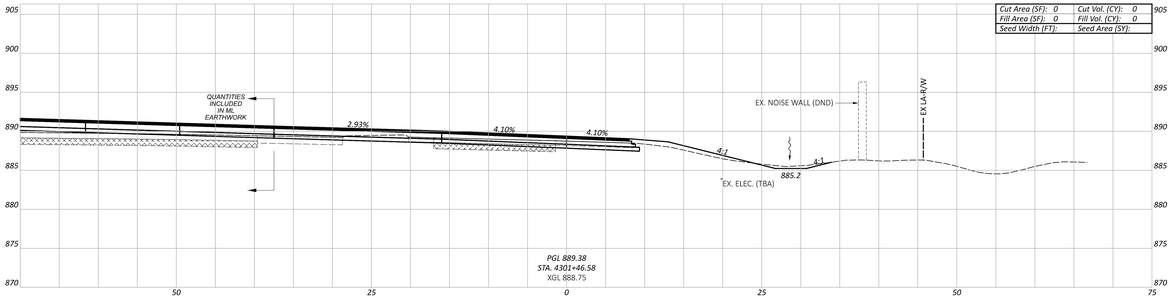
Seed Width (FT):	Seed Area (SY):



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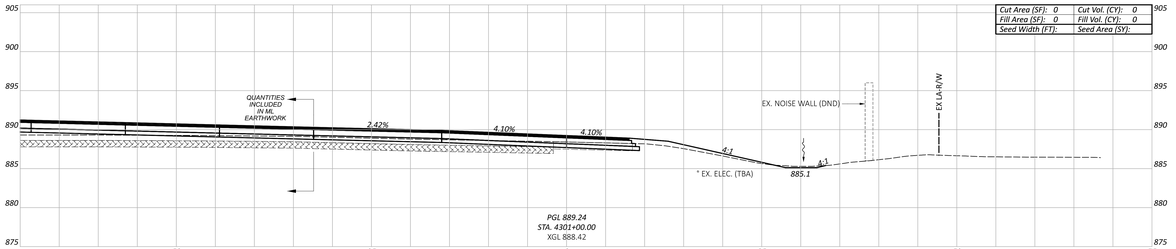
STA. 4301+46.58
XGL 888.75



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STA. 4301+00.00
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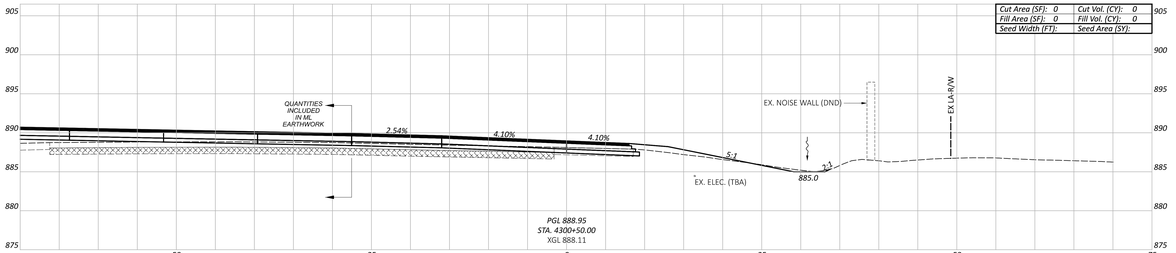

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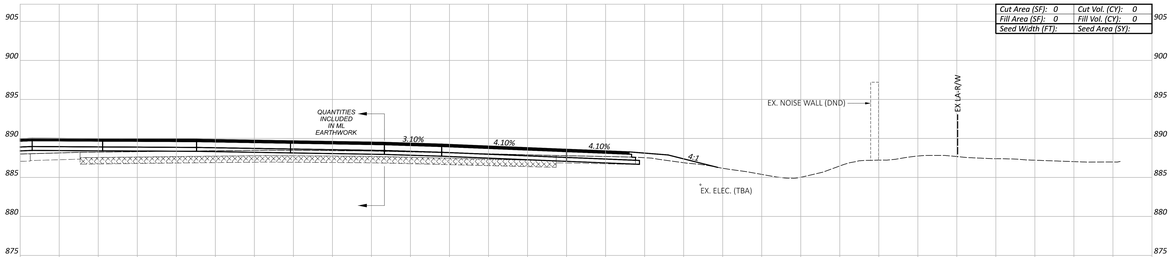
STA. 4300+50.00
XGL 888.11



PGL 888.61
STA. 4300+00.00
XGL 887.79

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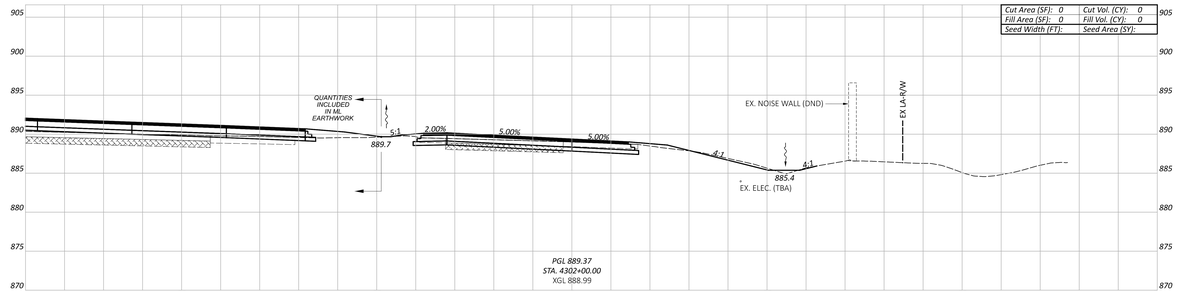

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STA. 4302+00.00
XGL 888.99

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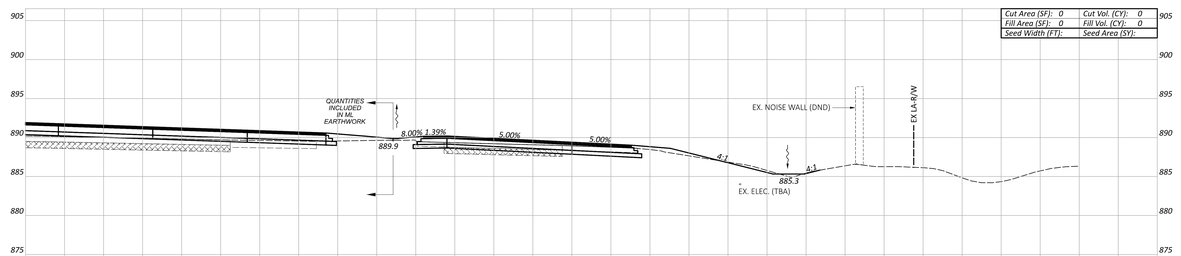

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STA. 4301+80.13
XGL 888.93

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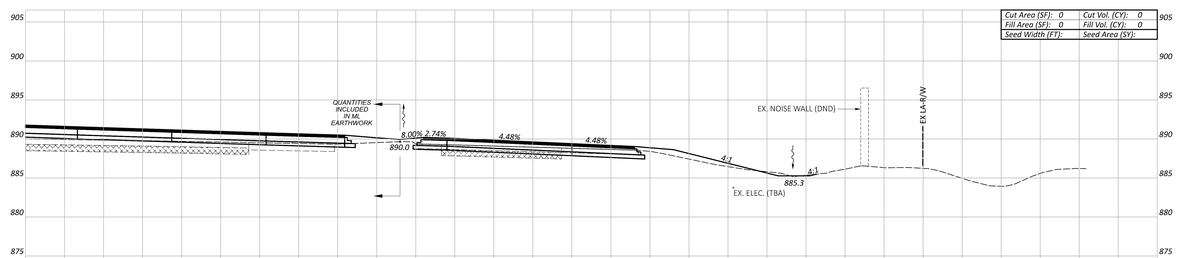

PGL 889.39
STA. 4301+60.86
XGL 888.80

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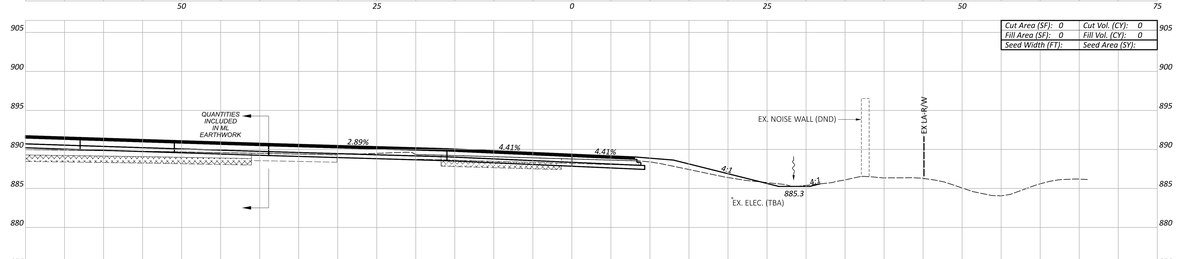


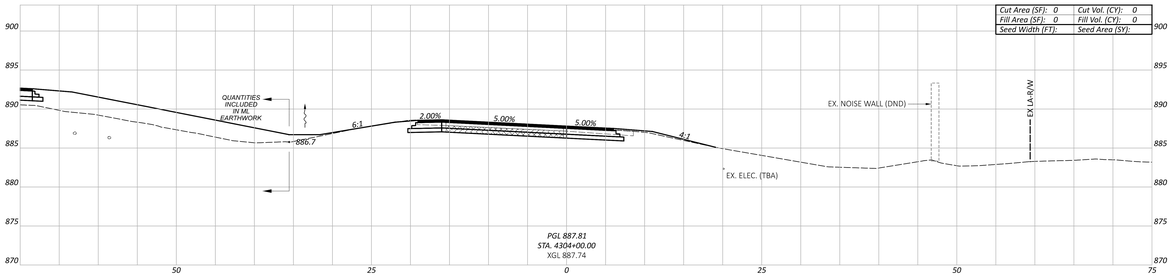
PGL 889.39
STA. 4301+58.12
XGL 888.78

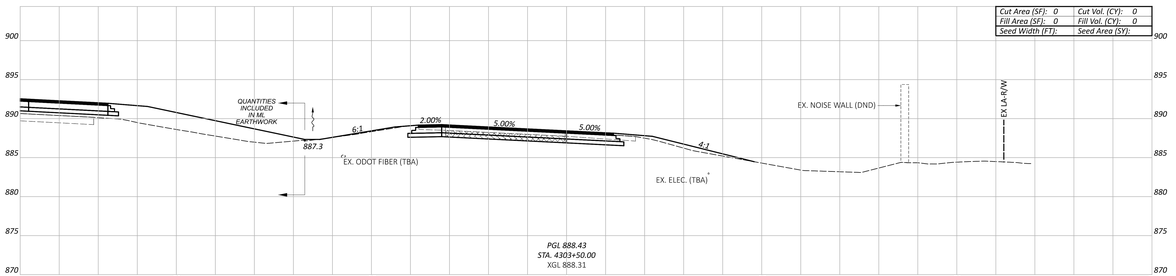
CROSS SECTIONS - MORSE ROAD RAMP C STA. 4300+00.00 TO STA. 4302+00.00

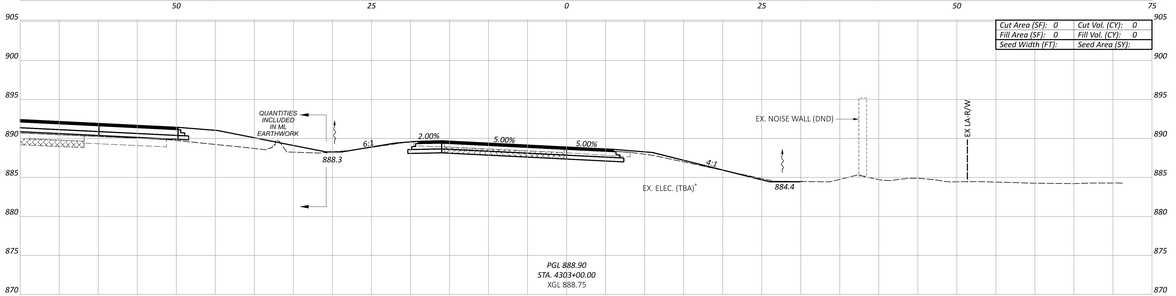
DESIGN AGENCY
Jacobs

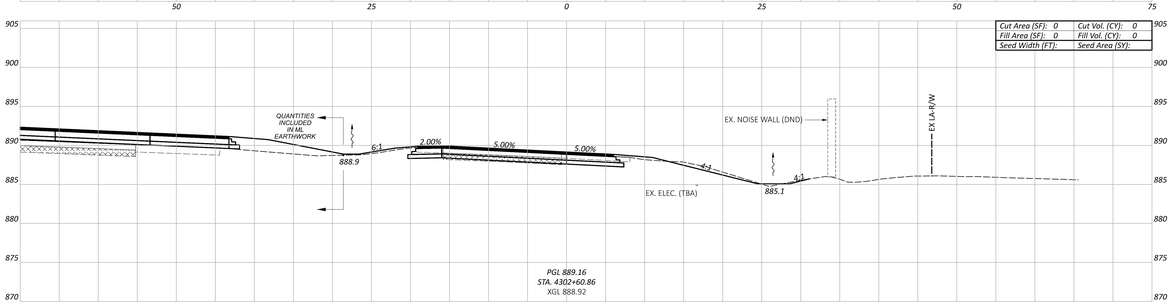
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

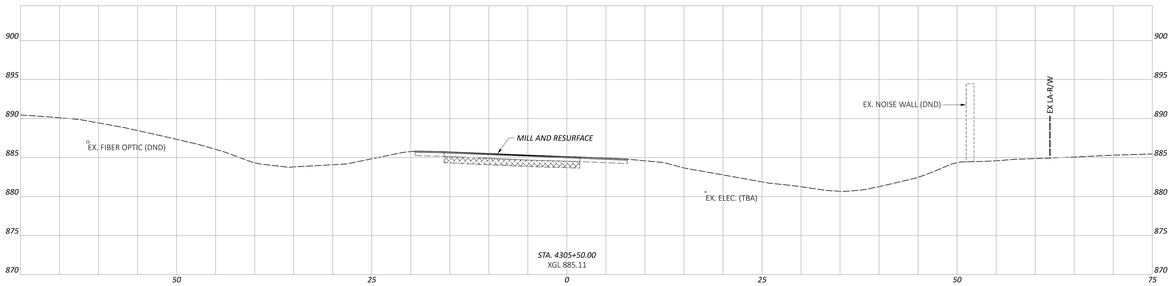
Sheet Totals			
Seeding	Cut	Fill	SHEET: P.280
			TOTAL: 618

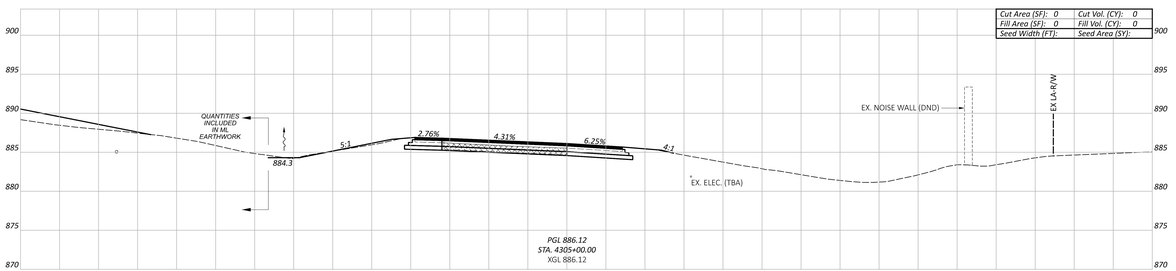


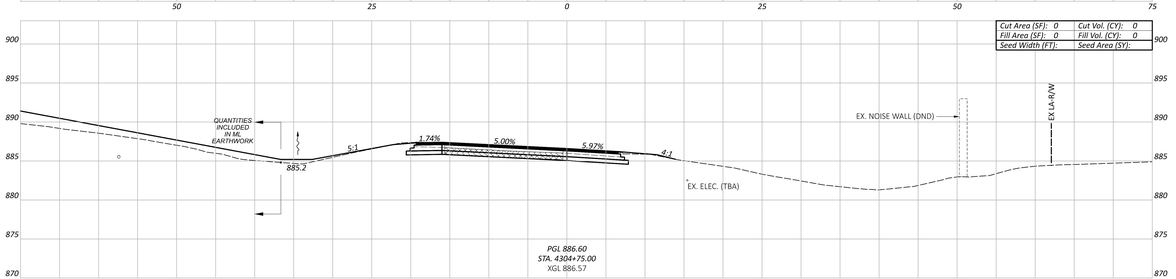


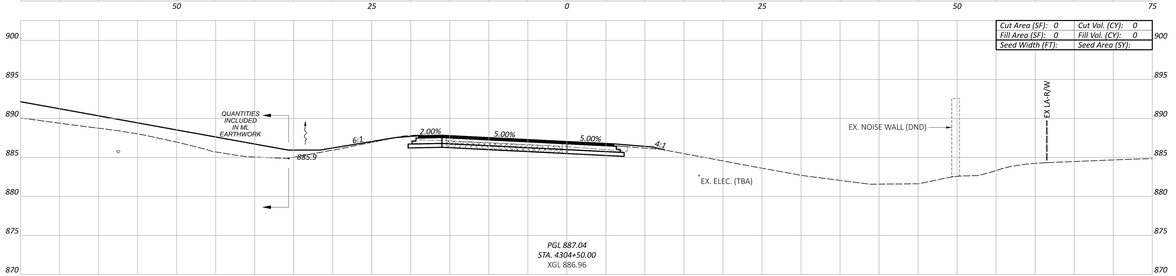












CROSS SECTIONS - MORSE ROAD RAMP C
STA. 4302+60.86 TO STA. 4305+50.00

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.281	618

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MODEL: BLF_ROADWAY - 5300+73.20 Sheet: XSAMPLE01 - 66x34 (in) LAST: 2/17/2026 7:46:11:53 PM PLTDEV: DWGDEF_PSF_FY.ctb|fg PENTBL: DWGDEF_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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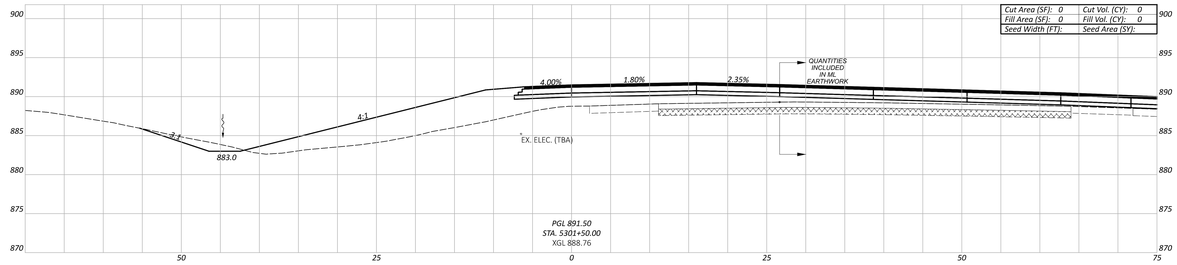
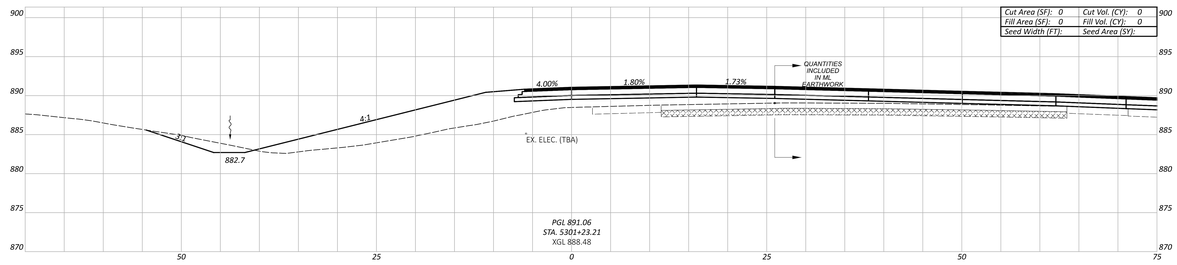
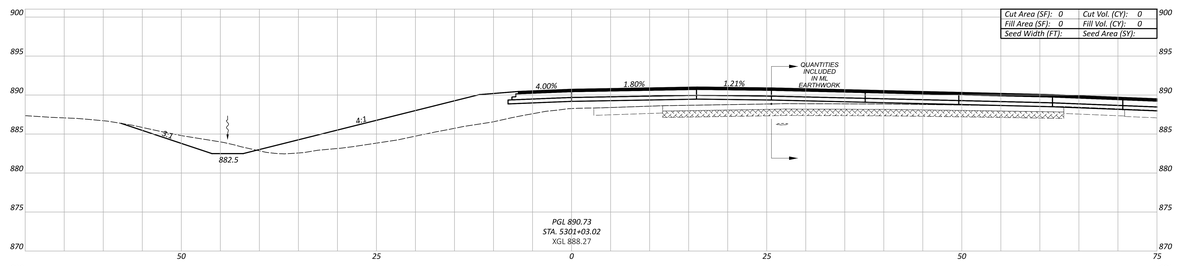
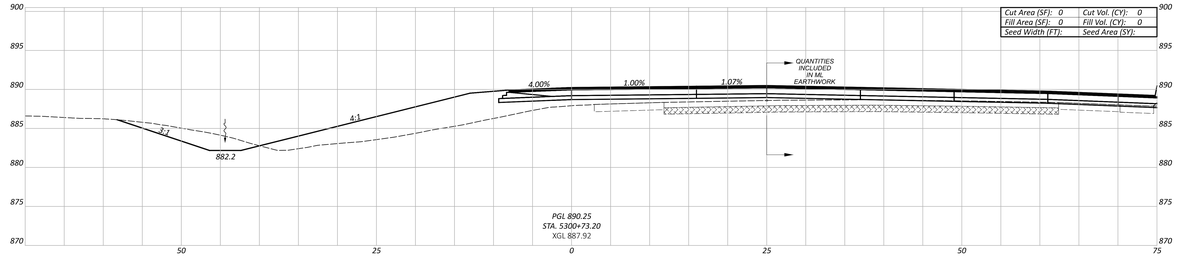
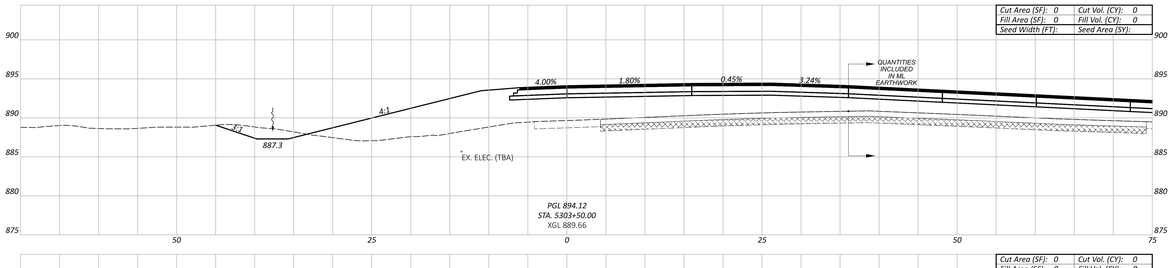
CROSS SECTIONS - MORSE ROAD RAMP D
STA. 5300+73.20 TO STA. 5303+50.00

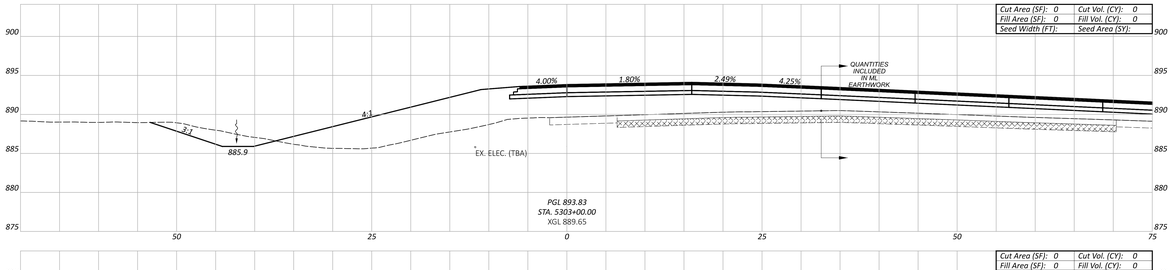


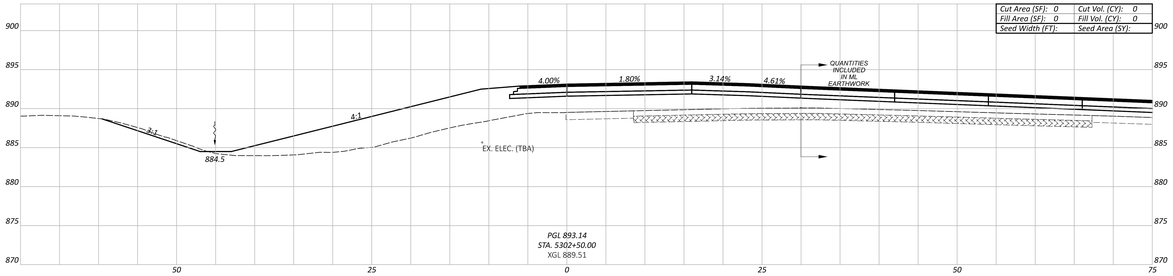


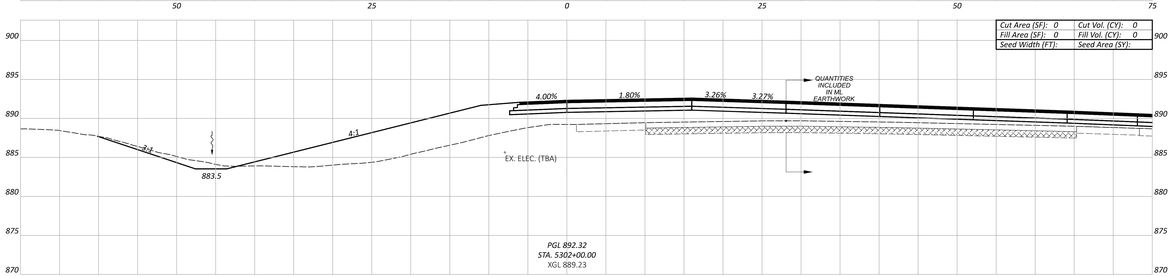












DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.282	618

MODEL: BLF_MODELS - 5303+82.83 [Sheet] (MARKER: 66x8 [Arr] UNIT: 2/2/2025 TIME: 11:53:17 PM PLTDEV: DWGDEF_PSF_2-1.stb[g PENTBL: DWGDEF_Penn.ctb USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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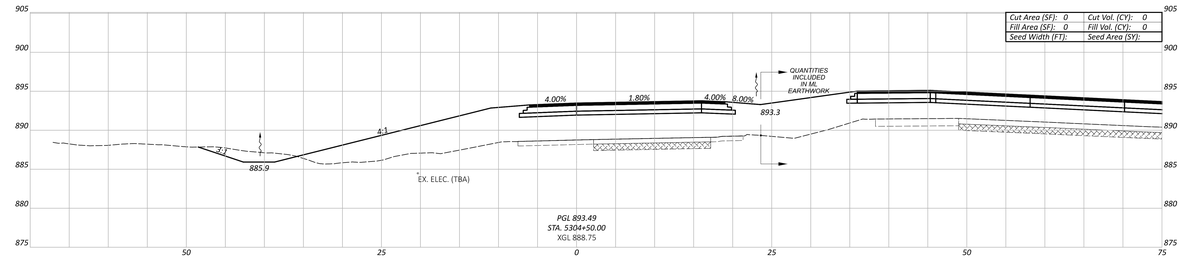
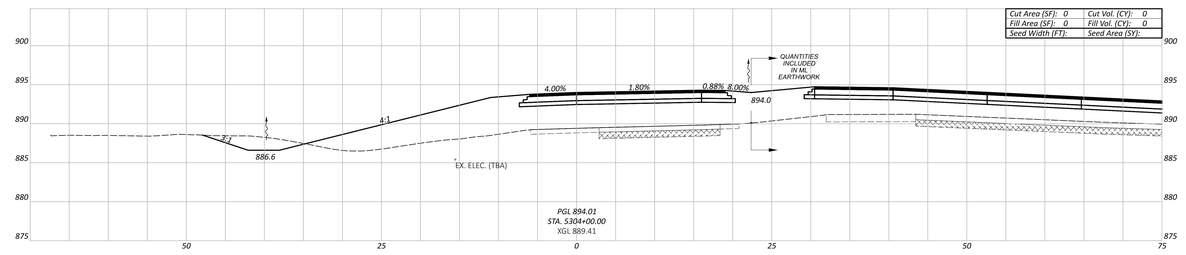
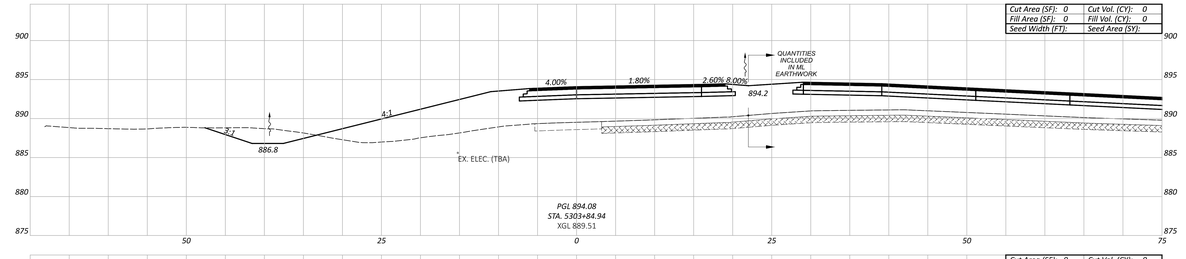
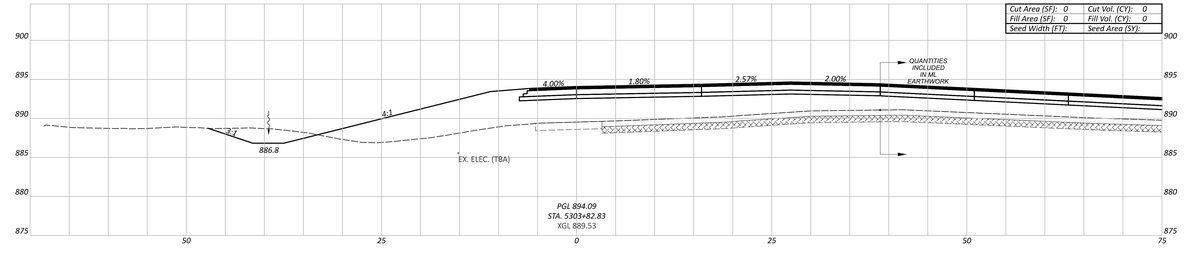
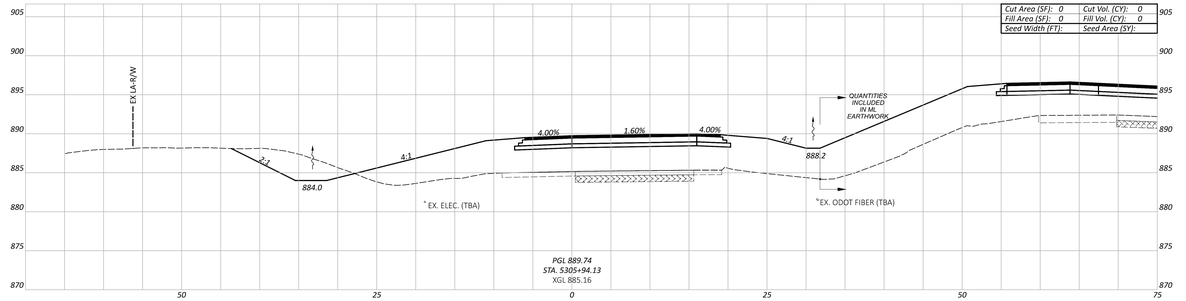
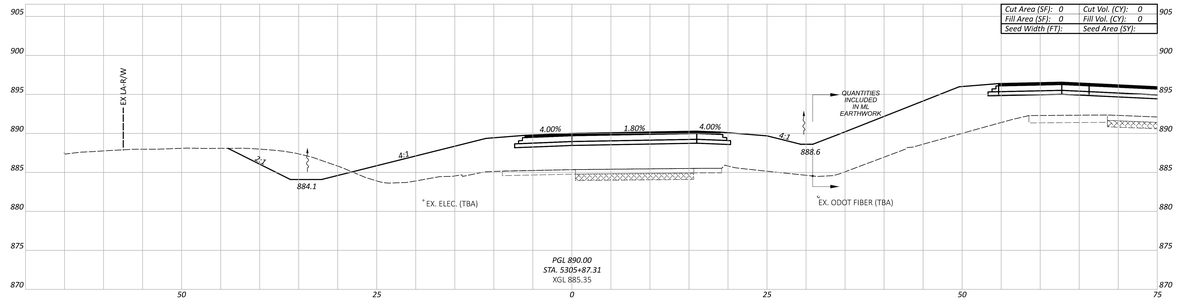


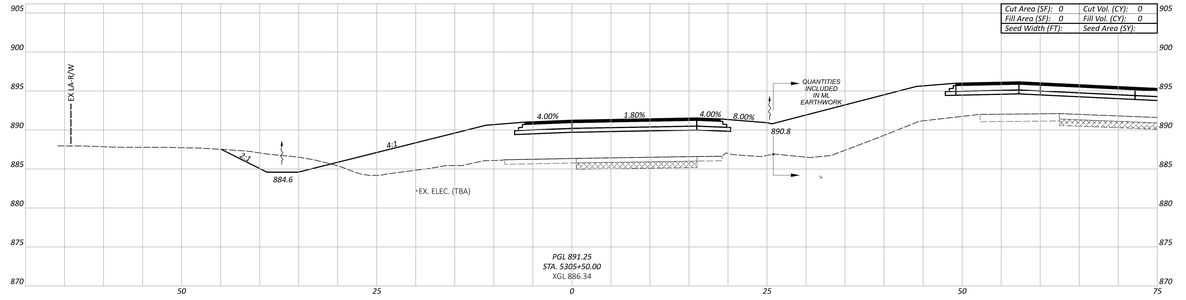


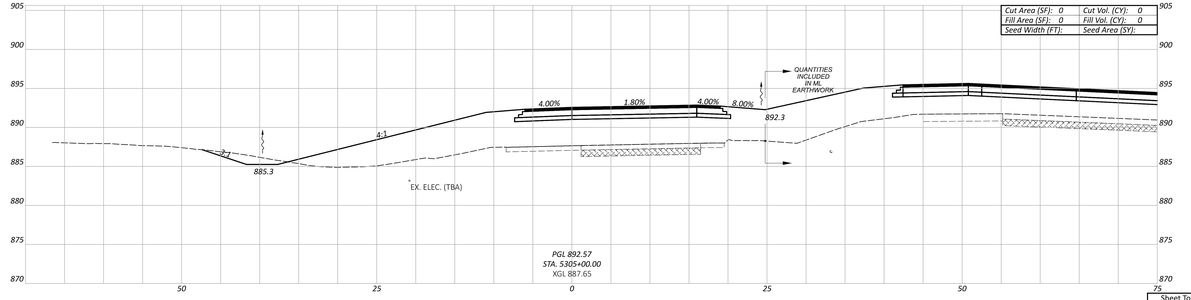












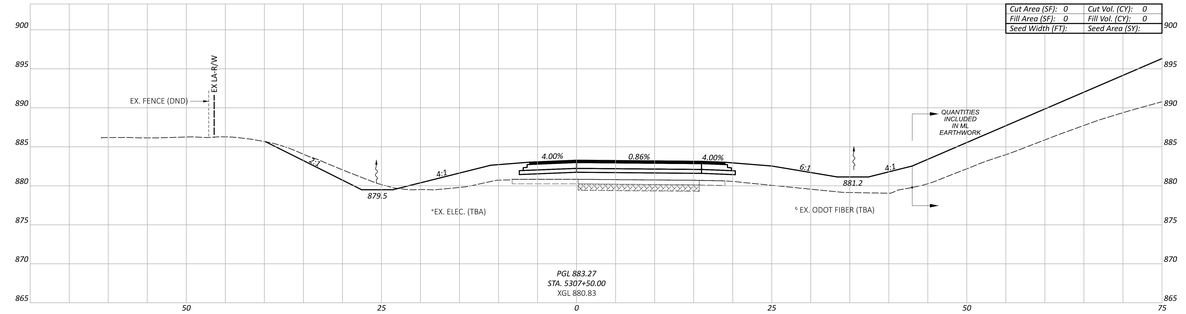
CROSS SECTIONS - MORSE ROAD RAMP D
STA. 5303+82.83 TO STA. 5305+94.13

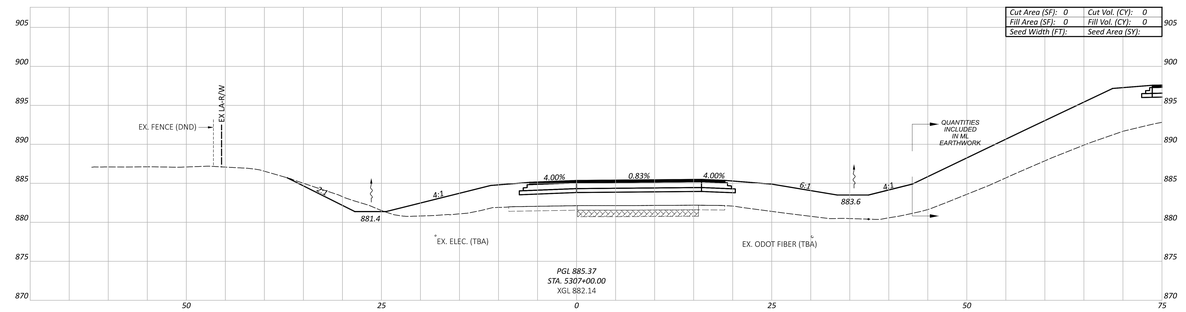
DESIGN AGENCY
Jacobs

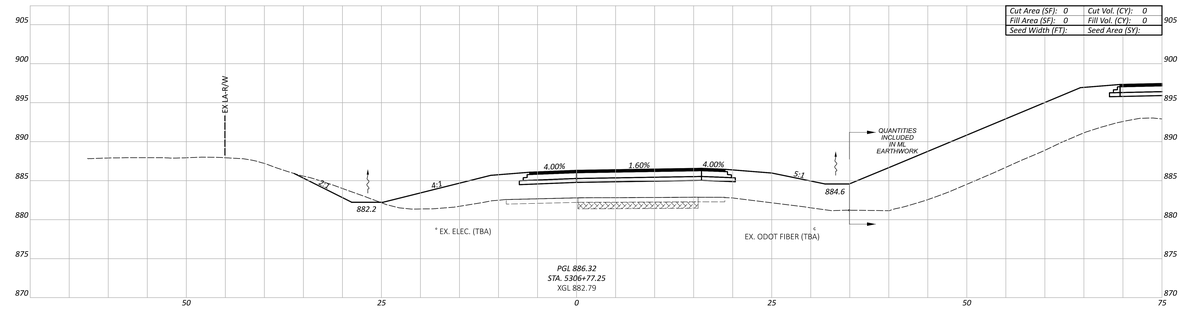
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT ID: 109164

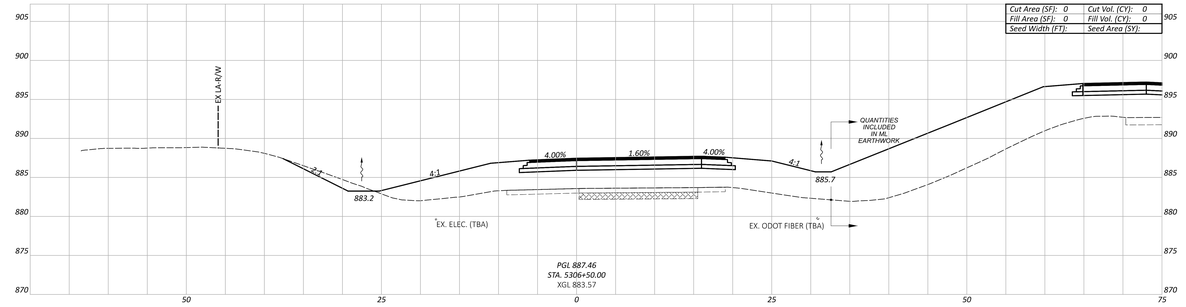
Sheet Totals			
Seeding	Cut	Fill	

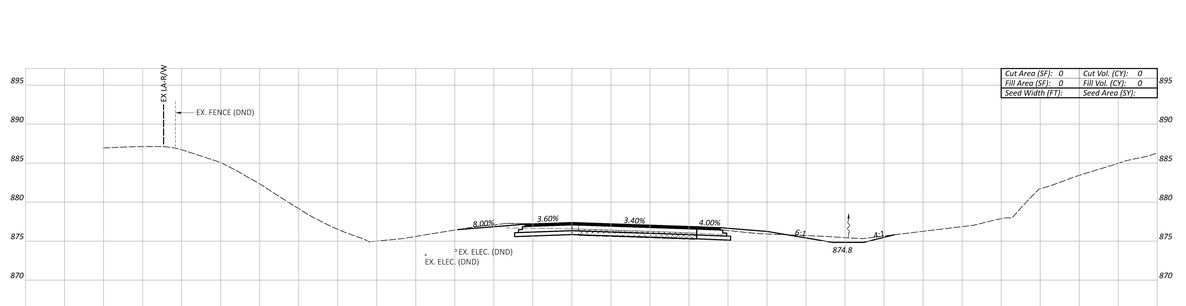
SHEET: P.283
TOTAL: 618

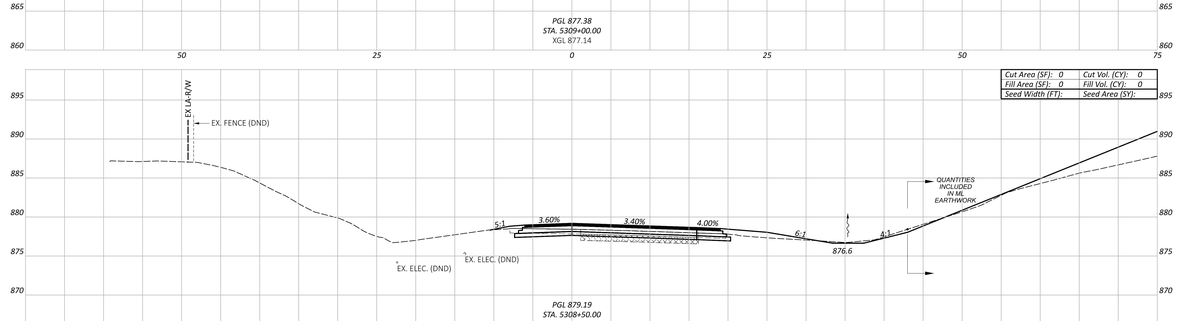


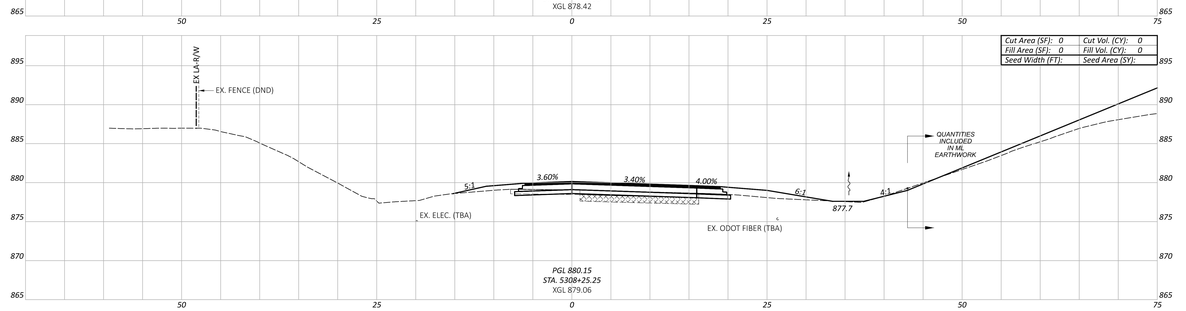


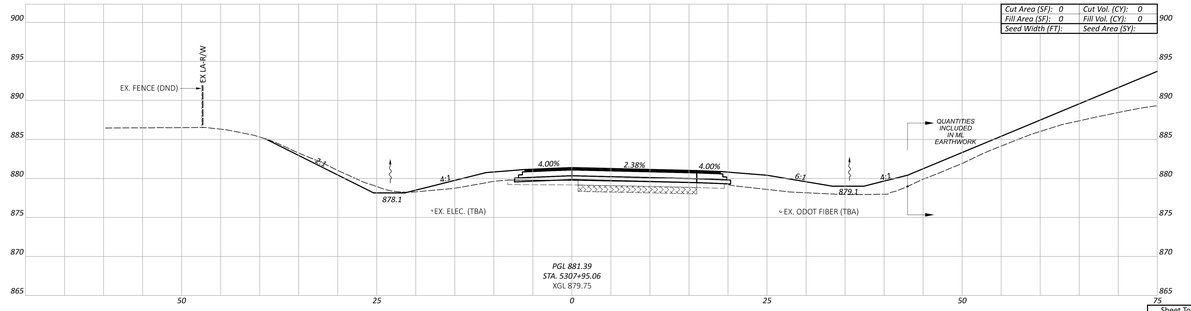












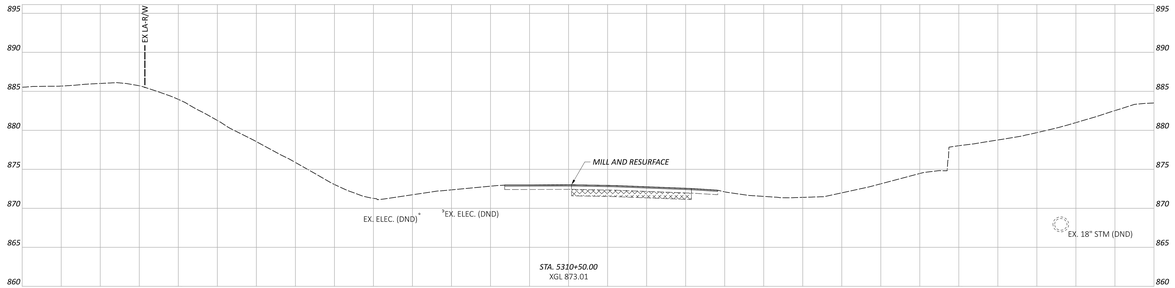
CROSS SECTIONS - MORSE ROAD RAMP D
STA. 5306+50.00 TO STA. 5309+00.00

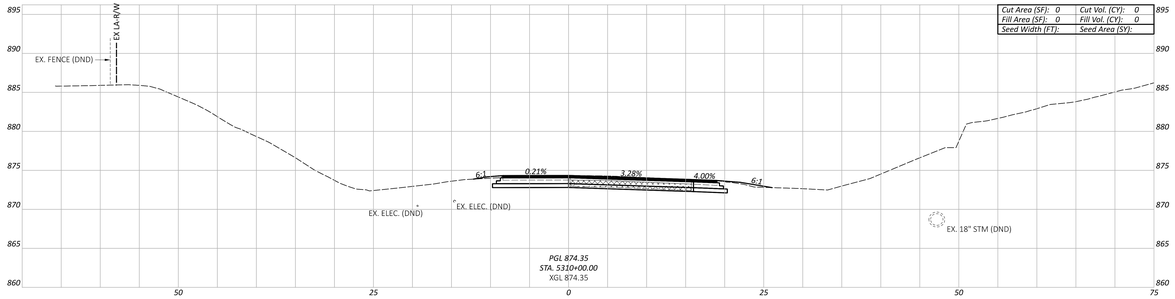
FRA-71-19.10

Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.284	618

DESIGN AGENCY
Jacobs
DESIGNER
CGL
REVIEWER
MCK 02/19/26
PROJECT #
109164

MODEL: BU_ROADWAY - 5306+50.00 [Sheet] WARNING: 66x34 [in] UNIT: 1/300'[US] TIME: 11:54:14 PM PLTDRV: DWGDRV_PSF_FX.pltcfg PENTBL: DWGDT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CHDOTCIVD3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ACTIVE FILE PATH: C:\Users\chris.lawrence\Jacobs\Morse Road Ramp D - Documents\Roadway\Cross Sections\FRA-71-19.10 - Morse Road Ramp D - Cross Sections.dgn





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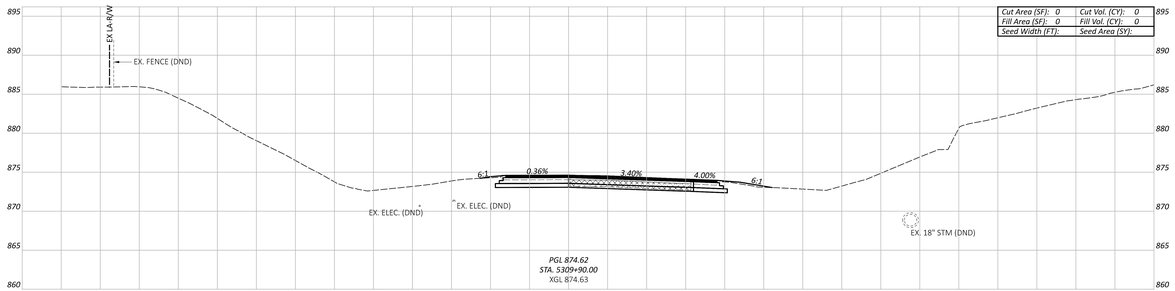

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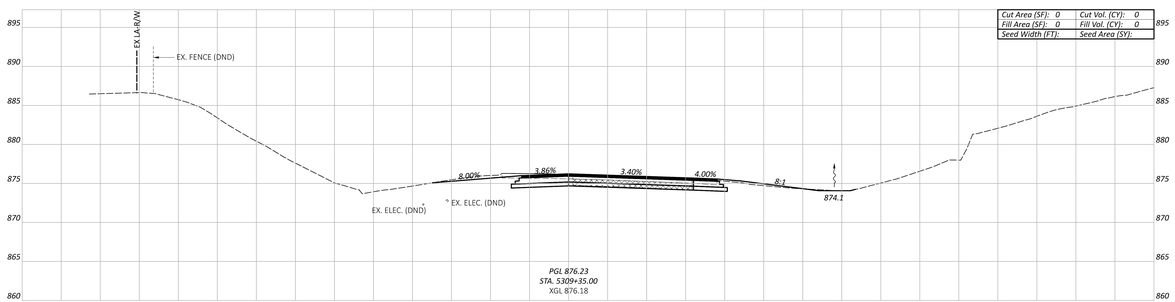

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CROSS SECTIONS - MORSE ROAD RAMP D
STA. 5309+35.00 TO STA. 5310+50.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.285	618

FRA-71-19.10

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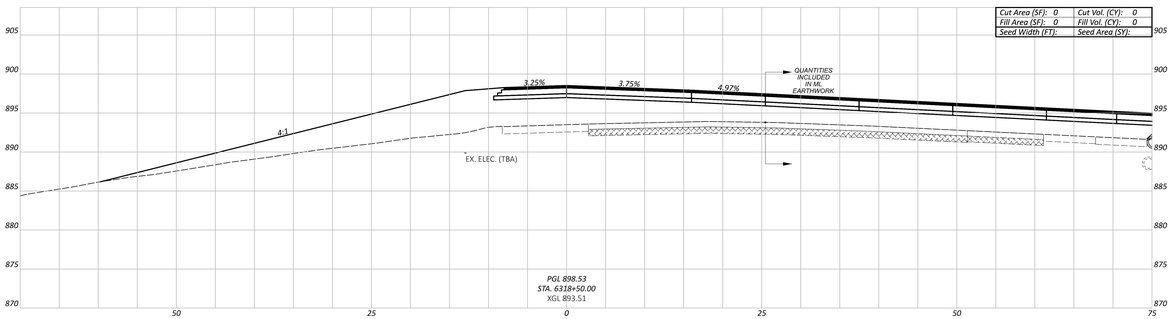

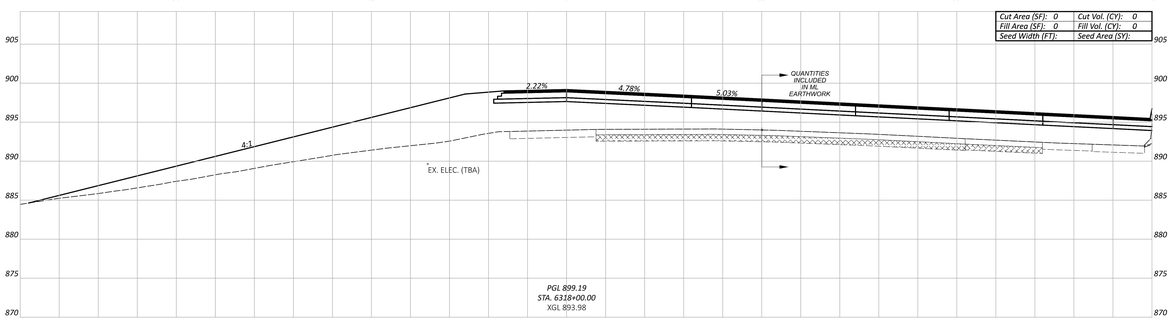

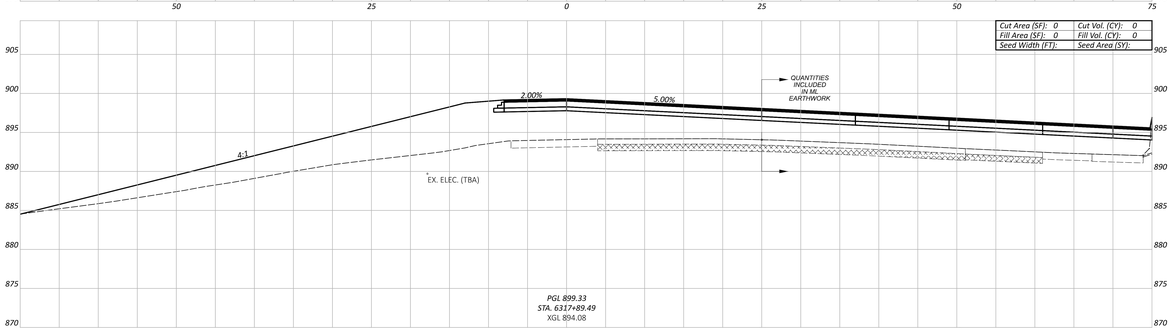

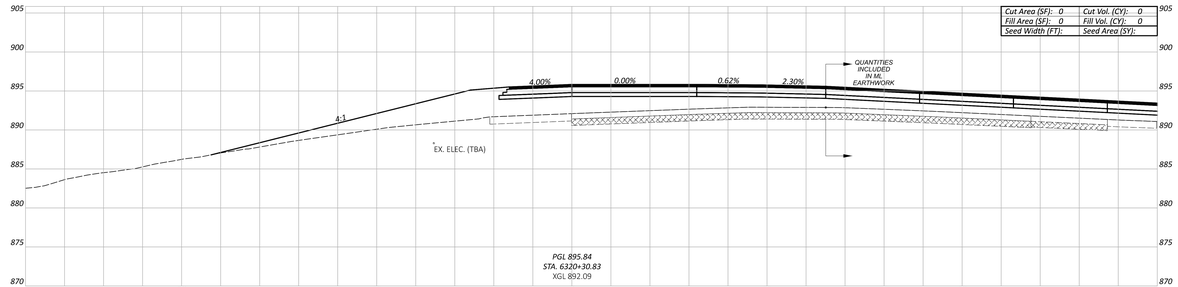

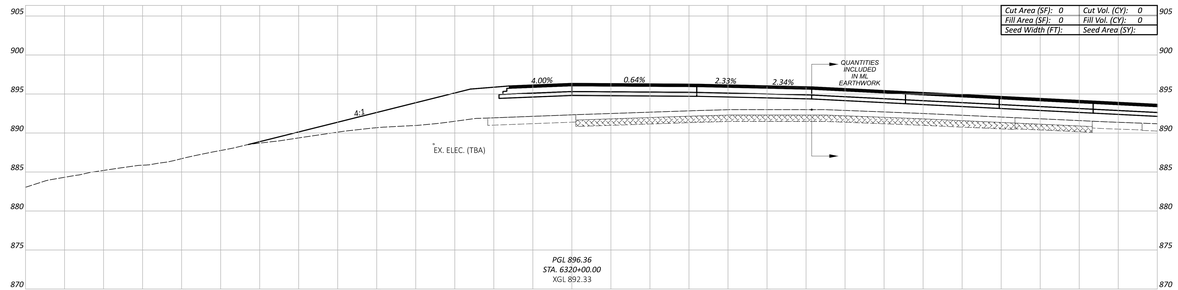

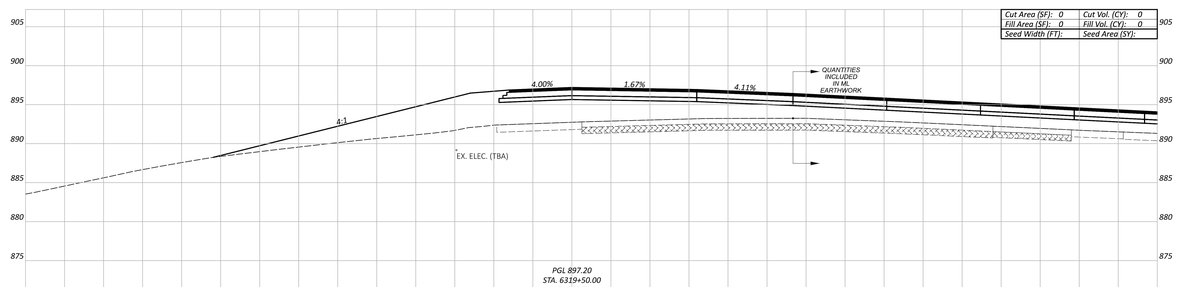

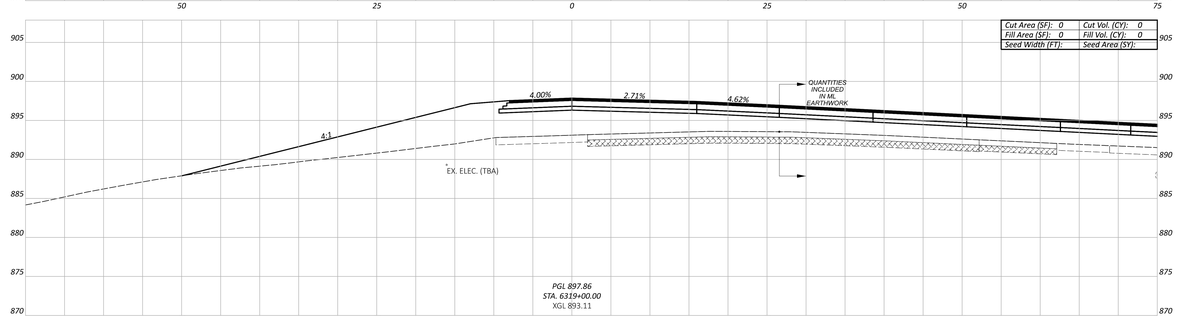

CROSS SECTIONS - SINCLAIR ROAD RAMP E
STA. 6317+89.49 TO STA. 6320+30.83

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT #
109164

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.286	618

FRA-71-19.10

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MODEL: BU_ROADWAY | ROADWAY | 0.05+93.86 | Sheet | PAPERSIZE: 66x34 in | DATE: 12/02/2026 | TIME: 11:54:34 PM | PSTBY: DPOOT_PW | F: \drive | PSTYPE: DPOOT_PW.ctb | USER: ChrisLawrence@jacobs.com | WORKSPACE: DPOOTDVG | WORKSET: 109164 | PRODUCT: OpenRoadsDesigner 24.00.00.25
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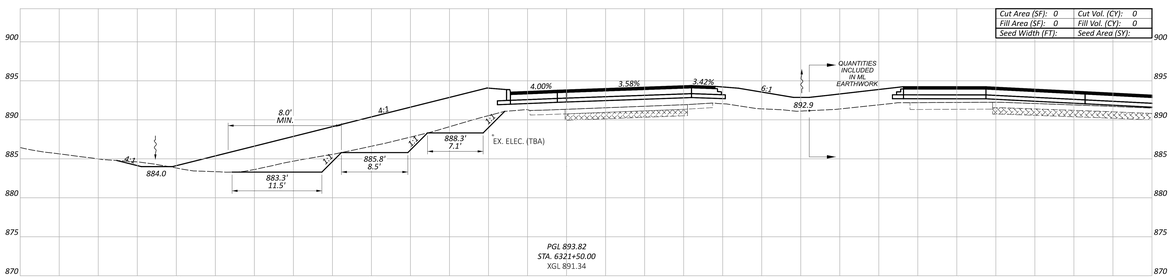
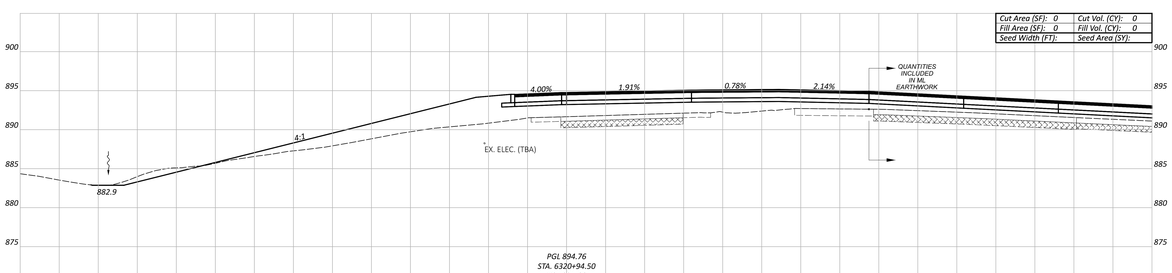
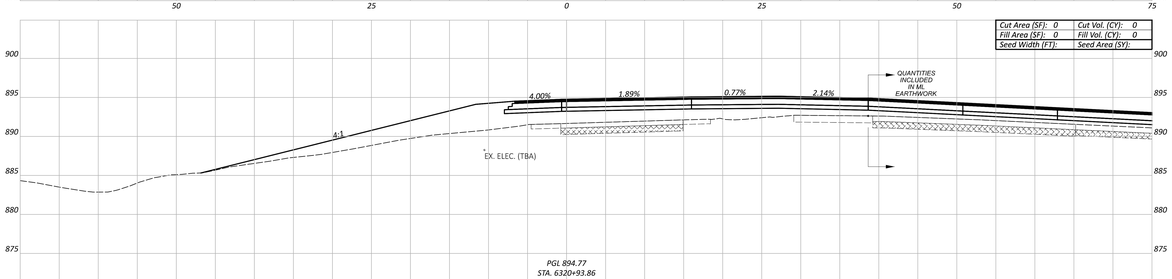
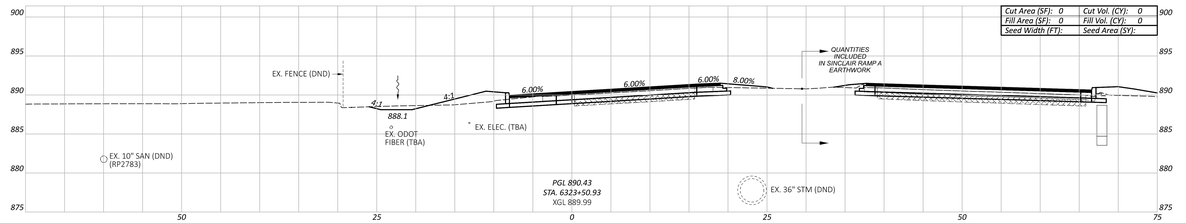
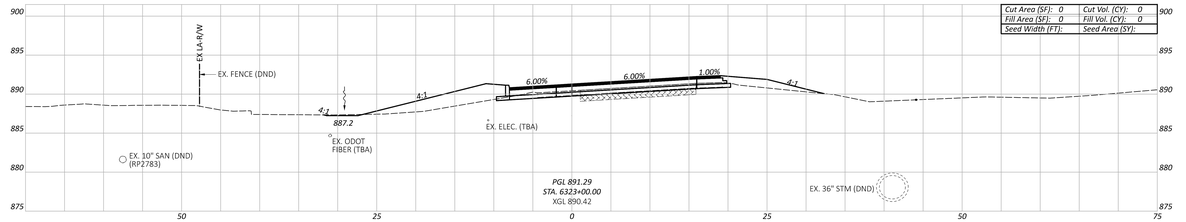
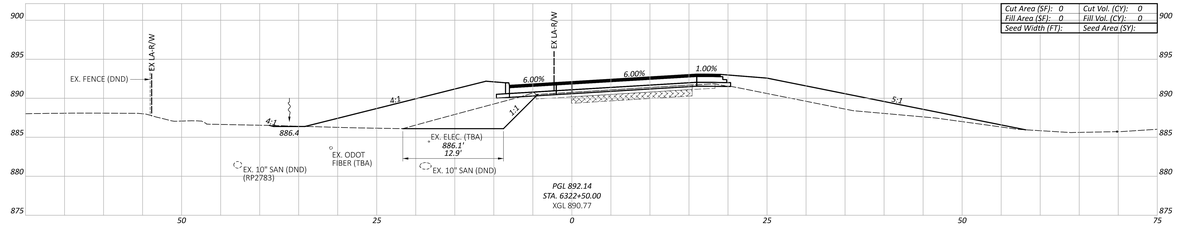


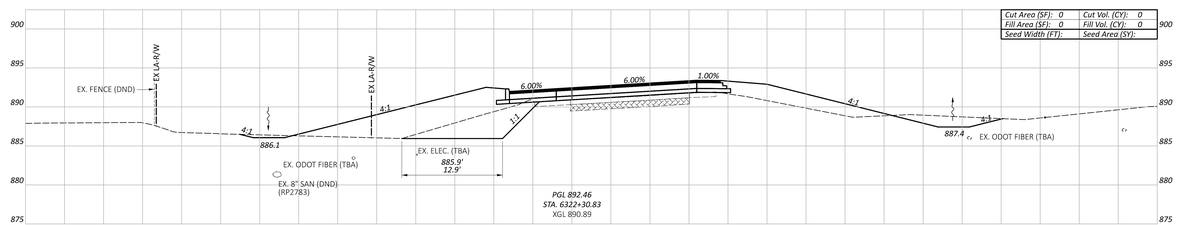


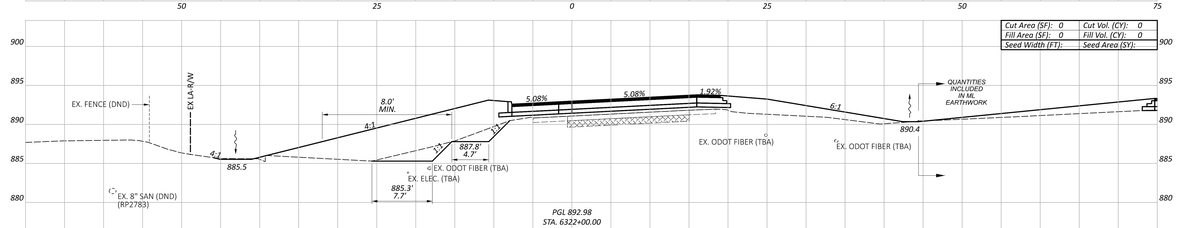










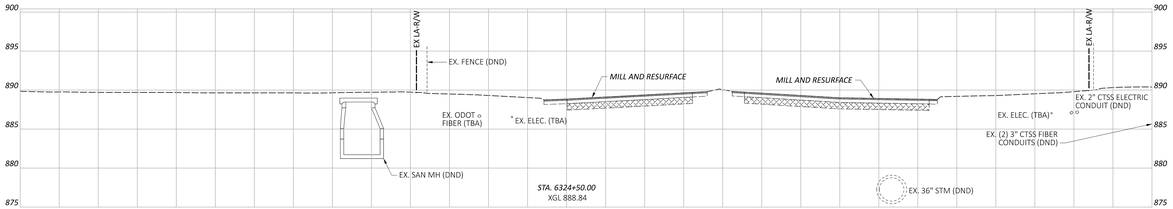


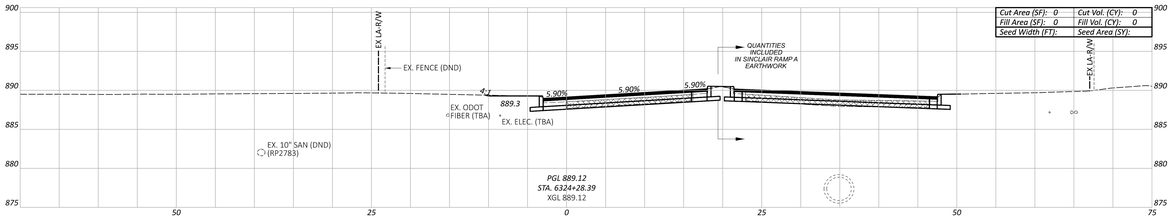
CROSS SECTIONS - SINCLAIR ROAD RAMP E
STA. 6320+93.86 TO STA. 6323+50.93

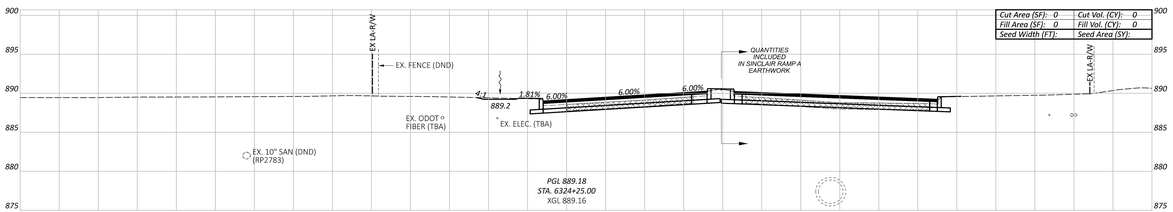
DESIGN AGENCY
Jacobs

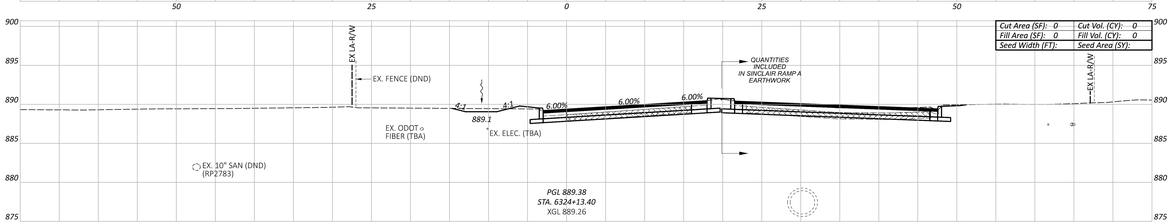
DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

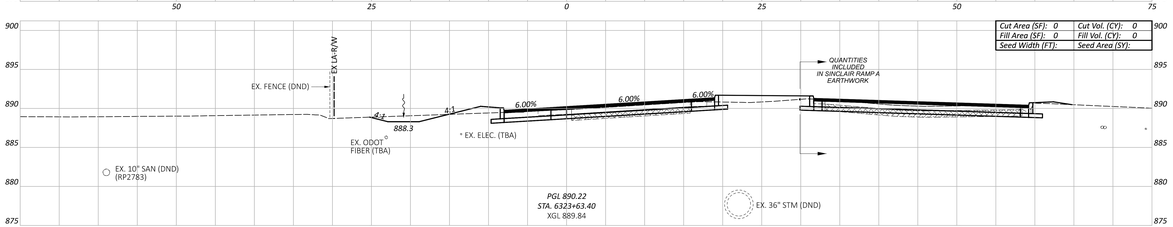
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.287	618











FRA-71-19.10

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ALL RIGHTS RESERVED. USE PURSUANT TO COMPANY INSTRUCTIONS. FILE NAME: 109164-FRA-71-19.10-CROSS SECTIONS - SINCLAIR ROAD RAMP E STA. 6323+63.40 TO STA. 6324+50.00.dgn

CROSS SECTIONS - SINCLAIR ROAD RAMP E
STA. 6323+63.40 TO STA. 6324+50.00

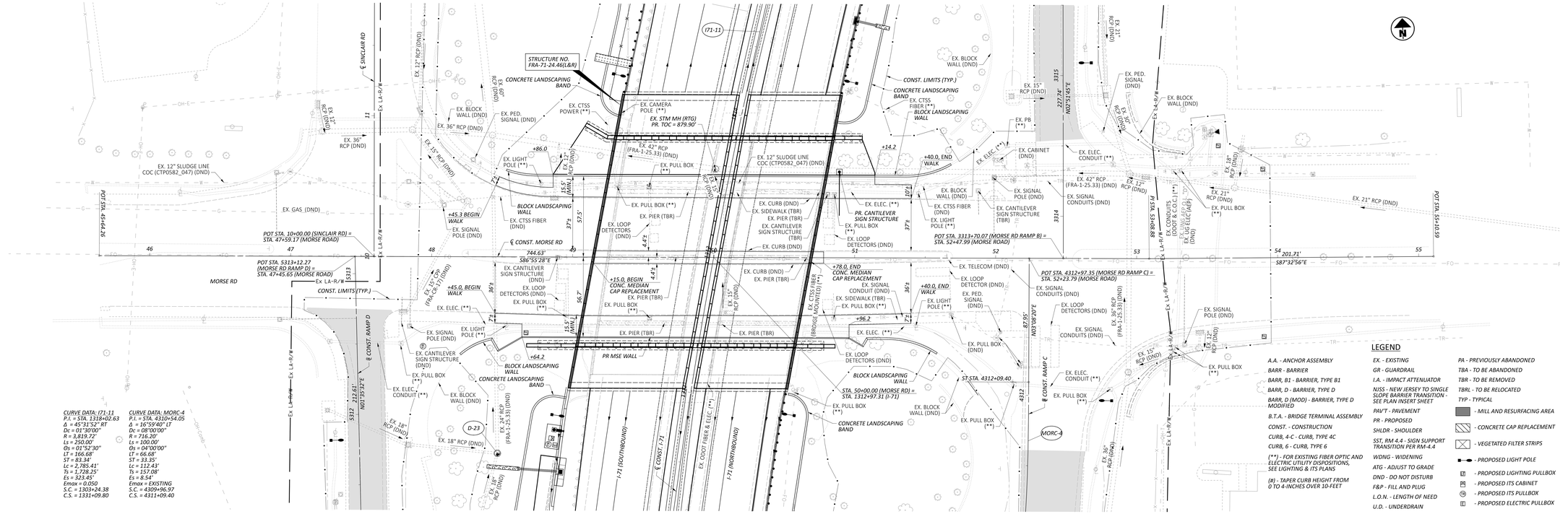
DESIGN AGENCY
Jacobs

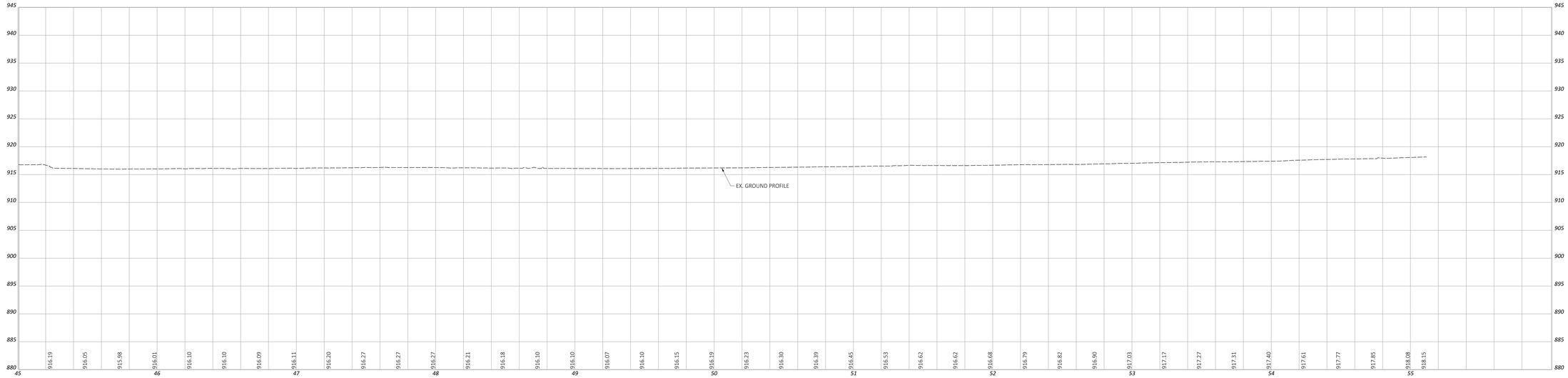
DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.288	618





LEGEND

A.A. - ANCHOR ASSEMBLY
BARR - BARRIER
BARR, B1 - BARRIER, TYPE B1
BARR, D - BARRIER, TYPE D
BARR, D (MOD) - BARRIER, TYPE D MODIFIED
B.T.A. - BRIDGE TERMINAL ASSEMBLY
CONST. - CONSTRUCTION
CURB, 4-C - CURB, TYPE 4C
CURB, 6 - CURB, TYPE 6
(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS
(#) - TAPER CURB HEIGHT FROM 0 TO 4-INCHES OVER 10-FEET

EX. - EXISTING
GR - GUARDRAIL
I.A. - IMPACT ATTENUATOR
NJSS - NEW JERSEY TO SINGLE SLOPE BARRIER TRANSITION - SEE PLAN INSERT SHEET
PAVT - PAVEMENT
PR - PROPOSED
SHLDR - SHOULDER
SST, RM 4.4 - SIGN SUPPORT TRANSITION PER RM-4.4
WDNG - WIDENING
ATG - ADJUST TO GRADE
DND - DO NOT DISTURB
F&P - FILL AND PLUG
L.O.N. - LENGTH OF NEED
U.D. - UNDERDRAIN

PA - PREVIOUSLY ABANDONED
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBRL - TO BE RELOCATED
TYP - TYPICAL

- MILL AND RESURFACING AREA
- CONCRETE CAP REPLACEMENT
- VEGETATED FILTER STRIPS
- PROPOSED LIGHT POLE
- PROPOSED ITS CABINET
- PROPOSED ITS PULLBOX
- PROPOSED ELECTRIC PULLBOX

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE MORSE ROAD

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/11/26
PROJECT ID 109164
SHEET P.289 TOTAL 618

FRA-71-19.10

MODEL: CU_MORSE Date: 04/09/2026 08:44:04 | USER: JSTOLZENBERG | STATE: NJ | PLOTTED: 3/31/2026 7:48:15 PM | PLOTBY: CHRISTOPHER JAMES | PW: 109164 | CTB: ChrisLawrence@jacobs.com WORKSPACE: CHRISTOVAD WORKSET: 109164 PRODUCT: OpenRoads Designer 24.00.02.25
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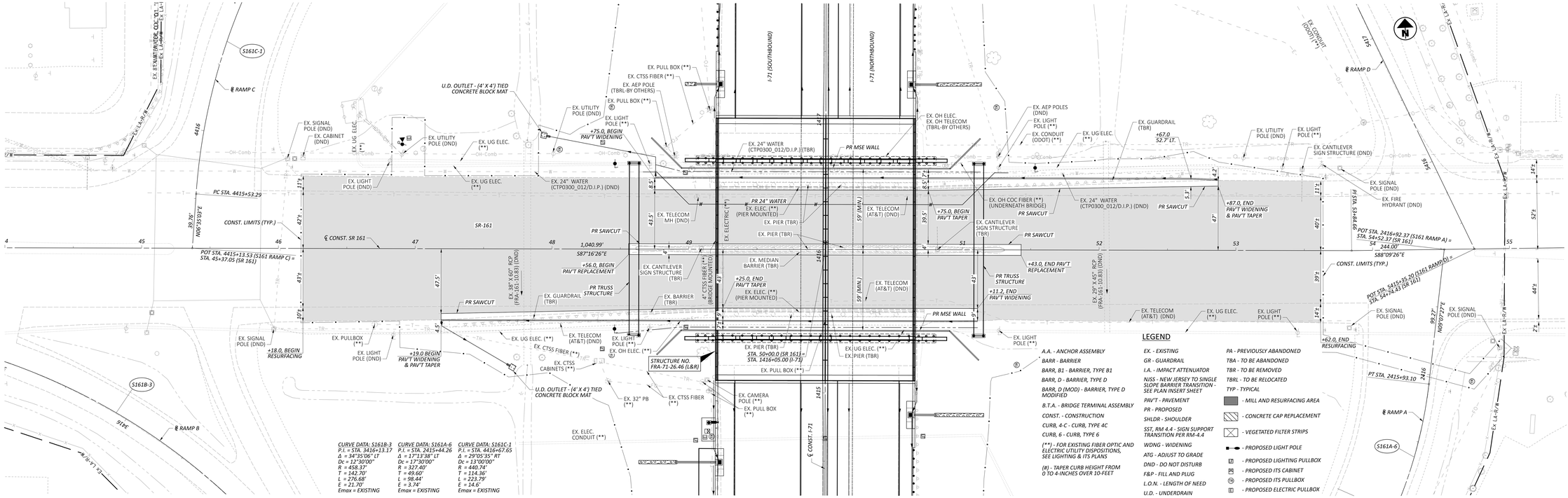

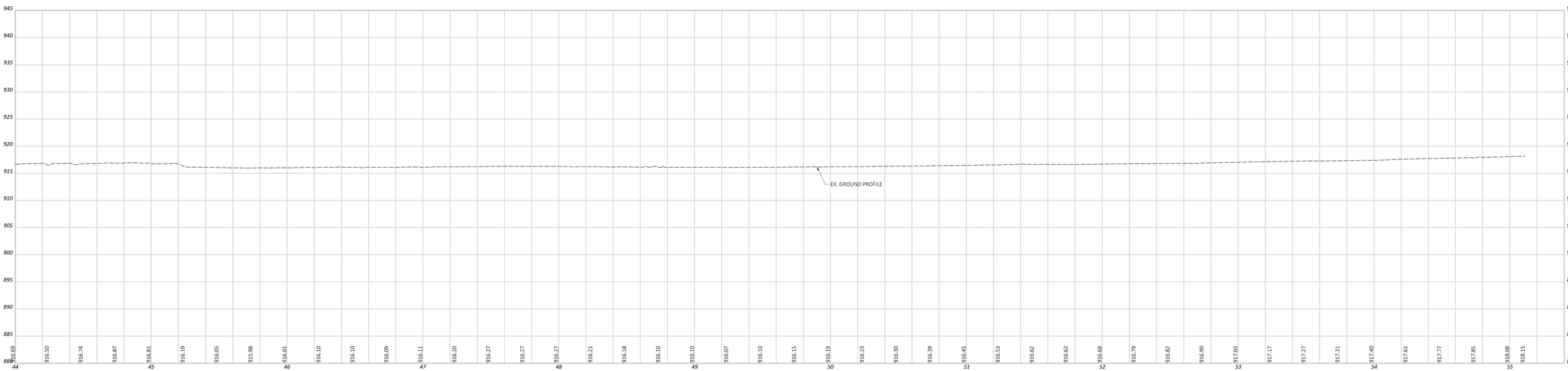

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE SR 161

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/11/26
PROJECT ID 109164
SHEET P.290 TOTAL 618

FRA-71-19.10

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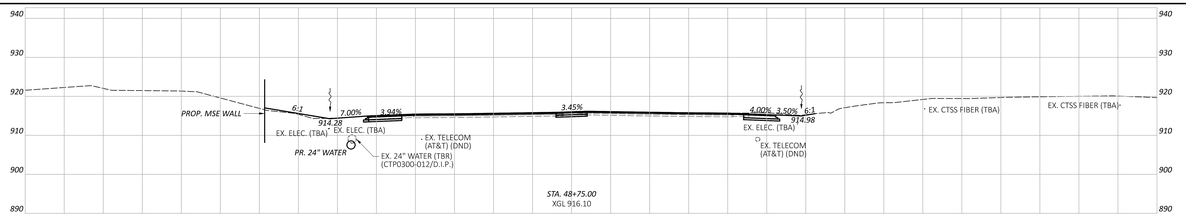
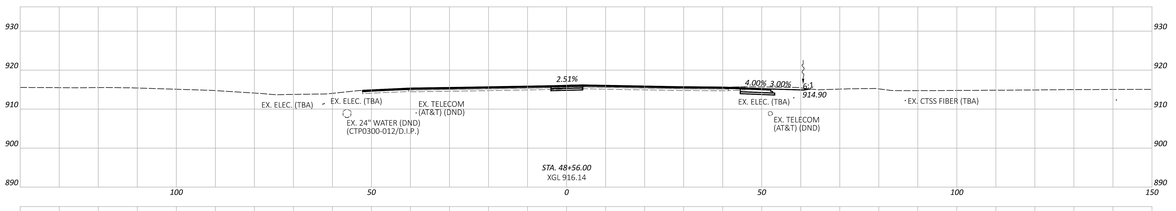
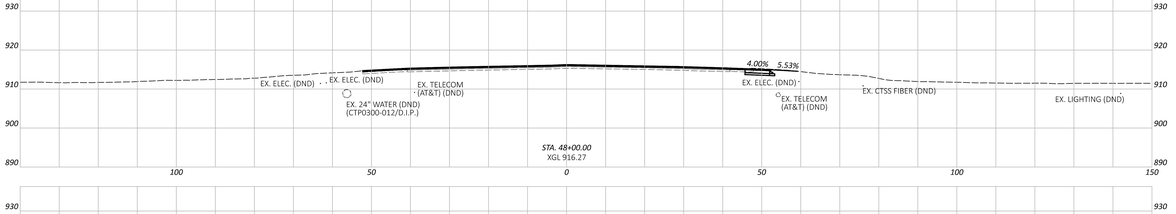
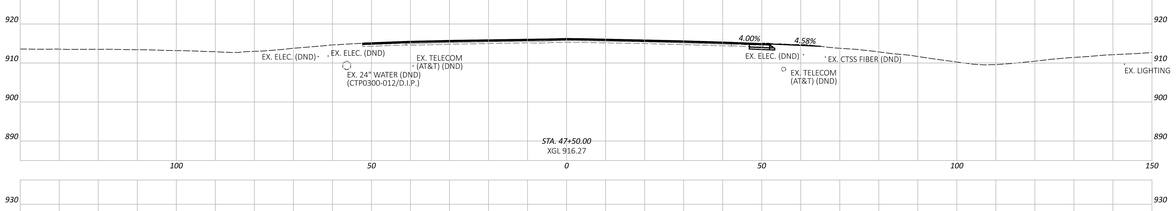
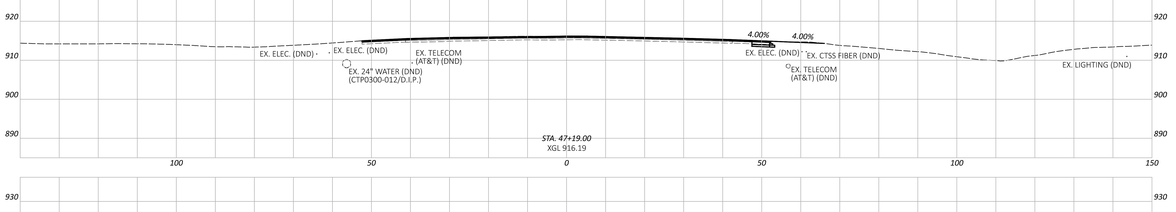
ACTIVE CONFIGURATION: Default | ACTIVE DESIGN MODEL: FRA-71-19.10.dgn | PLOT STYLE TABLE: Pentel_Color.ctb | PLOTTED BY: Christopher Lawrence | PLOTTED ON: 3/31/2026 3:15:32 PM

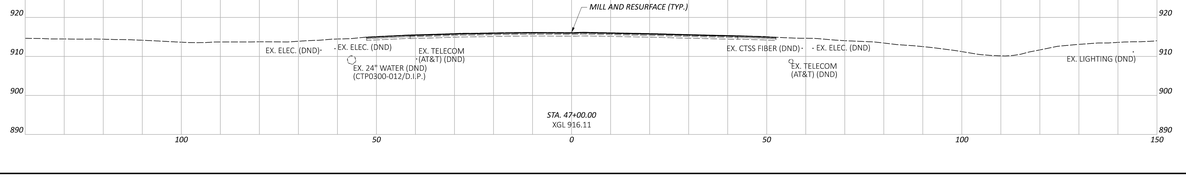


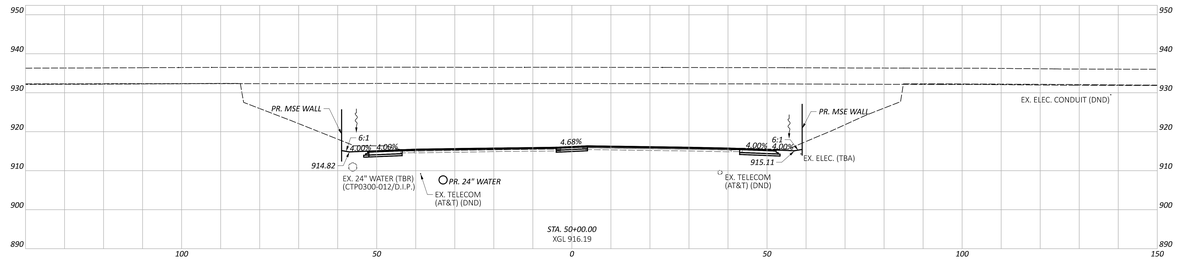


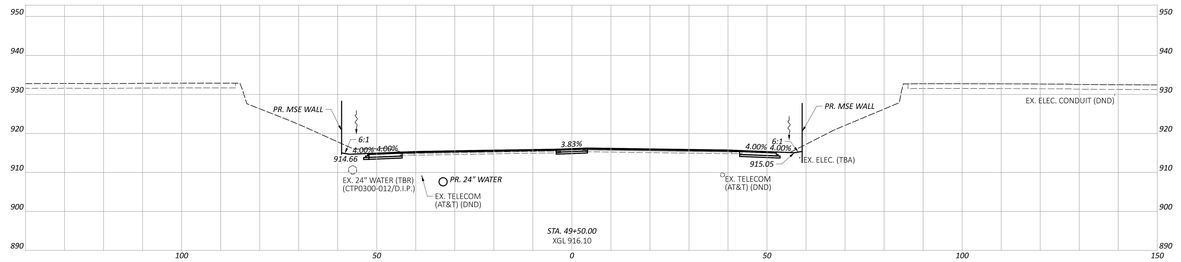


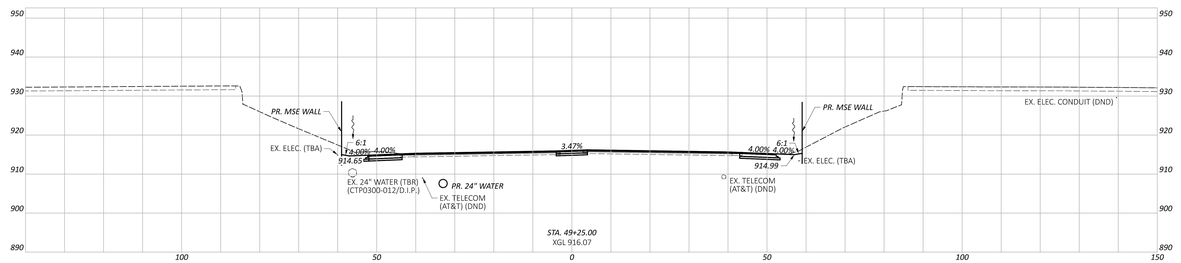


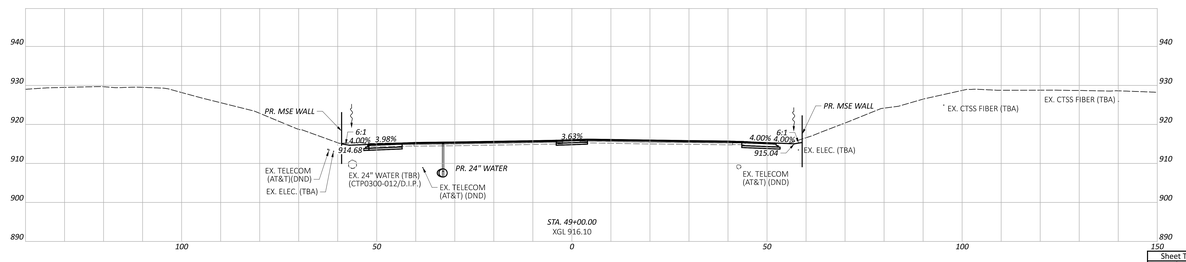












CROSS SECTIONS - SR 161
STA. 47+00.00 TO STA. 50+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/19/26
PROJECT #: 109164

Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.291	618

FRA-71-19.10

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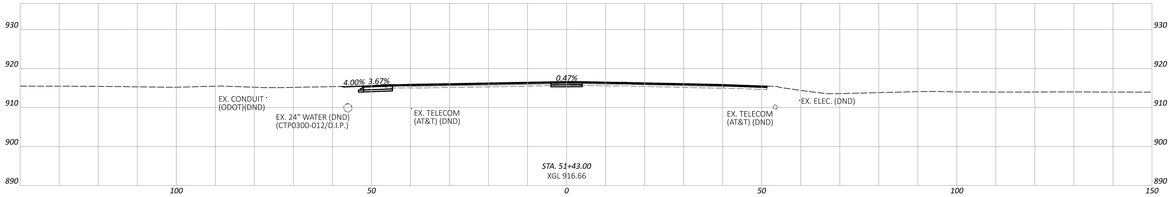

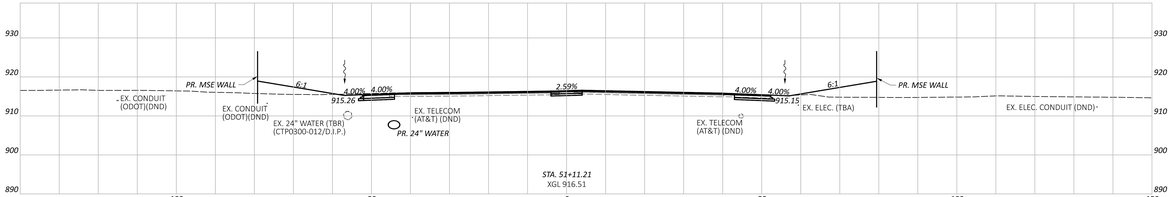

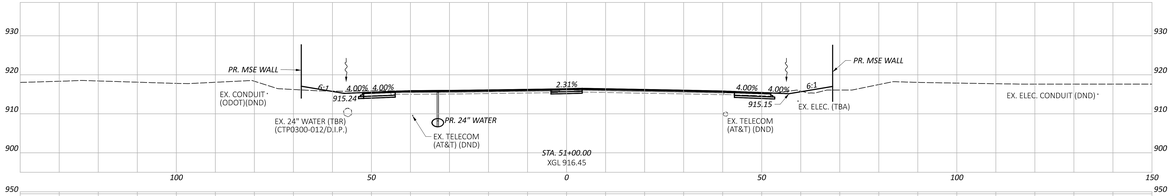

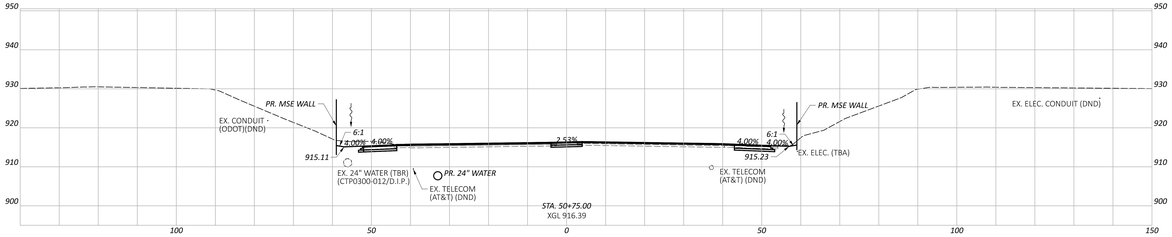

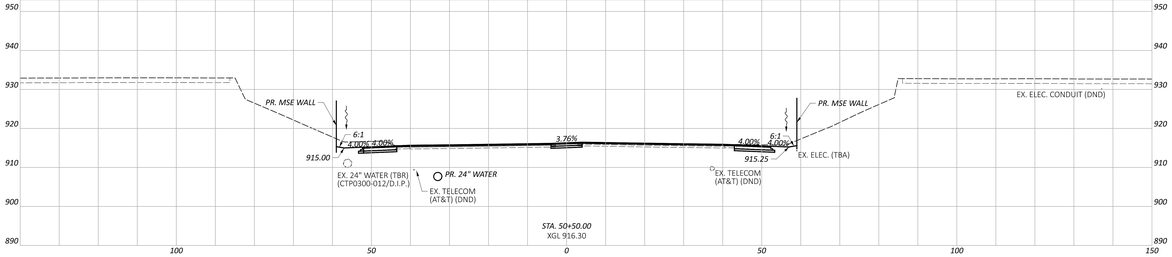

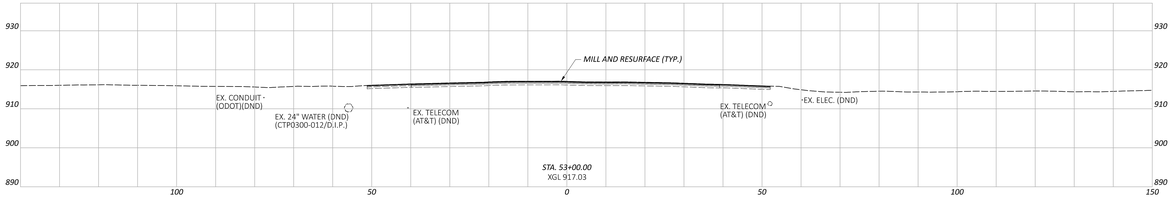

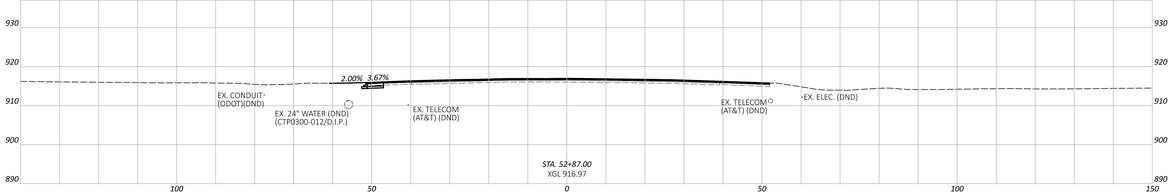

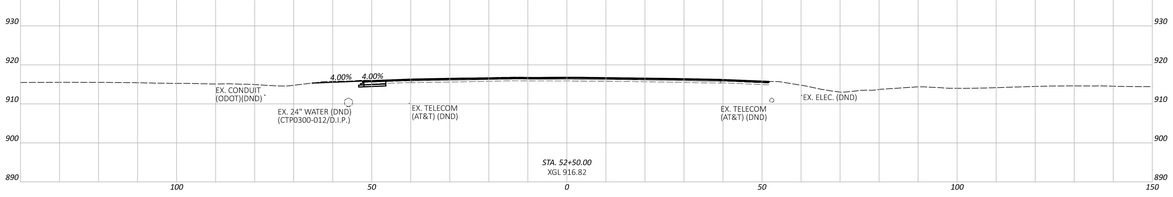

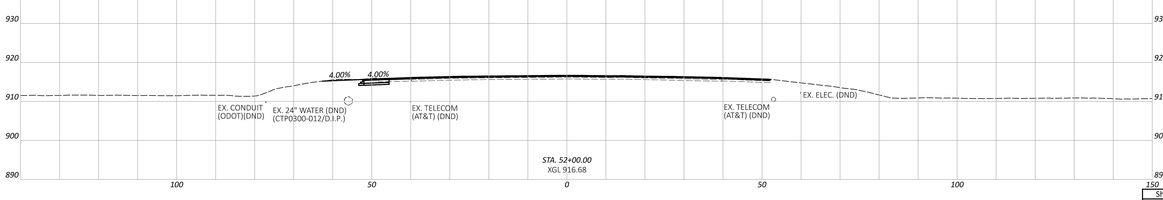

CROSS SECTIONS - SR 161
STA. 50+50.00 TO STA. 53+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/19/26

PROJECT ID
109164

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.292	618

FRA-71-19.10

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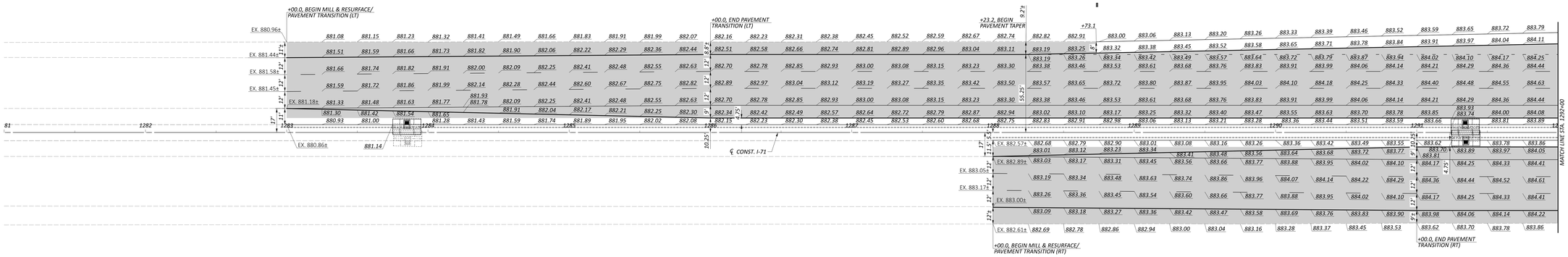

- MILL AND RESURFACING AREA

NOTE: ELEVATIONS ARE SHOWN AT 25' INTERVALS

HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1281+00.00 TO STA. 1292+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CGL

REVIEWER
MCK 02/04/26

PROJECT ID
109164

SHEET P.293 TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet 1 PAYPERIOD: 04x24 (to) 5 DATE: 3/31/2026 TIME: 11:16:44 AM PLTDEV: DWG?C_PSF_(Landg_PENTRL.DWG)?_Pen.tbl USER: ChrisLawrence1@jacobs.com WORKSPACE: CHDOT5142 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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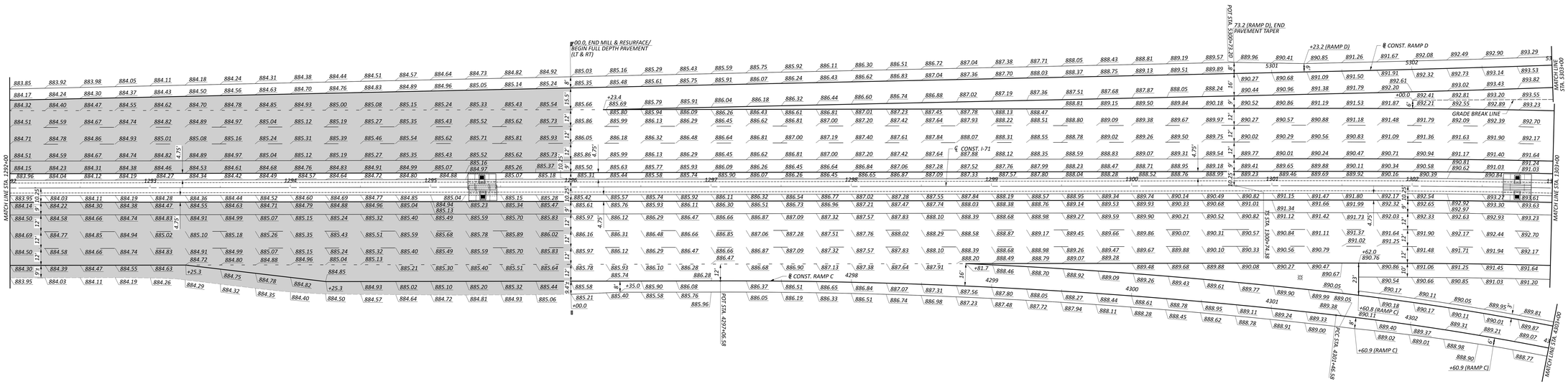

HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1292+00.00 TO STA. 1303+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.294
TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet 2 PAYREQST: 66a34 Fri 3 SAVE: 3/31/2026 TIME: 11:16:44 AM USER: CHRISTOPHER.CHRIST_PSF_CJ-HALL PENTEL CHRIST_PSF_CJ-HALL PENTEL CHRIST_PenTel USER: ChrisLawrence1@jacobs.com WORKSPACE: CHRISTOPHER.CHRIST_PSF_CJ-HALL PENTEL CHRIST_PenTel WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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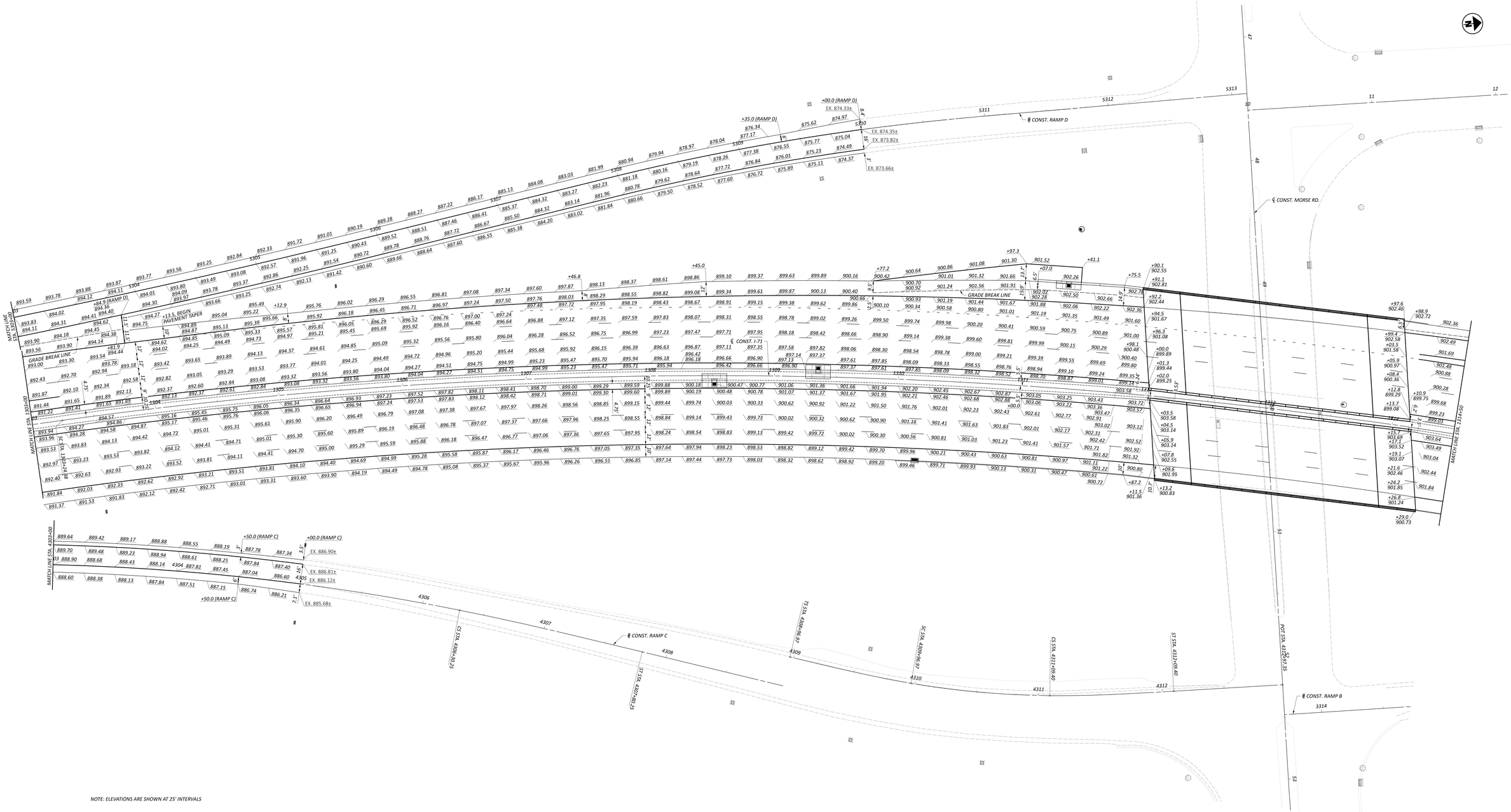

FRA-71-19.10

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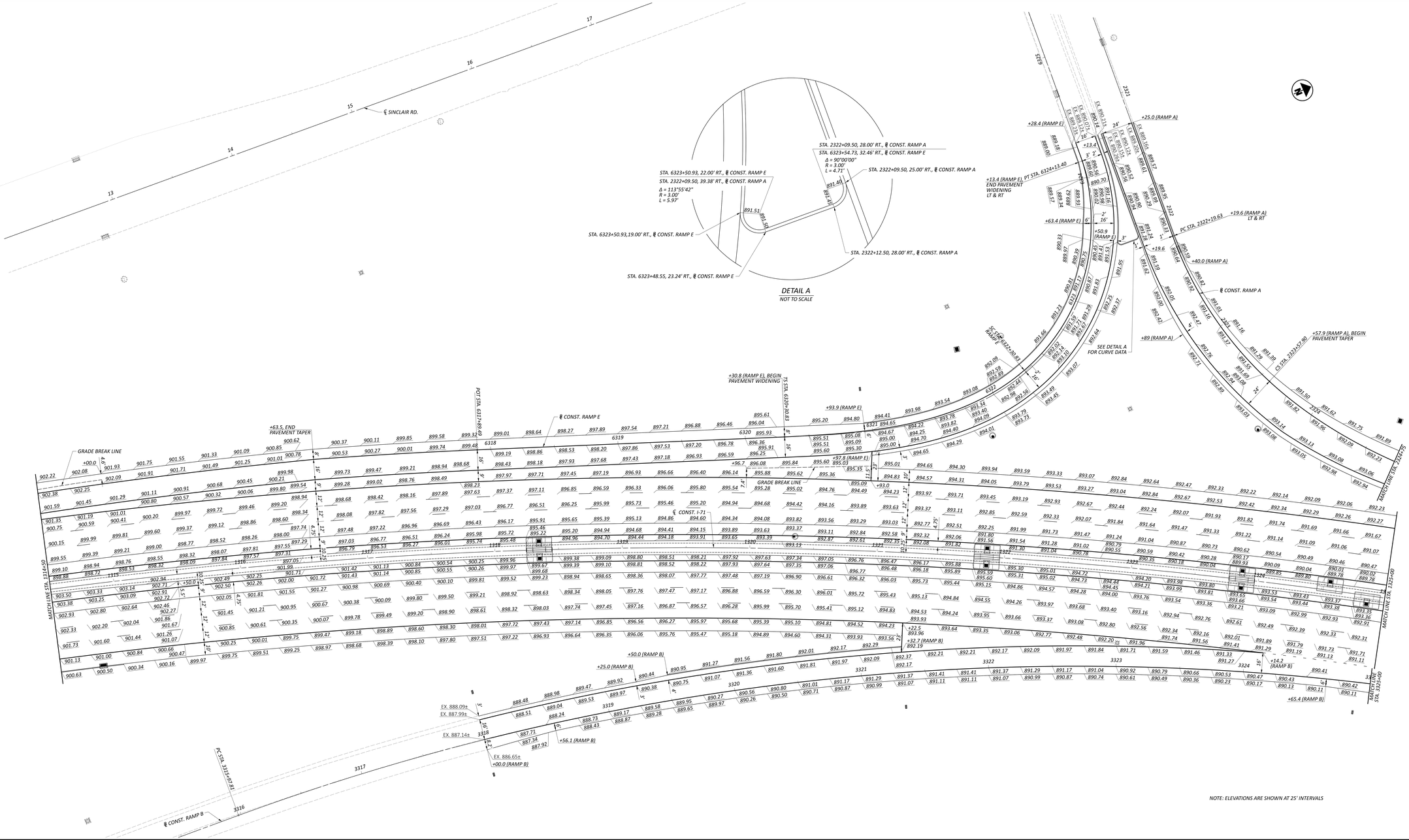
DESIGN AGENCY	Jacobs
DESIGNER	CGL
REVIEWER	MCK 02/04/26
PROJECT ID	109164
SHEET	P.295
TOTAL	618



HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1314+50.00 TO STA. 1325+00.00

DESIGN AGENCY
Jacobs

DESIGNED: CGL
REVIEWED: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.296 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet 4 PAYMENT: 6ka3-Fe1 DATE: 3/31/2026 TIME: 11:15:44 AM SYSTEM: ONDOT_PDF_2 LAYER: PENTRL ONDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: ONDOTS42 WORKSET: 109164 PRODUCT: CivilRadiodesigner 24.00.02.25
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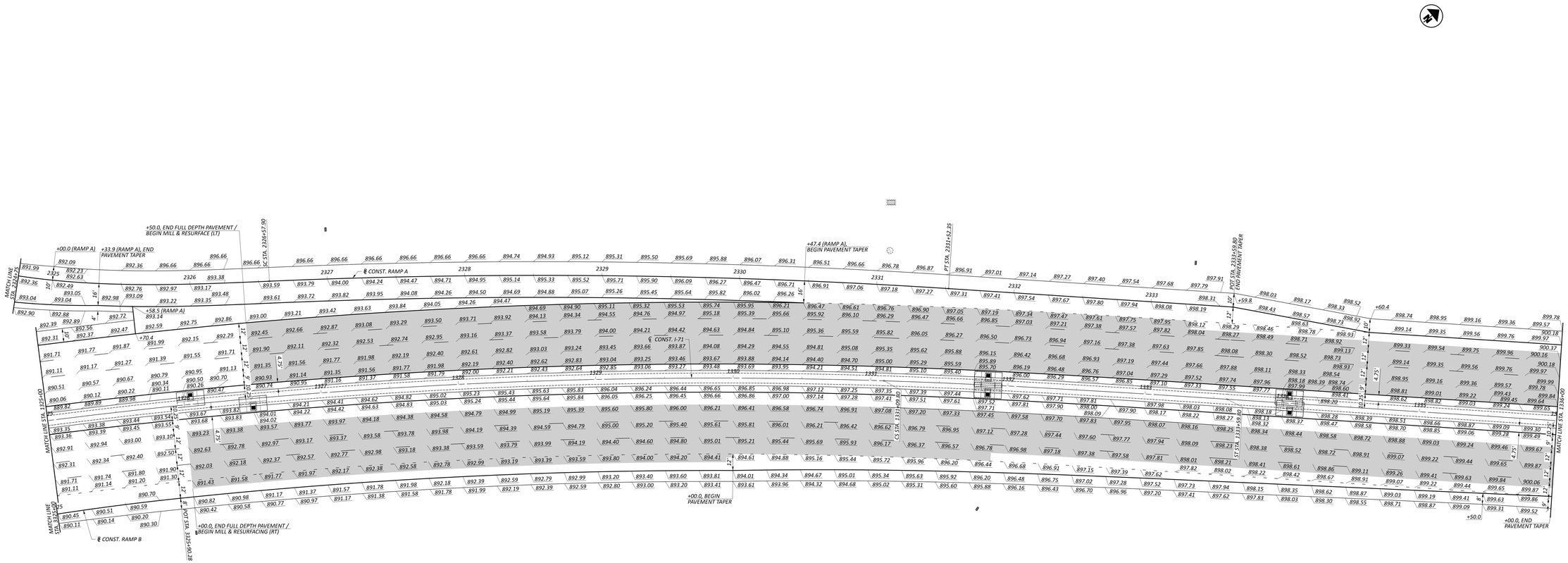

- MILL AND RESURFACING AREA

NOTE: ELEVATIONS ARE SHOWN AT 25' INTERVALS

HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1325+00.00 TO STA. 1336+00.00

DESIGN AGENCY
Jacobs

DESIGNER	CGL
REVIEWER	MCK 02/04/26
PROJECT ID	109164
SHEET	P.297
TOTAL	618

FRA-71-19.10

MODEL: CU_071 - Sheet 5 PAYMENT: 6kA34-Fri 3 DATE: 3/7/2026 TIME: 11:15:4 AM PLTDRV: DWDT_PS-F_LinkN_PENTBL: DWDT_PenTbl USER: ChrisLawrence@jacobs.com WORKPACKET: DWDTDT042 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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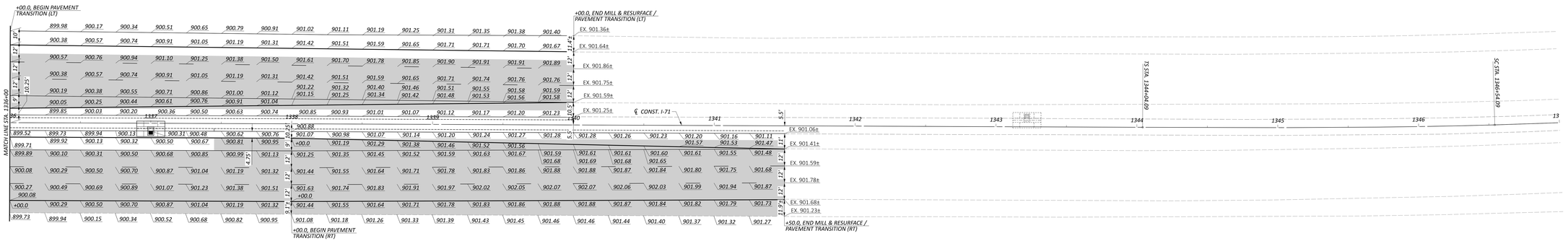

▨ - MILL AND RESURFACING AREA

NOTE: ELEVATIONS ARE SHOWN AT 25' INTERVALS

HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1336+00.00 TO STA. 1347+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.298 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet 6 PAVEMENT 66x34 (v.) DATE: 3/31/2026 TIME: 11:11:54 AM USER: CHRIS CHROST, PE# 27-24426, PENTEL CHROST, PE# 88 USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHROST0142 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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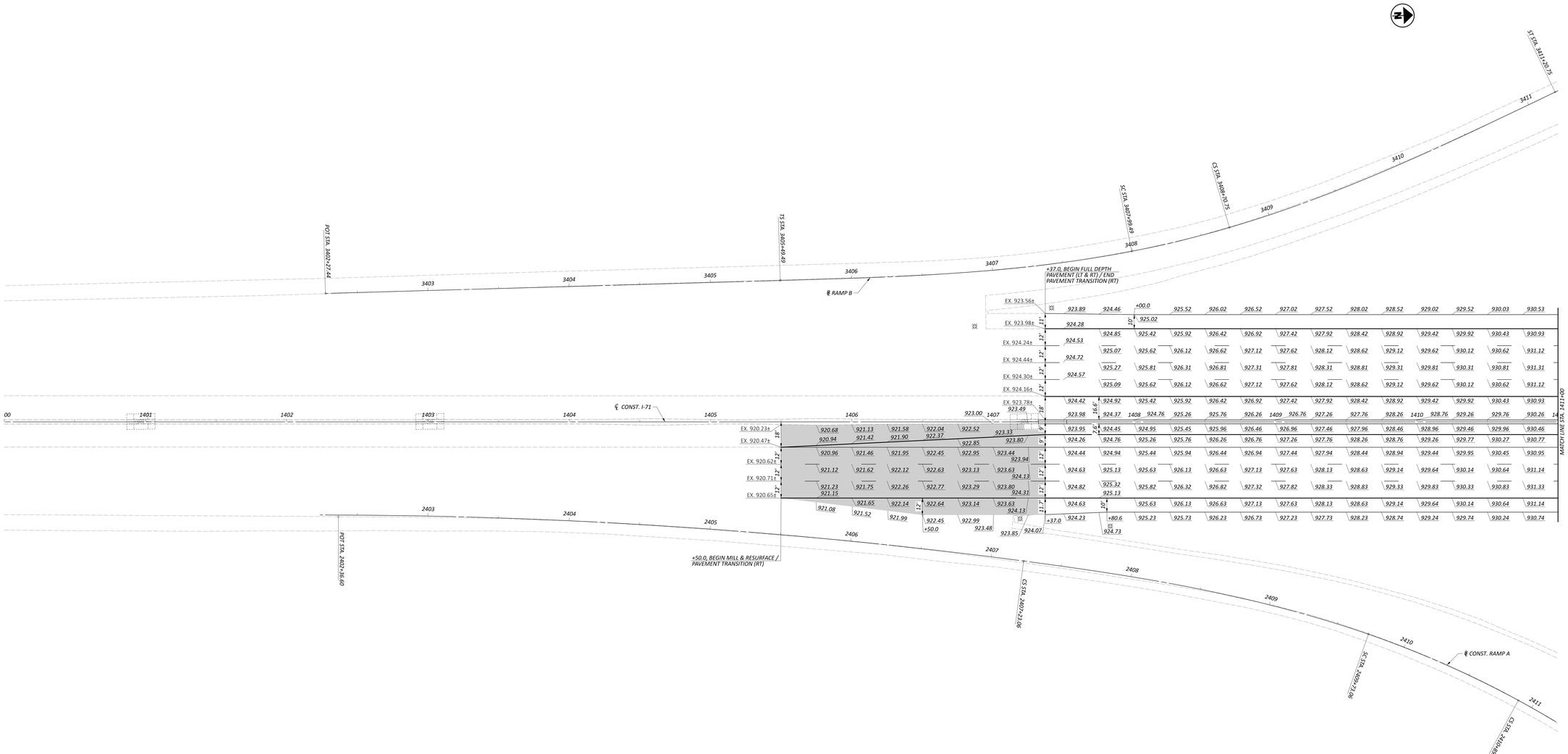

HORIZONTAL SCALE IN FEET
0 10 20 40

PAVEMENT DETAILS - I-71
STA. 1400+00.00 TO STA. 1411+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.299 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet 7 PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 11:15:59 AM BYDIR: ONDOT_PSF_I-Unit_PENTBL: ONDOT_PenSet USER: ChrisLawrence1@jacobs.com WORKSPACE: ONDOTSUS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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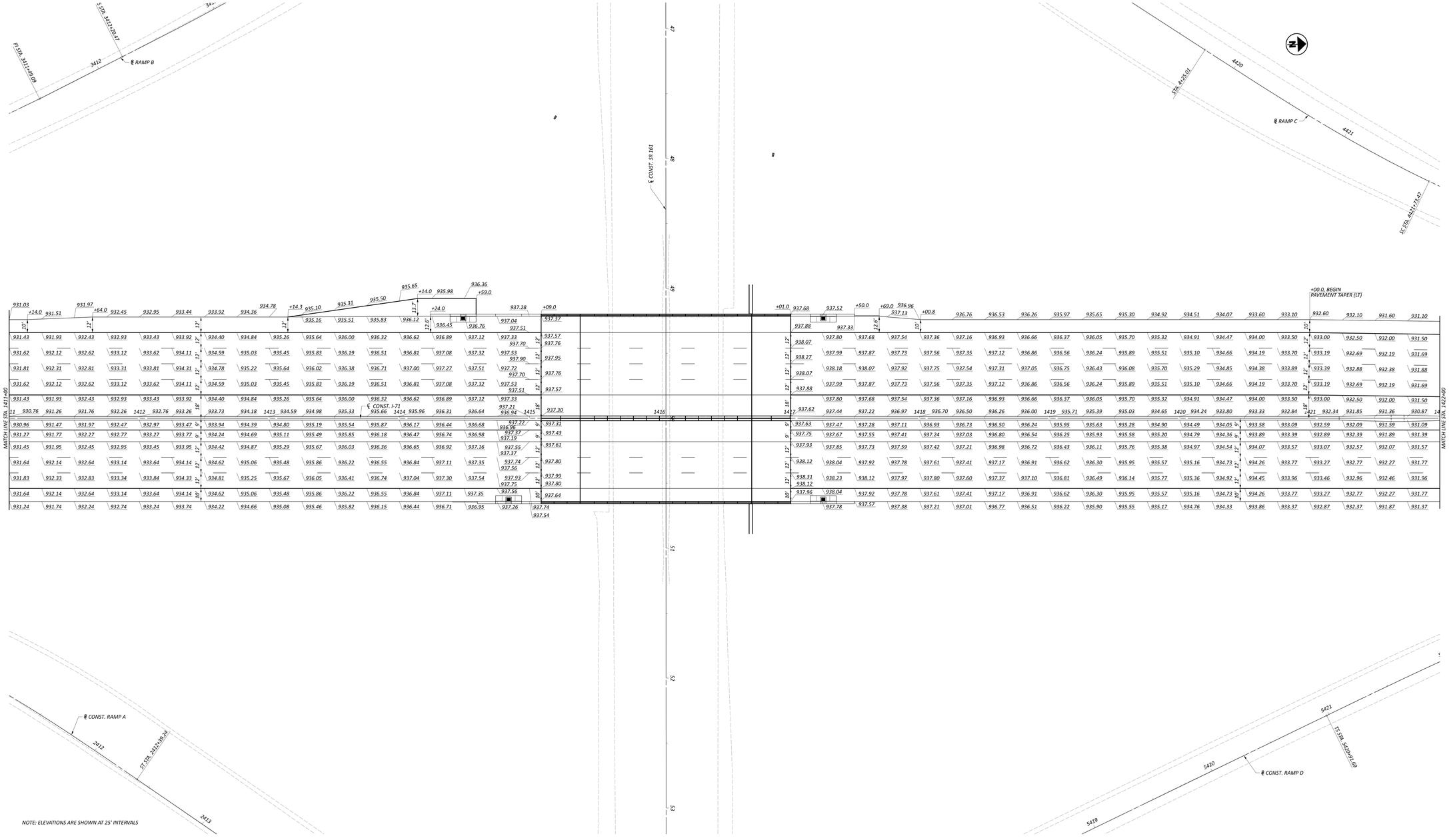


HORIZONTAL SCALE IN FEET
0 10 20 40

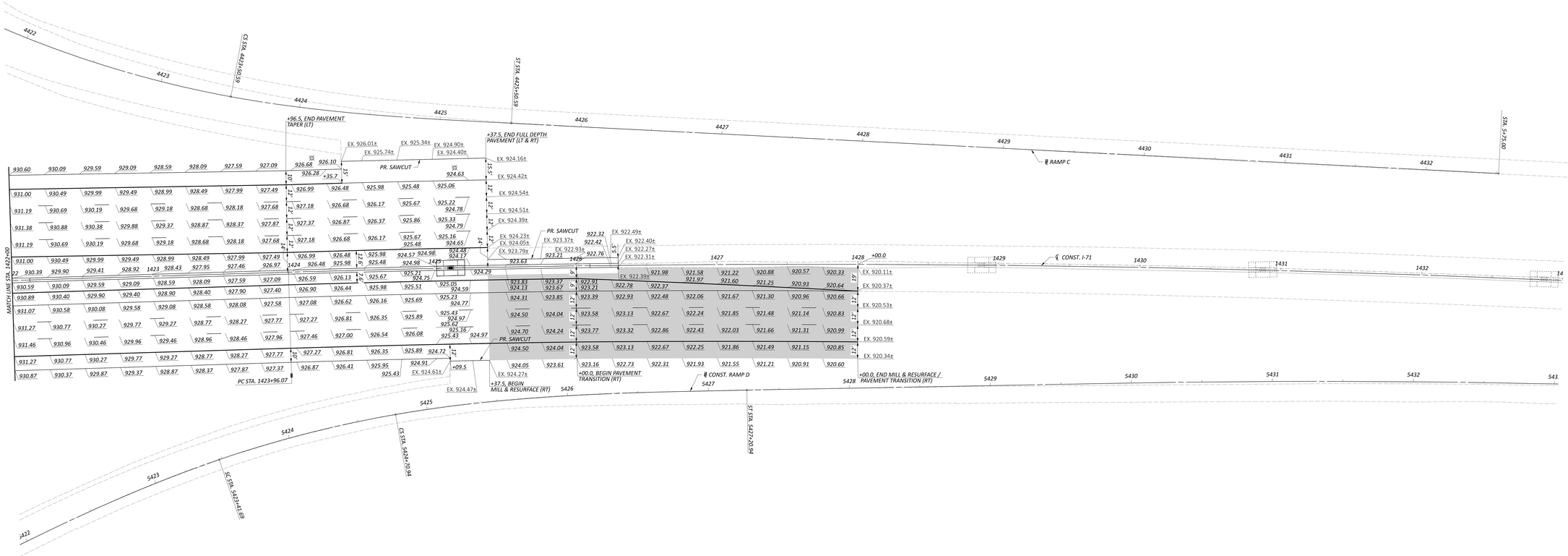
PAVEMENT DETAILS - I-71
STA. 1411+00.00 TO STA. 1422+00.00

FRA-71-19.10

MODEL: CU_071 - Sheet II PAYSHEET: 66x34 (in.) DATE: 3/31/2026 TIME: 11:10:00 AM SYSTEM: OHDOT_PSF_I-LHSA_PENTRU_OHDOT_Plan.ctb USER: ChrisLawrence1@jacobs.com WORKSPACE: OHDOTSHEETS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
DATA REFERENCE FILE(S): C:\Projects\OHDOT\109164\Design\Roadway\Plan Production\Pavement Plan\Pavement Plan.dgn

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.300 TOTAL: 618



HORIZONTAL SCALE IN FEET
0 10 20 40

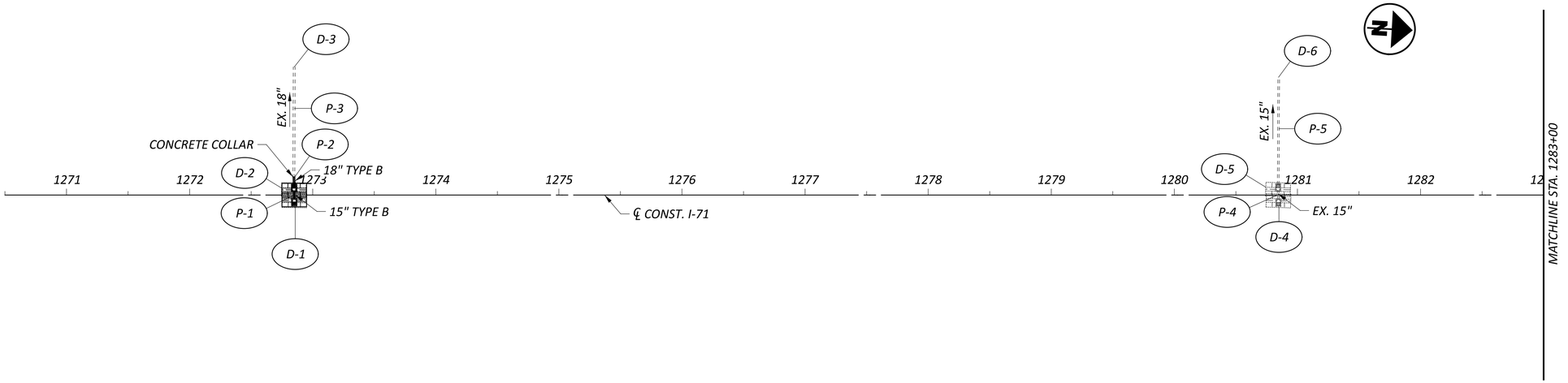
PAVEMENT DETAILS - I-71
STA. 1422+00.00 TO STA. 1433+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CGL
REVIEWER: MCK 02/04/26
PROJECT ID: 109164
SHEET: P.301 TOTAL: 618

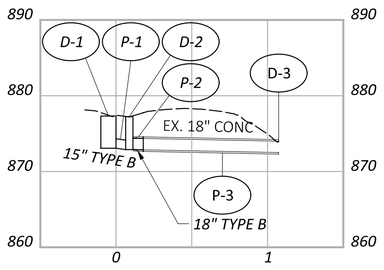
FRA-71-19.10

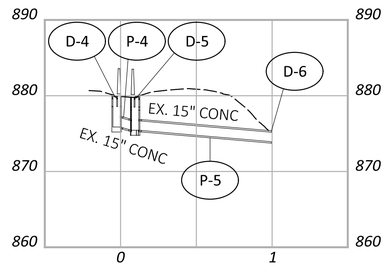
MODEL: CU_071 - Sheet 9 PAYMENT: 6&4+0+1 DATE: 3/31/2026 TIME: 11:10:04 AM USER: CHRIS.GROOT_PSF_FJ-HNTB_PENTEL.GROOT_PenTel USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHOOTS142 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DATA IN THIS PLAN SET IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE STATE OF OHIO AND ITS REPRESENTATIVES MAKE NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OF THE DATA CONTAINED HEREIN.



DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-1		11.0 ft	15"	TYPE B	1.64 %	D-1	873.07 ft	D-2	872.89 ft	PROPOSED (REMOVE EXISTING)
P-2		8.0 ft	18"	TYPE B	0.39 %	D-2	872.89 ft	CONC. COLLAR	±872.86 ft	PROPOSED (REMOVE EXISTING)
P-3		91.0 ft	18"	EX. CONC	0.39 %	CONC. COLLAR	±872.86 ft	D-3	±872.50 ft	DO NOT DISTURB
P-4		13.0 ft	15"	EX. CONC	3.31 %	D-4	±875.87 ft	D-5	±875.44 ft	DO NOT DISTURB
P-5		90.0 ft	15"	EX. CONC	1.68 %	D-5	±875.44 ft	D-6	±873.93 ft	DO NOT DISTURB

DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-1	℄ CONST. I-71	1272+85.00	6.75 ft	RT	I-3B50, APP	877.32 ft	873.07 ft	(OUT) P-1 E 873.07	PROPOSED (REMOVE EXISTING)
D-2	℄ CONST. I-71	1272+85.00	6.75 ft	LT	I-3B50, APP	877.24 ft	872.89 ft	(IN) P-1 E 872.89, (OUT) P-2 E 872.89	PROPOSED (REMOVE EXISTING)
D-3	℄ CONST. I-71	1272+84.98	104.20 ft	LT	EX. HW	N/A	±872.50 ft	(OUT) P-3 E ±872.5	DO NOT DISTURB
D-4	℄ CONST. I-71	1280+84.50	7.11 ft	RT	EX. I-3B	±879.92 ft	±875.87 ft	(OUT) P-4 E ±875.87	DO NOT DISTURB
D-5	℄ CONST. I-71	1280+84.34	6.91 ft	LT	EX. I-3B	±879.84 ft	±875.44 ft	(IN) P-4 E ±875.44, (OUT) P-5 E ±875.44	DO NOT DISTURB
D-6	℄ CONST. I-71	1280+84.77	96.09 ft	LT	EX. HW	N/A	±873.93 ft	(OUT) P-5 E ±873.93	DO NOT DISTURB





HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1270+50.00 TO STA. 1283+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.302 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 1 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:23 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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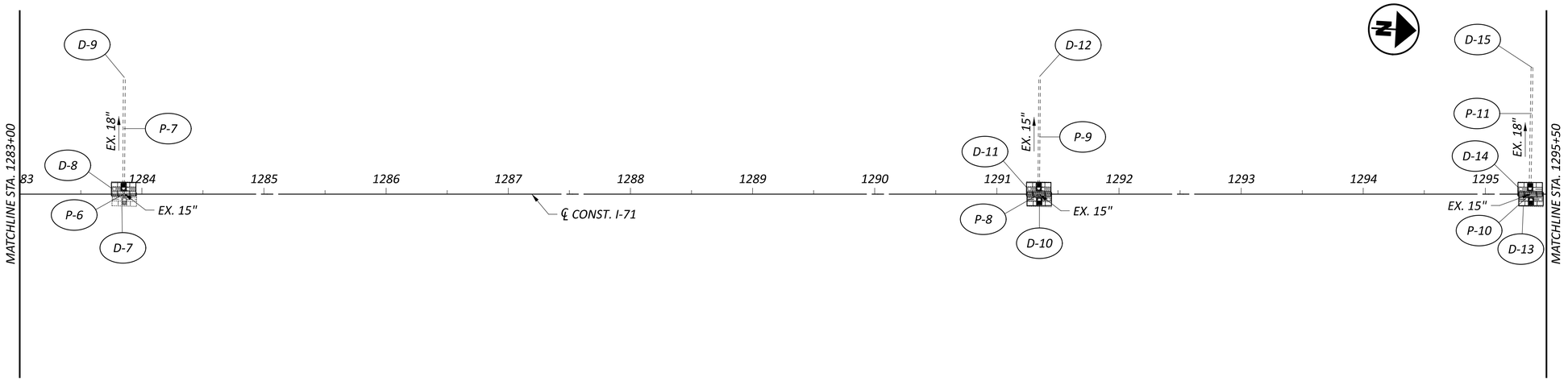
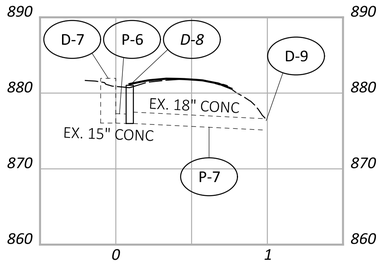
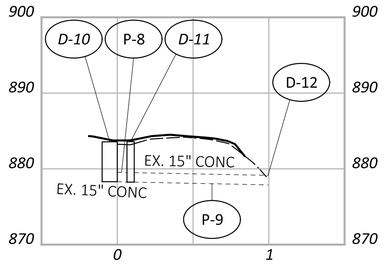
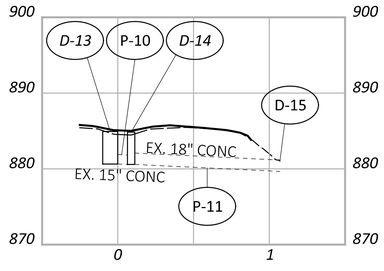


DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-6		13.0 ft	15"	EX. CONC	0.42 %	D-7	±876.04 ft	D-8	±875.99 ft	DO NOT DISTURB
P-7		90.0 ft	18"	EX. CONC	0.96 %	D-8	±875.99 ft	D-9	±875.12 ft	DO NOT DISTURB
P-8		13.0 ft	15"	EX. CONC	0.46 %	D-10	±878.31 ft	D-11	±878.25 ft	DO NOT DISTURB
P-9		90.0 ft	15"	EX. CONC	0.40 %	D-11	±878.25 ft	D-12	±877.89 ft	DO NOT DISTURB
P-10		13.0 ft	15"	EX. CONC	0.42 %	D-13	±880.64 ft	D-14	±880.59 ft	DO NOT DISTURB
P-11		98.0 ft	18"	EX. CONC	0.94 %	D-14	±880.59 ft	D-15	±879.67 ft	DO NOT DISTURB

DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-7	℄ CONST. I-71	1283+85.61	7.20 ft	RT	EX. I-3B	±880.79 ft	±876.04 ft	(OUT) P-6 E ±876.04	DO NOT DISTURB
D-8	℄ CONST. I-71	1283+85.08	6.75 ft	LT	I-3B1, RTG	881.03 ft	±875.99 ft	(IN) P-6 E ±875.99, (OUT) P-7 E ±875.99	RECONSTRUCT TO GRADE
D-9	℄ CONST. I-71	1283+85.67	95.64 ft	LT	EX. HW	N/A	±875.12 ft	(IN) P-7 E ±875.12	DO NOT DISTURB
D-10	℄ CONST. I-71	1291+34.72	6.75 ft	RT	I-3B1, RTG	883.58 ft	±878.31 ft	(OUT) P-8 E ±878.31	RECONSTRUCT TO GRADE
D-11	℄ CONST. I-71	1291+34.32	6.75 ft	LT	I-3B1, RTG	883.60 ft	±878.25 ft	(IN) P-8 E ±878.25, (OUT) P-9 E ±878.25	RECONSTRUCT TO GRADE
D-12	℄ CONST. I-71	1291+34.98	96.36 ft	LT	EX. HW	N/A	±877.89 ft	(IN) P-9 E ±877.89	DO NOT DISTURB
D-13	℄ CONST. I-71	1295+37.33	6.75 ft	RT	I-3B1, RTG	884.93 ft	±880.64 ft	(OUT) P-10 E ±880.64	RECONSTRUCT TO GRADE
D-14	℄ CONST. I-71	1295+36.64	6.75 ft	LT	I-3B1, RTG	884.85 ft	±880.59 ft	(IN) P-10 E ±880.59, (OUT) P-11 E ±880.59	RECONSTRUCT TO GRADE
D-15	℄ CONST. I-71	1295+38.15	103.70 ft	LT	EX. HW	N/A	±879.67 ft	(IN) P-11 E ±879.67	DO NOT DISTURB







HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1283+00.00 TO STA. 1295+50.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.303 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 2 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:29 AM PLTDRV: OHDOT_PDF_Ex.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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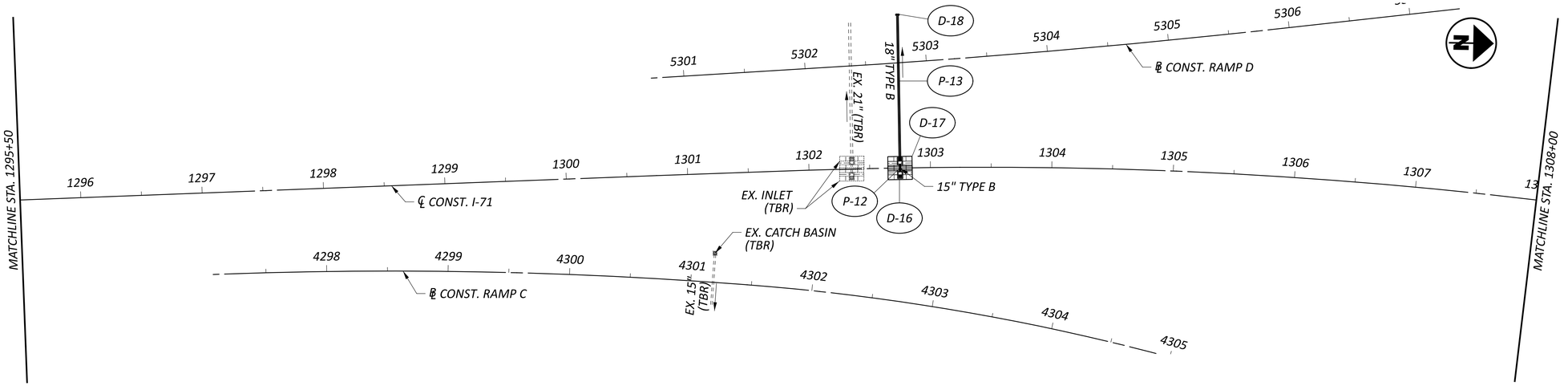
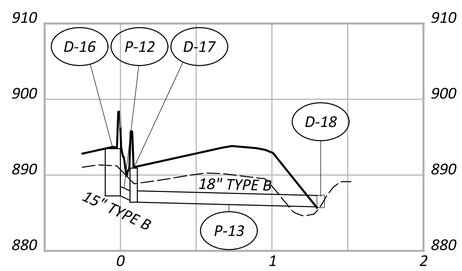


DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-12		13.0 ft	15"	TYPE B	4.54 %	D-16	887.25 ft	D-17	886.66 ft	PROPOSED
P-13		121.0 ft	18"	TYPE B	0.50 %	D-17	886.41 ft	D-18	885.81 ft	PROPOSED

DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-16	℄ CONST. I-71	1302+75.00	6.75 ft	RT	I-3B1, APP	893.49 ft	887.25 ft	(OUT) P-12 E 887.25	PROPOSED
D-17	℄ CONST. I-71	1302+75.00	6.75 ft	LT	I-3B1, APP	890.92 ft	886.41 ft	(IN) P-12 E 886.66, (OUT) P-13 E 886.41	PROPOSED
D-18	℄ CONST. I-71	1302+75.00	126.56 ft	LT	HW-2.1	N/A	885.81 ft	(IN) P-13 E 885.81	PROPOSED



HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1295+50.00 TO STA. 1308+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.304 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 3 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:30 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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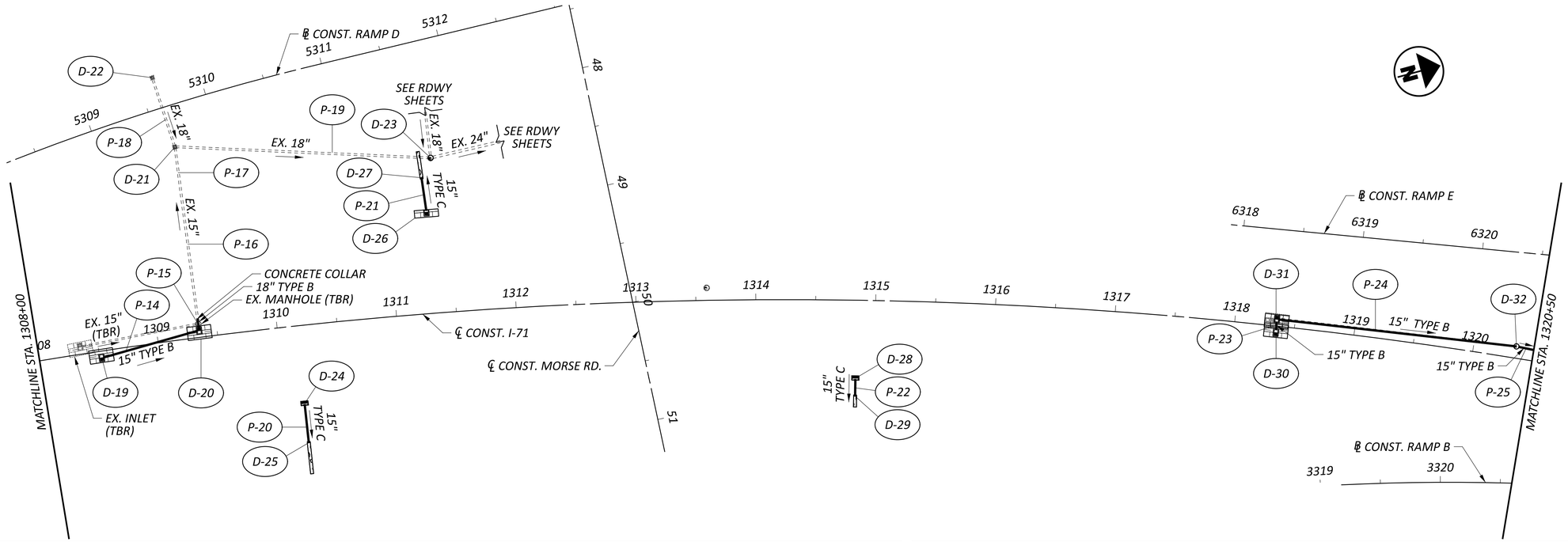
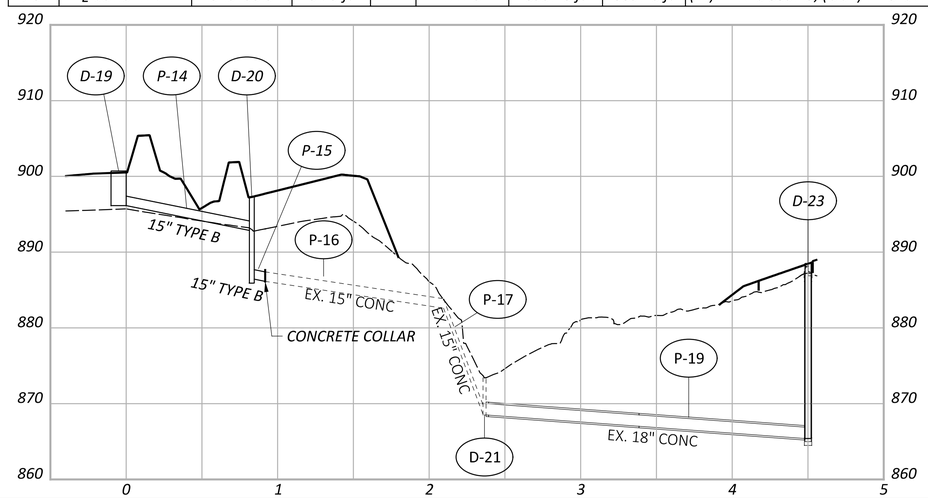
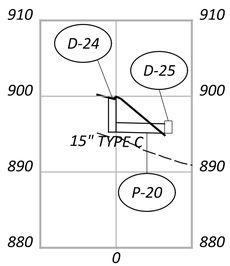
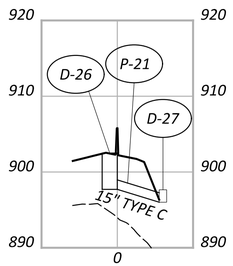


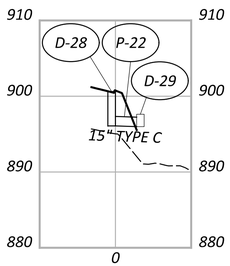
DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-19	℄ CONST. I-71	1308+51.58	6.75 ft	RT	I-3B1, APP	900.39 ft	896.14 ft	(OUT) P-14 S 896.14	PROPOSED
D-20	℄ CONST. I-71	1309+35.18	6.75 ft	LT	I-3B1, APP	897.11 ft	886.44 ft	(IN) P-14 S 892.86, (OUT) P-15 E 886.44	PROPOSED
D-21	℄ CONST. RAMP D	5309+62.38	34.52 ft	RT	EX. CB-2-2B	±872.76 ft	±868.51 ft	(IN) P-18 W ±868.56, (IN) P-17 E ±868.58, (OUT) P-19 S ±868.51	DO NOT DISTURB
D-22	℄ CONST. RAMP D	5309+61.86	26.31 ft	LT	EX. CB-2-2B	±873.46 ft	±869.61 ft	(OUT) P-18 W ±869.61	DO NOT DISTURB
D-23	℄ CONST. I-71	1311+38.23	129.37 ft	LT	MH-3	888.50 ft	±865.40 ft	(IN) P-19 S ±865.40	RECONSTRUCT TO GRADE
D-24	℄ CONST. I-71	1310+16.00	65.17 ft	RT	CB-3	899.52 ft	895.27 ft	(OUT) P-20 W 895.27	PROPOSED
D-25	℄ CONST. I-71	1310+16.00	98.00 ft	RT	HW-2.1	N/A	895.12 ft	(IN) P-20 W 895.12	PROPOSED
D-26	℄ CONST. I-71	1311+31.47	83.25 ft	LT	I-3D	902.11 ft	897.71 ft	(OUT) P-21 E 897.71	PROPOSED
D-27	℄ CONST. I-71	1311+29.71	113.44 ft	LT	HW-2.1	N/A	896.02 ft	(IN) P-21 E 896.02	PROPOSED
D-28	℄ CONST. I-71	1314+84.00	65.17 ft	RT	CB-3	900.34 ft	896.09 ft	(OUT) P-22 W 896.09	PROPOSED
D-29	℄ CONST. I-71	1314+84.00	80.00 ft	RT	HW-2.1	N/A	895.99 ft	(IN) P-22 W 895.99	PROPOSED
D-30	℄ CONST. I-71	1318+35.00	6.75 ft	RT	I-3B1, APP	899.44 ft	893.19 ft	(OUT) P-23 E 893.19	PROPOSED (REMOVE EXISTING)
D-31	℄ CONST. I-71	1318+34.70	6.75 ft	LT	I-3B1, APP	895.00 ft	890.75 ft	(IN) P-23 E 892.00, (OUT) P-24 S 890.75	PROPOSED (REMOVE EXISTING)
D-32	℄ CONST. I-71	1320+35.32	9.79 ft	LT	MH-3	893.18 ft	889.23 ft	(IN) P-24 S 889.23, (OUT) P-25 SW 889.23	PROPOSED (REMOVE EXISTING)

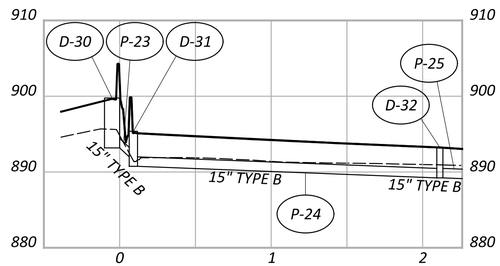
DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-14		85.0 ft	15"	TYPE B	3.86 %	D-19	896.14 ft	D-20	892.86 ft	PROPOSED
P-15		10.0 ft	15"	TYPE B	3.00 %	D-20	886.44 ft	CONC. COLLAR	±886.14 ft	PROPOSED
P-16		118.0 ft	15"	EX. CONC	3.00 %	CONC. COLLAR	±886.14 ft	BEND	±883.60 ft	EXISTING
P-17		27.0 ft	15"	EX. CONC	51.93 %	BEND	±883.60 ft	D-21	±868.58 ft	DO NOT DISTURB
P-18		61.0 ft	18"	EX. CONC	1.72 %	D-22	±869.61 ft	D-21	±868.56 ft	DO NOT DISTURB
P-19		214.0 ft	18"	EX. CONC	1.45 %	D-21	±868.51 ft	D-23	±865.40 ft	DO NOT DISTURB
P-20		31.0 ft	15"	TYPE C	0.50 %	D-24	895.27 ft	D-25	895.12 ft	PROPOSED
P-21		30.0 ft	15"	TYPE C	5.65 %	D-26	897.71 ft	D-27	896.02 ft	PROPOSED
P-22		14.0 ft	15"	TYPE C	0.70 %	D-28	896.09 ft	D-29	895.99 ft	PROPOSED
P-23		12.0 ft	15"	TYPE B	9.92 %	D-30	893.19 ft	D-31	892.00 ft	PROPOSED (REMOVE EXISTING)
P-24		201.0 ft	15"	TYPE B	0.76 %	D-31	890.75 ft	D-32	889.23 ft	PROPOSED (REMOVE EXISTING)
P-25		151.0 ft	15"	TYPE B	0.76 %	D-32	889.23 ft	D-34	888.08 ft	PROPOSED (REMOVE EXISTING)











HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1308+00.00 TO STA. 1320+50.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.305 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 4 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:31 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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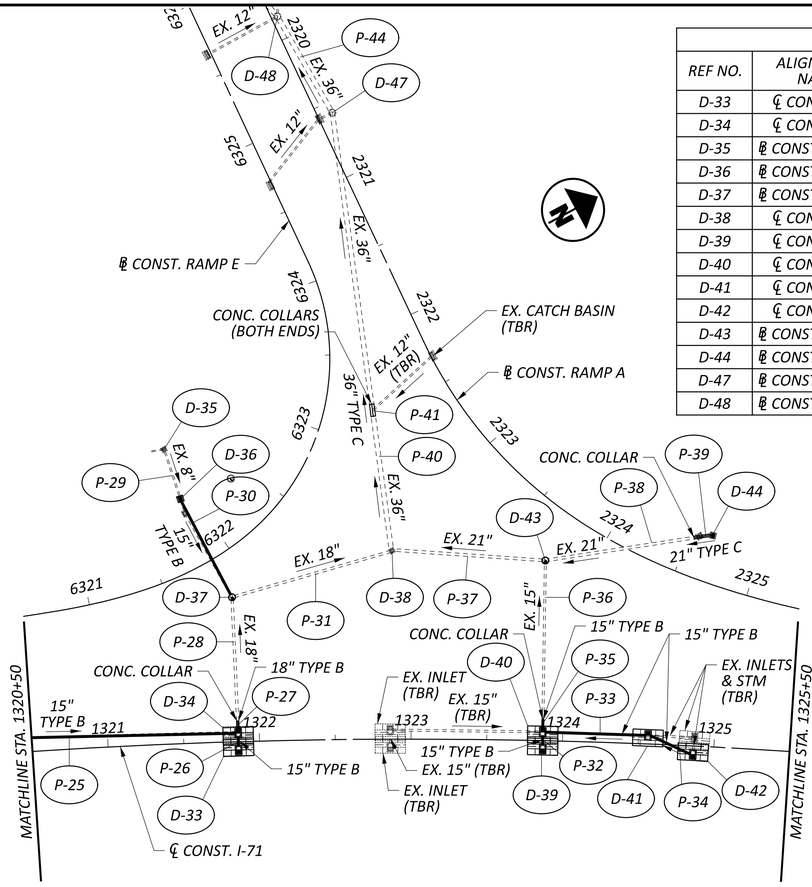
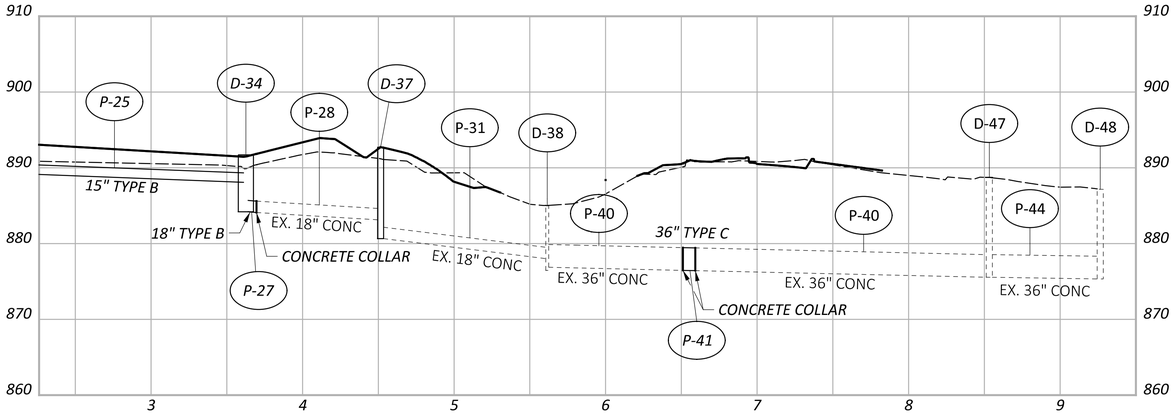
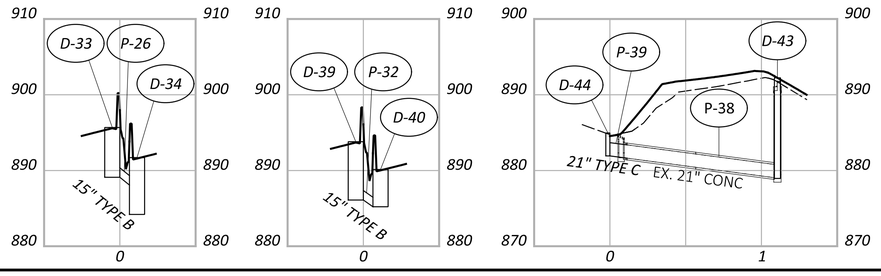
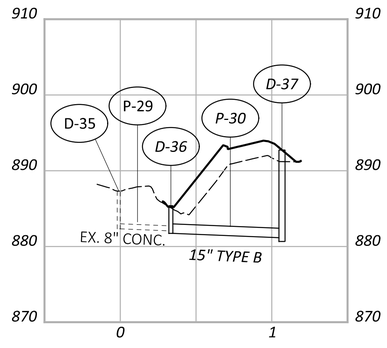


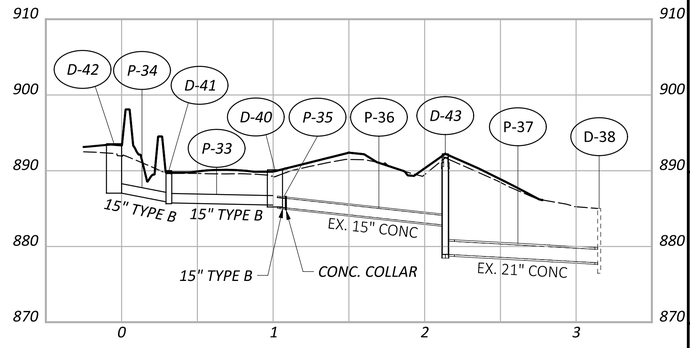
DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-33	℄ CONST. I-71	1321+86.00	6.75 ft	RT	I-3B1, APP	895.35 ft	889.10 ft	(OUT) P-26 SE 889.10	PROPOSED (REMOVE EXISTING)
D-34	℄ CONST. I-71	1321+86.00	6.75 ft	LT	I-3B1, APP	891.33 ft	884.20 ft	(IN) P-26 SE 888.08, (IN) P-25 SW 888.08, (OUT) P-27 W 884.20	PROPOSED (REMOVE EXISTING)
D-35	℄ CONST. RAMP E	6322+03.71	78.19 ft	LT	EX. CB	±887.23 ft	±882.33 ft	(OUT) P-29 W ±882.33	DO NOT DISTURB
D-36	℄ CONST. RAMP E	6321+89.84	45.03 ft	LT	CB-8	885.22 ft	881.73 ft	(IN) P-29 W ±882.06, (OUT) P-30 W 881.73	PROPOSED
D-37	℄ CONST. RAMP E	6321+85.42	28.19 ft	RT	MH-3	892.74 ft	±880.66 ft	(IN) P-28 SE ±883.14, (IN) P-30 W 881.16, (OUT) P-31 S ±880.66	RECONSTRUCT TO GRADE
D-38	℄ CONST. I-71	1322+87.86	124.36 ft	LT	EX. CB	±884.37 ft	±876.87 ft	(IN) P-31 S ±878.02, (IN) P-37 NE ±877.86, (OUT) P-40A E ±876.87	DO NOT DISTURB
D-39	℄ CONST. I-71	1323+87.03	6.75 ft	RT	I-3B1, APP	893.47 ft	886.11 ft	(OUT) P-32 SE 886.11	PROPOSED (REMOVE EXISTING)
D-40	℄ CONST. I-71	1323+86.81	6.75 ft	LT	I-3B1, APP	889.77 ft	885.22 ft	(IN) P-32 SE 885.22, (IN) P-33 NE 885.47, (OUT) P-35 SE 885.22	PROPOSED (REMOVE EXISTING)
D-41	℄ CONST. I-71	1324+56.25	6.75 ft	LT	I-3B1, APP	889.65 ft	885.75 ft	(IN) P-34 NE 885.90, (OUT) P-33 NE 885.75	PROPOSED
D-42	℄ CONST. I-71	1324+86.35	6.75 ft	RT	I-3B1, APP	893.23 ft	887.03 ft	(OUT) P-34 NE 887.03	PROPOSED
D-43	℄ CONST. RAMP A	2323+74.66	34.14 ft	RT	MH-3	892.23 ft	878.95 ft	(IN) P-36 SE 882.85, (IN) P-38 N 879.05, (OUT) P-37 NE 878.95	RECONSTRUCT TO GRADE
D-44	℄ CONST. RAMP A	2324+65.38	30.74 ft	LT	CB-8	884.50 ft	881.93 ft	(OUT) P-39 SW 881.93	PROPOSED
D-47	℄ CONST. RAMP A	2320+57.48	9.80 ft	LT	EX. MH	±888.75 ft	±875.55 ft	(IN) P-40B E ±875.55, (IN) P-43 S ±880.95, (OUT) P-44 E ±875.55	DO NOT DISTURB
D-48	℄ CONST. RAMP A	2319+84.50	4.07 ft	LT	EX. MH	±887.17 ft	±875.33 ft	(IN) P-44 E ±875.33	DO NOT DISTURB

DRAINAGE PIPES DETAILS									
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-25		151.0 ft	15"	TYPE B	0.76 %	D-32	889.23 ft	D-34	888.08 ft	PROPOSED (REMOVE EXISTING)
P-26		12.0 ft	15"	TYPE B	8.50 %	D-33	889.10 ft	D-34	888.08 ft	PROPOSED (REMOVE EXISTING)
P-27		8.0 ft	18"	TYPE B	1.20 %	D-34	884.20 ft	CONC. COLLAR	±884.10 ft	PROPOSED (REMOVE EXISTING)
P-28		80.0 ft	18"	EX. CONC	1.20 %	CONC. COLLAR	±884.10 ft	D-37	±883.14 ft	DO NOT DISTURB
P-29		34.0 ft	8"	EX. CONC	0.80 %	D-35	±882.33 ft	D-36	±882.06 ft	DO NOT DISTURB
P-30		73.0 ft	15"	TYPE B	0.78 %	D-36	881.73 ft	D-37	881.16 ft	PROPOSED (REMOVE EXISTING)
P-31		110.0 ft	18"	EX. CONC	2.40 %	D-37	±880.66 ft	D-38	±878.02 ft	DO NOT DISTURB
P-32		12.0 ft	15"	TYPE B	7.42 %	D-39	886.11 ft	D-40	885.22 ft	PROPOSED (REMOVE EXISTING)
P-33		70.0 ft	15"	TYPE B	0.40 %	D-41	885.75 ft	D-40	885.47 ft	PROPOSED
P-34		32.0 ft	15"	TYPE B	3.53 %	D-42	887.03 ft	D-41	885.90 ft	PROPOSED
P-35		8.0 ft	15"	TYPE B	2.10 %	D-40	885.22 ft	CONC. COLLAR	±885.05 ft	PROPOSED (REMOVE EXISTING)
P-36		105.0 ft	15"	EX. CONC	2.10 %	CONC. COLLAR	±885.05 ft	D-43	±882.85 ft	DO NOT DISTURB
P-37		101.0 ft	21"	EX. CONC	1.08 %	D-43	±878.95 ft	D-38	±877.86 ft	DO NOT DISTURB
P-38		99.00 ft	21"	EX. CONC	2.57 %	CONC. COLLAR	±881.60 ft	D-43	±879.05 ft	DO NOT DISTURB
P-39		13.0 ft	21"	TYPE C	2.57%	D-44	881.93 ft	CONC. COLLAR	±881.60 ft	PROPOSED (REMOVE EXISTING)
P-40		292.0 ft	36"	EX. CONC	0.45 %	D-38	876.87 ft	D-47	875.55 ft	REMOVE BLIND TAP CONNECTION
P-41		8.0 ft	36"	TYPE C	0.45 %	CONC. COLLAR	±876.47 ft	CONC. COLLAR	±876.43 ft	PROPOSED (PIPE REPAIR)
P-44		73.0 ft	36"	EX. CONC	0.30 %	D-47	±875.55 ft	D-48	±875.33 ft	DO NOT DISTURB









HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1320+50.00 TO STA. 1325+50.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.306 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 5 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:33 AM PLTDRV: OHDOT_PDF_Ex.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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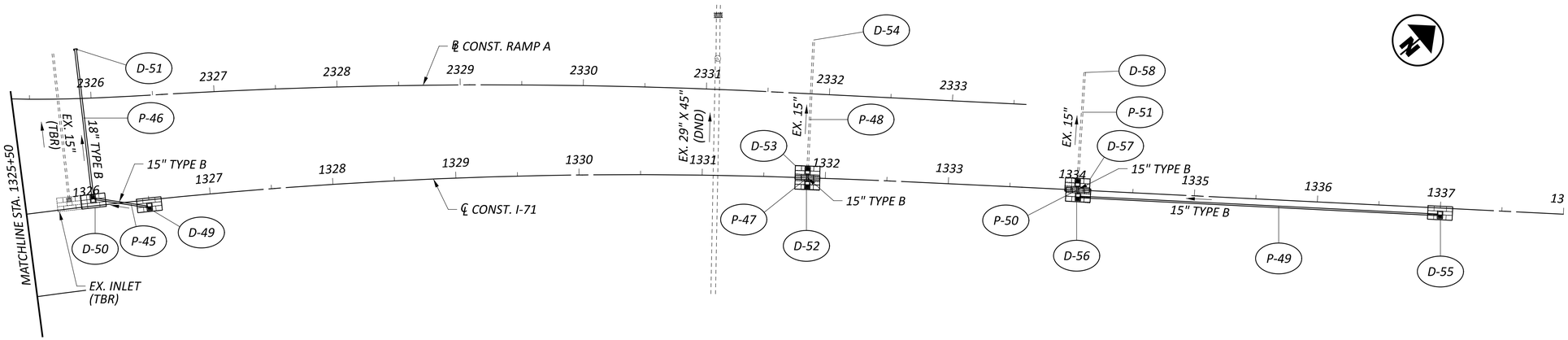
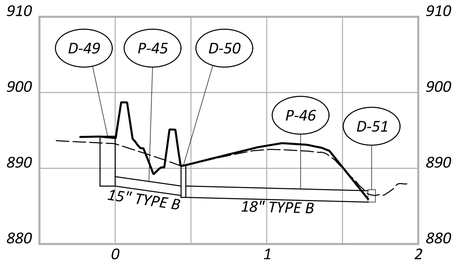
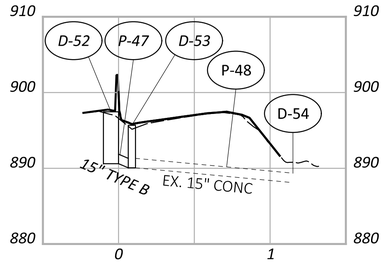
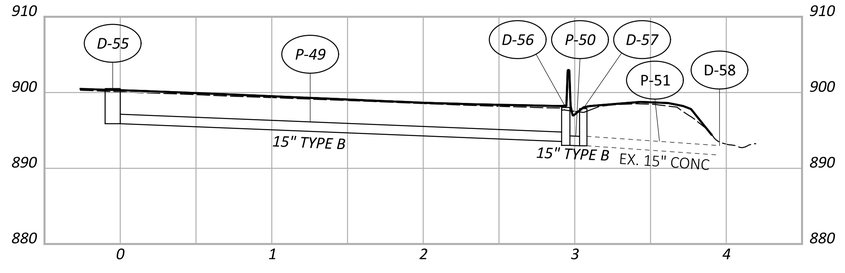


DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-45		47.0 ft	15"	TYPE B	2.64 %	D-49	887.65 ft	D-50	886.41 ft	PROPOSED
P-46		124.0 ft	18"	TYPE B	0.50 %	D-50	886.16 ft	D-51	885.54 ft	PROPOSED
P-47		12.00 ft	15"	TYPE B	4.50 %	D-52	890.61 ft	D-53	890.07 ft	PROPOSED (REMOVE EXISTING)
P-48		106.0 ft	15"	EX. CONC	1.86 %	D-53	±890.07 ft	D-54	±888.10 ft	DO NOT DISTURB
P-49		294.0 ft	15"	TYPE B	0.80 %	D-55	895.88 ft	D-56	893.53 ft	PROPOSED
P-50		12.0 ft	15"	TYPE B	0.42 %	D-56	893.02 ft	D-57	892.97 ft	PROPOSED (REMOVE EXISTING)
P-51		90.0 ft	15"	EX. CONC	1.36 %	D-57	±892.97 ft	D-58	±891.75 ft	DO NOT DISTURB

DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-49	℄ CONST. I-71	1326+50.00	6.75 ft	RT	I-3B1, APP	893.90 ft	887.65 ft	(OUT) P-45 NE 887.65	PROPOSED
D-50	℄ CONST. I-71	1326+05.00	6.75 ft	LT	I-3B1, APP	890.18 ft	886.16 ft	(IN) P-45 NE 886.41, (OUT) P-46 SE 886.16	PROPOSED
D-51	℄ CONST. I-71	1326+04.85	128.19 ft	LT	HW-2.1	N/A	885.54 ft	(IN) P-46 SE 885.54	PROPOSED
D-52	℄ CONST. I-71	1331+85.58	6.75 ft	RT	I-3B1, APP	897.45 ft	890.61 ft	(OUT) P-47 SE 890.61	PROPOSED (REMOVE EXISTING)
D-53	℄ CONST. I-71	1331+85.41	6.75 ft	LT	I-3B1, RTG	895.68 ft	±890.07 ft	(IN) P-47 SE 890.07, (OUT) P-48 SE ±890.07	RECONSTRUCT TO GRADE
D-54	℄ CONST. I-71	1331+86.76	111.87 ft	LT	EX. HW	N/A	±888.10 ft	(IN) P-48 SE ±888.10	DO NOT DISTURB
D-55	℄ CONST. I-71	1337+00.00	6.75 ft	RT	I-3B1, APP	900.14 ft	895.88 ft	(OUT) P-49 NE 895.88	PROPOSED
D-56	℄ CONST. I-71	1334+05.69	6.75 ft	RT	I-3B1, APP	898.03 ft	893.02 ft	(IN) P-49 NE 893.53, (OUT) P-68 SE 893.02	PROPOSED (REMOVE EXISTING)
D-57	℄ CONST. I-71	1334+04.81	6.75 ft	LT	I-3B1, RTG	897.88 ft	±892.97 ft	(IN) P-68 SE 892.97, (OUT) P-51 SE ±892.97	RECONSTRUCT TO GRADE
D-58	℄ CONST. I-71	1334+06.12	95.49 ft	LT	EX. HW	N/A	±891.75 ft	(IN) P-51 SE ±891.75	DO NOT DISTURB







HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1325+50.00 TO STA. 1338+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.307 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 6 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:34 AM PLTDRV: OHDOT_PDF_Ex.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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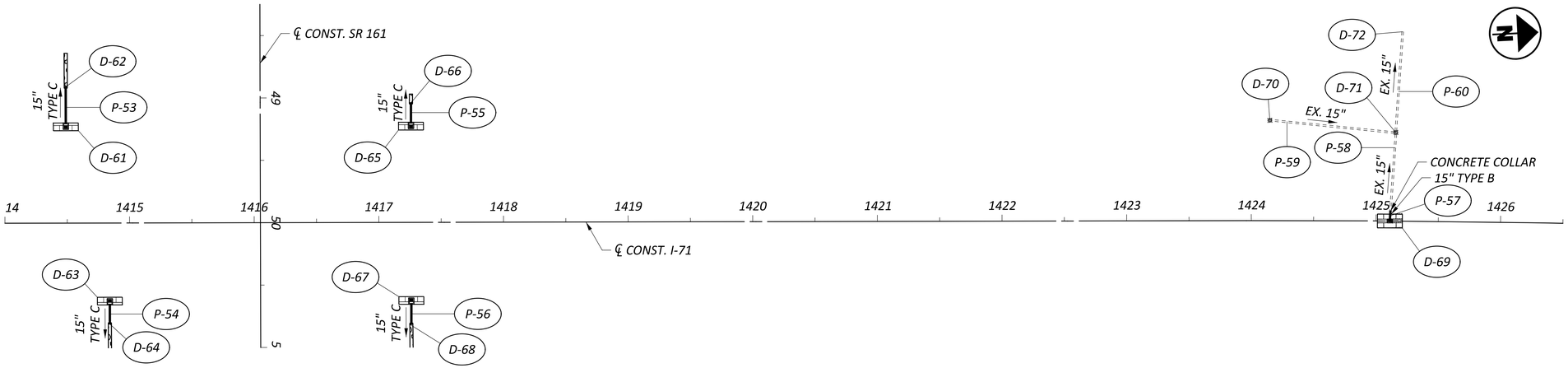
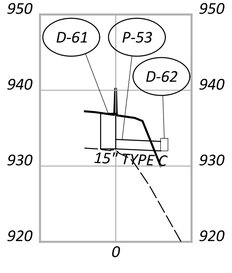
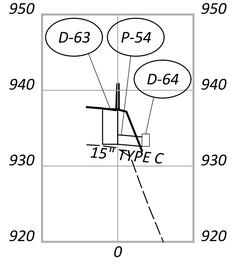
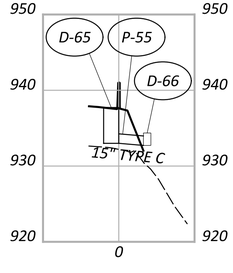


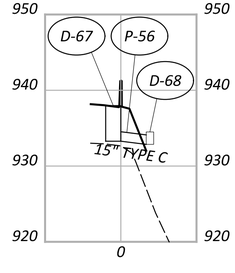
DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-53		30.0 ft	15"	TYPE C	0.85 %	D-61	932.27 ft	D-62	932.01 ft	PROPOSED
P-54		16.0 ft	15"	TYPE C	1.75 %	D-63	932.88 ft	D-64	932.60 ft	PROPOSED
P-55		16.0 ft	15"	TYPE C	1.75 %	D-65	933.01 ft	D-66	932.73 ft	PROPOSED
P-56		17.0 ft	15"	TYPE C	2.50 %	D-67	933.28 ft	D-68	932.86 ft	PROPOSED
P-57		8.00 ft	15"	TYPE B	5.40 %	D-69	919.34 ft	CONC. COLLAR	±918.91 ft	PROPOSED (REMOVE EXISTING)
P-58		63.0 ft	15"	EX. CONC	5.40 %	CONC. COLLAR	±918.91 ft	D-71	±915.51 ft	DO NOT DISTURB
P-59		102.0 ft	15"	EX. CONC	1.00 %	D-70	±919.43 ft	D-71	±918.41 ft	DO NOT DISTURB
P-60		81.0 ft	15"	EX. CONC	5.40 %	D-71	±915.51 ft	D-72	±911.13 ft	DO NOT DISTURB

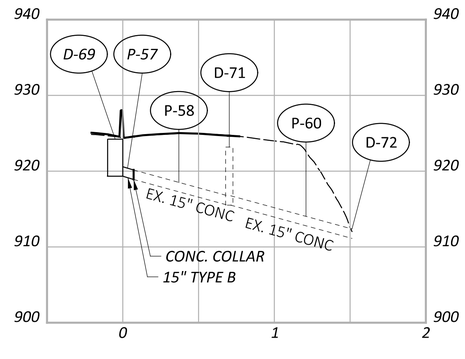
DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-61	℄ CONST. I-71	1414+49.04	77.00 ft	LT	I-3D	936.52 ft	932.27 ft	(OUT) P-53 E 932.27	PROPOSED
D-62	℄ CONST. I-71	1414+49.03	109.15 ft	LT	HW-2.1	N/A	932.01 ft	(IN) P-53 E 932.01	PROPOSED
D-63	℄ CONST. I-71	1414+84.04	62.42 ft	RT	I-3D	937.13 ft	932.88 ft	(OUT) P-54 W 932.88	PROPOSED
D-64	℄ CONST. I-71	1414+84.04	80.97 ft	RT	HW-2.1	N/A	932.60 ft	(IN) P-54 W 932.60	PROPOSED
D-65	℄ CONST. I-71	1417+25.95	77.00 ft	LT	I-3D	937.26 ft	933.01 ft	(OUT) P-55 E 933.01	PROPOSED
D-66	℄ CONST. I-71	1417+25.95	95.84 ft	LT	HW-2.1	N/A	932.73 ft	(IN) P-55 E 932.73	PROPOSED
D-67	℄ CONST. I-71	1417+25.95	62.42 ft	RT	I-3D	937.53 ft	933.28 ft	(OUT) P-56 W 933.28	PROPOSED
D-68	℄ CONST. I-71	1417+25.95	81.77 ft	RT	HW-2.1	N/A	932.86 ft	(IN) P-56 W 932.86	PROPOSED
D-69	℄ CONST. I-71	1425+11.17	0.00 ft	℄	I-4B1	924.23 ft	919.34 ft	(OUT) P-57 E 919.34	PROPOSED (REMOVE EXISTING)
D-70	℄ CONST. I-71	1424+14.95	80.37 ft	LT	EX. CB	±925.65 ft	±919.43 ft	(OUT) P-59 S ±919.43	DO NOT DISTURB
D-71	℄ CONST. I-71	1425+15.43	70.97 ft	LT	EX. CB	±923.18 ft	±915.51 ft	(IN) P-59 S ±918.41, (IN) P-58 E ±915.51, (OUT) P-60 E ±915.51	DO NOT DISTURB
D-72	℄ CONST. I-71	1425+20.24	151.78 ft	LT	EX. HW	N/A	±911.13 ft	(IN) P-60 E ±911.13	DO NOT DISTURB











HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1414+00.00 TO STA. 1426+50.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.308 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 7 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:36 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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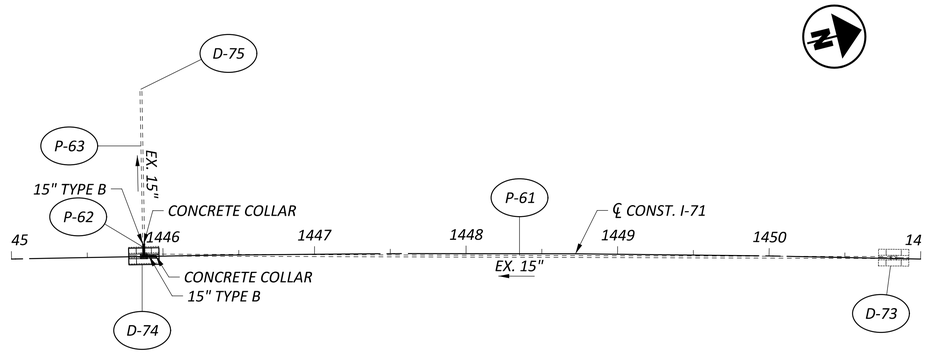
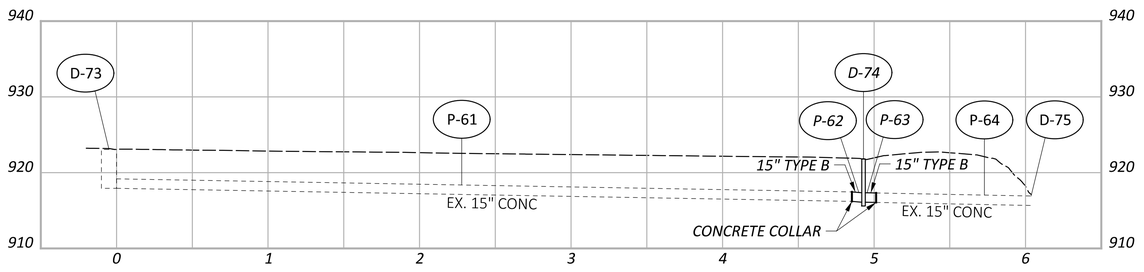


DRAINAGE PIPES DETAILS										
REF NO.	CFN	LENGTH	SIZE	TYPE	SLOPE	START STRUCT. REF NO.	START INVERT ELEV.	STOP STRUCT. REF NO.	STOP INVERT ELEV.	DISPOSITION
P-61		487.0 ft	15"	EX. CONC	0.37 %	D-73	±917.92 ft	CONC. COLLAR	±916.12 ft	DO NOT DISTURB
P-62		8.0 ft	15"	TYPE B	0.37 %	CONC. COLLAR	±916.12 ft	D-74	916.09 ft	PROPOSED (REMOVE EXISTING)
P-63		8.0 ft	15"	TYPE B	0.39 %	D-74	916.09 ft	CONC. COLLAR	±916.06 ft	PROPOSED (REMOVE EXISTING)
P-64		102.0 ft	15"	EX. CONC	0.39 %	CONC. COLLAR	±916.06 ft	D-75	±915.66 ft	DO NOT DISTURB

DRAINAGE STRUCTURES DETAILS									
REF NO.	ALIGNMENT NAME	STATION	OFFSET	SIDE	TYPE	GRATE/RIM ELEV.	INVERT ELEV.	CONNECTED PIPES	DISPOSITION
D-73	℄ CONST. I-75	1450+82.24	0.00 ft	℄	EX. INLET	923.05 ft	917.92 ft	(OUT) P-61 N 917.92	DO NOT DISTURB
D-74	℄ CONST. I-75	1445+87.33	0.00 ft	℄	I-3D50	921.79 ft	916.09 ft	(IN) P-62 N 916.09, (OUT) P-63 E 916.09	PROPOSED
D-75	℄ CONST. I-75	1445+87.26	110.27 ft	LT	EX. HW	N/A	±915.66 ft	(IN) P-64 E ±915.66	DO NOT DISTURB



HORIZONTAL SCALE IN FEET
0 25 50 100

DRAINAGE DETAILS
STA. 1445+00.00 TO STA. 1451+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.309 TOTAL 618

FRA-71-19.10

MODEL: Drainage Plan - Sheet 8 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:37 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEx02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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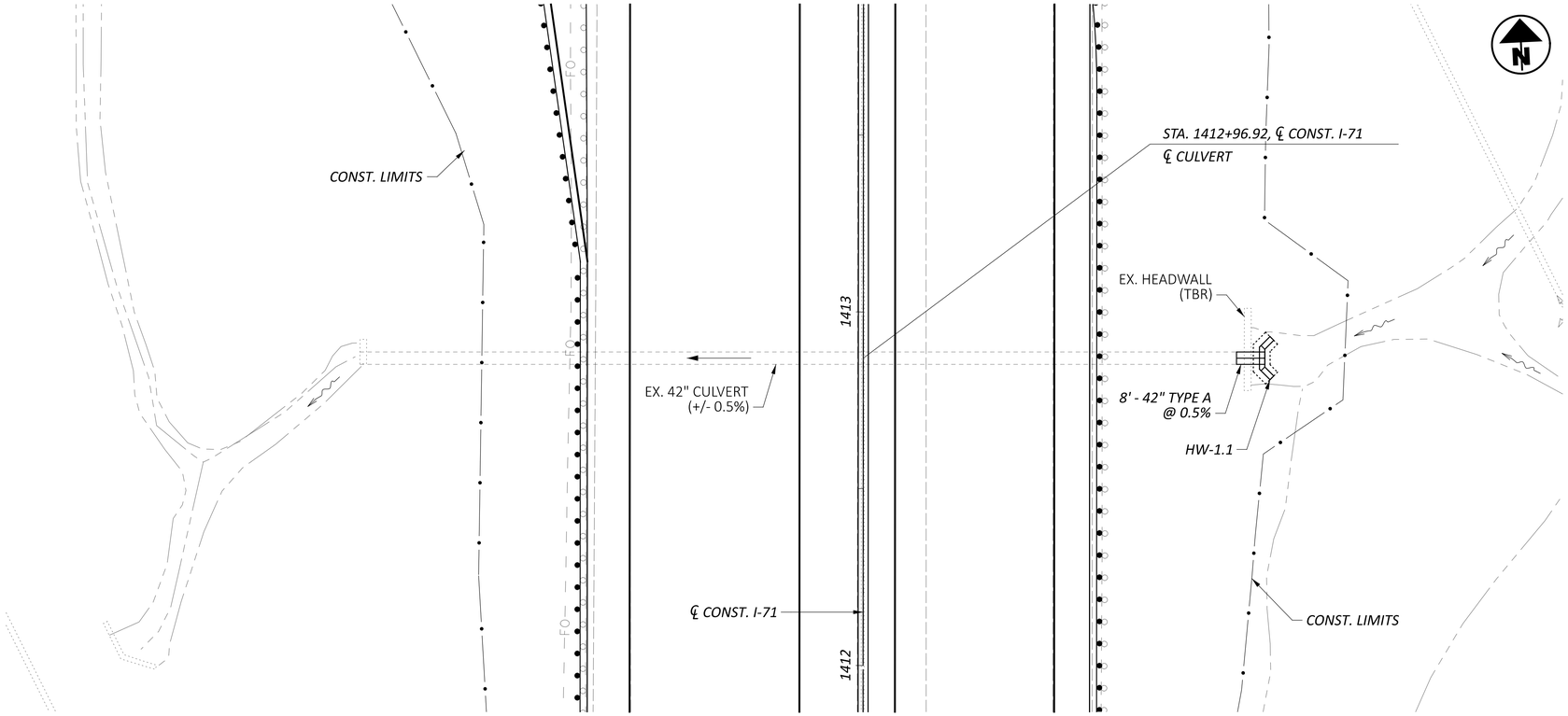


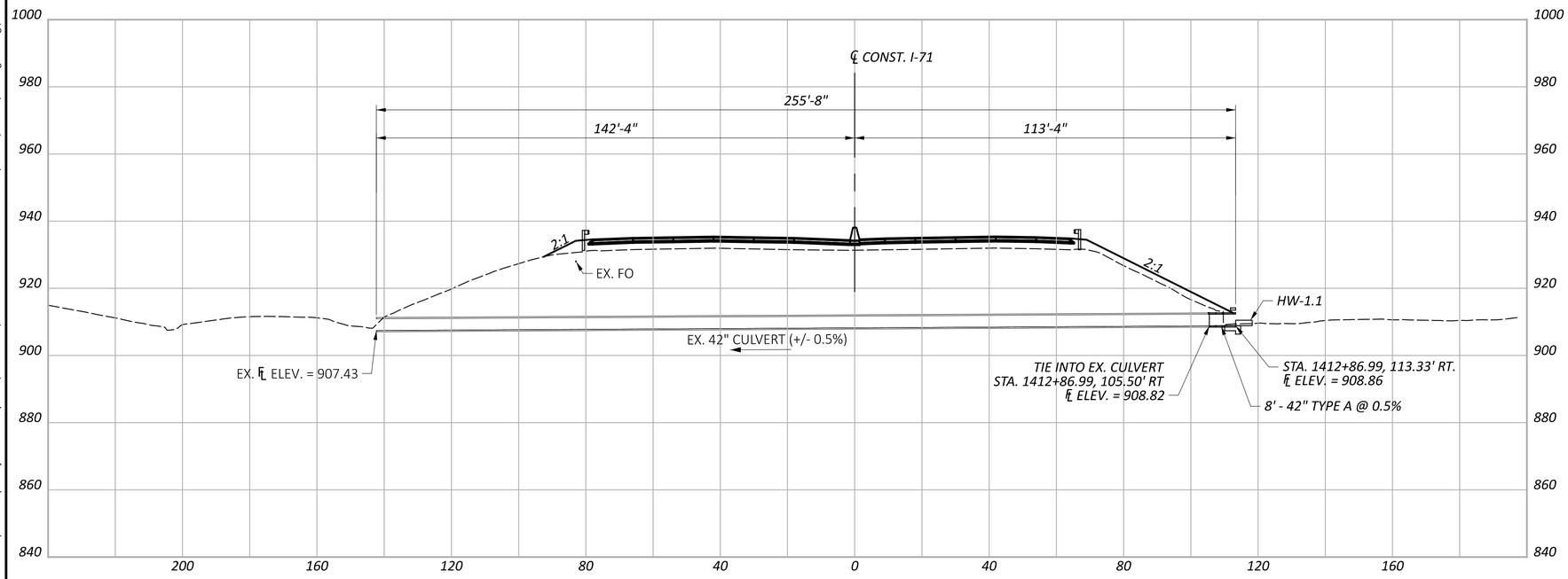
HORIZONTAL
SCALE IN FEET
0 10 20 40

ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION

EXISTING STRUCTURE

TYPE: ROUND CONCRETE PIPE
SIZE: 42"
SKEW: 0°
ALIGNMENT: TANGENT
CFN: 1807089



CULVERT DETAIL
STA. 1412+96.92

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/05/26
PROJECT ID 109164
SHEET P.310 TOTAL 618

FRA-71-19.10

MODEL: Profile Run Culvert - Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:12:59 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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PROPOSED WORK:

THE FOLLOWING PROPOSED WORK APPLIES AT THE LOCATION BELOW:

WALL NO. 1 - I-71 SB EXIT RAMP TO 11TH AVE.

PROPOSED WORK:

1) REMOVING A PORTION OF THE EXISTING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALL AND REGRADING.
2) REMOVING AND REPLACING A PORTION OF THE EXISTING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALL
3) 519 PATCHING
4) REMOVING AND REPLACING EXISTING WALL MOUNTED FENCING
5) CONCRETE SEALING WITH EPOXY-URETHANE

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD DRAWINGS:

F-1.1 REVISED 07/19/2013

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

N/A

DESIGN DATA

CONCRETE CLASS QC1 (RETAINING WALL) - COMPRESSIVE STRENGTH 4.0 KSI

EPOXY-COATED REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04 FOR FURTHER INFORMATION.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THE PROVISIONS OF C&MS 202 APPLY, IN ADDITION TO THOSE LISTED HEREIN. THE ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE EXISTING CONCRETE REINFORCEMENT TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

UNDERGROUND UTILITIES

SEE ROADWAY PLANS

MAINTENANCE OF TRAFFIC

SEE ROADWAY PLANS

ITEM 201 - CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROPOSED WORK, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATION UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING. NO TREE REMOVAL SHALL OCCUR BETWEEN OCTOBER 1ST AND MARCH 31ST.

ITEM 202 - FENCE REMOVED, AS PER PLAN

THIS ITEM INCLUDES REMOVAL OF BOTH WALL MOUNTED AND NON-WALL MOUNTED FENCE INDICATED FOR REMOVAL IN THE PLANS.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THE PROVISIONS OF C&MS 503 APPLY, IN ADDITION TO THOSE LISTED HEREIN. THE ITEM SHALL INCLUDE EXCAVATION NECESSARY TO CONSTRUCT THE PROPOSED WORK (E.G. REMOVE POTIONS OF EXISTING WALL, ERECT FORMWORK AND POUR NEW CAST-IN-PLACE REINFORCED CONCRETE WALL). ALL EXCAVATION MUST REMAIN WITHIN THE LIMITS OF EXISTING RIGHT-OF-WAY.

TO MITIGATE THE RETAINED/BENCHED EXCAVATION HEIGHT DURING REMOVAL AND CONSTRUCTION OF THE RETAINING WALL, THE CONTRACTOR MAY CUT-BACK THE RETAINED SOIL, BUT SHALL ENSURE THE SLOPE IS STABLE AND STAYS WITHIN EXISTING RIGHT-OF-WAY DURING PROPOSED WORK.

ALL ITEMS REMOVED THAT ARE NOT TO BE REBUILT AND INCORPORATED INTO THE FINAL PERMANENT CONDITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFFSITE.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE PROVISIONS OF C&MS 503 APPLY, IN ADDITION TO THOSE LISTED HEREIN. THIS ITEM HAS BEEN ADDED TO THE PLANS FOR USE AS DESIRED/NECESSARY BY THE CONTRACTORS MEANS AND METHODS TO ENSURE THE EXISTING SLOPE IS STABLE AND REMAINS WITHIN EXISTING RIGHT-OF-WAY DURING PROPOSED WORK.

THE ITEM SHALL INCLUDE THE CONSTRUCTION OF TEMPORARY SHORING SYSTEM (E.G. DRIVEN STEEL PLATES, FORM WORK ANCHORED TO EXISTING PORTIONS OF STRUCTURE TO REMAIN, STAGED REMOVAL AND REPLACEMENT RELYING ON SOIL ARCHING , ETC.) TO CONSTRUCT THE PROPOSED WORK (E.G. REMOVE POTIONS OF EXISTING WALL, ERECT FORMWORK AND POUR NEW CAST-IN-PLACE REINFORCED CONCRETE WALL). THE ENTIRE SHORING SYSTEM MUST REMAIN WITHIN THE LIMITS OF EXISTING RIGHT-OF-WAY.

PORTIONS OF THE EXCAVATION TO PERFORM THE PROPOSED WORK (REMOVAL AND REPLACEMENT OF THE EXISTING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALL) ARE NOT ANTICIPATED TO EXCEED 7-FT.

THE CONTRACTOR SHALL BE AWARE THAT LIMITED RIGHT-OF-WAY EXISTS BEHIND THE RETAINING WALL. ADDITIONALLY, THE PRESENCE OF AN EXISTING SHALLOW FOUNDATION (THE HEEL OF THE EXISTING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALL FOOTING) AND UTILITIES WILL FURTHER RESTRICT THE ABILITY TO ERECT/EMBED A ''CONVENTIONAL DRIVEN' SHORING SYSTEM.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

BACKFILL

FILL THE VOID CREATED BY EXCAVATING FOR THE RETAINING WITH C LOW STRENGTH MORTAR (LSM) BACKFILL, TYPE 1 PER C&MS 613.

ITEM 510 - DOWEL HOLES, WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

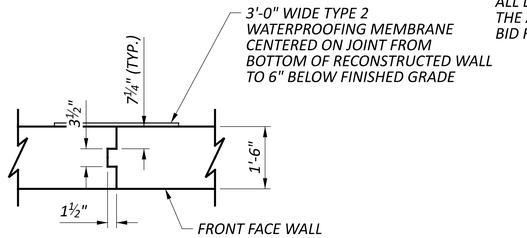
PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS THE PROPOSED DOWEL HOLE, THEN MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS EXCEPT AS NOTED HEREIN. INSTALL REINFORCING STEEL ACCORDING TO C&MS 510 USING NONSHRINK, NONMETALLIC GROUT CONFORMING TO C&MS 705.20.

CONTRACTOR SHALL FIELD ADJUST LOCATIONS OF DOWEL BARS AS NECESSARY TO AVOID CONFLICT. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS AND 3" CLEAR FROM EDGE OF EXISTING CONCRETE SURFACES.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 510, DOWEL HOLES, WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN.

CONTRACTION/EXPANSION JOINTS

CONTRACTOR SHALL PLACE CONTRACTION/EXPANSION JOINTS NOT TO EXCEED A 30-FOOT SPACING AS MEASURED ALONG THE FRONT FACE OF WALL. LOCATION OF CONTRACTION JOINTS MAY BE CHOSEN BY THE CONTRACTOR TO FACILITATE FORMING AND REINFORCING STEEL PLACEMENT.



CONTRACTION JOINT DETAIL

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

THIS ITEM CONSISTS OF PATCHING THE EXISTING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALL IN ACCORDANCE WITH C&MS 519.

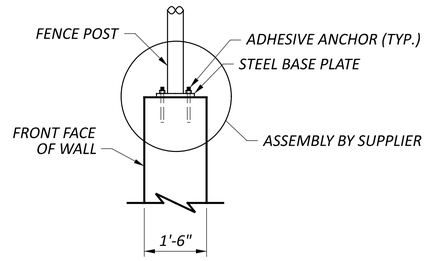
THE ENGINEER SHALL SOUND THE EXISTING RETAINING WALL AND IDENTIFY PATCHING LIMITS ON THE WALL BY DELINEATING THE PATCHING AREA WITH ORANGE SPRAY PAINT FOR THE CONTRACTOR TO PERFORM.

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS FOR THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 519, PATCHING CONCRETE STRUCTURE, AS PER PLAN, SF.

ITEM 606 - FENCE, TYPE CLT, AS PER PLAN

THIS ITEM CONSISTS OF CONSTRUCTING A FENCE ATOP THE RETAINING WALL. A CHAIN LINK FENCE IN ACCORDANCE WITH ODOT C&MS 607 SHALL BE MOUNTED TO THE TOP OF THE RETAINING WALL UTILIZING A BASE PLATE AND ADHESIVE ANCHORS WITH A WASHER AND NUT.

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS FOR THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 607, FENCE, AS PER PLAN, FOOT.



ABBREVIATION LEGEND

℄ - BASELINE
BOT. - BOTTOM
CLR. - CLEAR
CONST. - CONSTRUCTION
D.N.D. - DO NOT DISTURB
E.F. - EACH FACE
EX. - EXISTING
EL. - ELEVATION
E.O.P. - EDGE OF PAVEMENT
E.O.S. - EDGE OF SHOULDER
FTG. - FOOTING
HORIZ. - HORIZONTAL
MAX. - MAXIMUM
MIN. - MINIMUM
R/W - RIGHT OF WAY
SER. - SERIES
SPA. - SPACING
STA. - STATIONING
T.B.R. - TO BE REMOVED
T.B.R.R. - TO BE REMOVED AND REPLACED
TYP. - TYPICAL

ITEM	EXTENSION	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION
202	11201		LS	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
202	75001		FT	FENCE REMOVED, AS PER PLAN
203	10000		CY	EXCAVATION
203	20000		CY	EMBANKMENT
503	11101		LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN
503	21101		LS	UNCLASSIFIED EXCAVATION, AS PER PLAN
509	10000		LB	EPOXY COATED STEEL REINFORCEMENT
510	10001		EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN
511	46010		CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING
512	10100		SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	33000		SY	TYPE 2 WATERPROOFING
519	11101		SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN
607	23001		FT	FENCE, TYPE CLT, AS PER PLAN
613	41250		CY	LOW STRENGTH MORTAR BACKFILL (TYPE 1)

WALL 1 GENERAL NOTES AND ESTIMATED QUANTITIES
11TH AVE. EXIT RAMP

DESIGN AGENCY
Jacobs

DESIGNER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SHEET P.311 TOTAL 618

FRA-71-19.10

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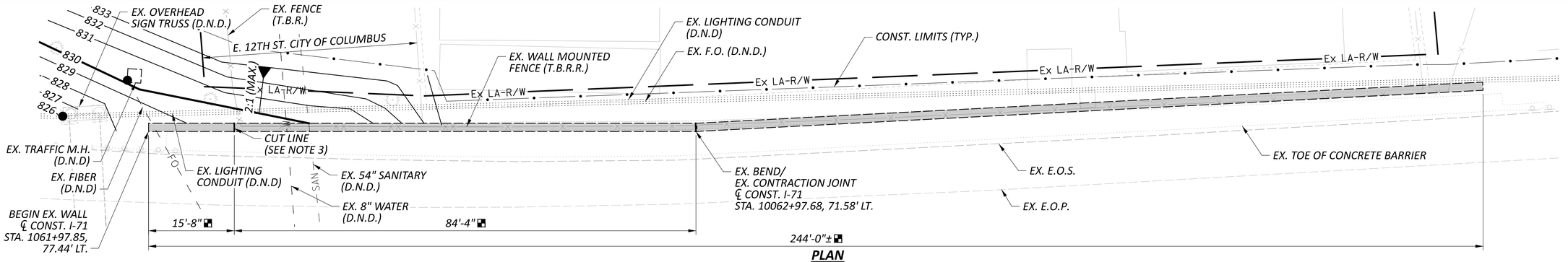
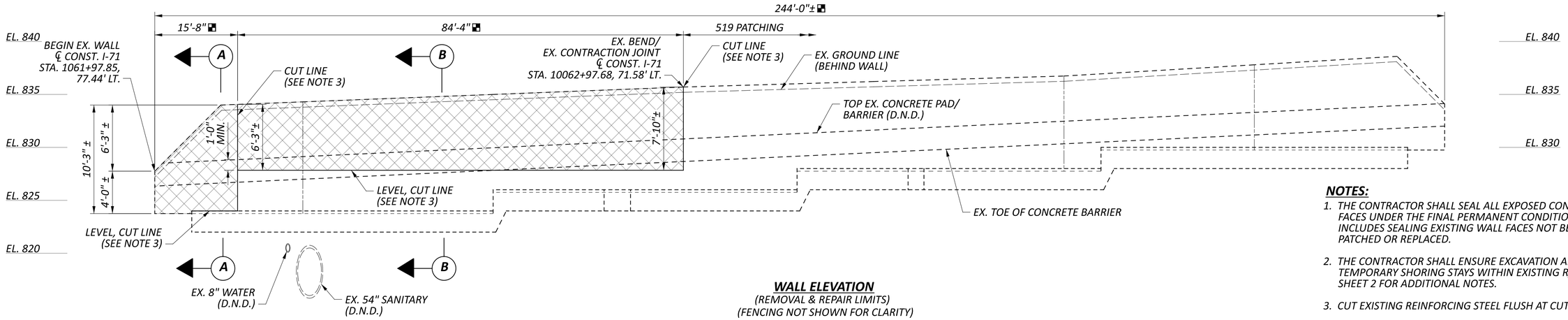


PLAN



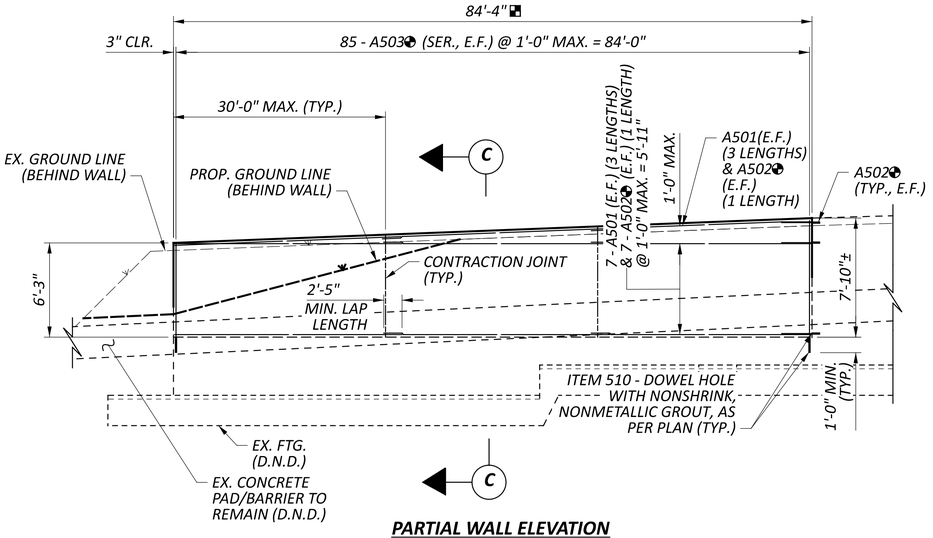
WALL ELEVATION
(REMOVAL & REPAIR LIMITS)
(FENCING NOT SHOWN FOR CLARITY)

NOTES:

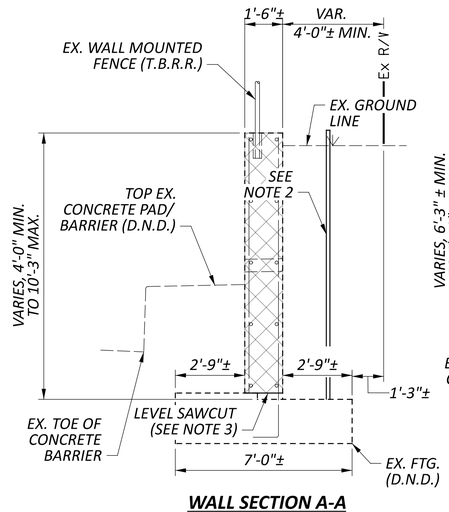
1. THE CONTRACTOR SHALL SEAL ALL EXPOSED CONCRETE FACES UNDER THE FINAL PERMANENT CONDITION. THIS INCLUDES SEALING EXISTING WALL FACES NOT BEING PATCHED OR REPLACED.
2. THE CONTRACTOR SHALL ENSURE EXCAVATION AND/OR TEMPORARY SHORING STAYS WITHIN EXISTING R/W. SEE SHEET 2 FOR ADDITIONAL NOTES.
3. CUT EXISTING REINFORCING STEEL FLUSH AT CUT LINE.
4. MINIMUM LAP LENGTHS:
   #5 BAR (HORIZ.): 2'-5"
5. FOR NOTES AND ABBREVIATION LEGEND, SEE SHEET 2.

LEGEND:

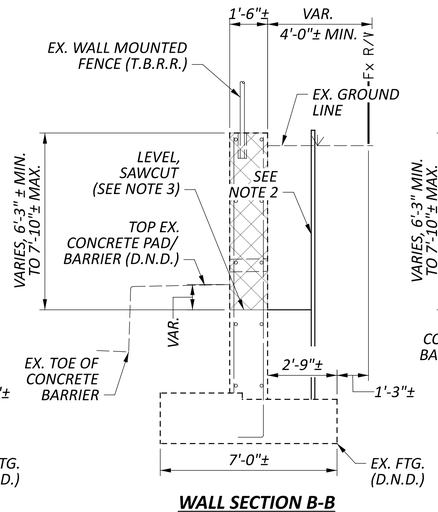
- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
- ■ - MEASURED ALONG FRONT FACE OF WALL (±)
- ◔ - DENOTES DOWEL BAR



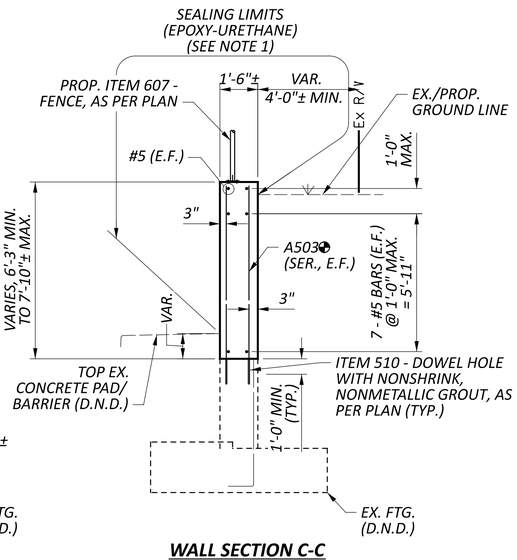
PARTIAL WALL ELEVATION
(STEM WALL REPLACEMENT)
(FENCING NOT SHOWN FOR CLARITY)



WALL SECTION A-A



WALL SECTION B-B



WALL SECTION C-C

HORIZONTAL SCALE IN FEET
0 5 10 20

WALL 1 PLAN AND ELEVATION
11TH AVE. EXIT RAMP

DESIGN AGENCY
Jacobs

DESIGNER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SHEET P.312 TOTAL 618

FRA-71-19.10

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WATERWORK NOTES

THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2026 EDITION AND ALL REVISIONS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER MAIN SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

NO PERSON SHALL BEGIN CONSTRUCTION OR INSTALLATION OF A PUBLIC WATER MAIN UNTIL PLANS HAVE BEEN APPROVED BY THE STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA).

THE INSTALLATION OF PVC PIPING IS NOT PERMITTED IN THE "DOWNTOWN"DISTRICT COMMUNITY, AS DEFINED BY THE CITY OF COLUMBUS CODE OF ORDINANCES, CODE 3359.03. IT IS ALSO NOT PERMITTED FOR INSTALLATION ON ANY "PRIORITY 1"(HIGH TRAFFIC VOLUME) ARTERIAL STREETS, AS DEFINED BY THE COLUMBUS DEPARTMENT OF PUBLIC SERVICE PER THE FOLLOWING LINK: HTTPS://WWW.COLUMBUS.GOV/PUBLICSERVICE/SNOW-AND-ICE-CONTROL/. PVC PIPE MAY ONLY BE USED AS AN ALTERNATE FOR 6 AND 8-INCH DUCTILE IRON WATER MAINS, AND SHALL NOT BE USED FOR HYDRANT LEADS OR WATER TAPS.

THESE DESIGN PLANS HAVE ASSUMED DUCTILE IRON AS THE BASELINE PIPE MATERIAL FOR DESIGN. ALL FITTINGS, DEFLECTIONS, AND OTHER DESIGN ELEMENTS ARE BASED OFF OF THE DUCTILE IRON STANDARDS. IF PVC PIPING IS TO BE UTILIZED IN THE PERMITTED LOCATIONS FOR CONSTRUCTION, A FORMAL PLAN REVISION SHALL BE SUBMITTED FOR REVIEW AND APPROVAL REGARDING ANY CHANGES TO THE DESIGN PLANS.

ALL WATER MAINS SHALL BE CLEANED AND FLUSHED, AND ANY WATER MAIN 12-INCH AND LARGER MUST BE PROPERLY PIGGED, IN ACCORDANCE WITH SECTION 801.15 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.16 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE CITY MAY NOT APPROVE ANY TEST LASTING LESS THAN TWO HOURS, REGARDLESS OF THE AMOUNT OF LEAKAGE.

ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 801.17 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF A.W.W.A. C-651. WHEN THE WATER MAINS ARE READY FOR DISINFECTION, THE INSPECTOR SHALL SUBMIT A WRITTEN REQUEST FOR CHLORINATION OF THE MAINS THAT NEED DISINFECTED, THREE (3) SETS OF "AS-BUILT"PLANS (FULL SIZE SHEETS ONLY), THE AS-BUILT SURVEY COORDINATES, WATER SERVICE REPORTS AND A PRESSURE TEST TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTION OF ALL WATER MAINS CONSTRUCTED UNDER THIS PLAN.

THE CONTRACTOR SHALL PROVIDE CHLORINATION TAPS AND BLOWOFFS AS PER THE REQUIREMENTS OF SECTION 801.17 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. IN ADDITION TO THE BLOWOFF LOCATIONS NOTED IN 801.17, THE CONTRACTOR SHALL ALSO INSTALL BLOWOFFS AT EVERY 1,100 LINEAR FEET OF THE WATER MAIN INSTALLED FOR SAMPLING.

ANY SECTION OF WATER MAIN THAT IS LONGER THAN 20 FEET IN LENGTH SHALL BE CHLORINATED. HAND SWABBING METHODS WILL ONLY BE PERMITTED FOR SECTIONS LESS THAN OR EQUAL TO 20 FEET IN LENGTH. USE UNSCENTED HOUSEHOLD BLEACH FOR HAND SWABBING OF PIPE AND FITTINGS. PLEASE NOTE THAT CUT-IN-TEES, SLEEVES, AND ANY OTHER REQUIRED FITTINGS OR PIPING SHALL BE TAKEN INTO ACCOUNT AND ARE INCLUDED IN THE TOTAL LENGTH OF THE SECTION (CUT TO CUT).

ONLY ONE CONNECTION TO AN EXISTING WATER MAIN IS PERMITTED BEFORE DISINFECTION OF A NEW WATER MAIN HAS BEEN COMPLETED. ALL OTHER CONNECTIONS MUST BE MADE AFTER THE MAIN HAS BEEN DISINFECTED.

MAINTAIN EIGHTEEN (18) INCHES VERTICAL AND TEN (10) FEET HORIZONTAL SEPARATION BETWEEN ANY SANITARY OR STORM SEWER PIPING AND ALL PROPOSED WATER MAINS.

WHEN CROSSING THE EXISTING WATER MAIN, AND LOW STRENGTH MORTAR (ITEM 613) IS TO BE USED AS BACKFILL, THE CONTRACTOR SHALL PROVIDE SIZE NO. 57 CRUSHED CARBONATE STONE (CCS) 1 FOOT BELOW TO 1 FOOT ABOVE THE EXISTING WATER MAIN.

IF DURING EXCAVATION, THE POLYETHYLENE ENCASEMENT ON THE EXISTING WATER MAIN BECOMES DAMAGED, THE CONTRACTOR SHALL REPAIR THE POLYETHYLENE ENCASEMENT PER MANUFACTURER'S SPECIFICATIONS AND DOW STANDARD DRAWINGS L-1003 AND L-1004, AT THEIR OWN EXPENSE. ENSURE THAT THE ENTIRE EXPOSED AREA IS COVERED WITH NEW POLYETHYLENE ENCASEMENT AND SECURELY TAPED, PRIOR TO BACKFILLING.

CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE OHIO ADMINISTRATIVE CODE CHAPTER 3745-83-02 WATER DISRUPTION OF SERVICE RULE. EXCAVATE PITS SUFFICIENTLY BELOW THE AREA TO BE CONNECTED TO IN ORDER TO MAINTAIN WATER LEVELS BELOW THE WATER MAIN. IF WATER FROM THE PIT ENTERS THE EXISTING MAIN, CONTACT DIVISION OF WATER IMMEDIATELY. ENSURE THAT SUFFICIENTLY SIZED PUMPS ARE UTILIZED TO REMOVE WATER FROM THE TRENCH AND BACKUP PUMPS ARE KEPT ON SITE FOR REDUNDANCY.

"ITEM SPECIAL SURVEY COORDINATES"SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS. THE SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, HORIZONTAL DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, TRACER WIRE BOXES, AND CASING PIPE TERMINI. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT.

ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2011) ADJUSTMENT, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM (GRID), SOUTH ZONE, WITH ELEVATIONS BASED ON NAVD 88 DATUM. ALL COORDINATES (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N XXXXXX.XX, E XXXXXX.XX, C/L ELEV. XXX.XX). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT HORIZONTAL AND A TENTH OF A FOOT (0.10) OR LESS VERTICAL.

THE COORDINATES SHALL BE DOCUMENTED TO THE ENGINEER IN DIGITAL SPREADSHEET FORM AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION. COORDINATES SHALL BE SUBMITTED TO THE ENGINEER ON A BI-WEEKLY BASIS. COORDINATES SHALL ALSO BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION.

LUMP SUM PAYMENT IS FULL COMPENSATION FOR ALL WORK INVOLVED IN OBTAINING AND DOCUMENTING THE SURVEY COORDINATES AS DESCRIBED IN THIS SPECIFICATION.

ALL WATER MAIN VALVE BOXES, WATER TAP BOXES, TEST STATIONS, PITOMETER TAP STRUCTURES, METER PIT COVERS, AND OTHER SURFACE UTILITY STRUCTURES WITHIN THE DISTURBED AREA SHALL BE ADJUSTED TO GRADE. ANY OF THESE STRUCTURES LOCATED WITHIN PAVEMENT, DRIVEWAYS, OR OTHER TRAVELED AREAS, WHETHER EXISTING OR PROPOSED, SHALL BE EQUIPPED WITH A TRAFFIC RATED, HEAVY DUTY VALVE BOX AND/OR COVER IN ACCORDANCE WITH THE STANDARD DRAWINGS. EXISTING WATER TAP BOXES TO REMAIN THAT ARE ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT, CENTERED OVER THE CURB STOP, AND ADJUSTED TO THE PROPOSED GRADE.

RISER RINGS WILL NOT BE PERMITTED ON ANY NEWLY INSTALLED VALVE BOXES TO BRING VALVES TO FINAL GRADE. THE CONTRACTOR SHALL ENSURE THAT THE BOXES ARE INSTALLED AT THE CORRECT GRADE FOR FINAL PAVING OPERATIONS AND THAT THEIR PAVING CONTRACTOR INSTALLS PAVEMENT CORRECTLY AT LIDS DURING PAVING OPERATIONS. VALVE LIDS ARE NOT PERMITTED TO SET ABOVE FINAL GRADE AND SHALL BE A MAXIMUM OF ¼"BELOW FINAL GRADE

WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER TAP/SERVICE LINE, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR TAP/SERVICE LINE. A MINIMUM OF 3-FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER MAIN THRUST BLOCKS.

A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE

A MINIMUM OF 4 FEET OF COVER IS REQUIRED PRIOR TO PRESSURE TESTING ANY WATER MAIN. A SUFFICIENT AMOUNT OF BACKFILL SHALL BE INSTALLED TO PROVIDE THE ADEQUATE RESTRAINT IN AREAS WHERE REQUIRED.

THE PROPOSED WATER MAIN SHALL BE LOCATED A MINIMUM DISTANCE OF TWENTY (20) FEET AWAY FROM ANY EXISTING OR PROPOSED STRUCTURE, OVERHANG OR FOOTER.

ALL VALVE BOXES AND WATER TAP BOXES SHALL BE LOCATED WITHIN THE EASEMENT AREA.

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION NOT TO DAMAGE THE EXISTING 24 INCH WATER MAIN DUE TO MINIMAL COVER.

WHERE INDICATED ON THE PLANS, THE EXISTING WATER MAIN SHALL BE ABANDONED; AND ANY EXISTING WATER SERVICE LINES OFF THIS MAIN SHALL BE TRANSFERRED TO THE NEW WATER MAIN. PRIOR TO ABANDONMENT OF THE EXISTING WATER MAIN, THE PROPOSED WATER MAIN SHALL BE PIGGED (IF REQUIRED), TESTED, CHLORINATED AND PUT IN SERVICE AND THEN THE EXISTING WATER SERVICE LINES SHALL BE TRANSFERRED. THE CONTRACTOR SHALL MAINTAIN WATER SERVICE TO ALL PROPERTIES DURING CONSTRUCTION OF THE NEW WATER MAIN AND SHALL NOTIFY ALL CUSTOMERS AFFECTED BY THE TRANSFER OF WATER SERVICE LINES. TO ENSURE THAT ALL EXISTING WATER SERVICE LINES ARE TRANSFERRED TO THE NEW MAIN, NO WATER MAIN SHALL BE ABANDONED UNTIL THE NEW WATER MAIN HAS BEEN PUT IN SERVICE; ALL AFFECTED WATER SERVICE LINES HAVE BEEN TRANSFERRED; AND THE EXISTING WATER MAIN TO BE ABANDONED HAS BEEN SHUT DOWN FOR 24 HOURS. ALL VISIBLE VALVE BOXES, FIRE HYDRANTS, AND WATER TAP BOXES ON THE WATER MAIN TO BE ABANDONED, WHICH WILL NO LONGER BE IN SERVICE, SHALL BE REMOVED. ALL WATER MAINS TO BE ABANDONED SHALL BE MADE WATER TIGHT. THE REQUIRED SURFACE RESTORATION SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM(S).

THE CONTRACTOR SHALL COORDINATE HIS WORK SUCH THAT NO WATER CUSTOMER WILL HAVE THEIR SERVICE DISRUPTED MORE THAN TWO (2) TIMES THROUGHOUT THE DURATION OF THIS PROJECT.

THE CONTRACTOR IS REQUIRED TO SUBMIT A SEQUENCE OF CONSTRUCTION TO THE CITY AT THE PRECONSTRUCTION CONFERENCE. THIS SEQUENCE OF CONSTRUCTION SHOULD ALSO DETAIL THE CONTRACTOR'S PLANS FOR TESTING AND CHLORINATION OF THE NEW MAINS, INCLUDING THE SOURCE OF THE WATER AND LOCATION OF TEMPORARY CHLORINATION AND BLOW-OFF TAPS. THE CITY SHALL HAVE THE RIGHT TO APPROVE, REJECT OR MODIFY THE CONSTRUCTION SEQUENCE TO ENSURE THAT THE INTERRUPTIONS ARE HELD TO A MINIMUM. NOTE: THE CITY MAY TAKE UP TO 10 WORKING DAYS TO RESPOND TO THIS SUBMITTAL.

WATER WORK NOTES

DESIGN AGENCY
Jacobs

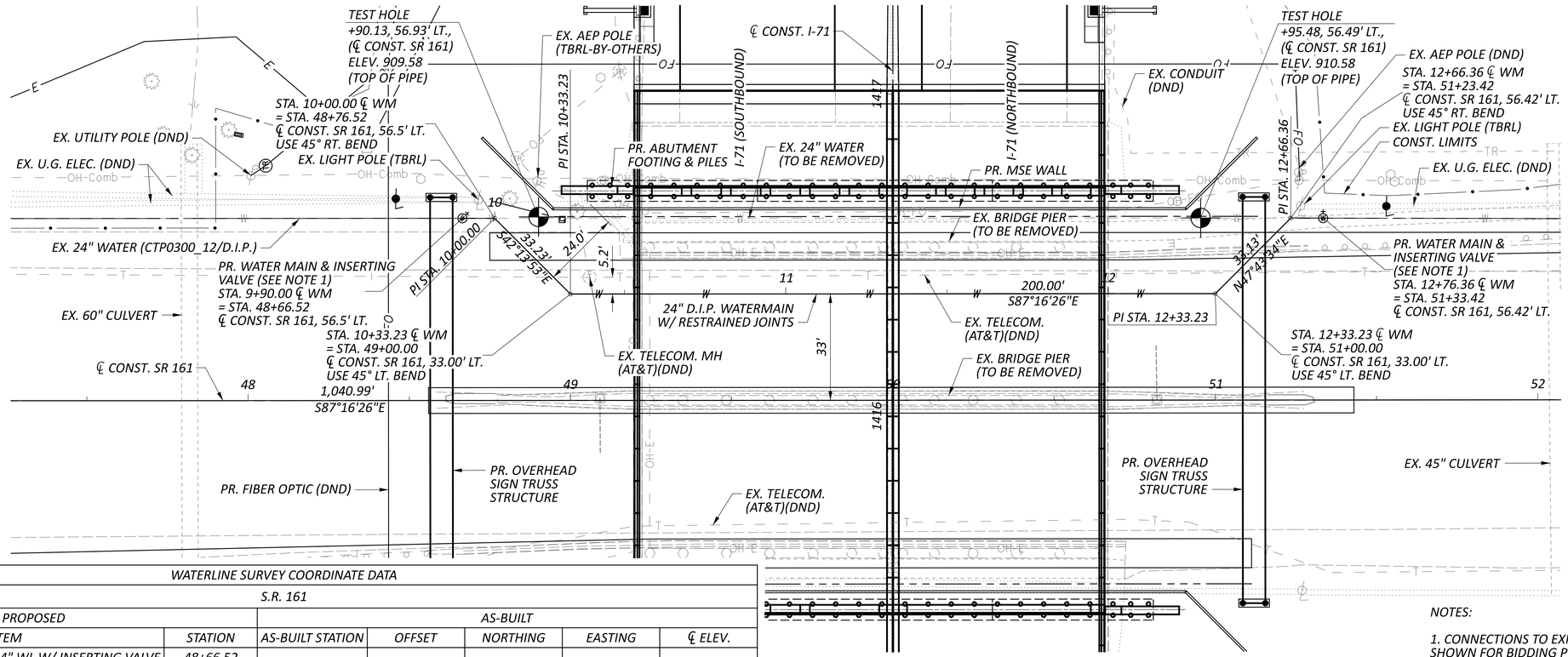
DESIGNER
SRH

REVIEWER
MCK 03/23/26

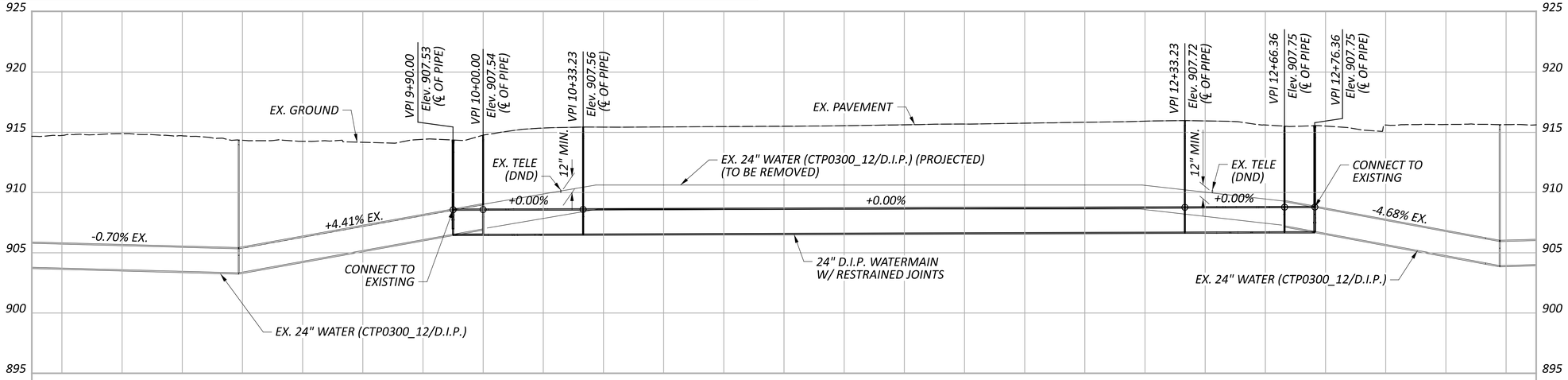
PROJECT ID
109164

SHEET P.313 | TOTAL 618

FRA-71-19.10



WATERLINE SURVEY COORDINATE DATA							
S.R. 161							
PROPOSED			AS-BUILT				
REF #	ITEM	STATION	AS-BUILT STATION	OFFSET	NORTHING	EASTING	℄ ELEV.
1	CUT & CONNECT TO EX. 24" WL W/ INSERTING VALVE	48+66.52					
2	45° HORIZONTAL BEND	48+76.52					
3	45° HORIZONTAL BEND	49+00.00					
4	45° HORIZONTAL BEND	51+00.00					
5	45° HORIZONTAL BEND	51+23.42					
6	CUT & CONNECT TO EX. 24" WL W/ INSERTING VALVE	51+33.42					



STATION	9+00	10+00	11+00	12+00	13+00
EX GROUND	914.72	914.76	915.49	915.84	915.61
℄ OF PIPE	904.46±	907.54	907.62	907.71	906.69±
CUT	9.26±	6.22	6.87	7.13	7.92±

NOTES:

1. CONNECTIONS TO EXISTING WATER LINE ARE SHOWN FOR BIDDING PURPOSES ONLY AND ARE BASED ON AVAILABLE RECORD DOCUMENTATION. CONTRACTOR SHALL FIELD LOCATE EXISTING WATER LINE AND SHALL SUBMIT, FOR REVIEW AND APPROVAL, A REVISED RELOCATION PLAN BASED ON EXISTING CONDITIONS, INCLUDING EXISTING JOINTS LOCATIONS. SUBMITTAL SHALL ALSO INCLUDE ALL SUPPORTING CALCULATIONS FOR RESTRAINED JOINT LOCATIONS AND LENGTHS.

HORIZONTAL SCALE IN FEET
0 10 20 40

WATERLINE RELOCATION PLAN
SR 161

DESIGN AGENCY
Jacobs

DESIGNER MCK
REVIEWER BAP 03/05/26
PROJECT ID 109164
SHEET P.314 TOTAL 618

FRA-71-19.10

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ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
				NOISE BARRIERS
SPECIAL	60610900	LS		SPECIAL - NOISE BARRIER (REFLECTIVE TYPE BARRIER PANELS WITH STRUCTURAL THICKNESS = 4½")

NOISE BARRIER WALL DATA

SHAFT NO.	NOISE BARRIER STATION	POST TYPE	TOP OF BARRIER ELEVATION	BOTTOM OF BARRIER ELEVATION	BARRIER HEIGHT (FT.)	POST SPACING (FT.)	GAP (IN.)	PLATE THICKNESS (IN.)	SHAFT LENGTH (FT.)	TOP OF SHAFT ELEVATION	TIP OF SHAFT ELEVATION
142	10+12.00	A	884.00	872.00	12.00	8	2.1875	1.125	8	871.72	863.72
143	10+20.00	A	884.00	872.00	12.00	8	2.1875	1.125	8	871.72	863.72
144	10+28.00	A	884.00	871.50	12.50	8	2.1875	1.125	8	871.22	863.22
145	10+36.00	A	884.00	871.00	13.00	8	2.1875	1.125	8	870.72	862.72
146	10+44.00	A	884.00	871.00	13.00	8	2.1875	1.125	8	870.72	862.72
147	10+52.00	A	884.00	870.50	13.50	8	2.1875	1.125	8	870.22	862.22
148	10+60.00	A	884.00	870.00	14.00	8	2.1875	1.125	8	869.72	861.72
149	10+68.00	A	884.00	869.50	14.50	8	2.1875	1.125	8	869.22	861.22
150	10+76.00	A	884.00	869.00	15.00	8	2.1875	1.125	8	868.72	860.72
151	10+84.00	A	884.00	868.50	15.50	8	2.1875	1.125	8	868.22	860.22
152	10+92.00	A	884.00	868.00	16.00	8	2.1875	1.125	8	867.72	859.72
153	11+00.00	A	884.00	867.00	17.00	8	2.1875	1.125	8	866.72	858.72
154	11+08.00	A	884.00	866.00	18.00	8	2.1875	1.125	8	865.72	857.72
155	11+16.00	A	884.00	865.00	19.00	8	2.1875	1.125	8	864.72	856.72
156	11+24.00	A	884.00	864.00	20.00	8	2.1875	1.125	8	863.72	855.72
157	11+32.00	A	883.00	863.00	20.00	8	2.1875	1.125	8	862.72	854.72
158	11+40.00	A	881.50	861.50	20.00	8	2.1875	1.125	8	861.22	853.22
159	11+48.00	B	880.00	860.00	20.00	8	1.8750	0.875	8	859.77	851.77

NOISE BARRIER WALL SCHEDULE

PROPOSED WORK:

THIS TASK INVOLVES EXTENSION OF EXISTING NOISE BARRIER WALL AND REPLACEMENT OF EXISTING NOISE BARRIER PANELS WITH FULL-HEIGHT NOISE BARRIER PANELS AT SOUTH OF W. COOKE ROAD IN FRANKLIN COUNTY.

ITEM 606 - NOISE BARRIER (REFLECTIVE TYPE BARRIER WALLS WITH STRUCTURAL THICKNESS = 4 ½")

THIS WORK CONSISTS OF THE FOLLOWING PROPOSED WORK:

1) *REMOVE AND REPLACEM EXISTING NOISE BARRIER PANELS AND POSTS INCLUDING NEW FOUNDATIONS. CUT EXISTING ANCHOR BOLT FLUSH AT TOP OF SHAFT AND GRIND SMOOTH.*
2) *REMOVE EXISTING NOISE BARRIER FOUNDATIONS IF IN CONFLICT WITH PROPOSED WORK OR AS DIRECTED BY THE ENGINEER. BACKFILL VOIDS IN ACCORDANCE WITH C&MS 202.*
3) *EXTENSION/CONSTRUCTION OF NOISE BARRIER WALL NORTH OF EXISTING END OF WALL.*

ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK AS DETAILED IN THE PLANS AND STANDARD DRAWING NBS-1-09 SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 606, SPECIAL - NOISE BARRIER (REFLECTIVE TYPE BARRIER PANELS WITH STRUCTURAL THICKNESS = 4 1/2").

NOISE BARRIER (WALL 9) GENERAL NOTES AND ESTIMATED QUANTITIES SOUTH OF W. COOKE RD.

DESIGN AGENCY
Jacobs

DESIGNER MAN
REVIEWER MJR 01/25/25
PROJECT ID 109164
SHEET P.315 TOTAL 618

FRA-71-19.10

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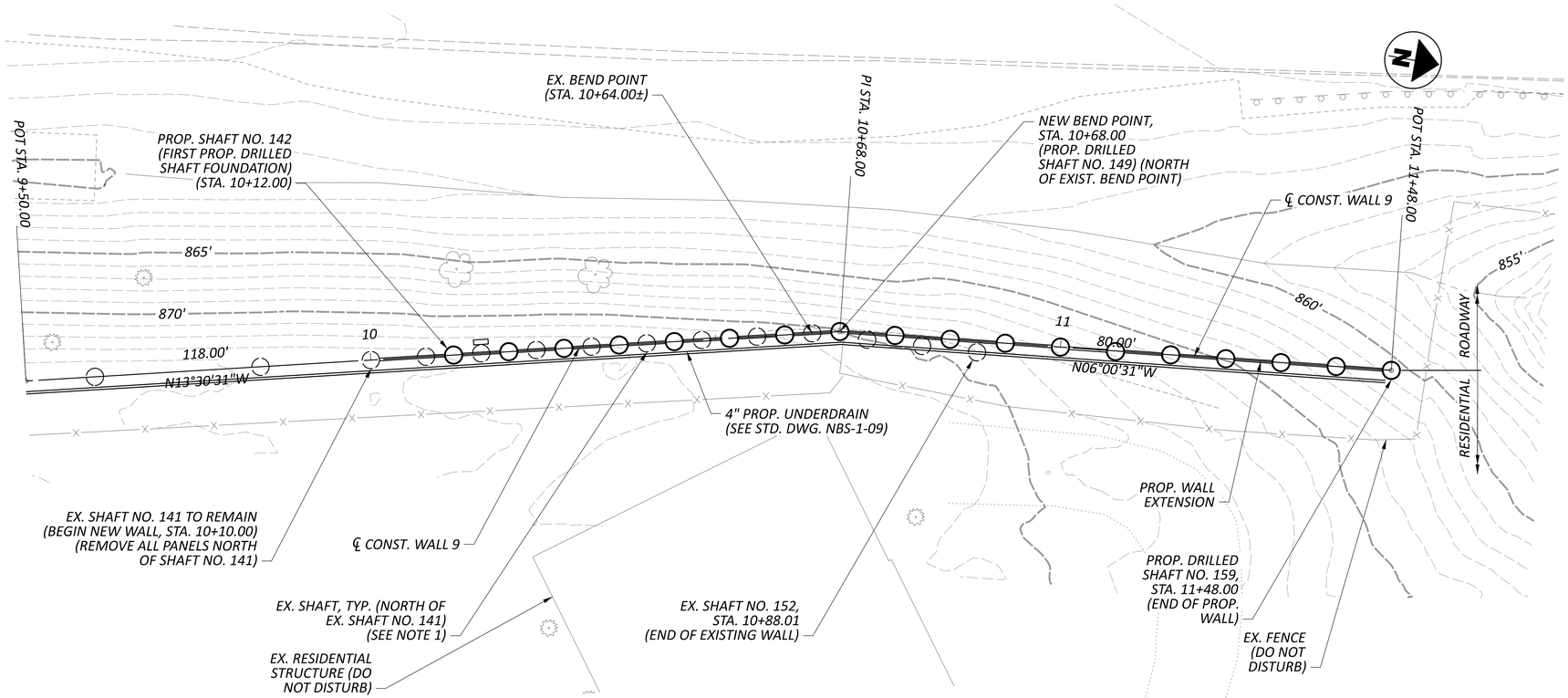
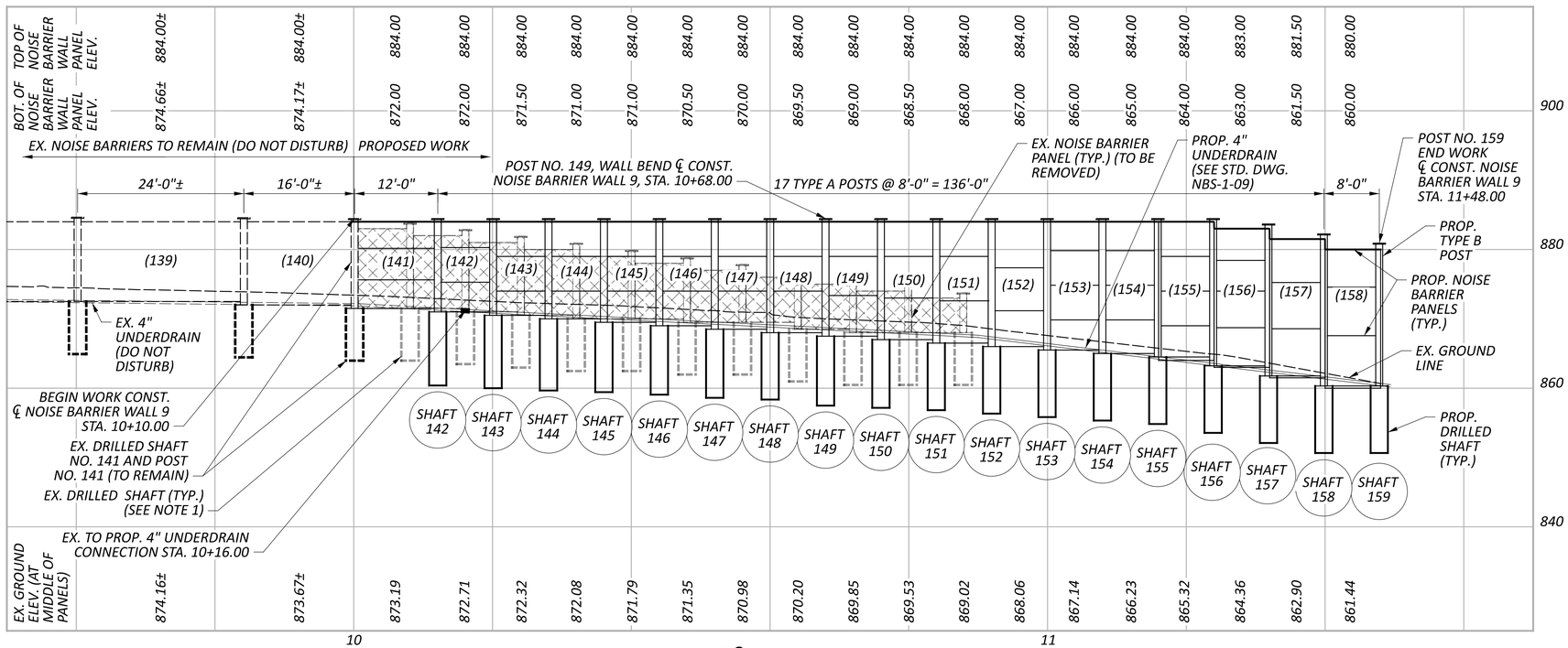


PLAN VIEW (WALL 9)

NOTES:

1) REMOVE EXISTING NOISE BARRIER FOUNDATIONS IF IN CONFLICT WITH PROPOSED WORK OR AS DIRECTED BY THE ENGINEER.



PROFILE ALONG ℄ NOISE BARRIER WALL 9

LEGEND:

SHAFT XXX - *PROPOSED DRILLED SHAFT FOUNDATION*

- *REMOVE AND REPLACE EXISTING NOISE BARRIER PANELS. PAYMENT INCLUDED WITH NOISE BARRIER (REFLECTIVE TYPE BARRIER PANELS WITH STRUCTURAL THICKNESS = 4 1/2"), LUMP SUM.*

HORIZONTAL SCALE IN FEET
0 5 10 20

NOISE BARRIER (WALL 9) PLAN AND ELEVATION SOUTH OF W. COOKE RD.

DESIGN AGENCY
Jacobs

DESIGNER MAN
REVIEWER RLC 05/10/24
PROJECT ID 109164
SHEET P.316 TOTAL 618

FRA-71-19.10

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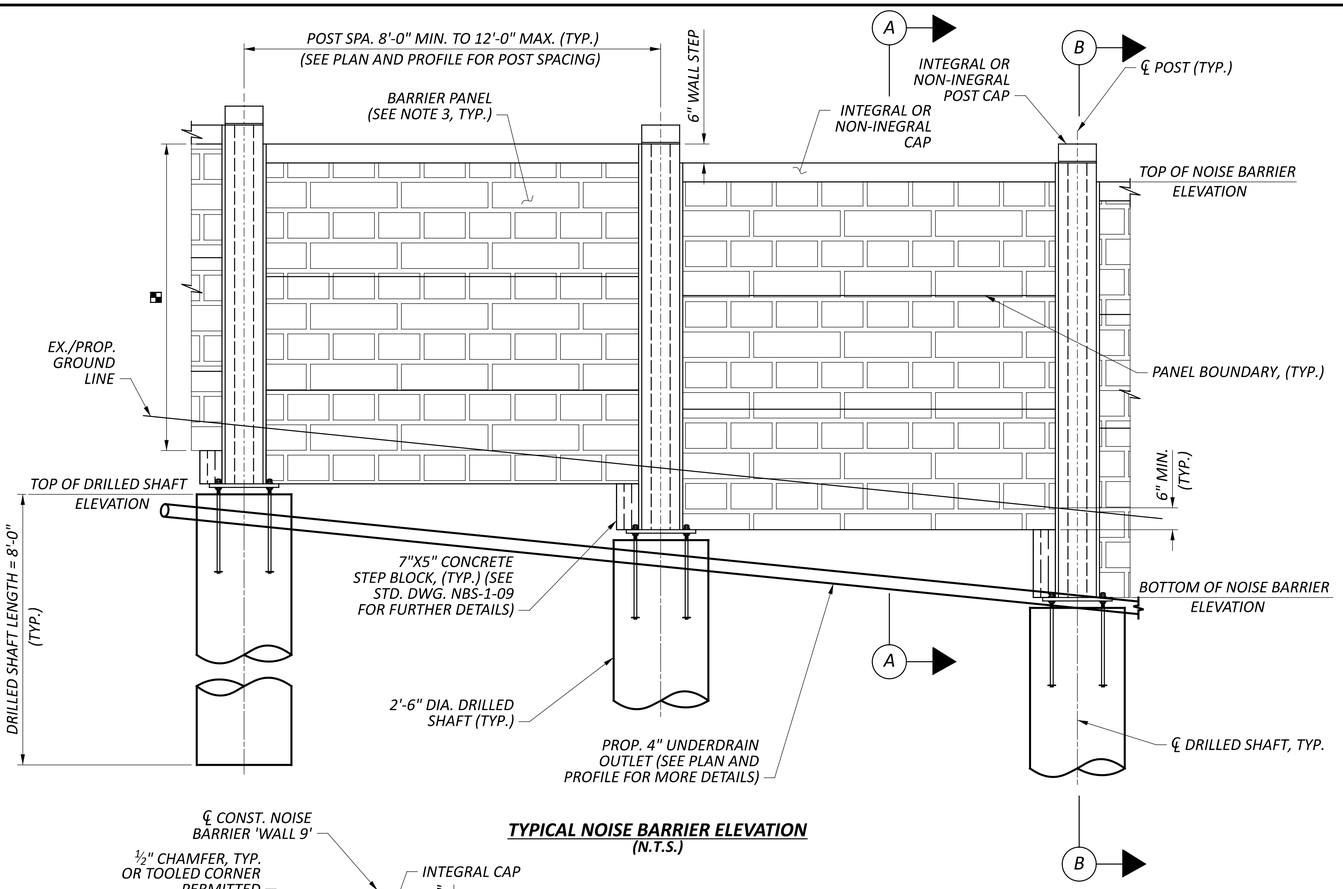
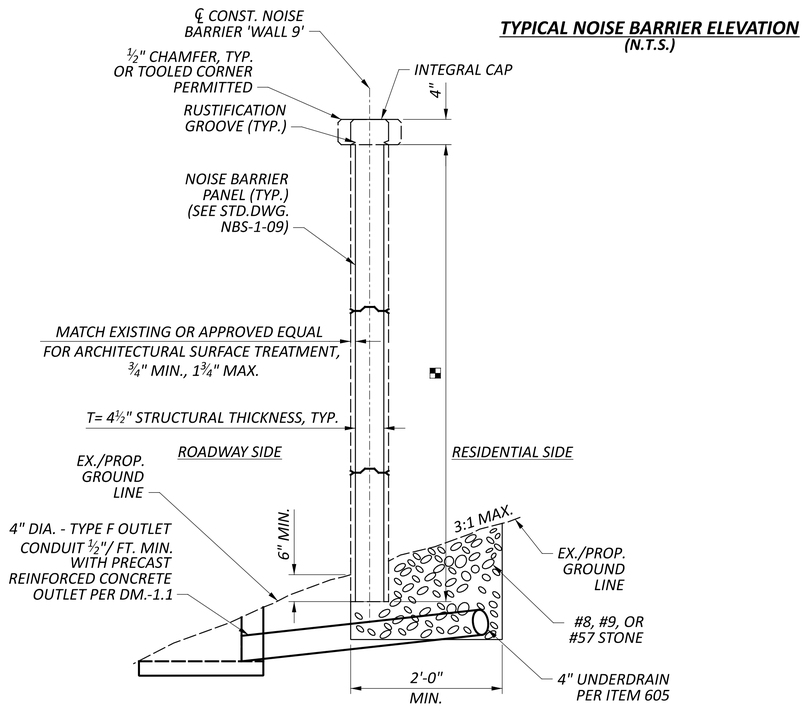
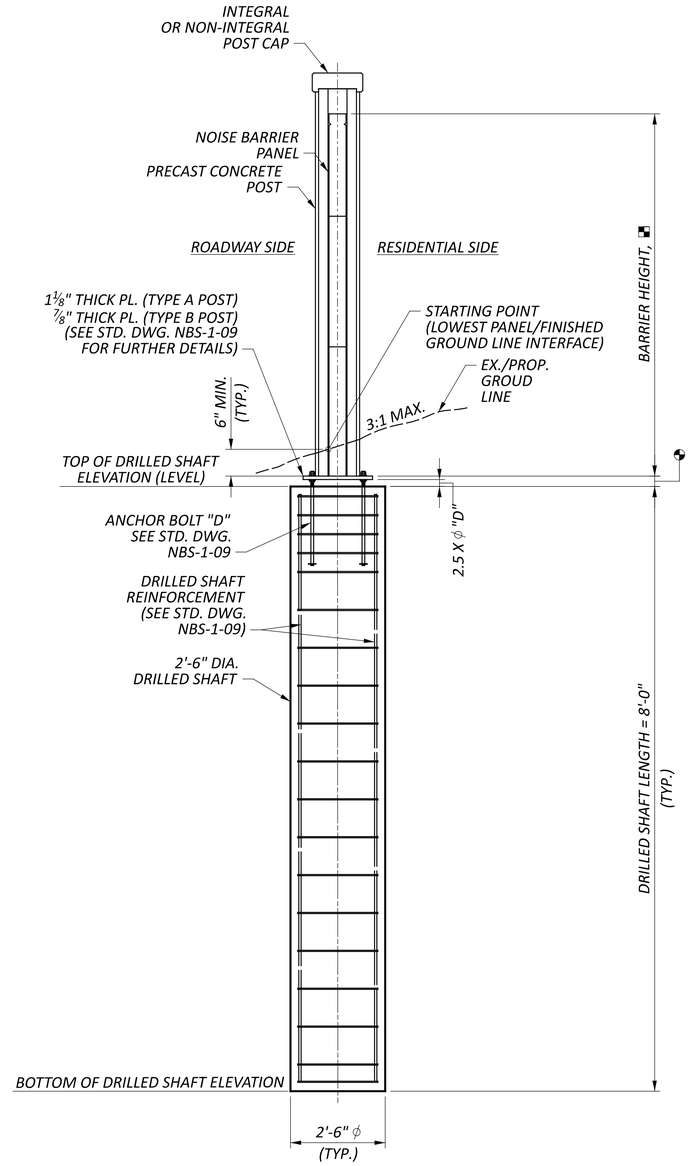


TYPICAL NOISE BARRIER ELEVATION
(N.T.S.)



A **SECTION**
TYPICAL WALL SECTION (N.T.S.)



B **SECTION**
TYPICAL WALL SECTION (N.T.S.)

NOTES & LEGEND:

1. *REFER TO NOISE BARRIER SPECIFICATIONS AND STANDARD DRAWING NBS-1-09.*
2. *DRAINAGE REQUIREMENTS SHALL CONFORM TO STD. DWG. NBS-1-09.*
3. *PANELS SHALL MATCH THE EXISTING WALL AESTHETIC TO THE SATISFACTION OF THE ENGINEER. REFER TO NBS-1-09 FOR ADDITIONAL REQUIREMENTS.*

▪ = *SEE PLAN AND PROFILE OF WALL FOR NOISE BARRIER PANELS HEIGHT AND SPACINGS.*

◔ = $3\frac{5}{16}$" *MAX. TYP. GAP (POST A) BETWEEN BOTTOM OF POST & TOP OF DRILLED SHAFT*
= $2\frac{3}{4}$" *MAX. TYP. GAP (POST B) BETWEEN BOTTOM OF POST & TOP OF DRILLED SHAFT*

NOISE BARRIER (WALL 9) DETAILS SOUTH OF W. COOKE RD.

DESIGN AGENCY
Jacobs

DESIGNER	MAN
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SHEET	P.317
TOTAL	618

FRA-71-19.10

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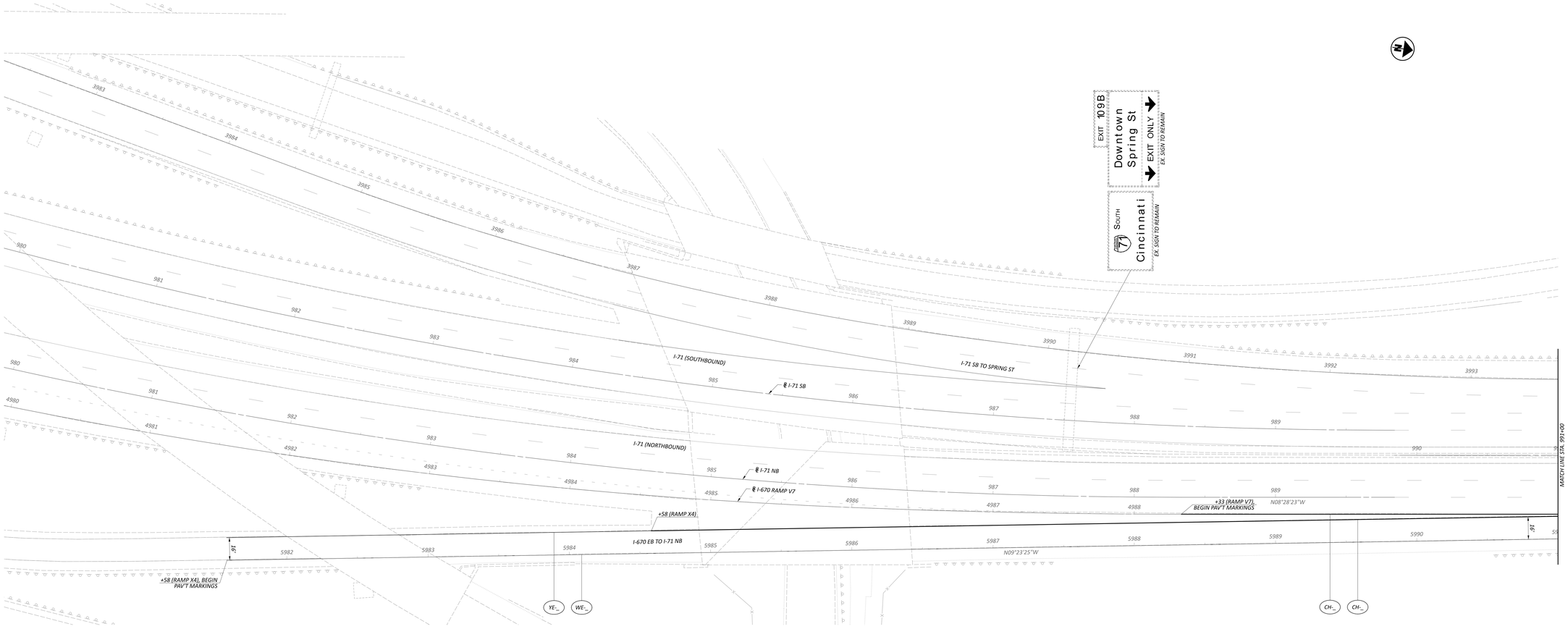


PAVEMENT MARKING LEGEND	
XX	PROPOSED PAVEMENT MARKINGS, ITEM 642
XX	PROPOSED PAVEMENT MARKINGS, ITEM 646
XX	EXISTING PAVEMENT MARKINGS (TO REMAIN)
	RAISED PAVEMENT MARKERS- INSTALL PER STD. CONST. DWGS TC-65.10 AND TC-65.11

INTERSTATE LINE SPECIFICATIONS (ODOT)		
ITEM 644	ITEM 646	
WE	WE	EDGE LINE, 6" WHITE
YE	YE	EDGE LINE, 6" YELLOW
LL	LL	LANE LINE, 6" WHITE
CH	CH	CHANNELIZING LINE, 12" WHITE
CM	CM	CHEVRON MARKING, 24" WHITE
LA	LA	LANE ARROW
WD	WD	WORD ON PAVEMENT
DL6	DL6	DOTTED LINE, 6" WHITE (3' LINE / 9' GAP)

SR 161 LINE SPECIFICATIONS (CITY OF COLUMBUS)	
ITEM 642	
WE	EDGE LINE, 6" WHITE
YE	EDGE LINE, 4" YELLOW
LL	LANE LINE, 6" WHITE
DY	CENTER LINE, 4" SOLID DOUBLE YELLOW
CH	CHANNELIZING LINE, 12" WHITE
SL	STOP LINE, 24" WHITE
XW	CROSSWALK LINE, 12" WHITE
YT	TRANSVERSE / DIAGONAL LINE, 24" YELLOW
WT	TRANSVERSE / DIAGONAL LINE, 24" WHITE
LA	LANE ARROW
WD	WORD ON PAVEMENT

SIGN LEGEND	
	PROPOSED SIGN
	EXISTING SIGN TO BE REMOVED
	EXISTING SIGN TO REMAIN

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

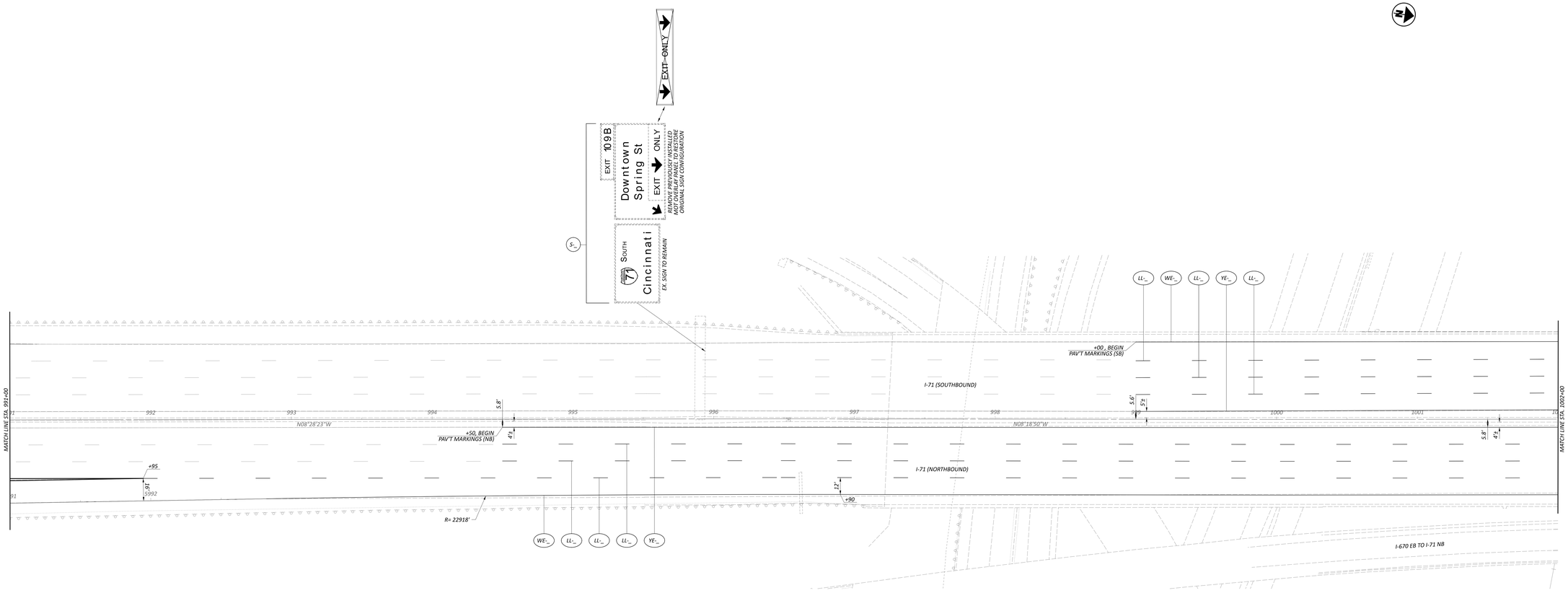
TRAFFIC CONTROL PLAN - I-71
BEGIN WORK TO STA. 991+00.00

DESIGN AGENCY: Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/16/26
PROJECT ID: 109164
SHEET: P.318 | TOTAL: 618

FRA-71-19.10

MODEL: CLP_071 - Sheet 1 PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 11:16:04 AM BY/DBY: CHADEY, PSP, JJ-cadd, PENTRL: CHADEY_PSP_JJ-cadd_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHADEY5420 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\109164\Highway\Roadway\Plans\Sheets\TCP\FRA-71-19.10_TCP_Sheet 1.dgn



HORIZONTAL SCALE IN FEET
0 10 20 40

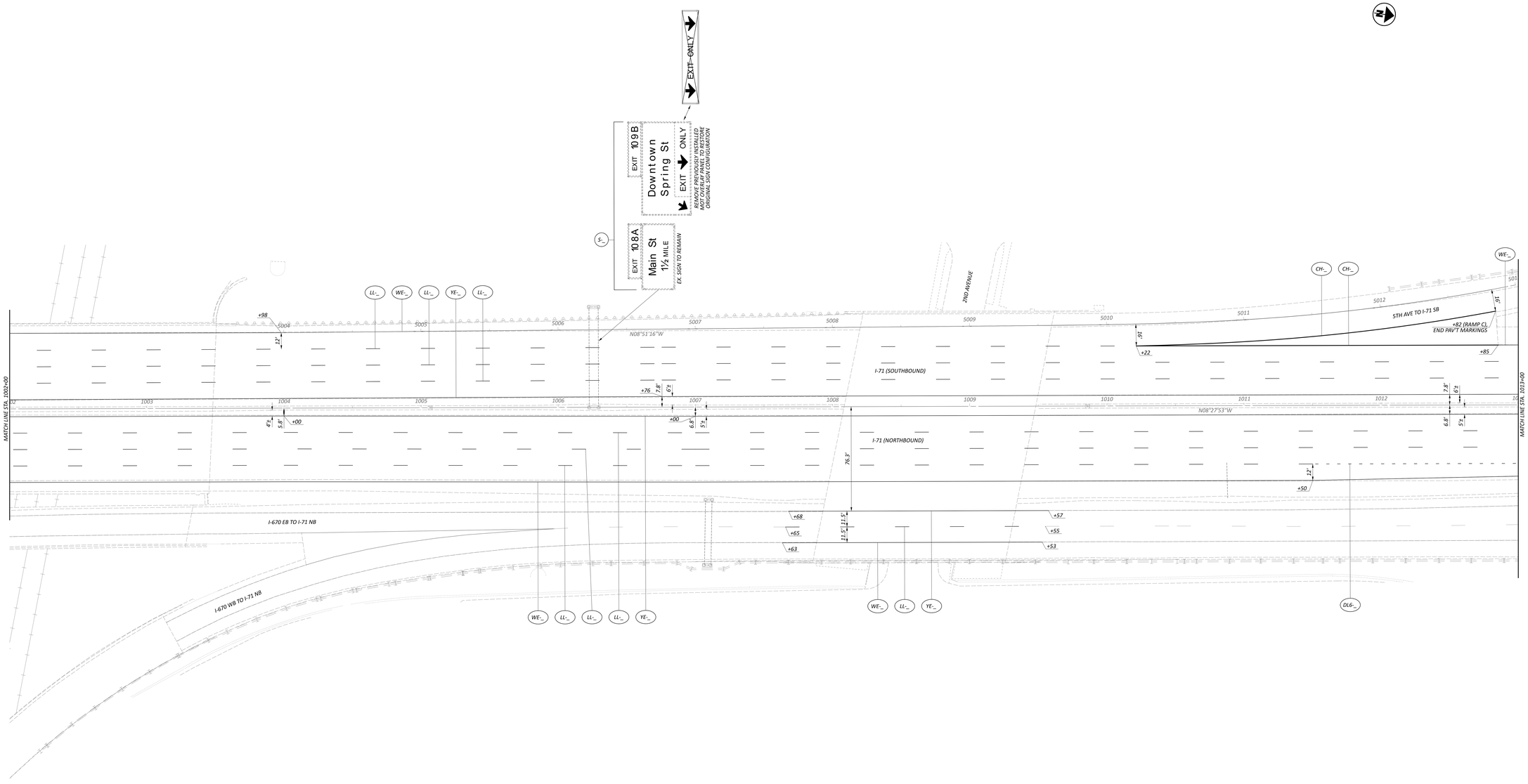
TRAFFIC CONTROL PLAN - I-71
STA. 991+00.00 TO STA. 1002+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/16/26
PROJECT ID 109164
SHEET P.319 TOTAL 618

FRA-71-19.10

MODEL: CLP_OT1 - Sheet 2 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 11:16:13 AM BYDIR: DWGOT_PSF_I-71HOL PENTBL: DWGOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DWGOTS\42 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE: C:\Users\chris.lawrence\Jacobs\Desktop\Projects\109164 - FRA-71-19.10 HOL\Sheets\109164_TCP_I-71_STA_991+00_TO_STA_1002+00.dgn



HORIZONTAL SCALE IN FEET
0 10 20 40

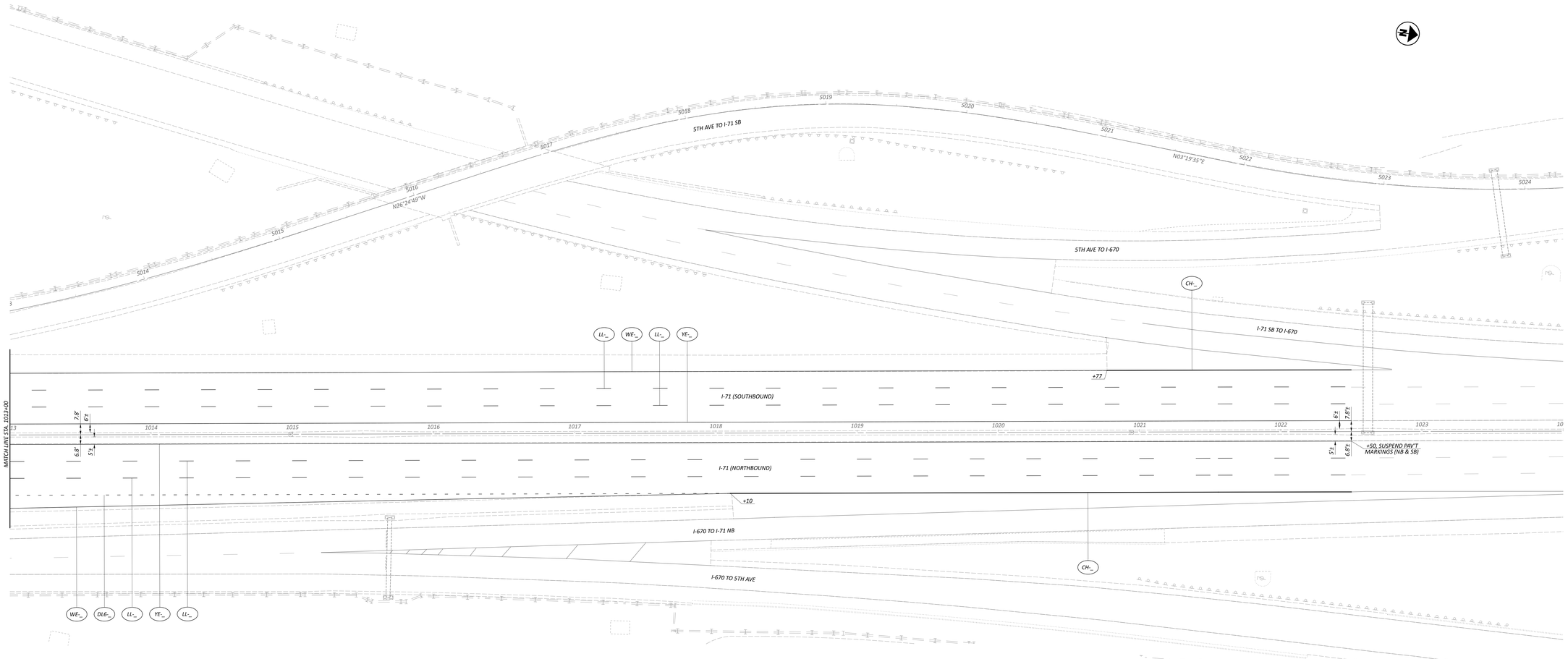
TRAFFIC CONTROL PLAN - I-71
STA. 1002+00.00 TO STA. 1013+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/16/26
PROJECT ID: 109164
SHEET: P.320
TOTAL: 618

FRA-71-19.10

MODEL: C3F_DT1 - Sheet: 3 PAPERSIZE: 66x34.0 in SAVED: 3/17/2026 TIME: 11:16:14 AM BYDIR: ONDOT_PSF_E-I-MGB_PENTBL: ONDOT_PW.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTDGN2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: N:\Projects\109164\Roadway\Traffic\Sheets\FRA-71-19.10_TRAFFIC CONTROL PLAN - I-71 STA. 1002+00.00 TO STA. 1013+00.00.dgn



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1013+00.00 TO STA. 1024+00.00

DESIGN AGENCY
Jacobs

DESIGNED CNR
REVIEWED MCK 03/16/26
PROJECT ID 109164
SHEET P.321 TOTAL 618

FRA-71-19.10

MODEL: CLP_071 - Sheet 4 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 11:16:13 AM PLTDRV: DWG2PC_PSF_[-color]_PENTBL: DWG2PC_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DWGTOLVZ WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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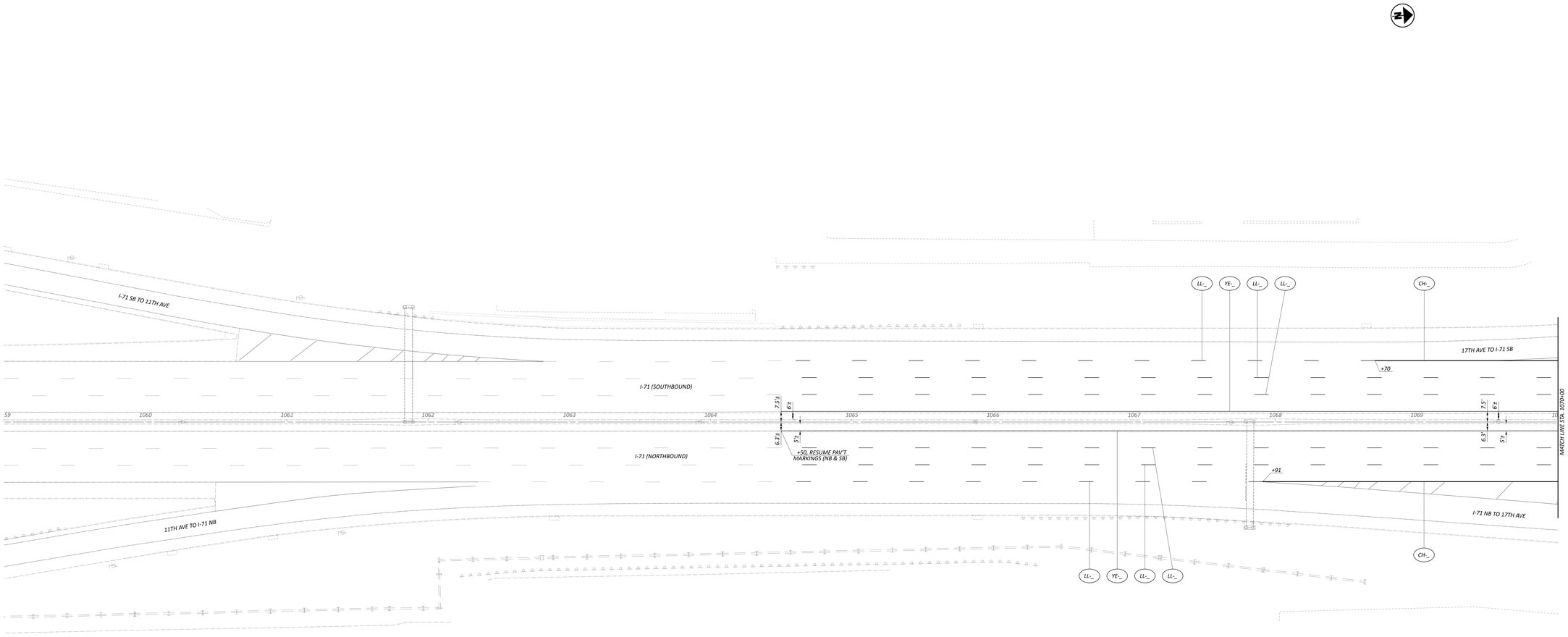


HORIZONTAL SCALE IN FEET
0 10 20 40

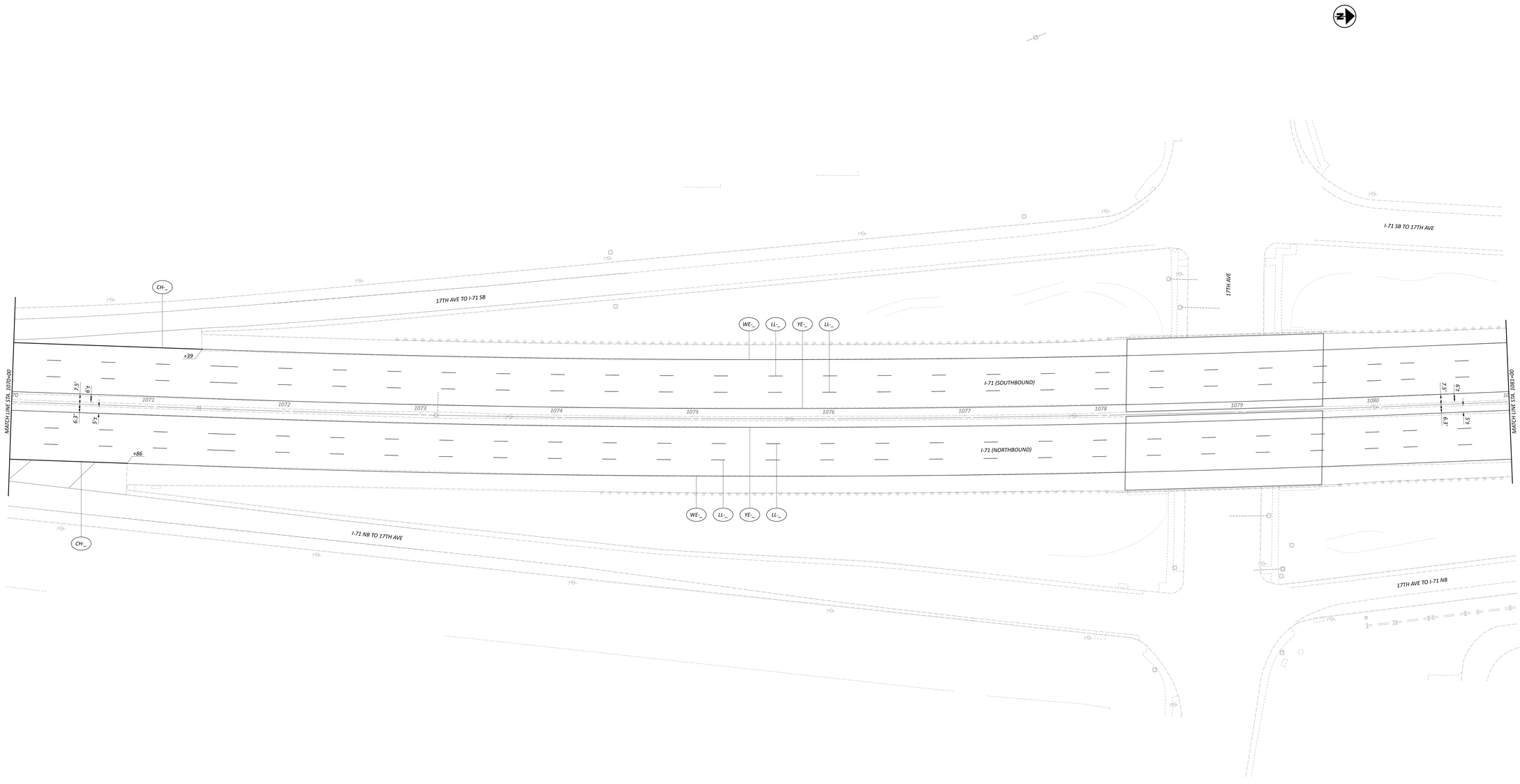
TRAFFIC CONTROL PLAN - I-71
STA. 1059+00.00 TO STA. 1070+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/16/26
PROJECT ID: 109164
SHEET: P.322
TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet: 5 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 11:16:14 AM BYDIR: DWOOT_PSF: 17-cmb_PENTBL: DWOOT_PenSet USER: Chris.Lawrence@jacobs.com WORKSPACE: DWOOT0142 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
ALL DESIGNS, DRAWINGS AND SPECIFICATIONS CONTAINED IN THIS PLAN ARE THE PROPRIETARY PROPERTY OF JACOBS AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF JACOBS.



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1070+00.00 TO STA. 1081+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET
P.323

TOTAL
618

FRA-71-19.10

MODEL: CU_071 - Sheet 6 PAPERSIZE: 66x34.0 in | DATE: 3/17/2026 TIME: 11:16:17 AM BY/DBY: DHOOT; PSF: [--Unit]; PENTBL: DHOOT_PSF; File Unit: USER: Chris.Lawmon1@jacobs.com WORKSPACE: DHOOT01423 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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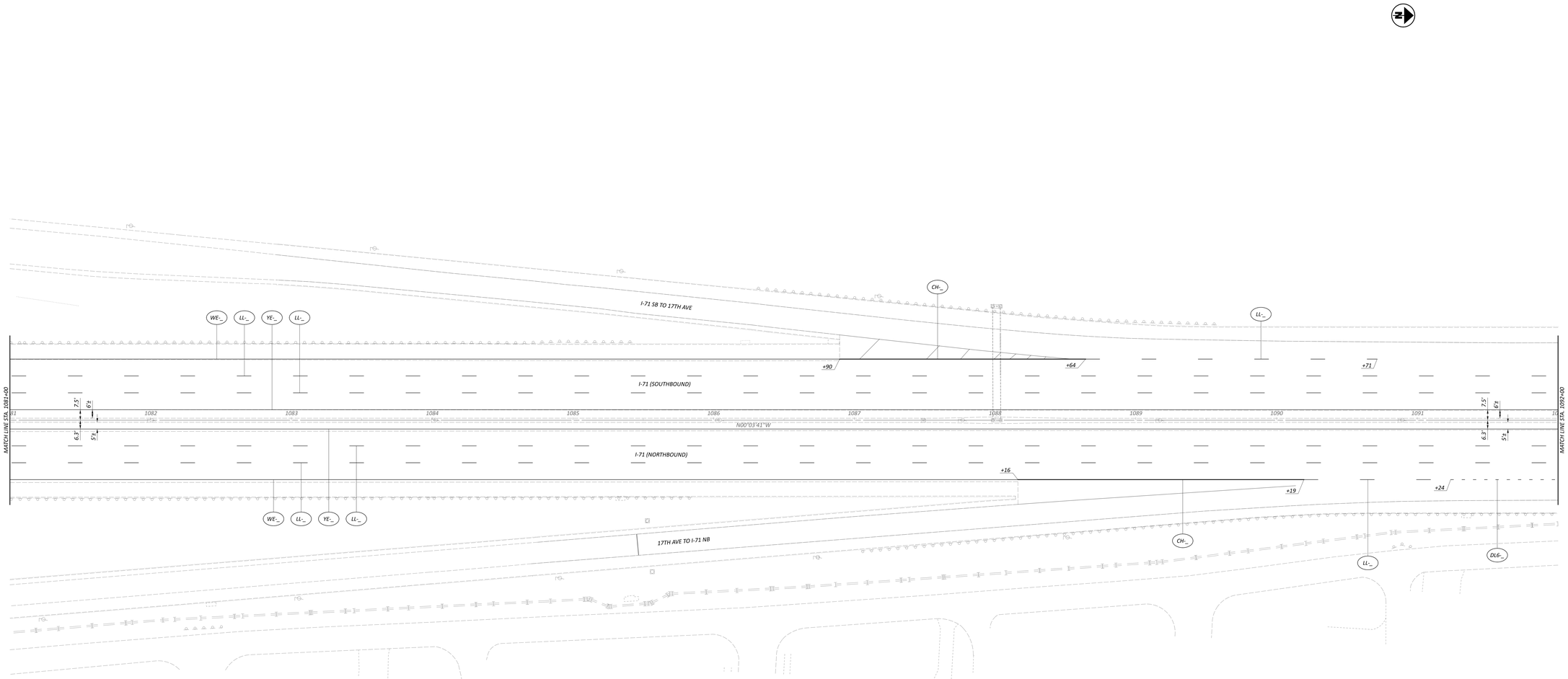


HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1081+00.00 TO STA. 1092+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

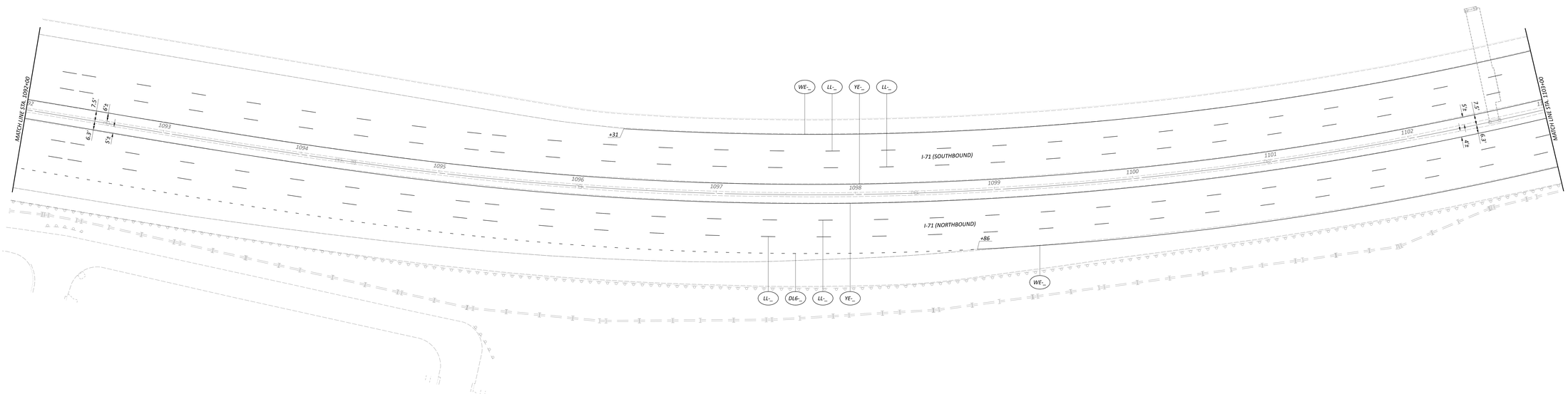
PROJECT ID
109164

SHEET
P.324

TOTAL
618

FRA-71-19.10

MODEL: CU_071 - Sheet 7 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 11:16:14 AM BYDIR: ONDOT_PSF_I-71HOL PENTBL: ONDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOTDIST2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILE NAME: P:\109164\Highway\Roadway\Design\Traffic\Sheets\FRA-71-19.10_TCP_I-71_STA_1081+00_TO_1092+00.dgn



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1092+00.00 TO STA. 1103+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET P.325 | TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet 8 PAPERSIZE: 66x34.0 in | DATE: 3/17/2026 TIME: 11:16:19 AM PLTDRV: CHDOT_PSF_11.stb| PLTBL: CHDOT_Pen.tbl USER: Chris.Lawmon@jacobs.com WORKSPACE: CHDOT042 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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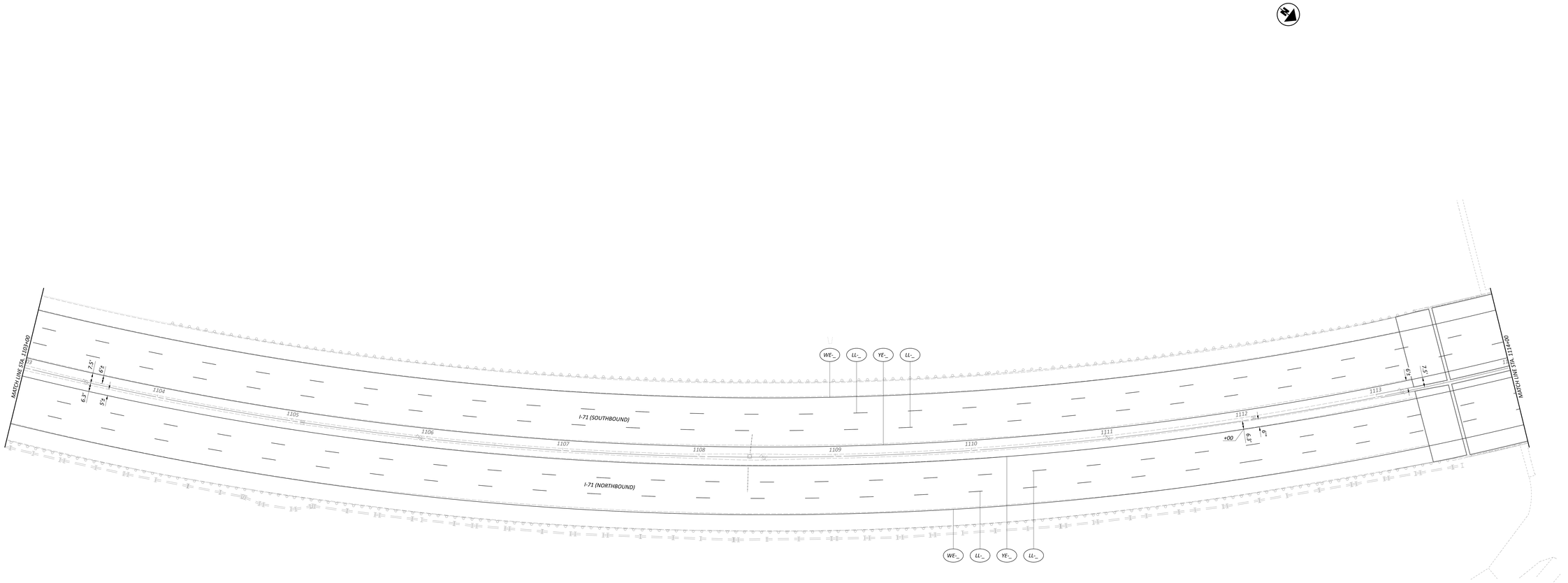


HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1103+00.00 TO STA. 1114+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

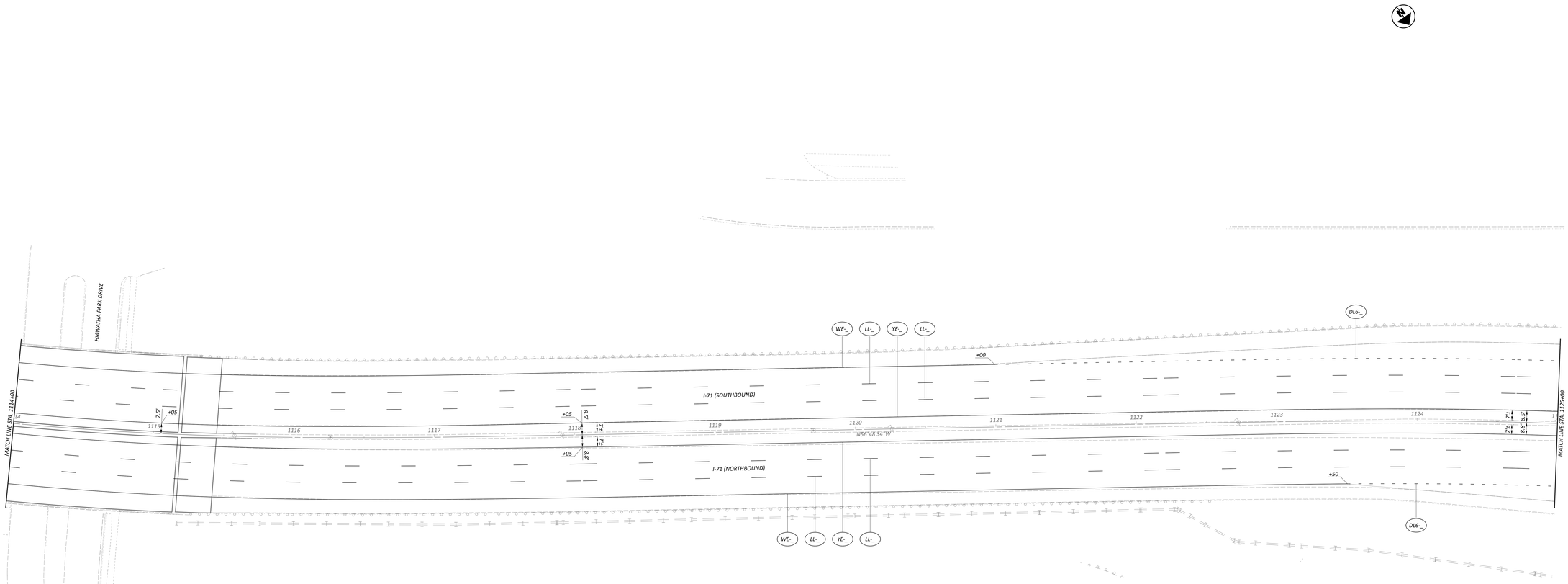
REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET P.326 | TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet: 9 PAPERSIZE: 66x34.0 in | DATE: 3/17/2026 TIME: 11:16:24 AM USERPROFILE: CMOOT PSF: I-71HOL PENTBL: CMOOT_PW.tbl USER: Chris.Lawmon1@jacobs.com WORKSPACE: CMOOT0143 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
FILENAME: P:\Projects\Ohio\FRA-71-19.10\Design\Roadway\Plan Sheets\Traffic Control\FRA-71-19.10_TCP_009.dgn



FRA-71-19.10

MODEL: CU_071 - Sheet: SS WARNINGS: 66x44 Dia | DATE: 2/11/2026 7:44:11 AM | PLOTTED: GROOT, JOY - J-shelf, ENTIRE CHOOT, Pen:68 USER: Chris.Lawrence@jacobs.com WORKSPACE: OHDOTCVG3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25

FILE: C:\Users\chris.lawrence\Jacobs\Documents\CADD\109164 - I-71 Corridor Study\Roadway\Plan Production\109164_071_SS.dgn

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1114+00.00 TO STA. 1125+00.00

DESIGN AGENCY
Jacobs

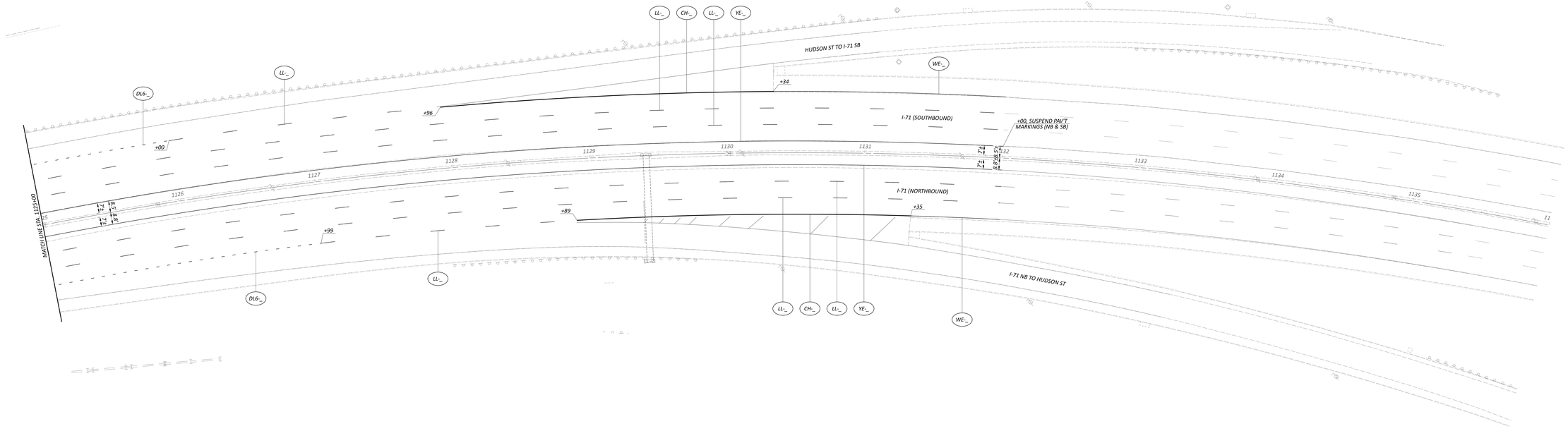
DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET
P.327

TOTAL
618



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1125+00.00 TO STA. 1136+00.00

DESIGN AGENCY
Jacobs

DESIGNED CNR
REVIEWED MCK 03/16/26
PROJECT ID 109164
SHEET P.328 TOTAL 618

FRA-71-19.10

MODEL: CLP_OT1 - Sheet:11 WARNOCK 66x44 (Ex.) DATE: 2/11/2026 TIME: 11:16:17 AM PTDBY: GROOT, JOP, J-Lead, PENTRE, CHRISTOPHER Pen-tbl: USER: Chris.Lawrence@jacobs.com WORKSPACE: CHRISTCVG3 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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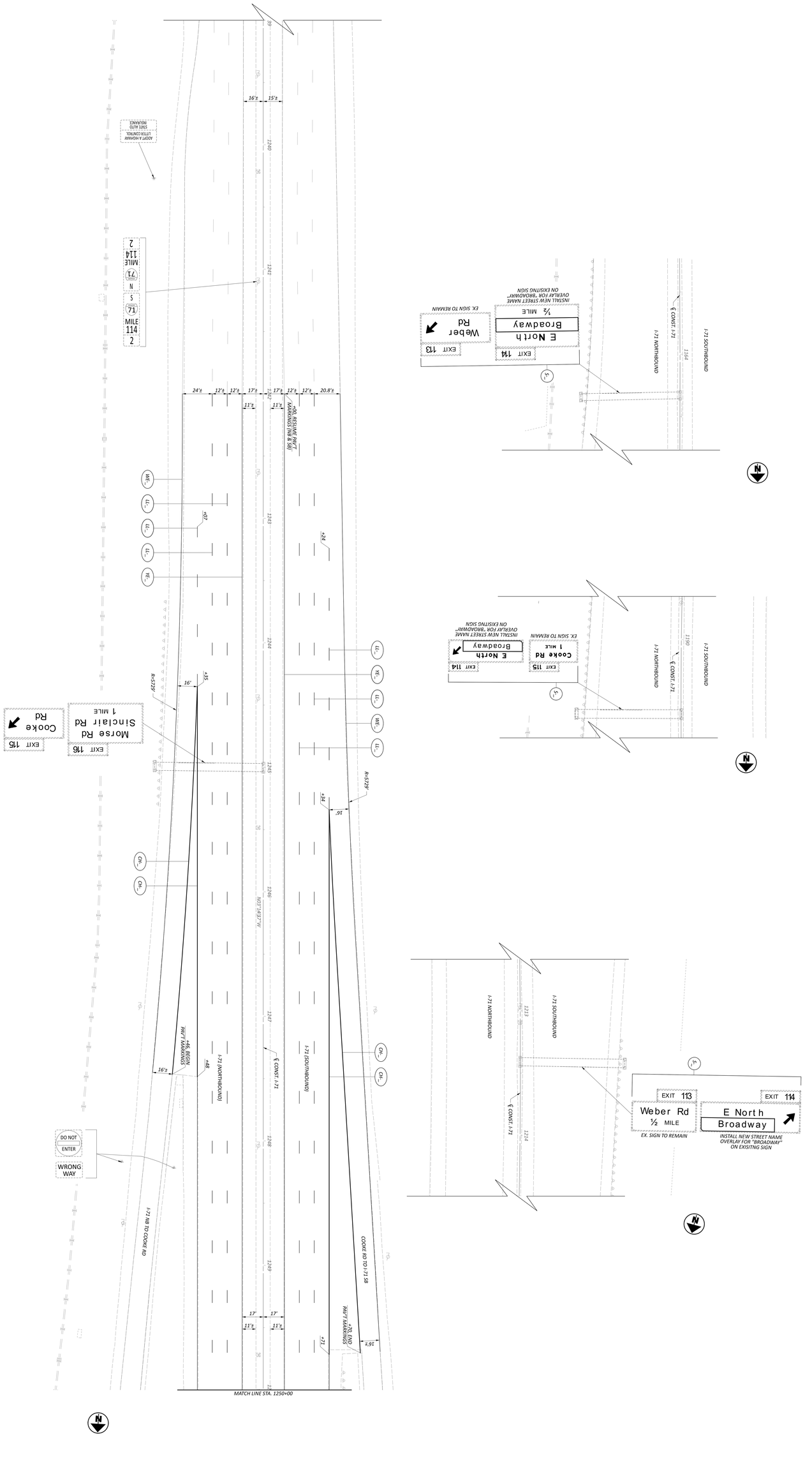

TRAFFIC CONTROL PLAN - I-71
STA. 1239+00.00 TO STA. 1250+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

689	P.327	109164	03/16/26	MCK	CMK
SHEET NO.	TOTAL SHEETS	PROJECT NO.	DATE	DESIGNED	DRAWN

jacobs

CHECKED

MODEL: CLP_I071 - Sheet 13 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:25 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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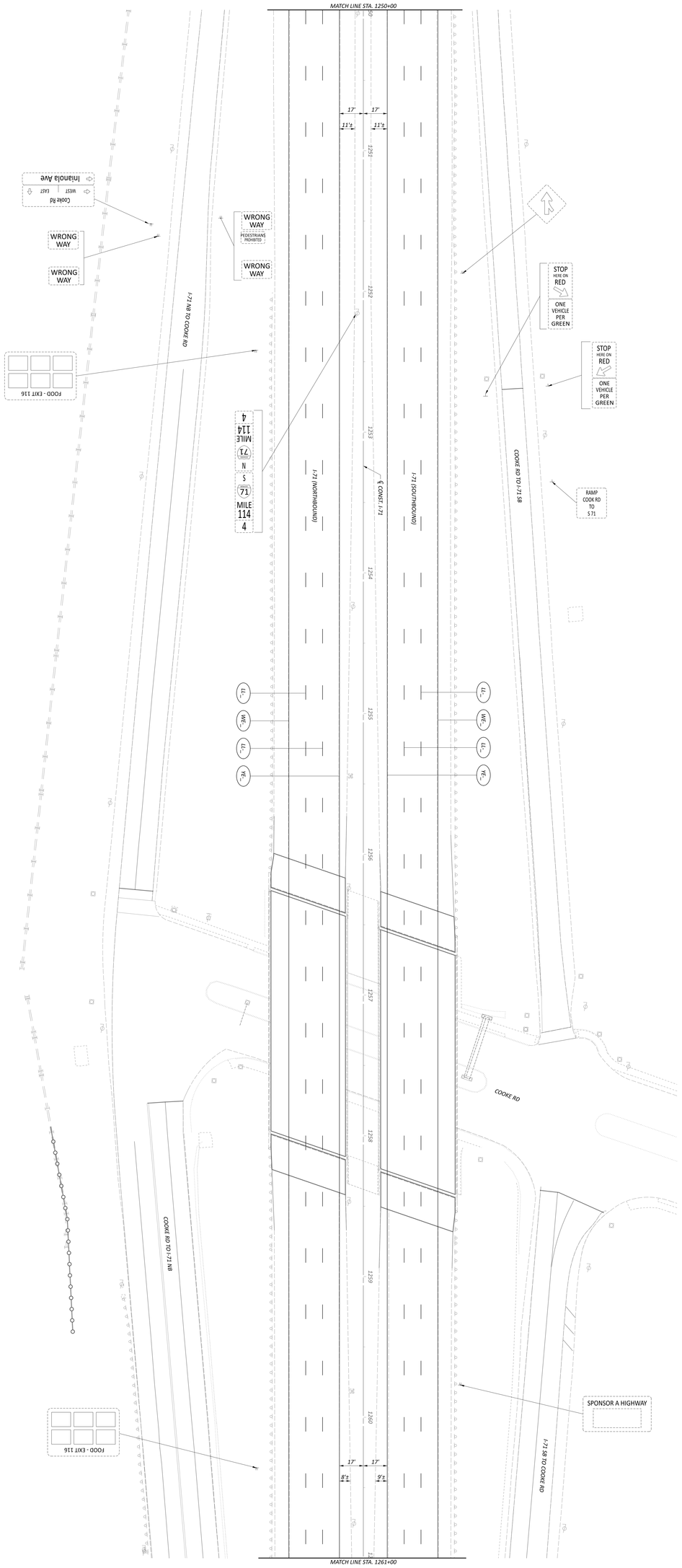
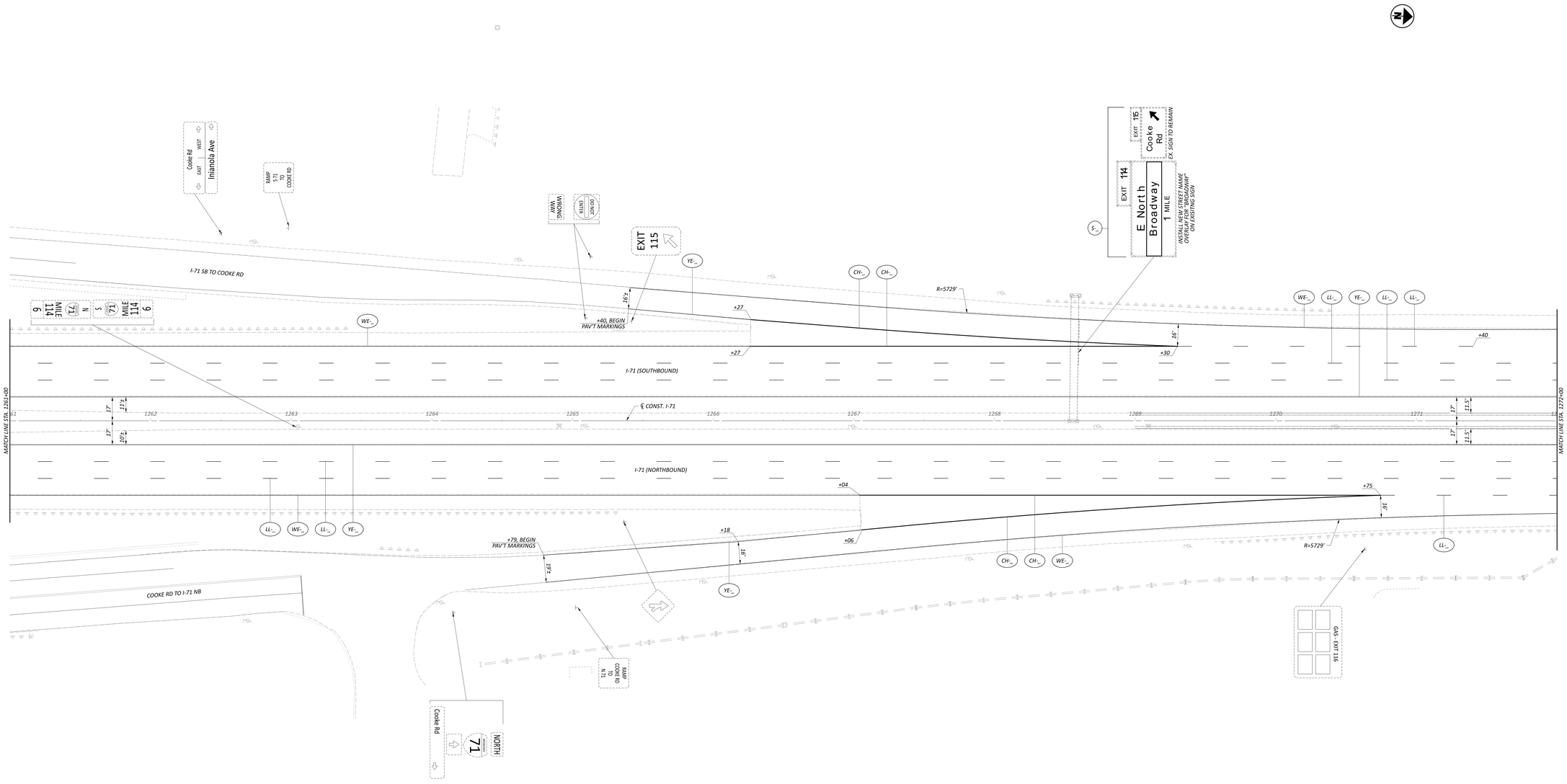


TRAFFIC CONTROL PLAN - I-71
STA. 1250+00.00 TO STA. 1261+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

688	P.391	109164	MCK 03/16/26	CNK	jacobs
SHEET NO.	TOTAL SHEETS	PROJECT NO.	DESIGNED - KSH DRAWN - MCK CHECKED - CNK	QUALITY CHECK	DESIGN AGENCY



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1261+00.00 TO STA. 1272+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/16/26
PROJECT ID: 109164
SHEET: P.331
TOTAL: 618

FRA-71-19.10

MODEL: CLP_OT1 - Sheet 14 MARKERS: 66-44 Fri | DATE: 3/12/2026 TIME: 11:16:19 AM PLOTTED: 03/12/2026 7:29:07 PM | USER: Chris.Lizenby@jacobs.com WORKSPACE: C:\WORKSPACE\ CHOOSTCVGS WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
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MODEL: CLP_I071 - Sheet 15 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:27 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCIVv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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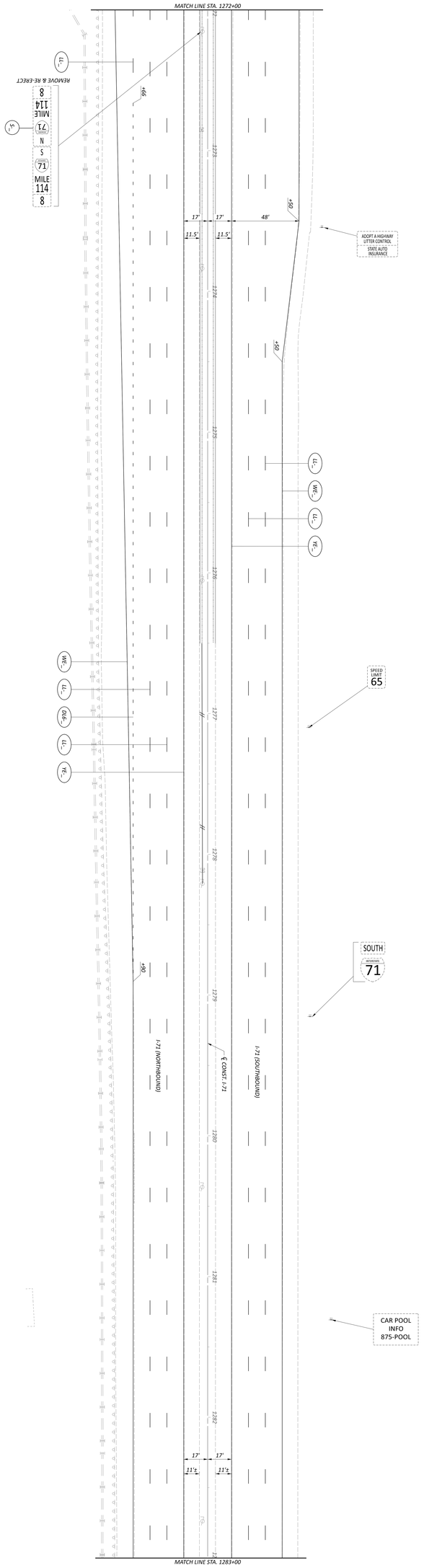
MATCH LINE STA. 1272+00
REMOVE & RE-ERECT
8
MILE
114
71
S
N
71
MILE
114
8
59'
50'
50'
17'
17'
48'
11.5'
11.5'
ADOPT A HIGHWAY
LITTER CONTROL
STATE AUTO
INSURANCE
SPEED
LIMIT
65
SOUTH
71
CAR POOL
INFO
875-POOL
I-71 (NORTHBOUND)
℄ CONST. I-71
I-71 (SOUTHBOUND)
90'
11'
11'
11

MODEL: CLP_I071 - Sheet 16 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:28 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCIVD2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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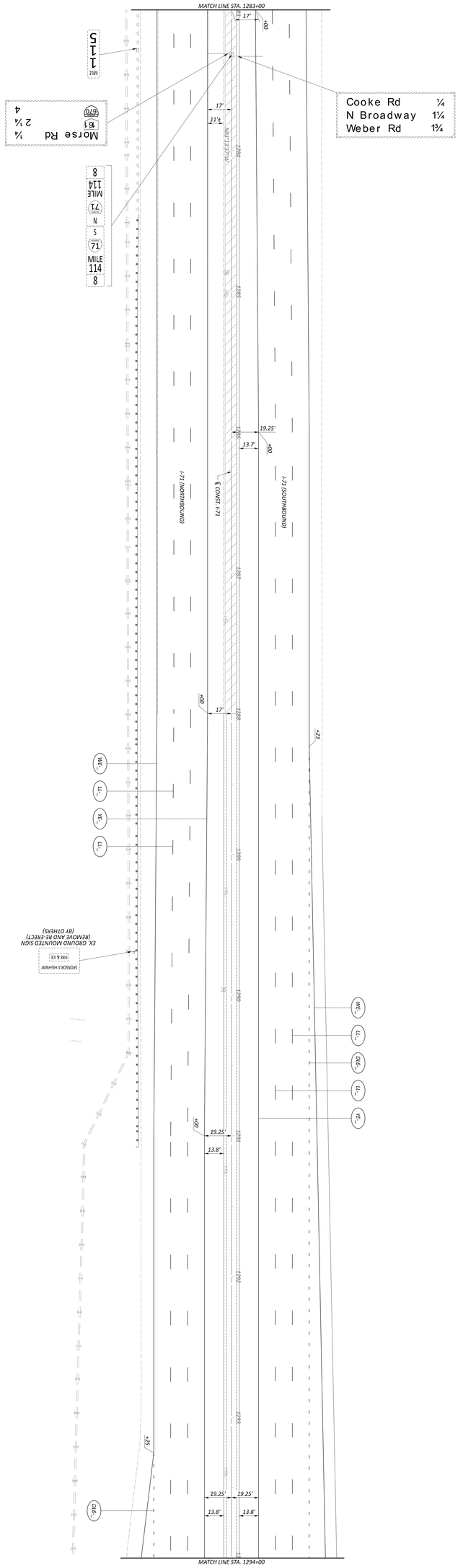
MATCH LINE STA. 1283+00
MATCH LINE STA. 1294+00
Cooke Rd ¼
N Broadway 1¼
Weber Rd 1¾
Morse Rd ½ 2½ 4
MILE 114.8
MILE 114.8
71 SOUTH
71 NORTH
I-71 (NORTHBOUND)
℄ CONST. I-71
I-71 (SOUTHBOUND)
SPEED LIMIT 70
SPEED LIMIT 70
SPEED LIMIT 70

MODEL: CLP_I071 - Sheet 17 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:29 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCtv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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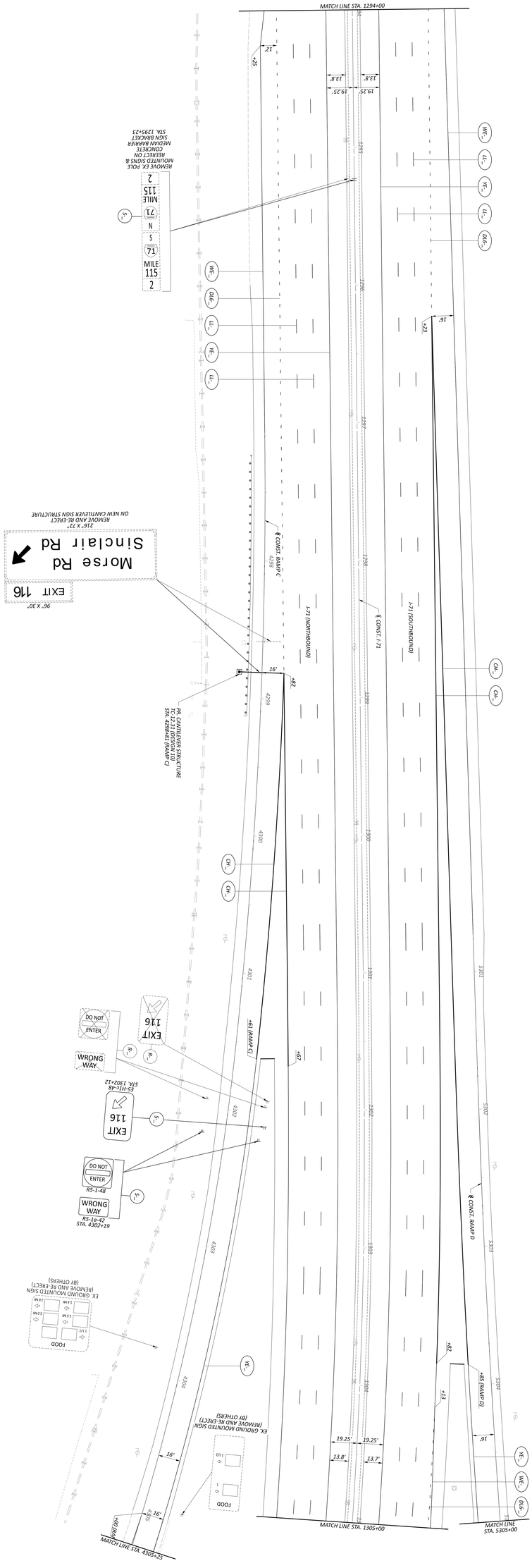


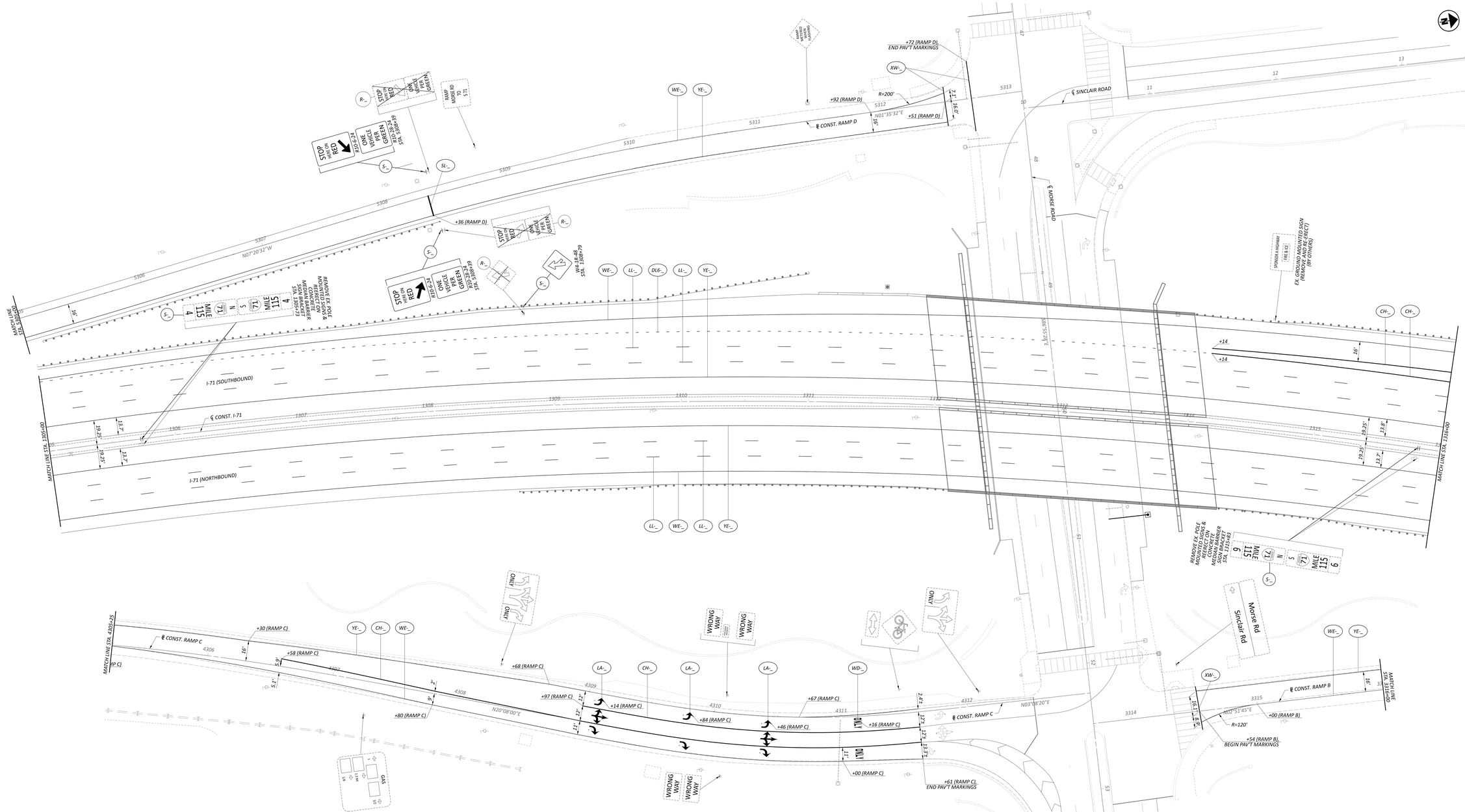
TRAFFIC CONTROL PLAN - I-71
STA. 1294+00.00 TO STA. 1305+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

SHEET NO. 488	TOTAL SHEETS P-234	PROJECT NO. 109164	DESIGNED MCK 03/16/26	DRAWN CNS	CHECKED

jacobs

QUALITY ASSURANCE


HORIZONTAL SCALE IN FEET
0 10 20 40
TRAFFIC CONTROL PLAN - I-71
STA. 1305+00.00 TO STA. 1316+00.00
I-71 (SOUTHBOUND)
I-71 (NORTHBOUND)
℄ CONST. I-71
℄ CONST. RAMP D
℄ CONST. RAMP C
℄ CONST. RAMP B
℄ SINCLAIR ROAD
℄ MORSE ROAD
MATCH LINE STA. 1305+00
MATCH LINE STA. 1316+00
+72 (RAMP D) END PAV'T MARKINGS
+92 (RAMP D)
+51 (RAMP D)
+36 (RAMP D)
+30 (RAMP C)
+58 (RAMP C)
+80 (RAMP C)
+68 (RAMP C)
+97 (RAMP C)
+14 (RAMP C)
+84 (RAMP C)
+67 (RAMP C)
+46 (RAMP C)
+16 (RAMP C)
+00 (RAMP C)
+61 (RAMP C), END PAV'T MARKINGS
+00 (RAMP B)
+54 (RAMP B) BEGIN PAV'T MARKINGS
R=200'
R=120'
N07°20'32"W
S01°35'32"E
S88°55'24"E
N03°08'20"E
N20°08'00"E
N02°51'45"E
RAMP MORSE RD TO I-71
STOP ON RED
ONE VEHICLE PER GREEN
R10-6,24
SIX SIGNAL HEADS
W4-18-48 STA. 1308+79
REMOVE EX. POST MOUNTED SIGNS & CONCRETE MEDIAN BARRIER SIGN BRACKET STA. 1315+83
MILE 115 6
MILE 115 7
SPONSOR A HIGHWAY
EX. GROUND MOUNTED SIGN (REMAIN AND PROTECT) (BY OTHERS)
Morse Rd
Sinclair Rd
WRONG WAY
WRONG WAY
ONLY
GAS
Jacobs
DESIGNER CNR
REVIEWER MCK 03/16/26
PROJECT ID 109164
SHEET P.335
TOTAL 618
FRA-71-19.10
MODEL: CLP_OT1 - Sheet: 18 (MARKERS: 66x44 Dia.) DATE: 3/12/2026 TIME: 10:18:58 AM PTOBY: CROOT_PW J:\eng_PROJ\FRA\71\109164\Traffic\Sheets\FRA-71-19.10_TCP.dgn
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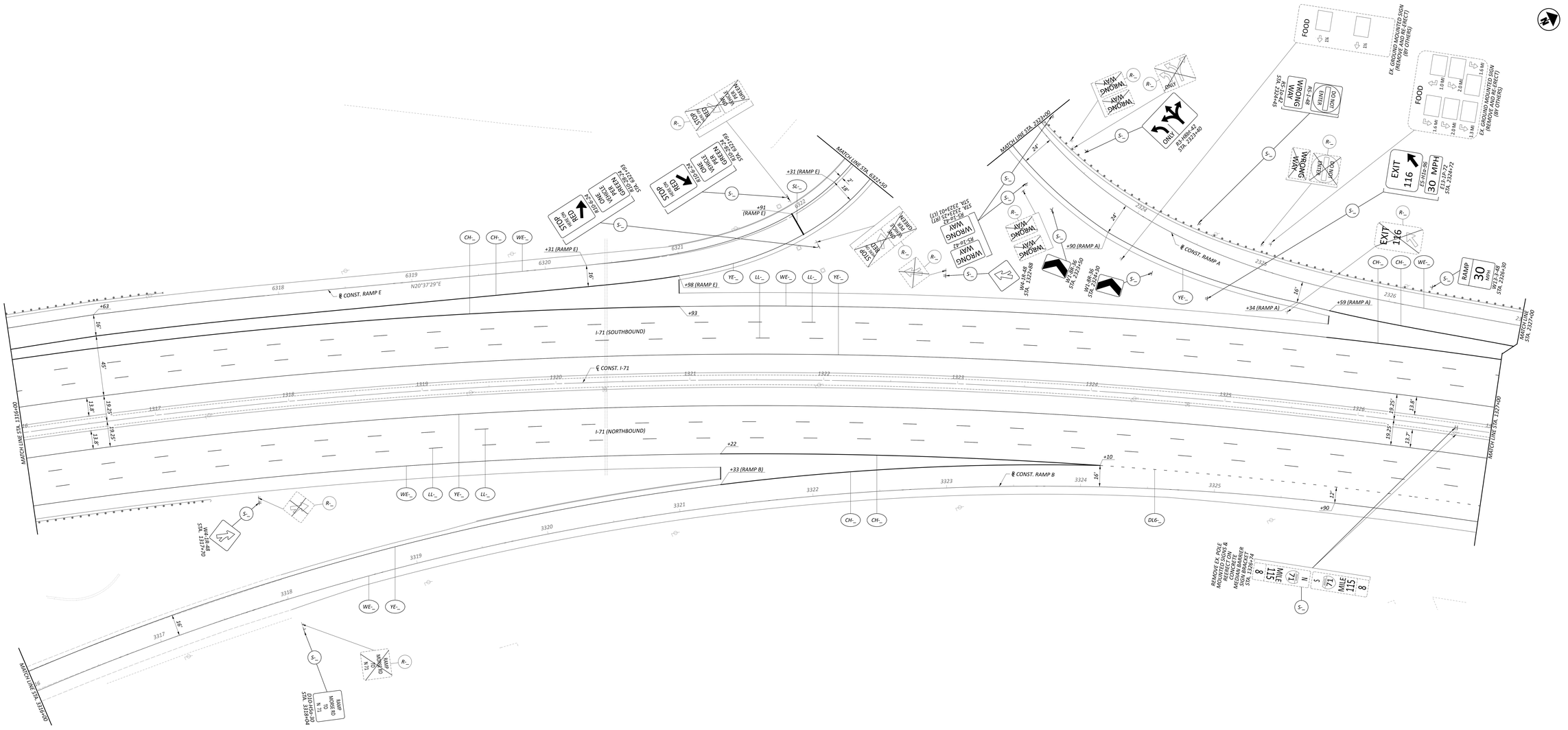
PLOTTED BY: Chris.Lizenmire@gmail.com WORKSPACE: CROOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25


MATCH LINE STA. 1316+00
MATCH LINE STA. 1327+00
MATCH LINE STA. 3316+00
MATCH LINE STA. 6322+50
MATCH LINE STA. 2323+00
℄ CONST. RAMP E
℄ CONST. I-71
℄ CONST. RAMP A
℄ CONST. RAMP B
I-71 (SOUTHBOUND)
I-71 (NORTHBOUND)
N20°37'29"E
+63
+93
+31 (RAMP E)
+98 (RAMP E)
+91 (RAMP E)
+22
+33 (RAMP B)
+10
+90 (RAMP A)
+34 (RAMP A)
+59 (RAMP A)
+90
STOP
RAMP
AHEAD
ONE
WAY
TRAFFIC
GREEN
WHITE
R10-7-24
STA. 6321+73
R10-7-24
STA. 6321+93
STOP
AHEAD
R10-6-24
STA. 6321+93
STOP
RAMP
AHEAD
R10-6-24
STA. 6321+73
STOP
RAMP
AHEAD
R10-6-24
STA. 2323+01 (LT)
STA. 2323+01 (RT)
WRONG
WAY
R5-1a-24
STA. 2323+42
WRONG
WAY
R5-1a-24
STA. 2323+40
WRONG
WAY
R5-1a-24
STA. 2324+45
WRONG
WAY
R5-1a-24
STA. 2324+72
WRONG
WAY
R5-1a-24
STA. 2324+72
DO NOT
ENTER
R5-1-24
STA. 2324+45
DO NOT
ENTER
R5-1-24
STA. 2324+72
ONE
WAY
R6-2-24
STA. 2324+72
ONE
WAY
R6-2-24
STA. 2324+72
FOOD
1K
1K
FOOD
1.0 MI
2.0 MI
3.3 MI
1.0 MI
2.0 MI
3.3 MI
EX. GROUND MOUNTED SIGN
(REMOVE AND RE-ERECT)
(BY OTHERS)
EX. GROUND MOUNTED SIGN
(REMOVE AND RE-ERECT)
(BY OTHERS)
EXIT
116
30
MPH
E5-51-24
STA. 2324+72
EXIT
116
E5-51-24
STA. 2324+72
RAMP
30
MPH
E13-3-48
STA. 2326+30
W1-16-48
STA. 1317+70
W1-6-48
STA. 1320+68
W1-6R-36
STA. 2322+50
W1-6R-36
STA. 2322+50
REMOVE EX. POLE MOUNTED SIGN & REERECT ON SINGLE POST & MEDIAN BARRIER SIGN BRACKET STA. 2324+74
8
MILE
115
71
N
S
71
MILE
115
8
WRONG WAY
TO I-71 N
R5-1a-48
STA. 3318+04
WRONG WAY
TO I-71 N
R5-1a-48
STA. 3318+04
CH–
CH–
WE–
YE–
LL–
WE–
LL–
YE–
WE–
LL–
YE–
LL–
CH–
CH–
DL6–
S–
R–
SL–
YE–
CH–
CH–
WE–
S–
S–
S

MODEL: CLP_I071 - Sheet 20 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:33 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCIVil2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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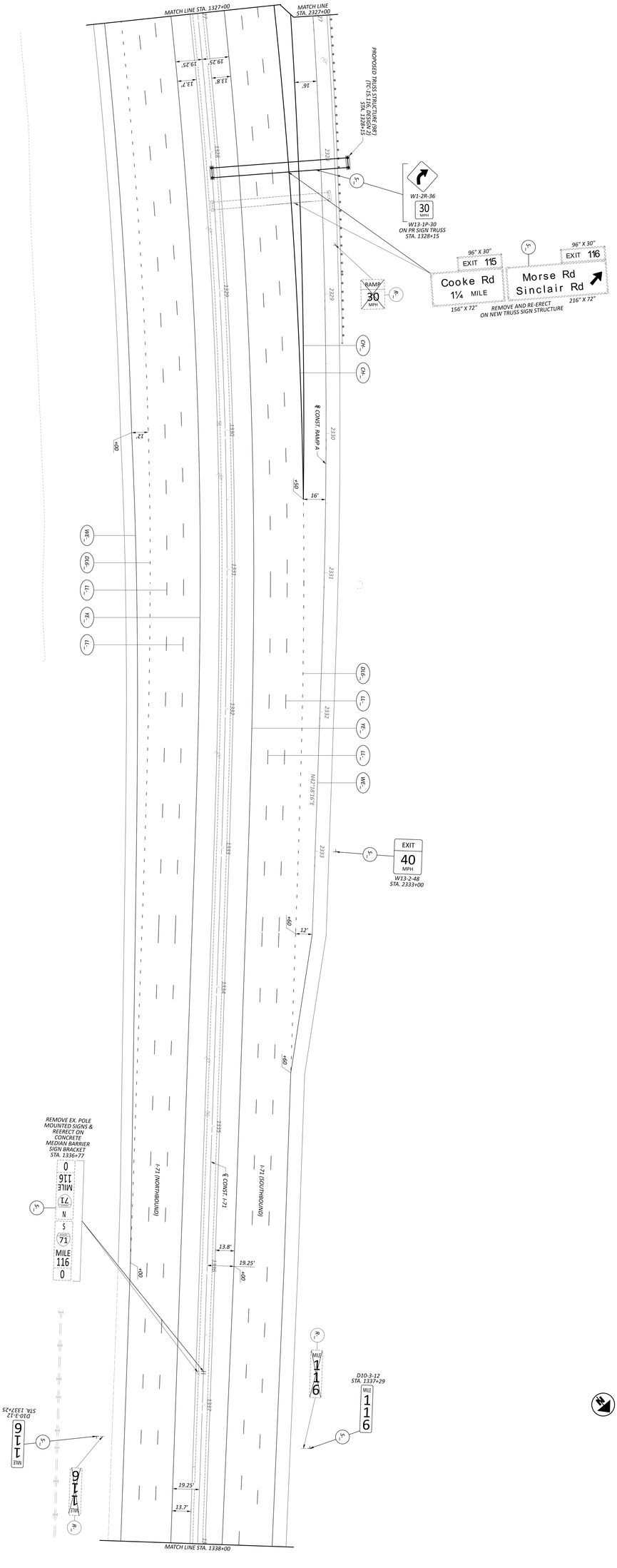

TRAFFIC CONTROL PLAN - I-71
STA. 1327+00.00 TO STA. 1338+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

SHEET NO. 488	TOTAL SHEETS P-337	PROJECT NO. 109164	DESIGNED MCK 03/16/26	DRAWN CMK	CHECKED	QUALITY CHECK

MODEL: CLP_I071 - Sheet 21 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:34 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCtv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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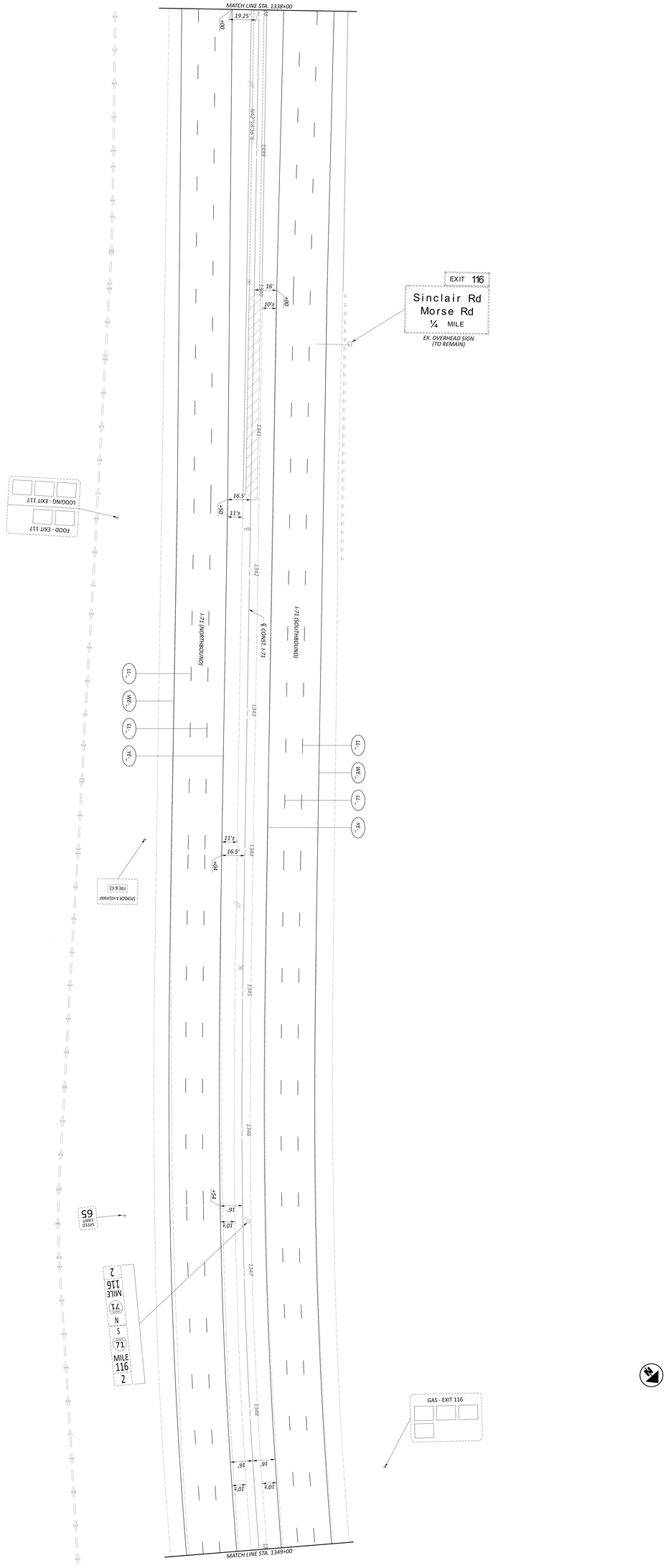

TRAFFIC CONTROL PLAN - I-71
STA. 1338+00.00 TO STA. 1349+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

MODEL: CLP_I071 - Sheet 22 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:35 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCtv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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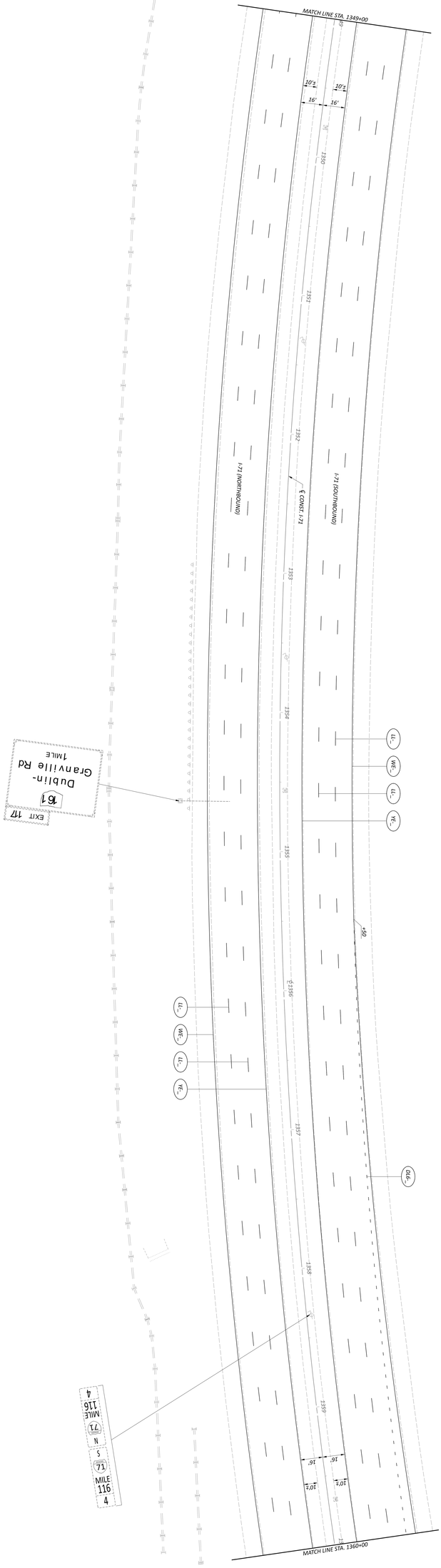

TRAFFIC CONTROL PLAN - I-71
STA. 1349+00.00 TO STA. 1360+00.00

HORIZONTAL
SCALE IN FEET
0 20
10 40

688	P.391	109164	MCK 03/16/26	CNK	jacobs	DESIGN AGENCY
SHEET No.	TOTAL SHEETS	PROJECT No.	DESIGNED	CHECKED		

FRA-71-19.10

MODEL: CLP_I071 - Sheet 23 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:36 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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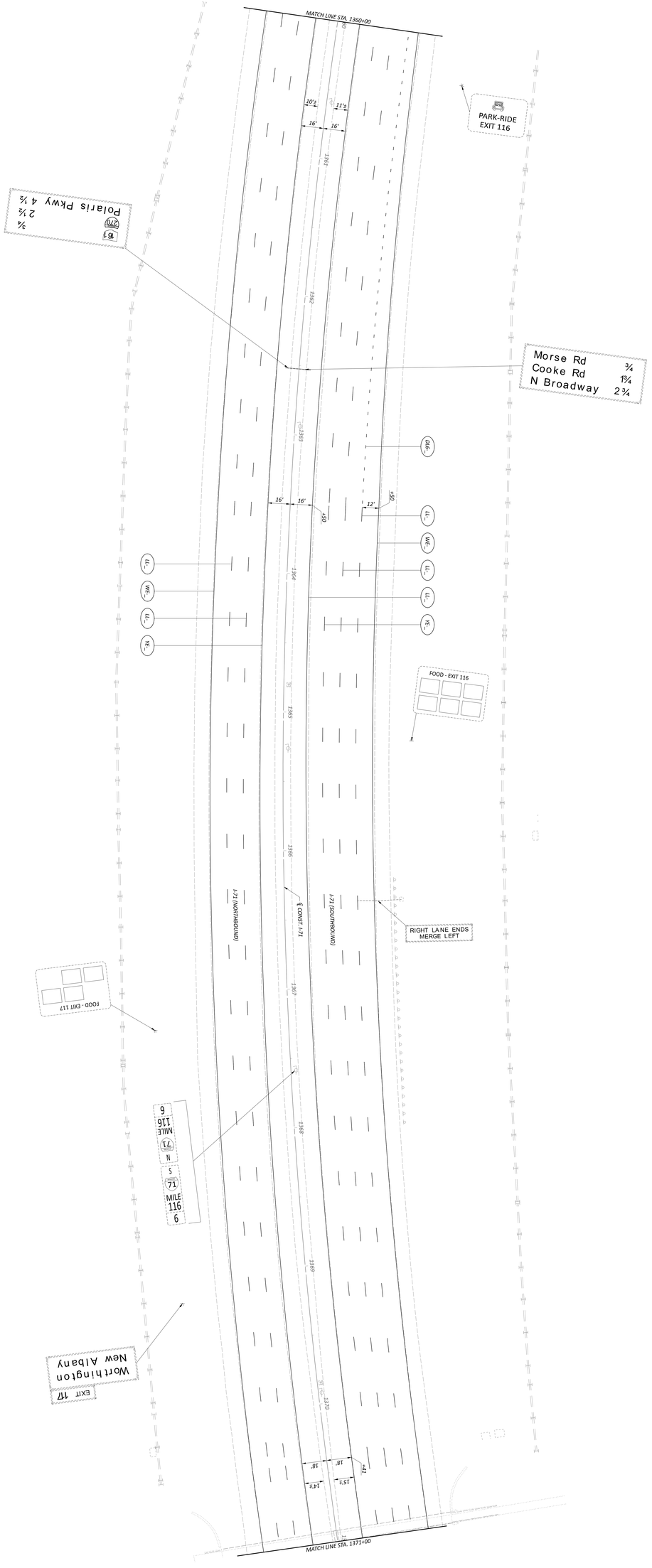
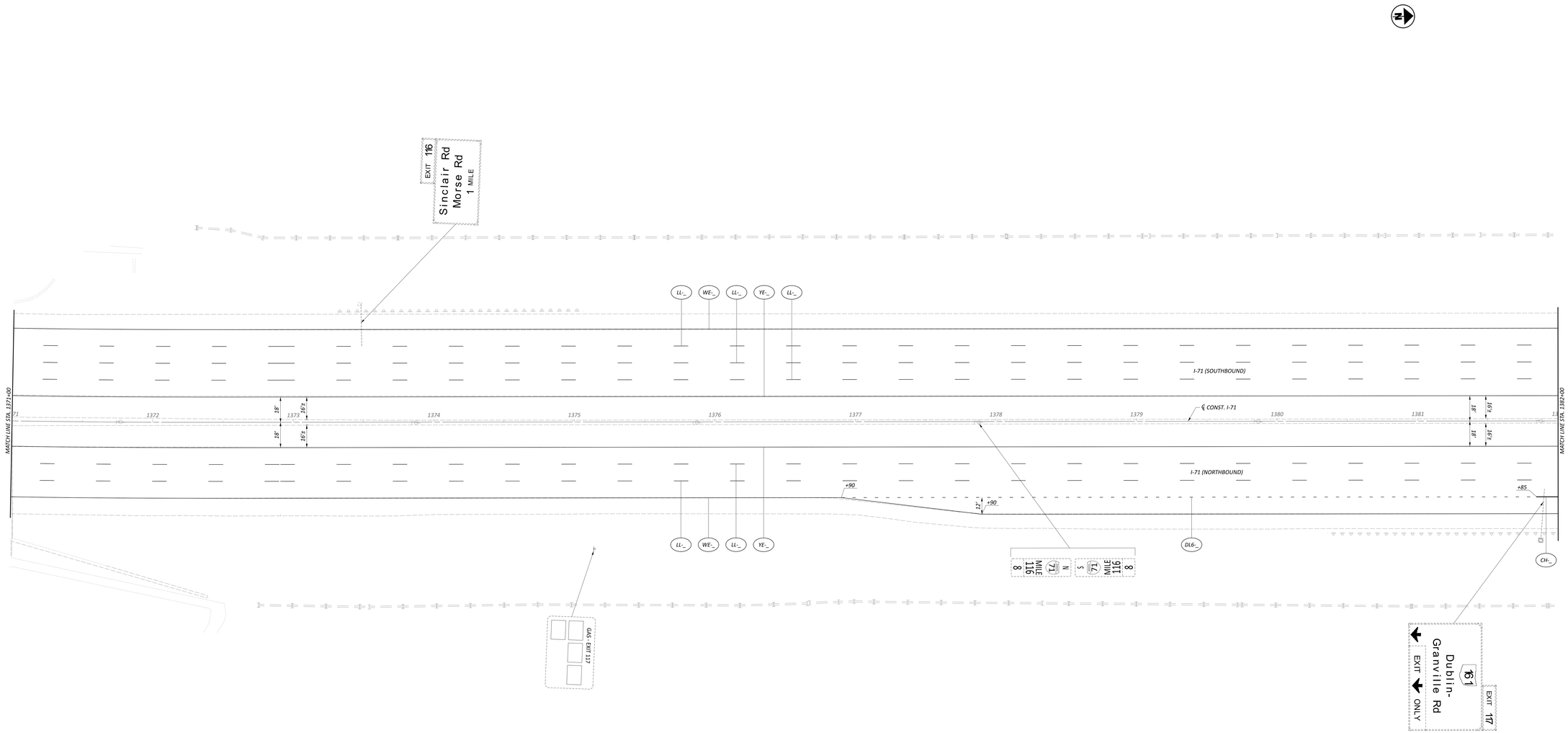


TRAFFIC CONTROL PLAN - I-71
STA. 1360+00.00 TO STA. 1371+00.00

HORIZONTAL
SCALE IN FEET
0 20
10 40



FRA-71-19.10

MODEL: CU_OT1 - Sheet:24 JMARKSON -66x44.0in | DATE: 3/11/2026 7AM | 3:16:17 AM | PITDEV: DROOT_PSF_I-71.ctb| PENTBL: DROOT_Pen.tbl USER: Chris.Lisenmeyer@jacobs.com WORKSPACE: DROOT\CIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
FILE: I:\Projects\109164\Highway\Roadway\Design\Plans\Traffic\FRA-71-19.10_TRAFFIC CONTROL PLAN - I-71 STA. 1371+00 TO STA. 1382+00.dgn

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1371+00.00 TO STA. 1382+00.00

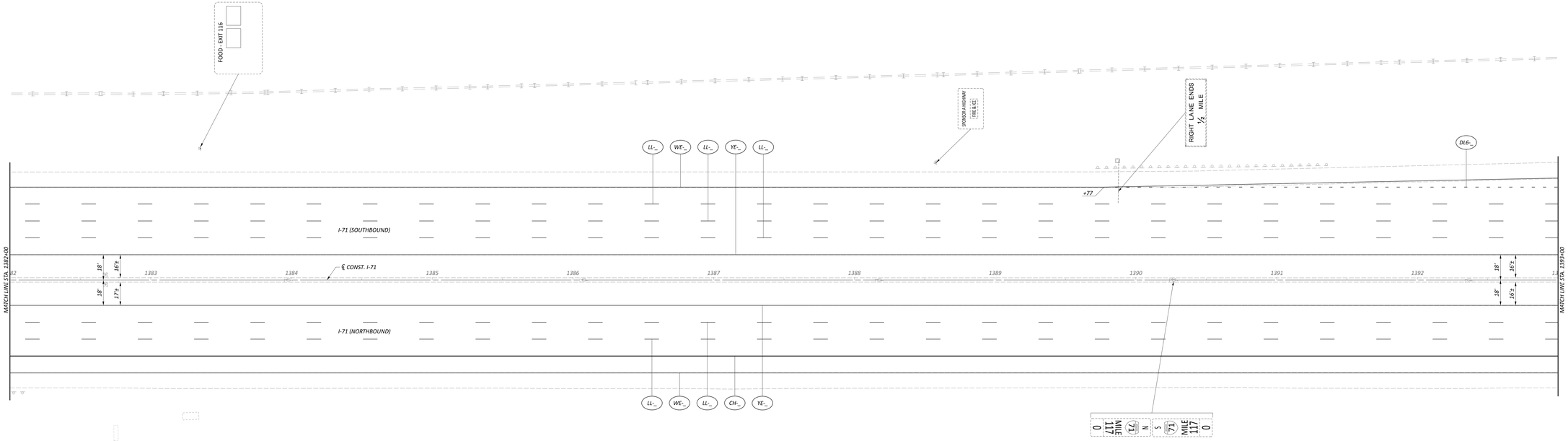
DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET P.341 | TOTAL 618



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1382+00.00 TO STA. 1393+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

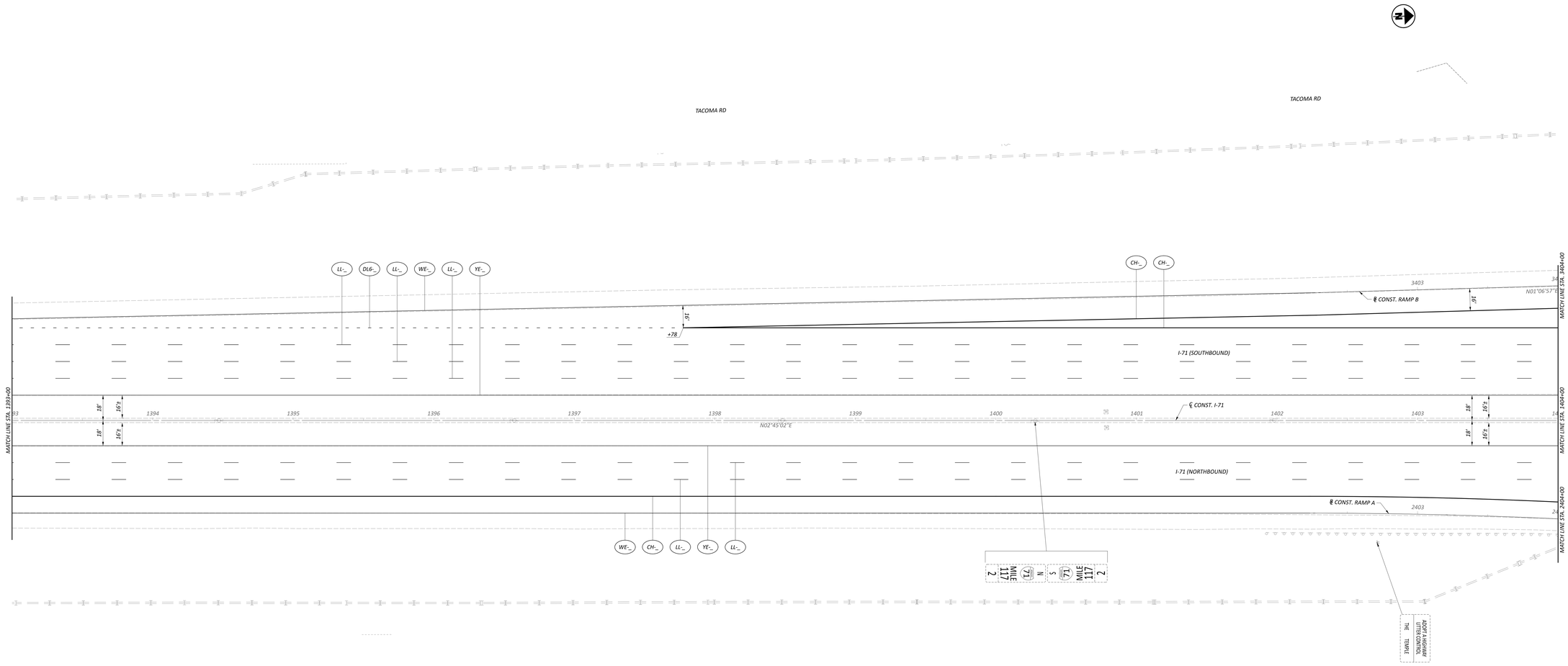
PROJECT ID
109164

SHEET
P.342

TOTAL
618

FRA-71-19.10

MODEL: CLP_OT1 - Sheet:25 PAPERSIZE: 66.44 IN | DATE: 3/11/2026 7:44:11 | 3:16:18 AM | PLOTBY: GROOT, JOP, J-F | config: PENTBL: CHROOT: /PW: J-F | config: PENTBL: CHROOT: /PW: USER: Chris.Lizenmire@jacobs.com WORKSPACE: CHROOT/CIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
FILE: C:\Users\Chris.Lizenmire\Jacobs\Connected Data - Documents\109164 - FRA-71-19.10 - I-71 Widen Rehab Replacement\CIVIL\Sheets\FRA-71-19.10_TCP01.dgn



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1393+00.00 TO STA. 1404+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET
P.343

TOTAL
618

FRA-71-19.10

MODEL: CU_071 - Sheet: 04 JMARKSON 66x44 ES | DATE: 3/11/2026 7:44:11 AM | STORY: GROUT / PVI / J-shelf& PENTEL CHOOT / Pen:68 USER: Chris.Lawrence@jacobs.com WORKSPACE: CHOOTCIVD1 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
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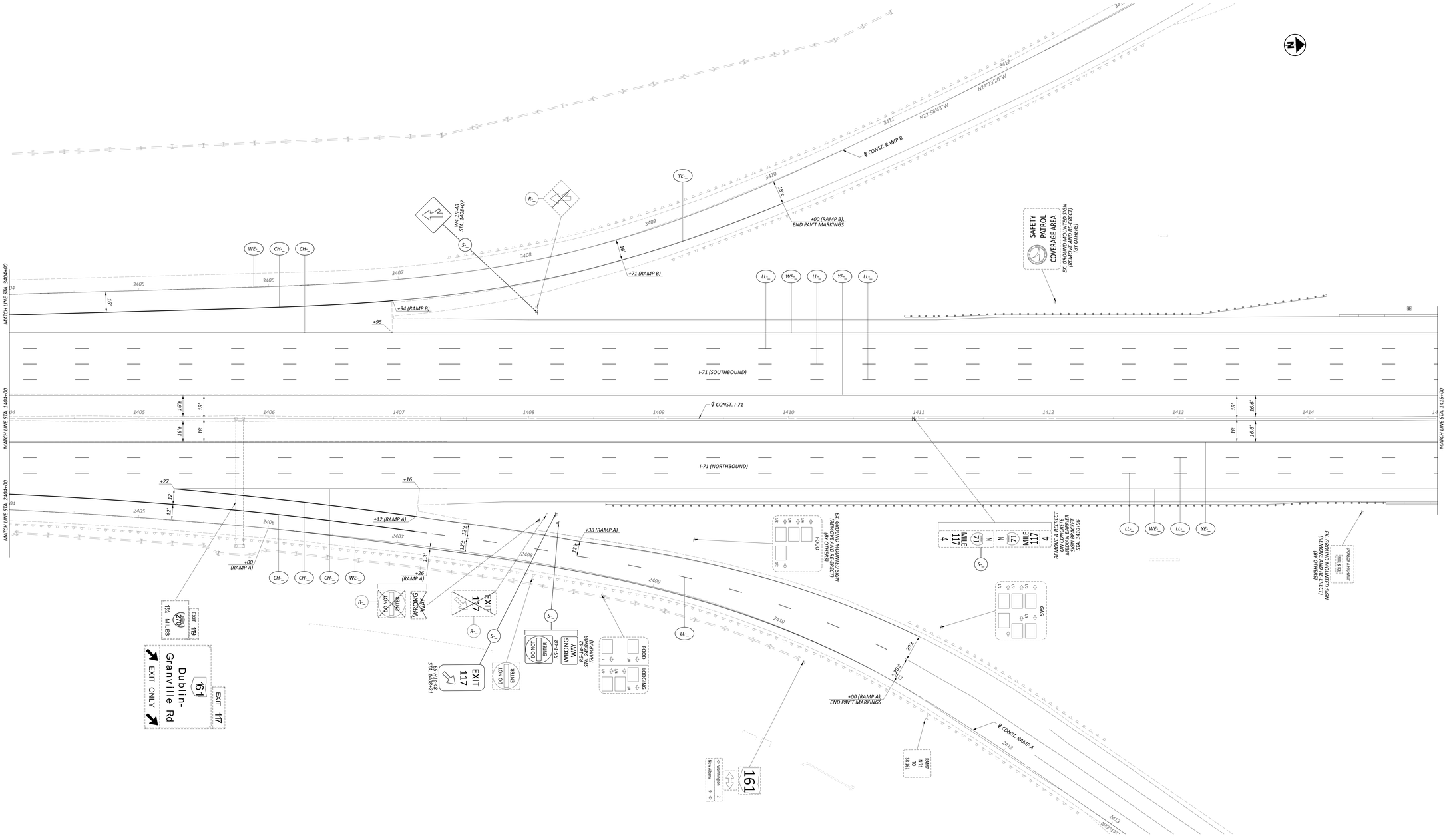

FRA-71-19.10

MODEL: CLV_OT1 - Sheet:27 /MARKERS: 66.64 Ea | USER: JSTILLINGS THAN | 3:18:48 AM 3/7/2026 | PLOT: 3:20:07 PM | F:\pwdg_EN\ENG_CHOOT_Proj\E USER: Chris.Lizenmier@jacobs.com WORKSPACE: CHOOTCIVIL WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25

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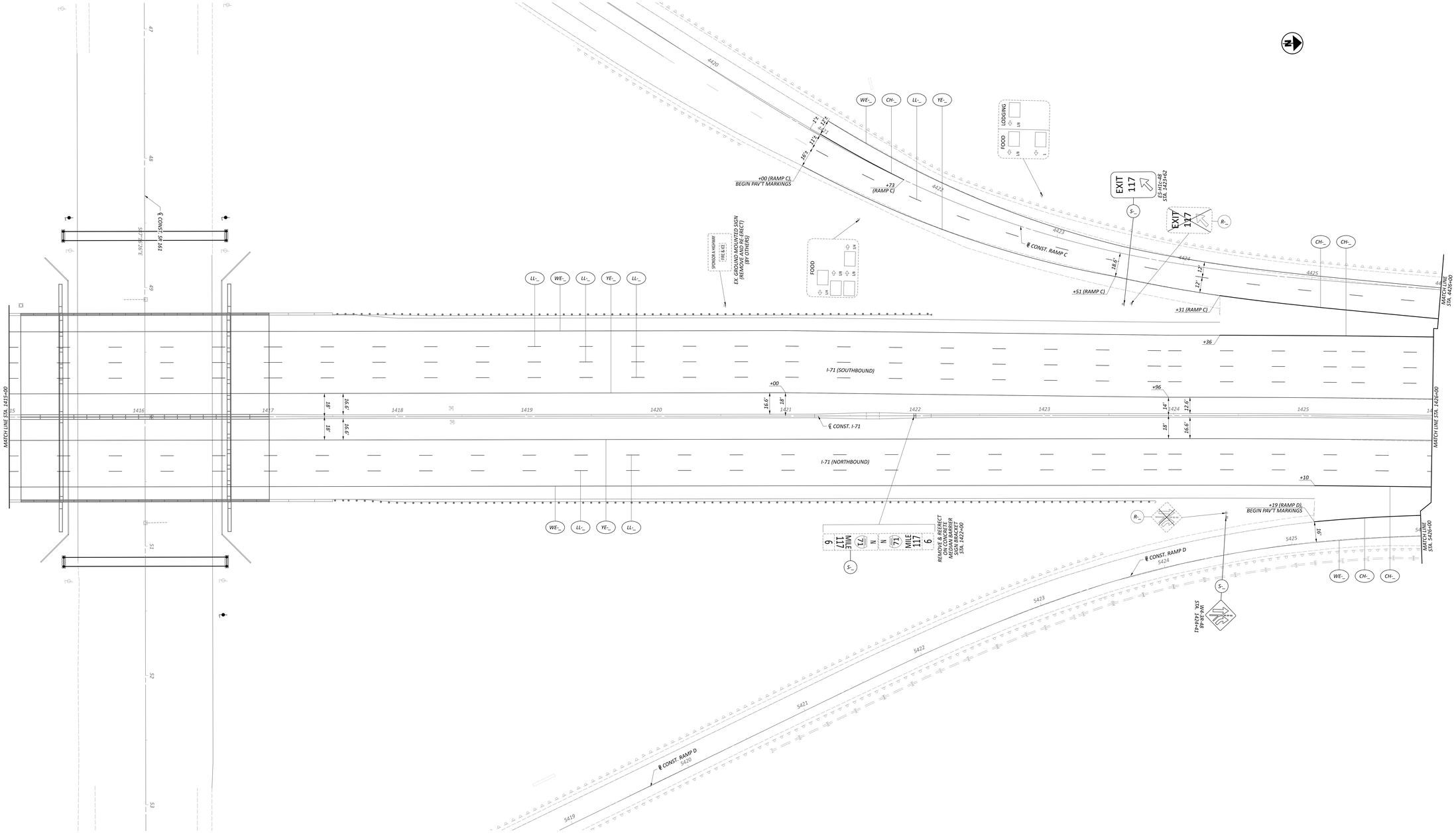
HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1404+00.00 TO STA. 1415+00.00

DESIGN AGENCY
Jacobs

DESIGNER	CNR
REVIEWER	MCK 03/16/26
PROJECT ID	109164
SHEET	P.344
TOTAL	618



HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1415+00.00 TO STA. 1426+00.00

DESIGN AGENCY
Jacobs

DESIGNER: CNR
REVIEWER: MCK 03/16/26
PROJECT ID: 109164
SHEET: P.345
TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Sheet 24 PAPERSIZE: 66.44 IN x 33.97 IN DATE: 3/12/2026 TIME: 11:18:41 AM USER: GROOT_PW J:\pw\fra_fra\Documents\FRA-71-19.10\Design\Roadway\Plan Sheets\FRA-71-19.10_TCP24.dgn
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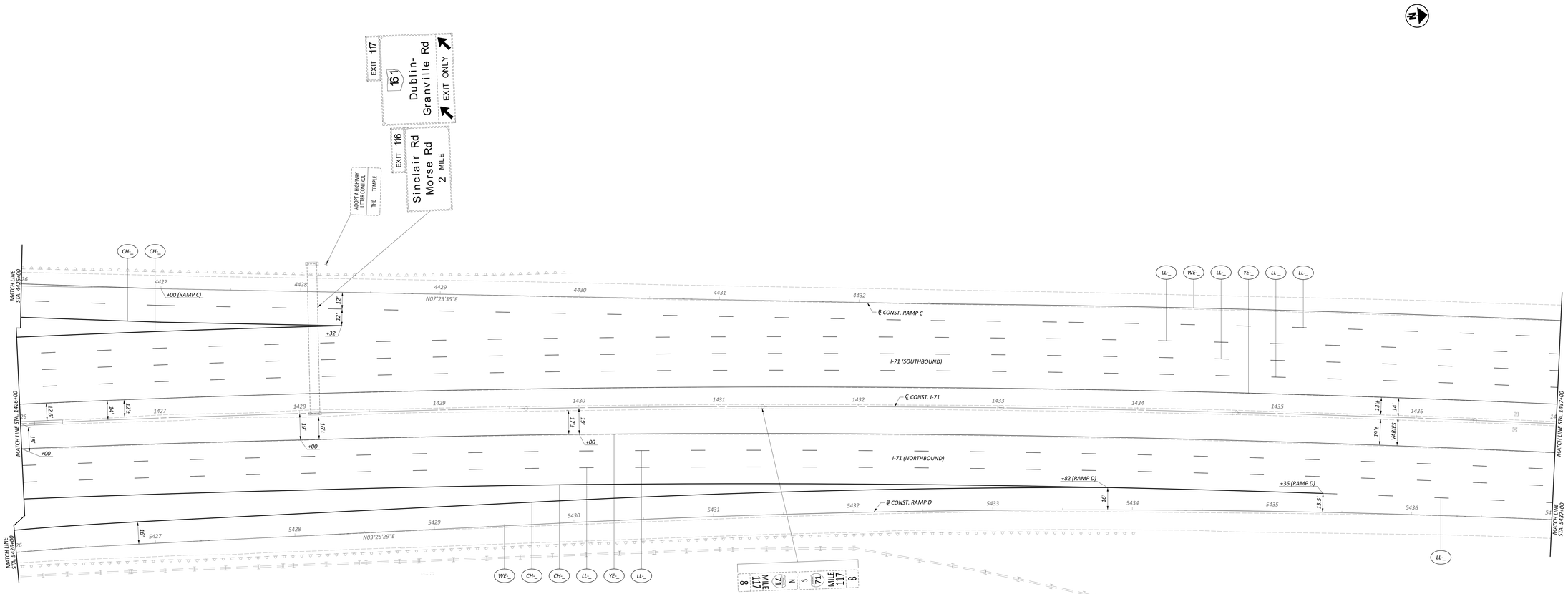
Bentley PowerGeotech CONNECT Edition 10.00.02.25 [Build 10.00.02.25] -



FRA-71-19.10

MODEL: CU_071 - Sheet:29 JWARNOCK 66.44 Ins | DATE: 2/12/2026 7AM | 11:14:42 AM | PTOBY: GROOT, JPG | Config: PENTRE, CHOOT | Pen-tbl: USER: Chris.Lizenner@jacobs.com WORKSPACE: CHOOTCVG5 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25

ELEMENTS: Horizontal Alignment, Vertical Alignment, Profile, Superelevation, Template, Corridor, Terrain Model, Feature Definition, Civil Cell, Point Group

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1426+00.00 TO STA. 1437+00.00

DESIGN AGENCY
Jacobs

DESIGNER CNR
REVIEWER MCK 03/16/26
PROJECT ID 109164
SHEET P.346 TOTAL 618

FRA-71-19.10

MODEL: CLP_I071 - Sheet 30 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:43 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCtv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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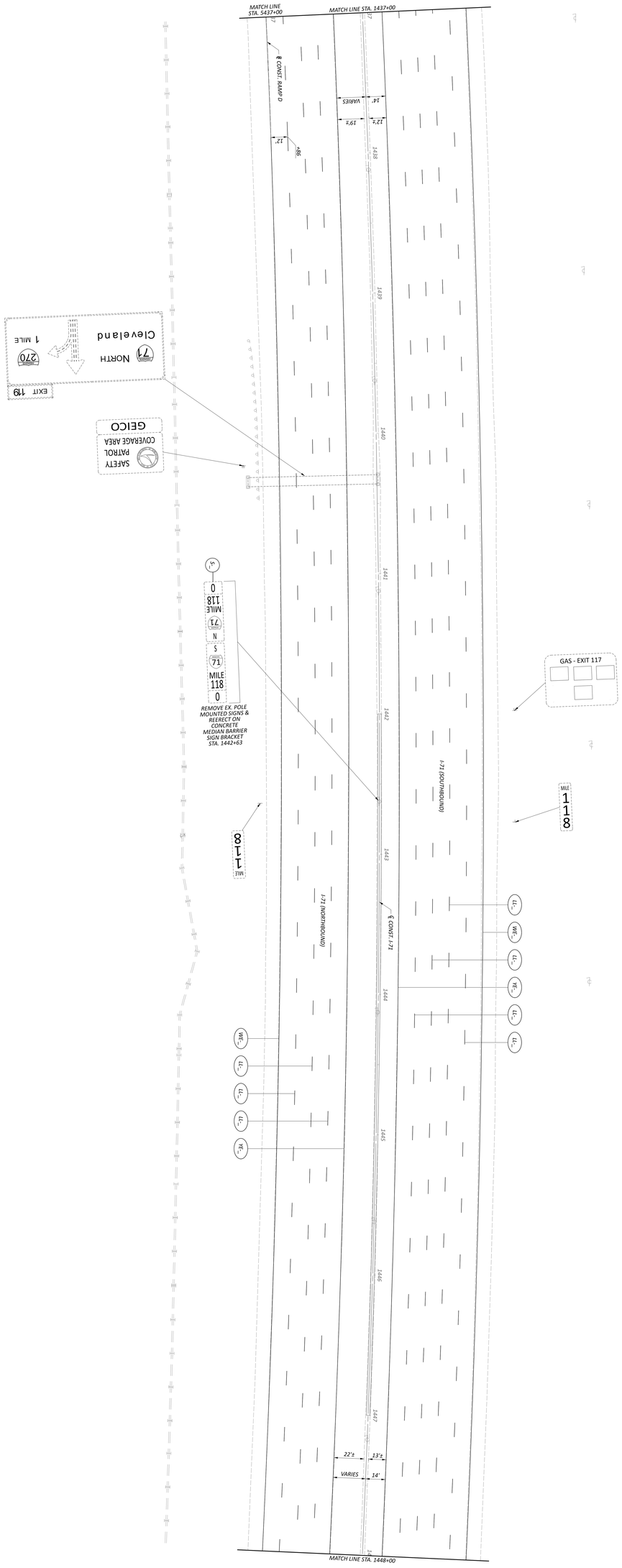
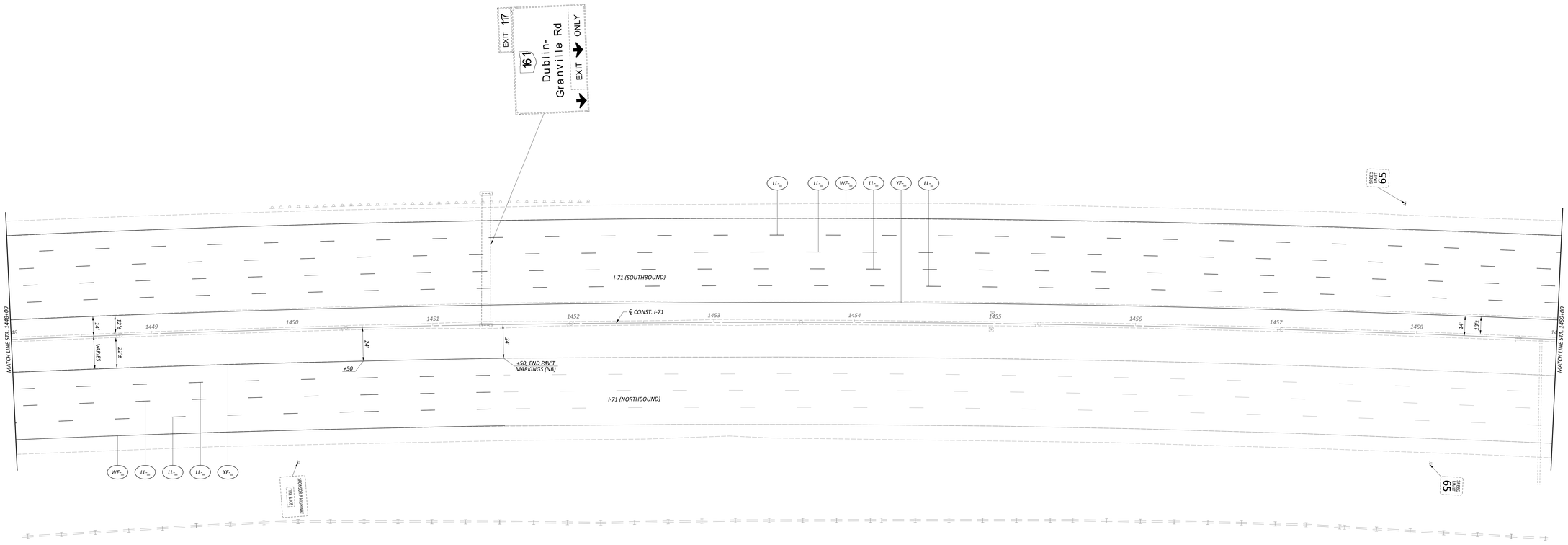


TRAFFIC CONTROL PLAN - I-71
STA. 1437+00.00 TO STA. 1448+00.00

HORIZONTAL SCALE IN FEET
0 20
10 40

SHEET NO. 30	PROJECT NO. 109164	DESIGNED MCK	DRAWN CMK	CHECKED	QUALITY CHECK
TOTAL SHEETS 48	DATE 03/16/26	REVISION	REVISION	REVISION	REVISION



FRA-71-19.10

MODEL: CLP_DT1 - Sheet:31 WARNINGS: 66x44 Ents | DATE: 2/11/2026 7:44:11 | 3:18:44 AM | PITSBY GROOT / PGI J-Lahaj, KENTRL CHROOT: /Pw-tld USER: Chris.Lawrence@jacobs.com WORKSPACE: CHROOT/CIVD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.00.25
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HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - I-71
STA. 1448+00.00 TO STA. 1459+00.00

DESIGN AGENCY
Jacobs

DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET
P.348

TOTAL
618

MODEL: CLP_I071 - Sheet 32 PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:16:45 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCtv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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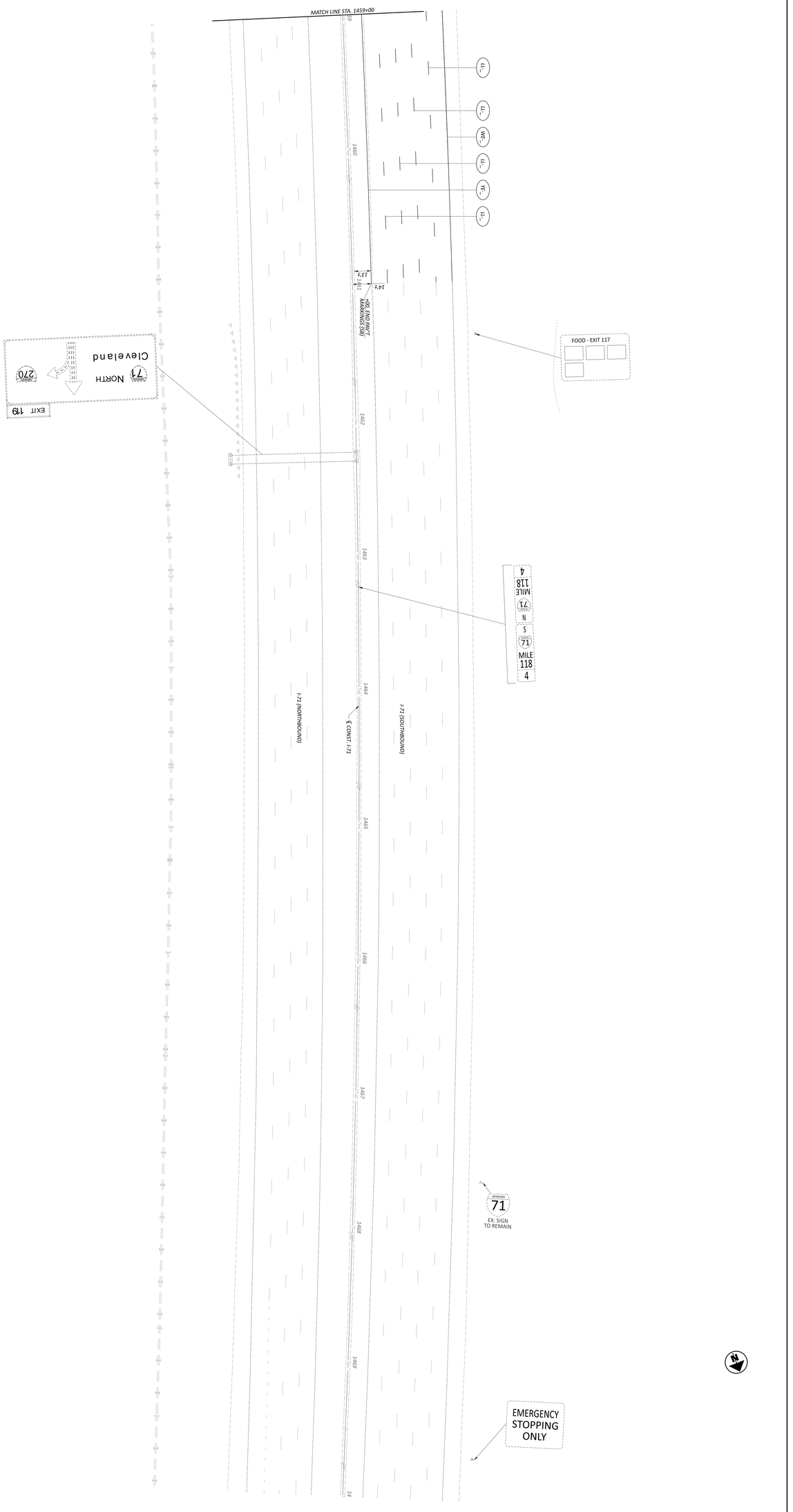

MODEL: Sheet PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:17:02 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCivil2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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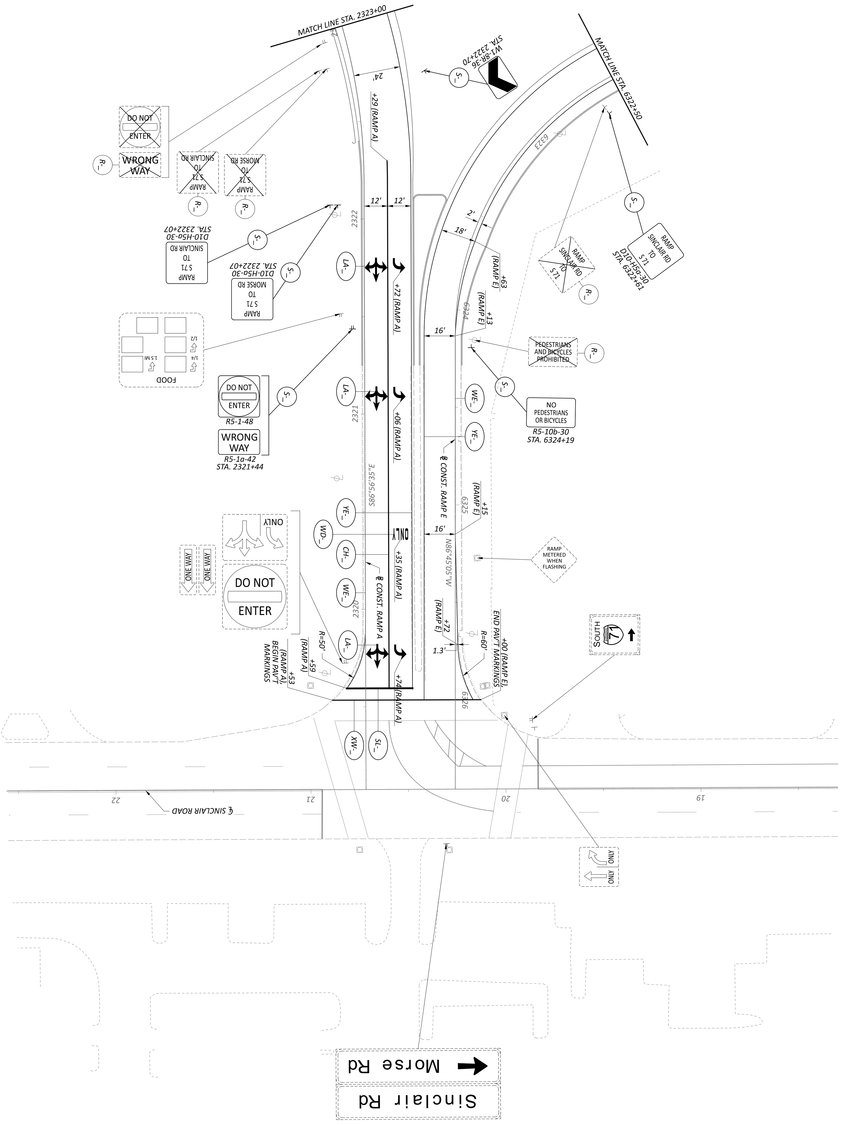

TRAFFIC CONTROL PLAN
SINCLAIR ROAD RAMPS A & E

HORIZONTAL SCALE IN FEET
0 20
10 40

FRA-71-19.10

MODEL: CLP_MORSE-1 - Sheet PAPERSIZE: 66x34 (in.) DATE: 3/31/2026 TIME: 12:17:29 AM PLTDRV: OHDOT_PDF_E+ plt.cfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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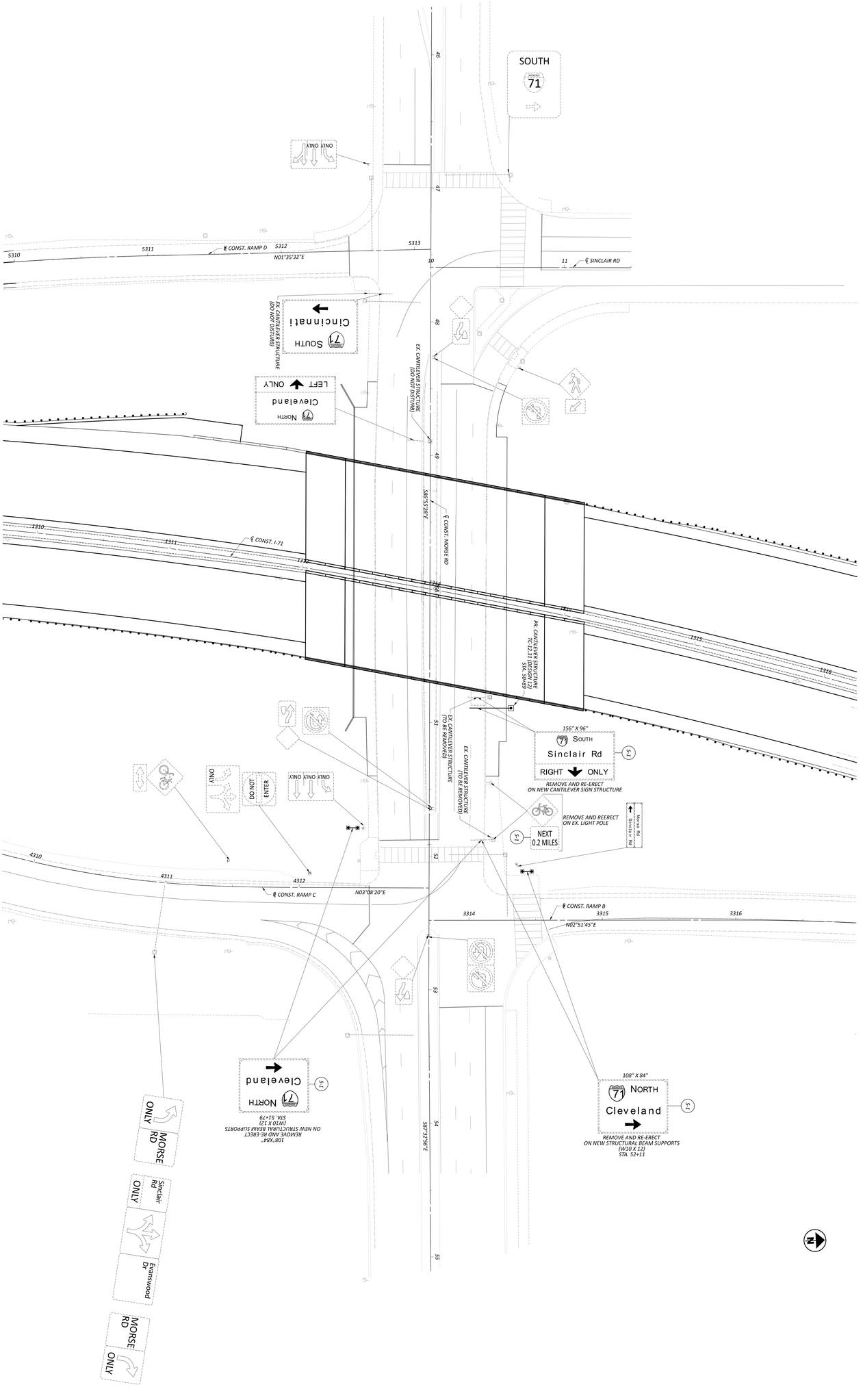
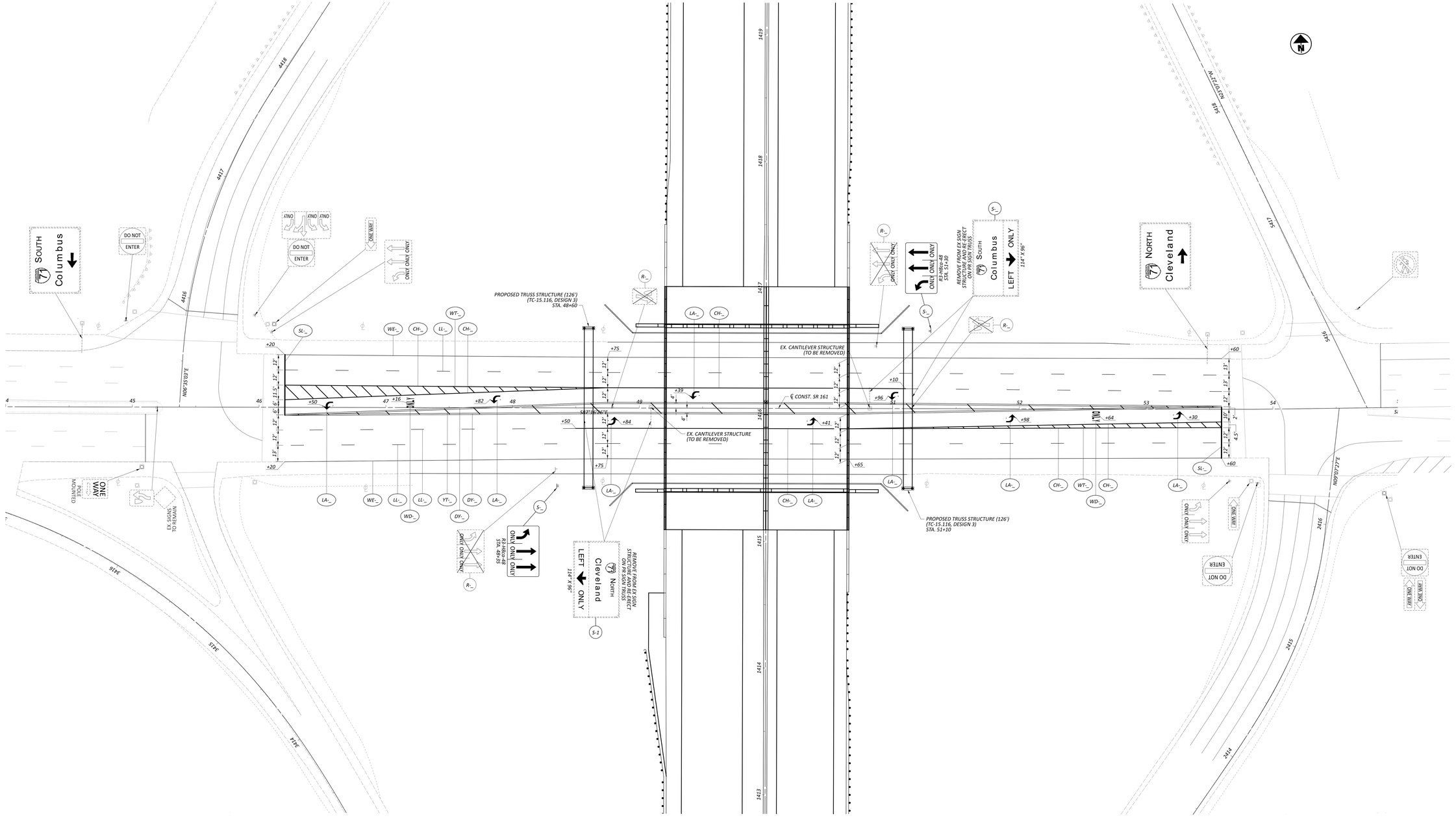


SHEET NO. 498 TOTAL SHEETS	SHEET NO. P-351 TOTAL SHEETS	PROJECT NO. 109164	DESIGNED MCK 03/16/26	DRAWN CNS	CHECKED	QUALITY CHECK

jacobs

TRAFFIC CONTROL PLAN
MORSE ROAD

HORIZONTAL SCALE IN FEET
0 20
10 40



FRA-71-19.10

MODEL: CU7_5163-1 Sheet: PAPERSIZE: 66x44 (in) DATE: 3/11/2026 TIME: 2:22:29 PM USER: CHRISTOPHER_FLANSBURG PENTEL: CHRISTOPHER_FLANSBURG.PLT.cfg DESIGNER: CHRISTOPHER_FLANSBURG EMAIL: Chris.Lawrence1@jacobs.com WORKGROUP: CHRISTOPHER_FLANSBURG WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25

HORIZONTAL
SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN
SR 161

DESIGN AGENCY
Jacobs

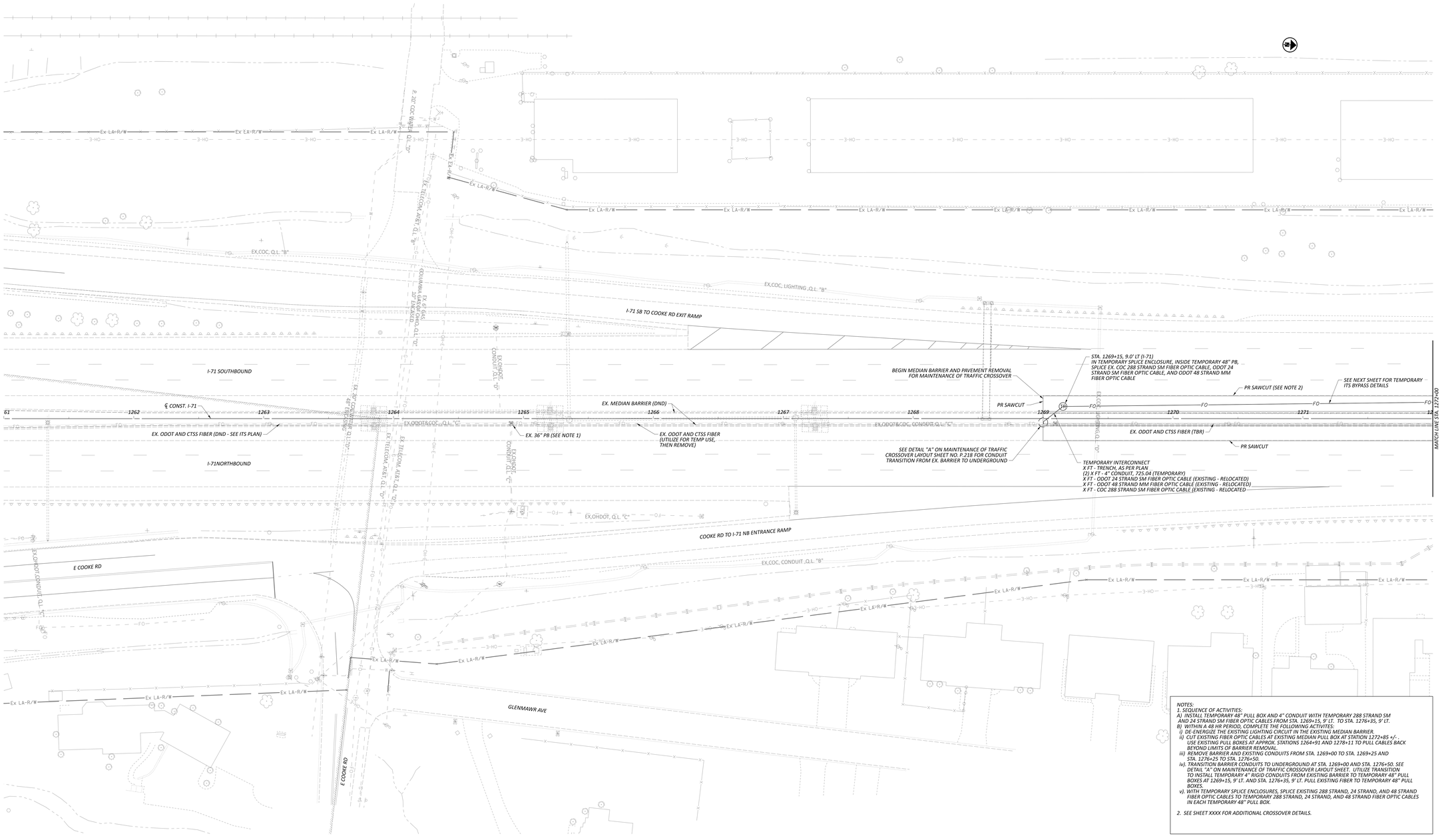
DESIGNER
CNR

REVIEWER
MCK 03/16/26

PROJECT ID
109164

SHEET
P 352

TOTAL
618



NOTES:
1. SEQUENCE OF ACTIVITIES:
A) INSTALL TEMPORARY 48" PULL BOX AND 4" CONDUIT WITH TEMPORARY 288 STRAND SM AND 24 STRAND SM FIBER OPTIC CABLES FROM STA. 1269+15, 9' LT. TO STA. 1276+35, 9' LT.
B) WITHIN A 48 HR PERIOD, COMPLETE THE FOLLOWING ACTIVITES:
i) DE-ENERGIZE THE EXISTING LIGHTING CIRCUIT IN THE EXISTING MEDIAN BARRIER.
ii) CUT EXISTING FIBER OPTIC CABLES AT EXISTING MEDIAN PULL BOX AT STATION 1272+85 +/- . USE EXISTING PULL BOXES AT APPROX. STATIONS 1264+91 AND 1278+11 TO PULL CABLES BACK BEYOND LIMITS OF BARRIER REMOVAL.
iii) REMOVE BARRIER AND EXISTING CONDUITS FROM STA. 1269+00 TO STA. 1269+25 AND STA. 1276+25 TO STA. 1276+50.
iv) TRANSITION BARRIER CONDUITS TO UNDERGROUND AT STA. 1269+00 AND STA. 1276+50. SEE DETAIL "A" ON MAINTENANCE OF TRAFFIC CROSSOVER LAYOUT SHEET. UTILIZE TRANSITION TO INSTALL TEMPORARY 4" RIGID CONDUITS FROM EXISTING BARRIER TO TEMPORARY 48" PULL BOXES AT 1269+15, 9' LT. AND STA. 1276+35, 9' LT. PULL EXISTING FIBER TO TEMPORARY 48" PULL BOXES.
v) WITH TEMPORARY SPLICE ENCLOSURES, SPLICE EXISTING 288 STRAND, 24 STRAND, AND 48 STRAND FIBER OPTIC CABLES TO TEMPORARY 288 STRAND, 24 STRAND, AND 48 STRAND FIBER OPTIC CABLES IN EACH TEMPORARY 48" PULL BOX.

2. SEE SHEET XXXX FOR ADDITIONAL CROSSOVER DETAILS.

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

TEMPORARY ITS PLAN
BEGIN WORK TO STA. 1272+00

DESIGN AGENCY
Jacobs

DESIGNER: BAP
REVIEWER: RF 03/20/26
PROJECT ID: 109164
SHEET: P.353 TOTAL: 618

FRA-71-19.10

MODEL: CU - ITS - Sheet 1 PAYPRINT: 06x34 (in.) DATE: 3/31/2026 TIME: 3:47:29 PM PLTDRV: DHDOT_PRF_FLAT4b_PENTBL: DHDOT_Pen.tbl USER: ChrisLawrence1@jacobs.com WORKSPACE: C:\HDOT\CAD WORKSET: DEFAULT PRODUCT: OpenRoadsDesigner 24.00.02.25
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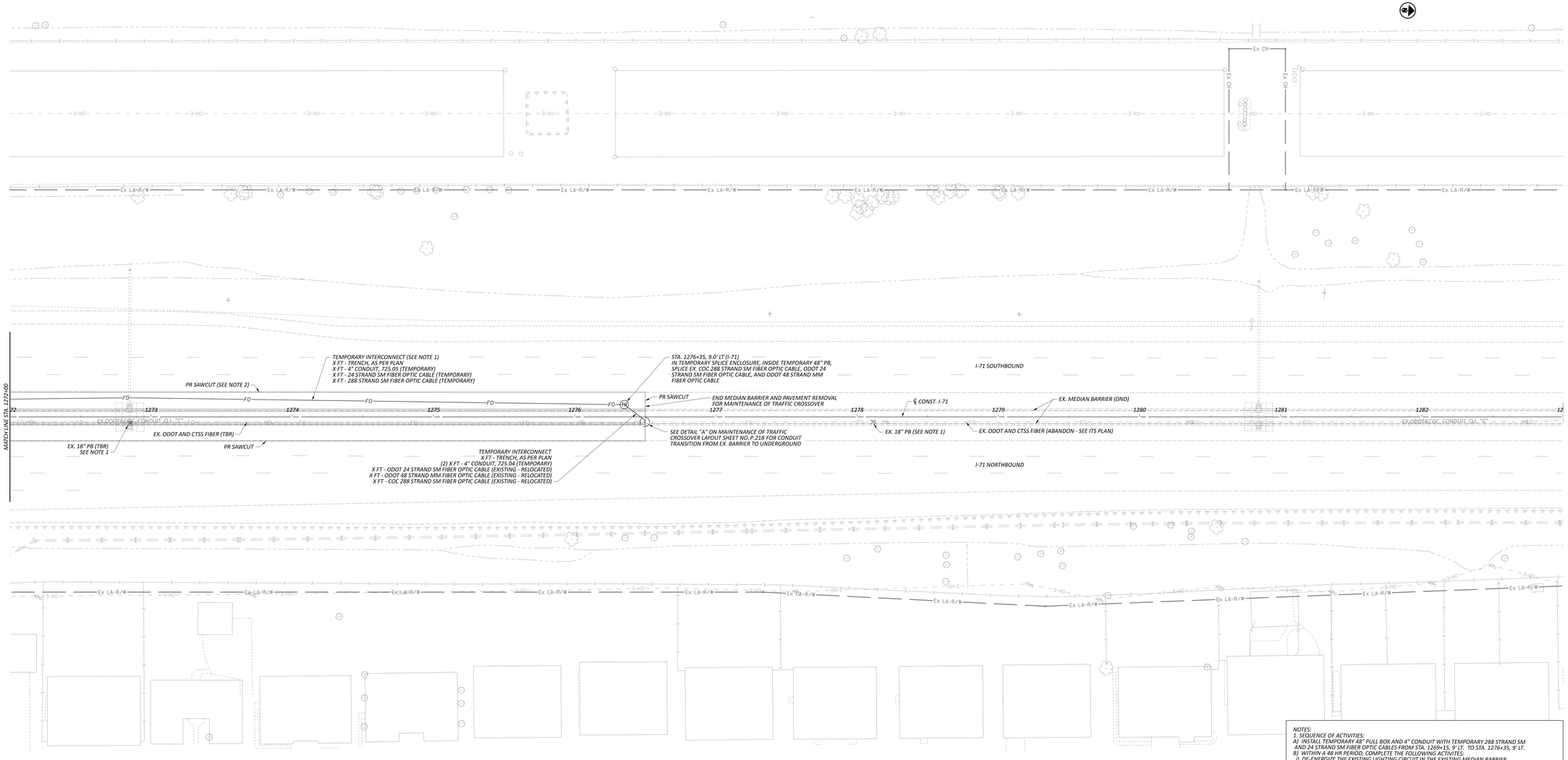

NOTES:

1. SEQUENCE OF ACTIVITIES:

A) INSTALL TEMPORARY 48" PULL BOX AND 4" CONDUIT WITH TEMPORARY 288 STRAND SM AND 24 STRAND SM FIBER OPTIC CABLES FROM STA. 1269+15, 9' LT. TO STA. 1276+35, 9' LT.

B) WITHIN A 48 HR PERIOD, COMPLETE THE FOLLOWING ACTIVITES;

i) DE-ENERGIZE THE EXISTING LIGHTING CIRCUIT IN THE EXISTING MEDIAN BARRIER,

ii) CUT EXISTING FIBER OPTIC CABLES AT EXISTING MEDIAN PULL BOX AT STATION 1272+85 +/- . USE EXISTING PULL BOXES AT APPROX. STATIONS 1264+91 AND 1278+11 TO PULL CABLES BACK BEYOND LIMITS OF BARRIER REMOVAL.

iii) REMOVE BARRIER AND EXISTING CONDUITS FROM STA. 1269+00 TO STA. 1269+25 AND STA. 1276+25 TO STA. 1276+50.

iv) TRANSITION BARRIER CONDUITS TO UNDERGROUND AT STA. 1269+00 AND STA. 1276+50. SEE DETAIL "A" ON MAINTENANCE OF TRAFFIC CROSSOVER LAYOUT SHEET. UTILIZE TRANSITION TO INSTALL TEMPORARY 4" RIGID CONDUITS FROM EXISTING BARRIER TO TEMPORARY 48" PULL BOXES AT 1269+15, 9' LT. AND STA. 1276+35, 9' LT. PULL EXISTING FIBER TO TEMPORARY 48" PULL BOXES.

v). WITH TEMPORARY SPLICE ENCLOSURES, SPLICE EXISTING 288 STRAND, 24 STRAND, AND 48 STRAND FIBER OPTIC CABLES TO TEMPORARY 288 STRAND, 24 STRAND, AND 48 STRAND FIBER OPTIC CABLES IN EACH TEMPORARY 48" PULL BOX.

2. SEE SHEET XXXX FOR ADDITIONAL CROSSOVER DETAILS.

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

TEMPORARY ITS PLAN
STA. 1272+00.00 TO END WORK

DESIGN AGENCY
Jacobs

DESIGNER: BAP
REVIEWER: RF 03/20/26
PROJECT ID: 109164
SHEET: P.354 TOTAL: 618

FRA-71-19.10

MODEL: CU - ITS - Sheet 2 PAYRIDGE: 66x34 (in) SAVED: 3/31/2026 7:04:25 PM PLOTBY: CHHOT_PW_LA-HNL PENTBL: CHHOT_Pen.tbl USER: ChrisLuemmert@jacobs.com WORKSPACE: CHHOTSTEAD WORKSET: 109164 PRODUCT: OpenRoadDesigner 24.00.02.25
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HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1260+00.00 TO STA. 1271+00.00

FRA-71-19.10

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DESIGNER
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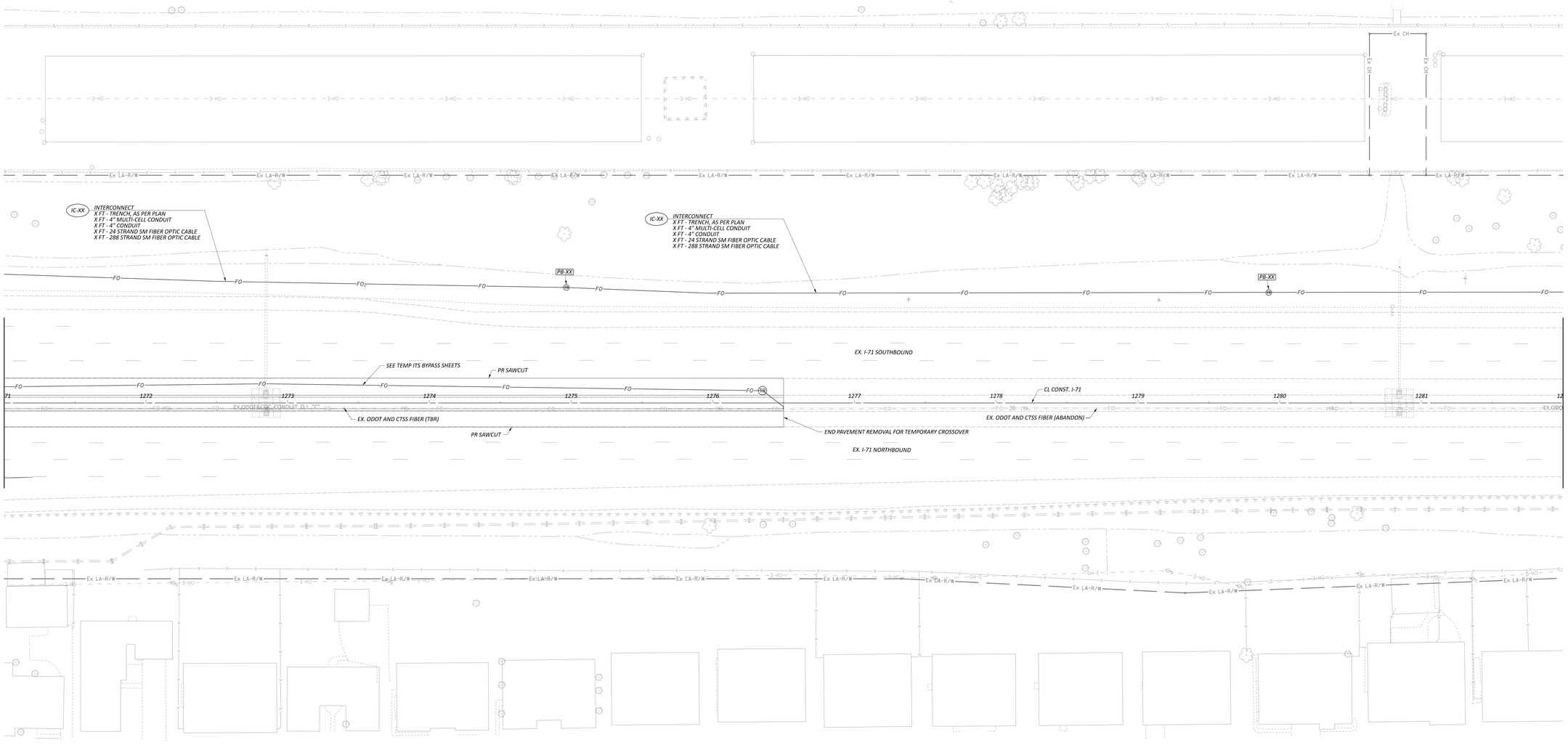
PROJECT ID
109164
SHEET P.355 TOTAL 618



FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1271+00.00 TO STA. 1282+00.00

DESIGN AGENCY
Jacobs

DESIGNER
BAP

REVIEWER
RF 03/20/26

PROJECT ID
109164

SHEET P.356 TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Plan PAYPAGES: 66x34 in | DATE: 3/31/2026 TIME: 10:33:03 AM FSTORY: CMDOT_PDF_U-LARGE_FSTITEL: CMDOT_Pln.dgn USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCIVIL02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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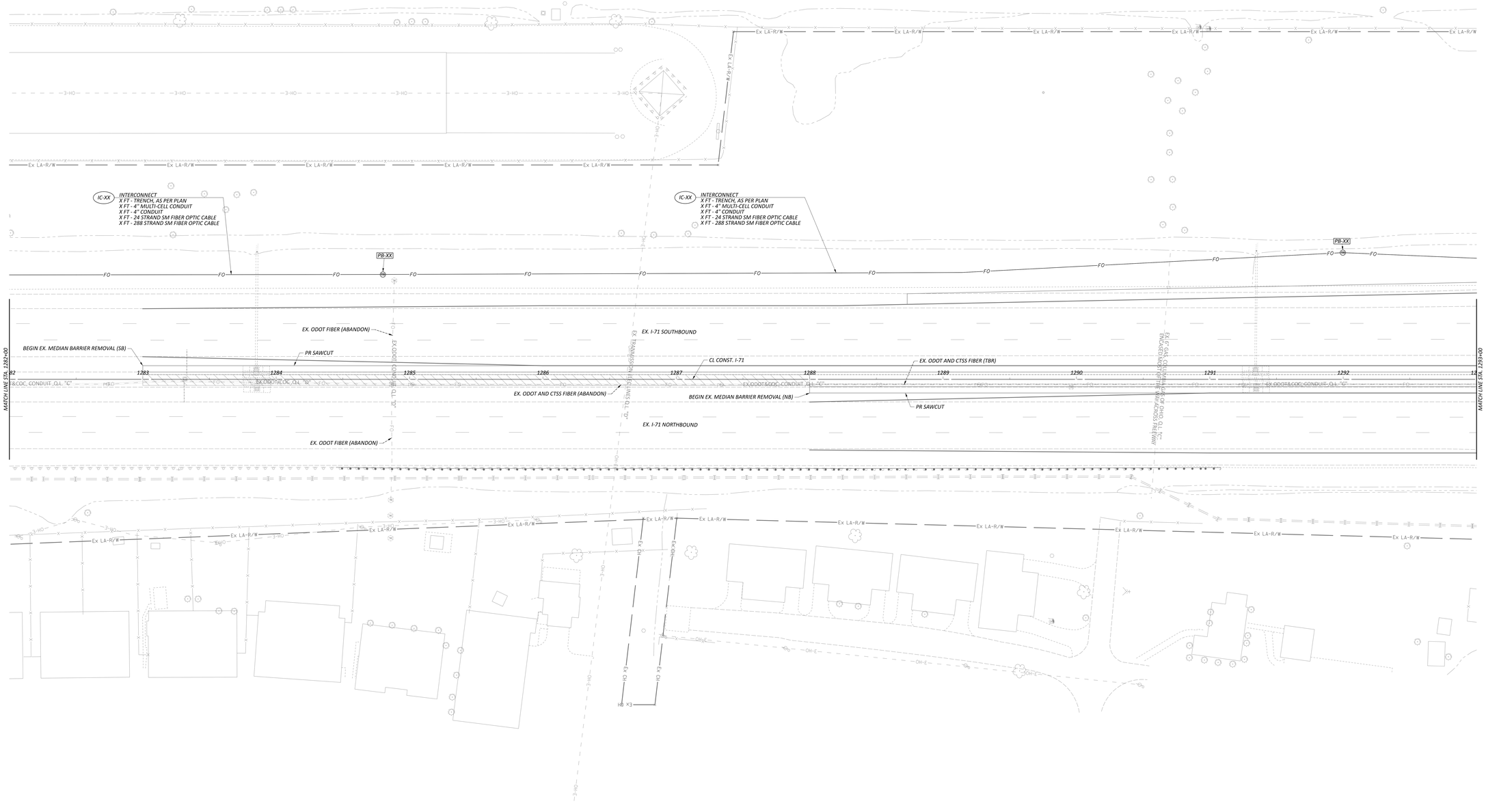

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1282+00.00 TO STA. 1293+00.00

DESIGN AGENCY
Jacobs

DESIGNER BAP
REVIEWER RF 03/20/26
PROJECT ID 109164
SHEET P.357 TOTAL 618

FRA-71-19.10

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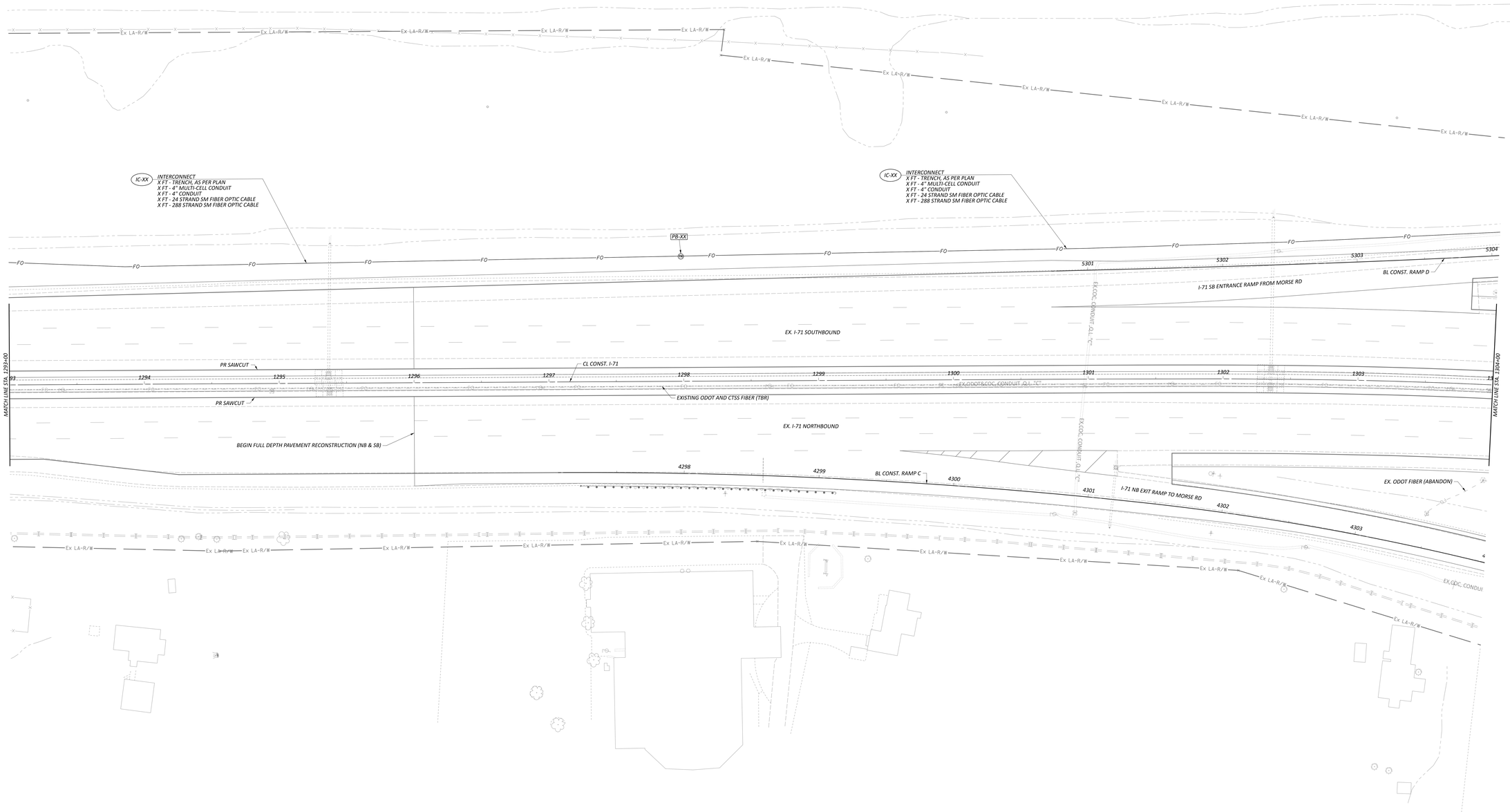

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1293+00.00 TO STA. 1304+00.00

DESIGN AGENCY
Jacobs

DESIGNER
BAP

REVIEWER
RF 03/20/26

PROJECT ID
109164

SHEET P.358 | TOTAL 618

FRA-71-19.10

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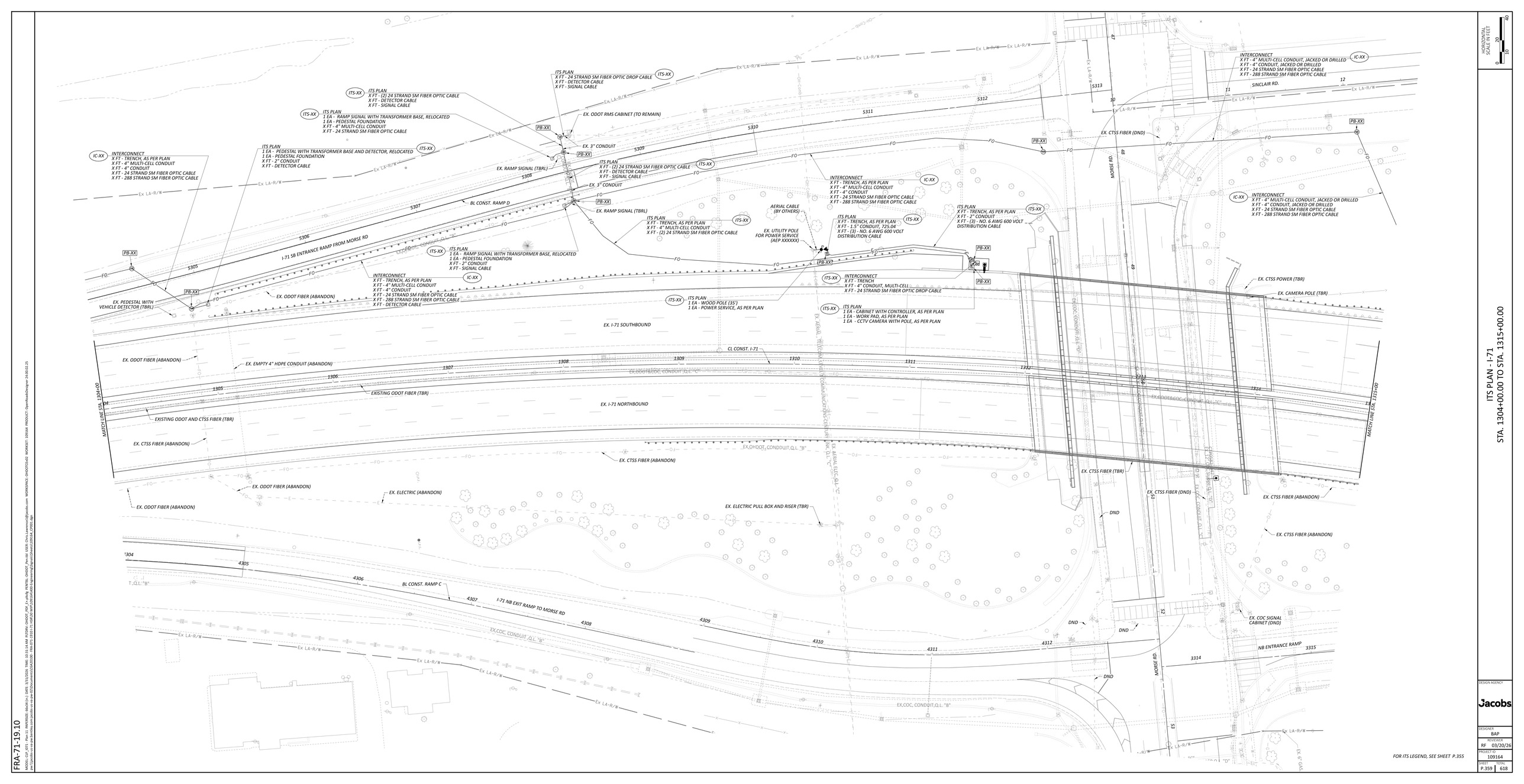

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1304+00.00 TO STA. 1315+00.00

FRA-71-19.10

MODEL: CLF_DT1 - Plot: 11 PAPERSIZE: 66x34.0 in | DATE: 3/31/2026 TIME: 10:11:44 AM EDITOR: DWOOT, PEF, C:\JHSB_PENTRL DWOOT_Pen.ctb USER: Chris.Lawrence@jacobs.com WORKSPACE: DWOOT0420 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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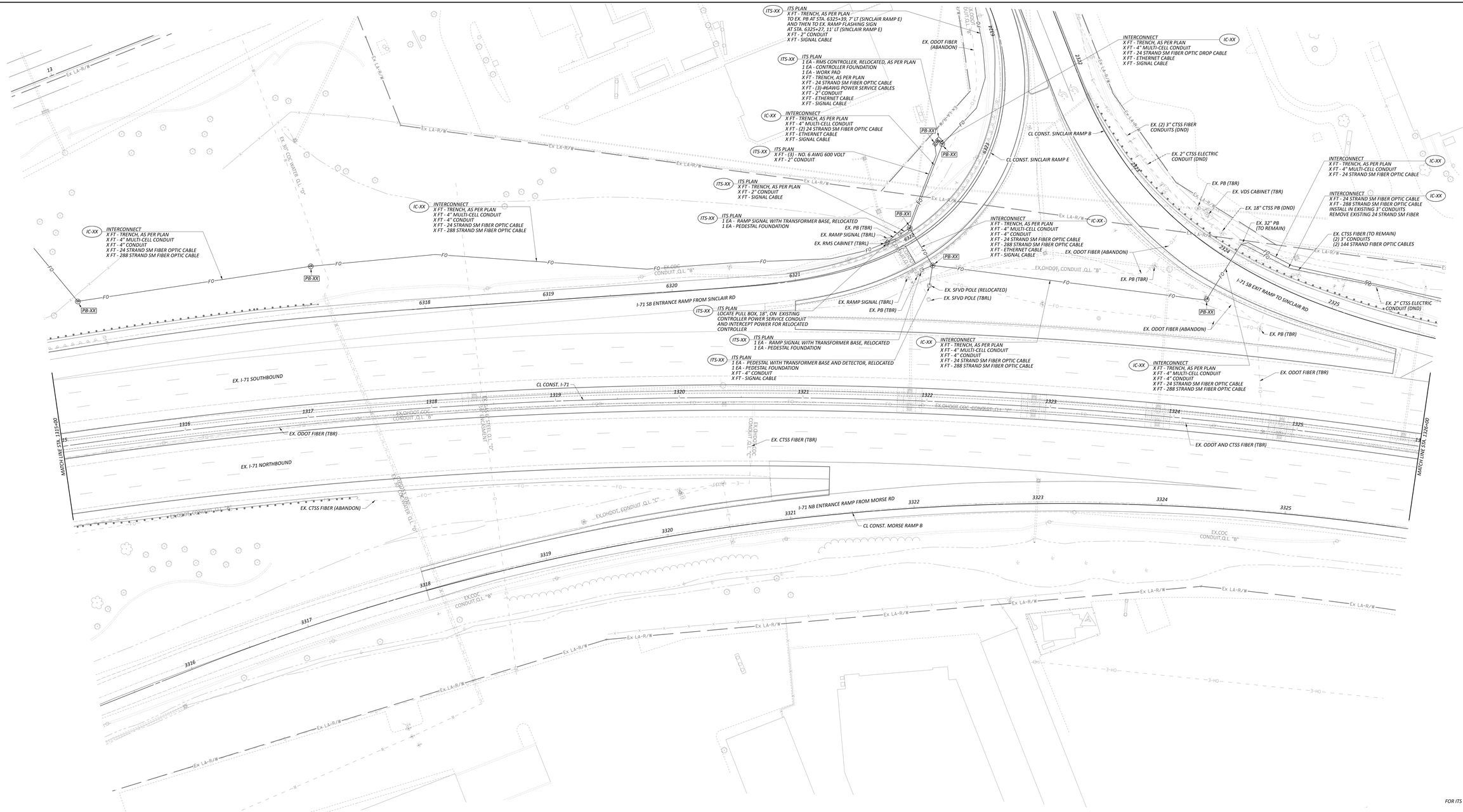
PROJECT ID 109164
SHEET P.359 TOTAL 618


ITS-XX
ITS PLAN
X FT - TRENCH, AS PER PLAN
TO EX. PB AT STA. 6325+39, 7' LT (SINCLAIR RAMP E)
AND THEN TO EX. RAMP FLASHING SIGN
AT STA. 6325+27, 11' LT (SINCLAIR RAMP E)
X FT - 2" CONDUIT
X FT - SIGNAL CABLE
ITS PLAN
1 EA - RMS CONTROLLER, RELOCATED, AS PER PLAN
1 EA - CONTROLLER FOUNDATION
1 EA - WORK PAD
X FT - TRENCH, AS PER PLAN
X FT - 24 STRAND SM FIBER OPTIC CABLE
X FT - (3)-#6AWG POWER SERVICE CABLES
X FT - 2" CONDUIT
X FT - ETHERNET CABLE
X FT - SIGNAL CABLE
IC-XX
INTERCONNECT
X FT - TRENCH, AS PER PLAN
X FT - 4" MULTI-CELL CONDUIT
X FT - (2) 24 STRAND SM FIBER OPTIC CABLE
X FT - ETHERNET CABLE
X FT - SIGNAL CABLE
ITS PLAN
X FT - (3) - NO. 6 AWG 600 VOLT
X FT - 2" CONDUIT
ITS PLAN
X FT - TRENCH, AS PER PLAN
X FT - 2" CONDUIT
X FT - SIGNAL CABLE
ITS PLAN
1 EA - RAMP SIGNAL WITH TRANSFORMER BASE, RELOCATED
1 EA - PEDESTAL FOUNDATION
INTERCONNECT
X FT - TRENCH, AS PER PLAN
X FT - 4" MULTI-CELL CONDUIT
X FT - 4" CONDUIT
X FT - 24 STRAND SM FIBER OPTIC CABLE
X FT - 288 STRAND SM FIBER OPTIC CABLE
PB-XX
EX. ODOT FIBER (ABANDON)
EX. PB (TBR)
EX. RAMP SIGNAL (TBRL)
EX. RMS CABINET (TBRL)
EX. SFVD POLE (RELOCATED)
EX. SFVD POLE (TBRL)
ITS PLAN
LOCATE PULL BOX, 18", ON EXISTING
CONTROLLER POWER SERVICE CONDUIT
AND INTERCEPT POWER FOR RELOCATED
CONTROLLER
ITS PLAN
1 EA - RAMP SIGNAL WITH TRANSFORMER BASE, RELOCATED
1 EA - PEDESTAL FOUNDATION
ITS PLAN
1 EA - PEDESTAL WITH TRANSFORMER BASE AND DETECTOR, RELOCATED
1 EA - PEDESTAL FOUNDATION
X FT - 4" CONDUIT
X FT - SIGNAL CABLE
INTERCONNECT
X FT - TRENCH, AS PER PLAN
X FT - 4" MULTI-CELL CONDUIT
X FT - 4" CONDUIT
X FT - 24 STRAND SM FIBER OPTIC CABLE
X FT - 288 STRAND SM FIBER OPTIC CABLE
INTERCONNECT
X FT - TRENCH, AS PER PLAN
X FT - 4" MULTI-CELL CONDUIT
X FT - 24 STRAND SM FIBER OPTIC DROP CABLE
X FT - ETHERNET CABLE
X FT - SIGNAL CABLE
EX. (2) 3" CTSS FIBER CONDUITS (DND)
EX. 2" CTSS ELECTRIC CONDUIT (DND)
EX. PB (TBR)
EX. VDS CABINET (TBR)
EX. 18" CTSS PB (DND)
EX. 32" PB (TO REMAIN)
INTERCONNECT
X FT - TRENCH, AS PER PLAN
X FT - 4" MULTI-CELL CONDUIT
X FT - 24 STRAND SM FIBER OPTIC CABLE
X FT - 24 STRAND SM FIBER OPTIC CABLE
INSTALL IN EXISTING 3" CONDUITS
REMOVE EXISTING 24 STRAND SM FIBER
EX. CTSS FIBER (TO REMAIN)
(2) 3" CONDUITS
(2) 144 STRAND FIBER OPTIC CABLES
EX. 2" CTSS ELECTRIC CONDUIT (DND)
EX. ODOT FIBER (TBR)
EX. ODOT AND CTSS FIBER (TBR)
EX. CTSS FIBER (TBR)
EX. CTSS FIBER (ABANDON)
CL CONST. SINCLAIR RAMP B
CL CONST. SINCLAIR RAMP E
CL CONST. I-71
CL CONST. MORSE RAMP B
I-71 SB ENTRANCE RAMP FROM SINCLAIR RD
I-71 SB EXIT RAMP TO SINCLAIR RD
I-71 NB ENTRANCE RAMP FROM MORSE RD
EX. I-71 SOUTHBOUND
EX. I-71 NORTHBOUND
EX. 30" COX WATER O.L. "D"
EX. 8" COX STEEL O.L. "D"
EX. 6" COX STEEL O.L. "D"
EX. 4" COX STEEL O.L. "D"
EX. 3" COX STEEL O.L. "D"
EX.COC CONDUIT O.L. "B"
EX.OHDOT CONDUIT O.L. "B"
EX.OHDOT CONDUIT O.L. "C"
EX.OHDOT CONDUIT O.L. "D"
EX.COC CONDUIT O.L. "C"
EX.COC CONDUIT O.L. "D"
Ex LA-R/W
FO
3-HO
MATCH LINE STA. 1315+00
MATCH LINE STA. 1326+00
6318
6319
6320
6321
6322
6323
6324
1316
1317
1318
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3316
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3320
3321
3322
3323
3324
3325
2322
2324
HORIZONTAL SCALE IN FEET
0
10
20
40
ITS PLAN - I-71
STA. 1315+00.00 TO STA. 1326+00.00
FOR ITS LEGEND, SEE SHEET P.355
DESIGN AGENCY
Jacobs
DESIGNER
BAP
REVIEWER
RF 03/20/26
PROJECT ID
109164
SHEET P.360
TOTAL 618
FRA-71-19.10
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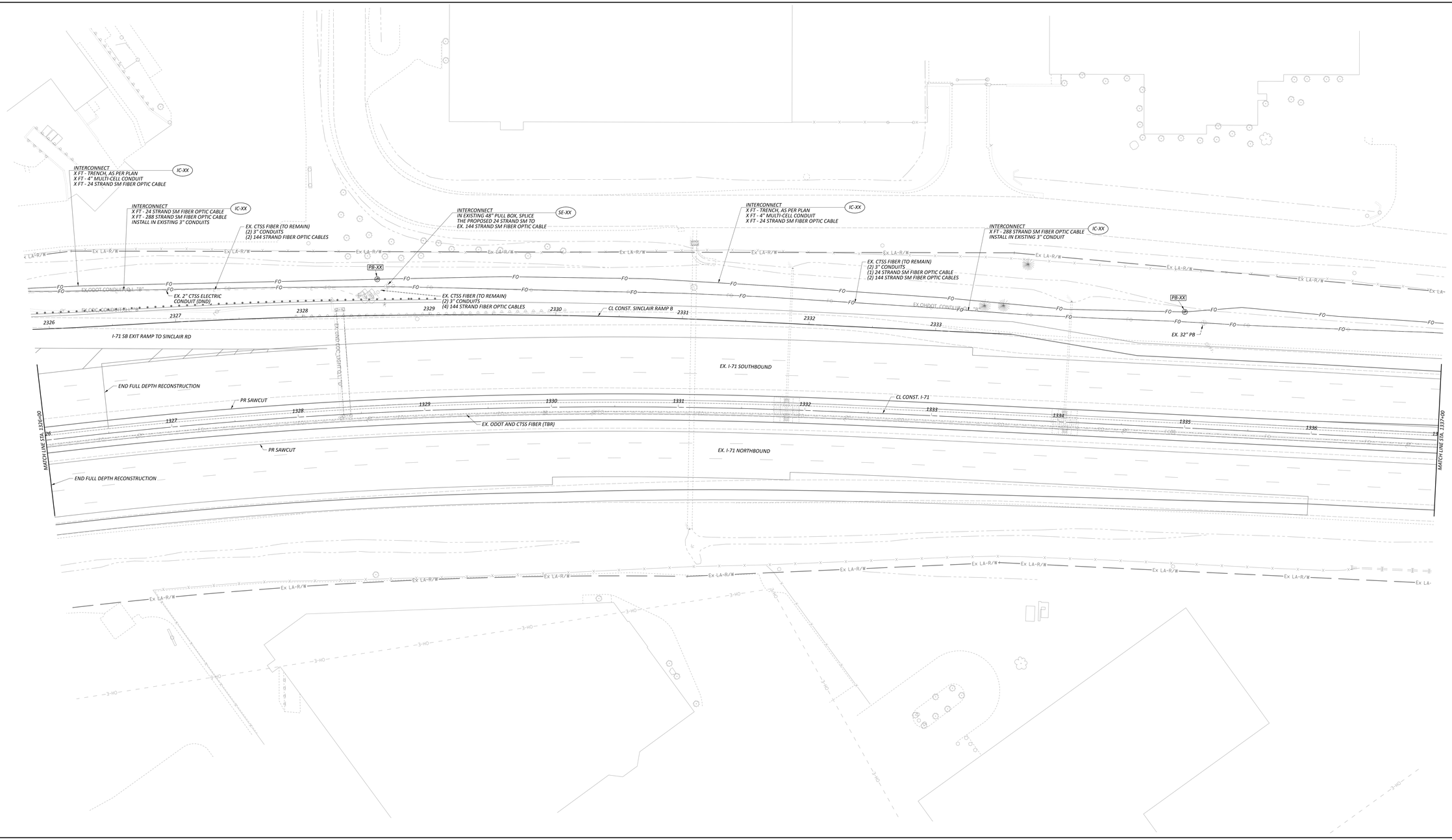

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1326+00 TO STA. 1337+00

DESIGN AGENCY
Jacobs

DESIGNER BAP
REVIEWER RF 03/20/26
PROJECT ID 109164
SHEET P.361 TOTAL 618

FRA-71-19.10

MODEL: CU_ITS - Plot: 13 PAPERSIZE: 66x34 (in.) DATE: 3/17/2026 TIME: 03:15:24 AM BYDWG: DHOOT, PM: T. LANG, PENTBL: DHOOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DHOOTS4D WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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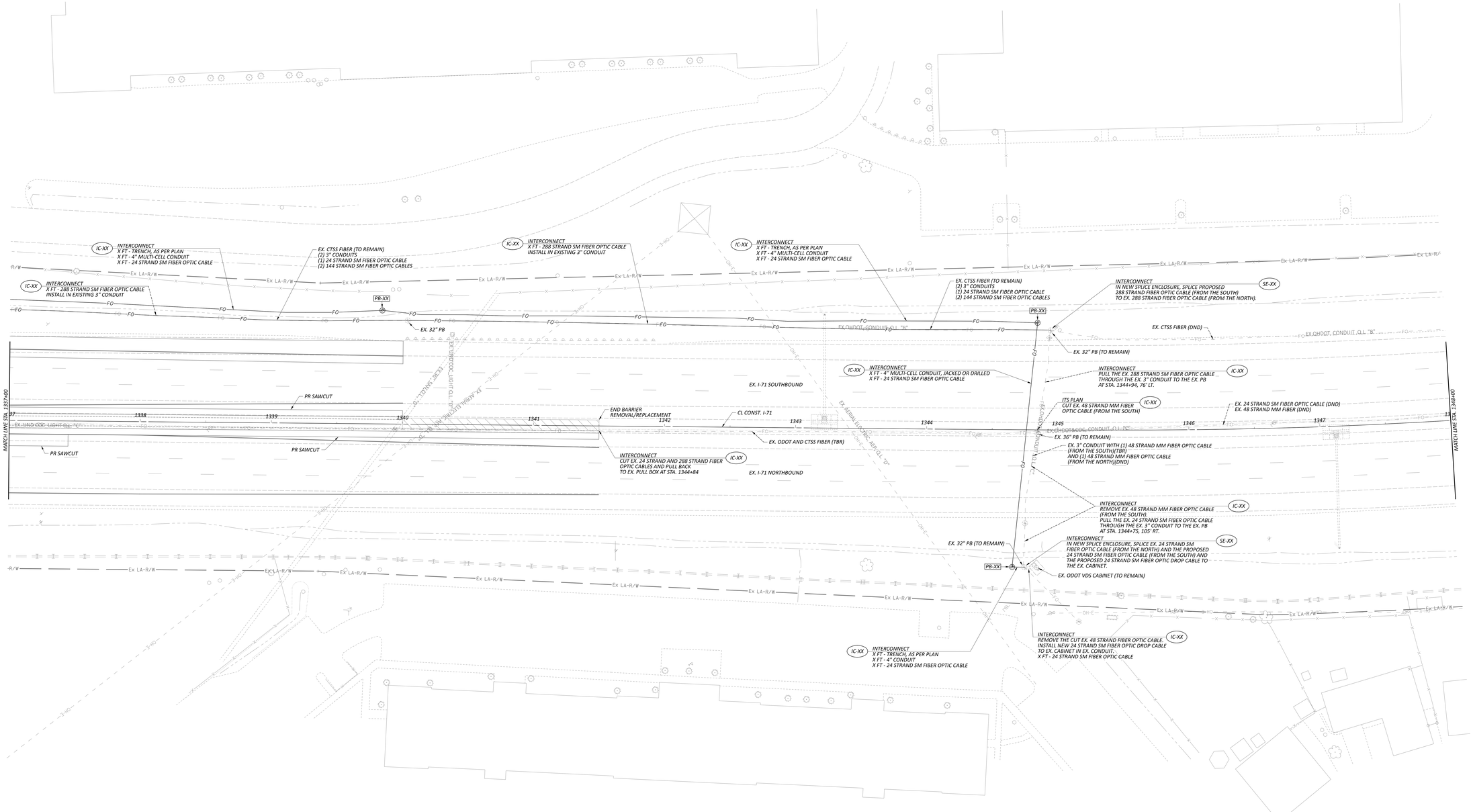

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1337+00.00 TO STA. 1348+00.00

DESIGN AGENCY
Jacobs

DESIGNER BAP
REVIEWER RF 03/20/26
PROJECT ID 109164
SHEET P.362 TOTAL 618

FRA-71-19.10

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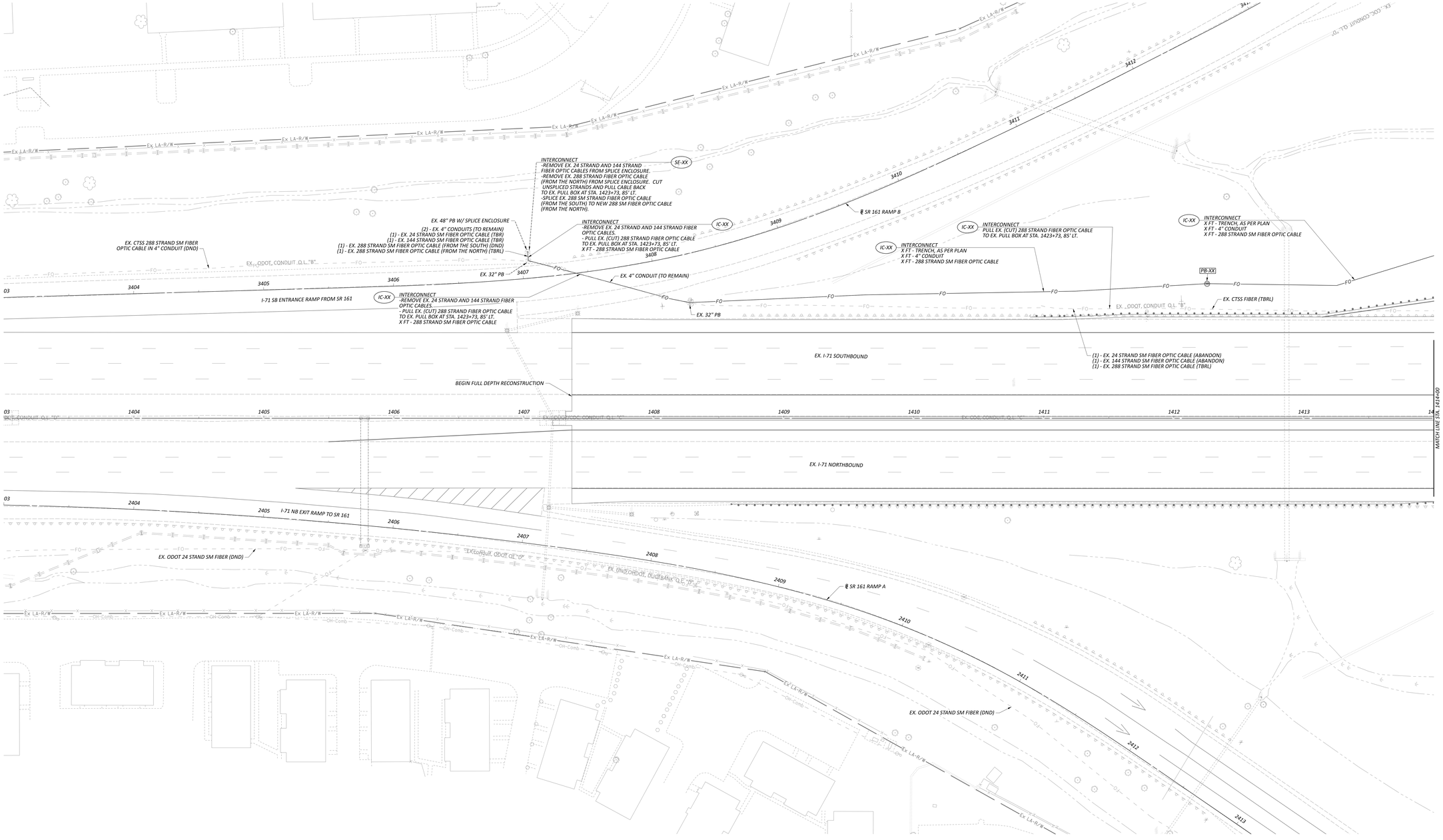

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1403+00.00 TO STA. 1414+00.00

DESIGN AGENCY
Jacobs

DESIGNER: BAP
REVIEWER: RF 03/20/26
PROJECT ID: 109164
SHEET: P.363 TOTAL: 618

FRA-71-19.10

MODEL: CU_071 - Plan 20 PAPERSIZE: 66x34.0in | DATE: 3/31/2026 TIME: 10:31:27 AM BY/DIR: DWOFF, PM: C.Lemmo@jacobs.com WORKSPACE: DWOFF0x40 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.12.25
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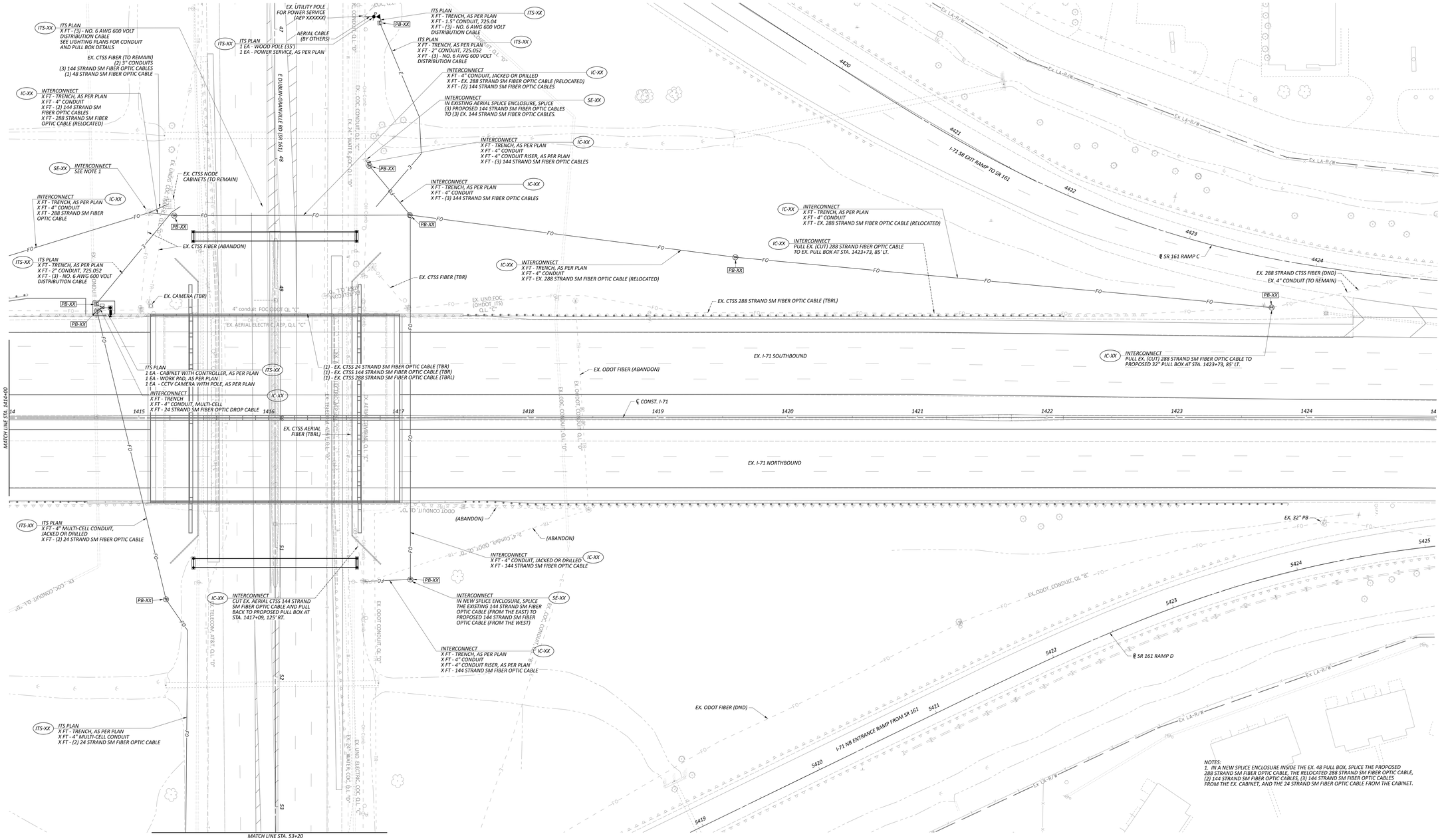

NOTES:
1. IN A NEW SPLICE ENCLOSURE INSIDE THE EX. 48 PULL BOX, SPLICE THE PROPOSED 288 STRAND SM FIBER OPTIC CABLE, THE RELOCATED 288 STRAND SM FIBER OPTIC CABLE, (2) 144 STRAND SM FIBER OPTIC CABLES, (3) 144 STRAND SM FIBER OPTIC CABLES FROM THE EX. CABINET, AND THE 24 STRAND SM FIBER OPTIC CABLE FROM THE CABINET.

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71
STA. 1414+00.00 TO STA. 1425+00.00

DESIGN AGENCY
Jacobs

DESIGNER BAP
REVIEWER RF 03/20/26
PROJECT ID 109164
SHEET P.364 TOTAL 618

FRA-71-19.10

MODEL: CLF_ITS - Plan 21 PAPERSIZE: 66x34 (in) DATE: 3/31/2026 TIME: 10:31:31 AM BY/DBY: DHOOT, PM: C.J.HAIL PENTEL: DHOOT, Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: DHOOT0402 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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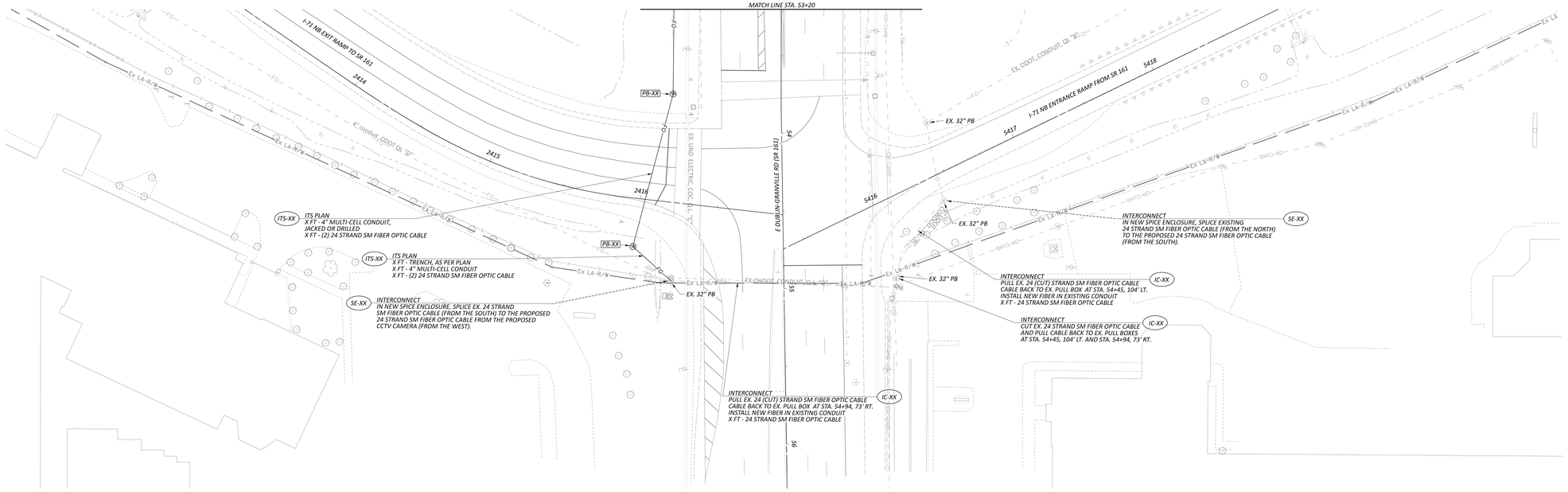

FOR ITS LEGEND, SEE SHEET P.355

HORIZONTAL SCALE IN FEET
0 10 20 40

ITS PLAN - I-71 SR 161 RAMPS A & D

DESIGN AGENCY
Jacobs

DESIGNER: BAP
REVIEWER: RF 03/20/26
PROJECT ID: 109164
SHEET: P.365 TOTAL: 618

FRA-71-19.10

MODEL: CLF_563 - Plan 22 PAPERSIZE: 66x34 in | DATE: 3/31/2026 TIME: 03:19:38 AM BY/DBY: OHDOT_PSF (J-uhdg ENTRL OHDOT_Pen.tbl USER: Chris.Lawmon@jacobs.com WORKSPACE: OHDOTSVG5 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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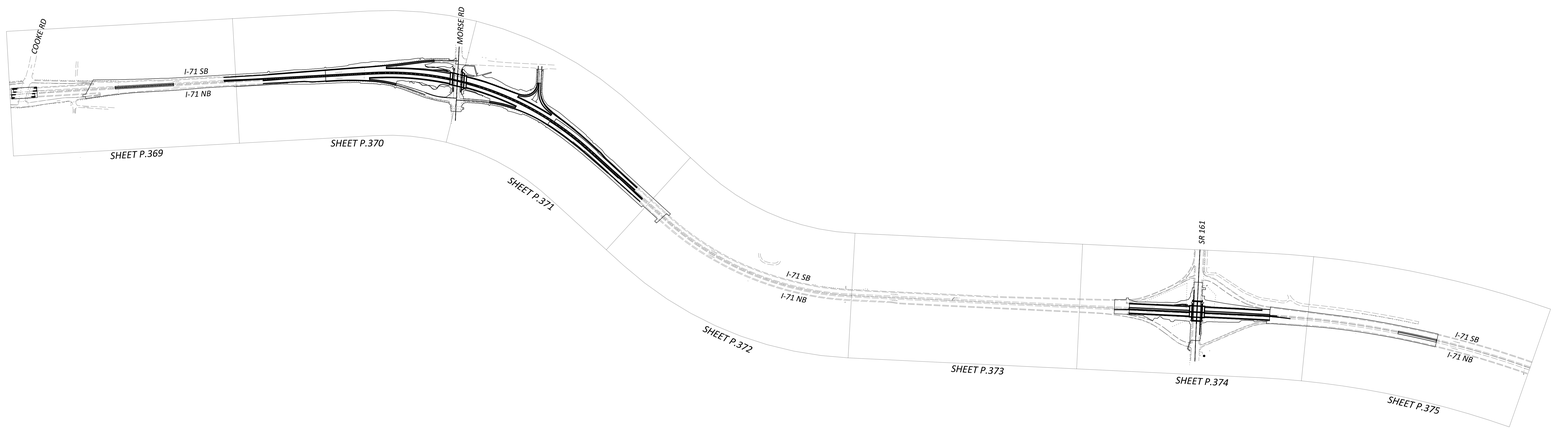

FRA-71-19.10

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LIGHTING PLAN - I-71
SCHEMATIC PLAN

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.366 | TOTAL 618

GENERAL LIGHTING NOTE

THE CONTRACTOR SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, NATIONAL ELECTRICAL SAFETY CODE AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY IN PRFORMING CONTRACT WORK. THE HIGHWAY LIGHTING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2023 ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS. THIS DOCUMENT SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THES PLANS, EXCEPT AS SUCH SPECIFICATIONS ARE MODIFIED BY THE FOLLOWING SPECIFICATIONS OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE LIGHTING SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 90 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION, THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY. EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE LIGHTING SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

PADLOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH C&MS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

ITEM 625, LIGHT POLE, REMOVE AND RE-ERECT, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF REMOVING, STORING, AND RE-ERECTING AN EXISTING LIGHT POLE AT THE LOCATION NOTED ON THE PLANS. TEMPORARILY RELOCATE THE POLE TO A LOCATION THAT IS OUTSIDE OF THE CLEAR ZONE AND STORE IN A MANNER TO PREVENT DAMAGE AS APPROVED BY THE ENGINEER.

THE LIGHT POLE SHALL BE CLEANED AND REPAIRED TO BRING THE POLE TO A GOOD SERVICEABLE CONDITION. THE EXISTING POLE NUMBER DECAL SHALL BE REMOVED AND REPLACED IF IT IS IN POOR CONDITION OR IF THE POLE NUMBER HAS CHANGED.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHT POLE, REMOVE AND RE-ERECT, AS PER PLAN, FOR EACH POLE INSTALLED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LIGHTING, MISC.: REMOVAL OF UNDERPASS LIGHTING

THIS ITEM OF WORK SHALL CONSIST OF REMOVING THE EXISTING UNDERPASS LIGHTING SYSTEM, WHICH INCLUDES THE REMOVAL OF DISCONNECT SWITCHES, CONDUITS, FITTINGS, WIRING, FIXTURES, AND ALL RELATED APPURTENANCES.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHTING, MISC.: REMOVAL OF UNDERPASS LIGHTING, FOR EACH INTERCHANGE WHERE EXISTING UNDERPASS LIGHTING IS REMOVED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

SPECIAL, MAINTAIN EXISTING LIGHTING

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

SPECIAL, MAINTAIN EXISTING LIGHTING CONT'D

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

WHEN THE PROJECT BEGINS AND THE CONTRACTOR HAS TAKEN OVER MAINTENANCE OF THE EXISTING FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED LAYOUTS AND LOCATIONS OF THE EXISTING AND PROPOSED ELECTRICAL CIRCUITS AND RELATED ITEMS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL LOCATE AND MARK ALL UNDERGROUND ELECTRICAL CIRCUITS (INCLUDING TRAFFIC LOOPS AND LOOP LEAD-INS) FOR THE DURATION OF THE PROJECT.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE HL AND TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.
   - A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
   - B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
   - C. METAL PULL BOX LIDS SHALL BE BONDED BY ATTACHMENT OF THE EQUIPMENT GROUNDING CONDUCTOR TO THE FRAME DIAGONAL AS PROVIDED ON SCD. HL-30.11.
   - D. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.
2. CONDUITS.
   - A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
   - B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.

GROUNDING AND BONDING

- C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
- D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3. WIRE FOR GROUNDING AND BONDING.
   - A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
     - I. USE SAME SIZE EQUIPMENT GROUNDING CONDUCTOR AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF #4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE #4 AWG.
     - II. THE INSULATION SHALL BE GREN OR GREEN WITH YELLOW STRIPE(S). FOR #4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.

4 . GROUND ROD.
   - A. A 3/4-INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
   - B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

5. POWER SERVICE AND DISCONNECT SWITCH.
   - A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
   - B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.
   - C. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

6. STRUCTURE GROUNDING

HL-50.24 SHOWS A 1/0 AWG STRANDED COPPER CABLE USED FOR STRUCTURE GROUNDING. ADDITIONALLY, THIS SAME CABLE SHALL BE INSULATED AND ANY CONNETIONS AND BARE COPPER STRANDS EXPOSED TO CONCRETE SHALL BE COVERED WITH MASTIC TO PREVENT CONTACT WITH THE CONCRETE.

7. PAYMENT - ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

ITEM 625, DISTRIBUTION CABLE REMOVED, AS PER PLAN

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING DISTRIBUTION CABLE THAT IS NOT TO REMAIN IN SERVICE, AS SHOWN IN THE PLANS.

EXISTING LIGHTING CONDUIT WITH CIRCUIT CABLES CALLED OUT FOR REMOVAL MAY BE ABANDONED IN PLACE, UNLESS IT CONFLICTS WITH ANY PROPOSED IMPROVEMENTS, IN WHICH CASE IT SHALL BE REMOVED. ANY CONDUIT THAT IS REQUIRED TO BE REMOVED SHALL BE INCIDENTAL TO THIS PAY ITEM.

LIGHTING GENERAL NOTES

DESIGN AGENCY

Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.367 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:19:15 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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625, PULL BOX CLEANED

THIS ITEM OF WORK SHALL CONSIST OF CLEANING AN EXISTING PULL BOX BY REMOVING ANY EXISTING CABLES NOT BEING RECONNECTED, AND DEBRIS SO THAT NEW CABLES CAN BE INSTALLED. ANY UNUSED OPENINGS SHALL BE CLOSED. DISTURBED AREAS NEAR THE PULL BOX SHALL BE CLEARED OF WEEDS OR DEBRIS AND SHALL BE FULLY RESTORED. MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF OF THE PROJECT SITE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "PULL BOX CLEANED" FOR EACH PULL BOX CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

625, CONDUIT CLEANED AND CABLES REMOVED

THIS ITEM SHALL CONSIST OF CLEANING AN EXISTING CONDUIT BY REMOVING EXISTING CABLES, MUD AND DEBRIS SO THAT NEW CABLE CAN BE INSTALLED. INCIDENTAL TO THE CLEANING IS THE INSTALLATION OF BUSHINGS AND/OR COUPLINGS ON THE ENDS OF EXISTING CONDUIT AS REQUIRED. MATERIALS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR PROPER DISPOSAL OFF OF THE PROJECT SITE. DISTURBED AREAS SHALL BE PROPERLY RESTORED.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "CONDUIT CLEANED AND CABLES REMOVED" PER FOOT OF CONDUIT CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

CONDUIT EXPANSION AND DEFLECTION

EXPANSION FITTINGS SHALL BE OZ TYPE AX, CROUSE HINDS TYPE XJG, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL PROVIDE EITHER 4 OR 8 INCHES TOTAL MOVEMENT AS SPECIFIED BY THE PLAN DETAILS AND SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS.

DEFLECTION COUPLINGS SHALL BE OZ TYPE DX, CROUSE HINDS TYPE XD, OR EQUAL APPROVED BY THE ENGINEER. EACH DEFLECTION COUPLING SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS. MINIMUM DEFLECTION CAPABILITY: 25 DEGREES.

EXPANSION AND DEFLECTION FITTINGS FULLY OR PARTIALLY EMBEDDED IN CONCRETE, SOIL, OR SIMILAR MATERIAL SHALL BE COMPLETELY WRAPPED IN A NEOPRENE SLEEVE OR SHEET OF 1/2-INCH MINIMUM THICKNESS. SECURE NEOPRENE WRAP WITH TIE-WRAPS PRIOR TO EMBEDMENT OF THE FITTING.

PADLOCKS AND KEYS

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH C&MS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, 240V

IN ADDITION TO THE REQUIREMENTS OF THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS SHALL BE AS FOLLOWS:

LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS WITH ASYMMETRIC DISTRIBUTION SHALL BE:

AEL, ATBM-P40-XXXX-R3-3K
GE EVOLVE, ERL2-18C330-XXX

OR EQUAL AS APPROVED BY THE ENGINEER.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, 240V, FOR EACH LUMINAIRE INSTALLED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS WORK IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LUMINAIRE, UNDERPASS, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LUMINAIRES FOR UNDERPASS LIGHTING SHALL BE AS FOLLOWS:

LUMINAIRES FOR UNDERPASS LIGHTING UNITS SHALL BE HOLOPHANE TUNNELPASS TNLEDMED PK1 30K MVOLT UDP DGRA SCRW (AT MORSE ROAD) AND TNLEDMED PK1 30K XVOLT UDP DGRA SCRW (AT SR 161), OR EQUAL AS APPROVED BY THE ENGINEER. WALL MOUNTED LUMINAIRES SHALL BE FURNISHED WITH AN INTEGRAL FUSE HOLDER AND 10 AMP FUSE.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "LUMINAIRE, UNDERPASS, AS PER PLAN" FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, SERVICE TO UNDERPASS LIGHTING, AS PER PLAN

THIS ITEM SHALL CONSIST OF PROVIDING COMPLETE ELECTRICAL SERVICE, EXCEPT FOR LUMINAIRES AND PULL BOX GROUND ROD, FOR AN UNDERPASS LIGHTING SYSTEM. THE WORK SHALL INCLUDE DISCONNECT SWITCH, CONDUITS, FITTINGS, WIRING, AND ALL INCIDENTALS NECESSARY TO PROVIDE A COMPLETE UNDERPASS LIGHTING SYSTEM, IN PLACE, TESTED AND ACCEPTED.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE, UNDER CMS ITEM 625, "SERVICE TO UNDERPASS LIGHTING, AS PER PLAN" FOR EACH LIGHTED UNDERPASS, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LIGHTING, MISC.: REMOVAL OF UNDERPASS LIGHTING

THIS ITEM OF WORK SHALL CONSIST OF REMOVING THE EXISTING UNDERPASS LIGHTING SYSTEM, WHICH INCLUDES THE REMOVAL OF DISCONNECT SWITCHES, CONDUITS, FITTINGS, WIRING, FIXTURES, AND ALL RELATED APPURTENANCES.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHTING, MISC.: REMOVAL OF UNDERPASS LIGHTING, FOR EACH INTERCHANGE WHERE EXISTING UNDERPASS LIGHTING IS REMOVED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LIGHT POLE FOUNDATION REMOVED, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF REMOVING THE EXISTING LIGHT POLE FOUNDATION TO A MINIMUM OF 1 FOOT BELOW FINISHED GRADE, OR REMOVING THE FOUNDATION COMPLETELY, BACKFILLING THE VOID WITH COMPACTED MATERIAL, AND RESTORING THE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, LIGHT POLE FOUNDATION REMOVED, AS PER PLAN, FOR EACH FOUNDATION REMOVED, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

LIGHTING GENERAL NOTES

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.367A TOTAL 618

FRA-71-19.10

MODEL: Sheet2 PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 9:09:01 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1f@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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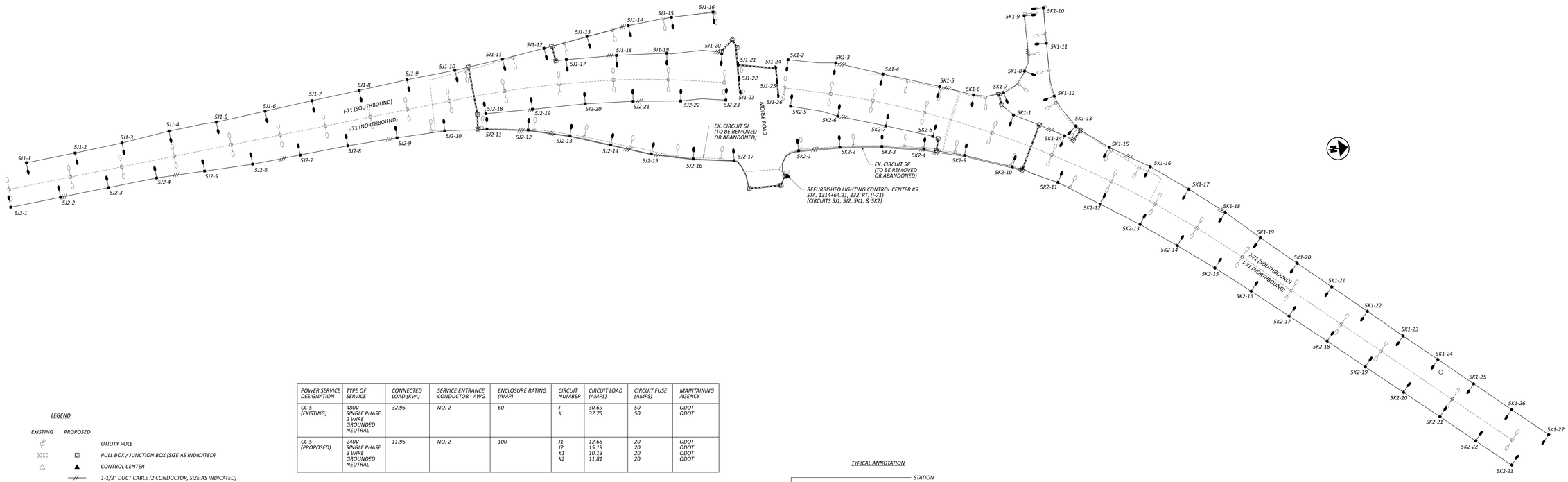


HORIZONTAL SCALE IN FEET
0 50 100 200

LEGEND

EXISTING	PROPOSED	
		UTILITY POLE
		PULL BOX / JUNCTION BOX (SIZE AS INDICATED)
		CONTROL CENTER
		1-1/2" DUCT CABLE (2 CONDUCTOR, SIZE AS INDICATED)
		1-1/2" DUCT CABLE (3 CONDUCTOR, SIZE AS INDICATED)
		CONDUIT (TYPE, SIZE & INSTALLATION AS INDICATED)
		QUANTITY REFERENCE NUMBER
		REMOVALS (ITEMS AS INDICATED)
		CONVENTIONAL LIGHT POLE (SINGLE OR TWIN-ARM)
		RELOCATED GROUND MOUNTED CONVENTIONAL LIGHT POLE
		LIGHT TOWER, SYMMETRIC DISTRIBUTION
		RELOCATED LIGHT TOWER, SYMMETRIC DISTRIBUTION
		UNDERPASS LUMINAIRE

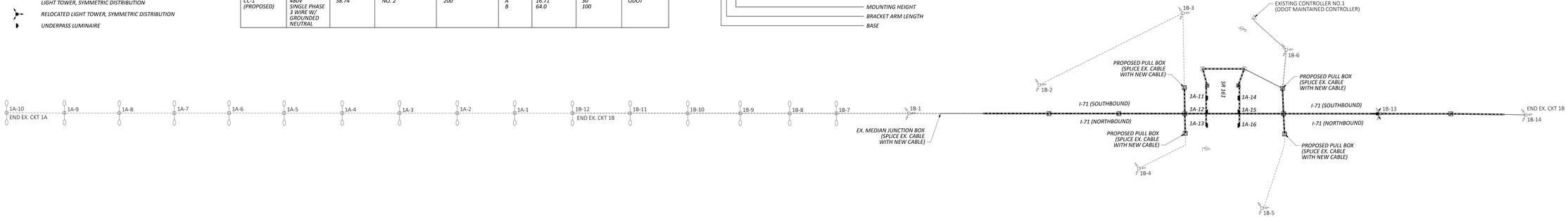
POWER SERVICE DESIGNATION	TYPE OF SERVICE	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR - AWG	ENCLOSURE RATING (AMP)	CIRCUIT NUMBER	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE (AMPS)	MAINTAINING AGENCY
CC-5 (EXISTING)	480V SINGLE PHASE 2 WIRE GROUNDED NEUTRAL	32.95	NO. 2	60	J K	30.69 37.75	50 50	ODOT ODOT
CC-5 (PROPOSED)	240V SINGLE PHASE 3 WIRE GROUNDED NEUTRAL	11.95	NO. 2	100	J1 J2 K1 K2	12.68 15.19 10.13 11.81	20 20 20 20	ODOT ODOT ODOT ODOT

POWER SERVICE DESIGNATION	TYPE OF SERVICE	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR - AWG	ENCLOSURE RATING (AMP)	CIRCUIT NUMBER	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE (AMPS)	MAINTAINING AGENCY
CC-1 (EXISTING)	480V SINGLE PHASE 3 WIRE W/ GROUNDED NEUTRAL	38.40	NO. 2	100	A B	16.0 64.0	30 100	ODOT
CC-1 (PROPOSED)	480V SINGLE PHASE 3 WIRE W/ GROUNDED NEUTRAL	38.74	NO. 2	200	A B	16.71 64.0	30 100	ODOT

TYPICAL ANNOTATION

STA. XXXX+XX, XX' RT., I-71 (XX-XX)
ATXXBXX, CONVENTIONAL SOLID STATE (LED)

- STATION
- OFFSET
- ROADWAY SIDE
- ALIGNMENT REFERENCE
- CONTROLLER AND CIRCUIT NO.
- POLE NO.
- (XX) SUBSUMMARY REFERENCE NO.
- LUMINAIRE TYPE
- MOUNTING HEIGHT
- BRACKET ARM LENGTH
- BASE



LIGHTING PLAN - CIRCUIT DIAGRAM
CIRCUITS J1, J2, K1 & K2

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.368 | TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet 1 PAPERSIZE: 66x34.0 in | DATE: 7/31/2024 TIME: 12:19:12 AM PLTDRV: DWGPC_PDF_E.pltcfg PENTBL: DWGPC_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: DWGPC WORKSET: 109164 PRODUCT: CivilRadialDesigner 24.00.02.25
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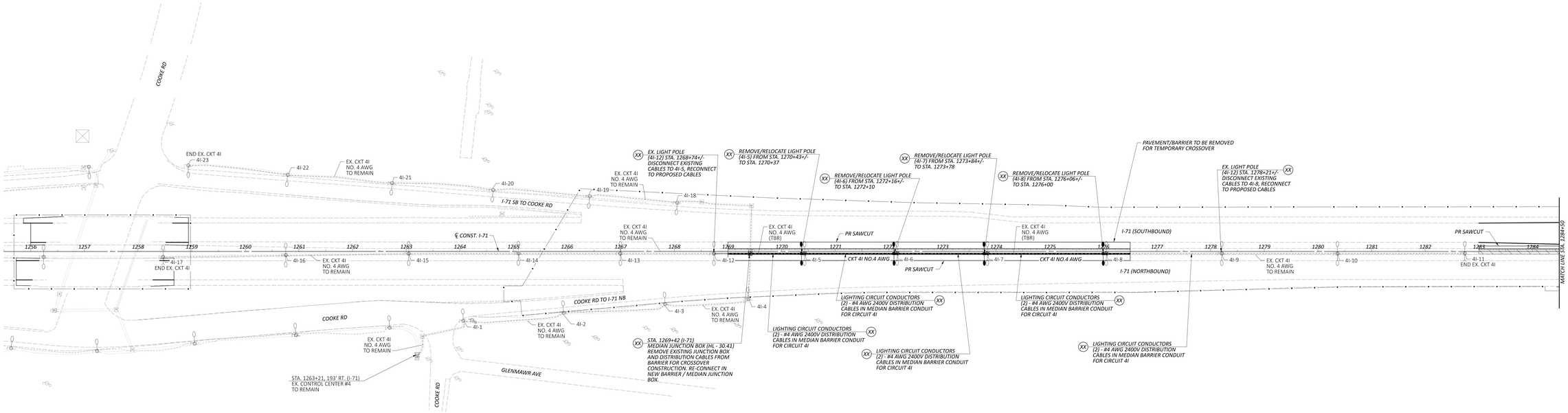

LEGEND

EXISTING	PROPOSED	
		UTILITY POLE
		PULL BOX / JUNCTION BOX (SIZE AS INDICATED)
		CONTROL CENTER
		1-1/2" DUCT CABLE (2 CONDUCTOR, SIZE AS INDICATED)
		1-1/2" DUCT CABLE (3 CONDUCTOR, SIZE AS INDICATED)
		CONDUIT (TYPE, SIZE & INSTALLATION AS INDICATED)
	(XX)	QUANTITY REFERENCE NUMBER
		REMOVALS (ITEMS AS INDICATED)
		CONVENTIONAL LIGHT POLE (SINGLE OR TWIN-ARM)
		RELOCATED GROUND MOUNTED CONVENTIONAL LIGHT POLE
		LIGHT TOWER, SYMMETRIC DISTRIBUTION
		RELOCATED LIGHT TOWER, SYMMETRIC DISTRIBUTION
		UNDERPASS LUMINAIRE

POWER SERVICE DESIGNATION	TYPE OF SERVICE	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR - AWG	ENCLOSURE RATING (AMP)	CIRCUIT NUMBER	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE (AMPS)	MAINTAINING AGENCY
CC-4 (EXISTING)	480V SINGLE PHASE 2 WIRE GROUNDED NEUTRAL	28.82	NO. 4	60	I	26.10	40	ODOT

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
BEGIN WORK TO STA. 1284+50.00

DESIGN AGENCY
Jacobs
DESIGNER
REVIEWER
PROJECT ID
109164
SHEET P.369 TOTAL 618

FRA-71-19.10

MODEL: CU1_071 - Sheet:0 PAPERSIZE: 66x34.0 in | DATE: 7/31/2024 TIME: 2:03:03 PM | FCDIR: C:\MDOT_CMDP_1\ | pltSB_FIXTBL: CMDOT_Pen.tbl | USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTCU01 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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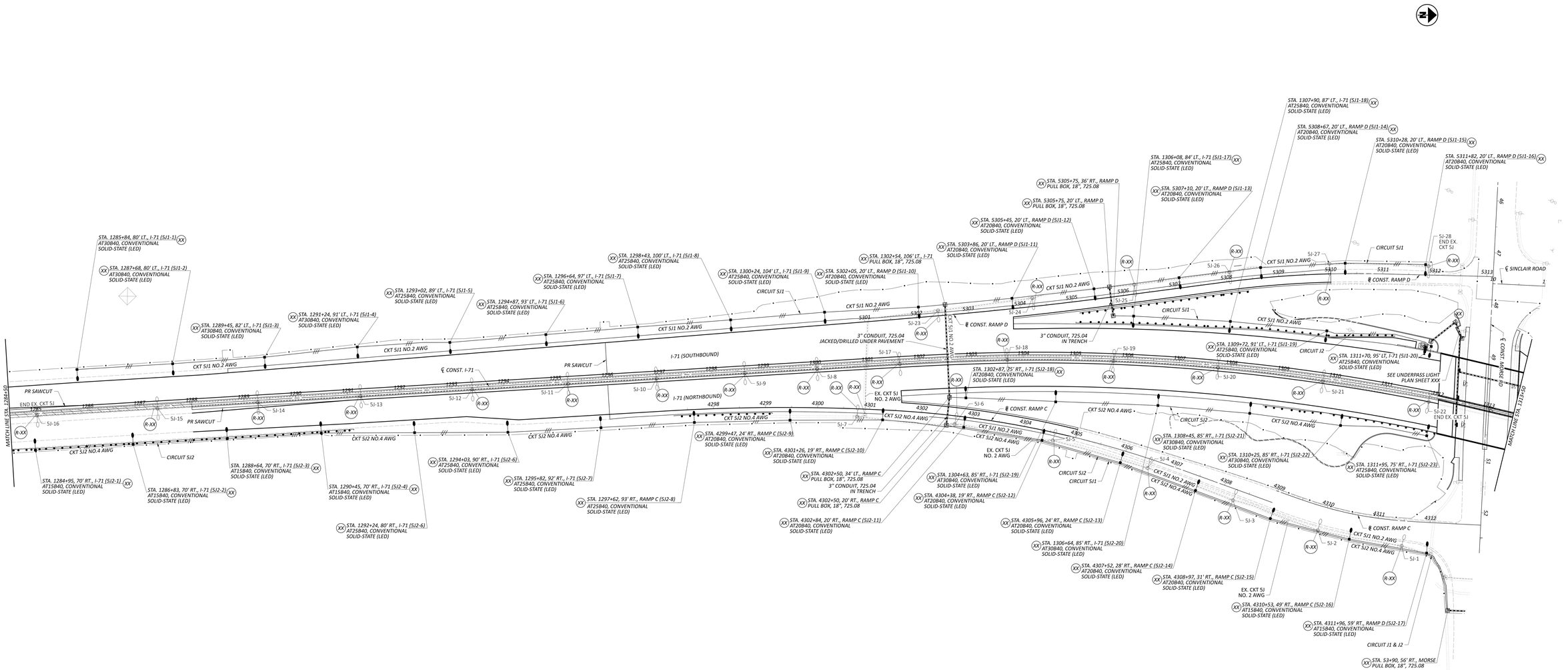

NOTES:

1. REMOVE EXISTING CIRCUITS 5J AND 5K AS NEEDED TO INSTALL PROPOSED CIRCUITS. ABANDON REMAINING CIRCUITRY.

2. EXISTING CIRCUITS CONSIST OF (2) NO. 4 AWG, UNLESS NOTED OTHERWISE.

FOR LEGEND SEE SHEET P.369.

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
STA . 1284+50.00 TO STA. 1313+50.00

DESIGN AGENCY
Jacobs
DESIGNER
REVIEWER
PROJECT ID
109164
SHEET P.370 TOTAL 618

FRA-71-19.10

MODEL: CLP_OTI - Sheet 1 PAPERSIZE: 66x34 in | DATE: 7/7/2026 TIME: 12:19:55 AM PLOTBY: CHRISTI_PEAT_C LAYER: PENTEL CHRISTI_PEAT USER: Chris.Lawrence@jacobs.com WORKSPACE: C:\MICROSTATION\CHRISTI_PEAT\WORKSPACE\ WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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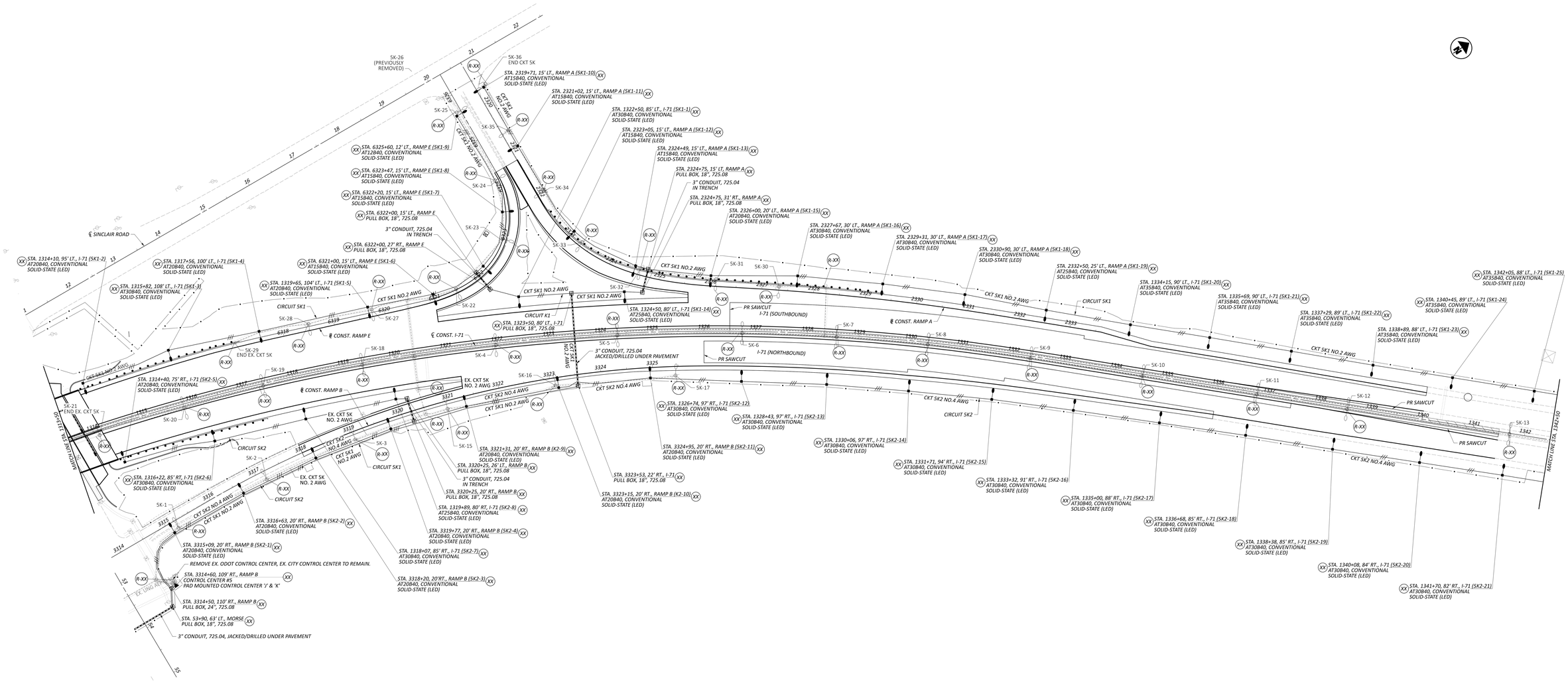


NOTES:

1. REMOVE EXISTING CIRCUITS 5J AND 5K AS NEEDED TO INSTALL PROPOSED CIRCUITS. ABANDON REMAINING CIRCUITRY.

2. EXISTING CIRCUITS CONSIST OF (2) NO. 4 AWG, UNLESS NOTED OTHERWISE.

FOR LEGEND SEE SHEET P.369.

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

LIGHTING PLAN
STA. 1313+50.00 TO STA. 1342+50.00

DESIGN AGENCY: Jacobs

DESIGNER

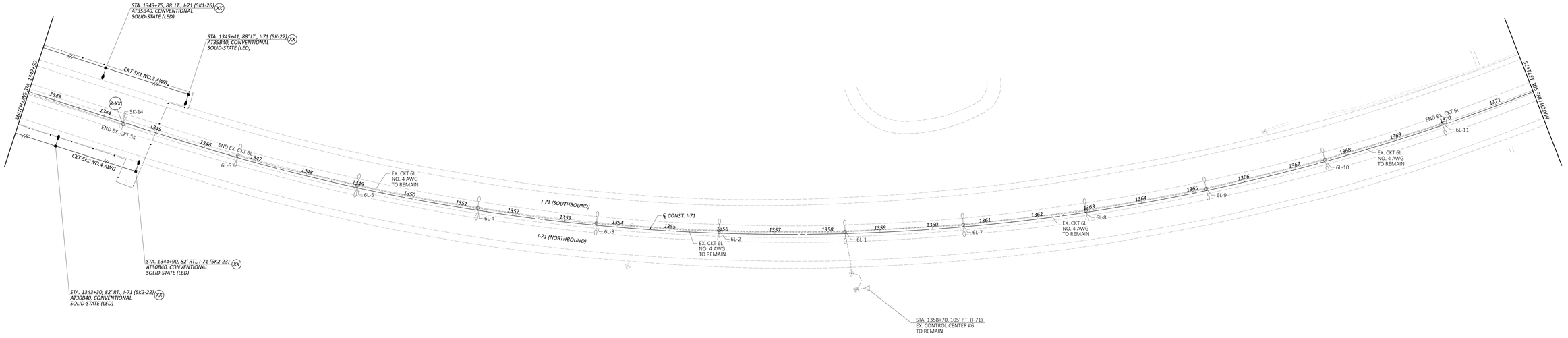
REVIEWER

PROJECT ID: 109164

SHEET: P.371 | TOTAL: 618

FRA-71-19.10

MODEL: CLP_OT1 - Sheet 2 PAPERSIZE: 66x34.0 in SAVED: 3/31/2026 TIME: 11:39:55 AM BY:DEBO, ONDOT_PDF_F-LANE_PENTEL, ONDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: ONDOT5K02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25



POWER SERVICE DESIGNATION	TYPE OF SERVICE	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR - AWG	ENCLOSURE RATING (AMP)	CIRCUIT NUMBER	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE (AMPS)	MAINTAINING AGENCY
CC-6 (EXISTING)	480V SINGLE PHASE 2 WIRE GROUNDED NEUTRAL	9.89	NO. 4	60	L	20.60	30	ODOT

FOR LEGEND SEE SHEET P.369.

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
STA. 1342+50.00 TO STA. 1371+75.00

DESIGN AGENCY
Jacobs
DESIGNER
REVIEWER
PROJECT ID
109164
SHEET P.372 TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet 3 PAPERSIZE: 66x34.0in SAVED: 7/31/2024 TIME: 11:33:03 AM PLOTTED: 08/07/2024 PSF: FJ-HMB_PENTBL: CMDOT_Pen.tbl USER: Chris.Lawrence@jacobs.com WORKSPACE: CMDOTSHEET WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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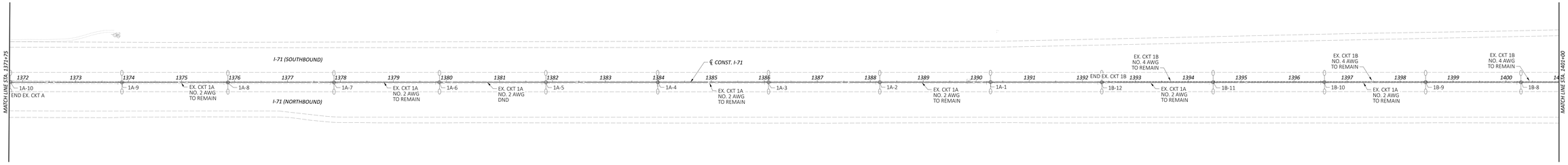

FOR LEGEND SEE SHEET P.369.

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
STA. 1371+75.00 TO STA. 1401+00.00

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.373 | TOTAL 618

FRA-71-19.10

MODEL: CLV_071 - Sheet 4 PAPERSIZE: 66x34.0 in | DATE: 7/7/2026 TIME: 12:26:04 AM PLTDRV: DWG2PC.PSF | LAYER: PENTBL: DWG2PC.PENTBL USER: Chris.Lawrence1@jacobs.com WORKSPACE: DWG2TEXT2 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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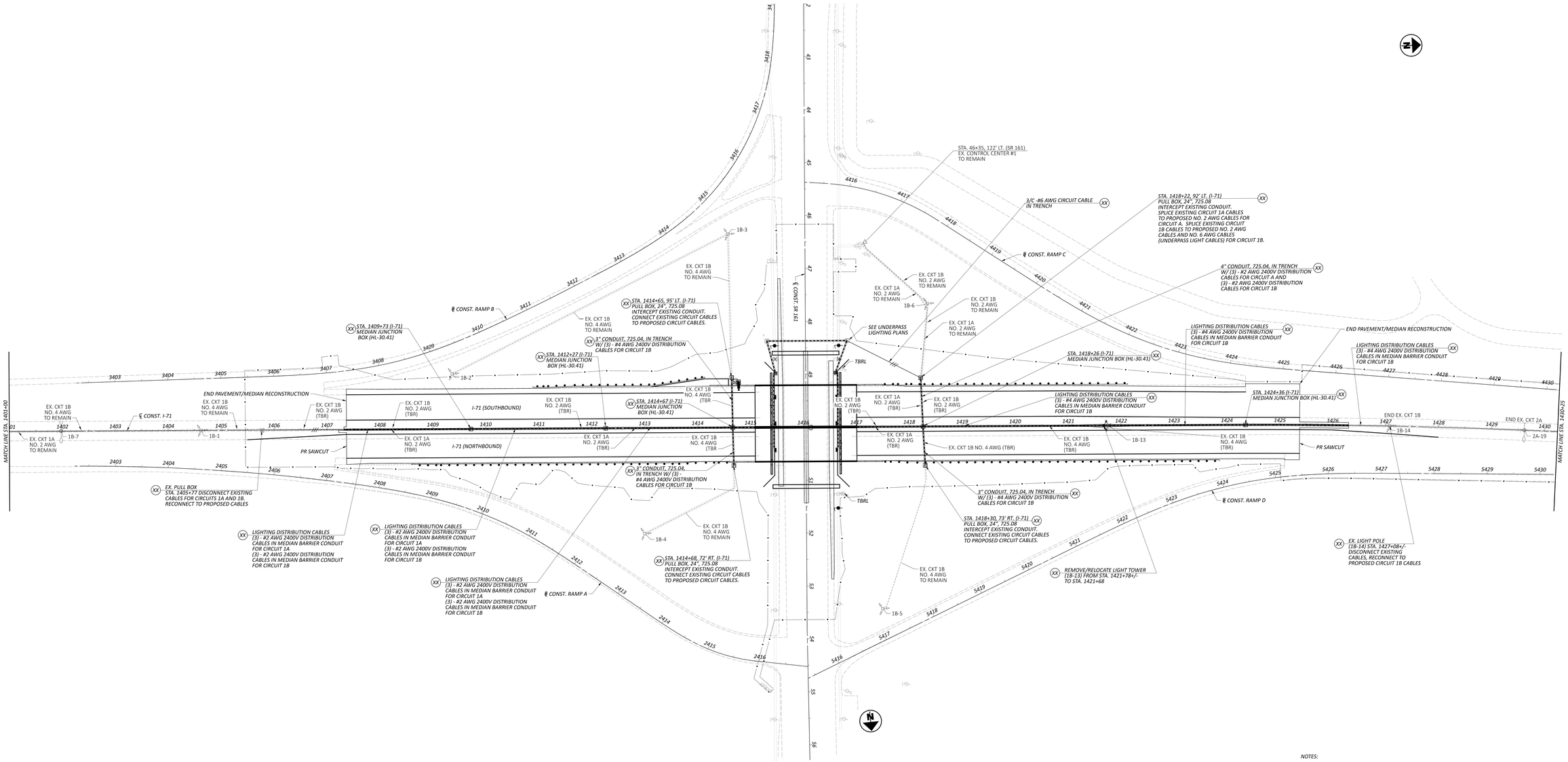

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
STA. 1401+00.00 TO STA. 1430+25.00

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.374 TOTAL 618

FRA-71-19.10

MODEL: CLF_DT1 - Sheet: 5 PAPERSIZE: 66x34.0 in SHTS: 37/37/2265 TIME: 12:20:04 AM BY:DAVI, DAVOT, PSF, [--Unit], PENTBL: DAVOT, PenTbl: USER: Dan.Lawrence@jacobs.com WORKSPACE: DAVOT05142 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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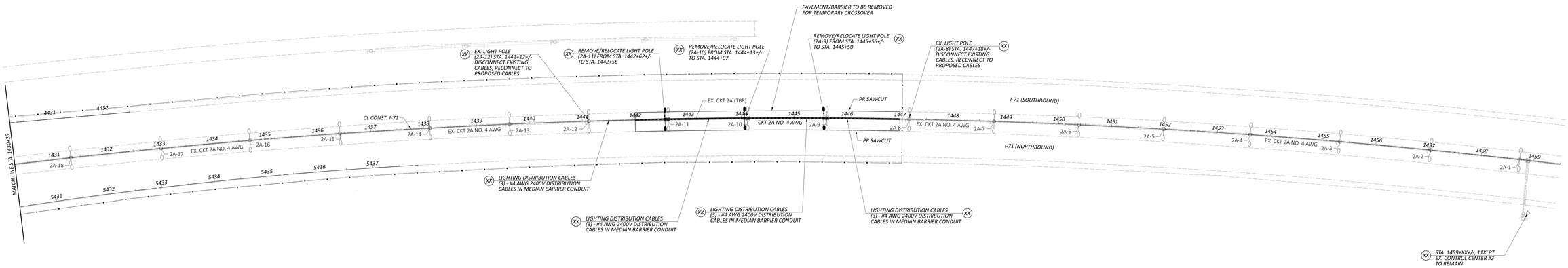

POWER SERVICE DESIGNATION	TYPE OF SERVICE	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR - AWG	ENCLOSURE RATING (AMP)	CIRCUIT NUMBER	CIRCUIT LOAD (AMPS)	CIRCUIT FUSE (AMPS)	MAINTAINING AGENCY
CC-2 (EXISTING)	480V SINGLE PHASE 3 WIRE W/ GROUNDED NEUTRAL	21.36	NO. 4	60	A	44.50	60	ODOT

FOR LEGEND SEE SHEET P.369.

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
STA. 1430+25.00 TO END WORK

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.375 TOTAL 618

FRA-71-19.10

MODEL: CU_071 - Sheet 6 PAPERSIZE: 66x34.0 in | DATE: 7/7/2026 TIME: 12:20:04 AM PLOTBY: CHADO7, PSF: 1 unit, PENTBL: CHADO7_PSF.ctb USER: Chris.Lawrence1@jacobs.com WORKSPACE: CHADO7SAD WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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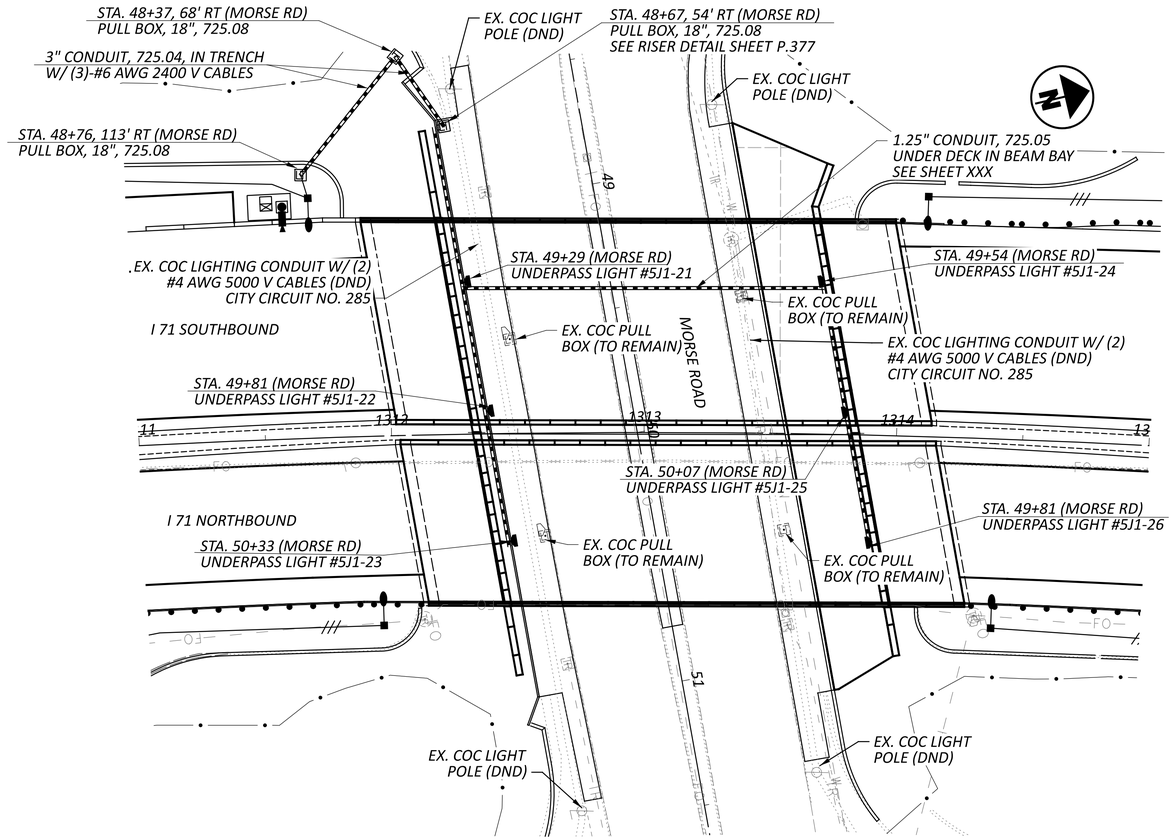
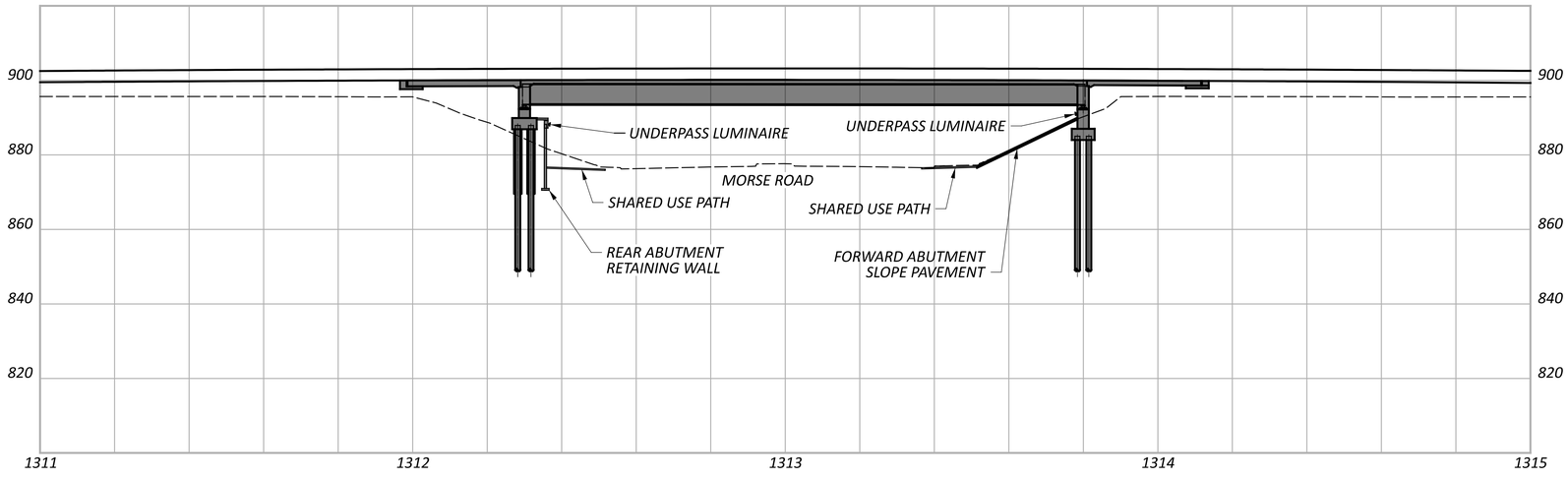


PLAN



PROFILE ALONG I-71 PROFILE GRADE LINE

NOTES:

1) SEE SHEET P.377 FOR ELEVATION VIEWS.

2) PROVIDE 0.75" PVC-COATED (SEALTIGHT) FLEXIBLE STEEL CONDUIT FROM SPLICE BOX TO UNDERPASS LIGHTING FIXTURE

3) ADJUST EXISTING PULL BOXES TO GRADE SO THAT THEY ARE FLUSH WITH THE PROPOSED SHARED USE PATH.

4) REMOVE EXISTING UNDERPASS LIGHTING.

FOR LEGEND SEE SHEET P.369

UNDERPASS LIGHTING PLAN

FRA-071-24.46 L&R: I-71 OVER MORSE ROAD

FRA-71-19.10

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.376 | TOTAL 618

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:20:27 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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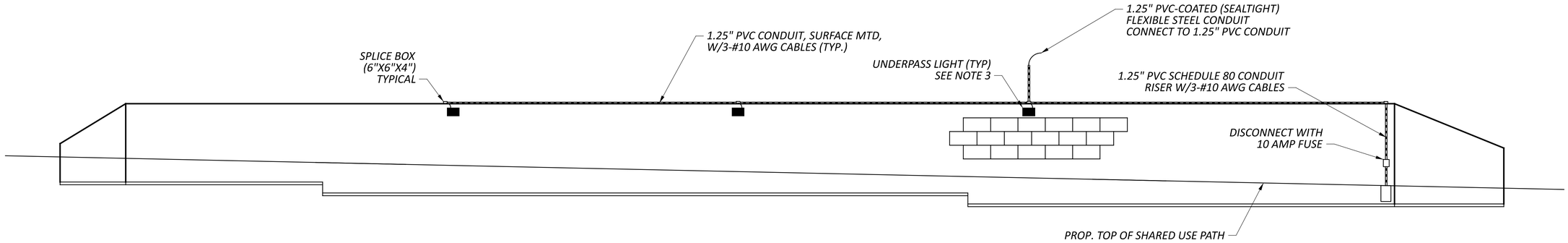
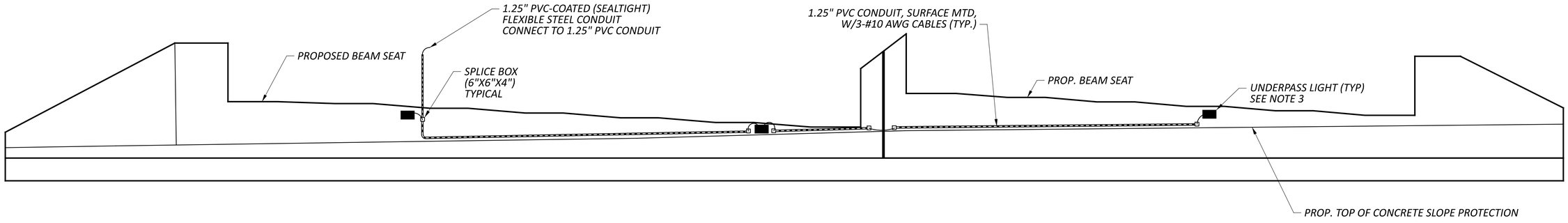


REAR ABUTMENT RETAINING WALL ELEVATION



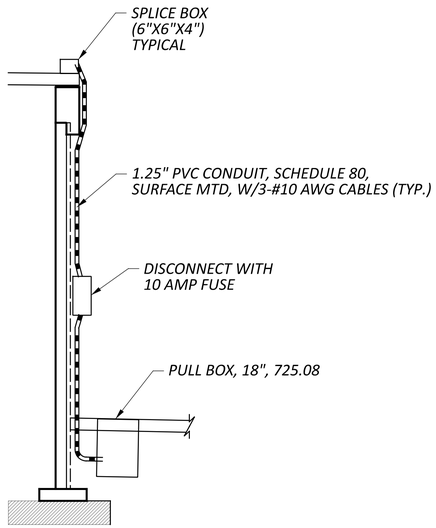
FORWARD ABUTMENT ELEVATION

NOTES:

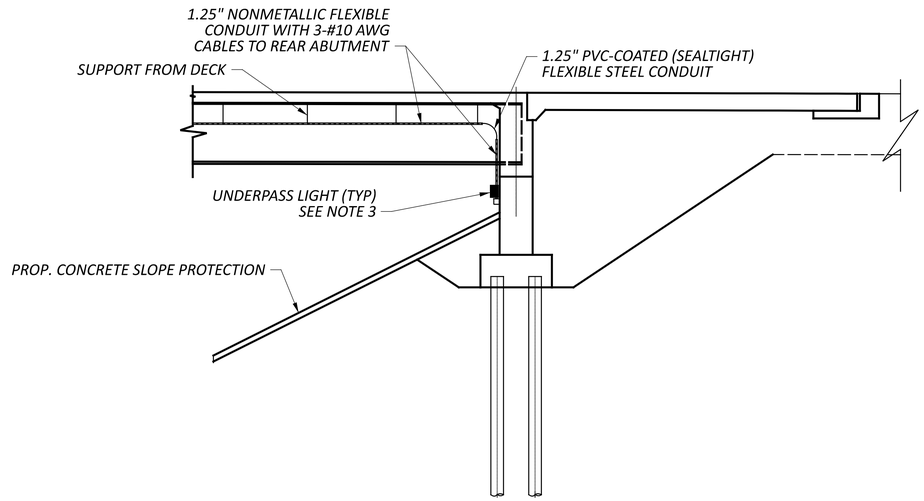
1) SEE SHEET P.376 FOR UNDERPASS LIGHTING PLAN VIEW.

2) PROVIDE 0.75 PVC-COATED (SEALTIGHT) FLEXIBLE STEEL CONDUIT FROM SPLICE BOX TO UNDERPASS LIGHTING FIXTURE.

3) FOR THE REAR ABUTMENT, MOUNT UNDERPASS LIGHT IN CENTER OF WALL COPING. FOR THE FORWARD ABUTMENT, MOUNT UNDERPASS LIGHT 12" BELOW THE PROPOSED BEAM SEAT.



RISER DETAIL



FORWARD ABUTMENT DETAIL

FOR LEGEND SEE SHEET P.368.

UNDERPASS LIGHTING ABUTMENT ELEVATIONS
FRA-071-24.46 L&R: I-71 OVER MORSE ROAD

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.377 TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:20:40 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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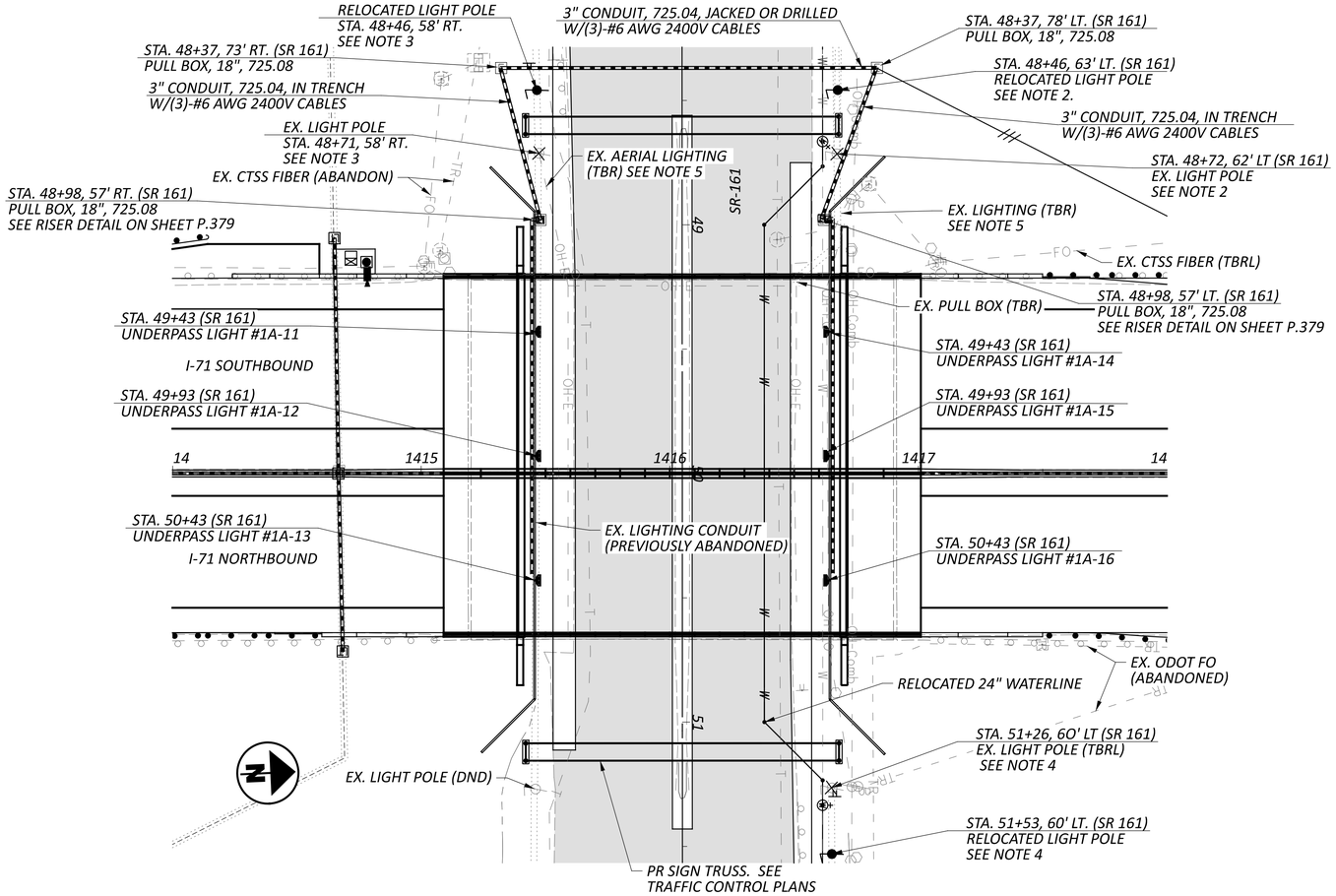
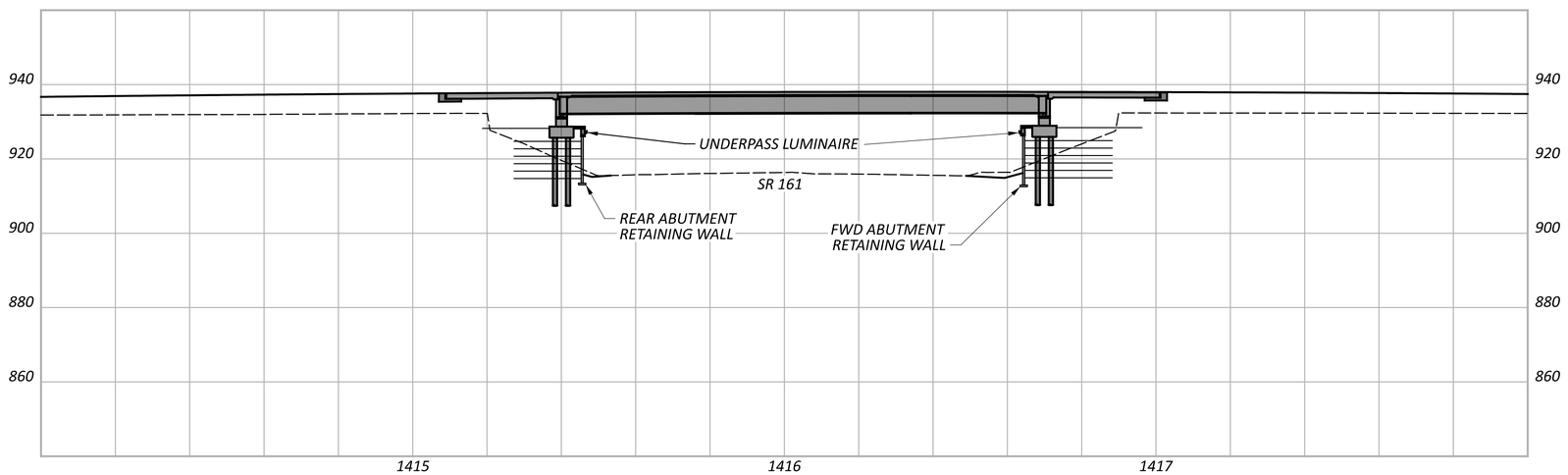


PLAN



PROFILE ALONG I-71 PROFILE GRADE LINE

NOTES:

1) SEE SHEET P.379 FOR ELEVATION VIEWS.

2) INSTALL NEW LIGHT POLE FOUNDATION ON EXISTING CONDUIT AT STA. 48+46, 63' LT. DISCONNECT POLE AND BRACKET CABLES IN EX. LIGHT POLE AT STA. 48+72, 62' LT. AND PULL CONDUCTORS BACK TO PROPOSED FOUNDATION. RELOCATE EX. LIGHT POLE TO NEW FOUNDATION.

3) INSTALL NEW LIGHT POLE FOUNDATION ON EXISTING CONDUIT AT STA. 48+46, 58' RT. DISCONNECT POLE AND BRACKET CABLES IN EX. LIGHT POLE AT STA. 48+71, 58' RT. AND PULL CONDUCTORS BACK TO PROPOSED FOUNDATION. RELOCATE EX. LIGHT POLE TO NEW FOUNDATION.

4) INSTALL NEW LIGHT POLE FOUNDATION ON EXISTING CONDUIT AT STA. 51+53, 60' LT. DISCONNECT POLE AND BRACKET CABLES IN EX. LIGHT POLE AT STA. 51+26, 60' LT. AND PULL CONDUCTORS BACK TO PROPOSED FOUNDATION. RELOCATE EX. LIGHT POLE TO NEW FOUNDATION.

5) REMOVE EXISTING UNDERPASS LIGHTING.

FOR LEGEND SEE SHEET P.369

UNDERPASS LIGHTING PLAN
FRA-071-26.46 L&R: I-71 OVER SR-161

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.378 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:21:03 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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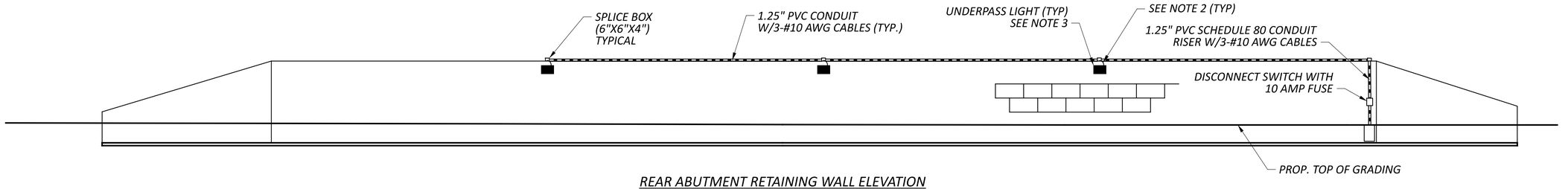
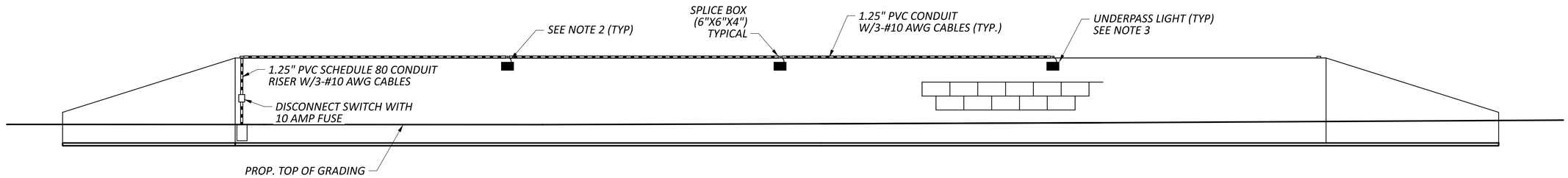
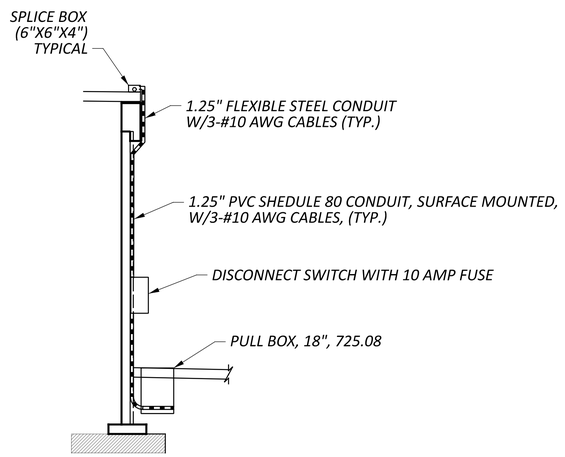


REAR ABUTMENT RETAINING WALL ELEVATION



FORWARD ABUTMENT RETAINING WALL ELEVATION



RISER DETAIL

NOTES:

1) SEE SHEET P.378 FOR UNDERPASS LIGHTING PLAN VIEW.

2) PROVIDE 0.75 PVC-COATED (SEALTIGHT) FLEXIBLE STEEL CONDUIT FROM SPLICE BOX TO UNDERPASS LIGHTING FIXTURE.

3) MOUNT UNDERPASS LIGHT IN CENTER OF WALL COPING.

FOR LEGEND SEE SHEET P.368.

UNDERPASS LIGHTING ABUTMENT ELEVATIONS
FRA-071-26.46 L&R: I-71 OVER SR-161

DESIGN AGENCY
Jacobs

DESIGNER

REVIEWER

PROJECT ID
109164

SHEET P.379 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:21:23 AM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Chris.Lawrence1@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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C/C CURVE										
CURVE #	STATION	OFFSET	SIDE	REFERENCE	RADIUS	ANGLE	LENGTH	CHORD	BEGIN STATION/OFFSET	END STATION/OFFSET
C-1	1311+67.86	93.5'	LT.	CL CONST. I-71	15.0'	90°	23.6'	21.2'	1311+68, 109' LT.	1311+82, 87' LT.
C-2	1313+97.66	85.0'	LT.	CL CONST. I-71	15.0'	88.6°	23.2'	21.0'	1313+83, 85' LT.	1313+98, 100' LT.
C-3	1314+49.47	175.0'	LT.	CL CONST. I-71	75.0'	33.7°	44.1'	43.5'	1314+50, 100' LT.	1314+90, 100' LT.
C-4	1314+25.60	69.1'	RT.	CL CONST. I-71	15.0'	87.1°	22.8'	20.7'	1314+10, 70' RT.	1314+26, 84' RT.
C-5	1315+52.39	182.6'	RT.	CL CONST. I-71	100.0'	15.6°	52.4	52.3'	1315+50, 83' RT.	1315+82, 87' RT.
C-6	1311+28.87	148.5'	RT.	CL CONST. I-71	65.0'	69.3°	78.6'	73.9'	1310+66, 124' RT.	1311+30, 84' RT.
C-7	1311+93.80	68.9'	RT.	CL CONST. I-71	16.3'	90.9°	23.8'	21.4'	1311+94, 84' RT.	1312+09, 69' RT.
C-8	48+52.68	106.71'	RT.	MORSE RD	50.0'	29.5°	25.7'	25.4'	48+20, 69' RT.	48+43, 48' RT.
C-9	48+79.68	137.53'	LT.	MORSE RD	65.0'	19.4°	22.0'	21.9'	48+53, 61' LT.	48+86, 58' LT.
C-10	51+23.43	121.75'	RT.	MORSE RD	65.0'	32.9°	37.4'	36.8'	51+06, 62' RT.	51+59, 67' RT.
C-11	51+36.15	122.50'	LT.	MORSE RD	65.0'	29.7°	33.7'	33.3'	51+15, 58' LT.	51+68, 66' LT.
C-12	1308+99.63	146.74'	LT.	CL CONST. I-71	45.0'	60.4°	47.4'	45.3'	1308+68, 116' LT.	1309+10, 103' LT.

NOTES:
1. THE INTENT OF THIS PROJECT IS TO CAREFULLY REMOVE AND RE-INSTALL THE EXISTING RETAINING WALL. CAREFULLY REMOVE EXISTING VERSA-LOK LANDSCAPING RETAINING WALL BLOCKS WITHIN THE FOLLOWING LIMITS AND STORE IN A MANNER TO PREVENT DAMAGE TO THE SATISFACTION OF THE ENGINEER:
   A. STA. 48+20, 69' RT. (MORSE RD) TO STA. 49+14, 57' RT. (MORSE RD)
   B. STA. 50+64, 56' RT. (MORSE RD) TO STA. 51+59, 67' RT. (MORSE RD)
   C. STA. 48+53, 62' LT. (MORSE RD) TO STA. 49+29, 60' LT. (MORSE RD)
   D. STA. 50+81, 58' LT. (MORSE RD) TO STA. 51+68, 66' LT. (MORSE RD)
2. SORT EXISTING REMOVED RETAINING BLOCKS AND UTILIZE UNDAMAGED BLOCKS TO RE-ERECT LANDSCAPING RETAINING WALL. SEE DETAIL ON SHEET XXX.
3. PROVIDE 12" (MINIMUM) TOPSOIL DEPTH BETWEEN THE PROPOSED CONCRETE EDGING AND THE PROPOSED CONSTRUCTION LIMITS.
4. DO NOT DISTURB EXISTING PLANT MATERIAL LOCATED OUTSIDE OF THE CONSTRUCTION LIMITS.
5. SEE SHEET XXX FOR PLANTING AND CONCRETE EDGING DETAILS.

STA. 1319+23, 106' LT. (I-71) CUT EXISTING CONCRETE EDGING MATCH PROPOSED CONCRETE EDGING TO EXISTING. CONNECT PROPOSED 2.5" IRRIGATION PIPE TO EXISTING

STA. 1308+67, 85' LT. (I-71) BEGIN PROPOSED EDGING. CAP PROPOSED 2.5" IRRIGATION PIPE

℄ CONST. RAMP D

STA. 48+20, 69' RT. (MORSE RD) BEGIN RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

STA. 48+53, 61' LT. (MORSE RD) BEGIN RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

STA. 48+43, 58' RT. (MORSE RD) END RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

RE-ERECTED RETAINING WALL SEE NOTE 2

AUSTRIAN PINE TREES (18)

GREEN VASE ZELKOVA (4)

EX. CONCRETE EDGING (TO REMAIN)

C-8

STA. 48+43, 58' RT

C-9

STA. 48+86, 58' LT. (MORSE RD) END RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

REMOVE EX. RETAINING WALL. SEE NOTE 1

SHRUBS TBD (45)

TREES TBD (7)

AUSTRIAN PINE TREES (14)

WINTER RED WINTERBERRY HOLLY (7)

EX. CONCRETE EDGING (TO REMAIN)

C-12

C-1

C-2

C-3

PROPOSED CONCRETE EDGING SEE NOTE 5

STA. 1310+34, 114' LT. (I-71) CUT EXISTING CONCRETE EDGING MATCH PROPOSED CONCRETE EDGING TO EXISTING. CONNECT PROPOSED 2.5" IRRIGATION PIPE TO EXISTING

WINTER RED WINTERBERRY HOLLY (9)

EX. CONCRETE EDGING (TBR)

REMOVE EX. RETAINING WALL. SEE NOTE 1

SHRUBS TBD (47)

TREES TBD (12)

STA. 1311+82, 87' LT. (I-71) END PROPOSED EDGING. CAP PROPOSED 2.5" IRRIGATION PIPE

PROPOSED RETAINING WALL SEE BRIDGE PLANS

STA. 1313+83, 85' LT. (I-71) BEGIN PROPOSED EDGING. CAP PROPOSED 2.5" IRRIGATION PIPE

EX. CONCRETE EDGING (TBR)

STA. 1314+90, 113' LT. (I-71) CUT EXISTING CONCRETE EDGING MATCH PROPOSED CONCRETE EDGING TO EXISTING. CONNECT PROPOSED 2.5" IRRIGATION PIPE TO EXISTING

PROPOSED CONCRETE EDGING SEE NOTE 5

℄ CONST. RAMP E

STA. 1312+09, 69' RT. (I-71) END PROPOSED EDGING. CAP PROPOSED 2.5" IRRIGATION PIPE

STA. 1314+10, 68' RT. (I-71) BEGIN PROPOSED EDGING. CAP PROPOSED 2.5" IRRIGATION PIPE

PROPOSED CONCRETE EDGING SEE NOTE 5

STA. 1316+00, 92' RT. (I-71) CUT EXISTING CONCRETE EDGING MATCH PROPOSED CONCRETE EDGING TO EXISTING. CONNECT PROPOSED 2.5" IRRIGATION PIPE TO EXISTING

REMOVE EX. RETAINING WALL. SEE NOTE 1

EX. CONCRETE EDGING (TBR)

C-7

C-4

C-5

C-6

REMOVE EX. RETAINING WALL. SEE NOTE 1

STA. 1310+60, 140' RT. (I-71) CUT EXISTING CONCRETE EDGING MATCH PROPOSED CONCRETE EDGING TO EXISTING. CONNECT PROPOSED 2.5" IRRIGATION PIPE TO EXISTING

EX. CONCRETE EDGING (TBR)

EX. CONCRETE EDGING (TO REMAIN)

AUSTRIAN PINE TREES (16)

WINTER RED WINTERBERRY HOLLY (38)

STA. 51+14, 58' LT. (MORSE RD) BEGIN RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

RE-ERECTED RETAINING WALL SEE NOTE 2

AUSTRIAN PINE TREES (13)

TREES TBD (9)

SHRUBS TBD (59)

WINTER RED WINTERBERRY HOLLY (15)

EX. CONCRETE EDGING (TO REMAIN)

C-11

C-10

STA. 51+06, 62' RT. (MORSE RD) BEGIN RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

TREES TBD (20)

RE-ERECTED RETAINING WALL SEE NOTE 2

SHRUBS TBD (59)

℄ CONST. RAMP B

STA. 51+68, 66' LT. (MORSE RD) END RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

℄ CONST. RAMP C

STA. 51+59, 67' RT. (MORSE RD) END RE-ERECTED RETAINING WALL TOP OF WALL EL. XXX.XX

HORIZONTAL SCALE IN FEET
0 15 30 60

LANDSCAPING PLAN - MORSE ROAD

DESIGN AGENCY
Jacobs

DESIGNER
BAP

REVISION
XXX 03/20/26

PROJECT ID
109164

SHEET P.380 TOTAL 618

FRA-71-19.10

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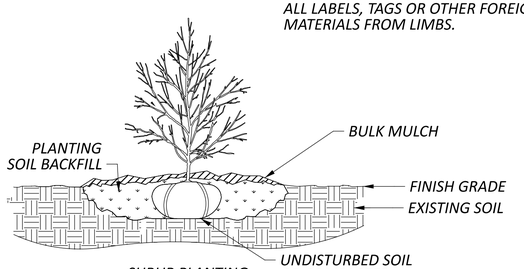
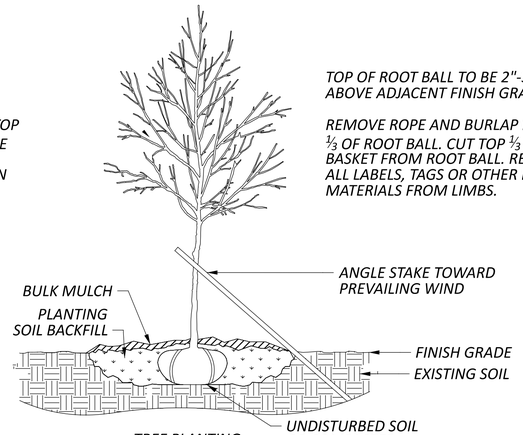


TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISH GRADE

REMOVE ROPE AND BURLAP FROM TOP ⅓ OF ROOT BALL. CUT TOP ⅓ OF WIRE BASKET FROM ROOT BALL. REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIALS FROM LIMBS.

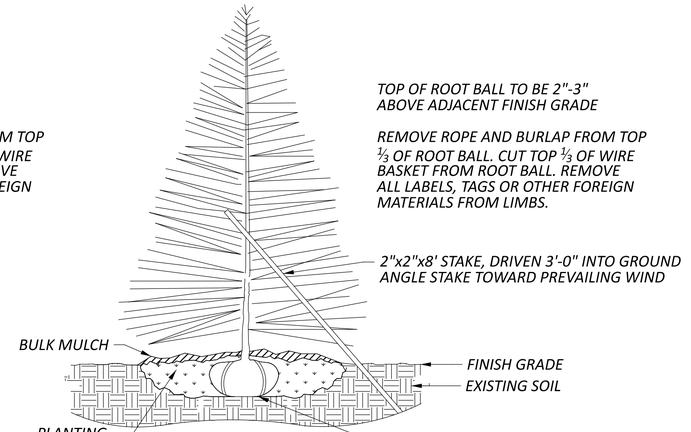
SHRUB PLANTING
NOT TO SCALE



TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISH GRADE

REMOVE ROPE AND BURLAP FROM TOP ⅓ OF ROOT BALL. CUT TOP ⅓ OF WIRE BASKET FROM ROOT BALL. REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIALS FROM LIMBS.

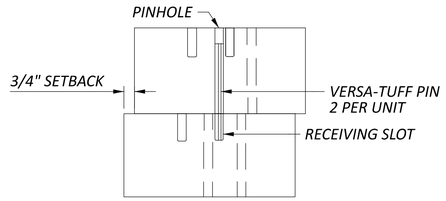
TREE PLANTING
NOT TO SCALE



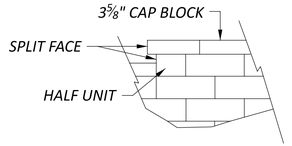
TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISH GRADE

REMOVE ROPE AND BURLAP FROM TOP ⅓ OF ROOT BALL. CUT TOP ⅓ OF WIRE BASKET FROM ROOT BALL. REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIALS FROM LIMBS.

EVERGREEN TREE PLANTING
NOT TO SCALE



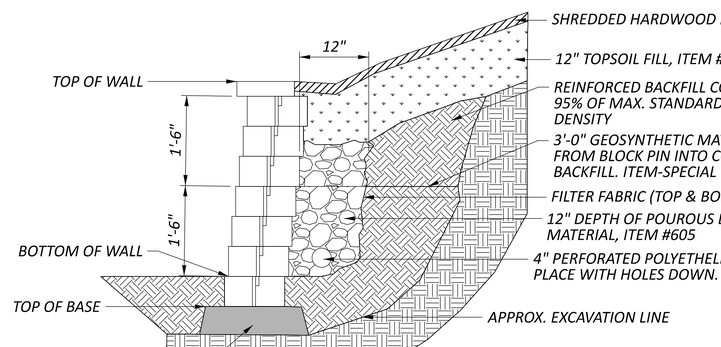
PINNING DETAIL FOR BATTERED WALL
NOT TO SCALE



GENERAL NOTES FOR CAPPING:

1. CAPS SHALL BE ADHERED TO WALL USING VERSA-LOK CONCRETE ADHESIVE.
2. CAPS MAY BE PLACED WITH A ½" TO ¾" OVERHANG ON TOP OF WALL.
3. WHEN CUTTING CAP UNIT FOR WALL END DO NOT USE A CAP SECTION LESS THAN 6" WIDE.
4. DO NOT OVERHANG CAP AT END OF COURSE MORE THAN 1".
5. INSTALL CAPS WITH TOP OF MOLD FACING UP.

CAPPING DETAIL - PROFILE
NOT TO SCALE

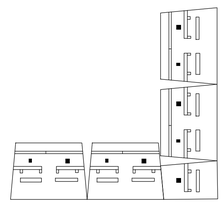


CONCRETE EDGING
NOT TO SCALE

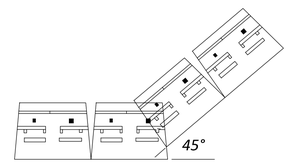
RE-ERECTED LANDSCAPING BLOCK RETAINING WALL
NOT TO SCALE

THE DETAILS AND INSTALLATION SPECIFICATION FOUND ON THIS SHEET WERE PROVIDED BY THE MANUFACTURER OF VERSA-LOK

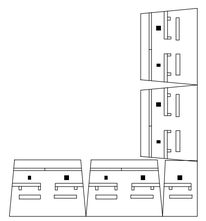
WALL MANUFACTURER: OBERFIELD'S INC. (614) 252-0955
4033 ALUM CREEK DR., OBETZ, OH. 43207
PRODUCT: VERSA-LOK WEATHERED MOSAIC RETAINING WALL SYSTEM
SIZE: 6"X12"X16"
COLOR: FLAGSTONE BLEND



SECOND COURSE

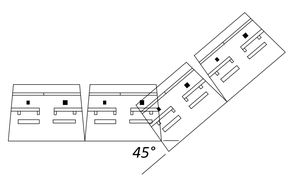


SECOND COURSE



FIRST COURSE

90 DEGREE-OUTSIDE



FIRST COURSE

OBLIQUE ANGLE-OUTSIDE

CAPPING DETAIL - PROFILE
NOT TO SCALE

LANDSCAPING NOTES

DESIGN AGENCY
Jacobs

DESIGNER CGL
REVIEWER BRP 03/25/26
PROJECT ID 109164
SHEET P.381 TOTAL 618

FRA-71-19.10

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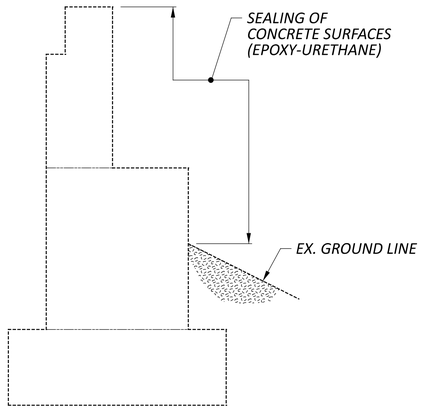
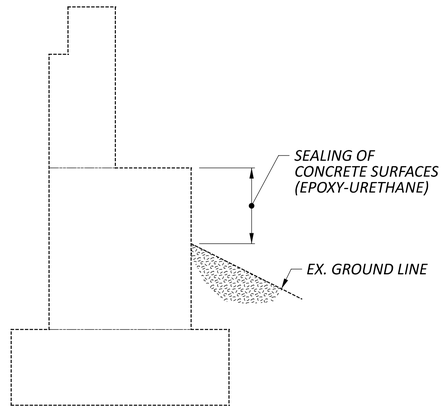
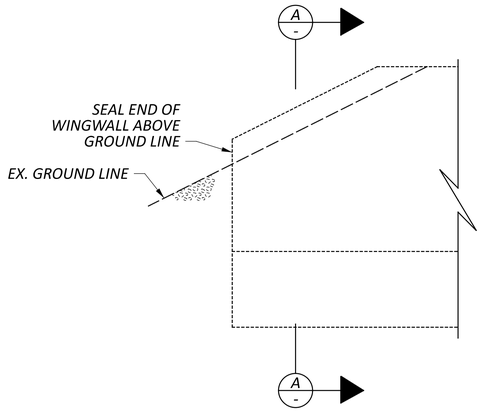


ABUTMENT SEALING LIMITS
I-71 OVER 17TH AVE.

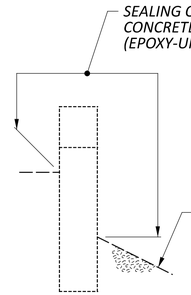


ABUTMENT SEALING LIMITS
I-71 RAMP OVER 2ND AVE.
I-71 MAINLINE OVER 2ND AVE.
I-71 OVER HIAWATHA PARK DR.
I-71 OVER COOKE RD.

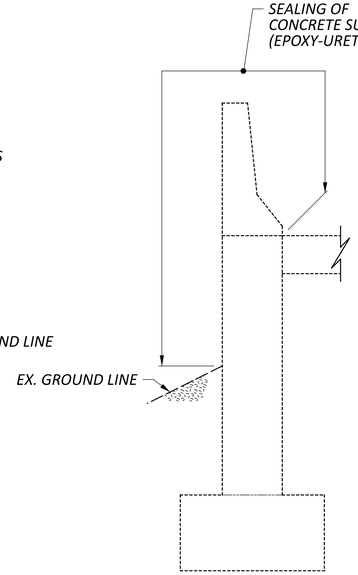


ELEVATION

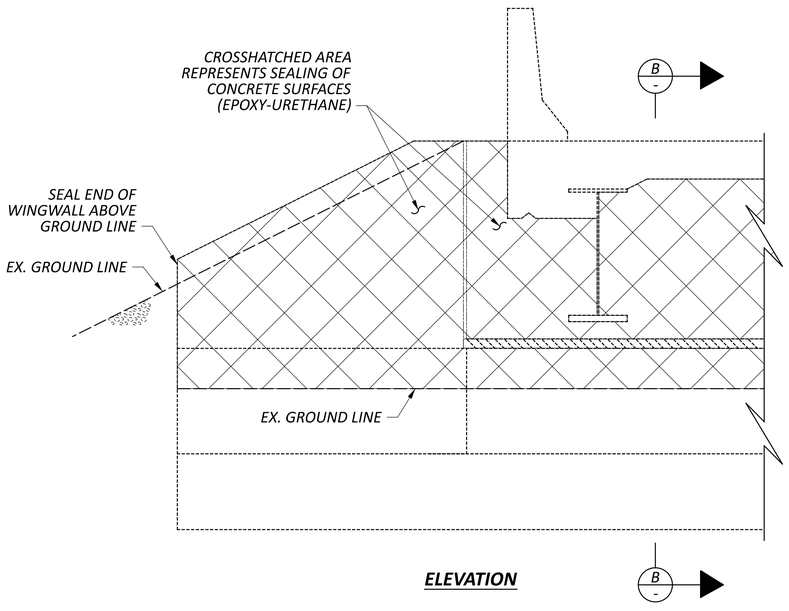
TYPICAL WINGWALL SEALING LIMITS
(STRAIGHT WING ABUTMENT)



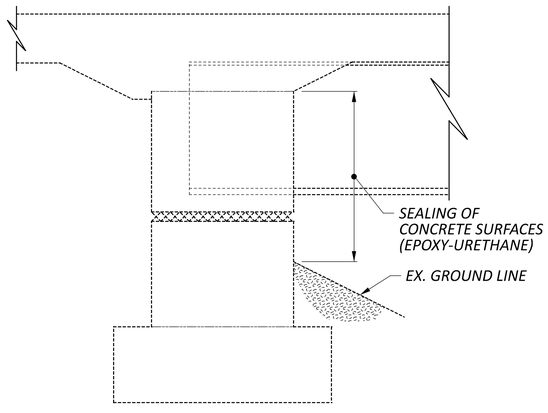
SECTION A-A



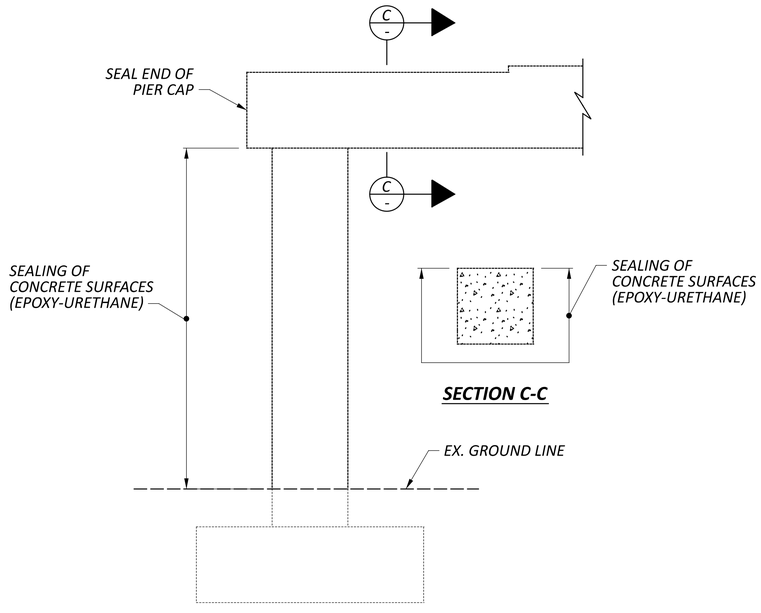
TYPICAL WINGWALL SEALING LIMITS
(TURNBACK WALL ON U-TYPE ABUTMENT)



ELEVATION



SECTION B-B



SECTION C-C

TYPICAL PIER SEALING LIMITS

WINGWALL AND ABUTMENT SEALING LIMITS
I-71 OVER MORSE RD.
I-71 OVER SR 161

COMMON SUBSTRUCTURE SEALING LIMITS

FRA-71-19.10

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SFN
-

DESIGN AGENCY
Jacobs

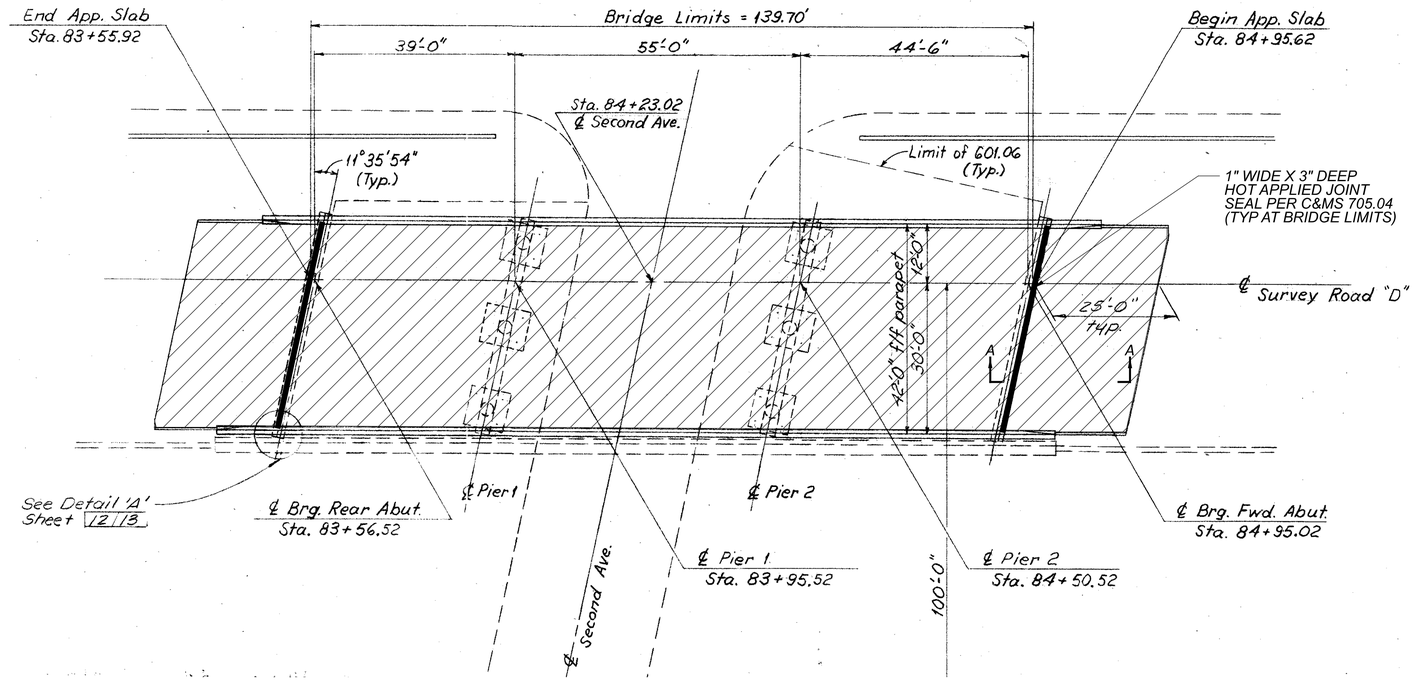
DESIGNER	CHECKER
KPL	ADS

REVIEWER
MJR 01/25/25

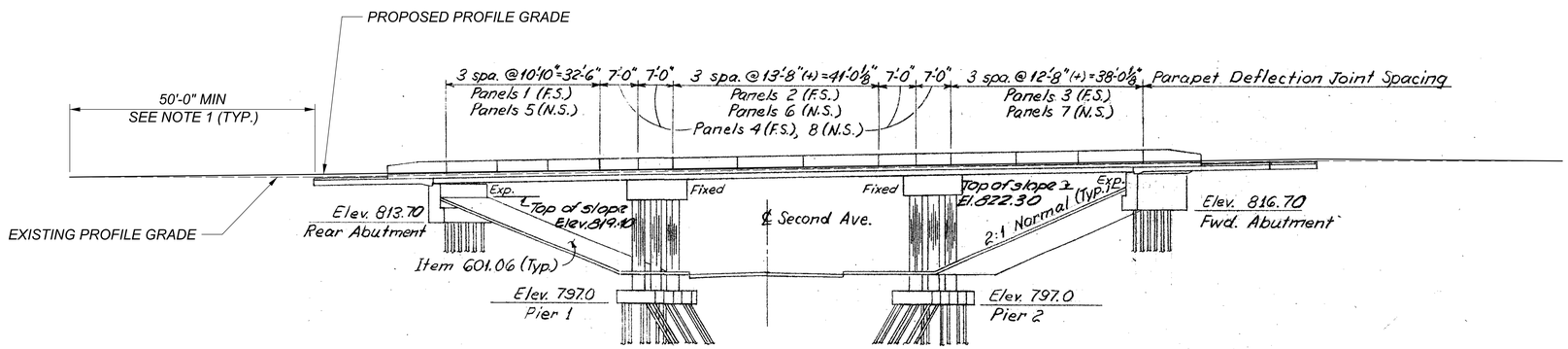
PROJECT ID
109164

SUBSET	TOTAL
-	-

SHEET	TOTAL
P. 382	618



PLAN



PROFILE

LEGEND:

▨ - LIMITS OF ITEM 202 - WEARING COURSE REMOVED & ASPHALT CONCRETE OVERLAY

NOTES:

1. THE CONTRACTOR SHALL USE A MINIMUM 50'-0" LONG TAPER TO ACCOUNT FOR THE RAISED PROFILE ATOP THE BRIDGE DECK AND APPROACH SLABS.

EXISTING STRUCTURE

TYPE: 3 SPAN PRESTRESSED CONCRETE, NON-COMPOSITE BOX BEAMS SUPPORTED ON REINFORCED CONCRETE SUBSTRUCTURE UNITS

SPANS: 39'-0"± -55'-0"± -44'-6"± ALONG ℄ SUBSTRUCTURE BRGS.

ROADWAY: 42'-0"± F/F CONCRETE BARRIER

LOADING: HS 20-44 AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 2½"± ASPHALT CONCRETE

SKEW: 11°35'54" ± L.F.

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNEMNT: TANGENT

CROWN: 0.0156± FT/FT

STRUCTURE FILE NUMBER: 2506467

DATE BUILT: 1995

PROPOSED WORK

1. REMOVE AND REPLACE ASPHALT CONCRETE WEARING SURFACE AND WATERROOFING ON BRIDGE DECK AND APPROACH SLABS.
2. REPAIR CORNER OF EAST EXTERIOR PRESTRESSED CONCRETE BOX BEAM (B21-48) AT FORWARD (NORTH) ABUTMENT.
3. C&MS 519 PATCHING AND SEALING EXPOSED CONCRETE SURFACES WITH EPOXY-URETHANE.

SITE PLAN
BRIDGE NO. FRA-00071-18.750 B
I-71 RAMP OVER 2ND AVE.

SFN 2506467

DESIGN AGENCY

Jacobs

DESIGNER	CHECKER
KPL	ADS

REVIEWER MJR 01/25/25

PROJECT ID 109164

SUBSET	TOTAL
1	3

SHEET	TOTAL
P. 383	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

N/A

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

N/A

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL (BDM), 2020, DATED JULY, 2025.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS

CONSTRUCTION PLANS FOR THE EXISTING BRIDE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION (ODOT), DISTRICT 6 OFFICE, 400 E. WILLIAM STREET, DELAWARE, OHIO AND ARE AVAILABLE FOR REFERENCE.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

UPON COMPLETION OF THE PROPOSED ASPHALT OVERLAY, THE CONTRACTOR SHALL SAW CUT ALONG THE APPROACH SLAB AND BRIDGE LIMIT AS DETAILED IN THE PLANS, AN AREA 1" WIDE BY 3" DEEP AND FILL THIS AREA WITH HOT APPLIED JOINT SEALER PER C&MS 705.04.

ITEM 530 - SPECIAL - STRUCTURES MISC.: PATCHING CONCRETE STRUCTURE: PRESTRESSED CONCRETE BOX BEAM REPAIR

REPAIRS SPALLS IN PRESTRESSED CONCRETE BOX BEAMS WITH CONCRETE PATCHING PER C&MS 519 WHEN THE BEAM REINFORCING AND/OR STRANDS ARE EXPOSED.

FOLLOWING REMOVAL OF DETERIORATED CONCRETE PER C&MS 519, BUT PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

CONFINE THE CONCRETE PATCH WITH A FIBER REINFORCED POLYMER (FRP) WRAP. SEAL ALL REPAIRS AREAS WITH AN EPOXY-URETHANE SEALER PER C&MS 512.03. THE COLOR OF THE SEALER SHALL CLOSELY MATCH THE COLOR OF THE EXISTING BEAMS. THE MATERIAL SUPPLIER SHALL VERIFY THAT THE COATING IS COMPATIBLE WITH THE INSTALLED FIBER WRAP SYSTEM.

THE FOLLOWING AREA HAS BEEN OBSERVED TO REQUIRE PATCHING:

EAST FASCIA BEAM: END OF BEAM AT FORWARD (NORTH) ABUTMENT - 4 S.F.

MEASUREMENT & PAYMENT: ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE BID FOR ITEM 530 - SPECIAL MISC.: PATCHING CONCRETE STRUCTURE: PRESTRESSED CONCRETE BOX BEAM REPAIR.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

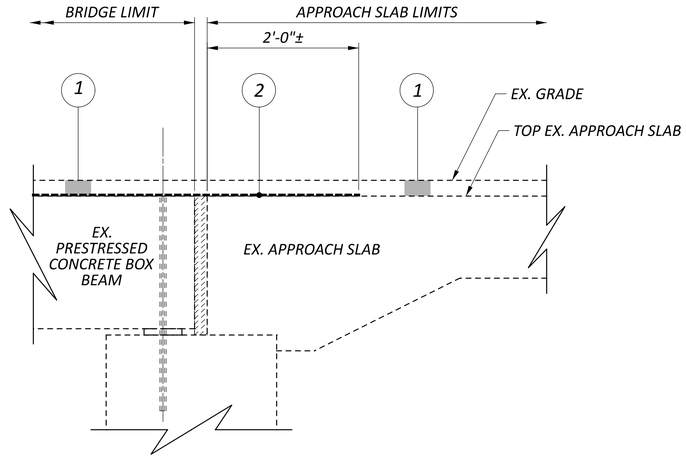
ALL PROVISIONS OF C&MS 519 APPLY IN ADDITION TO THOSE LISTED HEREIN. THE CONTRACTOR SHALL PATCH EXPOSED CONCRETE SURFACES BASED ON VISUAL DETERIORATION ONLY. THE CONTRACTOR IS NOT REQUIRED TO SOUND THE ENTIRE EXPOSED CONCRETE SURFACE(S) TO DETERMINE WHICH AREAS REQUIRE PATCHING.

THE ENGINEER SHALL PERFORM A VISUAL INSPECTION OF THE EXPOSED CONCRETE SURFACE. AREAS OBSERVED TO BE DETERIORATED WILL BE DELINEATED BY THE ENGINEER BY SOUNDING THE CONCRETE. THE ENGINEER WILL SOUND AND MARK THE PATCHING LIMITS USING ORANGE SPRAY PAINT AND NOTIFY THE CONTRACTOR WHEN THIS ACTIVITY IS COMPLETE.

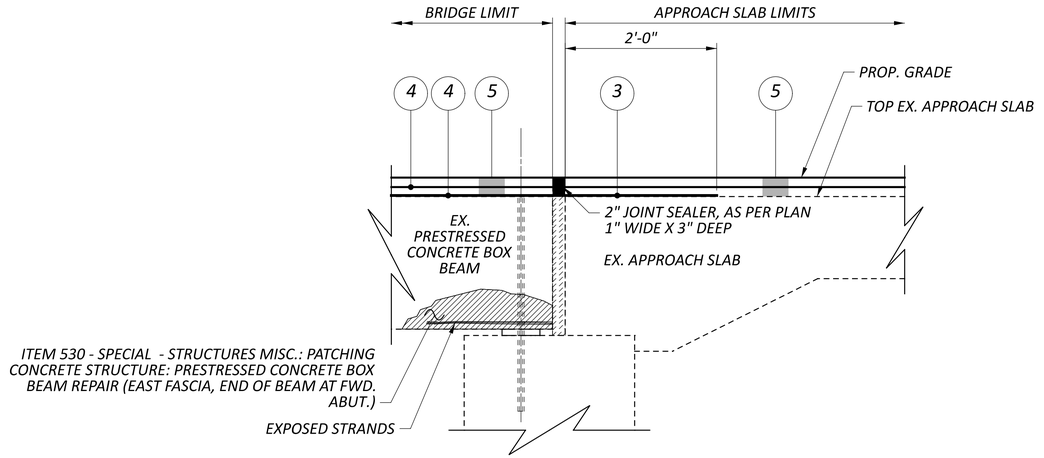
THE FOLLOWING QUANTITY HAS BEEN ESTIMATED BASED UPON THE OBSERVED CONDITION USING AVAILABLE IMAGERY, A 2023 INSPECTION BY THE ENGINEER AND AVAILABLE INSPECTION RECORDS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: 10 SF

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REPAIRS ON A SQUARE-FOOT BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.



TYPICAL SECTION
(WEARING COURSE REMOVAL)



TYPICAL SECTION
(PROP. WEARING COURSE)

LEGEND:

1. ITEM 202 - WEARING COURSE REMOVED (ASPHALT CONCRETE, AVG. THICKNESS = 2½"±)
2. EX. WATERPROOFING (TO BE REMOVED) (INCLUDE W/ ITEM 202 - WEARING COURSE REMOVED FOR PAYMENT)
3. ITEM 512 - TYPE 3 WATERPROOFING
4. ITEM 407 - NON-TRACKING TACK COAT
5. ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M (TWO EQUAL 1½" LIFTS)

ABBREVIATION LEGEND

APPR. (APP.) - APPROACH
℄ - CENTERLINE
C.J. - CONSTRUCTION JOINT
CLR. - CLEARANCE
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
CY - CUBIC YARD
EA - EACH
EX. - EXISTING
FT - FEET
LS - LUMP SUM
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
NB - NORTHBOUND
PROP. - PROPOSED
RT. - RIGHT
SB - SOUTHBOUND
STA. - STATION
SY - SQUARE YARD
SHDR. (SHD.) - SHOULDER
T/T - TOE-TO-TOE
TYP. - TYPICAL
W/ - WITH

ITEM	EXTENSION	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
202	23500	861	SY	WEARING COURSE REMOVED			634	227	
407	20000	104	GAL	NON-TRACKING TACK COAT			77	27	
441	50100	72	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG70-22M			53	19	
512	10100	357	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	18	149	190		
512	33010	652	SY	TYPE 3 WATERPROOFING			652		2/3
516	31011	82	FT	2" DEEP JOINT SEALER, AS PER PLAN			82		2/3
519	11101	10	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	5	5			2/3
530	00600	4	SF	SPECIAL - STRUCTURE MISC.: PATCHING CONCRETE STRUCTURE: PRESTRESSED CONCRETE BOX BEAM REPAIR			2		2/3

STRUCTURE GENERAL NOTES
BRIDGE NO. FRA-00071-18.750 B
I-71 RAMP OVER 2ND AVE.

SFN 2506467
DESIGN AGENCY Jacobs
DESIGNER KPL | CHECKER ADS
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 2 | TOTAL 3
SHEET P. 384 | TOTAL 618

FRA-71-19.10

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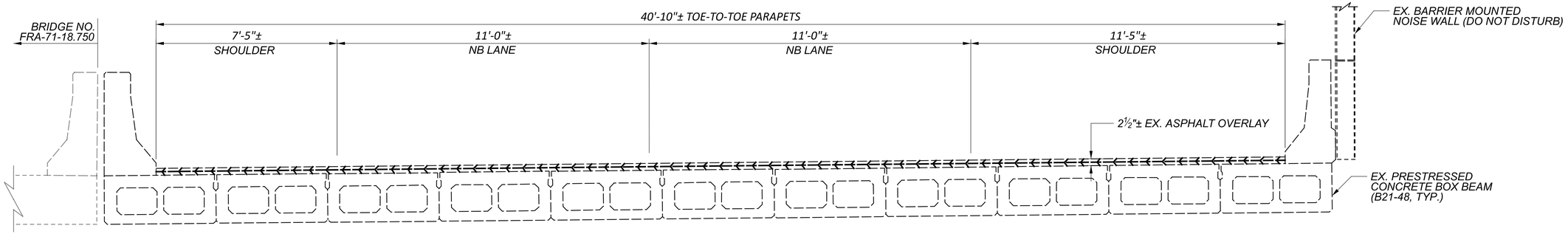
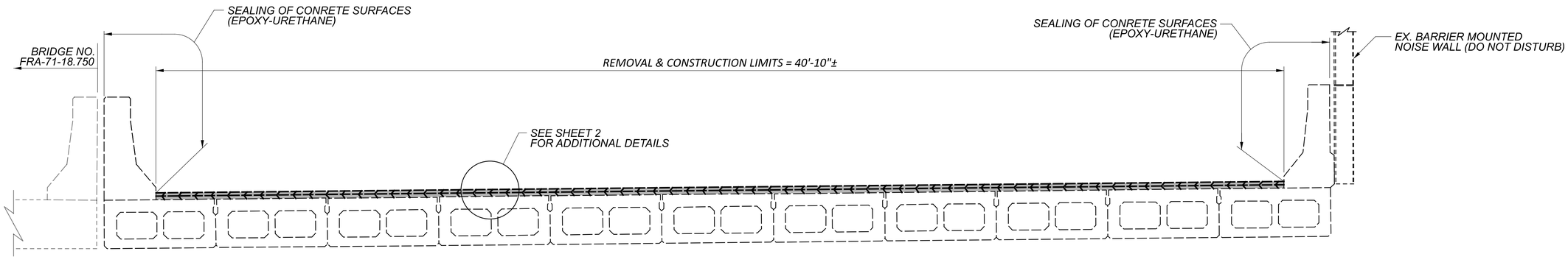
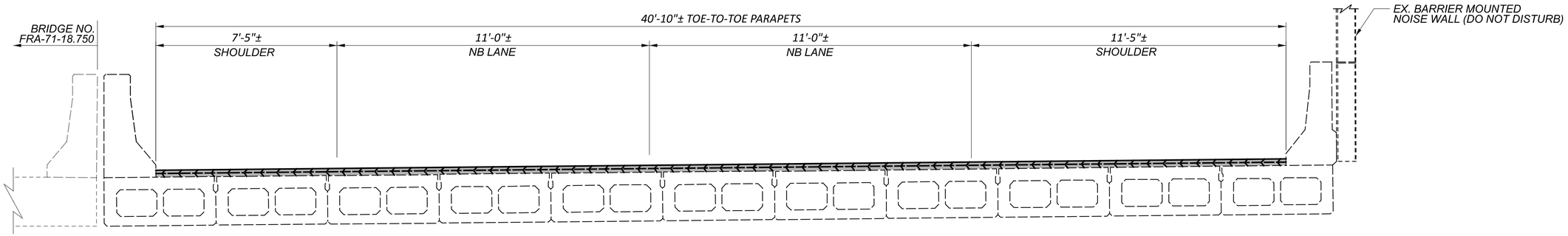


EXISTING TRANSVERSE SECTION



CONSTRUCTION

(REFER TO MOT PLANS FOR WEEKEND CLOSURE AND DETOUR)



FINAL CONDITION

LEGEND:

- *LIMITS OF ITEM 202 - WEARING COURSE REMOVED & ASPHALT CONCRETE OVERLAY.*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 2/3.*
2. *FOR NOTES AND TYPICAL WEARING COURSE SECTIONS, SEE SHEET 2/3.*
3. *PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES AND CARRIED TO THE GENERAL SUMMARY FOR PAYMENT.*

STAGE CONSTRUCTION DETAILS
BRIDGE NO. FRA-00071-18.750 B
I-71 RAMP OVER 2ND AVE.

SFN	2506467
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	3
TOTAL	3
SHEET	P. 385
TOTAL	618

FRA-71-19.10

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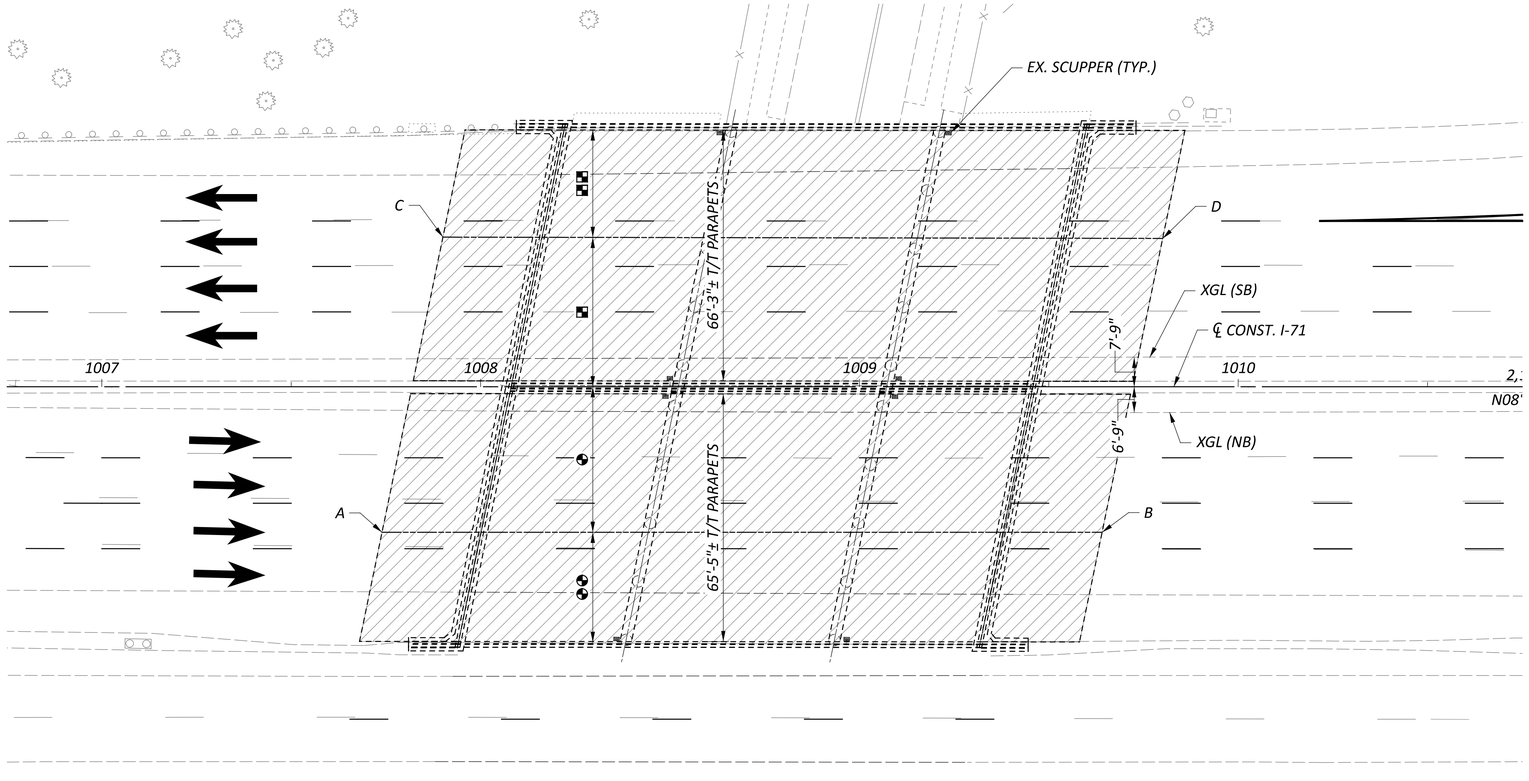
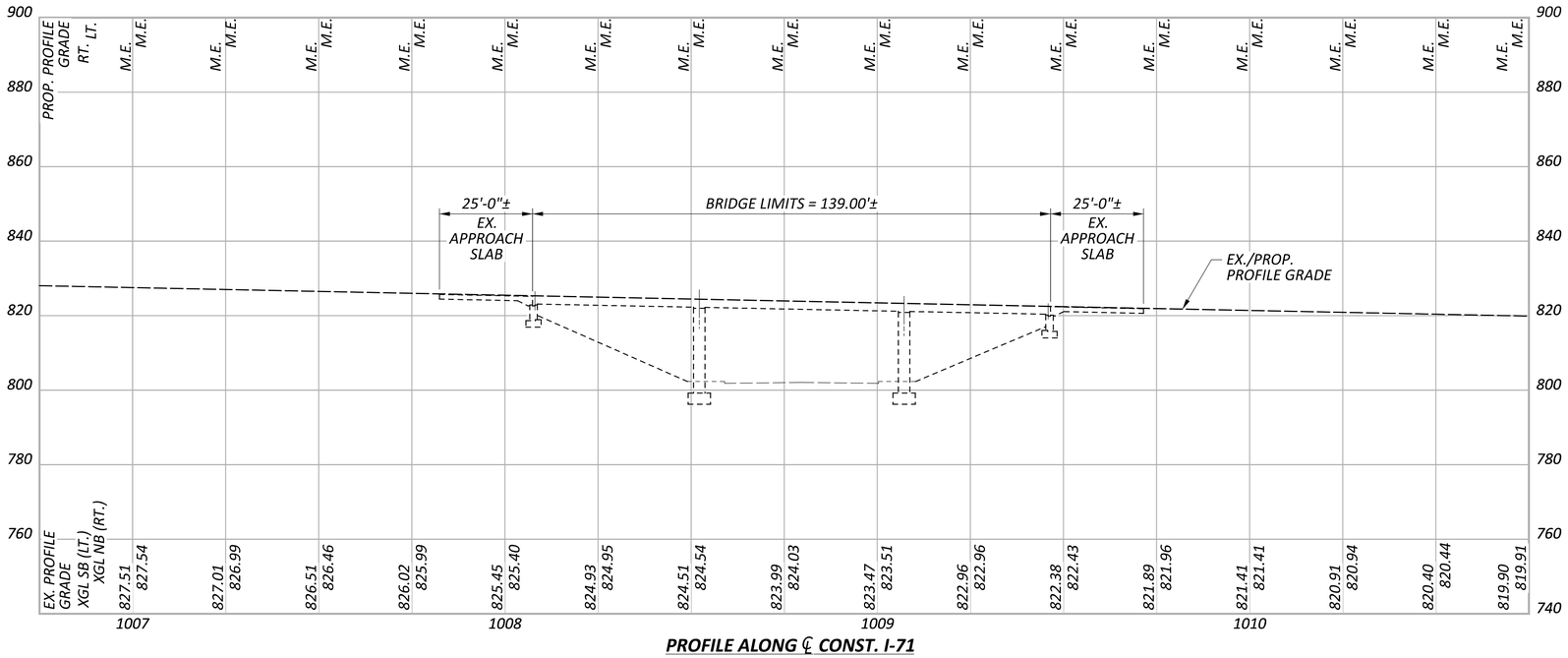


PLAN



PROFILE ALONG ℄ CONST. I-71

LEGEND:

- *LIMITS OF ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE (SDC) OVERLAY USING HYDRODEMOLITION, AS PER PLAN (1¾" THICK)*
- *PHASE 5A (STEP 1) 38'-5" FROM ℄ CONST. I-71 TO PHASE C.J.*
- *PHASE 5A (STEP 2) 28'-10½"± FROM PHASE C.J. TO TOE OF PARAPET*
- *PHASE 5B (STEP 1) 39'-6" FROM ℄ CONST. I-71 PHASE C.J.*
- *PHASE 5B (STEP 2) 28'-6"± FROM PHASE C.J. TO TOE OF PARAPET*

M.E. - MATCH EXISTING (SHOWN IN ELEVATION)

A - PHASE C.J., I-71 NB @ BEGIN REAR APPROACH SLAB ℄ CONST. I-71 STA. 1007+73.97, 38.42'' RT.
B - PHASE C.J., I-71 NB @ END FWD. APPROACH SLAB ℄ CONST. I-71 STA. 1009+64.07, 38.42'' RT.
C - PHASE C.J., I-71 SB @ BEGIN REAR APPROACH SLAB ℄ CONST. I-71 STA. 1007+90.04, 39.50' LT.
D - PHASE C.J., I-71 SB @ END FWD. APPROACH SLAB ℄ CONST. I-71 STA. 1009+80.07, 39.50' LT.

NOTES:

1. *FOR DESIGN TRAFFIC, SEE ROADWAY SHEETS.*

EXISTING STRUCTURE

TYPE: THREE SPAN CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE SUPPORTED ON REINFORCED CONCRETE SUBSTRUCTURE

SPANS: 44'-1½"± - 55'-0"± - 38'-7½"± C/C SPANS

ROADWAY: 66'-3"± T/T PARAPETS (SOUTHBOUND)
65'-5"± T/T PARAPETS (NORTHBOUND)

LOADING: CF 2000 (57)

SKEW: 11°36'38"± L.F.

WEARING SURFACE: 1¼"± LATEX MODIFIED CONCRETE OVERLAY

APPROACH SLABS: 25' LONG (AS-1-81)

ALIGNMENT: TANGENT

CROWN: 0.016± FT/FT

STRUCTURE FILE NUMBER: 2507838

DATE BUILT: 1961 (1990 1ST GEN OVERLAY, 2010 REHAB)

DISPOSITION: BRIDGE PRESERVATION (SEE PROPOSED WORK BELOW)

PROPOSED STRUCTURE

PROPOSED WORK: REMOVE EXISTING 1¼" LMC OVERLAY VIA HYDRODEMOLITION (SS 848). PLACE NEW 1¾" NOMINAL SDC OVERLAY ON BRIDGE DECKS AND APPROACH SLABS TO BOTH NORTHBOUND AND SOUTHBOUND I-71 MAINLINE STRUCTURES OVER 2ND AVE. 519 PATCHING AND SEALING OF EXPOSED CONCRETE SURFACES.

TYPE: NO CHANGE

SPANS: NO CHANGE

ROADWAY: NO CHANGE

LOADING: NO CHANGE

SKEW: NO CHANGE

WEARING SURFACE: 1¾" SDC OVERLAY (NORTHBOUND & SOUTHBOUND) BRIDGE DECK & APPROACH SLABS

APPROACH SLABS: NO CHANGE

ALIGNMENT: NO CHANGE

CROWN: NO CHANGE

DECK AREA: 9072 SF (NORTHBOUND)
9168 SF (SOUTHBOUND)

COORDINATES: LATITUDE N39°58'52.96"
LONGITUDE W82°59'3.80"

SITE PLAN
BRIDGE NO. FRA-00071-18.750
I-71 MAINLINE OVER 2ND AVE.

SFN 2507838

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
KPL	MAN

REVIEWER MJR 01/25/25

PROJECT ID 109164

SUBSET	TOTAL
1	4

SHEET	TOTAL
P. 386	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

N/A

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848 DATED 09/19/2024

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL (BDM), 2020, DATED JULY, 2025.

DESIGN DATA

N/A

DECK PROTECTION METHOD

NEW 1¾" THICK SDC OVERLAY - LEFT (SB) AND RIGHT (NB) BRIDGE INCLUDING DECK/SLAB AND APRPOACH SLABS

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS

CONSTRUCTION PLANS FOR THE EXISTING BRIDE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION (ODOT), DISTRICT 6 OFFICE, 400 E. WILLIAM STREET, DELAWARE, OHIO AND ARE AVAILABLE FOR REFERENCE.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

UPON COMPLETION OF THE PROPOSED OVERLAY, THE CONTRACTOR SHALL SAW CUT ALONG THE APPROACH SLAB AND BRIDGE LIMIT AS DETAILED IN THE PLANS (SEE SHEET 4), AN AREA 1" WIDE BY 2" DEEP AND FILL THIS AREA WITH HOT APPLIED JOINT SEALER PER C&MS 705.04.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL PROVISIONS OF C&MS 519 APPLY IN ADDITION TO THOSE LISTED HEREIN. THE CONTRACTOR SHALL PATCH EXPOSED CONCRETE SURFACES BASED ON VISUAL DETERIORATION ONLY. THE CONTRACTOR IS NOT REQUIRED TO SOUND THE ENTIRE EXPOSED CONCRETE SURFACES TO DETERMINE WHICH AREAS REQUIRE PATCHING.

THE ENGINEER SHALL PERFORM A VISUAL INSPECTION OF THE EXPOSED CONCRETE SURFACE. AREAS OBSERVED TO BE DETERIORATED WILL BE DELINEATED BY THE ENGINEER BY SOUNDING THE CONCRETE. THE ENGINEER WILL SOUND AND MARK THE PATCHING LIMITS USING ORANGE SPRAY PAINT AND NOTIFY THE CONTRACTOR WHEN THIS ACTIVITY IS COMPLETE.

THE FOLLOWING QUANTITY HAS BEEN ESTIMATED BASED UPON THE OBSERVED CONDITION USING AVAILABLE IMAGERY, A 2023 INSPECTION BY THE ENGINEER, AND AVAILABLE INSPECTION RECORDS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: 200 SF

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REPAIRS ON A SQUARE-FOOT BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

ITEM 530 - SPECIAL - STRUCTURES MISC.: CLEANING OF DRAINAGE SYSTEMS

THIS WORK CONSISTS OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM DRAINAGE SYSTEMS. EQUIPMENT MAY CONSISTS OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS FROM DRAINAGE SYSTEMS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLANS SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. IMMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOURS UNTIL WORK IS COMPLETE. CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPS AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, SCUPPERS AND DOWNSPOUTS (IF PRESENT).

THE FOLLOWING ARE TO BE CLEANED:
1. CLEANING SCUPPERS AND DOWNSPOUTS (IF PRESENT):
A) USE SHOVEL, HAND SCRAPERS, AND OTHER TOOLS TO BREAK UP DEBRIS IN THE SCUPPERS TO THE MAXIMUM EXTENT PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.

THE CONTRACTOR SHALL USE POTABLE WATER FOR CLEANING. DISCHARGING TO OR COLLECTING WATER FROM STREAMS IS PROHIBITED. PRESSURE WASHER WATER PRESSURE SHALL BE CAPABLE OF 1,500 PSI. CONTRACTOR SHALL NOT PRESSURE WASH NEAR EXISTING UTILITIES OR BRIDGE ITEMS CONTAINING OR COATED WITH ASBESTOS OR TANSITE. OPERATING PRESSURES SHALL BE SUFFICIENT TO REMOVE THE ACCUMULATED MATERIAL WITHOUT DAMAGE TO THE STRUCTURE. THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE SYSTEMS REMAIN CLEAN AND FREE OF ALL DEBRIS UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE. ANY DAMAGE OR DETERIORATED SYSTEMS SHALL BE REPORTED TO THE ENGINEER.

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE AS FOLLOWS:

ITEM 503 SPECIAL - STRUCTURE, MISC.: CLEANING OF DRAINAGE SYSTEMS (LS)

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T= 1¾")

ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN

THIS ITEM SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION (SS) 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

A) THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

B) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER.

C) A UNIFORM REMOVAL DEPTH OF ½" SHALL BE PERFORMED EXCEPT AS NOTED BELOW.

PORTIONS OF THE EXISTING SLAB THAT WERE RECONSTRUCTED IN 2010 AND THE EXISTING APPROACH SLABS DO NOT HAVE AN EXISTING RIGID OVERLAY AS SHOWN ON SHEET 4. THE CONTRACTOR SHALL REMOVE A NOMINAL DEPTH OF 1¾" OF CONCRETE USING HYDRODEMOLITION AND/OR HAND CHIPPING.

ALL LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS TO REMOVE THE EXISTING CONCRETE SURFACE SHALL BE INCLUDED WITH ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN.

ABBREVIATION LEGEND

℄ - CENTERLINE
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
CY - CUBIC YARD
EX. - EXISTING
LS - LUMP SUM
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
NB - NORTHBOUND
PROP. - PROPOSED
RT. - RIGHT
SB - SOUTHBOUND
SDC - SUPERPLASTICIZED DENSE CONCRETE OVERLAY
SF - SQUARE FOOT
SY - SQUARE YARD
SHDR. (SHD.) - SHOULDER
TYP. - TYPICAL

ITEM	EXTENSION	LEFT BRIDGE	RIGHT BRIDGE	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
512	10100	429	429	858	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	54	428	376		
516	31011	133	131	264	FT	2" DEEP JOINT SEALER, AS PER PLAN			264		2/4
519	11101	100	100	200	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	80	50	70		2/4
530	00200	-	-	LS	LS	SPECIAL - STRUCTURE MISC.: CLEANING OF DRAINAGE SYSTEMS					2/4
848	10201	1392	1374	2766	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=1¾" AVG.)			2034	732	2/4
848	20001	1392	1374	2766	SY	SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN			2034	732	2/4
848	30200	15	15	30	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			26	4	
848	50000	70	69	139	SY	HAND CHIPPING			139		
848	50100	-	-	LS	LS	TEST SLAB					
848	50200	16	16	32	CY	FULL-DEPTH REPAIR			32		
848	50320	1024	1011	2035	SY	EXISTING CONCRETE OVERLAY REMOVED (1¼"± THICK)			2035		
848	50340	154	152	306	SY	REMOVAL OF DEBONDED OR DETERIORATED EX. VARIABLE THICKNESS CONCRETE OVERLAY			306		

STRUCTURE GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-18.750
I-71 MAINLINE OVER 2ND AVE.

SFN 2507838
DESIGN AGENCY Jacobs
DESIGNER KPL | CHECKER MAN
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 2 | TOTAL 4
SHEET P. 387 | TOTAL 618

FRA-71-19.10

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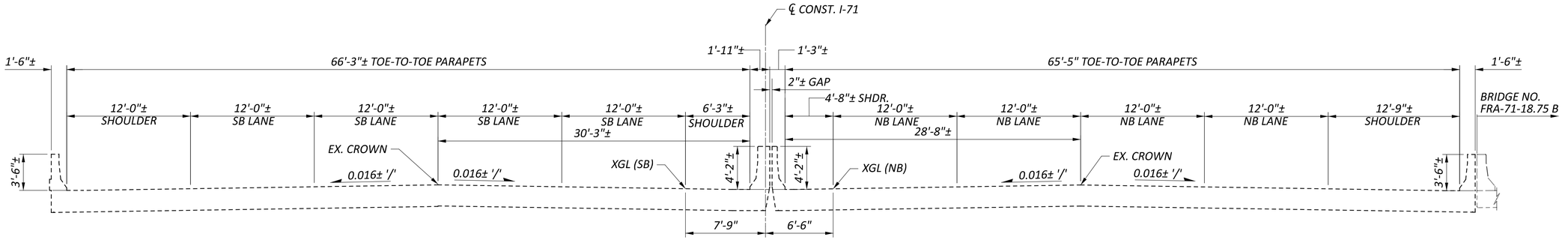
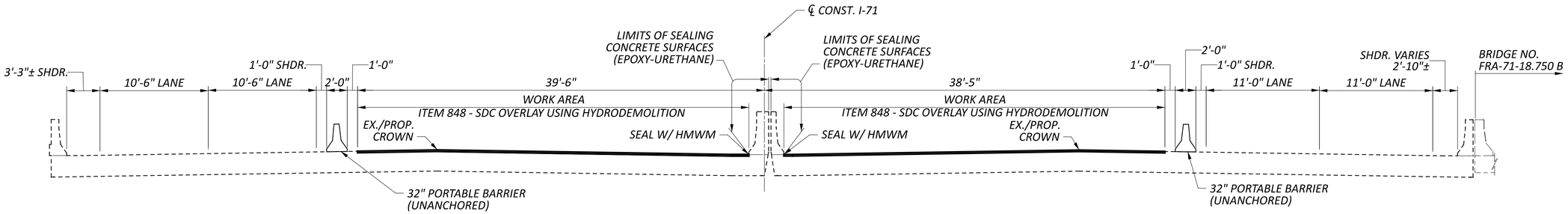
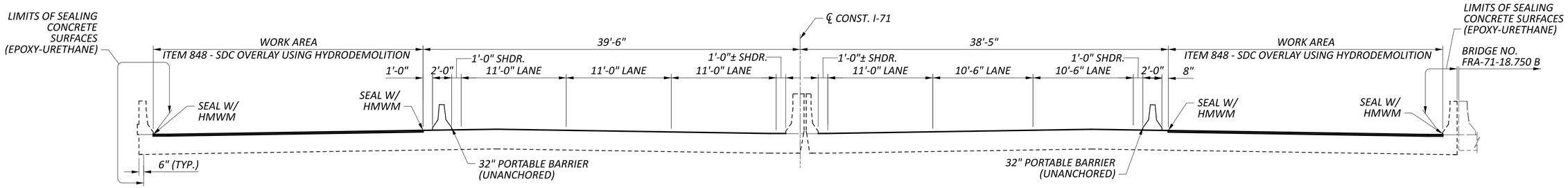


EXISTING TRANSVERSE SECTION



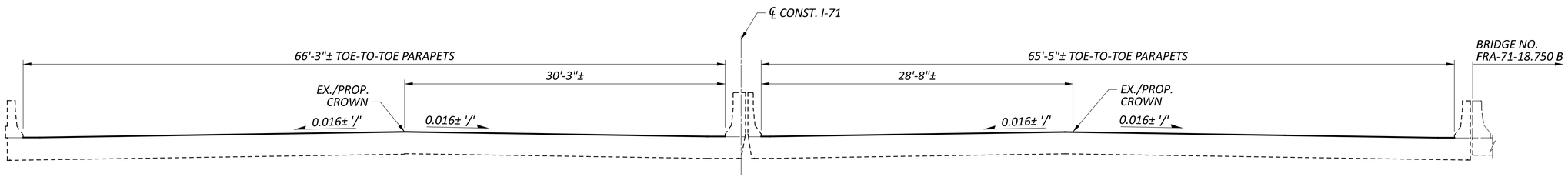
PHASE 5B (STEP 1) CONSTRUCTION (LT. BRIDGE ONLY)

PHASE 5A (STEP 1) CONSTRUCTION (RIGHT BRIDGE ONLY)



PHASE 5B (STEP 2) CONSTRUCTION (LT. BRIDGE ONLY)

PHASE 5A (STEP 2 CONSTRUCTION (RIGHT BRIDGE ONLY)



PROPOSED TRANSVERSE SECTION
(REFER TO TRAFFIC CONTROL FOR PAVEMENT MARKINGS)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/4.
2. SEAL JOINTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 848. PER 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.
3. PORTABLE CONCRETE BARRIER INCLUDED WITH ROADWAY QUANTITIES.

STAGED CONSTRUCTION DETAILS
BRIDGE NO. FRA-00071-18.750
I-71 MAINLINE OVER 2ND AVE.

SFN	2507838
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	MAN
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	3
TOTAL	4
SHEET	P. 388
TOTAL	618

FRA-71-19.10

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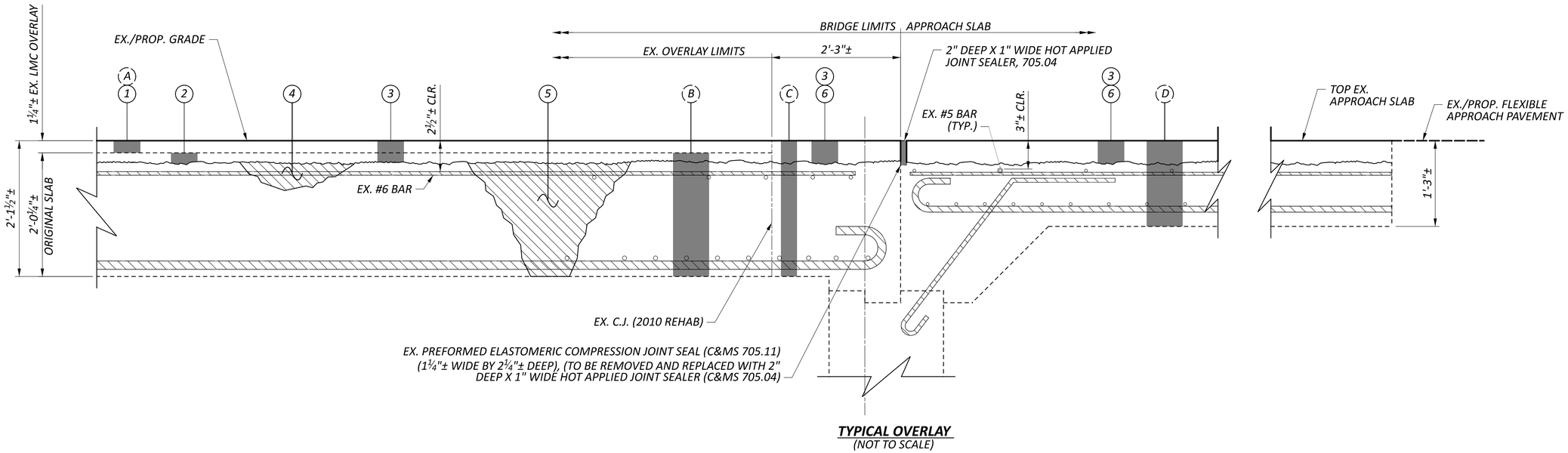

TYPICAL OVERLAY
(NOT TO SCALE)

LEGEND:

(1) - *ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED (T=1¼"±)*

(2) - *ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION (T=½")*

(3) - *ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (T=1¾")*

(4) - *ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (VARIABLE THICKNESS), MATERIAL ONLY*

(5) - *ITEM 848 - FULL DEPTH REPAIR*

(6) - *REMOVE 1¾" OF CONCRETE USING HYDRODEMILITION AND/OR HAND CHIPPING (INCLUDE FOR PAYMENT WITH ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION)*

(A) - *EXISTING CONCRETE LMC OVERLAY (T=1¼"±)*

(B) - *EXISTING REINFORCED CONCRETE SLAB (T=2'-0¼"±)*

(C) - *EXISTING REINFORCED CONCRETE SLAB (T=2'-1½"±)*

(D) - *EXISTING REINFORCED CONCRETE APPROACH SLAB (AS-1-81, 25 FT LONG, T=1'-3"±)*

OVERLAY DETAILS
BRIDGE NO. FRA-00071-18.750
I-71 MAINLINE OVER 2ND AVE.

SFN	2507838
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	MAN
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	4
TOTAL	4
SHEET	P. 389
TOTAL	618

FRA-71-19.10

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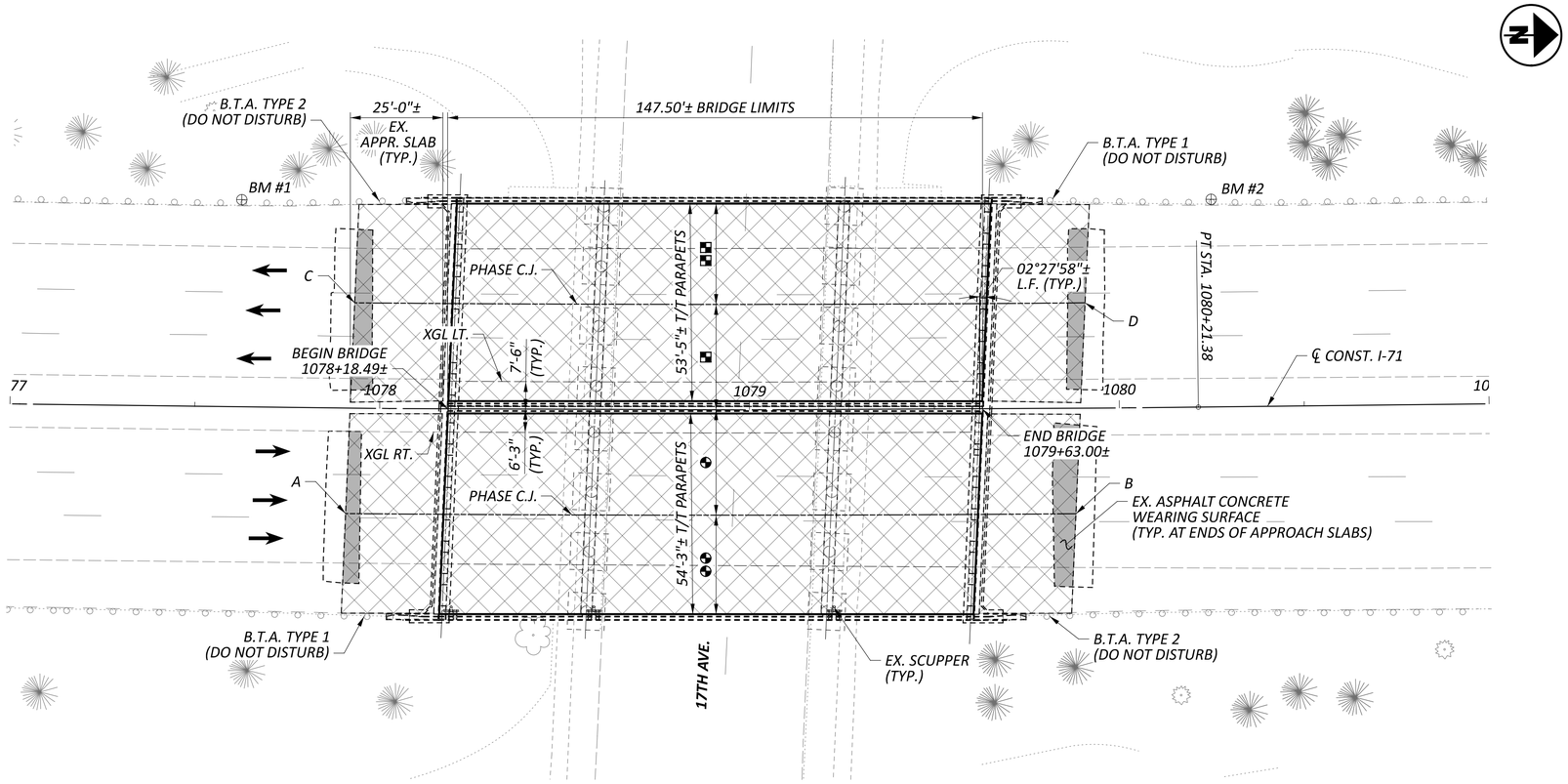
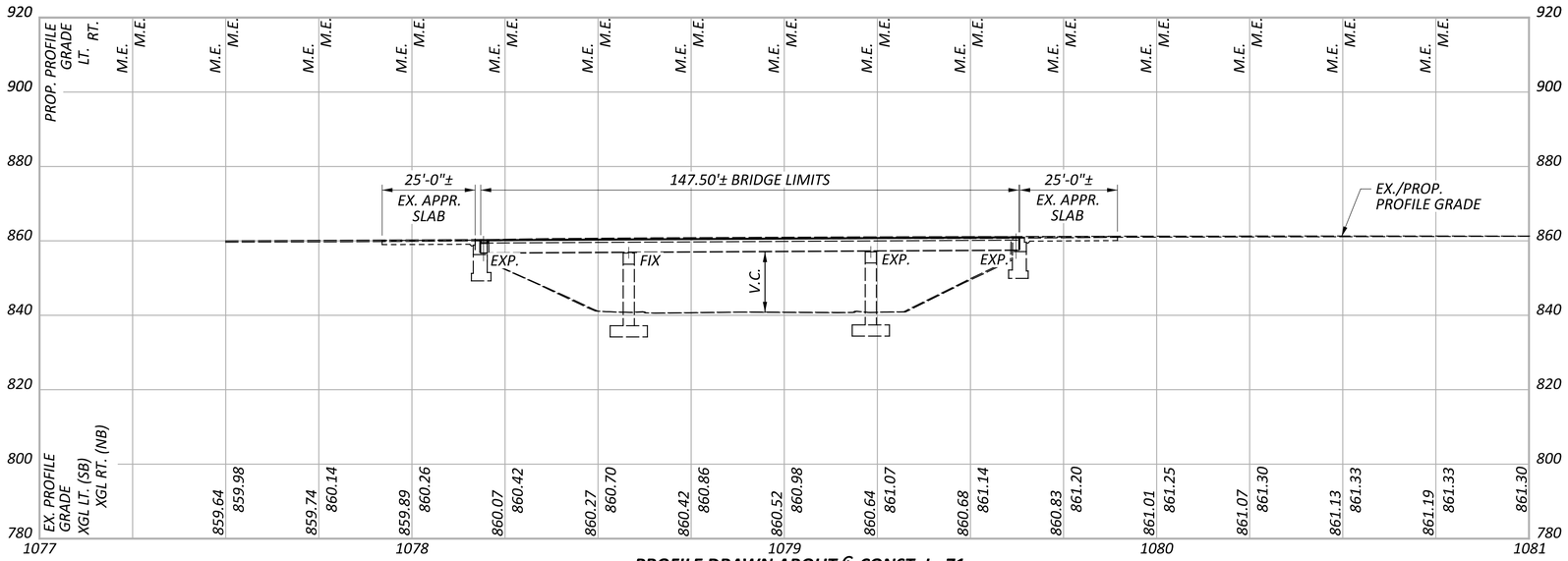


PLAN
(BEAMS NOT SHOWN FOR CLARITY)



PROFILE DRAWN ABOUT ℄ CONST. I - 71

LEGEND:

- LIMITS OF ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE (SDC) OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2" THICK)
- APPROXIMATE LIMITS OF EXISTING ASPHALT CONCRETE WEARING SURFACE ATOP SCARIFIED APPROACH SLAB PERFORMED UNDER UNKNOWN PROJECT/MAINTENANCE

M.E. - MATCH EXISTING

◔ - PHASE 6A (STEP 1) 28'-6" FROM ℄ CONST. I-71 TO PHASE C.J.
◔◔ - PHASE 6A (STEP 2) 26'-9"± FROM PHASE C.J. TO TOE OF PARAPET

◘ - PHASE 6B (STEP 1) 28'-6" FROM ℄ CONST. I-71 TO PHASE C.J.
◘◘ - PHASE 6B (STEP 2) 27'-2"± FROM PHASE C.J. TO TOE OF PARAPET

V.C. - NO CHANGE
15.5' REQUIRED MIN. VERTICAL CLEARANCE
15.4'± ACTUAL MIN. VERTICAL CLEARANCE (INVENTORY)

A - PHASE C.J., I-71 NB @ BEGIN REAR APPROACH SLAB
℄ CONST. I-71 STA. 1077+91.02, 28.50' RT.
B - PHASE C.J., I-71 NB @ END FWD. APPROACH SLAB
℄ CONST. I-71 STA. 1079+88.04, 28.50' RT.
C - PHASE C.J., I-71 SB @ BEGIN REAR APPROACH SLAB
℄ CONST. I-71 STA. 1077+92.98, 28.50' LT.
D - PHASE C.J., I-71 SB @ END FWD. APPROACH SLAB
℄ CONST. I-71 STA. 1079+90.98, 28.50' LT.

NOTES:

1. SEE ROADWAY PLANS FOR DESING TRAFFIC.

EXISTING STRUCTURE

TYPE: 3-SPAN, CONTINUOUS, ROLLED STEEL BEAM BRIDGE WITH NON-COMPOSITE, REINFORCED CONCRETE DECK SUPPORTED ON REINFORCED CONCRETE SUBSTRUCTURE

SPANS: 39'-0"± - 65'-0"± - 39'-0"± (W.R.T. ORIGINAL REFERENCE CHORD)

ROADWAY: 53'-5"± (SOUTHBOUND), 54'-3"± (NORTHBOUND) T/T PARAPETS

LOADING: CF 2,000 (57)

SKEW: 02°27'58"± L.F. W/ REFERENCE LINE

WEARING SURFACE: 1¾"± MICROSILICA CONCRETE OVERLAY

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNMENT: 0°30'00"± LT. CURVE

CROWN: 3/16" PER FOOT

STRUCTURE FILE NUMBER: 2507951

DATE BUILT: 1961

DISPOSITION: BRIDGE PRESERVATION (SEE PROPOSED WORK BELOW)

PROPOSED STRUCTURE

PROPOSED WORK: REMOVE EXISTING 1¾"± THICK MICROSILICA CONCRETE OVERLAY VIA HYDRODEMOLITION (SS 848). PLACE NEW 2" NOMINAL SDC OVERLAY ON BRIDGE DECKS AND APPROACH SLABS TO BOTH NORTHBOUND AND SOUTHBOUND I-71 MAINLINE STRUCTURES OVER 17TH AVE. 519 PATCHING AND SEALING OF EXPOSED CONCRETE SURFACES.

TYPE: NO CHANGE

SPANS: NO CHANGE

ROADWAY: NO CHANGE

LOADING: NO CHANGE

SKEW: NO CHANGE

WEARING SURFACE: 2" SDC OVERLAY (NORTHBOUND & SOUTHBOUND) BRIDGE DECK & APPROACH SLABS

APPROACH SLABS: NO CHANGE

ALIGNMENT: NO CHANGE

CROWN: NO CHANGE

DECK AREA: 8400± SF (NORTHBOUND), 8157± SF (SOUTHBOUND)

COORDINATES: LATITUDE 40° 00' 1.90" N
LONGITUDE 82° 59' 4.26" W

SITE PLAN
BRIDGE NO. FRA-00071-20.080
I-71 OVER 17TH AVE.

SFN 2507951

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
ADS	KPL

REVIEWER MJR 01/25/25

PROJECT ID 109164

SUBSET	TOTAL
1	4

SHEET	TOTAL
P. 390	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

PCB-91 REVISED 07/17/2020

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848 DATED 07/19/2024

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL (BDM), 2020, DATED JULY, 2025.

DECK PROTECTION METHOD

NEW SDC OVERLAY, 2" THICKNESS
LEFT (SB) AND RIGHT (NB) BRIDGE DECKS
AND APPROACH SLABS

DESIGN DATA

N/A

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION (ODOT), DISTRICT 6 OFFICE, 400 E. WILLIAM STREET, DELAWARE, OHIO AND ARE AVAILABLE FOR REFERENCE.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO REMOVE THE EXISTING STRIP SEAL GLAND AND REPLACE IN KIND. THIS ITEM INCLUDES ALL WORK NECESSARY TO CLEAN AND PREPARE THE EXISTING JOINT SURFACES (E.G. RETAINER CLIPS) FOR THE NEW STRIP SEAL. THE PROPOSED STRIP SEAL GLAND SHALL BE INSTALLED IN ONE CONTINUOUS STRIP FOR THE ENTIRE LENGTH OF THE BRIDGE JOINT.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL PROVISIONS OF C&MS 519 APPLY IN ADDITION TO THOSE LISTED HEREIN. THE CONTRACTOR SHALL PATCH EXPOSED CONCRETE SURFACES BASED ON VISUAL DETERIORATION ONLY. THE CONTRACTOR IS NOT REQUIRED TO SOUND THE ENTIRE EXPOSED CONCRETE SURFACES TO DETERMINE WHICH AREAS REQUIRE PATCHING.

THE ENGINEER SHALL PERFORM A VISUAL INSPECTION OF THE EXPOSED CONCRETE SURFACE. AREAS OBSERVED TO BE DETERIORATED WILL BE DELINEATED BY THE ENGINEER BY SOUNDING THE CONCRETE. THE ENGINEER WILL SOUND AND MARK THE PATCHING LIMITS USING ORANGE SPRAY PAINT AND NOTIFY THE CONTRACTOR WHEN THIS ACTIVITY IS COMPLETE.

THE FOLLOWING QUANTITY HAS BEEN ESTIMATED BASED UPON THE OBSERVED CONDITION USING AVAILABLE IMAGERY, A 2023 INSPECTION BY THE ENGINEER AND AVAILABLE INSPECTION RECORDS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: 310 SF.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REPAIRS ON A SQUARE-FOOT BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

ITEM 530 - SPECIAL - STRUCTURES MISC.: CLEANING OF DRAINAGE SYSTEMS

THIS WORK SHALL CONSISTS OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM EXISTING DRAINAGE SYSTEMS TO REMAIN. EQUIPMENT MAY CONSISTS OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS FROM DRAINAGE SYSTEMS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLANS SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. IMMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOURS UNTIL WORK IS COMPLETE. CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPS AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, SCUPPERS AND DOWNSPOUTS (IF PRESENT).

THE FOLLOWING ARE TO BE CLEANED:
1. CLEANING SCUPPERS AND DOWNSPOUTS (IF PRESENT):
A) USE SHOVEL, HAND SCRAPERS, AND OTHER TOOLS TO BREAK UP DEBRIS IN THE SCUPPERS TO THE MAXIMUM EXTENT PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.

THE CONTRACTOR SHALL USE POTABLE WATER FOR CLEANING. DISCHARGING TO OR COLLECTING WATER FROM STREAMS IS PROHIBITED. PRESSURE WASHER WATER PRESSURE SHALL BE CAPABLE OF 1,500 PSI. CONTRACTOR SHALL NOT PRESSURE WASH NEAR EXISTING UTILITIES OR BRIDGE ITEMS CONTAINING OR COATED WITH ASBESTOS OR TANSITE. OPERATING PRESSURES SHALL BE SUFFICIENT TO REMOVE THE ACCUMULATED MATERIAL WITHOUT DAMAGE TO THE STRUCTURE. THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE SYSTEMS REMAIN CLEAN AND FREE OF ALL DEBRIS UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE. ANY DAMAGE OR DETERIORATED SYSTEMS SHALL BE REPORTED TO THE ENGINEER.

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE AS FOLLOWS:

ITEM 530 SPECIAL - STRUCTURE, MISC.: CLEANING OF DRAINAGE SYSTEMS (LS)

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2" THICK)

THIS ITEM SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION (SS) 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

A) THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

B) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER.

ABBREVIATION LEGEND

APPR. - APPROACH
BOT. - BOTTOM
BRG. - BEARING
℄ - CENTERLINE
C.J. - CONSTRUCTION JOINT
CLR. - CLEARANCE
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
CY - CUBIC YARD
DIA. - DIAMETER
EA - EACH
E.F. - EACH FACE
EL. (ELEV.) - ELEVATION
EX. - EXISTING
F.F. - FAR FACE
FT - FEET
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE
HSR - HARD SHOULDER RUNNING
LB - POUND
LS - LUMP SUM
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
NB - NORTHBOUND
N.F. - NEAR FACE
P.B. - PORTABLE BARRIER
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PGL - PROFILE GRADE LINE
PROP. - PROPOSED
R.C. - REFERENCE CHORD
RT. - RIGHT
SB - SOUTHBOUND
SDC - SUPERPLASTICIZED DENSE CONCRETE
SER. - SERIES
STA. - STATION
SY - SQUARE YARD
SHD. - SHOULDER
T/T - TOE-TO-TOE
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
W.R.T. - WITH RESPECT TO
W/ - WITH
ϕ - DIAMETER

ITEM	EXTENSION	LEFT BRIDGE	RIGHT BRIDGE	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
512	10100	700	700	1400	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	340	460	600		
516	01301	111	113	224	SY	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN			224		2/4
519	11101	155	155	310	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	150	100	60		2/4
530	00200	-	-	LS	LS	SPECIAL - STRUCTURE MISC.: CLEANING OF DRAINAGE SYSTEMS					2/4
848	10201	1173	1191	2364	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2" THICK)			1766	598	2/4
848	20000	1173	1191	2364	SY	SURFACE PREPARATION USING HYDRODEMOLITION			1766	598	
848	30200	25	19	44	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			39	5	
848	50000	88	90	178	SY	HAND CHIPPING			178		
848	50100	-	-	LS	LS	TEST SLAB			615		
848	50200	14	9	23	CY	FULL-DEPTH REPAIR			23		
848	50320	876	890	1766	SY	EXISTING CONCRETE OVERLAY REMOVED (1¾" THICK)			1766		
848	50340	263	201	464	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			464		

STRUCTURE GENERAL NOTES
BRIDGE NO. FRA-00071-20.080
I-71 OVER 17TH AVE.

SFN 2507951
DESIGN AGENCY Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 2 | TOTAL 4
SHEET P. 391 | TOTAL 618

FRA-71-19.10

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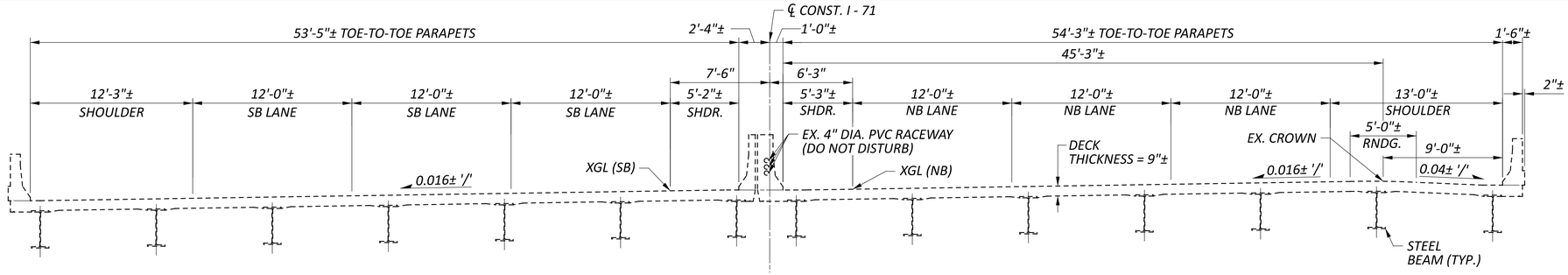

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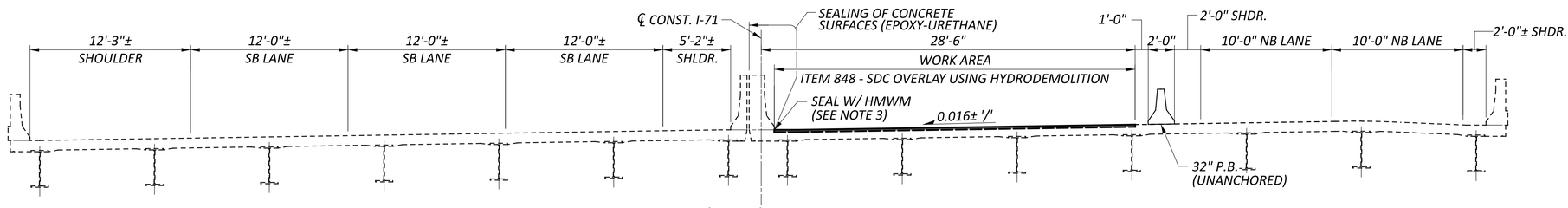
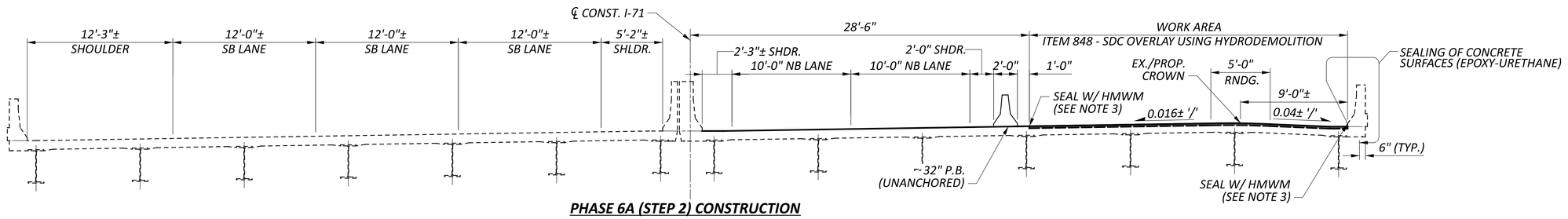


PHASE 6A (STEP 1) CONSTRUCTION



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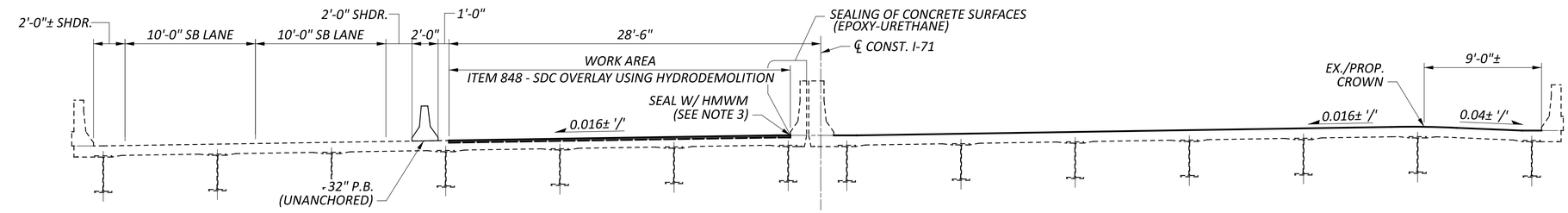
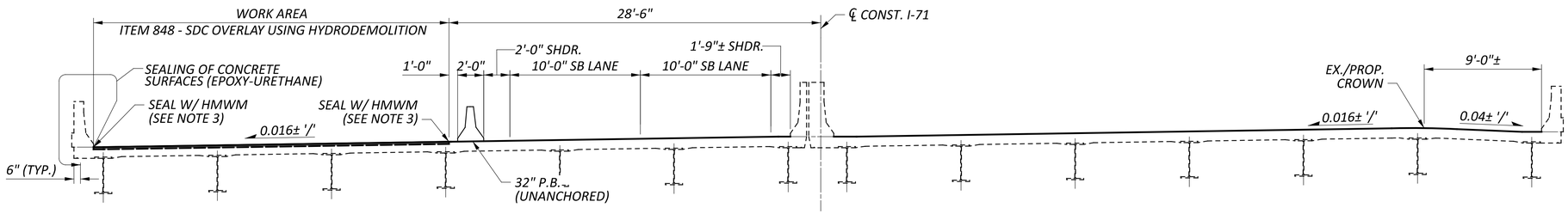


PHASE 6B (STEP 1) CONSTRUCTION



PHASE 6B (STEP 2) CONSTRUCTION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/4.
2. FOR TYPICAL OVERLAY DETAILS, SEE SHEET 4/4.
3. SEAL JOINTS IN ACCORDANCE WITH SS 848. PER SS 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.
4. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES.
5. REFER TO TRAFFIC CONTROL PLANS FOR PROPOSED PAVEMENT MARKINGS.

STAGED CONSTRUCTION DETAILS
BRIDGE NO. FRA-00071-20.080
I-71 OVER 17TH AVE.

SFN 2507951
DESIGN AGENCY Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 3 | TOTAL 4
SHEET P. 392 | TOTAL 618

FRA-71-19.10

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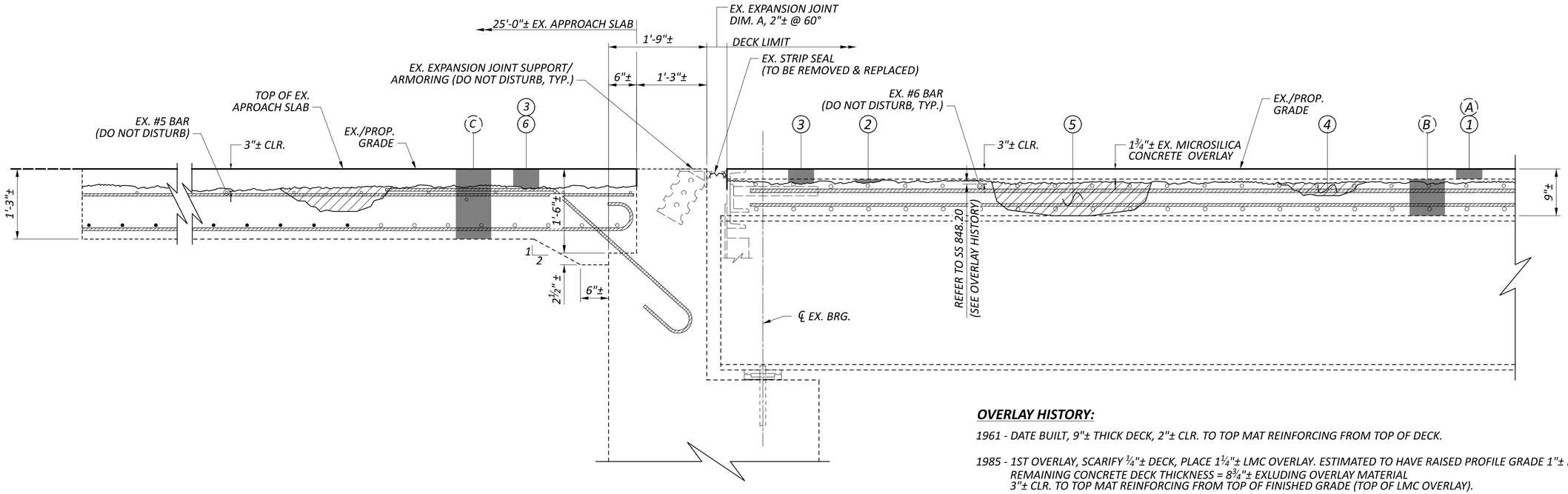

TYPICAL OVERLAY DETAIL

OVERLAY HISTORY:

1961 - DATE BUILT, 9"± THICK DECK, 2"± CLR. TO TOP MAT REINFORCING FROM TOP OF DECK.

1985 - 1ST OVERLAY, SCARIFY ¼"± DECK, PLACE 1¼"± LMC OVERLAY. ESTIMATED TO HAVE RAISED PROFILE GRADE 1"± FROM EX.
REMAINING CONCRETE DECK THICKNESS = 8¾"± EXLUDING OVERLAY MATERIAL
3"± CLR. TO TOP MAT REINFORCING FROM TOP OF FINISHED GRADE (TOP OF LMC OVERLAY).

1990 - REHABILITATION TO JOINT AND PARAPETS/BARRIERS.

2008 - 2ND OVERLAY, REMOVE 1¼"± LMC OVERLAY, REMOVE ½"± DECK, PLACE 1¾"± MICROSILICA CONCRETE OVERLAY
TO MATCH EXISTING PROFILE GRADE. REMAINING CONCRETE DECK THICKNESS = 8¼"± EXLUDING OVERLAY MATERIAL
3"± CLR. TO TOP MAT REINFORCING FROM TOP OF FINISHED GRADE (TOP OF MICROSILICA OVERLAY).

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/4.

LEGEND:

(1) - *ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED (T=1¾"±)*

(2) - *ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION (T=¼")*

(3) - *ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (T=2")*

(4) - *ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (VARIABLE THICKNESS), MATERIAL ONLY*

(5) - *ITEM 848 - FULL DEPTH REPAIR*

(6) - *REMOVE 2" OF CONCRETE USING HYDRODEMILITION AND/OR HAND CHIPPING (INCLUDE FOR PAYMENT WITH ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION)*

(7) - *ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY*

(A) - *EXISTING MICROSILICA CONCRETE OVERLAY (T=1¾"±)*

(B) - *EXISTING REINFORCED CONCRETE DECK (T=8¼"±)*

(C) - *EXISTING REINFORCED CONCRETE APPROACH SLAB (AS-1-81, 25 FT LONG, T=1'-3"±)*

OVERLAY DETAIL
BRIDGE NO. FRA-00071-20.080
I-71 OVER 17TH AVE.

SFN	2507951
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	4
TOTAL	4
SHEET	P. 393
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:09:16 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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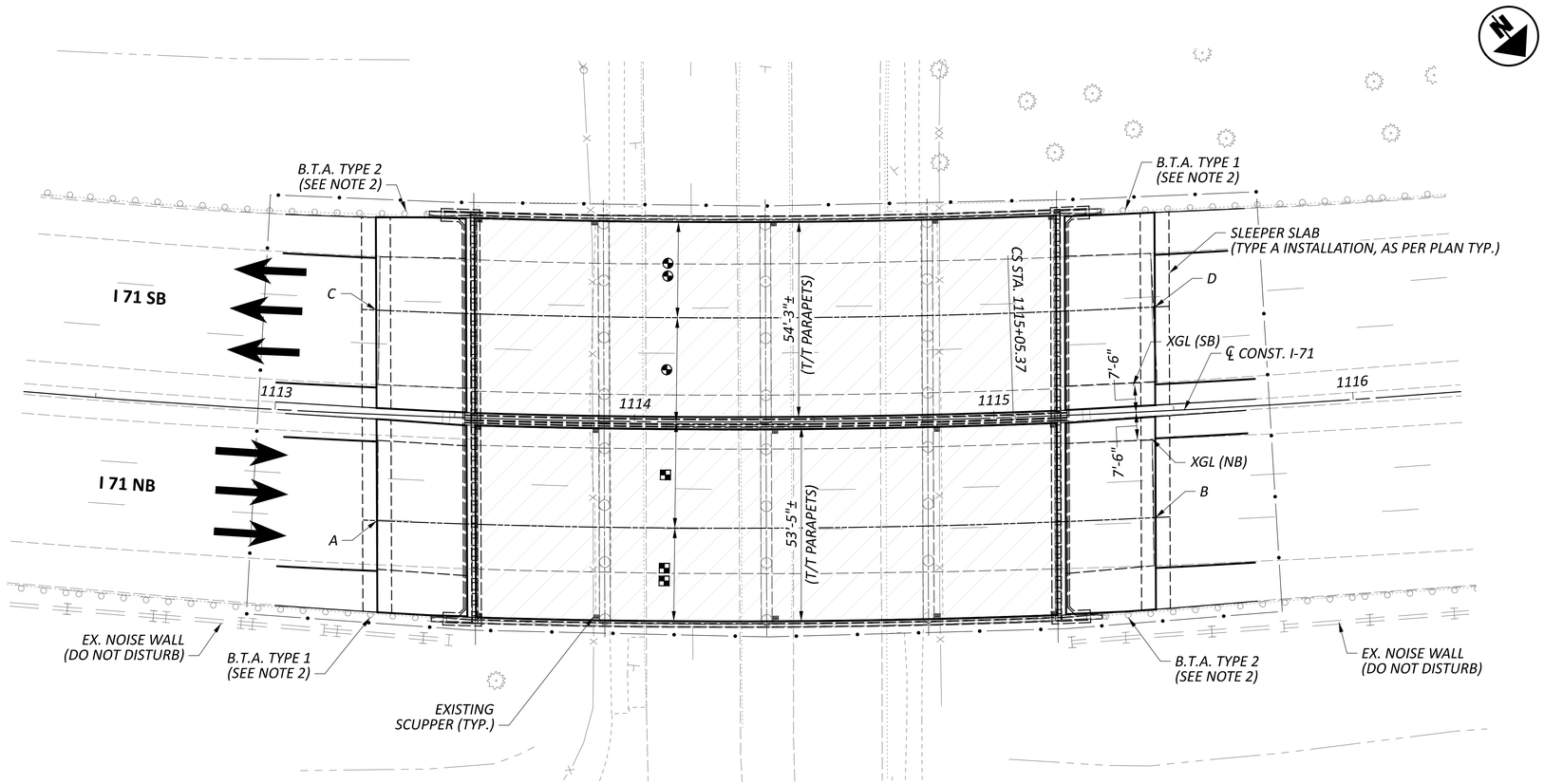
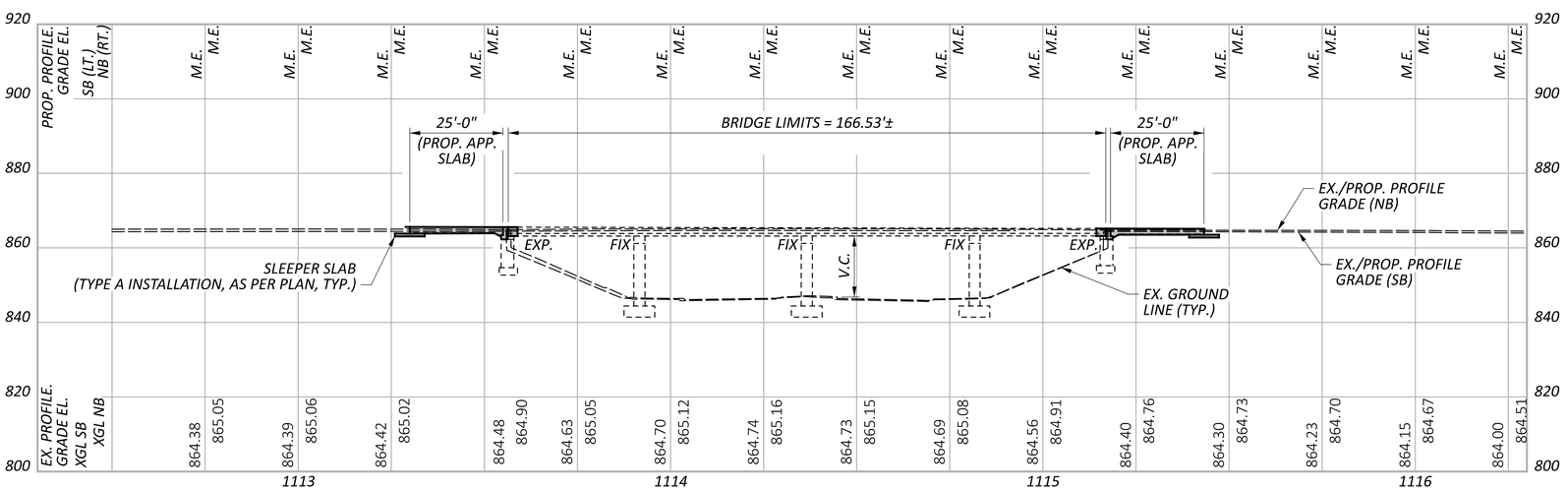


PLAN



PROFILE ALONG ℄ CONST. I-71

LEGEND:

- *LIMITS OF ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=2½")*

▪ *- PHASE 7A (STEPS 1 & 3) 29'-6" FROM ℄ CONST. I-71 TO PHASE C.J.*
▪▪ *- PHASE 7A (STEPS 2 & 4) 25'-11"± FROM PHASE C.J. TO TOE OF PARAPET*

◔ *- PHASE 7B (STEPS 1 & 3) 29'-0" FROM ℄ CONST. I-71 TO PHASE C.J.*
◔◔ *- PHASE 7B (STEPS 2 & 4) 26'-8"± FROM PHASE C.J. TO TOE OF PARAPET*

V.C. - NO CHANGE
15.5' REQUIRED MINIMUM VERTICAL CLEARANCE
15.1' ACTUAL MINIMUM VERTICAL CLEARANCE (INVENTORY)

A - PHASE C.J., I-71 NB @ BEGIN REAR APPROACH SLAB
℄ CONST. I-71 STA. 1113+29.64, 29.50' RT.

B - PHASE C.J., I-71 NB @ END FWD. APPROACH SLAB
℄ CONST. I-71 STA. 1115+43.50, 29.50' RT.

C - PHASE C.J., I-71 SB @ BEGIN REAR APPROACH SLAB
℄ CONST. I-71 STA. 1113+29.89, 29.50' LT.

D - PHASE C.J., I-71 SB @ END FWD. APPROACH SLAB
℄ CONST. I-71 STA. 1115+46.21, 29.50' LT.

NOTES:

1. *SEE ROADWAY PLANS FOR DESIGN TRAFFIC.*
2. *REMOVE AND REINSTALL EXISTING BRIDGE TERMINAL ASSEMBLIES (B.T.A.) AND APPROACH GUARDRAIL INCLUDING ALL HARDWARE AS NECESSARY TO CONSTRUCT PROPOSED APPROACH SLABS. ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO REMOVE, STORE AND REINSTALL BRIDGE TERMINAL ASSEMBLIES AND GUARDRAIL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN, LUMP SUM.*

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS REINFORCED CONCRETE SLAB SUPPORTED ON CAP AND COLUMN PIERS AND STUB ABUTMENTS

SPANS: 36'-0"± - 45'-0"± - 45'-0"± - 36'-0"± C/C BRGS. (W.R.T. ORIGINAL R.C.)

ROADWAY: 54'-3"± (LT.), 53'-5"± (RT.) TOE-TO-TOE PARAPETS

LOADING: CF 2,000 (57)

SKEW: NONE

WEARING SURFACE: 1¾"± MICROSILICA CONCRETE OVERLAY

APPROACH SLABS: AS-1-54, 25' LONG

ALIGNMENT: 02°30'00" LEFT CURVE

CROWN: SUPERELEVATION VARIES

STRUCTURE FILE NUMBER: 2507986

DATE BUILT: 1961

DISPOSITION: BRIDGE PRESERVATION (SEE PROPOSED WORK BELOW)

PROPOSED STRUCTURE

PROPOSED WORK: REMOVE EXISTING 1¾"± THICK MICROSILICA OVERLAY USING HYDRODEMOLITION. PLACE 2½" THICK SDC OVERLAY ON SLAB. REPLACE APPROACH SLABS; INSTALL FULL-WIDTH APPROACH SLABS WITH TYPE A INSTALLATION. MODIFY BACKWALL TO ACCOMODATE PROPOSED APPROACH SLABS. REPLACE COMPRESSION SEAL W/ NEW COMPRESSION SEAL. PATCHING AND SEALING.

TYPE: NO CHANGE

SPANS: NO CHANGE

ROADWAY: NO CHANGE

LOADING: NO CHANGE

SKEW: NO CHANGE

WEARING SURFACE: 2½"± SDC OVERLAY

APPROACH SLABS: AS-1-15, 25' LONG & AS-2-15 (TYPE A INSTALLATION, A.P.P.)

ALIGNMENT: NO CHANGE

CROWN: NO CHANGE

STRUCTURE FILE NUMBER: NO CHANGE

CROWN: NO CHANGE

DECK AREA: 8879± SF (LT.), 8743± SF (RT.) TOE-TO-TOE PARAPETS

COORDINATES: LATITUDE 40°00'34.55" NORTH
LONGITUDE 82°59'14.48" WEST

SITE PLAN
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN 2507986

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
KPL	KPL

REVIEWER MJR 01/25/25

PROJECT ID 109164

SUBSET	TOTAL
1	13

SHEET	TOTAL
P. 394	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	01/20/2023
AS-2-15	REVISED	01/20/2023
PCB-91	REVISED	07/17/2020

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848 DATED 07/19/2024

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL (BDM), 2020, DATED JULY, 2025.

DECK PROTECTION METHOD

NEW SDC OVERLAY, 2½" THICKNESS

DESIGN DATA

N/A

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS

CONSTRUCTION PLANS FOR THE EXISTING BRIDE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION (ODOT), DISTRICT 6 OFFICE, 400 E. WILLIAM STREET, DELAWARE, OHIO AND ARE AVAILABLE FOR REFERENCE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THIS ITEM SHALL INCLUDE THE REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXIST.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.01.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL OF UNCLASSIFIED ITEMS (EXISTING FLEXIBLE PAVEMENT, PORTIONS OF THE EXISTING CONCRETE BASE SLAB (A.K.A. FOUNDATION) SUPPORTING THE MEDIAN BARRIER, AGGREGATE BASE, SUBGRADE, SOIL, TOPSOIL, DEBRIS, VEGETATION, ETC.) TO CONSTRUCT PROPOSED FULL-WIDTH APPROACH SLABS. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL MATERIAL OFF SITE.

ADDITIONALLY, THIS ITEM SHALL INCLUDE ANY WORK NECESSARY TO REMOVE, STORE AND REINSTALL EXISTING BRIDGE TERMINAL ASSEMBLIES AND GUARDRAIL AS NECESSARY TO CONSTRUCT THE PROPOSED APPROACH SLABS.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED FOR PAYMENT UNDER THE LUMP SUM CONTRACT BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

ITEM 516 - ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN

THIS WORK CONSIST OF REMOVING THE EXISTING COMPRESSION SEAL, AND INSTALLATION OF THE PROPOSED ARMORLESS PREFORMED JOINT SEAL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE. INSTALL THE ARMORLESS PREFORMED JOINT SEAL TOE TO TOE OF EXISTING PARAPETS WITH UPTURNS INTO THE PARAPETS.

INSTALL THE JOINT IN ONE CONTINUOUS PIECE.

JOINT FACES: EX. STEEL ARMORING/EX. STEEL ARMORING
TOTAL DESIGN MOVEMENT: 1"
OPENING @ 60°F: 2"±

SELECT THE ARMORLESS PREFORMED JOINT SEAL FROM ONE OF THE MANUFACTURERS LISTED BELOW:

R.J. WATSON, INC.
11035 WALDEN AVENUE
ALDEN, NY 14004-9616
PHONE: (716) 901-7020
FAX: (716) 901-7015
-SILICOFLEX SF 225

WATSON BOWMAN ACME CORP.
95 PINEVIEW DRIVE
AMHERST, NY 14228-2121
PHONE: (716) 691-7566
FAX: (716) 691-9239
-JENEE W SERIES, 25W

D.S. BROWN COMPANY
300 EAST CHERRY STREET
NORTH BALTIMORE, OH 45872-1227
PHONE: (419) 257-3561
FAX: (419) 257-2200
- V-300

THE SEAL, ADHESIVE, AND SILICONE SEALANT ARE AN INTEGRAL JOINT SYSTEM THAT SHALL BE DESIGNED AND SUPPLIED BY THE SAME MANUFACTURER.

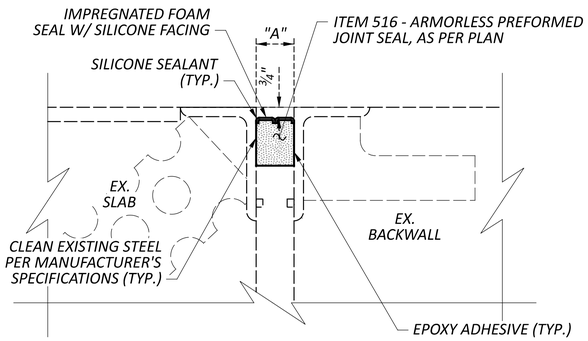
SET THE TOP OF THE JOINT SEAL ¾" BELOW THE ROADWAY SURFACE. IF EXISTING RETAINER BARS AND/OR JOINT SUPPORT BOLTS ARE PRESENT. THEN THE CONTRACTOR SHALL REMOVE EXISTING RETAINERS AND BOLTS THAT INTERFERE WITH THE INSTALLATION OF THE PROPOSED JOINT SEAL BY GRINDING SMOOTH.

THE CONTRACTOR SHALL SUBMIT THE JOINT SEAL INSTALLATION PROCEDURES TO THE ENGINEER AT LEAST SEVEN (7) CALENDAR DAYS BEFORE CONSTRUCTION BEGINS. THE DEPARTMENT'S ACCEPTANCE IS NOT REQUIRED.

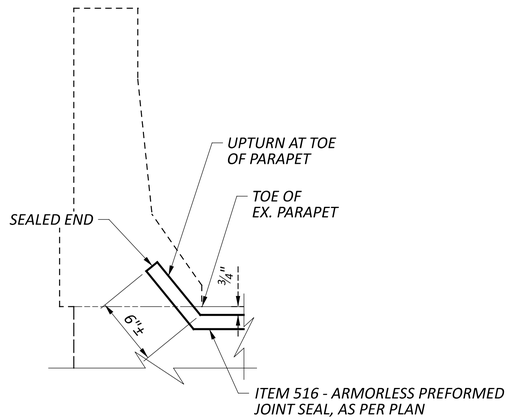
THE DEPARTMENT WILL MEASURE THE ARMORLESS PREFORMED JOINT SEAL BY THE NUMBER OF FEET HORIZONTALLY ALONG THE JOINT CENTERLINE.

THE DEPARTMENT WILL INCLUDE THE COST OF ALL MATERIALS, LABOR, EQUIPMENT, SURFACE PREPARATION, TOOLS, THE MANUFACTURER'S REPRESENTATIVE, AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE IN THE CONTRACT PRICE BID PER FOOT FOR ITEM 516 - ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.

ITEM 516 - ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN - CONTINUED



EXPANSION JOINT DETAIL



PARAPET SECTION

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

UPON COMPLETION OF THE PROPOSED APPROACH SLAB, THE CONTRACTOR SHALL SAW CUT ALONG THE APPROACH SLAB AND BRIDGE LIMIT AS DETAILED IN THE PLANS, AN AREA 1" WIDE BY 2" DEEP AND FILL THIS AREA WITH HOT APPLIED JOINT SEALER PER C&MS 705.04.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL PROVISIONS OF C&MS 519 APPLY IN ADDITION TO THOSE LISTED HEREIN. THE CONTRACTOR SHALL EXPOSED CONCRETE SURFACES BASED ON VISUAL DETERIORATION ONLY. THE CONTRACTOR IS NOT REQUIRED TO SOUND THE ENTIRE EXPOSED CONCRETE SURFACES TO DETERMINE WHICH AREAS REQUIRE PATCHING.

THE ENGINEER SHALL PERFORM A VISUAL INSPECTION OF THE EXPOSED CONCRETE SURFACE. AREAS OBSERVED TO BE DETERIORATED WILL BE DELINEATED BY THE ENGINEER BY SOUNDING THE CONCRETE. THE ENGINEER WILL SOUND AND MARK THE PATCHING LIMITS USING ORANGE SPRAY PAINT AND NOTIFY THE CONTRACTOR WHEN THIS ACTIVITY IS COMPLETE.

THE FOLLOWING QUANTITY HAS BEEN ESTIMATED BASED UPON THE OBSERVED CONDITION USING AVAILABLE IMAGERY, A 2023 INSPECTION BY THE ENGINEER AND AVAILABLE INSPECTION RECORDS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: XXX SF.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REPAIRS ON A SQUARE-FOOT BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")

ITEM 526 - TYPE A INSTALLATION, AS PER PLAN

PROVISIONS OF C&MS 511 & 526 APPLY IN ADDITION TO THE CONDITIONS AND/OR REVISIONS HEREIN.

TO CONFORM TO THE PERMITTED WEEKEND CLOSURE WINDOW(S) TO PERFORM THE WORK; USE CONCRETE WITH AN ACCELERATING ADMIXTURE SUCH AS SIKA RAPID-1 OR ANY APPROVED EQUIVALENT TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 6 HOURS FOR THE TYPE A INSTALLATION AND 12 HOURS FOR THE REINFORCED CONCRETE APPROACH SLAB. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME PER SUPPLEMENT 1126.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

ADDITIONALLY, A POLYMER MODIFIED EXPANSION JOINT AS DETAILED IN ODOT STANDARD CONSTRUCTION DRAWING AS-2-15 IS NOT REQUIRED.

ITEM 530 - SPECIAL - STRUCTURES MISC.: CLEANING OF DRAINAGE SYSTEMS

THIS WORK SHALL CONSISTS OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM DRAINAGE SYSTEMS. EQUIPMENT MAY CONSISTS OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS FROM DRAINAGE SYSTEMS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLANS SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. IMMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOURS UNTIL WORK IS COMPLETE. CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPS AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, SCUPPERS AND DOWNSPOUTS (IF PRESENT).

THE FOLLOWING ARE TO BE CLEANED:
1. CLEANING SCUPPERS AND DOWNSPOUTS (IF PRESENT):
A) USE SHOVEL, HAND SCRAPERS, AND OTHER TOOLS TO BREAK UP DEBRIS IN THE SCUPPERS TO THE MAXIMUM EXTEND PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.

THE CONTRACTOR SHALL USE POTABLE WATER FOR CLEANING. DISCHARGING TO OR COLLECTING WATER FROM STREAMS IS PROHIBITED. PRESSURE WASHER WATER PRESSURE SHALL BE CAPABLE OF 1,500 PSI. CONTRACTOR SHALL NOT PRESSURE WASH NEAR EXISTING UTILITIES OR BRIDGE ITEMS CONTAINING OR COATED WITH ASBESTOS OR TANSITE. OPERATING PRESSURES SHALL BE SUFFICIENT TO REMOVE THE ACCUMULATED MATERIAL WITHOUT DAMAGE TO THE STRUCTURE. THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE SYSTEMS REMAIN CLEAN AND FREE OF ALL DEBRIS UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE. ANY DAMAGE OR DETERIORATED SYSTEMS SHALL BE REPORTED TO THE ENGINEER.

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE AS FOLLOWS:

ITEM 530 SPECIAL - STRUCTURE, MISC.: CLEANING OF DRAINAGE SYSTEMS (LS)

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)

THIS ITEM SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION (SS) 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

A) THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

B) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER.

STRUCTURE GENERAL NOTES
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	2
TOTAL	13
SHEET	P. 395
TOTAL	618

FRA-71-19.10

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ITEM	EXTENSION	LEFT BRIDGE	RIGHT BRIDGE	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
202	11203	-	-	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2/13
202	22900	200	200	400	SY	APPROACH SLAB REMOVED				400	
503	21301	-	-	LS	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN					2/13
512	10100	709	695	1404	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	120	595	689		
516	10011	113	111	224	FT	ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN			224		2/13
516	13200	150	150	300	SF	½" PREFORMED EXPANSION JOINT FILLER			300		
516	13600	374	374	748	SF	1" PREFORMED EXPANSION JOINT FILLER			748		
516	31001	109	107	216	FT	2" DEEP JOINT SEALER, AS PER PLAN			216		2/13
519	11101	228	183	411	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	175	186	50		2/13
526	25010	298	298	596	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T = 15")				596	2/13
526	90011	107	108	215	FT	TYPE A INSTALLATION, AS PER PLAN				215	2/13
530	00200	-	-	LS	LS	SPECIAL - STRUCTURE MISC.: CLEANING OF DRAINAGE SYSTEMS					2/13
848	10201	962	947	1909	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)			1909		2/13
848	20000	962	947	1909	SY	SURFACE PREPARATION USING HYDRODEMOLITION			1909		
848	30200	145	143	288	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			288		
848	50000	77	76	153	SY	HAND CHIPPING			153		
848	50100	-	-	LS	LS	TEST SLAB					
848	50200	11	10	21	CY	FULL-DEPTH REPAIR			21		
848	50320	962	947	1909	SY	EXISTING CONCRETE OVERLAY REMOVED (1¾" THICK)			1909		
848	50340	145	143	188	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			188		

ABBREVIATION LEGEND

A.P.P. - AS PER PLAN
APPR. (APP.) - APPROACH
BOT. (B) - BOTTOM
BRG. - BEARING
℄ - CENTERLINE
C.J. - CONSTRUCTION JOINT
CLR. - CLEARANCE
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
CY - CUBIC YARD
DIA. - DIAMETER
EA - EACH
E.F. - EACH FACE
EL. (ELEV.) - ELEVATION
EX. - EXISTING
F.F. - FAR FACE
FT - FEET
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE
HSR - HARD SHOULDER RUNNING
LB - POUND
LMC - LATEX MODIFIED CONCRETE
LONG. - LONGITUDINAL
LS- LUMP SUM
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
NB - NORTHBOUND
N.F. - NEAR FACE
P.B. - PORTABLE BARRIER
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PGL - PROFILE GRADE LINE
PROP. - PROPOSED
RT. - RIGHT
SB - SOUTHBOUND
SDC - SUPERPLASTICIZED DENSE CONCRETE
SER. - SERIES
STA. - STATION
SY - SQUARE YARD
SHDR. (SHD.) - SHOULDER
(T) - TOP
T/T - TOE-TO-TOE
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
W/ - WITH
W.R.T. - WITH RESPECT TO
ϕ - DIAMETER

BRIDGE ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN 2507986
DESIGN AGENCY Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 3 | TOTAL 13
SHEET P. 396 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:10:02 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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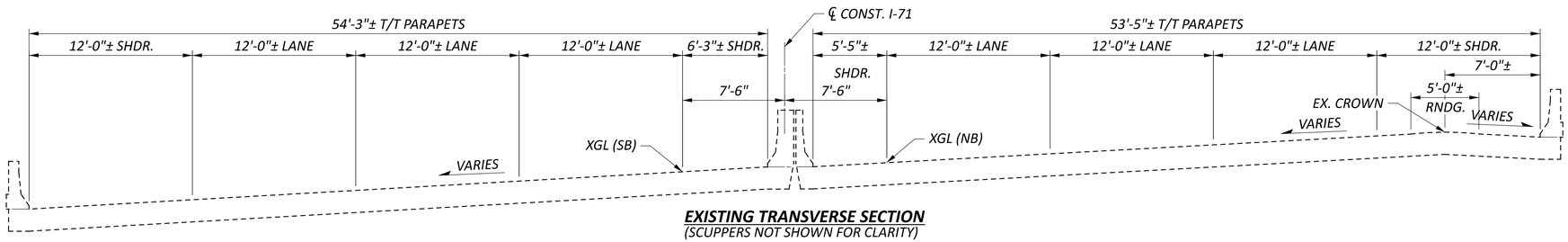

EXISTING TRANSVERSE SECTION
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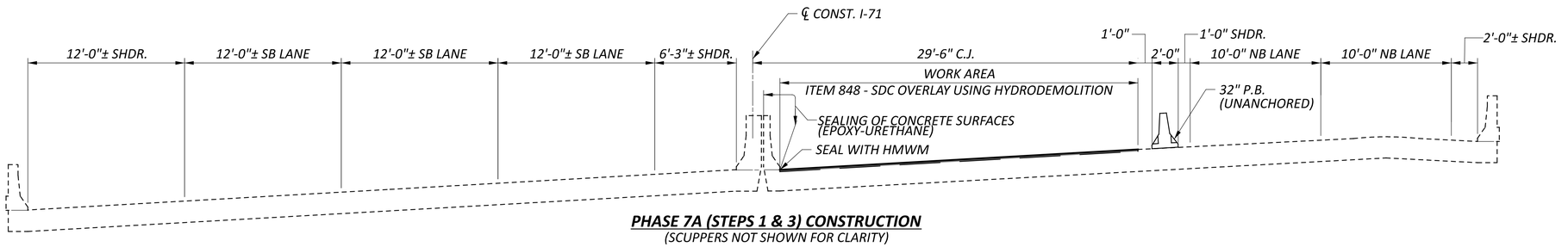
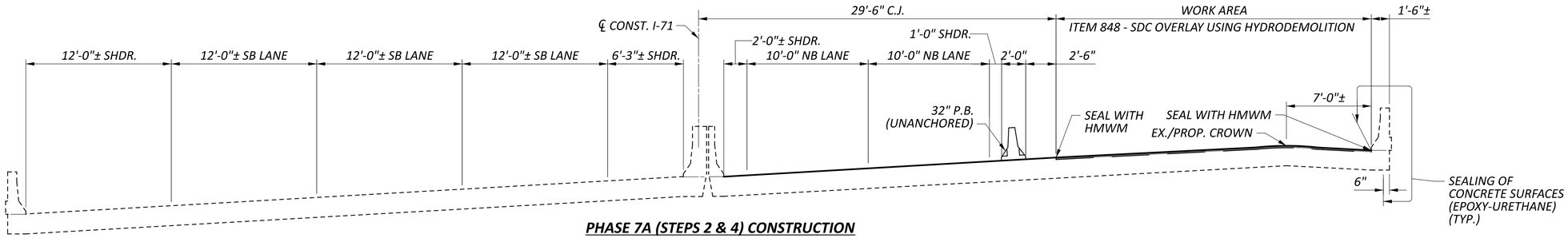
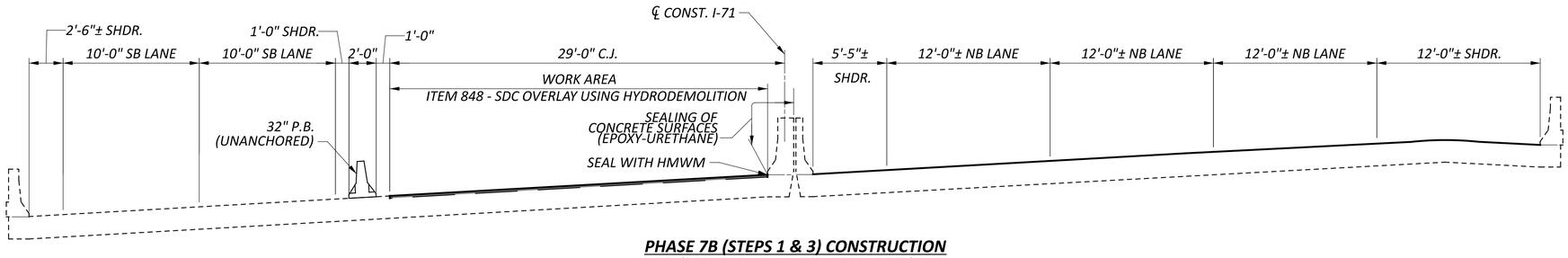


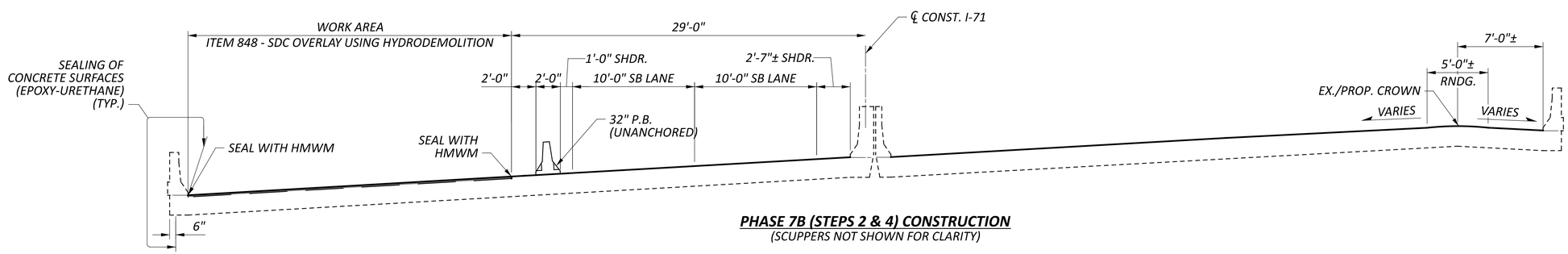
PHASE 7A (STEPS 1 & 3) CONSTRUCTION
(SCUPPERS NOT SHOWN FOR CLARITY)



PHASE 7A (STEPS 2 & 4) CONSTRUCTION
(SCUPPERS NOT SHOWN FOR CLARITY)



PHASE 7B (STEPS 1 & 3) CONSTRUCTION
(SCUPPERS NOT SHOWN FOR CLARITY)



PHASE 7B (STEPS 2 & 4) CONSTRUCTION
(SCUPPERS NOT SHOWN FOR CLARITY)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 3/13.
2. FOR TYPICAL OVERLAY DETAILS, SEE SHEET 10/13.
3. SEAL JOINTS IN ACCORDANCE WITH SS 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.
4. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES.
5. REFER TO TRAFFIC CONTROL PLANS FOR PROPOSED MARKINGS.

STAGED CONSTRUCTION DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	MAN
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	4
TOTAL	13
SHEET	P. 397
TOTAL	618

FRA-71-19.10

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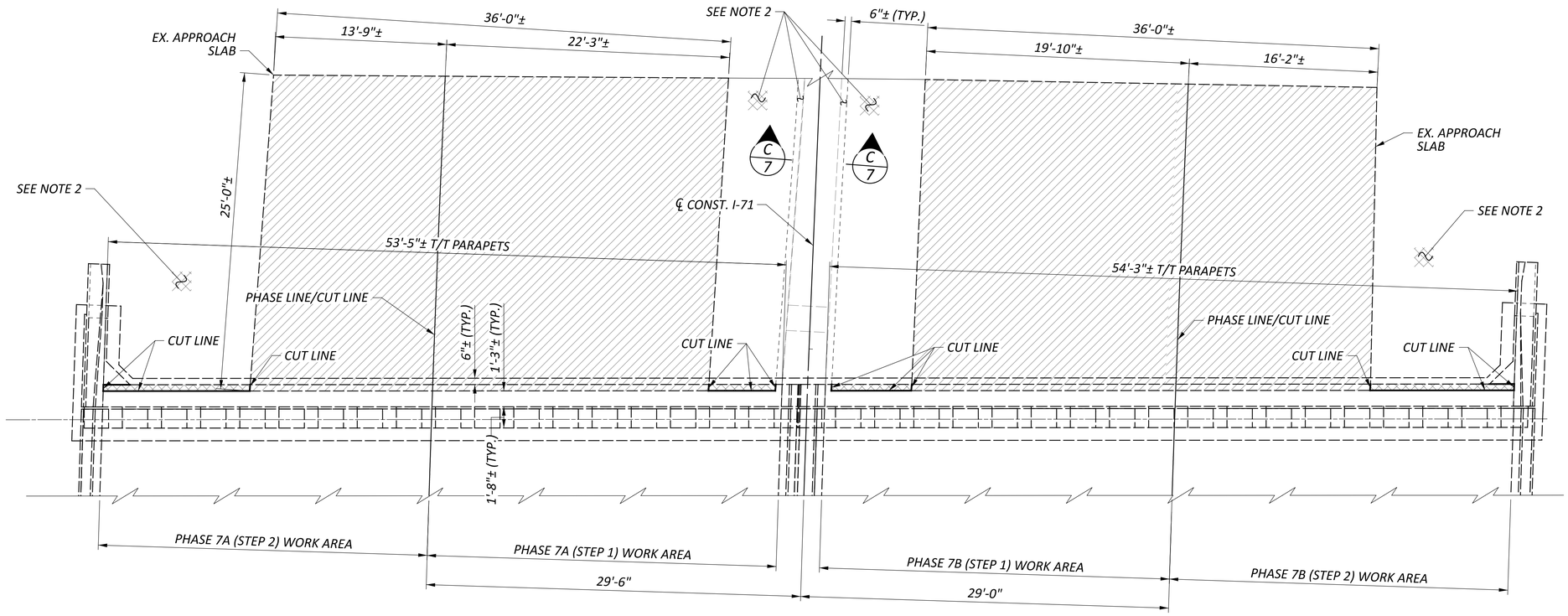
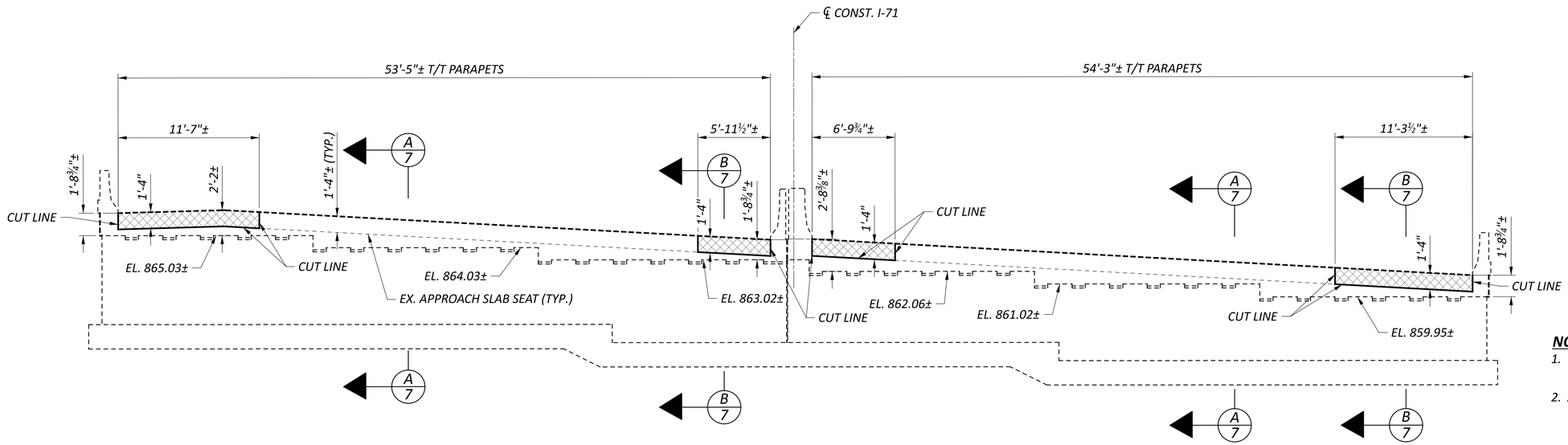


PLAN - REAR ABUTMENT
(EX. REINFORCING AND JOINT ARMOR NOT SHOWN FOR CLARITY)



ELEVATION - REAR ABUTMENT
(EX. REINFORCING NOT SHOWN FOR CLARITY)

LEGEND:

- *ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN*
- *ITEM 202 - APPROACH SLAB REMOVED*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 3/13.*
2. *ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXISTS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.*

REAR ABUTMENT - REMOVAL DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	5
TOTAL	13
SHEET	P. 398
TOTAL	618

FRA-71-19.10

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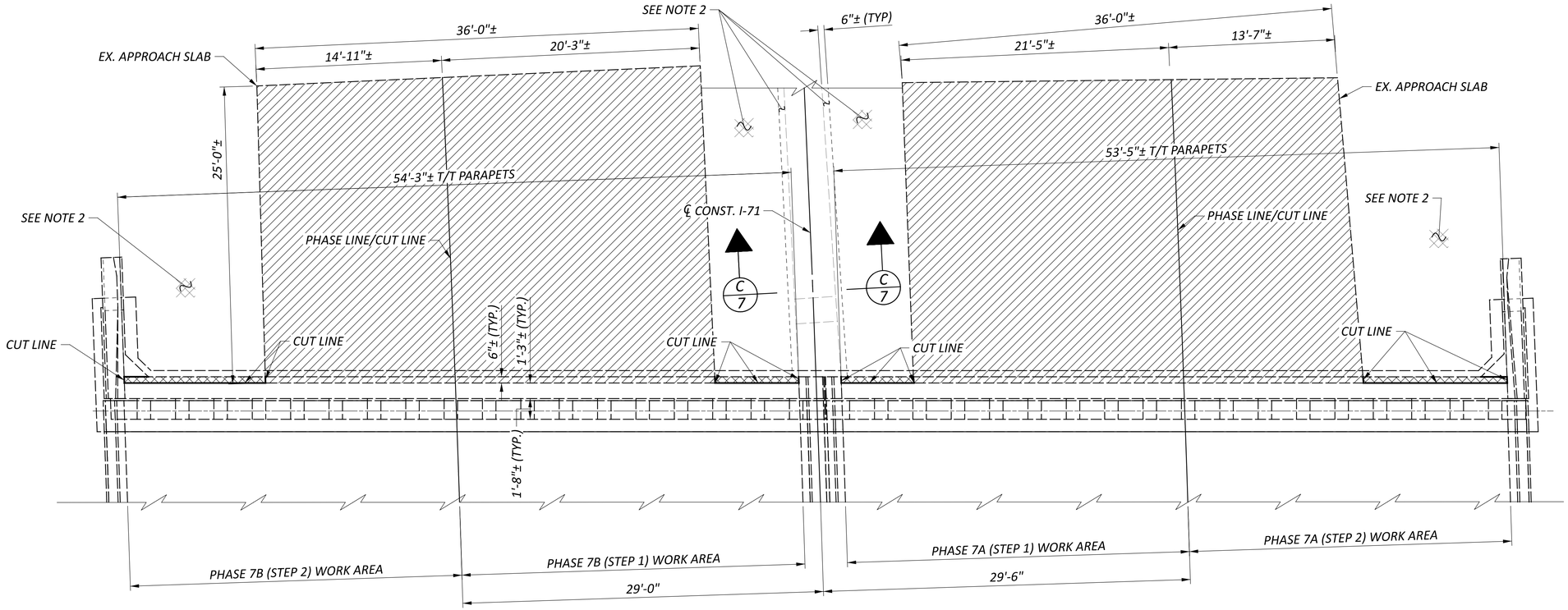
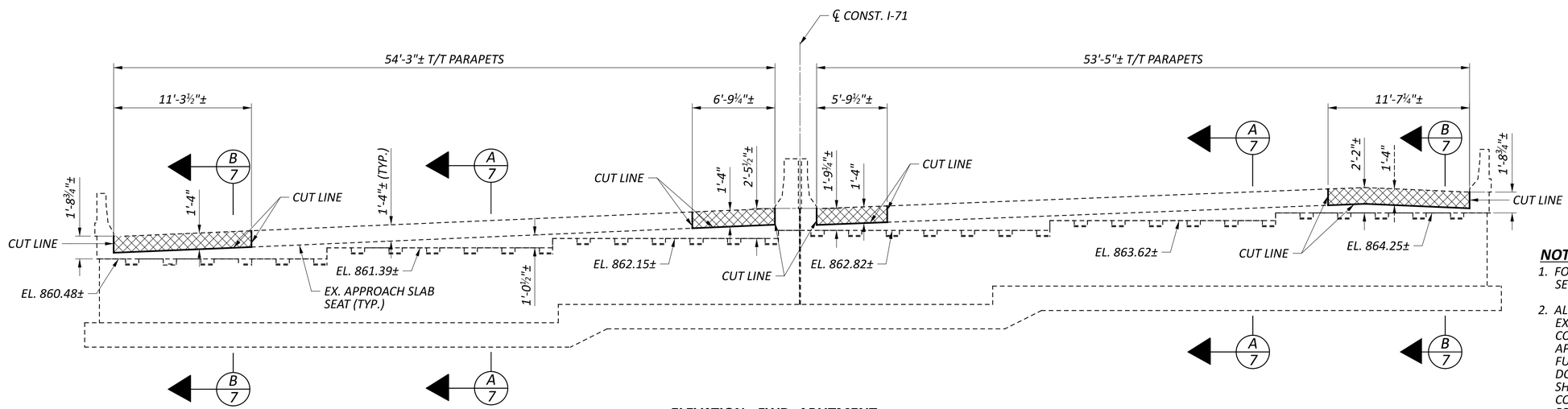


PLAN - FWD. ABUTMENT
(EX. REINFORCING AND JOINT ARMOR NOT SHOWN FOR CLARITY)



ELEVATION - FWD. ABUTMENT
(EX. REINFORCING NOT SHOWN FOR CLARITY)

LEGEND:

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- ITEM 202 - APPROACH SLAB REMOVED

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 3/13.
2. ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXISTS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

FORWARD ABUTMENT - REMOVAL DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	6
TOTAL	13
SHEET	P. 399
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:10:51 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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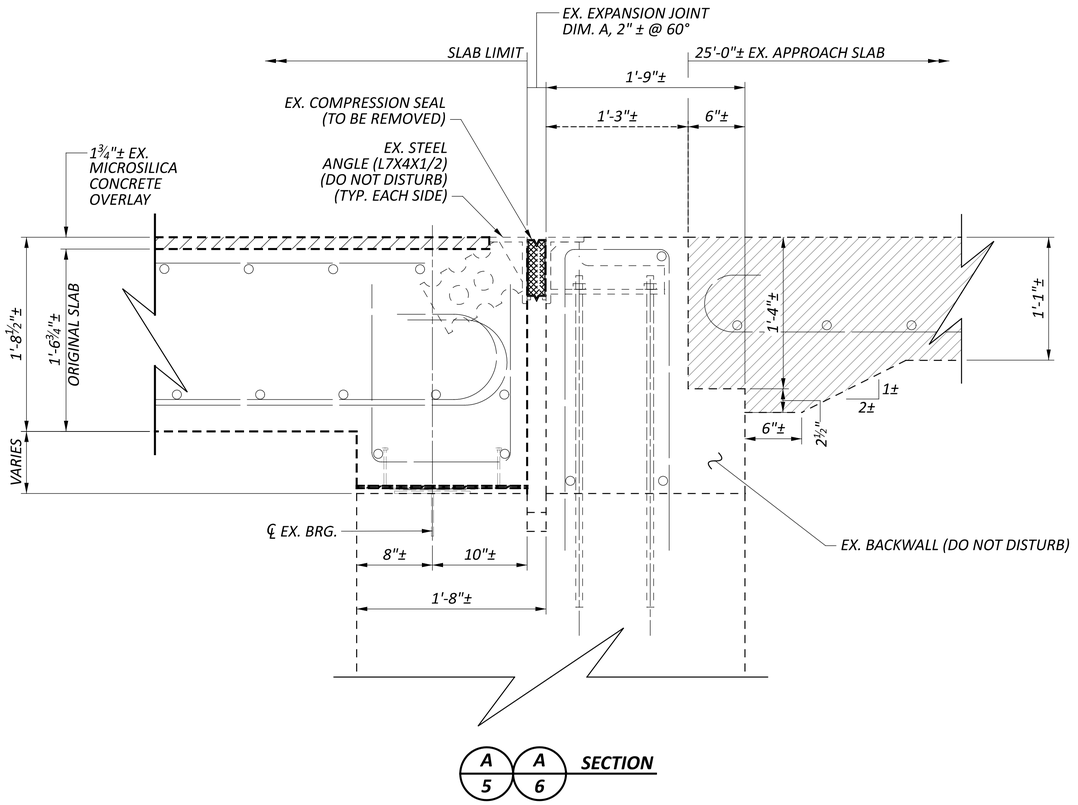
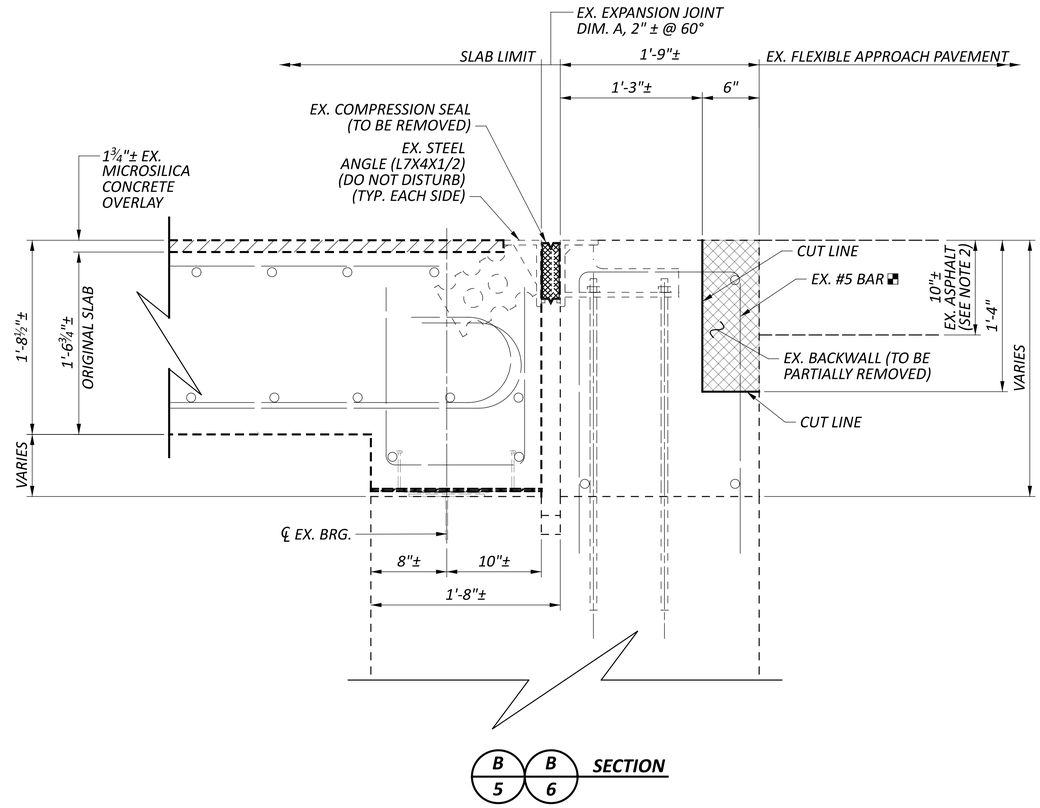
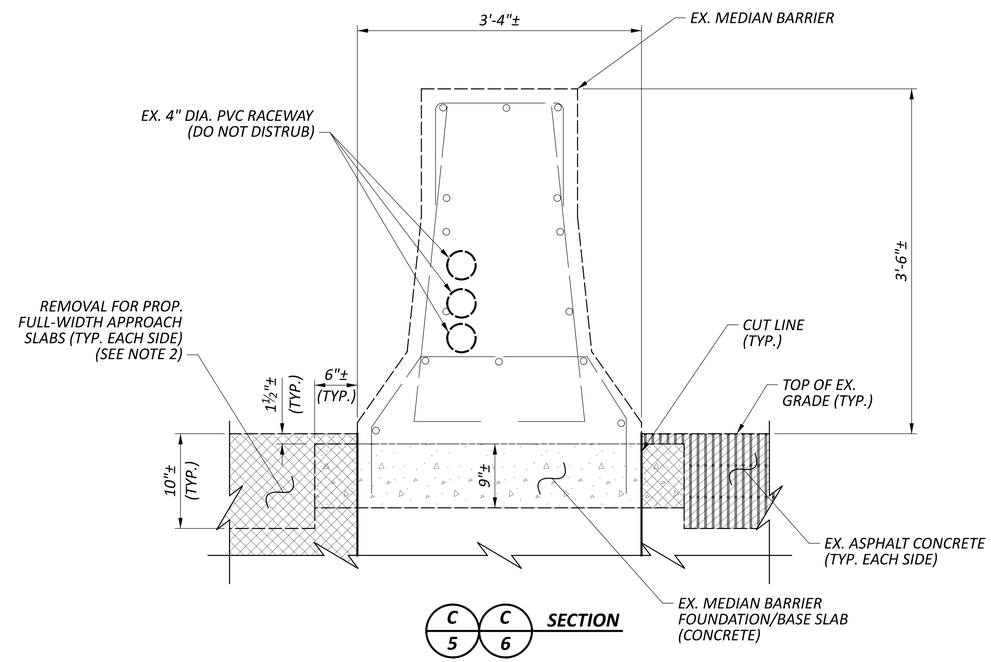


A/5 A/6 SECTION



B/5 B/6 SECTION



C/5 C/6 SECTION

LEGEND:

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- ITEM 202 - APPROACH SLAB REMOVED
- CUT EXISTING REINFORCING BAR(S) FLUSH AT THE CUT LINE

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 3/13.
2. ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXISTS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

ABUTMENT REMOVAL SECTIONS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	QTH
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	7
TOTAL	13
SHEET	P. 400
TOTAL	618

FRA-71-19.10

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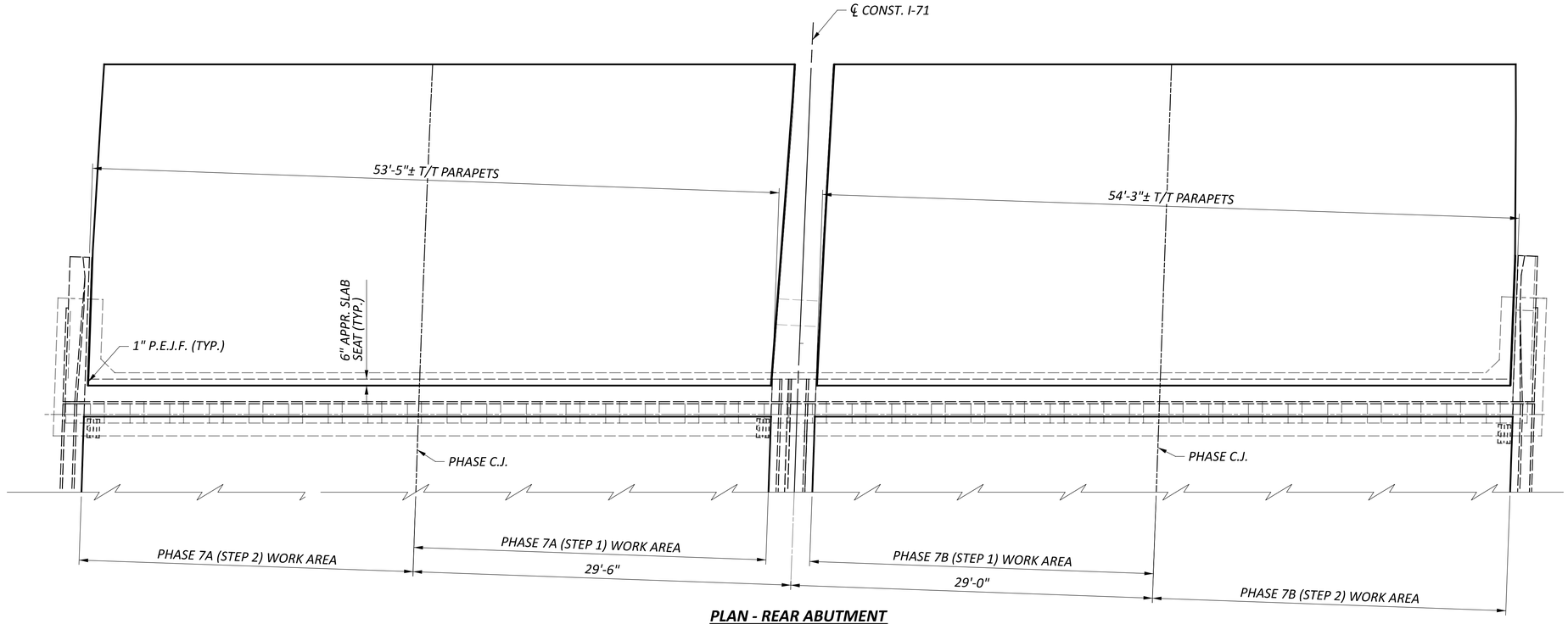
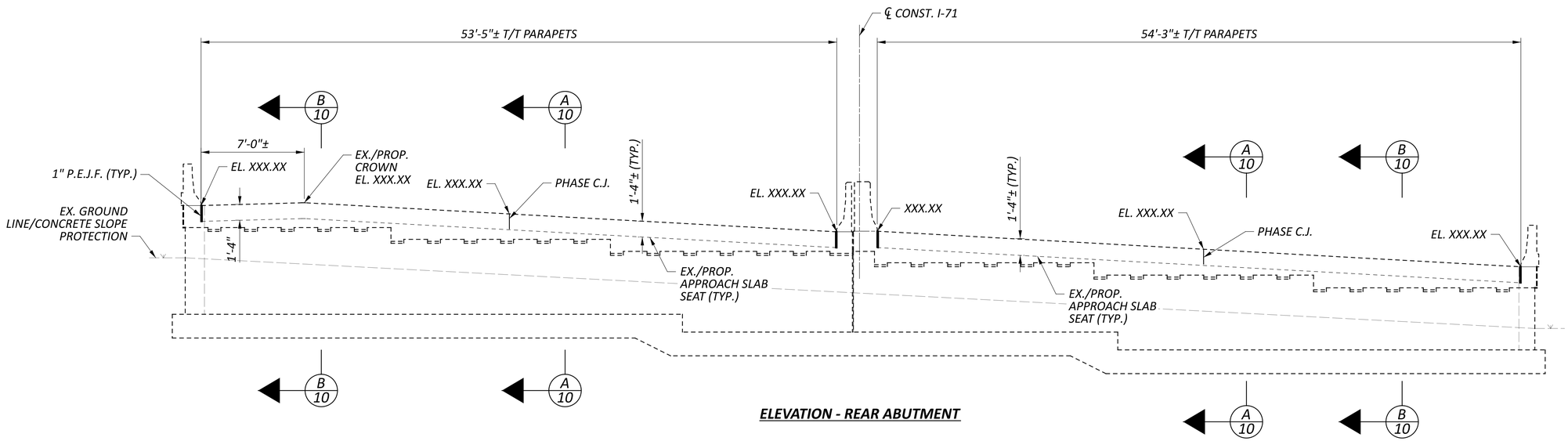


PLAN - REAR ABUTMENT

(EXP. JT. AND JT. ARMOR NOT SHOWN FOR CLARITY)



ELEVATION - REAR ABUTMENT

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 3/13.*
2. *FOR PROPOSED REAR APPROACH SLAB DETAILS, SEE SHEET 11/13.*

REAR ABUTMENT DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	MAN
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	8
TOTAL	13
SHEET	P. 401
TOTAL	618

FRA-71-19.10

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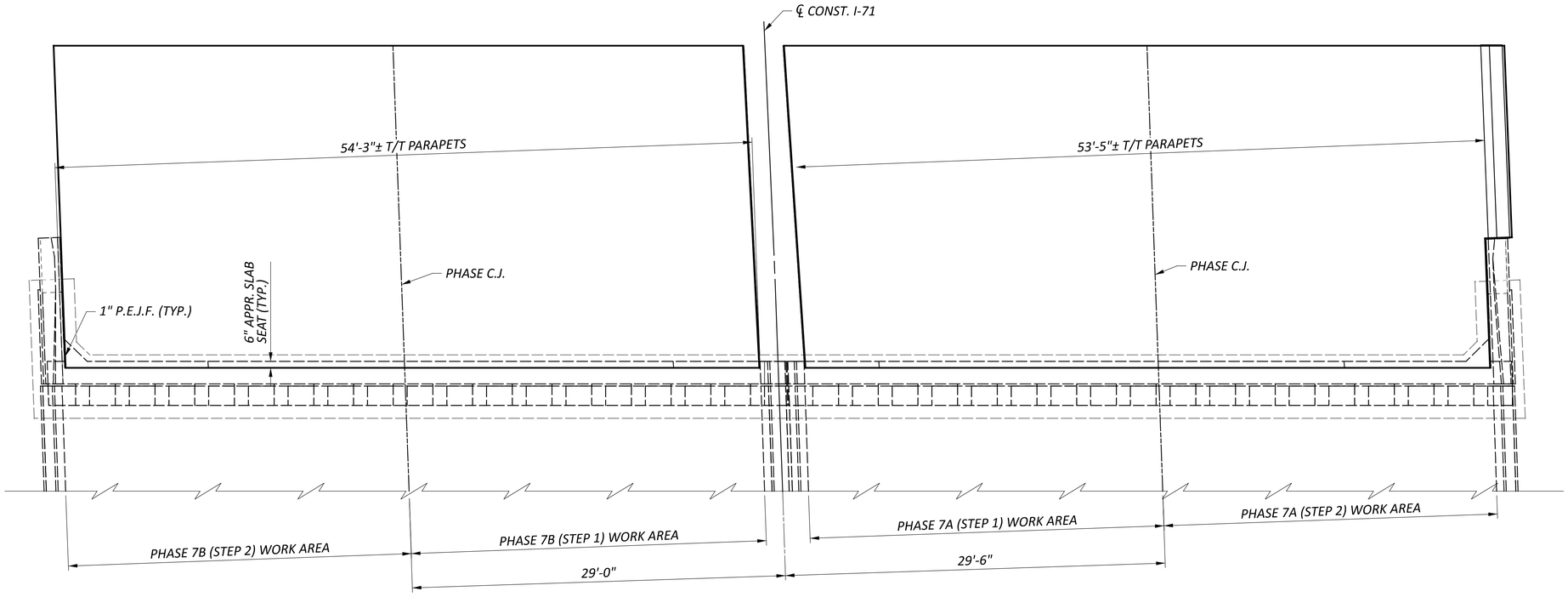
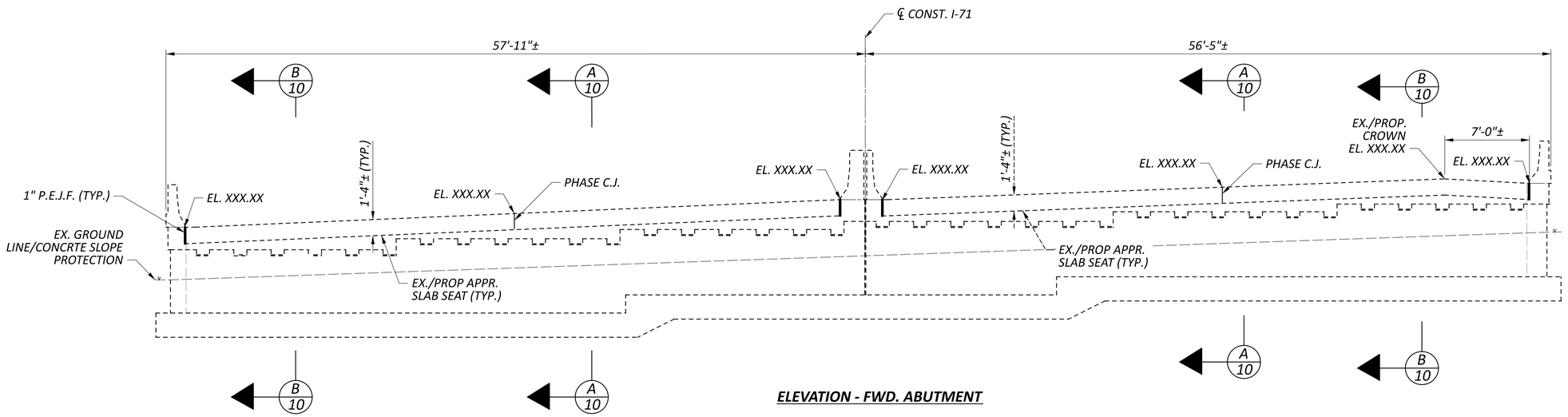


PLAN - FWD. ABUTMENT
(EXP. JT. AND JT. ARMOR NOT SHOWN FOR CLARITY)



ELEVATION - FWD. ABUTMENT

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 3/13.*
2. *FOR PROPOSED FORWARD APPROACH SLAB DETAILS, SEE SHEET 12/13.*

FORWAD ABUTMENT DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	9
TOTAL	13
SHEET	P. 402
TOTAL	618

FRA-71-19.10

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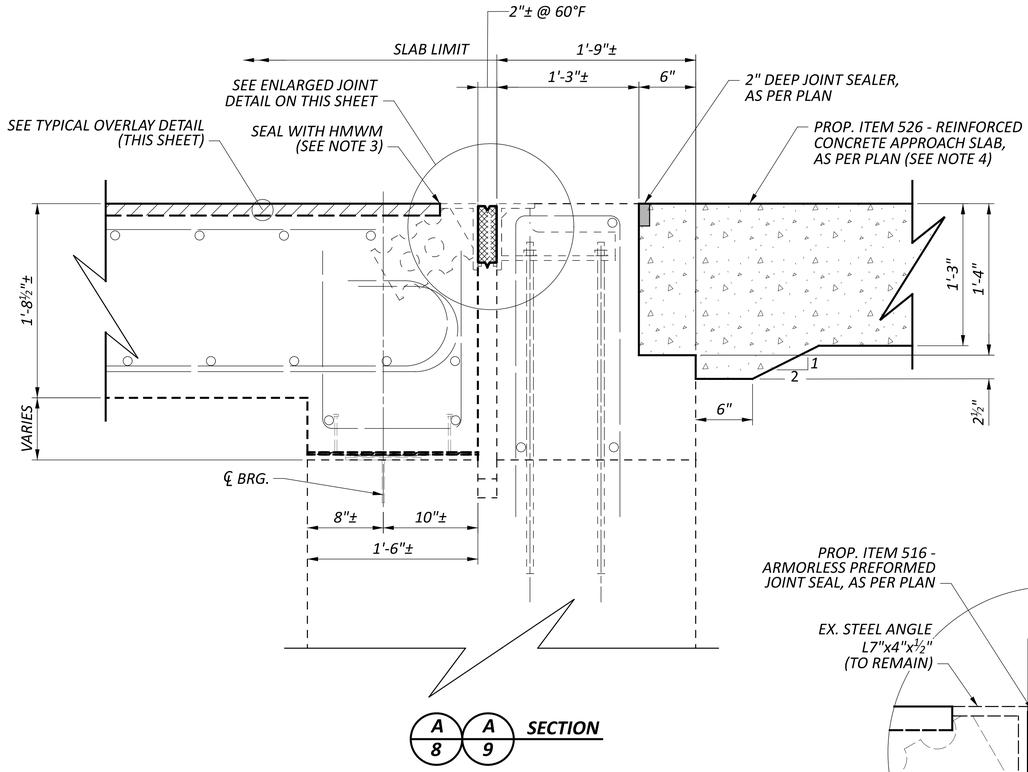
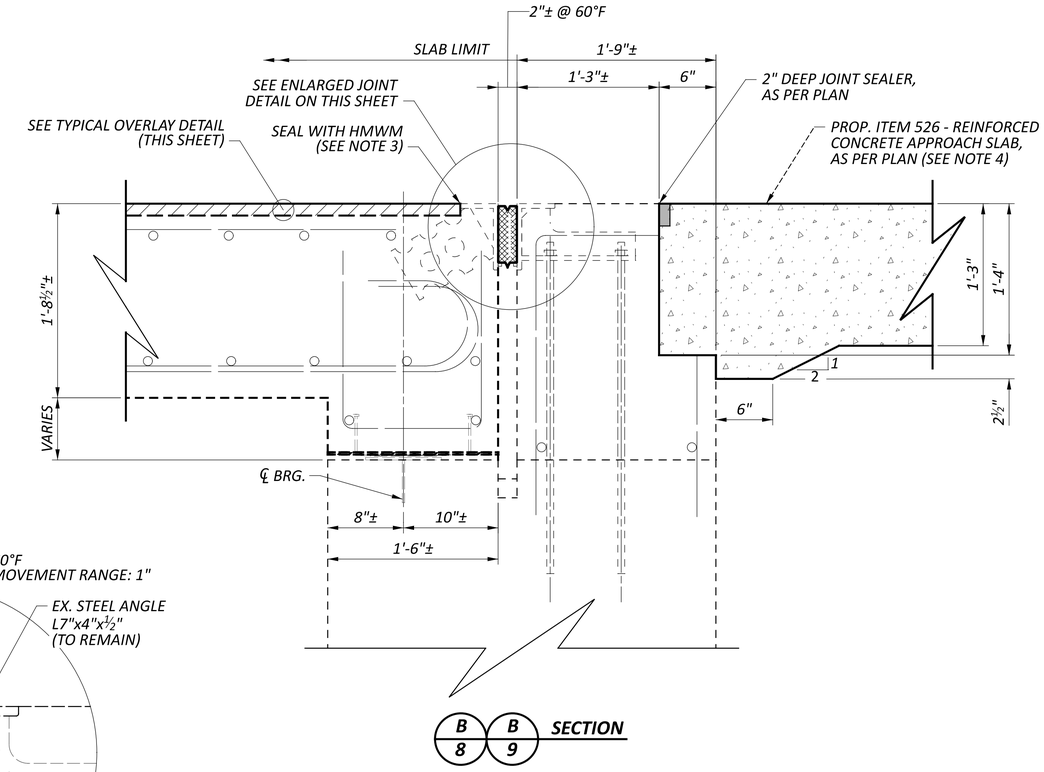
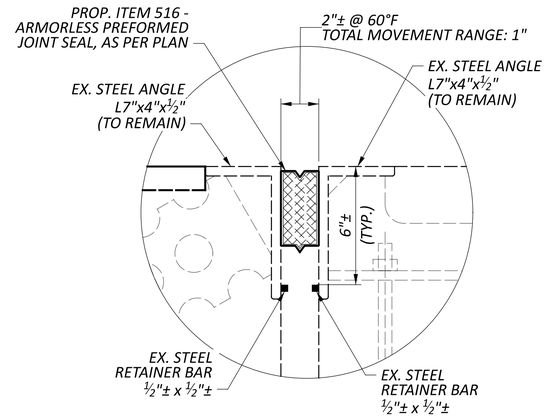
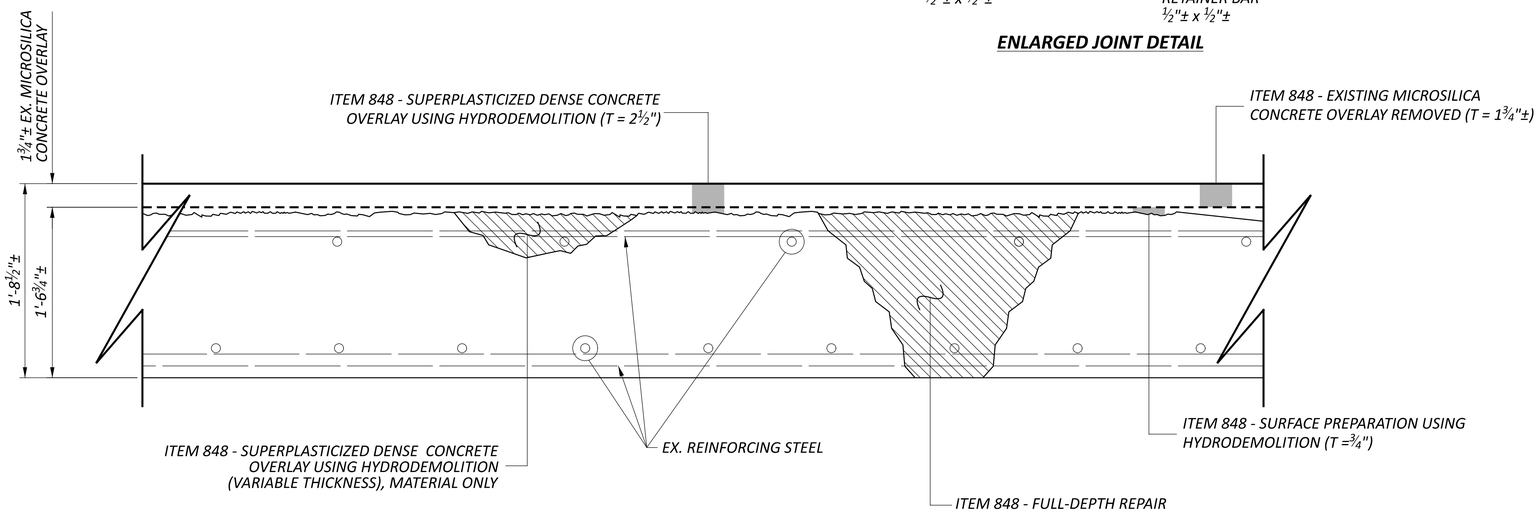






ENLARGED JOINT DETAIL



TYPICAL OVERLAY DETAIL

NOTES:

1. *FOR ABBREVIATION LEGEND SEE SHEET 3/13.*
2. *FURNISH AMORLESS PREFORMED JOINT SEAL IN ONE CONTINUOUS PIECE. SEE SHEET 2/13 FOR ADDITIONAL NOTES.*
3. *SEAL JOINTS IN ACCORDANCE WITH SS 848. PER 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.*
4. *PROPOSED APPROACH SLAB SHALL OMIT REINFORCING TYING APPROACH SLAB TO EXISTING BACKWALL. IN OTHER WORDS OMIT 'D801' BARS TYPICALLY PROVIDED PER ODOT STANDARD CONSTRUCTION DRAWING AS-1-15.*

ABUTMENT & OVERAY DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN	2507986
DESIGN AGENCY	Jacobs
DESIGNER	QTH
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	10
TOTAL	13
SHEET	P. 403
TOTAL	618

FRA-71-19.10

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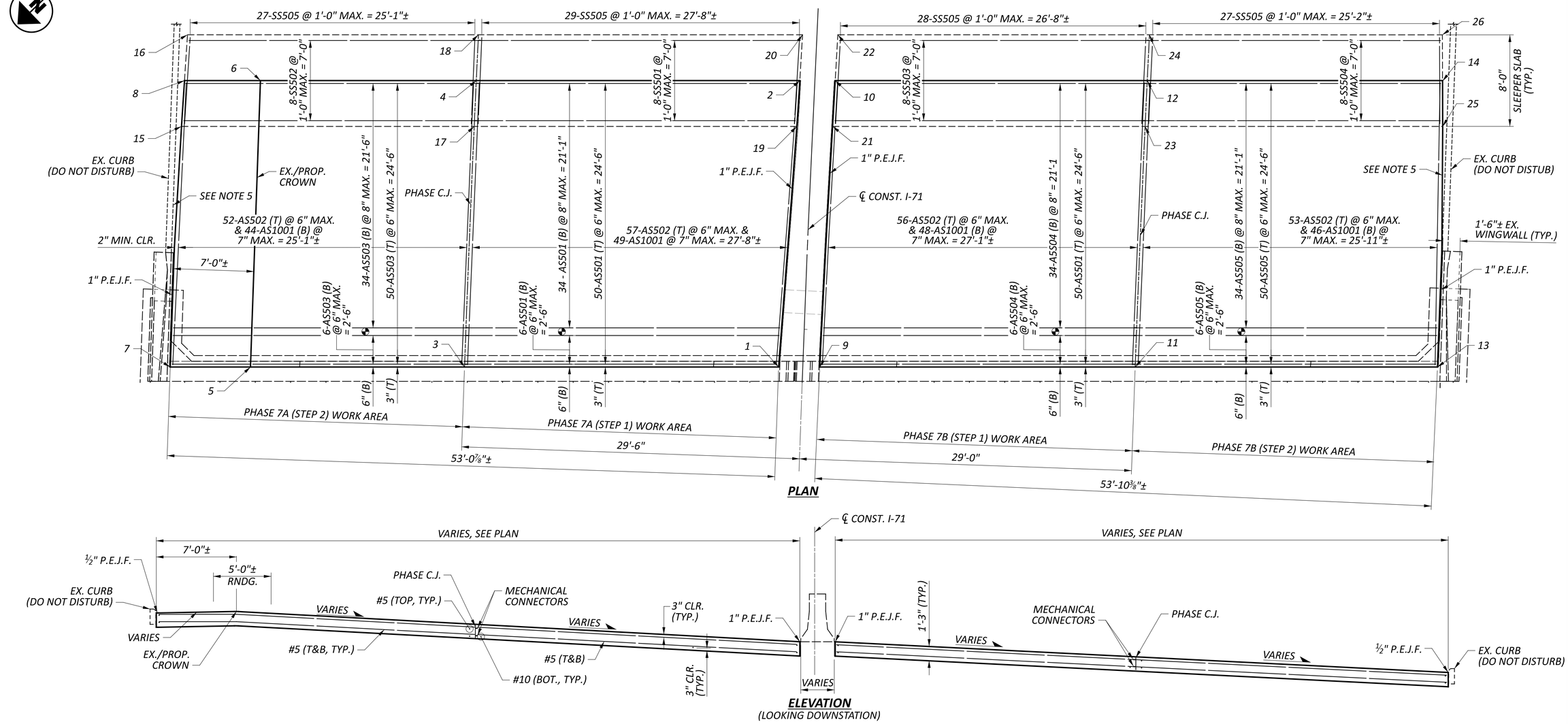

PLAN

ELEVATION
(LOOKING DOWNSTATION)

APPROACH SLAB FINAL SURFACE ELEVATIONS - RIGHT (NB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
1			
2			
3	TO BE COMPLETED WITH STAGE 3		
4			
5			
6			
7			
8			

APPROACH SLAB FINAL SURFACE ELEVATIONS - LEFT (SB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
9			
10			
11	TO BE COMPLETED WITH STAGE 3		
12			
13			
14			

SLEEPER SLAB - TOP OF SLEEPER SLAB ELEV. - RIGHT (NB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
15			
16			
17	TO BE COMPLETED WITH STAGE 3		
18			
19			
20			

SLEEPER SLAB - TOP OF SLEEPER SLAB ELEV. - LEFT (SB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
21			
22			
21	TO BE COMPLETED WITH STAGE 3		
23			
24			
25			
26			

LEGEND:

◕ - 8" MAX. (BOT.)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 3/13.
2. SEE ODOT SCD. DWG. AS-1-15, AS-2-15 AND BP-5.1 FOR ADDITIONAL DETAILS NOT SHOWN.
3. A POLYMER MODIFIED ASPHALT EXPANSION JOINT IS NOT REQUIRED WITH THE TYPE A INSTALLATION.
4. TRIM REINFORCING BARS AS NEEDED TO PROVIDE 2" MINIMUM CLEAR COVER.
5. PROPOSED OUTSIDE EDGE OF APPROACH SLABS SHALL FOLLOW EXISTING CURB LINE. PLACE 1/2" PREFORMED EXPANSION JOINT FILLER (P.E.J.F.) ALONG THE INTERFACE OF THE PROPOSED APPROACH SLAB AND EXISTING CURB AS SHOWN IN ODOT SCD. BP-5.1 AND SEAL WITH JOINT SEALER PER C&MS 705.04.
6. THE PROPOSED ELEVATIONS PROVIDED ARE TO BE CONSIDERED APPROXIMATE. FIELD VERIFY ALL PROPOSED ELEVATIONS AT THE LOCATIONS SHOWN IN THESE PLANS. ADJUST THE PROPOSED ELEVATIONS ACCORDINGLY TO MAINTAIN THE EXISTING CROSS SLOPE AND PROFILE IN ORDER TO MATCH UP WITH THE EXISTING ROADWAY AND THE EXISTING BRIDGE ABUTMENT. NOTIFY THE ENGINEER OF THE PROPOSED ADJUSTMENTS PRIOR TO CONSTRUCTING THE PROPOSED WORK.

REAR APPROACH SLAB DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN 2507986
DESIGN AGENCY Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 11 | TOTAL 13
SHEET P. 404 | TOTAL 618

FRA-71-19.10

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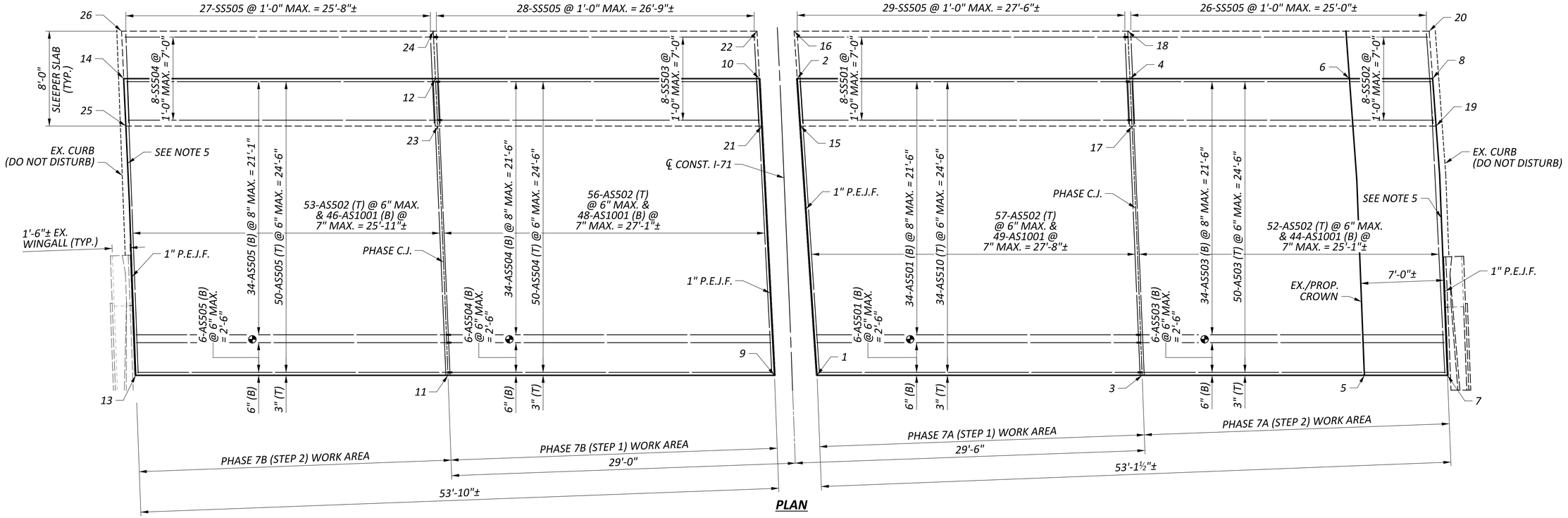
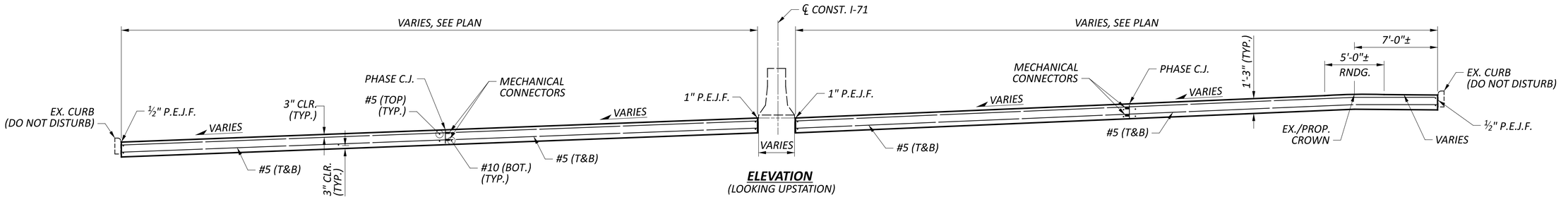


PLAN



ELEVATION
(LOOKING UPSTATION)

LEGEND:

◒ - 8" MAX. (BOT.)

NOTES;

1. FOR ABBREVIATION LEGEND, SEE SHEET 3/13.
2. SEE ODOT SCD. DWG. AS-1-15, AS-2-15 AND BP-5.1 FOR ADDITIONAL DETAILS NOT SHOWN.
3. A POLYMER MODIFIED ASPHALT EXPANSION JOINT IS NOT REQUIRED WITH THE TYPE A INSTALLATION.
4. TRIM REINFORCING BARS AS NEEDED TO PROVIDE 2" MINIMUM CLEAR COVER.
5. PROPOSED OUTSIDE EDGE OF APPROACH SLAB SHALL FOLLOW EXISTING CURB LINE. PLACE 1/2" PREFORMED EXPANSION JOINT FILLER (P.E.J.F.) ALONG THE INTERFACE OF THE PROPOSED APPROACH SLAB AND EXISTING CURB AS SHOWN IN ODOT SCD. BP-5.1 AND SEAL WITH JOINT SEALER PER C&MS 705.04.
6. THE PROPOSED ELEVATIONS PROVIDED ARE TO BE CONSIDERED APPROXIMATE. FIELD VERIFY ALL PROPOSED ELEVATIONS AT THE LOCATIONS SHOWN IN THESE PLANS. ADJUST THE PROPOSED ELEVATIONS ACCORDINGLY TO MAINTAIN THE EXISTING CROSS SLOPE AND PROFILE IN ORDER TO MATCH UP WITH THE EXISTING ROADWAY AND THE EXISTING BRIDGE ABUTMENT. NOTIFY THE ENGINEER OF THE PROPOSED ADJUSTMENTS PRIOR TO CONSTRUCTING THE PROPOSED WORK.

APPROACH SLAB FINAL SURFACE ELEVATIONS - RIGHT (NB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
1			
2			
3	TO BE COMPLETED WITH STAGE 3		
4			
5			
6			
7			
8			

SLEEPER SLAB - TOP OF SLEEPER SLAB ELEV. - RIGHT (NB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
15			
16			
17	TO BE COMPLETED WITH STAGE 3		
18			
19			
20			

APPROACH SLAB FINAL SURFACE ELEVATIONS - LEFT (SB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
9			
10			
11	TO BE COMPLETED WITH STAGE 3		
12			
13			
14			

SLEEPER SLAB - TOP OF SLEEPER SLAB ELEV. - LEFT (SB)			
POINT ID	STATION	OFFSET	SURFACE ELEV.
21			
22			
23	TO BE COMPLETED WITH STAGE 3		
24			
25			
26			

FORWARD APPROACH SLAB DETAILS
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN 2507986
DESIGN AGENCY Jacobs
DESIGNER KPL | CHECKER ADS
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 12 | TOTAL 13
SHEET P. 405 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:12:39 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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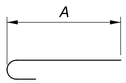
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
APPROACH SLABS (FOR INFORMATION ONLY)											
AS501■	180	27'-9"	5,225	STR							
AS502	436	24'-6"	11,141	STR							
AS503■	180	25'-3"	4,740	STR							
AS504■	180	27'-2"	5,100	STR							
AS505	180	26'-0"	4,881	STR							
AS1001	374	25'-11"	41,708	16	24'-6"						
SUB-TOTAL			72,795								
SLEEPER SLABS (FOR INFORMATION ONLY)											
SS501	16	27'-8"	462	STR							
SS502	16	25'-0"	417	STR							
SS503	16	26'-9"	446	STR							
SS504	16	25'-8"	428	STR							
SS505■	16	7'-6"	1,729	STR							
SUB-TOTAL			3,482								
GRAND TOTAL			76,277								

APPROACH SLAB AND SLEEPER SLAB REINFORCING SHOWN INCLUDES THE NUMBER/WEIGHT OF THE LEFT AND RIGHT BRIDGES FOR BOTH THE REAR AND FORWARD APPROACH SLABS.



TYPE-16

LEGEND:

■ - *REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.*

NOTES:

1. *THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, AN AS501 BAR IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.*
2. *STRAIGHT BARS ARE INDICATED BY "STR".*
3. *ALL REINFORCING STEEL SHALL BE EPOXY COATED.*
4. *ALL REINFORCING STEEL SHALL BE GRADE 60 WITH A MINIMUM YIELD STRENGTH OF 60 KSI.*

REINFORCING STEEL LIST
BRIDGE NO. FRA-00071-20.750
I-71 OVER HIAWATHA PARK DR.

SFN 2507986
DESIGN AGENCY Jacobs
DESIGNER KPL | CHECKER ADS
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 13 | TOTAL 13
SHEET P. 406 | TOTAL 618

FRA-71-19.10

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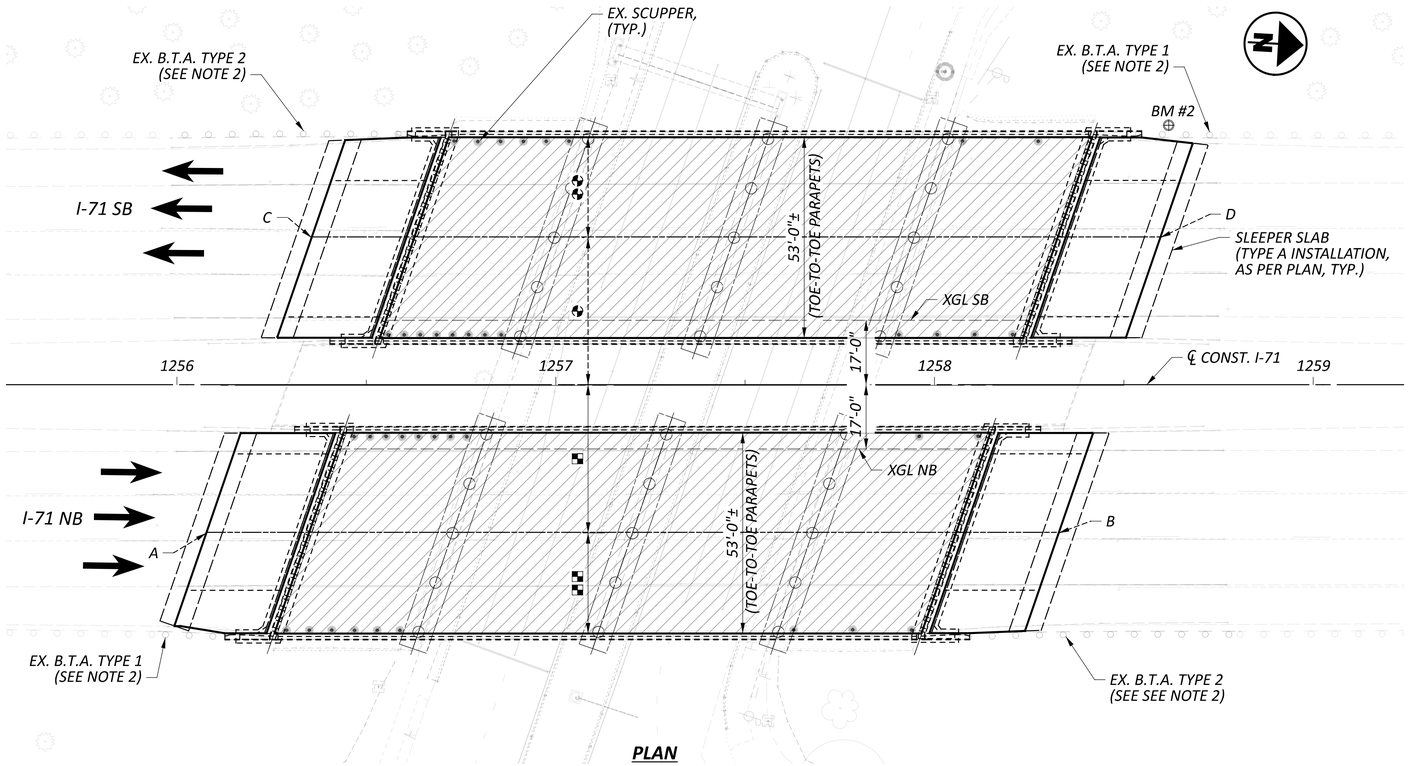
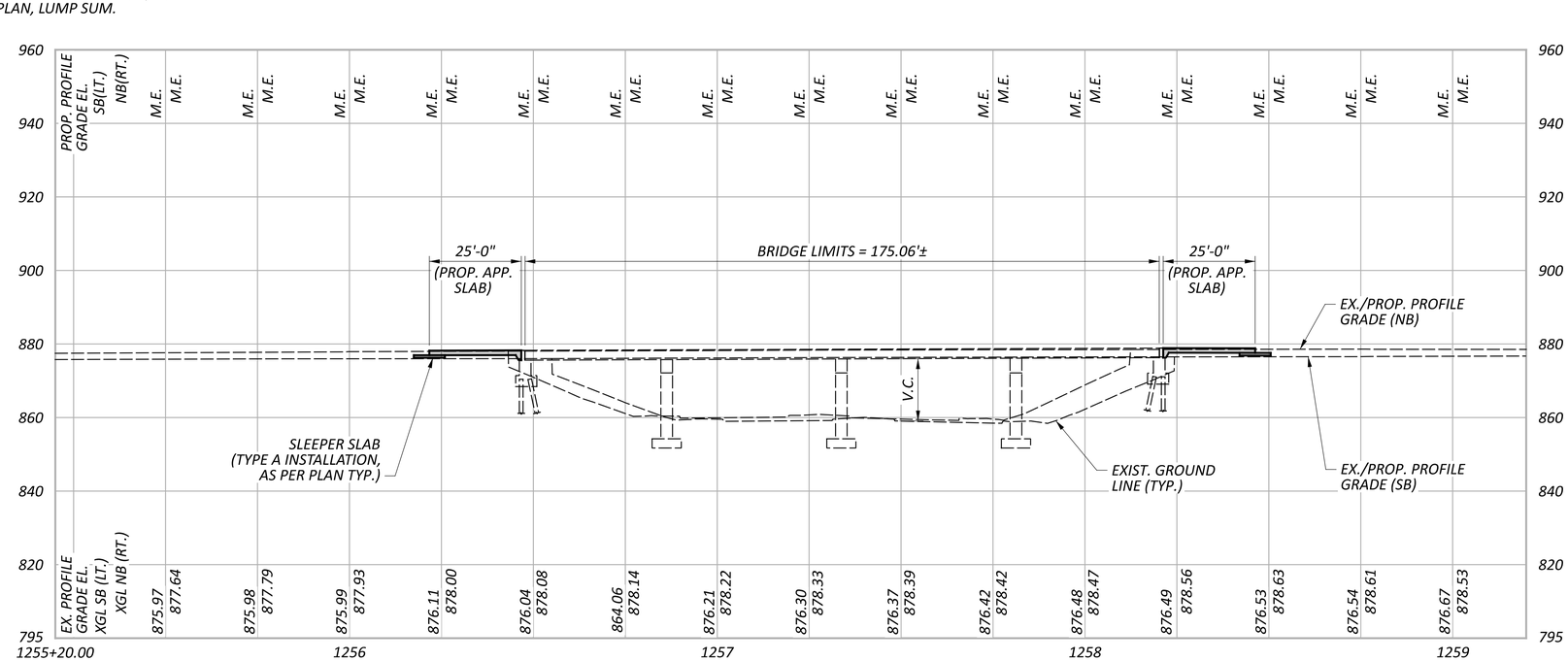


PLAN

NOTES:

1. SEE ROADWAY PLANS FOR DESIGN TRAFFIC.
2. REMOVE AND REINSTALL EXISTING BRIDGE TERMINAL ASSEMBLIES (B.T.A.) AND APPROACH GUARDRAIL INCLUDING ALL HARDWARE AS NECESSARY TO CONSTRUCT PROPOSED APPROACH SLABS. ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO REMOVE, STORE AND REINSTALL BRIDGE TERMINAL ASSEMBLIES AND GUARDRAIL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN, LUMP SUM.



PROFILE ALONG ℄ CONST. I-71

LEGEND:

- ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)
- PHASE 1B (STEPS 1 & 3) 39'-0" FROM ℄ CONST. I-71 TO PHASE C.J.
- PHASE 1B (STEPS 2 & 4) 26'-8½"± FROM PHASE C.J. TO TOE OF PARAPET
- PHASE 1A (STEPS 1 & 3) 39'-0" FROM ℄ CONST. I-71 TO PHASE C.J.
- PHASE 1A (STEPS 2 & 4) 26'-3½"± FROM PHASE C.J. TO TOE OF PARAPET

V.C. - NO CHANGE
15.00' REQUIRED MINIMUM VERTICAL CLEARANCE
15.17' ACTUAL MINIMUM VERTICAL CLEARANCE (INVENTORY)

A - PHASE C.J., I-71 NB @ BEGIN REAR APPROACH SLAB
CONST. I-71 STA. 1256+07.81, 39.00' RT.

B - PHASE C.J., I-71 NB @ END FWD. APPROACH SLAB
CONST. I-71 STA. 1258+32.85, 39.00' RT.

C - PHASE C.J., I-71 SB @ BEGIN REAR APPROACH SLAB
CONST. I-71 STA. 1256+35.62, 39.00' LT.

D - PHASE C.J., I-71 NB @ END FWD. APPROACH SLAB
CONST. I-71 STA. 1258+59.69, 39.00' LT.

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS REINFORCED CONCRETE SLAB SUPPORTED ON CAP AND COLUMN PIERS AND STUB ABUTMENTS SUPPORTED ON PILES

SPANS: 38'-0"± - 47'-6"± - 47'-6"± - 38'-0"± C/C BRGS.

ROADWAY: 53'-0"± (LT.), 53'-0"± (RT.)

LOADING: CF 2,000 (57)

SKEW: 19°00'00" (LEFT FORWARD)

WEARING SURFACE: 1¾" ± MICROSILICA CONCRETE OVERLAY

APPROACH SLABS: AS-1-54, 25' LONG

ALIGNMENT: TANGENT

CROWN: 0.0156 FT./FT.

STRUCTURE FILE NUMBER: 2508133 & 2508168

DATE BUILT: 1960

DISPOSITION: BRIDGE PRESERVATION (SEE PROPOSED WORK BELOW)

PROPOSED STRUCTURE

PROPOSED WORK: REMOVE EXISTING 1¾"± THICK MICROSILICA CONCRETE OVERLAY USING HYDRODMEOLITION. PLACE 2½" THICK SDC OVERLAY ON SLAB. REPLACE APPRACH SLABS; INSTALL FULL-WIDTH APPROACH SLABS WITH TYPE A INSTALLATION. MODIFY BACKWALL TO ACCOMODATE PROPOSED APPROACH SLABS. C&MS 519 PATCHING AND SEALING EXPOSED CONCRETE SURFACES.

TYPE: NO CHANGE

SPANS: NO CHANGE

ROADWAY: NO CHANGE

LOADING: NO CHANGE

SKEW: NO CHANGE

WEARING SURFACE: 2½" SDC OVERLAY FOR SB & 2½" SDC OVERLAY FOR NB

APPROACH SLABS: AS-1-15, 25' LONG & AS-2-15 (TYPE A INSTALLATION, A.P.P.)

ALIGNMENT: NO CHANGE

CROWN: NO CHANGE

STRUCTURE FILE NUMBER: NO CHANGE

CROWN: NO CHANGE

DECK AREA: 8752± SF (LT.), 8802± SF (RT.)

COORDINATES: LATITUDE 40°02'46.04" NORTH
LONGITUDE 82°59'50.54" WEST

SITE PLAN
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
KPL	ADS

REVIEWER MJR 01/25/25

PROJECT ID 109164

SUBSET	TOTAL
1	14

SHEET	TOTAL
P. 407	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	01/20/2023
AS-2-15	REVISED	07/21/2023
PCB-91	REVISED	07/17/2020

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848 DATED 07/19/2024

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL (BDM), 2020, DATED JULY, 2025.

DECK PROTECTION METHOD

NEW SDC OVERLAY, 2½" THICKNESS

DESIGN DATA

N/A

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS

CONSTRUCTION PLANS FOR THE EXISTING BRIDE ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION (ODOT), DISTRICT 6 OFFICE, 400 E. WILLIAM STREET, DELAWARE, OHIO AND ARE AVAILABLE FOR REFERENCE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.01.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL OF UNCLASSIFIED ITEMS (EXISTING FLEXIBLE PAVEMENT, PORTIONS OF THE EXISTING CONCRETE BASE SLAB (A.K.A. FOUNDATION) SUPPORTING THE MEDIAN BARRIER, AGGREGATE BASE, SUBGRADE, SOIL, TOPSOIL, DEBRIS, VEGETATION, ETC.) TO CONSTRUCT PROPOSED FULL-WIDTH APPROACH SLABS. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL MATERIAL OFF SITE.

ADDITIONALLY, THIS ITEM SHALL INCLUDE ANY WORK NECESSARY TO REMOVE, STORE AND REINSTALL EXISTING BRIDGE TERMINAL ASSEMBLIES AND GUARDRAIL AS NECESSARY TO CONSTRUCT THE PROPOSED APPROACH SLABS.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED FOR PAYMENT UNDER THE LUMP SUM CONTRACT BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

UPON COMPLETION OF THE PROPOSED APPROACH SLAB, THE CONTRACTOR SHALL SAW CUT ALONG THE APPROACH SLAB AND BRIDGE LIMIT AS DETAILED IN THE PLANS, AN AREA 1" WIDE BY 2" DEEP AND FILL THIS AREA WITH HOT APPLIED JOINT SEALER PER C&MS 705.04.

ADDITIONALLY THIS ITEM INCLUDES REMOVING AND CLEANING THE EXISTING SLIDING PLATE EXPANSION JOINT TO PLACE NEW HOT APPLIED JOINT SEALER PER C&MS 705.04.

REFER TO SHEET 11/14 FOR ADDITIONAL NOTES AND DETAILS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL PROVISIONS OF C&MS 519 APPLY IN ADDITION TO THOSE LISTED HEREIN. THE CONTRACTOR SHALL EXPOSED CONCRETE SURFACES BASED ON VISUAL DETERIORATION ONLY. THE CONTRACTOR IS NOT REQUIRED TO SOUND THE ENTIRE EXPOSED CONCRETE SURFACES TO DETERMINE WHICH AREAS REQUIRE PATCHING.

THE ENGINEER SHALL PERFORM A VISUAL INSPECTION OF THE EXPOSED CONCRETE SURFACE. AREAS OBSERVED TO BE DETERIORATED WILL BE DELINEATED BY THE ENGINEER BY SOUNDING THE CONCRETE. THE ENGINEER WILL SOUND AND MARK THE PATCHING LIMITS USING ORANGE SPRAY PAINT AND NOTIFY THE CONTRACTOR WHEN THIS ACTIVITY IS COMPLETE.

THE FOLLOWING QUANTITY HAS BEEN ESTIMATED BASED UPON THE OBSERVED CONDITION USING AVAILABLE IMAGERY, A 2023 INSPECTION BY THE ENGINEER AND AVAILABLE INSPECTION RECORDS.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN: XXX SF.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REPAIRS ON A SQUARE-FOOT BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN. ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT PRICE FOR ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")

ITEM 526 - TYPE A INSTALLATION, AS PER PLAN

PROVISIONS OF C&MS 511 & 526 APPLY IN ADDITION TO THE CONDITIONS AND/OR REVISIONS HEREIN.

TO CONFORM TO THE PERMITTED WEEKEND CLOSURE WINDOW(S) TO PERFORM THE WORK; USE CONCRETE WITH AN ACCELERATING ADMIXTURE SUCH AS SIKA RAPID-1 OR ANY APPROVED EQUIVALENT TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 6 HOURS FOR THE TYPE A INSTALLATION AND 12 HOURS FOR THE REINFORCED CONCRETE APPROACH SLAB. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME PER SUPPLEMENT 1126.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

ADDITIONALLY, A POLYMER MODIFIED EXPANSION JOINT AS DETAILED IN ODOT STANDARD CONSTRUCTION DRAWING AS-2-15 IS NOT REQUIRED.

ITEM 530 - SPECIAL - STRUCTURES MISC.: CLEANING OF DRAINAGE SYSTEMS

THIS WORK SHALL CONSISTS OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM DRAINAGE SYSTEMS. EQUIPMENT MAY CONSISTS OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS FROM DRAINAGE SYSTEMS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLANS SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. IMMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOURS UNTIL WORK IS COMPLETE. CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPS AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, SCUPPERS AND DOWNSPOUTS (IF PRESENT).

THE FOLLOWING ARE TO BE CLEANED:
1. CLEANING SCUPPERS AND DOWNSPOUTS (IF PRESENT):
A) USE SHOVEL, HAND SCRAPERS, AND OTHER TOOLS TO BREAK UP DEBRIS IN THE SCUPPERS TO THE MAXIMUM EXTEND PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.

THE CONTRACTOR SHALL USE POTABLE WATER FOR CLEANING. DISCHARGING TO OR COLLECTING WATER FROM STREAMS IS PROHIBITED. PRESSURE WASHER WATER PRESSURE SHALL BE CAPABLE OF 1,500 PSI. CONTRACTOR SHALL NOT PRESSURE WASH NEAR EXISTING UTILITIES OR BRIDGE ITEMS CONTAINING OR COATED WITH ASBESTOS OR TANSITE. OPERATING PRESSURES SHALL BE SUFFICIENT TO REMOVE THE ACCUMULATED MATERIAL WITHOUT DAMAGE TO THE STRUCTURE. THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE SYSTEMS REMAIN CLEAN AND FREE OF ALL DEBRIS UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE. ANY DAMAGE OR DETERIORATED SYSTEMS SHALL BE REPORTED TO THE ENGINEER.

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE AS FOLLOWS:

ITEM 503 SPECIAL - STRUCTURE, MISC.: CLEANING OF DRAINAGE SYSTEMS (LS)

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)

THIS ITEM SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION (SS) 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

A) THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

B) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER.

ABBREVIATION LEGEND

A.P.P. - AS PER PLAN
APPR. (APP.) - APPROACH
BOT. (B) - BOTTOM
BRG. - BEARING
℄ - CENTERLINE
C.J. - CONSTRUCTION JOINT
CLR. - CLEARANCE
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
CY - CUBIC YARD
DIA. - DIAMETER
EA - EACH
E.F. - EACH FACE
EL. (ELEV.) - ELEVATION
EX. - EXISTING
F.F. - FAR FACE
FT - FEET
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE
HSR - HARD SHOULDER RUNNING
LB - POUND
LMC - LATEX MODIFIED CONCRETE
LONG. - LONGITUDINAL
LS- LUMP SUM
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
NB - NORTHBOUND
N.F. - NEAR FACE
P.B. - PORTABLE BARRIER
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PGL - PROFILE GRADE LINE
PROP. - PROPOSED
RT. - RIGHT
SB - SOUTHBOUND
SDC - SUPERPLASTICIZED DENSE CONCRETE
SER. - SERIES
STA. - STATION
SY - SQUARE YARD
SHDR. (SHD.) - SHOULDER
(T) - TOP
T/T - TOE-TO-TOE
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
W/ - WITH
W.R.T. - WITH RESPECT TO
ϕ - DIAMETER

GENERAL NOTES
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133
DESIGN AGENCY Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 2 | TOTAL 14
SHEET P. 408 | TOTAL 618

FRA-71-19.10

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ITEM	EXTENSION	LEFT BRIDGE	RIGHT BRIDGE	TOTAL 01/NHS/BR	UNIT	ESTIMATED QUANTITIES DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
202	11203	-	-	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2/14
202	22900	212	212	424	SY	APPROACH SLAB REMOVED				424	
503	21301	-	-	LS	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN					2/14
512	10100	918	918	1836	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	142	1050	644		
516	13600	203	212	415	SF	1" PREFORMED EXPANSION JOINT FILLER			415		
516	31001	113	113	226	FT	2" DEEP JOINT SEALER, AS PER PLAN			226		2/14
519	11101	559	559	1118	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	100	318	700		2/14
526	25010	294	294	588	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T = 15")				588	
526	90011	112	112	224	FT	TYPE A INSTALLATION, AS PER PLAN				224	2/14
530	00200	-	-	LS	LS	SPECIAL - STRUCTURE MISC.: CLEANING OF DRAINAGE SYSTEMS					2/14
848	10201	1000	980	1980	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)			1980		2/14
848	20000	1000	980	1980	SY	SURFACE PREPARATION USING HYDRODEMOLITION			1980		
848	30200	22	22	44	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			44		
848	50000	40	40	80	SY	HAND CHIPPING			80		
848	50100	-	-	LS	LS	TEST SLAB					
848	50200	14	14	28	CY	FULL-DEPTH REPAIR			28		
848	50320	1000	980	1980	SY	EXISTING CONCRETE OVERLAY REMOVED (1¾" THICK)			1980		
848	50340	354	346	700	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			700		

ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
ADS	KPL

REVIEWER
MJR 01/25/25

PROJECT ID
109164

SUBSET	TOTAL
3	14

SHEET	TOTAL
P. 409	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:13:37 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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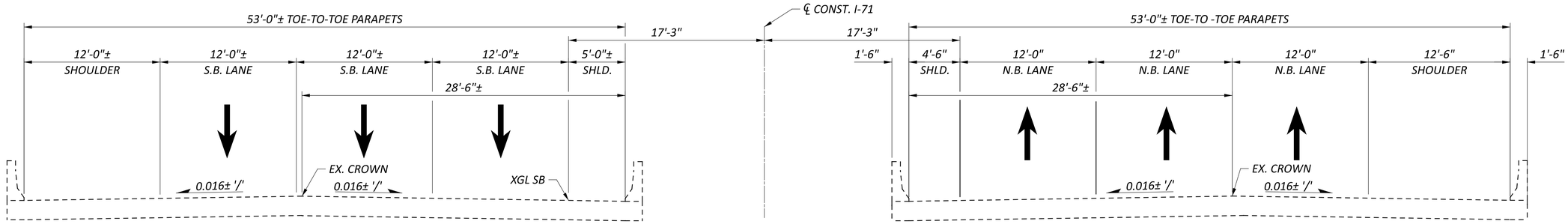
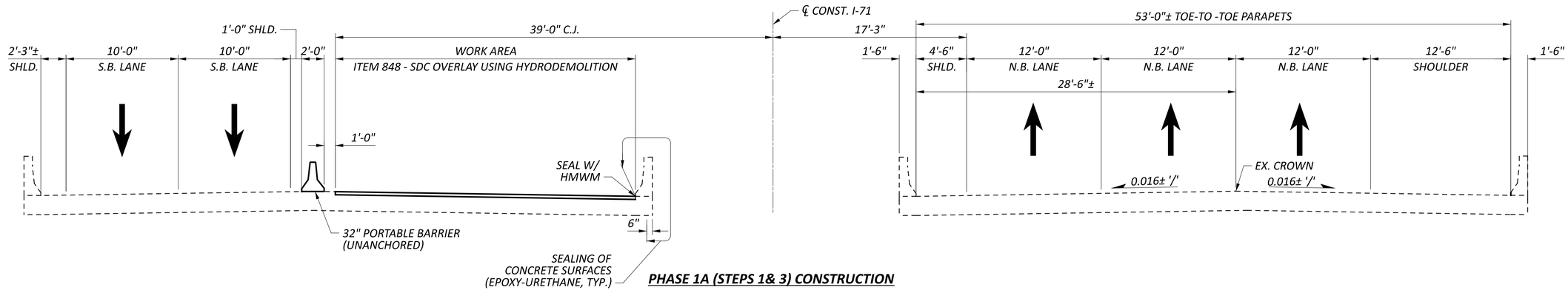
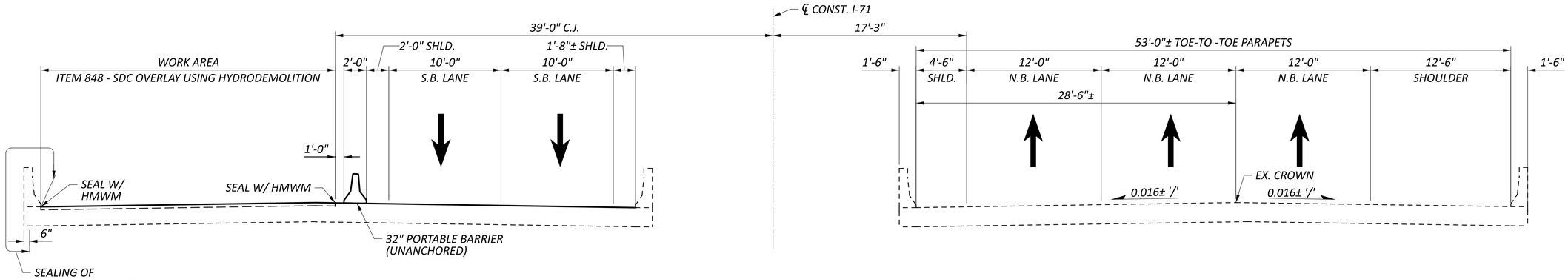


EXISTING TRANSVERSE SECTION



PHASE 1A (STEPS 1& 3) CONSTRUCTION



PHASE 1A (STEPS 2 & 4) CONSTRUCTION

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 2/14.*
2. *FOR TYPICAL OVERLAY DETAILS, SEE SHEET 11/14.*
3. *SEAL JOINTS IN ACCORDANCE WITH C&MS 848. PER SS 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.*
4. *PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES.*
5. *REFER TO TRAFFIC CONTROL PLANS FOR PROPOSED PAVEMENT MARKINGS.*

STAGED CONSTRUCTION DETAILS (1 OF 2)
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	4
TOTAL	14
SHEET	P. 410
TOTAL	618

FRA-71-19.10

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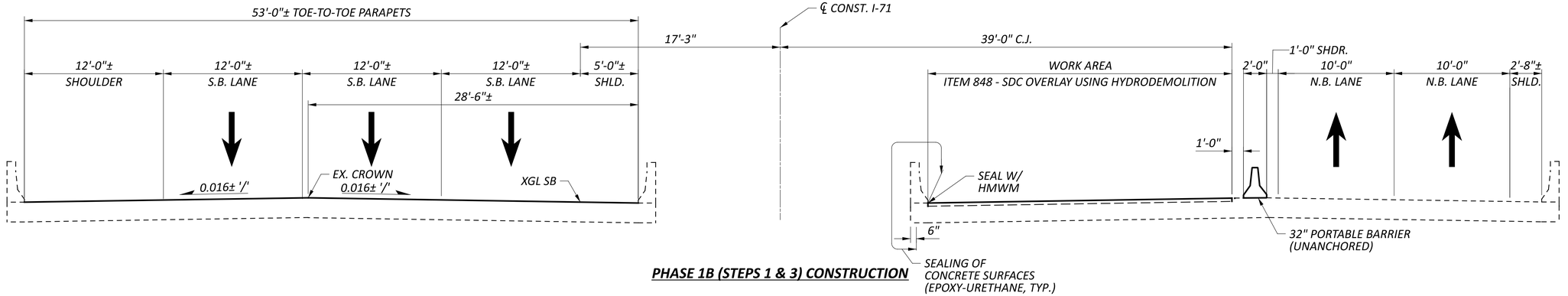
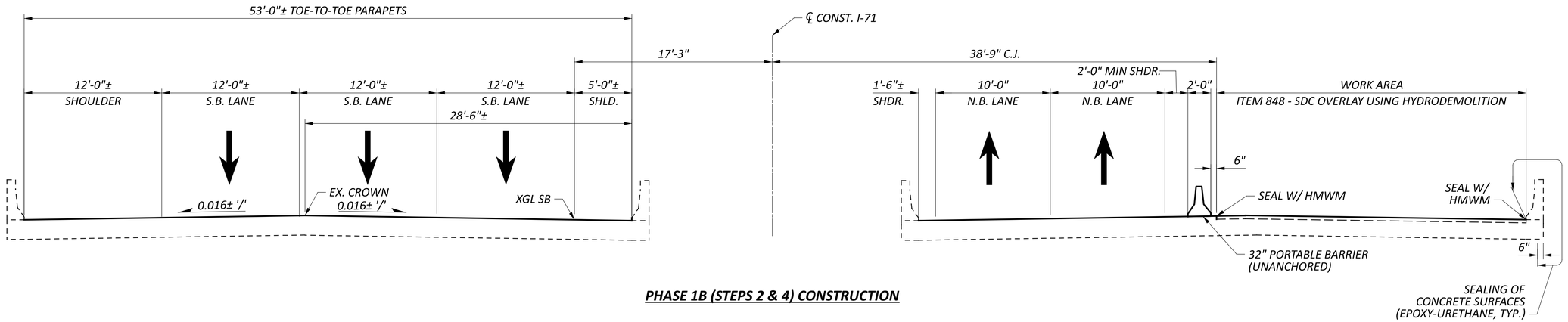
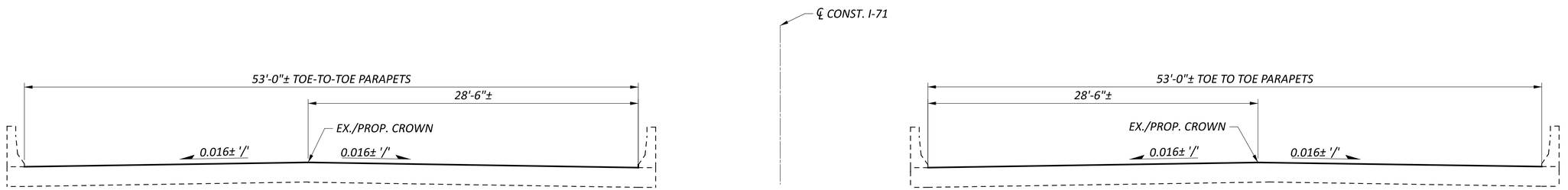


PHASE 1B (STEPS 1 & 3) CONSTRUCTION



PHASE 1B (STEPS 2 & 4) CONSTRUCTION



PROPOSED TRANSVERSE SECTION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/14.
2. FOR TYPICAL OVERLAY DETAILS, SEE SHEET 11/14.
3. SEAL JOINTS IN ACCORDANCE WITH C&MS 848. PER SS 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.
4. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES.
5. REFER TO TRAFFIC CONTROL PLANS FOR PROPOSED PAVEMENT MARKINGS.

STAGED CONSTRUCTION DETAILS (2 OF 2)
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133
DESIGN AGENCY
Jacobs
DESIGNER KPL | CHECKER ADS
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 5 | TOTAL 14
SHEET P. 411 | TOTAL 618

FRA-71-19.10

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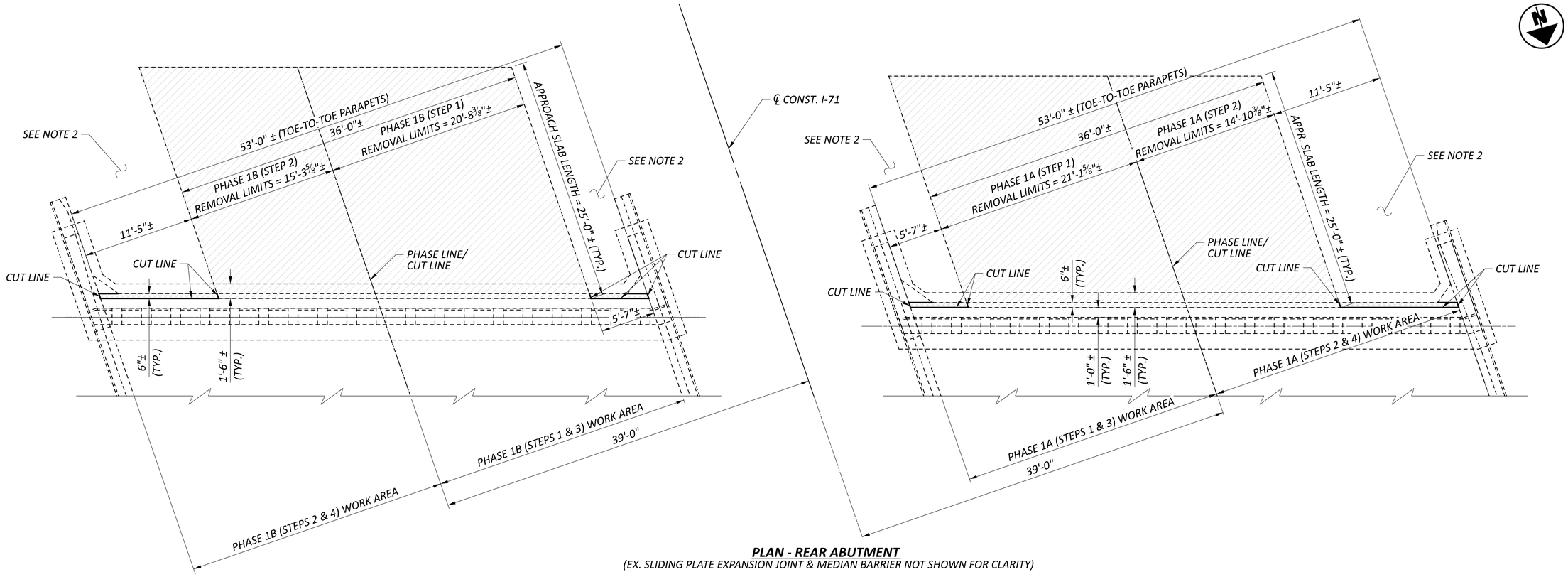
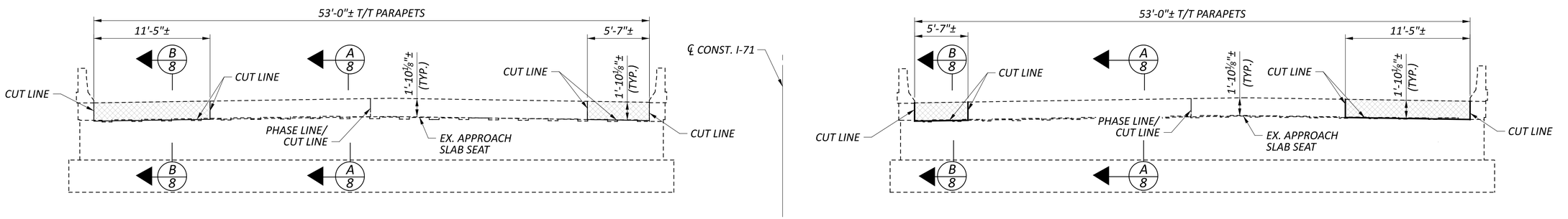


PLAN - REAR ABUTMENT

(EX. SLIDING PLATE EXPANSION JOINT & MEDIAN BARRIER NOT SHOWN FOR CLARITY)



ELEVATION - REAR ABUTMENT

(EX. REINFORCING NOT SHOWN FOR CLARITY)

LEGEND:

- *ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN*
- *ITEM 202 - APPROACH SLAB REMOVED*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 2/14.*
2. *ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXIST, SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.*
3. *SEE SECTION C ON SHEET XX FOR SIMILAR REMOVAL DETAILS AT EXISTING MEDIAN BARRIER INCLUDING REMOVAL OF EXISTING MEDIAN BASE SLAB/FOUNDATION AS NECESSARY FOR FULL-WIDTH APPROACH SLABS.*

REMOVAL DETAILS (1 OF 3)
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	6
TOTAL	14
SHEET	P. 412
TOTAL	618

FRA-71-19.10

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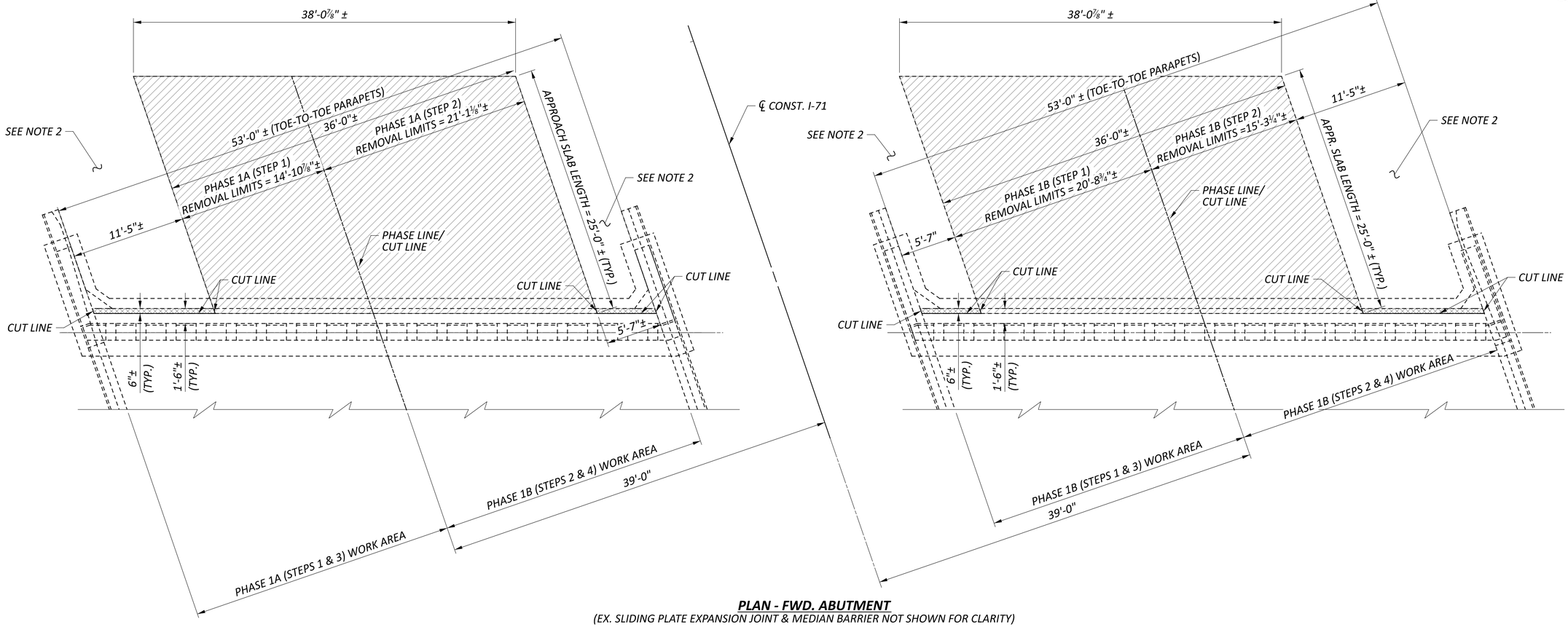
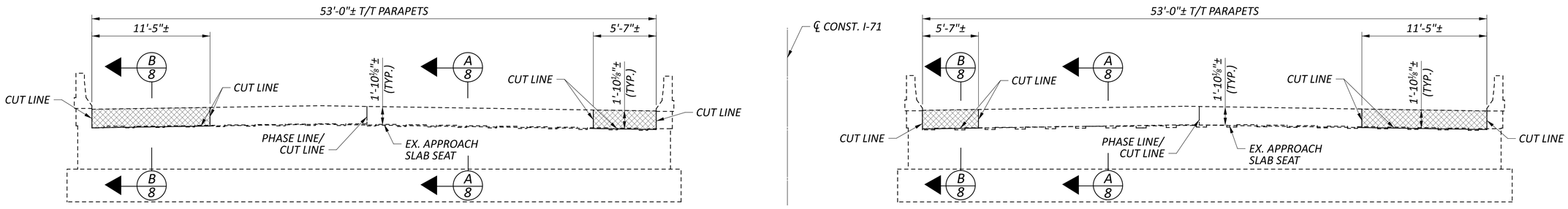


PLAN - FWD. ABUTMENT

(EX. SLIDING PLATE EXPANSION JOINT & MEDIAN BARRIER NOT SHOWN FOR CLARITY)



ELEVATION - FWD. ABUTMENT

(EX. REINFORCING NOT SHOWN FOR CLARITY)

LEGEND:

-ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

-ITEM 202 - APPROACH SLAB REMOVED

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/14.
2. ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE FULL-WIDTH APPROACH SLABS DO NOT CURRENTLY EXIST, SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.
3. SEE SECTION C ON SHEET XX FOR SIMILAR REMOVAL DETAILS AT EXISTING MEDIAN BARRIER INCLUDING REMOVAL OF EXISTING MEDIAN BASE SLAB/FOUNDATION AS NECESSARY FOR FULL-WIDTH APPROACH SLABS.

REMOVAL DETAILS (2 OF 3)
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	7
TOTAL	14
SHEET	P. 413
TOTAL	618

FRA-71-19.10

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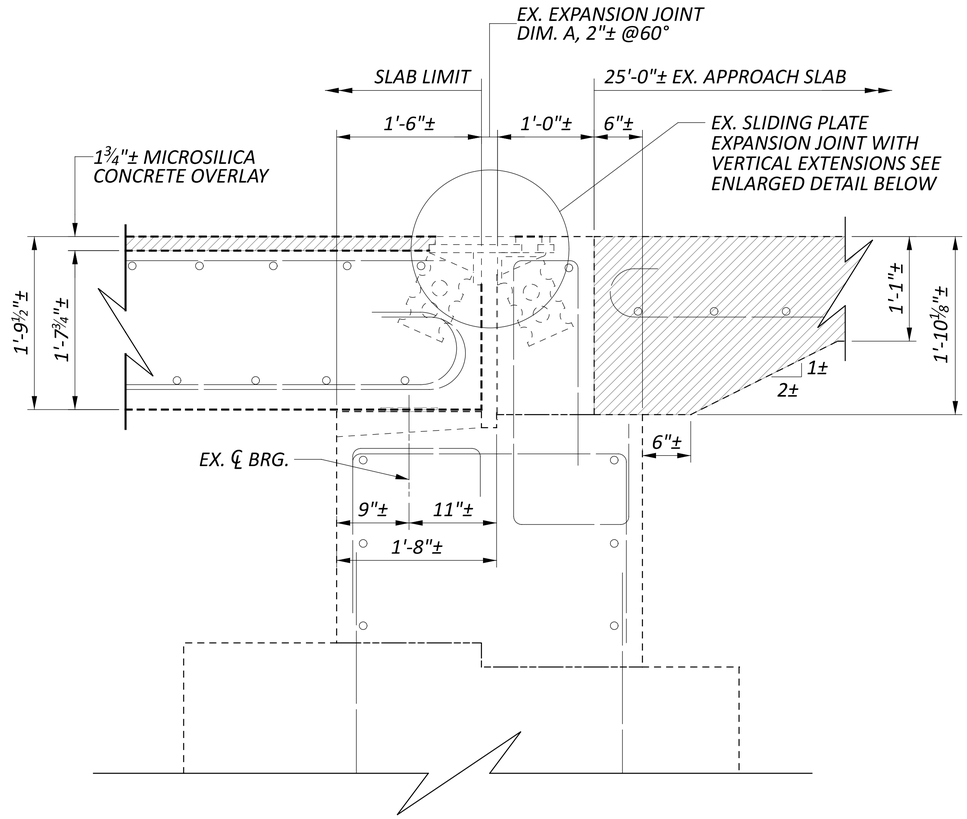
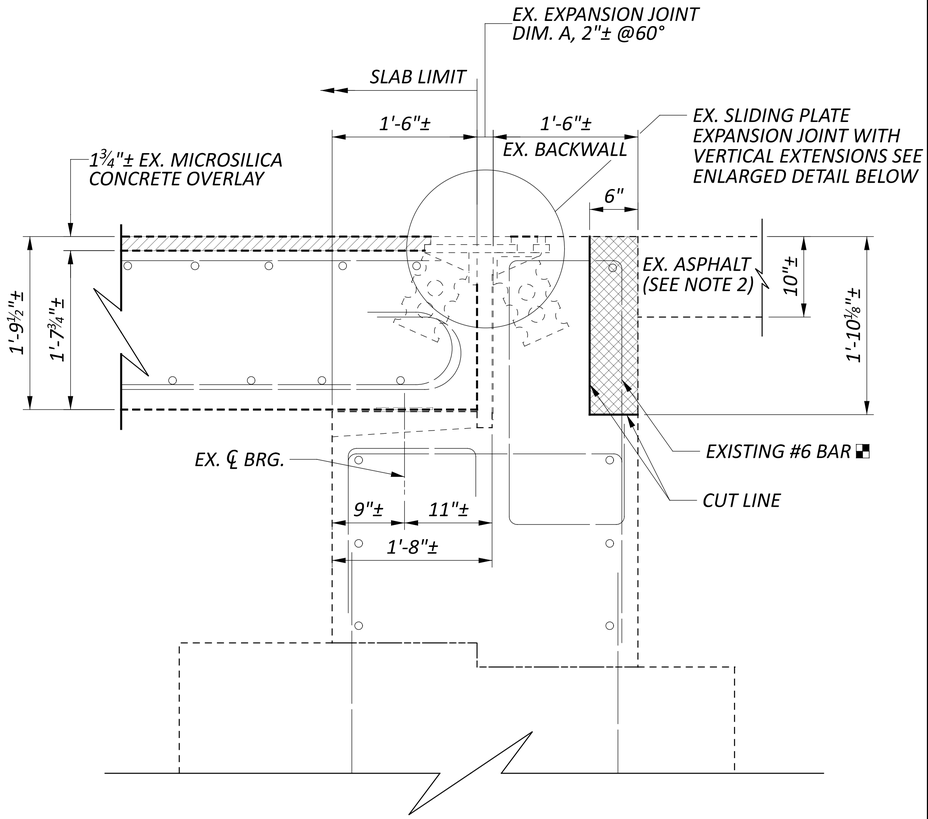
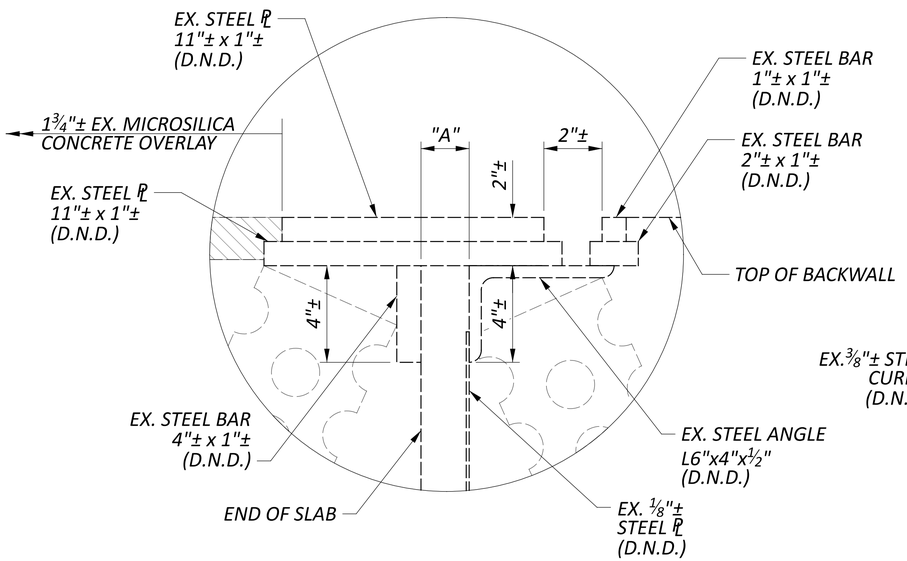


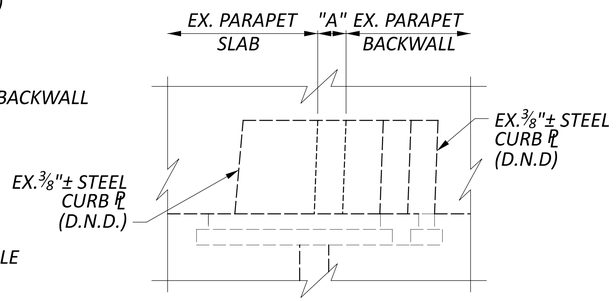
A/6 A/7 **SECTION**



B/6 B/7 **SECTION**



ENLARGED DETAIL
(EX. SLIDING PLATE EXP. JT. REMOVAL)



EX. CURB PLATE DETAIL

LEGEND:

- ITEM 202 - APPROACH SLAB REMOVED
- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- CUT EXISTING REINFORCING BAR(S) FLUSH AT THE CUT LINE

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/14.
2. ALL REMOVAL AND EXCAVATION NECESSARY TO CONSTRUCT NEW FULL-WIDTH APPROACH SLABS WHERE APPROACH SLABS DO NOT CURRENTLY EXIST SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.
3. ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO REMOVE PORTIONS OF EXISTING SLIDING PLATE EXPANSION JOINT SHALL BE INCLUDED WITH THE LINEAR FOOT CONTRACT PRICE BID FOR ITEM 202 - REMOVAL MISC.: SLIDING PLATE EXPANSION JOINT REMOVED.

REMOVAL DETAILS (3 OF 3)
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	8
TOTAL	14
SHEET	P. 414
TOTAL	618

FRA-71-19.10

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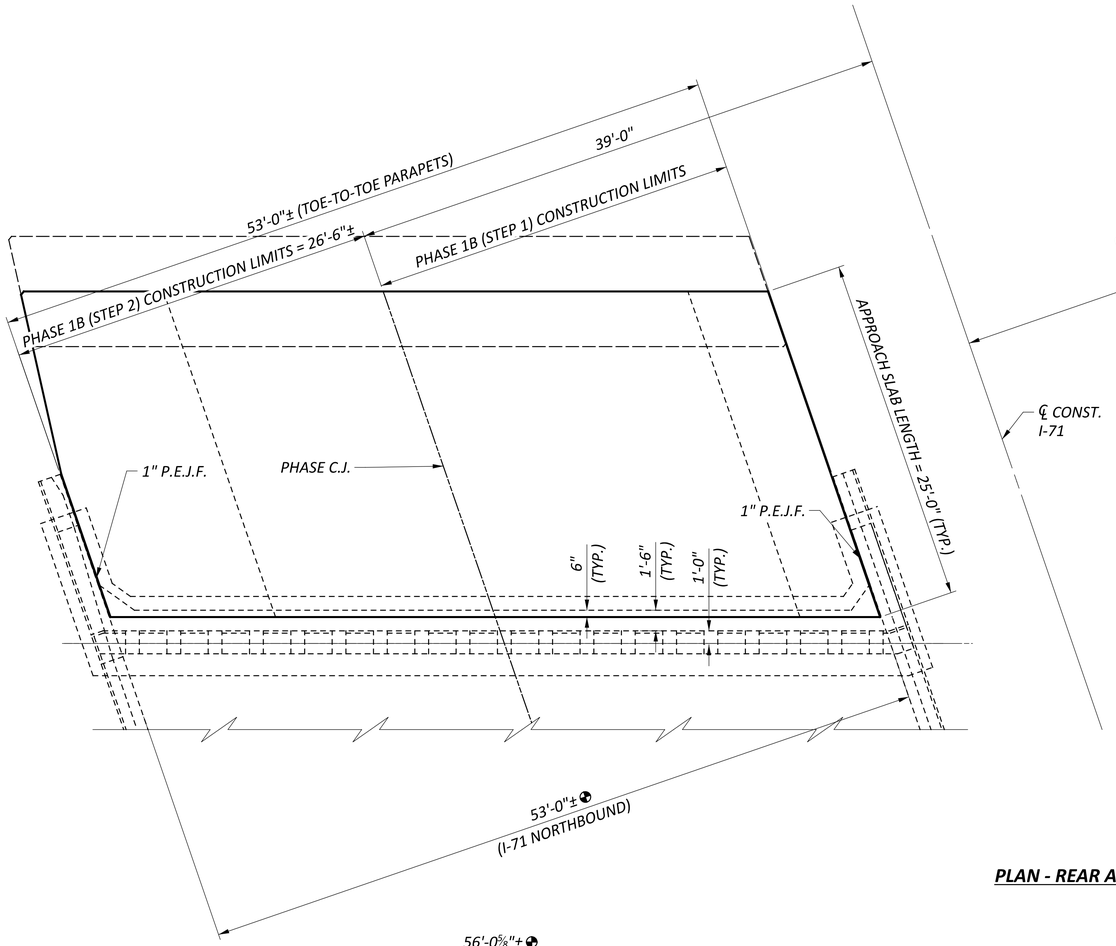
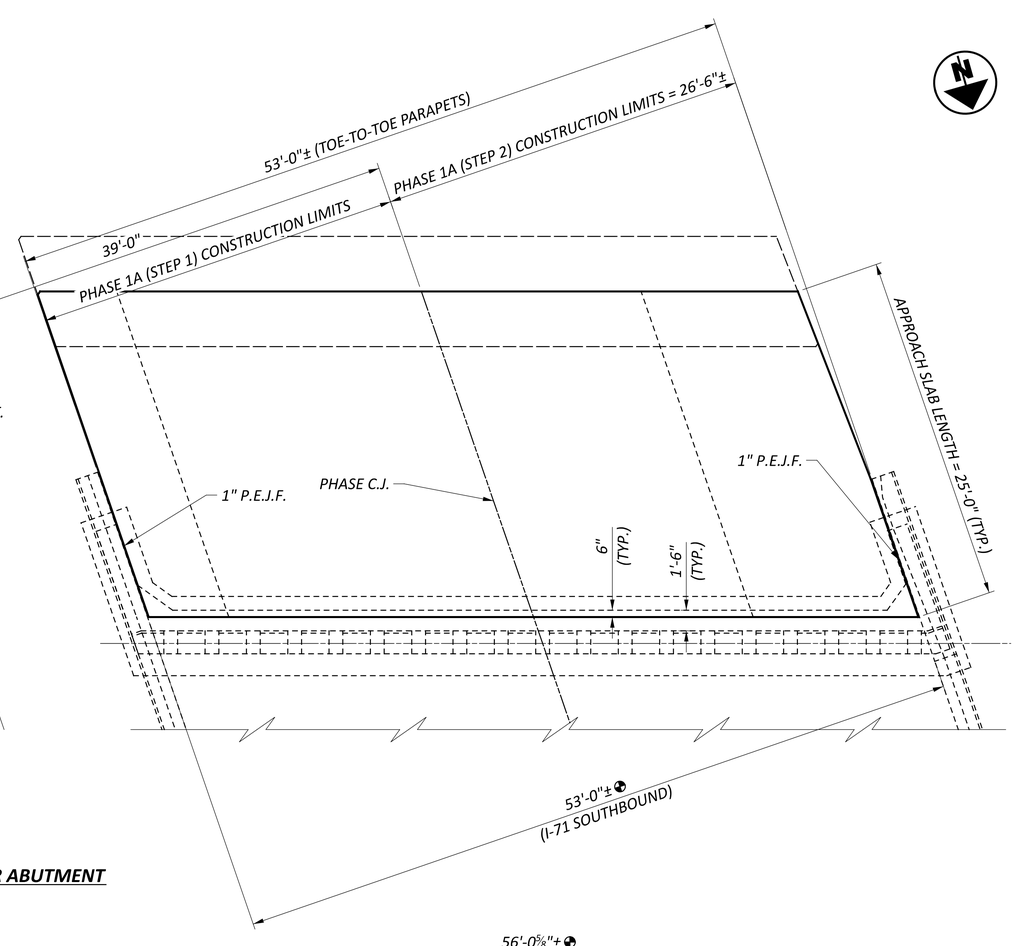
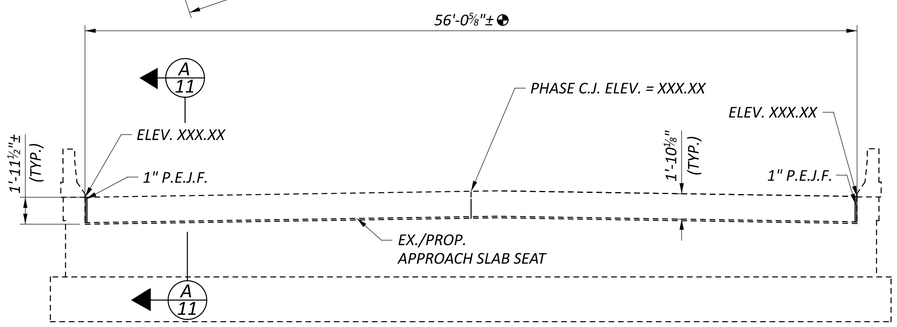
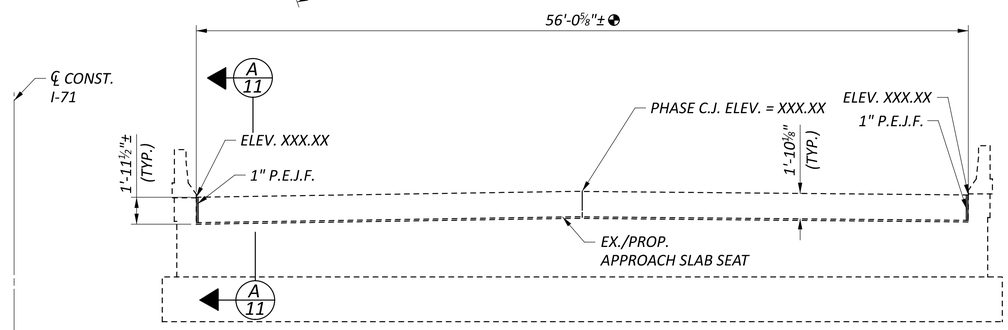




PLAN - REAR ABUTMENT





ELEVATION - REAR ABUTMENT

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/14.

LEGEND:

◕ *- MEASURED ALONG FRONT FACE OF BACKWALL.*

REAR ABUTMENT PLAN AND ELEVATION
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	9
TOTAL	14
SHEET	P. 415
TOTAL	618

FRA-71-19.10

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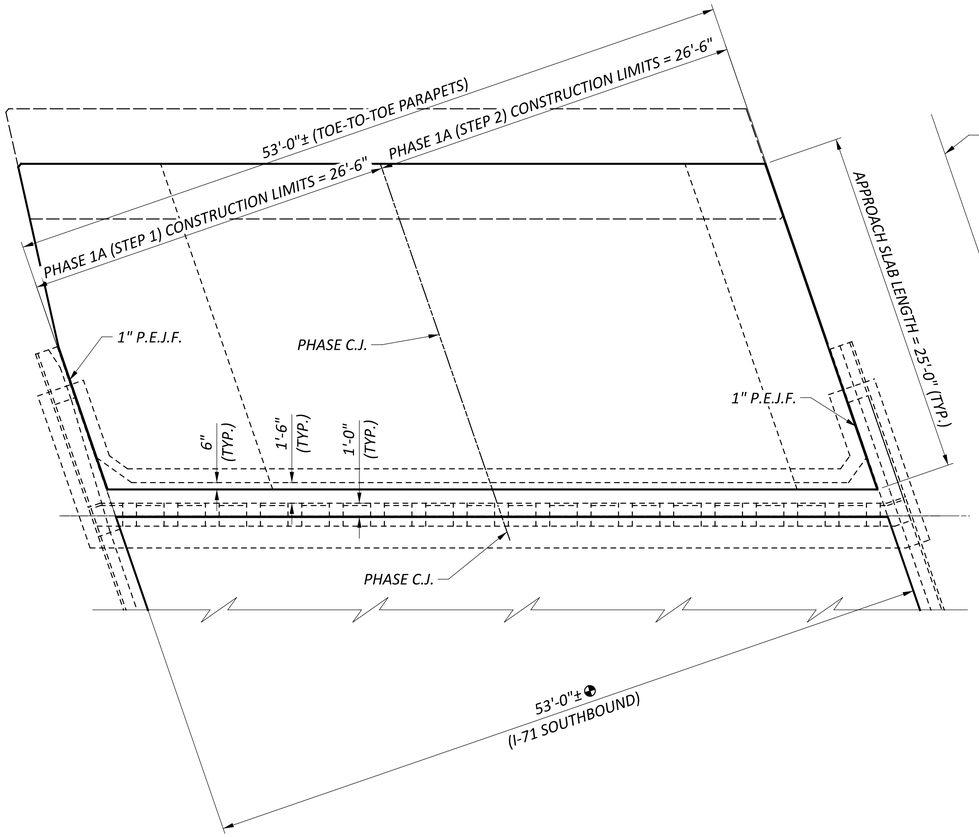
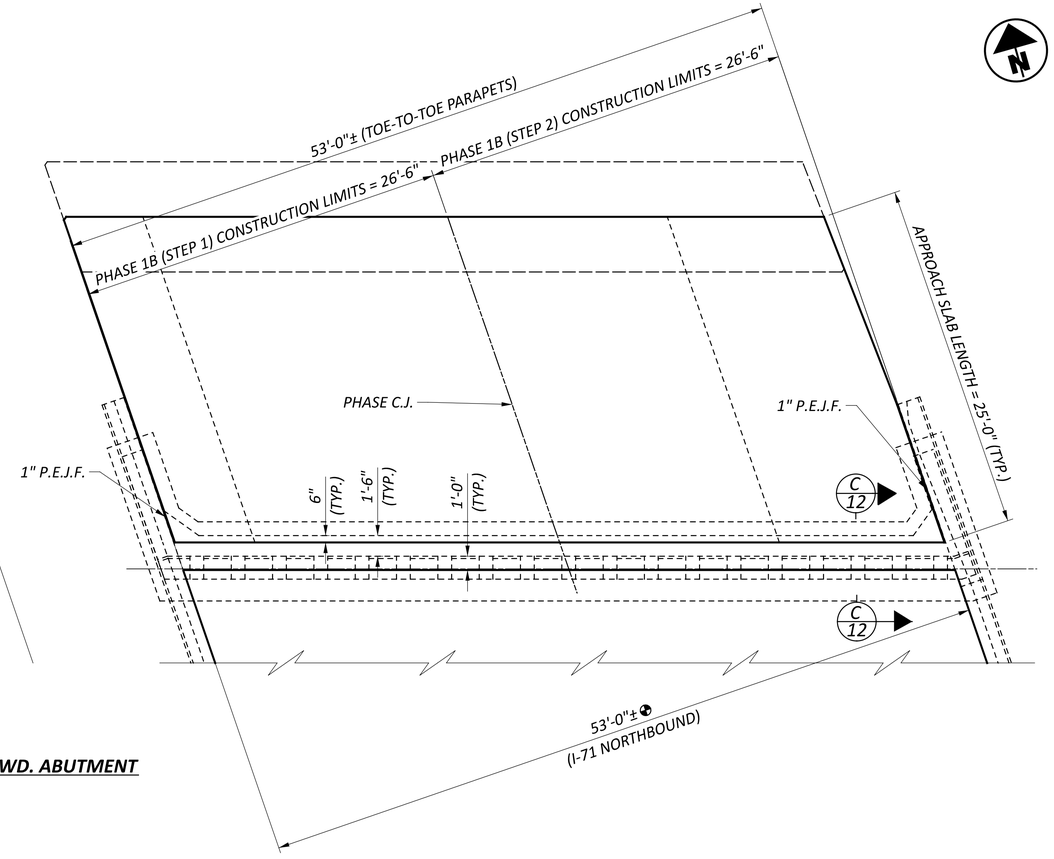
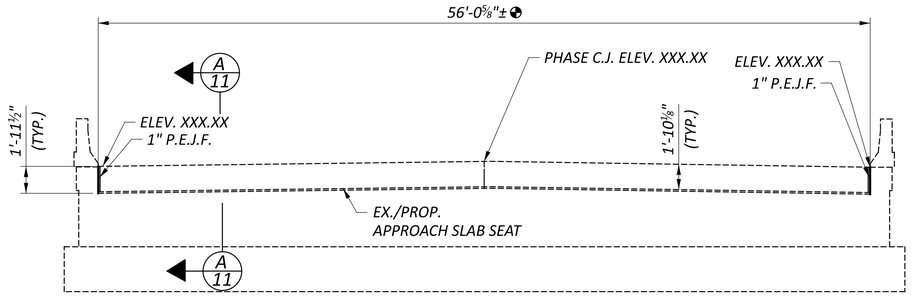
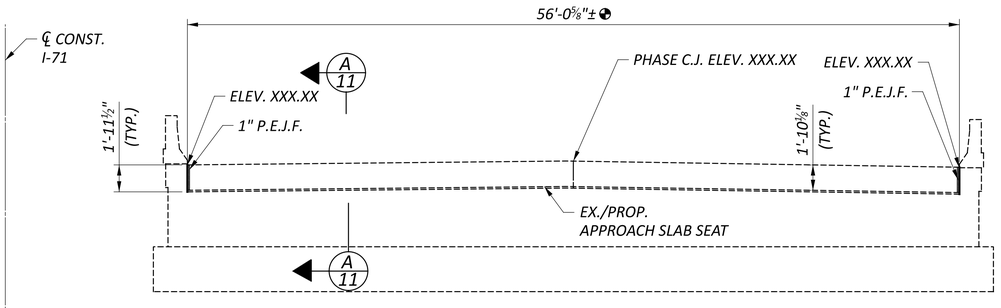




PLAN - FWD. ABUTMENT





ELEVATION - FWD. ABUTMENT

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 2/14.

LEGEND:

◒ *- MEASURED ALONG FRONT FACE OF BACKWALL.*

FORWARD ABUTMENT PLAN AND ELEVATION
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	ADS
CHECKER	KPL
REVIEWER	MJR 01/25/25
PROJECT ID	109164
SUBSET	10
TOTAL	14
SHEET	P. 416
TOTAL	618

FRA-71-19.10

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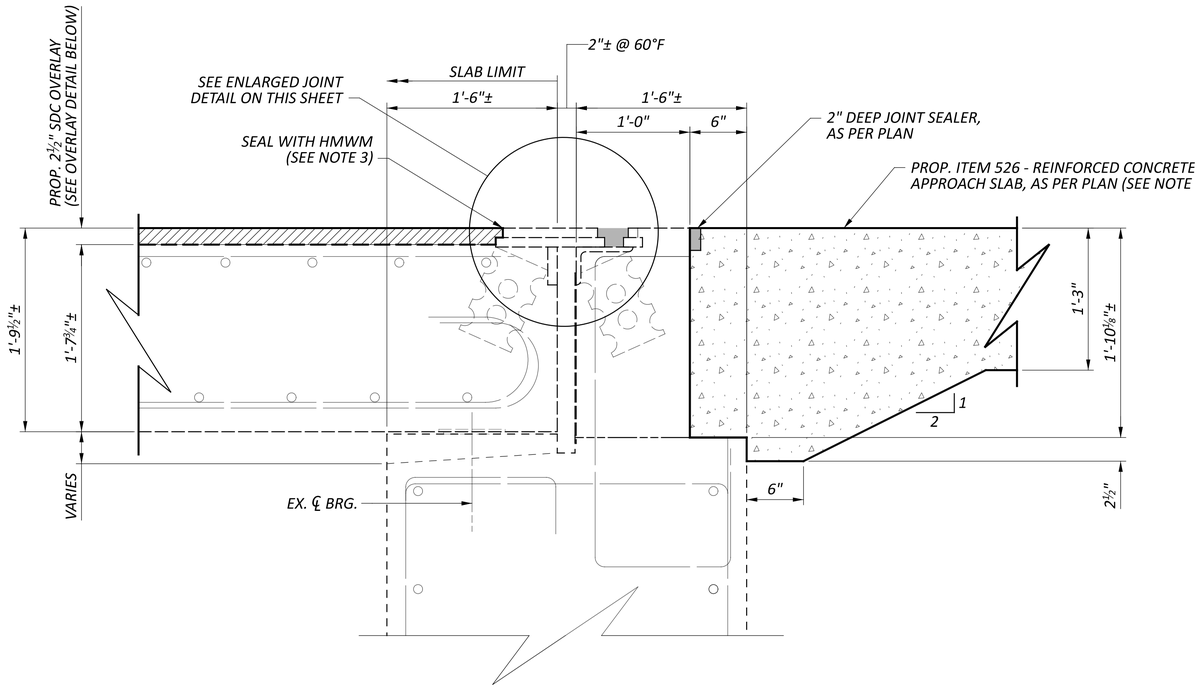
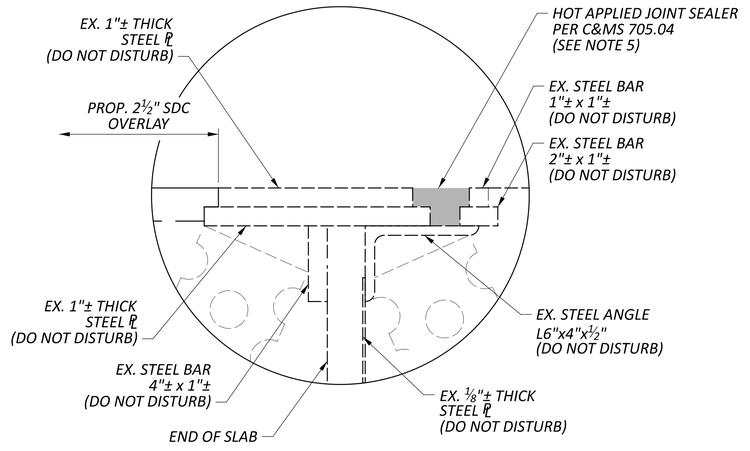
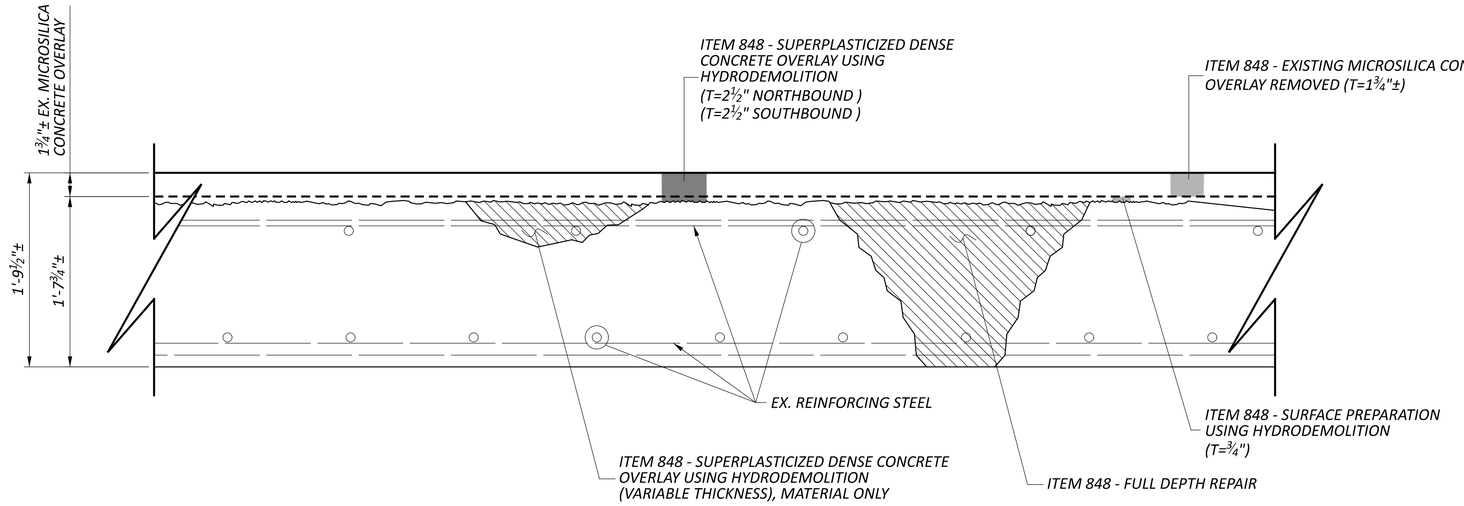


A/9 A/10 **SECTION**



ENLARGED JOINT DETAIL



TYPICAL OVERLAY DETAIL

NOTES:

1. *FOR ABBREVIATION LEGEND SEE SHEET 2/14.*
2. *FURNISH AMORLESS PREFORMED JOINT SEAL IN ONE CONTINUOUS PIECE. SEE SHEET 2/14 FOR ADDITIONAL NOTES.*
3. *SEAL JOINTS IN ACCORDANCE WITH SS 848. PER 848.32 THE COST OF SEALING SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE OVERLAY ITEM.*
4. *PROPOSED APPROACH SLAB SHALL OMIT REINFORCING TYING APPROACH SLAB TO EXISTING BACKWALL. IN OTHER WORDS OMIT 'D801' BARS TYPICALLY PROVIDED PER ODOT STANDARD CONSTRUCTION DRAWING AS-1-15.*
5. *REMOVE EXISTING JOINT SEALER AND CLEAN EXISTING SURFACE. PLACE NEW JOINT SEALER PER C&MS 705.04. ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THIS WORK SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN.*

ABUTMENT SECTION AND DETAILS
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN	2508133
DESIGN AGENCY	Jacobs
DESIGNER	KPL
CHECKER	ADS
REVIEWER	MJR 01/25/25
PROJECT ID	109165
SUBSET	11
TOTAL	14
SHEET	P. 417
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:15:13 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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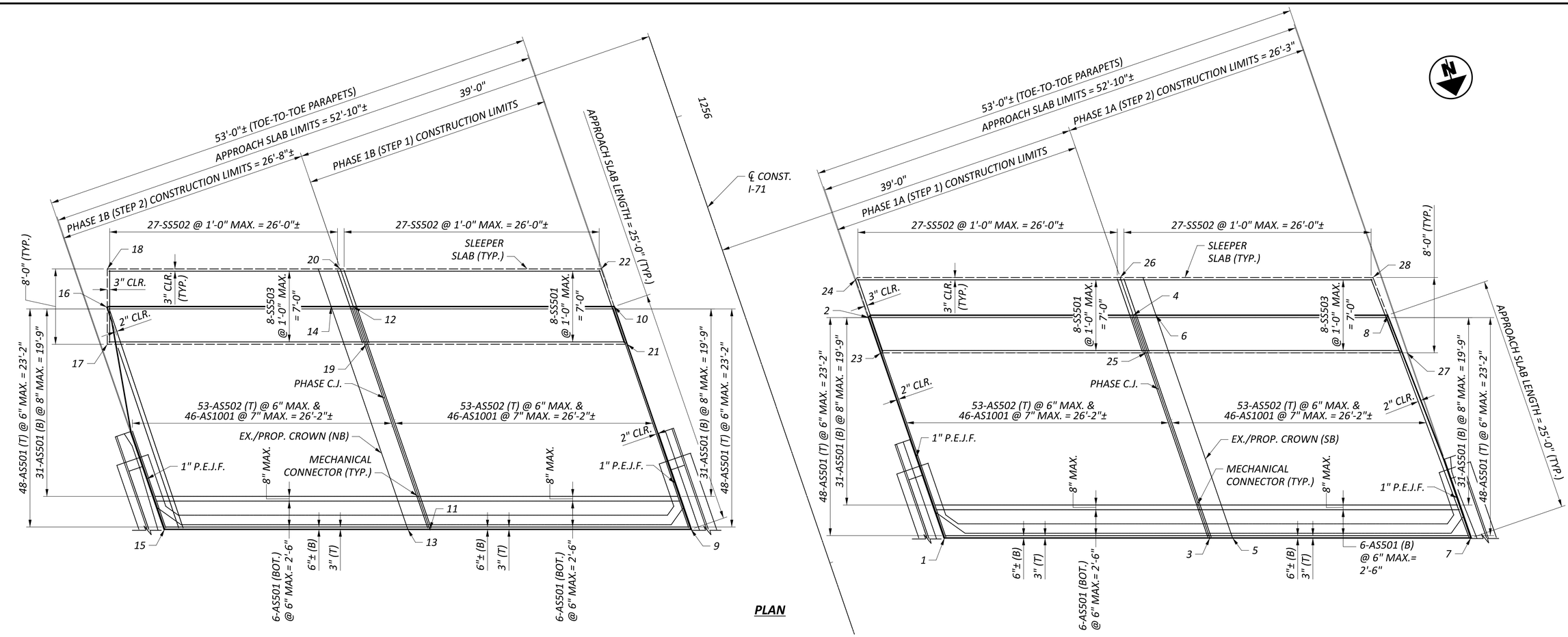
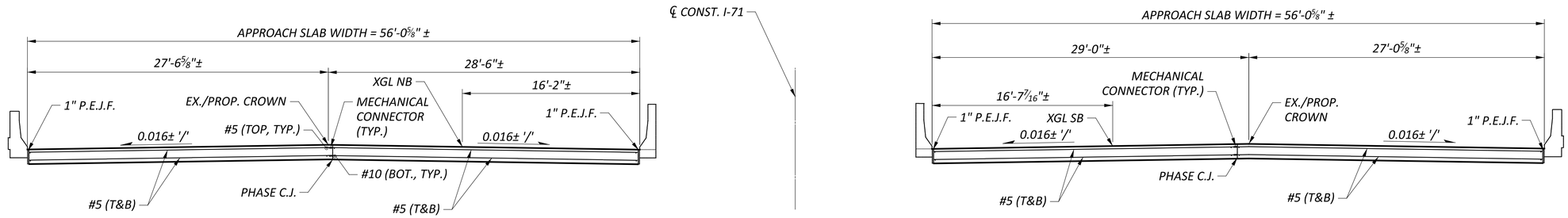


PLAN



SLEEPER SLAB & APPROACH SLAB TOP SURFACE ELEVATIONS			
POINT ID	STATION	OFFSET	SURFACE ELEV.
1			
2			
3			
4			
5	TO BE COMPLETED WITH STAGE 3		
6			
7			
8			
9			
10			

POINT ID	STATION	OFFSET	SURFACE ELEV.
11			
12			
13			
14			
15	TO BE COMPLETED WITH STAGE 3		
16			
17			
18			
19			
20			
21			

POINT ID	STATION	OFFSET	SURFACE ELEV.
22			
23			
24			
25	TO BE COMPLETED WITH STAGE 3		
26			
27			
28			

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 2/14.*
2. *SEE ODOT SCD. DWG. AS-1-15, AS-2-15 FOR ADDITIONAL DETAILS.*
3. *A POLYMER MODIFIED ASPHALT EXPANSION JOINT IS NOT REQUIRED WITH THE TYPE A INSTALLATION.*
4. *TRIM REINFORCING BARS AS NEEDED TO PROVIDE 2" MINIMUM CLEAR COVER.*
5. *THE PROPOSED ELEVATIONS PROVIDED ARE TO BE CONSIDERED APPROXIMATE. FIELD VERIFY ALL PROPOSED ELEVATIONS AT THE LOCATIONS SHOWN IN THESE PLANS. ADJUST THE PROPOSED ELEVATIONS ACCORDINGLY TO MAINTAIN THE EXISTING CROSS SLOPE AND PROFILE IN ORDER TO MATCH UP WITH THE EXISTING ROADWAY AND THE EXISTING BRIDGE ABUTMENT. NOTIFY THE ENGINEER OF THE PROPOSED ADJUSTMENTS PRIOR TO CONSTRUCTING THE PROPOSED WORK.*

REAR APPROACH SLAB DETAILS
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133
DESIGN AGENCY
Jacobs
DESIGNER ADS | CHECKER KPL
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 12 | TOTAL 14
SHEET P. 418 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:15:29 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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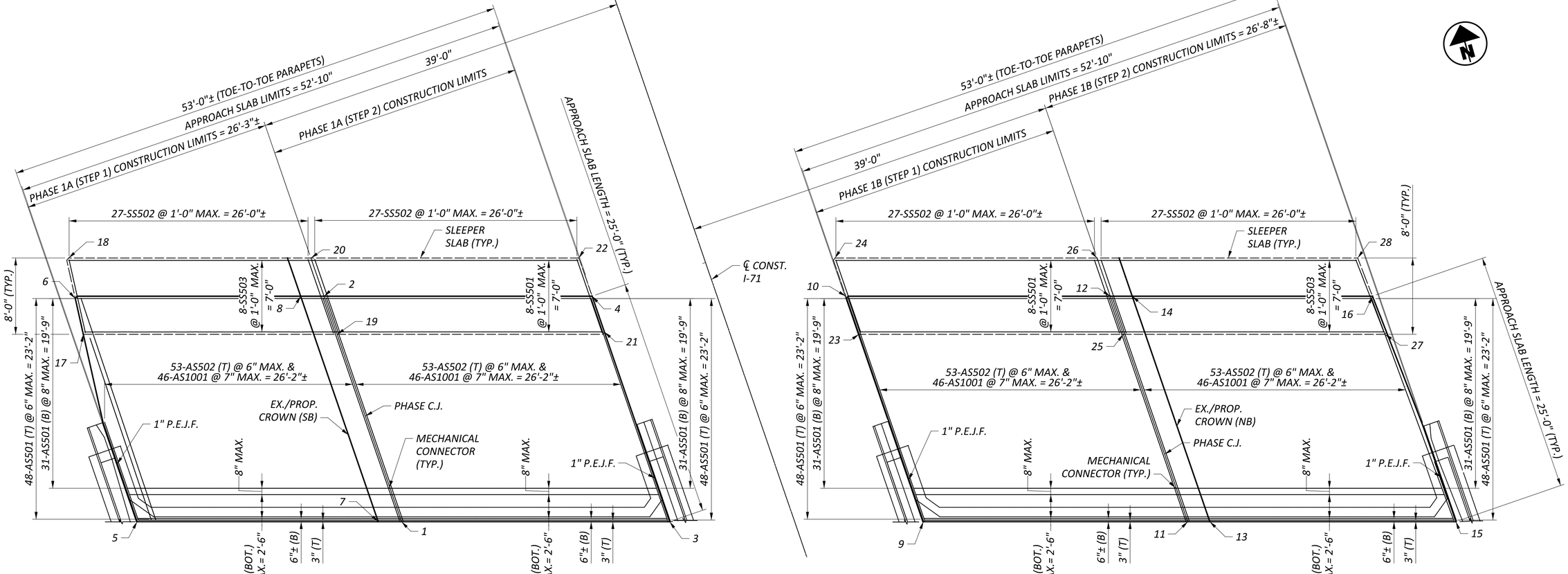
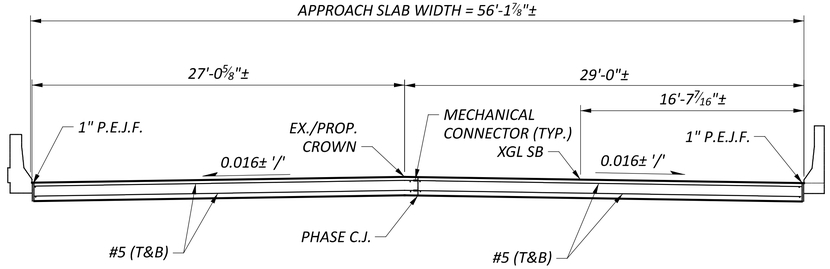
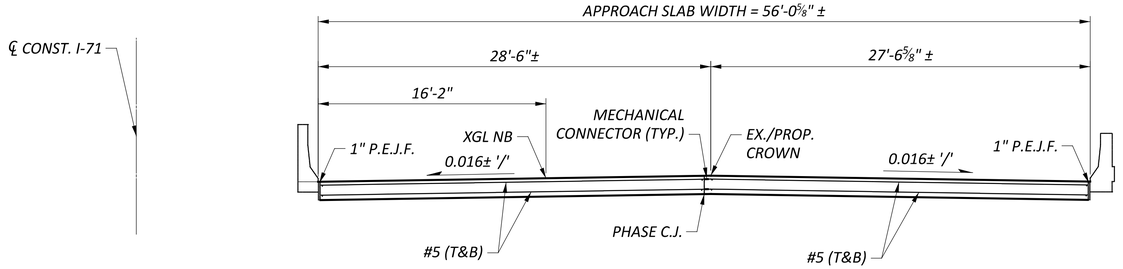


PLAN





SLEEPER SLAB & APPROACH SLAB TOP SURFACE ELEVATIONS			
POINT ID	STATION	OFFSET	SURFACE ELEV.
1			
2			
3			
4			
5	TO BE COMPLETED WITH STAGE 3		
6			
7			
8			
9			
10			

POINT ID	STATION	OFFSET	SURFACE ELEV.
11			
12			
13			
14			
15			
16	TO BE COMPLETED WITH STAGE 3		
17			
18			
19			
20			
21			

POINT ID	STATION	OFFSET	SURFACE ELEV.
22			
23			
24			
25	TO BE COMPLETED WITH STAGE 3		
26			
27			
28			

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 2/14.*
2. *SEE ODOT SCD. DWG. AS-1-15, AS-2-15 FOR ADDITIONAL DETAILS.*
3. *A POLYMER MODIFIED ASPHALT EXPANSION JOINT IS NOT REQUIRED WITH THE TYPE A INSTALLATION.*
4. *TRIM REINFORCING BARS AS NEEDED TO PROVIDE 2" MINIMUM CLEAR COVER.*
5. *THE PROPOSED ELEVATIONS PROVIDED ARE TO BE CONSIDERED APPROXIMATE. FIELD VERIFY ALL PROPOSED ELEVATIONS AT THE LOCATIONS SHOWN IN THESE PLANS. ADJUST THE PROPOSED ELEVATIONS ACCORDINGLY TO MAINTAIN THE EXISTING CROSS SLOPE AND PROFILE IN ORDER TO MATCH UP WITH THE EXISTING ROADWAY AND THE EXISTING BRIDGE ABUTMENT. NOTIFY THE ENGINEER OF THE PROPOSED ADJUSTMENTS PRIOR TO CONSTRUCTING THE PROPOSED WORK.*

FORWARD APPROACH SLAB DETAILS
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133

DESIGN AGENCY: Jacobs

DESIGNER	CHECKER
KPL	ADS

REVIEWER: MJR 01/25/25

PROJECT ID: 109164

SUBSET	TOTAL
13	14

SHEET	TOTAL
P. 419	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 10:15:44 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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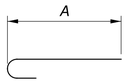
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
APPROACH SLABS (FOR INFORMATION ONLY)											
AS501■	664	27'-9"	19,218	STR							
AS502	424	24'-6"	10,835	STR							
AS1001	368	25'-11"	41,039	16	24'-6"						
		SUB-TOTAL	71,092								
SLEEPER SLABS (FOR INFORMATION ONLY)											
SS501■	32	27'-9"	926	STR							
SS502	216	7'-11"	1,784	STR							
SS503■	32	27'-2"	907	STR							
		SUB-TOTAL	3,617								
		GRAND TOTAL	74,709								

APPROACH SLAB AND SLEEPER SLAB REINFORCING SHOWN INCLUDES THE NUMBER/WEIGHT OF THE LEFT AND RIGHT BRIDGES FOR BOTH THE REAR AND FORWARD APPROACH SLABS.



TYPE-16

LEGEND:

■ - *REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.*

NOTES:

1. *THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, AN AS501 BAR IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.*
2. *STRAIGHT BARS ARE INDICATED BY "STR".*
3. *ALL REINFORCING STEEL SHALL BE EPOXY COATED.*
4. *ALL REINFORCING STEEL SHALL BE GRADE 60 WITH A MINIMUM YIELD STRENGTH OF 60 KSI.*

REINFORCING STEEL LIST
BRIDGE NO. FRA-00071-23.460
I-71 OVER COOKE RD.

SFN 2508133
DESIGN AGENCY Jacobs
DESIGNER KPL | CHECKER ADS
REVIEWER MJR 01/25/25
PROJECT ID 109164
SUBSET 14 | TOTAL 14
SHEET P. 420 | TOTAL 618

FRA-71-19.10

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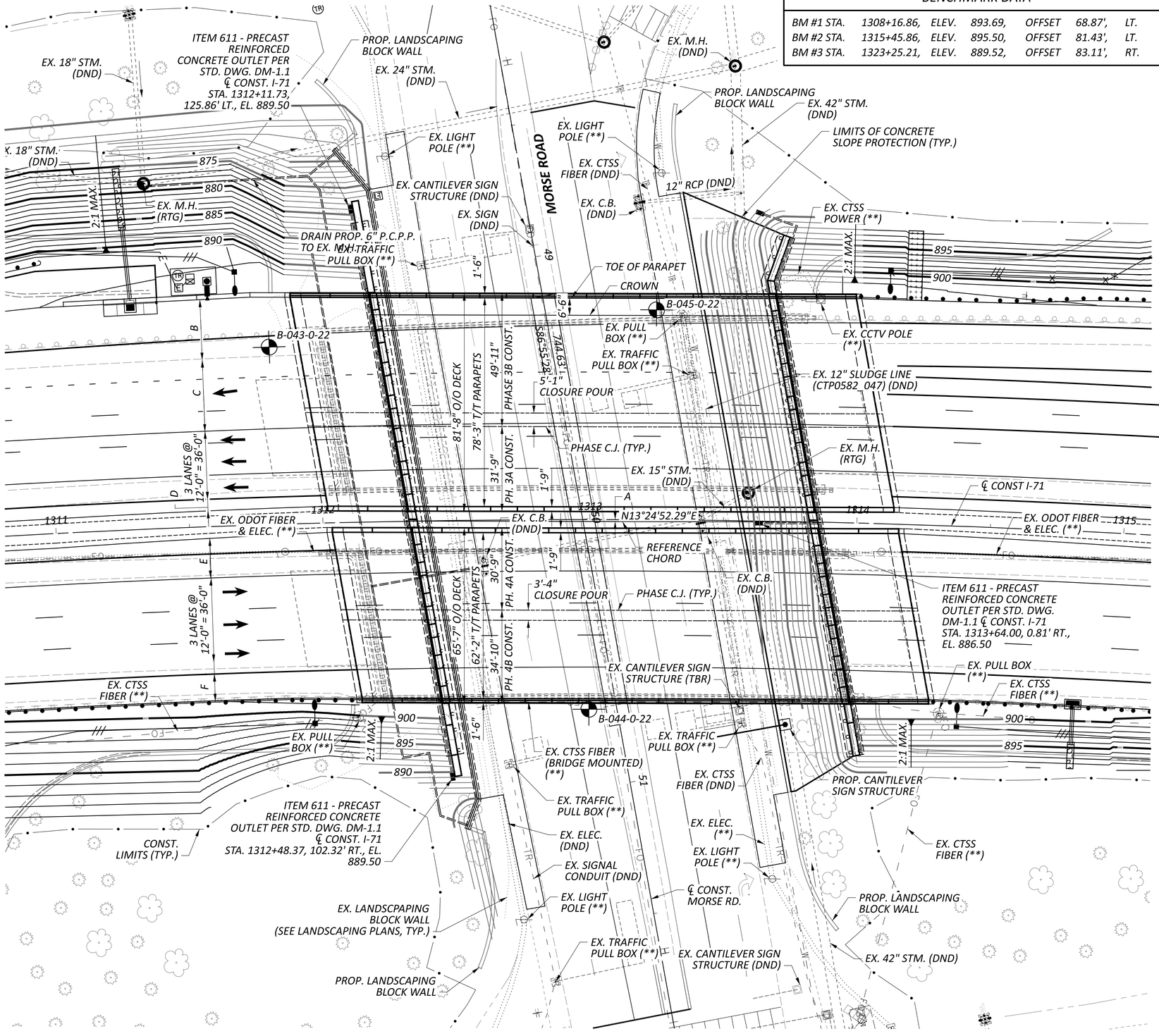


PLAN
(GIRDERS AND TEMPORARY SHORING NOT SHOWN FOR CLARITY)

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS

BENCHMARK DATA

BM #1 STA.	1308+16.86,	ELEV.	893.69,	OFFSET	68.87',	LT.
BM #2 STA.	1315+45.86,	ELEV.	895.50,	OFFSET	81.43',	LT.
BM #3 STA.	1323+25.21,	ELEV.	889.52,	OFFSET	83.11',	RT.

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR ADDITIONAL BENCHMARK AND SURVEY INFORMATION, SEE ROADWAY PLANS.
3. FOR BRIDGE PROFILES, SEE SHEET 2.
4. FOR GENERAL PLAN, SEE SHEET 3.

DESIGN TRAFFIC:

2030 ADT = 134,014 2030 ADTT = 16,646
2050 ADT = 151,444 2050 ADTT = 17,746
DIRECTIONAL DISTRIBUTION = 0.53 (NB)

LEGEND

- BORING LOCATION
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
  15'-9" ACTUAL MINIMUM VERTICAL CLEARANCE (SEE SHEET 2)
- A - VARIES, 0" MIN. TO $8\frac{13}{16}$" MAX.
- B - SHOULDER VARIES, 9'-$1\frac{3}{8}$"± MIN. TO 12'-$6\frac{3}{4}$"± MAX.
- C - RAMP LANE VARIES, 16'-$1\frac{1}{2}$"± MIN. TO 19'-2"± MAX.
- D - SHOULDER VARIES, 4'-0" MIN.
- E - SHOULDER VARIES, 12'-0"± MIN.
- F - SHOULDER VARIES, 10'-0" MIN.

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS REINFORCED CONCRETE SLAB SUPPORTED ON REINFORCED CONCRETE STUB ABUTMENTS AND CAP AND COLUMN PIERS

SPANS: 38'-0"± - 47'-6"± - 47'-6"± - 38'-0"± C/C BEARINGS (W.R.T. RECORD R.C.)

ROADWAY: 53'-0"± T/T PARAPET - RIGHT (NORTHBOUND) BRIDGE VARIES, 58'-2"± TO 63'-3"± T/T PARAPET - LEFT(SOUTHBOUND)

LOADING: CF2000

SKEW: 10°15'04"± RIGHT (NORTHBOUND)
10°01'32"± LEFT (SOUTHBOUND)

WEARING SURFACE: LMC OVERLAY/MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (25' LONG)

ALIGNMENT: 01°30'00" RT. CURVE

CROWN: 0.05± FT/FT

STRUCTURE FILE NUMBER: 2508192 (LEFT), 2508222 (RIGHT)

DATE BUILT: 1959

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN STEEL PLATE GIRDER (ASTM A709, GRADE 50) WITH COMPOSITE REINFORCED CONCRETE DECK SUPPORTED ON SEMI-INTEGRAL ABUTMENTS

SPANS: 150'-0" C/C BEARINGS (W.R.T. REFERENCE CHORD)

ROADWAY: 62'-2" TOE/TOE PARAPET (RIGHT BRIDGE)
78'-3" TOE/TOE PARAPET (LEFT BRIDGE)

LOADING: HL93 AND 60 PSF FUTURE WEARING SURFACE

SKEW: 10°20'00" WITH RESPECT TO REFERENCE CHORD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-15, AS-2-15) W/ TYPE C

ALIGNMENT: 01°30'00" RT. CURVE

CROWN: 0.05 FT/FT

DECK AREA: 9971 SF (RIGHT), 12,416 SF (LEFT)

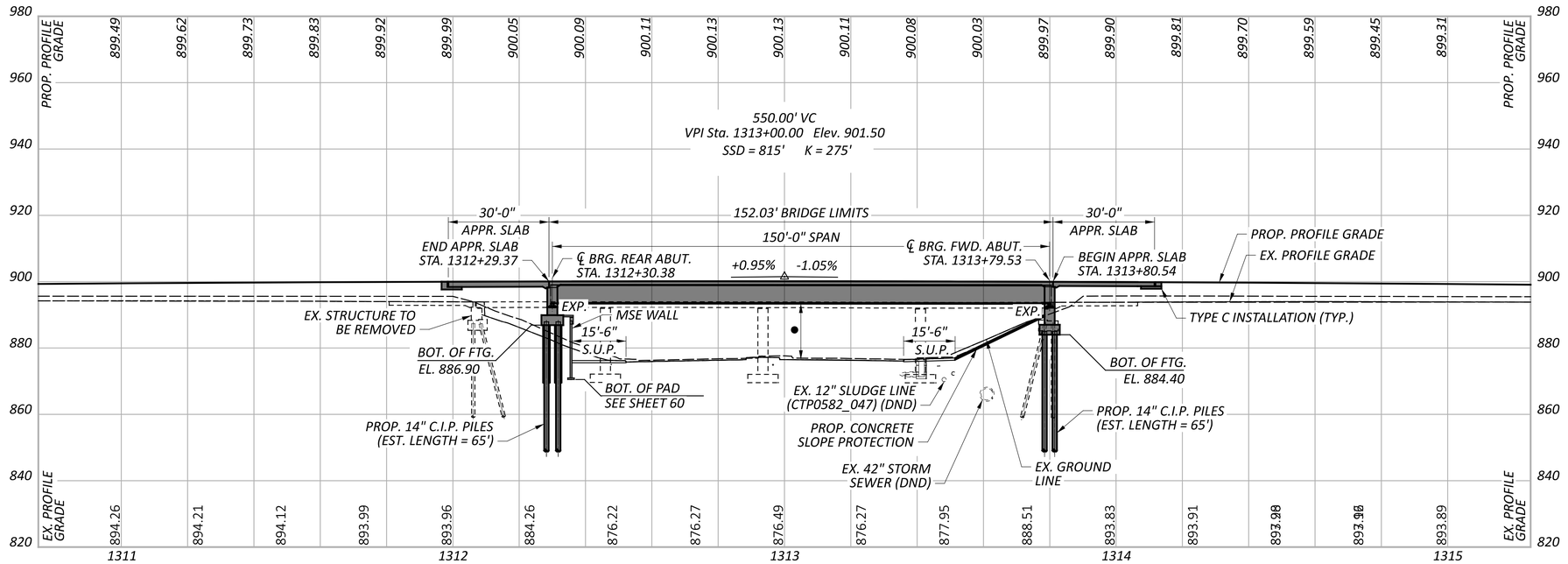
STRUCTURE FILE NUMBER: TBD (LEFT), TBD (RIGHT)

COORDINATES: LATITUDE 40°03'41.11" NORTH
LONGITUDE 82°59'52.70" WEST

HORIZONTAL SCALE IN FEET
0 10 20 40

SITE PLAN (1 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	1
TOTAL	65
SHEET	P. 421
TOTAL	618



PROFILE ALONG PROFILE GRADE LINE - LEFT BRIDGE (SOUTHBOUND)

LEGEND:

- *15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
  15'-9" ACTUAL MINIMUM VERTICAL CLEARANCE

PROFILE ALONG PROFILE GRADE LINE - RIGHT BRIDGE (NORTHBOUND)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR GENERAL PLAN, SEE SHEET 3.*

SITE PLAN (2 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	2
TOTAL	65
SHEET	P. 422
TOTAL	618

FRA-71-19.10

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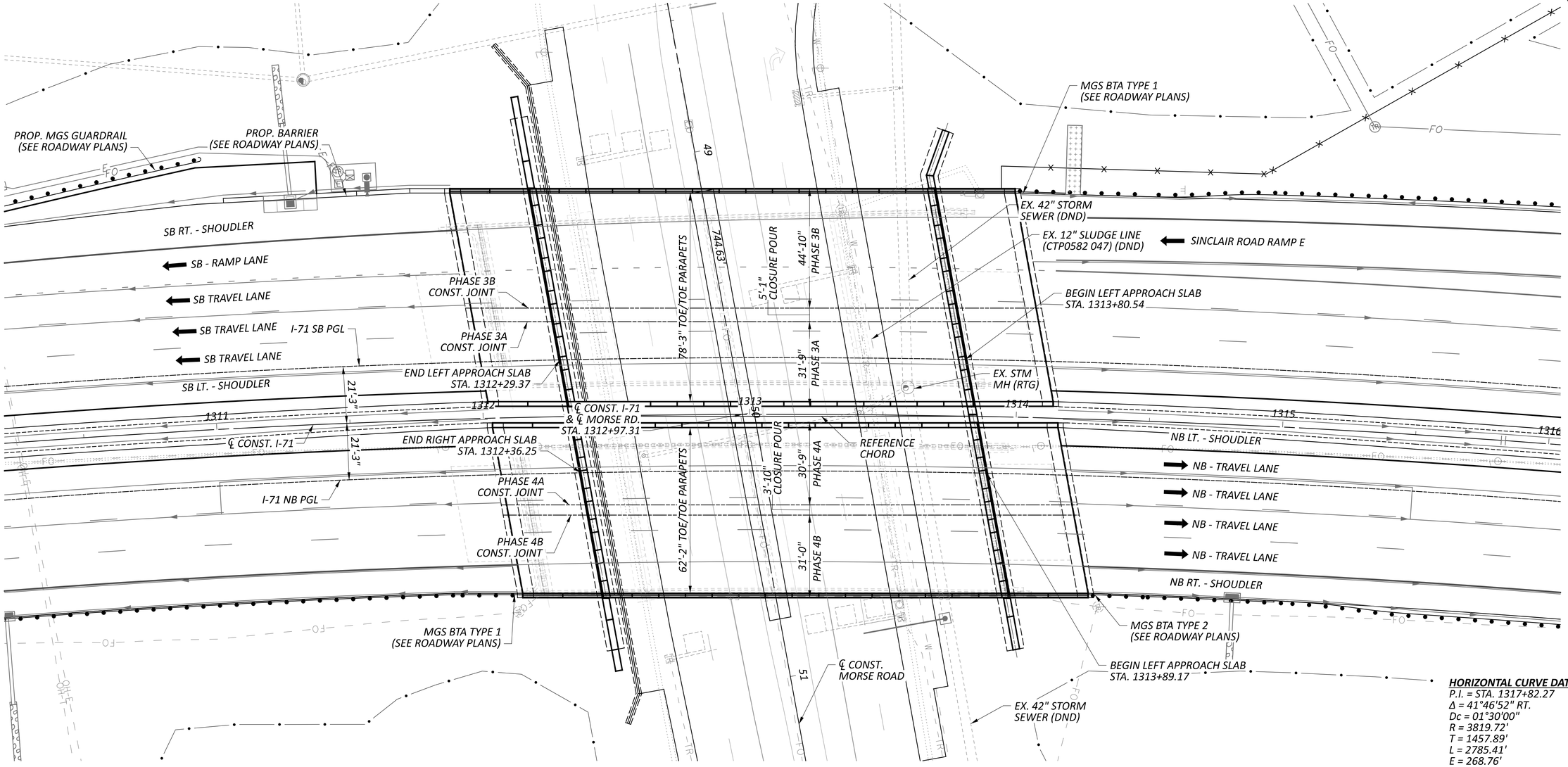
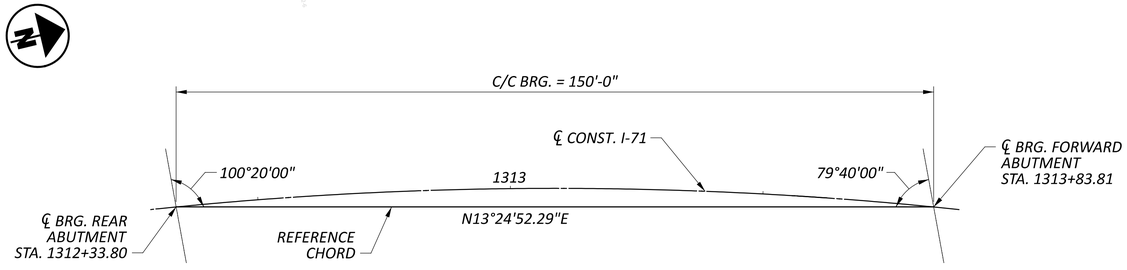
FRA-71-19.10



HORIZONTAL CURVE DATA
P.I. = STA. 1317+82.27
Δ = 41°46'52" RT.
Dc = 01°30'00"
R = 3819.72'
T = 1457.89'
L = 2785.41'
E = 268.76'

GENERAL PLAN



GEOMETRIC LAYOUT

NOTES:

1. FOR TEMPORARY SHORING PLAN, SEE SHEET 17.
2. FOR STAGED CONSTRUCTION DETAILS, SEE SHEETS 7 THRU 8.
3. FOR ABBREVIATION LEGEND, SEE SHEET 5.

GENERAL PLAN
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER DBL
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 3 | TOTAL 65
SHEET P. 423 | TOTAL 618

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	1/20/2023
AS-2-15	REVISED	7/21/2023
GSD-1-19	REVISED	7/19/2024
PCB-91	REVISED	7/17/2020
SBR-1-20	REVISED	7/19/2024
SBR-2-20	REVISED	7/19/2024
SICD-1-21	REVISED	1/19/2024
SICD-2-14	REVISED	1/15/2021

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	XX/YY/ZZZZ
840	DATED	1/16/2026
867	DATED	4/15/2022

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020, DATED JULY 2025.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.05 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT:

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH - 60-KSI

GFRP REINFORCEMENT (PARAPETS)

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI (GIRDERS, CONNECTION PLATES, SPLICE PLATES, CROSS FRAMES MEMBERS, BEARING STIFFENERS, LOAD PLATES, SEMI-INTEGRAL ABUTMENT PEDESTALS)

STEEL CAST-IN-PLACE (C.I.P.) REINFORCED CONCRETE PIPE PILES (C&MS 507) - ASTM A252 GRADE 3 - YIELD STRENGTH 45 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL

2½" CONCRETE COVER

MONOLITHIC WEARING SURFACE

A MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES TO BE 1 INCH THICK.

EXISTING BRIDGE PLANS

FOR INFORMATION NOT SHOWN, EXISTING BRIDGE PLANS MAY BE INSPECTED IN THE OFFICE OF STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE DISTRICT 6 OFFICE, 400 EAST WILLIAM STREET, DELAWARE, OHIO 43015.

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC PLANS, SEE ROADWAY SHEETS.

UTILITIES

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE(S) AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04 FOR FURTHER INFORMATION.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT AT THE BRIDGES.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO:

OHIO EPA, CDO
50 WEST TOWN ST, SUITE 700
COLUMBUS, OHIO 43215
KELLY TOTH, APC MANAGER
(614) 728-3778
FAX: (614) 728-3898

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION.

INFORMATION REQUIRED ON THE FORM SHALL INCLUDE: 1) THE CONTRACTOR NAME, ADDRESS AND CONTACT INFORMATION 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THE PROVISIONS OF C&MS 202 APPLY, IN ADDITION TO THOSE LISTED HEREIN. THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES AND HEADACHE BALLS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK CAREFULLY TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED FOR MAINTAINING TRAFFIC.

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE.

REMOVAL METHODS:

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. UNLESS OTHERWISE ADVISED BY THE ENGINEER, THE CONTRACTOR IS PERMITTED TO USE A HYDRAULIC HOE-RAM ONLY FOR SUBSTRUCTURE REMOVALS ONLY AFTER THE PHASED REMOVAL LIMITS OF THE SUPERSTRUCTURE ARE COMPLETE FOR THAT PHASE. THE CONTRACTOR MUST SUBMIT DEMOLITION PLAN(S) ACCORDING TO C&MS 501.05.

EXISTING CIP PILES:

REMOVE ALL EXISTING PILING TO A MINIMUM OF 1-FOOT BELOW THE PROPOSED BOTTOM OF FOOTING ELEVATION. FILL THE REMOVAL CAVITY ACCORDING TO C&MS 202.

PILE DRIVING CONSTRAINTS

REAR ABUTMENT:

PRIOR TO DRIVING PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET. THE CONTRACTOR MAY PRE-DRIVE PILES BEFORE CONSTRUCTING THE MSE WALL. PRE-DRIVING CONSISTS OF INSTALLING THE PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST 3-FEET OF PILE ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE PILES TO THE UBV UNTIL AFTER THE MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A 24 CALENDAR DAY WAITING PERIOD HAS ELAPSED. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH PILE A DISTANCE OF AT LEAST 0.50-INCH.

IF NOT PRE-DRIVING PILES, INSTALL PILES THROUGH THE PILE SLEEVES AFTER THE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

ITEM 507 - PREBORED HOLES, AS PER PLAN

THE CONTRACTOR SHALL PREBORE PILE HOLES FOR ALL FORWARD ABUTMENT PILES TO A MINIMUM ELEVATION OF 869.00 FOR THE LEFT BRIDGE (PILE NO.s 69-106) AND ELEVATION 872.00 FOR THE RIGHT BRIDGE (PILE NO.s 107-136). THE DIAMETER OF THE PREBORED HOLE SHALL BE A MINIMUM 2-INCH LARGER THAN THE DIAMETER OF THE PILE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AN OPEN HOLE.

PREBORED HOLES SHALL BE CLEAN AND FREE OF ALL DELETERIOUS MATERIALS PRIOR TO BACKFILLING OPERATIONS. BACKFILL THE CAVITY BETWEEN THE PILE AND THE PREBORED HOLE WITH GRANULAR MATERIAL CONFORMING TO C&MS 703.11, STRUCTURAL BACKFILL TYPE 2, EXCEPT 100 PERCENT OF THE MATERIAL SHALL PASS THROUGH A ¾" SIEVE. BACKFILL THE CAVITY UP TO THE BOTTOM OF FOOTING ELEVATION.

ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID AT THE CONTRACT BID PRICE FOR ITEM 507 - PREBORED HOLES, AS PER PLAN.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE, UBV)

THE ULTIMATE BEARING VALUE IS 343 KIPS PER FOOT FOR ABUTMENT PILES.

ABUTMENT PILES:
14" DIAMETER CIP PILES

REAR ABUTMENT:
ESTIMATED LENGTH = 65'-0"
ORDER LENGTH = 70'-0"

FORWARD ABUTMENT:
ESTIMATED LENGTH = 65'-0"
ORDER LENGTH = 70'-0"

PILE DRIVING: THE MAXIMUM RATED ENERGY OF THE HAMMER SHALL NOT EXCEED 47,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 40,500 POUNDS PER SQUARE INCH.

A MINIMUM WALL THICKNESS OF 0.375" SHALL BE USED AT ALL THE REAR ABUTMENT PILES. A MINIMUM WALL THICKNESS OF 0.250" SHALL BE USED AT THE FORWARD ABUTMENT PILES. ALL STEEL SHALL BE ASTM A252 STEEL, GRADE 3 WITH A MINIMUM YIELD STRENGTH OF 45 KSI.

PILES DRIVEN TO FULL ESTIMATED LENGTH WITH PILE/SOIL SETUP
ITEM 523 - DYNAMIC LOAD TESTING, AS PER PLAN
ITEM 523 - RESTRIKE, AS PER PLAN

THE ULTIMATE BEARING VALUE (UBV) LISTED ABOVE WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME DEPENDENT INCREASE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 WORKING DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES IN EACH SUBSTRUCTURE TO THEIR FULL ESTIMATED LENGTHS, 65-FEET AT THE REAR ABUTMENT AND 65-FEET AT THE FORWARD ABUTMENT. PERFORM DYNAMIC LOAD TESTING ON BOTH PILES WHILE DRIVING. AFTER DRIVING AND TESTING THE FIRST TWO PILES, DRIVE THE REMAINING PILES IN THE SUBSTRUCTURE TO THE SAME DEPTH AS THE FIRST TWO PILES. AFTER DRIVING ALL PILES TO THE ESTIMATED LENGTH, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A PERIOD OF 7 DAYS. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM RESTRIKES ON BOTH OF THE FIRST TWO PILES (ONE RESTRIKE ITEM).

SUBMIT ALL TEST RESULTS TO THE ENGINEER. IF THE RESTRIKE RESULTS INDICATE THAT BOTH PILES ACHIEVED THE REQUIRED UBV, ALL PILES IN THE SUBSTRUCTURE MAY BE ACCEPTED BY THE ENGINEER.

IF THE RESTRIKE RESULTS INDICATE THAT EITHER OF THE TWO PILES DID NOT ACHIEVE THE REQUIRED UBV, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH ADDITIONAL RESTRIKE TESTING OR DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

IF DIRECTED BY THE ENGINEER, PERFORM ADDITIONAL RESTRIKE TESTING OR DRIVE ALL PILES IN THE SUBSTRUCTURE TO THE ESTABLISHED DRIVING CRITERIA. THE DEPARTMENT WILL PAY FOR SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS UNDER C&MS 109.05 WITH A NEGOTIATED PRICE PER SPLICE.

THIS PLAN NOTE INCLUDES A QUANTITY OF ONE EACH ITEM 523 DYNAMIC LOAD TESTING, AS PER PLAN AND A QUANTITY OF ONE EACH ITEM 523 RESTRIKE, AS PER PLAN PER EACH SUBSTRUCTURE UNIT.

ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT

THE COLOR OF THE FINISH COAT SHALL BE FEDERAL COLOR NO. FS 595 17038, OSHA BLACK/ANA 515/622

DECK PLACEMENT ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE.

BRIDGE	CONST. PHASE	MAX. WHEEL LOAD (KIP)	MAX. RAIL-TO-RAIL WIDTH (FT.)	MAX. BRACKET OVERHANG (MEASURED ℄ FROM GIRDER) (IN.)
LEFT	3A	2.20	33.05	70
LEFT	3B	2.33	46.50	70
RIGHT	4A	2.20	32.03	70
RIGHT	4B	2.20	32.28	70

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN(S) SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

REFER TO SHEET 16 FOR ADDITIONAL NOTES.

STRUCTURE GENERAL NOTES (1 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MJR | CHECKER DBL
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 4 | TOTAL 65
SHEET P. 424 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:43:30 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10

ITEM 622 - PORTABLE BARRIER, 32", BRIDGE MOUNTED, AS PER PLAN

THE CONTRACTOR SHALL UTILIZE AN ANCHORED PORTABLE BARRIER SYSTEM WHERE SPECIFIED IN THE PLANS AND GENERAL NOTES. THE CONTRACTOR IS PERMITTED TO USE PCB-91 OR RM-4.2 SEGMENTS EXCEPT AS NOTED HEREIN. THE USE OF RM-4.2 IS NOT PERMITTED WHERE LESS THAN ONE FOOT OF EDGE DISTANCE (MEASURED FROM THE EDGE OF DECK ALONG THE REMOVAL LINE TO THE NEAREST TOE OF BARRIER) IS PROVIDED. THE CONTRACTOR SHALL UTILIZE PCB-91 OR THE EASI-SET WORLDWIDE TEMPORARY BARRIER (OR APPROVED EQUAL) WHERE LESS THAN ONE FOOT OF EDGE DISTANCE IS PROVIDED.

THE FOLLOWING ANCHOR REQUIREMENTS APPLY:

	NO. OF ANCHORS REQUIRED (EACH BARRIER SEGMENT)	
	EDGE DISTANCE, D < 1'-0"	EDGE DISTANCE, D >= 1'-0"
PCB-91	6	3
RM-4.2	NOT PERMITTED	2
EASI-SET WORLDWIDE (OR APPROVED EQUAL)	SEE MANUFACTURER RECOMMENDATIONS	SEE MANUFACTURER RECOMMENDATIONS

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT ANCHORED PORTABLE BARRIER INCLUDING APPROVED ALTERNATES AS DESCRIBED ABOVE WILL BE PAID AT THE CONTRACT BID PRICE FOR ITEM 622 - PORTABLE BARRIER, 32", BRIDGE MOUNTED, AS PER PLAN.

ITEM SPECIAL - SETTLEMENT PLATFORMS

DESCRIPTION:

THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS WITHIN THE PROPOSED REAR ABUTMENT EMBANKMENT AND/OR MSE WALL BACKFILL AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND THE EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING THE WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT THE LINK BELOW ON THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION.

HTTP://WWW.DOT.STATE.OH.US/GEOTECHNICAL/PAGES/SETTELMENT.ASPX

A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

MATERIALS:

SOUND LUMBER SUCH AS 19MMM (3/4-INCH) EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 64MM (2-1/2-INCH) STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 915MM X 915MM X 3.2MM (36" X 36" X 1/8") MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS:

THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING PLACEMENT OF THE EMBANKMENT AND/OR MSE WALL CONSTRUCTION. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL PROTECT SETTLEMENT PLATFORMS FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

THE TOP OF SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF ONE FOOT BELOW THE BOTTOM OF FOOTING ELEVATION OR TWO FEET BELOW THE FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

CRITERIA:

REMAINING SETTLEMENT (AFTER WAITING PERIOD) IS LESS THAN OR EQUAL TO 1 INCH FOR WALLS AND EMBANKMENTS.

WAITING PERIOD:

THE WAITING PERIOD SHALL NOT BE CONSIDERED TO BEGIN UNTIL ALL FILL IS CONSTRUCTED TO THE BOTTOM OF FOOTING ELEVATIONS. THE FILL SHALL CONSISTS OF THE PROPOSED MSE WALL BACKFILL OR EMBANKMENT CONSTRUCTED TO THE ENTIRE LATERAL EXTENTS OF THE PHASED CONSTRUCTION WITHIN ONE FOOT OF THE PROPOSED VERTICAL EXTENTS.

NO CONSTRUCTION OF STRUCTURES (INCLUDING FOUNDATIONS, LIMITED CONSTRUCTION OF PILE DRIVING SPECIFIED HEREIN, MSE WALL TOP PANELS, COPING, ETC.) OR PAVING OF ROADWAYS SHALL BEGIN UNTIL CONFIRMATION HAS BEEN RECEIVED FROM THE ENGINEER THAT THE CRITERIA TO END THE WAITING PERIOD HAVE BEEN MET.

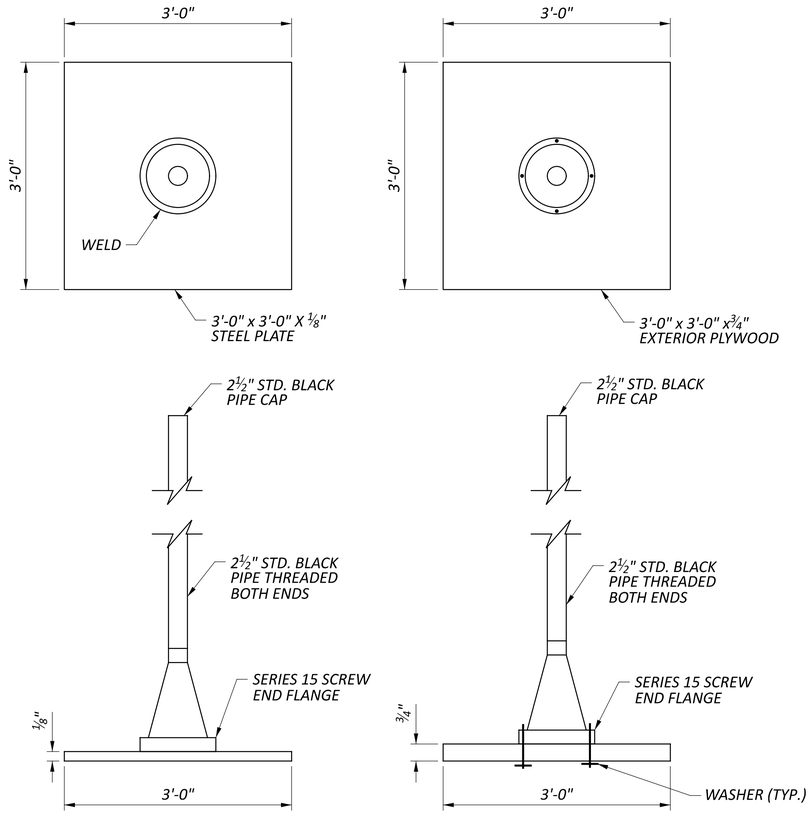
IT IS ANTICIPATED THAT AFTER COMPLETION OF MSE WALL AND/OR EMBANKMENT CONSTRUCTION, A 24 CALENDAR DAY WAITING PERIOD AT THE REAR ABUTMENT (MSE WALL 1) AND A 30 CALENDAR DAY WAITING PERIOD AT THE FORWARD ABUTMENT WILL BE REQUIRED BEFORE THE SETTLEMENT RATE THRESHOLD IS ACHIEVED.

***METHOD OF MEASUREMENT**:*

THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT:

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR ITEM SPECIAL - SETTLEMENT PLATFORMS WHICH IS COMPENSATION FOR CONSTRUCTING, MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.



SETTLEMENT PLATFORM DETAILS

SEQUENCE OF CONSTRUCTION

THE PROPOSED BRIDGE WORK (INCLUDING THE APPROACH SLABS AND MSE WALL) SHALL BE COORDINATED WITH OVERALL PROJECT MAINTENANCE OF TRAFFIC (MOT) PLANS.

FOR ADDITIONAL DETAILS REGARDING SEQUENCE OF CONSTRUCTION OF TEMPORARY SHORING, SEE SHEET 17.

PHASE 3A

1. *INSTALL PORTABLE CONCRETE BARRIERS ON NORTHBOUND (RIGHT) AND SOUTHBOUND (LEFT) LANES AND DIVERT TRAFFIC AS SHOWN ON MOT PLANS.*
2. *REMOVE PORTIONS OF THE EXISTING SUPERSTRUCTURE AS SHOWN IN THE PLANS.*
3. *INSTALL TEMPORARY SHORING.*
4. *REMOVE PORTIONS OF EXISTING SUBSTRUCTURE.*
5. *COMPLETE PHASE 3A CONSTRUCTION.*

PHASE 3B

1. *INSTALL PORTABLE CONCRETE BARRIER ON PHASE 3A CONSTRUCTION AND DIVERT SOUTHBOUND TRAFFIC TO MOT PHASE 3B.*
2. *REMOVE REMAINING PORTIONS OF EXISTING SOUTHBOUND (LEFT) BRIDGE.*
3. *CONSTRUCT PHASE 3B AND CLOSURE POUR.*

PHASE 4A

1. *INSTALL PORTABLE CONCRETE BARRIERS ON NORTHBOUND (RIGHT) AND SOUTHBOUND (LEFT) LANES AND DIVERT TRAFFIC AS SHOWN ON MOT PLANS.*
2. *REMOVE PORTIONS OF THE EXISTING NORTHBOUND SUPERSTRUCTURE AS SHOWN IN THE PLANS.*
3. *INSTALL TEMPORARY SHORING.*
4. *REMOVE PORTIONS OF EXISTING SUBSTRUCTURE.*
5. *COMPLETE PHASE 4A CONSTRUCTION.*

PHASE 4B

1. *INSTALL PORTABLE CONCRETE BARRIER ON PHASE 4A CONSTRUCTION AND DIVERT NORTHBOUND TRAFFIC TO MOT PHASE 4B.*
2. *REMOVE REMAINING PORTIONS OF EXISTING NORTBOUND (RIGHT) BRIDGE.*
3. *CONSTRUCT PHASE 4B AND CLOSURE POUR.*

ABBREVIATION LEGEND:

ABUT. - ABUTMENT
ADT - AVERAGE DAILY TRAFFIC
ADTT - AVERAGE DAILY TRUCK TRAFFIC
APPR. - APPROACH
B OR BOT. - BOTTOM
BM - BENCHMARK
BRG. - BEARING
℄ - CENTERLINE
C/C - CENTER TO CENTER
C.I.P. - CAST-IN-PLACE
C.J. - CONSTRUCTION JOINT
CLR. - CLEAR
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
C.P. - CLOSURE POUR
CVN - CHARPY V-NOTCH
DIA. - DIAMETER
DIST. - DISTANCE
DND - DO NOT DISTURB
DWG. - DRAWING
E.F. - EACH FACE
EL. OR ELEV. - ELEVATION
EOP - EDGE OF PAVEMENT
EQ. - EQUAL
EST. - ESTIMATED
EX. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F/F - FACE TO FACE
FT. - FOOT OR FEET
FTG. - FOOTING
FWD. - FORWARD
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE
IN. - INCH
JT. - JOINT
LT. - LEFT
MAX. - MAXIMUM
MISC. - MISCELLANEOUS
MSE - MECHANICALLY STABILIZED EARTH
NB - NORTHBOUND
NO. - NUMBER
N.P.C.P.P - NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O - OUT TO OUT
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
PGL - PROFILE GRADE LINE
PROP. - PROP.
R - RADIUS
R.C. - REFERENCE CHORD
REF. - REFERENCE
RNDG. - ROUNDING
RT. - RIGHT
R/W - RIGHT OF WAY
SB - SOUTHBOUND
SCD - STANDARD CONSTRUCTION DRAWING
SER. - SERIES
SHD. OR SHLDR. - SHOULDER
SPA. - SPACE OR SPACES
STA. - STATION
STD. - STANDARD
STR - STRAIGHT
S.U.P. - SHARED USE PATH
T - TOP
T/T - TOE TO TOE
TEMP - TEMPORARY
T&B - TOP AND BOTTOM
TBR - TO BE REMOVED
TBRO - TO BE RELOCATED BY OTHERS
TBRR - TO BE REMOVED AND REPLACED
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
VAR. - VARIES
W.R.T. - WITH RESPECT TO

STRUCTURE GENERAL NOTES (2 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MJR
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	5
TOTAL	65
SHEET	P. 425
TOTAL	618

ESTIMATED QUANTITIES

CALC.	DATE	CHK'D	DATE
MJR	4/4/24	XXX	XX/YY/ZZ

ITEM	ITEM EXT.	TOTAL LEFT	TOTAL RIGHT	UNIT	DESCRIPTION	LEFT BRIDGE FRA-71-24.46 L (SFN 250XXXX)				RIGHT BRIDGE FRA-71-24.46 R (SFN 250XXXX)				SHEET REF.
						ABUT.	PIERS	SUPER.	GEN.	ABUT.	PIERS	SUPER.	GEN.	
202	11003			LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN									4/65
202	22900			SY	APPROACH SLAB REMOVED									
503	11101			LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN									4/65
503	21300			LS	UNCLASSIFIED EXCAVATION									
505	11100			LS	PILE DRIVING MOBILIZATION									
507	00600			FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN									
507	00650			FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED									
507	92201			FT	PREBORED HOLES, AS PER PLAN									4/65
509	10000			LB	EPOXY COATED STEEL REINFORCEMENT									
509	30020			FT	NO. 4 DEFORMED GFRP REINFORCEMENT									
511	33500			EA	SEMI-INTEGRAL DIAPHRAGM GUIDE									
511	34446			CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK									
511	34450			CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)									
511	44112			CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING									
511	46512			CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING									
512	10100			SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)									
512	33000			SY	TYPE 2 WATERPROOFING									
513	10280			LB	STRUCTURAL STEEL MEMBERS, LEVEL 4									
513	20000			EA	WELDED STUD SHEAR CONNECTORS									
514	00060			SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT									
514	00066			SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT									
516	13600			SF	1" PREFORMED EXPANSION JOINT FILLER									
516	13900			SF	2" PREFORMED EXPANSION JOINT FILLER									
516	14020			FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL									
516	44300			EA	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (18" x 19" x 4.504" WITH 14" x 26" x 2.5" TOP LOAD PLATE AND 19" x 20" x 2.0" BOT. LOAD PLATE AND HP 10x42 PEDESTAL)									32/65
518	21050			SY	POROUS BACKFILL WITH GEOTEXTILE FABRIC									
518	40000			FT	6" PERFORATED CORRUGATED PLASTIC PIPE									
518	40010			FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS									
523	20001			EA	DYNAMIC LOAD TESTING, AS PER PLAN									4/65
523	20501			EA	RESTRIKE, AS PER PLAN									4/65
526	30000			SY	REINFORCED CONCRETE APPROACH SLABS (T=17")									
526	90030			FT	TYPE C INSTALLATION									
867	00100			LS	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL									
SPECIAL	53000400			EA	SPECIAL - STRUCTURES - SETTLEMENT PLATFORMS									5/65

NOTES:

1. *UNLESS NOTED OTHERWISE, ALL PAY ITEMS ARE INCLUDED IN THE FUNDING PARTICIPATION SPLIT CODE XX/YY/ZZ.*
2. *FOR MSE WALL ESTIMATED QUANTITIES, SEE SHEET 59.*

STRUCTURE ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	DBL

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
6	65

SHEET	TOTAL
P. 426	618

FRA-71-19.10

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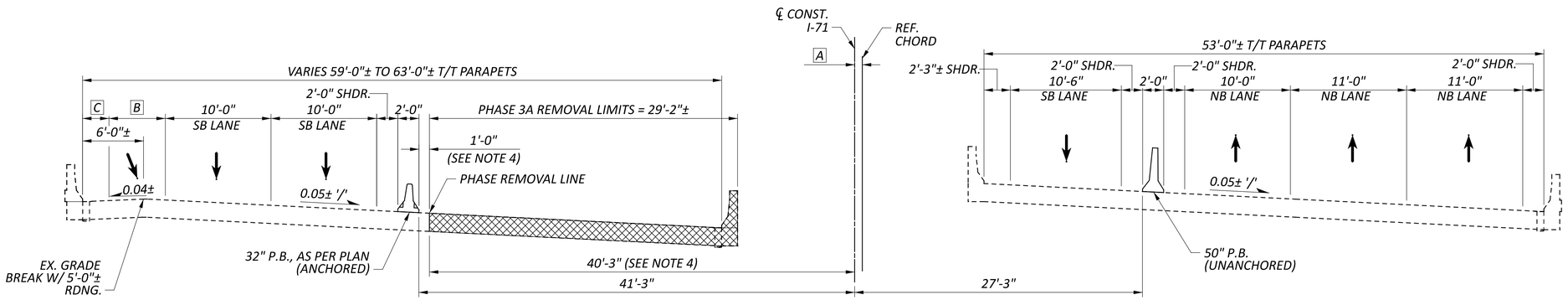
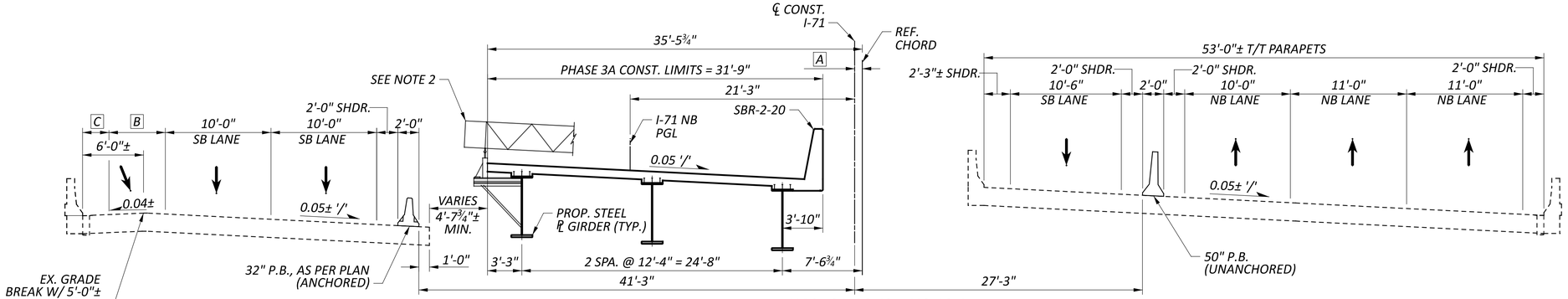
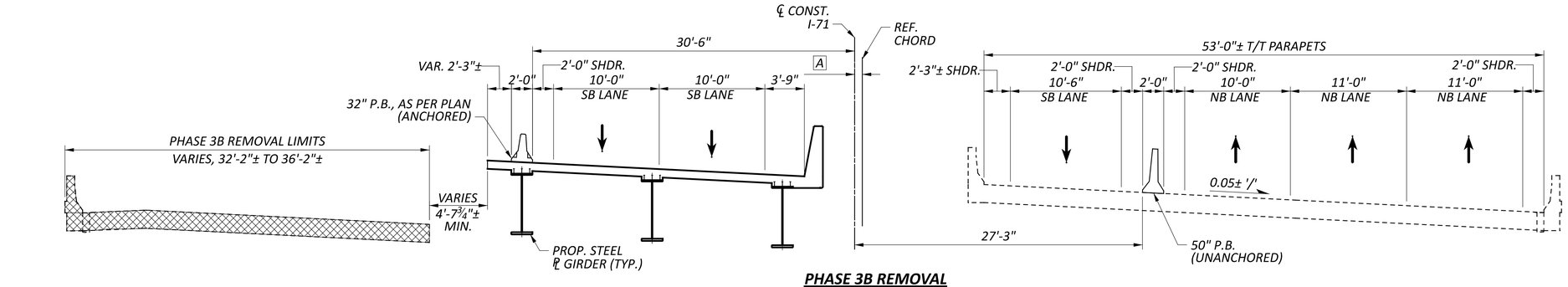


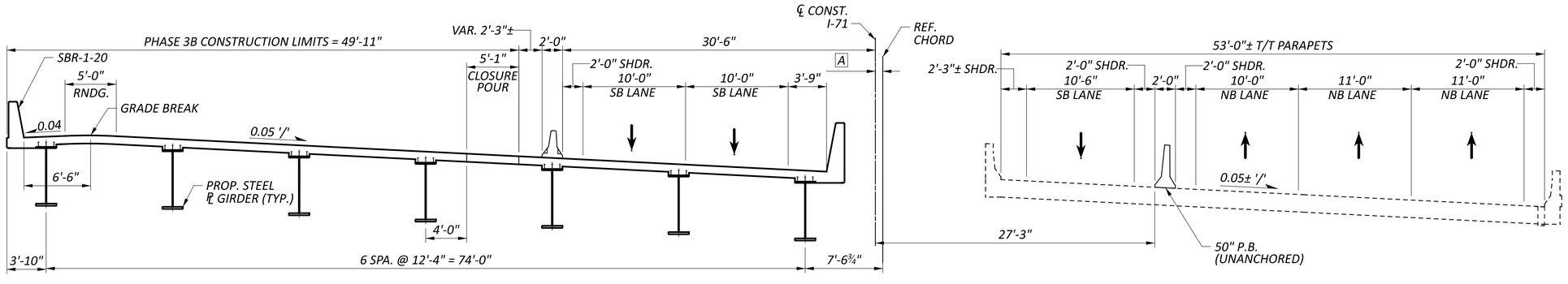
PHASE 3A REMOVAL



PHASE 3A CONSTRUCTION



PHASE 3B REMOVAL



PHASE 3B CONSTRUCTION

LEGEND:

- ▨ - *ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN*
- A - *VARIES 0" TO 8 13/16"*
- B - *I-71 SB ACCELERATION LANE FROM SINCLAIR ENTRANCE RAMP VARIES, 6'-7"± TO 2'-10"± FROM EX. FWD. ABUT. ℄ BRG. TO EX. REAR ABUT. ℄ BRG. (SEE NOTE 5)*
- C - *SHOULDER VARIES, 3'-7½"± TO 2'-7½"± FROM EX. FWD. ABUT. ℄ BRG. TO EX. REAR ABUT. ℄ BRG. (SEE NOTE 5)*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FINISHING MACHINE SHALL NOT EXTEND BEYOND TOE (TRAFFIC SIDE) OF ANCHORED BARRIER, AS PER PLAN*
3. *PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES. SEE SHEET 5 FOR ADDITIONAL NOTES INCLUDING ANCHORAGE REQUIREMENTS.*
4. *PHASE REMOVAL LINES ARE SET BASED UPON THE ROADWAY ALIGNMENT (℄ CONST. I-71). THE REMOVAL LIMITS WILL VARY AS THE EXISTING SLAB LIMITS ARE NOT ALWAYS CONCENTRIC (A.K.A. PARALLEL) TO THE ℄CONST. I-71 ALIGNMENT. THE INTENT IS TO PROVIDE A CONSTANT EDGE DISTANCE OF 1'-0" FROM THE PHASE REMOVAL LINES TO THE BACK OF THE ANCHORED PORTABLE BARRIER.WHEREAS THE PROPOSED BRIDGE CONSTRUCTION USES STRAIGHT (I.E. NON-CURVED) PHASED CONSTRUCTION JOINTS, GIRDERS AND DECK EDGES. PHASE CONSTRUCTION JOINTS ARE PARALLEL TO THE PROPOSED BRIDGE REFERENCE CHORD.*
5. *REFER TO THE MAINTENANCE OF TRAFFIC PLANS FOR ADDITIONAL INFORMATION AND TEMPORARY STRIPING.*
6. *CROSSFRAMES NOT SHOWN FOR CLARITY. DO NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.*
7. *FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 5.*

STAGED CONSTRUCTION DETAILS (1 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	7
TOTAL	65
SHEET	P. 427
TOTAL	618

FRA-71-19.10

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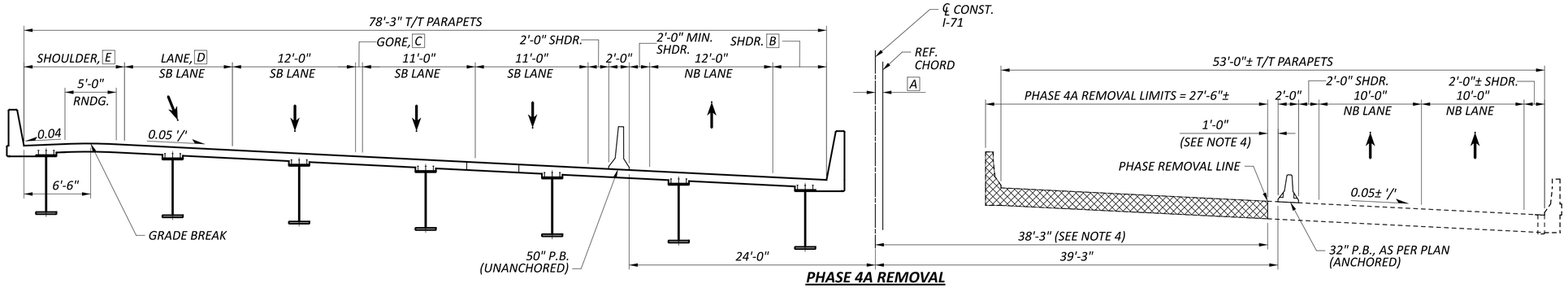
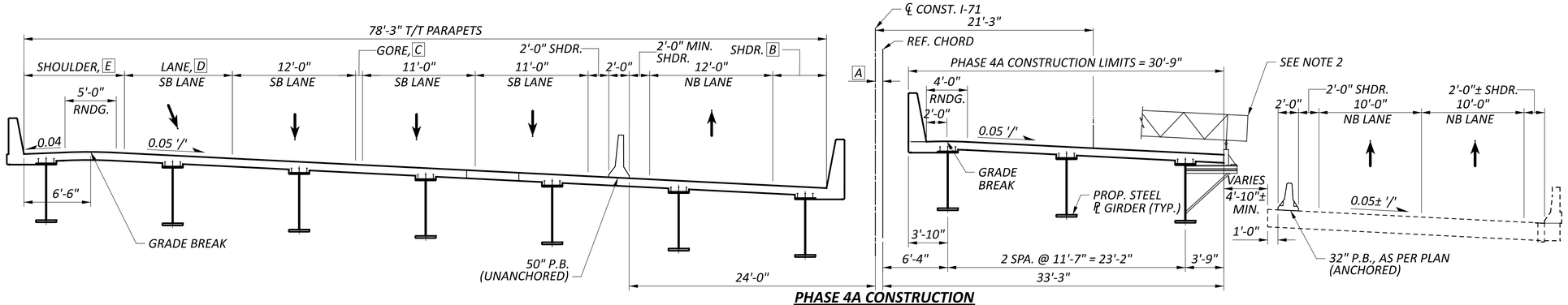
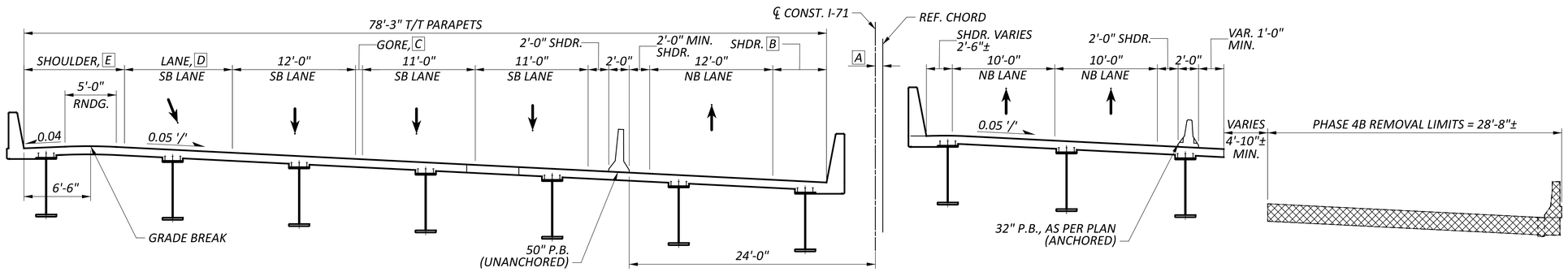


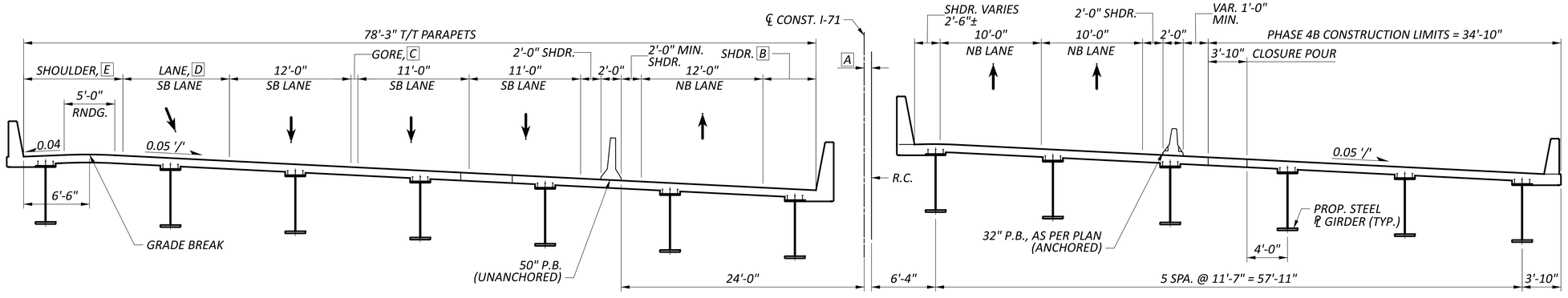
PHASE 4A REMOVAL



PHASE 4A CONSTRUCTION



PHASE 4B REMOVAL



PHASE 4B CONSTRUCTION

LEGEND:

- ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- A - VARIES 0" TO $8\frac{13}{16}$"
- B - SHOULDER VARIES, 2'-0" MIN. REFER TO MOT PLANS FOR TEMORARY STRIPING (SEE NOTE 5)
- C - GORE VARIES, 0'-0" MIN. REFER TO MOT PLANS FOR TEMORARY STRIPING (SEE NOTE 5)
- D - I-71 SB ACCELERATION LANE FROM SINCLAIR ENTRANCE RAMP VARIES, 12'-0"± TO 10'-$5\frac{1}{2}$"± (SEE NOTE 5)
- E - SHOULDER VARIES, 9'-$1\frac{3}{8}$"± MIN. REFER TO MOT PLANS FOR TEMORARY STRIPING (SEE NOTE 5)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FINISHING MACHINE SHALL NOT EXTEND BEYOND TOE (TRAFFIC SIDE) OF ANCHORED BARRIER, AS PER PLAN
3. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES. SEE SHEET 5 FOR ADDITIONAL NOTES INCLUDING ANCHORAGE REQUIREMENTS.
4. PHASE REMOVAL LINES ARE SET BASED UPON THE ROADWAY ALIGNMENT (℄ CONST. I-71). THE REMOVAL LIMITS WILL VARY AS THE EXISTING SLAB LIMITS ARE NOT ALWAYS CONCENTRIC (A.K.A. PARALLEL) TO THE ℄CONST. I-71 ALIGNMENT. THE INTENT IS TO PROVIDE A CONSTANT EDGE DISTANCE OF 1'-0" FROM THE PHASE REMOVAL LINES TO THE BACK OF THE ANCHORED PORTABLE BARRIER.WHEREAS THE PROPOSED BRIDGE CONSTRUCTION USES STRAIGHT (I.E. NON-CURVED) PHASED CONSTRUCTION JOINTS, GIRDERS AND DECK EDGES. PHASE CONSTRUCTION JOINTS ARE PARALLEL TO THE PROPOSED BRIDGE REFERENCE CHORD.
5. REFER TO THE MAINTENANCE OF TRAFFIC PLANS FOR ADDITIONAL INFORMATION AND TEMPORARY STRIPING.
6. CROSSFRAMES NOT SHOWN FOR CLARITY. DO NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
7. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 5.

STAGED CONSTRUCTION DETAILS (2 OF 2)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	8
TOTAL	65
SHEET	P. 428
TOTAL	618

FRA-71-19.10

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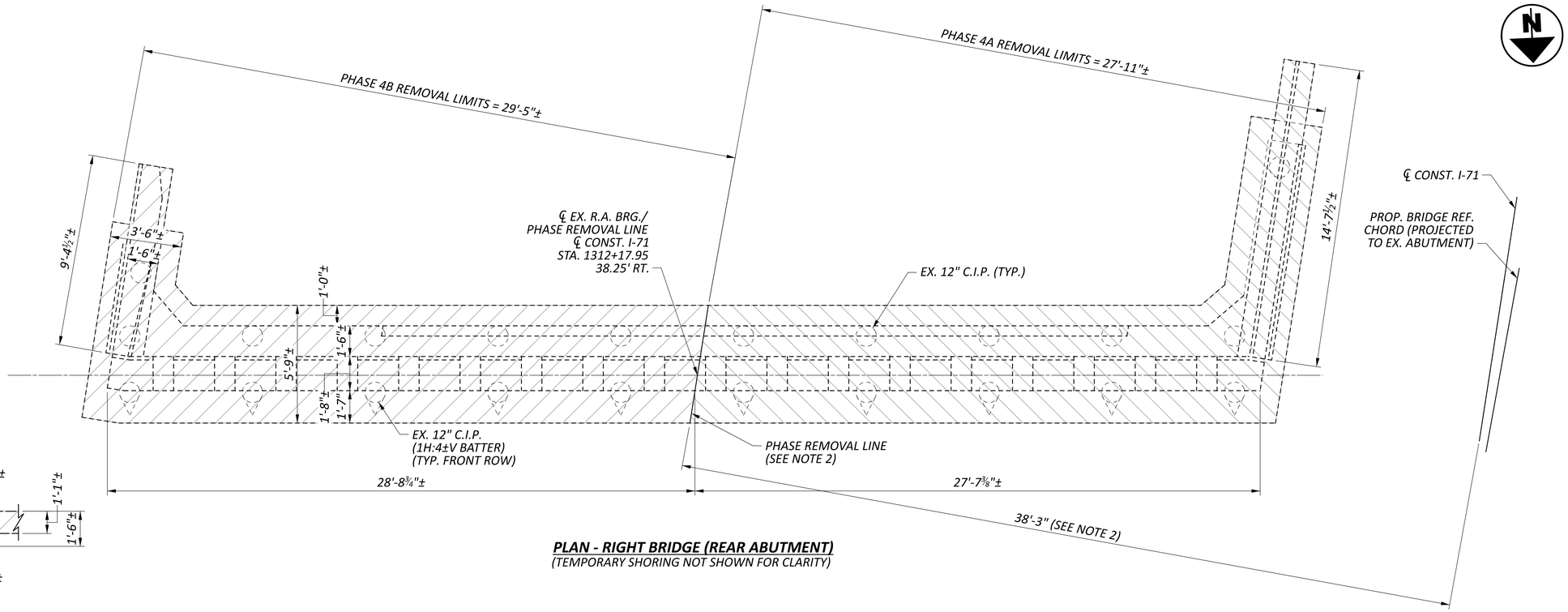
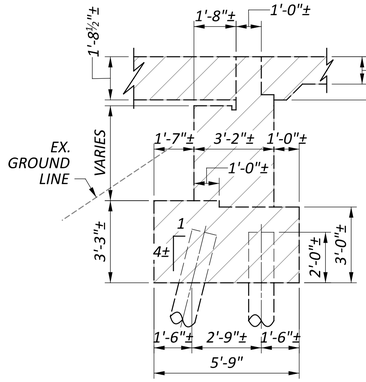
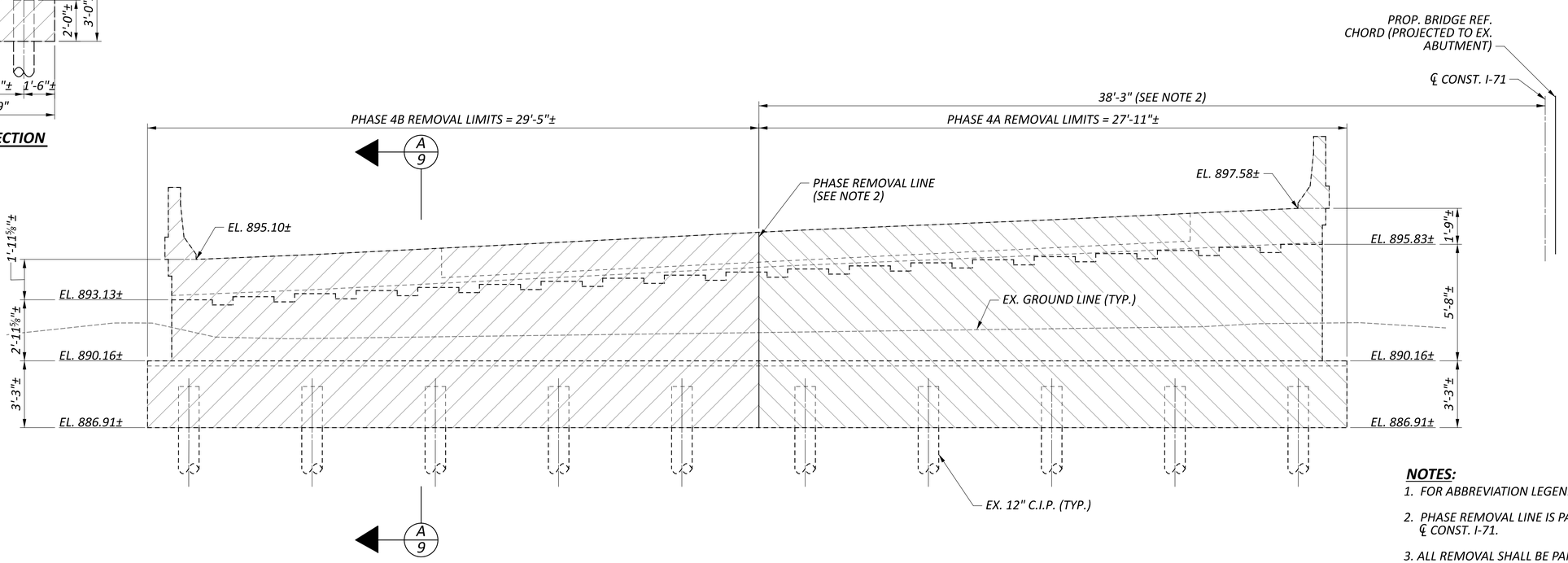


PLAN - RIGHT BRIDGE (REAR ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)



A/9 SECTION



ELEVATION - RIGHT BRIDGE (REAR ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)

LEGEND:

- PHASE 4A REMOVAL
- PHASE 4B REMOVAL

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. PHASE REMOVAL LINE IS PARALLEL TO ℄ CONST. I-71.
3. ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.

EXISTING REAR ABUTMENT REMOVAL DETAILS (RIGHT BRIDGE)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	9
TOTAL	65
SHEET	P. 429
TOTAL	618

FRA-71-19.10

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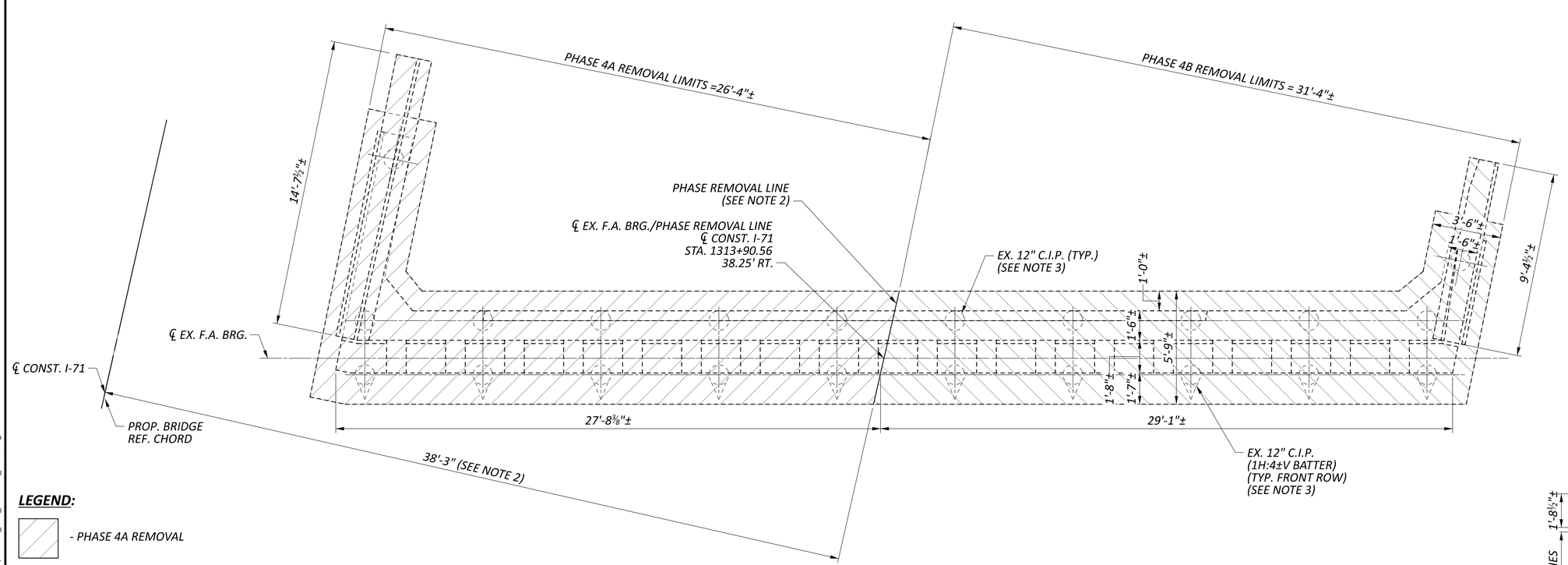
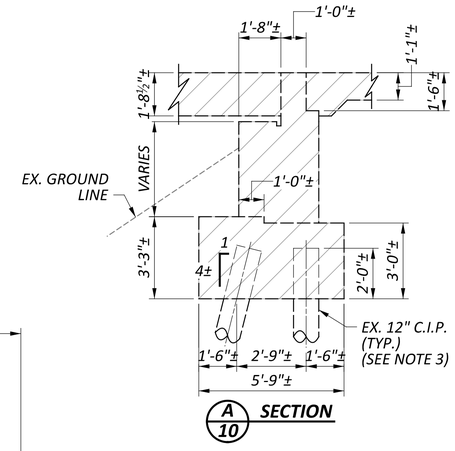
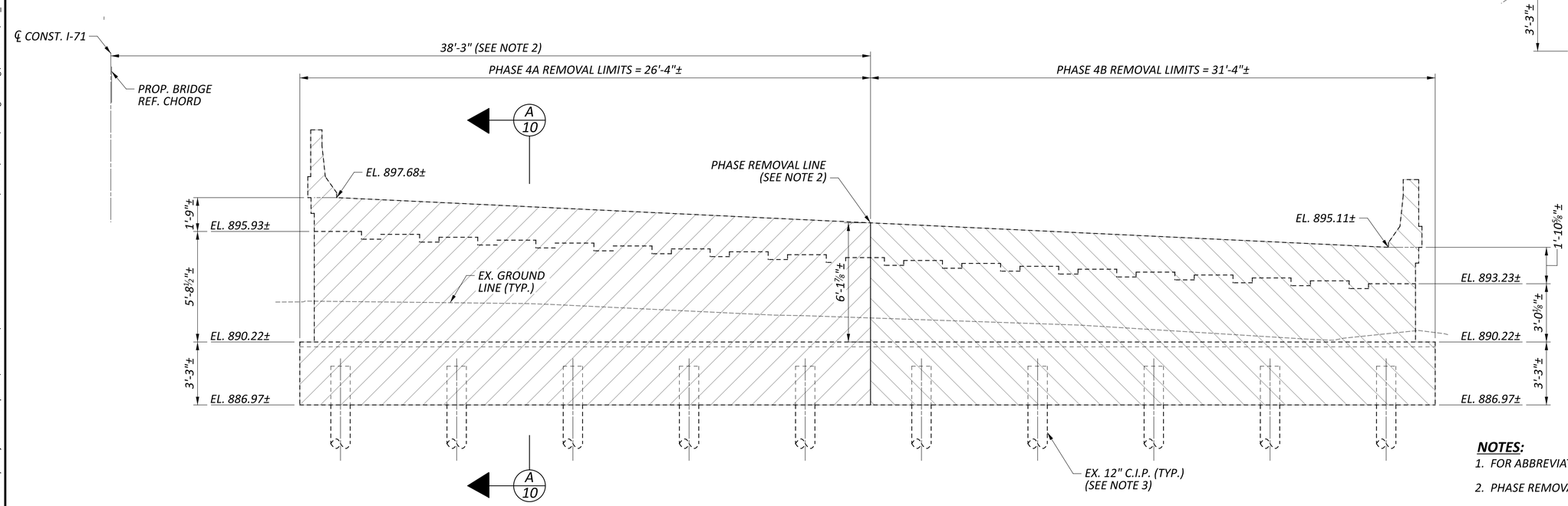


LEGEND:

- PHASE 4A REMOVAL
- PHASE 4B REMOVAL

PLAN - RIGHT BRIDGE (FORWARD ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)





ELEVATION - RIGHT BRIDGE (FORWARD ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *PHASE REMOVAL LINE IS PARALLEL TO ℄ CONST. I-71.*
3. *EXISTING PILES SHALL BE CUT 1'-0" MIN. BELOW THE PROPOSED BOTTOM OF FOOTING ELEVATION.*
4. *ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.*

EXISTING FORWARD ABUTMENT REMOVAL DETAILS - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	10
TOTAL	65
SHEET	P. 430
TOTAL	618

FRA-71-19.10

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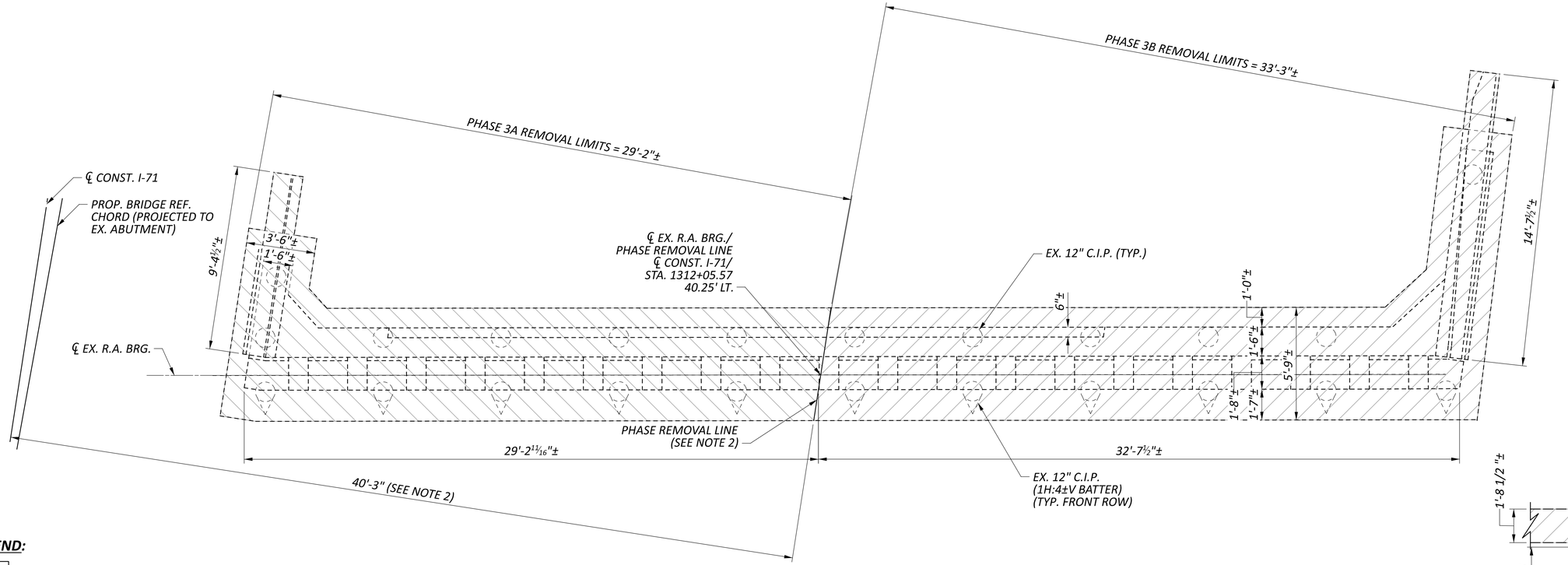
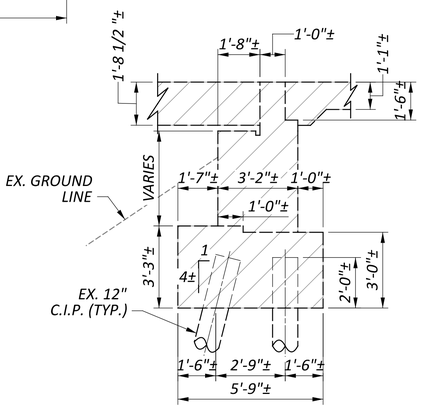


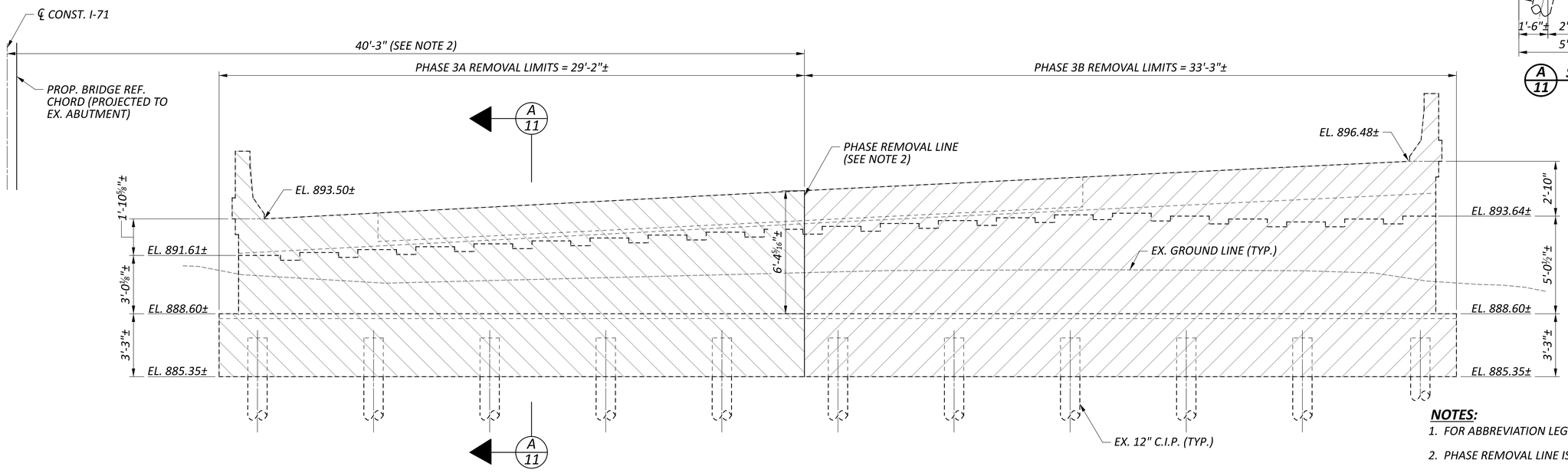
LEGEND:

- PHASE 3A REMOVAL
- PHASE 3B REMOVAL

PLAN - LEFT BRIDGE (REAR ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)



A 11 SECTION



ELEVATION - LEFT BRIDGE (REAR ABUTMENT)
(TEMPORARY SHORING NOT SHOWN FOR CLARITY)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *PHASE REMOVAL LINE IS PARALLEL TO ℄ CONST. I-71.*
3. *ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.*

EXISTING REAR ABUTMENT REMOVAL DETAILS - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	11
TOTAL	65
SHEET	P. 431
TOTAL	618

FRA-71-19.10

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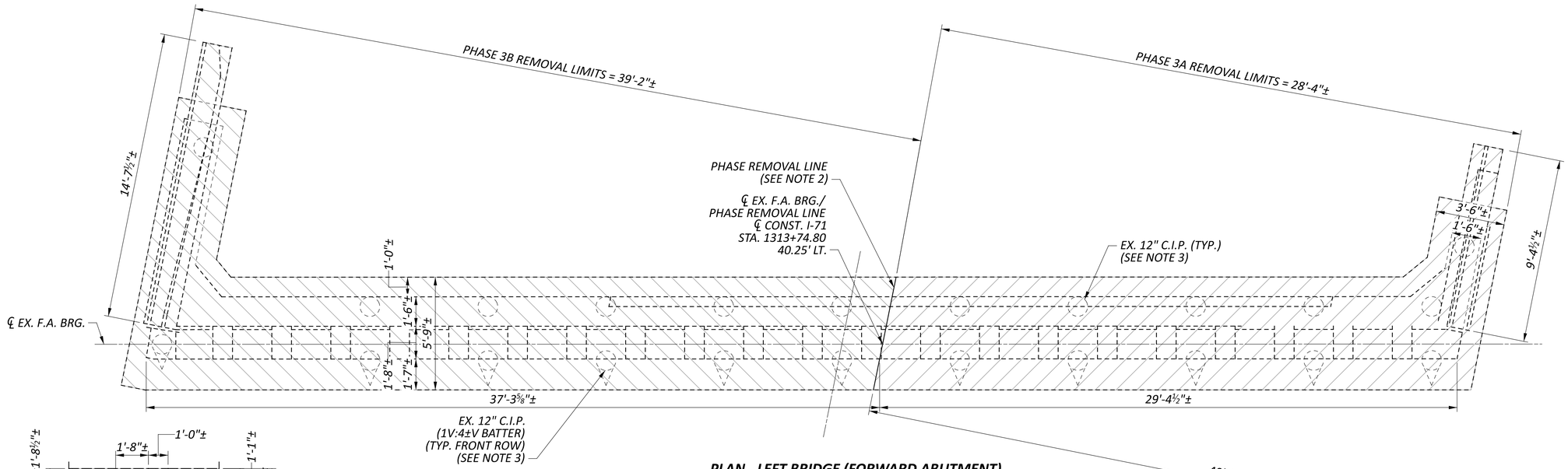
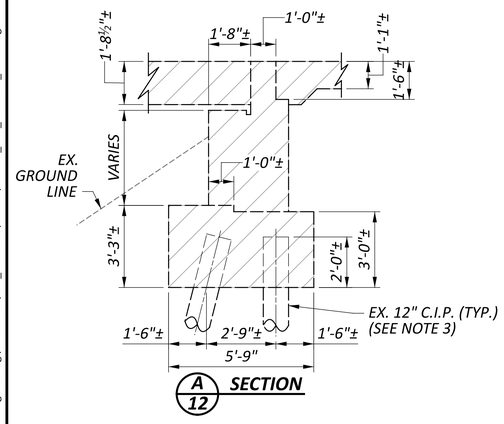


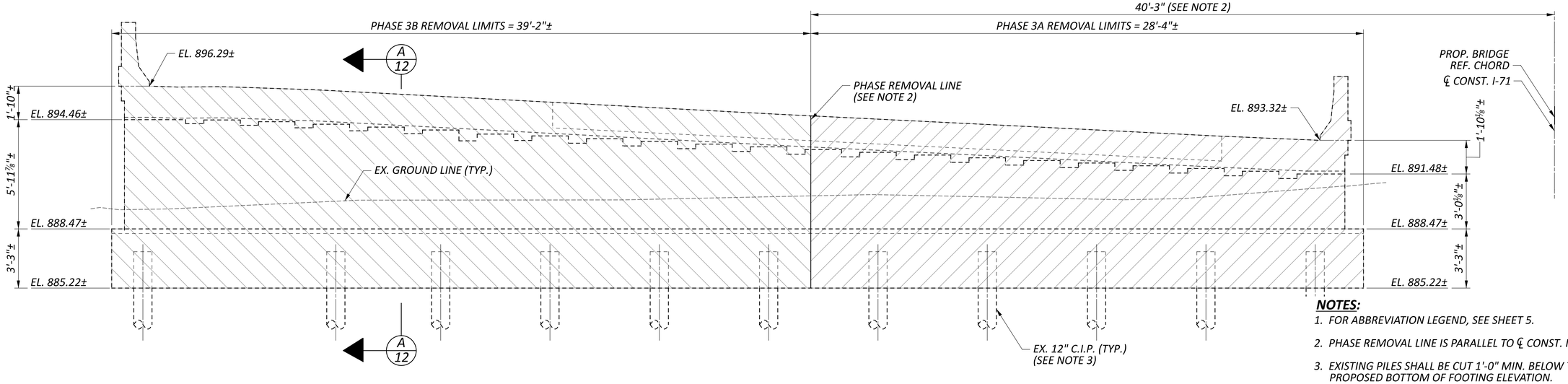
PLAN - LEFT BRIDGE (FORWARD ABUTMENT)



A 12 SECTION

LEGEND:

- PHASE 3A REMOVAL
- PHASE 3B REMOVAL



ELEVATION - LEFT BRIDGE (FORWARD ABUTMENT)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *PHASE REMOVAL LINE IS PARALLEL TO ℄ CONST. I-71.*
3. *EXISTING PILES SHALL BE CUT 1'-0" MIN. BELOW THE PROPOSED BOTTOM OF FOOTING ELEVATION.*
4. *ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.*

EXISTING FORWARD ABUTMENT REMOVAL DETAILS - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	12
TOTAL	65
SHEET	P. 432
TOTAL	618

FRA-71-19.10

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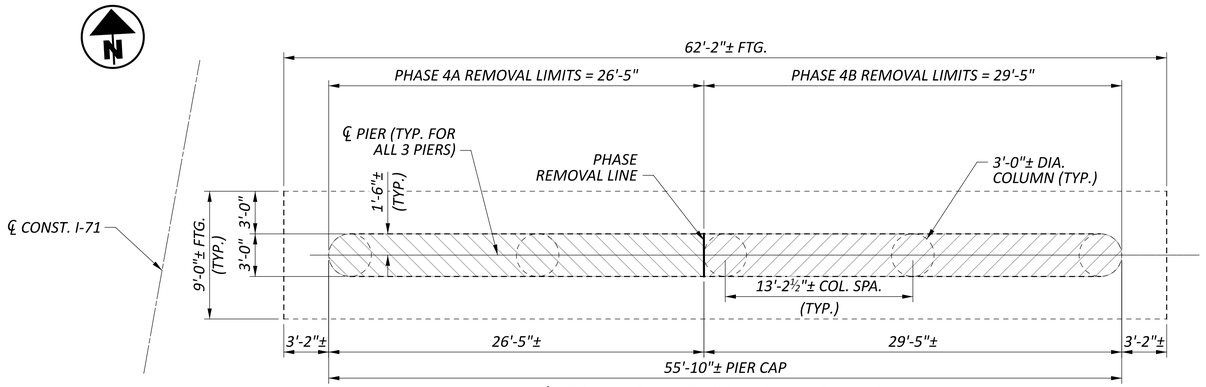
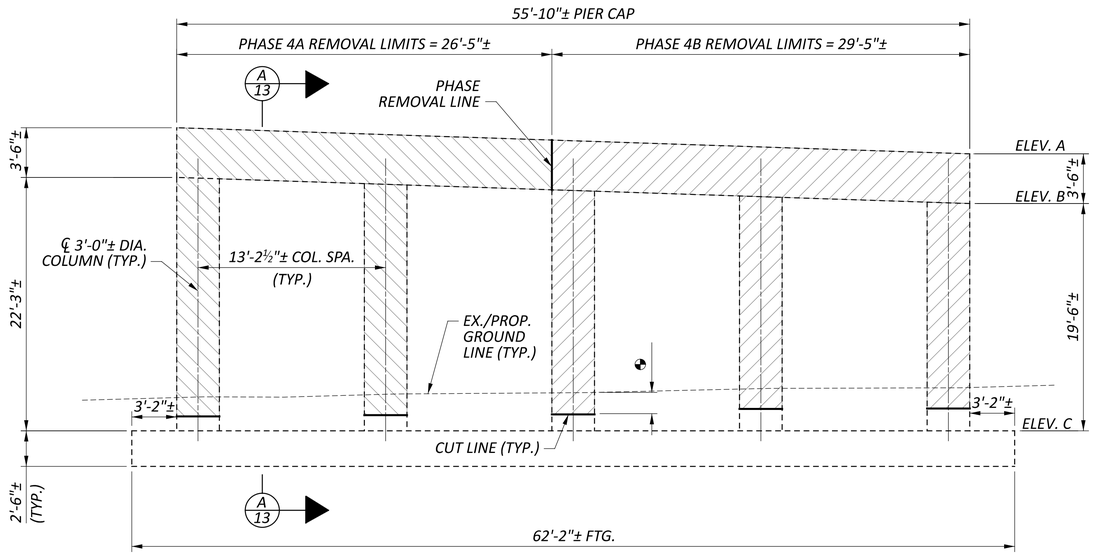
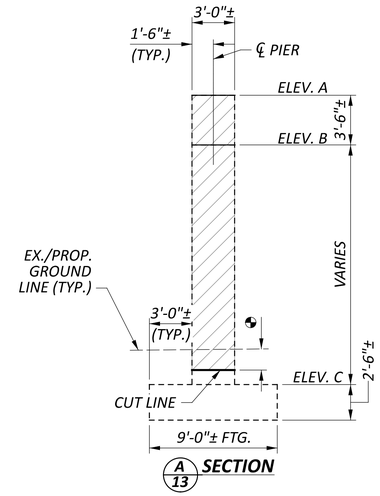


(PIER REMOVAL, TYPICAL OF ALL 3 PIERS RIGHT BRIDGE NORTHBOUND - PLAN)



(PIER REMOVAL, TYPICAL OF ALL 3 PIERS RIGHT BRIDGE NORTHBOUND - ELEVATION)



LOCATION	ELEV. A	ELEV. B	ELEV. C
PIER 1	896.02±	893.29±	873.79±
PIER 2	896.08±	893.33±	873.83±
PIER 3	896.08±	893.32±	873.82±

LEGEND:

= PHASE 4A REMOVAL LIMITS

= PHASE 4B REMOVAL LIMITS

= 1'-6" MIN. BELOW PROP. GROUND LINE FOR PIER 2
1'-0" MIN. BELOW PROP. GROUND LINE FOR PIERS 1 & 3

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL DETAILS.
3. EXISITNG REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.
4. ALL EXCAVATION REQUIRED TO REMOVE PORTIONS OF THE EXISTING PIERS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 503 - UNCLASSIFIED EXCAVATION. REFER TO ROADWAY TYPICAL SECTIONS FOR PROPOSED PAVEMENT BUILD-UP FOR MORSE ROAD.

EXISTING PIER REMOVAL DETAILS (1 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	13
TOTAL	65
SHEET	P. 433
TOTAL	618

FRA-71-19.10

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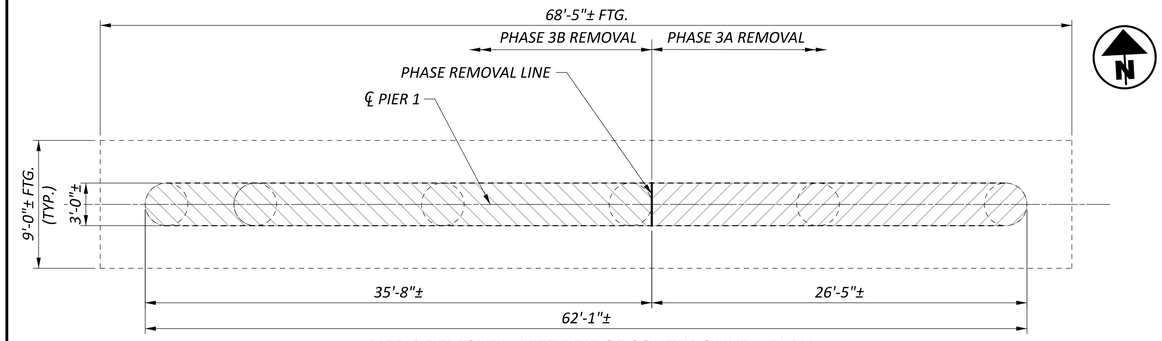
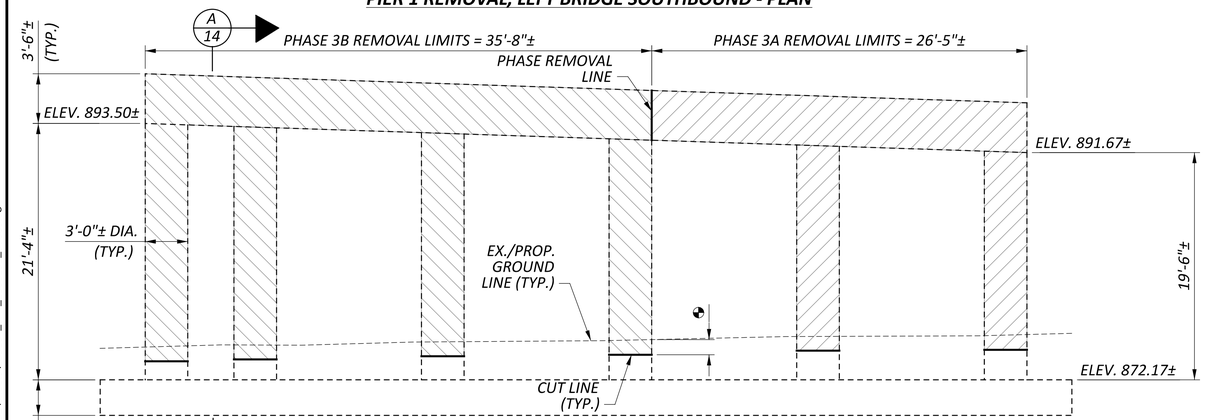
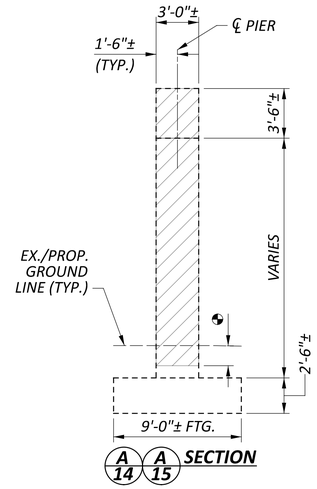
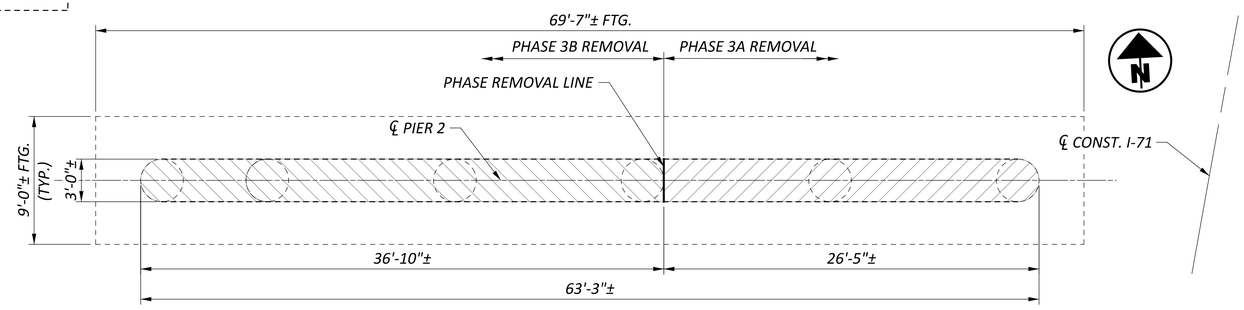


PIER 1 REMOVAL, LEFT BRIDGE SOUTHBOUND - PLAN

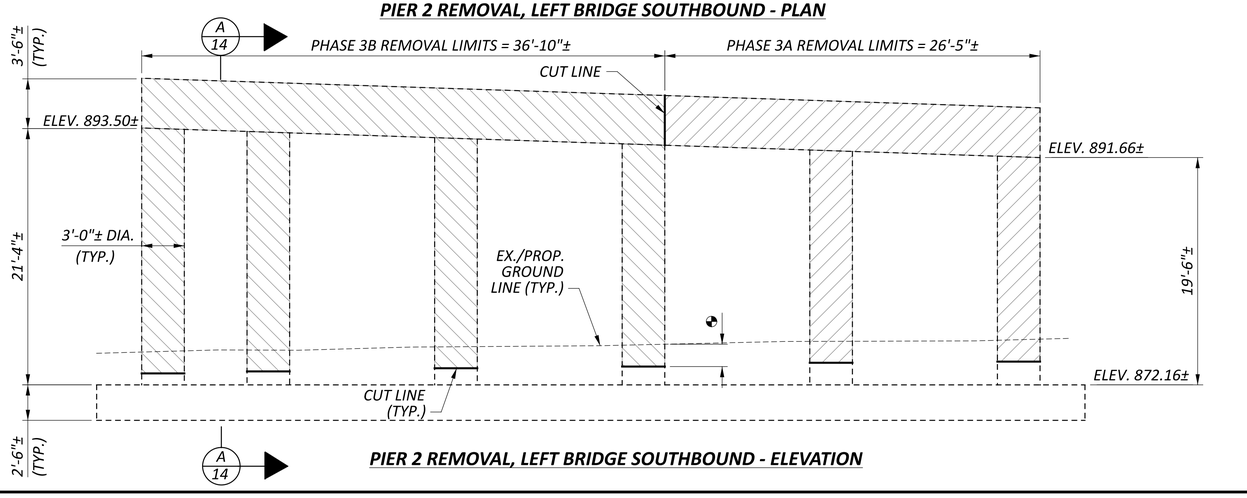


PIER 1 REMOVAL, LEFT BRIDGE SOUTHBOUND - ELEVATION





PIER 2 REMOVAL, LEFT BRIDGE SOUTHBOUND - PLAN



PIER 2 REMOVAL, LEFT BRIDGE SOUTHBOUND - ELEVATION

LEGEND

= PHASE 3A REMOVAL LIMITS

= PHASE 3B REMOVAL LIMITS

= 1'-6" MIN. BELOW PROP. GROUND LINE FOR PIER 2
1'-0" MIN. BELOW PROP. GROUND LINE FOR PIERS 1 & 3

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVE OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.
3. EXISTING REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.
4. ALL EXCAVATION REQUIRED TO REMOVE PORTIONS OF THE EXISTING PIERS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 503 - UNCLASSIFIED EXCAVATION. REFER TO ROADWAY TYPICAL SECTIONS FOR PROPOSED PAVEMENT BUILD-UP FOR MORSE ROAD.

EXISTING PIER REMOVAL DETAILS (2 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	14
TOTAL	65
SHEET	P. 434
TOTAL	618

FRA-71-19.10

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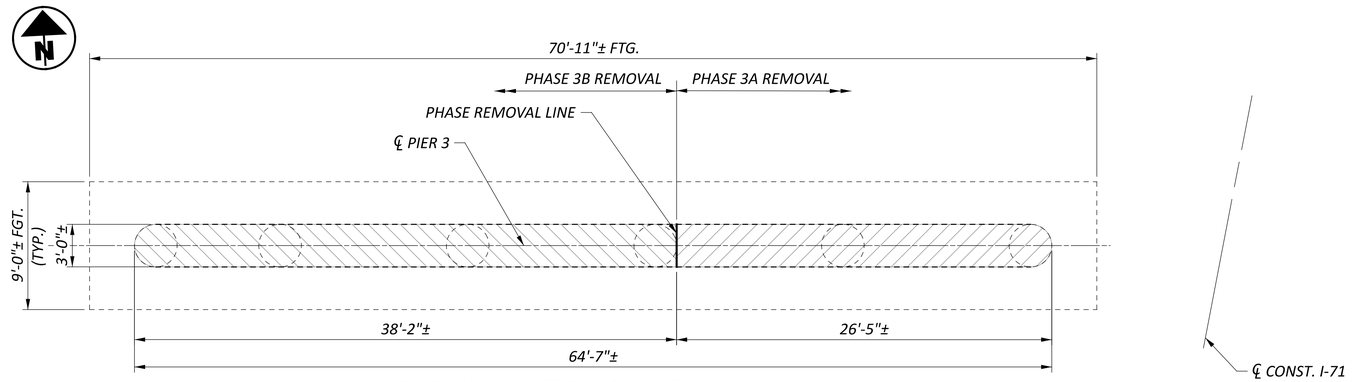
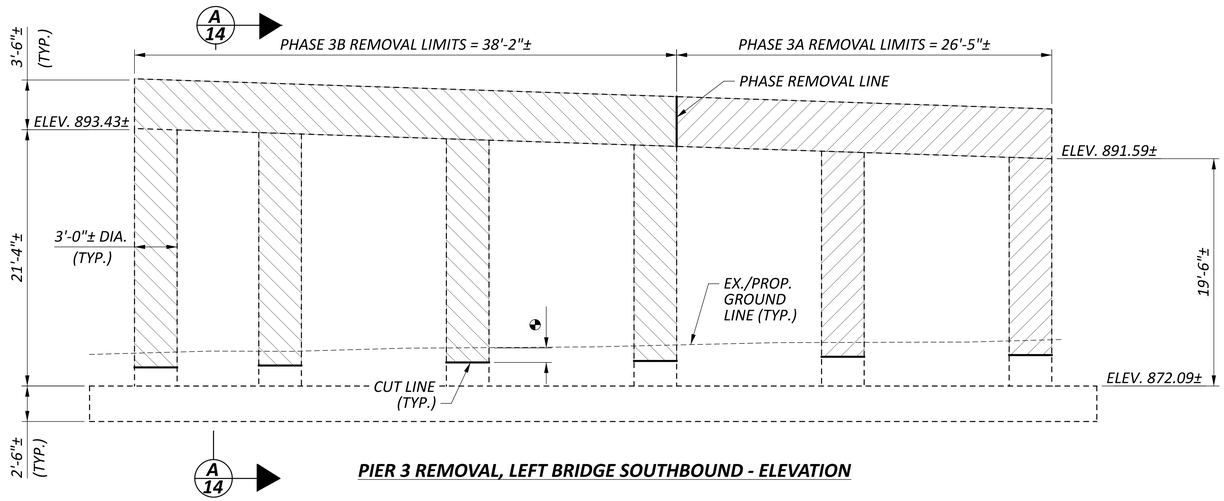


PIER 3 REMOVAL, LEFT BRIDGE SOUTHBOUND - PLAN



PIER 3 REMOVAL, LEFT BRIDGE SOUTHBOUND - ELEVATION

LEGEND

= PHASE 3A REMOVAL LIMITS

= PHASE 3B REMOVAL LIMITS

= 1'-6" MIN. BELOW PROP. GROUND LINE FOR PIER 2
1'-0" MIN. BELOW PROP. GROUND LINE FOR PIERS 1 & 3

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 5 FOR ADDITIONAL NOTES.
3. EXISTING REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.

EXISTING PIER REMOVAL DETAILS (3 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	15
TOTAL	65
SHEET	P. 435
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:46:02 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

1.0 DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, THE 2nd EDITION OF THE "AASHTO GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS", 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2020, DATED JULY 2025.

2.0 OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF TEMPORARY WORKS.

3.0 DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

STEEL SOLDIER PILES - ASTM A572 GRADE 50 - YIELD STRENGTH 50 KSI

STEEL SHEET PILING - ASTM A572 GRADE 50 - YIELD STRENGTH 50 KSI

4.0 UNCLASSIFIED EXCAVATION:

THIS WORK CONSISTS OF ALL EXCAVATION NECESSARY TO PERFORM THE WORK DESCRIBED IN THE TEMPORARY SHORING WALL PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXCAVATION LIMITS NECESSARY FOR INSTALLATION OF THE WORK. THE CONTRACTOR MAY NOT EXCAVATE OR WORK OUTSIDE OF THE RIGHT OF WAY UNLESS OTHERWISE SHOWN IN THESE PLANS.

5.0 STEEL SOLDIER PILES

THE FOLLOWING STEEL PILE SECTIONS ARE INCLUDED IN THE DESIGN OF TEMPORARY SOLDIER PILE AND LAGGING WALLS:

STEEL PILES, MISC.: SOLDIER PILES HP14x89
STEEL PILES, MISC.: SOLDIER PILES W18x311
STEEL PILES, MISC.: SOLDIER PILES W24x176
STEEL PILES, MISC.: SOLDIER PILES W24x306
STEEL PILES, MISC.: SOLDIER PILES W30x292

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50 IN ACCORDANCE WITH C&MS 711.01. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

6.0 DRILLED SHAFTS

THE FOLLOWING DRILLED SHAFT SIZES ARE INCLUDED IN THE DESIGN OF TEMPORARY SOLDIER PILE AND LAGGING WALLS:

DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK
DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR TEMPORARY SOLDIER PILE AND LAGGING WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL THE DRILLED SHAFTS IN ACCORDANCE WITH C&MS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

THE BOTTOM OF THE DRILLED SHAFT EXCAVATION SHALL BE AS CLEAN AS PRACTICAL PRIOR TO CONCRETE PLACEMENT. THE DRILLED SHAFT EXCAVATION SHALL BE INSPECTED BY THE ENGINEER IMMEDIATELY BEFORE THE CONCRETE IS PLACED. NO CONCRETE SHALL BE PLACED DURING INCLEMENT WEATHER CONDITIONS WHICH PROHIBIT A THOROUGH INSPECTION.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT WITHIN 3 INCHES OF THE PLAN LOCATION. PLACE THE SOLDIER PILE WITHIN THE HOLE SO IT IS VERTICAL AND NOT INCLINED MORE THAN 1 INCH BETWEEN TOP TO BOTTOM. PLACE THE SOLDIER PILES SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF DRILLED SHAFTS. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC1 CONCRETE ACCORDING TO C&MS 511. PLACE CONCRETE TO THE ELEVATION FOR THE TOP OF THE DRILLED SHAFT. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLIDER PILE IS ACCEPTABLE.

6.0 DRILLED SHAFTS CONTINUED...

CHECK THE POSITION, THE VERTICAL ALIGNMENT AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES. FILL THE HOLE ABOVE THE BOTTOM OF THE DRILLED SHAFT TO THE EXISTING GROUND SURFACE WITH ITEM C&MS 613 LOW STRENGTH MORTAR (LSM) BACKFILL.

REMOVE CONCRETE AND LSM AS NECESSARY FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE THE LAGGING. PLACE LAGGING SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE ENDS OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING. WAIT AT LEAST 12 HOURS AFTER PLACING CONCRETE IN THE DRILLED SHAFTS BEFORE PLACING LAGGING.

SEQUENCE OF INSTALLATION: INSTALL THE DRILLED SHAFTS IN SEQUENCE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48-HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THESE CRITERIA IS PERMISSIBLE.

PROTECTION OF UNATTENDED OPEN SHAFTS: COVER UNATTENDED OPEN SHAFTS. USE TEMPORARY COVERS OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. LEAVE NO DRILLED SHAFT EXCAVATION UN-POURED OVERNIGHT.

THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE LAGGING. ANY TEMPORARY GRADING, EXCAVATION, EMBANKMENT, AGGREGATE, DRAINAGE, SHEETING, ETC. NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

7.0 RETAINING WALL, TIMBER LAGGING:

THIS WORK CONSISTS OF FURNISHING AND PLACING TIMBER LAGGING BETWEEN THE SOLDIER PILES AS TEMPORARY SUPPORT FOR THE RETAINED SOIL. FURNISH TIMBER LAGGING CONSISTING OF CONSTRUCTION GRADE, UNTREATED HARDWOOD WITH A MINIMUM THICKNESS OF 3 INCHES UNLESS OTHERWISE SHOWN IN THE PLANS. TO PERMIT DRAINAGE, PROVIDE ¼ TO ½-INCH SPACES BETWEEN THE LAGGING BOARDS USING ⅜-INCH THICK SPACER BLOCKS OR OTHER MEANS ACCEPTABLE TO THE ENGINEER. PLACE THE LAGGING BOARDS BETWEEN THE FLANGES OF THE SOLDIER PILES AND BEARING AGAINST THE FLANGES ON THE EXPOSED SIDE OF THE WALL SO THAT THE SOLIDER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING BOARDS. PERFORM EXCAVATION FOR PLACEMENT OF THE LAGGING IN SUCH A MANNER THAT THE LAGGING IS TIGHT AGAINST THE EXCAVATION CUT FACE. BACKFILL ANY VOIDS BEHIND THE LAGGING WITH A SUITABLE COMPACTED GRANULAR MATERIAL CONFORMING TO C&MS 703.16.C ACCEPTABLE TO THE ENGINEER. THE COST OF ANY SUCH BACKFILLING REQUIRED, INCLUDING MATERIAL, PLACEMENT AND COMPACTION, IS INCIDENTAL TO THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

THE SAME SPECIES SHALL BE USED FOR ALL THE TIMBER MEMBERS REQUIRED. THE TIMBER MEMBERS SHALL BE OF A GRADE AND TYPE WITH AN ALLOWABLE EXTREME FIBER STRESS IN BENDING OF A MINIMUM OF 1250 PSI AND ALLOWABLE STRESS IN SHEAR OF A MINIMUM OF 85 PSI. THE WOOD SHALL BE SEASONED, SOUND, AND FREE FROM DECAY AND INSECT ATTACK, WITHOUT LOOSE AND/OR CLUTTER KNOTS. THE TIMBER LAGGING USED SHALL CONFORM TO THE REQUIREMENTS SHOWN IN THE PLANS. IF THE LAGGING USED AT ANY LOCATION IS FOUND TO BE INADEQUATE, THE CONTRACTOR IS RESPONSIBLE FOR ALL CORRECTIVE MEASURES. LAGGING MAY BE FIELD CUT.

8.0 ENGINEER DESIGNED TEMPORARY SHEETING:

FOR LOCATIONS OF TEMPORARY SHEET PILING REFER TO SHEET 17. STEEL SHEET PILING SHALL CONFORM TO ASTM A572 GRADE 50 WITH A MINIMUM YIELD STRENGTH OF 50 KSI, A MINIMUM SECTION MODULUS OF 48.5 IN3/FT, AND MINIMUM MOMENT OF INERTIA OF 361.22 IN4/FT. REFER TO THE TABLE BELOW FOR DESIGN REQUIREMENTS.

DESIGN CRITERIA:
MAXIMUM RETAINED HEIGHT, H: 9'-6"
EARTH PRESSURE: ACTIVE (Ka)
LIVE LOAD SURCHARGE: 250 PSF (UNFACTORED)
MAXIMUM PERMITTED DEFLECTION: 1%H

9.0 ENGINEER DESIGNED TEMPORARY SHEETING:

IN ADDITION TO THE LOCATIONS DEPICTED IN THE PLANS, TEMPORARY SHEETING MAY BE REQUIRED AT VARIOUS LOCATIONS/STAGES TO CONSTRUCT THE PROPOSED BRIDGE WORK. THE CONTRACTOR IS PERMITTED TO USE THE DESIGN SHOWN IN SECTION 8.0 PROVIDED THE THE USE DOES NOT EXCEED THE DESIGN CRITERIA SHOWN IN SECTION 8.0. ELSE THE CONTRACTOR SHALL DESIGN, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05 FOR TEMPORARY SUPPORT OF EXCAVATION.

10.0 REMOVAL OF TEMPORARY SHORING

REMOVE TEMPORARY SHORING WHEN NO LONGER REQUIRED TO SUPPORT THE EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS TO REMOVE AND/OR DECONSTRUCT TEMPORARY SHORING. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING AND PROPOSED STRUCTURE(S). THE CONTRACTOR SHALL PERFORM DEMOLITION OPERATIONS SUCH THAT THERE IS NOT ANY DAMAGE TO THE NEW STRUCTURE OR TO PORTIONS OF THE EXISTING STRUCTURE BEING TEMPORARILY MAINTAINED. THE USE OF EXPLOSIVES AND HEADACHE BALLS WILL NOT BE PERMITTED FOR ANY DEMOLITION OF TEMPORARY SHORING. UNLESS OTHERWISE NOTED, TEMPORARY SHORING SHALL BE REMOVED TO A MINIMUM OF 1 FOOT BELOW THE PROPOSED GROUND SURFACE AND/OR NEAREST PROPOSED BRIDGE ELEMENT (I.E. MSE LEVELING PAD, ABUTMENT FOOTING, ETC.).

STEEL SHEET PILING - LEFT IN PLACE

EXTRACTION OF SHEET PILING NEAR TEMPORARY WIRE FACED MSE WALL MAY UNACCEPTABLY DEFORM THE NEARBY TEMPORARY WIRE FACED MSE WALL(S). THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND TEMPORARY WIRE FACED MSE WALL SUPPLIER ON THE SAFE EXTRACTION OF SHEET PILING NEAR SUCH WALLS. THE CONTRACTOR IS PERMITTED TO LEAVE SHEET PILING IN PLACE AS APPROVED BY THE ENGINEER.

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED WITH THE CONTRACT THE CONTRACT LUMP SUM PRICE BID FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

11.0 METHOD OF MEASUREMENT AND PAYMENT:

THIS WORK INCLUDES ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL TEMPORARY SHORING AS DESCRIBED HEREIN. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SHORING (E.G. SOLDIER PILE AND LAGGING WALLS, SHEET PILE WALLS) AT THE CONTRACT LUMP SUM PRICE BID FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

TEMPORARY SHORING NOTES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
DBL	DBL

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
16	65

SHEET	TOTAL
P. 436	618

FRA-71-19.10

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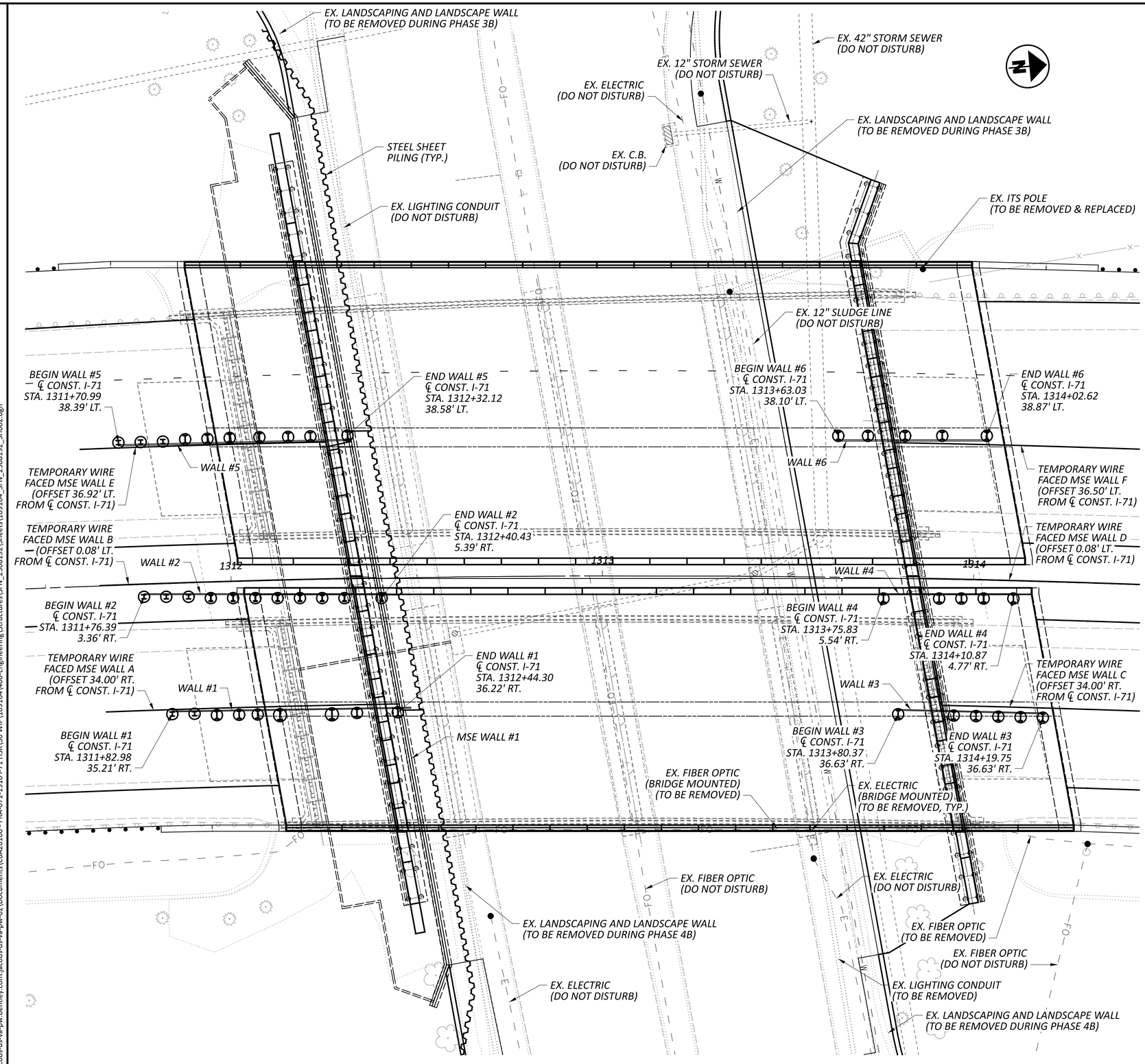

TEMPORARY SHORING - PLAN

TEMPORARY SHORING - CONSTRUCTION SEQUENCE

PHASE 3A REMOVAL & CONSTRUCTION

1. REMOVE PORTIONS OF EXISTING FRA-71-24.46 L (SOUTHBOUND) BRIDGE AND A PORTION OF THE EXISTING FRA-71-24.46 R (NORTHBOUND) BRIDGE INCLUDING PORTIONS OF APPROACH SLABS, ABUTMENTS, PIERS, PAVEMENT, MEDIAN BARRIER AND CAPPED MEDIAN CONCRETE SLOPE PROTECTION TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS.
2. DRILL SHAFTS AND INSTALL SOLDIER PILES (WALL #2, #4, #5 & #6).
3. INSTALL SHEET PILING AS SHOWN IN THE PLANS.
4. EXCAVATE AND INSTALL LAGGING IN TOP-DOWN MANNER TO BOTTOM OF EXCAVATION (ALL WALLS).
5. COMPLETE PHASE 3A ABUTMENT AND MSE WALL #1 CONSTRUCTION.
6. INSTALL THE TEMPORARY WIRE FACED MSE WALLS (B,D, E & F) AND EMBANKMENT TO SUPPORT THE PROPOSED ROADWAY APPROACH EMBANKMENT IN PHASE 3A.
7. COMPLETE PHASE 3A SUPERSTRUCTURE CONSTRUCTION OF BRIDGE, APPROACH SLABS AND APPROACH ROADWAY WORK.

PHASE 3B REMOVAL & CONSTRUCTION

1. REMOVE REMAINING PORTIONS OF EXISTING FRA-71-24.46 L (SOUTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENT, PIERS, PAVEMENT, LANDSCAPING AND LANDSCAPING WALLS TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS AND PROPOSED WORK.
2. INSTALL SHEET PILING AS SHOWN IN THE PLANS.
3. EXCAVATE. REMOVE PORTIONS OF TEMPORARY SHORING SYSTEMS (WALLS #5 & WALL #6) FROM PHASE 3A ENCOUNTERED DURING EXCAVATION.
4. COMPLETE PHASE 3B ABUTMENT AND MSE WALL #1 CONSTRUCTION.
5. COMPLETE PHASE 3B SUPERSTRUCTURE CONSTRUCTION OF BRIDGE, APPROACH SLAB AND APPROACH ROADWAY WORK.

PHASE 4A REMOVAL & CONSTRUCTION

1. REMOVE PORTIONS OF EXISTING FRA-71-24.46 R (NORTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENTS, PIERS, PAVEMENT, MEDIAN BARRIER AND CAPPED MEDIAN CONCRETE SLOPE PROTECTION TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS.
2. INSTALL SHEET PILING AS SHOWN IN THE PLANS.
3. EXCAVATE. REMOVE PORTIONS OF TEMPORARY SHORING SYSTEMS (WALLS #2 & WALL #4) FROM PHASE 3A ENCOUNTERED DURING EXCAVATION.
4. DRILL SHAFTS AND INSTALL SOLDIER PILES (WALL #1 & WALL #3).
5. EXCAVATE AND INSTALL LAGGING IN TOP-DOWN MANNER TO BOTTOM OF EXCAVATION (ALL WALLS).
6. COMPLETE PHASE 4A ABUTMENT AND MSE WALL #1 CONSTRUCTION.
7. COMPLETE PHASE 4A SUPERSTRUCTURE CONSTRUCTION OF BRIDGE, APPROACH SLAB AND APPROACH ROADWAY WORK.

PHASE 4B REMOVAL & CONSTRUCTION

1. REMOVE REMAINING PORTIONS OF EXISTING FRA-71-24.46 R (NORTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENT, PIERS, PAVEMENT, LANDSCAPING AND LANDSCAPING WALLS TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS AND PROPOSED WORK.
2. INSTALL SHEET PILING AS SHOWN IN THE PLANS.
3. EXCAVATE. REMOVE PORTIONS OF TEMPORARY SHORING SYSTEMS (WALLS #1 & WALL #3) FROM PHASE 4A ENCOUNTERED DURING EXCAVATION.
4. COMPLETE PHASE 4B ABUTMENT AND MSE WALL #1 CONSTRUCTION.
5. COMPLETE PHASE 4B SUPERSTRUCTURE CONSTRUCTION OF BRIDGE, APPROACH SLAB AND APPROACH ROADWAY WORK.

NOTES:

1. FOR ADDITIONAL NOTES, SEE SHEET 16.
2. ALL STATIONS AND OFFSETS SHOWN ARE AT THE CENTERLINE OF SOLDIER PILE AND ALL STATIONS AND OFFSETS ARE BASED ON THE ℄ CONSTRUCTION I-71.
3. RECORD PLANS INDICATE THE FRONT ROW OF EXISTING PILES (12" CIP) AT BOTH THE EXISTING REAR AND FORWARD ABUTMENTS TO BE BATTERED (1H:4V). PILE LOCATIONS SHOWN ARE BASED UPON RECORD PLANS AND SHALL BE CONSIDERED APPROXIMATE. THE ENGINEER HAS ESTABLISHED A TEMPORARY SHORING LAYOUT MINDFUL OF THE EXISTING PILE LOCATIONS, PILE BATTER AND PILE LIMITS TO MITIGATE RISK OF ENCOUNTERING AN EXISTING PILE DURING INSTALLATION OF TEMPORARY SHORING (I.E. DRILLING SHAFTS) AND THE CONSTRUCTION OF PROPOSED WORK (PRIMARILY PROPOSED PILE LAYOUT AT THE PROPOSED FORWARD ABUTMENT). THE DESIGN SHOWN IN THE PLANS ALLOWS FOR PILE/SHAFT RELOCATION RESULTING IN AN INCREASE TO THE PILE/SHAFT SPACING OF 1-FOOT. NOTIFY THE ENGINEER IF CONFLICTS ARE ENCOUNTERED REQUIRING FURTHER RELOCATION. THE ENGINEER WILL PROVIDE RECOMMENDATIONS ON HOW TO PROCEED.

TEMPORARY SHORING PLAN
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	17
TOTAL	65
SHEET	P. 437
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:46:40 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com
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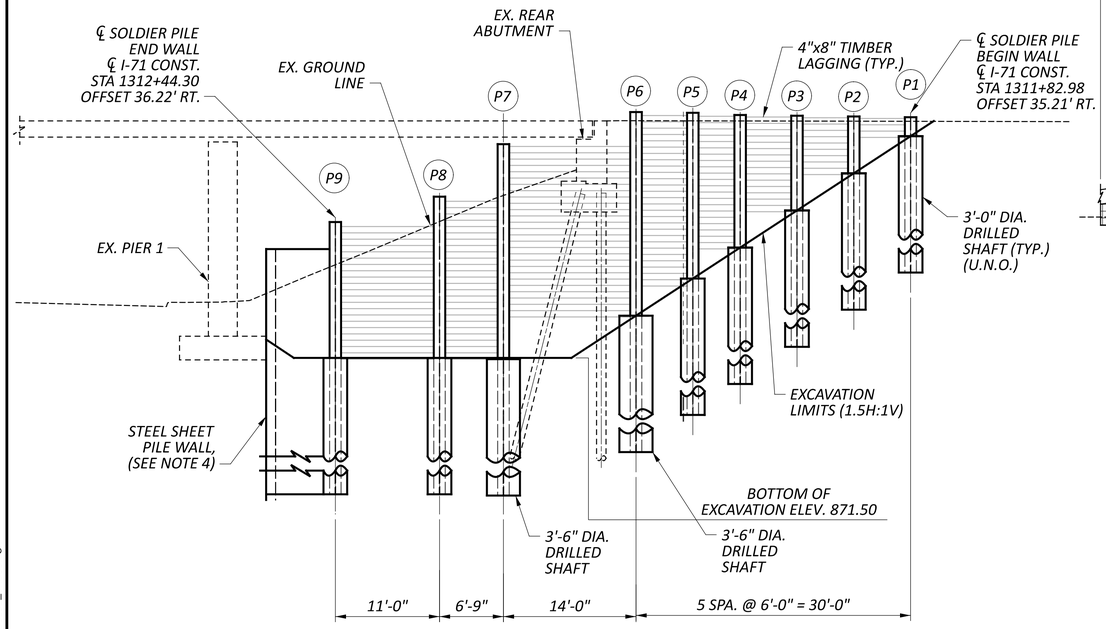
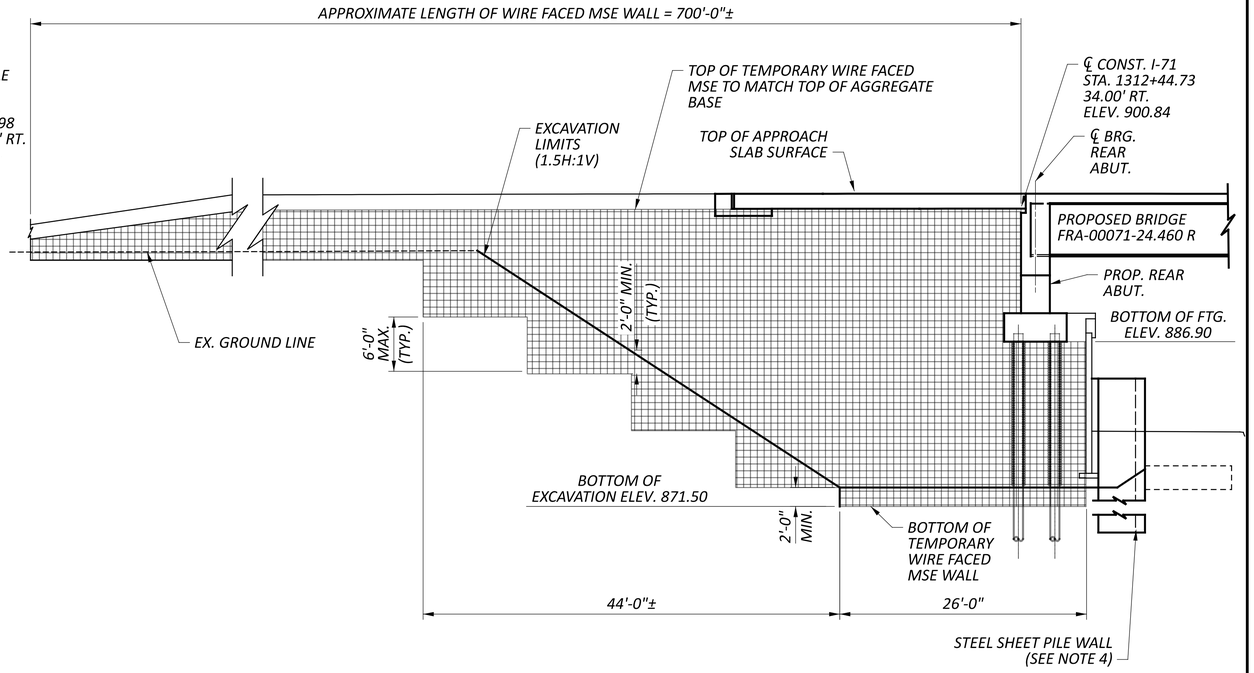


TEMPORARY SHORING "WALL 1" ELEVATION



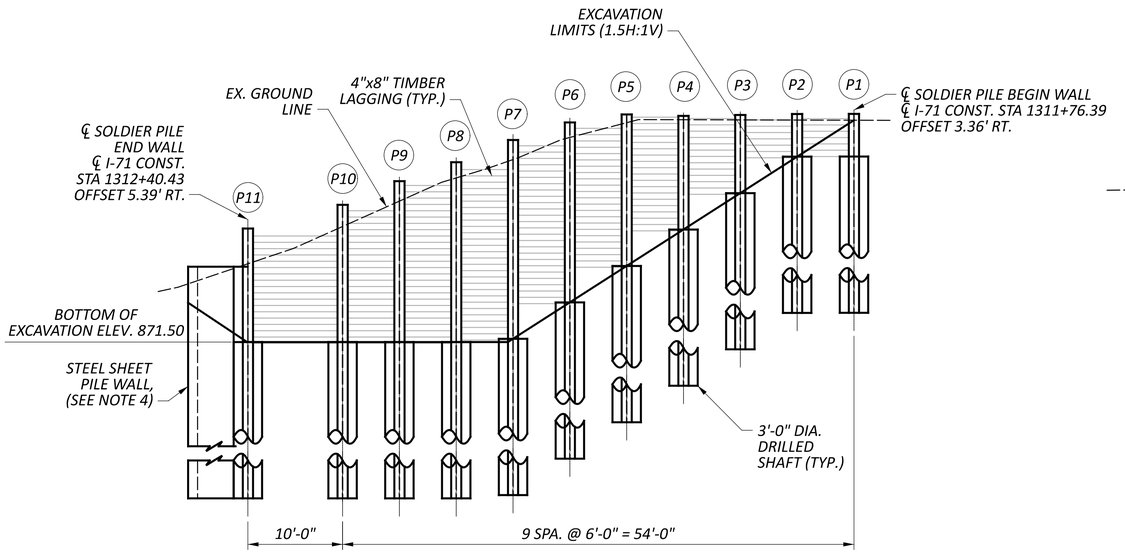
TEMPORARY WIRE FACED MSE "WALL A" (FOR PHASE 4A)

NOTES:

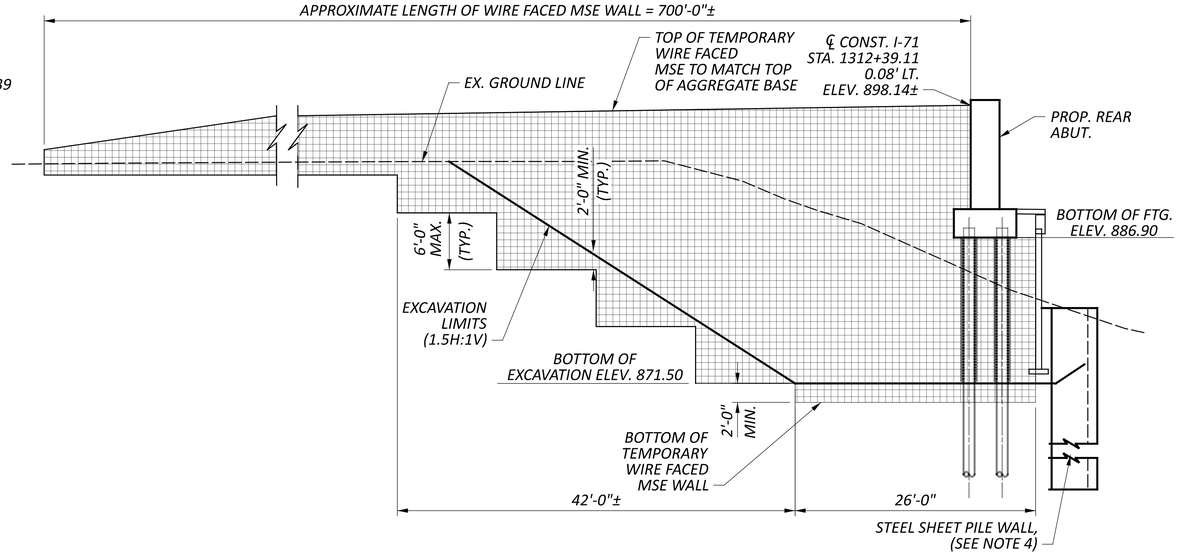
1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR ADDITIONAL SHORING DETAILS AND NOTES, SEE SHEET 16.*
3. *FOR SOLDIER PILE AND LAGGING SCHEDULE, SEE SHEET 21.*
4. *FOR STEEL SHEET PILING INFORMATION, SEE SHEET 16.*
5. *PAYMENT FOR TEMPORARY WIRE FACED MSE WALLS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 867, TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.*
6. *ALL STATIONS AND OFFSETS SHOWN ARE AT THE CENTERLINE OF SOLIDER PILE AND ALL STATIONS AND OFFSETS ARE BASED ON THE ℄ CONSTRUCTION I-71.*

LEGEND:

= *TEMPORARY WIRE FACED MSE WALL*



TEMPORARY SHORING "WALL 2" ELEVATION



TEMPORARY WIRE FACED MSE WALL "WALL B" (FOR PHASE 3A)

TEMPORARY SHORING ELEVATIONS (1 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	18
TOTAL	65
SHEET	P. 438
TOTAL	618

FRA-71-19.10

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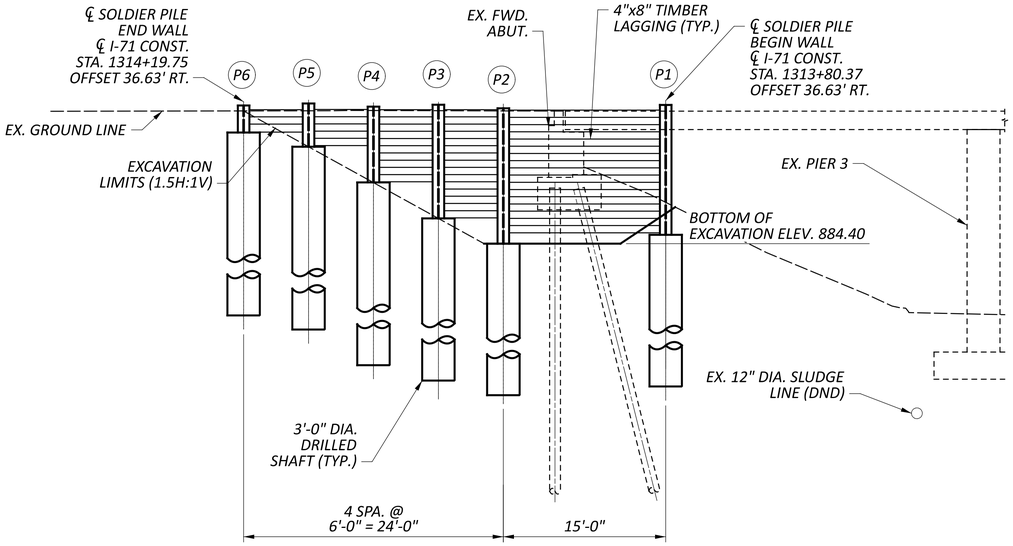
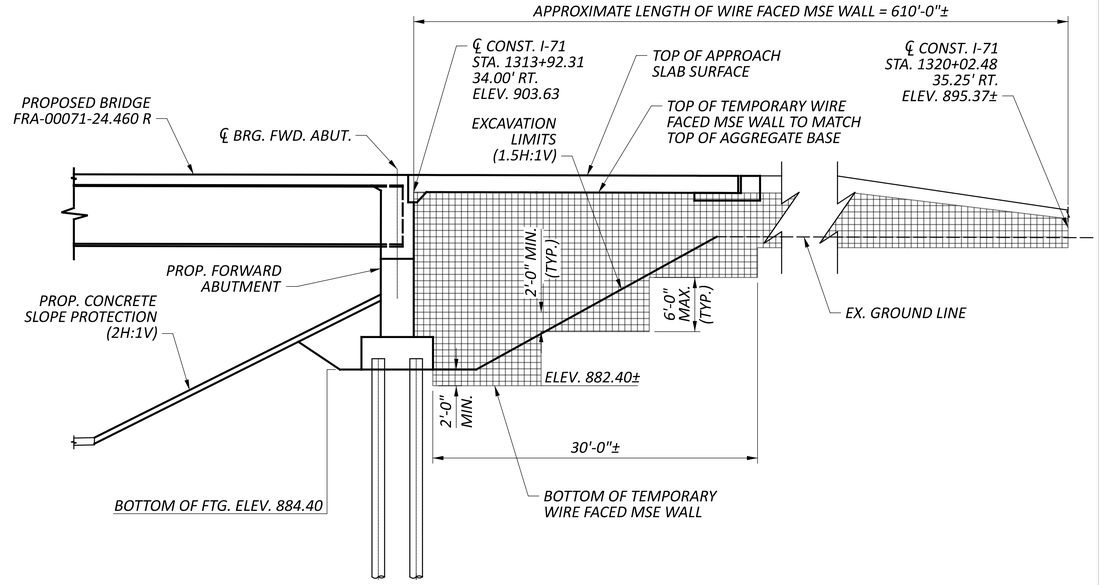


TEMPORARY SHORING "WALL 3" ELEVATION



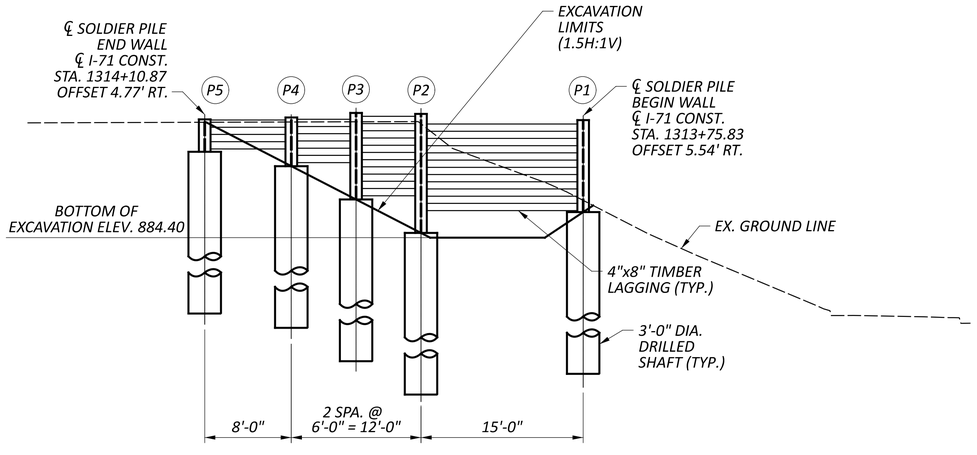
TEMPORARY WIRE FACED MSE "WALL C" (FOR PHASE 4A)

LEGEND:

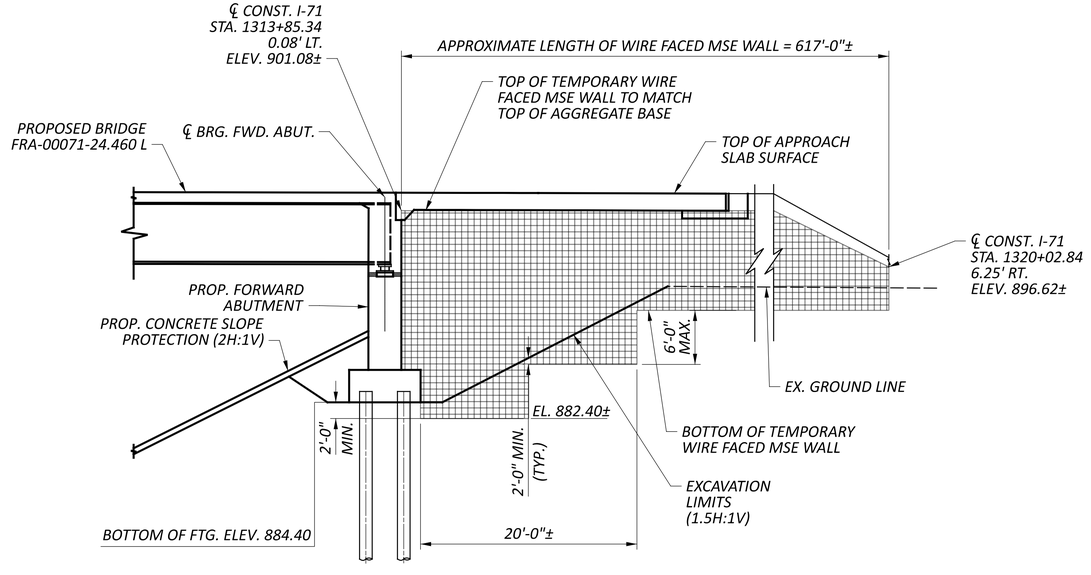
= TEMPORARY WIRE FACED MSE WALL

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR ADDITIONAL SHORING DETAILS AND NOTES, SEE SHEET 16.*
3. *FOR SOLDIER PILE AND LAGGING SCHEDULE, SEE SHEET 21.*
4. *FOR STEEL SHEET PILING INFORMATION, SEE SHEET 16.*
5. *PAYMENT FOR TEMPORARY WIRE FACED MSE WALLS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 867, TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.*
6. *ALL STATIONS AND OFFSETS SHOWN ARE AT THE CENTERLINE OF SOLIDER PILE AND ALL STATIONS AND OFFSETS ARE BASED ON THE ℄ CONSTRUCTION I-71.*
7. *CONTRACTOR SHALL ADJUST SOLDIER PILE SPACING IF NECESSARY TO AVOID CONFLICT WITH PORTIONS OF EXISTING SUBSTRUCTURE (ABUTMENT AND PILES) DURING INSTALLATION OF TEMPORARY SHORING WALL #3.*



TEMPORARY SHORING "WALL 4" ELEVATION



TEMPORARY WIRE FACED MSE "WALL D" (FOR PHASE 3A)

TEMPORARY SHORING ELEVATIONS (2 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	19
TOTAL	65
SHEET	P. 439
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:47:10 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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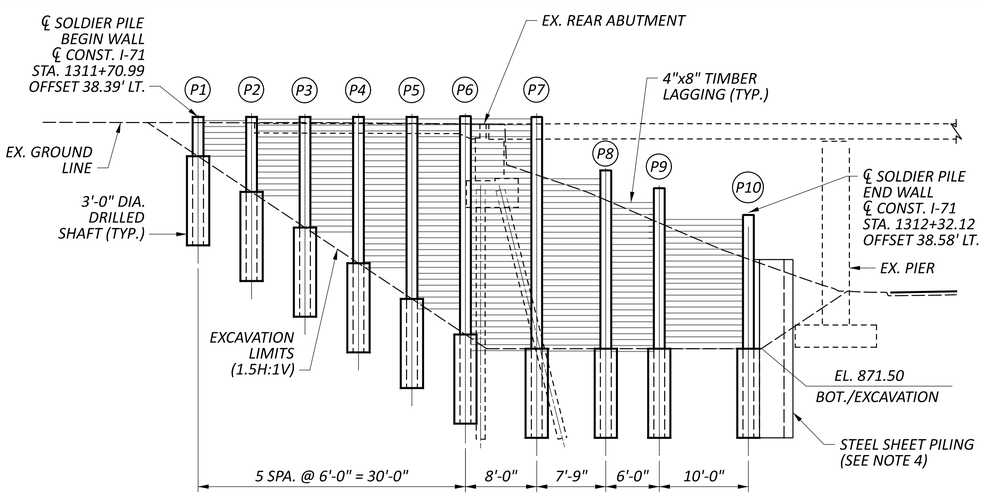
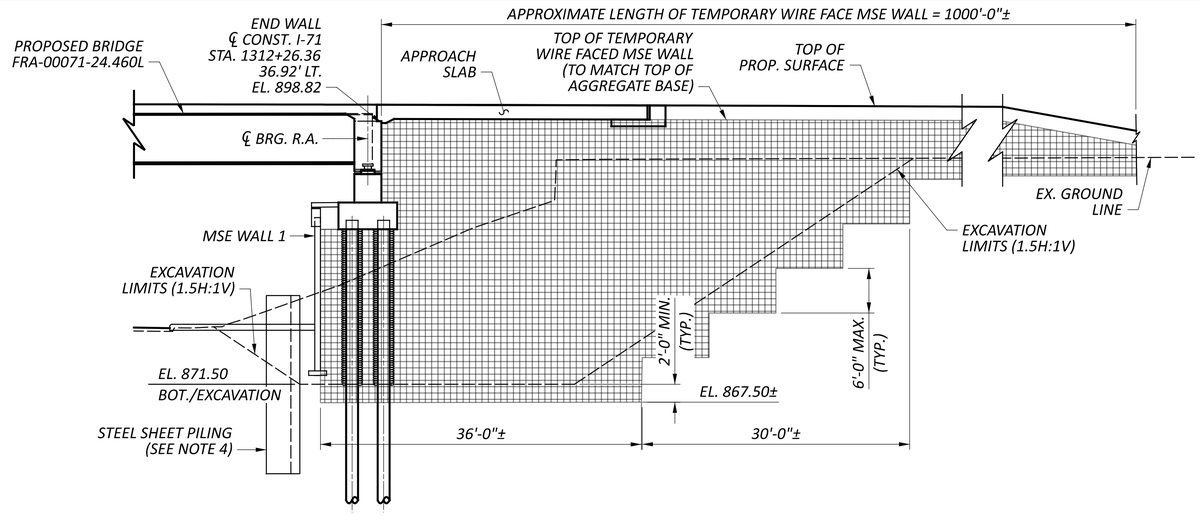


TEMPORARY SHORING "WALL 5" ELEVATION (FOR PHASE 3A)



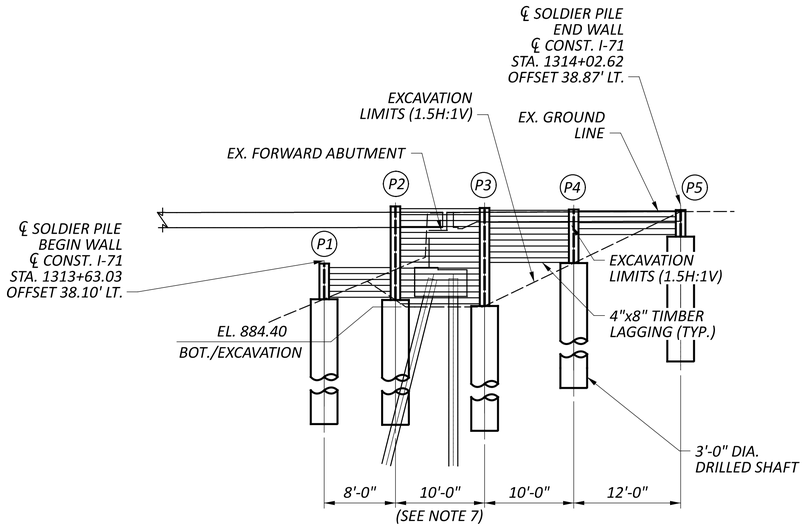
TEMPORARY WIRE FACED MSE "WALL E" (FOR PHASE 3A)

LEGEND:

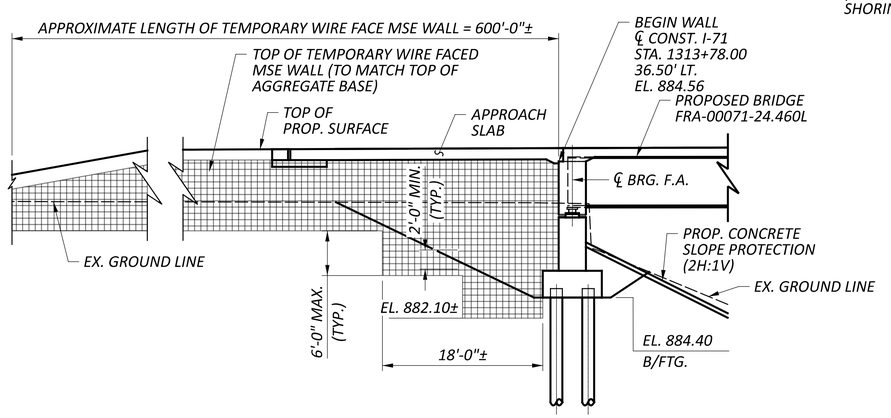
= TEMPORARY WIRE FACED MSE WALL

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FOR ADDITIONAL SHORING DETAILS AND NOTES, SEE SHEET 16.
3. FOR SOLDIER PILE AND LAGGING SCHEDULE, SEE SHEET 21.
4. FOR STEEL SHEET PILING INFORMATION, SEE SHEET 16.
5. PAYMENT FOR TEMPORARY WIRE FACED MSE WALLS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.
6. ALL STATIONS AND OFFSETS SHOWN ARE AT THE CENTERLINE OF SOLDIER PILE AND ALL STATIONS AND OFFSETS ARE BASED ON THE ℄ CONSTRUCTION I-71.
7. CONTRACTOR SHALL ADJUST SOLDIER PILE SPACING NECESSARY TO AVOID CONFLICT WITH PORTIONS OF EXISTING SUBSTRUCTURE (ABUTMENT AND PILES) DURING INSTALLATIONS OF TEMPORARY SHORING WALL #5 & WALL #6.



TEMPORARY SHORING "WALL 6" ELEVATION (FOR PHASE 3A)



TEMPORARY WIRE FACED MSE "WALL F" (FOR PHASE 3A)

TEMPORARY SHORING ELEVATIONS (3 OF 3)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	20
TOTAL	65
SHEET	P. 440
TOTAL	618

FRA-71-19.10

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TEMPORARY SHORING WALL #1								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	HP14x89	1311+82.98	35.21' RT.	897.00	895.00	875.00	20'-0"	3'-0"
2	HP14x89	1311+89.03	35.30' RT.	897.00	891.00		20'-0"	3'-0"
3	W24x176	1311+95.08	35.85' RT.	897.00	887.00		25'-0"	3'-0"
4	W24x176	1312+01.14	35.93' RT.	897.00	883.00		25'-0"	3'-0"
5	W24x176	1312+06.19	35.99' RT.	897.00	880.00		25'-0"	3'-0"
6	W30x292	1312+12.24	36.33' RT.	897.00	876.00		40'-0"	3'-6"
7	W30x292	1312+26.38	36.44' RT.	894.00	871.50		40'-0"	3'-6"
8	W24x176	1312+33.19	36.19' RT.	889.00	871.50		25'-0"	3'-0"
9	W24x176	1312+44.30	36.22' RT.	886.00	871.50		25'-0"	3'-0"

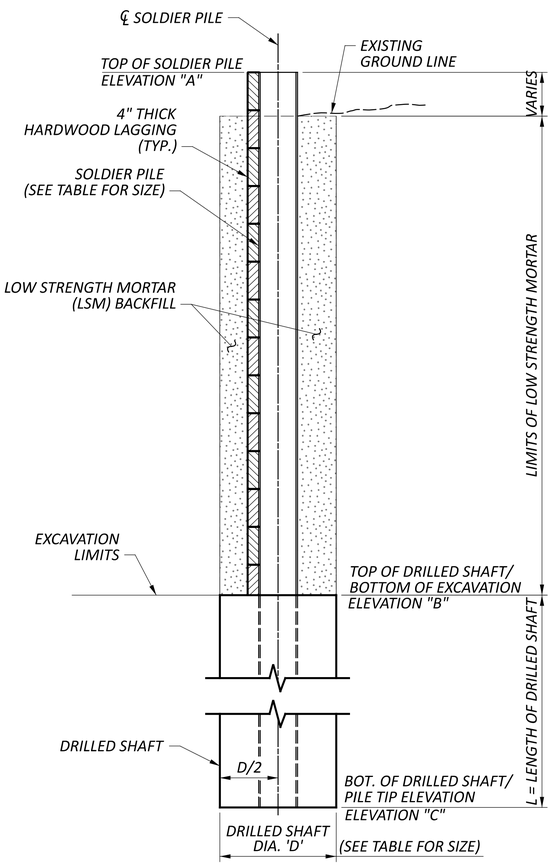
TEMPORARY SHORING WALL #2								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	HP14x89	1311+76.39	3.36' RT.	896.00	895.00		25'-0"	3'-0"
2	HP14x89	1311+82.39	3.56' RT.	896.00	891.00		25'-0"	3'-0"
3	HP14x89	1311+88.40	3.76' RT.	896.00	887.00		25'-0"	3'-0"
4	W18x311	1311+94.93	4.29' RT.	896.00	883.00		35'-0"	3'-0"
5	W18x311	1312+00.39	4.47' RT.	896.00	879.50		35'-0"	3'-0"
6	W18x311	1312+06.40	4.63' RT.	895.00	876.00		35'-0"	3'-0"
7	W18x311	1312+12.40	4.79' RT.	893.00	871.50		35'-0"	3'-0"
8	W18x311	1312+18.41	4.94' RT.	890.50	871.50		35'-0"	3'-0"
9	W18x311	1312+24.41	5.07' RT.	888.50	871.50		35'-0"	3'-0"
10	W18x311	1312+30.42	5.20' RT.	886.00	871.50		35'-0"	3'-0"
11	W18x311	1312+40.43	5.39' RT.	883.50	871.50		35'-0"	3'-0"

TEMPORARY SHORING WALL #3								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	W24x176	1313+80.37	36.63' RT.	897.50	885.00		30'-0"	3'-0"
2	W24x176	1313+95.52	36.67' RT.	897.50	884.00		30'-0"	3'-0"
3	W24x176	1314+01.58	36.68' RT.	897.50	886.50		20'-0"	3'-0"
4	W24x176	1314+07.64	36.67' RT.	897.50	890.00		20'-0"	3'-0"
5	W24x176	1314+13.69	36.65' RT.	897.50	893.00		20'-0"	3'-0"
6	W24x176	1314+19.75	36.63' RT.	897.50	894.50		20'-0"	3'-0"

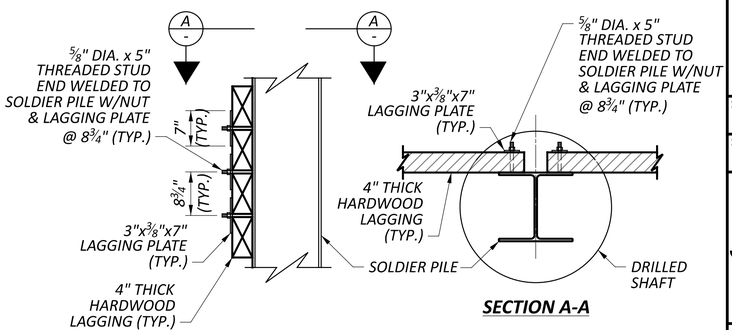
TEMPORARY SHORING WALL #4								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	W24x176	1313+75.83	5.54' RT.	896.00	886.50		30'-0"	3'-0"
2	W24x176	1313+90.85	5.25' RT.	896.00	884.00		30'-0"	3'-0"
3	W24x176	1313+96.85	5.11' RT.	896.00	888.00		20'-0"	3'-0"
4	W24x176	1314+02.86	4.97' RT.	896.00	891.00		20'-0"	3'-0"
5	W24x176	1314+10.87	4.77' RT.	896.00	894.00		20'-0"	3'-0"

TEMPORARY SHORING WALL #5								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	HP14x89	1311+70.99	38.39' LT.	895.50	891.00		20'-0"	3'-0"
2	HP14x89	1311+76.93	38.32' LT.	895.50	887.00		20'-0"	3'-0"
3	HP14x89	1311+82.87	38.26' LT.	895.50	883.00		20'-0"	3'-0"
4	W24x176	1311+88.81	38.68' LT.	895.50	879.00		25'-0"	3'-0"
5	W24x176	1311+94.75	38.64' LT.	895.50	875.00		25'-0"	3'-0"
6	W24x306	1312+00.69	38.69' LT.	895.50	872.50		40'-0"	3'-0"
7	W24x306	1312+08.61	38.66' LT.	895.50	871.50		40'-0"	3'-0"
8	W24x176	1312+16.28	38.56' LT.	889.50	871.50		25'-0"	3'-0"
9	W24x176	1312+22.22	38.56' LT.	887.50	871.50		25'-0"	3'-0"
10	W24x176	1312+32.12	38.58' LT.	884.50	871.50		25'-0"	3'-0"

TEMPORARY SHORING WALL #6								
SOLDIER PILE NUMBER	SOLDIER PILE SIZE	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET FROM ℄ CONST. I-71	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "L"	DRILLED SHAFT DIAMETER, D
1	W24x176	1313+63.03	38.10' LT.	889.00	884.00		20'-0"	3'-0"
2	W24x176	1313+70.95	38.22' LT.	895.50	883.00		25'-0"	3'-0"
3	W24x176	1313+80.85	38.39' LT.	895.50	883.00		25'-0"	3'-0"
4	W24x176	1313+90.75	38.59' LT.	895.50	889.00		20'-0"	3'-0"
5	W24x176	1314+02.62	38.87' LT.	895.50	892.00		20'-0"	3'-0"



SOLDIER PILE & LAGGING WALL TYPICAL SECTION



SECTION A-A

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. ALL STATIONS AND OFFSETS SHOWN ARE AT THE ℄ OF SOLDIER PILE AND ALL STATIONS AND OFFSETS ARE BASED ON THE ℄ CONSTRUCTION I-71.
3. SOLDIER PILES SHALL BE GRADE 50 STEEL.

SOLDIER PILE SCHEDULE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
21	65

SHEET	TOTAL
P. 441	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:47:38 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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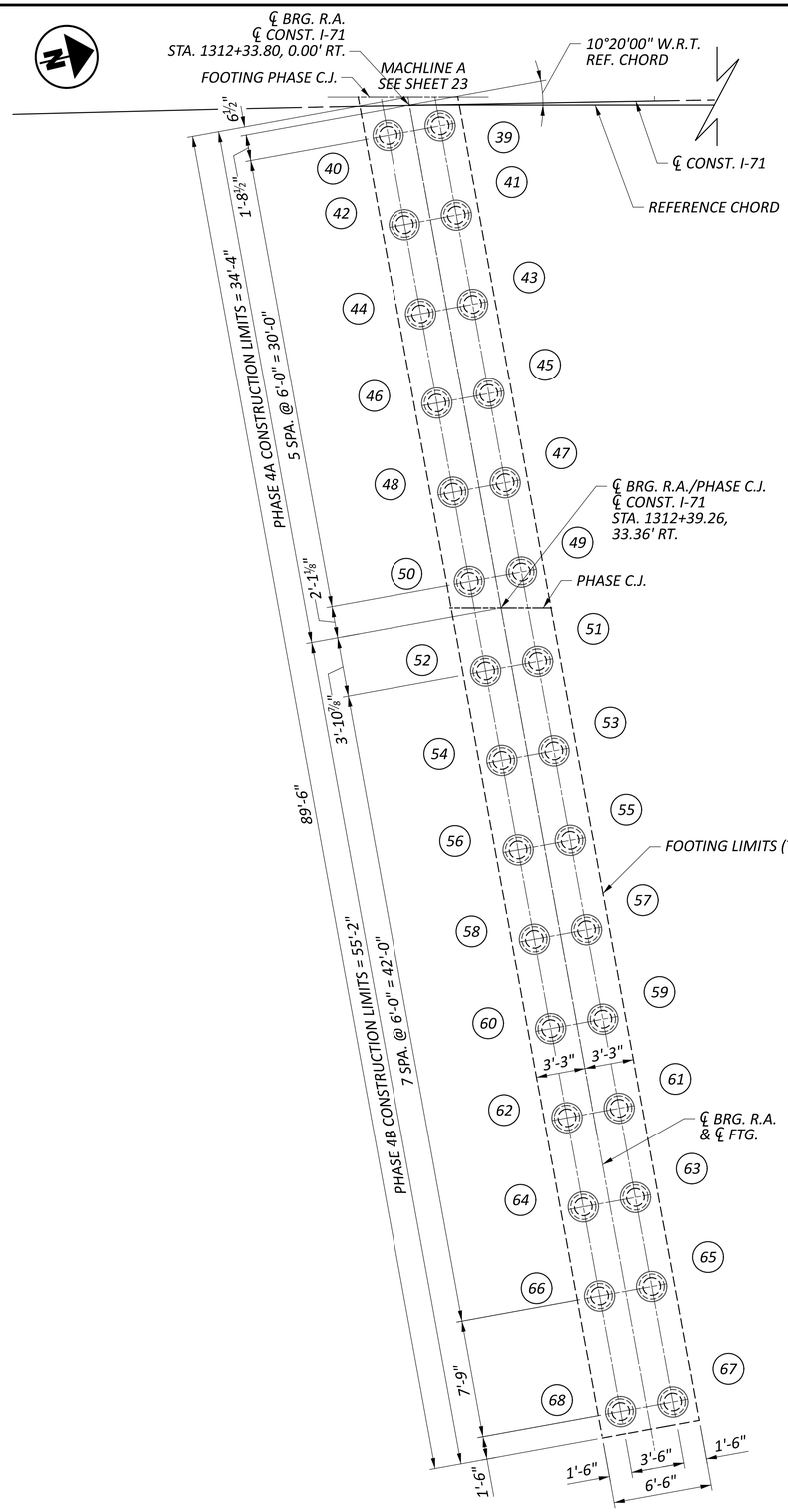


REAR ABUTMENT PLAN

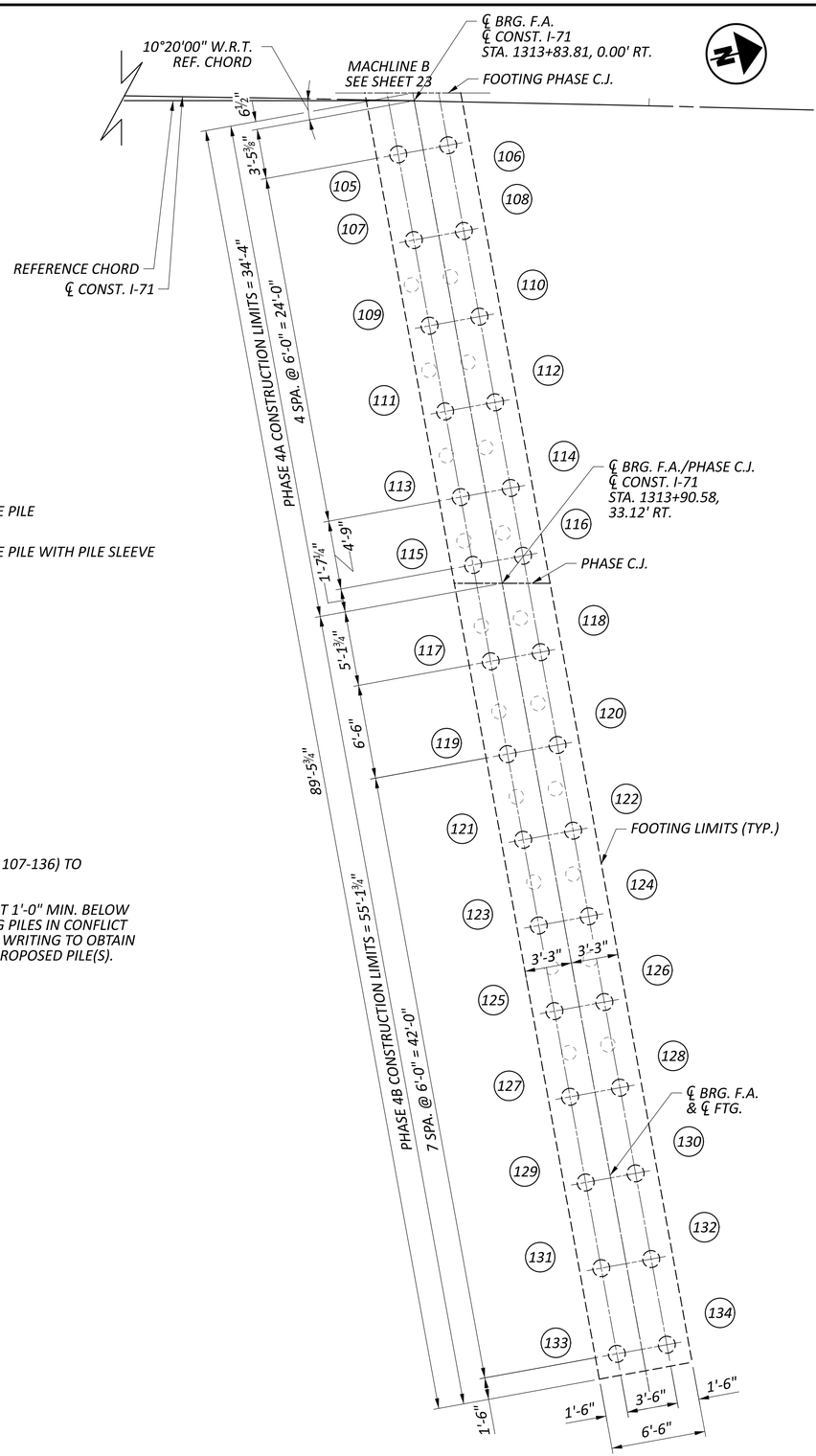
LEGEND:

- ○ - PROP. 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE
- ◌ - PROP. 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE WITH PILE SLEEVE
- (XX) - PILE NUMBER
- ◌ - EX. 12" CLOSED END PIPE PILE (SEE NOTE 5)

NOTES:

1. REAR ABUTMENT ESTIMATED PILE LENGTH = 65'-0".
2. FORWARD ABUTMENT ESTIMATED PILE LENGTH = 65'-0".
3. FOR PILE DRIVING CRITERIA AND UBV, SEE SHEET 4.
4. PREBORE ALL FORWARD ABUTMENT PILES (PILE NUMBERS 107-136) TO ELEVATION 872.00. SEE SHEET 4 FOR ADDITIONAL NOTES.
5. EXISTING PILES AT THE FORWARD ABUTMENT SHALL BE CUT 1'-0" MIN. BELOW THE PROPOSED BOTTOM OF FOOTING ELEVATION. EXISTING PILES IN CONFLICT WITH A PROPOSED PILE(S) SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S RECOMMENDATION ON RELOCATION OF THE PROPOSED PILE(S).
6. FOR ABBREVIATION LEGEND, SEE SHEET 5.

RIGHT (NORTHBOUND) PILE LAYOUT



FORWARD ABUTMENT PLAN

PILE LAYOUT - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	22
TOTAL	65
SHEET	P. 442
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:47:55 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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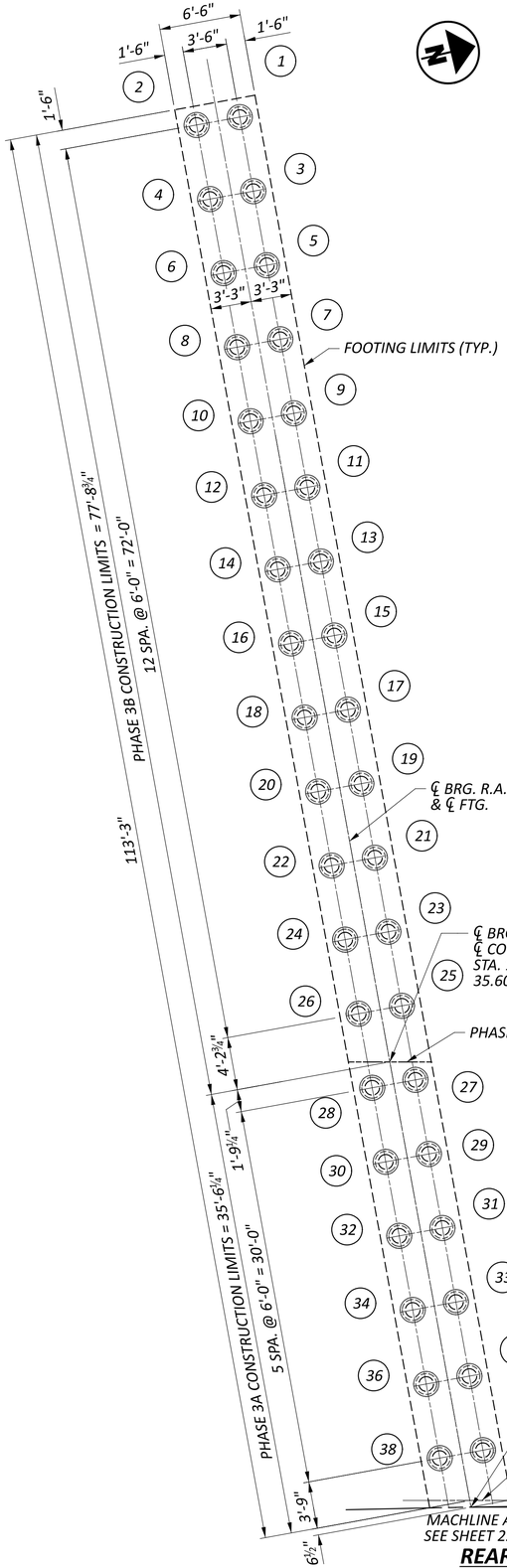


REAR ABUTMENT PLAN

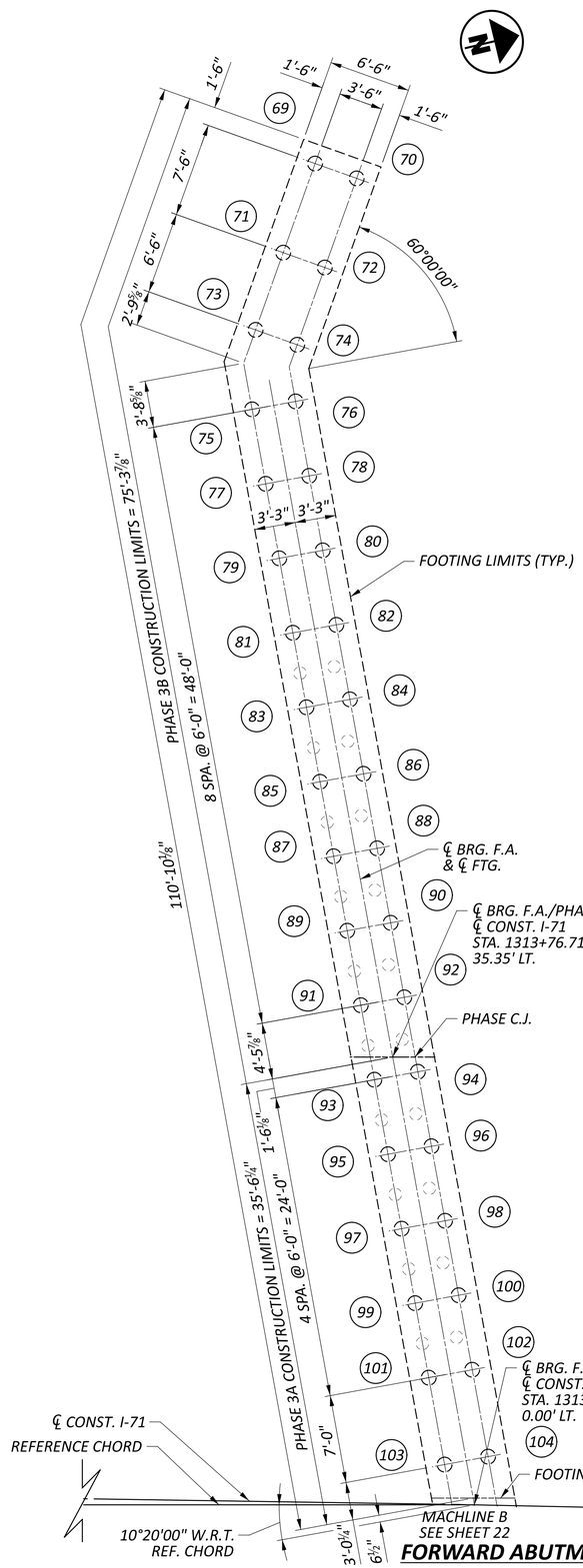
LEGEND:

- ○ - PROP. 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE
- ◌ - PROP. 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE WITH PILE SLEEVE
- (XX) - PILE NUMBER
- ◌ - EX. 12" CLOSED END PIPE PILE (SEE NOTE 5)

NOTES:

1. REAR ABUTMENT ESTIMATED PILE LENGTH = 65'-0".
2. FORWARD ABUTMENT ESTIMATED PILE LENGTH = 65'-0".
3. FOR PILE DRIVING CRITERIA AND UBV, SEE SHEET 4.
4. PREBORE ALL FORWARD ABUTMENT PILES (PILE NUMBERS 69-106) TO ELEVATION 869.00. SEE SHEET 4 FOR ADDITIONAL NOTES.
5. EXISTING PILES AT THE FORWARD ABUTMENT SHALL BE CUT 1'-0" MIN. BELOW THE PROPOSED BOTTOM OF FOOTING ELEVATION. EXISTING PILES IN CONFLICT WITH A PROPOSED PILE(S) SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S RECOMMENDATION ON RELOCATION OF THE PROPOSED PILE(S).
6. FOR ABBREVIATION LEGEND, SEE SHEET 5.

LEFT (SOUTHBOUND) PILE LAYOUT



FORWARD ABUTMENT PLAN

PILE LAYOUT- LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	23
TOTAL	65
SHEET	P. 443
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:48:09 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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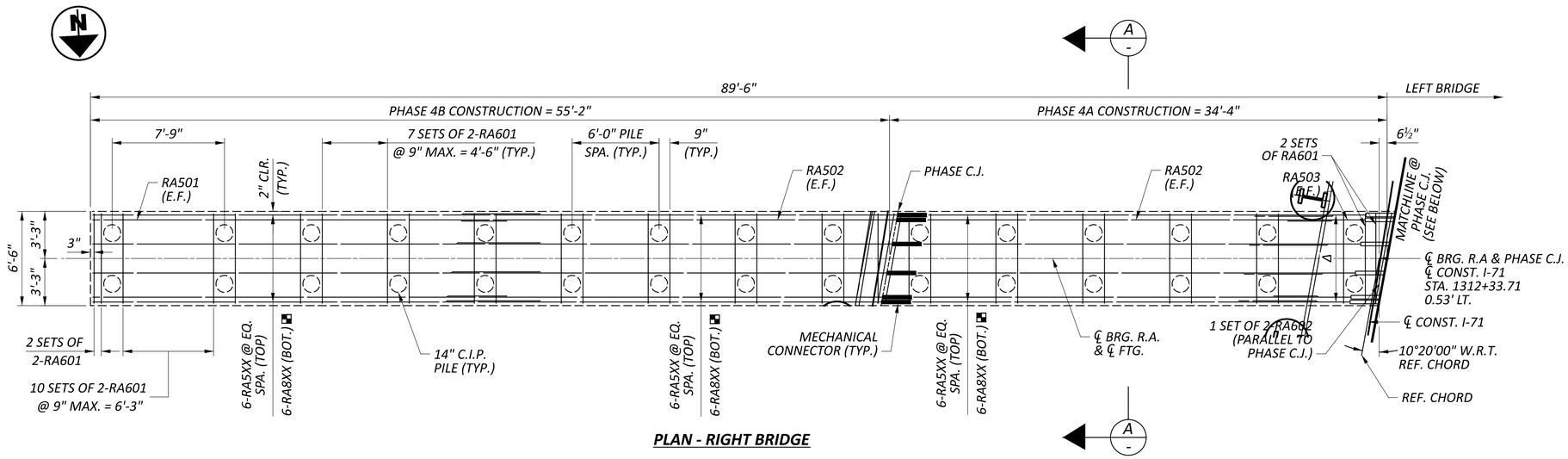
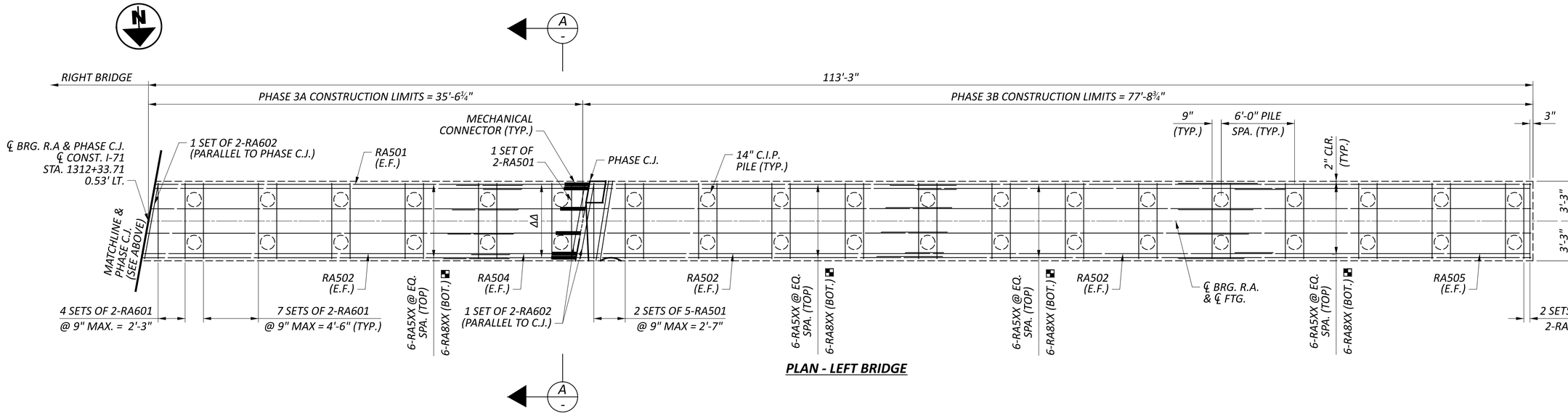
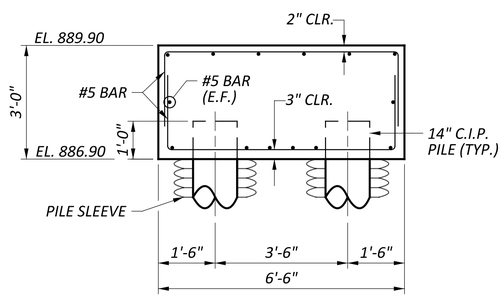


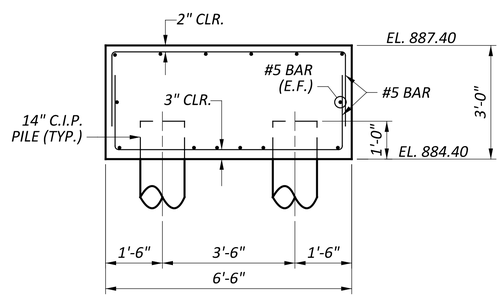
PLAN - RIGHT BRIDGE



PLAN - LEFT BRIDGE



A / - SECTION REAR ABUT. FTG.



B / 25 SECTION FWD. ABUT. FTG.

LEGEND:

▪ *SEE SECTION FOR REINFORCING SPACING*

ΔΔ 4-RA804 @ 3 EQ. SPA. = 6'-0" (T&B)

MIN. LAP LENGTHS

#5 BAR = 3'-1"
#8 BAR = 5'-4"

NOTES:

1. *FOR FOUNDATION PLAN/PILE LAYOUT, SEE SHEETS 22 & 23 .*

FOUNDATION PLAN - REAR ABUTMENT
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	24
TOTAL	65
SHEET	P. 444
TOTAL	618

FRA-71-19.10

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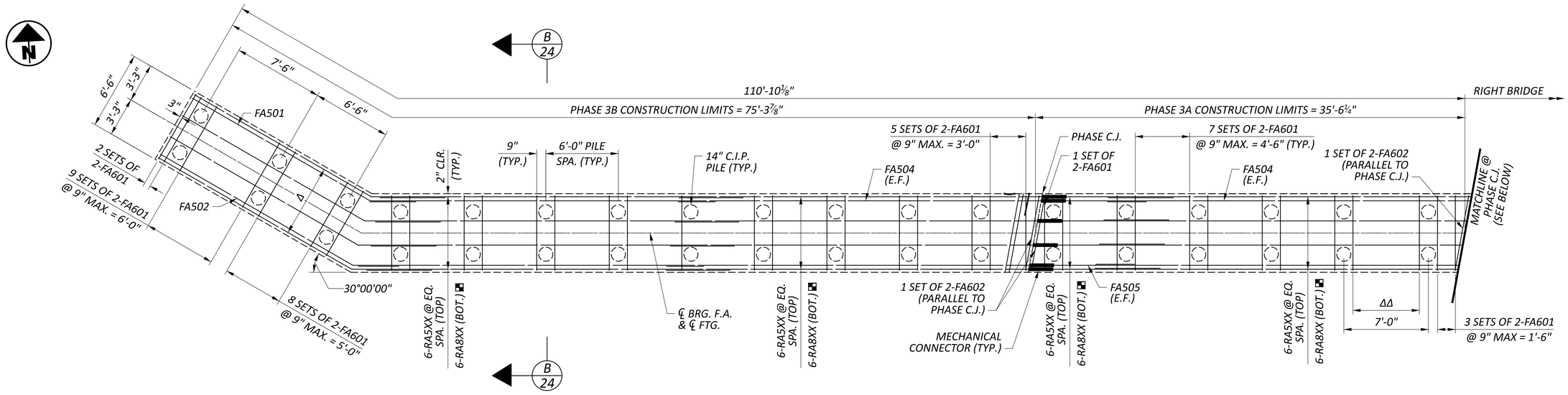
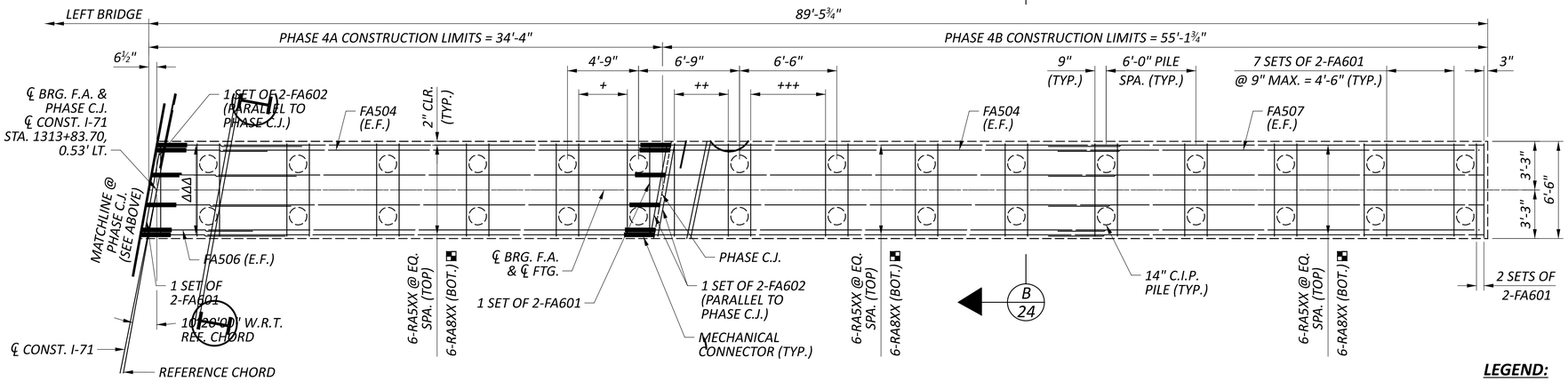


PLAN - LEFT BRIDGE



PLAN - RIGHT BRIDGE

LEGEND:

Δ - 6-FA5XX (SER., TOP) @ EQ. SPA. = 6'-0"
& 6-FA8XX (SER., BOT.), SEE SECTION FOR SPA.
ΔΔ - 9-FA601 @ 3 EQ. SPA. = 5'-6" (T&B)
- 6-FA5XX (SER., TOP) @ EQ. SPA. = 6'-0"
ΔΔΔ & 6-FA8XX (SER., BOT.), SEE SECTION FOR SPA.

+ - 6-FA601 @ 9" MAX. = 3'-3" (T&B)
++ - 8-FA601 @ 9" MAX. = 3'-7" (T&B)
+++ - 8-FA601 @ 9" MAX. = 5'-0" (T&B)

■ - SEE SECTION FOR REINFORCING SPACING

MIN. LAP LENGTHS

#5 BAR = 3'-1"
#8 BAR = 5'-4"

NOTES:

1. *FOR FOUNDATION PLAN/PILE LAYOUT, SEE SHEETS 22 & 23.*

FOUNDATION PLAN - FORWARD ABUTMENT
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	25
TOTAL	65
SHEET	P. 445
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:48:42 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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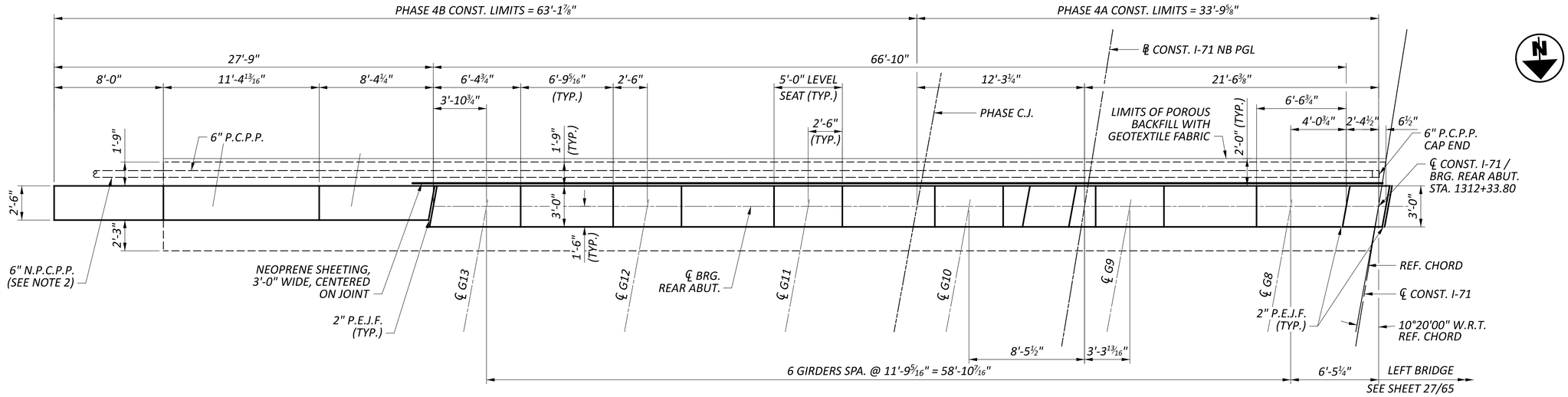
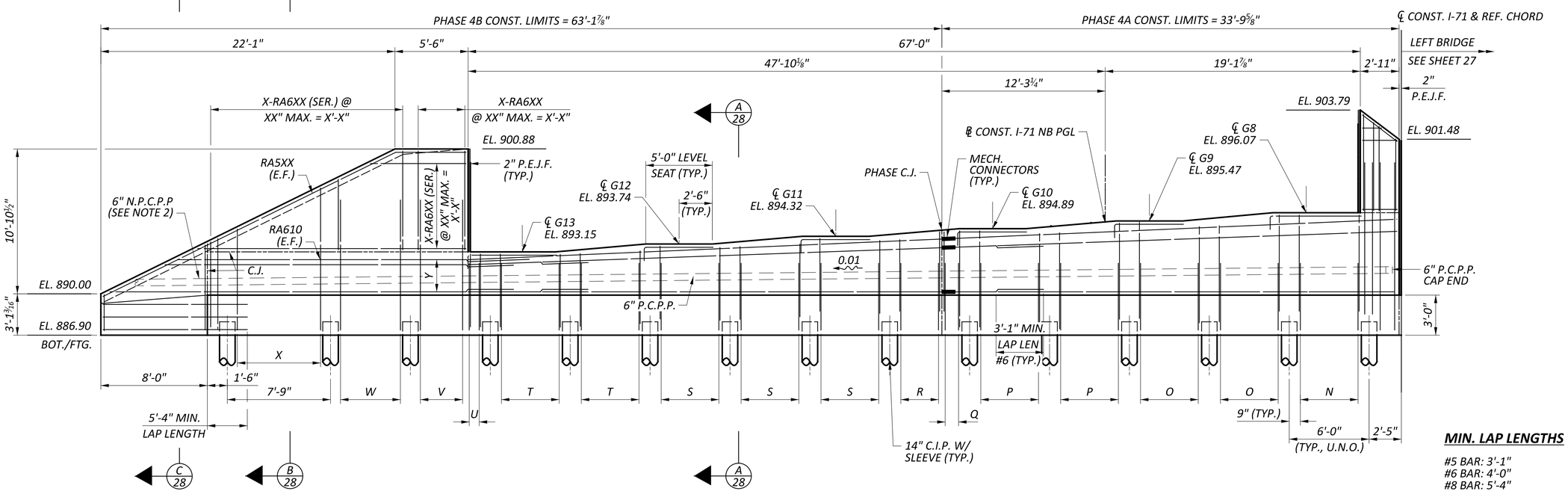


REAR ABUTMENT PLAN - RIGHT BRIDGE

(PILES NOT SHOWN FOR CLARITY)



LEGEND:

FOR REINFORCING STEEL LEGEND, SEE SHEET 28.

REAR ABUTMENT ELEVATION - RIGHT BRIDGE

(DIMENSIONS AND ELEVATIONS ABOUT ℄ BRG.)
(FOOTING REINFORCING AND PRECAST DRAINAGE OUTLET NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS

#5 BAR: 3'-1"
#6 BAR: 4'-0"
#8 BAR: 5'-4"

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 31.*
2. *FOR PIPE OUTLET DETAILS SEE SHEET 31.*
3. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

REAR ABUTMENT PLAN AND ELEVATION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	26
TOTAL	65
SHEET	P. 446
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:48:58 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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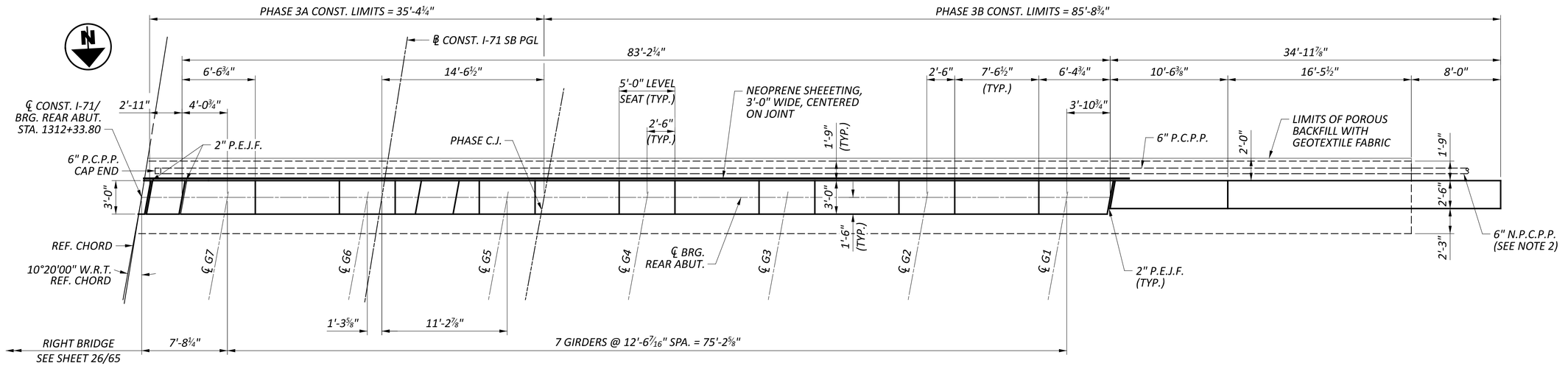
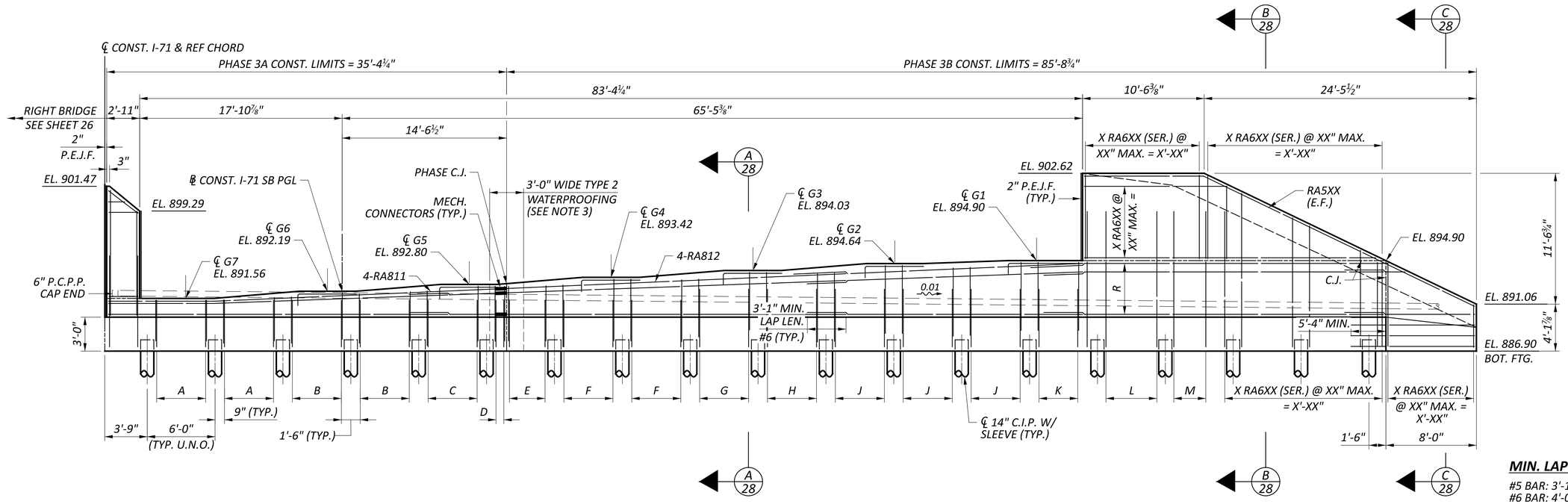


REAR ABUTMENT PLAN - LEFT BRIDGE

(PILES NOT SHOWN FOR CLARITY)



REAR ABUTMENT ELEVATION - LEFT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ABOUT ℄ BRG.)
(FOOTING REINFORCING AND PRECAST DRAIN OUTLET NOT SHOWN FOR CLARITY)

LEGEND:

FOR REINFORCING STEEL LEGEND, SEE SHEET 28.

MIN. LAP LENGTHS

#5 BAR: 3'-1"
#6 BAR: 4'-0"
#8 BAR: 5'-4"

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 31.*
2. *FOR PIPE OUTLET DETAILS, SEE SHEET 31.*
3. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

REAR ABUTMENT PLAN AND ELEVATION - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	27
TOTAL	65
SHEET	P. 447
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:49:14 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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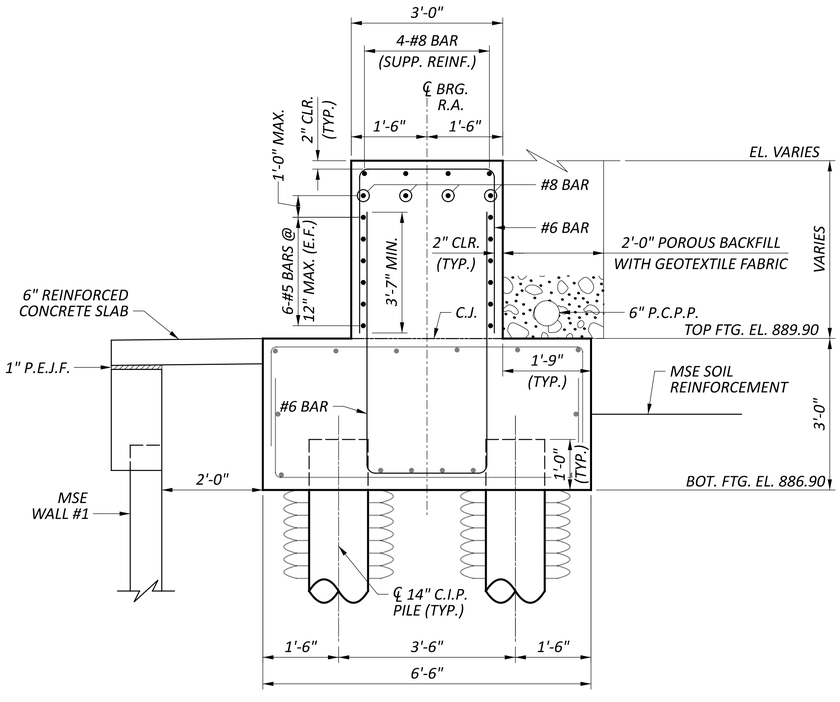
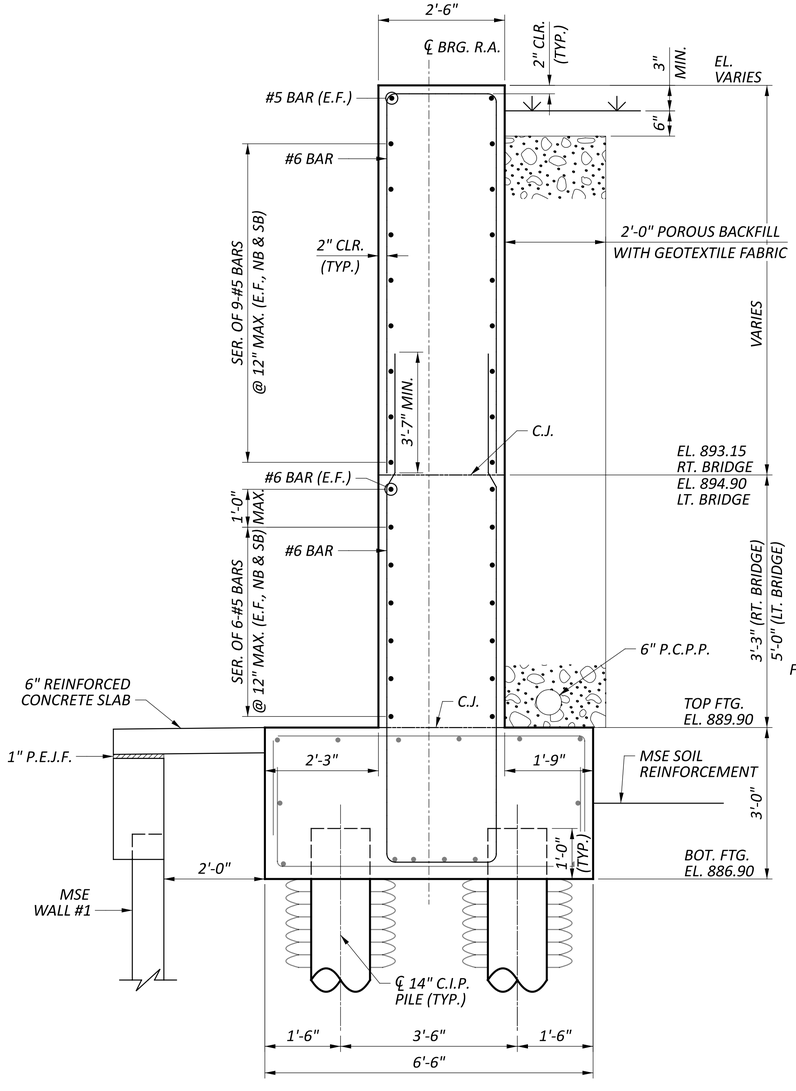
REINF. LEGEND:

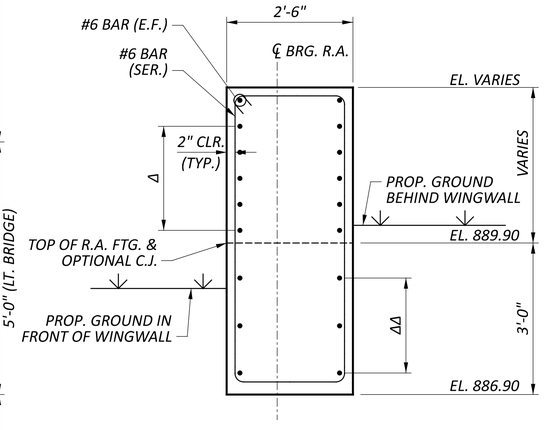
REAR LEFT	*REAR RIGHT*
A: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*N: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
B: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*O: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
C: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*P: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
D: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*Q: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
E: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*R: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
F: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*S: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
G: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*T: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
H: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*U: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
J: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*V: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
K: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*W: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
L: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*X: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
M: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*Y: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*
N: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	*Z: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"*



A 26 A 27 **SECTION** *(SEE NOTE 1)*



B 26 B 27 **SECTION** *(SEE NOTE 1)*



C 26 C 27 **SECTION**

LEGEND:

Δ - 6-#5 BARS (SER., E.F.) @ 12" MAX.

ΔΔ - 3-#8 BARS LAP WITH FTG. REINFORCING

NOTES:

1. *FOR MSE WALL DETAILS AND SEALING LIMITS, SEE SHEETS 59 THRU 61.*
2. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 31.*

REAR ABUTMENT DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	28
TOTAL	65
SHEET	P. 448
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:49:28 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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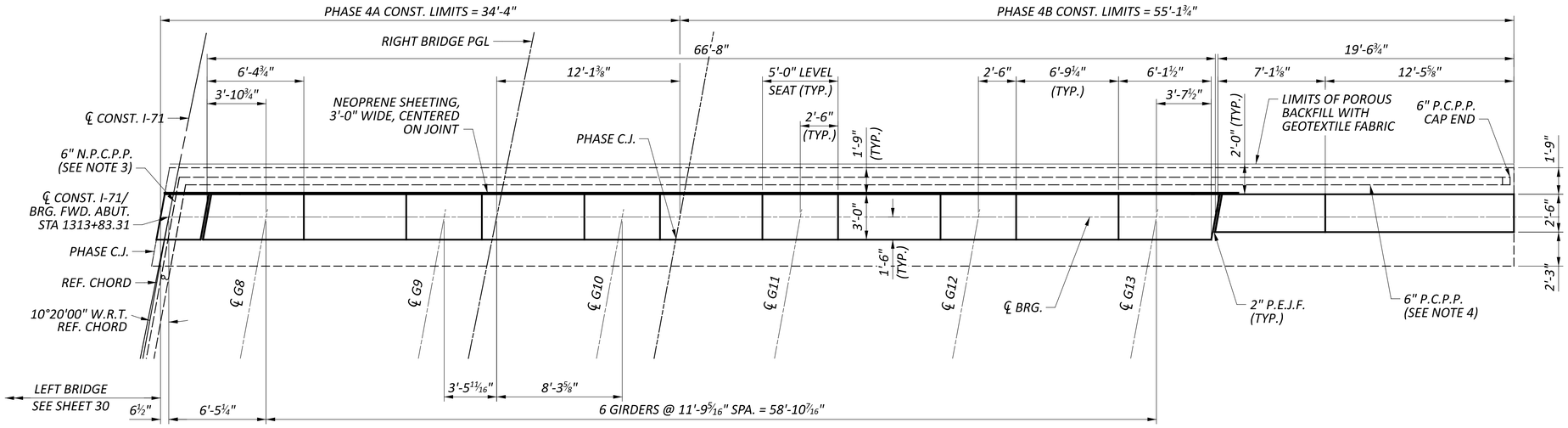
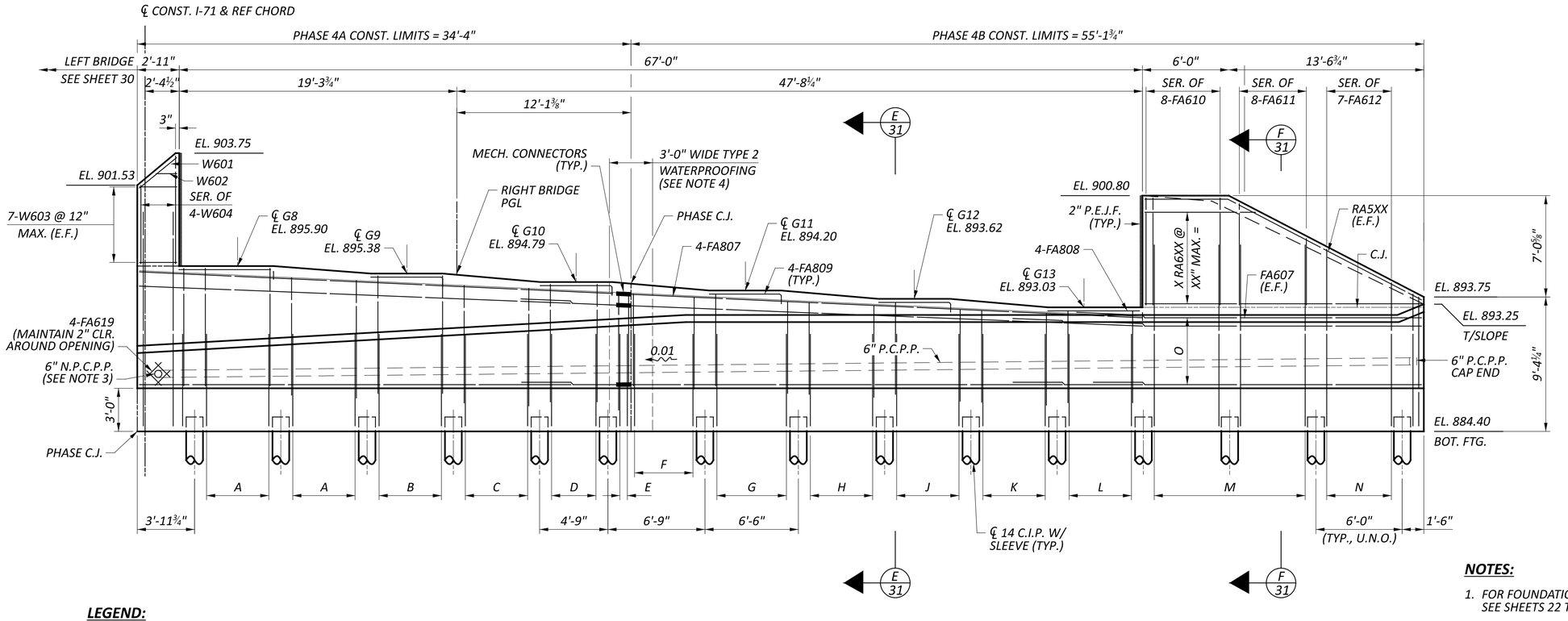


FORWARD ABUTMENT PLAN - RIGHT BRIDGE

(PILES NOT SHOWN FOR CLARITY)



LEGEND:

FOR REINFORCING STEEL LEGEND, SEE SHEET 31.

FORWARD ABUTMENT ELEVATION - RIGHT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ABOUT ℄ BRG.)
(FOOTING REINFORCING AND PRECAST DRAINAGE OUTLET NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS

#5 BAR: 3'-1"
#6 BAR: 4'-0"
#8 BAR: 5'-4"

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 25.*
2. *MAINTAIN 2" CLR. AROUND 6" N.P.C.P.P. OPENING. FIELD CUT BARS IF REQUIRED.*
3. *FOR PIPE OUTLET DETAILS, SEE SHEET 31.*
4. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

FORWARD ABUTMENT PLAN AND ELEVATION - RIGHT BRIDGE

BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	29
TOTAL	65
SHEET	P. 449
TOTAL	618

FRA-71-19.10

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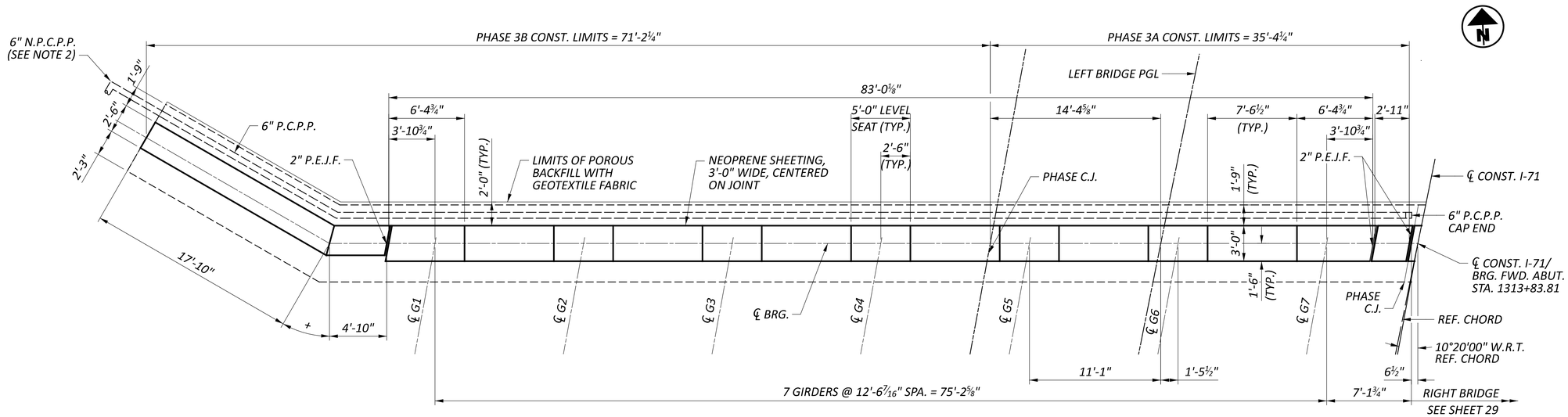
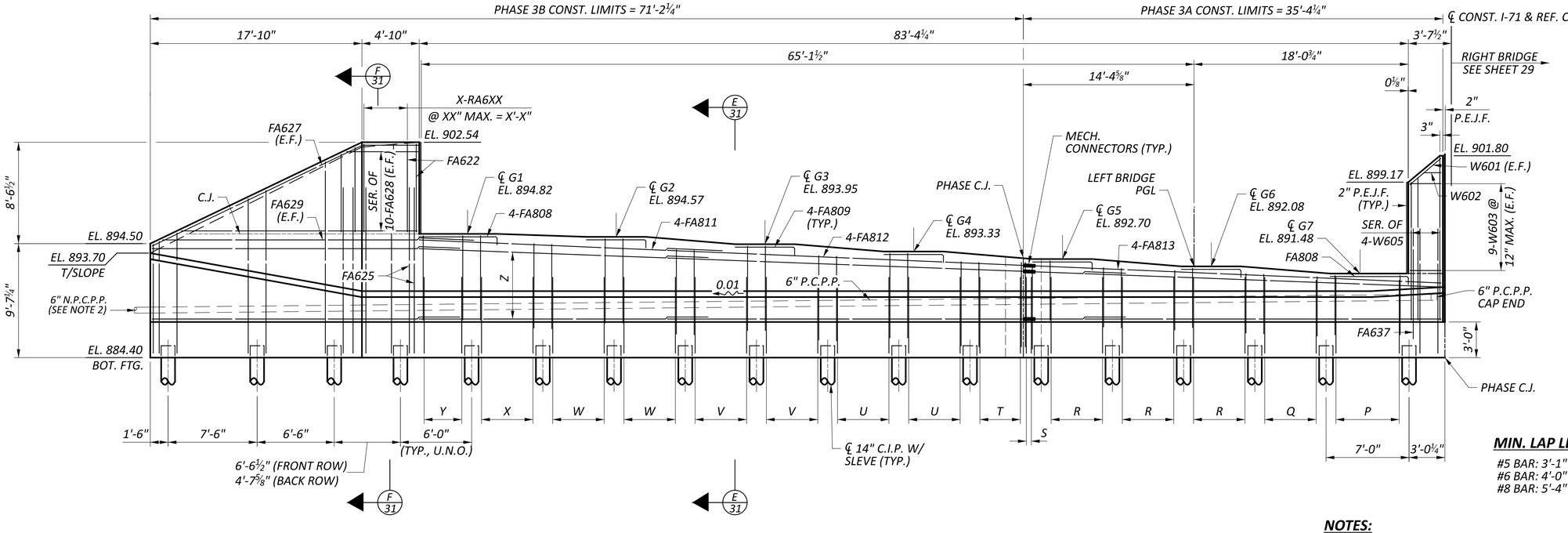


FORWARD ABUTMENT PLAN - LEFT BRIDGE

(PILES NOT SHOWN FOR CLARITY)



FORWARD ABUTMENT ELEVATION - LEFT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ABOUT ℄ BRG.)
(FOOTING REINFORCING AND PRECAST CONCRETE DRAINAGE OUTLET NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS

#5 BAR: 3'-1"
#6 BAR: 4'-0"
#8 BAR: 5'-4"

LEGEND:

FOR REINFORCING STEEL LEGEND, SEE SHEET 31.

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 31.*
2. *FOR PIPE OUTLET DETAILS, SEE SHEET 31.*
3. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

FORWARD ABUTMENT PLAN AND ELEVATION - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	30
TOTAL	65
SHEET	P. 450
TOTAL	618

FRA-71-19.10

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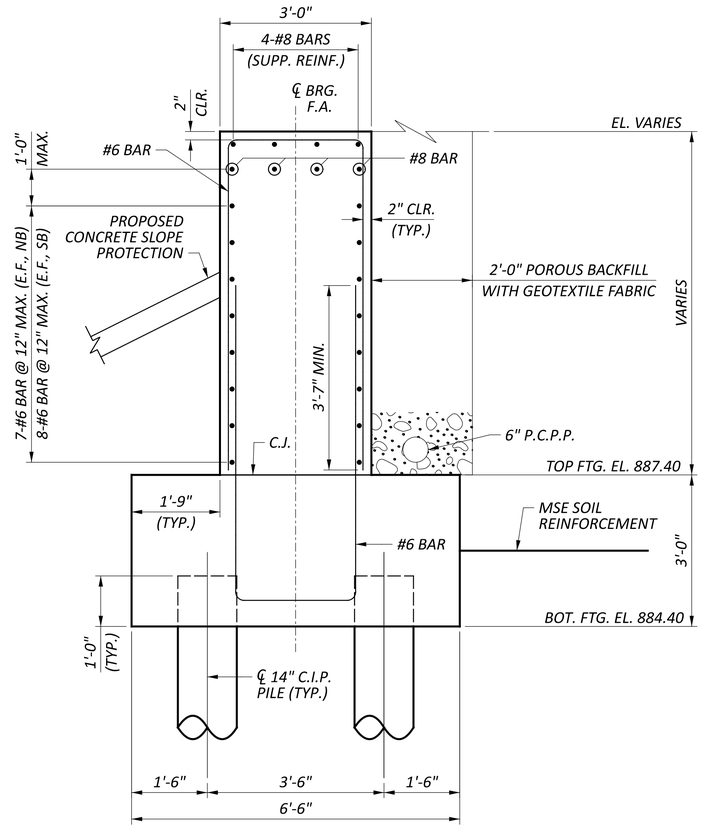
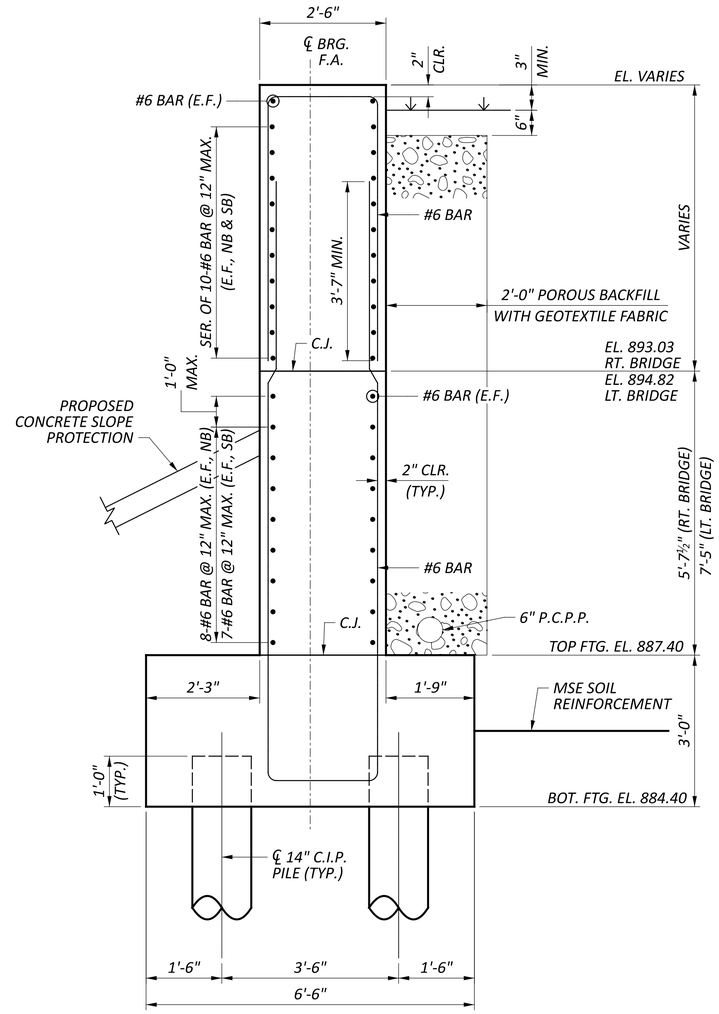
REINF. LEGEND:

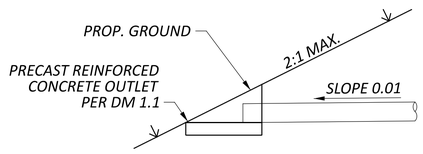
FWD LEFT	FWD RIGHT
P: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	A: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
Q: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	B: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
R: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	C: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
S: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	D: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
T: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	E: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
U: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	F: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
V: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	G: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
W: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	H: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
X: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	J: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
Y: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	K: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
Z: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"	L: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
	M: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
	N: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"
	O: X-SETS OF 2-RA6XX @ ZZ MAX. = Q'-Q"



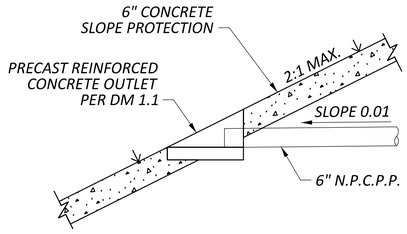
E 29 E 30 SECTION *(SEE NOTE 1)*



F 29 F 30 SECTION *(SEE NOTE 1)*



TYPICAL DRAIN PIPE OUTLET DETAIL



FORWARD ABUTMENT MEDIAN WALL DRAIN PIPE OUTLET DETAIL

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 22 THRU 31.*

FORWARD ABUTMENT DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	31
TOTAL	65
SHEET	P. 451
TOTAL	618

FRA-71-19.10

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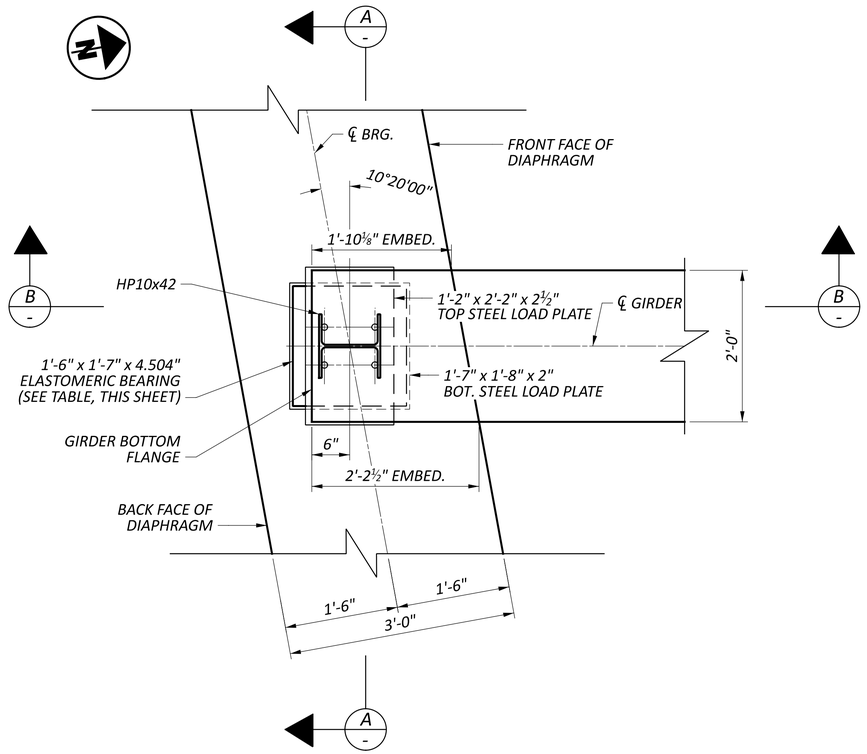
ctures\SFN_2508192\Sheets\109164_SFN_2508192_SF003.dgn

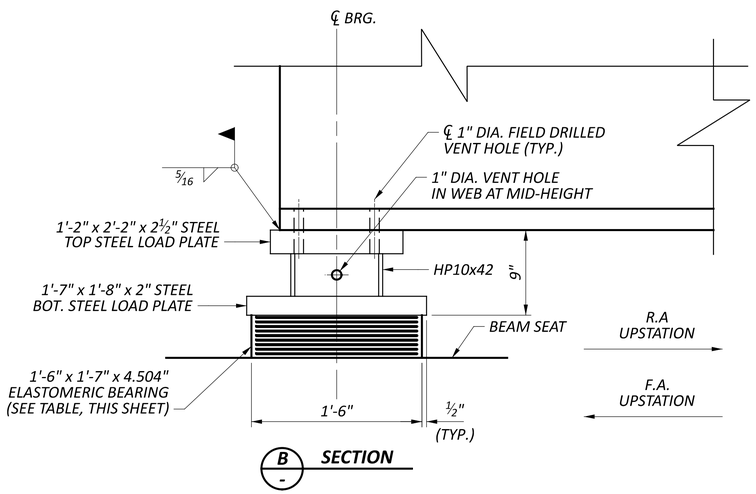
TABLE OF ELASTOMERIC BEARING DIMENSIONS										
LOCATION	INTERNAL ELASTOMER LAYER THICKNESS	EXTERNAL ELASTOMER LAYER THICKNESS	STEEL LAMINATE THICKNESS	NO. OF INTERNAL ELASTOMER LAYERS	NO. OF EXTERNAL ELASTOMER LAYERS	NO. OF STEEL LAMINATES	TOTAL BEARING THICKNESS	REACTIONS		* MAXIMUM DESIGN LOAD
								DL + DW	* LL	
LEFT (R.A. & F.A.)	0.375"	0.1875"	0.1046"	9	1	9	4.504"	293 k	118 k	411 k
RIGHT (R.A. & F.A.)	0.375"	0.1875"	0.1046"	9	1	9	4.504"	285 k	113 k	398 k

* - LOADS GIVEN ARE SERVICE LOADS WITHOUT IMPACT



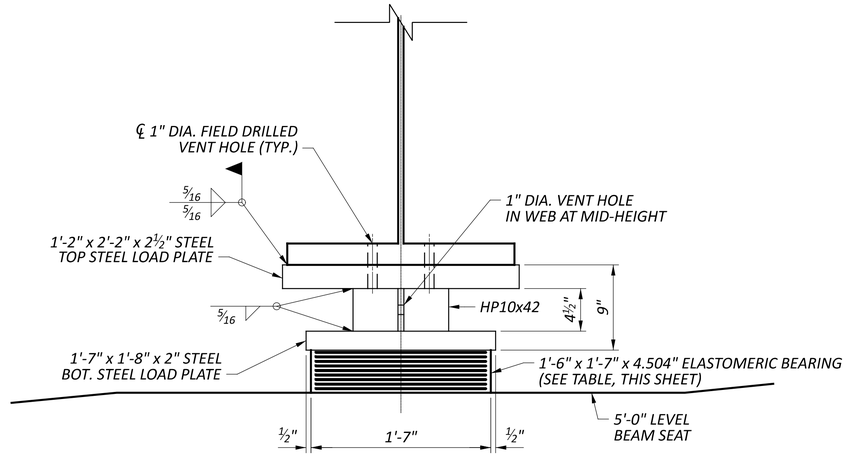
PARTIAL BEARING PLAN AT ABUTMENTS

(R.A. SHOWN, F.A. SIMILAR)
(BEARING STIFFENER NOT SHOWN FOR CLARITY)



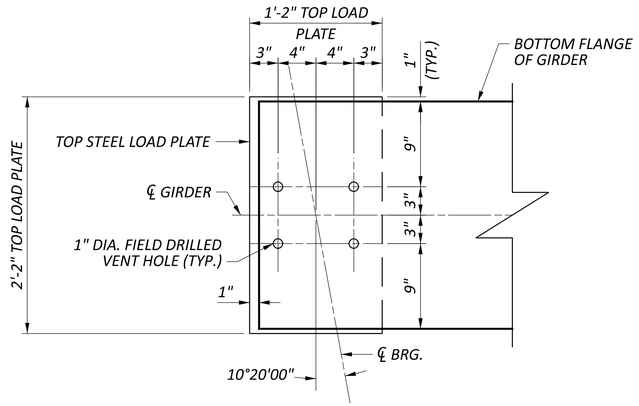
SECTION

(R.A. SHOWN, F.A. SIMILAR, NOT TO SCALE)
(EXPANDED POLYSTYRENE OR EXPANDABLE FORMS NOT SHOWN FOR CLARITY)
(BEARING STIFFENER NOT SHOWN FOR CLARITY)



SECTION

(EXPANDED POLYSTYRENE OR EXPANDABLE FORMS NOT SHOWN FOR CLARITY)
(BEARING STIFFENER NOT SHOWN FOR CLARITY)



FIELD DRILLED VENT HOLE PLAN

(R.A. SHOWN, F.A. SIMILAR)

NOTES:

1. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
2. LOAD PLATES: THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. THE STEEL LOAD PLATES SHALL BE ASTM A709 GRADE 50 STRUCTURAL STEEL.
3. STEEL UPPER LOAD PLATE, STEEL LOWER LOAD PLATE AND HP10x42 SUPPORT BLOCK SHALL BE CONSIDERED COMPONENTS OF THE ELASTOMERIC BEARING ASSEMBLY. THE COST OF ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE BEARING ASSEMBLY SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 516 - BEARING DEVICE MISC.: ELASTOMERIC BEARING ASSEMBLY.
4. EACH BEARING SHALL BE SHOP MARKED WITH THE FOLLOWING INFORMATION: FORWARD STATION DIRECTION, LOCATION (REAR ABUTMENT OR FORWARD ABUTMENT) AND BEAM NUMBER. THE MARK SHALL BE PLACED SO THAT IT WILL BE VISIBLE ONCE THE BEARING ASSEMBLY HAS BEEN INSTALLED.
5. WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

BEARING DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	32
TOTAL	65
SHEET	P. 452
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:50:23 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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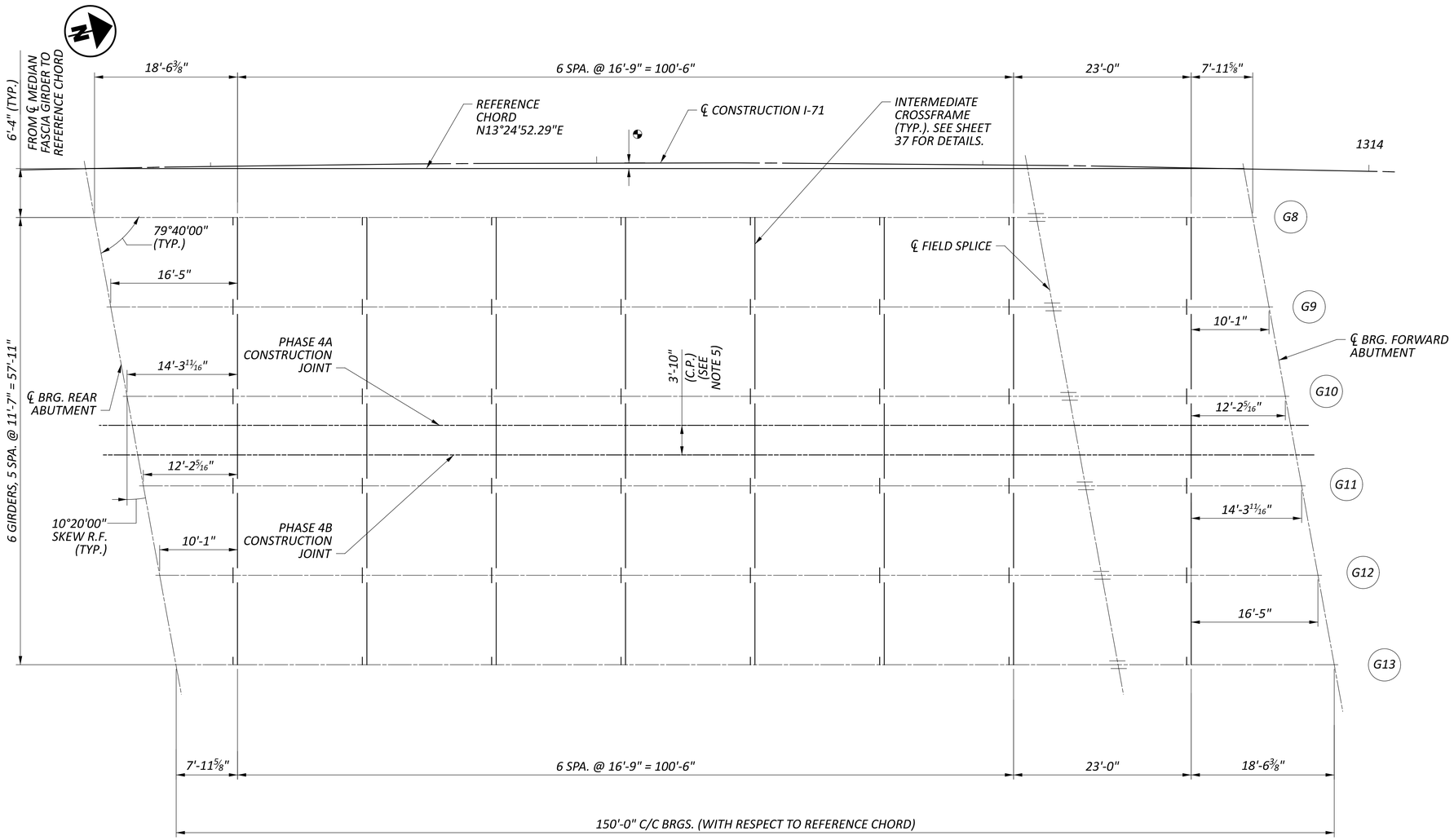

FRAMING PLAN - RIGHT BRIDGE

LEGEND:

(GXX) - *GIRDER LINE DESIGNATION*

℄ - *0" MIN. TO 8¹³⁄₁₆" MAX.*

NOTES:

1. *SEE SHEET 35 FOR GIRDER ELEVATIONS AND FIELD SPLICE DETAILS.*
2. *ALL GIRDERS SHALL BE ORIENTED PARALLEL TO REFERENCE CHORD. ALL INTERMEDIATE CROSSFRAMES SHALL BE PLACED NORMAL TO ℄ GIRDERS.*
3. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
4. *FOR STAGED CONSTRUCTION DETAILS, SEE SHEETS 7 THROUGH 8.*
5. *THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDE OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED. SEE SHEET 37 FOR ADDITIONAL NOTES.*

FRAMING PLAN - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	33
TOTAL	65
SHEET	P. 453
TOTAL	618

FRA-71-19.10

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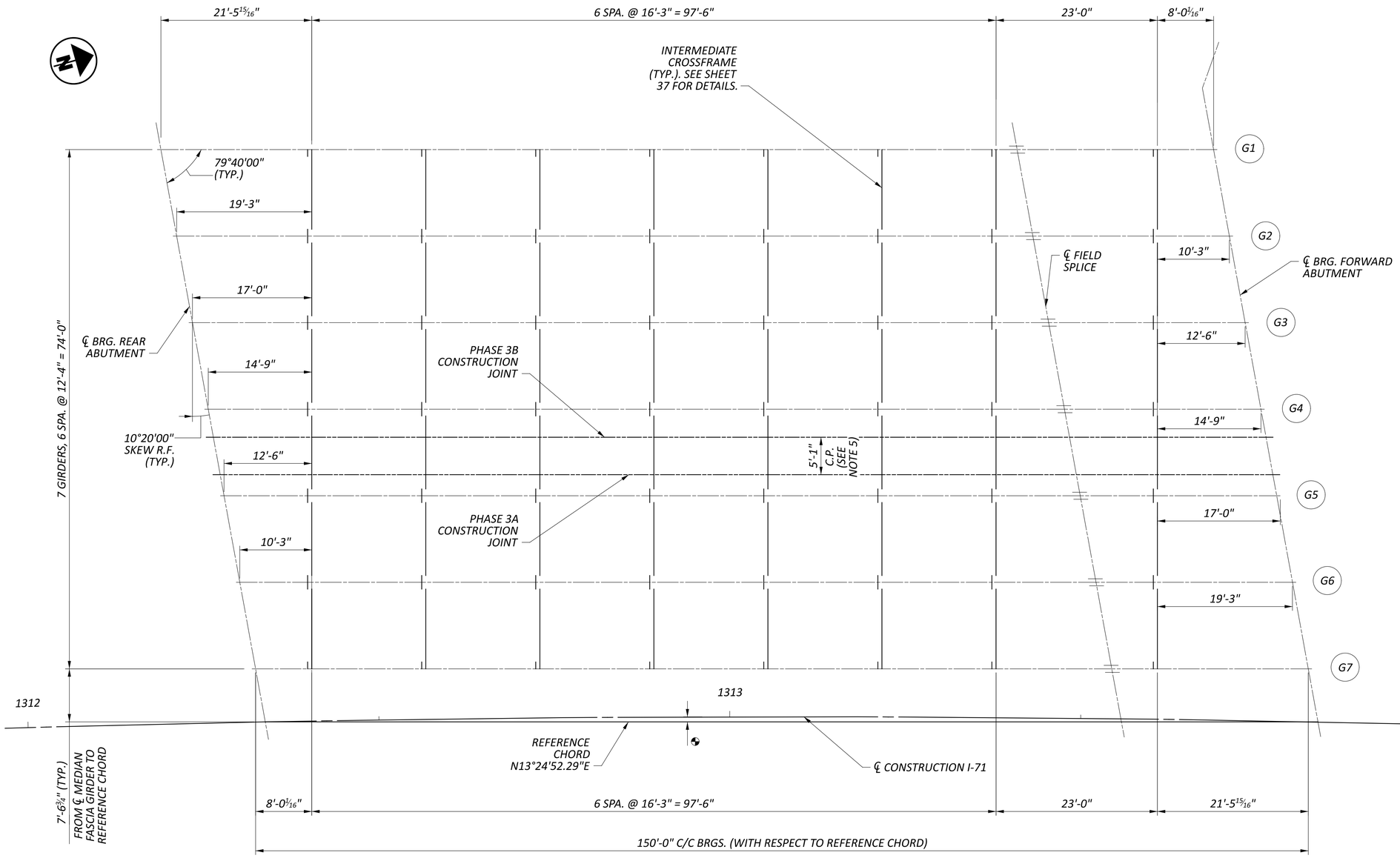

FRAMING PLAN - LEFT BRIDGE

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

◔ - 0" MIN. TO 8 13/16" MAX.

NOTES:

1. SEE SHEET 35 FOR GIRDER ELEVATIONS AND FIELD SPLICE DETAILS.
2. ALL GIRDERS SHALL BE ORIENTED PARALLEL TO REFERENCE CHORD. ALL INTERMEDIATE CROSSFRAMES SHALL BE PLACED NORMAL TO ℄ GIRDERS.
3. FOR ABBREVIATION LEGEND, SEE SHEET 5.
4. FOR STAGED CONSTRUCTION DETAILS, SEE SHEETS 7 THROUGH 8.
5. THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDE OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED. SEE SHEET 37 FOR ADDITIONAL NOTES.

FRA-71-19.10

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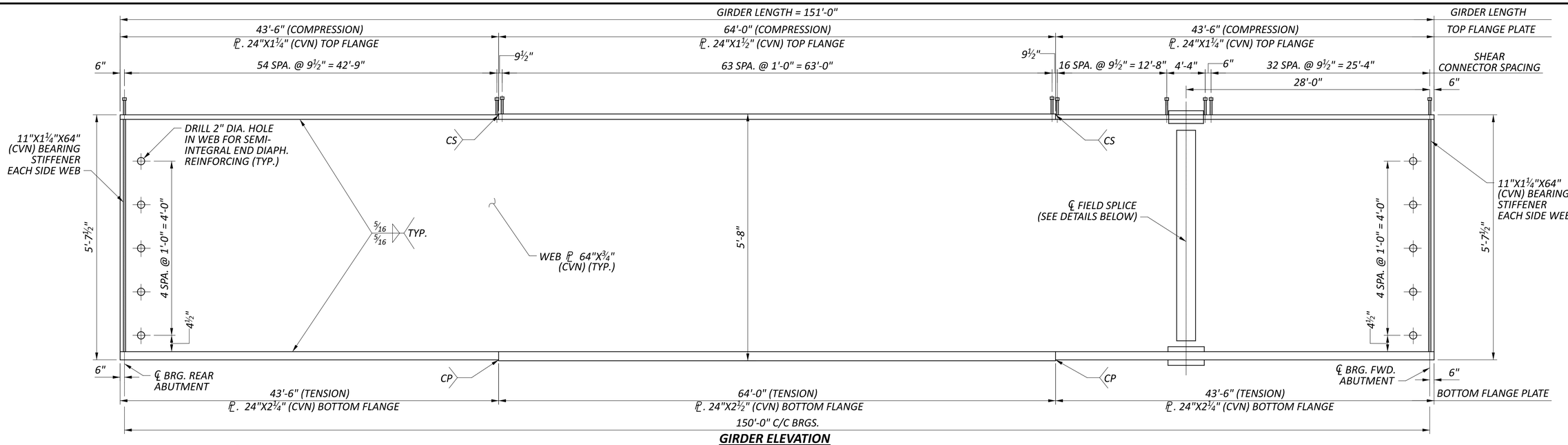
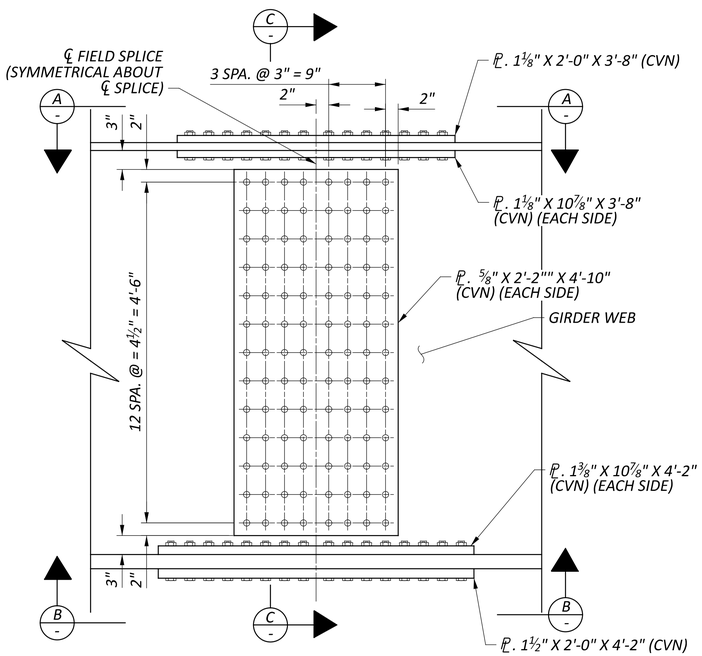
FRAMING PLAN - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	34
TOTAL	65
SHEET	P. 454
TOTAL	618

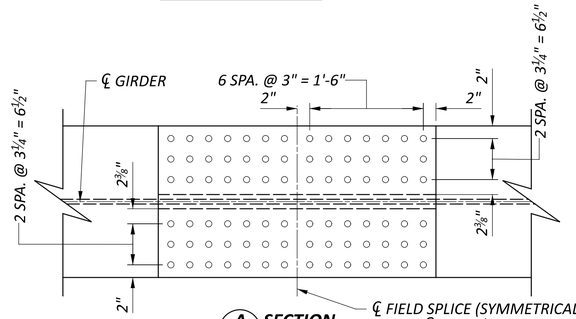


GIRDER ELEVATION



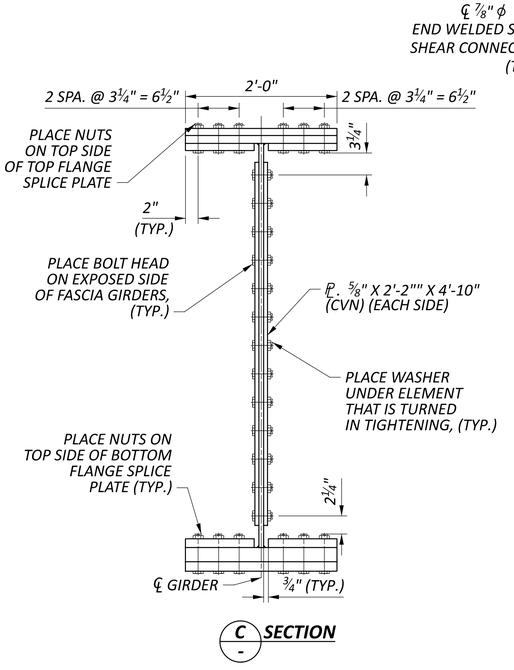
GIRDER SPLICE ELEVATION

(2 WEB PLATES REQUIRED)
(104 BOLTS REQUIRED)



(1 OUTSIDE PLATE AND 2 INSIDE PLATES REQUIRED AT TOP FLANGE)
(84 FLANGE BOLTS REQUIRED AT TOP FLANGE)

(1 OUTSIDE PLATE AND 2 INSIDE PLATES REQUIRED AT BOTTOM FLANGE)
(96 FLANGE BOLTS REQUIRED AT BOTTOM FLANGE)



SHEAR CONNECTOR DETAIL

NOTES:

1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS SPECIFIED IN C&MS 711.01.
2. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF GIRDER FLANGES DESIGNATED "COMPRESSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.
3. BUTT WELDS AT SHOP SPLICES SHALL BE COMPLETE PENETRATION WELDS. WELD REINFORCEMENT SHALL BE COMPLETELY REMOVED BY GRINDING IN THE DIRECTION OF MAIN STRESS.
4. INSTALL STIFFENERS/CONNECTION PLATES ACCORDING TO C&MS 513.
5. FOR CROSSFRAME DETAILS, SEE SHEET 37.
6. HIGH STRENGTH BOLTS SHALL BE 1"ϕ F3125, GRADE A325, UNLESS NOTED OTHERWISE. PROVIDE TYPE I BOLTS PER C&MS 711.02 FOR ALL GIRDERS. PROVIDE CLASS A SURFACE CONDITION FOR THE CONTACT AREA OF BOLTED FIELD SPLICES.
7. SHEAR CONNECTOR PLACEMENT ON THE FLANGE SPLICE PLATES IS NOT PERMITTED. ADJUST SPACING IF NECESSARY TO AVOID INTERFERENCE WITH SPLICE PLATES AND CONNECTION BOLTS.

LEGEND:

(C) - DENOTES COMPRESSION

(T) - DENOTES TENSION

(CS) - INDICATES BUTT WELD SUBJECTED TO COMPRESSION STRESS ONLY

(CP) - INDICATES COMPLETE JOINT PENETRATION WELD

(CVN) - CHARPY V-NOTCH

GIRDER ELEVATION AND DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	35
TOTAL	65
SHEET	P. 455
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:51:16 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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	GIRDERS 2 -6 (LEFT BRIDGE SOUTHBOUND)									
	R.A.	1/10 SPAN	2/10 SPAN	3/10 SPAN	4/10 SPAN	1/2 SPAN	6/10 SPAN	7/10 SPAN	8/10 SPAN	9/10 SPAN	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	5/8	1 1/8	1 9/16	1 13/16	1 7/8	1 3/4	1 1/2	1 1/8	5/8	0
DEFLECTION DUE TO STAGED DECK PLACEMENT	0	1 11/16	3 3/16	4 5/16	5	5 1/4	5	4 5/16	3 3/16	1 11/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	5/16	3/8	7/16	1/2	7/16	3/8	5/16	3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	1/4	1/2	5/8	3/4	7/8	3/4	3/4	1/2	3/8	0
REQUIRED SHOP CAMBER	0	2 11/16	5	6 3/4	7 15/16	8 3/8	7 7/8	6 7/8	5	2 13/16	0

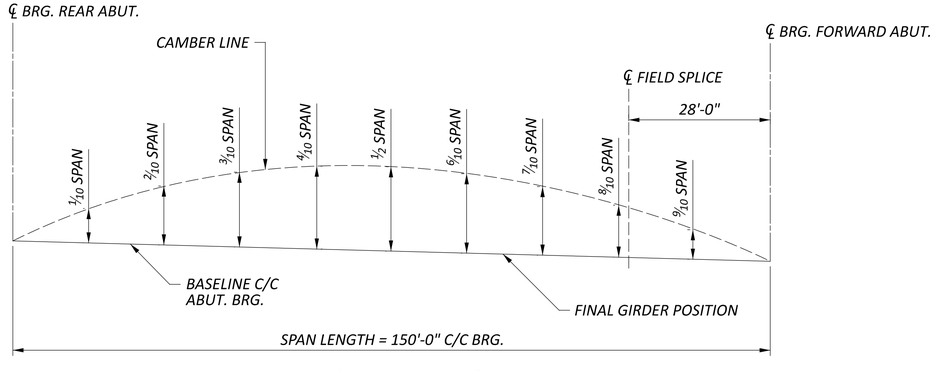
	GIRDERS 1,7 (LEFT BRIDGE SOUTHBOUND)									
	R.A.	1/10 SPAN	2/10 SPAN	3/10 SPAN	4/10 SPAN	1/2 SPAN	6/10 SPAN	7/10 SPAN	8/10 SPAN	9/10 SPAN	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	9/16	1 1/16	1 7/16	1 11/16	1 3/4	1 11/16	1 7/16	1 1/16	9/16	0
DEFLECTION DUE TO STAGED DECK PLACEMENT	0	1 9/16	2 15/16	3 15/16	4 5/8	4 13/16	4 5/8	3 15/16	2 15/16	1 9/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	5/16	7/16	1/2	1/2	1/2	7/16	5/16	3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	5/16	9/16	11/16	13/16	13/16	13/16	11/16	1/2	1/4	0
REQUIRED SHOP CAMBER	0	2 1/2	4 3/4	6 3/8	7 1/2	7 13/16	7 1/2	6 7/16	4 11/16	2 1/2	0

CAMBER TABLE (LEFT BRIDGE - SOUTHBOUND)

	GIRDERS 9 - 12 - (RIGHT BRIDGE NORTHBOUND)									
	R.A.	1/10 SPAN	2/10 SPAN	3/10 SPAN	4/10 SPAN	1/2 SPAN	6/10 SPAN	7/10 SPAN	8/10 SPAN	9/10 SPAN	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	5/8	1 1/8	1 1/2	1 3/4	1 7/8	1 3/4	1 1/2	1 1/8	5/8	0
DEFLECTION DUE TO STAGED DECK PLACEMENT	0	1 5/8	3	4 1/16	4 3/4	4 15/16	4 3/4	4 1/16	3	1 5/8	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/8	7/16	9/16	9/16	9/16	7/16	3/8	3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	1/4	7/16	5/8	3/4	13/16	3/4	5/8	7/16	5/16	0
REQUIRED SHOP CAMBER	0	2 9/16	4 13/16	6 5/8	7 11/16	8 1/8	7 11/16	6 9/16	4 13/16	2 5/8	0

	GIRDERS 8,13 (RIGHT BRIDGE NORTHBOUND)									
	R.A.	1/10 SPAN	2/10 SPAN	3/10 SPAN	4/10 SPAN	1/2 SPAN	6/10 SPAN	7/10 SPAN	8/10 SPAN	9/10 SPAN	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	9/16	1 1/16	1 7/16	1 11/16	1 3/4	1 11/16	1 7/16	1 1/16	9/16	0
DEFLECTION DUE TO STAGED DECK PLACEMENT	0	1 1/2	2 13/16	3 13/16	4 7/16	4 11/16	4 7/16	3 13/16	2 13/16	1 1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/8	1/2	9/16	5/8	9/16	1/2	3/8	3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	1/4	7/16	5/8	3/4	13/16	3/4	5/8	7/16	5/16	0
REQUIRED SHOP CAMBER	0	2 7/16	4 5/8	6 5/16	7 5/16	7 3/4	7 3/8	6 1/4	4 5/8	2 1/2	0

CAMBER TABLE (RIGHT BRIDGE - NORTHBOUND)



CAMBER DIAGRAM (NORTHBOUND & SOUTHBOUND)

NOTES:

1. CAMBER IS ROUNDED TO THE NEAREST 1/16".

CAMBER AND DEFLECTION TABLES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	DBL

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
36	65

SHEET	TOTAL
P. 456	618

FRA-71-19.10

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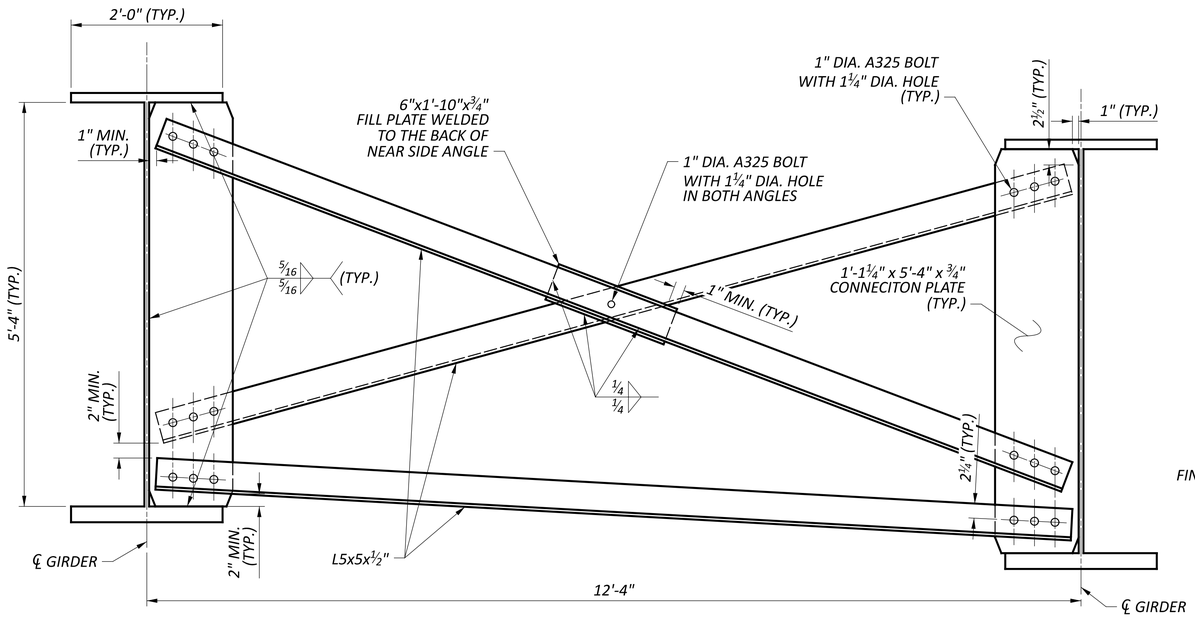
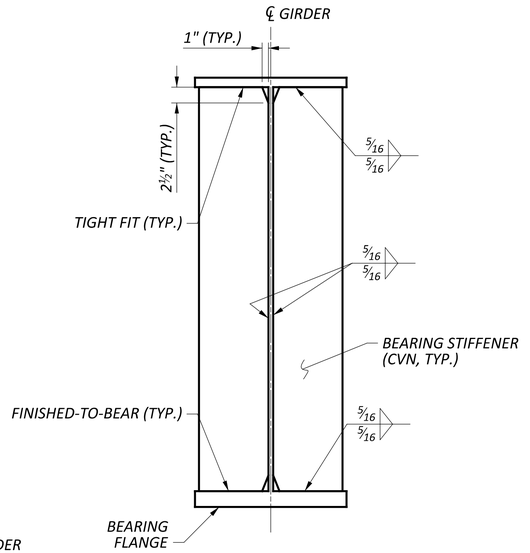
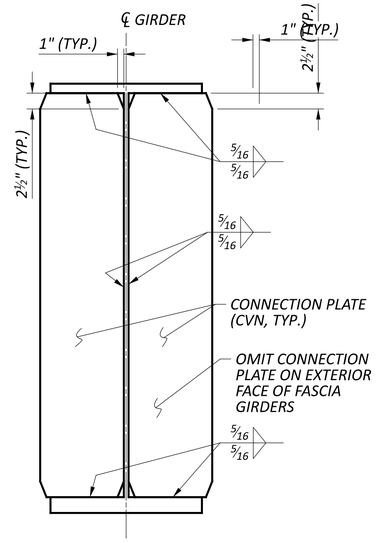


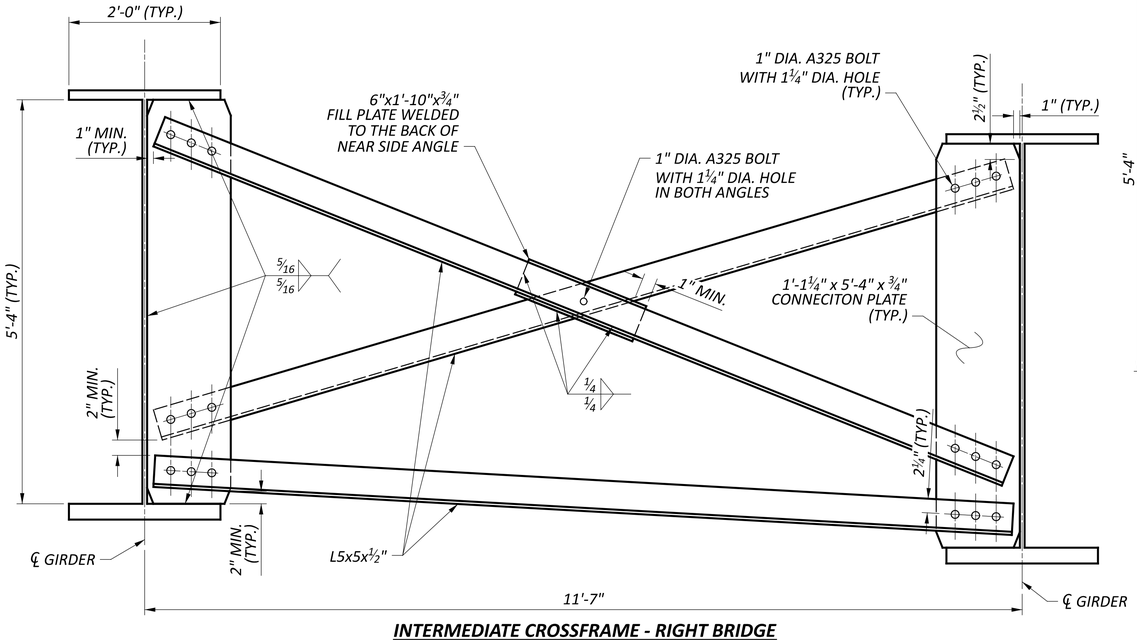
INTERMEDIATE CROSSFRAME - LEFT BRIDGE



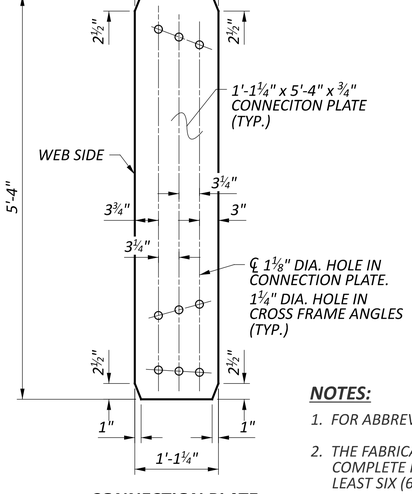
TYPICAL BEARING STIFFENER DETAIL



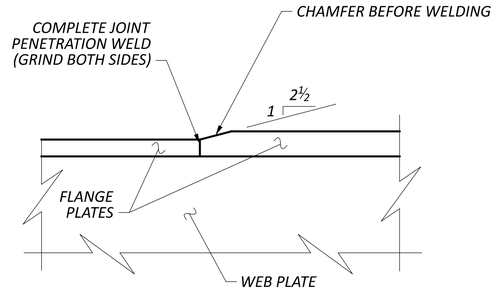
TYPICAL CONNECTION PLATE DETAIL



INTERMEDIATE CROSSFRAME - RIGHT BRIDGE
(SIMILAR TO LEFT BRIDGE, BUT DIFFERENT GIRDER SPACING)



CONNECTION PLATE



TYPICAL FLANGE TRANSITION DETAIL
(TO BE USED AT FLANGE THICKNESS TRANSITIONS)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. THE FABRICATOR SHALL CHECK LONGITUDINAL CROSSFRAME SPACING SO THAT INTERFERENCE WITH BOLTED SPLICES, COMPLETE PENETRATION WEB OR FLANGE WELDED SPLICES IS AVOIDED. SPACING SHALL BE ADJUSTED TO PROVIDE AT LEAST SIX (6) INCHES OF LONGITUDINAL CLEARANCE.
3. IN ACCORDANCE WITH C&MS 513, THE FABRICATOR SHALL DETAIL ALL CROSSFRAMES TO FIT WITH THE WEBS PLUMB AT THE COMPLETION OF SUPERSTRUCTURE ERECTION (STEEL DEAD LOAD FIT, SDLF).
4. CONNECTION PLATES SHALL BE NORMAL TO ℄ GIRDER.
5. IN BAYS WITH CLOSURE POUR, THE FABRICATOR SHALL DETAIL CROSSFRAMES TO FIT AT THE COMPLETION OF DECK PLACEMENT ON EACH SIDE OF THE CLOSURE POUR. BOLT HOLES IN THE CONNECTION PLATE ON ONE OF THE GIRDER LINES SHALL BE FIELD DRILLED AND SHOP DRILLED ON THE OTHER.
6. THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
7. ALL MATERIAL SHALL BE ASTM A709, GRADE 50, YIELD STRENGTH 50-KSI.
8. ALL MATERIAL SHALL BE SHOP PRIMED AND FIELD PAINTED PER C&MS 514.
9. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER ASTM F3125, GRADE A325, TYPE 1 WITH THREADS EXCLUDED FROM SHEAR PLANE UNLESS OTHERWISE NOTED. PROVIDE CLASS A SURFACE CONDITION FOR THE CONTACT AREA OF BOLTED PARTS OF THE CROSSFRAME.

INTERMEDIATE CROSSFRAME DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MJR
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	37
TOTAL	65
SHEET	P. 457
TOTAL	618

FRA-71-19.10

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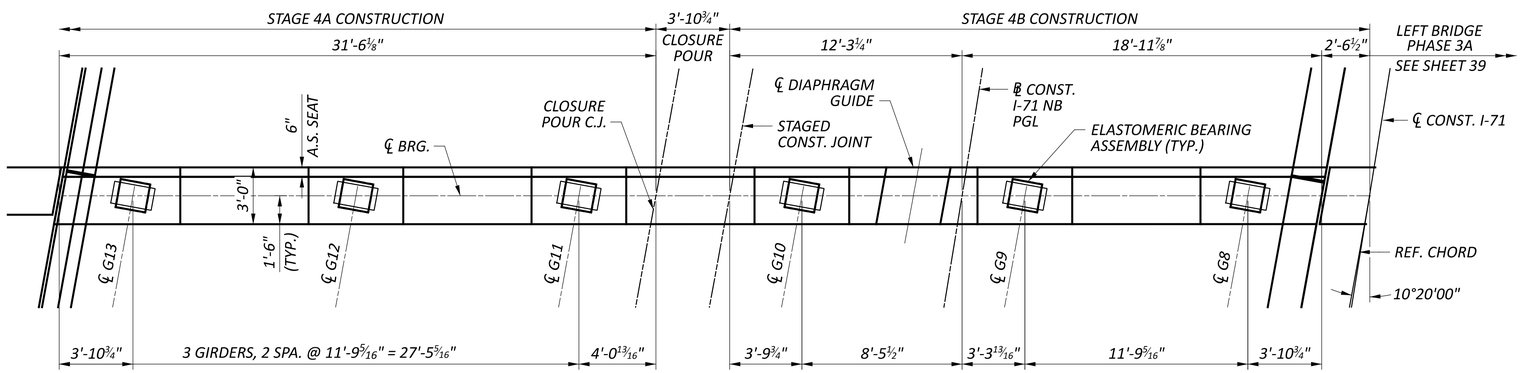
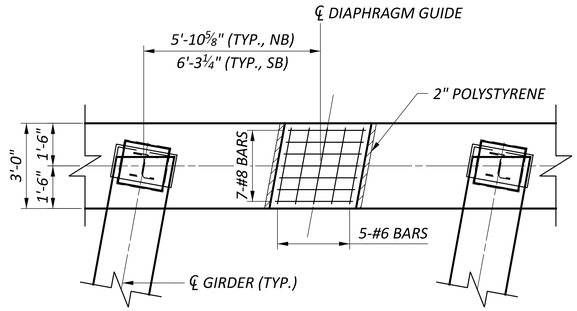
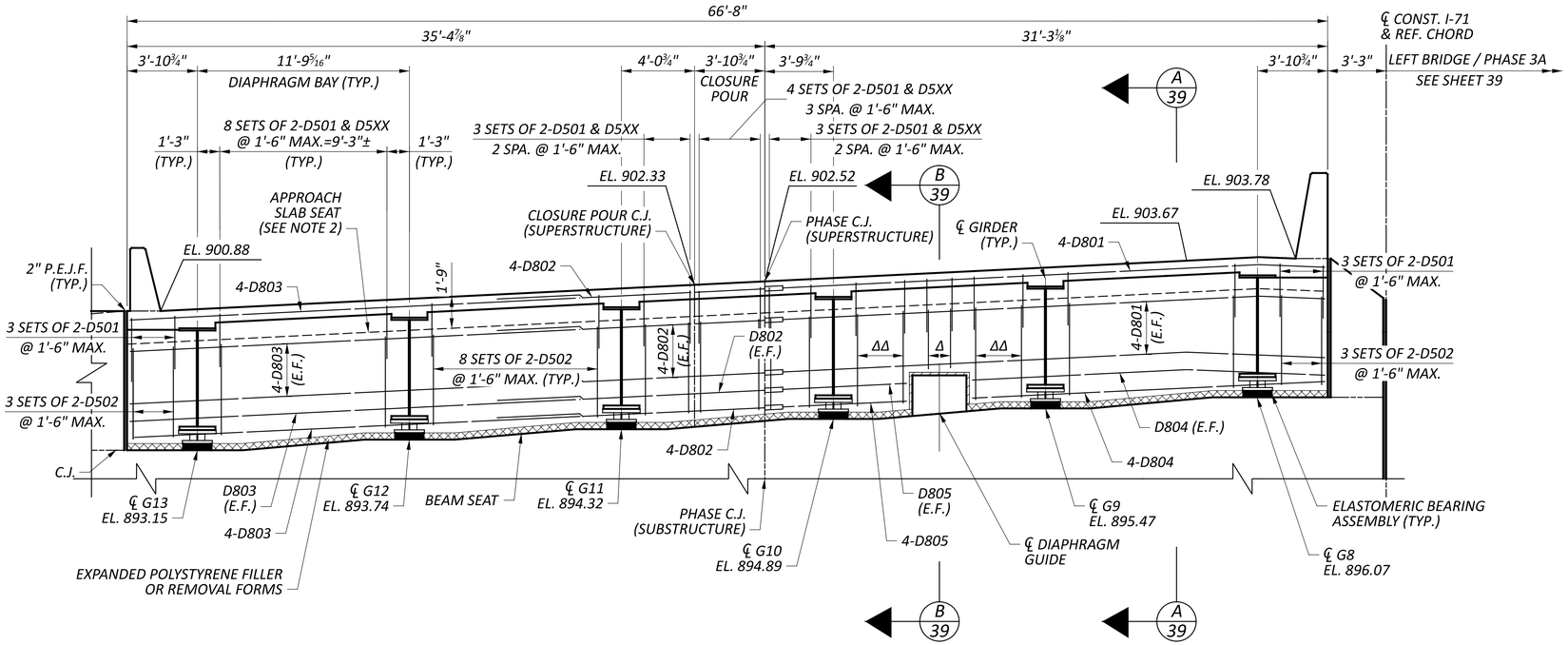


DIAPHRAGM PLAN - NORTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW)

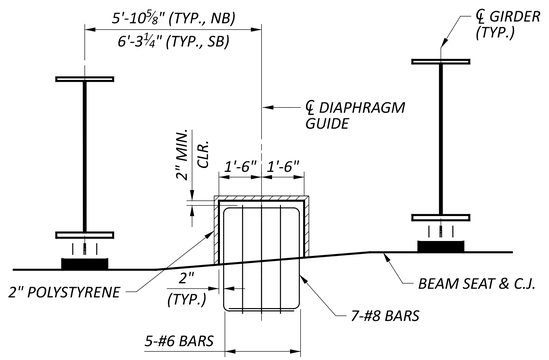


DIAPHRAGM GUIDE PLAN



DIAPHRAGM ELEVATION - NORTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW @ ℄ BRG.)



DIAPHRAGM GUIDE ELEVATION

LEGEND:

Δ	*2 SETS OF 2-D504 @ 1'-6" MAX.*
ΔΔ	*4 SETS OF 2-D502 @ 1'-6" MAX.*
ΔΔΔ	*MECHANICAL CONNECTOR (TYP.)*

NOTES:

1. *FOR REAR ABUTMENT DETAILS, SEE SHEETS 26 THRU 28.*
2. *PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL STEEL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
3. *ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.*
4. *ALL VERTICAL REINFORCEMENT SHALL BE PLACED PARALLEL TO BEAMS.*

REAR ABUTMENT DIAPHRAGM PLAN AND ELEVATION - RIGHT BRIDGE

BRIDGE NO. FRA-00071-24.460 L/R

I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	38
TOTAL	65
SHEET	P. 458
TOTAL	618

FRA-71-19.10

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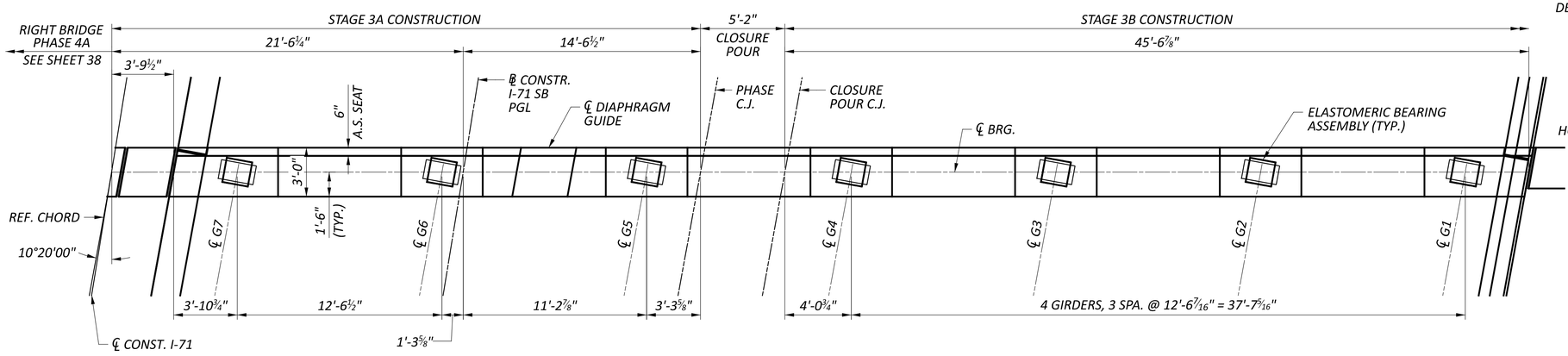
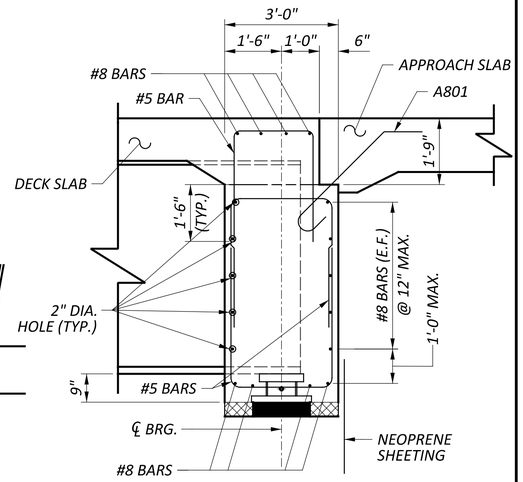
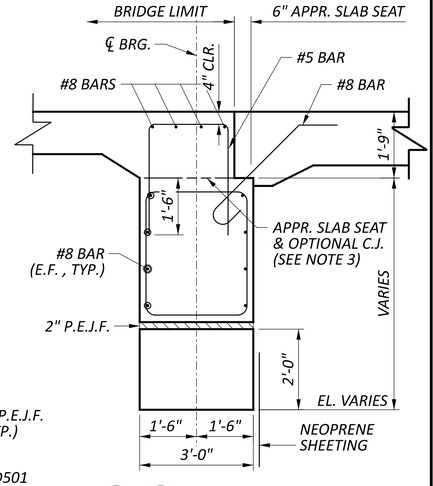


DIAPHRAGM PLAN - SOUTHBOUND

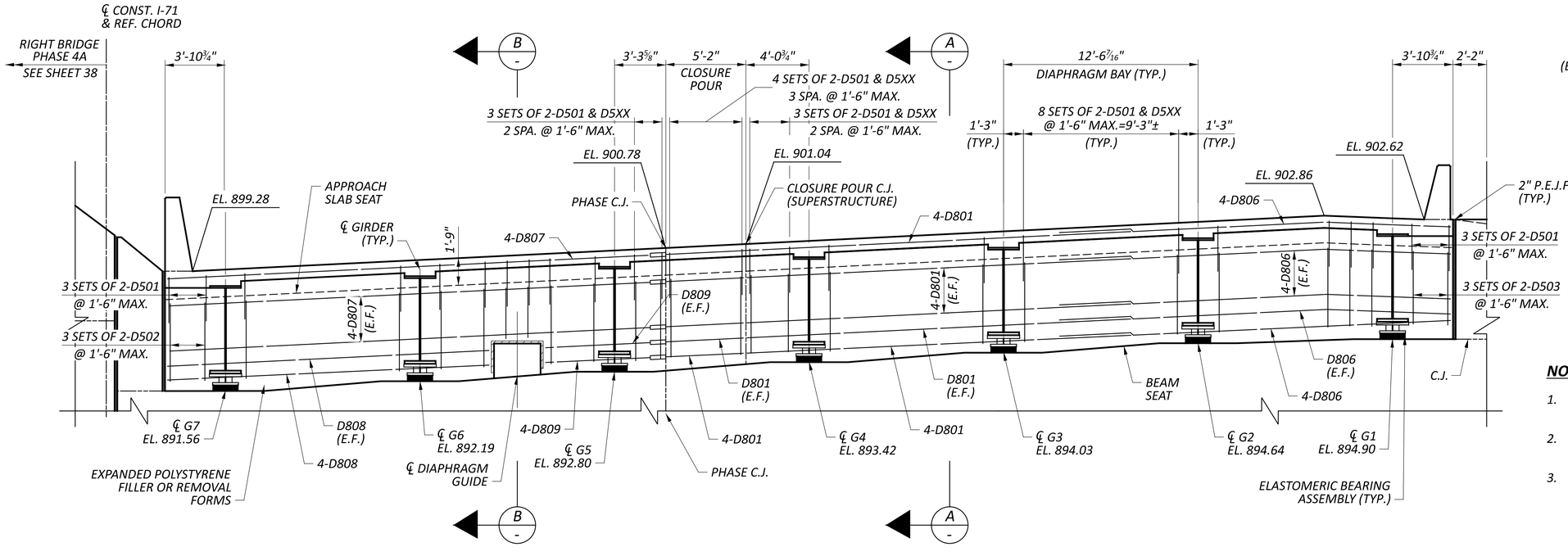
(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW)



A - 38 SECTION (NOT TO SCALE)



B - 38 SECTION (NOT TO SCALE)



DIAPHRAGM ELEVATION - SOUTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW @ ℄ BRG.)

LEGEND:

- Δ 2 SETS OF 2-D507 @ 1'-6" MAX.
- ΔΔ 4 SETS OF 2-D502 @ 1'-6" MAX.
- ΔΔΔ MECHANICAL CONNECTOR (TYP.)

NOTES:

1. FOR REAR ABUTMENT DETAILS, SEE SHEETS 26 THRU 28.
2. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 38.
3. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL STEEL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
4. ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.
5. ALL VERTICAL REINFORCEMENT SHALL BE PLACED PARALLEL TO BEAMS.

REAR ABUTMENT DIAPHRAGM PLAN AND ELEVATION - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	39
TOTAL	65
SHEET	P. 459
TOTAL	618

FRA-71-19.10

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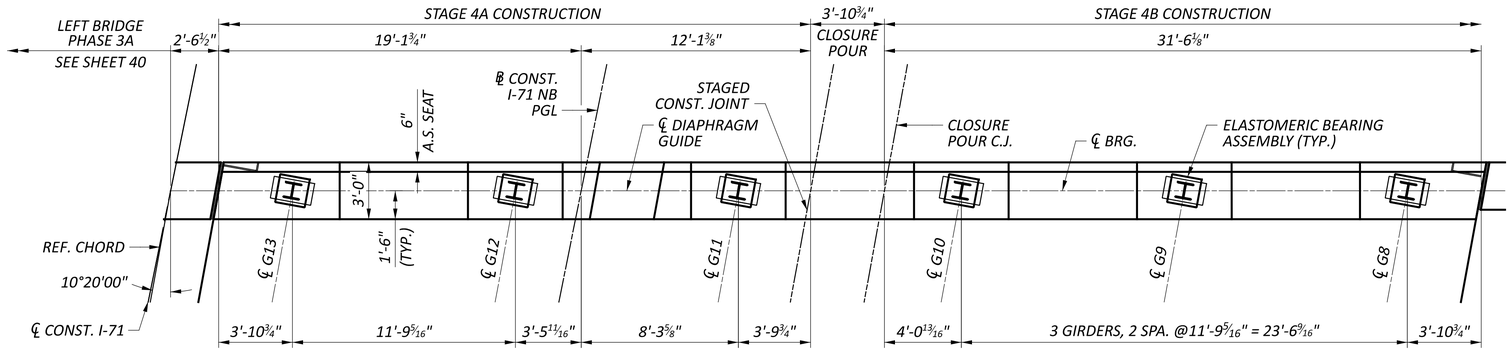
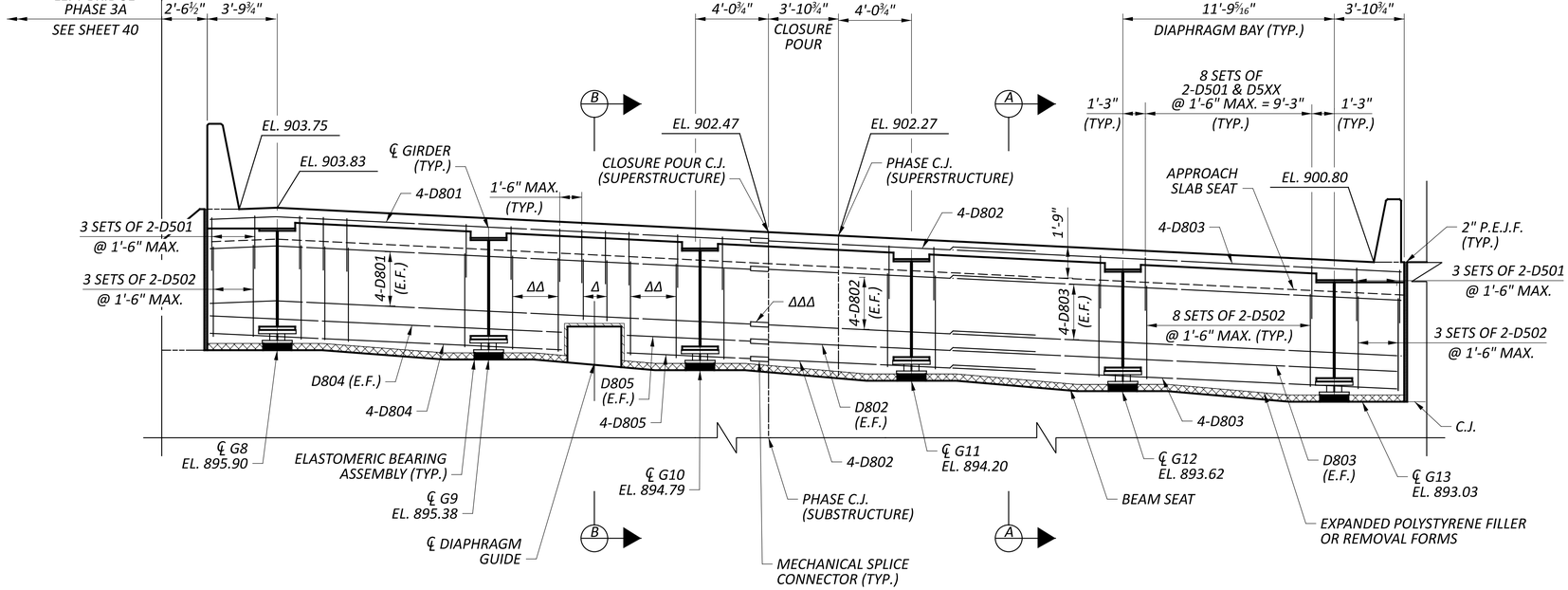


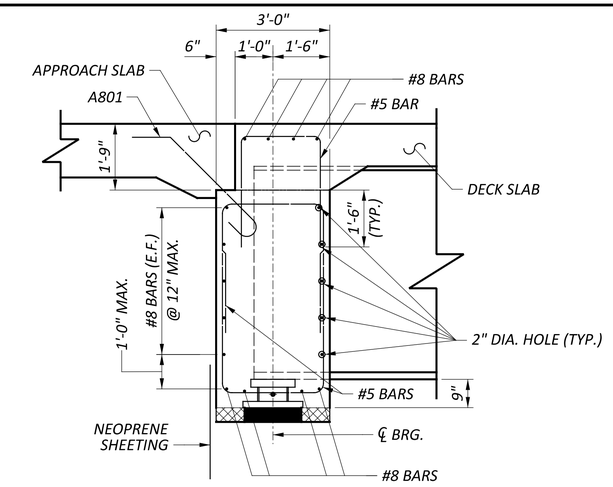
DIAPHRAGM PLAN - NORTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW)

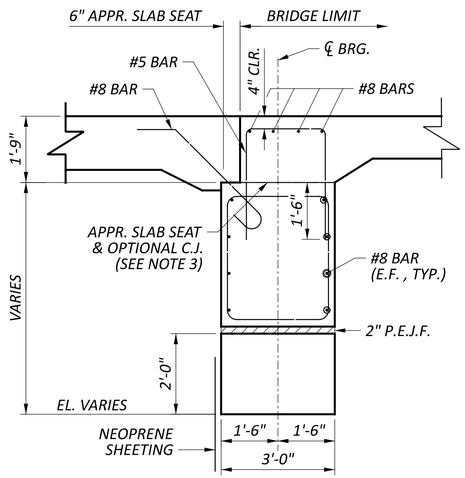


DIAPHRAGM ELEVATION - NORTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW @ ℄ BRG.)



A - A 41 ***SECTION*** *(NOT TO SCALE)*



B - B 41 ***SECTION*** *(NOT TO SCALE)*

LEGEND:

Δ - 2 SETS OF 2-D504 @ 1'-6" MAX.

ΔΔ - 4 SETS OF 2-D502 @ 1'-6" MAX.

ΔΔΔ - MECHANICAL CONNECTOR (TYP.)

MIN. LAP LENGTHS

#8 BAR = 5'-4"

NOTES:

1. *FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 29 THRU 31.*
2. *FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 38.*
3. *PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL STEEL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
4. *ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.*
5. *ALL VERTICAL REINFORCEMENT SHALL BE PLACED PARALLEL TO BEAMS.*

FORWARD ABUTMENT DIAPHRAGM PLAN AND ELEVATION - RIGHT BRIDGE

BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	40
TOTAL	65
SHEET	P. 460
TOTAL	618

FRA-71-19.10

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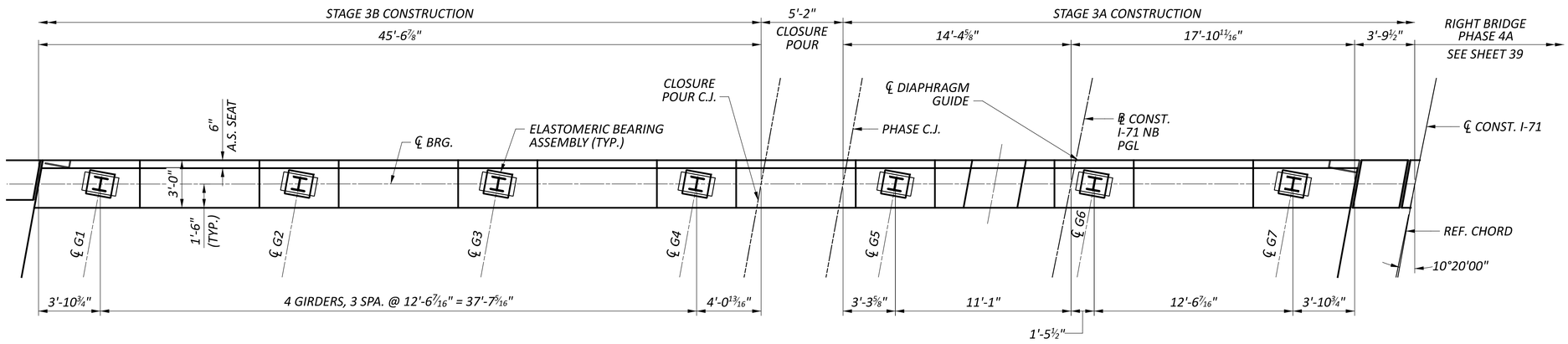
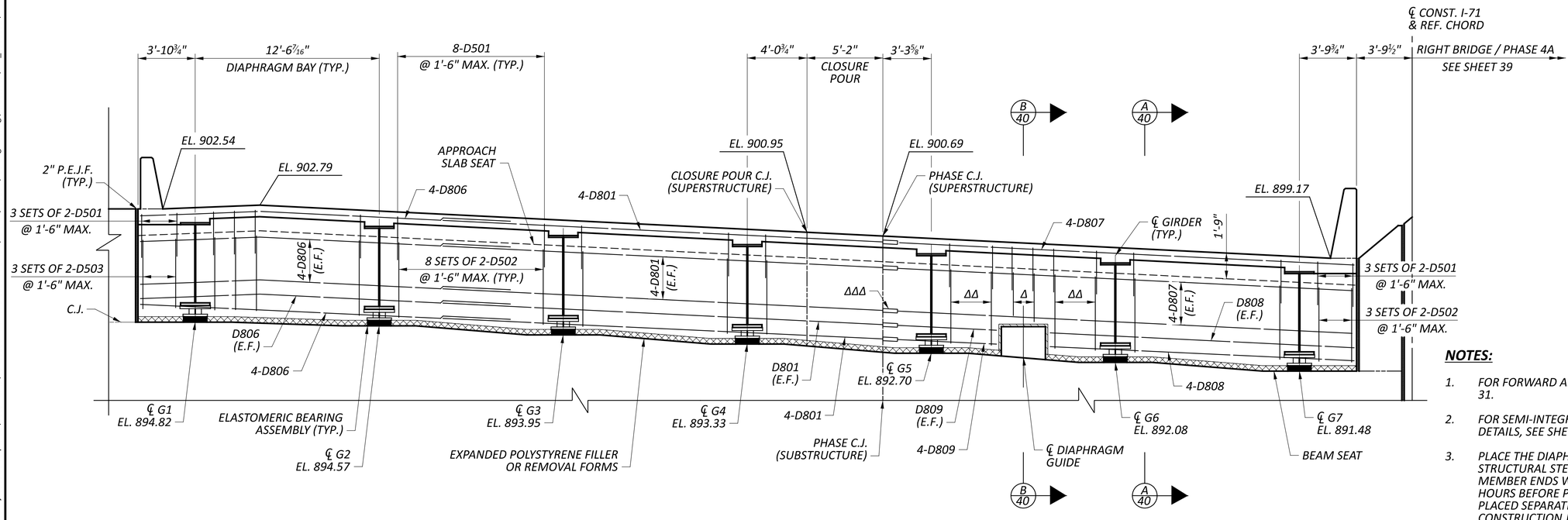


DIAPHRAGM PLAN - SOUTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW)



DIAPHRAGM ELEVATION - SOUTHBOUND

(DIMENSIONS AND ELEVATIONS SHOWN ALONG SKEW @ ℄ BRG.)

LEGEND:

Δ	2 SETS OF 2-D507 @ 1'-6" MAX.
ΔΔ	4 SETS OF 2-D502 @ 1'-6" MAX.
ΔΔΔ	MECHANICAL CONNECTOR (TYP.)

NOTES:

1. FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 29 THRU 31.
2. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 38.
3. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL STEEL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
4. ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.
5. ALL VERTICAL REINFORCEMENT SHALL BE PLACED PARALLEL TO BEAMS.

FORWARD ABUTMENT DIAPHRAGM PLAN AND ELEVATION - LEFT BRIDGE

BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	41
TOTAL	65
SHEET	P. 461
TOTAL	618

FRA-71-19.10

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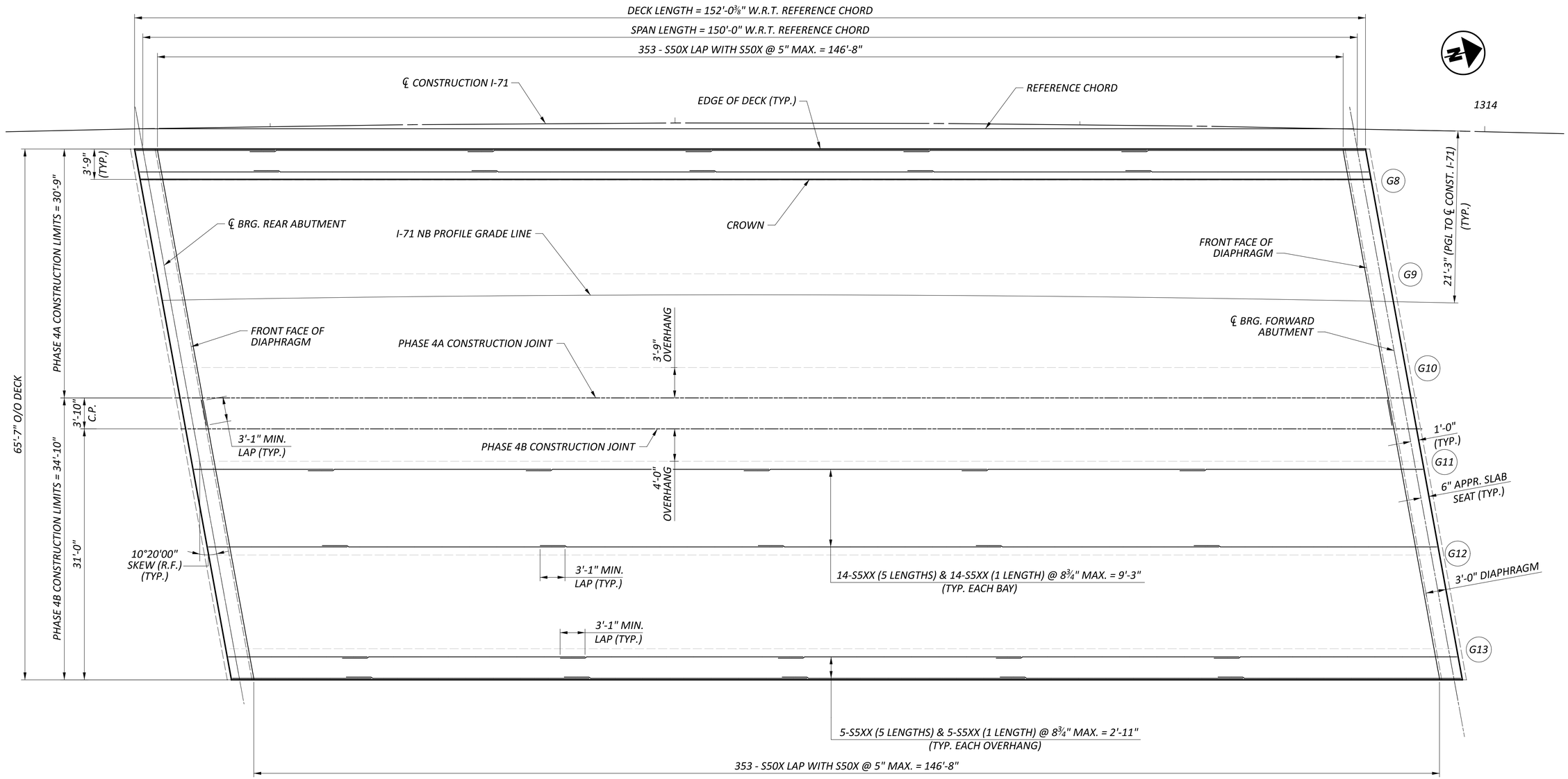

DECK PLAN RIGHT BRIDGE (NB) - BOTTOM REINFORCING

(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   - NO. 4 BAR = 2'-6"
   - NO. 5 BAR = 3'-1"
   - NO. 6 BAR = 4'-0"

DECK PLAN - RIGHT BRIDGE (BOTTOM MAT)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	42
TOTAL	65
SHEET	P. 462
TOTAL	618

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:53:23 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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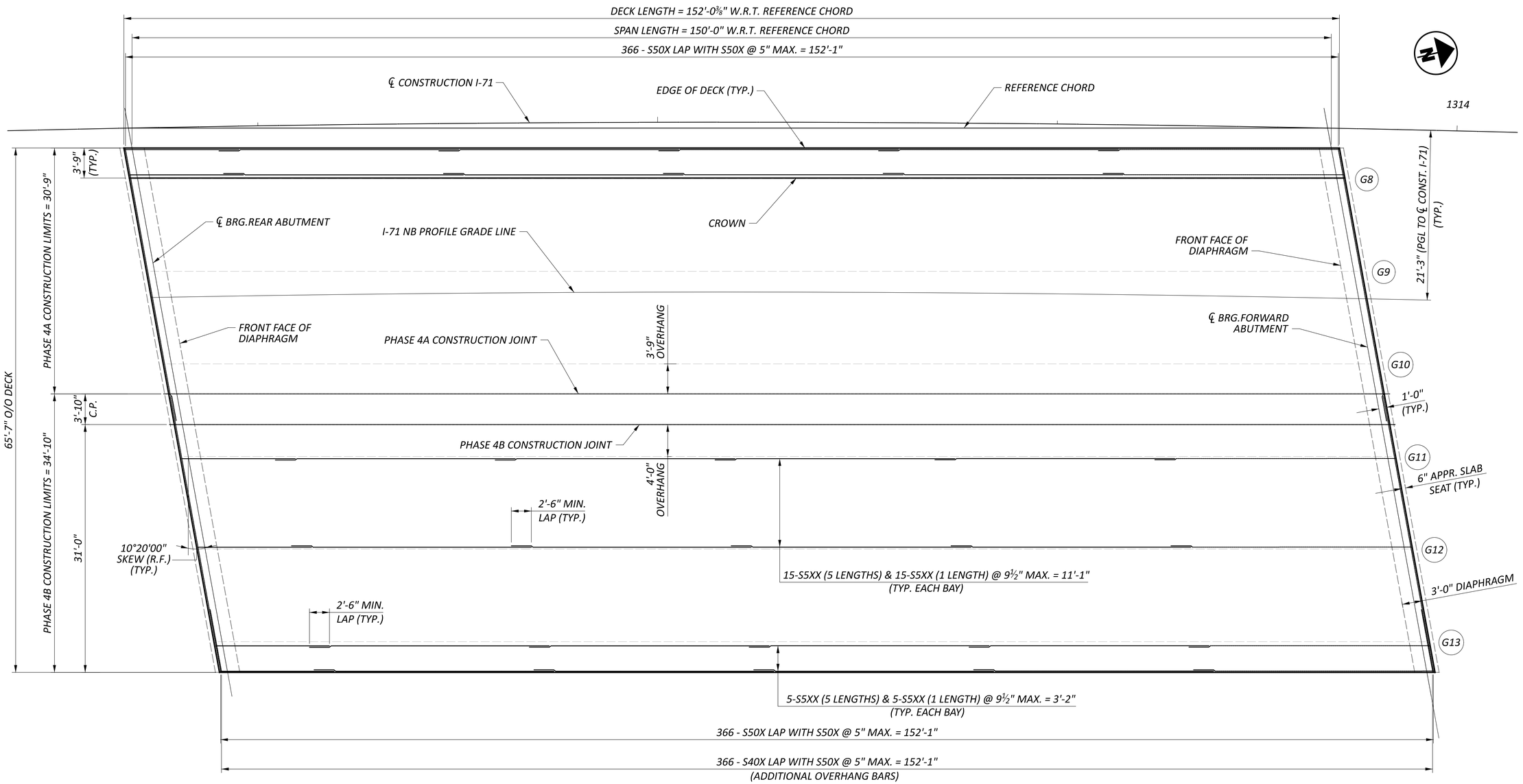

DECK PLAN RIGHT BRIDGE (NB) - TOP REINFORCING

(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - *GIRDER LINE DESIGNATION*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *MINIMUM REINFORCING STEEL LAP LENGTHS:*
   - *NO. 4 BAR = 2'-6"*
   - *NO. 5 BAR = 3'-1"*
   - *NO. 6 BAR = 4'-0"*

DECK PLAN - RIGHT BRIDGE (TOP MAT)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	43
TOTAL	65
SHEET	P. 463
TOTAL	618

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:53:38 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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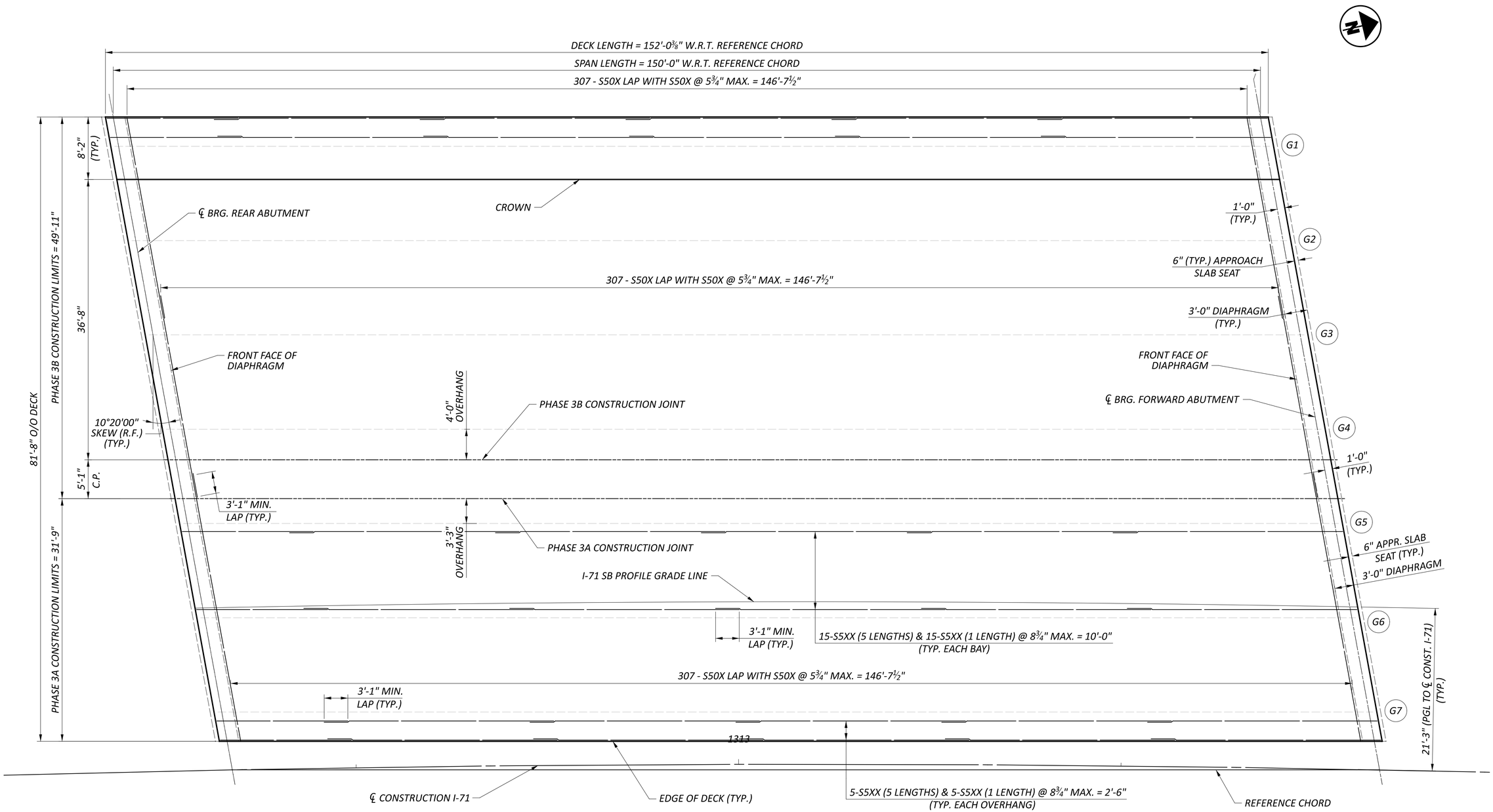

DECK PLAN LEFT BRIDGE (SB) - BOTTOM REINFORCING
(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   - NO. 4 BAR = 2'-6"
   - NO. 5 BAR = 3'-1"
   - NO. 6 BAR = 4'-0"

DECK PLAN - LEFT BRIDGE (BOTTOM MAT)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	44
TOTAL	65
SHEET	P. 464
TOTAL	618

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:53:52 AM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FRA-71-19.10

DECK LENGTH = 152'-0⅜" W.R.T. REFERENCE CHORD
SPAN LENGTH = 150'-0" W.R.T. REFERENCE CHORD
318 - S60X LAP WITH S60X @ 5¾" MAX. = 151'-10¾"

PHASE 3B CONSTRUCTION LIMITS = 49'-11"
8'-2" (TYP.)
36'-8"
5'-1" C.P.
PHASE 3A CONSTRUCTION LIMITS = 31'-9"

CROWN
FRONT FACE OF DIAPHRAGM
℄ BRG. REAR ABUTMENT
10°20'00" SKEW (R.F.) (TYP.)
4'-0" OVERHANG
PHASE 3B CONSTRUCTION JOINT
318 - S60X LAP WITH S60X @ 5¾" MAX. = 151'-10¾"
4'-0" MIN. LAP (TYP.)
3'-3" OVERHANG
PHASE 3A CONSTRUCTION JOINT
I-71 SB PROFILE GRADE LINE
2'-6" MIN. LAP (TYP.)
318 - S60X LAP WITH S60X @ 5¾" MAX. = 151'-10¾"
20-S5XX (5 LENGTHS) & 20-S5XX (1 LENGTH) @ 7¾" MAX. = 11'-10" (TYP. EACH BAY)
2'-6" MIN. LAP (TYP.)
1313
EDGE OF DECK (TYP.)
℄ CONSTRUCTION I-71
6-S5XX (5 LENGTHS) & 6-S5XX (1 LENGTH) @ 7½" MAX. = 3'-2" (TYP. EACH OVERHANG)
REFERENCE CHORD
318 - S40X LAP WITH S60X @ 5¾" MAX. = 151'-10¾" (ADDITIONAL OVERHANG BARS)

G1
G2
G3
G4
G5
G6
G7
1'-0" (TYP.)
6" APPR. SLAB SEAT (TYP.)
3'-0" DIAPHRAGM
FRONT FACE OF DIAPHRAGM
℄ BRG. FORWARD ABUTMENT
21'-3" (PGL TO ℄ CONST. I-71) (TYP.)

DECK PLAN LEFT BRIDGE (SB) - TOP REINFORCING
(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

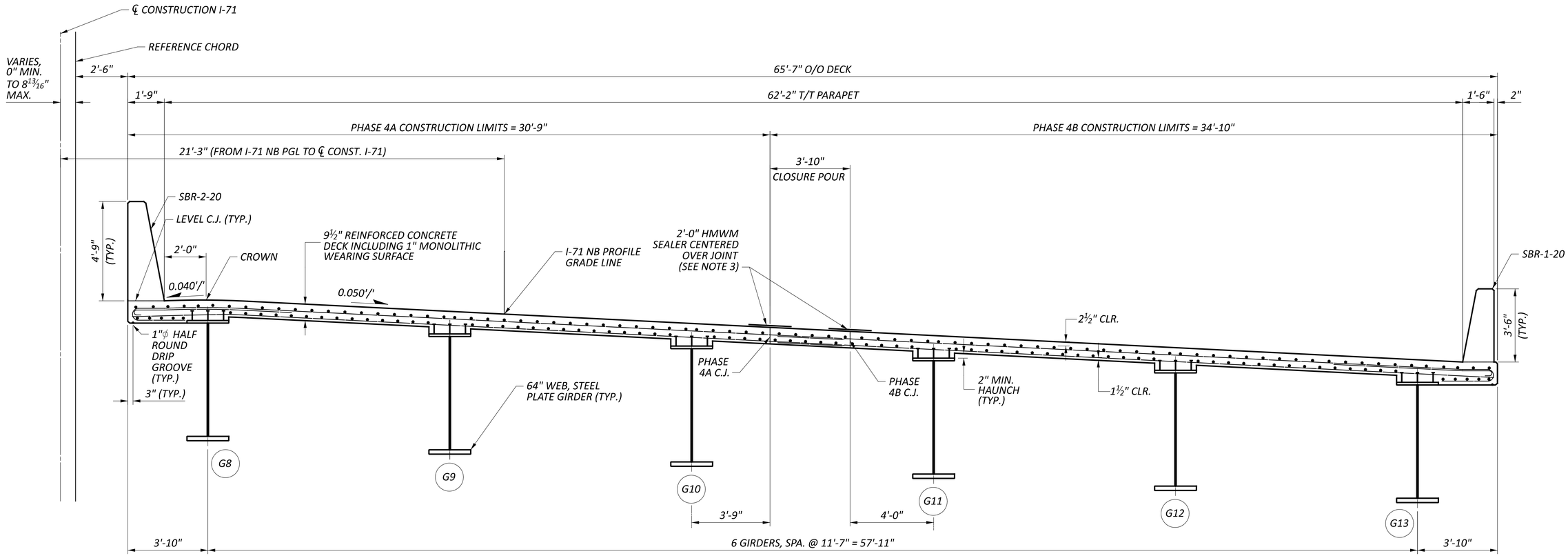
(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   - NO. 4 BAR = 2'-6"
   - NO. 5 BAR = 3'-1"
   - NO. 6 BAR = 4'-0"

DECK PLAN - LEFT BRIDGE (TOP MAT)
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

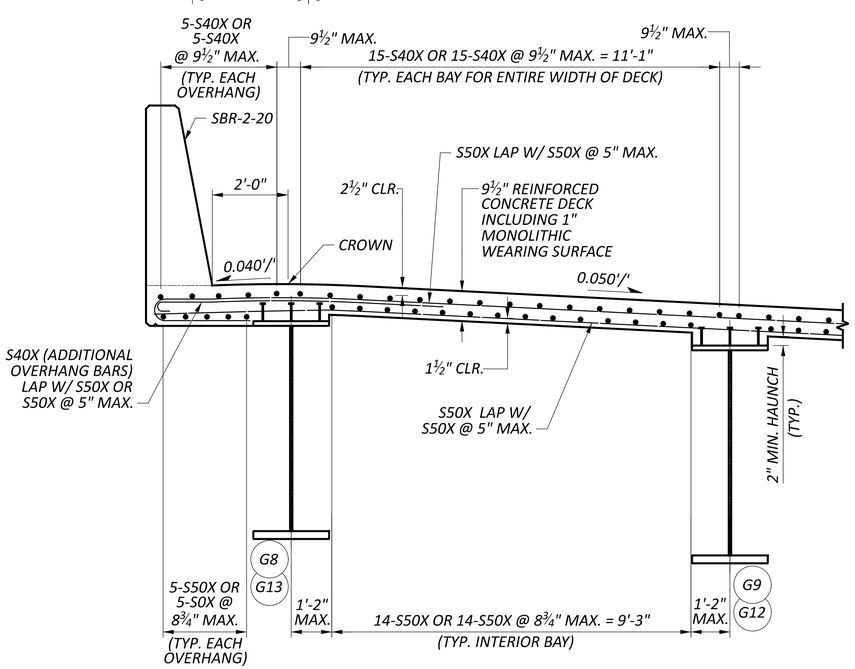
SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	45
TOTAL	65
SHEET	P. 465
TOTAL	618



TRANSVERSE SECTION - RIGHT BRIDGE NORTHBOUND

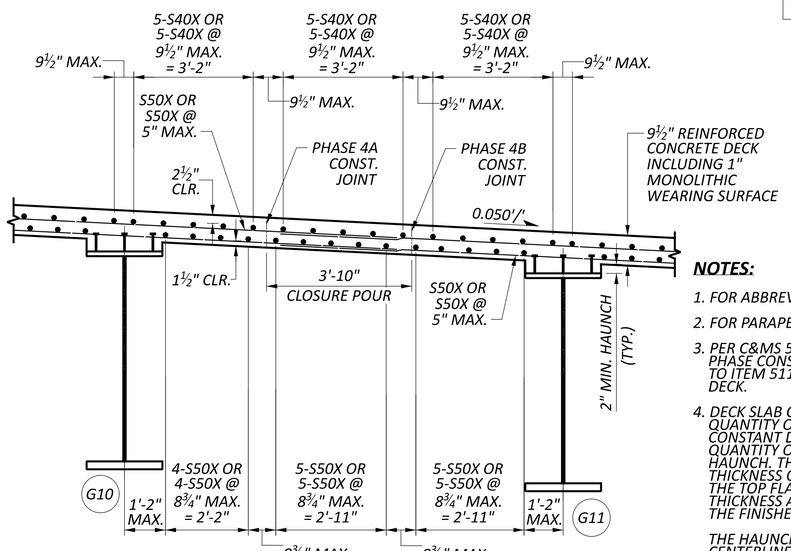
(LOOKING UPSTATION)
(CROSSFRAMES NOT SHOWN FOR CLARITY)
(PARAPET REINFORCING STEEL NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS	
NO. 4 BARS	2'-6"
NO. 5 BARS	3'-1"
NO. 6 BARS	4'-0"



TYPICAL REINFORCING AND OVERHANG DETAIL - RIGHT BRIDGE NORTHBOUND

(BAY BETWEEN GIRDERS G8 AND G9 SHOWN, BAY BETWEEN GIRDERS G13 AND G12 OPPOSITE HAND)



TYPICAL REINFORCING - RIGHT BRIDGE NORTHBOUND

(BAY BETWEEN GIRDERS G10 AND G11 FOR CLOSURE POUR SHOWN)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR PARAPET DETAILS, SEE SHEETS 54 THROUGH 55.*
3. *PER C&MS 511.19, THE 2'-0" HMWM CENTERED ON THE PHASE CONSTRUCTION JOINT IS CONSIDERED INCIDENTAL TO ITEM 511-CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.*
4. *DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 2.85 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.*

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH C&MS 511.23.

TRANSVERSE SECTION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY
Jacobs
DESIGNER DBL | CHECKER MAN
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 46 | TOTAL 65
SHEET P. 466 | TOTAL 618

FRA-71-19.10

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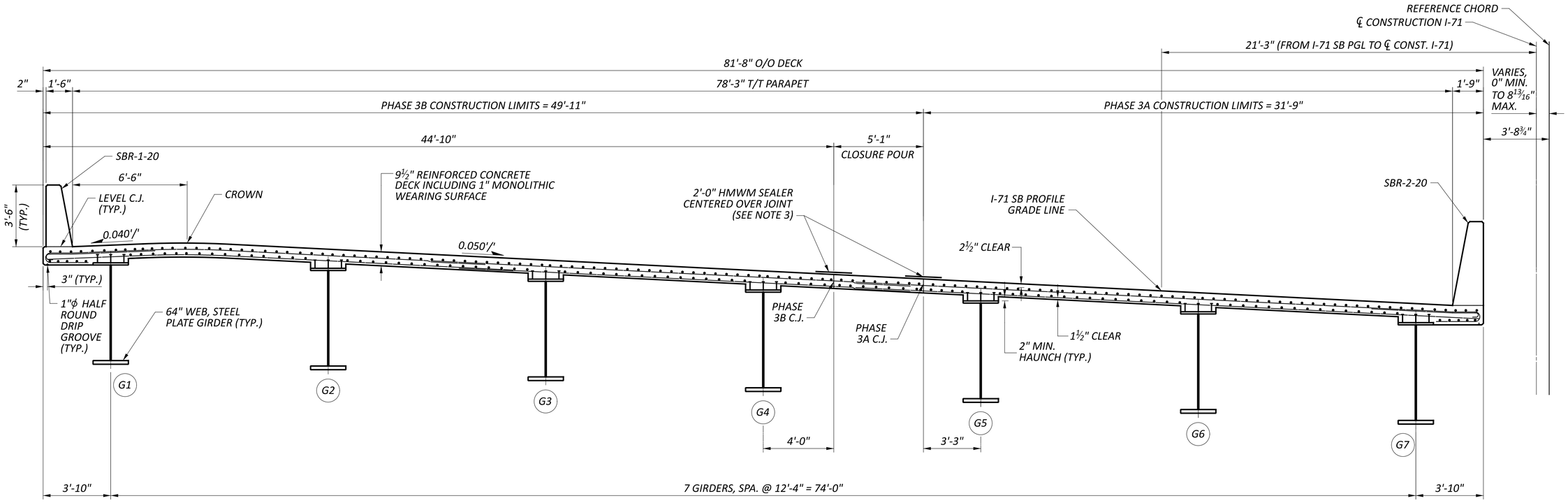
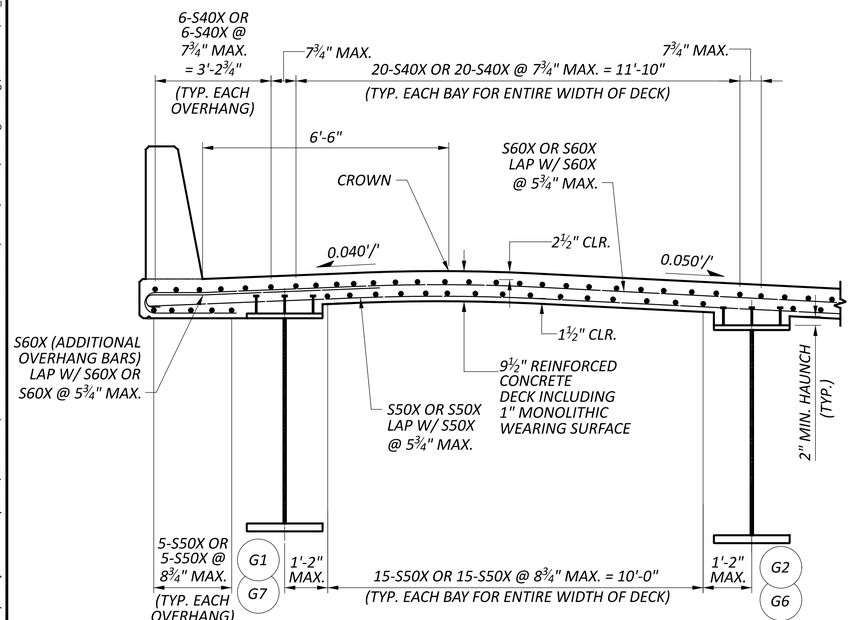


TRANSVERSE SECTION - LEFT BRIDGE SOUTHBOUND

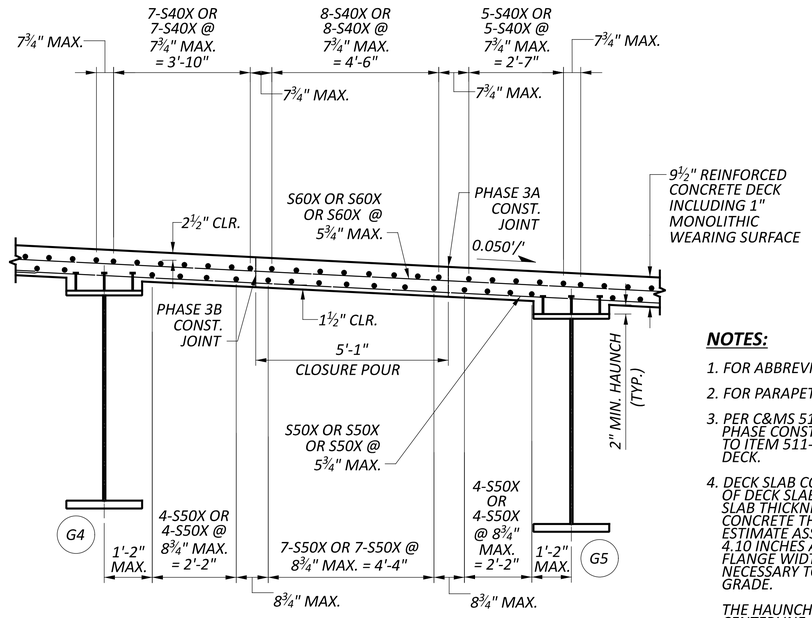
(LOOKING UPSTATION)
(CROSSFRAMES NOT SHOWN FOR CLARITY)
(PARAPET REINFORCING STEEL NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS	
NO. 4 BARS	2'-6"
NO. 5 BARS	3'-1"
NO. 6 BARS	4'-0"



TYPICAL REINFORCING AND OVERHANG DETAIL -LEFT BRIDGE SOUTHBOUND

BAY BETWEEN GIRDERS 1 AND 2 SHOWN,
BAY BETWEEN GIRDERS 7 AND 6 OPPOSITE HAND



TYPICAL REINFORCING -LEFT BRIDGE SOUTHBOUND

(BAY BETWEEN GIRDERS G4 AND G5 FOR CLOSURE POUR SHOWN)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FOR PARAPET DETAILS, SEE SHEETS 54 THROUGH 55.
3. PER C&MS 511.19, THE 2'-0" HMWM CENTERED ON THE PHASE CONSTRUCTION JOINT IS CONSIDERED INCIDENTAL TO ITEM 511-CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.
4. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4.10 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

   THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH C&MS 511.23.

TRANSVERSE SECTION - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	47
TOTAL	65
SHEET	P. 467
TOTAL	618

FRA-71-19.10

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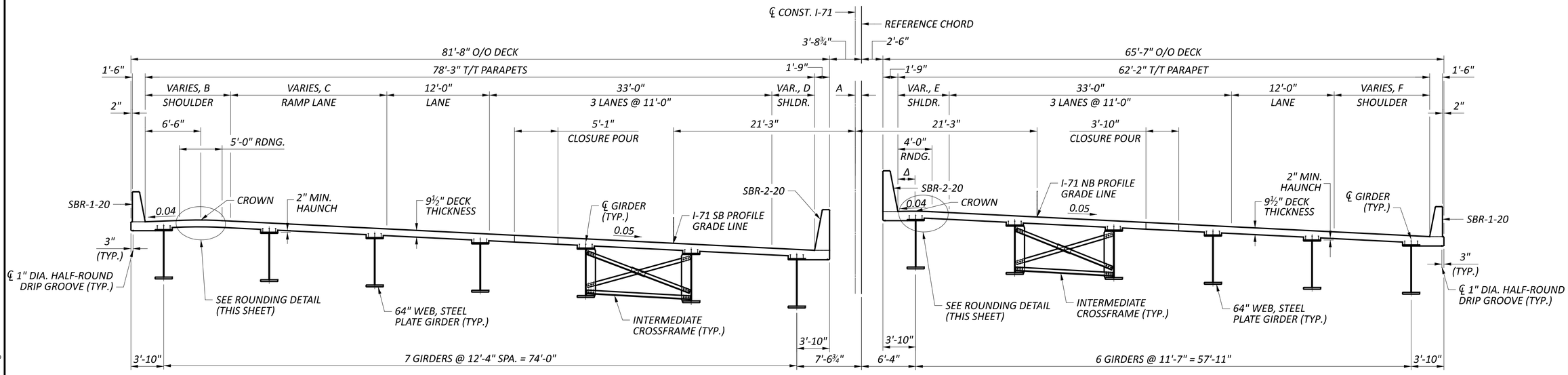
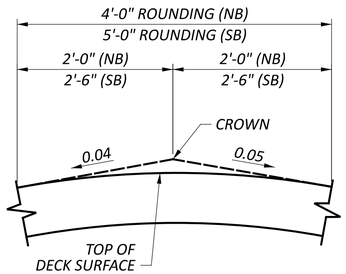
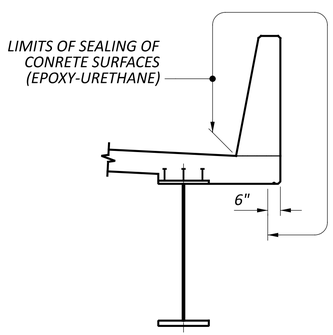


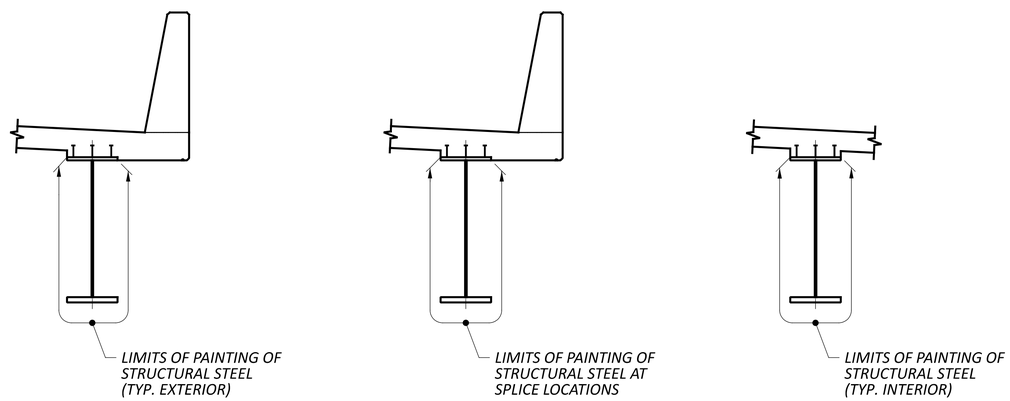
TRANSVERSE SECTION



TYPICAL ROUNDING DETAIL
(NOT TO SCALE)



TYPICAL LIMITS OF CONCRETE SEALING
(NOT TO SCALE)



LIMITS OF PAINTING OF STRUCTURAL STEEL
(NOT TO SCALE)

LEGEND:

A - VARIES, 0" MIN. TO $8^{13}/_{16}$" MAX.

B - SHOULDER VARIES, 9'-$1^{3}/_{8}$"± MIN. TO 12'-$6^{3}/_{4}$"± MAX.
(REFER TO PAVEMENT MARKING PLANS)

C - RAMP LANE VARIES, 16'-$1^{1}/_{2}$"± MIN. TO 19'-2"± MAX.
(REFER TO PAVEMENT MARKING PLANS)

D - SHOULDER VARIES, 4'-$8^{3}/_{4}$"± MIN. TO 4'-$9^{3}/_{4}$"± MAX.
(REFER TO PAVEMENT MARKING PLANS)

E - SHOULDER VARIES, 5'-$11^{1}/_{2}$"± MIN. TO 6'-$0^{1}/_{2}$"± MAX.
(REFER TO PAVEMENT MARKING PLANS)

F - SHOULDER VARIES, 10'-3"± MIN. TO 11'-$4^{1}/_{8}$"± MAX.
(REFER TO PAVEMENT MARKING PLANS)

Δ - 2'-0"

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*

TRANSVERSE SECTION - GENERAL GEOMETRY
BRIDGE NO. FRA-00071-24.460 L/R L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	48
TOTAL	65
SHEET	P. 468
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:54:33 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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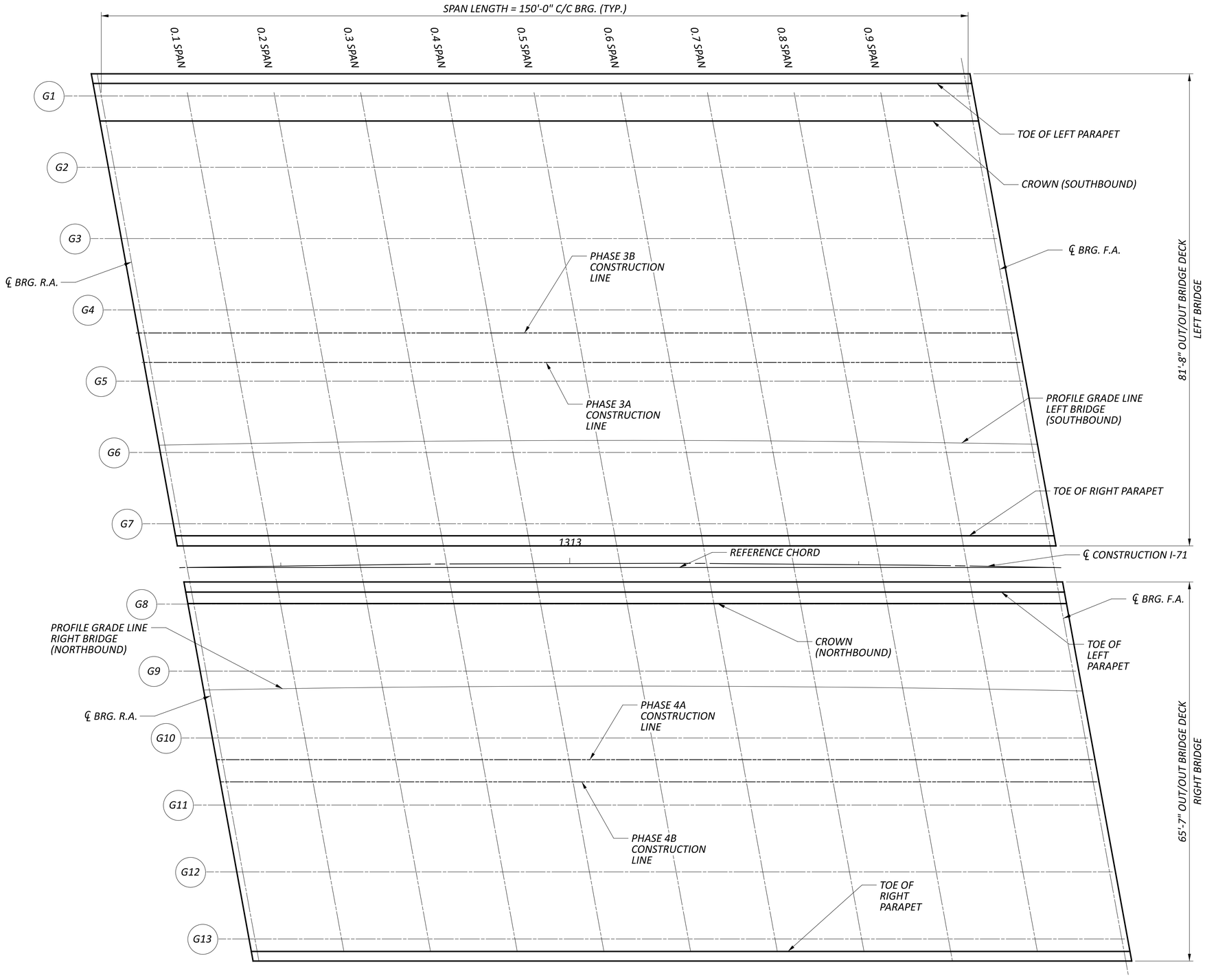

CRITICAL BRIDGE POINTS PLAN

(FOR USE WITH CAMBER, SCREED, TOP OF HAUNCH AND FINAL DECK SURFACE ELEVATION TABLES)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FOR ROUNDING DETAIL, SEE SHEET 48.
3. FOR SCREED ELEVATIONS, SEE SHEET 50.
4. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 51.
5. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 53.

BRIDGE CRITICAL POINTS PLAN
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	49
TOTAL	65
SHEET	P. 469
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:54:50 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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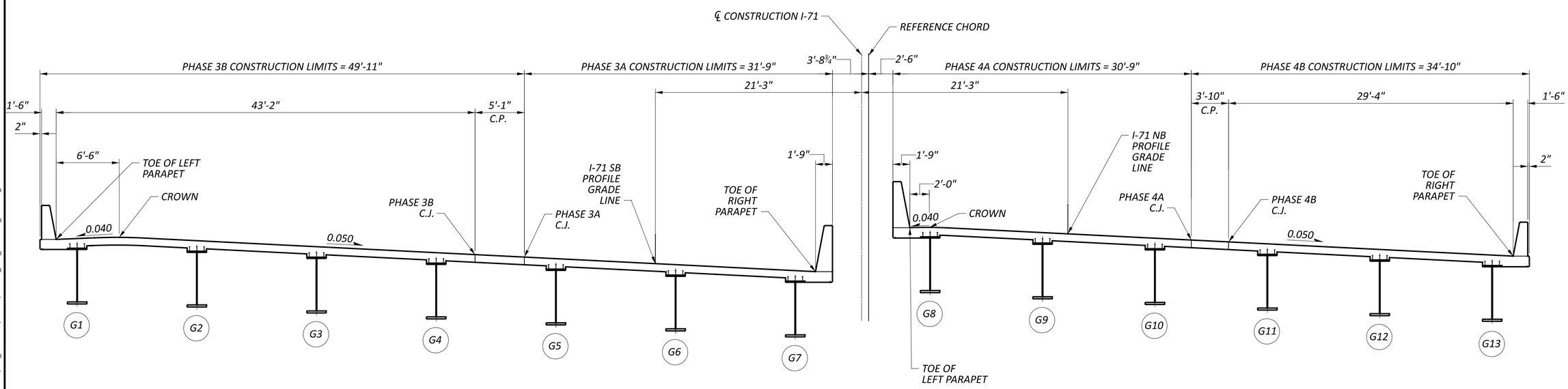

SCREED LOCATION TRANSVERSE SECTION - LEFT BRIDGE & RIGHT BRIDGE

(FOR USE WITH CAMBER, SCREED, TOP OF HAUNCH AND FINAL DECK SURFACE ELEVATION TABLES)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FOR ROUNDING DETAIL, SEE SHEET 48.
3. FOR SCREED ELEVATIONS, SEE SHEET 50.
4. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 51.
5. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 53.

BRIDGE CRITICAL POINTS TRANSVERSE SECTION
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER / CHECKER	MAN / DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET / TOTAL	50 / 65
SHEET / TOTAL	P. 470 / 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:55:02 AM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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SCREED ELEVATIONS - LEFT BRIDGE SOUTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1312+20.47	902.60	1312+35.15	902.76	1312+49.83	902.89	1312+64.50	902.99	1312+79.18	903.05	1312+93.86	903.07
CROWN	1312+21.49	902.86	1312+36.19	903.02	1312+50.89	903.15	1312+65.59	903.25	1312+80.30	903.31	1312+95.00	903.33
PHASE 3B CONSTRUCTION JOINT	1312+27.27	901.04	1312+42.11	901.20	1312+56.95	901.34	1312+71.80	901.45	1312+86.64	901.51	1313+01.49	901.52
PHASE 3A CONSTRUCTION JOINT	1312+28.08	900.78	1312+42.94	900.95	1312+57.80	901.08	1312+72.67	901.20	1312+87.53	901.26	1313+02.40	901.27
PROFILE GRADE LINE	1312+30.38	900.07	1312+45.24	900.25	1312+60.12	900.39	1312+75.01	900.51	1312+89.91	900.58	1313+04.82	900.59
TOE OF RIGHT PARAPET	1312+32.91	899.29	1312+47.89	899.44	1312+62.87	899.57	1312+77.85	899.67	1312+92.83	899.72	1313+07.81	899.74

SCREED ELEVATIONS - LEFT BRIDGE SOUTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1313+08.55	903.04	1313+23.23	902.97	1313+37.91	902.85	1313+52.59	902.71	1313+67.26	902.54
CROWN	1313+09.71	903.30	1313+24.41	903.23	1313+39.12	903.11	1313+53.82	902.96	1313+68.52	902.79
PHASE 3B CONSTRUCTION JOINT	1313+16.33	901.49	1313+31.18	901.42	1313+46.02	901.28	1313+60.86	901.13	1313+75.71	900.94
PHASE 3A CONSTRUCTION JOINT	1313+17.26	901.24	1313+32.12	901.16	1313+46.99	901.03	1313+61.85	900.87	1313+76.71	900.69
PROFILE GRADE LINE	1313+19.74	900.56	1313+34.67	900.48	1313+49.61	900.34	1313+64.56	900.17	1313+79.53	899.97
TOE OF RIGHT PARAPET	1313+22.79	899.70	1313+37.77	899.62	1313+52.75	899.50	1313+67.73	899.35	1313+82.71	899.17

SCREED ELEVATIONS - LEFT BRIDGE SOUTHBOUND

SCREED ELEVATIONS - RIGHT BRIDGE NORTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1312+34.49	903.79	1312+49.51	903.95	1312+64.53	904.08	1312+79.54	904.18	1312+94.56	904.24	1313+09.58	904.26
CROWN	1312+34.82	903.87	1312+49.84	904.03	1312+64.87	904.16	1312+79.89	904.26	1312+94.92	904.32	1313+09.95	904.34
PROFILE GRADE LINE	1312+37.27	903.13	1312+52.31	903.30	1312+67.36	903.45	1312+82.42	903.56	1312+97.49	903.63	1313+12.57	903.64
PHASE 4A CONSTRUCTION LINE	1312+39.26	902.52	1312+54.39	902.69	1312+69.52	902.82	1312+84.65	902.93	1312+99.79	902.99	1313+14.92	903.01
PHASE 4B CONSTRUCTION LINE	1312+39.89	902.33	1312+55.04	902.50	1312+70.19	902.63	1312+85.34	902.74	1313+00.49	902.80	1313+15.64	902.82
TOE OF RIGHT PARAPET	1312+44.80	900.87	1312+60.06	901.03	1312+75.33	901.16	1312+90.60	901.25	1313+05.86	901.31	1313+21.13	901.33

SCREED ELEVATIONS - RIGHT BRIDGE NORTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. R.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1313+24.60	904.23	1313+39.62	904.16	1313+54.64	904.06	1313+69.66	903.92	1313+84.67	903.75
CROWN	1313+24.98	904.31	1313+40.00	904.24	1313+55.03	904.14	1313+70.05	904.00	1313+85.08	903.83
PROFILE GRADE LINE	1313+27.66	903.62	1313+42.76	903.54	1313+57.88	903.41	1313+73.00	903.26	1313+88.14	903.07
PHASE 4A CONSTRUCTION LINE	1313+30.06	902.98	1313+45.19	902.91	1313+60.32	902.79	1313+75.45	902.65	1313+90.58	902.47
PHASE 4B CONSTRUCTION LINE	1313+30.78	902.79	1313+45.93	902.71	1313+61.08	902.60	1313+76.23	902.46	1313+91.37	902.28
TOE OF RIGHT PARAPET	1313+36.40	901.30	1313+51.67	901.22	1313+66.93	901.11	1313+82.20	900.97	1313+97.46	900.80

SCREED ELEVATIONS - RIGHT BRIDGE NORTHBOUND

NOTES:

1. *SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.*
2. *SEE SHEET 49 AND 52 FOR CRITICAL BRIDGE POINTS PLAN AND SCREED LOCATION TRANSVERSE SECTION.*

SCREED ELEVATION TABLES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	DBL

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
51	65

SHEET	TOTAL
P. 471	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:55:15 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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TOP OF HAUNCH ELEVATIONS - LEFT BRIDGE SOUTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
GIRDER 1	1312+20.81	901.90	1312+35.50	902.05	1312+50.18	902.19	1312+64.87	902.29	1312+79.55	902.35	1312+94.24	902.36
GIRDER 2	1312+22.74	901.67	1312+37.47	901.84	1312+52.20	901.98	1312+66.94	902.08	1312+81.67	902.15	1312+96.41	902.17
GIRDER 3	1312+24.68	901.06	1312+39.46	901.22	1312+54.24	901.36	1312+69.02	901.47	1312+83.80	901.54	1312+98.58	901.55
GIRDER 4	1312+26.64	900.44	1312+41.46	900.61	1312+56.29	900.75	1312+71.11	900.85	1312+85.94	900.92	1313+00.77	900.93
GIRDER 5	1312+28.60	899.83	1312+43.47	899.99	1312+58.35	900.13	1312+73.22	900.23	1312+88.10	900.30	1313+02.98	900.32
GIRDER 6	1312+30.58	899.22	1312+45.50	899.38	1312+60.42	899.52	1312+75.35	899.62	1312+90.27	899.69	1313+05.20	899.70
GIRDER 7	1312+32.57	898.60	1312+47.54	898.75	1312+62.51	898.88	1312+77.48	898.98	1312+92.46	899.04	1313+07.43	899.05

TOP OF HAUNCH ELEVATIONS - LEFT BRIDGE SOUTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
GIRDER 1	1313+08.93	902.33	1313+23.62	902.26	1313+38.31	902.15	1313+53.00	902.00	1313+67.68	901.83
GIRDER 2	1313+11.14	902.14	1313+25.88	902.06	1313+40.61	901.94	1313+55.35	901.78	1313+70.08	901.60
GIRDER 3	1313+13.37	901.52	1313+28.15	901.44	1313+42.93	901.32	1313+57.71	901.16	1313+72.49	900.98
GIRDER 4	1313+15.60	900.90	1313+30.43	900.82	1313+45.26	900.69	1313+60.09	900.54	1313+74.92	900.36
GIRDER 5	1313+17.86	900.28	1313+32.73	900.20	1313+47.61	900.07	1313+62.48	899.92	1313+77.36	899.73
GIRDER 6	1313+20.12	899.66	1313+35.05	899.58	1313+49.97	899.45	1313+64.89	899.29	1313+79.81	899.11
GIRDER 7	1313+22.40	899.02	1313+37.38	898.94	1313+52.35	898.81	1313+67.32	898.66	1313+82.29	898.49

TOP OF HAUNCH ELEVATIONS - LEFT BRIDGE SOUTHBOUND

TOP OF HAUNCH ELEVATIONS - RIGHT BRIDGE NORTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
GIRDER 8	1312+34.83	903.07	1312+49.86	903.23	1312+64.88	903.36	1312+79.91	903.46	1312+94.94	903.53	1313+09.96	903.54
GIRDER 9	1312+36.73	902.50	1312+51.80	902.65	1312+66.87	902.80	1312+81.94	902.90	1312+97.02	902.97	1313+12.09	902.98
GIRDER 10	1312+38.64	901.92	1312+53.75	902.08	1312+68.87	902.22	1312+83.99	902.33	1312+99.11	902.39	1313+14.23	902.40
GIRDER 11	1312+40.56	901.34	1312+55.72	901.50	1312+70.88	901.64	1312+86.05	901.75	1313+01.21	901.81	1313+16.38	901.83
GIRDER 12	1312+42.49	900.77	1312+57.70	900.92	1312+72.91	901.06	1312+88.12	901.17	1313+03.33	901.23	1313+18.55	901.25
GIRDER 13	1312+44.43	900.19	1312+59.69	900.34	1312+74.95	900.47	1312+90.20	900.57	1313+05.46	900.63	1313+20.72	900.65

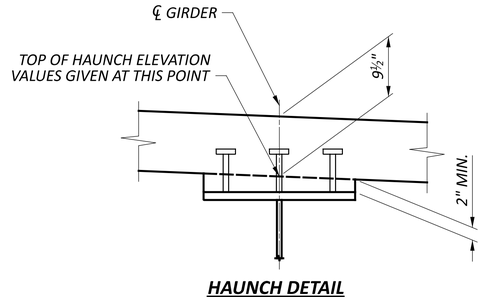
TOP OF HAUNCH ELEVATIONS - RIGHT BRIDGE NORTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
GIRDER 8	1313+24.99	903.52	1313+40.02	903.45	1313+55.04	903.34	1313+70.07	903.20	1313+85.09	903.04
GIRDER 9	1313+27.16	902.96	1313+42.24	902.89	1313+57.31	902.77	1313+72.38	902.62	1313+87.45	902.46
GIRDER 10	1313+29.35	902.38	1313+44.47	902.31	1313+59.58	902.19	1313+74.70	902.04	1313+89.81	901.87
GIRDER 11	1313+31.55	901.80	1313+46.71	901.72	1313+61.87	901.61	1313+77.04	901.45	1313+92.20	901.29
GIRDER 12	1313+33.76	901.22	1313+48.97	901.14	1313+64.18	901.02	1313+79.39	900.87	1313+94.59	900.70
GIRDER 13	1313+35.98	900.62	1313+51.24	900.54	1313+66.50	900.43	1313+81.75	900.29	1313+97.01	900.12

TOP OF HAUNCH ELEVATIONS - RIGHT BRIDGE NORTHBOUND

NOTES:

1. *TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE ℄ OF THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.*

2. *SEE SHEET 49 FOR GIRDERS NUMBERS AND TOP OF HAUNCH ELEVATION LOCATIONS.*



HAUNCH DETAIL

TOP OF HAUNCH ELEVATIONS TABLES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	DBL

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
52	65

SHEET	TOTAL
P. 472	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:55:52 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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FINAL DECK SURFACE ELEVATIONS - LEFT BRIDGE SOUTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LEFT EDGE OF DECK	1312+20.22	902.60	1312+34.88	902.62	1312+49.55	902.63	1312+64.23	902.63	1312+78.90	902.63	1312+93.57	902.63
TOE OF LEFT PARAPET	1312+20.47	902.60	1312+35.15	902.62	1312+49.83	902.63	1312+64.50	902.63	1312+79.18	902.63	1312+93.86	902.63
℄ GIRDER 1	1312+20.81	902.69	1312+35.50	902.70	1312+50.18	902.71	1312+64.87	902.72	1312+79.55	902.72	1312+94.24	902.72
CROWN	1312+21.49	902.86	1312+36.19	902.88	1312+50.89	902.89	1312+65.59	902.89	1312+80.30	902.89	1312+95.00	902.89
℄ GIRDER 2	1312+22.74	902.46	1312+37.47	902.48	1312+52.20	902.49	1312+66.94	902.49	1312+81.67	902.49	1312+96.41	902.49
℄ GIRDER 3	1312+24.68	901.85	1312+39.46	901.86	1312+54.24	901.87	1312+69.02	901.88	1312+83.80	901.88	1312+98.58	901.87
℄ GIRDER 4	1312+26.64	901.23	1312+41.46	901.25	1312+56.29	901.26	1312+71.11	901.26	1312+85.94	901.26	1313+00.77	901.25
PHASE 3B CONSTRUCTION JOINT	1312+27.27	901.04	1312+42.11	901.05	1312+56.95	901.06	1312+71.80	901.06	1312+86.64	901.06	1313+01.49	901.05
PHASE 3A CONSTRUCTION JOINT	1312+28.08	900.78	1312+42.94	900.80	1312+57.80	900.80	1312+72.67	900.81	1312+87.53	900.81	1313+02.40	900.80
℄ GIRDER 5	1312+28.60	900.62	1312+43.47	900.63	1312+58.35	900.64	1312+73.22	900.64	1312+88.10	900.64	1313+02.98	900.64
PROFILE GRADE LINE	1312+30.38	900.07	1312+45.24	900.10	1312+60.12	900.11	1312+75.01	900.12	1312+89.91	900.13	1313+04.82	900.12
℄ GIRDER 6	1312+30.58	900.01	1312+45.50	900.02	1312+60.42	900.03	1312+75.35	900.03	1312+90.27	900.03	1313+05.20	900.02
℄ GIRDER 7	1312+32.57	899.39	1312+47.54	899.40	1312+62.51	899.41	1312+77.48	899.41	1312+92.46	899.41	1313+07.43	899.40
TOE OF RIGHT PARAPET	1312+32.91	899.29	1312+47.89	899.30	1312+62.87	899.31	1312+77.85	899.31	1312+92.83	899.30	1313+07.81	899.30

FINAL DECK SURFACE ELEVATIONS - LEFT BRIDGE SOUTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
LEFT EDGE OF DECK	1313+08.25	902.62	1313+22.92	902.61	1313+37.60	902.59	1313+52.27	902.57	1313+66.94	902.54
TOE OF LEFT PARAPET	1313+08.55	902.62	1313+23.23	902.61	1313+37.91	902.59	1313+52.59	902.57	1313+67.26	902.54
℄ GIRDER 1	1313+08.93	902.71	1313+23.62	902.69	1313+38.31	902.68	1313+53.00	902.65	1313+67.68	902.62
CROWN	1313+09.71	902.88	1313+24.41	902.87	1313+39.12	902.85	1313+53.82	902.82	1313+68.52	902.79
℄ GIRDER 2	1313+11.14	902.48	1313+25.88	902.47	1313+40.61	902.45	1313+55.35	902.42	1313+70.08	902.39
℄ GIRDER 3	1313+13.37	901.86	1313+28.15	901.85	1313+42.93	901.83	1313+57.71	901.80	1313+72.49	901.77
℄ GIRDER 4	1313+15.60	901.24	1313+30.43	901.23	1313+45.26	901.20	1313+60.09	901.18	1313+74.92	901.15
PHASE 3B CONSTRUCTION JOINT	1313+16.33	901.04	1313+31.18	901.03	1313+46.02	901.00	1313+60.86	900.98	1313+75.71	900.94
PHASE 3A CONSTRUCTION JOINT	1313+17.26	900.79	1313+32.12	900.77	1313+46.99	900.75	1313+61.85	900.72	1313+76.71	900.69
℄ GIRDER 5	1313+17.86	900.62	1313+32.73	900.61	1313+47.61	900.58	1313+62.48	900.56	1313+77.36	900.52
PROFILE GRADE LINE	1313+19.74	900.11	1313+34.67	900.09	1313+49.61	900.06	1313+64.56	900.02	1313+79.53	899.97
℄ GIRDER 6	1313+20.12	900.00	1313+35.05	899.99	1313+49.97	899.96	1313+64.89	899.93	1313+79.81	899.90
℄ GIRDER 7	1313+22.40	899.39	1313+37.38	899.37	1313+52.35	899.34	1313+67.32	899.31	1313+82.29	899.28
TOE OF RIGHT PARAPET	1313+22.79	899.28	1313+37.77	899.26	1313+52.75	899.24	1313+67.73	899.21	1313+82.71	899.17

FINAL DECK SURFACE ELEVATIONS - LEFT BRIDGE SOUTHBOUND

FINAL DECK SURFACE ELEVATIONS - RIGHT BRIDGE NORTHBOUND												
LOCATIONS	℄ BRG. R.A.		1/10 SPAN		2/10 SPAN		3/10 SPAN		4/10 SPAN		1/2 SPAN	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1312+34.49	903.79	1312+49.51	903.81	1312+64.53	903.82	1312+79.54	903.83	1312+94.56	903.83	1313+09.58	903.83
CROWN	1312+34.82	903.87	1312+49.84	903.89	1312+64.87	903.90	1312+79.89	903.91	1312+94.92	903.91	1313+09.95	903.91
℄ GIRDER 8	1312+34.83	903.86	1312+49.86	903.88	1312+64.88	903.89	1312+79.91	903.90	1312+94.94	903.91	1313+09.96	903.90
℄ GIRDER 9	1312+36.73	903.29	1312+51.80	903.30	1312+66.87	903.32	1312+81.94	903.32	1312+97.02	903.33	1313+12.09	903.32
PROFILE GRADE LINE	1312+37.27	903.13	1312+52.31	903.15	1312+67.36	903.18	1312+82.42	903.19	1312+97.49	903.20	1313+12.57	903.19
℄ GIRDER 10	1312+38.64	902.71	1312+53.75	902.73	1312+68.87	902.74	1312+83.99	902.75	1312+99.11	902.75	1313+14.23	902.74
PHASE 2A CONSTRUCTION JOINT	1312+39.26	902.52	1312+54.39	902.54	1312+69.52	902.55	1312+84.65	902.56	1312+99.79	902.56	1313+14.92	902.56
PHASE 2B CONSTRUCTION JOINT	1312+39.89	902.33	1312+55.04	902.35	1312+70.19	902.36	1312+85.34	902.37	1313+00.49	902.37	1313+15.64	902.37
℄ GIRDER 11	1312+40.56	902.13	1312+55.72	902.15	1312+70.88	902.16	1312+86.05	902.17	1313+01.21	902.17	1313+16.38	902.17
℄ GIRDER 12	1312+42.49	901.56	1312+57.70	901.57	1312+72.91	901.58	1312+88.12	901.59	1313+03.33	901.59	1313+18.55	901.59
℄ GIRDER 13	1312+44.43	900.98	1312+59.69	900.99	1312+74.95	901.00	1312+90.20	901.01	1313+05.46	901.01	1313+20.72	901.01
TOE OF RIGHT PARAPET	1312+44.80	900.87	1312+60.06	900.89	1312+75.33	900.90	1312+90.60	900.90	1313+05.86	900.90	1313+21.13	900.90
RIGHT EDGE OF DECK	1312+45.08	900.87	1312+60.35	900.89	1312+75.62	900.90	1312+90.90	900.90	1313+06.17	900.90	1313+21.45	900.90

FINAL DECK SURFACE ELEVATIONS - RIGHT BRIDGE NORTHBOUND										
LOCATIONS	6/10 SPAN		7/10 SPAN		8/10 SPAN		9/10 SPAN		℄ BRG. F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
TOE OF LEFT PARAPET	1313+24.60	903.82	1313+39.62	903.81	1313+54.64	903.80	1313+69.66	903.78	1313+84.67	903.75
CROWN	1313+24.98	903.90	1313+40.00	903.89	1313+55.03	903.88	1313+70.05	903.86	1313+85.08	903.83
℄ GIRDER 8	1313+24.99	903.90	1313+40.02	903.89	1313+55.04	903.87	1313+70.07	903.85	1313+85.09	903.83
℄ GIRDER 9	1313+27.16	903.32	1313+42.24	903.31	1313+57.31	903.29	1313+72.38	903.27	1313+87.45	903.25
PROFILE GRADE LINE	1313+27.66	903.19	1313+42.76	903.17	1313+57.88	903.14	1313+73.00	903.11	1313+88.14	903.07
℄ GIRDER 10	1313+29.35	902.74	1313+44.47	902.73	1313+59.58	902.71	1313+74.70	902.69	1313+89.81	902.66
PHASE 2A CONSTRUCTION JOINT	1313+30.06	902.55	1313+45.19	902.54	1313+60.32	902.52	1313+75.45	902.50	1313+90.58	902.47
PHASE 2B CONSTRUCTION JOINT	1313+30.78	902.36	1313+45.93	902.35	1313+61.08	902.33	1313+76.23	902.31	1313+91.37	902.28
℄ GIRDER 11	1313+31.55	902.16	1313+46.71	902.14	1313+61.87	902.13	1313+77.04	902.10	1313+92.20	902.08
℄ GIRDER 12	1313+33.76	901.58	1313+48.97	901.56	1313+64.18	901.54	1313+79.39	901.52	1313+94.59	901.49
℄ GIRDER 13	1313+35.98	901.00	1313+51.24	900.98	1313+66.50	900.96	1313+81.75	900.94	1313+97.01	900.91
TOE OF RIGHT PARAPET	1313+36.40	900.89	1313+51.67	900.87	1313+66.93	900.85	1313+82.20	900.83	1313+97.46	900.80
RIGHT EDGE OF DECK	1313+36.72	900.89	1313+52.00	900.87	1313+67.27	900.85	1313+82.54	900.83	1313+97.81	900.80

FINAL DECK SURFACE ELEVATIONS - RIGHT BRIDGE NORTHBOUND

NOTES:

1. *FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.*
2. *SEE SHEET 49 FOR GIRDER NUMBERS AND FINAL DECK SURFACE ELEVATION LOCATIONS.*

FINAL DECK SURFACE ELEVATION TABLES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER DBL
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 53 | TOTAL 65
SHEET P. 473 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:56:19 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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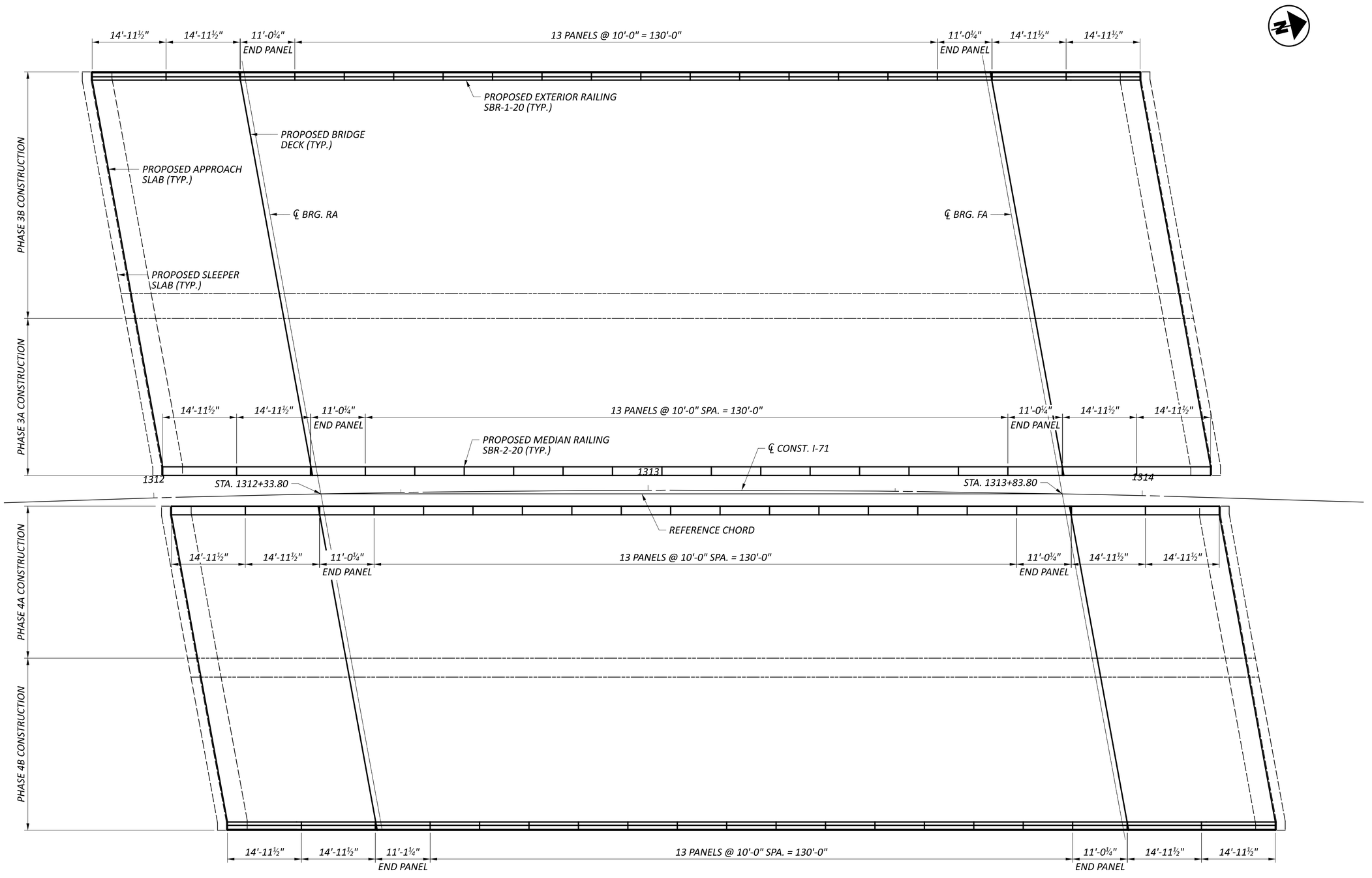

BRIDGE RAILING PLAN

BRIDGE PARAPET PLAN
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER / CHECKER	DBL / MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET / TOTAL	54 / 65
SHEET / TOTAL	P. 474 / 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:57:02 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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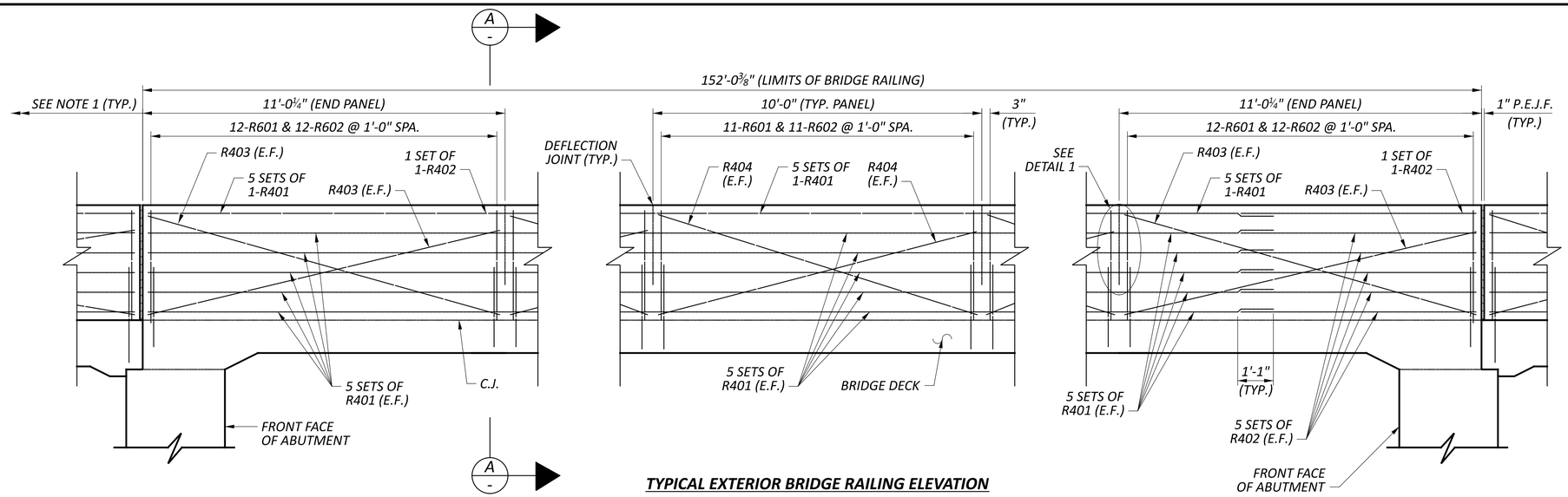
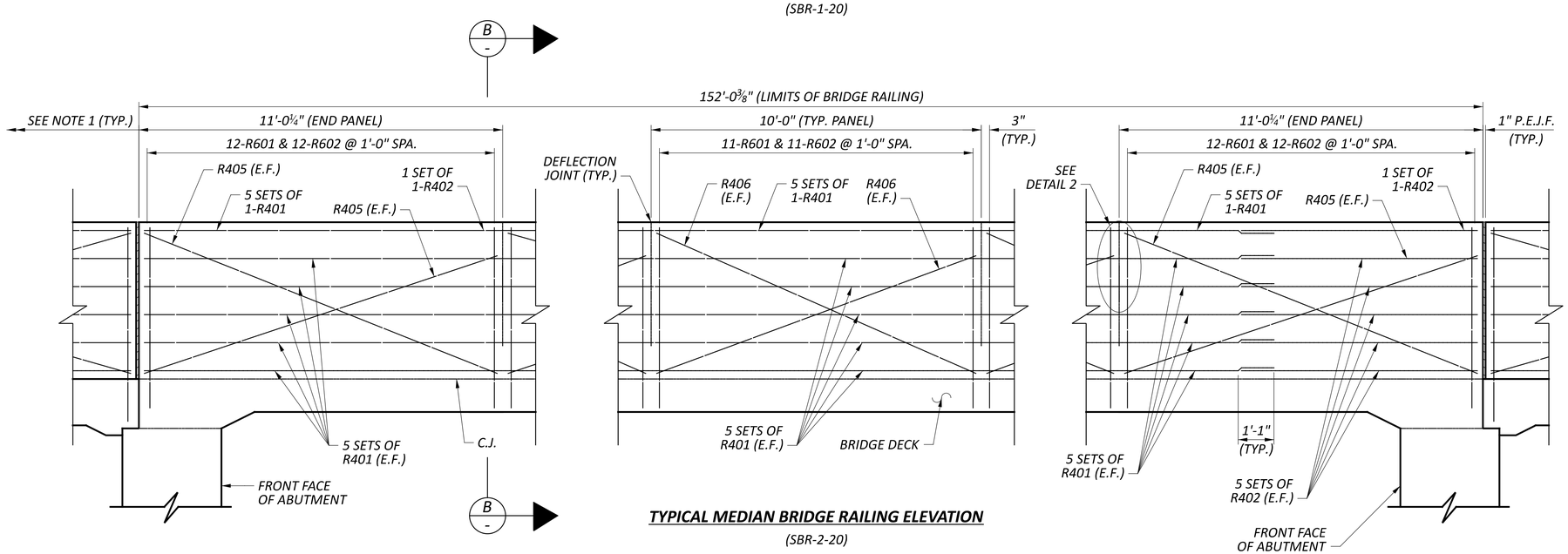


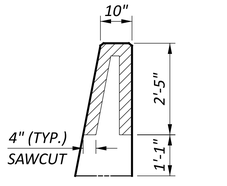
TYPICAL EXTERIOR BRIDGE RAILING ELEVATION

(SBR-1-20)

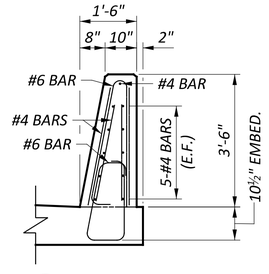


TYPICAL MEDIAN BRIDGE RAILING ELEVATION

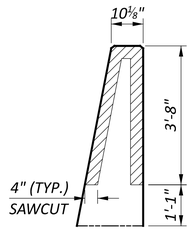
(SBR-2-20)



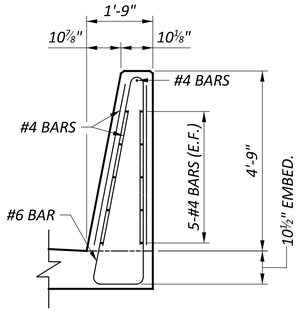
DETAIL 1



A SECTION



DETAIL 2



B SECTION

PARAPET STIFFENING G.F.R.P. REINFORCEMENT			
BAR MARK	*NUMBER*	*LENGTH*	*TYPE*
R401	*XX*	*X'-X"*	*ST*
R402	*XX*	*X'-X"*	*ST*
R403	*XX*	*X'-X"*	*ST*
R404	*XX*	*X'-X"*	*ST*
R405	*XX*	*X'-X"*	*ST*
R406	*XX*	*X'-X"*	*ST*

NOTES:

1. *FOR APPROACH PARAPET DETAILS SEE SHEET 58.*

BRIDGE PARAPET DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER MAN
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 55 | TOTAL 65
SHEET P. 475 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:57:14 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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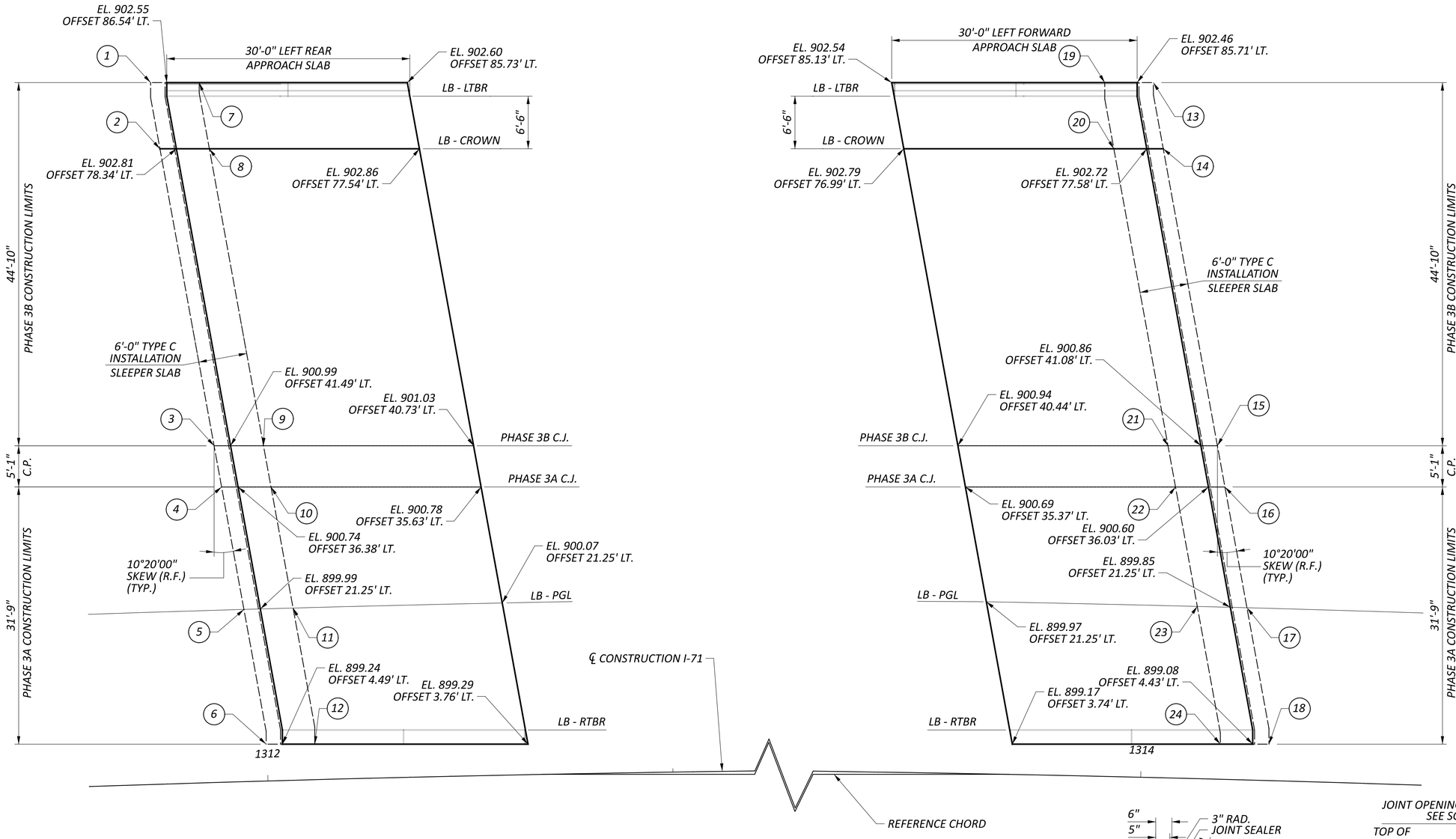
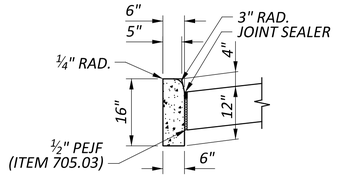
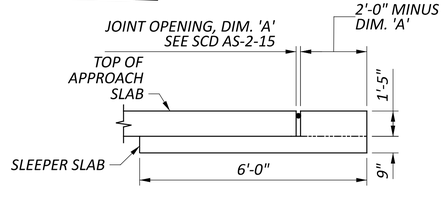


APPROACH SLAB PLAN (LEFT BRIDGE SOUTHBOUND)



TYPE 4-C CURB DETAIL (TYP.)



TYPICAL SLEEPER SLAB SECTION

SLEEPER SLAB SURFACE ELEVATION AT TOP OF ROADWAY			
1	902.55	13	902.46
2	902.81	14	902.71
3	900.99	15	900.85
4	900.73	16	900.60
5	899.98	17	899.84
6	899.35	18	899.08

SLEEPER SLAB SURFACE ELEVATION UNDER APPROACH SLAB			
7	901.14	19	901.05
8	901.40	20	901.31
9	899.58	21	899.45
10	899.32	22	899.20
11	898.58	23	898.45
12	897.83	24	897.68

NOTES:

1. *FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15 TYPE C INSTALLATION.*
2. *FOR BRIDGE RAILING DETAILS, SEE SHEET 55.*
3. *FOR ADDITIONAL BRIDGE RAILING TRANSITION DETAILS, SEE ODOT STANDARD DRAWING SBR-1-20 AND SICD-1-21.*
4. *THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QA/QC (T=17").*
5. *FOR INTEGRAL CURB TYPE 4C DETAILS, SEE ODOT STANDARD DRAWING BP-5.1. THE INTEGRAL CURB TYPE 4C SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.*
6. *THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.*

APPROACH SLAB DETAILS - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:57:29 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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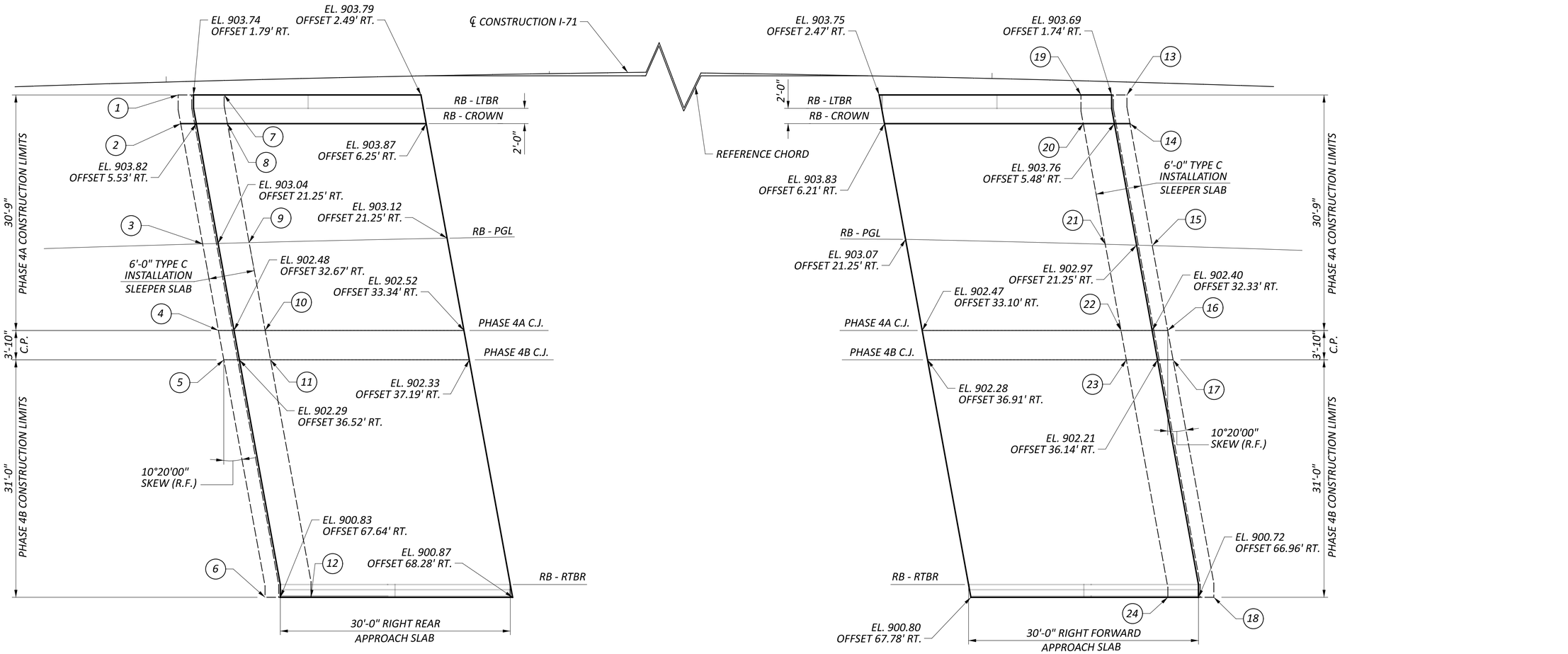
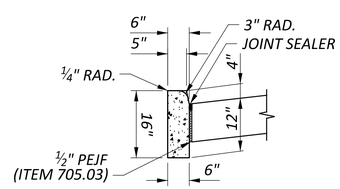
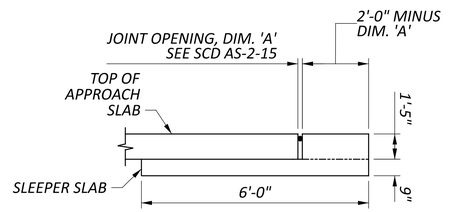
SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	56
TOTAL	65
SHEET	P. 476
TOTAL	618



APPROACH SLAB PLAN (RIGHT BRIDGE NORTHBOUND)



TYPE 4-C CURB DETAIL (TYP.)



TYPICAL SLEEPER SLAB SECTION

SLEEPER SLAB SURFACE ELEVATION AT TOP OF ROADWAY			
1	903.73	13	903.68
2	903.81	14	903.75
3	903.04	15	902.96
4	902.47	16	902.40
5	902.28	17	902.20
6	900.82	18	900.72

SLEEPER SLAB SURFACE ELEVATION UNDER APPROACH SLAB			
7	903.75	19	903.70
8	903.83	20	903.78
9	903.05	21	902.98
10	902.48	22	902.41
11	902.29	23	902.22
12	900.83	24	900.73

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15 TYPE C INSTALLATION.
2. FOR BRIDGE RAILING DETAILS, SEE SHEET 55.
3. FOR ADDITIONAL BRIDGE RAILING TRANSITION DETAILS, SEE ODOT STANDARD DRAWING SBR-1-20 AND SICD-1-21.
4. THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QA/QC (T=17").
5. FOR INTEGRAL CURB TYPE 4C DETAILS, SEE ODOT STANDARD DRAWING BP-5.1. THE INTEGRAL CURB TYPE 4C SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.
6. THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.

APPROACH SLAB DETAILS - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD
SFN TBD
DESIGN AGENCY
Jacobs
DESIGNER MAN | CHECKER DBL
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 57 | TOTAL 65
SHEET P. 477 | TOTAL 618

FRA-71-19.10

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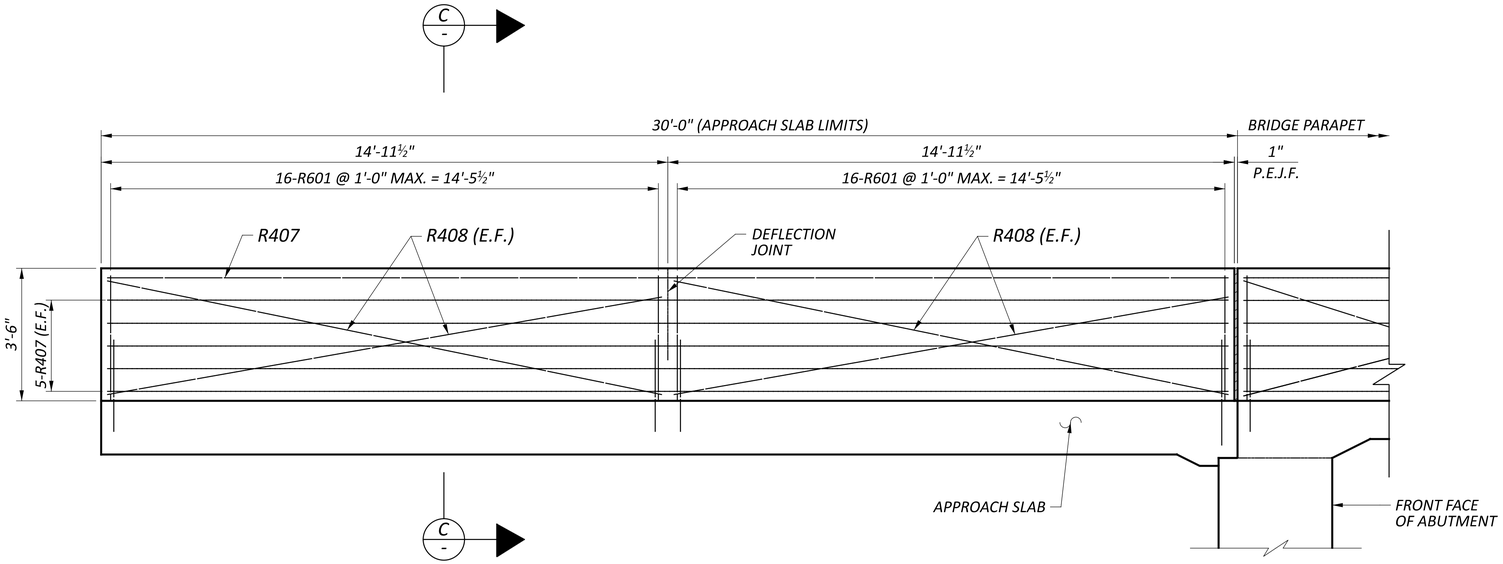
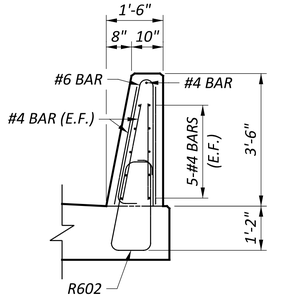
Asad.Nawaz@jacobs.com

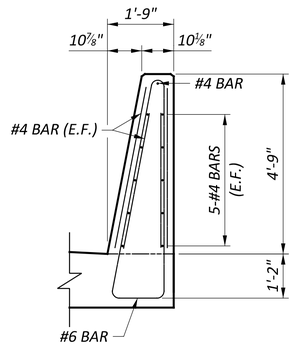


TYPICAL EXTERIOR APPROACH RAILING ELEVATION

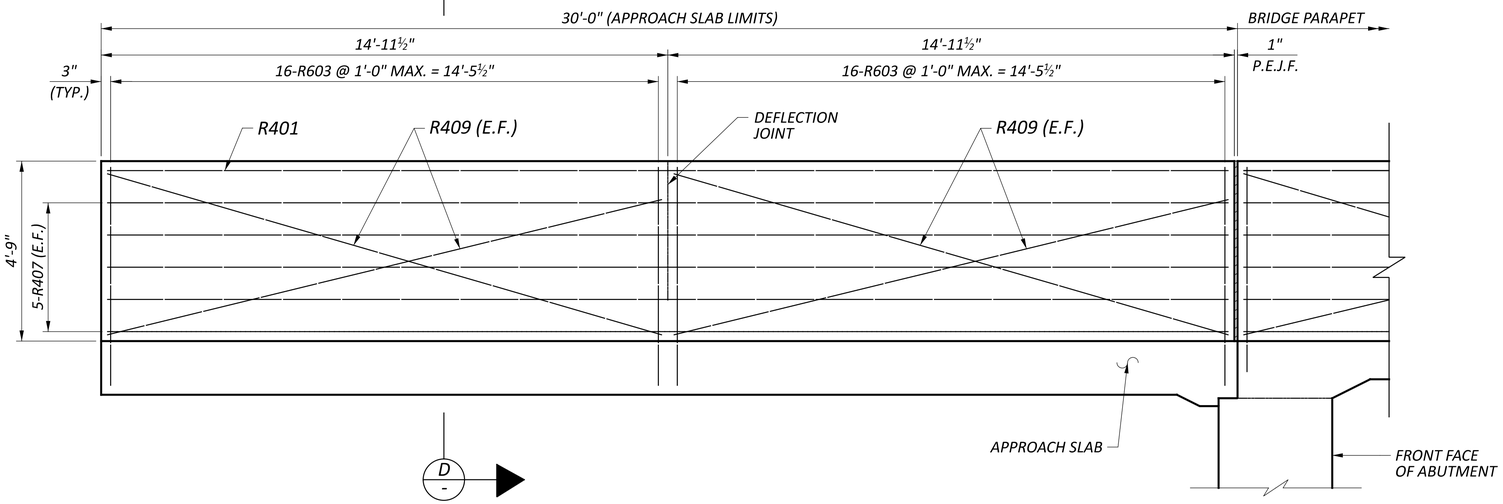
(SBR-1-20)



C - ***SECTION***



D - ***SECTION***



TYPICAL MEDIAN APPROACH PARAPET ELEVATION

(SBR-2-20)

PARAPET STIFFENING G.F.R.P. REINFORCEMENT			
BAR MARK	*NUMBER*	*LENGTH*	*TYPE*
R407	*XX*	*X'-X"*	*ST*
R408	*XX*	*X'-X"*	*ST*
R409	*XX*	*X'-X"*	*ST*

NOTES:

1. FOR ADDITIONAL PARAPET DETAILS, SEE SHEETS 54 & 55.

APPROACH PARAPET DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN TBD

SFN TBD

DESIGN AGENCY

Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
58	65

SHEET	TOTAL
P. 478	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:57:56 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	XX/YY/ZZZZ
840	DATED	01/16/2026
878	DATED	01/16/2026

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020 DATED JULY 2025.

DESIGN DATA

CONCRETE CLASS QC1 (LEVELING PAD, COPING & GUTTER)
- COMPRESSIVE STRENGTH 4.0 KSI

CONCRETE REINFORCEMENT
EPOXY COATED STEEL REINFORCEMENT
- MINIMUM YIELD STRENGTH 60-KSI

FOUNDATION BEARING RESISTANCE

THE REINFORCED SOIL MASSES, AS DESIGNED PRODUCE MAXIMUM SERVICE LIMIT STATE BEARING PRESSURES [1], MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE [2] AND PROVIDE THE FACTORED BEARING RESISTANCE [3] AS DEPICTED BELOW FOR EACH WALL.

FOUNDATION BEARING RESISTANCE			
MSE WALL NO.	SERVICE BEARING PRESSURE (KSF) [1]	FACTORED BEARING PRESSURE (KSF) [2]	FACTORED BEARING RESISTANCE (KSF) [3]
#1	7.56	5.50	11.1

MSE WALL DESIGN PARAMETERS

THE FOLLOWING TABLE LIST THE MINIMUM SOIL REINFORCEMENT LENGTHS FOR EACH WALL. THE SOIL REINFORCEMENT LENGTH IS A FUNCTION OF THE DESIGN WALL HEIGHT (H) AND WILL VARY ALONG THE LENGTH OF THE WALL.

MSE WALL DESIGN PARAMETERS	
MSE WALL NO.	MINIMUM SOIL REINFORCEMENT LENGTH (FT.)
#1	0.70H

PROPRIETARY RETAINING WALL DATA

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION (SS) 840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE THE FOLLOWING NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOADS DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURES LISTED IN THE FOLLOWING TABLE, APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL OR LIVE LOAD SURCHARGE. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL AND LIVE LOAD SURCHARGE IN THE DESIGN CALCULATIONS.

BRIDGE SUPERSTRUCTURE LOADS (K/FT.)		
MSE WALL NO.	BRIDGE NO.	FRICTION LOAD (FR)
#1	FRA-71-24.46 L/R	3.00

ITEM 511 - CONCRETE MISC.: CLASS QC1 CONCRETE, GUTTER

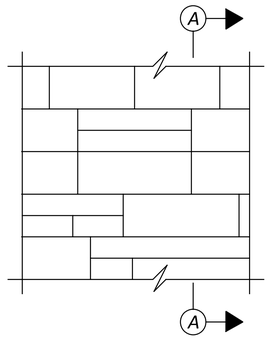
THIS ITEM INCLUDES ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT A CAST-IN-PLACE CONCRETE GUTTER ATOP THE MSE WALL COPING AS DETAILED WITHIN THE PLANS.

AESTHETIC SURFACE TREATMENT

ALL PROVISIONS OF ODOT SUPPLEMENTAL SPECIFICATION 840 APPLY IN ADDITION TO THOSE LISTED HEREIN.

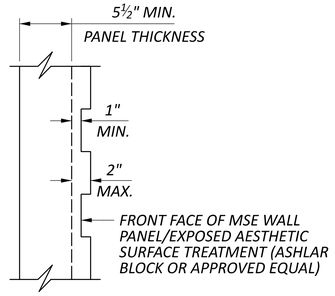
THE RELIEF OF AESTHETIC PATTERN FORMLINER SHALL NOT EXCEED A MAXIMUM RELIEF OF 2.0 INCHES. THE MINIMUM RELIEF OF THE AESTHETIC PATTERN FORMLINER IS 1.0 INCHES. AESTHETIC TREATMENT SHALL UTILIZE AN ASHLAR BLOCK FORMLINER PATTERN OR APPROVED EQUAL. SEAL ALL CONCRETE SURFACES WITH A LIGHT-NEUTRAL EPOXY-URETHANE SEALER (FEDERAL COLOR 17778).

THE AESTHETIC SURFACE TREATMENT MUST BE SUBMITTED TO THE DEPARTMENT FOR APPROVAL.



AESTHETIC SURFACE TREATMENT ELEVATION

(ASHLAR BLOCK OR APPROVED EQUAL)



AESTHETIC SURFACE TREATMENT SECTION A-A

LIMITS OF MSE WALL EARTHWORK

LEGEND:

- ITEM 203 - EMBANKMENT
- ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN
- ITEM 840 - WALL EXCAVATION
- ITEM 840 - SELECT GRANULAR BACKFILL

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

EXCAVATION NECESSARY TO CONSTRUCT THE MSE WALL AND/OR PROPOSED BRIDGE ABUTMENT NOT SEPARATELY INCLUDED WITH ITEM 840 - WALL EXCAVATION SHALL BE INCLUDED WITH THE LUMP SUM BID PRICE FOR ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN, FOR PAYMENT. PLAN DETAILS DEPICT ANTICIPATED EXCAVATION; HOWEVER THE CONTRACTOR SHALL DETERMINE THE FINAL QUANTITIES BASED UPON FIELD MEASUREMENTS.

THE FOLLOWING ESTIMATED EXCAVATION QUANTITY IS PROVIDED FOR REFERENCE ONLY AND ARE BASED UPON AN ASSUMED MAXIMUM CUT SLOPE OF 1.5H:1V.

ESTIMATED - ITEM 203 EXCAVATION	
MSE WALL NO.	EXCAVATION (CY.)
#1	X.XX

ALL EXCAVATION AND SUBSEQUENT BACKFILL BELOW THE EXISTING GROUND SHALL BE PERFORMED PER THE APPLICABLE SECTIONS OF C&MS 203 AND 503. SUITABLE SITE SOILS DISPLACED DURING WALL EXCAVATION MAY BE REUSED AS EMBANKMENT MATERIAL WITHIN THE LIMITS SHOWN WITHIN THESE PLANS. THE SUITABILITY OF ALL SITE SOILS INTENDED FOR REUSE SHALL BE APPROVED BY AN ON-SITE GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF OHIO PRIOR TO PLACEMENT AND SOILS SHALL CONFORM TO BACKFILL REQUIREMENTS OF C&MS 203.

ESTIMATED QUANTITIES - MSE WALL #1

CALC.	DATE	CHK'D	DATE
XXX	XX/YY/ZZ	XXX	XX/YY/ZZ

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SHEET REF.
203	20000		CY	EMBANKMENT	
203	35120		CY	GRANULAR MATERIAL, TYPE C	
503	21301		LS	UNCLASSIFIED EXCAVATION, AS PER PLAN	XX
509	10000		LB	EPOXY COATED STEEL REINFORCEMENT	
510	10000		EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
511	71100		CY	CONCRETE, MISC.: CLASS QC1 CONCRETE, GUTTER	XX
512	10100		SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
516	13600		SF	1" PREFORMED EXPANSION JOINT FILLER	
840	20000		SF	MECHANICALLY STABILIZED EARTH WALL	
840	21000		CY	WALL EXCAVATION	
840	22000		SY	FOUNDATION PREPARATION	
840	23000		CY	SELECT GRANULAR BACKFILL	
840	25010		FT	6" DRAINAGE PIPE, PERFORATED	
840	25020		FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26000		FT	CONCRETE COPING	
840	26050		SF	AESTHETIC SURFACE TREATMENT	XX
840	27000		DAY	ON-SITE ASSISTANCE	
840	28000		LS	SGB INSPECTION AND COMPACTION TESTING	
SPECIAL	530000400		EA	STRUCTURES: SETTLEMENT PLATFORMS	XX

MSE WALL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MJR
CHECKER	DBL
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	59
TOTAL	65
SHEET	P. 479
TOTAL	618

FRA-71-19.10

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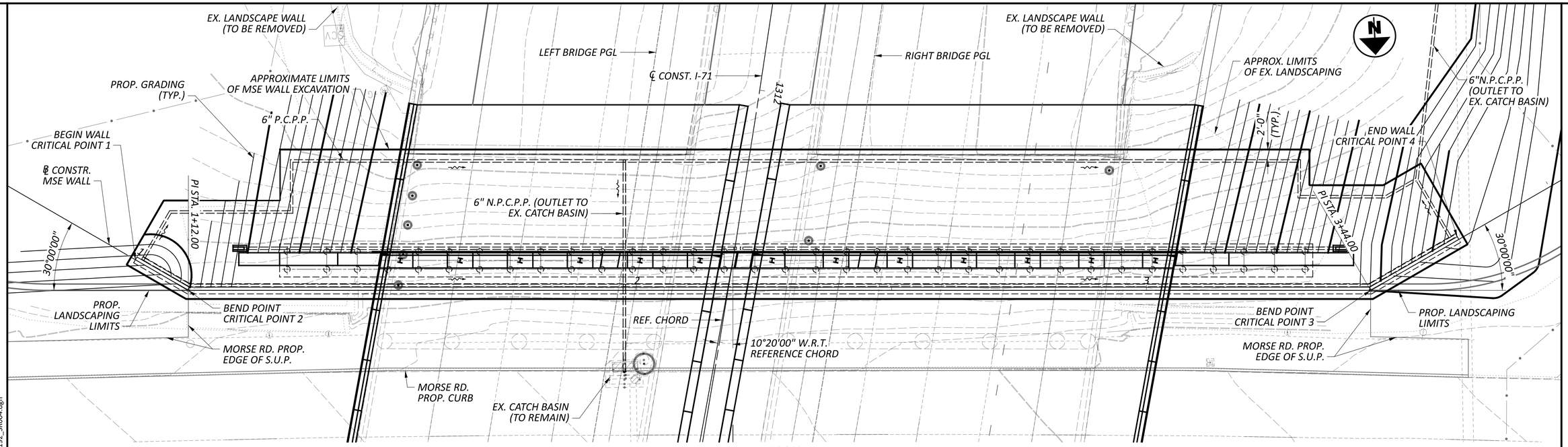


PLAN

MSE WALL INFORMATION			
LOCATION	BORING NO.	MAX WALL DESIGN HEIGHT	REINFORCING LENGTH (FT)
R.A.	B-043-0-22	32.50'	0.70H

MSE WALL CRITICAL POINT DATA				
CONTROL POINT NO.	MSE WALL STATION	℄ CONST. I-71 STATION	℄ CONST. I-71 OFFSET	TOP OF WALL ELEVATION
1	1+00.00	1312+53.02	115.72' RT.	883.50
2	1+12.00	1312+57.34	104.47' RT.	889.30
3	3+44.00	1312+13.02	124.49' LT.	889.30
4	3+64.00	1312+07.88	140.06' LT.	881.20

LEGEND:

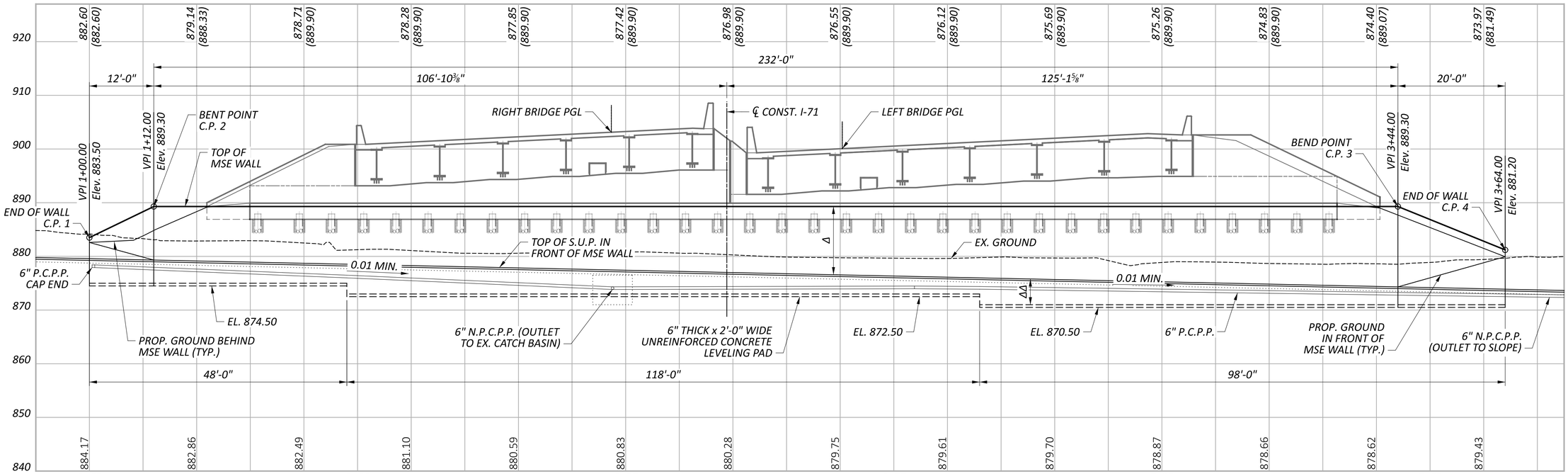
Δ - SEALING OF CONCRETE SURFACES (EPOXY URETHANE): SEAL EXTERIOR SURFACES OF ALL PANELS AND COPING

ΔΔ - 3'-0" MIN.

C.P. - CRITICAL POINT

NOTES:

1. *FOR ADDITIONAL MSE WALL DETAILS, SEE SHEET 61.*



PROFILE ALONG ℄ CONST. MSE WALL 1

MSE WALL PLAN AND ELEVATION
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	60
TOTAL	65
SHEET	P. 480
TOTAL	618

FRA-71-19.10

MODEL: BLP_WALL1 - MSE WALL 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 11:59:34 AM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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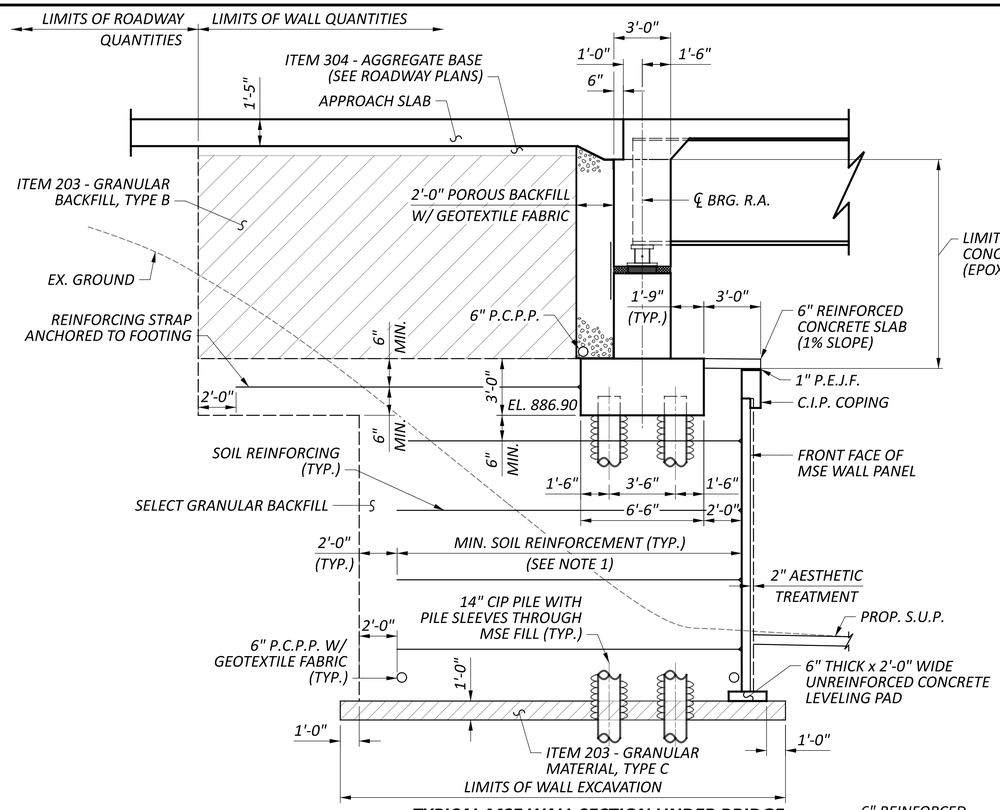
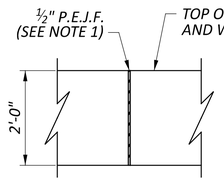
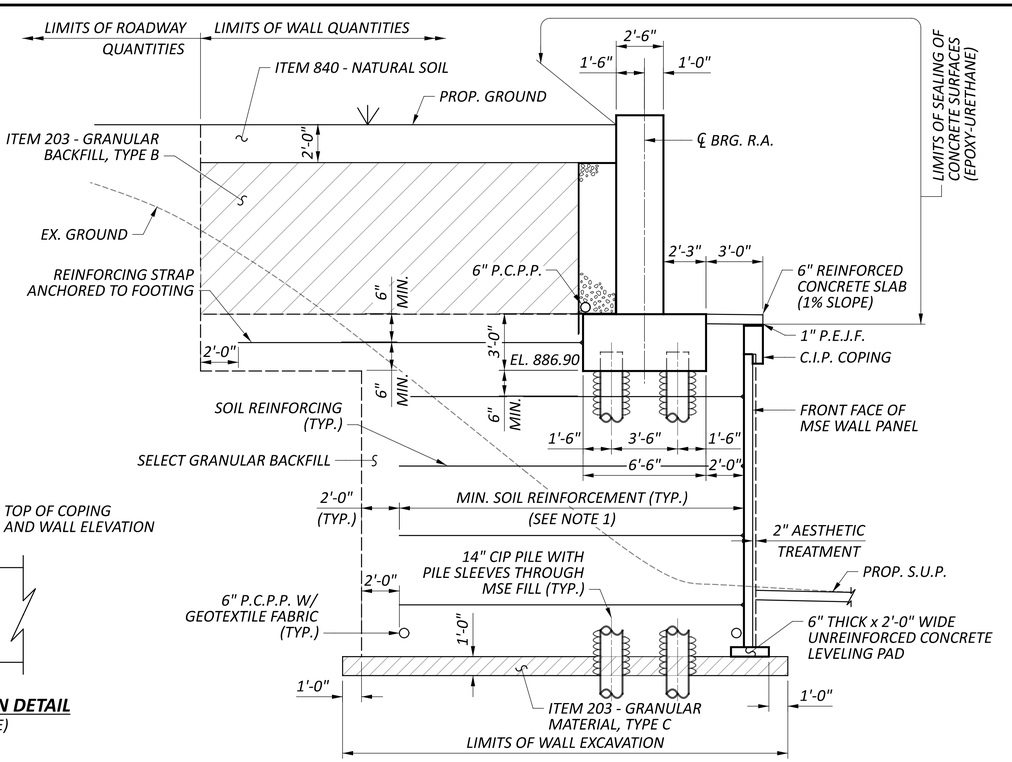


TYPICAL MSE WALL SECTION UNDER BRIDGE



COPING EXPANSION DETAIL
(NOT TO SCALE)



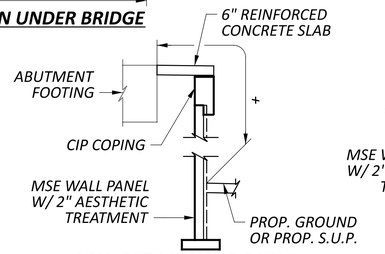
TYPICAL MSE WALL SECTION ALONG WINGWALL

LEGEND:

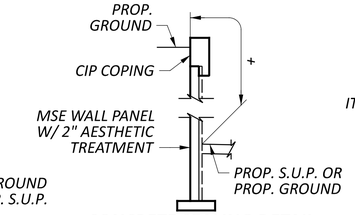
\+ - LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

NOTES:

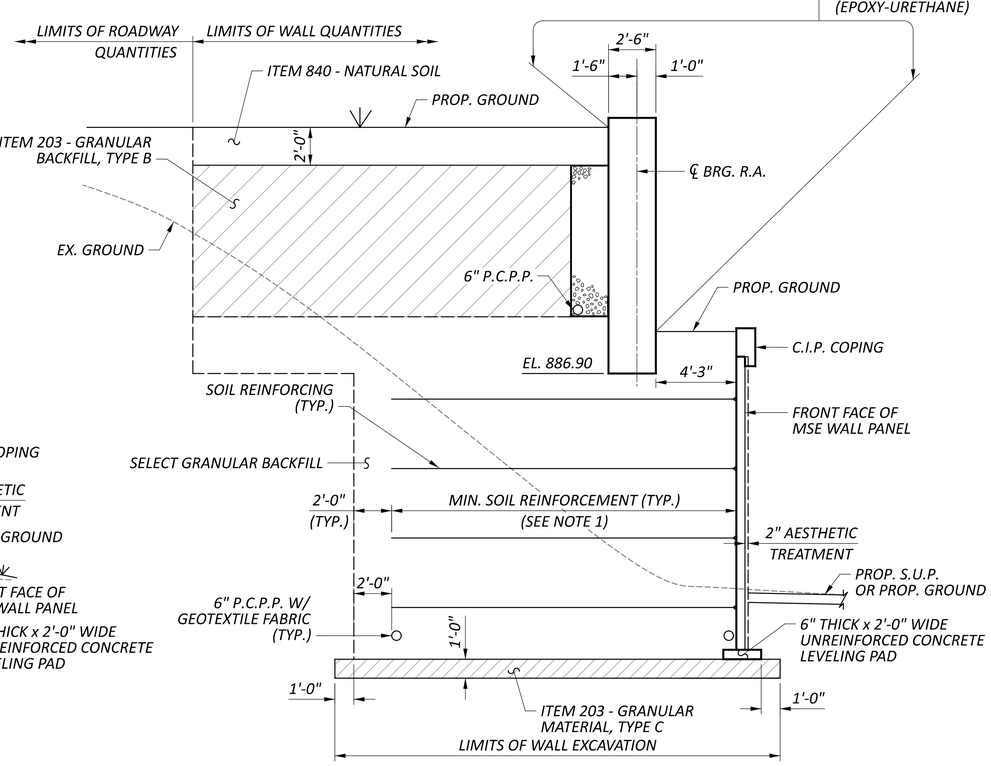
1. FOR MSE WALL PLAN, ELEVATION AND MSE WALL DATA, SEE SHEET 60.



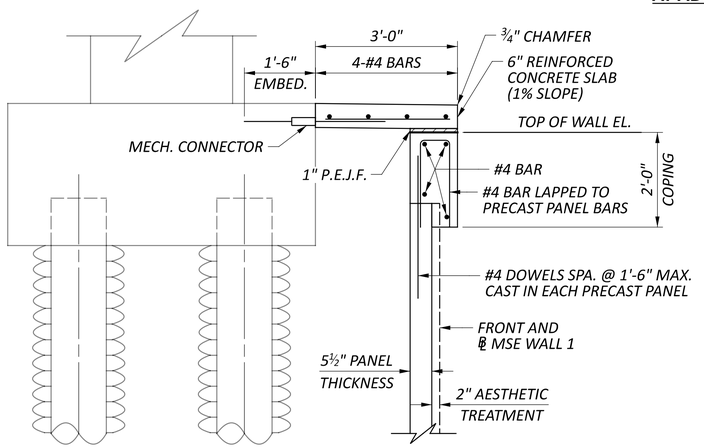
CONCRETE SEALING DETAIL AT ABUTMENT AND WINGWALL



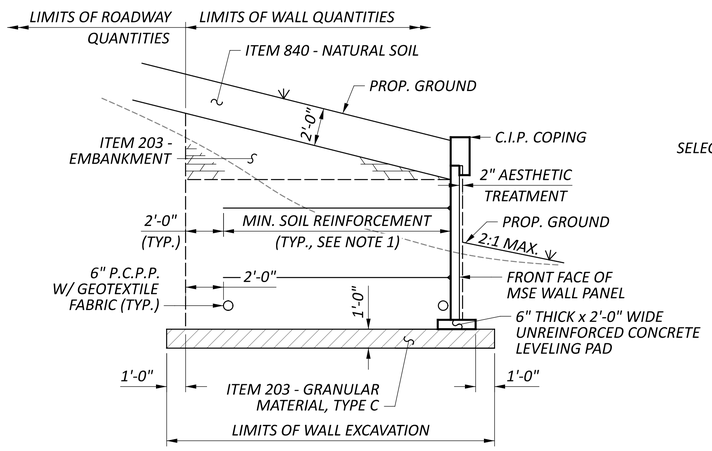
CONCRETE SEALING DETAIL AT END OF MSE WALL



TYPICAL MSE WALL SECTION AT END OF WINGWALL



MSE WALL COPING DETAIL
(NOT TO SCALE)



TYPICAL MSE WALL SECTION AT END OF MSE WALL

FRA-71-19.10

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MSE WALL DETAILS
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER MORSE RD.

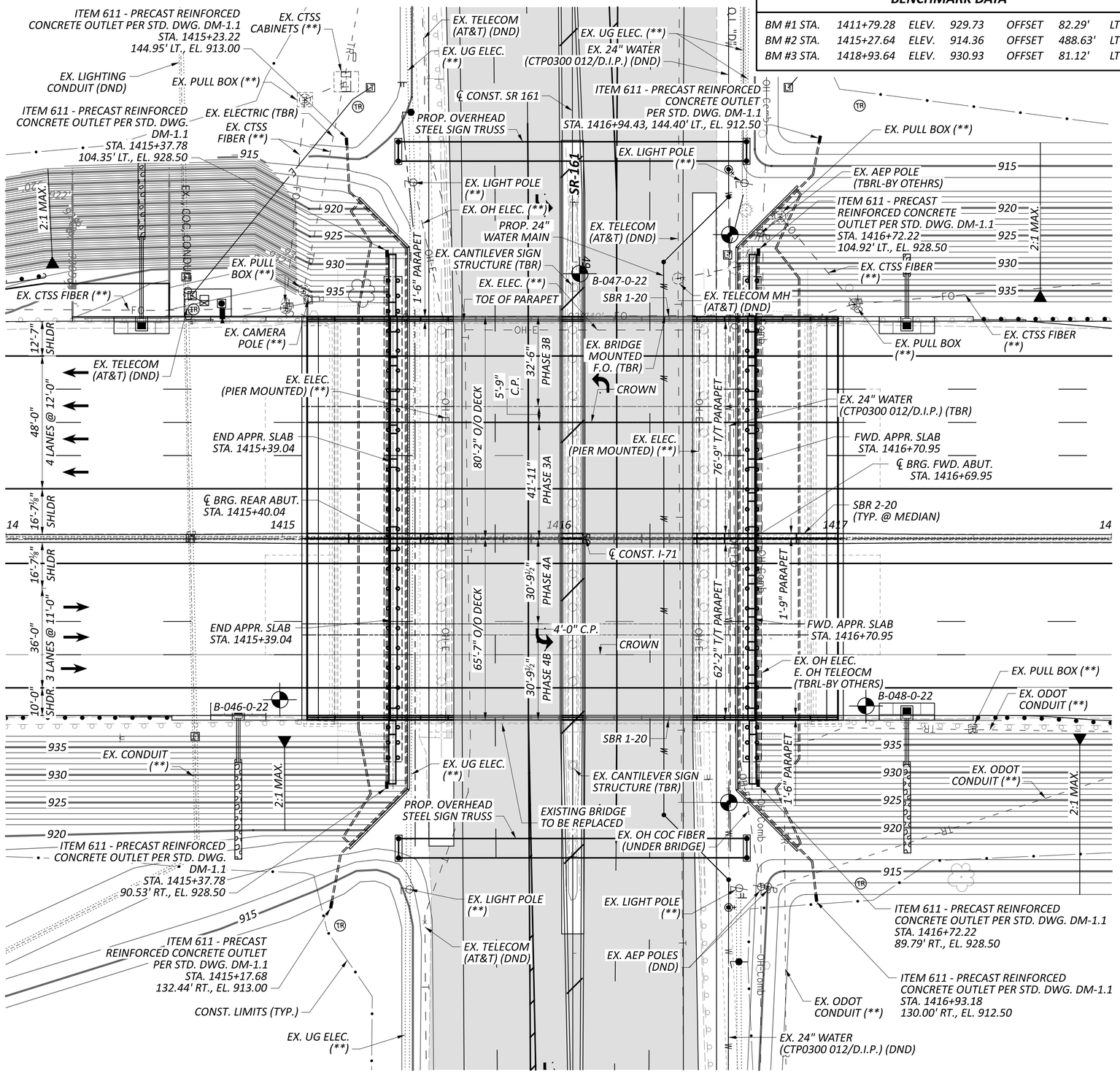
SFN	TBD
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	61
TOTAL	65
SHEET	P. 481
TOTAL	618

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC



PLAN

(GIRDERS AND TEMPORARY SHORING NOT SHOWN FOR CLARITY)

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS

BENCHMARK DATA

BM #1 STA.	1411+79.28	ELEV.	929.73	OFFSET	82.29'	LT.
BM #2 STA.	1415+27.64	ELEV.	914.36	OFFSET	488.63'	LT.
BM #3 STA.	1418+93.64	ELEV.	930.93	OFFSET	81.12'	LT.

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR ADDITIONAL SURVEY INFORMATION, SEE ROADWAY PLANS.
3. FOR BRIDGE PROFILES, SEE SHEET 2.
4. FOR GENERAL PLAN, SEE SHEET 3.

DESIGN TRAFFIC:

2030 ADT = 129,542 2030 ADTT = 14,326
2050 ADT = 151,092 2050 ADTT = 16,709
DIRECTIONAL DISTRIBUTION = 0.535 NORTHBOUND

LEGEND

- BORING LOCATION
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
  15'-6" ACTUAL MINIMUM VERTICAL CLEARANCE (SEE SHEET 2)

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS REINFORCED CONCRETE SLAB SUPPORTED ON REINFORCED CONCRETE STUB ABUTMENTS AND CAP AND COLUMN PIERS

SPANS: 38'-0", 47'-6", 47'-6", 38'-0" C/C BEARINGS

ROADWAY: 64'-3" T/T PARAPET - RIGHT (NORTHBOUND) BRIDGE
76'-9" T/T PARAPET - LEFT (SOUTHBOUND) BRIDGE

LOADING: CF2000

SKEW: NONE

WEARING SURFACE: LMC OVERLAY/MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-54/AS-1-81 (25' LONG)

ALIGNMENT: TANGENT

CROWN: 0.0156 FT/FT

STRUCTURE FILE NUMBER: 2508257

DATE BUILT: 1959

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN STEEL PLATE GIRDER (ASTM A709, GRADE 50) WITH COMPOSITE REINFORCED CONCRETE DECK SUPPORTED ON SEMI-INTEGRAL ABUTMENTS WITH MSE WALLS

SPAN: 129'-11" C/C BEARINGS

ROADWAY: 62'-2" TOE/TOE PARAPET (RIGHT BRIDGE)
76'-9" TOE/TOE PARAPET (LEFT BRIDGE)

LOADING: HL93 AND 60 PSF FUTURE WEARING SURFACE

SKEW: NONE

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-15, AS-2-15) W/ TYPE C (REAR AND FWD.)

CROWN: 0.016 FT/FT

DECK AREA: 8,653 SF (RIGHT), 10,577 SF (LEFT)

STRUCTURE FILE NUMBER: TBD (LEFT), TBD (RIGHT)

COORDINATES: LATITUDE 40° 05'14.60" NORTH
LONGITUDE 82°59'14.23" WEST

HORIZONTAL SCALE IN FEET
0 10 20 40

SITE PLAN (1 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	1
TOTAL	64
SHEET	P. 486
TOTAL	618

FRA-71-19.10

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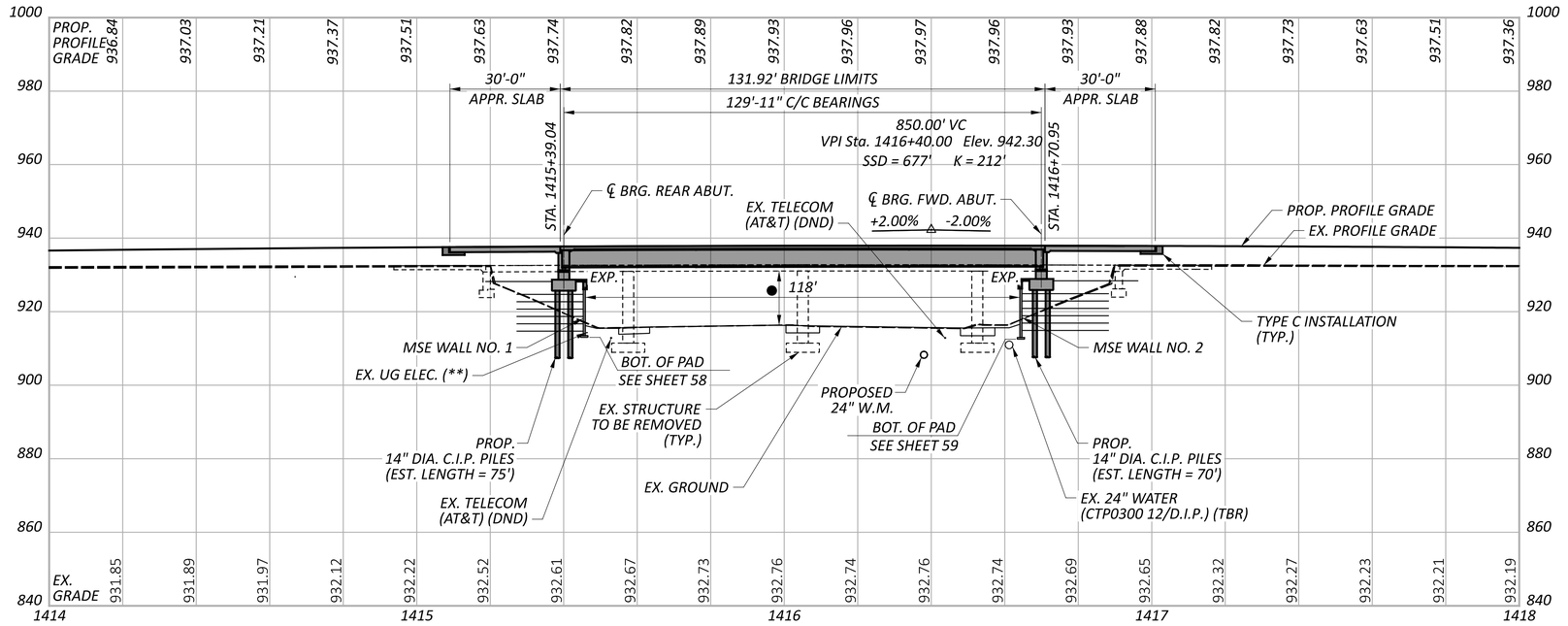
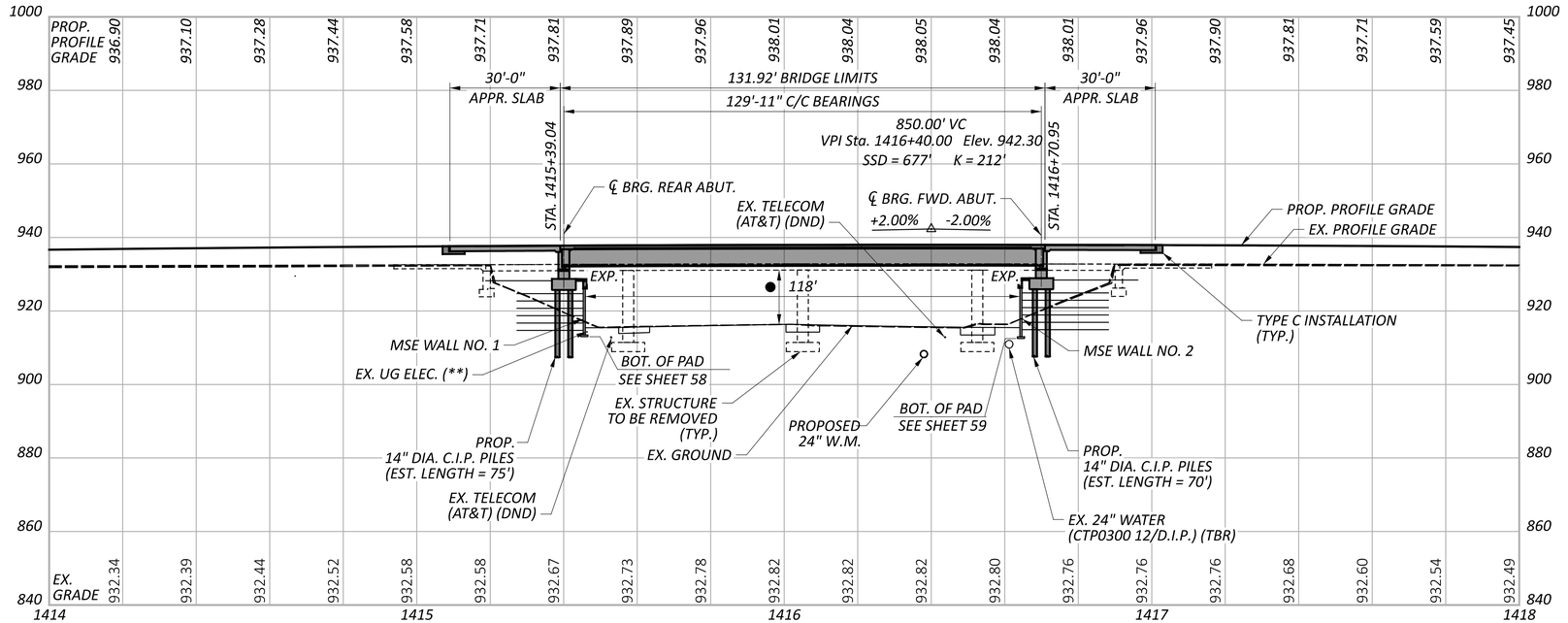


PROFILE ALONG PROFILE GRADE - LEFT BRIDGE (SOUTHBOUND)



PROFILE ALONG PROFILE GRADE - RIGHT BRIDGE (NORTHBOUND)

LEGEND:

- ● *15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
  15'-6" ACTUAL MINIMUM VERTICAL CLEARANCE

(**) - FOR EXISTING FIBER OPTIC AND ELECTRIC UTILITY DISPOSITIONS, SEE LIGHTING & ITS PLANS

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR GENERAL PLAN, SEE SHEET 3.*

HORIZONTAL SCALE IN FEET
0 10 20 40

SITE PLAN (2 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	ZF

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
2	64

SHEET	TOTAL
P. 487	618

FRA-71-19.10

MODEL: CLP_173 - Bridge Profiles [Sheet] PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 3:05:22 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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GENERAL PLAN

NOTES:

1. FOR TEMPORARY SHORING PLAN, SEE SHEET 13.
2. FOR STAGED CONSTRUCTION DETAILS, SEE SHEETS 7 THRU 8.
3. FOR ABBREVIATION LEGEND, SEE SHEET 5.

HORIZONTAL SCALE IN FEET
0 10 20 40

GENERAL PLAN
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	3
TOTAL	64
SHEET	P.488
TOTAL	618

FRA-71-19.10

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	1/20/2023
AS-2-15	REVISED	7/21/2023
GSD-1-19	REVISED	7/19/2024
PCB-91	REVISED	7/17/2020
SBR-1-20	REVISED	7/19/2024
SBR-2-20	REVISED	7/19/2024
SICD-1-21	REVISED	1/19/2024
SICD-2-14	REVISED	1/15/2021

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	XX/YY/ZZZZ
840	DATED	1/16/2026
866	DATED	4/21/2017
867	DATED	4/15/2022

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020, DATED JULY 2025.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.05 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT:

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH - 60-KSI

GFRP REINFORCEMENT (PARAPETS)

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI (GIRDERS, CONNECTION PLATES, SPLICE PLATES, CROSS FRAMES MEMBERS, BEARING STIFFENERS, LOAD PLATES, SEMI-INTEGRAL ABUTMENT PEDESTALS)

STEEL CAST-IN-PLACE (C.I.P.) REINFORCED CONCRETE PIPE PILES (C&MS 507) - ASTM A252 GRADE 3 - YIELD STRENGTH 45 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER

MONOLITHIC WEARING SURFACE

A MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES TO BE 1 INCH THICK.

EXISTING BRIDGE PLANS

FOR INFORMATION NOT SHOWN, EXISTING BRIDGE PLANS MAY BE INSPECTED IN THE OFFICE OF STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE DISTRICT 6 OFFICE, 400 EAST WILLIAM STREET, DELAWARE, OHIO 43015.

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC PLANS, SEE ROADWAY SHEETS.

UTILITIES

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE(S) AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04 FOR FURTHER INFORMATION.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE BRIDGE WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT AT THE BRIDGES.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO:

OHIO EPA, CDO
50 WEST TOWN ST, SUITE 700
COLUMBUS, OHIO 43215
KELLY TOTH, APC MANAGER
(614) 728-3778
FAX: (614) 728-3898

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR REHABILITATION.

INFORMATION REQUIRED ON THE FORM SHALL INCLUDE: 1) THE CONTRACTOR NAME, ADDRESS AND CONTACT INFORMATION 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THE PROVISIONS OF C&MS 202 APPLY, IN ADDITION TO THOSE LISTED HEREIN. THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES AND HEADACHE BALLS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK CAREFULLY TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED FOR MAINTAINING TRAFFIC.

CUT LINE CONSTRUCTION JOINT PREPARATION:
SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE.

REMOVAL METHODS:
THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. UNLESS OTHERWISE ADVISED BY THE ENGINEER, THE CONTRACTOR IS PERMITTED TO USE A HYDRAULIC HOE-RAM ONLY FOR SUBSTRUCTURE REMOVALS ONLY AFTER THE PHASED REMOVAL LIMITS OF THE SUPERSTRUCTURE ARE COMPLETE FOR THAT PHASE. THE CONTRACTOR MUST SUBMIT DEMOLITION PLAN(S) ACCORDING TO C&MS 501.05.

PILE DRIVING CONSTRAINTS

PRIOR TO DRIVING REAR AND FORWARD ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS UP TO THE BOTTOM OF FOOTING ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES INTO THE SOILS ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST 3-FEET OF PILE ABOVE THE TOP OF PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE DRIVING CRITERIA DETERMINED BY RESTRIKE TESTING UNTIL AFTER THE ABOVE REQUIRED MSE ALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A 21 CALENDAR WAITING PERIOD HAS ELAPSED. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE ABUTMENT PILES TO THE DRIVING CRITERIA DETERMINED BY RESTRIKE TESTING. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5-INCH.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH THE PILE SLEEVES AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE, UBV)

THE ULTIMATE BEARING VALUE IS 357 KIPS PER FOOT FOR ABUTMENT PILES.

ABUTMENT PILES:
14" DIAMETER C.I.P. PILES

REAR ABUTMENT:
ESTIMATED LENGTH = 75'-0"
ORDER LENGTH = 80'-0"

FORWARD ABUTMENT:
ESTIMATED LENGTH = 70'-0"
ORDER LENGTH = 75'-0"

PILE DRIVING: THE MAXIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL NOT EXCEED 47,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 40,500 POUNDS PER SQUARE INCH.

A MINIMUM WALL THICKNESS OF 0.250" SHALL BE USED AT ALL THE REAR ABUTMENT PILES. A MINIMUM WALL THICKNESS OF 0.500" SHALL BE USED AT THE FORWARD ABUTMENT PILES. ALL STEEL SHALL BE ASTM A252 STEEL, GRADE 3 WITH A MINIMUM YIELD STRENGTH OF 45 KSI.

PILES DRIVEN TO FULL ESTIMATED LENGTH WITH PILE/SOIL SETUP
ITEM 523 - DYNAMIC LOAD TESTING, AS PER PLAN
ITEM 523 - RESTRIKE, AS PER PLAN

THE ULTIMATE BEARING VALUE (UBV) LISTED ABOVE WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME DEPENDENT INCREASE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 WORKING DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES IN EACH SUBSTRUCTURE TO THEIR FULL ESTIMATED LENGTHS, 75-FEET AT THE REAR ABUTMENT AND 70-FEET AT THE FORWARD ABUTMENT. PERFORM DYNAMIC LOAD TESTING ON BOTH PILES WHILE DRIVING. AFTER DRIVING AND TESTING THE FIRST TWO PILES, DRIVE THE REMAINING PILES IN THE SUBSTRUCTURE TO THE SAME DEPTH AS THE FIRST TWO PILES. AFTER DRIVING ALL PILES TO THE ESTIMATED LENGTH, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A PERIOD OF 7 DAYS. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM RESTRIKES ON BOTH OF THE FIRST TWO PILES (ONE RESTRIKE ITEM).

SUBMIT ALL TEST RESULTS TO THE ENGINEER. IF THE RESTRIKE RESULTS INDICATE THAT BOTH PILES ACHIEVED THE REQUIRED UBV, ALL PILES IN THE SUBSTRUCTURE MAY BE ACCEPTED BY THE ENGINEER.

IF THE RESTRIKE RESULTS INDICATE THAT EITHER OF THE TWO PILES DID NOT ACHIEVE THE REQUIRED UBV, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH ADDITIONAL RESTRIKE TESTING OR DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

IF DIRECTED BY THE ENGINEER, PERFORM ADDITIONAL RESTRIKE TESTING OR DRIVE ALL PILES IN THE SUBSTRUCTURE TO THE ESTABLISHED DRIVING CRITERIA. THE DEPARTMENT WILL PAY FOR SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS UNDER C&MS 109.05 WITH A NEGOTIATED PRICE PER SPLICE.

THIS PLAN NOTE INCLUDES A QUANTITY OF ONE EACH ITEM 523 DYNAMIC LOAD TESTING, AS PER PLAN AND A QUANTITY OF ONE EACH ITEM 523 RESTRIKE, AS PER PLAN PER EACH SUBSTRUCTURE UNIT.

ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT

THE COLOR OF THE FINISH COAT SHALL BE FEDERAL COLOR NO. FS 595 17038, OSHA BLACK/ANA 515/622.

DECK PLACEMENT ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE.

BRIDGE	CONST. PHASE	MAX. WHEEL LOAD (KIP)	MAX. RAIL-TO-RAIL WIDTH (FT.)	MAX. BRACKET OVERHANG (MEASURED ℄ FROM GIRDER) (IN.)
LEFT	3A	2.2	42.33	70
LEFT	3B	2.2	31.67	70
RIGHT	4A	2.2	31.11	70
RIGHT	4B	2.2	31.21	70

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN(S) SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN. THE FOLLOWING CRITERIA APPLIES TO CANTILEVER (I.E. UNANCHORED), STEEL SHEET PILING SHOWN IN THE PLANS.

REFER TO SHEET 12 FOR ADDITIONAL NOTES.

ITEM 622 - PORTABLE BARRIER, 32", BRIDGE MOUNTED, AS PER PLAN

THE CONTRACTOR SHALL UTILIZE AN ANCHORED PORTABLE BARRIER SYSTEM WHERE SPECIFIED IN THE PLANS AND GENERAL NOTES. THE CONTRACTOR IS PERMITTED TO USE PCB-91 OR RM-4.2 SEGMENTS EXCEPT AS NOTED HEREIN. THE USE OF RM-4.2 IS NOT PERMITTED WHERE LESS THAN ONE FOOT OF EDGE DISTANCE (MEASURED FROM THE EDGE OF DECK ALONG THE REMOVAL LINE TO THE NEAREST TOE OF BARRIER) IS PROVIDED. THE CONTRACTOR SHALL UTILIZE PCB-91 OR THE EASI-SET WORLDWIDE TEMPORARY BARRIER (OR APPROVED EQUAL) WHERE LESS THAN ONE FOOT OF EDGE DISTANCE IS PROVIDED.

THE FOLLOWING ANCHOR REQUIREMENTS APPLY:

	NO. OF ANCHORS REQUIRED (EACH BARRIER SEGMENT)	
	EDGE DISTANCE, D < 1'-0"	EDGE DISTANCE, D >= 1'-0"
PCB-91	6	3
RM-4.2	NOT PERMITTED	2
EASI-SET WORLDWIDE (OR APPROVED EQUAL)	SEE MANUFACTURER RECOMMENDATIONS	SEE MANUFACTURER RECOMMENDATIONS

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT ANCHORED PORTABLE BARRIER INCLUDING APPROVED ALTERNATES AS DESCRIBED ABOVE WILL BE PAID AT THE CONTRACT BID PRICE FOR ITEM 622 - PORTABLE BARRIER, 32", BRIDGE MOUNTED, AS PER PLAN.

STRUCTURE GENERAL NOTES (1 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN
TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
MAN	FM

REVIEWER
MJR 03/13/26

PROJECT ID
109164

SUBSET	TOTAL
4	64

SHEET	TOTAL
P. 489	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:22:31 PM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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ITEM SPECIAL - SETTLEMENT PLATFORMS

DESCRIPTION:

THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS WITHIN THE PROPOSED ABUTMENT EMBANKMENTS AND/OR MSE WALL BACKFILL AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND THE EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING THE WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT THE LINK BELOW ON THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION.

HTTP://WWW.DOT.STATE.OH.US/GEOTECHNICAL/PAGES/SETTELMENT.ASPX

A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

MATERIALS:

SOUND LUMBER SUCH AS 19MMM (3/4-INCH) EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 64MM (2-1/2-INCH) STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 915MM X 915MM X 3.2MM (36" X 36" X 1/8") MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS:

THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING PLACEMENT OF THE EMBANKMENT AND/OR MSE WALL CONSTRUCTION. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL PROTECT SETTLEMENT PLATFORMS FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

THE TOP OF SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF ONE FOOT BELOW THE BOTTOM OF FOOTING ELEVATION OR TWO FEET BELOW THE FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

CRITERIA:

REMAINING SETTLEMENT (AFTER WAITING PERIOD) IS LESS THAN OR EQUAL TO 1 INCH FOR WALLS AND EMBANKMENTS.

WAITING PERIOD:

THE WAITING PERIOD SHALL NOT BE CONSIDERED TO BEGIN UNTIL ALL FILL IS CONSTRUCTED TO THE BOTTOM OF FOOTING ELEVATIONS. THE FILL SHALL CONSISTS OF THE PROPOSED MSE WALL BACKFILL OR EMBANKMENT CONSTRUCTED TO THE ENTIRE LATERAL EXTENTS OF THE PHASED CONSTRUCTION WITHIN ONE FOOT OF THE PROPOSED VERTICAL EXTENTS.

NO CONSTRUCTION OF STRUCTURES (INCLUDING FOUNDATIONS, LIMITED CONSTRUCTION OF PILE DRIVING SPECIFIED HEREIN, MSE WALL TOP PANELS, COPING, ETC.) OR PAVING OF ROADWAYS SHALL BEGIN UNTIL CONFIRMATION HAS BEEN RECEIVED FROM THE ENGINEER THAT THE CRITERIA TO END THE WAITING PERIOD HAVE BEEN MET.

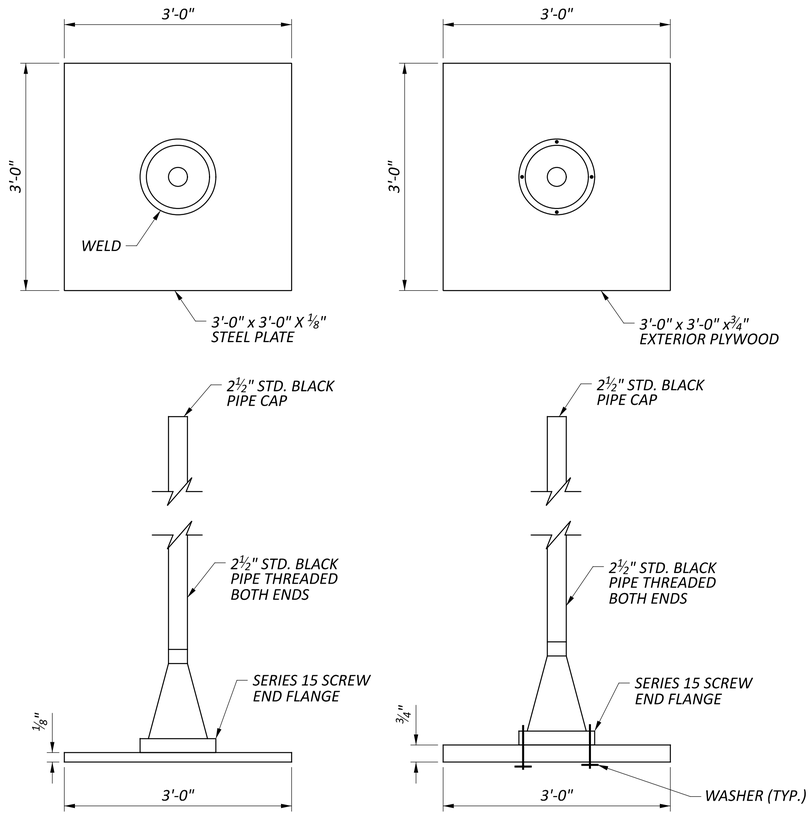
IT IS ANTICIPATED THAT AFTER COMPLETION OF MSE WALL AND/OR EMBANKMENT CONSTRUCTION, A 21 CALENDAR DAY WAITING PERIOD AT THE REAR ABUTMENT (MSE WALL 1) AND A 21 CALENDAR DAY WAITING PERIOD AT THE FORWARD ABUTMENT WILL BE REQUIRED BEFORE THE SETTLEMENT RATE THRESHOLD IS ACHIEVED.

***METHOD OF MEASUREMENT**:*

THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT:

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR ITEM SPECIAL - SETTLEMENT PLATFORMS WHICH IS COMPENSATION FOR CONSTRUCTING, MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, MATERIAL, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.



SETTLEMENT PLATFORM DETAILS

SEQUENCE OF CONSTRUCTION

THE PROPOSED BRIDGE WORK (INCLUDING THE APPROACH SLABS) SHALL BE COORDINATED WITH OVERALL PROJECT MAINTENANCE OF TRAFFIC PLANS.

FOR ADDITIONAL DETAILS REGARDING SEQUENCE OF CONSTRUCTION OF TEMPORARY SHORING, SEE SHEET 13.

PHASE 3A

1. *INSTALL PORTABLE CONCRETE BARRIERS ON NORTHBOUND (RIGHT) AND SOUTHBOUND (LEFT) LANES AND DIVERT TRAFFIC AS SHOWN ON MOT PLANS.*
2. *REMOVE PORTIONS OF THE EXISTING SUPERSTRUCTURE AS SHOWN IN THE PLANS.*
3. *INSTALL TEMPORARY SHORING.*
4. *REMOVE PORTIONS OF EXISTING SUBSTRUCTURE.*
5. *COMPLETE PHASE 3A CONSTRUCTION.*

PHASE 3B

1. *INSTALL PORTABLE CONCRETE BARRIER ON PHASE 3A CONSTRUCTION AND DIVERT SOUTHBOUND TRAFFIC TO MOT PHASE 3B.*
2. *REMOVE REMAINING PORTIONS OF EXISTING SOUTHBOUND (LEFT) BRIDGE.*
3. *CONSTRUCT PHASE 3B AND CLOSURE POUR.*

PHASE 4A

1. *INSTALL PORTABLE CONCRETE BARRIERS ON NORTHBOUND (RIGHT) AND SOUTHBOUND (LEFT) LANES AND DIVERT TRAFFIC AS SHOWN ON MOT PLANS.*
2. *REMOVE PORTIONS OF THE EXISTING NORTHBOUND SUPERSTRUCTURE AS SHOWN IN THE PLANS.*
3. *INSTALL TEMPORARY SHORING.*
4. *REMOVE PORTIONS OF EXISTING SUBSTRUCTURE.*
5. *COMPLETE PHASE 4A CONSTRUCTION.*

PHASE 4B

1. *INSTALL PORTABLE CONCRETE BARRIER ON PHASE 4A CONSTRUCTION AND DIVERT NORTHBOUND TRAFFIC TO MOT PHASE 4B.*
2. *REMOVE REMAINING PORTIONS OF EXISTING NORTHBOUND (RIGHT) BRIDGE.*
3. *CONSTRUCT PHASE 4B AND CLOSURE POUR.*

ABBREVIATION LEGEND:

ABUT. - ABUTMENT
ADT - AVERAGE DAILY TRAFFIC
ADTT - AVERAGE DAILY TRUCK TRAFFIC
APPR. - APPROACH
B OR BOT. - BOTTOM
BM - BENCHMARK
BRG. - BEARING
℄ - CENTERLINE
C/C - CENTER TO CENTER
C.I.P. - CAST-IN-PLACE
C.J. - CONSTRUCTION JOINT
CLR. - CLEAR
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONST. - CONSTRUCTION
C.P. - CLOSURE POUR
CVN - CHARPY V-NOTCH
DIA. - DIAMETER
DIST. - DISTANCE
DND - DO NOT DISTURB
DWG. - DRAWING
E.F. - EACH FACE
EL. OR ELEV. - ELEVATION
EOP - EDGE OF PAVEMENT
EQ. - EQUAL
EST. - ESTIMATED
EX. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F/F - FACE TO FACE
FT. - FOOT OR FEET
FTG. - FOOTING
FWD. - FORWARD
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE
IN. - INCH
JT. - JOINT
LT. - LEFT
MAX. - MAXIMUM
MISC. - MISCELLANEOUS
MSE - MECHANICALLY STABILIZED EARTH
NB - NORTHBOUND
NO. - NUMBER
N.P.C.P.P - NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O - OUT TO OUT
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
PGL - PROFILE GRADE LINE
PROP. - PROP.
R - RADIUS
REF. - REFERENCE
RNDG. - ROUNDING
RT. - RIGHT
R/W - RIGHT OF WAY
SB - SOUTHBOUND
SCD - STANDARD CONSTRUCTION DRAWING
SER. - SERIES
SHD. OR SHLDR. - SHOULDER
SPA. - SPACE OR SPACES
STA. - STATION
STD. - STANDARD
STR - STRAIGHT
S.U.P. - SHARED USE PATH
T - TOP
T/T - TOE TO TOE
TEMP - TEMPORARY
T&B - TOP AND BOTTOM
TBR - TO BE REMOVED
TBRO - TO BE RELOCATED BY OTHERS
TBRR - TO BE REMOVED AND REPLACED
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
VAR. - VARIES
W.R.T. - WITH RESPECT TO

STRUCTURE GENERAL NOTES (2 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	5
TOTAL	64
SHEET	P. 490
TOTAL	618

FRA-71-19.10

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ESTIMATED QUANTITIES

CALC.	DATE	CHK'D	DATE
MJR	XX/YY/ZZ	XXX	XX/YY/ZZ

ITEM	ITEM EXT.	TOTAL LEFT	TOTAL RIGHT	GRAND TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE FRA-71-26.46 L (SFN 250XXXX)				RIGHT BRIDGE FRA-71-26.46 R (SFN 250XXXX)				SHEET REF.
							ABUT.	PIERS	SUPER.	GEN.	ABUT.	PIERS	SUPER.	GEN.	
202	11003				LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN									
202	22900				SY	APPROACH SLAB REMOVED									
503	11101				LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN									
505	11100				LS	PILE DRIVING MOBILIZATION									
507	00600				FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN									
507	00650				FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED									
509	10000				LB	EPOXY COATED STEEL REINFORCEMENT									
509	30020				FT	NO. 4 DEFORMED GFRP REINFORCEMENT									
511	33500				EA	SEMI-INTEGRAL DIAPHRAGM GUIDE									
511	34446				CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK									
511	34450				CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)									
511	44112				CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING									
511	46512				CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING									
512	10100				SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)									
512	33000				SY	TYPE 2 WATERPROOFING									
513	10280				LB	STRUCTURAL STEEL MEMBERS, LEVEL 4									
513	20000				EA	WELDED STUD SHEAR CONNECTORS									
514	00060				SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT									
514	00066				SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT									
516	13600				SF	2" PREFORMED JOINT FILLER									
516	13900				SF	2" PREFORMED EXPANSION JOINT FILLER									
516	14020				FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL									
516	44300				EA	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (17" x 18" x 4.983" WITH 14" x 25" x 2.0" TOP LOAD PLATE AND 18" x 19" x 2.0" BOT. LOAD PLATE AND W10x49 PEDESTAL)									
518	21050				SY	POROUS BACKFILL WITH GEOTEXTILE FABRIC									
518	40000				FT	6" PERFORATED CORRUGATED PLASTIC PIPE									
518	40010				FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS									
523	20001				EA	DYNAMIC LOAD TESTING, AS PER PLAN									
523	20501				EA	RESTRIKE, AS PER PLAN									
526	30000				SY	REINFORCED CONCRETE APPROACH SLABS (T=17")									
526	90030				FT	TYPE C INSTALLATION									
867	00100				LS	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL									
SPECIAL	53000400				EA	SPECIAL - STRUCTURES - SETTLEMENT PLATFORMS									

NOTES:

1. UNLESS NOTED OTHERWISE, ALL PAY ITEMS ARE INCLUDED IN THE FUNDING PARTICIPATION SPLIT CODE XX/YY/ZZ.
2. FOR MSE WALL ESTIMATED QUANTITIES, SEE SHEET 57.

STRUCTURE ESTIMATED QUANTITIES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
6	64

SHEET	TOTAL
P. 491	618

FRA-71-19.10

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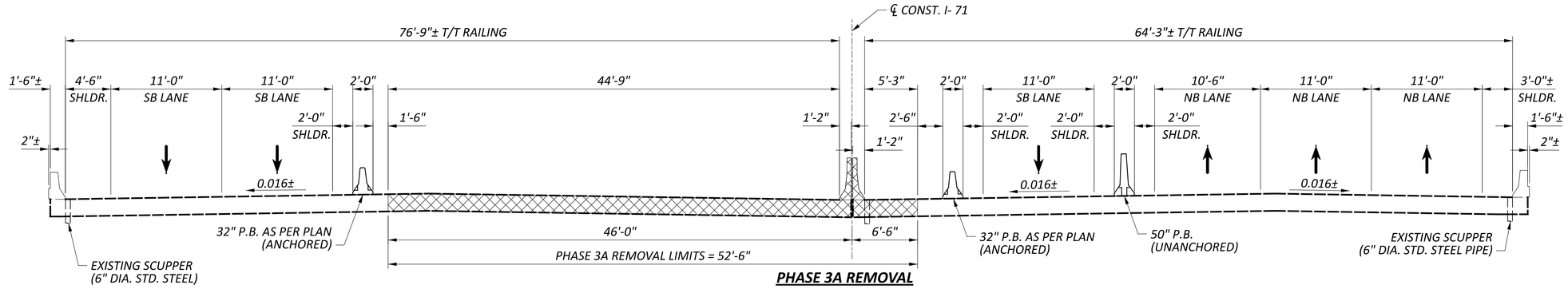
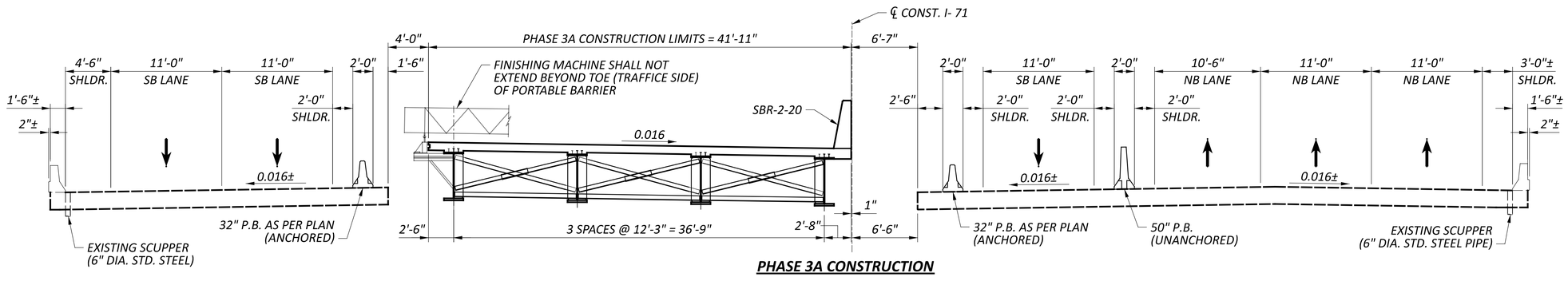
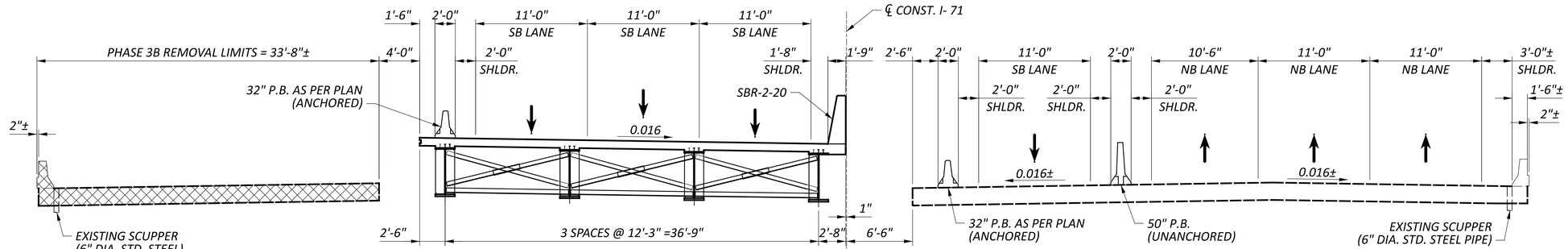


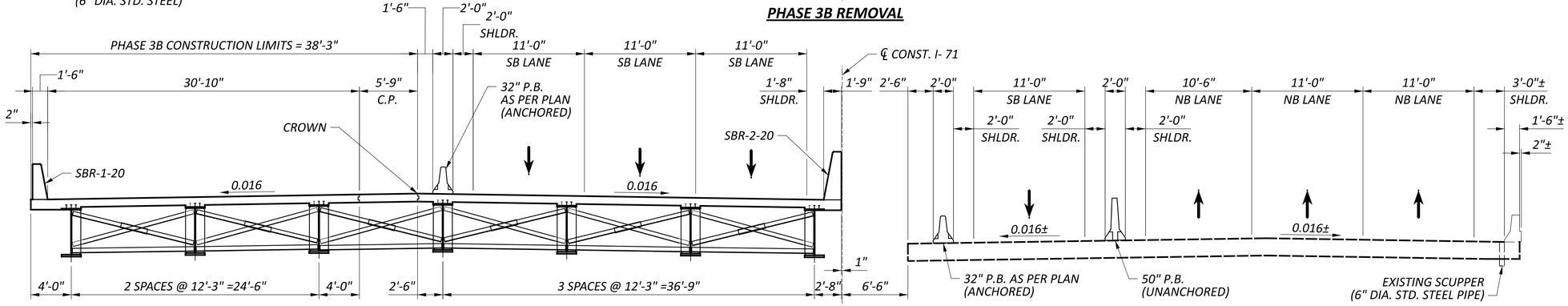
PHASE 3A REMOVAL



PHASE 3A CONSTRUCTION



PHASE 3B REMOVAL



PHASE 3B CONSTRUCTION

LEGEND:

- ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FINISHING MACHINE SHALL NOT EXTEND BEYOND TOE (TRAFFIC SIDE) OF ANCHORED BARRIER.
3. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES. SEE SHEET 4 FOR ADDITIONAL NOTES INCLUDING ANCHORAGE REQUIREMENTS.
4. PHASE CONSTRUCTION JOINTS ARE PARALLEL TO THE CENTERLINE CONSTRUCTION I-71. MAINTAIN TRAFFIC PER THE MAINTENANCE OF TRAFFIC PLANS. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE EXISTING STRUCTURE AND MAY ADJUST EDGE DISTANCES PROVIDED TO NON-TRAFFIC SIDE OF PORTABLE BARRIER AS APPROVED BY THE ENGINEER TO MEET THE VERIFIED CONDITIONS.
5. CROSSFRAMES NOT SHOWN FOR CLARITY. DO NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
6. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 5.

STAGED CONSTRUCTION DETAILS (1 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	7
TOTAL	64
SHEET	P. 492
TOTAL	618

FRA-71-19.10

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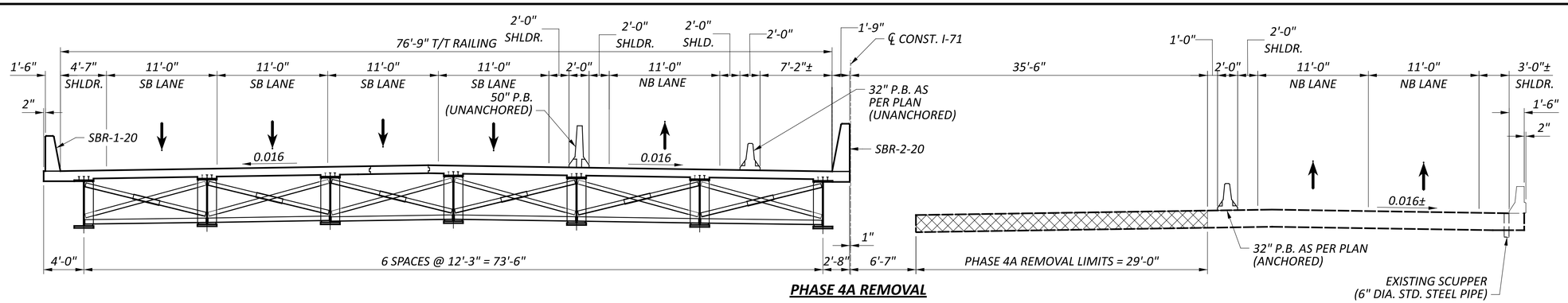
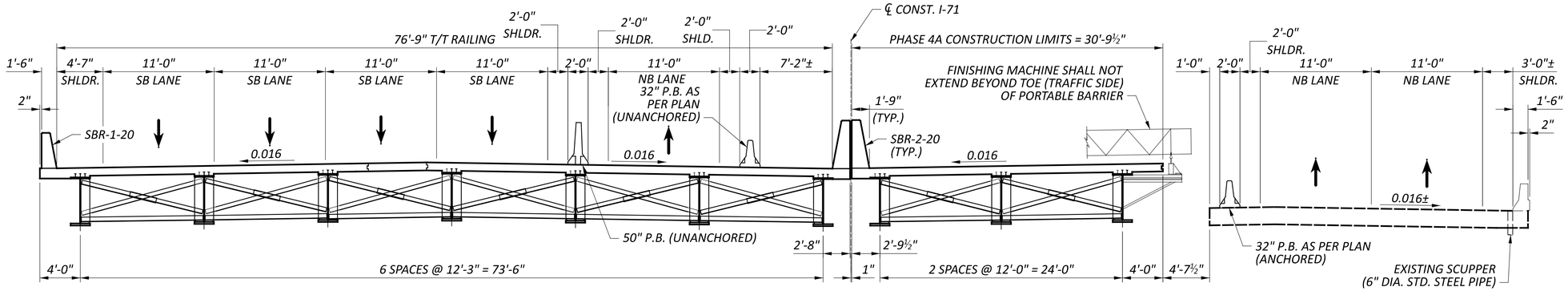
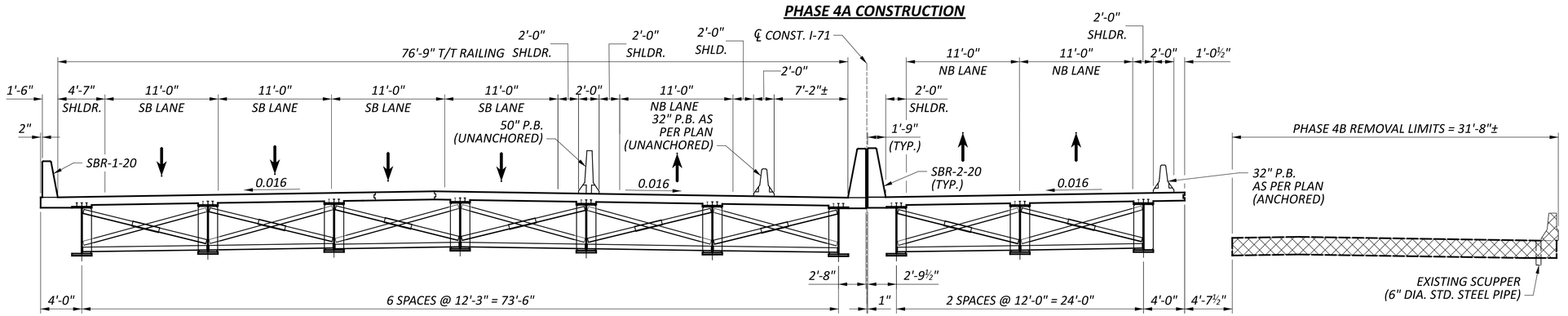


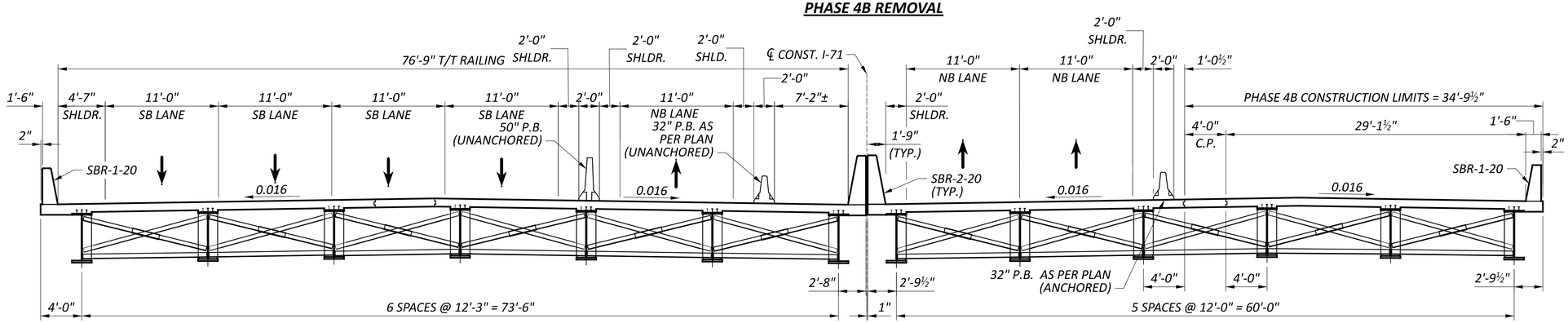
PHASE 4A REMOVAL



PHASE 4A CONSTRUCTION



PHASE 4B REMOVAL



PHASE 4B CONSTRUCTION

LEGEND:

- ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FINISHING MACHINE SHALL NOT EXTEND BEYOND TOE (TRAFFIC SIDE) OF ANCHORED BARRIER.
3. PORTABLE BARRIER INCLUDED WITH ROADWAY QUANTITIES. SEE SHEET 4 FOR ADDITIONAL NOTES INCLUDING ANCHORAGE REQUIREMENTS.
4. PHASE CONSTRUCTION JOINTS ARE PARALLEL TO THE CENTERLINE CONSTRUCTION I-71. MAINTAIN TRAFFIC PER THE MAINTENANCE OF TRAFFIC PLANS. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE EXISTING STRUCTURE AND MAY ADJUST EDGE DISTANCES PROVIDED TO NON-TRAFFIC SIDE OF PORTABLE BARRIER AS APPROVED BY THE ENGINEER TO MEET THE VERIFIED CONDITIONS.
5. CROSSFRAMES NOT SHOWN FOR CLARITY. DO NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
6. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 5.

STAGED CONSTRUCTION DETAILS (2 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	8
TOTAL	64
SHEET	P. 493
TOTAL	618

FRA-71-19.10

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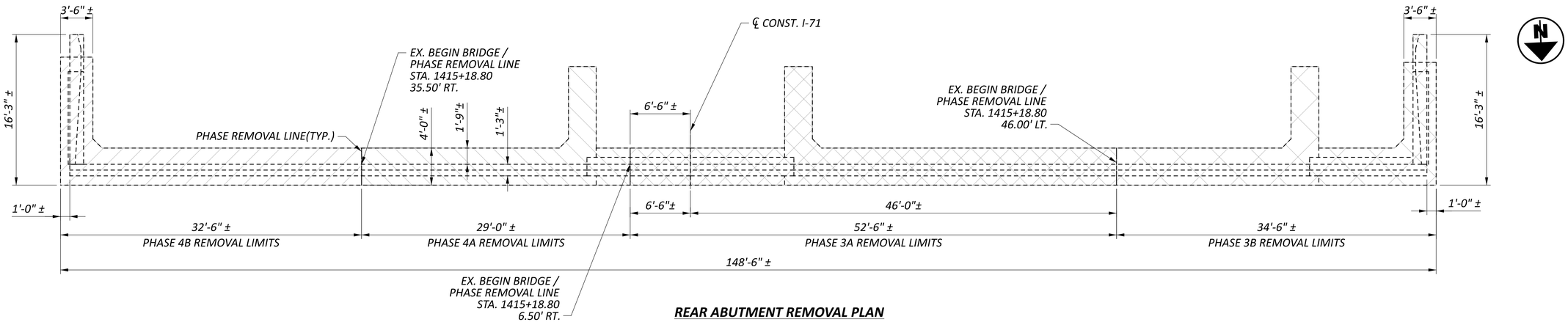
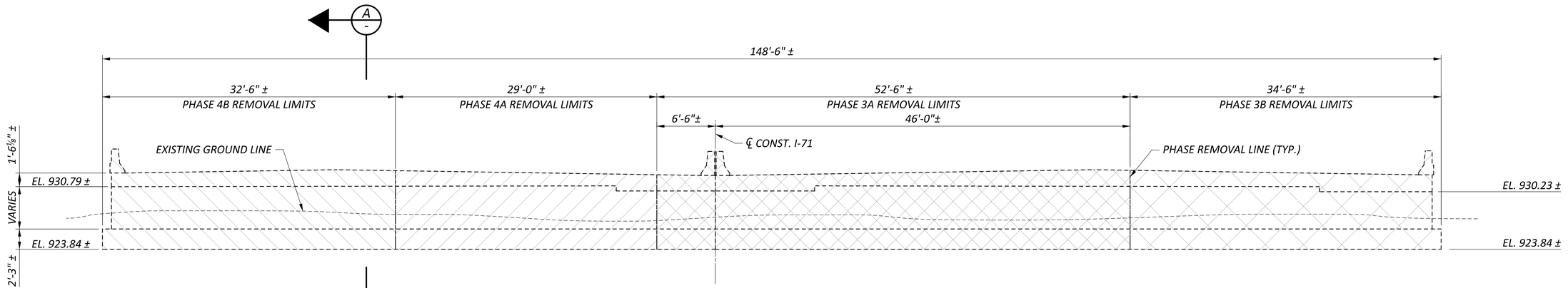
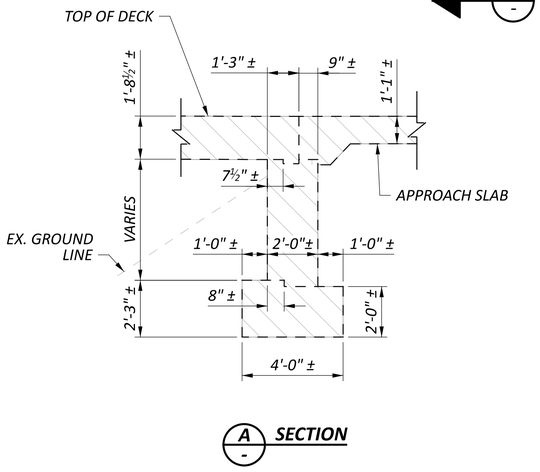


REAR ABUTMENT REMOVAL PLAN



REAR ABUTMENT REMOVAL ELEVATION



A SECTION
-

LEGEND:

- *PHASE 3A REMOVAL*
- *PHASE 3B REMOVAL*
- *PHASE 2A REMOVAL*
- *PHASE 2B REMOVAL*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 4 FOR ADDITIONAL NOTES.*
3. *EXISTING REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.*

EXISTING REAR ABUTMENT REMOVAL DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	9
TOTAL	64
SHEET	P. 494
TOTAL	618

FRA-71-19.10

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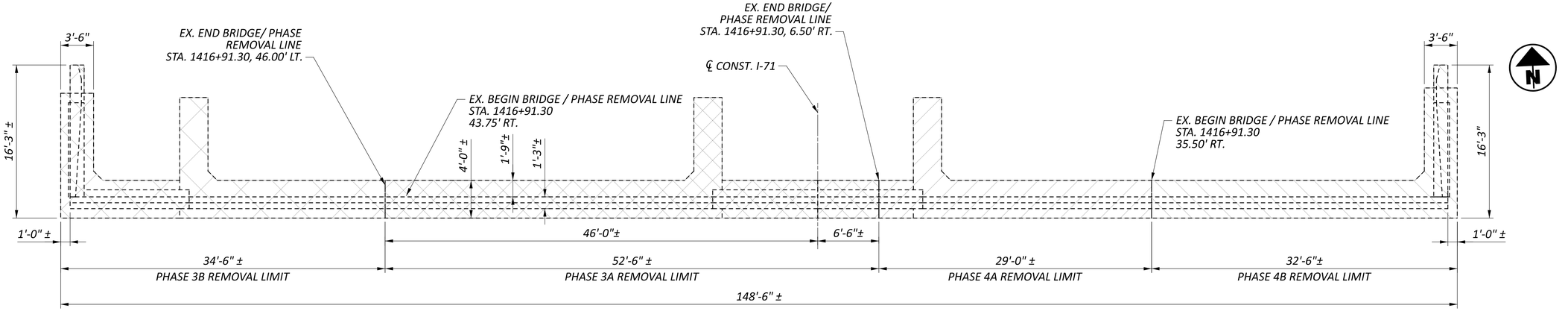
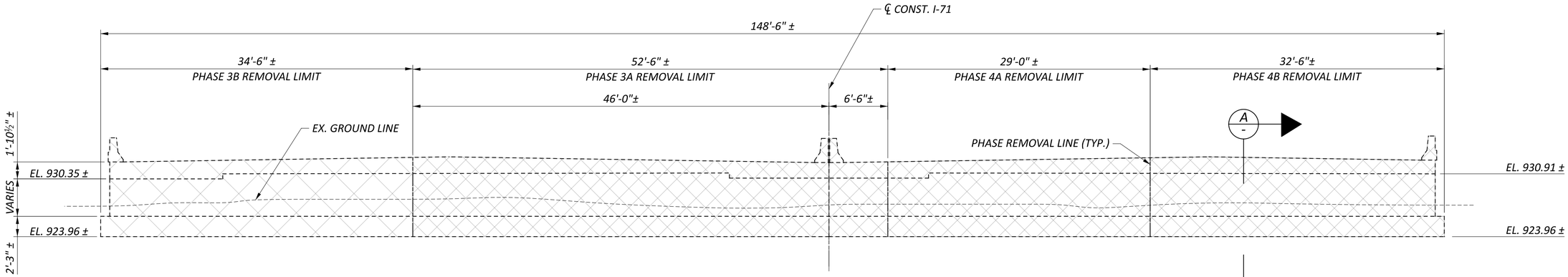
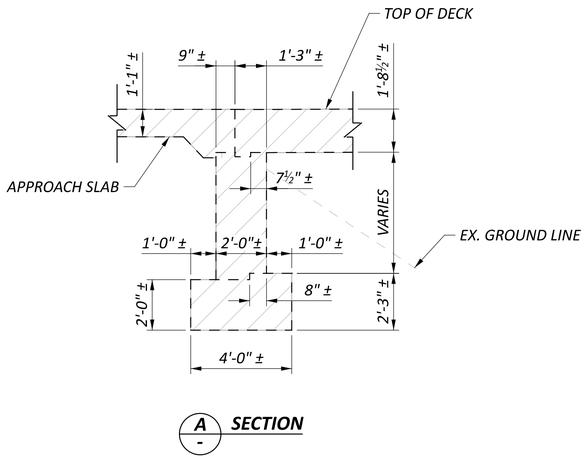


FORWARD ABUTMENT REMOVAL PLAN



FORWARD ABUTMENT REMOVAL ELEVATION



A
-
SECTION

LEGEND:

- *PHASE 3A REMOVAL*
- *PHASE 3B REMOVAL*
- *PHASE 4A REMOVAL*
- *PHASE 4B REMOVAL*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *ALL REMOVAL SHALL BE PAID FOR UNDER ITEM 202, STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 4 FOR ADDITIONAL NOTES.*
4. *EXISTING REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.*

EXISTING FORWARD ABUTMENT REMOVAL DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	10
TOTAL	64
SHEET	P. 495
TOTAL	618

FRA-71-19.10

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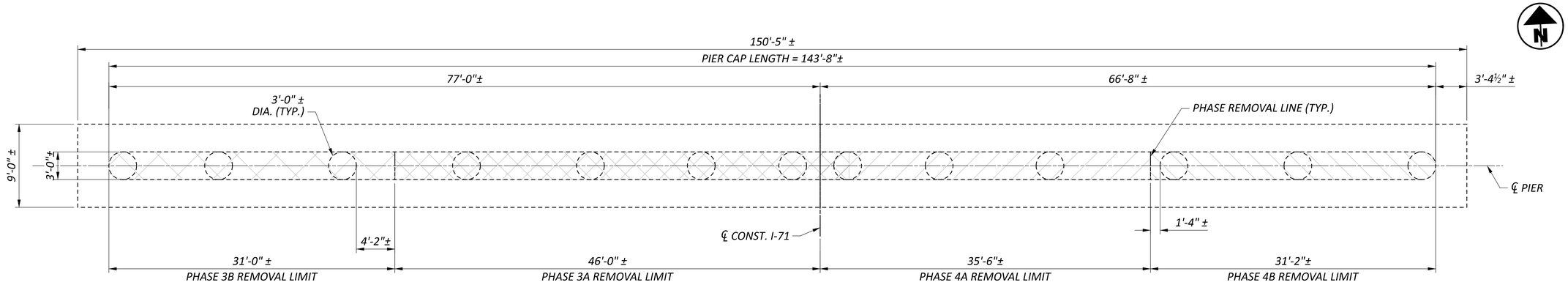
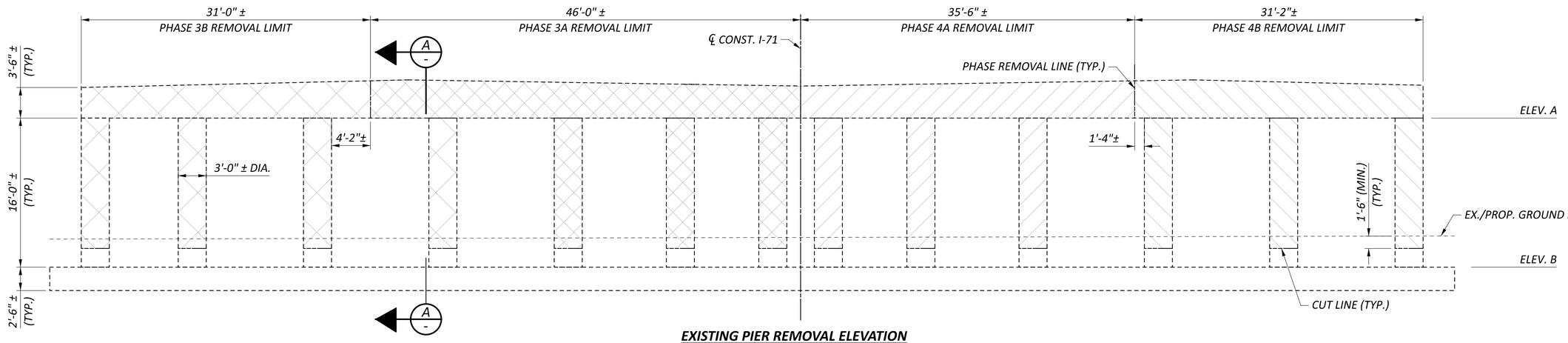
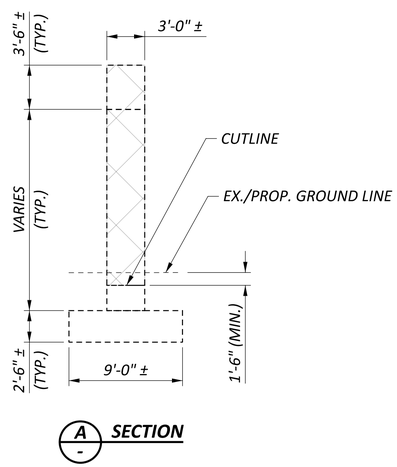


EXISTING PIER REMOVAL PLAN



EXISTING PIER REMOVAL ELEVATION
(EXISTING CONCRETE BARRIER NOT SHOWN FOR CLARITY)



A - **SECTION**

EXISTING PIER ELEVATIONS		
LOCATION	A	B
PIER #1	927.38±	911.44±
PIER #2	927.44±	911.44±
PIER #3	927.45±	911.44±

LEGEND:

- PHASE 3A REMOVAL
- PHASE 3B REMOVAL
- PHASE 4A REMOVAL
- PHASE 4B REMOVAL

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. ALL REMOVAL SHALL BE PAID UNDER ITEM 202, STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN. SEE SHEET 4 FOR ADDITIONAL NOTES.
3. EXISTING REINFORCING NOT SHOWN FOR CLARITY, REFER TO RECORD PLANS FOR REINFORCING.
4. ALL EXCAVATION REQUIRED TO REMOVE PORTIONS OF THE EXISTING PIERS SHALL BE INCLUDED FORPAYMENT UNDER ITEM 503 - UNCLASSIFIED EXCAVATION. REFER TO ROADWAY TYPICAL SECTIONS FOR PROPOSED PAVEMENT REPAIRS FOR SR-161.

EXISTING PIER REMOVAL DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
11	64

SHEET	TOTAL
P. 496	618

FRA-71-19.10

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ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

1.0 DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, THE 2nd EDITION OF THE "AASHTO GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS", 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2020, DATED JULY 2025.

2.0 OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF TEMPORARY WORKS.

3.0 DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (DRILLED SHAFT)

STEEL SOLDIER PILES - ASTM A572 GRADE 50 - YIELD STRENGTH 50 KSI

STEEL SHEET PILING - ASTM A572 GRADE 50 - YIELD STRENGTH 50 KSI

4.0 UNCLASSIFIED EXCAVATION:

THIS WORK CONSISTS OF ALL EXCAVATION NECESSARY TO PERFORM THE WORK DESCRIBED IN THE TEMPORARY SHORING WALL PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXCAVATION LIMITS NECESSARY FOR INSTALLATION OF THE WORK. THE CONTRACTOR MAY NOT EXCAVATE OR WORK OUTSIDE OF THE RIGHT OF WAY UNLESS OTHERWISE SHOWN IN THESE PLANS.

5.0 STEEL SOLDIER PILES

THE FOLLOWING STEEL PILE SECTIONS ARE INCLUDED IN THE DESIGN OF TEMPORARY SOLDIER PILE AND LAGGING WALLS:

STEEL PILES, MISC.: SOLDIER PILES HP14x73
STEEL PILES, MISC.: SOLDIER PILES W14x193

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50 IN ACCORDANCE WITH C&MS 711.01. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

6.0 DRILLED SHAFTS

THE FOLLOWING DRILLED SHAFT SIZES ARE INCLUDED IN THE DESIGN OF TEMPORARY SOLDIER PILE AND LAGGING WALLS:

DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR TEMPORARY SOLDIER PILE AND LAGGING WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL THE DRILLED SHAFTS IN ACCORDANCE WITH C&MS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

THE BOTTOM OF THE DRILLED SHAFT EXCAVATION SHALL BE AS CLEAN AS PRACTICAL PRIOR TO CONCRETE PLACEMENT. THE DRILLED SHAFT EXCAVATION SHALL BE INSPECTED BY THE ENGINEER IMMEDIATELY BEFORE THE CONCRETE IS PLACED. NO CONCRETE SHALL BE PLACED DURING INCLEMENT WEATHER CONDITIONS WHICH PROHIBIT A THOROUGH INSPECTION.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT WITHIN 3 INCHES OF THE PLAN LOCATION. PLACE THE SOLDIER PILE WITHIN THE HOLE SO IT IS VERTICAL AND NOT INCLINED MORE THAN 1 INCH BETWEEN TOP TO BOTTOM. PLACE THE SOLDIER PILES SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF DRILLED SHAFTS. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC1 CONCRETE ACCORDING TO C&MS 511. PLACE CONCRETE TO THE ELEVATION FOR THE TOP OF THE DRILLED SHAFT. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLIDER PILE IS ACCEPTABLE.

6.0 DRILLED SHAFTS CONTINUED...

CHECK THE POSITION, THE VERTICAL ALIGNMENT AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES. FILL THE HOLE ABOVE THE BOTTOM OF THE DRILLED SHAFT TO THE EXISTING GROUND SURFACE WITH ITEM C&MS 613 LOW STRENGTH MORTAR (LSM) BACKFILL.

REMOVE CONCRETE AND LSM AS NECESSARY FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE THE LAGGING. PLACE LAGGING SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE ENDS OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING. WAIT AT LEAST 12 HOURS AFTER PLACING CONCRETE IN THE DRILLED SHAFTS BEFORE PLACING LAGGING.

SEQUENCE OF INSTALLATION: INSTALL THE DRILLED SHAFTS IN SEQUENCE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48-HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THESE CRITERIA IS PERMISSIBLE.

PROTECTION OF UNATTENDED OPEN SHAFTS: COVER UNATTENDED OPEN SHAFTS. USE TEMPORARY COVERS OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. LEAVE NO DRILLED SHAFT EXCAVATION UN-POURED OVERNIGHT.

THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE LAGGING. ANY TEMPORARY GRADING, EXCAVATION, EMBANKMENT, AGGREGATE, DRAINAGE, SHEETING, ETC. NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

7.0 RETAINING WALL, TIMBER LAGGING:

THIS WORK CONSISTS OF FURNISHING AND PLACING TIMBER LAGGING BETWEEN THE SOLDIER PILES AS TEMPORARY SUPPORT FOR THE RETAINED SOIL. FURNISH TIMBER LAGGING CONSISTING OF CONSTRUCTION GRADE, UNTREATED HARDWOOD WITH A MINIMUM THICKNESS OF 3 INCHES UNLESS OTHERWISE SHOWN IN THE PLANS. TO PERMIT DRAINAGE, PROVIDE ¼ TO ½-INCH SPACES BETWEEN THE LAGGING BOARDS USING ⅜-INCH THICK SPACER BLOCKS OR OTHER MEANS ACCEPTABLE TO THE ENGINEER. PLACE THE LAGGING BOARDS BETWEEN THE FLANGES OF THE SOLDIER PILES AND BEARING AGAINST THE FLANGES ON THE EXPOSED SIDE OF THE WALL SO THAT THE SOLIDER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING BOARDS. PERFORM EXCAVATION FOR PLACEMENT OF THE LAGGING IN SUCH A MANNER THAT THE LAGGING IS TIGHT AGAINST THE EXCAVATION CUT FACE. BACKFILL ANY VOIDS BEHIND THE LAGGING WITH A SUITABLE COMPACTED GRANULAR MATERIAL CONFORMING TO C&MS 703.16.C ACCEPTABLE TO THE ENGINEER. THE COST OF ANY SUCH BACKFILLING REQUIRED, INCLUDING MATERIAL, PLACEMENT AND COMPACTION, IS INCIDENTAL TO THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

THE SAME SPECIES SHALL BE USED FOR ALL THE TIMBER MEMBERS REQUIRED. THE TIMBER MEMBERS SHALL BE OF A GRADE AND TYPE WITH AN ALLOWABLE EXTREME FIBER STRESS IN BENDING OF A MINIMUM OF 1250 PSI AND ALLOWABLE STRESS IN SHEAR OF A MINIMUM OF 85 PSI. THE WOOD SHALL BE SEASONED, SOUND, AND FREE FROM DECAY AND INSECT ATTACK, WITHOUT LOOSE AND/OR CLUTTER KNOTS. THE TIMBER LAGGING USED SHALL CONFORM TO THE REQUIREMENTS SHOWN IN THE PLANS. IF THE LAGGING USED AT ANY LOCATION IS FOUND TO BE INADEQUATE, THE CONTRACTOR IS RESPONSIBLE FOR ALL CORRECTIVE MEASURES. LAGGING MAY BE FIELD CUT.

8.0 ENGINEER DESIGNED TEMPORARY SHEETING:

FOR LOCATIONS OF TEMPORARY SHEET PILING REFER TO SHEETS XX THRU XX. STEEL SHEET PILING SHALL CONFORM TO ASTM A572 GRADE 50 WITH A MINIMUM YIELD STRENGTH OF 50 KSI, A MINIMUM SECTION MODULUS OF 48.5 IN3/FT, AND MINIMUM MOMENT OF INERTIA OF 361.22 IN4/FT. REFER TO THE TABLE BELOW FOR DESIGN REQUIREMENTS.

DESIGN CRITERIA:
MAXIMUM RETAINED HEIGHT, H: 20'-0"
EARTH PRESSURE: ACTIVE (Ka)
LIVE LOAD SURCHARGE: 250 PSF (UNFACTORED)
EXISTING ABUTMENT SOIL PRESSURE: 3000 PSF (UNFACTORED)
MAXIMUM PERMITTED DEFLECTION: 1%H

9.0 ENGINEER DESIGNED TEMPORARY SHEETING:

IN ADDITION TO THE LOCATIONS DEPICTED IN THE PLANS, TEMPORARY SHEETING MAY BE REQUIRED AT VARIOUS LOCATIONS/STAGES TO CONSTRUCT THE PROPOSED BRIDGE WORK. THE CONTRACTOR IS PERMITTED TO USE THE DESIGN SHOWN IN SECTION 8.0 PROVIDED THE THE USE DOES NOT EXCEED THE DESIGN CRITERIA SHOWN IN SECTION 8.0. ELSE THE CONTRACTOR SHALL DESIGN, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05 FOR TEMPORARY SUPPORT OF EXCAVATION.

10.0 REMOVAL OF TEMPORARY SHORING

REMOVE TEMPORARY SHORING WHEN NO LONGER REQUIRED TO SUPPORT THE EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS TO REMOVE AND/OR DECONSTRUCT TEMPORARY SHORING. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING AND PROPOSED STRUCTURE(S). THE CONTRACTOR SHALL PERFORM DEMOLITION OPERATIONS SUCH THAT THERE IS NOT ANY DAMAGE TO THE NEW STRUCTURE OR TO PORTIONS OF THE EXISTING STRUCTURE BEING TEMPORARILY MAINTAINED. THE USE OF EXPLOSIVES AND HEADACHE BALLS WILL NOT BE PERMITTED FOR ANY DEMOLITION OF TEMPORARY SHORING. UNLESS OTHERWISE NOTED, TEMPORARY SHORING SHALL BE REMOVED TO A MINIMUM OF 1 FOOT BELOW THE PROPOSED GROUND SURFACE AND/OR NEAREST PROPOSED BRIDGE ELEMENT (I.E. MSE LEVELING PAD, ABUTMENT FOOTING, ETC.).

STEEL SHEET PILING - LEFT IN PLACE

EXTRACTION OF SHEET PILING NEAR TEMPORARY WIRE FACED MSE WALL MAY UNACCEPTABLY DEFORM THE NEARBY TEMPORARY WIRE FACED MSE WALL(S). THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND TEMPORARY WIRE FACED MSE WALL SUPPLIER ON THE SAFE EXTRACTION OF SHEET PILING NEAR SUCH WALLS. THE CONTRACTOR IS PERMITTED TO LEAVE SHEET PILING IN PLACE AS APPROVED BY THE ENGINEER.

ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED WITH THE CONTRACT THE CONTRACT LUMP SUM PRICE BID FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

11.0 METHOD OF MEASUREMENT AND PAYMENT:

THIS WORK INCLUDES ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL TEMPORARY SHORING AS DESCRIBED HEREIN. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SHORING (E.G. SOLDIER PILE AND LAGGING WALLS, SHEET PILE WALLS) AT THE CONTRACT LUMP SUM PRICE BID FOR ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

TEMPORARY SHORING NOTES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN
TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER
MJR 03/13/26

PROJECT ID
109164

SUBSET	TOTAL
12	64

SHEET	TOTAL
P. 497	618

FRA-71-19.10

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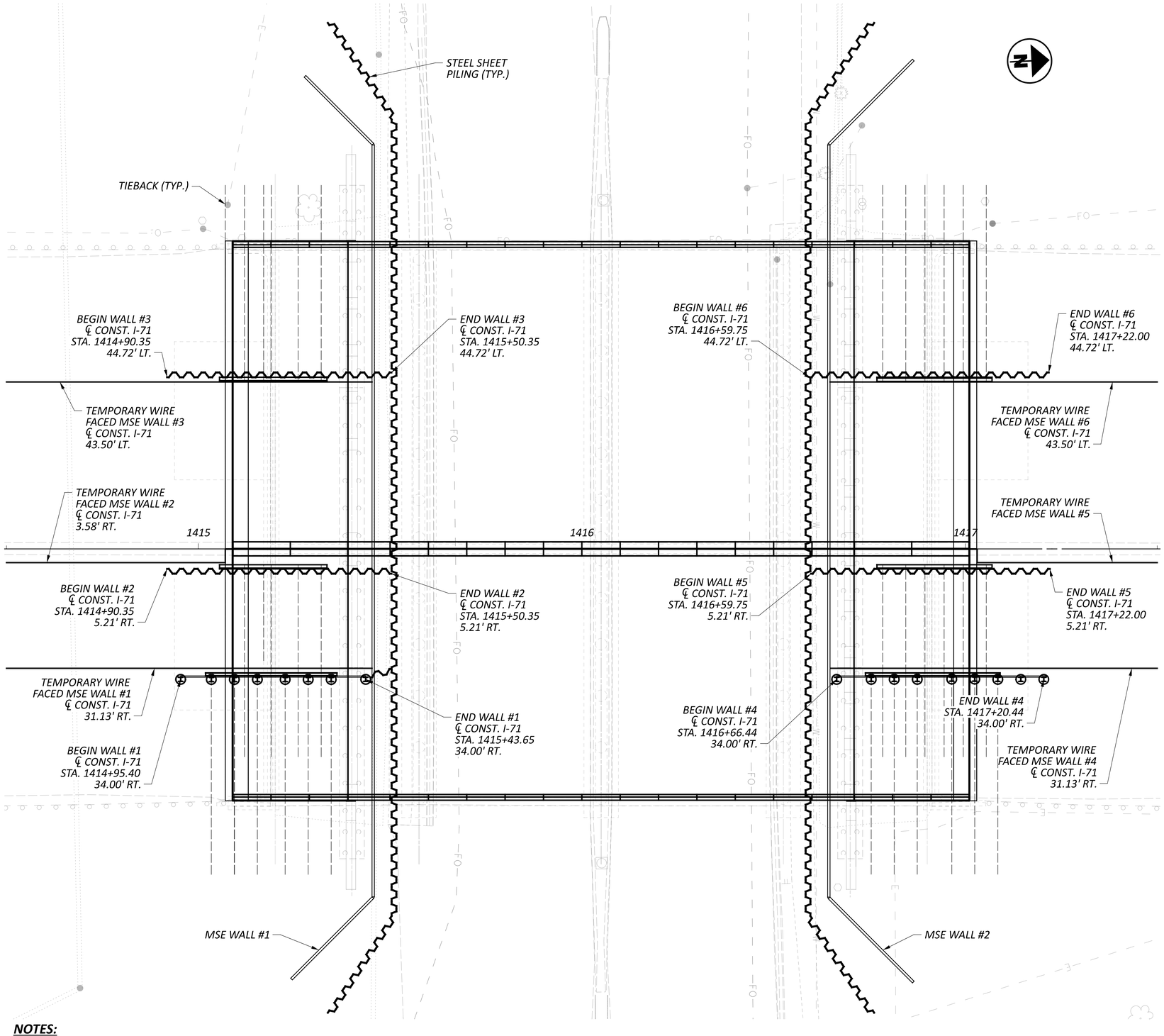

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5/63.
2. STATIONS AND OFFSETS ARE SHOWN AT ℄ SOLDIER PILE WALLS AND AT THE EXPOSED FACE OF THE SHEET PILE WALLS

TEMPORARY SHORING - PLAN

TEMPORARY SHORING - CONSTRUCTION SEQUENCE

PHASE 3A REMOVAL & CONSTRUCTION

1. REMOVE PORTIONS OF EXISTING FRA-71-26.46 L (SOUTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENTS, PIERS, PAVEMENT, MEDIAN BARRIER AND CAPPED MEDIAN CONCRETE SLOPE PROTECTION TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS.
2. INSTALL SHEET PILING WALLS #2, #3, #5 & #6, AS SHOWN IN THE PLANS.
3. EXCAVATE TO THE DEPTH OF THE TOPMOST WALER FOR THE UPPER TIEBACKS. REMOVE TEMPORARY SHORING SYSTEMS FROM PHASE 2A ENCOUNTERED DURING EXCAVATION. CUT TIEBACKS WHERE ENCOUNTERED.
4. INSTALL WALER AND UPPER TIEBACKS.
5. REPEAT STEPS 3 AND 4 TO THE DEPTH OF WALER FOR THE NEXT LEVEL OF TIEBACKS. EXCAVATE AND INSTALL LAGGING IN TOP-DOWN MANNER TO BOTTOM OF EXCAVATION.
6. REMOVE SHEET PILING OR CUT AT MINIMUM ELEVATION OF 1 FOOT BELOW THE FINISHED GROUND LINE.
7. INSTALL THE TEMPORARY WIRE FACED MSE WALL AND EMBANKMENT TO SUPPORT THE PROPOSED ROADWAY APPROACH EMBANKMENT IN PHASE 3A.
8. COMPLETE PHASE 3A SUPERSTRUCTURE CONSTRUCTION OF BRIDGE AND APPROACH.

PHASE 3B REMOVAL & CONSTRUCTION

1. REMOVE REMAINING PORTIONS OF EXISTING FRA-71-26.46 L (SOUTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENT, PIERS, AND PAVEMENT TO ALLOW FOR PROPOSED WORK.
2. EXCAVATE. REMOVE TEMPORARY SHORING SYSTEMS FROM PHASE 3A ENCOUNTERED DURING EXCAVATION. CUT SOLDIER PILES A MAXIMUM OF 1 FOOT ABOVE THE BOTTOM OF EXCAVATION. CUT TIEBACKS WHERE ENCOUNTERED.
3. COMPLETE PHASE 3B ABUTMENT AND MSE WALL CONSTRUCTION.
4. CONSTRUCT THE EMBANKMENT TO SUPPORT THE PROPOSED ROADWAY APPROACH EMBANKMENT IN PHASE 3B.
5. REMOVE SHEET PILING OR CUT AT MINIMUM ELEVATION OF 1 FOOT BELOW THE FINISHED GROUND LINE.
6. COMPLETE PHASE 3B SUPERSTRUCTURE CONSTRUCTION OF BRIDGE AND APPROACH.

PHASE 4A REMOVAL & CONSTRUCTION

1. REMOVE PORTIONS OF EXISTING FRA-71-26.46 R (NORTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENTS, PIERS AND PAVEMENT TO ALLOW FOR INSTALLATION OF TEMPORARY SHORING SYSTEMS AND PROPOSED WORK.
2. DRILL SHAFTS AND INSTALL SOLDIER PILES (WALL #1 AND #4).
3. EXCAVATE TO THE DEPTH OF THE TOPMOST WALER FOR THE UPPER TIEBACKS. REMOVE TEMPORARY SHORING SYSTEMS FROM PHASE 3A ENCOUNTERED DURING EXCAVATION. CUT TIEBACKS WHERE ENCOUNTERED.
4. INSTALL WALER AND UPPER TIEBACKS.
5. REPEAT STEPS 3 AND 4 TO THE DEPTH OF WALER FOR THE NEXT LEVEL OF TIEBACKS.
6. COMPLETE PHASE 4A ABUTMENT AND MSE WALL CONSTRUCTION.
7. INSTALL THE TEMPORARY WIRE FACED MSE WALL AND EMBANKMENT TO SUPPORT THE PROPOSED ROADWAY APPROACH EMBANKMENT IN PHASE 4A.
8. REMOVE SHEET PILING OR CUT AT MINIMUM ELEVATION OF 1 FOOT BELOW THE FINISHED GROUND LINE.
9. COMPLETE PHASE 4A SUPERSTRUCTURE CONSTRUCTION OF BRIDGE AND APPROACH.

PHASE 4B REMOVAL & CONSTRUCTION

1. REMOVE REMAINING PORTIONS OF EXISTING FRA-71-26.46 R (NORTHBOUND) BRIDGE, APPROACH SLABS, ABUTMENT, PIERS, AND PAVEMENT TO ALLOW FOR PROPOSED WORK.
2. EXCAVATE. REMOVE TEMPORARY SHORING SYSTEMS FROM PHASE 3A OR 4A ENCOUNTERED DURING EXCAVATION. CUT TIEBACKS WHERE ENCOUNTERED.
3. COMPLETE PHASE 4B ABUTMENT AND MSE WALL CONSTRUCTION.
4. CONSTRUCT THE EMBANKMENT TO SUPPORT THE PROPOSED ROADWAY APPROACH EMBANKMENT IN PHASE 4B.
5. CUT SOLDIER PILES A MAXIMUM OF 1 FOOT ABOVE THE BOTTOM OF EXCAVATION.
6. COMPLETE PHASE 4B SUPERSTRUCTURE CONSTRUCTION OF BRIDGE AND APPROACH.

TEMPORARY SHORING PLAN
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	13
TOTAL	64
SHEET	P. 498
TOTAL	618

FRA-71-19.10

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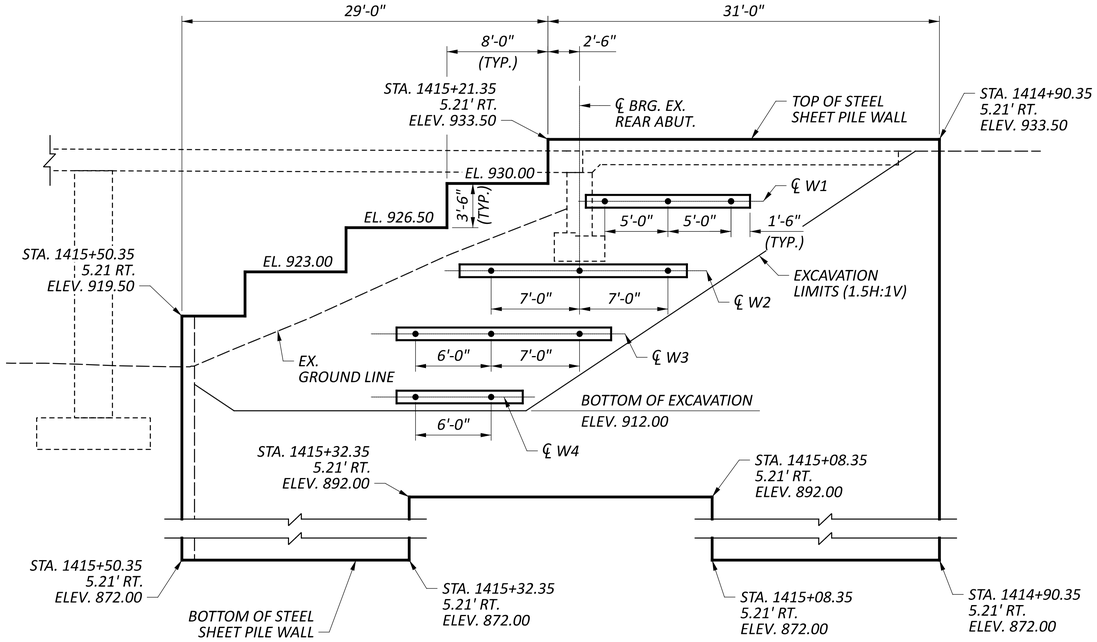
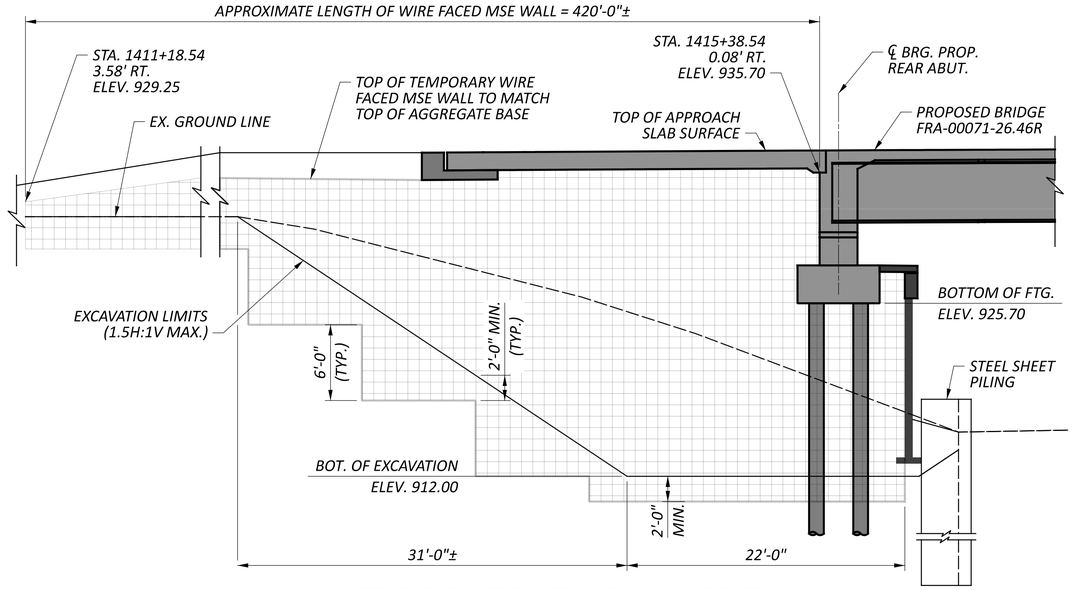


TEMPORARY SHORING WALL #2 ELEVATION
(LOOKING EAST)

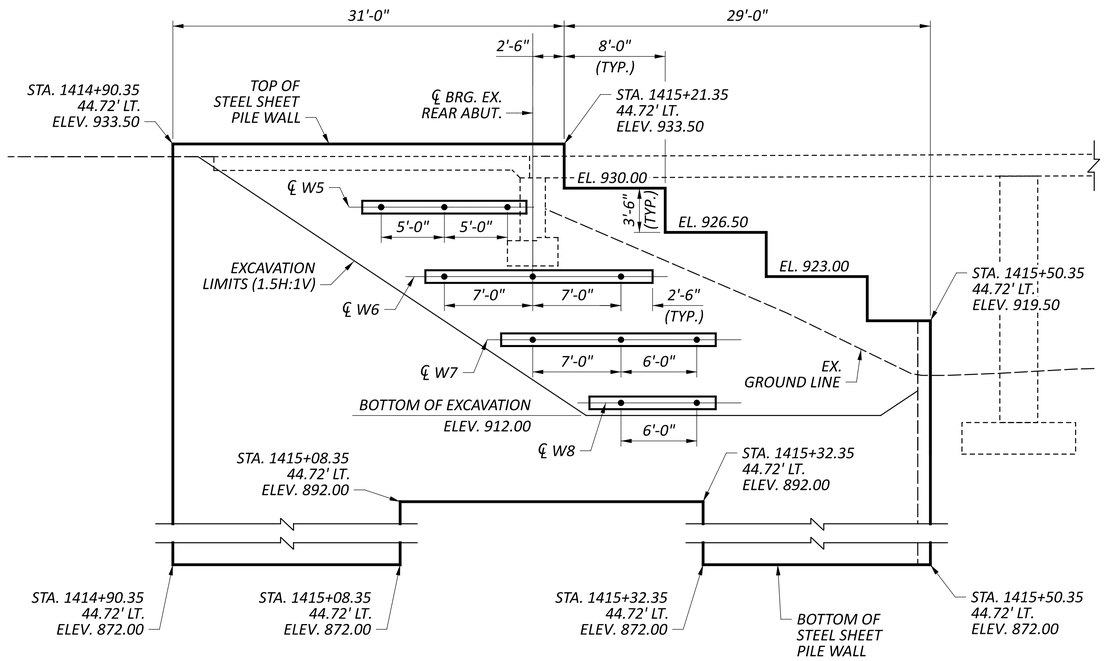


TEMPORARY WIRE FACED MSE WALL #2 ELEVATION
(LOOKING WEST)

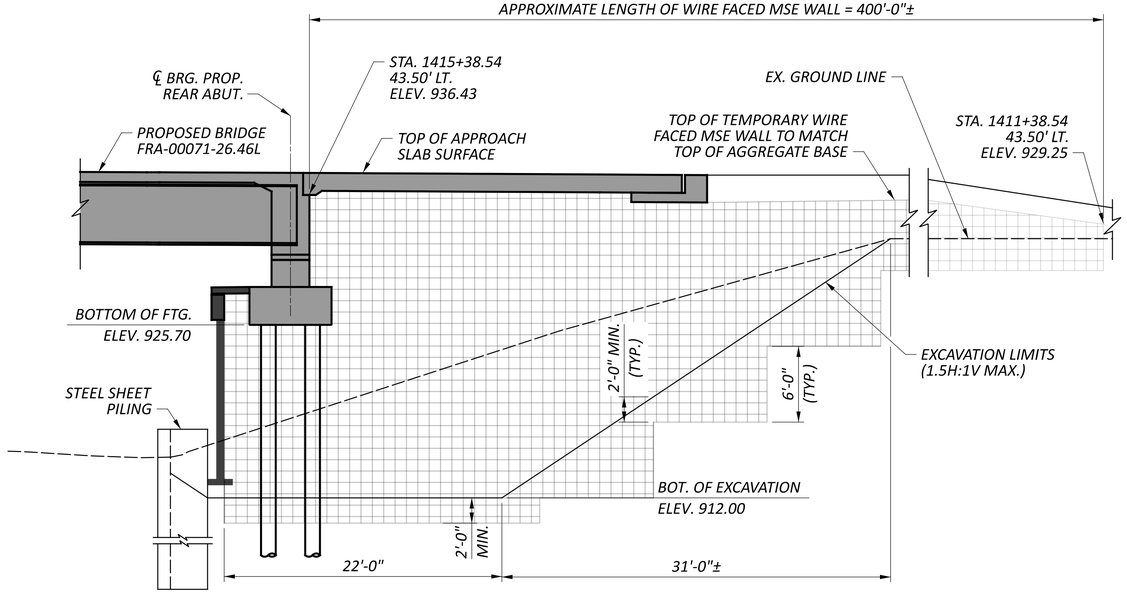
LEGEND:

TEMPORARY WIRE FACED MSE WALL

WALL #2 AND #3 WALER AND TIE-BACK ANCHOR INFORMATION						
WALER NO.	CL WALER EL.	WALER LENGTH	NUMBER OF ANCHORS	ANCHOR INCLINATION	LOCK-OFF LOAD (K/FT)	FACTORED DESIGN LOAD (K/FT)
W1	928.50	13'-0"	3	15°	7	9
W2	923.00	17'-0"	3	15°	10	13
W3	918.00	16'-0"	3	15°	10	13
W4	913.00	9'-0"	2	15°	10	13
W5	928.50	13'-0"	3	15°	7	9
W6	923.00	17'-0"	3	15°	10	13
W7	918.00	16'-0"	3	15°	10	13
W8	913.00	9'-0"	2	15°	10	13



TEMPORARY SHORING WALL #3 ELEVATION
(LOOKING WEST)



TEMPORARY WIRE FACED MSE WALL #3 ELEVATION
(LOOKING EAST)

TEMPORARY SHORING ELEVATIONS (1 OF 3)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER MJR 03/05/26

PROJECT ID 109164

SUBSET	TOTAL
14	64

SHEET	TOTAL
P. 499	618

FRA-71-19.10

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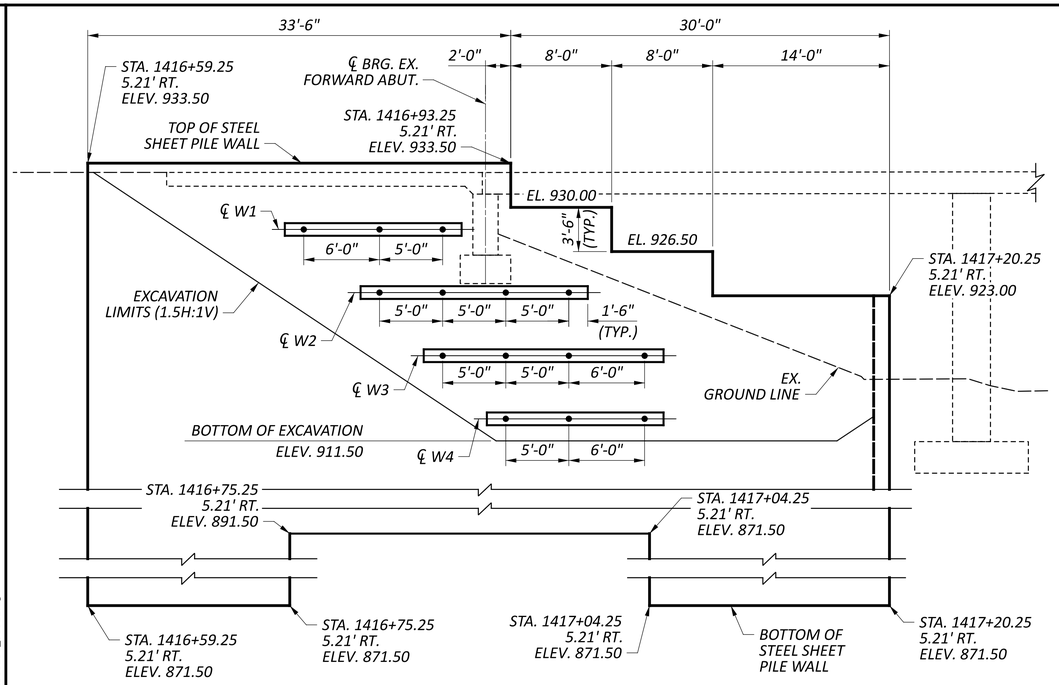

TEMPORARY SHORING WALL #5 ELEVATION
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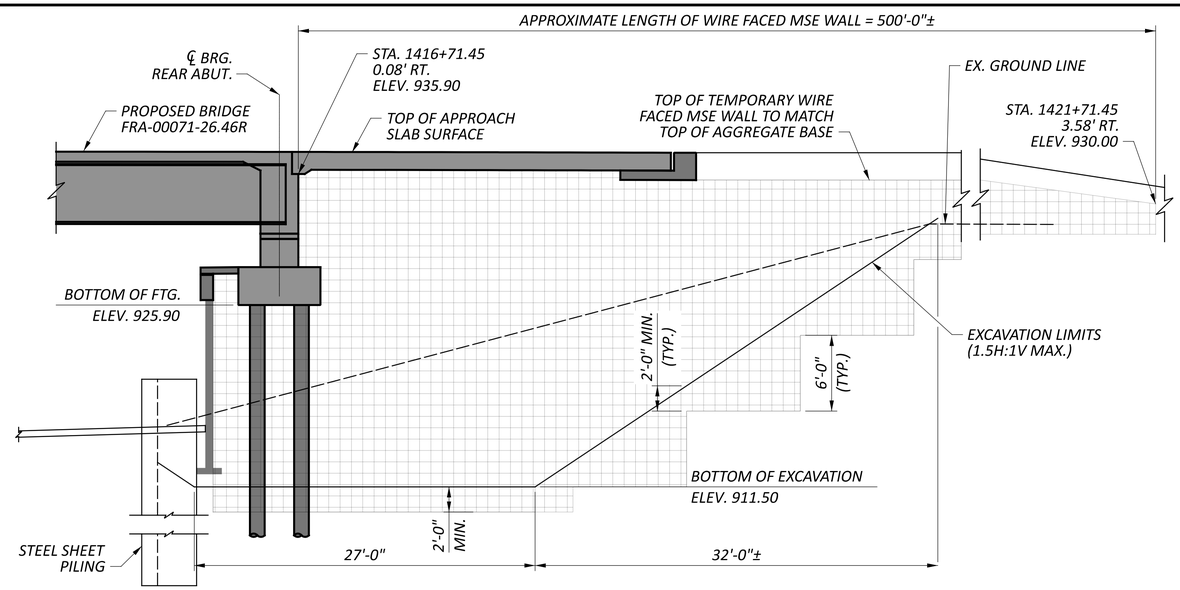
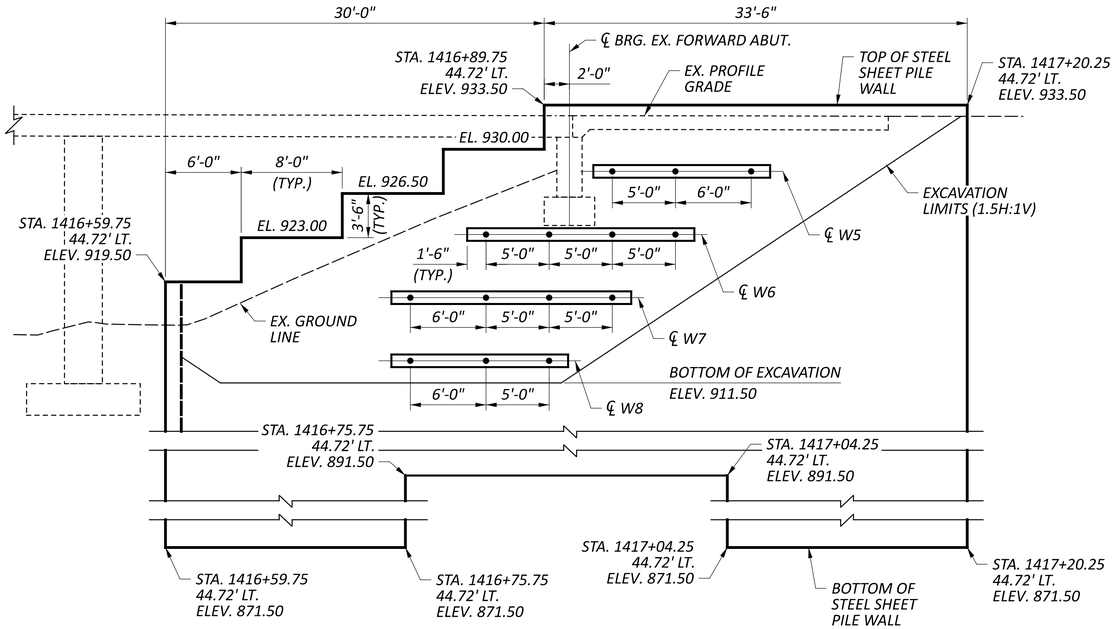


TEMPORARY WIRE FACED MSE WALL #5 ELEVATION
(LOOKING EAST)

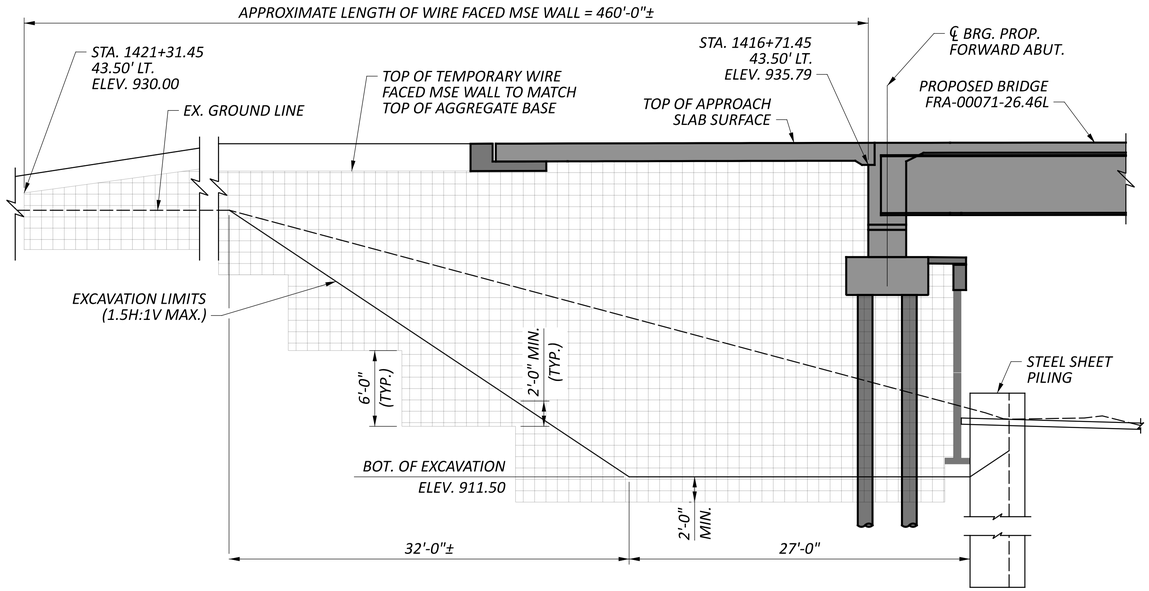
LEGEND:

TEMPORARY WIRE FACED MSE WALL

WALL #5 AND #6 WALER AND TIE-BACK ANCHOR INFORMATION						
WALER NO.	CL WALER EL.	WALER LENGTH	NUMBER OF ANCHORS	ANCHOR INCLINATION	LOCK-OFF LOAD (K/FT)	FACTORED DESIGN LOAD (K/FT)
W1	928.25	14'-0"	3	15°	10	19
W2	923.25	18'-0"	4	15°	10	19
W3	918.25	19'-0"	4	15°	10	19
W4	913.25	14'-0"	3	15°	10	19
W5	928.25	14'-0"	3	15°	10	19
W6	923.25	18'-0"	4	15°	10	19
W7	918.25	19'-0"	4	15°	10	19
W8	913.25	14'-0"	3	15°	10	19



TEMPORARY SHORING WALL #6 ELEVATION
(LOOKING WEST)



TEMPORARY WIRE FACED MSE WALL #6 ELEVATION
(LOOKING EAST)

TEMPORARY SHORING ELEVATIONS (2 OF 3)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER MAN
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 15 | TOTAL 64
SHEET P. 500 | TOTAL 618

FRA-71-19.10

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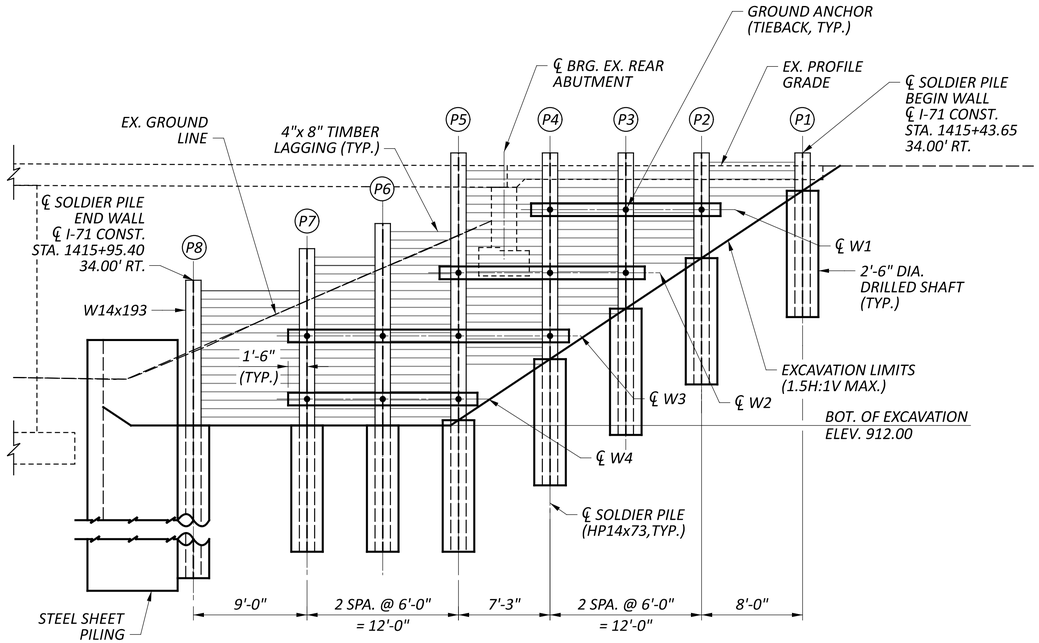
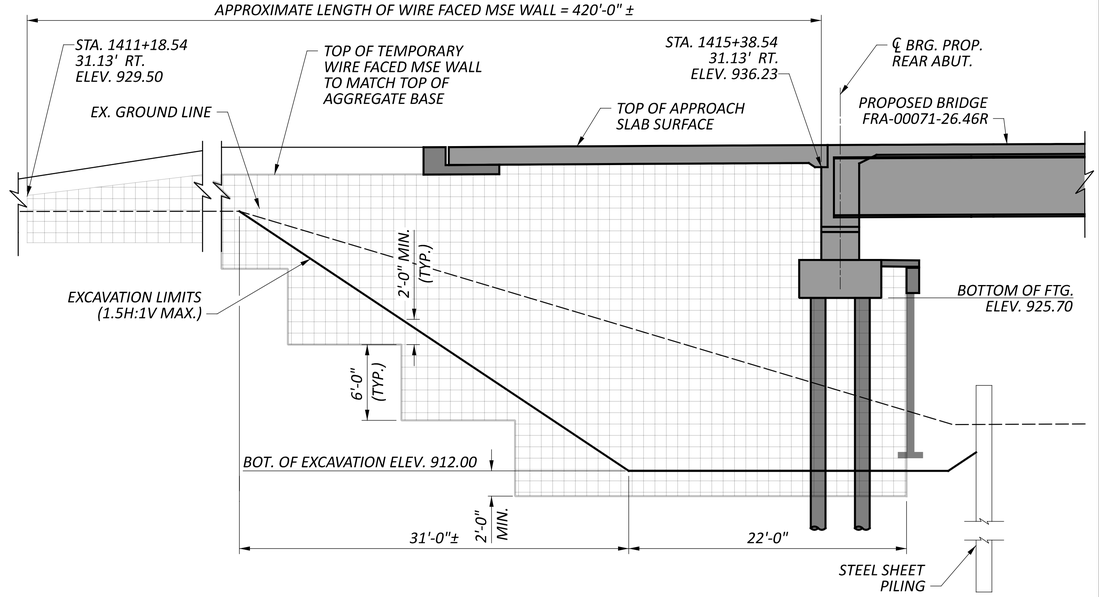


TEMPORARY SHORING WALL #1 ELEVATION
(LOOKING EAST)

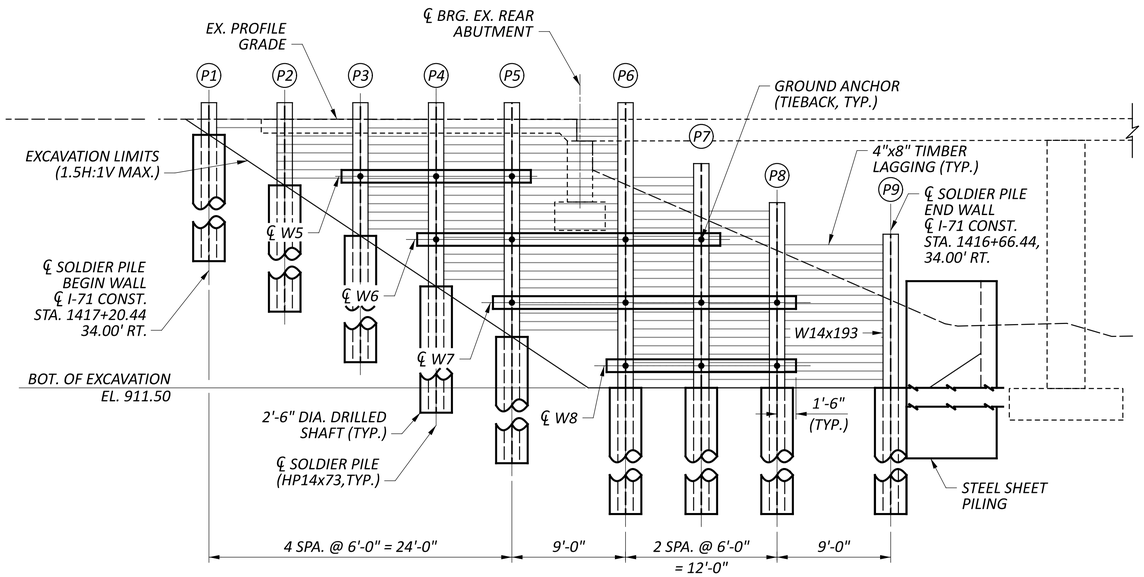


TEMPORARY WIRE FACED MSE WALL #1 ELEVATION
(LOOKING WEST)

WALL #1 AND #4 WALER AND TIE-BACK ANCHOR INFORMATION						
WALER NO.	CL WALER EL.	WALER LENGTH	NUMBER OF ANCHORS	ANCHOR INCLINATION	LOCK-OFF LOAD (K/FT)	FACTORED DESIGN LOAD (K/FT)
W1	929.00	15'-0"	3	15°	7	9
W2	924.00	16'-3"	3	15°	10	14
W3	919.00	22'-3"	4	15°	10	14
W4	914.00	15'-0"	3	15°	10	14
W5	928.25	15'-0"	3	15°	7	10
W6	923.25	24'-0"	4	15°	10	16
W7	918.25	24'-0"	4	15°	10	16
W8	913.25	15'-0"	3	15°	10	16

LEGEND:

TEMPORARY WIRE FACED MSE WALL



TEMPORARY SHORING WALL #4 ELEVATION
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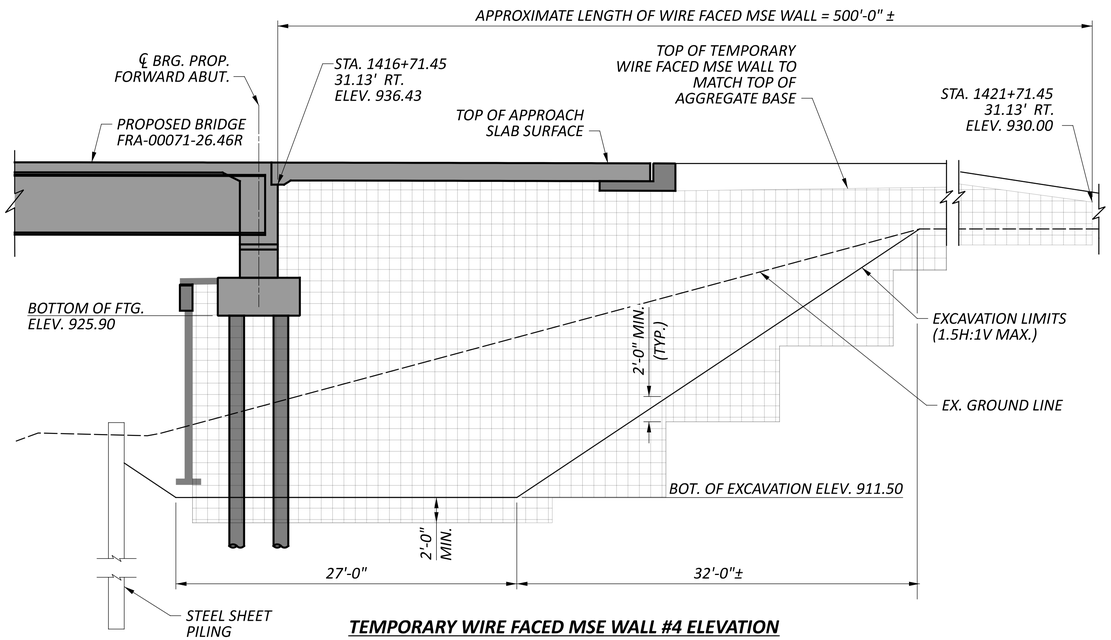

TEMPORARY WIRE FACED MSE WALL #4 ELEVATION
(LOOKING WEST)

TEMPORARY SHORING ELEVATIONS (3 OF 3)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

CTY-RTE-SECTION

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER MJR 03/05/26

PROJECT ID 109164

SUBSET	TOTAL
16	64

SHEET	TOTAL
P. 501	618

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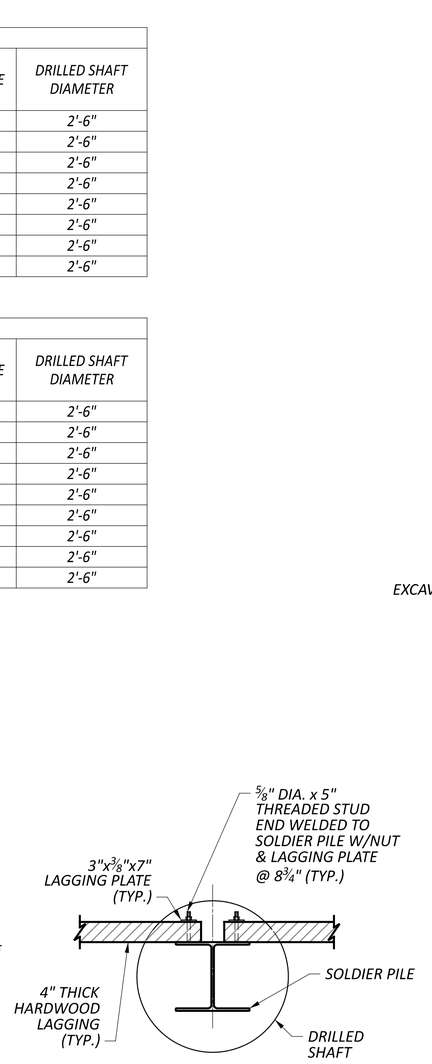
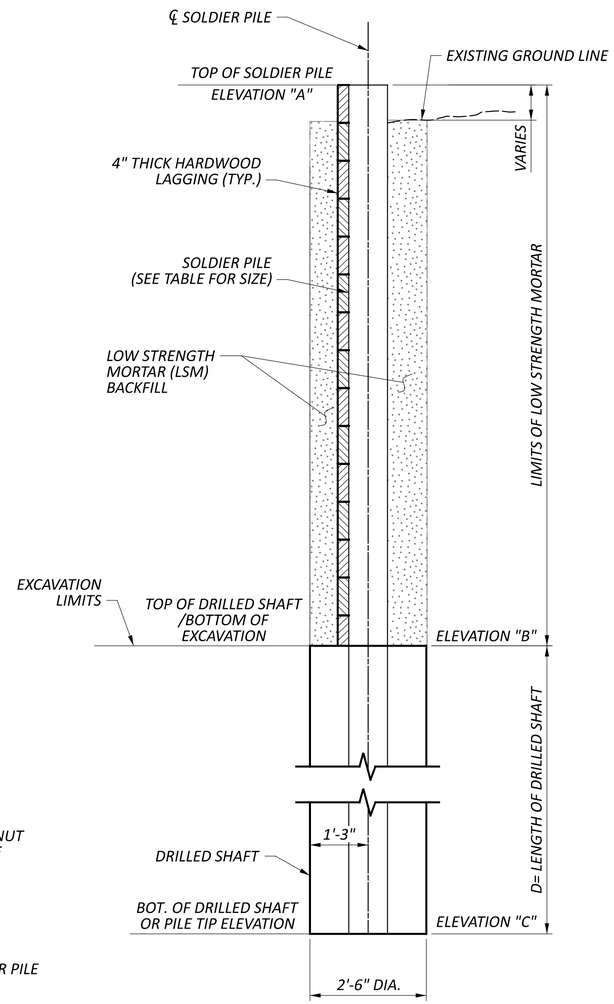
TEMPORARY SHORING WALL #1								
SOLDIER PILE NO.	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET (FROM ℄ CONST. I-71)	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	BOT. OF DRILLED SHAFT OR PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "D"	SOLDIER PILE SIZE	DRILLED SHAFT DIAMETER
P1	1414+95.40	34.00' RT.	924.00	912.00	887.00	25'-0"	W14x193	2'-6"
P2	1415+03.40	34.00' RT.	926.00	912.00	897.00	15'-0"	HP14x73	2'-6"
P3	1415+09.40	34.00' RT.	928.00	912.00	897.00	15'-0"	HP14x73	2'-6"
P4	1415+15.40	34.00' RT.	939.42	912.42	897.42	15'-0"	HP14x73	2'-6"
P5	1415+22.65	34.00' RT.	938.25	917.25	902.25	15'-0"	HP14x73	2'-6"
P6	1415+28.65	34.00' RT.	938.25	921.25	906.25	15'-0"	HP14x73	2'-6"
P7	1415+34.65	34.00' RT.	938.25	925.25	910.25	15'-0"	HP14x73	2'-6"
P8	1415+43.65	34.00' RT.	933.59	930.59	915.59	15'-0"	HP14x73	2'-6"

TEMPORARY SHORING WALL #4								
SOLDIER PILE NO.	SOLDIER PILE STATION ALONG ℄ CONST. I-71	SOLDIER PILE OFFSET (FROM ℄ CONST. I-71)	TOP OF SOLDIER PILE ELEVATION "A"	TOP OF DRILLED SHAFT ELEVATION "B"	BOT. OF DRILLED SHAFT OR PILE TIP ELEVATION "C"	LENGTH OF DRILLED SHAFT "D"	SOLDIER PILE SIZE	DRILLED SHAFT DIAMETER
P1	1416+66.44	34.00' RT.	924.00	931.53	916.53	15'-0"	W14x193	2'-6"
P2	1416+75.44	34.00' RT.	926.00	927.53	897.53	30'-0"	W14x193	2'-6"
P3	1416+81.44	34.00' RT.	928.00	923.53	908.53	15'-0"	HP14x73	2'-6"
P4	1416+87.44	34.00' RT.	939.42	919.53	904.53	15'-0"	HP14x73	2'-6"
P5	1416+96.44	34.00' RT.	938.25	915.53	900.53	15'-0"	HP14x73	2'-6"
P6	1417+02.44	34.00' RT.	938.25	911.50	896.50	15'-0"	HP14x73	2'-6"
P7	1417+08.44	34.00' RT.	938.25	911.50	896.50	15'-0"	HP14x73	2'-6"
P8	1417+14.44	34.00' RT.	933.59	911.50	896.50	15'-0"	HP14x73	2'-6"
P9	1417+20.44	34.00' RT.	933.59	911.50	881.50	30'-0"	W14x193	2'-6"

SOLDIER PILE & LAGGING WALL SCHEDULE

SECTION A-A





SOLDIER PILE & LAGGING WALL TYPICAL SECTION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. STATIONS AND OFFSETS ARE SHOWN AT THE CENTERLINE OF THE SOLDIER PILE WALLS AND AT THE EXPOSED FACE OF THE SHEET PILE WALLS. THE STATIONS AND OFFSETS ARE BARSED ON THE ℄ CONSTRUCTION I-71.
3. SOLDIER PILES SHALL BE GRADE 50 (50 KSI) STEEL.

SOLDIER PILE SCHEDULE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
DBL	MAN

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
17	64

SHEET	TOTAL
P. 502	618

FRA-71-19.10

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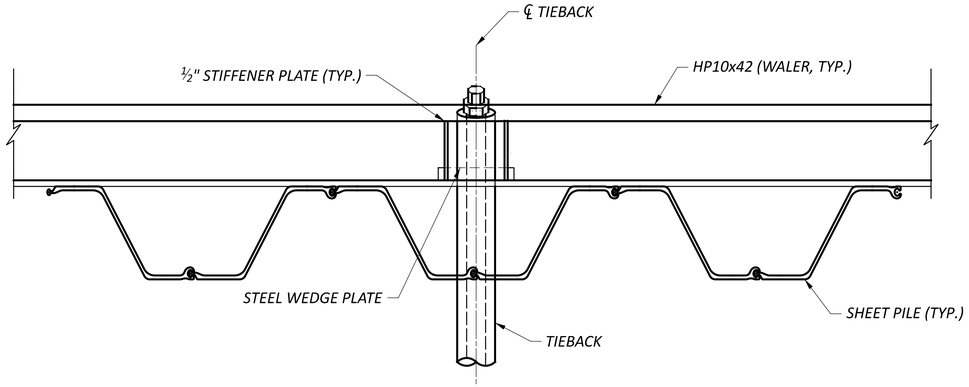
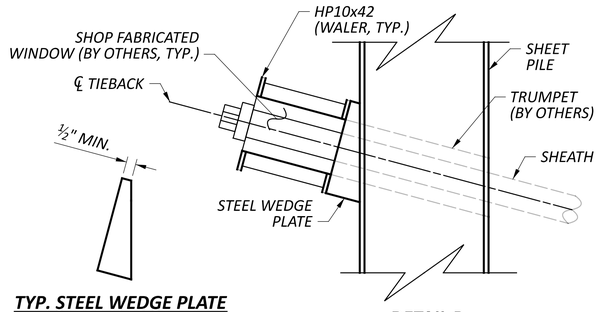


T 17 **PLAN VIEW**

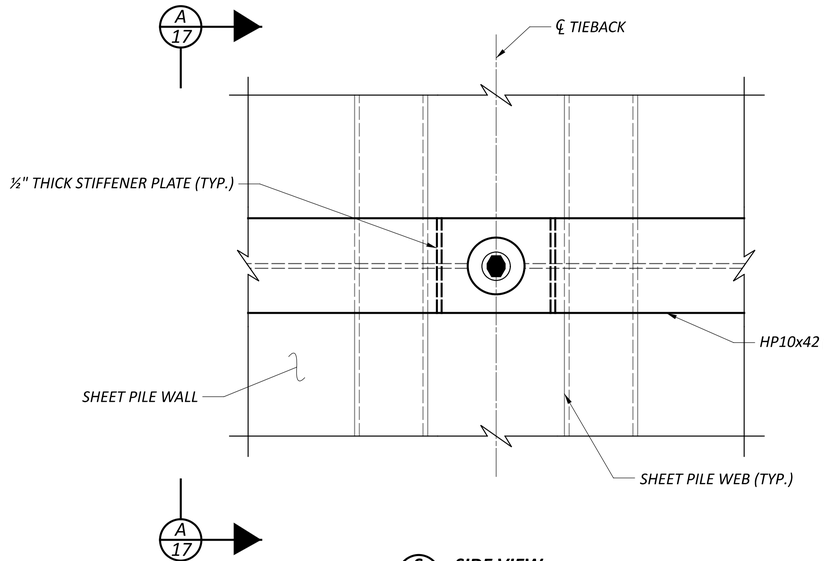


TYP. STEEL WEDGE PLATE

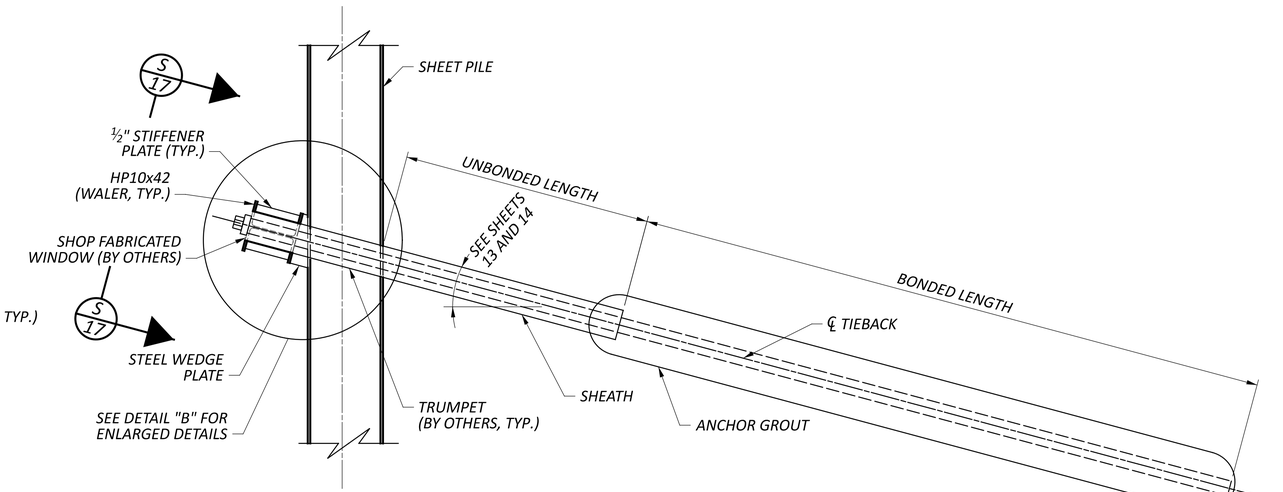
DETAIL B

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *DESIGN, CONSTRUCT, AND TEST TIE BACKS IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION 866 FOR ADDITIONAL INFORMATION.*
3. *ALL STEEL SHALL BE GRADE 50 (ASTM A572).*
4. *WELD MATERIAL SHALL BE Fexx = 70 KSI.*
5. *FOR SHEET PILE WALL TIEBACK SCHEDULES, SEE SHEETS 13 AND 14.*



S 17 ***SIDE VIEW***



A 17 ***TYPICAL SECTION***

TEMPORARY SHORING DETAILS (1 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	DBL
CHECKER	MAN
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	18
TOTAL	64
SHEET	P. 503
TOTAL	618

FRA-71-19.10

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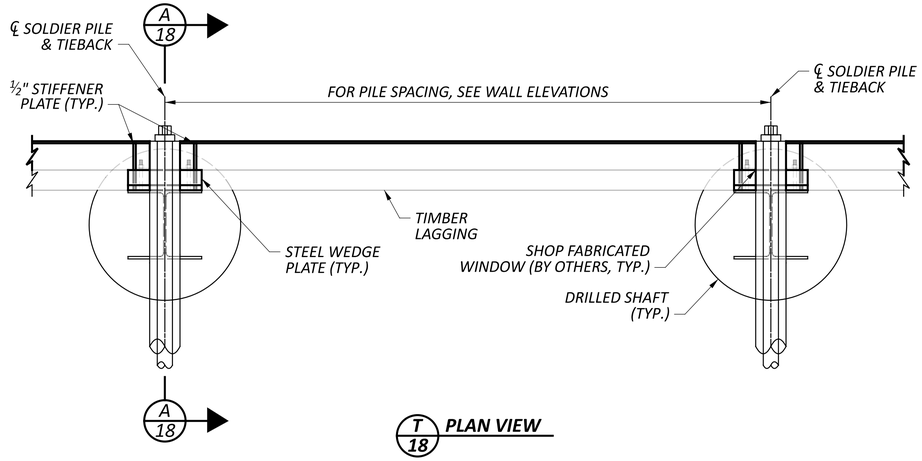
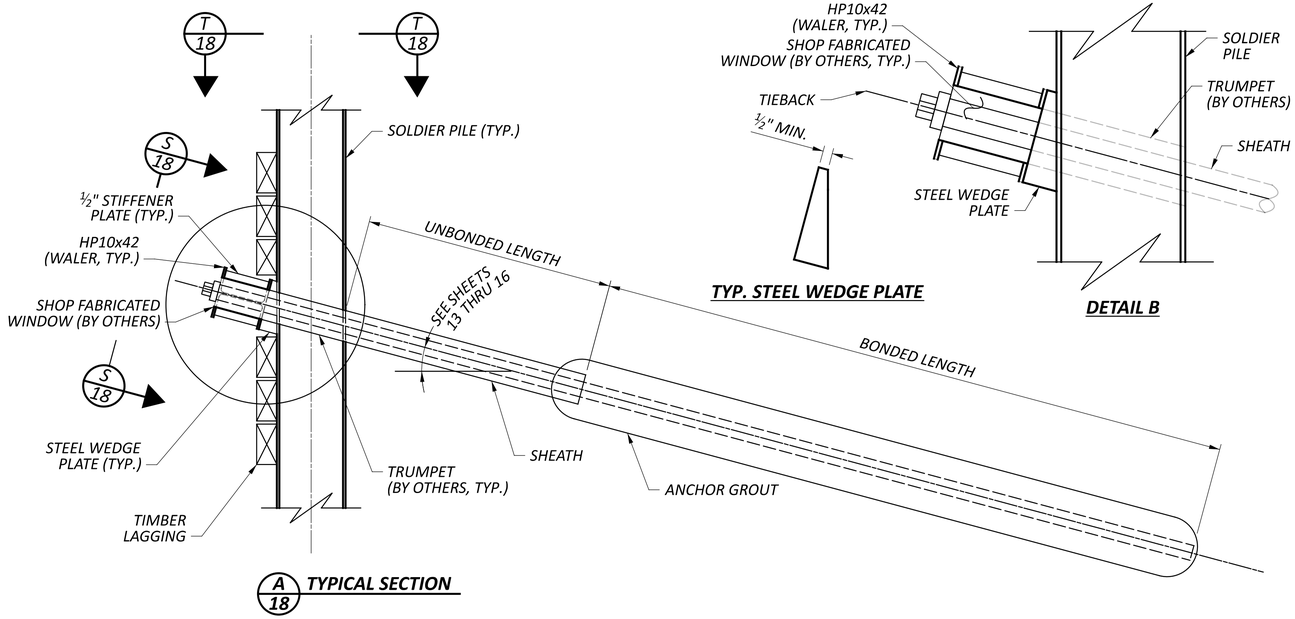


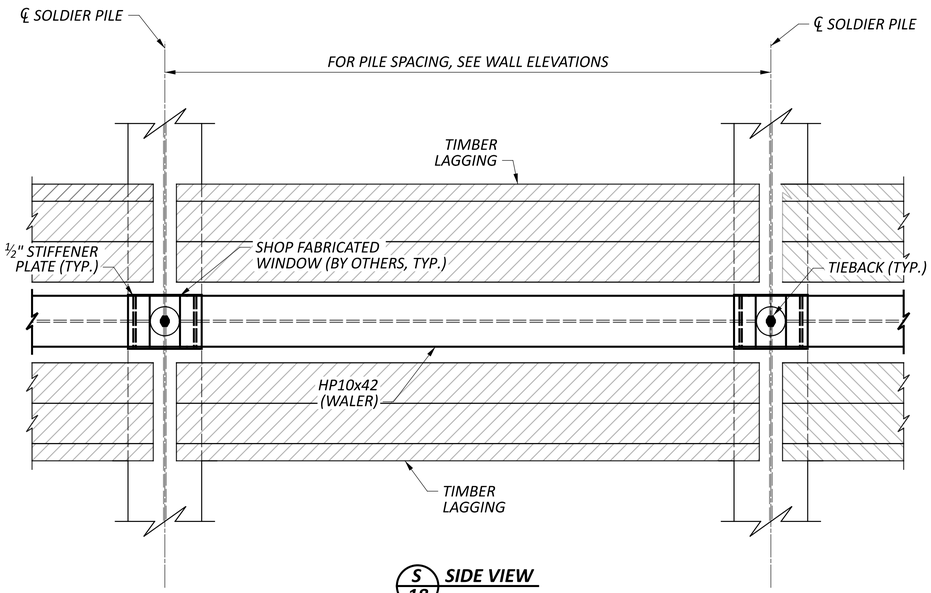
T 18 PLAN VIEW



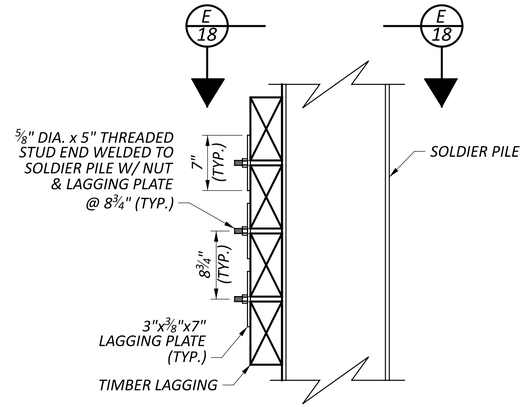
A 18 TYPICAL SECTION

TYP. STEEL WEDGE PLATE

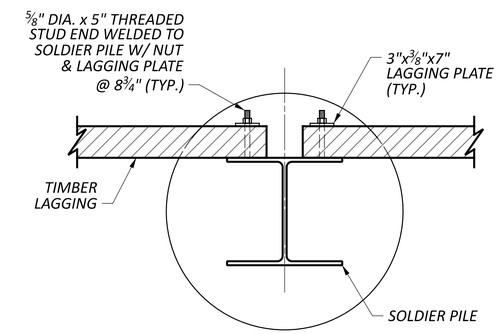
DETAIL B



S 18 SIDE VIEW



TYPICAL SECTION
(TIMBER LAGGING)



E 18 SECTION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. DESIGN, CONSTRUCT AND TEST TIE BACKS IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION 866 FOR ADDTIONAL INFORMATION.
3. ALL STEEL SHALL BE GRADE 50 (ASTM A572).
4. TIMBER LAGGING SHALL BE ROUGH SAWN OAK HARDWOOD STRUCTURAL GRADE #2 OR BETTER.
5. WELD MATERIAL SHALL BE Fexx = 70 KSI.
6. FOR SOLIDER PILE SCHEDULES AND TIEBACK INFORMATION, SEE SHEET 16.

TEMPORARY SHORING DETAILS (2 OF 2)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER MAN
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 19 | TOTAL 64
SHEET P. 504 | TOTAL 618

FRA-71-19.10

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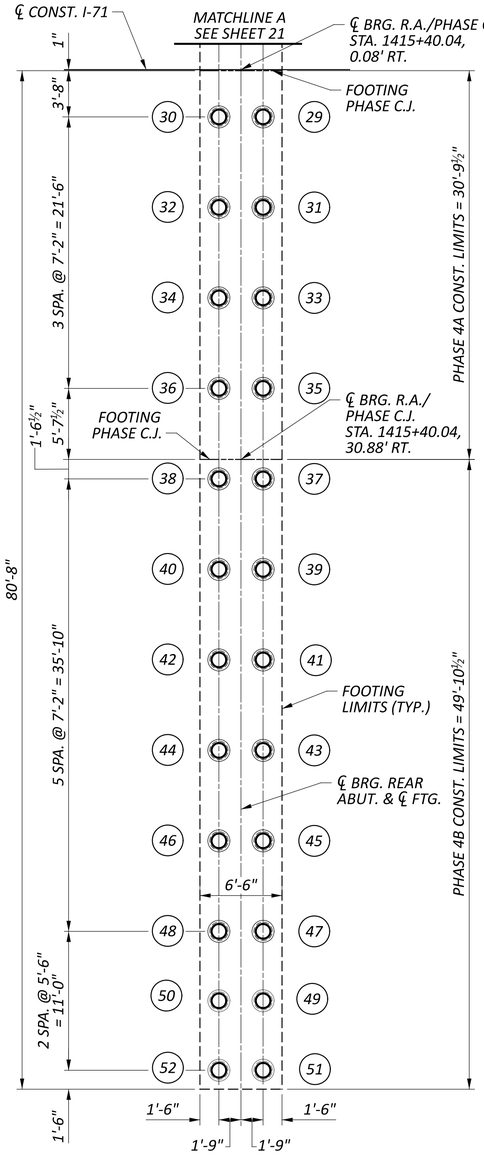


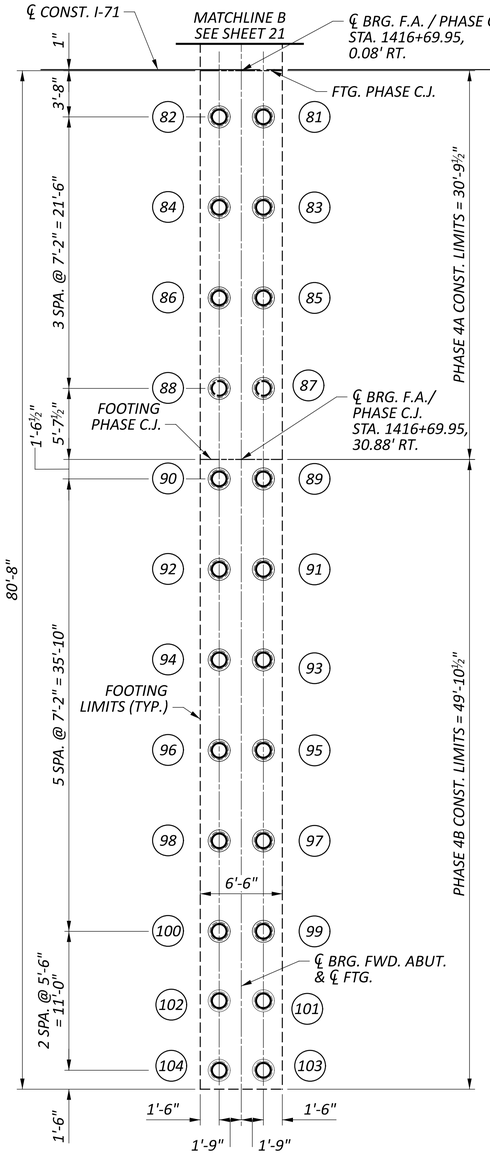
REAR ABUTMENT PLAN

LEGEND:

- ◯ - 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE WITH PILE SLEEVE
- (XX) - PILE NUMBER

NOTES:

1. REAR ABUTMENT ESTIMATED PILE LENGTH = 75'-0".
2. FORWARD ABUTMENT ESTIMATED PILE LENGTH = 70'-0".
3. FOR PILE DRIVING CRITERIA AND UBV, SEE SHEET 4.
4. FOR ABBREVIATION LEGEND, SEE SHEET 5.



FORWARD ABUTMENT PLAN

PILE LAYOUT - RIGHT BRIDGE

PILE LAYOUT - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	20
TOTAL	64
SHEET	P. 505
TOTAL	618

FRA-71-19.10

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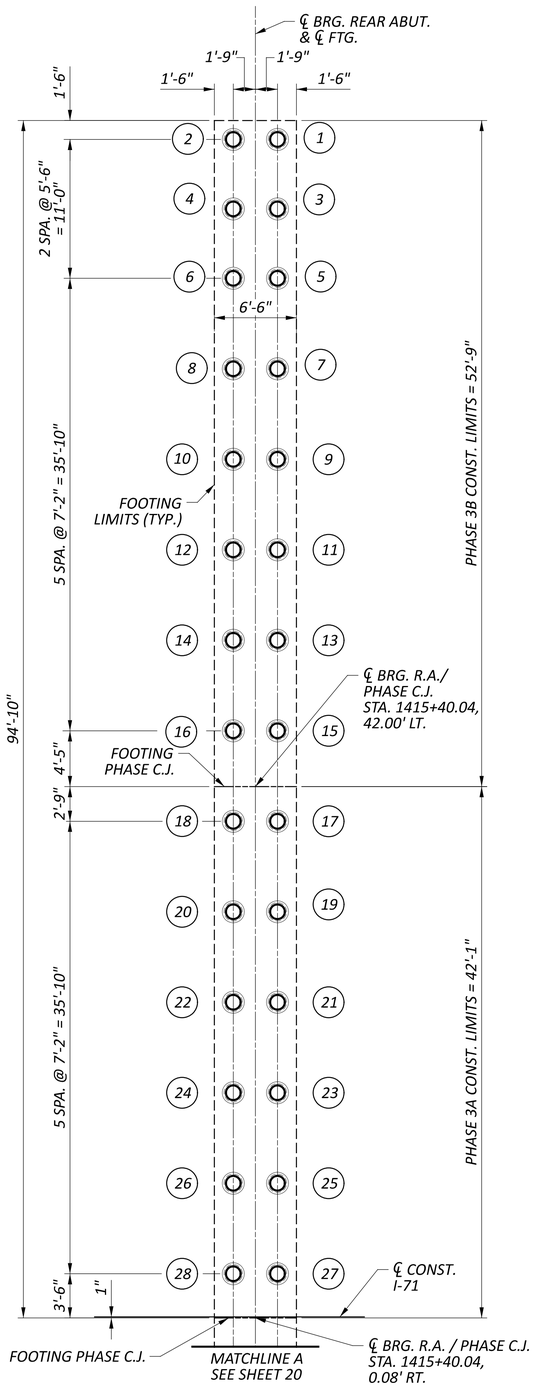


REAR ABUTMENT PLAN

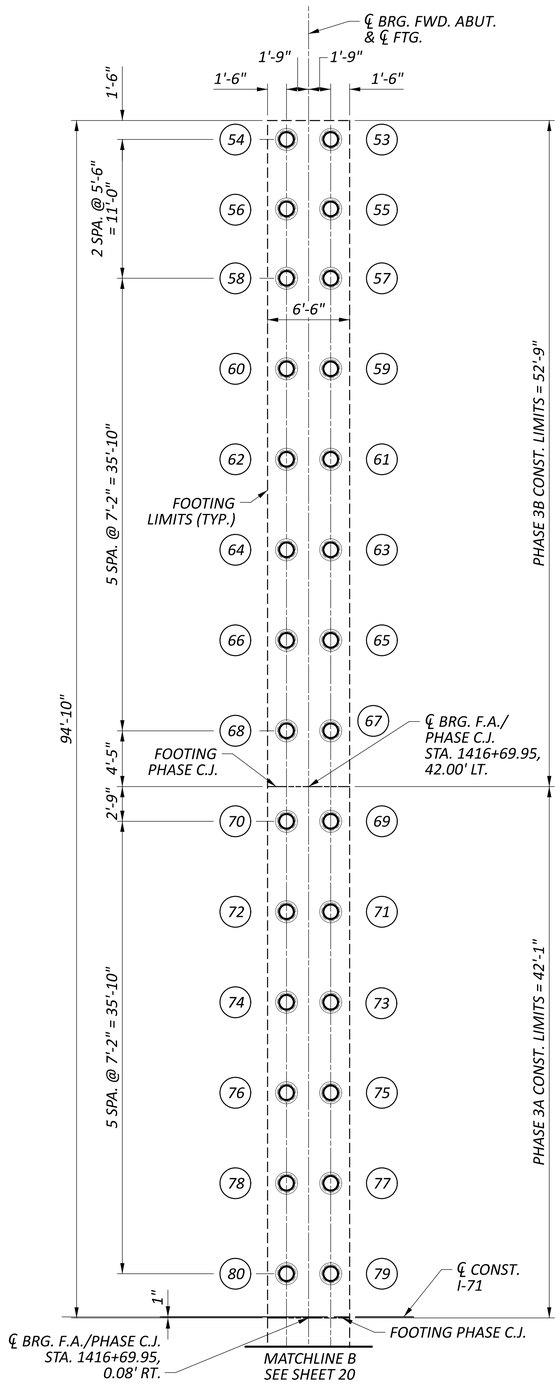
LEGEND:

- 14" DIA. CAST-IN-PLACE REINFORCED CONCRETE PILE WITH PILE SLEEVE

XX - PILE NUMBER

NOTES:

1. REAR ABUTMENT ESTIMATED PILE LENGTH = 75'-0".
2. FORWARD ABUTMENT ESTIMATED PILE LENGTH = 70'-0".
3. FOR PILE DRIVING CRITERIA AND UBV, SEE SHEET 4.
4. FOR ABBREVIATION LEGEND, SEE SHEET 5.



FORWARD ABUTMENT PLAN

PILE LAYOUT - LEFT BRIDGE

PILE LAYOUT - LEFT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
21	64

SHEET	TOTAL
P. 506	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:26:09 PM PLTDRV: OHDOT_PDF_F+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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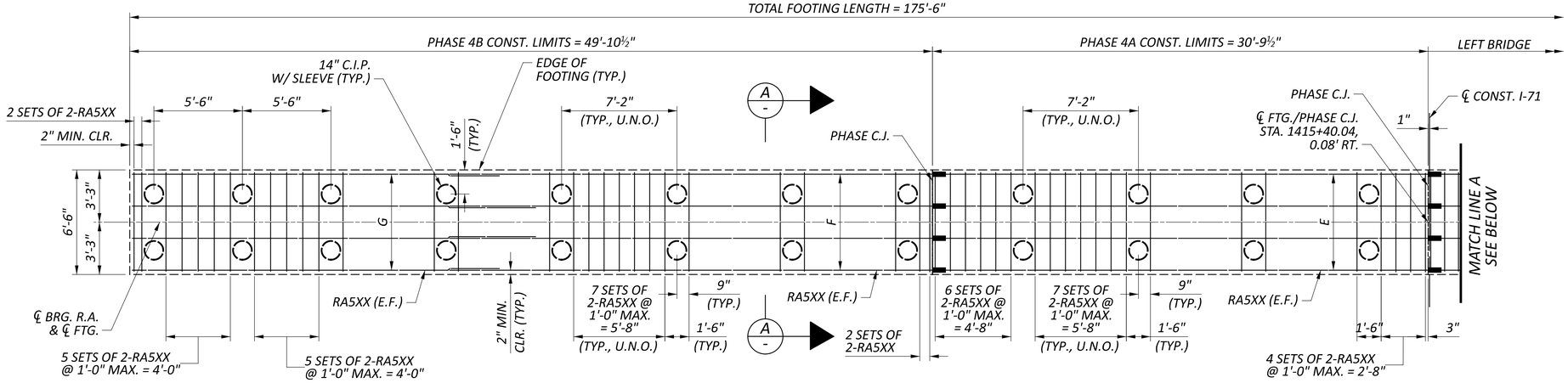
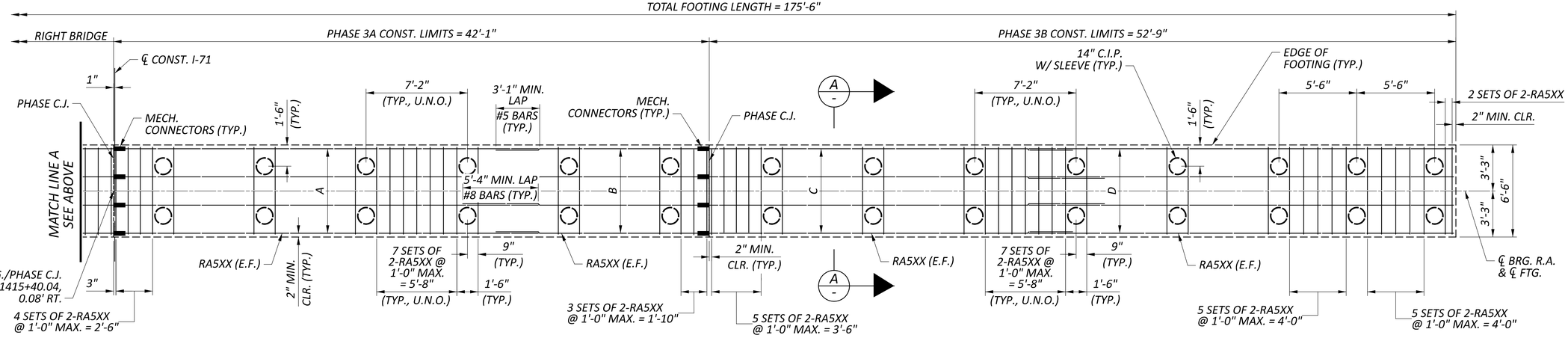


FOUNDATION PLAN - REAR ABUTMENT
(RIGHT BRIDGE)



FOUNDATION PLAN - REAR ABUTMENT
(LEFT BRIDGE)

REINFORCING LEGEND:

A: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

B: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

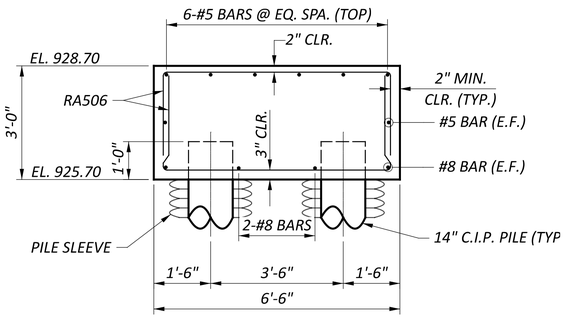
C: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

D: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

E: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

F: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

G: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)



A - SECTION REAR ABUT. FTG.

MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"

NOTES:

1. FOR FOUNDATION PLAN/PILE LAYOUT, SEE SHEETS 20 THRU 21.

FOUNDATION PLAN - REAR ABUTMENT
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER ZF
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 22 | TOTAL 64
SHEET P. 507 | TOTAL 618

FRA-71-19.10

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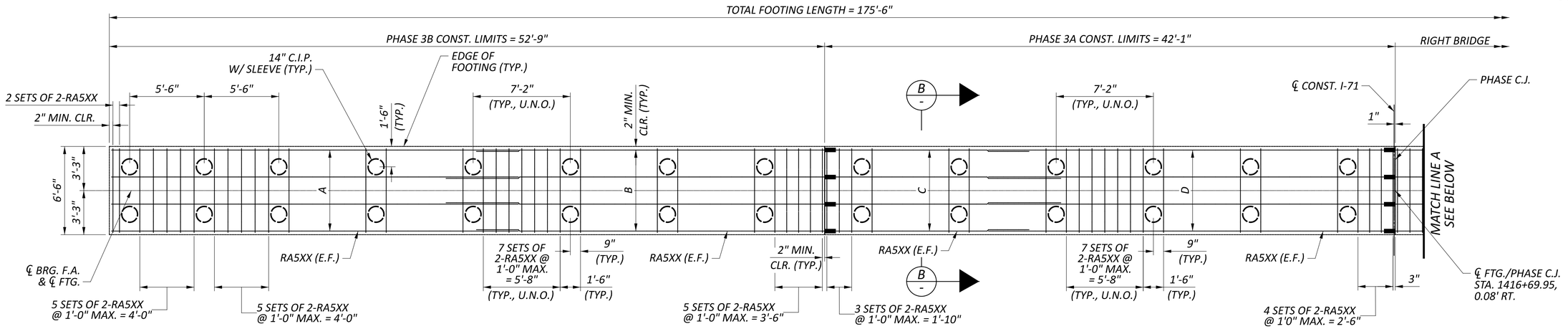
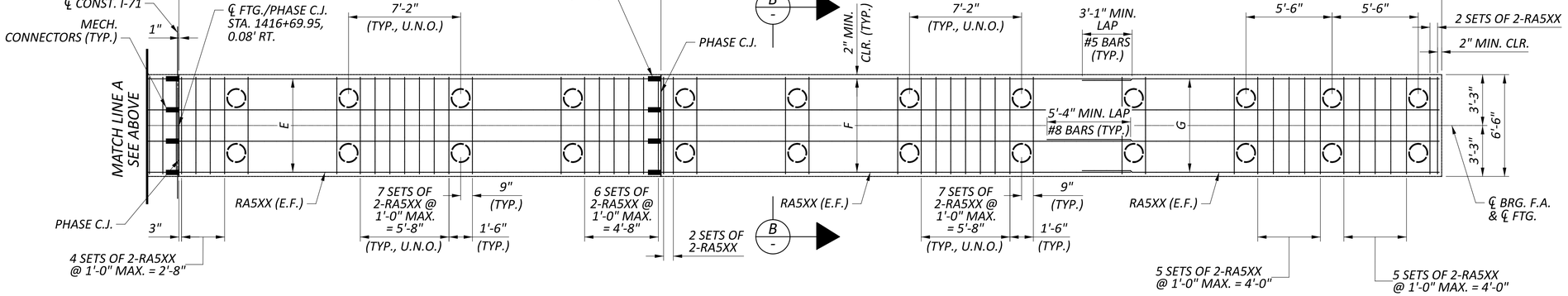


FOUNDATION PLAN - FORWARD ABUTMENT
(LEFT BRIDGE)



FOUNDATION PLAN - FORWARD ABUTMENT
(RIGHT BRIDGE)

REINFORCING LEGEND:

A: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

B: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

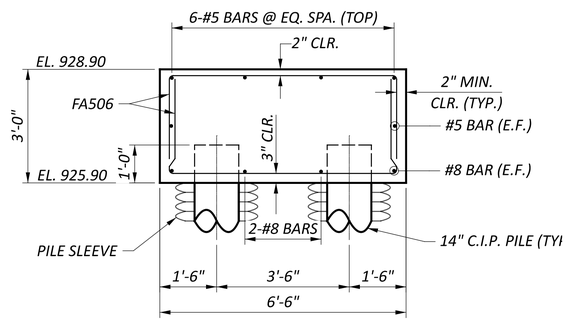
C: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

D: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

E: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

F: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)

G: 6-RA6XX @ EQ. SPA. = 6'-0" (TOP) & 4-RA8XX (BOT., SEE SECTION FOR SPA.)



B - SECTION FWD ABUT. FTG.

MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"

NOTES:

1. FOR FOUNDATION PLAN/PILE LAYOUT, SEE SHEETS 20 THRU 21.

FOUNDATION PLAN - FORWARD ABUTMENT
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	23
TOTAL	64
SHEET	P. 508
TOTAL	618

FRA-71-19.10

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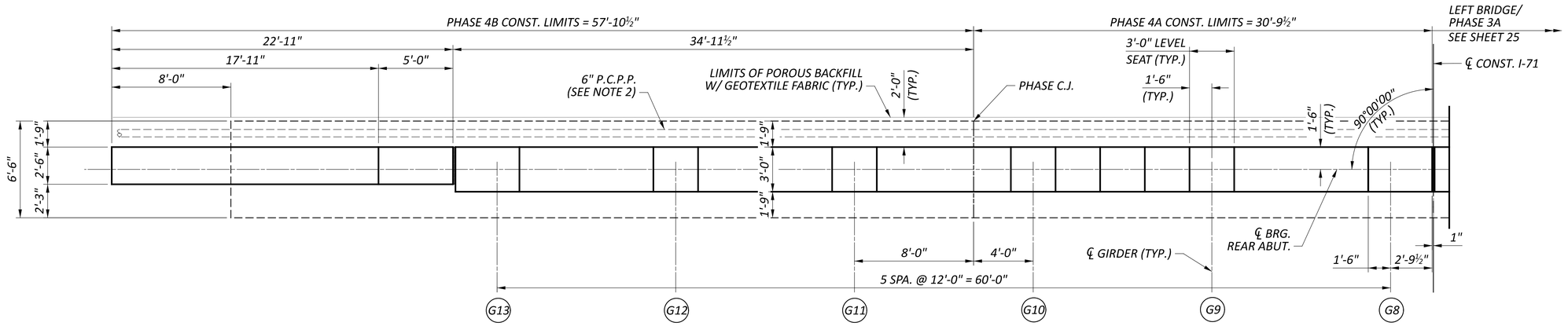
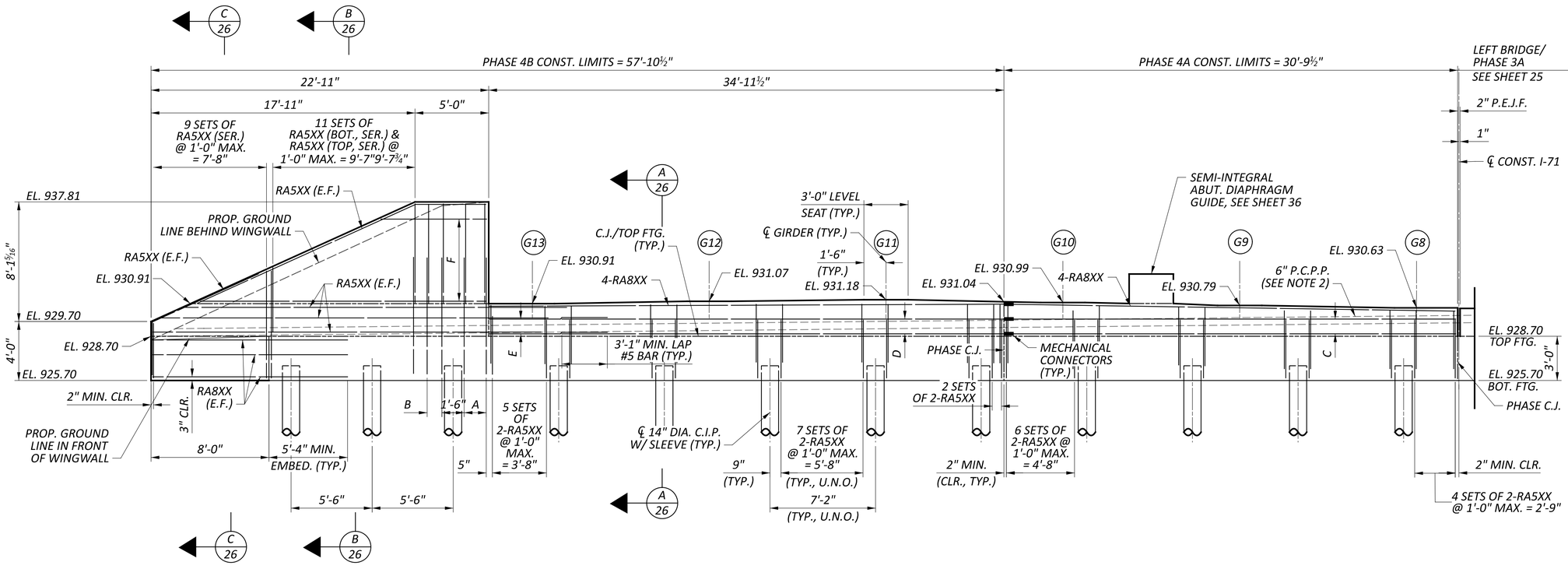


REAR ABUTMENT PLAN - RIGHT BRIDGE

(PILES AND TEMP. SHORING NOT SHOWN FOR CLARITY)

LEGEND:

(GX) - GIRDER LINE DESIGNATION



REAR ABUTMENT ELEVATION - RIGHT BRIDGE

REINFORCING LEGEND:

A: 3 SETS OF RA5XX (BOT.) & RA5XX (TOP) @ 1'-0" MAX. = 1'-6"

B: 2 SETS OF RA5XX (BOT.) & RA5XX (TOP) @ 1'-0" MAX.

C: 2-RA5XX (E.F.) @ 1'-0" MAX.

D: 2-RA5XX (E.F.) @ 1'-0" MAX.

E: 2-RA5XX (E.F.) @ 1'-0" MAX. LAP W/ RA5XX

F: 7-RA5XX (E.F., SER.) @ 1'-0" MAX. = 5'-6"

NOTES:

1. FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.
2. FOR PIPE OUTLET LOCATIONS, SEE SHEET 1. FOR OUTLET DETAILS SEE SHEET 26. MINIMUM SLOPE SHALL BE ⅛" PER FOOT. CAP AT HIGH POINT(S).
3. PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.

REAR ABUTMENT PLAN AND ELEVATION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	24
TOTAL	64
SHEET	P. 509
TOTAL	618

FRA-71-19.10

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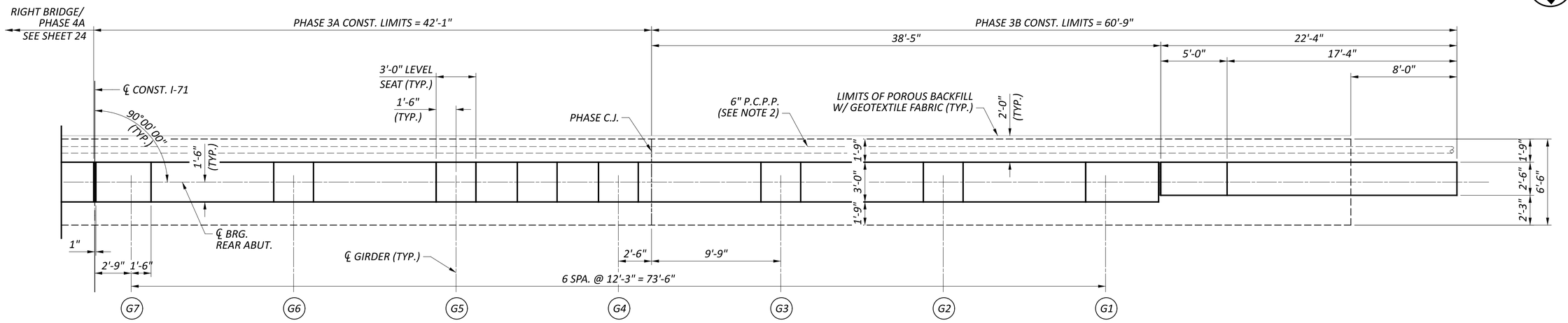
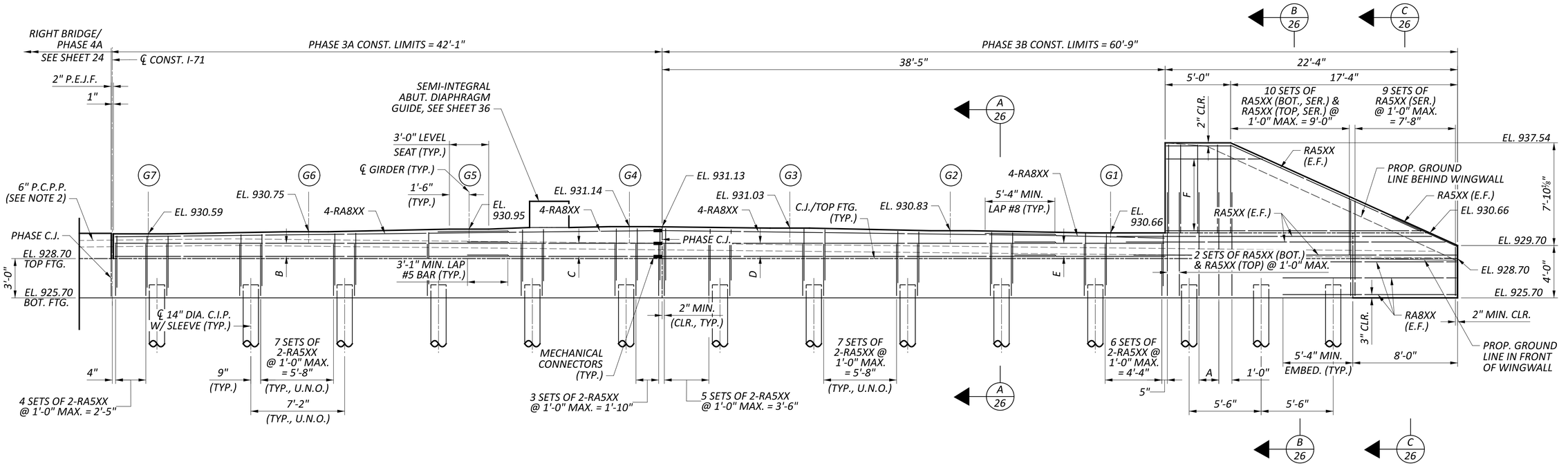


REAR ABUTMENT PLAN - LEFT BRIDGE
(PILES AND TEMP. SHORING NOT SHOWN FOR CLARITY)

LEGEND:

(GX) - GIRDER LINE DESIGNATION



REAR ABUTMENT ELEVATION - LEFT BRIDGE
(FTG. REINFORCING & MSE WALL NOT SHOWN FOR CLARITY)

REINFORCING LEGEND:

A: 3 SETS OF RA5XX (BOT.) & RA5XX (TOP) @ 1'-0" MAX. = 1'-6"

B: 2-RA5XX (E.F.) @ 1'-0" MAX.

C: 2-RA5XX (E.F.) @ 1'-0" MAX. LAP W/ RA5XX

D: 2-RA5XX (E.F.) @ 1'-0" MAX.

E: 2-RA5XX (E.F.) @ 1'-0" MAX. LAP W/ RA5XX

F: 7-RA5XX (E.F., SER.) @ 1'-0" MAX. = 5'-6"

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.*
2. *FOR PIPE OUTLET LOCATIONS, SEE SHEET 1. FOR OUTLET DETAILS SEE SHEET 26. MINIMUM SLOPE SHALL BE ⅛" PER FOOT. CAP AT HIGH POINT(S).*
3. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

REAR ABUTMENT PLAN AND ELEVATION - LEFT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	25
TOTAL	64
SHEET	P. 510
TOTAL	618

FRA-71-19.10

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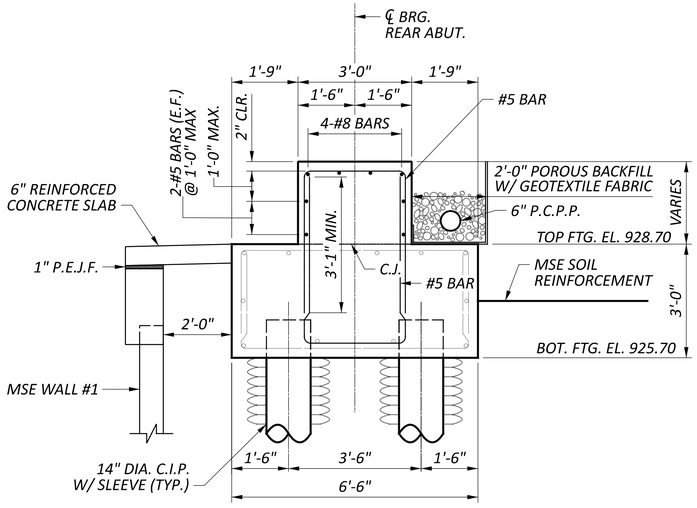
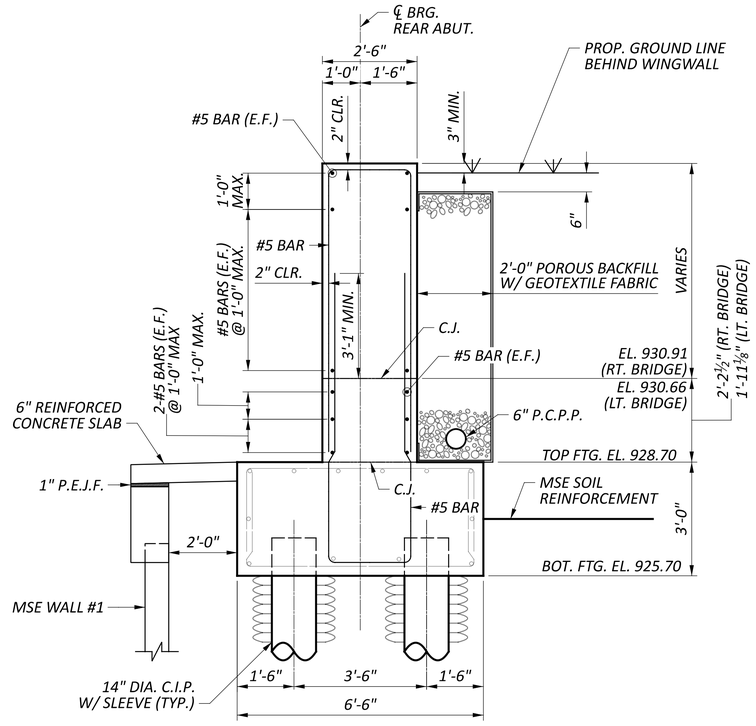
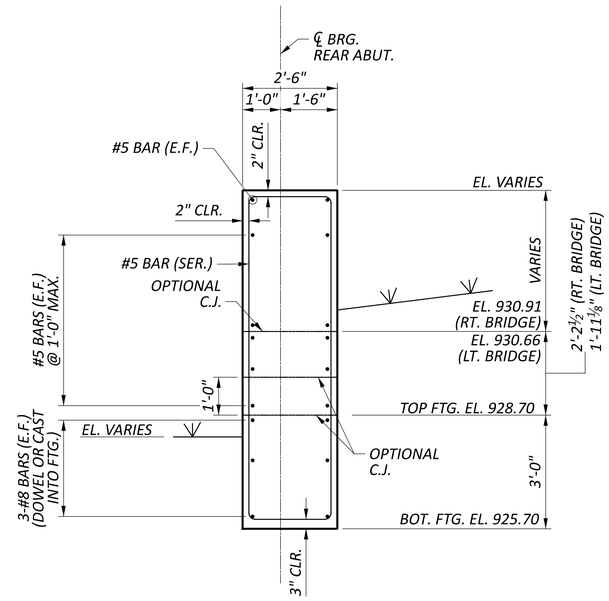


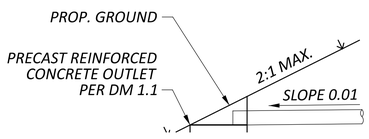
A 24 A 25 SECTION
REAR ABUTMENT



B 24 B 25 SECTION
REAR ABUTMENT
WINGWALL ON FTG.



C 24 C 25 SECTION
REAR ABUTMENT
WINGWALL W/O FTG.



TYPICAL DRAIN PIPE OUTLET DETAIL

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.*
3. *FOR MSE WALL DETAILS AND SEALING LIMITS, SEE SHEETS 57 THRU 60.*

REAR ABUTMENT DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	26
TOTAL	64
SHEET	P. 511
TOTAL	618

FRA-71-19.10

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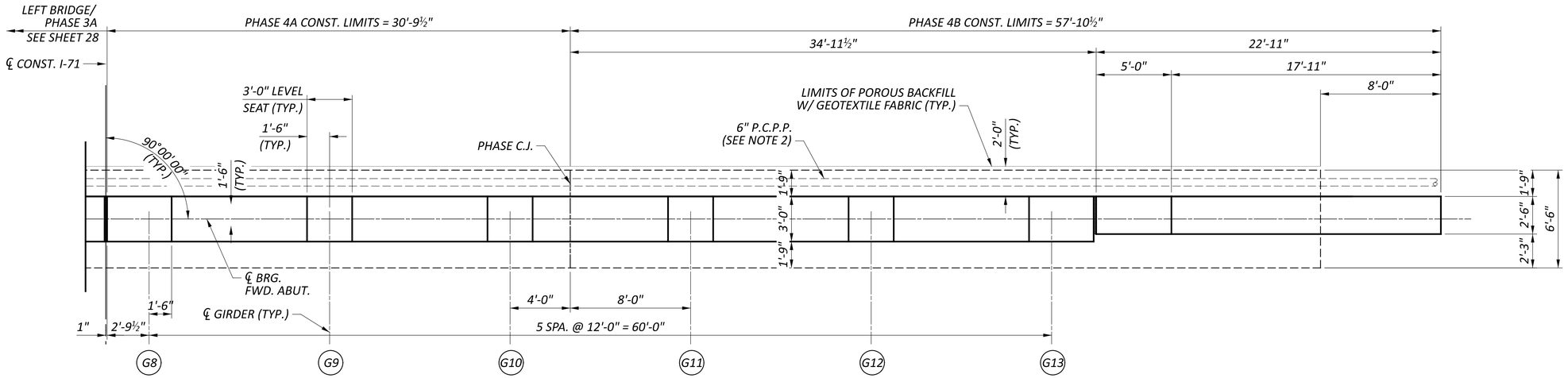
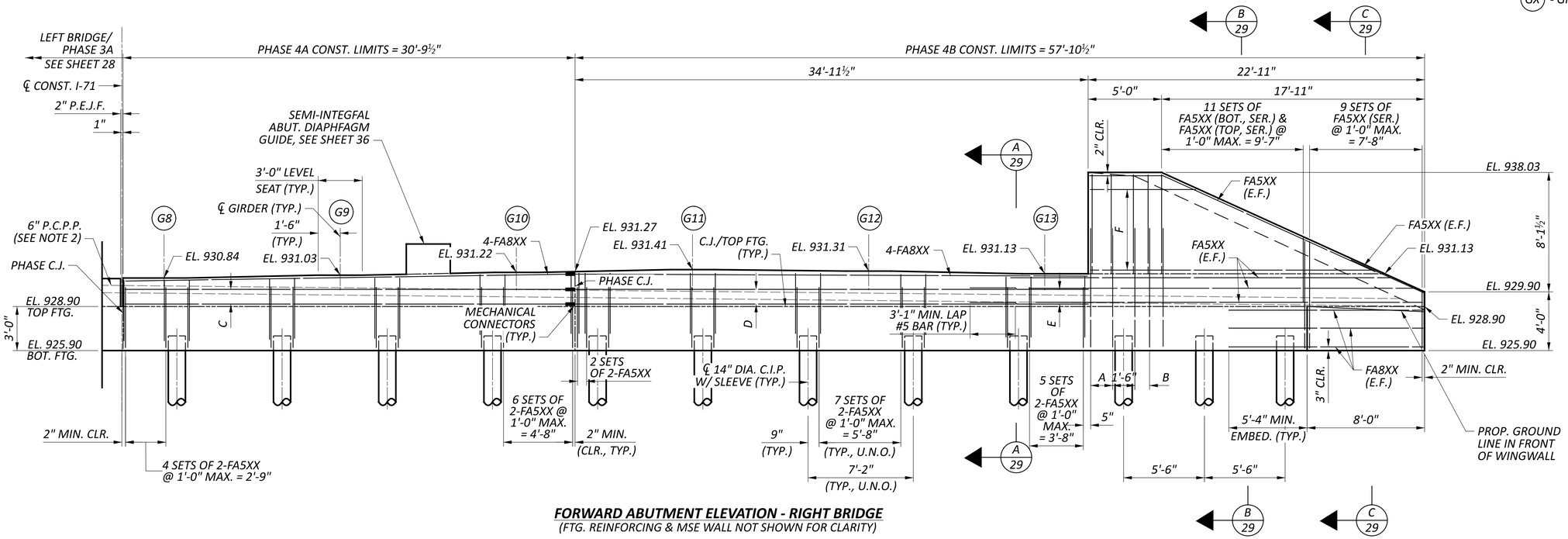


FORWARD ABUTMENT PLAN - RIGHT BRIDGE
(PILES AND TEMP. SHORING NOT SHOWN FOR CLARITY)

LEGEND:

(GX) - GIRDER LINE DESIGNATION



FORWARD ABUTMENT ELEVATION - RIGHT BRIDGE
(FTG. REINFORCING & MSE WALL NOT SHOWN FOR CLARITY)

REINFORCING LEGEND:

A: 3 SETS OF FA5XX (BOT.) & FA5XX (TOP) @ 1'-0" MAX. = 1'-6"

B: 2 SETS OF FA5XX (BOT.) & FA5XX (TOP) @ 1'-0" MAX.

C: 2-FA5XX (E.F.) @ 1'-0" MAX.

D: 2-FA5XX (E.F.) @ 1'-0" MAX.

E: 2-FA5XX (E.F.) @ 1'-0" MAX. LAP W/ FA5XX

F: 7-FA5XX (E.F., SER.) @ 1'-0" MAX. = 5'-6"

NOTES:

1. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.*
2. *FOR PIPE OUTLET LOCATIONS, SEE SHEET 1. FOR OUTLET DETAILS SEE SHEET 26. MINIMUM SLOPE SHALL BE ⅛" PER FOOT. CAP AT HIGH POINT(S).*
3. *PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.*

FORWARD ABUTMENT PLAN AND ELEVATION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 27 | TOTAL 64
SHEET P. 512 | TOTAL 618

FRA-71-19.10

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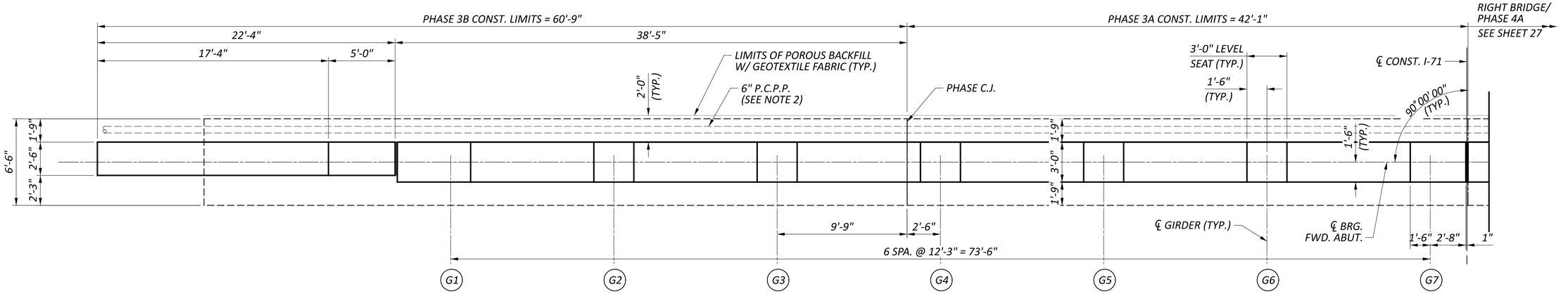
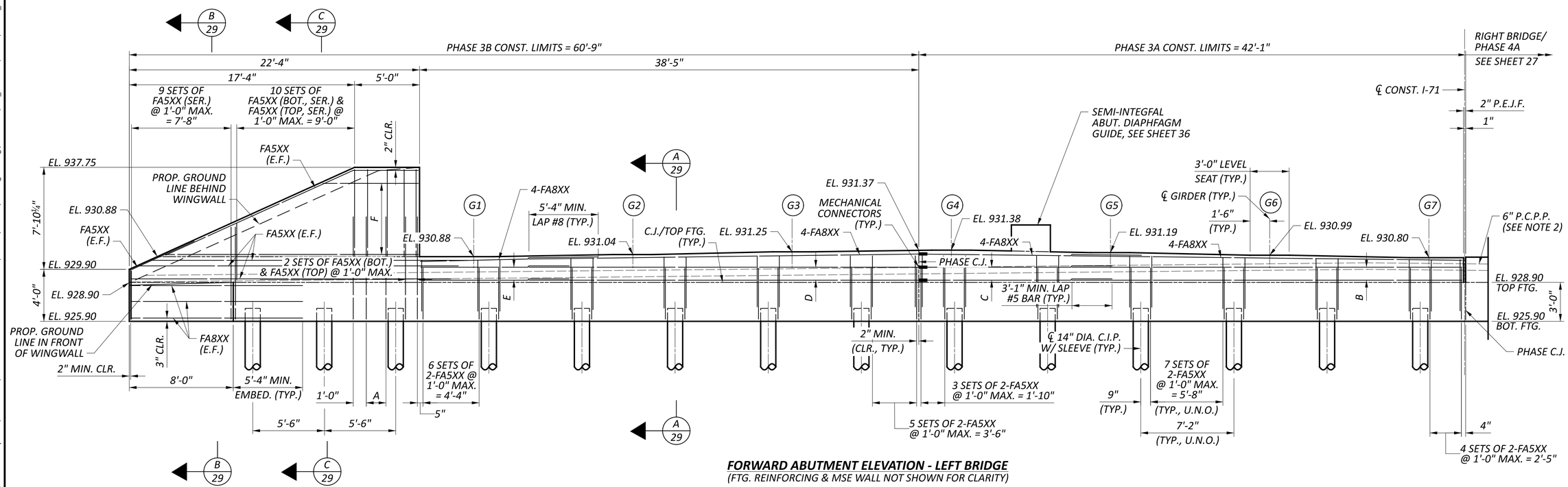


FORWARD ABUTMENT PLAN - LEFT BRIDGE

(PILES AND TEMP. SHORING NOT SHOWN FOR CLARITY)

LEGEND:

(GX) - GIRDER LINE DESIGNATION



FORWARD ABUTMENT ELEVATION - LEFT BRIDGE

(FTG. REINFORCING & MSE WALL NOT SHOWN FOR CLARITY)

REINFORCING LEGEND:

A: 3 SETS OF FA5XX (BOT.) & FA5XX (TOP) @ 1'-0" MAX. = 1'-6"

B: 2-FA5XX (E.F.) @ 1'-0" MAX.

C: 2-FA5XX (E.F.) @ 1'-0" MAX. LAP W/ FA5XX

D: 2-FA5XX (E.F.) @ 1'-0" MAX.

E: 2-FA5XX (E.F.) @ 1'-0" MAX. LAP W/ FA5XX

F: 7-FA5XX (E.F., SER.) @ 1'-0" MAX. = 5'-6"

NOTES:

1. FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.
2. FOR PIPE OUTLET LOCATIONS, SEE SHEET 1. FOR OUTLET DETAILS SEE SHEET 26. MINIMUM SLOPE SHALL BE ⅜" PER FOOT. CAP AT HIGH POINT(S).
3. PLACE TYPE 2 WATERPROOFING CENTERED ON THE VERTICAL JOINT FROM THE BEAM SEAT TO THE BOTTOM OF FOOTING.

FORWARD ABUTMENT PLAN AND ELEVATION - LEFT BRIDGE

BRIDGE NO. FRA-00071-26.460 L/R

I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	28
TOTAL	64
SHEET	P. 513
TOTAL	618

FRA-71-19.10

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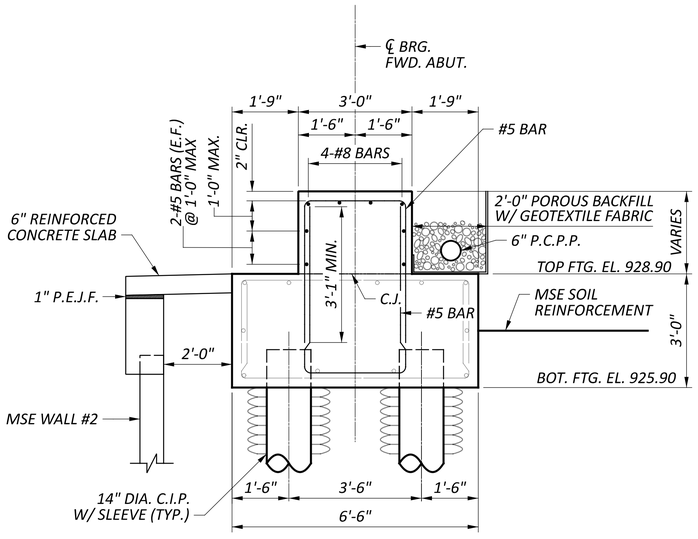
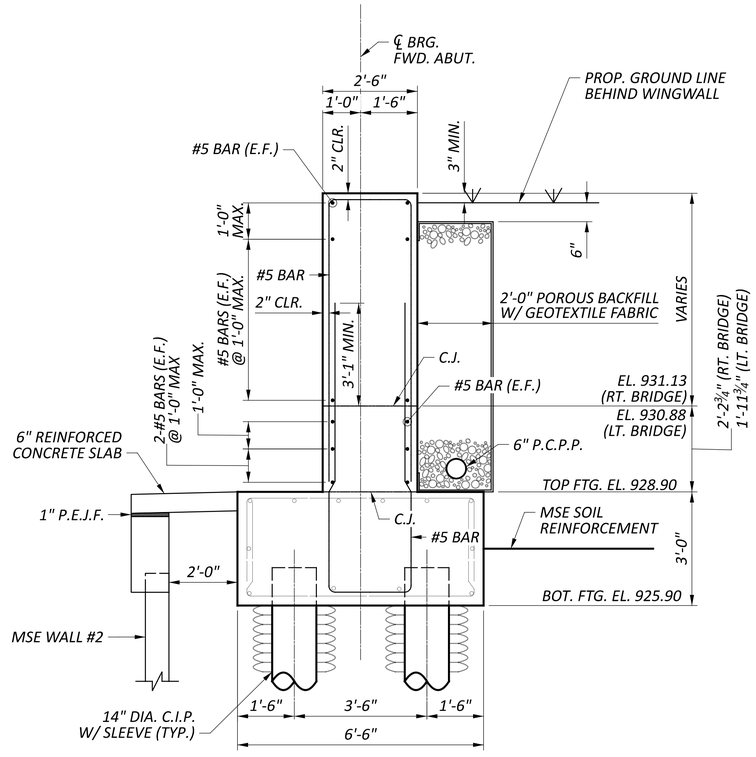
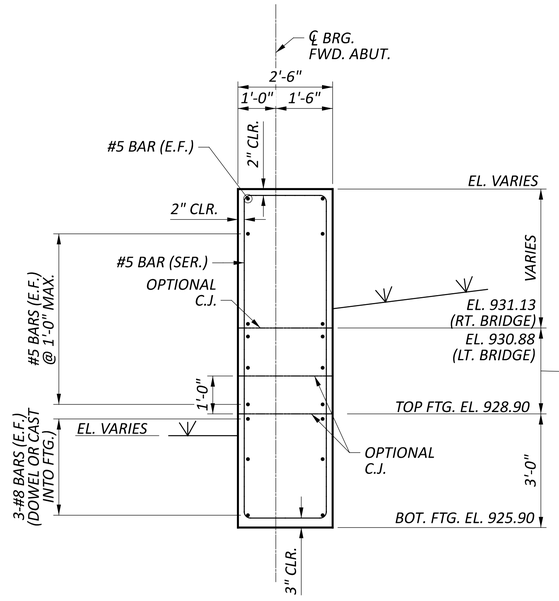


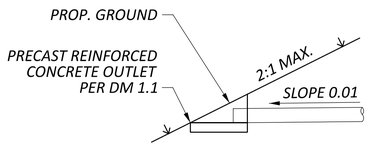
A/27 A/28 **SECTION**
FWD. ABUTMENT



B/27 B/28 **SECTION**
FWD. ABUTMENT
WINGWALL ON FTG.



C/27 C/28 **SECTION**
FWD. ABUTMENT
WINGWALL W/O FTG.



TYPICAL DRAIN PIPE OUTLET DETAIL

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR FOUNDATION PLAN AND FOOTING REINFORCING, SEE SHEETS 20 THRU 23.*
3. *FOR MSE WALL DETAILS AND SEALING LIMITS, SEE SHEETS 57 THRU 60.*

FORWARD ABUTMENT DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	29
TOTAL	64
SHEET	P. 514
TOTAL	618

FRA-71-19.10

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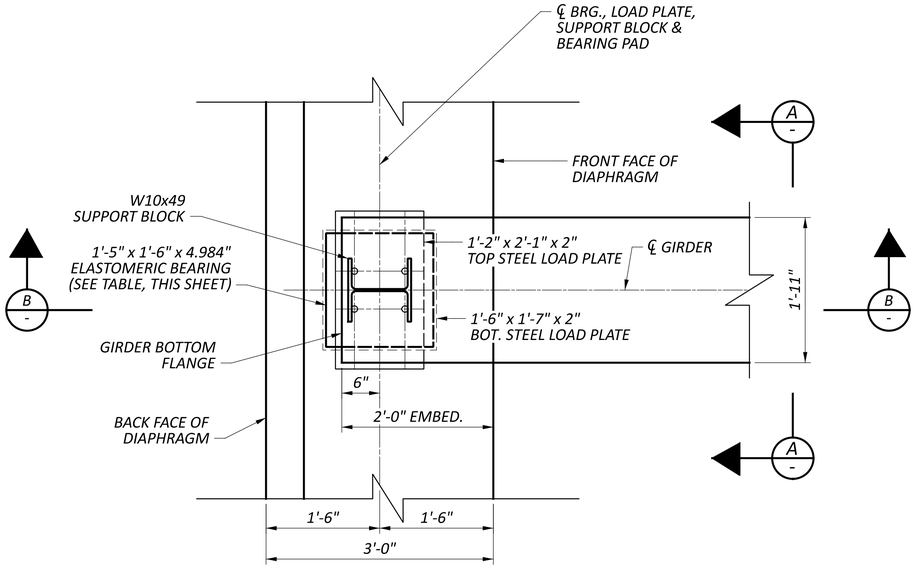
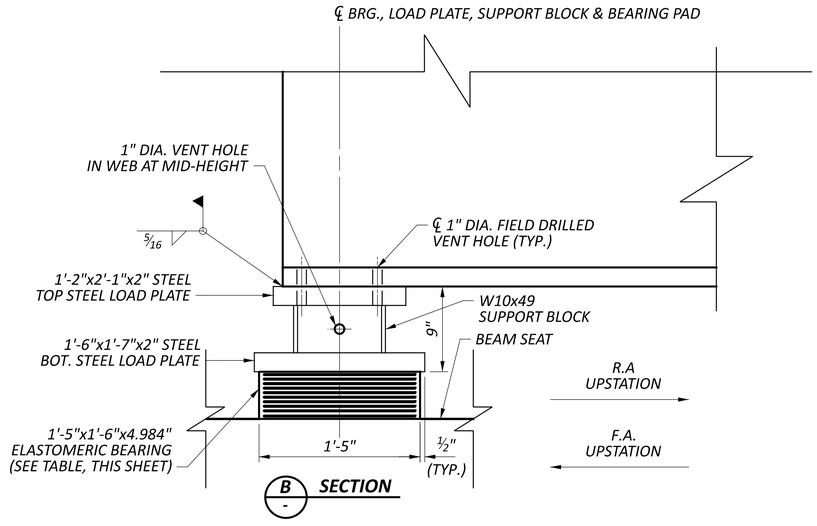
TABLE OF ELASTOMERIC BEARING DIMENSIONS										
LOCATION	INTERNAL ELASTOMER LAYER THICKNESS	EXTERNAL ELASTOMER LAYER THICKNESS	STEEL LAMINATE THICKNESS	NO. OF INTERNAL ELASTOMER LAYERS	NO. OF EXTERNAL ELASTOMER LAYERS	NO. OF STEEL LAMINATES	TOTAL BEARING THICKNESS	* REACTIONS		* MAXIMUM DESIGN LOAD
								DL + DW	LL	
LEFT BRIDGE (R.A. & F.A.)	0.375"	0.1875"	0.1046"	10	1	10	4.984"	242 k	108 k	350 k
RIGHT BRIDGE (R.A. & F.A.)	0.375"	0.1875"	0.1046"	10	1	10	4.984"	238 k	107 k	345 k

* LOADS GIVEN ARE SERVICE LOADS WITH NO IMPACT

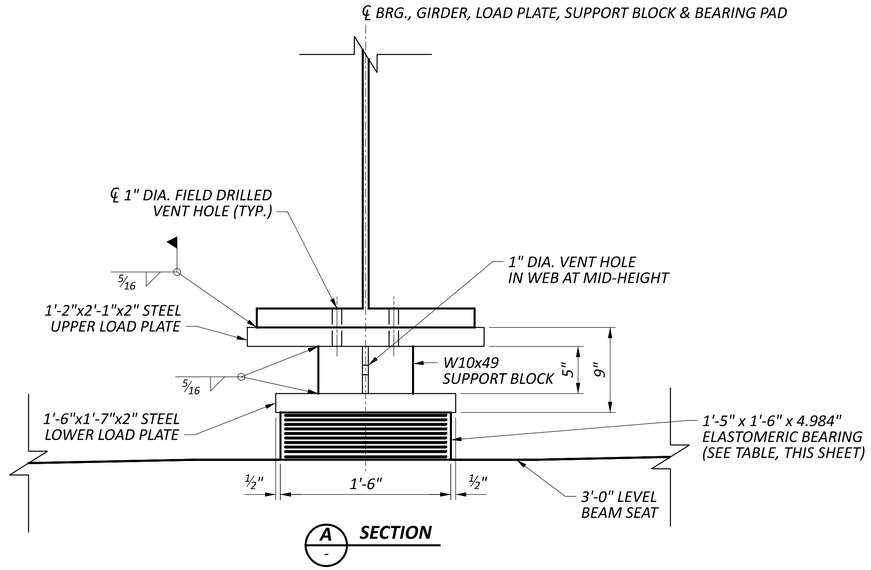


PARTIAL BEARING PLAN AT ABUTMENTS

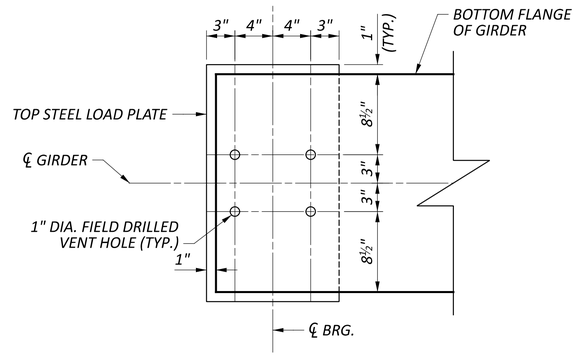
(R.A. SHOWN, F.A. SIMILAR)
(BEARING STIFFENER NOT SHOWN FOR CLARITY)



(R.A. SHOWN, F.A. SIMILAR, NOT TO SCALE)
(EXPANDED POLYSTYRENE OR EXPANDABLE FORMS AND BEARING STIFFENER NOT SHOWN FOR CLARITY)



(EXPANDED POLYSTYRENE OR EXPANDABLE FORMS AND BEARING STIFFENERS NOT SHOWN FOR CLARITY)



FIELD DRILLED VENT HOLE PLAN

(R.A. SHOWN, F.A. SIMILAR)

NOTES:

1. *ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.*

2. *LOAD PLATES: THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MODLING PROCESS. THE STEEL LOAD PLATES SHALL BE ASTM A709 GRADE 50 STRUCTURAL STEEL.*

3. *TOP STEEL LOAD PLATE, BOTTOM STEEL LOAD PLATE AND W10x49 SUPPORT BLOCK SHALL BE CONSIDERED COMPONENTS OF THE ELASTOMERIC BEARING ASSEMBLY. THE COST OF ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE BEARING ASSEMBLY SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 516 - BEARING DEVICE MISC.: ELASTOMERIC BEARING ASSEMBLY.*

4. *EACH BEARING SHALL BE SHOP MARKED WITH THE FOLLOWING INFORMATION: FORWARD STATION DIRECTION, LOCATION (REAR ABUTMENT, PIER OR FORWARD ABUTMENT) AND BEAM NUMBER. THE MARK SHALL BE PLACED SO THAT IT WILL BE VISIBLE ONCE THE BEARING ASSEMBLY HAS BEEN INSTALLED.*

5. *WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300° F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.*

BEARING DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN
TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
MAN	HS

REVIEWER
MJR 03/13/26

PROJECT ID
109164

SUBSET	TOTAL
30	64

SHEET	TOTAL
P. 515	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:28:22 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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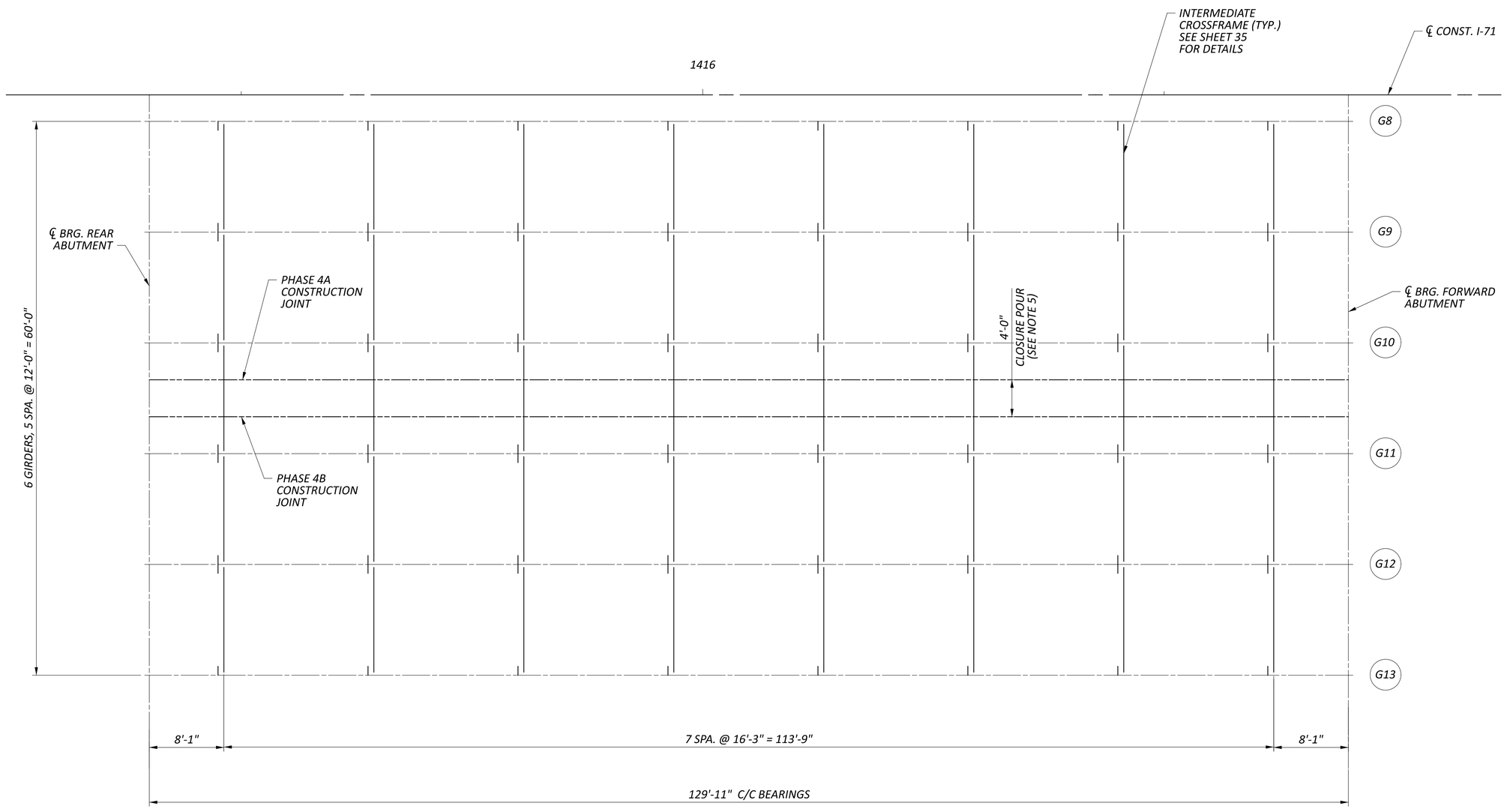

FRAMING PLAN - RIGHT BRIDGE

LEGEND:

(GX) - GIRDER LINE DESIGNATION

NOTES:

1. SEE SHEET 33 FOR GIRDER ELEVATIONS AND DETAILS.
2. ALL GIRDERS SHALL BE ORIENTED PARALLEL TO ℄ CONSTRUCTION I-71. ALL INTERMEDIATE CROSSFRAMES SHALL BE PLACED NORMAL TO ℄ GIRDERS.
3. FOR ABBREVIATION LEGEND, SEE SHEET 5.
4. FOR STAGED CONSTRUCTION DETAILS, SEE SHEETS 7 THRU 8.
5. THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED. SEE SHEET 35 FOR ADDITIONAL NOTES.

FRAMING PLAN - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	31
TOTAL	64
SHEET	P. 516
TOTAL	618

FRA-71-19.10

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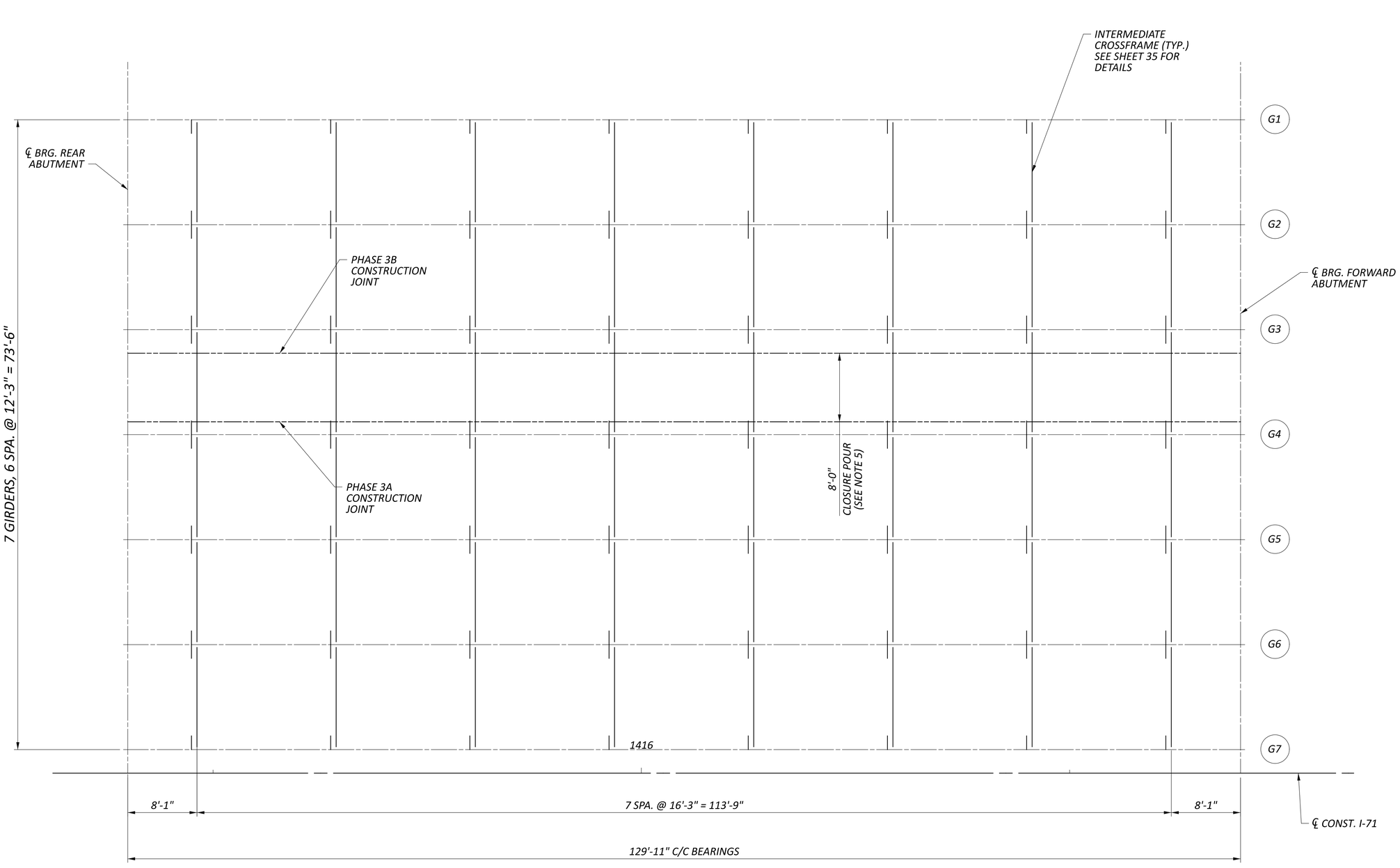

FRAMING PLAN - LEFT BRIDGE

NOTES:

1. *SEE SHEET 33 FOR GIRDER ELEVATIONS AND DETAILS.*
2. *ALL GIRDERS SHALL BEORIENTED PARALLEL TO ℄ CONSTRUCITON I-71. INTERMEDIATE CROSSFRAMES SHALL BE PLACED NORMAL TO ℄ GIRDE.*
3. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
4. *FOR STAGED CONSTRUCTION DETAILSSEE SHEETS 7 THRU 8.*
5. *THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRET POURS ON BOTH SIDE OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED. SEE SHEET 35 FOR ADDITIONAL NOTES.*

LEGEND:

(GX) - *GIRDER LINE DESIGNATION*

FRAMING PLAN - LEFT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	32
TOTAL	64
SHEET	P. 517
TOTAL	618

FRA-71-19.10

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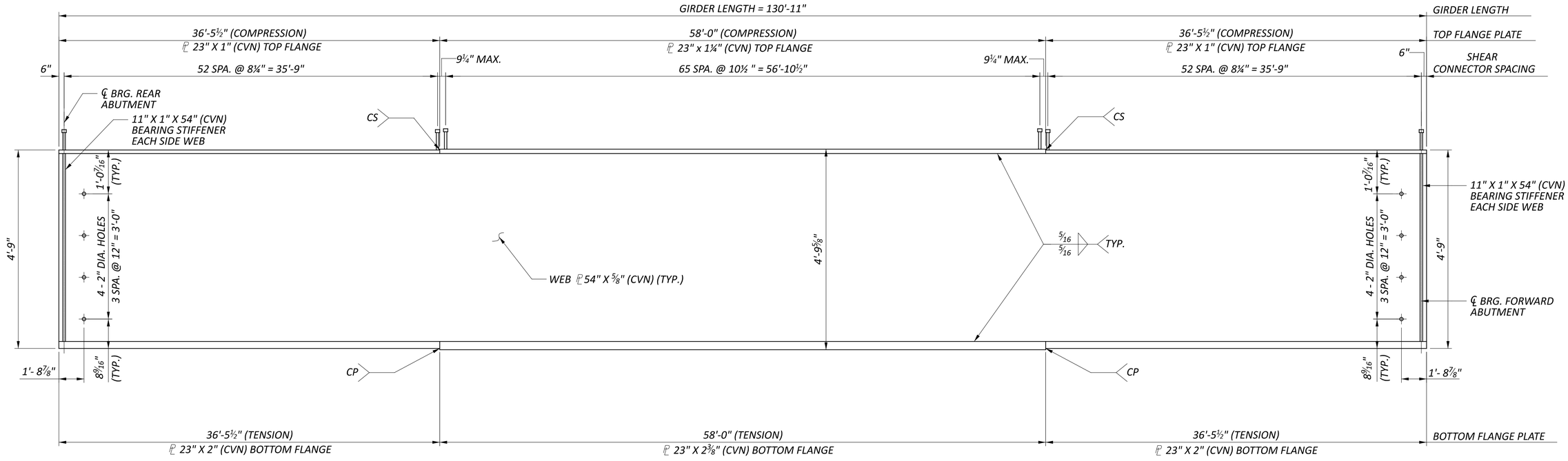

GIRDER ELEVATION

NOTES:

1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS SPECIFIED IN C&MS 711.01.
2. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE: FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.
3. BUTT WELDS AT SHOP SPLICES SHALL BE COMPLETE PENETRATION WELDS. WELD REINFORCEMENT SHALL BE COMPLETELY REMOVED BY GRINDING IN THE DIRECTION OF MAIN STRESS.
4. INSTALL STIFFENERS/CONNECTION PLATES ACCORDING TO C&MS 513.
5. FOR CROSSFRAME DETAILS, SEE SHEET 35.
6. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER F3125, GRADE A325, UNLESS NOTED OTHERWISE. PROVIDE TYPE 1 BOLTS PER C&MS 711.02 FOR ALL GIRDERS.
7. SHEAR CONNECTOR PLACEMENT ON THE FLANGE SPLICE PLATES IS NOT PERMITTED. ADJUST SPACING IF NECESSARY TO AVOID INTERFERENCE WITH SPLICE PLATES AND CONNECTION BOLTS.

LEGEND:

(C) - DENOTES COMPRESSION

(T) - DENOTES TENSION

(CS) - INDICATES BUTT WELD SUBJECT TO COMPRESSION STRESS ONLY

(CP) - INDICATES COMPLETE JOINT PENETRATION WELD

(CVN) - CHARPY V-NOTCH

GIRDER ELEVATION AND DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	HS

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
33	64

SHEET	TOTAL
P. 518	618

FRA-71-19.10

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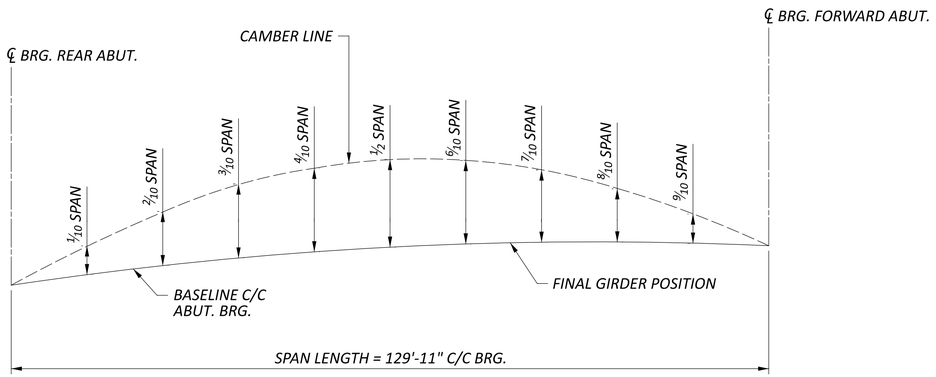
DEFLECTION AND CAMBER TABLE (LEFT BRIDGE)											
GIRDER G1 DEFLECTION AND CAMBER	LOCATION										
	CL BRG. R.A.	0.10L	0.20L	0.30L	0.40L	0.50L	0.60L	0.70L	0.80L	0.90L	CL BRG. F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/2"	7/8"	1 3/16"	1 5/16"	1 3/8"	1 5/16"	1 1/8"	7/8"	1/2"	0"
DEFLECTION DUE TO STAGED DECK PLACEMENT	0"	1 1/2"	2 3/4"	3 3/4"	4 5/16"	4 9/16"	4 5/16"	3 3/4"	2 3/4"	1 1/2"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	3/16"	5/16"	3/8"	7/16"	7/16"	7/16"	3/8"	5/16"	3/16"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	7/16"	13/16"	1 1/16"	1 3/16"	1 1/4"	1 3/16"	1 1/16"	13/16"	7/16"	0"
REQUIRED SHOP CAMBER	0"	2 5/8"	4 3/4"	6 3/8"	7 1/4"	7 5/8"	7 1/4"	6 5/16"	4 3/4"	2 5/8"	0"
GIRDERS G2 - G6 DEFLECTION AND CAMBER	LOCATION										
	CL BRG. R.A.	0.10L	0.20L	0.30L	0.40L	0.50L	0.60L	0.70L	0.80L	0.90L	CL BRG. F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/2"	15/16"	1 1/4"	1 7/16"	1 1/2"	1 7/16"	1 3/16"	7/8"	1/2"	0"
DEFLECTION DUE TO STAGED DECK PLACEMENT	0"	1 5/8"	3"	4 1/16"	4 3/4"	5"	4 3/4"	4 1/16"	3"	1 5/8"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	3/16"	1/4"	3/8"	7/16"	7/16"	7/16"	3/8"	1/4"	3/16"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	7/16"	13/16"	1 1/16"	1 3/16"	1 1/4"	1 3/16"	1 1/16"	13/16"	7/16"	0"
REQUIRED SHOP CAMBER	0"	2 3/4"	5"	6 3/4"	7 13/16"	8 3/16"	7 13/16"	6 11/16"	4 15/16"	2 3/4"	0"
GIRDER G7 DEFLECTION AND CAMBER	LOCATION										
	CL BRG. R.A.	0.10L	0.20L	0.30L	0.40L	0.50L	0.60L	0.70L	0.80L	0.90L	CL BRG. F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/2"	7/8"	1 3/16"	1 5/16"	1 3/8"	1 5/16"	1 1/8"	7/8"	1/2"	0"
DEFLECTION DUE TO STAGED DECK PLACEMENT	0"	1 1/4"	2 5/16"	3 3/16"	3 11/16"	3 7/8"	3 11/16"	3 3/16"	2 5/16"	1 1/4"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	3/16"	5/16"	3/8"	7/16"	1/2"	7/16"	3/8"	5/16"	3/16"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	7/16"	13/16"	1 1/16"	1 3/16"	1 1/4"	1 3/16"	1 1/16"	13/16"	7/16"	0"
REQUIRED SHOP CAMBER	0"	2 3/8"	4 5/16"	5 13/16"	6 5/8"	7"	6 5/8"	5 3/4"	4 5/16"	2 3/8"	0"

DEFLECTION AND CAMBER TABLE (RIGHT BRIDGE)											
GIRDERS G1 & G6 DEFLECTION AND CAMBER	LOCATION										
	CL BRG. R.A.	0.10L	0.20L	0.30L	0.40L	0.50L	0.60L	0.70L	0.80L	0.90L	CL BRG. F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/2"	7/8"	1 3/16"	1 5/16"	1 3/8"	1 5/16"	1 1/8"	7/8"	1/2"	0"
DEFLECTION DUE TO STAGED DECK PLACEMENT	0"	1 1/4"	2 5/16"	3 3/16"	3 11/16"	3 7/8"	3 11/16"	3 3/16"	2 5/16"	1 1/4"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	3/16"	5/16"	7/16"	1/2"	9/16"	1/2"	7/16"	5/16"	3/16"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	7/16"	13/16"	1 1/16"	1 3/16"	1 1/4"	1 3/16"	1 1/16"	13/16"	7/16"	0"
REQUIRED SHOP CAMBER	0"	2 3/8"	4 5/16"	5 7/8"	6 11/16"	7 1/16"	6 11/16"	5 13/16"	4 5/16"	2 3/8"	0"
GIRDERS G2 - G5 DEFLECTION AND CAMBER	LOCATION										
	CL BRG. R.A.	0.10L	0.20L	0.30L	0.40L	0.50L	0.60L	0.70L	0.80L	0.90L	CL BRG. F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/2"	15/16"	1 1/4"	1 7/16"	1 1/2"	1 3/8"	1 3/16"	7/8"	1/2"	0"
DEFLECTION DUE TO STAGED DECK PLACEMENT	0"	1 9/16"	2 15/16"	4"	4 5/8"	4 7/8"	4 5/8"	4"	2 15/16"	1 9/16"	0"
DEFLECTION DUE TO REMAINING DEAD LOAD	0"	3/16"	5/16"	7/16"	1/2"	1/2"	1/2"	7/16"	5/16"	3/16"	0"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0"	7/16"	13/16"	1 1/16"	1 3/16"	1 1/4"	1 3/16"	1 1/16"	13/16"	7/16"	0"
REQUIRED SHOP CAMBER	0"	2 11/16"	5"	6 3/4"	7 3/4"	8 1/8"	7 11/16"	6 11/16"	4 15/16"	2 11/16"	0"



CAMBER DIAGRAM (NORTHBOUND & SOUTHBOUND)

NOTES:

1. CAMBER IS ROUNDED TO THE NEAREST $1/16$".

CAMBER AND DEFLECTION TABLES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 34 | TOTAL 64
SHEET P. 519 | TOTAL 618

FRA-71-19.10

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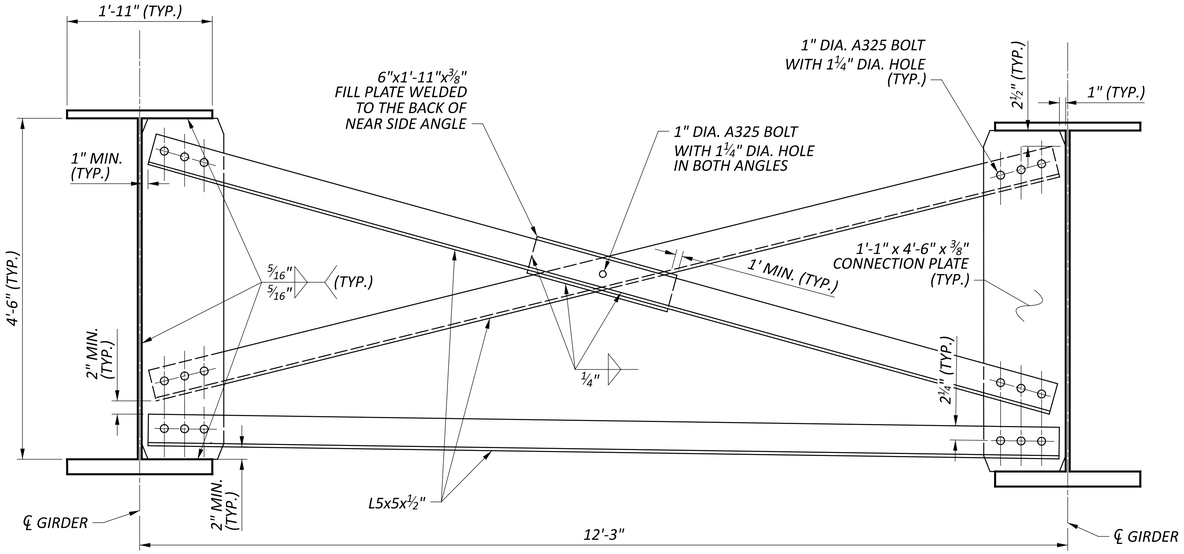
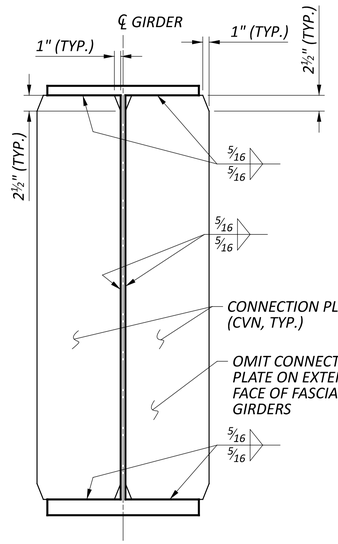
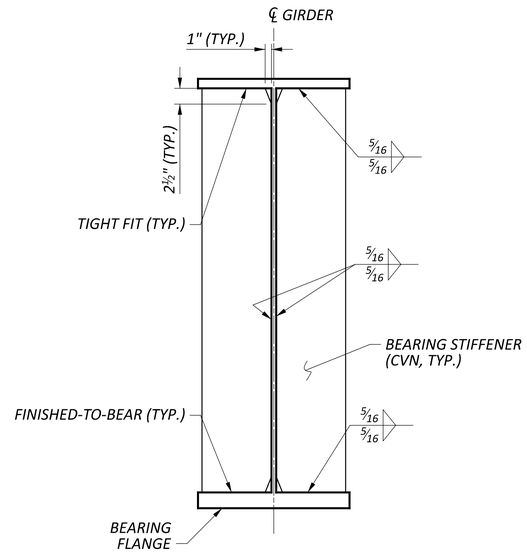


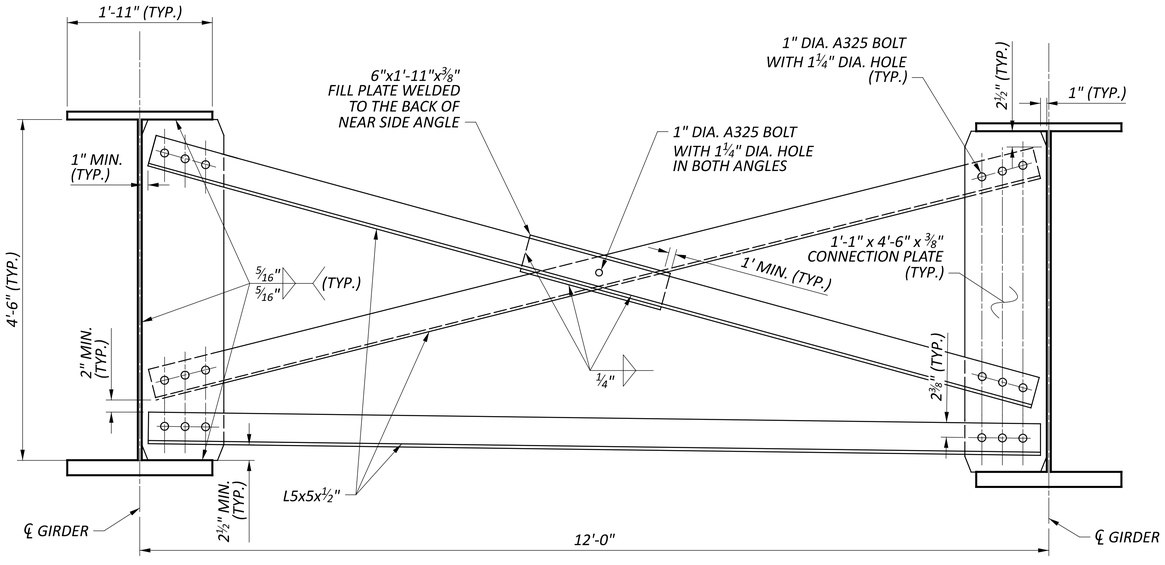
INTERMEDIATE CROSSFRAME - LEFT BRIDGE



TYPICAL CONNECTION PLATE DETAIL

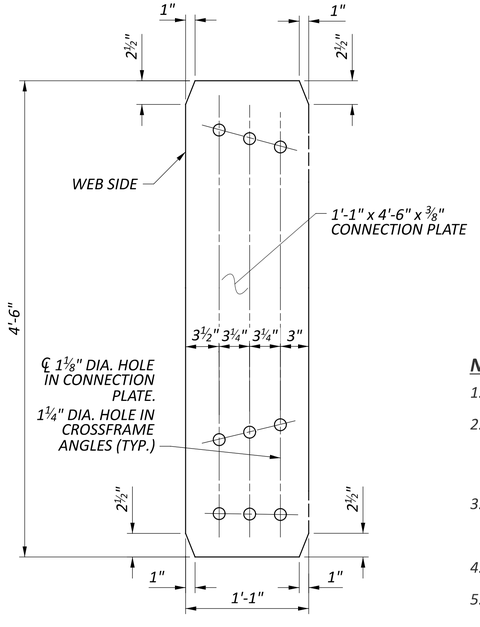


TYPICAL BEARING STIFFENER DETAIL

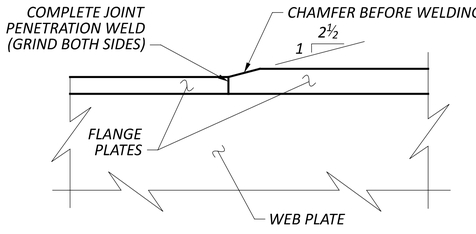


INTERMEDIATE CROSSFRAME - RIGHT BRIDGE

(SIMILAR TO LEFT BRIDGE, BUT DIFFERENT GIRDER SPACING)



CONNECTION PLATE



TYPICAL FLANGE TRANSITION DETAIL
(TO BE USED AT FLANGE THICKNESS TRANSITIONS)

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. THE FABRICATOR SHALL CHECK LONGITUDINAL CROSSFRAME SPACING SO THAT INTERFERENCE WITH COMPLETE PENETRATION WEB OR FLANGE WELDED SPLICES IS AVOIDED. SPACING SHALL BE ADJUSTED TO PROVIDE AT LEAST SIX (6) INCHES OF LONGITUDINAL CLEARANCE.
3. IN ACCORDANCE WITH C&MS 513, THE FABRICATOR SHALL DETAIL ALL CROSSFRAMES TO FIT WITH THE WEBS PLUMB AT THE COMPLETION OF SUPERSTRUCTURE ERECTION (STEEL DEAD LOAD FIT, SDLF).
4. CONNECTION PLATES SHALL BE NORMAL TO ℄ GIRDER.
5. IN BAYS WITH CLOSURE POUR, THE FABRICATOR SHALL DETAIL CROSSFRAMES TO FIT AT THE COMPLETION OF DECK PLACEMENT ON EACH SIDE OF THE CLOSURE POUR. BOLT HOLES IN THE CONNECTION PLATE ON ONE OF THE GIRDER LINES SHALL BE FIELD DRILLED AND SHOP DRILLED ON THE OTHER.
6. THE CONTRACTOR SHALL NOT PERMANENTLY ATTACH INTERMEDIATE CROSSFRAMES IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
7. ALL MATERIAL SHALL BE ASTM A709, GRADE 50, YIELD STRENGTH 50-KSI.
8. ALL MATERIAL SHALL BE SHOP PRIMED AND FIELD PAINTED PER C&MS 514.
9. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER ASTM F3125, GRADE A325, TYPE 1 WITH THREADS EXCLUDED FROM SHEAR PLANE UNLESS OTHERWISE NOTED.

INTERMEDIATE CROSSFRAME DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY

Jacobs

DESIGNER	CHECKER
DBL	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
35	64

SHEET	TOTAL
P. 520	618

FRA-71-19.10

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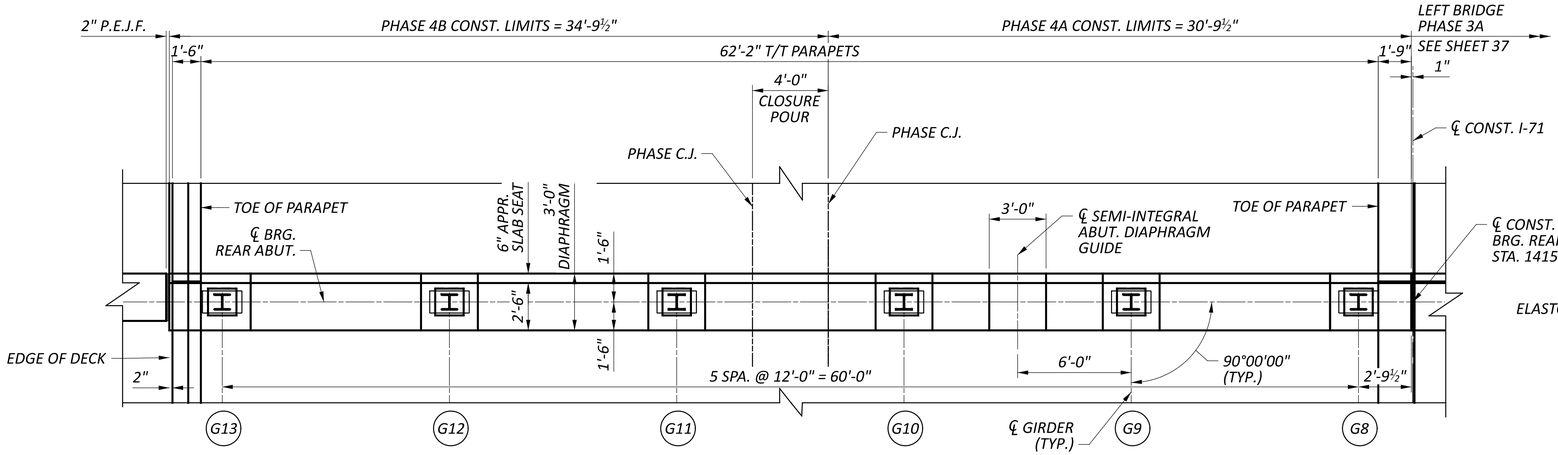
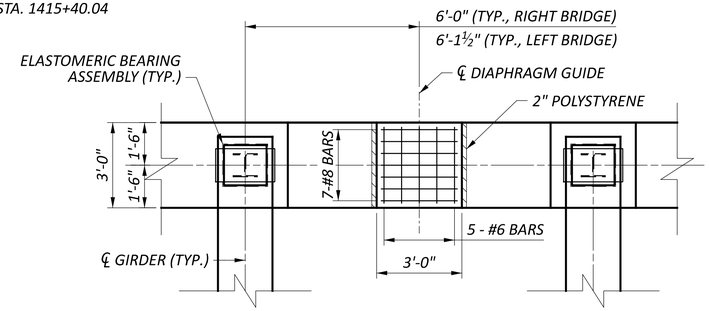


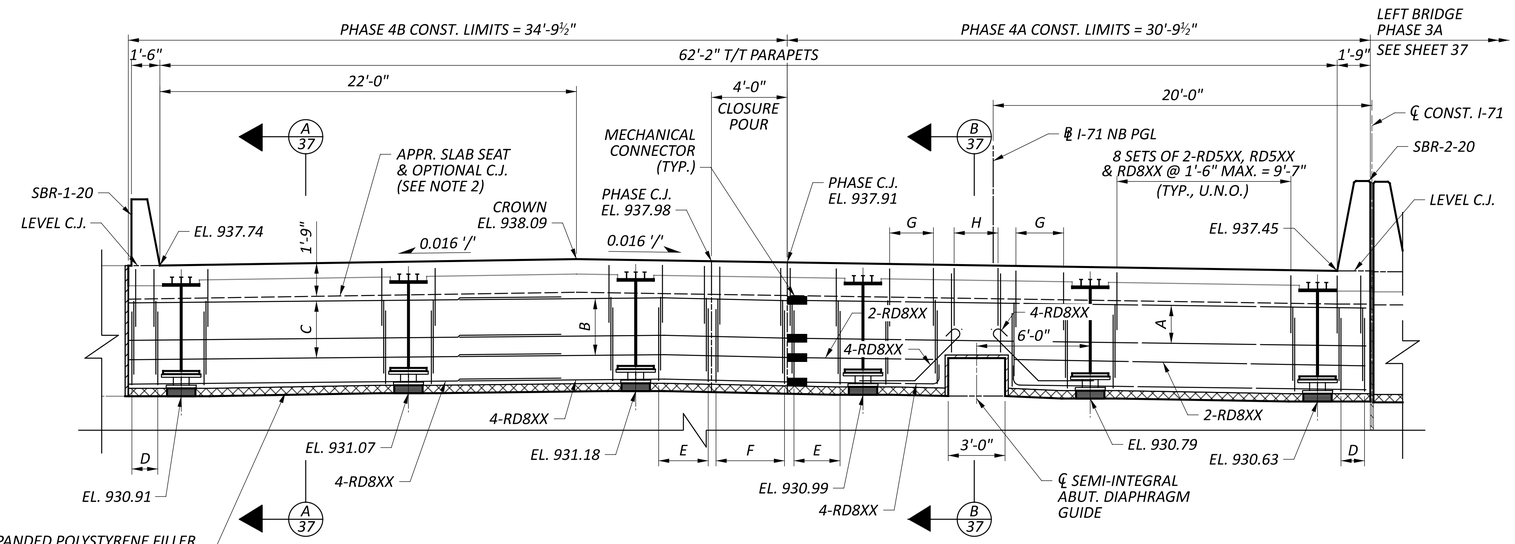
DIAPHRAGM PLAN - RIGHT BRIDGE



DIAPHRAGM GUIDE PLAN

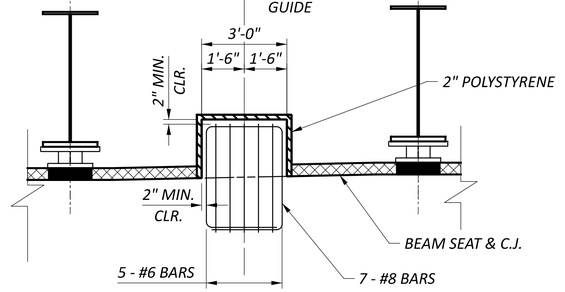
LEGEND:

GX - GIRDER LINE DESIGNATION



DIAPHRAGM ELEVATION - RIGHT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ALONG ℄ BRG.)



DIAPHRAGM GUIDE ELEVATION

REINFORCING STEEL LEGEND

A: 3 - RD8XX (E.F.) @ 1'-0" MAX. = 2'-0"
B: 4 - RD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
C: 4 - RD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
D: 2 SETS OF 2-RD5XX, RD5XX & RD8XX = 1'-5"
E: 3 SETS OF 2-RD5XX, RD5XX & RD8XX @ 1'-6" MAX. = 2'-6"
F: 4 SETS OF 2-RD5XX, RD5XX & RD8XX @ 1'-6" MAX. = 3'-8"
G: 3 SETS OF 2-RD5XX, RD5XX & RD8XX @ 1'-6" MAX. = 2'-8"
H: 3 SETS OF RD5XX & RD8XX @ 1'-6" MAX. = 2'-6"

MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"

NOTES:

1. *FOR REAR ABUTMENT DETAILS, SEE SHEETS 24 THRU 26.*
2. *PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
3. *ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.*

REAR ABUTMENT DIAPHRAGM PLAN AND ELEVATION - RIGHT BRIDGE

BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	36
TOTAL	64
SHEET	P. 521
TOTAL	618

FRA-71-19.10

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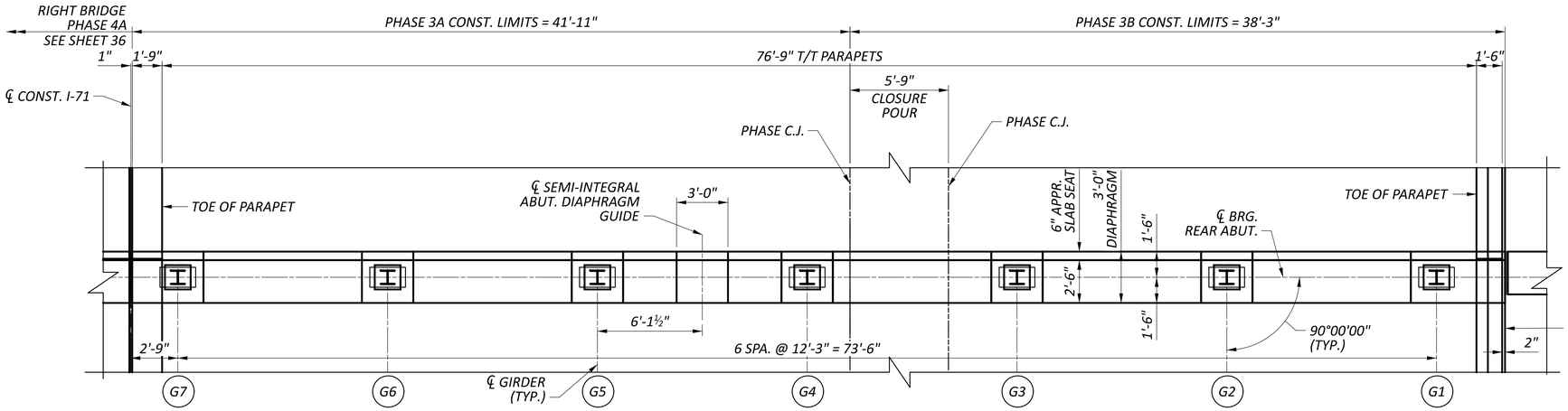
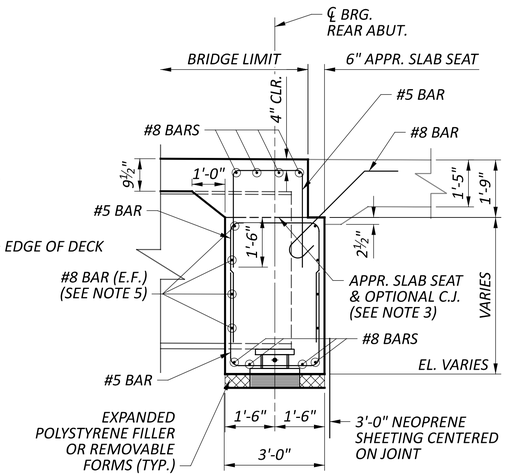


DIAPHRAGM PLAN - LEFT BRIDGE



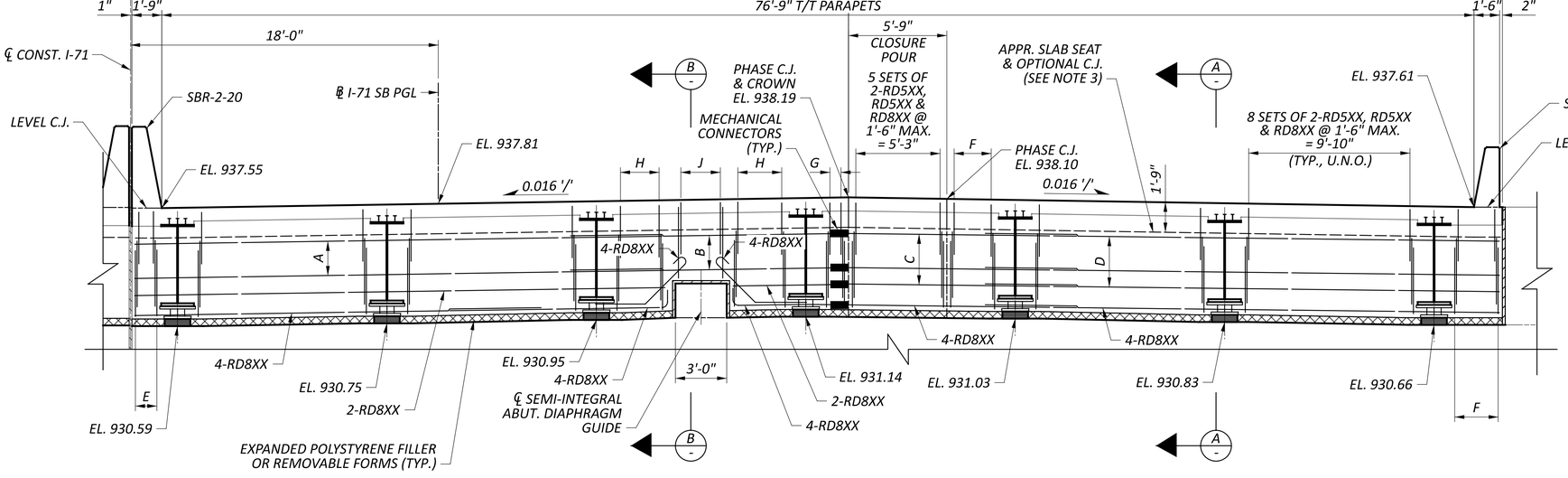
A - 37 **SECTION**

LEGEND:

(GX) - GIRDER LINE DESIGNATION

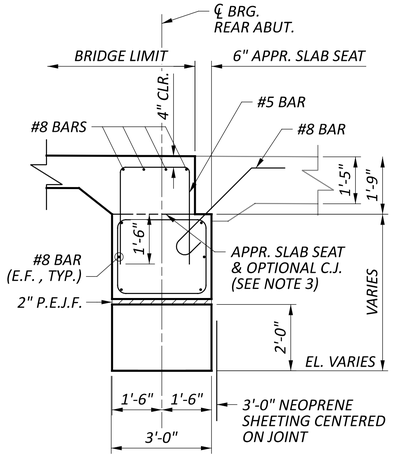
MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"



DIAPHRAGM ELEVATION - LEFT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ALONG ℄ BRG.)



B - 37 **SECTION**

REINFORCING STEEL LEGEND

A: 3 - RD8XX (E.F.) @ 1'-0" MAX. = 2'-0"
B: 3 - RD8XX (E.F.) @ 1'-0" MAX. = 2'-0"
C: 4 - RD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
D: 4 - RD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
E: 2 SETS OF 2-RD5XX, RD5XX & RD8XX = 1'-5"
F: 3 SETS OF 2-RD5XX, RD5XX & RD8XX = 2'-6"
G: 2 SETS OF 2-RD5XX, RD5XX & RD8XX @ 1'-6" MAX.
H: 3 SETS OF 2-RD5XX, RD5XX & RD8XX @ 1'-6" MAX. = 3'-0"
J: 3 SETS OF RD5XX & RD8XX @ 1'-6" MAX. = 2'-6"

NOTES:

1. FOR REAR ABUTMENT DETAILS, SEE SHEETS 24 THRU 26.
2. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 36.
3. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
4. ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.
5. 2" DIA. HOLES IN STEEL GIRDER FOR REINFORCING IN FRONT FACE OF DIAPHRAGM.

REAR ABUTMENT DIAPHRAGM PLAN AND ELEVATION - LEFT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

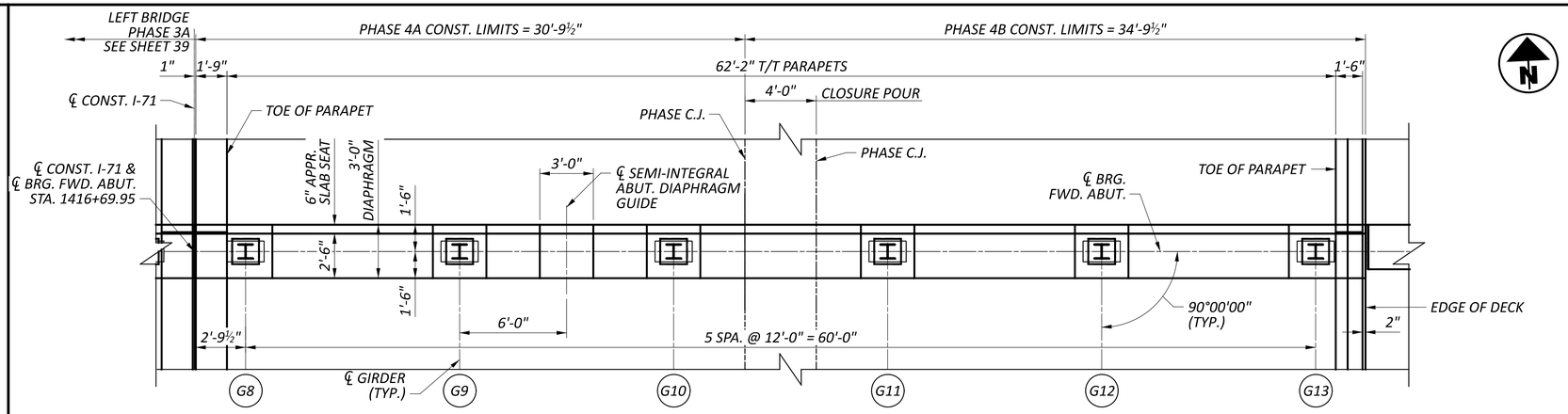
SFN TBD
DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
MAN	FM

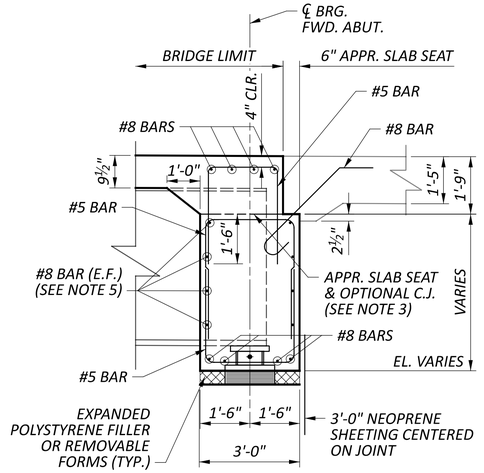
REVIEWER: MJR 03/13/26
PROJECT ID: 109164
SUBSET 37 | TOTAL 64
SHEET P. 522 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:30:05 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Structures\SFN_2508257\Sheets\109164_SFN_2508257_SR004.dgn



DIAPHRAGM PLAN - RIGHT BRIDGE



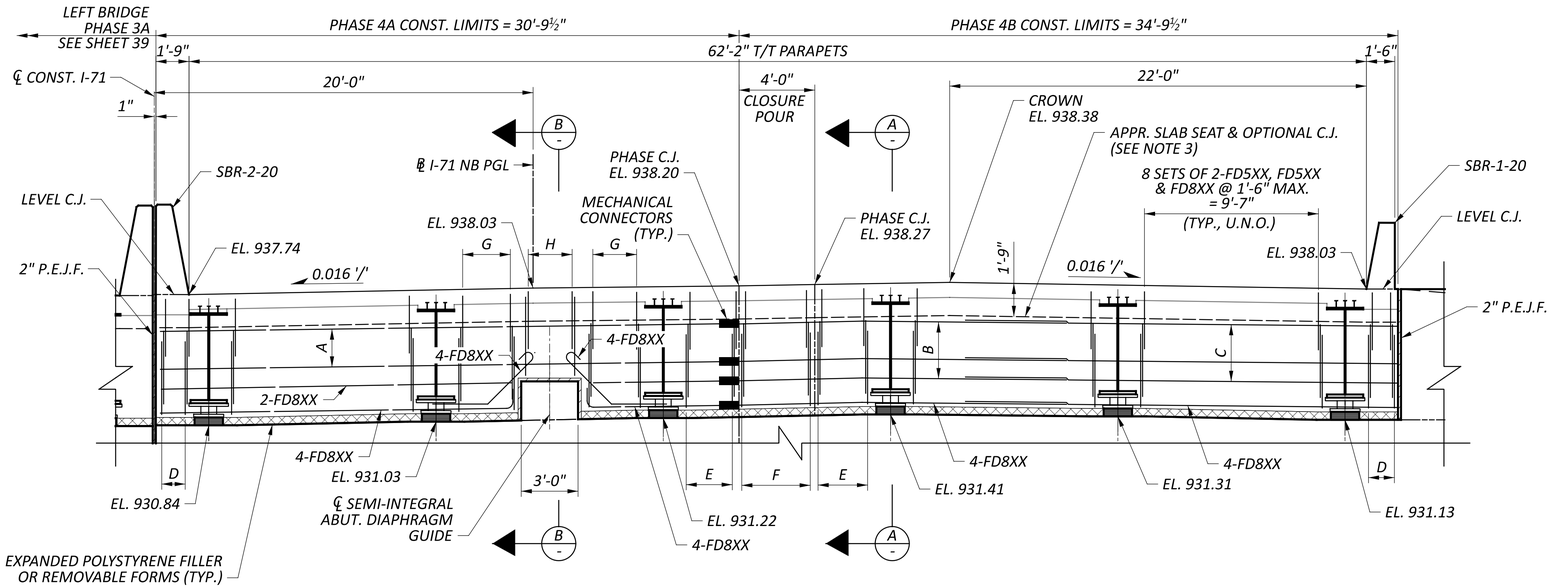
SECTION A - A / 39

LEGEND:

(GX) - GIRDER LINE DESIGNATION

MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"



DIAPHRAGM ELEVATION - RIGHT BRIDGE

(DIMENSIONS AND ELEVATIONS SHOWN ALONG ℄ BRG.)

SECTION B - B / 39

REINFORCING STEEL LEGEND

A: 3 - FD8XX (E.F.) @ 1'-0" MAX. = 2'-0"	D: 2 SETS OF 2-FD5XX, FD5XX & FD8XX = 1'-5"	G: 3 SETS OF 2-FD5XX, FD5XX & FD8XX @ 1'-6" MAX. = 2'-8"
B: 4 - FD8XX (E.F.) @ 1'-0" MAX. = 3'-0"	E: 3 SETS OF 2-FD5XX, FD5XX & FD8XX @ 1'-6" MAX. = 2'-6"	H: 3 SETS OF FD5XX & FD8XX @ 1'-6" MAX. = 2'-6"
C: 4 - FD8XX (E.F.) @ 1'-0" MAX. = 3'-0"	F: 4 SETS OF 2-FD5XX, FD5XX & FD8XX @ 1'-6" MAX. = 3'-8"	

NOTES:

1. *FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 27 THRU 29.*
2. *FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 36.*
3. *PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
4. *ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.*
5. *2" DIA. HOLES IN STEEL GIRDER FOR REINFORCING IN FRONT FACE OF DIAPHRAGM.*

FORWARD ABUTMENT DIAPHRAGM PLAN AND ELEVATION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	38
TOTAL	64
SHEET	P. 523
TOTAL	618

FRA-71-19.10

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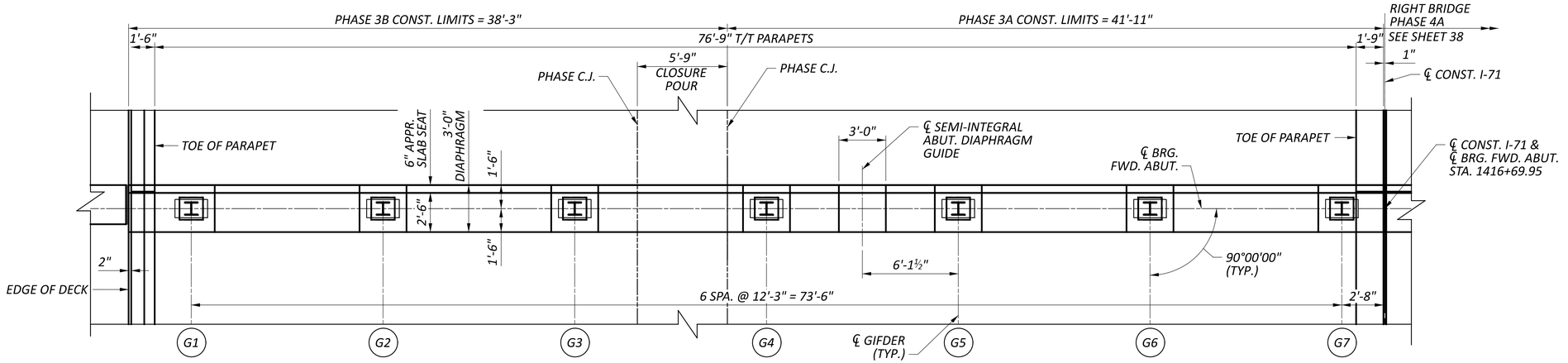


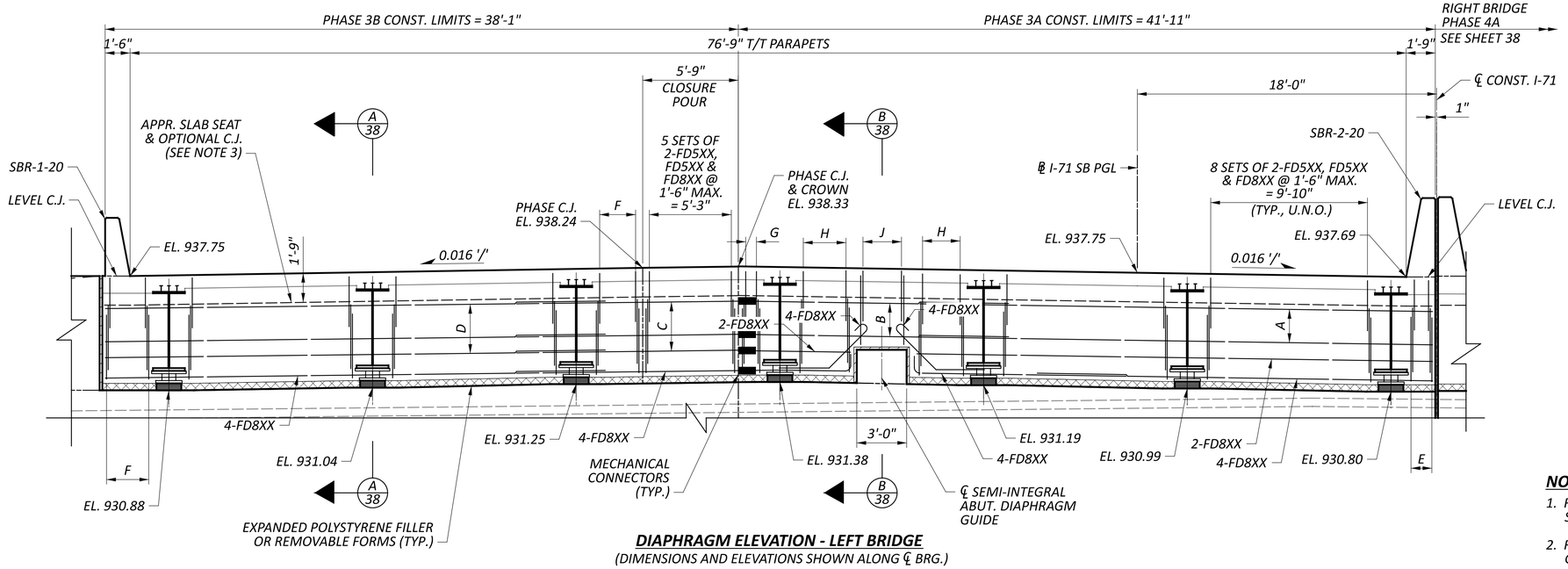
DIAPHRAGM PLAN - LEFT BRIDGE

LEGEND:

(GX) - GIRDER LINE DESIGNATION

MIN. LAP LENGTHS:

#5 BAR = 3'-1"
#8 BAR = 5'-4"



DIAPHRAGM ELEVATION - LEFT BRIDGE
(DIMENSIONS AND ELEVATIONS SHOWN ALONG ℄ BRG.)

REINFORCING STEEL LEGEND

A: 3 - FD8XX (E.F.) @ 1'-0" MAX. = 2'-0"
B: 3 - FD8XX (E.F.) @ 1'-0" MAX. = 2'-0"
C: 4 - FD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
D: 4 - FD8XX (E.F.) @ 1'-0" MAX. = 3'-0"
E: 2 SETS OF 2-FD5XX, FD5XX & FD8XX = 1'-5"
F: 3 SETS OF 2-FD5XX, FD5XX & FD8XX = 2'-6"
G: 2 SETS OF 2-FD5XX, FD5XX & FD8XX @ 1'-6" MAX.
H: 3 SETS OF 2-FD5XX, FD5XX & FD8XX @ 1'-6" MAX. = 3'-0"
J: 3 SETS OF FD5XX & FD8XX @ 1'-6" MAX. = 2'-6"

NOTES:

1. *FOR FORWAFD ABUTMENT DETAILS, SEE SHEETS 27 THRU 29.*
2. *FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS, SEE SHEET 36.*
3. *PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
4. *ALL REINFORCING STEEL SHALL MAINTAIN A 2" MINIMUM CLEARANCE TO FACE OF CONCRETE UNLESS NOTED OTHERWISE.*

FORWARD ABUTMENT DIAPHRAGM PLAN AND ELEVATION - LEFT BRIDGE

BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	39
TOTAL	64
SHEET	P. 524
TOTAL	618

FRA-71-19.10

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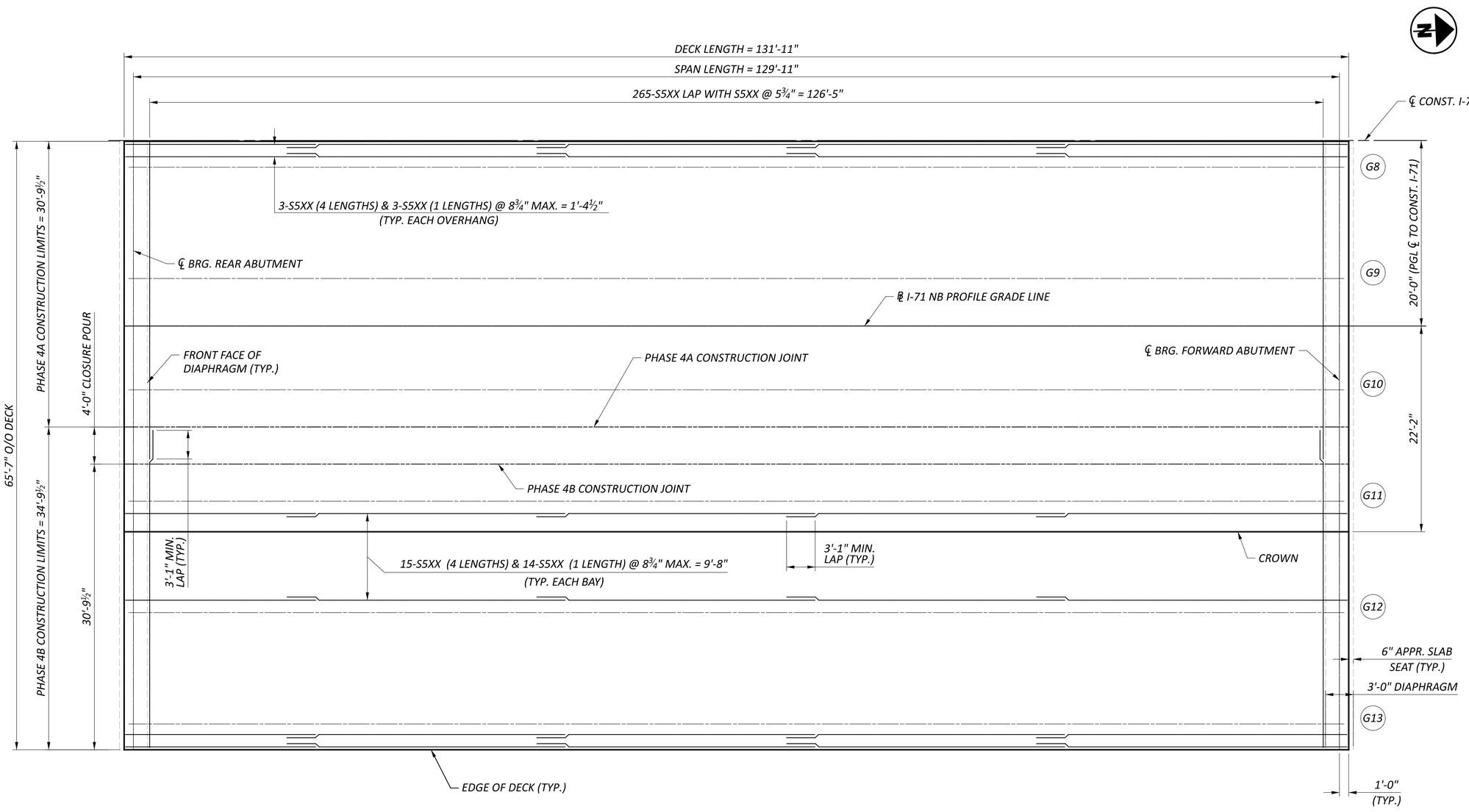

DECK PLAN - RIGHT BRIDGE (NB) - BOTTOM REINFORCING
(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   NO. 4 BAR = 2'-6"
   NO. 5 BAR = 3'-1"
   NO. 6 BAR = 4'-0"

DECK PLAN - RIGHT BRIDGE (BOTTOM MAT)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 40 | TOTAL 64
SHEET P. 525 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:30:50 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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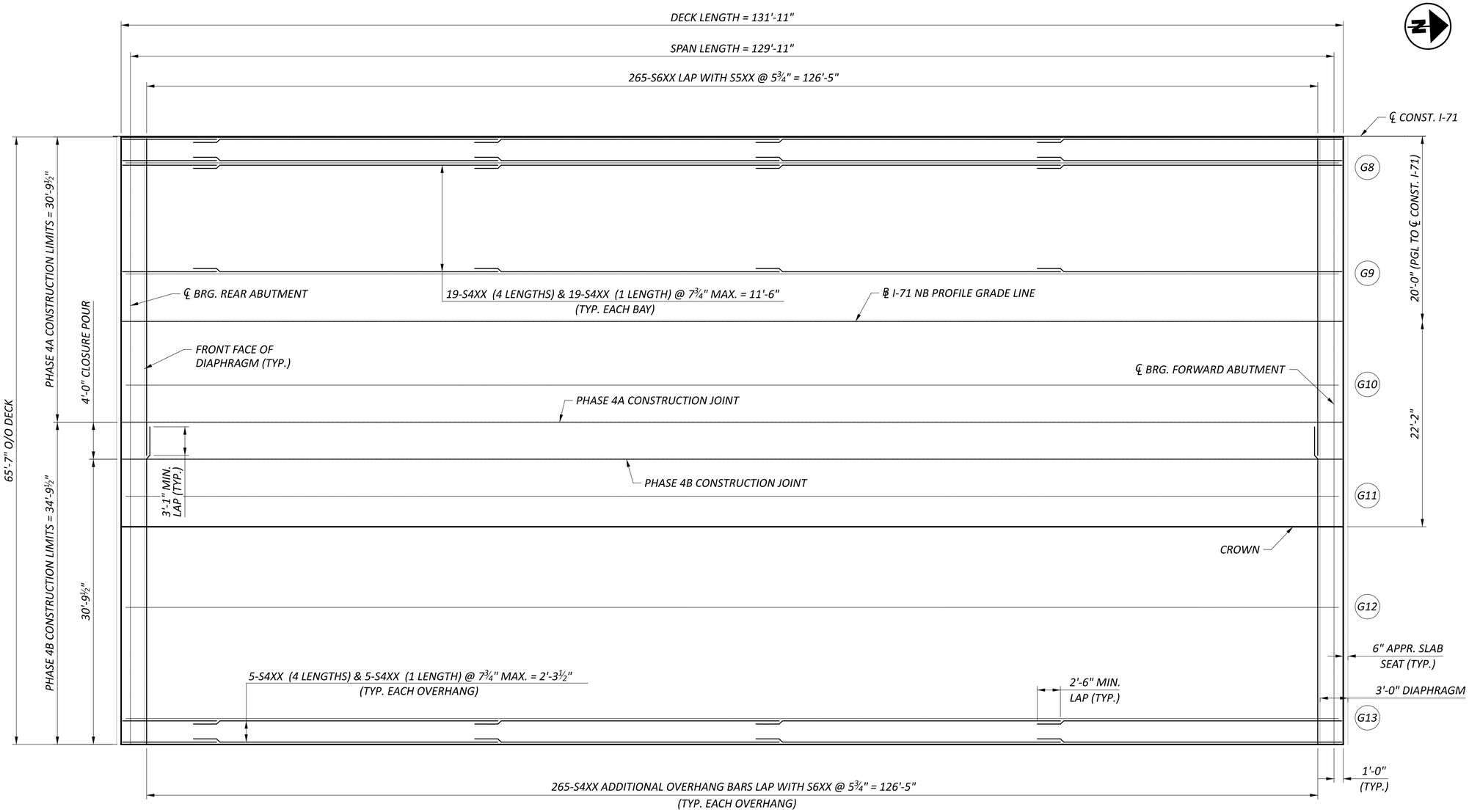


DECK PLAN - RIGHT BRIDGE (NB) - TOP REINFORCING

(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

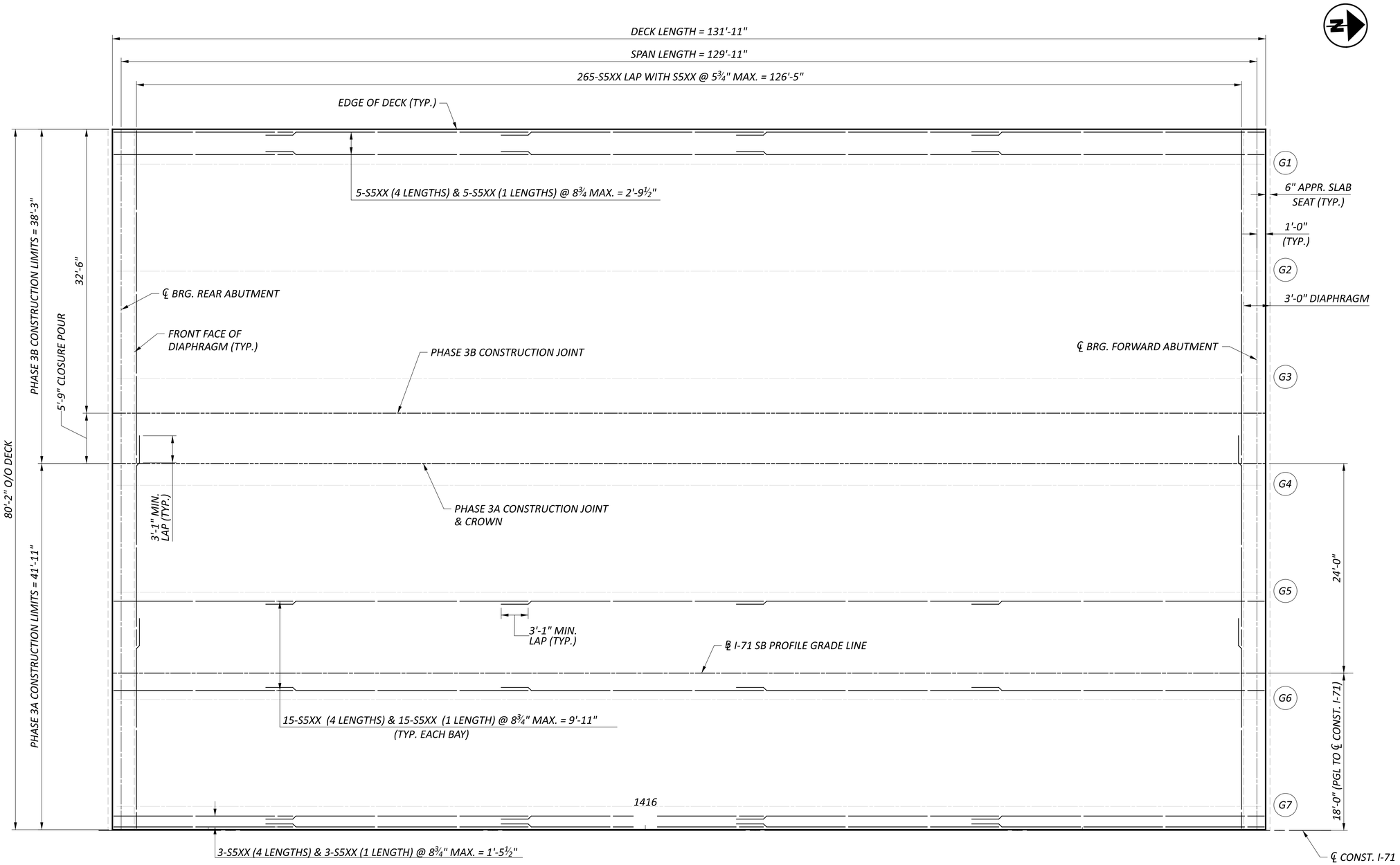
(GXX) - *GIRDER LINE DESIGNATION*

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *MINIMUM REINFORCING STEEL LAP LENGTHS:*
   NO. 4 BAR = 2'-6"
   NO. 5 BAR = 3'-1"
   NO. 6 BAR = 4'-0"

DECK PLAN - RIGHT BRIDGE (TOP MAT)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	41
TOTAL	64
SHEET	P. 526
TOTAL	618



DECK PLAN - LEFT BRIDGE (SB) - BOTTOM REINFORCING

(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   NO. 4 BAR = 2'-6"
   NO. 5 BAR = 3'-1"
   NO. 6 BAR = 4'-0"

DECK PLAN - LEFT BRIDGE (BOTTOM MAT)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	42
TOTAL	64
SHEET	P. 527
TOTAL	618

FRA-71-19.10

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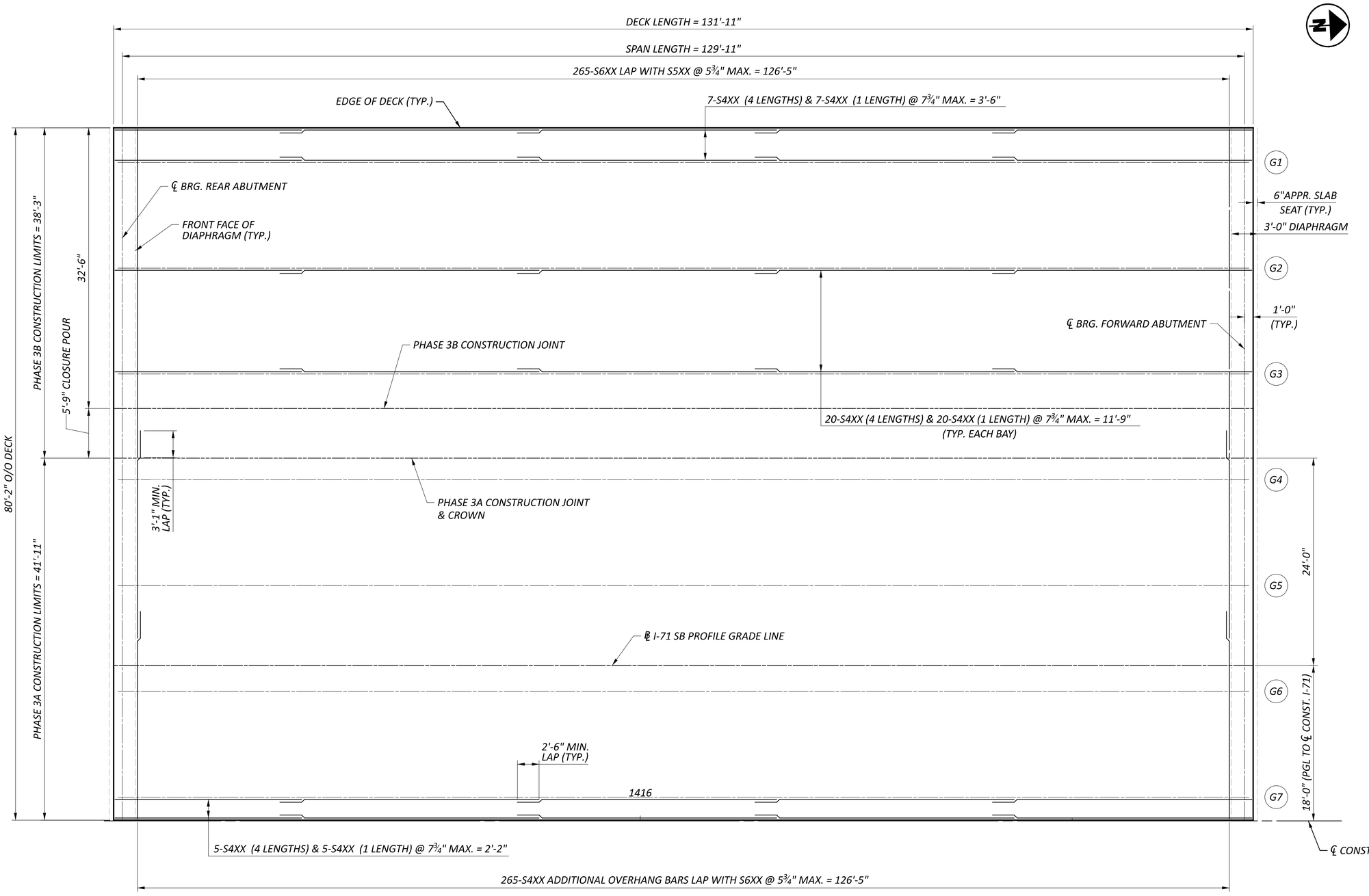

DECK PLAN - LEFT BRIDGE (SB) - TOP REINFORCING

(DIAPHRAGM BARS NOT SHOWN FOR CLARITY)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. MINIMUM REINFORCING STEEL LAP LENGTHS:
   - NO. 4 BAR = 2'-6"
   - NO. 5 BAR = 3'-1"
   - NO. 6 BAR = 4'-0"

DECK PLAN - LEFT BRIDGE (TOP MAT)
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	43
TOTAL	64
SHEET	P. 528
TOTAL	618

FRA-71-19.10

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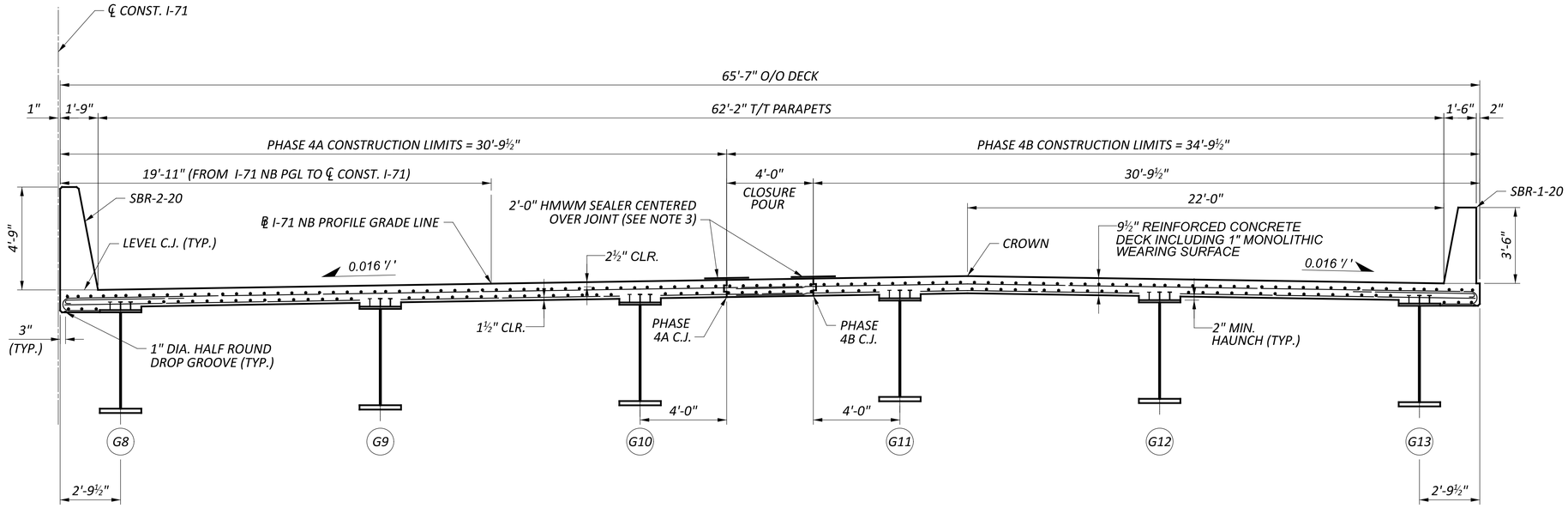
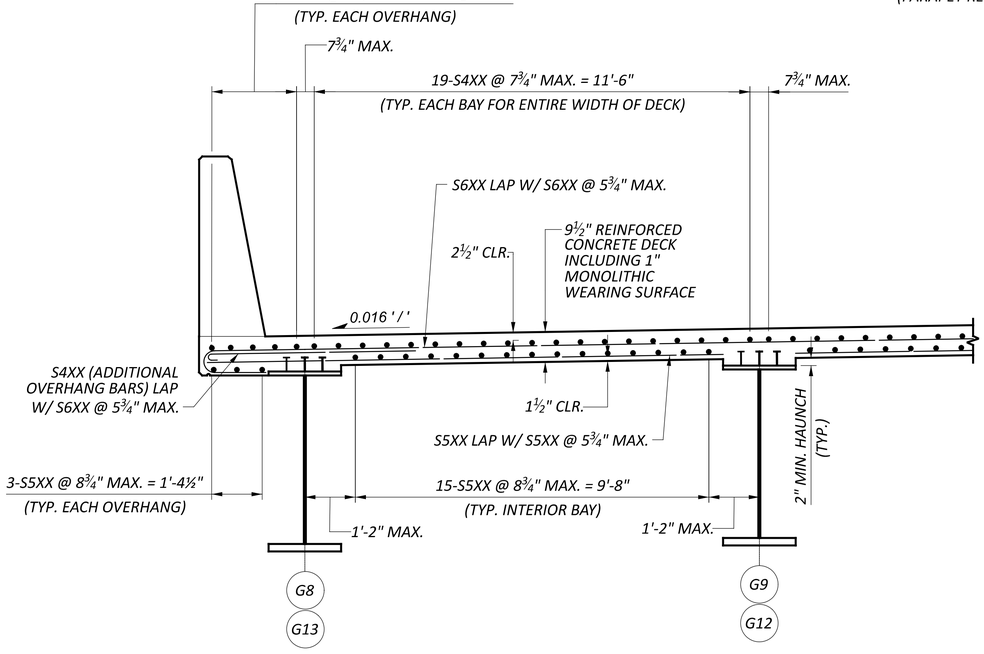


TRANSVERSE SECTION - RIGHT BRIDGE (NORTHBOUND)

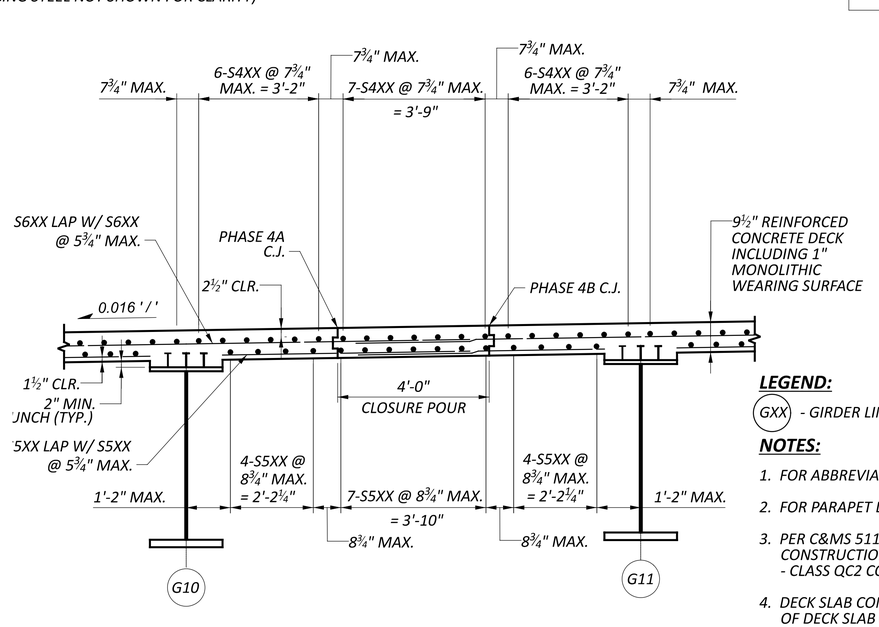
(LOOKING UPSTATION)
(CROSSFRAMES NOT SHOWN FOR CLARITY)
(PARAPET REINFORCING STEEL NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS	
NO. 4 BARS	2'-6"
NO. 5 BARS	3'-1"
NO. 6 BARS	4'-0"



TYPICAL REINFORCING AND OVERHANG DETAIL - RIGHT BRIDGE (NORTHBOUND)

(BAY BETWEEN GIRDERS G8 AND G9 SHOWN,
BAY BETWEEN GIRDERS G13 AND G12 OPPOSITE HAND)



TYPICAL REINFORCING - RIGHT BRIDGE (NORTHBOUND)

(BAY BETWEEN GIRDERS G10 AND G11 FOR CLOSURE POUR SHOWN)

LEGEND:

(GXX) - GIRDER LINE DESIGNATION

NOTES:

1. FOR ABBREVIATION LEGEND, SEE SHEET 5.
2. FOR PARAPET DETAILS, SEE SHEETS 52 THRU 53..
3. PER C&MS 511.19, THE 2'-0" HMWM CENTERED ON THE PHASE CONSTRUCTION JOINT IS CONSIDERED INCIDENTAL TO ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.
4. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 3.43" AND A HAUNCH WITH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.
5. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TOO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH C&MS 511.23.

TRANSVERSE SECTION - RIGHT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER MAN | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 44 | TOTAL 64
SHEET P. 529 | TOTAL 618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:31:52 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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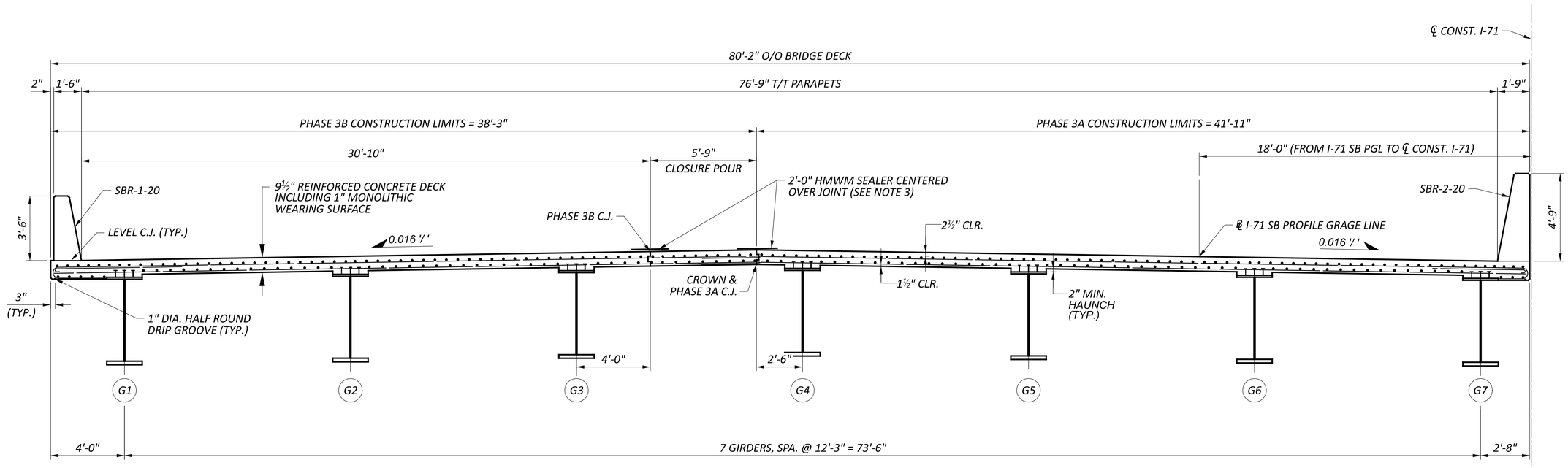
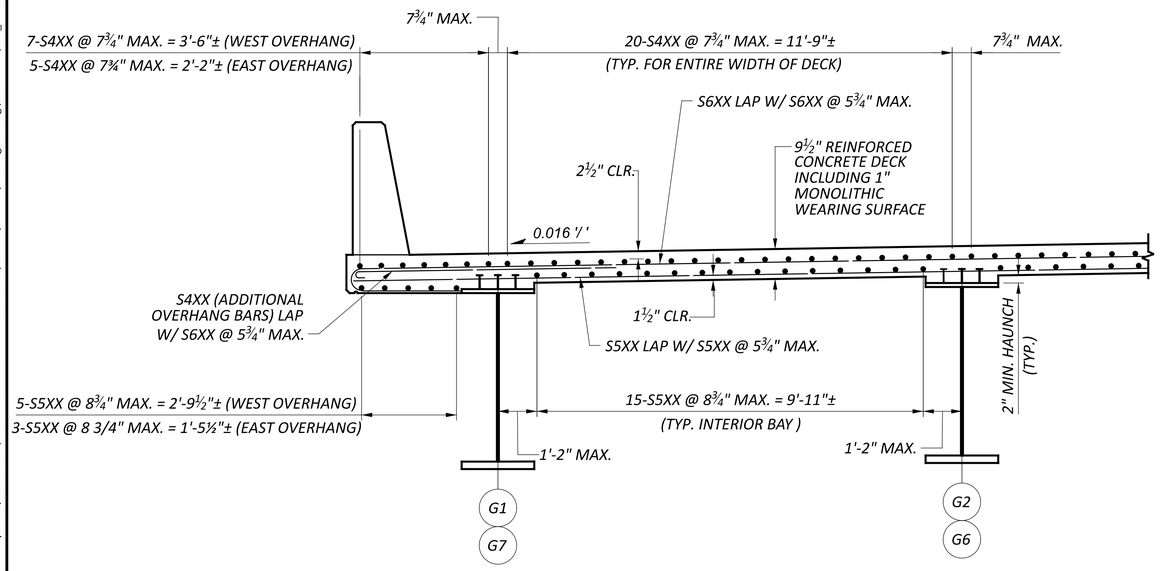


TRANSVERSE SECTION - LEFT BRIDGE (SOUTHBOUND)

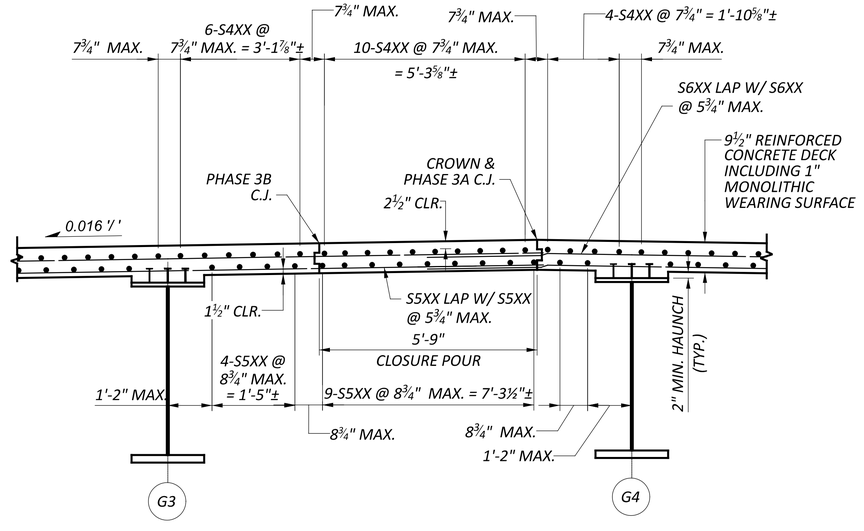
(LOOKING UPSTATION)
(CROSSFRAMES NOT SHOWN FOR CLARITY)
(PARAPET REINFORCING STEEL NOT SHOWN FOR CLARITY)

MIN. LAP LENGTHS	
NO. 4 BARS	2'-6"
NO. 5 BARS	3'-1"
NO. 6 BARS	4'-0"



TYPICAL REINFORCING AND OVERHANG DETAIL - LEFT BRIDGE (SOUTHBOUND)

(WEST OVERHANG AND BAY BETWEEN GIRDERS G1 AND G2 SHOWN,
EAST OVERHANG AND BAY BETWEEN GIRDERS G6 AND G7 SIMILAR AND OPPOSITE HAND)



TYPICAL REINFORCING - LEFT BRIDGE (SOUTHBOUND)

(BAY BETWEEN GIRDERS G3 AND G4 FOR CLOSURE POUR SHOWN)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*
2. *FOR PARAPET DETAILS, SEE SHEETS 52 THRU 53.*
3. *PER C&MS 511.19, THE 2'-0" HMWM CENTERED ON THE PHASE CONSTRUCTION JOINT IS CONSIDERED INCIDENTAL TO ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.*

TRANSVERSE SECTION - LEFT BRIDGE
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
MAN	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
45	64

SHEET	TOTAL
P. 530	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:32:06 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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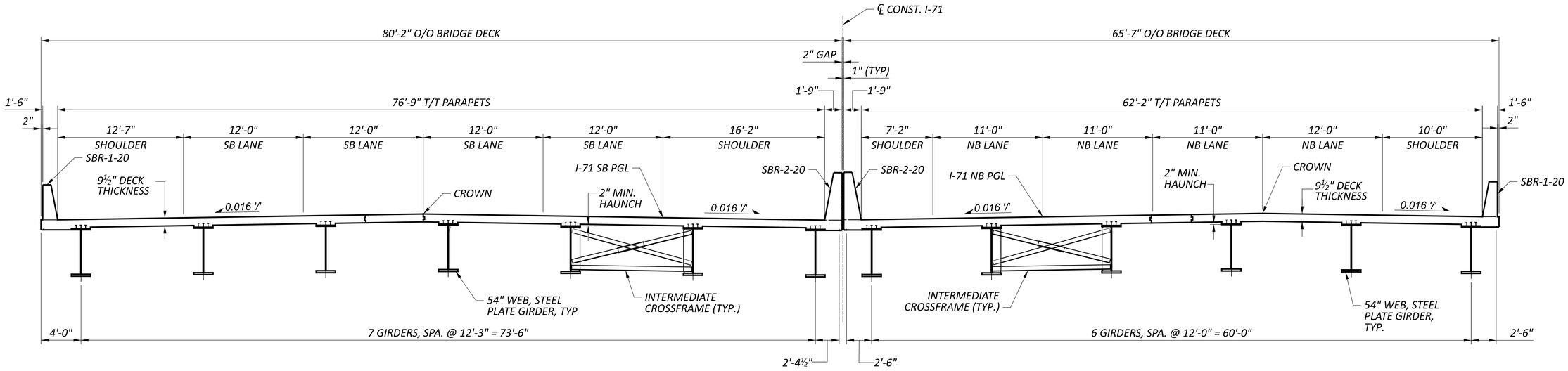
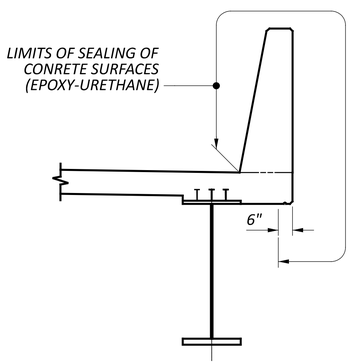
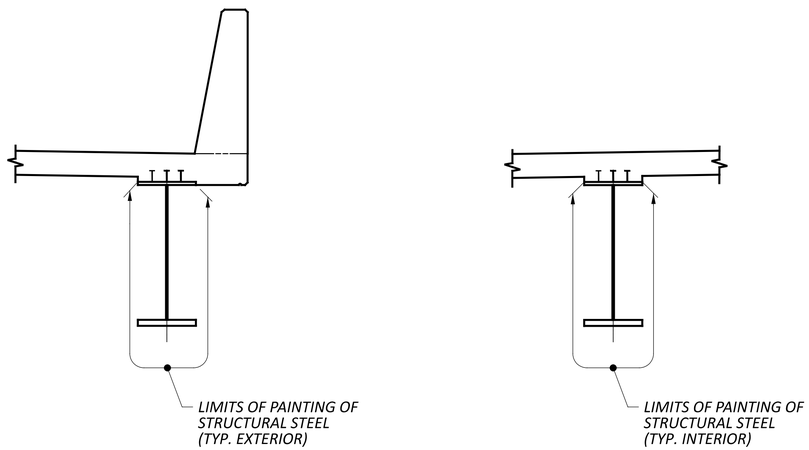


TRANSVERSE SECTION



TYPICAL LIMITS OF CONCRETE SEALING
(NOT TO SCALE)



LIMITS OF PAINTING OF STRUCTURAL STEEL
(NOT TO SCALE)

NOTES:

1. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*

TRANSVERSE SECTION - GENERAL GEOMETRY
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	46
TOTAL	64
SHEET	P. 531
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:32:19 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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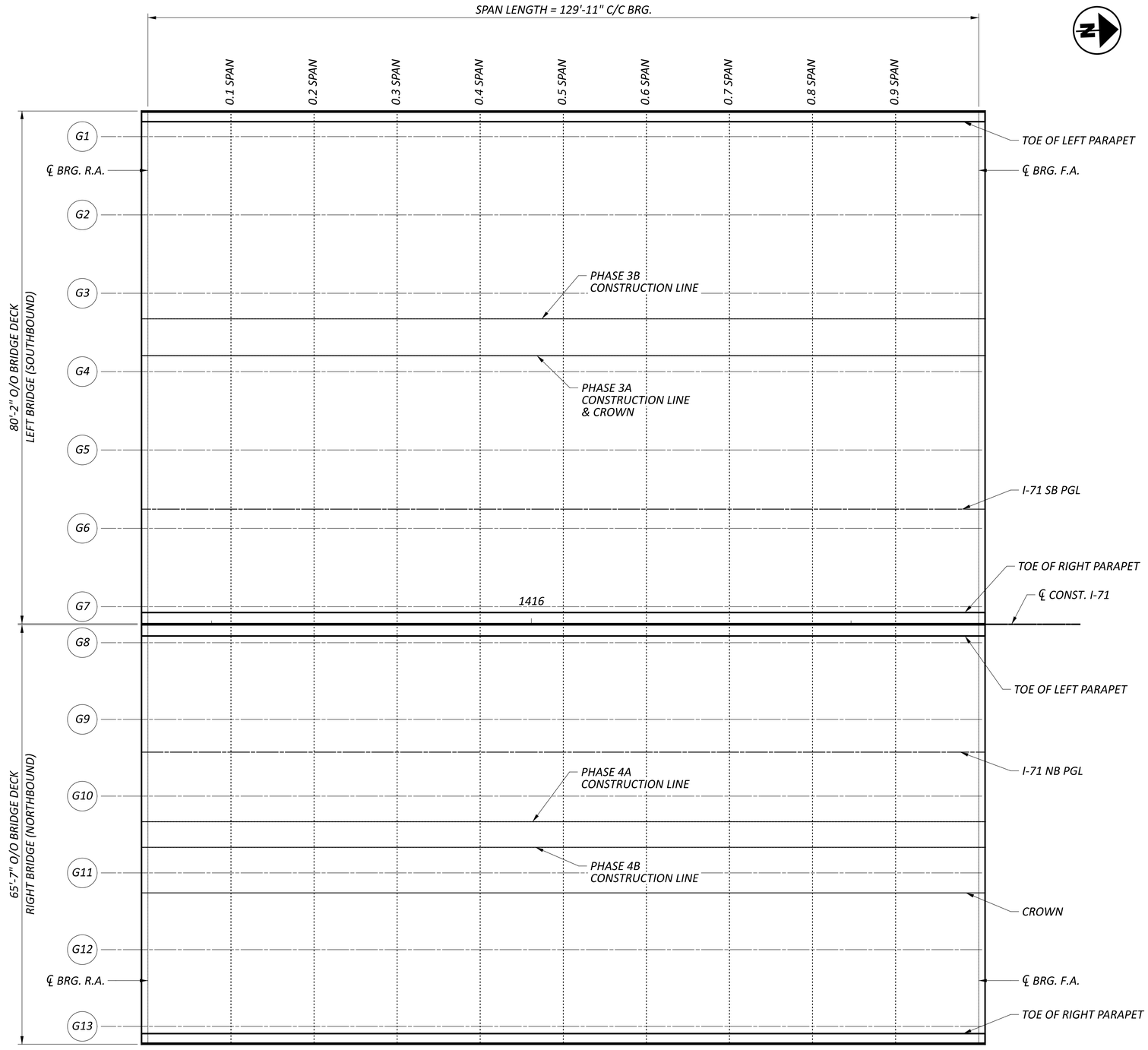

CRITICAL BRIDGE POINTS PLAN

(FOR USE WITH CAMBER, SCREED, TOP OF HAUNCH AND FINAL DECK SURFACE ELEVATION TABLES)

LEGEND:

(GXX) - *GIRDER LINE DESIGNATION*

NOTES:

1. *FOR SCREED TABLES, SEE SHEETS 49 THRU 51.*
2. *FOR SCREED LOCATION TRANSVERSE SECTIONS, SEE SHEET 48.*
3. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*

BRIDGE CRITICAL POINTS PLAN
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	MAN
CHECKER	ZF
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	47
TOTAL	64
SHEET	P. 532
TOTAL	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:32:35 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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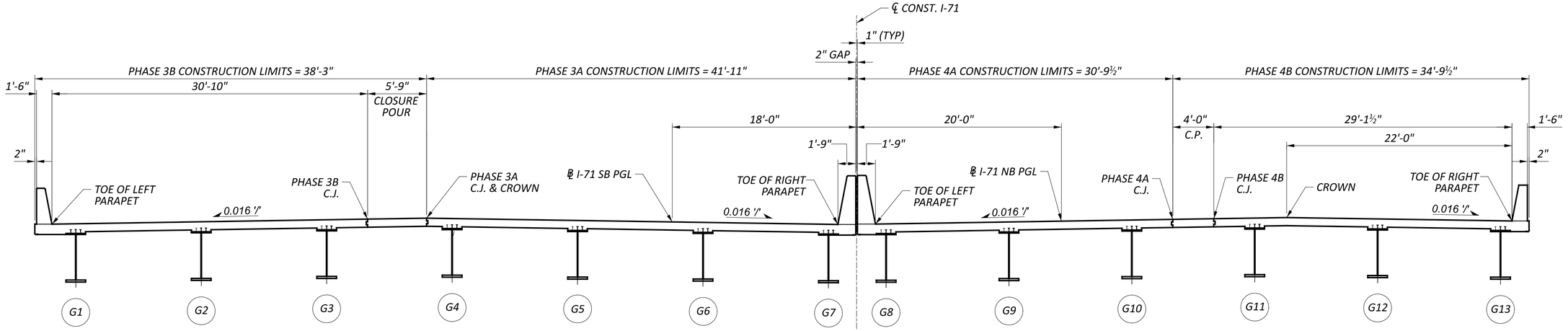

SCREED LOCATION TRANSVERSE SECTION - LEFT BRIDGE & RIGHT BRIDGE

(FOR USE WITH CAMBER, SCREED, TOP OF HAUNCH AND FINAL DECK SURFACE ELEVATION TABLES)

NOTES:

1. *FOR SCREED TABLE, SEE SHEETS 49 THRU 51.*
2. *FOR CRITICAL BRIDGE POINTS PLAN, SEE SHEET 47.*
3. *FOR ABBREVIATION LEGEND, SEE SHEET 5.*

BRIDGE CRITICAL POINTS TRANSVERSE SECTION
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN
TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
MAN	ZF

REVIEWER
MJR 03/13/26

PROJECT ID
109164

SUBSET	TOTAL
48	64

SHEET	TOTAL
P. 533	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:32:49 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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SCREED ELEVATIONS (SOUTHBOUND)												
LOCATION	TOE OF LEFT PARAPET		PHASE 3B C.J.		PHASE 3A C.J.		CROWN		PGL		TOE OF RIGHT PARAPET	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	937.54	141540.04	938.00	1415+40.04	938.10	1415+40.04	938.11	141540.04	937.74	1415+40.04	9+37.49
0.10L	1415+53.03	937.73	141553.03	938.20	1415+53.03	938.30	1415+53.03	938.31	141553.03	937.94	1415+53.03	9+37.66
0.20L	1415+66.02	937.90	141566.02	938.38	1415+66.02	938.47	1415+66.02	938.49	141566.02	938.11	1415+66.02	9+37.81
0.30L	1415+79.01	938.03	141579.01	938.51		938.61	1415+79.01	938.62	141579.01	938.25	1415+79.01	9+37.92
0.40L	1415+92.00	938.11	141592.00	938.61	1415+92.00	938.70	1415+92.00	938.72	141592.00	938.34	1415+92.00	9+38.01
0.50L	1416+05.00	938.16	141605.00	938.65	1416+05.00	938.75	1416+05.00	938.76	141605.00	938.39	1416+05.00	9+38.05
0.60L	1416+17.99	938.16	141617.99	938.65	1416+17.99	938.74	1416+17.99	938.76	141617.99	938.39	1416+17.99	9+38.05
0.70L	1416+30.98	938.11	141630.98	938.60	1416+30.98	938.69	1416+30.98	938.71	141630.98	938.33	1416+30.98	9+38.01
0.80L	1416+43.97	938.02	141643.97	938.50	1416+43.97	938.60	1416+43.97	938.61	141643.97	938.24	1416+43.97	9+37.93
0.90L	1416+56.96	937.90	141656.96	938.37	1416+56.96	938.47	1416+56.96	938.48	141656.96	938.11	1416+56.96	9+37.83
CL BRG. F.A.	1416+69.95	937.75	141669.95	938.21	1416+69.95	938.31	1416+69.95	938.32	141669.95	937.95	1416+69.95	9+37.70

SCREED ELEVATIONS (NORTHBOUND)												
LOCATION	TOE OF LEFT PARAPET		PGL		PHASE 4A C.J.		PHASE 4B C.J.		CROWN		TOE OF RIGHT PARAPET	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	937.53	1415+40.04	937.81	1415+40.04	937.98	1415+40.04	938.04	1415+40.04	938.15	1415+40.04	937.81
0.10L	1415+53.03	937.70	1415+53.03	938.01	1415+53.03	938.18	1415+53.03	938.24	1415+53.03	938.35	1415+53.03	937.98
0.20L	1415+66.02	937.85	1415+66.02	938.18	1415+66.02	938.35	1415+66.02	938.42	1415+66.02	938.53	1415+66.02	938.14
0.30L	1415+79.01	937.97	1415+79.01	938.32	1415+79.01	938.49	1415+79.01	938.55	1415+79.01	938.66	1415+79.01	938.25
0.40L	1415+92.00	938.05	1415+92.00	938.41	1415+92.00	938.58	1415+92.00	938.65	1415+92.00	938.76	1415+92.00	938.34
0.50L	1416+05.00	938.10	1416+05.00	938.46	1416+05.00	938.63	1416+05.00	938.69	1416+05.00	938.80	1416+05.00	938.38
0.60L	1416+17.99	938.10	1416+17.99	938.46	1416+17.99	938.63	1416+17.99	938.69	1416+17.99	938.80	1416+17.99	938.38
0.70L	1416+30.98	938.06	1416+30.98	938.41	1416+30.98	938.58	1416+30.98	938.64	1416+30.98	938.75	1416+30.98	938.34
0.80L	1416+43.97	937.98	1416+43.97	938.31	1416+43.97	938.48	1416+43.97	938.55	1416+43.97	938.66	1416+43.97	938.27
0.90L	1416+56.96	937.87	1416+56.96	938.18	1416+56.96	938.35	1416+56.96	938.42	1416+56.96	938.53	1416+56.96	938.16
CL BRG. F.A.	1416+69.95	937.74	1416+69.95	938.03	1416+69.95	938.20	1416+69.95	938.26	1416+69.95	938.37	1416+69.95	938.03

NOTES:

1. *SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.*
2. *SEE SHEET 47 AND SHEET 48 FOR CRITICAL BRIDGE POINTS PLAN AND SCREEN LOCATION TRANSVERSE SECTION.*

SCREED ELEVATION TABLES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
DBL	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
49	64

SHEET	TOTAL
P. 534	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:33:02 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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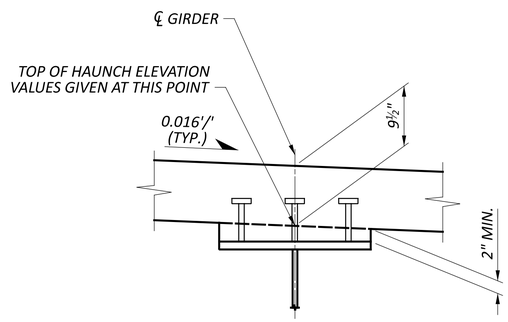
TOP OF HAUNCH ELEVATIONS (LEFT BRIDGE)														
LOCATION	G1		G2		G3		G4		G5		G6		G7	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	936.79	1415+40.04	936.98	1415+40.04	937.17	1415+40.04	937.28	1415+40.04	937.09	1415+40.04	936.90	1415+40.04	936.71
0.10L	1415+53.03	936.98	1415+53.03	937.18	1415+53.03	937.37	1415+53.03	937.48	1415+53.03	937.29	1415+53.03	937.10	1415+53.03	936.88
0.20L	1415+66.02	937.14	1415+66.02	937.35	1415+66.02	937.54	1415+66.02	937.66	1415+66.02	937.47	1415+66.02	937.27	1415+66.02	937.03
0.30L	1415+79.01	937.27	1415+79.01	937.49	1415+79.01	937.68	1415+79.01	937.79	1415+79.01	937.60	1415+79.01	937.41	1415+79.01	937.15
0.40L	1415+92.00	937.36	1415+92.00	937.58	1415+92.00	937.77	1415+92.00	937.89	1415+92.00	937.70	1415+92.00	937.50	1415+92.00	937.23
0.50L	1416+05.00	937.40	1416+05.00	937.63	1416+05.00	937.82	1416+05.00	937.93	1416+05.00	937.74	1416+05.00	937.55	1416+05.00	937.27
0.60L	1416+17.99	937.40	1416+17.99	937.62	1416+17.99	937.82	1416+17.99	937.93	1416+17.99	937.74	1416+17.99	937.55	1416+17.99	937.27
0.70L	1416+30.98	937.35	1416+30.98	937.57	1416+30.98	937.76	1416+30.98	937.88	1416+30.98	937.69	1416+30.98	937.50	1416+30.98	937.23
0.80L	1416+43.97	937.27	1416+43.97	937.48	1416+43.97	937.67	1416+43.97	937.78	1416+43.97	937.59	1416+43.97	937.40	1416+43.97	937.16
0.90L	1416+56.96	937.14	1416+56.96	937.35	1416+56.96	937.54	1416+56.96	937.65	1416+56.96	937.46	1416+56.96	937.27	1416+56.96	937.05
CL BRG. F.A.	1416+69.95	937.00	1416+69.95	937.19	1416+69.95	937.38	1416+69.95	937.49	1416+69.95	937.30	1416+69.95	937.11	1416+69.95	936.92

TOP OF HAUNCH ELEVATIONS (RIGHT BRIDGE)												
LOCATION	G8		G9		G10		G11		G12		G13	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	936.75	1415+40.04	936.94	1415+40.04	937.13	1415+40.04	937.32	1415+40.04	937.23	1415+40.04	937.04
0.10L	1415+53.03	936.92	1415+53.03	937.14	1415+53.03	937.33	1415+53.03	937.52	1415+53.03	937.43	1415+53.03	937.21
0.20L	1415+66.02	937.08	1415+66.02	937.32	1415+66.02	937.51	1415+66.02	937.70	1415+66.02	937.60	1415+66.02	937.36
0.30L	1415+79.01	937.20	1415+79.01	937.45	1415+79.01	937.64	1415+79.01	937.84	1415+79.01	937.74	1415+79.01	937.48
0.40L	1415+92.00	937.28	1415+92.00	937.55	1415+92.00	937.74	1415+92.00	937.93	1415+92.00	937.83	1415+92.00	937.56
0.50L	1416+05.00	937.32	1416+05.00	937.59	1416+05.00	937.78	1416+05.00	937.98	1416+05.00	937.88	1416+05.00	937.61
0.60L	1416+17.99	937.32	1416+17.99	937.59	1416+17.99	937.78	1416+17.99	937.97	1416+17.99	937.87	1416+17.99	937.61
0.70L	1416+30.98	937.28	1416+30.98	937.54	1416+30.98	937.73	1416+30.98	937.92	1416+30.98	937.82	1416+30.98	937.57
0.80L	1416+43.97	937.21	1416+43.97	937.45	1416+43.97	937.64	1416+43.97	937.83	1416+43.97	937.73	1416+43.97	937.49
0.90L	1416+56.96	937.10	1416+56.96	937.32	1416+56.96	937.51	1416+56.96	937.70	1416+56.96	937.60	1416+56.96	937.38
CL BRG. F.A.	1416+69.95	936.97	1416+69.95	937.16	1416+69.95	937.35	1416+69.95	937.54	1416+69.95	937.44	1416+69.95	937.25

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE ℄ OF THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. SEE SHEETS 47 AND 48 FOR GIRDERS NUMBERS AND TOP OF HAUNCH ELEVATION LOCATIONS.



HAUNCH DETAIL

TOP OF HAUNCH ELEVATIONS TABLES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:33:28 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 50 | TOTAL 64
SHEET P. 535 | TOTAL 618

FINAL DECK SURFACE ELEVATIONS (SOUTHBOUND)														
LOCATION	TOE OF LEFT PARAPET		G1		G2		G3		PHASE 3B C.J.		PHASE 3A C.J.		CROWN	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	937.54	1415+40.04	937.58	1415+40.04	937.77	1415+40.04	937.96	1415+40.04	938.00	1415+40.04	938.10	1415+40.04	938.11
0.10L	1415+53.03	937.60	1415+53.03	937.64	1415+53.03	937.83	1415+53.03	938.02	1415+53.03	938.06	1415+53.03	938.15	1415+53.03	938.17
0.20L	1415+66.02	937.65	1415+66.02	937.68	1415+66.02	937.88	1415+66.02	938.07	1415+66.02	938.11	1415+66.02	938.20	1415+66.02	938.22
0.30L	1415+79.01	937.69	1415+79.01	937.73	1415+79.01	937.92	1415+79.01	938.11	1415+79.01	938.15	1415+79.01	938.24	1415+79.01	938.26
0.40L	1415+92.00	937.72	1415+92.00	937.76	1415+92.00	937.95	1415+92.00	938.14	1415+92.00	938.18	1415+92.00	938.28	1415+92.00	938.29
0.50L	1416+05.00	937.75	1416+05.00	937.78	1416+05.00	937.97	1416+05.00	938.17	1416+05.00	938.21	1416+05.00	938.30	1416+05.00	938.32
0.60L	1416+17.99	937.76	1416+17.99	937.80	1416+17.99	937.99	1416+17.99	938.18	1416+17.99	938.23	1416+17.99	938.32	1416+17.99	938.33
0.70L	1416+30.98	937.77	1416+30.98	937.81	1416+30.98	938.00	1416+30.98	938.19	1416+30.98	938.23	1416+30.98	938.33	1416+30.98	938.34
0.80L	1416+43.97	937.77	1416+43.97	937.81	1416+43.97	938.00	1416+43.97	938.19	1416+43.97	938.24	1416+43.97	938.33	1416+43.97	938.34
0.90L	1416+56.96	937.77	1416+56.96	937.80	1416+56.96	937.99	1416+56.96	938.19	1416+56.96	938.23	1416+56.96	938.32	1416+56.96	938.34
CL BRG. F.A.	1416+69.95	937.75	1416+69.95	937.79	1416+69.95	937.98	1416+69.95	938.17	1416+69.95	938.21	1416+69.95	938.31	1416+69.95	938.32

FINAL DECK SURFACE ELEVATIONS (SOUTHBOUND) CONT.												
LOCATION	G4		G5		PGL		G6		G7		TOE OF RIGHT PARAPET	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	938.07	1415+40.04	937.88	1415+40.04	937.74	1415+40.04	937.69	1415+40.04	937.50	1415+40.04	937.49
0.10L	1415+53.03	938.13	1415+53.03	937.94	1415+53.03	937.80	1415+53.03	937.75	1415+53.03	937.56	1415+53.03	937.54
0.20L	1415+66.02	938.18	1415+66.02	937.99	1415+66.02	937.84	1415+66.02	937.80	1415+66.02	937.61	1415+66.02	937.59
0.30L	1415+79.01	938.22	1415+79.01	938.03	1415+79.01	937.88	1415+79.01	937.84	1415+79.01	937.65	1415+79.01	937.63
0.40L	1415+92.00	938.25	1415+92.00	938.06	1415+92.00	937.92	1415+92.00	937.87	1415+92.00	937.68	1415+92.00	937.67
0.50L	1416+05.00	938.28	1416+05.00	938.09	1416+05.00	937.94	1416+05.00	937.90	1416+05.00	937.71	1416+05.00	937.69
0.60L	1416+17.99	938.30	1416+17.99	938.10	1416+17.99	937.96	1416+17.99	937.91	1416+17.99	937.72	1416+17.99	937.71
0.70L	1416+30.98	938.30	1416+30.98	938.11	1416+30.98	937.97	1416+30.98	937.92	1416+30.98	937.73	1416+30.98	937.72
0.80L	1416+43.97	938.31	1416+43.97	938.11	1416+43.97	937.97	1416+43.97	937.92	1416+43.97	937.73	1416+43.97	937.72
0.90L	1416+56.96	938.30	1416+56.96	938.11	1416+56.96	937.96	1416+56.96	937.92	1416+56.96	937.73	1416+56.96	937.71
CL BRG. F.A.	1416+69.95	938.28	1416+69.95	938.09	1416+69.95	937.95	1416+69.95	937.90	1416+69.95	937.71	1416+69.95	937.70

FINAL DECK SURFACE ELEVATIONS (NORTHBOUND)												
LOCATION	TOE OF LEFT PARAPET		G8		G9		PGL		G10		PHASE 4A C.J.	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	937.53	1415+40.04	937.54	1415+40.04	937.73	1415+40.04	937.81	1415+40.04	937.92	1415+40.04	937.98
0.10L	1415+53.03	937.58	1415+53.03	937.60	1415+53.03	937.79	1415+53.03	937.87	1415+53.03	937.98	1415+53.03	938.04
0.20L	1415+66.02	937.63	1415+66.02	937.65	1415+66.02	937.84	1415+66.02	937.92	1415+66.02	938.03	1415+66.02	938.09
0.30L	1415+79.01	937.67	1415+79.01	937.69	1415+79.01	937.88	1415+79.01	937.96	1415+79.01	938.07	1415+79.01	938.13
0.40L	1415+92.00	937.71	1415+92.00	937.72	1415+92.00	937.92	1415+92.00	937.99	1415+92.00	938.11	1415+92.00	938.16
0.50L	1416+05.00	937.73	1416+05.00	937.75	1416+05.00	937.94	1416+05.00	938.02	1416+05.00	938.13	1416+05.00	938.19
0.60L	1416+17.99	937.75	1416+17.99	937.77	1416+17.99	937.96	1416+17.99	938.04	1416+17.99	938.15	1416+17.99	938.20
0.70L	1416+30.98	937.76	1416+30.98	937.78	1416+30.98	937.97	1416+30.98	938.05	1416+30.98	938.16	1416+30.98	938.21
0.80L	1416+43.97	937.76	1416+43.97	937.78	1416+43.97	937.97	1416+43.97	938.05	1416+43.97	938.16	1416+43.97	938.22
0.90L	1416+56.96	937.76	1416+56.96	937.77	1416+56.96	937.96	1416+56.96	938.04	1416+56.96	938.16	1416+56.96	938.21
CL BRG. F.A.	1416+69.95	937.74	1416+69.95	937.76	1416+69.95	937.95	1416+69.95	938.03	1416+69.95	938.14	1416+69.95	938.20

FINAL DECK SURFACE ELEVATIONS (NORTHBOUND) CONT.												
LOCATION	PHASE 4B C.J.		G11		CROWN		G12		G13		TOE OF RIGHT PARAPET	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
CL BRG. R.A.	1415+40.04	938.04	1415+40.04	938.12	1415+40.04	938.15	1415+40.04	938.02	1415+40.04	937.83	1415+40.04	937.81
0.10L	1415+53.03	938.10	1415+53.03	938.17	1415+53.03	938.21	1415+53.03	938.08	1415+53.03	937.88	1415+53.03	937.87
0.20L	1415+66.02	938.15	1415+66.02	938.22	1415+66.02	938.26	1415+66.02	938.13	1415+66.02	937.93	1415+66.02	937.92
0.30L	1415+79.01	938.19	1415+79.01	938.26	1415+79.01	938.30	1415+79.01	938.17	1415+79.01	937.98	1415+79.01	937.96
0.40L	1415+92.00	938.22	1415+92.00	938.30	1415+92.00	938.34	1415+92.00	938.20	1415+92.00	938.01	1415+92.00	937.99
0.50L	1416+05.00	938.25	1416+05.00	938.32	1416+05.00	938.36	1416+05.00	938.23	1416+05.00	938.04	1416+05.00	938.02
0.60L	1416+17.99	938.27	1416+17.99	938.34	1416+17.99	938.38	1416+17.99	938.24	1416+17.99	938.05	1416+17.99	938.04
0.70L	1416+30.98	938.28	1416+30.98	938.35	1416+30.98	938.39	1416+30.98	938.25	1416+30.98	938.06	1416+30.98	938.05
0.80L	1416+43.97	938.28	1416+43.97	938.35	1416+43.97	938.39	1416+43.97	938.26	1416+43.97	938.06	1416+43.97	938.05
0.90L	1416+56.96	938.27	1416+56.96	938.35	1416+56.96	938.38	1416+56.96	938.25	1416+56.96	938.06	1416+56.96	938.04
CL BRG. F.A.	1416+69.95	938.26	1416+69.95	938.33	1416+69.95	938.37	1416+69.95	938.24	1416+69.95	938.04	1416+69.95	938.03

FINAL DECK SURFACE ELEVATION TABLES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER DBL | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 51 | TOTAL 64
SHEET P. 536 | TOTAL 618

FRA-71-19.10

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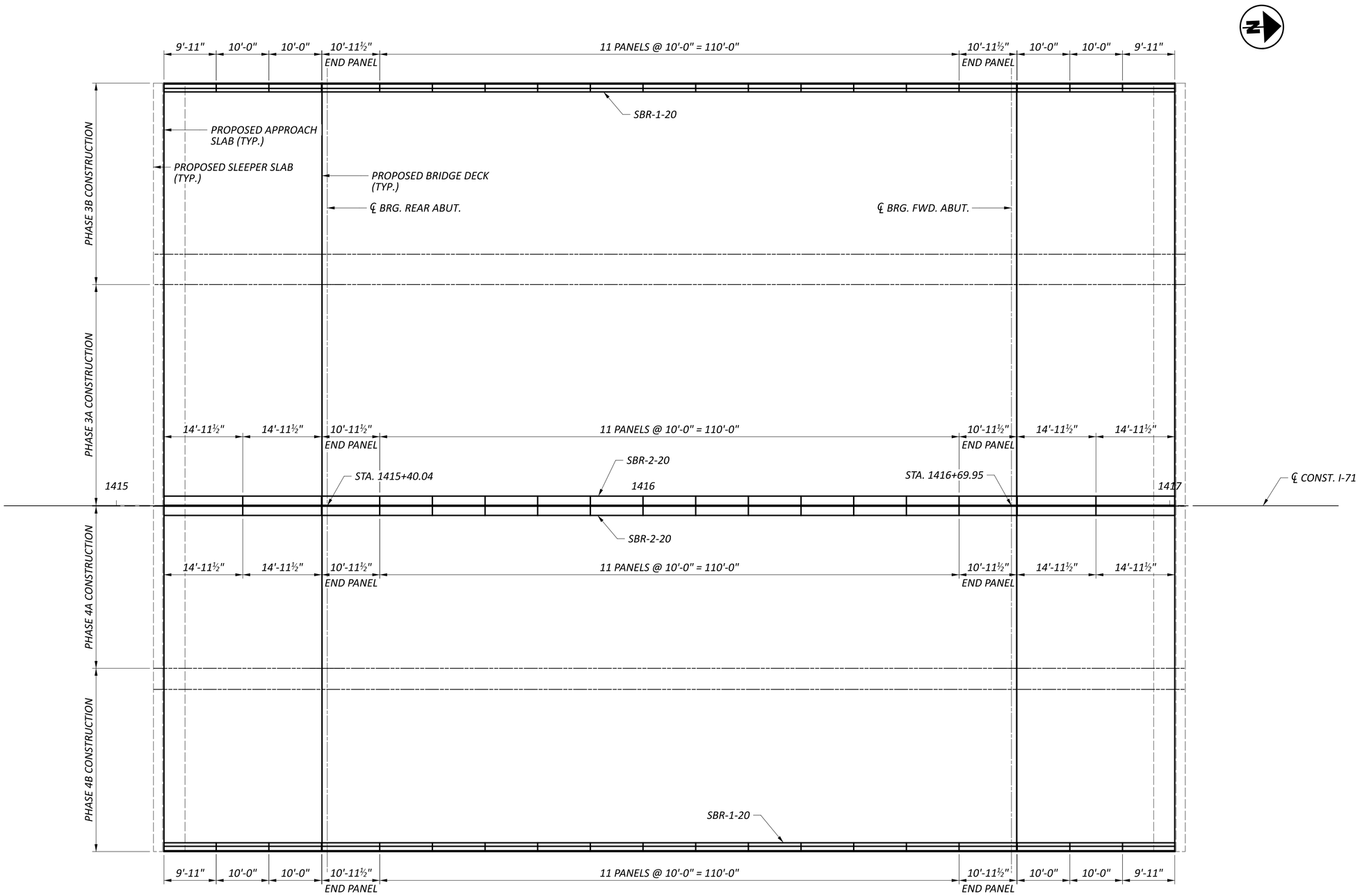

BRIDGE RAILING PLAN

HORIZONTAL SCALE IN FEET
0 ---NA--- ---NA---
---NA---

BRIDGE PARAPET PLAN
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

DESIGN AGENCY
Jacobs

DESIGNER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET / TOTAL	52 / 64
SHEET / TOTAL	P. 537 / 618

FRA-71-19.10

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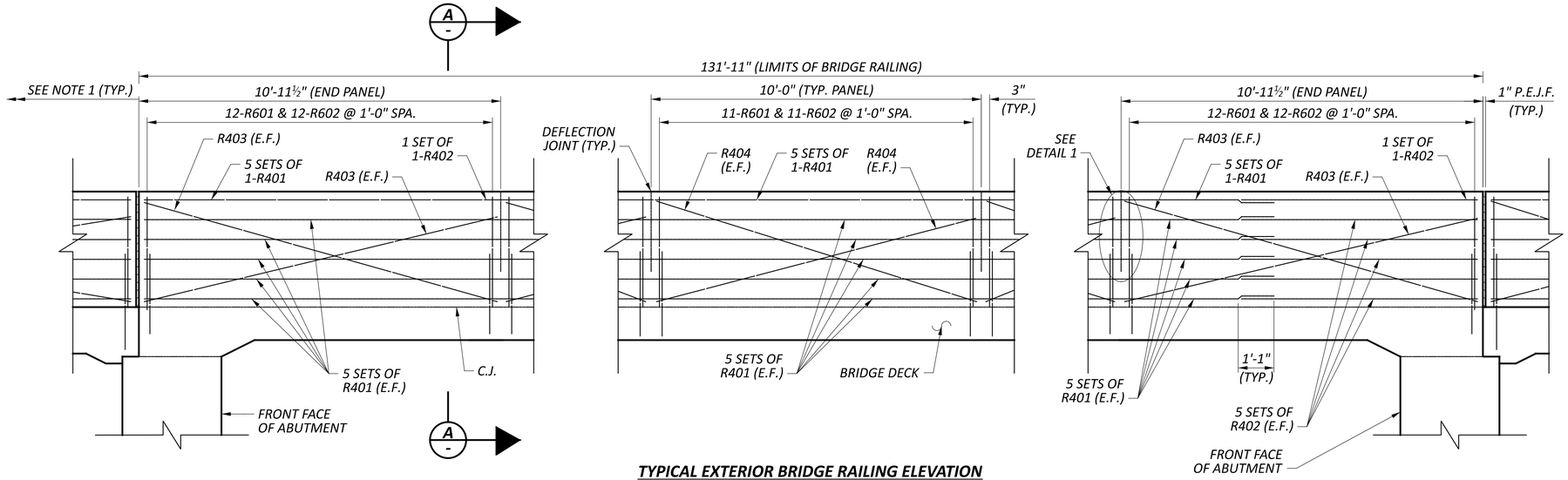
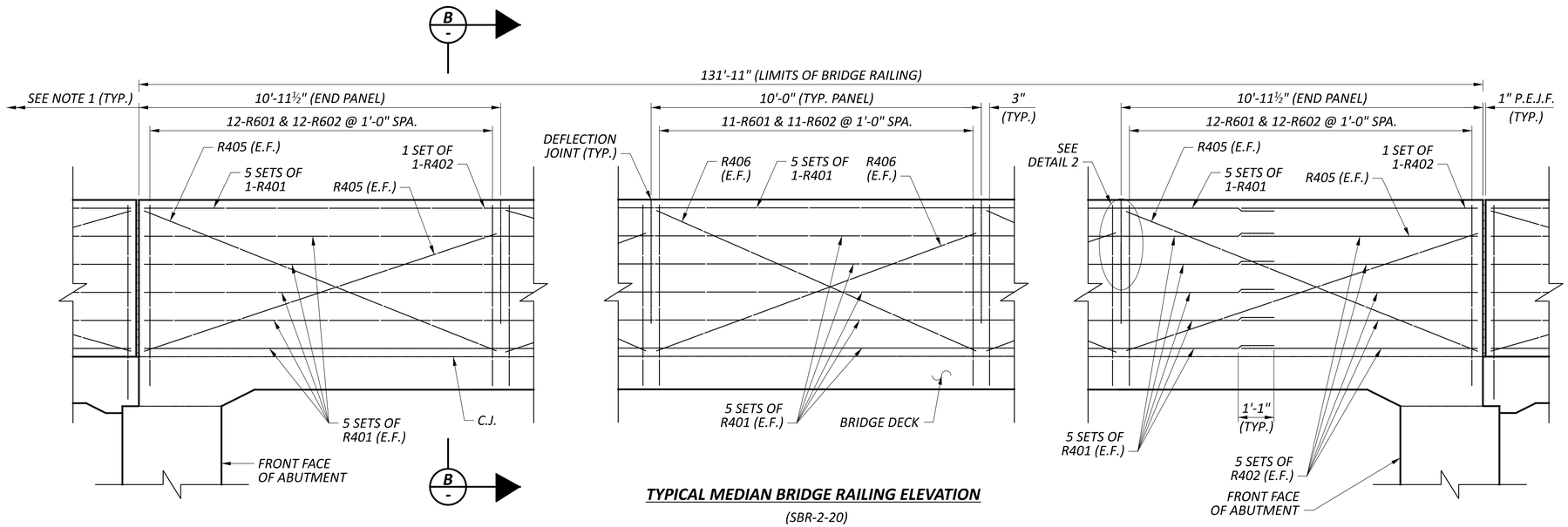


TYPICAL EXTERIOR BRIDGE RAILING ELEVATION

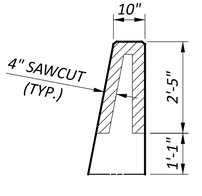
(SBR-1-20)



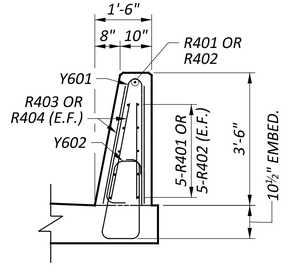
TYPICAL MEDIAN BRIDGE RAILING ELEVATION

(SBR-2-20)

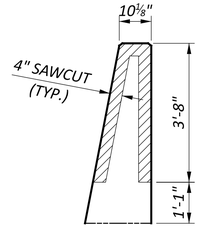
PARAPET STIFFENING G.F.R.P. REINFORCEMENT			
BAR MARK	NUMBER	LENGTH	TYPE
R401	220	30'-0"	ST
R402	44	7'-0"	ST
R403	16	10'-11"	ST
R404	104	10'-0"	ST
R405	16	11'-4"	ST
R406	104	10'-5"	ST



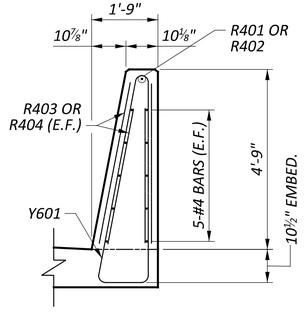
DETAIL 1



SECTION A-A



DETAIL 2



SECTION B-B

NOTES:

1. *FOR APPROACH SLAB RAILING DETAILS SEE SHEET 56.*

BRIDGE PARAPET DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER FM | CHECKER ZF
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 53 | TOTAL 64
SHEET P. 538 | TOTAL 618

FRA-71-19.10

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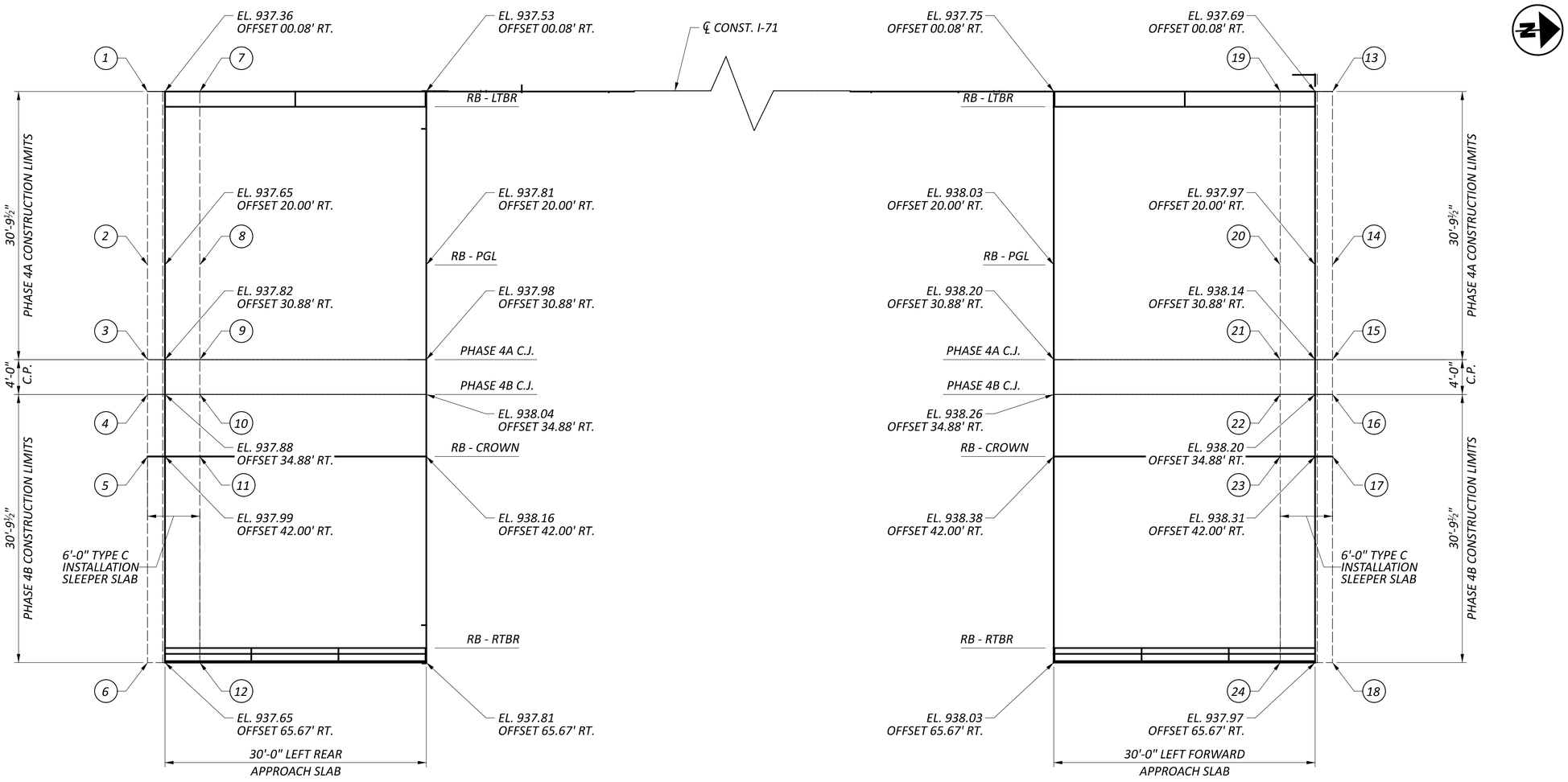
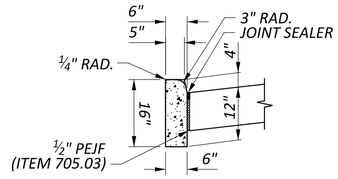
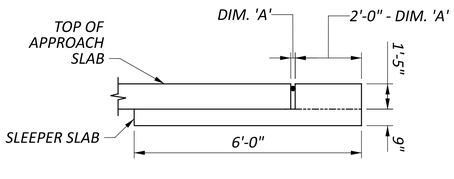


APPROACH SLAB PLAN (RIGHT BRIDGE NORTHBOUND)



TYPE 4-C CURB DETAIL (TYP.)



TYPICAL SLEEPER SLAB SECTION

SLEEPER SLAB SURFACE ELEVATION AT TOP OF ROADWAY			
1	937.35	13	937.68
2	937.63	14	937.96
3	937.80	15	938.13
4	937.87	16	938.19
5	937.98	17	938.31
6	937.63	18	937.96

SLEEPER SLAB SURFACE ELEVATION UNDER APPROACH SLAB			
7	937.39	19	937.70
8	937.67	20	937.98
9	937.84	21	938.15
10	937.90	22	938.21
11	938.01	23	938.32
12	937.67	24	937.98

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15 TYPE C INSTALLATION.
2. FOR BRIDGE RAILING DETAILS, SEE SHEETS 52 THRU 53.
3. FOR ADDITIONAL BRIDGE RAILING TRANSITION DETAILS, SEE ODOT STANDARD DRAWING SBR-1-20 AND SICD-1-21.
4. THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QA/QC (T=17").
5. FOR INTEGRAL CURB TYPE 4C DETAILS, SEE ODOT STANDARD DRAWING BP-5.1. THE INTEGRAL CURB TYPE 4C SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.
6. THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.

HORIZONTAL SCALE IN FEET
0 ---NA--- ---NA---
---NA--- ---NA---

APPROACH SLAB DETAILS - RIGHT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER SR 161

DESIGN AGENCY
Jacobs

DESIGNER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 54 TOTAL 64
SHEET P. 539 TOTAL 618

FRA-71-19.10

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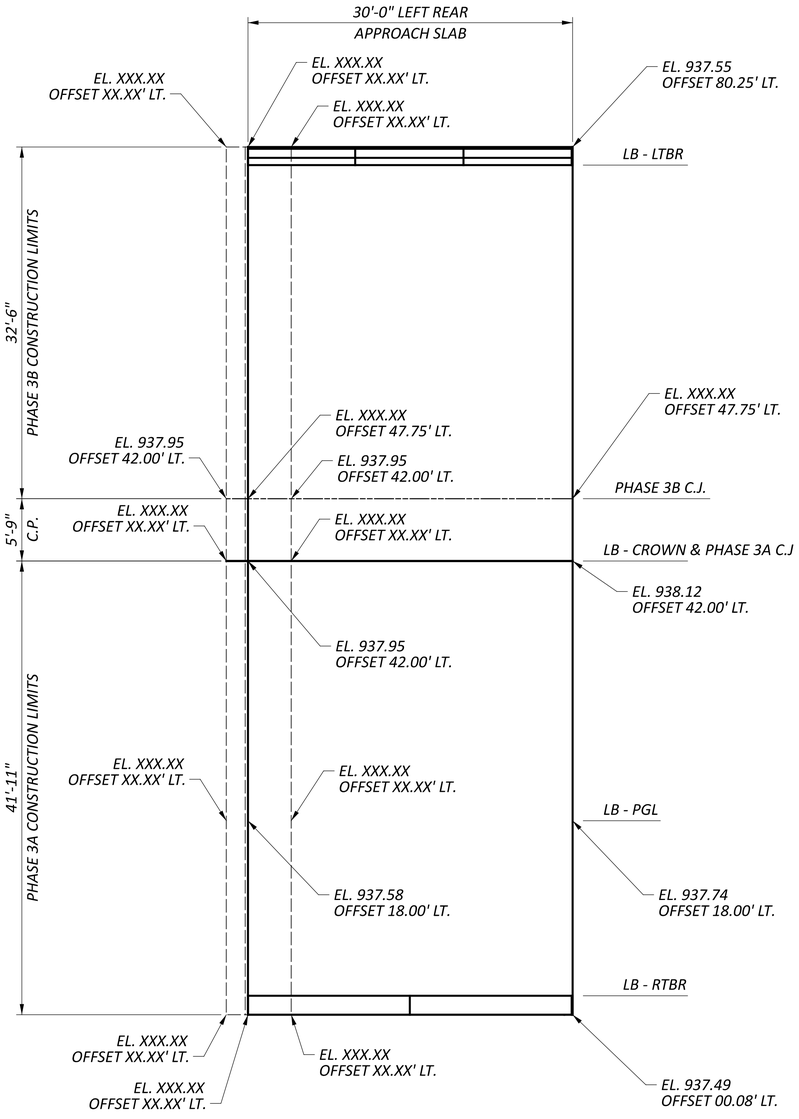
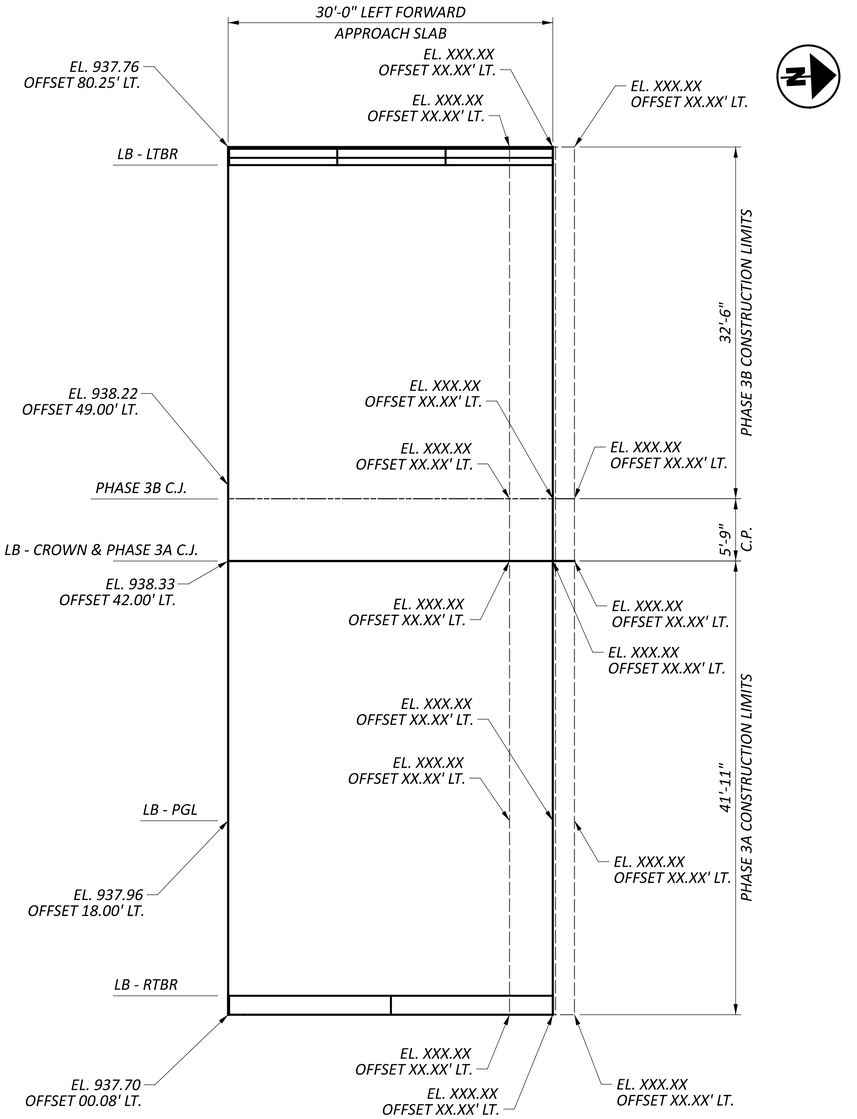
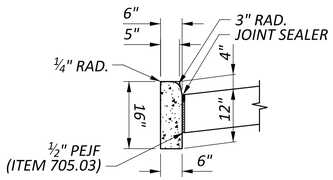
Asad.Nawaz@jacobs.com

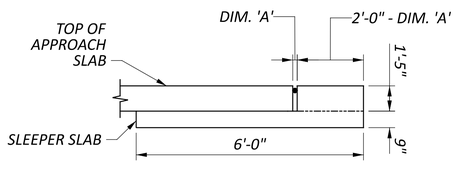




APPROACH SLAB PLAN (LEFT BRIDGE SOUTHBOUND)



TYPE 4-C CURB DETIL (TYP.)



TYPICAL SLEEPER SLAB SECTION

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15 TYPE C INSTALLATION.
2. FOR BRIDGE RAILING DETAILS, SEE SHEETS 52 THRU 53.
3. FOR ADDITIONAL BRIDGE RAILING TRANSITION DETAILS, SEE ODOT STANDARD DRAWING SBR-1-20 AND SICD-1-21.
4. THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QA/QC (T=17").
5. FOR INTEGRAL CURB TYPE 4C DETAILS, SEE ODOT STANDARD DRAWING BP-5.1. THE INTEGRAL CURB TYPE 4C SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.
6. THE SLEEPER SLAB SHALL BE PAID FOR WITH ITEM 526 - TYPE C INSTALLATION.

HORIZONTAL SCALE IN FEET
0 ---NA--- ---NA---
---NA--- ---NA---

APPROACH SLAB DETAILS - LEFT BRIDGE
BRIDGE NO. FRA-00071-24.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
FM	ZF

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
55	64

SHEET	TOTAL
P. 540	618

FRA-71-19.10

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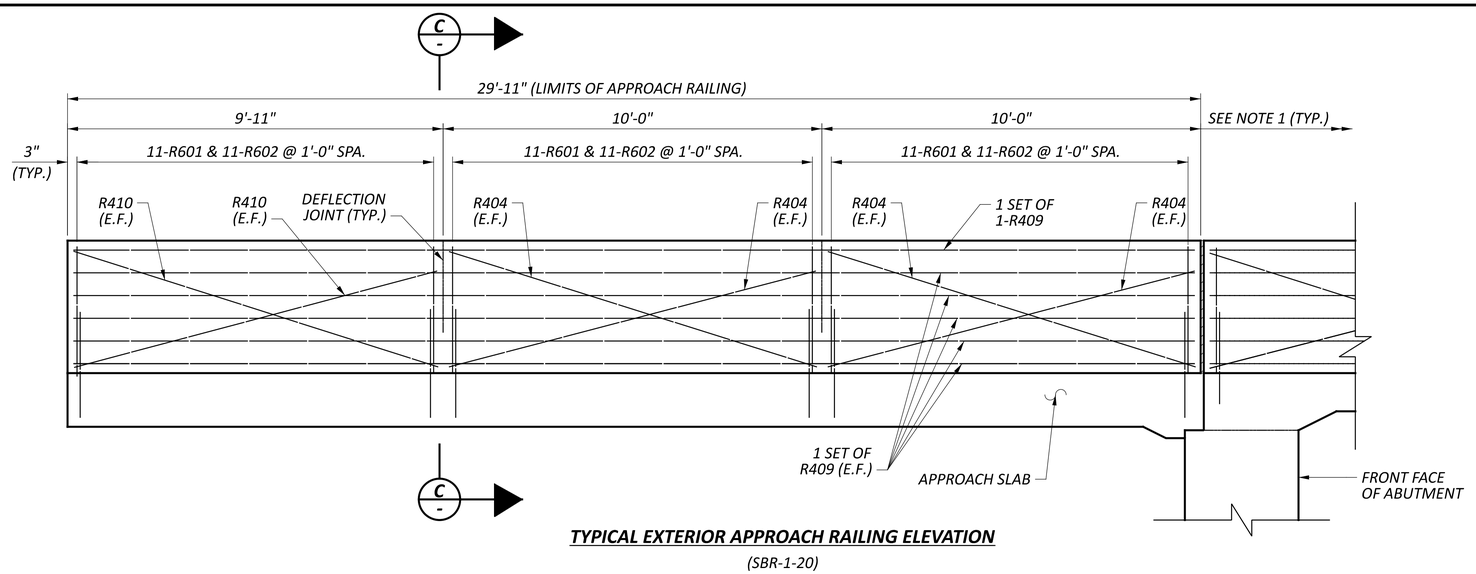
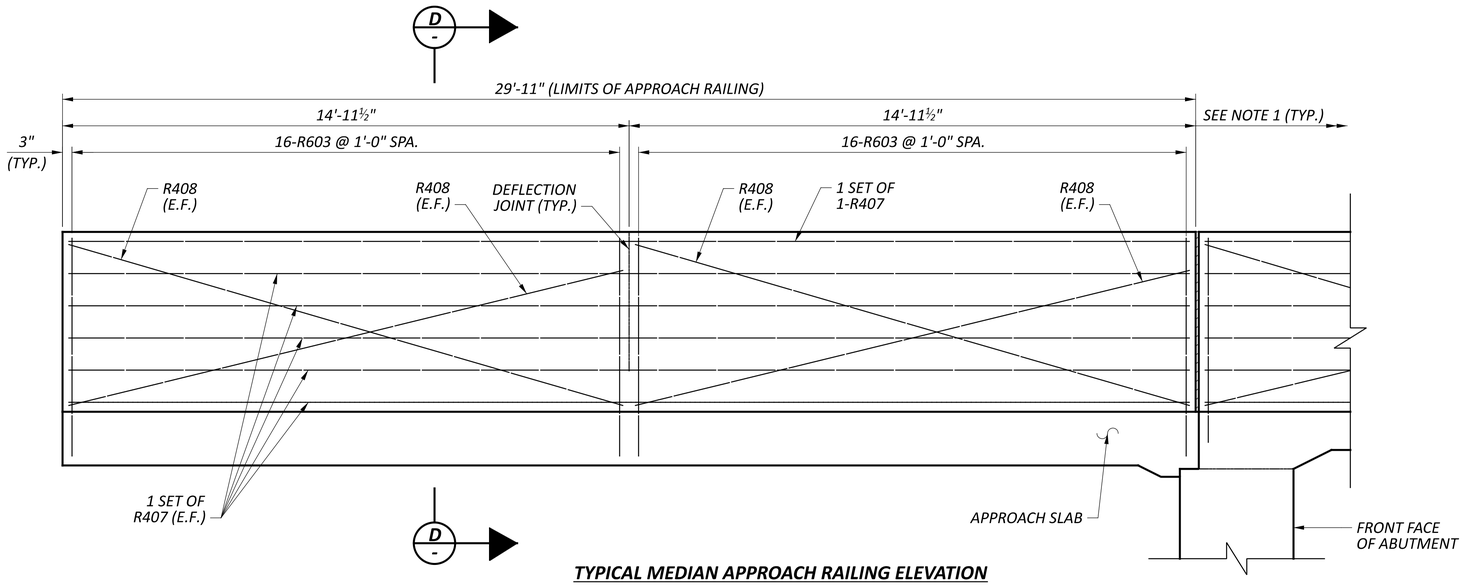


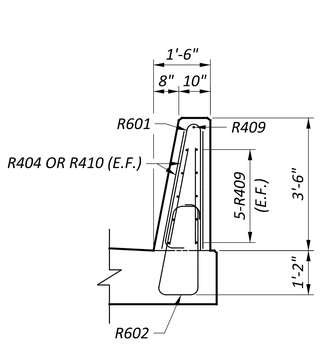
TYPICAL EXTERIOR APPROACH RAILING ELEVATION

(SBR-1-20)

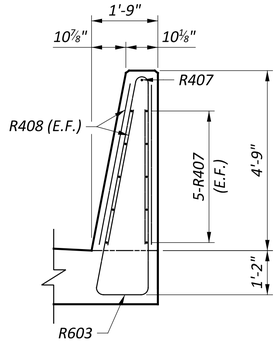


TYPICAL MEDIAN APPROACH RAILING ELEVATION

(SBR-2-20)



SECTION C-C



SECTION D-D

PARAPET STIFFENING G.F.R.P. REINFORCEMENT			
BAR MARK	NUMBER	LENGTH	TYPE
R407	44	29'-10"	ST
R408	32	15'-3"	ST
R409	44	17'-3"	ST
R410	16	16'-2"	ST

NOTES:

1. *FOR BRIDGE RAILING DETAILS SEE SHEETS 52 THRU 53.*

APPROACH PARAPET DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN
TBD

DESIGN AGENCY
Jacobs

DESIGNER	CHECKER
FM	ZF

REVIEWER
MJR 03/13/26

PROJECT ID
109164

SUBSET	TOTAL
56	64

SHEET	TOTAL
P. 541	618

FRA-71-19.10

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 3/31/2026 TIME: 12:35:13 PM PLTDRV: OHDOT_PDF_E+.pltcfg PENTBL: OHDOT_Pen.tbl USER: Asad.Nawaz@jacobs.com WORKSPACE: OHDOTCEv02 WORKSET: 109164 PRODUCT: OpenRoadsDesigner 24.00.02.25
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	XX/YY/ZZZZ
840	DATED	7/21/2023
878	DATED	01/21/2022

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN DATA

CONCRETE CLASS QC1 (LEVELING PAD, COPING & GUTTER)
- COMPRESSIVE STRENGTH 4.0 KSI

CONCRETE REINFORCEMENT
EPOXY COATED STEEL REINFORCEMENT
- MINIMUM YIELD STRENGTH 60-KSI

FOUNDATION BEARING RESISTANCE

THE REINFORCED SOIL MASSES, AS DESIGNED PRODUCE MAXIMUM SERVICE LIMIT STATE BEARING PRESSURES [1], MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE [2] AND PROVIDE THE FACTORED BEARING RESISTANCE [3] AS DEPICTED BELOW FOR EACH WALL.

FOUNDATION BEARING RESISTANCE			
MSE WALL NO.	SERVICE BEARING PRESSURE (KSF) [1]	FACTORED BEARING PRESSURE (KSF) [2]	FACTORED BEARING RESISTANCE (KSF) [3]
#1	5.95	4.31	9.10
#2	5.33	3.86	5.70

MSE WALL DESIGN PARAMETERS

THE FOLLOWING TABLE LIST THE MINIMUM SOIL REINFORCEMENT LENGTHS FOR EACH WALL. THE SOIL REINFORCEMENT LENGTH IS A FUNCTION OF THE DESIGN WALL HEIGHT (H) AND WILL VARY ALONG THE LENGTH OF THE WALL.

MSE WALL DESIGN PARAMETERS	
MSE WALL NO.	MINIMUM SOIL REINFORCEMENT LENGTH (FT.)
#1	0.70H
#2	0.90H

PROPRIETARY RETAINING WALL DATA

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION (SS) 840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE THE FOLLOWING NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOADS DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURES LISTED IN THE FOLLOWING TABLE, APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL OR LIVE LOAD SURCHARGE. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL AND LIVE LOAD SURCHARGE IN THE DESIGN CALCULATIONS.

BRIDGE SUPERSTRUCTURE LOADS (K/FT.)		
MSE WALL NO.	BRIDGE NO.	FRICTION LOAD (FR)
#1	FRA-71-26.46 L/R	4.70
#2	FRA-71-26.46 L/R	4.70

ITEM 511 - CONCRETE MISC.: CLASS QC1 CONCRETE, GUTTER

THIS ITEM INCLUDES ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO CONSTRUCT A CAST-IN-PLACE CONCRETE GUTTER ATOP THE MSE WALL COPING AS DETAILED WITHIN THE PLANS.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

EXCAVATION NECESSARY TO CONSTRUCT THE MSE WALL AND/OR PROPOSED BRIDGE ABUTMENT NOT SEPARATELY INCLUDED WITH ITEM 840 - WALL EXCAVATION SHALL BE INCLUDED WITH THE LUMP SUM BID PRICE FOR ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN, FOR PAYMENT. PLAN DETAILS DEPICT ANTICIPATED EXCAVATION; HOWEVER THE CONTRACTOR SHALL DETERMINE THE FINAL QUANTITIES BASED UPON FIELD MEASUREMENTS.

THE FOLLOWING ESTIMATED EXCAVATION QUANTITY IS PROVIDED FOR REFERENCE ONLY AND ARE BASED UPON AN ASSUMED MAXIMUM CUT SLOPE OF 1.5H:1V.

ESTIMATED - ITEM 203 EXCAVATION	
MSE WALL NO.	EXCAVATION (CY.)
#1	X.XX
#2	X.XX

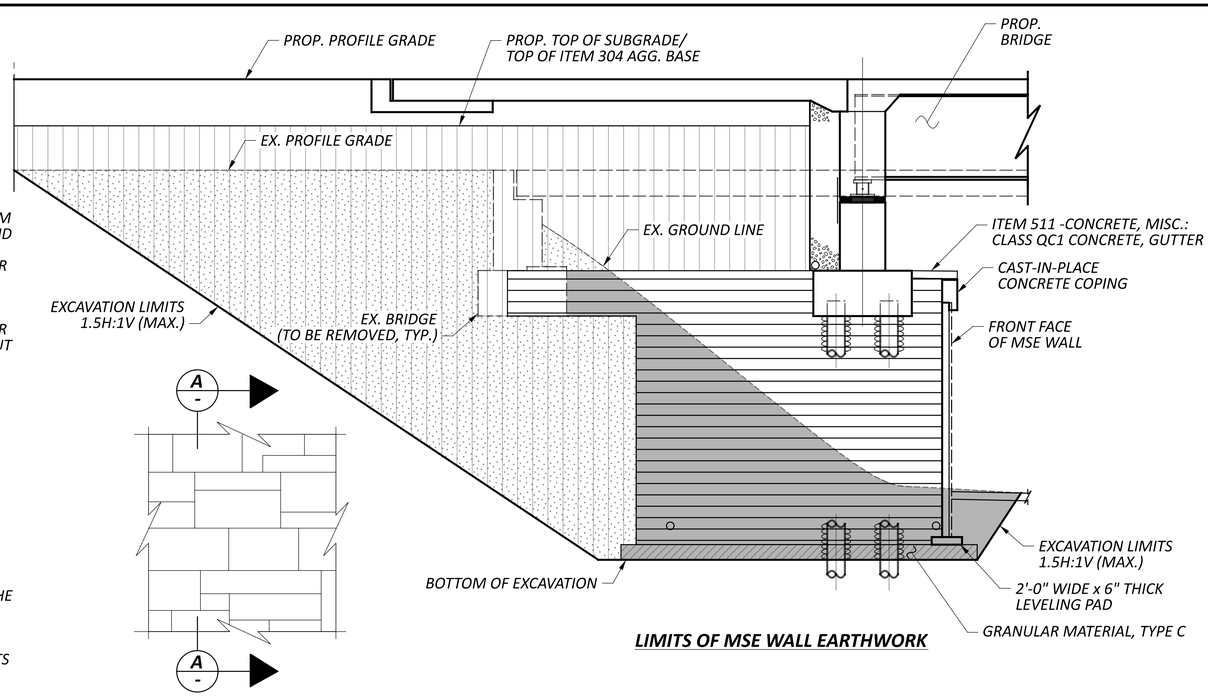
ALL EXCAVATION AND SUBSEQUENT BACKFILL BELOW THE EXISTING GROUND SHALL BE PERFORMED PER THE APPLICABLE SECTIONS OF C&MS 203 AND 503. SUITABLE SITE SOILS DISPLACED DURING WALL EXCAVATION MAY BE REUSED AS EMBANKMENT MATERIAL WITHIN THE LIMITS SHOWN WITHIN THESE PLANS. THE SUITABILITY OF ALL SITE SOILS INTENDED FOR REUSE SHALL BE APPROVED BY AN ON-SITE GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF OHIO PRIOR TO PLACEMENT AND SOILS SHALL CONFORM TO BACKFILL REQUIREMENTS OF C&MS 203.

AESTHETIC SURFACE TREATMENT

ALL PROVISIONS OF ODOT SUPPLEMENTAL SPECIFICATION 840 APPLY IN ADDITION TO THOSE LISTED HEREIN.

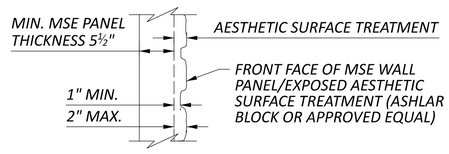
THE RELIEF OF AESTHETIC PATTERN FORMLINER SHALL NOT EXCEED A MAXIMUM RELIEF OF 1.0 INCHES. THE MINIMUM RELIEF OF THE AESTHETIC PATTERN FORMLINER IS 1.0 INCHES. AESTHETIC TREATMENT SHALL UTILIZE AN ASHLAR BLOCK FORMLINER PATTERN OR APPROVED EQUAL. SEAL ALL CONCRETE SURFACES WITH A LIGHT-NEUTRAL EPOXY-URETHANE SEALER (FEDERAL COLOR 17778).

THE AESTHETIC TREATMENT MUST BE SUBMITTED TO THE DEPARTMENT FOR APPROVAL



LIMITS OF MSE WALL EARTHWORK

AESTHETIC SURFACE TREATMENT



A - SECTION

LEGEND:

- ITEM 203 - EMBANKMENT
- ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN
- ITEM 840 - WALL EXCAVATION
- ITEM 840 - SELECT GRANULAR BACKFILL

ESTIMATED QUANTITIES - MSE WALLS

CALC.	DATE	CHK'D	DATE
XXX	XX/YY/ZZ	XXX	XX/YY/ZZ

ITEM	ITEM EXT.	MSE WALL #1	MSE WALL #2	TOTAL	UNIT	DESCRIPTION	SHEET REF.
203	20000				CY	EMBANKMENT	
203	35120				CY	GRANULAR MATERIAL, TYPE C	
503	21301				LS	UNCLASSIFIED EXCAVATION, AS PER PLAN	XX
509	10000				LB	EPOXY COATED STEEL REINFORCEMENT	
510	10000				EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
511	71100				CY	CONCRETE, MISC.: CLASS QC1 CONCRETE, GUTTER	XX
512	10100				SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
516	13600				SF	1" PREFORMED EXPANSION JOINT FILLER	
840	20000				SF	MECHANICALLY STABILIZED EARTH WALL	
840	21000				CY	WALL EXCAVATION	
840	22000				SY	FOUNDATION PREPARATION	
840	23000				CY	SELECT GRANULAR BACKFILL	
840	25010				FT	6" DRAINAGE PIPE, PERFORATED	
840	25020				FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26000				FT	CONCRETE COPING	
840	26050				SF	AESTHETIC SURFACE TREATMENT	XX
840	27000				DAY	ON-SITE ASSISTANCE	
840	28000				LS	SGB INSPECTION AND COMPACTION TESTING	
SPECIAL	530000400				EA	STRUCTURES: SETTLEMENT PLATFORMS	XX

MSE WALL NOTES AND QUANTITIES
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD

DESIGN AGENCY Jacobs

DESIGNER	CHECKER
ZF	FM

REVIEWER MJR 03/13/26

PROJECT ID 109164

SUBSET	TOTAL
57	64

SHEET	TOTAL
P. 542	618

FRA-71-19.10

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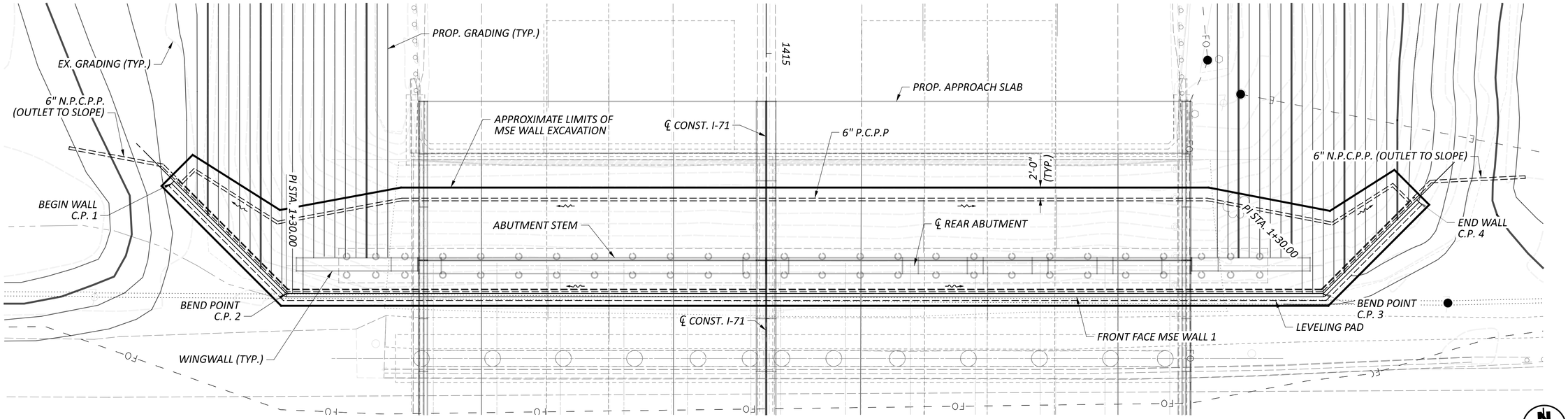


MSE WALL #1 PLAN

MSE WALL #1 CRITICAL POINT DATA				
CONTROL POINT NO.	MSE WALL STATION	CL CONST. I-71 STA.	CL CONST. I-71 OFFSET	TOP OF WALL ELEVATION
1	1+00.00	1415+24.07	111.88' RT.	919.00
2	1+30.00	1415+45.29	90.67' RT.	928.00
3	3+25.92	1415+45.29	105.25' LT	928.00
4	3+50.92	1415+27.61	122.93' LT.	920.00

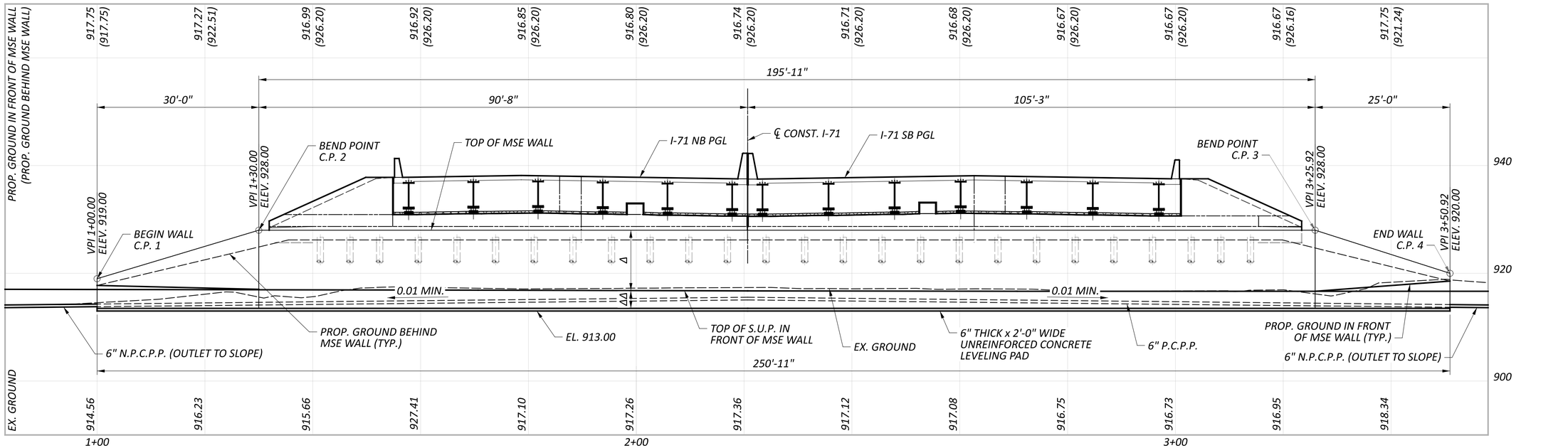
MSE WALL #1 INFORMATION			
LOCATION	BORING NO.	MAX. WALL DESIGN HEIGHT (FT)	REINFORCING LENGTH
R.A.	B-046-0-22	26.0	0.7H

LEGEND:

Δ - SEALING OF CONCRETE SURFACES (EPOXY URETHANE): SEALING EXTERIOR SURFACES OF ALL PANELS AND COPING
ΔΔ - 3'-0" MIN.
C.P. - CRITICAL POINT

NOTES:

1. FOR ADDITIONAL MSE WALL DETAILS, SEE SHEET 60.



PROFILE ALONG BACK FACE OF MSE WALL #1

REAR ABUTMENT MSE WALL PLAN AND ELEVATION
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN TBD
DESIGN AGENCY Jacobs
DESIGNER ZF | CHECKER FM
REVIEWER MJR 03/13/26
PROJECT ID 109164
SUBSET 58 | TOTAL 64
SHEET P. 543 | TOTAL 618

FRA-71-19.10

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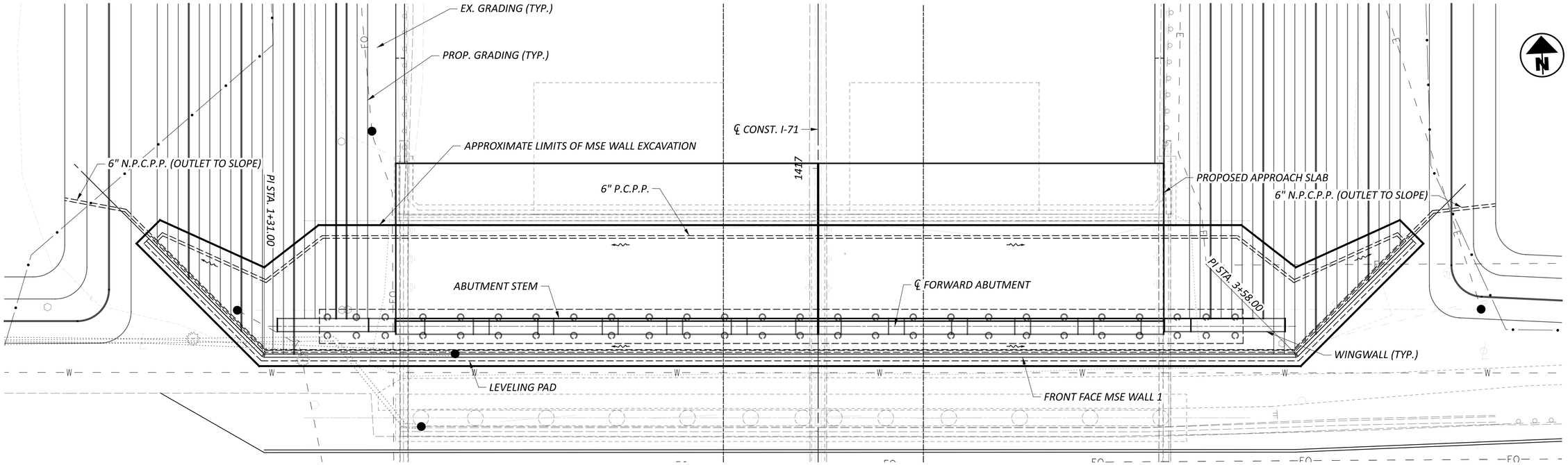


MSE WALL #2 PLAN

MSE WALL #2 CRITICAL POINT DATA				
CONTROL POINT NO.	MSE WALL STATION	CL CONST. I-71 STA.	CL CONST. I-71 OFFSET	TOP OF WALL ELEVATION
1	1+00.00	1416+86.63	127.17' LT.	918.50
2	1+31.00	1416+64.70	105.25' LT.	928.25
3	3+27.00	1416+64.70	90.75' RT.	928.25
4	3+58.00	1416+86.63	112.67' RT.	918.50

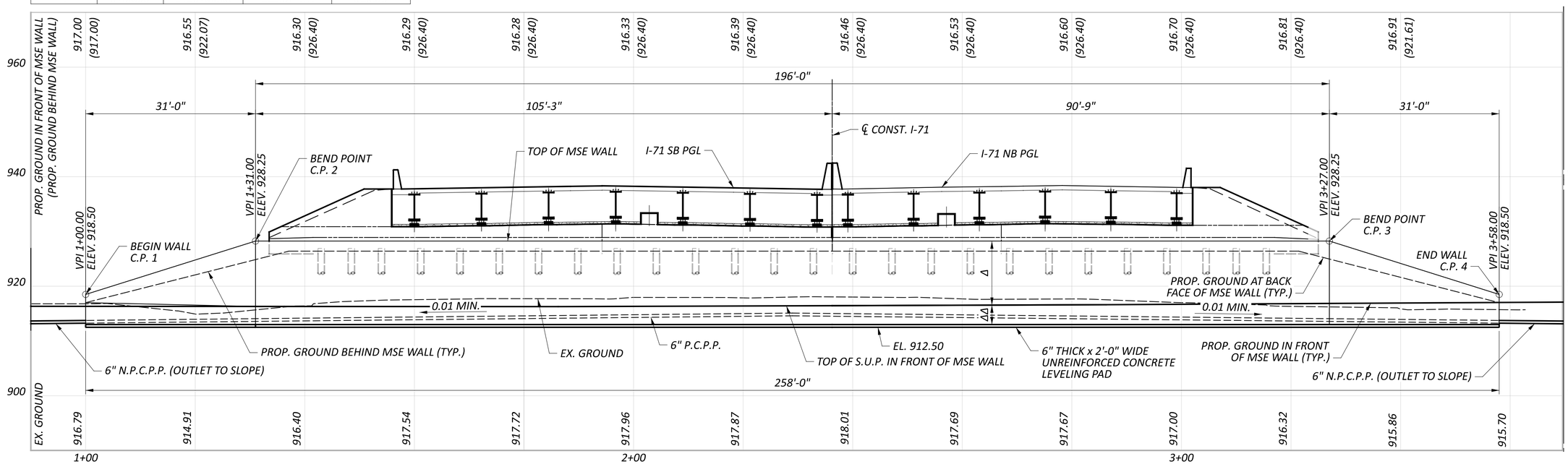
MSE WALL #2 INFORMATION			
LOCATION	BORING NO.	MAX. WALL DESIGN HEIGHT (FT)	REINFORCING LENGTH
F.A	B-048-0-22	26.0	0.9H

LEGEND:

Δ - SEALING OF CONCRETE SURFACES (EPOXY URETHANE): SEALING EXTERIOR SURFACES OF ALL PANELS AND COPING
ΔΔ - 3'-0" MIN.
C.P. - CRITICAL POINT

NOTES:

1. FOR ADDITIONAL MSE WALL DETAILS, SEE SHEET 60.



PROFILE ALONG BACK FACE OF MSE WALL #2

FRA-71-19.10

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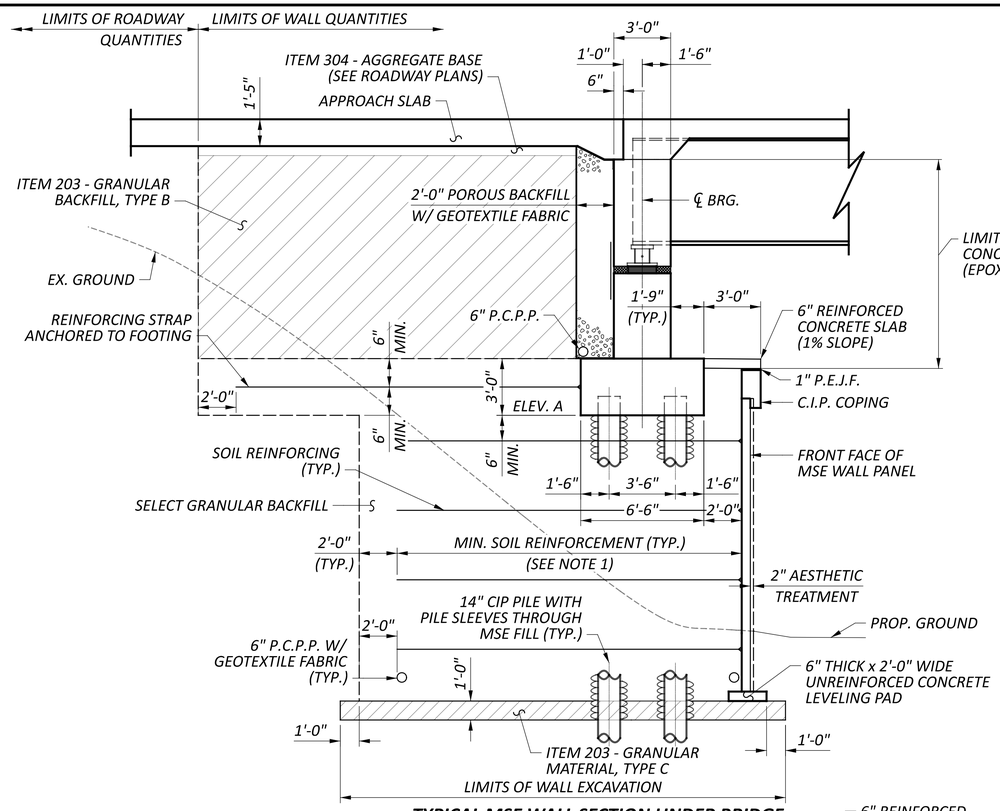
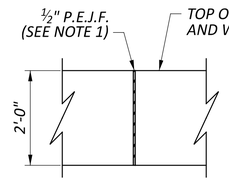
FORWARD ABUTMENT MSE WALL PLAN AND ELEVATION
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

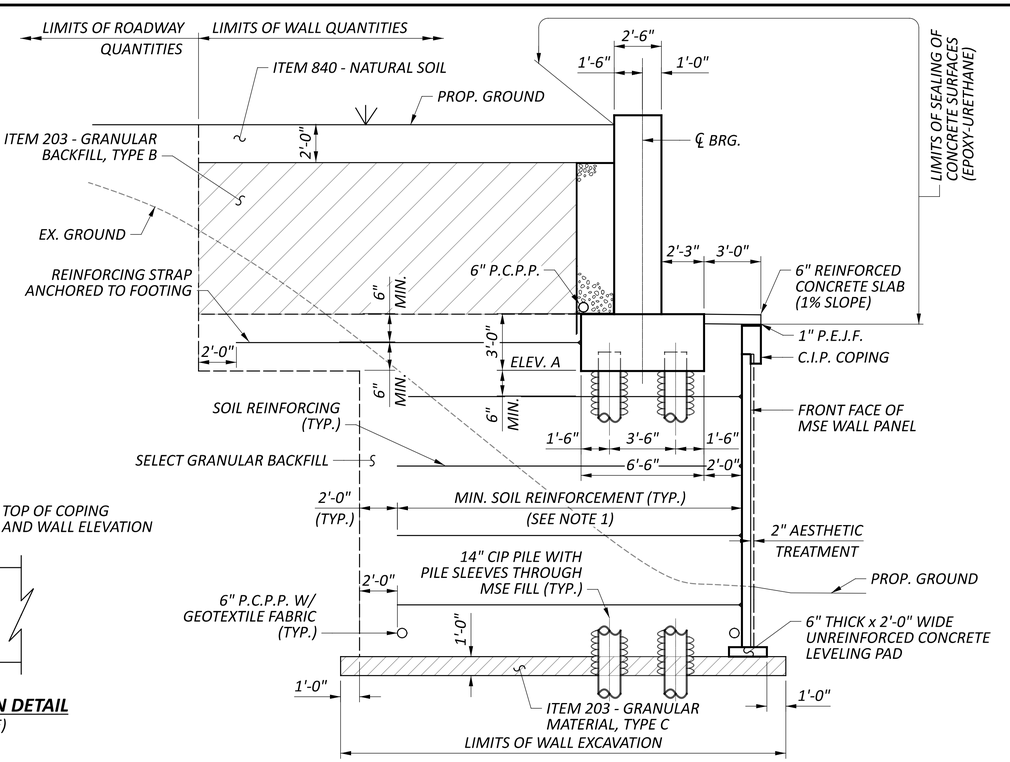
SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	ZF
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	59
TOTAL	64
SHEET	P. 544
TOTAL	618



TYPICAL MSE WALL SECTION UNDER BRIDGE



COPING EXPANSION DETAIL
(NOT TO SCALE)



TYPICAL MSE WALL SECTION ALONG WINGWALL

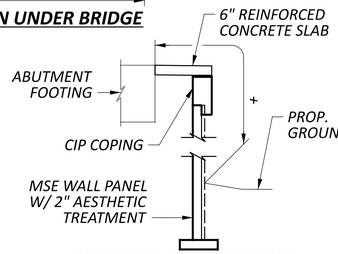
LEGEND:

\+ = LIMITS OF SEALING OF CONCRETE SURFACE (EPOXY-URETHANE)

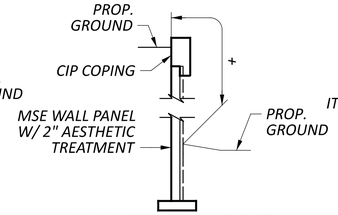
ELEV. A = 925.70 FOR REAR ABUTMENT
= 925.90 FOR FORWARD ABUTMENT

NOTES:

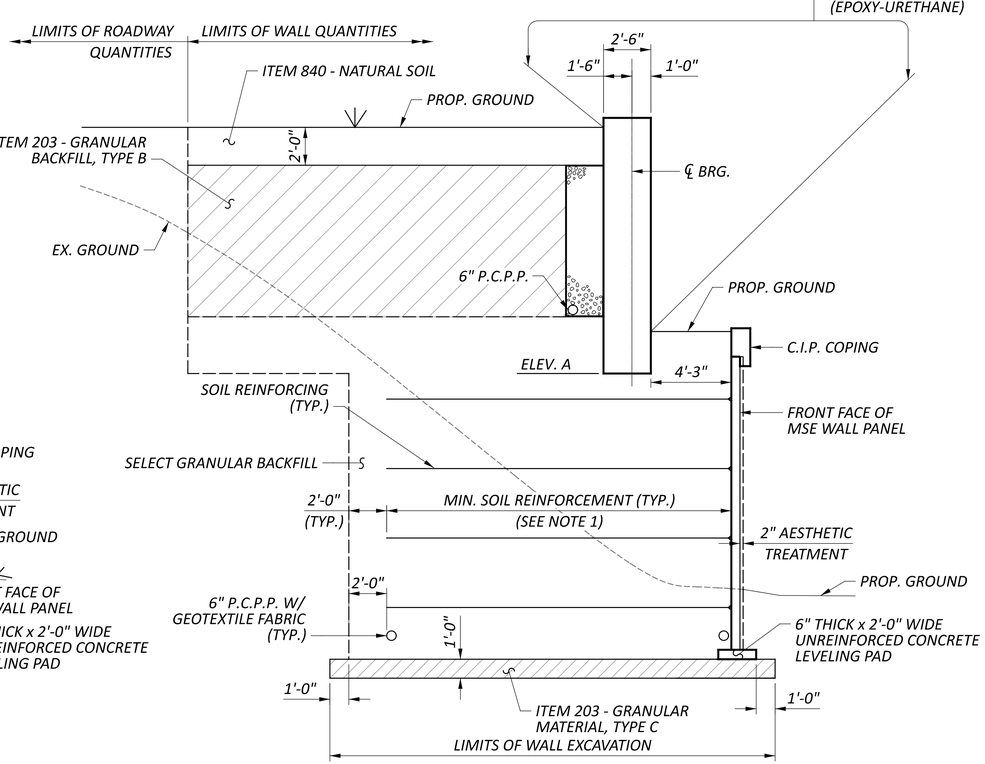
1. FOR MSE WALL PLAN, ELEVATION AND MSE WALL DATA, SEE SHEETS 58 THRU 59.



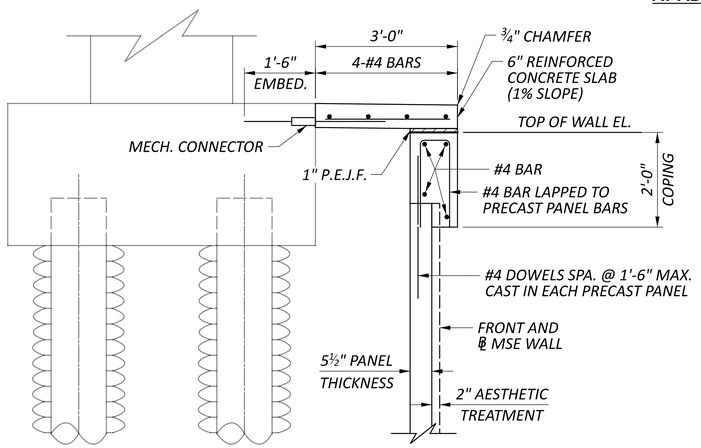
CONCRETE SEALING DETAIL AT ABUTMENT AND WINGWALL



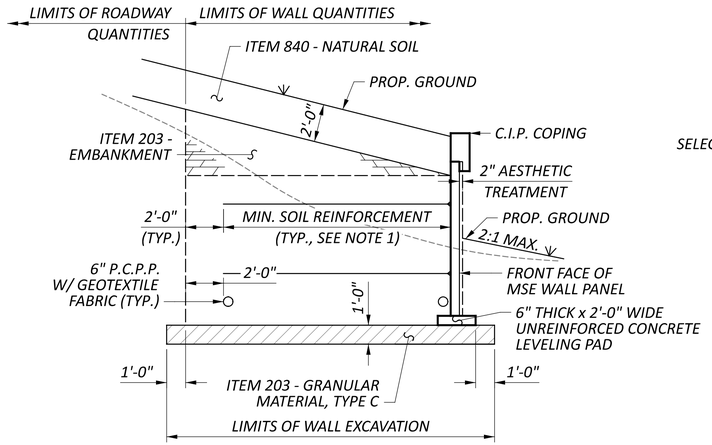
CONCRETE SEALING DETAIL AT END OF MSE WALL



TYPICAL MSE WALL SECTION AT END OF WINGWALL



MSE WALL COPING DETAIL
(NOT TO SCALE)



TYPICAL MSE WALL SECTION AT END OF MSE WALL

MSE WALL DETAILS
BRIDGE NO. FRA-00071-26.460 L/R
I-71 OVER SR 161

SFN	TBD
DESIGN AGENCY	Jacobs
DESIGNER	ZF
CHECKER	FM
REVIEWER	MJR 03/13/26
PROJECT ID	109164
SUBSET	60
TOTAL	64
SHEET	P. 545
TOTAL	618

FRA-71-19.10

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NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC
			TO BE COMPLETED WITH STAGE 3										

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

NUMBERS				LENGTH	WEIGHT	TYPE	DIMENSIONS						
MARK	SOUTHBOUND	NORTHBOUND	TOTAL				A	B	C	D	E	R	INC

PROJECT DESCRIPTION

FRA-071-19.10 PROJECT (PID 109164) IS ALONG THE IR-71 CORRIDOR BETWEEN 5TH AVE AND SR 161 IN FRANKLIN COUNTY, OHIO. THE OVERALL PROJECT OBJECTIVE IS TO ALLEVIATE CONGESTION, IMPROVE SAFETY, AND IMPROVE TRAFFIC INCIDENT MANAGEMENT, REPLACEMENT OF THE EXISTING BRIDGES CARRYING IR 71 OVER MORSE ROAD AND SR 161.

HISTORIC RECORDS

THE FOLLOWING REPORT/PLANS WERE AVAILABLE FOR REVIEW AND EVALUATION FOR THIS REPORT:

- STRUCTURE FOUNDATION EXPLORATION SHEETS AND BORING LOGS FOR THE BRIDGE PROJECT FRA-1 OVER SR 161 DESIGN SECTION D-12 DATED SEPTEMBER 12, 1957.
- SOIL PROFILE SHEETS AND BORING LOGS FOR THE SOIL PROFILE INVESTIGATION PROJECT FRA-1-25.30 DATED JUNE 17, 1958.
- SOIL PROFILE SHEETS AND BORING LOGS FOR THE SOIL PROFILE INVESTIGATION PROJECT FRA-3-20.49 DATED APRIL 7, 1958.
- SOIL PROFILE SHEETS AND BORING LOGS FOR THE SOIL PROFILE INVESTIGATION PROJECT FRA-3-18.31 DATED JANUARY 2, 1958.

HISTORICAL SOIL BORINGS ASSOCIATED WITH THE ABOVE PLANS WERE REVIEWED. SEVEN HISTORICAL BORINGS DRILLED AT THE SITE OF BRIDGE OVER SR 161 IN 1957 WERE UTILIZED DURING THE CURRENT DESIGN.

GEOLOGY

THE PROJECT SITE IS LOCATED WITHIN THE COLUMBUS LOWLAND TILL PLAINS, A SUBDIVISION OF THE SOUTHERN OHIO LOAMY TILL PLAIN. THIS IS A MODERATELY LOW RELIEF (25 FT) LOWLAND SURROUNDED IN ALL DIRECTIONS BY RELATIVE UPLANDS, HAVING A BROAD REGIONAL SLOPE TOWARD THE SCIOTO VALLEY, CONTAINING MANY LARGER STREAMS. ELEVATIONS OF THE REGION RANGE FROM 600 TO 850 FT ABOVE MEAN SEA LEVEL (AMSL) (950 FT AMSL NEAR POWELL MORAINE). THE GEOLOGY WITHIN THIS REGION IS DESCRIBED AS WISCONSINAN-AGE TILL THAT IS HIGH LIME IN THE WEST TO MEDIUM-LIME IN THE EAST. THE GEOLOGY IS ALSO DESCRIBED AS CONTAINING EXTENSIVE OUTWASH IN SCIOTO VALLEY OVERLYING DEEP DEVONIAN- TO MISSISSIPPIAN-AGE CARBONATE ROCKS, SHALES, AND SILTSTONES.

RECONNAISSANCE

A FIELD RECONNAISSANCE VISIT FOR THE OVERALL PROJECT AREA WAS CONDUCTED ON AUGUST 11, 2022, ALONG IR-71 BETWEEN E 11TH AVE. AND E DUBLIN GRANVILLE RD. THE LAND USE OF MOST OF THE PROJECT AREA CONSISTS OF COMMERCIAL PROPERTIES, INDUSTRIAL PROPERTIES, AND RESIDENTIAL PROPERTIES. IN GENERAL, THE PAVEMENT CONDITION OF THIS SECTION OF IR-71 WAS OBSERVED TO BE FAIR TO GOOD WITH SOME SIGNS OF WEATHERING AND SURFACE WEAR. MODERATE SEVERITY LONGITUDINAL AND TRANSVERSE CRACKING WAS COMMON ALONG THIS SECTION, AS WELL AS MODERATE SEVERITY PATCHING AND CRACK SEALING DEFICIENCIES. THE PROJECT AREA STARTS OUT IN A CUT BELOW THE SURROUNDING LAND NEAR E 11TH AVE. THEN TRANSITIONS TO EMBANKMENTS ABOVE THE SURROUNDING LAND NEAR E 17TH AVE., AFTER WHICH IR-71 TRANSITIONS TO BE ROUGHLY LEVEL WITH THE SURROUNDING LAND. THE ROADWAY IN THE PROJECT AREA DRAINS TO A DRAINAGE DITCH OFF THE OUTSIDE SHOULDERS OF THE ROADWAY, AS WELL AS DRAINAGE BASINS IN THE MEDIAN. THE EMBANKMENT APPEARED TO BE LIGHTLY TO HEAVILY VEGETATED, AND SIGNS OF STANDING WATER SUCH AS THE AFOREMENTIONED HEAVY VEGETATION WERE OBSERVED. NO SIGNS OF ISSUES DUE TO GEOTECHNICAL CONDITIONS WERE OBSERVED.

SUBSURFACE EXPLORATION

THE SUBSURFACE EXPLORATION WAS CONDUCTED BETWEEN AUGUST 15, 2022, AND SEPTEMBER 20, 2022, WHICH INCLUDED 48 BORINGS DRILLED TO DEPTHS RANGING BETWEEN 7.5 FT TO 91.5 FT BELOW GROUND SURFACE. BORINGS WERE DRILLED USING A CME 75T AND CME 45B TRUCK-MOUNTED DRILLING RIGS UTILIZING 3.25-INCH (INNER DIAMETER) HOLLOW STEM AUGERS. STRUCTURAL BORING SAMPLES WERE GENERALLY RECOVERED USING A SPLIT SPOON SAMPLER (AASHTO T-206 "STANDARD METHOD FOR PENETRATION TEST AND SPLIT BARREL SAMPLING OF SOILS.") AT 2.5-FT TO 5.0-FT INTERVALS, WHILE SUBGRADE BORING SAMPLES WERE RECOVERED CONTINUOUSLY FOR SUBGRADE EVALUATION PURPOSES. STANDARD PENETRATION TESTS (SPT) WERE CONDUCTED USING A CME AUTO HAMMER THAT HAS BEEN CALIBRATED ON JANUARY 24, 2022, TO BE 79 % AND 72.6 % EFFICIENT, RESPECTIVELY.

EXPLORATION FINDINGS

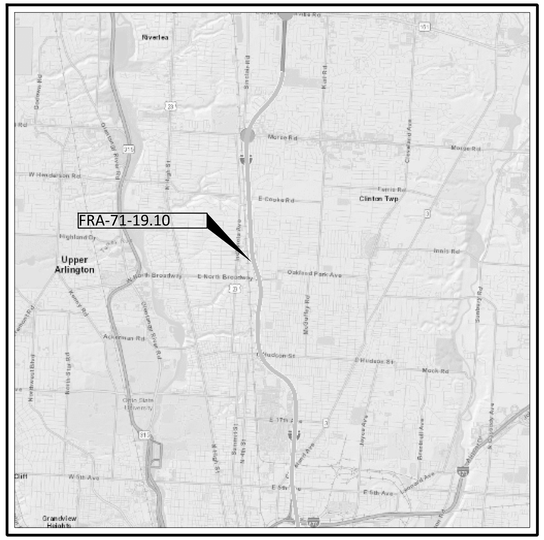
THE SUBGRADE CONDITIONS IN THE PROJECT AREA ARE RELATIVELY CONSISTENT AND ARE GENERALLY COMPRISED OF FIFTEEN- TO TWENTY-THREE-INCH-THICK EXISTING PAVEMENT SECTIONS (ASPHALT, CONCRETE, AND GRANULAR BASE) UNDERLAIN BY PRIMARILY COHESIVE FINE-GRAINED SOILS WITH MINOR NON-COHESIVE COARSE-GRAINED SOILS. THE SOILS ENCOUNTERED WITHIN THE PROJECT LIMITS ARE GENERALLY CLASSIFIED AS NON-COHESIVE A-1-a, A-1-b, A-2-4 AND A-4a OR COHESIVE A-4a, A-6a, A-6b AND A-7-6 SOILS ACCORDING TO THE ODOT SOIL CLASSIFICATION SYSTEM.

ALONG THE SOUTHBOUND (SB) OF IR-71, EIGHTY-FOUR PERCENT (84%) OF THE SAMPLES TAKEN ALONG IR-71 WERE CLASSIFIED AS COHESIVE FINE-GRAINED SOILS AND WERE COMPRISED OF: 1) SANDY SILT (A-4a, 46% OF THE SAMPLES); 2) SILT AND CLAY (A-6a, 22% OF THE SAMPLES); 3) SILTY CLAY (A-6b, 8% OF THE SAMPLES); 4) CLAY (A-7-6, 7% OF THE SAMPLES); AND 5) SILT (A-4b, 1% OF THE SAMPLES). IN TERMS OF CONSISTENCY OF THE COHESIVE SOILS, THE DESCRIPTION VARIES FROM VERY STIFF TO HARD CORRELATING TO CONVERTED SPT-N VALUES (N_{60}) RANGING FROM 4 BLOWS PER FOOT (BPF) TO REFUSAL. NATURAL MOISTURE CONTENTS RANGED FROM 1 TO 27 PERCENT. BASED ON ATTERBERG LIMITS TEST PERFORMED ON REPRESENTATIVE SAMPLES OF THE COHESIVE SOILS, THE LIQUID AND PLASTIC LIMIT WERE ESTIMATED TO RANGE FROM 18 TO 52 PERCENT AND FROM 12 TO 23 PERCENT, RESPECTIVELY. SIXTEEN PERCENT (16%) OF THE SAMPLES TAKEN ALONG THE IR-71 WERE CLASSIFIED AS NON-COHESIVE COARSE-GRAINED SOILS AND WERE COMPRISED OF: COMPRISED OF 1) GRAVEL AND/OR STONE FRAGMENTS (A-1-a, 2% OF THE SAMPLES); 2) GRAVEL WITH SAND (A-1-b, 7% OF THE SAMPLES); AND 3) GRAVEL WITH SAND AND SILT (A-2-4, 7% OF THE SAMPLES). WITH RESPECT TO THE RELATIVE DENSITY OF THE NON-COHESIVE GRANULAR SOILS, THE MATERIAL DESCRIPTION VARIES FROM LOOSE TO DENSE CORRELATING TO N_{60}VALUES RANGING FROM 4 TO 45 BPF. NATURAL MOISTURE CONTENTS OF GRANULAR SOILS RANGED FROM 4 TO 16 PERCENT.

LEGEND

	DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
	GRAVEL AND/OR STONE FRAGMENTS	A-1-a	2	3
	GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	9	19
	GRAVEL AND/OR STONE FRAGMENTS WITH SAND & SILT	A-2-4	10	15
	GRAVEL/STONE FRAGMENTS WITH SAND, SILT & CLAY	A-2-6	2	1
	COARSE AND FINE SAND	A-3a	0	5
	SANDY SILT	A-4a	81	240
	SILT	A-4b	3	0
	SILT AND CLAY	A-6a	31	35
	SILTY CLAY	A-6b	18	18
	CLAY	A-7-6	21	18
		TOTAL	177	356
	ROCK	VISUAL		
	PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
	SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		
	BORING LOCATION - PLAN VIEW.			
	HISTORICAL BORING LOCATION - PLAN VIEW.			
	DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
WC	INDICATES WATER CONTENT IN PERCENT.			
N_{60}	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.			
X/Y/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y= NUMBER OF BLOWS (UNCORRECTED) FOR SECOND D INCHES OF PENETRATION AT REFUSAL.			
W	INDICATES FREE WATER ELEVATION.			
	INDICATES STATIC WATER ELEVATION.			
SS	INDICATES A SPLIT SPOON SAMPLE.			
NP	INDICATES A NON-PLASTIC SAMPLE.			

RECON. - EB 08/11/22
DRILLING - JH 08/15/22 - 09/20/22
DRAWN - ZM 07/31/23 - 08/28/23
REVIEWED - CH 08/28/23



LOCATION MAP

SCALE IN MILES

0 1 2 3 4

PARTICLE SIZE DEFINITIONS

12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY

INDEX OF SHEETS

EXPLORATION NOTES (CONT.), SHEET 2.

SUMMARY OF SOIL TEST DATA, SHEET 3.

LOCATION FROM STA.	LOCATION TO STA.	PLAN	PROFILE	CROSS SECTION	STRUCTURE INCLUDED BRIDGE NO.	STRUCTURE INCLUDED SFN
IR 71						
1048+00	1060+50	4 - 5	4- 5	-		
1060+50	1073+00	6 - 7	6 - 7	-		
1073+00	1085+50	8 - 9	8 - 9	-		
1085+50	1098+00	10 - 11	10 - 11	-		
1098+00	1110+50	12 - 13	12 - 13	-		
1110+50	1123+00	14 - 15	14 - 15	-		
1123+00	1135+50	16 - 17	16 - 17	-		
1148+00	1160+50	18 - 19	18 - 19	-		
1160+50	1173+00	20 - 21	20 - 21	-		
1185+50	1198+00	22 - 23	22 - 23	-		
1198+00	1210+50	24 - 25	24 - 25	-		
1210+50	1223+00	26 - 27	26 - 27	-		
1310+50	1315+50	28	29	-	FRA-71-24.46	2508192 L & 2508222 R
1413+50	1418+50	30	31	-	FRA-71-26.46	2508257

BORING LOGS, SHEETS 32 - 69.

GEOTECHNICAL PROFILE - ROADWAY

DESIGN AGENCY: NEAS

DESIGNER: ZM

REVIEWER: CH 08-28-23

PROJECT ID: 109164

SUBSET 1 | TOTAL 69

SHEET P.550 | TOTAL 618

FRA-71-19.10

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 4:54:57 PM USER: zil
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EXPLORATION FINDINGS, CONTINUED

ALONG THE NORTHBOUND (NB) OF IR-71, EIGHTY-FOUR PERCENT (84%) OF THE SAMPLES TAKEN ALONG IR-71 WERE CLASSIFIED AS COHESIVE FINE-GRAINED SOILS AND WERE COMPRISED OF: 1) SANDY SILT (A-4a, 45% OF THE SAMPLES); 2) SILT AND CLAY (A-6a, 23% OF THE SAMPLES); 3) SILTY CLAY (A-6b, 8% OF THE SAMPLES); 4) CLAY (A-7-6, 7% OF THE SAMPLES); AND 5) SILT (A-4b, 1% OF THE SAMPLES). IN TERMS OF CONSISTENCY OF THE COHESIVE SOILS, THE DESCRIPTION VARIES FROM VERY STIFF TO HARD CORRELATING TO CONVERTED SPT-N VALUES (N_{60}) RANGING FROM 4 BLOWS PER FOOT (BPF) TO REFUSAL. NATURAL MOISTURE CONTENTS RANGED FROM 1 TO 27 PERCENT. BASED ON ATTERBERG LIMITS TEST PERFORMED ON REPRESENTATIVE SAMPLES OF THE COHESIVE SOILS, THE LIQUID AND PLASTIC LIMIT WERE ESTIMATED TO RANGE FROM 18 TO 52 PERCENT AND FROM 12 TO 23 PERCENT, RESPECTIVELY. SIXTEEN PERCENT (16%) OF THE SAMPLES TAKEN ALONG THE IR-71 WERE CLASSIFIED AS NON-COHESIVE COARSE-GRAINED SOILS AND WERE COMPRISED OF: COMPRISED OF 1) GRAVEL AND/OR STONE FRAGMENTS (A-1-a, 2% OF THE SAMPLES); 2) GRAVEL WITH SAND (A-1-b, 7% OF THE SAMPLES); AND 3) GRAVEL WITH SAND AND SILT (A-2-4, 7% OF THE SAMPLES). WITH RESPECT TO THE RELATIVE DENSITY OF THE NON-COHESIVE GRANULAR SOILS, THE MATERIAL DESCRIPTION VARIES FROM LOOSE TO DENSE CORRELATING TO N_{60} VALUES RANGING FROM 4 TO 45 BPF. NATURAL MOISTURE CONTENTS OF GRANULAR SOILS RANGED FROM 4 TO 16 PERCENT.

GROUNDWATER WAS ENCOUNTERED IN 10 OUT OF 48 PROJECT BORINGS DURING DRILLING AS PART OF THE PROJECT. GROUNDWATER WAS ENCOUNTERED AT DEPTHS RANGING FROM 12.5 TO 35.0 FT BELOW GROUND SURFACE (APPROXIMATE ELEVATIONS 820.2 TO 906.9 FT AMSL).

BEDROCK WAS ENCOUNTERED IN FOUR PROJECT BORINGS (B-027-0-22, B-028-0-22, B-029-0-22 AND B-030-0-22) AS SLIGHTLY TO HIGHLY WEATHERED SHALE, DEPTHS RANGING FROM 17.0 TO 23.0 FT BELOW GROUND SURFACE (APPROXIMATE ELEVATIONS 832.3 TO 838.2 FT AMSL).

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2023.

AVAILABLE INFORMATION

THE GEOTECHNICAL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE SOIL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

ORGANIC CONTENT BY LOSS ON IGNITION TEST

BORING ID	SAMPLE ID	SAMPLE ELEVATION	SAMPLE DEPTH	LOI (%)
B-025-0-22	SS-4	842.8' - 841.3'	8.5' - 10.0'	2.7
B-026-0-22	SS-6	840.2' - 838.7'	11.0' - 12.5'	2.7

GEOTECHNICAL PROFILE - ROADWAY

DESIGN AGENCY
NEAS National Engineering & Architectural Services Inc.

DESIGNER ZM
REVIEWER CH 08-28-23
PROJECT ID 109164
SUBSET 2 | TOTAL 69
SHEET P.551 | TOTAL 618

FRA-71-19.10

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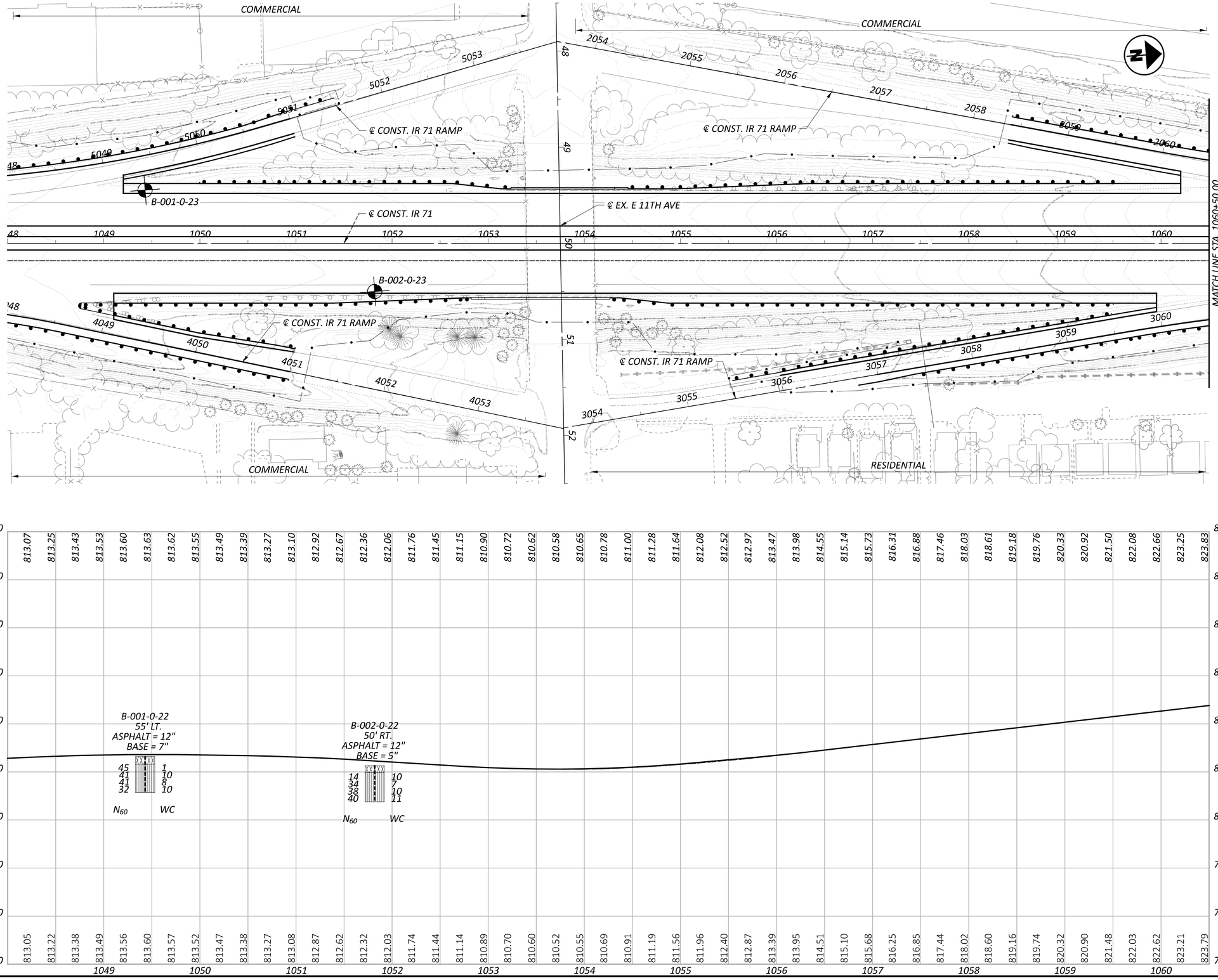
SUMMARY OF SOIL TEST DATA
IR 71

EXPLORATION NO., STATION & OFFSET	FROM	TO	SAMPLE ID	N60	% REC	HP tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO4
B-001-0-22	01.50	03.00	SS-1	45	33	4.50				SAME AS SS-2					1	A-4a (VISUAL)	
STA. 1049+43, 55' LT.	03.00	04.50	SS-2	41	44	4.50	7	8	14	44	27	24	16	8	10	A-4a (7)	280
LATITUDE = 39.992665	04.50	06.00	SS-3	41	44	4.50	22	14	17	31	16	21	15	6	8	A-4a (2)	
LONGITUDE = -82.985422	06.00	07.50	SS-4	32	28	4.50				SAME AS SS-3					10	A-4a (VISUAL)	
B-002-0-22	01.50	03.00	SS-1	14	56	4.50	8	11	22	38	21	18	12	6	10	A-4a (5)	133
STA. 1051+82, 50' RT.	03.00	04.50	SS-2	34	50	4.50	29	17	18	23	13	21	14	7	7	A-4a (0)	
LATITUDE = 39.993297	04.50	06.00	SS-3	38	61	4.50				SAME AS SS-2					10	A-4a (VISUAL)	
LONGITUDE = -82.984982	06.00	07.50	SS-4	40	100	4.50				SAME AS SS-2					11	A-4a (VISUAL)	
B-005-0-22	01.50	03.00	SS-1	8	44	3.00	13	13	16	33	25	26	17	9	16	A-4a (5)	60
STA. 1071+38, 54' RT.	03.00	04.50	SS-2	26	67	-	59	18	9	10	4	NP	NP	NP	9	A-1-a (0)	
LATITUDE = 39.998650	04.50	06.00	SS-3	7	39	2.25				SAME AS SS-1					16	A-4a (VISUAL)	
LONGITUDE = -82.984438	06.00	07.50	SS-4	13	100	3.00				SAME AS SS-1					16	A-4a (VISUAL)	
B-006-0-22	01.50	03.00	SS-1	21	100	-	43	23	14	16	4	NP	NP	NP	7	A-1-b (0)	100
STA. 1075+26, 52' LT.	03.00	04.50	SS-2	16	100	4.50	11	14	19	35	21	24	16	8	11	A-4a (4)	
LATITUDE = 39.999730	04.50	06.00	SS-3	24	100	4.50				SAME AS SS-2					11	A-4a (VISUAL)	
LONGITUDE = -82.984734	06.00	07.50	SS-4	30	100	4.50				SAME AS SS-2					12	A-4a (VISUAL)	
B-007-0-22	01.50	03.00	SS-1	13	100	4.25	11	15	18	35	21	24	16	8	13	A-4a (4)	80
STA. 1081+28, 53' LT.	03.00	04.50	SS-2	16	100	4.50	23	13	15	30	19	25	16	9	12	A-4a (3)	
LATITUDE = 40.001377	04.50	06.00	SS-3	27	100	4.00				SAME AS SS-2					25	A-4a (VISUAL)	
LONGITUDE = -82.984697	06.00	07.50	SS-4	19	100	4.50				SAME AS SS-2					12	A-4a (VISUAL)	
B-008-0-22	01.50	03.00	SS-1	17	100	-	36	17	14	23	10	NP	NP	NP	8	A-2-4 (0)	160
STA. 1085+48, 55' LT.	03.00	04.50	SS-2	21	100	-	31	12	13	27	17	29	17	12	11	A-6a (2)	
LATITUDE = 40.002529	04.50	06.00	SS-3	19	100	3.50	15	8	15	34	28	32	18	14	15	A-6a (7)	
LONGITUDE = -82.984705	06.00	07.50	SS-4	28	100	4.50				HARD, BROWN, SANDY SILT					15	A-4a (VISUAL)	
B-009-0-22	01.50	03.00	SS-1	29	89	-	36	25	12	21	6	NP	NP	NP	6	A-2-4 (0)	73
STA. 1090+50, 64' RT.	03.00	04.50	SS-2	11	78	3.25	4	5	12	37	42	41	19	22	22	A-7-6 (13)	
LATITUDE = 40.003906	04.50	06.00	SS-3	8	100	2.25				SAME AS SS-2					25	A-7-6 (VISUAL)	
LONGITUDE = -82.984281	06.00	07.50	SS-4	12	100	3.00				SAME AS SS-2					24	A-7-6 (VISUAL)	
B-010-0-22	01.50	03.00	SS-1	17	100	4.50	5	11	18	38	28	25	17	8	14	A-4a (6)	140
STA. 1094+34, 63' LT.	03.00	04.50	SS-2	13	100	4.25				SAME AS SS-1					14	A-4a (VISUAL)	
LATITUDE = 40.004957	04.50	06.00	SS-3	19	100	2.25	4	7	13	39	37	34	16	18	18	A-6b (11)	
LONGITUDE = -82.984740	06.00	07.50	SS-4	18	100	2.50				VERY STIFF, BROWN, SILT AND CLAY, SOME SAND					18	A-6a (VISUAL)	
B-011-0-22	01.50	03.00	SS-1	24	100	-	18	36	21	20	5	NP	NP	NP	8	A-1-b (0)	160
STA. 1098+37, 59' RT.	03.00	04.50	SS-2	22	100	4.50	12	10	15	33	30	33	18	15	13	A-6a (8)	
LATITUDE = 40.006090	04.50	06.00	SS-3	17	100	4.50				SAME AS SS-2					13	A-6a (VISUAL)	
LONGITUDE = -82.984466	06.00	07.50	SS-4	21	33	3.50				SAME AS SS-2					20	A-6a (VISUAL)	
B-012-0-22	01.50	03.00	SS-1	8	100	3.00	6	4	10	32	48	49	21	28	24	A-7-6 (17)	380
STA. 1102+35, 53' LT.	03.00	04.50	SS-2	14	100	4.50				SAME AS SS-1					16	A-7-6 (VISUAL)	
LATITUDE = 40.007055	04.50	06.00	SS-3	17	100	4.50	6	10	16	38	30	28	17	11	16	A-6a (7)	
LONGITUDE = -82.985244	06.00	07.50	SS-4	17	100	4.50				SAME AS SS-3					14	A-6a (VISUAL)	
B-013-0-22	01.50	03.00	SS-1	18	83	-	26	33	18	17	6	NP	NP	NP	8	A-1-b (0)	220
STA. 1106+36, 49' RT.	03.00	04.50	SS-2	28	100	4.50	8	9	20	38	25	23	14	9	10	A-4a (6)	
LATITUDE = 40.008162	04.50	06.00	SS-3	21	100	4.50				SAME AS SS-2					13	A-4a (VISUAL)	
LONGITUDE = -82.985552	06.00	07.50	SS-4	22	100	4.50				HARD, BROWN, SILT AND CLAY					17	A-6a (VISUAL)	
B-038-0-22	01.50	03.00	SS-1	22	89	-	30	23	17	23	7	NP	NP	NP	8	A-2-4 (0)	60
STA. 1207+01, 86' RT.	03.00	04.50	SS-2	38	100	-				SAME AS SS-1					9	A-2-4 (VISUAL)	
LATITUDE = 40.032767	04.50	06.00	SS-3	51	44	-	23	18	23	23	13	NP	NP	NP	8	A-4a (0)	
LONGITUDE = -82.995104	06.00	07.50	SS-4	50	100	-				SAME AS SS-3					12	A-4a (VISUAL)	
B-039-0-22	01.50	03.00	SS-1	30	94	-	27	33	21	14	5	NP	NP	NP	8	A-1-b (0)	420
STA. 1210+81, 68' RT.	03.00	04.50	SS-2	18	100	-				SAME AS SS-1					8	A-1-b (VISUAL)	
LATITUDE = 40.033732	04.50	06.00	SS-3	17	33	-	68	10	7	11	4	NP	NP	NP	5	A-1-a (0)	
LONGITUDE = -82.995601	06.00	07.50	SS-4	20	39	4.00				VERY STIFF, GRAY, SILT AND CLAY					14	A-6a (VISUAL)	
B-040-0-22	01.50	03.00	SS-1	9	78	2.25	2	5	11	43	39	43	21	22	23	A-7-6 (13)	260
STA. 1214+91, 69' RT.	03.00	04.50	SS-2	9	100	4.25	3	5	14	38	40	38	19	19	21	A-6b (12)	
LATITUDE = 40.034805	04.50	06.00	SS-3	7	100	2.50				SAME AS SS-2					21	A-6b (VISUAL)	
LONGITUDE = -82.995984	06.00	07.50	SS-4	5	100	3.50				VERY STIFF, BROWN, SILT AND CLAY					12	A-6a (VISUAL)	
B-041-0-22	01.50	03.00	SS-1	7	72	2.00	2	7	15	31	45	52	19	33	27	A-7-6 (18)	260
STA. 1218+90, 62' RT.	03.00	04.50	SS-2	13	100	4.50				SAME AS SS-1					17	A-7-6 (VISUAL)	
LATITUDE = 40.035863	04.50	06.00	SS-3	16	100	4.50	11	11	18	37	23	26	17	9	14	A-4a (5)	
LONGITUDE = -82.996289	06.00	07.50	SS-4	17	100	4.50				SAME AS SS-3					15	A-4a (VISUAL)	
B-042-0-22	01.50	03.00	SS-1	18	56	-	17	33	25	18	7	NP	NP	NP	11	A-1-b (0)	140
STA. 1222+88, 62' RT.	03.00	04.50	SS-2	22	100	4.50	11	11	15	37	26	28	18	10	13	A-4a (6)	
LATITUDE = 40.036934	04.50	06.00	SS-3	13	100	3.50	1	5	11	38	45	46	21	25	22	A-7-6 (15)	
LONGITUDE = -82.996469	06.00	07.50	SS-4	14	100	3.00				SAME AS SS-3					23	A-7-6 (VISUAL)	



HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1048+00 TO STA. 1060+50 IR 71 SOUTHBOUND

DESIGN AGENCY
KEA National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	4
TOTAL	69
SHEET	P.553
TOTAL	618

FRA-71-19.10

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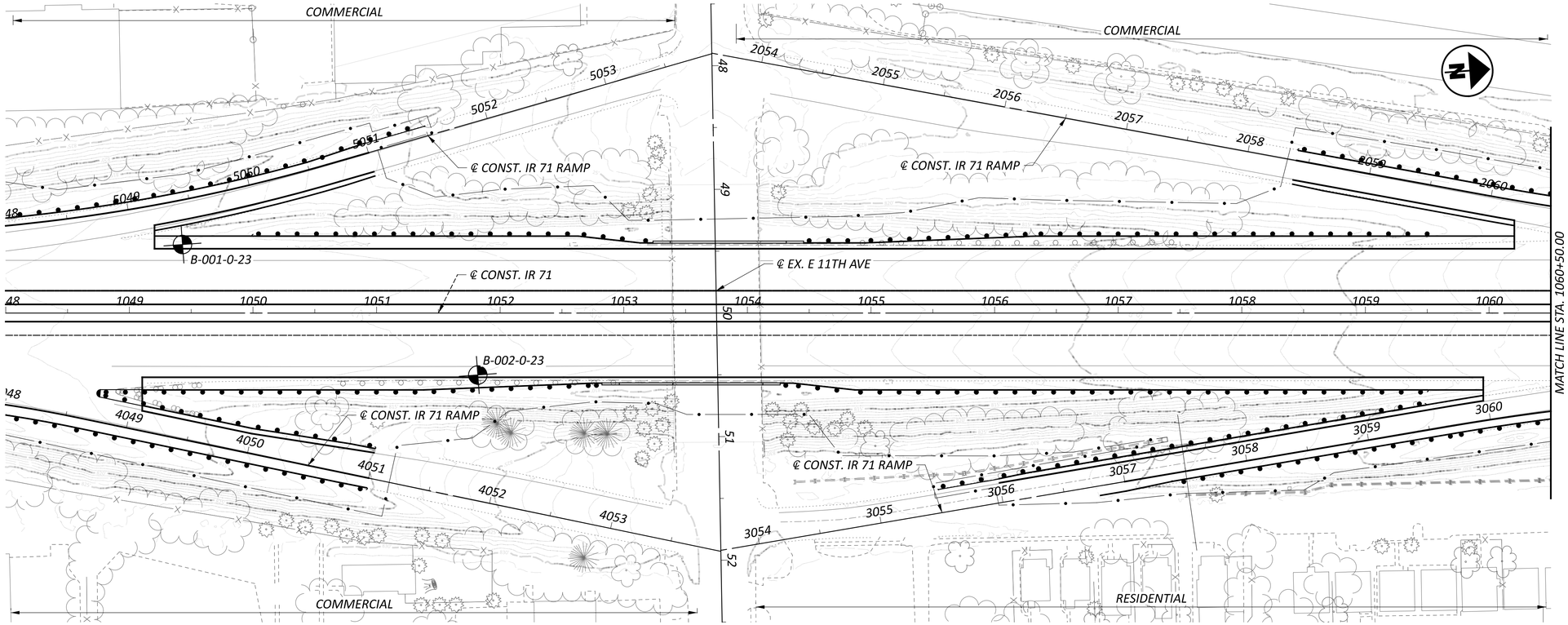

HORIZONTAL SCALE IN FEET
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GEOTECHNICAL PROFILE - ROADWAY
STA. 1048+00 TO STA. 1060+50 IR 71 NORTHBOUND

FRA-71-19.10

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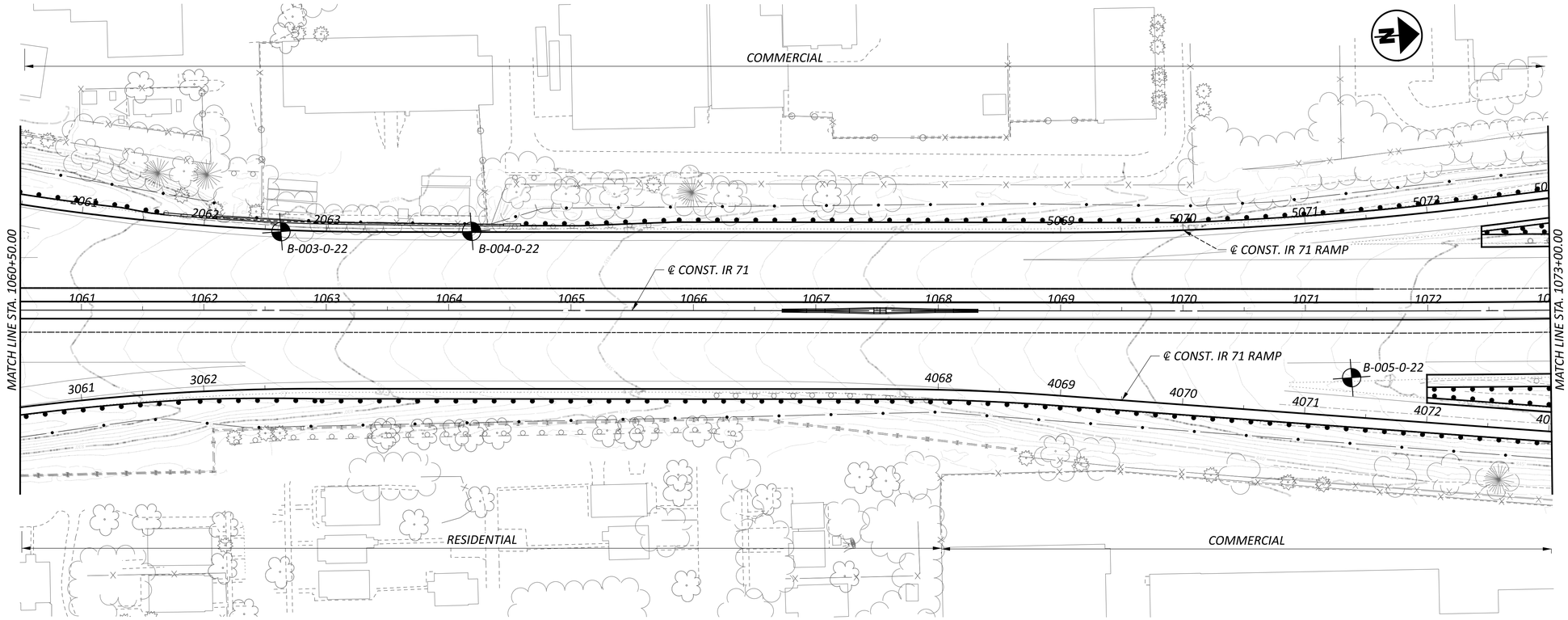
DESIGN AGENCY
KEA National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET / TOTAL	5 / 69
SHEET / TOTAL	P.554 / 618



HORIZONTAL SCALE IN FEET
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GEOTECHNICAL PROFILE - ROADWAY
STA. 1060+50 TO STA. 1073+00 IR 71 SOUTHBOUND

DESIGN AGENCY
HEAS Heavy Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	6
TOTAL	69
SHEET	P.555
TOTAL	618

FRA-71-19.10

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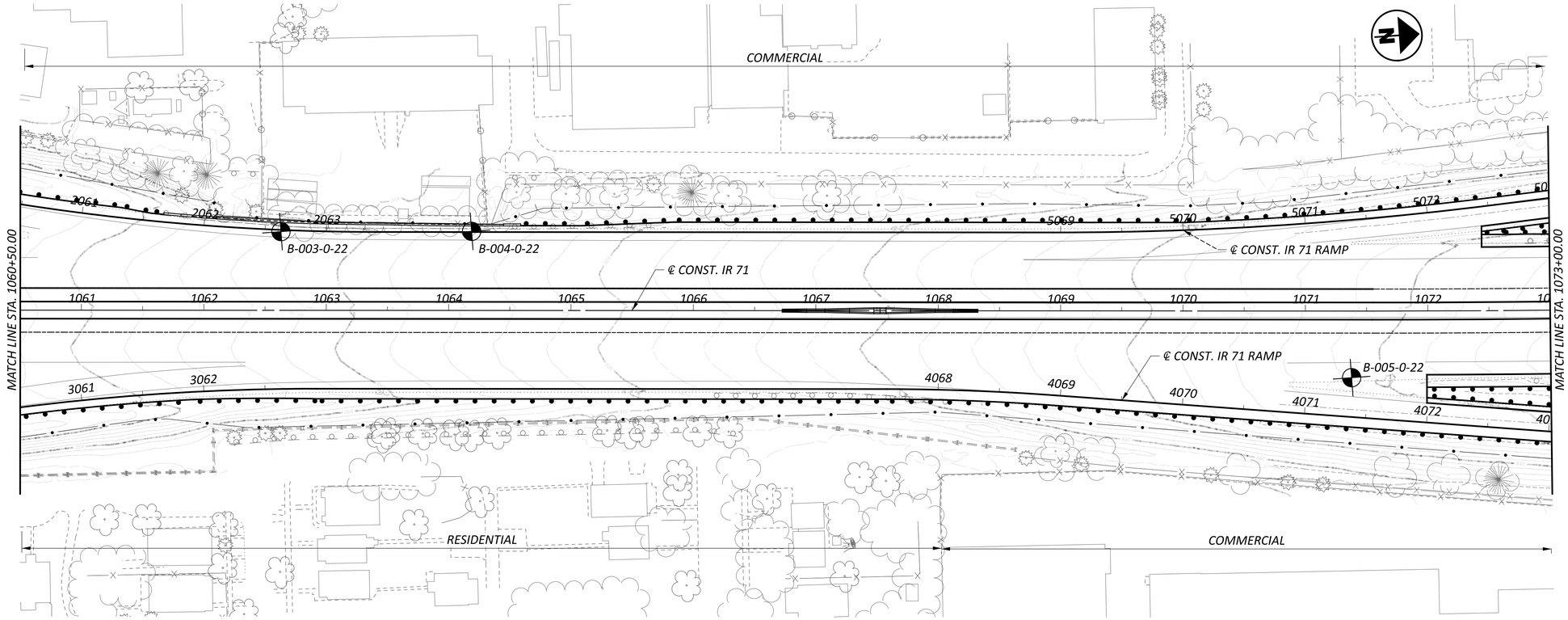

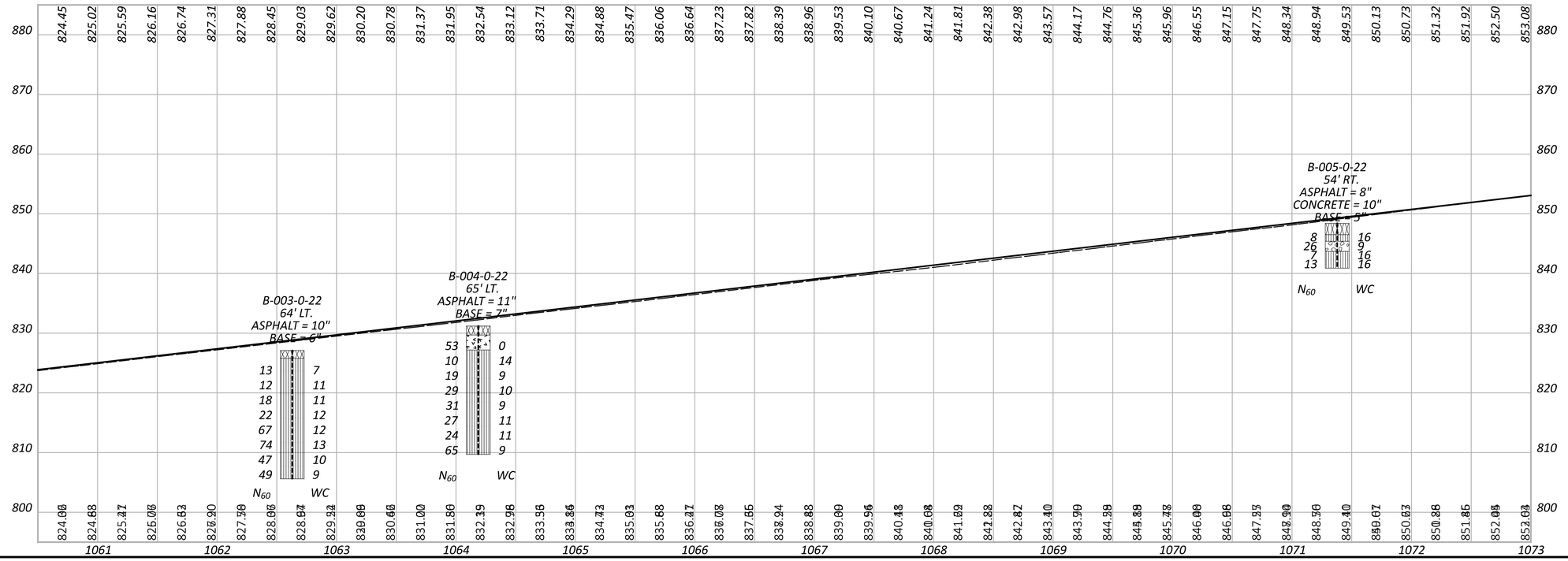

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1060+50 TO STA. 1073+00 IR 71 NORTHBOUND

DESIGN AGENCY
VDOT Virginia Department of Transportation
HEAS Highway Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	7
TOTAL	69
SHEET	P.556
TOTAL	618

FRA-71-19.10

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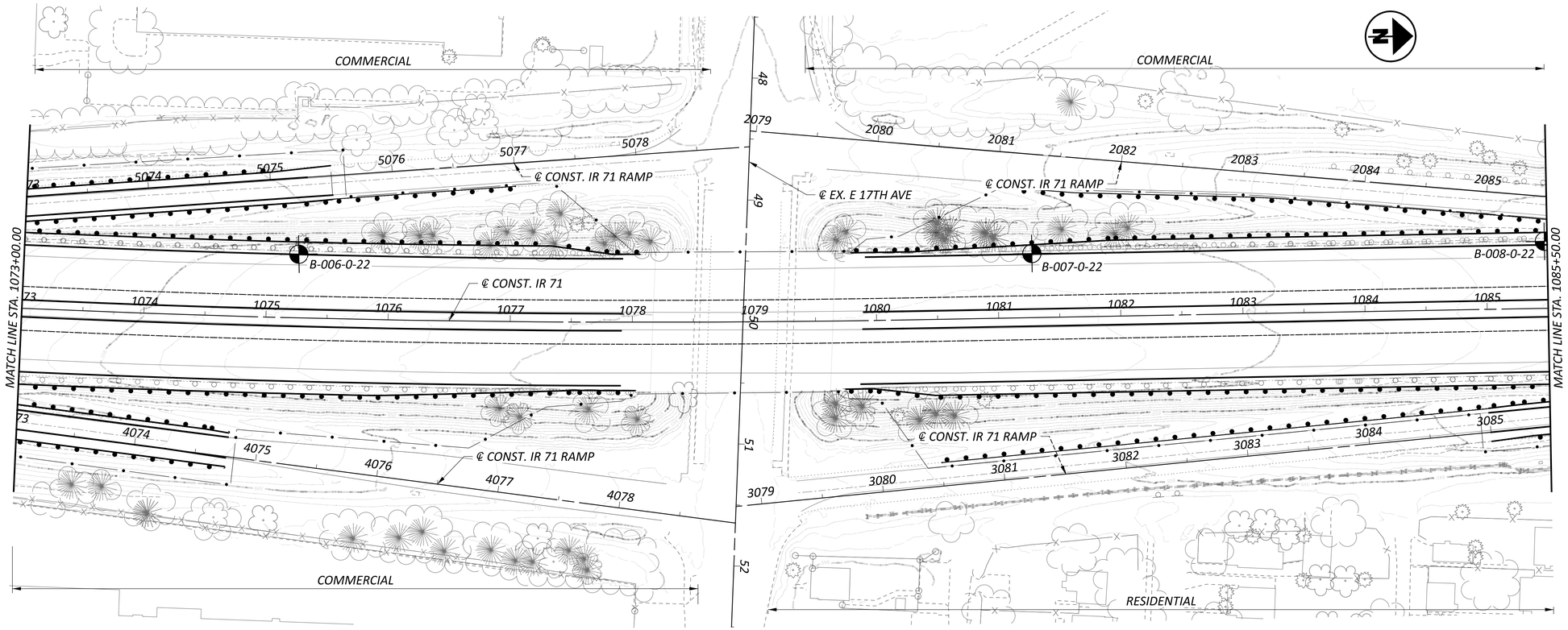

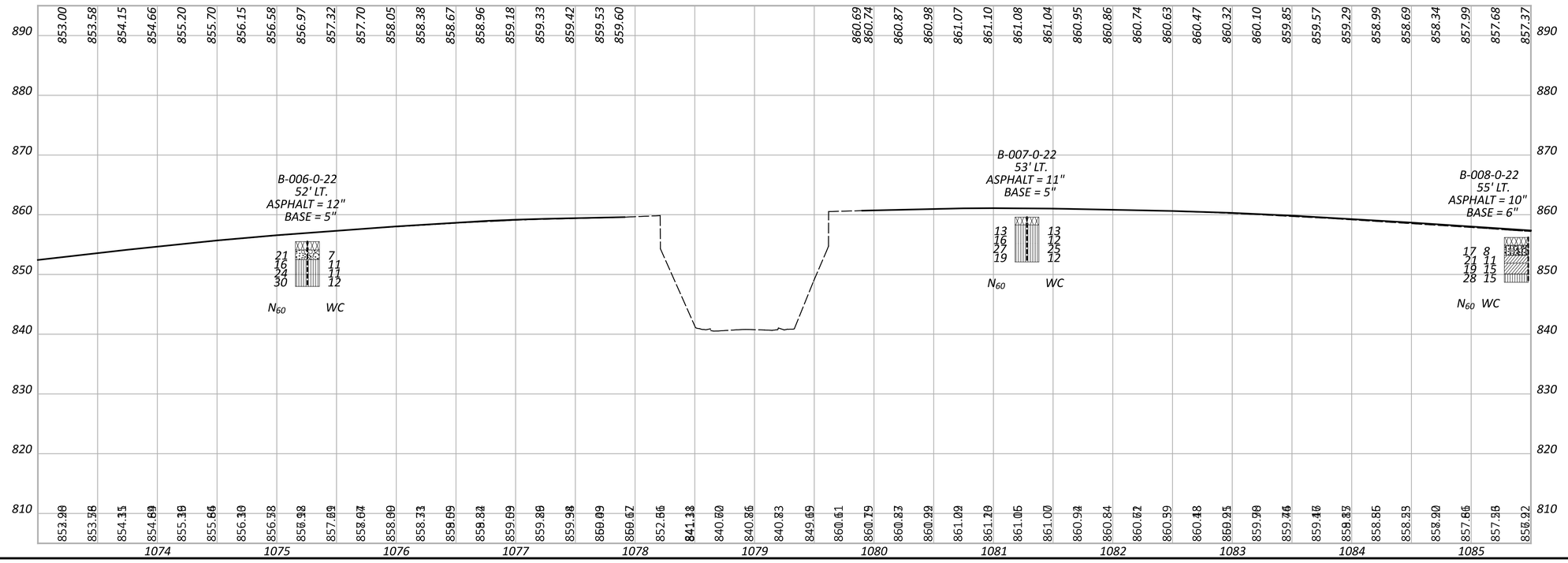

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1073+00 TO STA. 1085+50 IR 71 SOUTHBOUND

FRA-71-19.10

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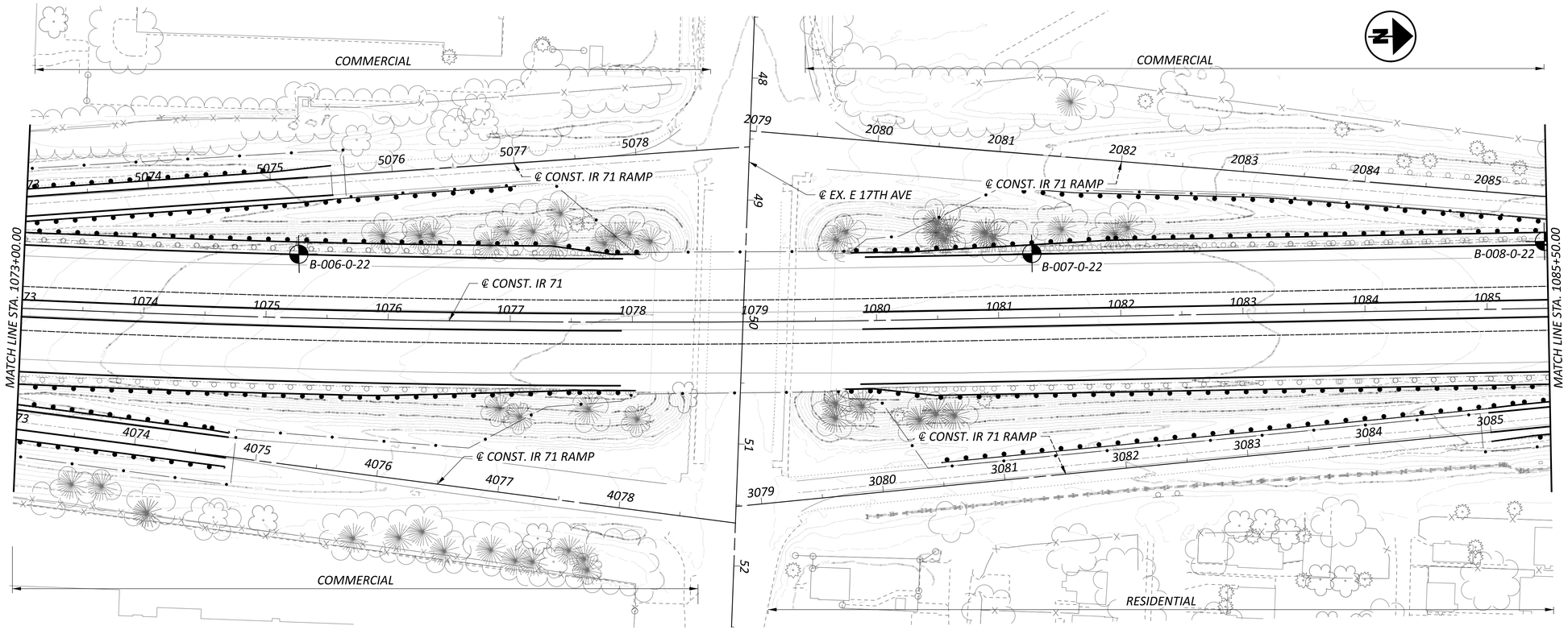
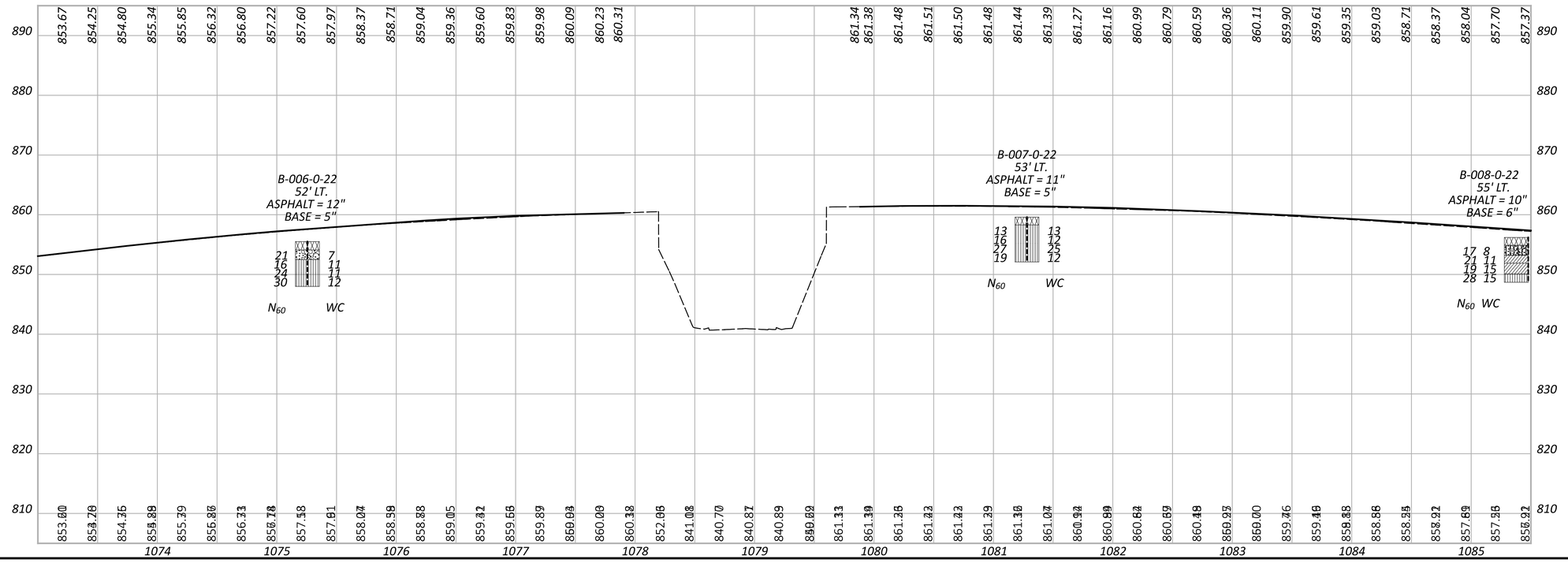
DESIGN AGENCY
KEA Kimley Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	8
TOTAL	69
SHEET	P.557
TOTAL	618





HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1073+00 TO STA. 1085+50 IR 71 NORTHBOUND

DESIGN AGENCY
HNTB Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	9
TOTAL	69
SHEET	P.558
TOTAL	618

FRA-71-19.10

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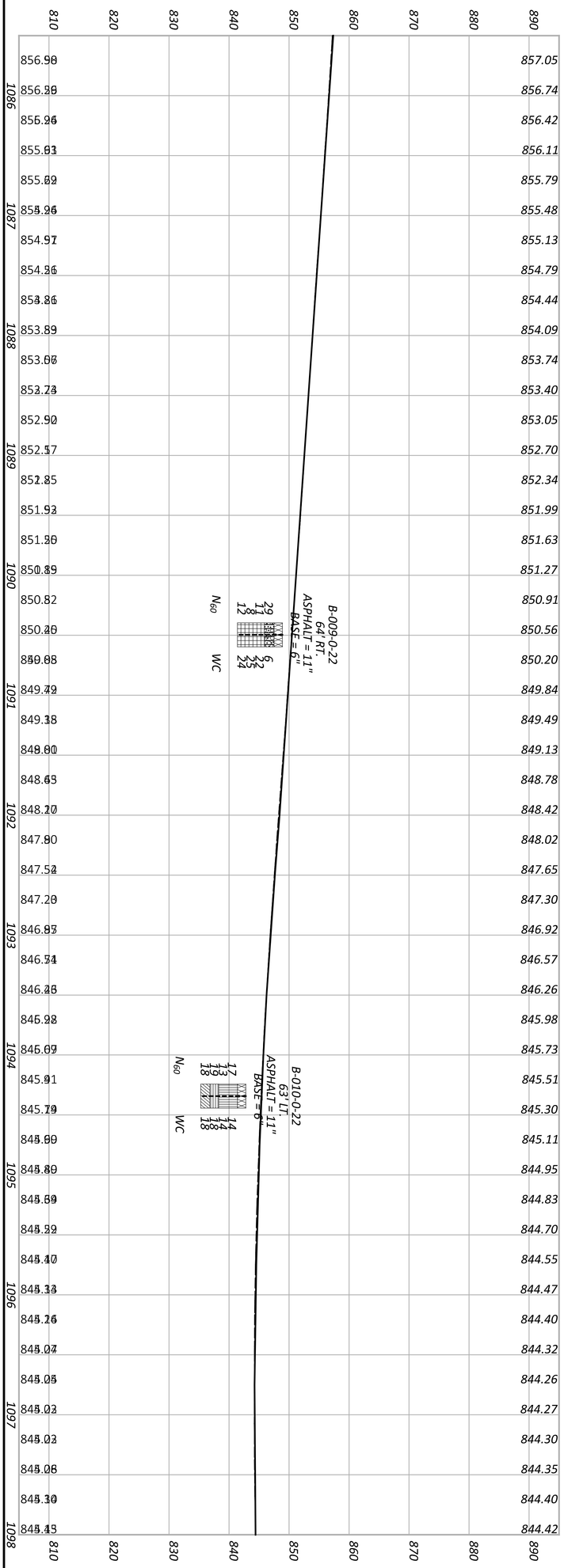

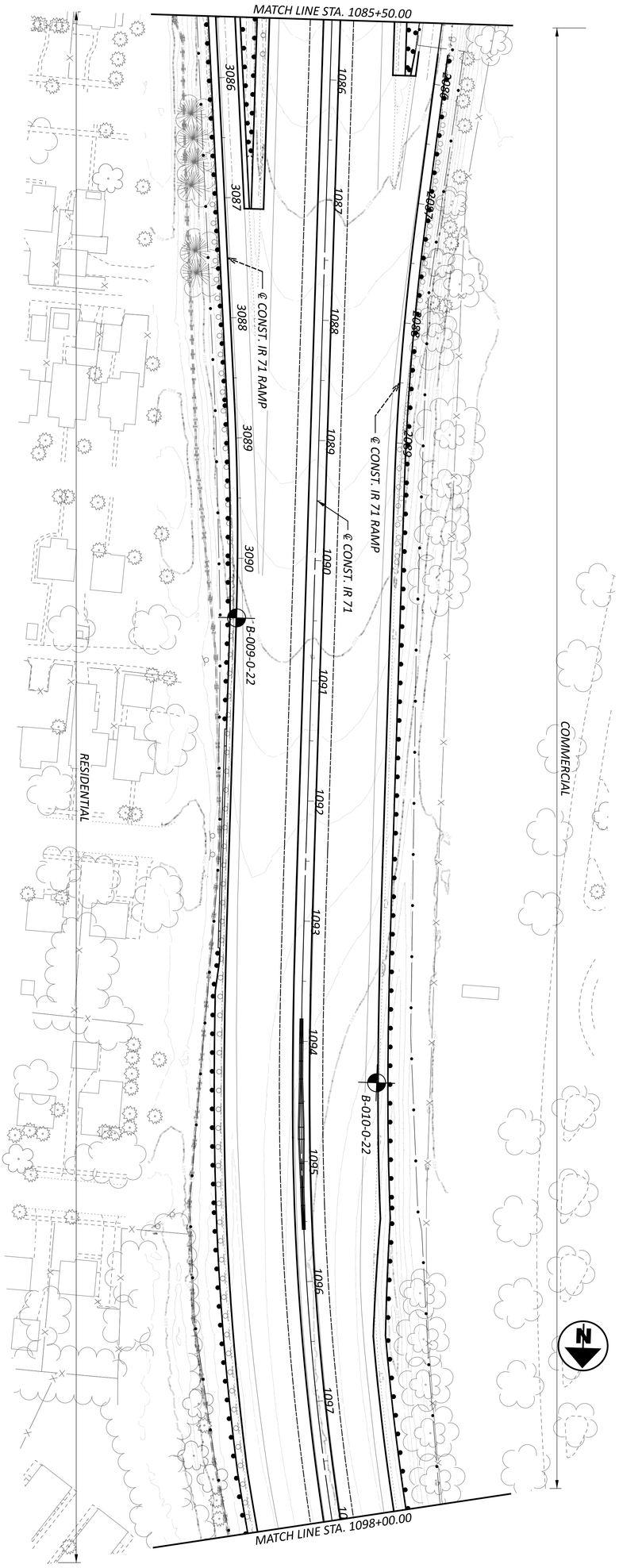

DESIGNER	DESIGN AGENCY
ZM	NEAS National Engineering & Architectural Services Inc.

REVIEWER	PROJECT ID	SUBSET	SHEET
CH 08-28-23	109164	10 TOTAL 69	P.559 TOTAL 618

GEOTECHNICAL PROFILE - ROADWAY
STA. 1085+50 TO STA. 1098+00 IR 71 SOUTHBOUND

HORIZONTAL SCALE IN FEET
0 50
25 100

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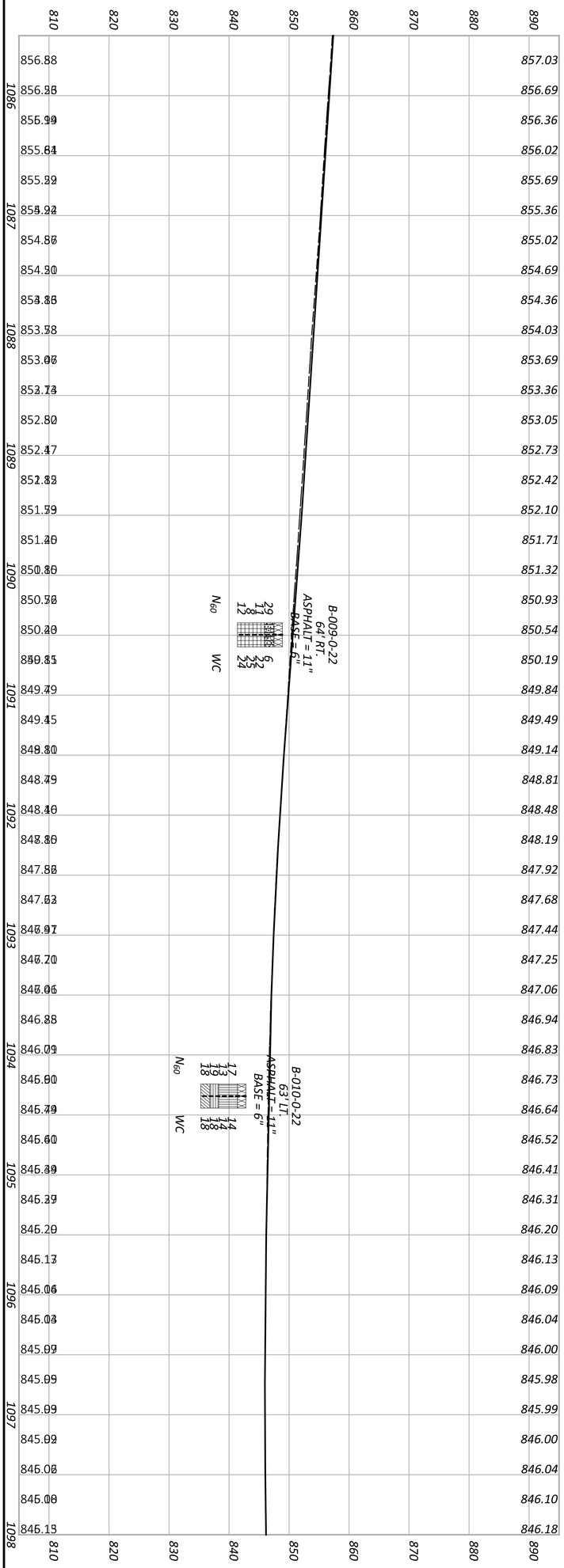

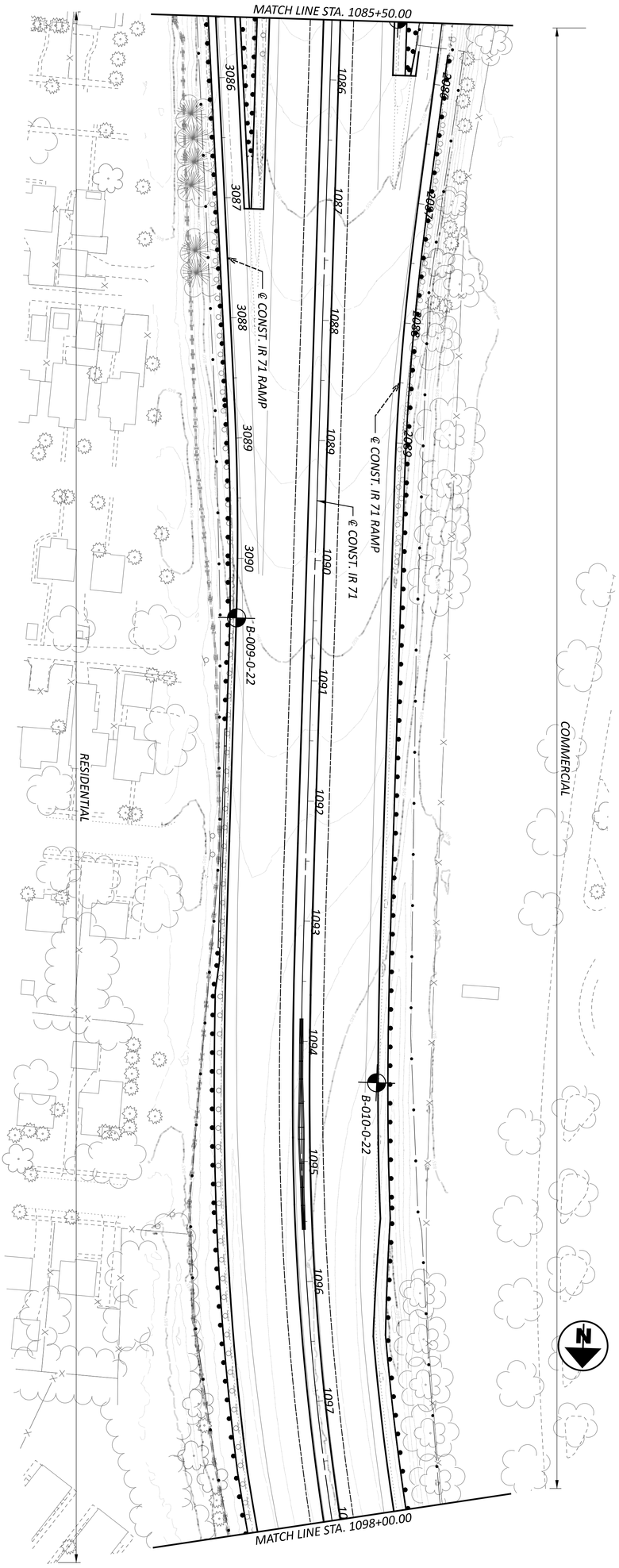

DESIGNER	REVIEWER	PROJECT ID	SUBSET	SHEET
ZM	CH	109164	11	P.560
	08-28-23		TOTAL 69	TOTAL 618

DESIGN AGENCY: NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
STA. 1085+50 TO STA. 1098+00 IR 71 NORTHBOUND

HORIZONTAL SCALE IN FEET
0 50
25 100

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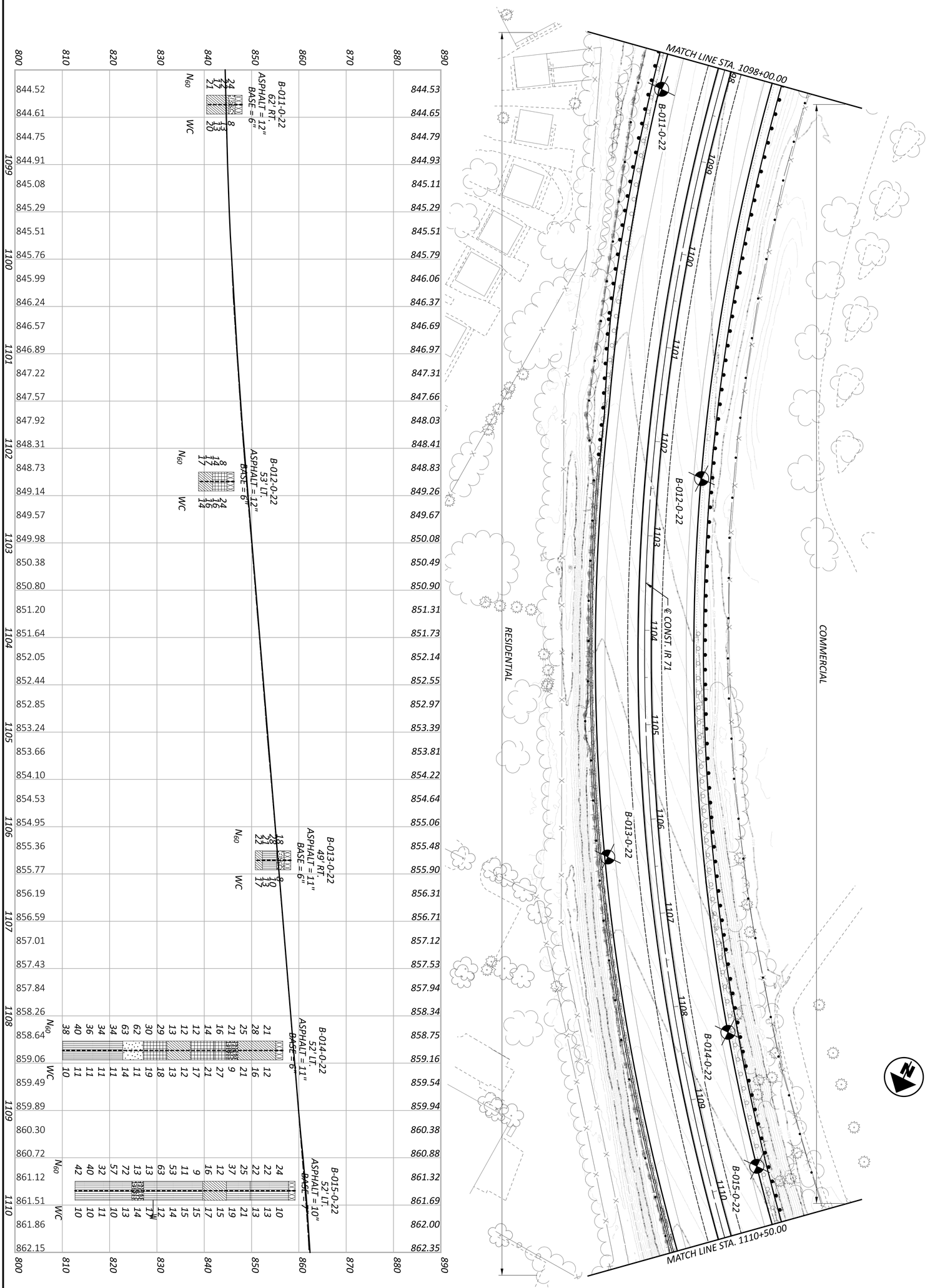

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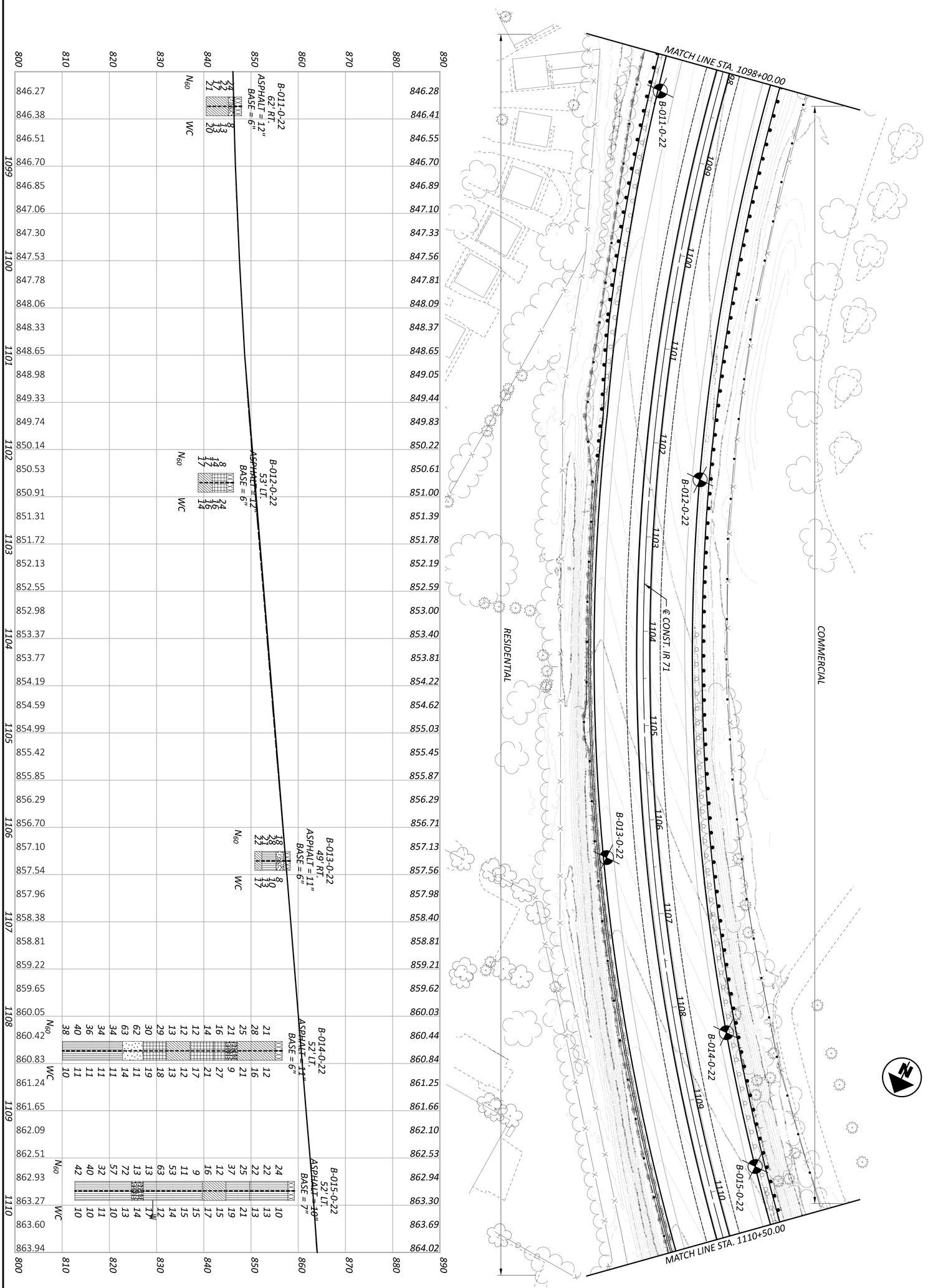

SHEET P.562	TOTAL 618	SUBSET 13	TOTAL 69	PROJECT ID 109164	REVIEWER CH 08-28-23	DESIGNER ZM

DESIGN AGENCY: NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
STA. 1098+00 TO STA. 1100+50 IR 71 NORTHBOUND

HORIZONTAL SCALE IN FEET
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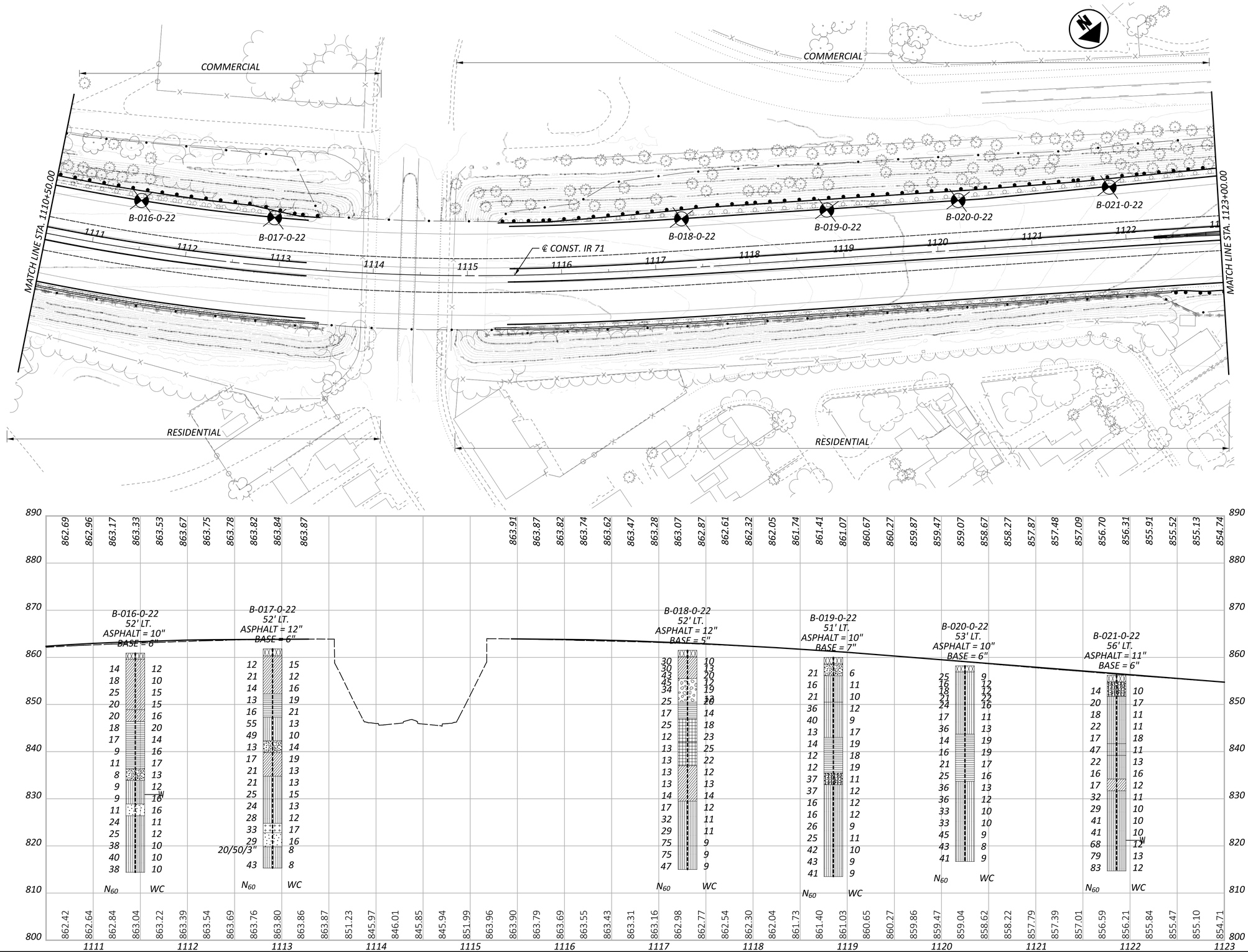
25 100



HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1100+50 TO STA. 1123+00 IR 71 SOUTHBOUND

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET / TOTAL	14 / 69
SHEET / TOTAL	P.563 / 618

FRA-71-19.10

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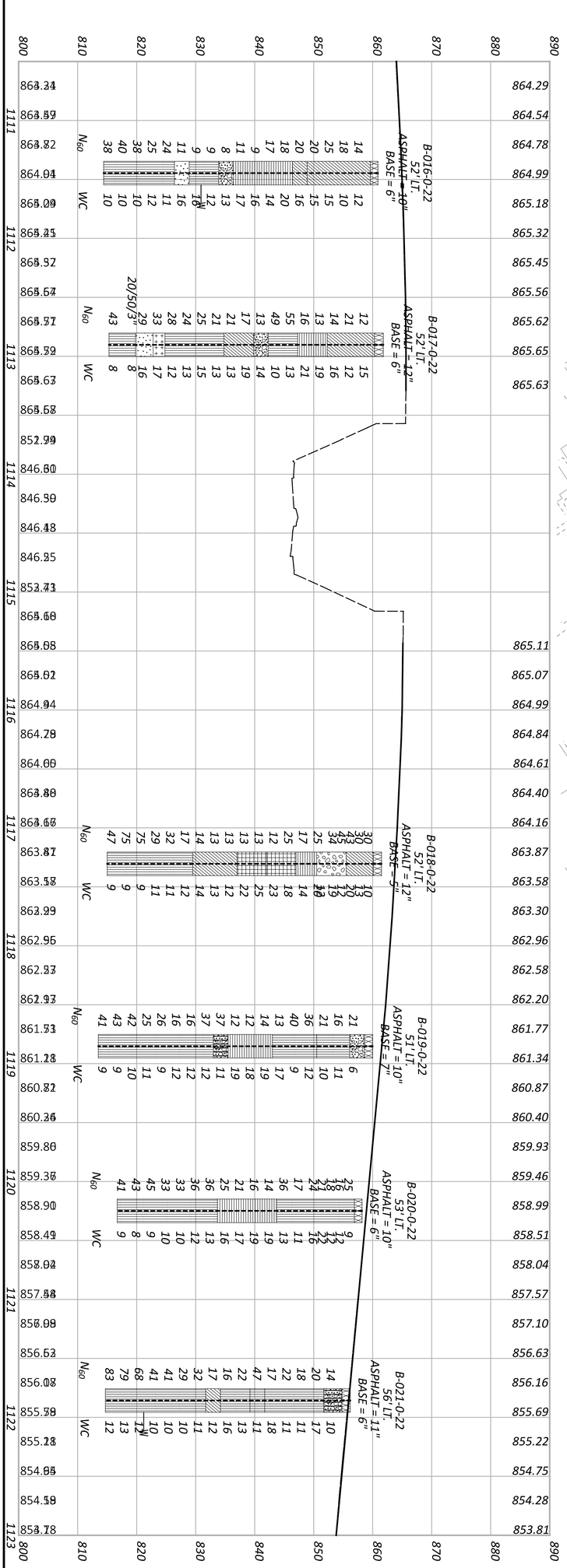
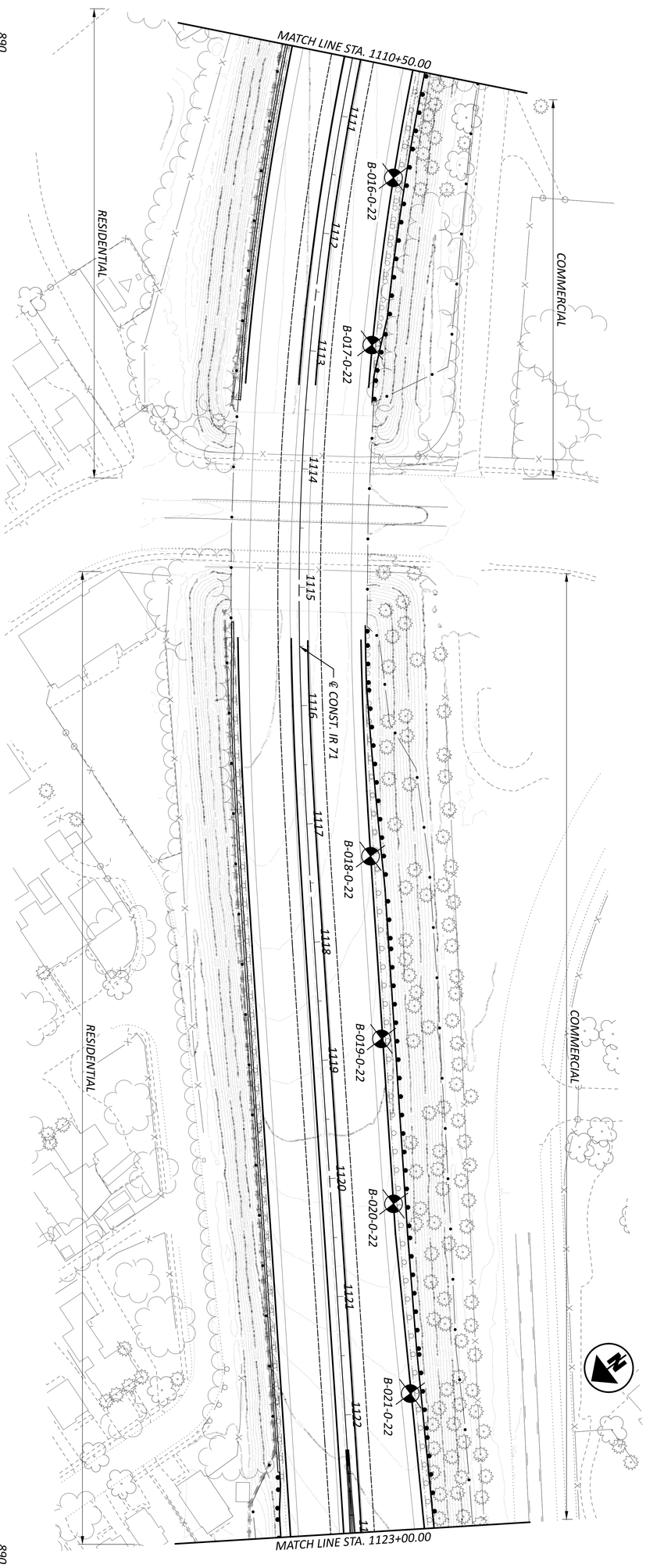




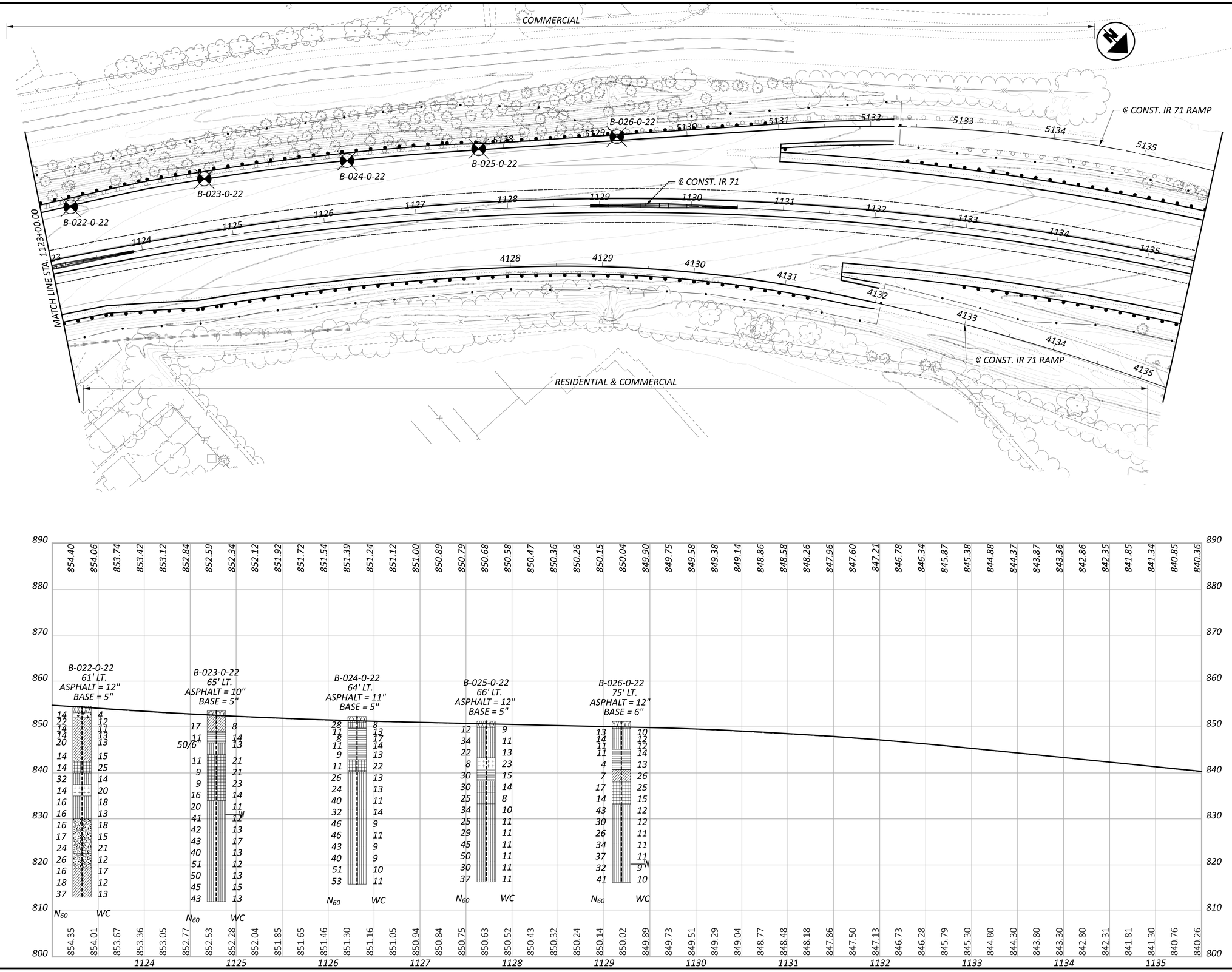
GEOTECHNICAL PROFILE - ROADWAY
STA. 1100+50 TO STA. 1123+00 IR 71 NORTHBOUND

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGNER	DESIGN AGENCY
ZM	NEAS National Engineering & Architectural Services Inc.

REVIEWER	PROJECT ID	SUBSET	TOTAL
CH 08-28-23	109164	15	69

SHEET	TOTAL
P.564	618



HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1123+00 TO STA. 1135+50 IR 71 SOUTHBOUND

DESIGN AGENCY
HNTB National Engineering & Architectural Services for Ohio

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	16
TOTAL	69
SHEET	P.565
TOTAL	618

FRA-71-19.10

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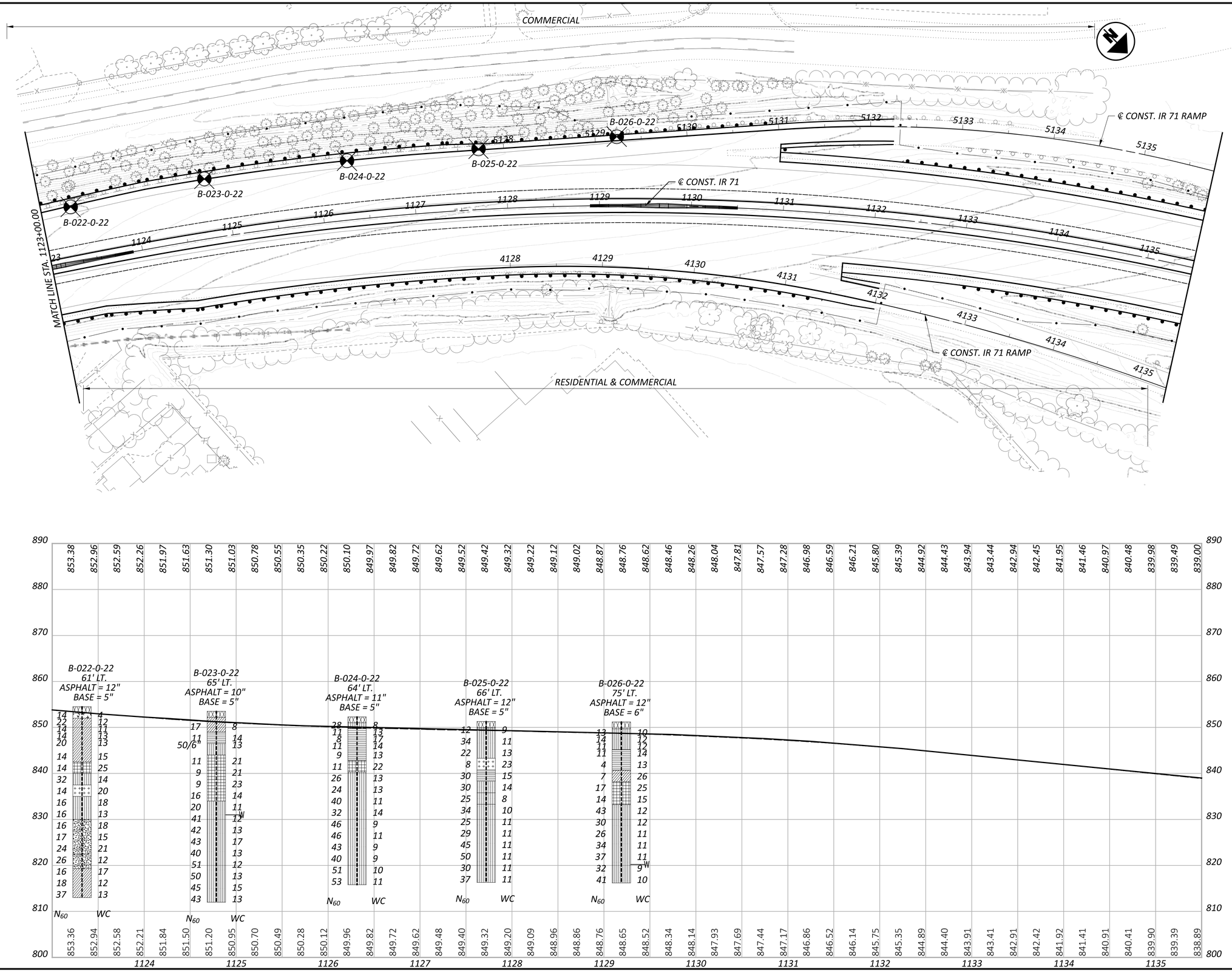

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1123+00 TO STA. 1135+50 IR 71 NORTHBOUND

DESIGN AGENCY
HNTB National Engineering & Architectural Services for

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	17
TOTAL	69
SHEET	P.566
TOTAL	618

FRA-71-19.10

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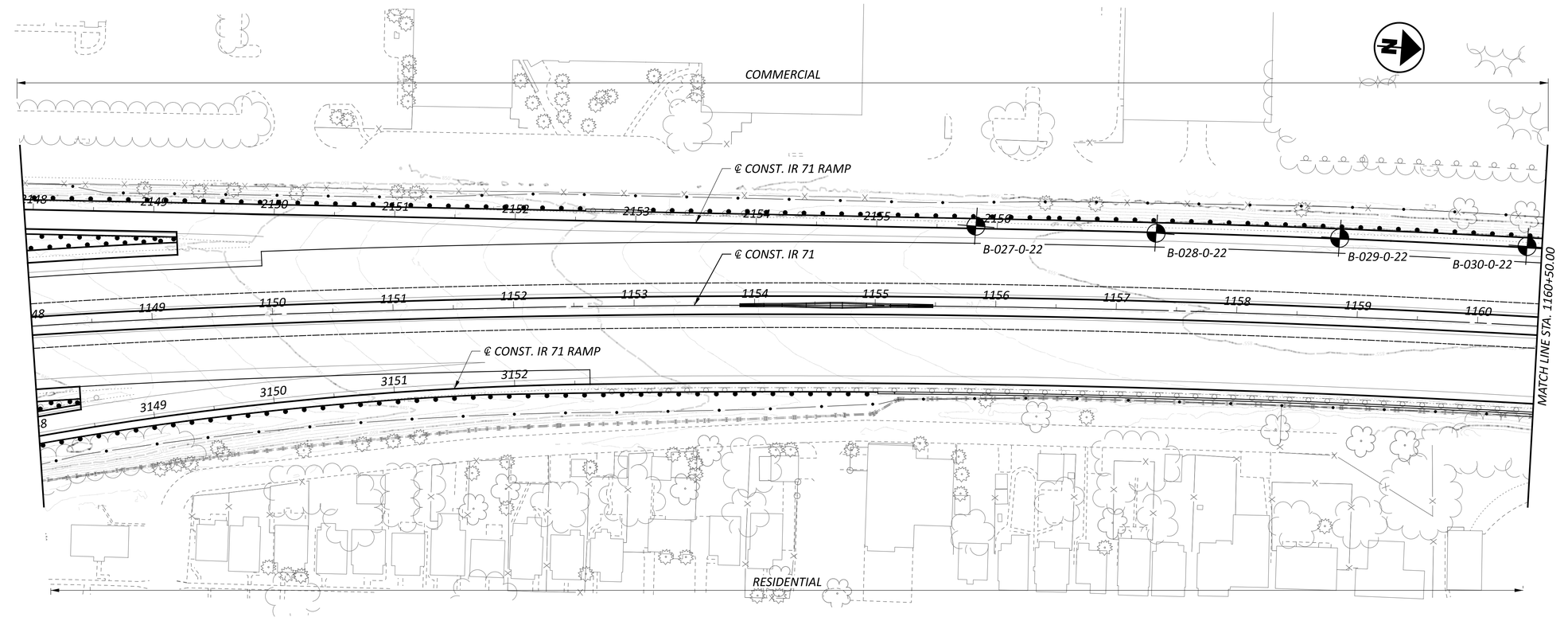

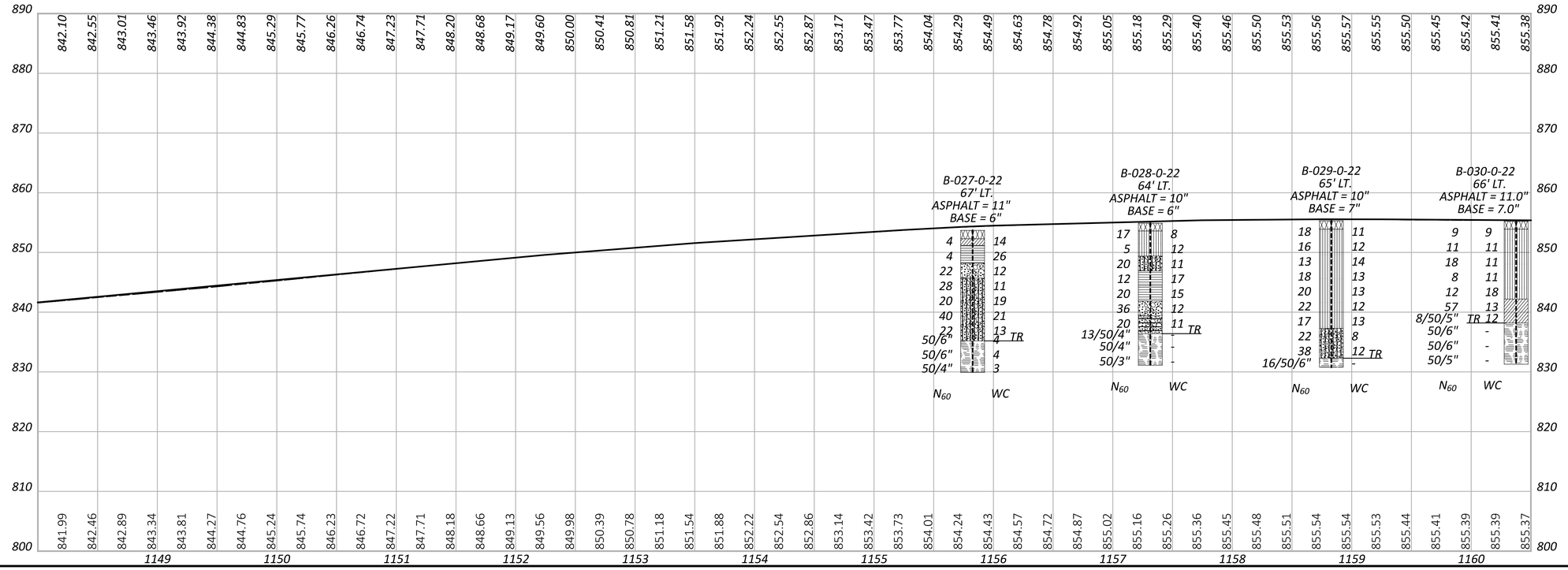

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1148+00 TO STA. 1160+50 IR 71 SOUTHBOUND

DESIGN AGENCY
KEA Kleinfelder Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	18
TOTAL	69
SHEET	P.567
TOTAL	618

FRA-71-19.10

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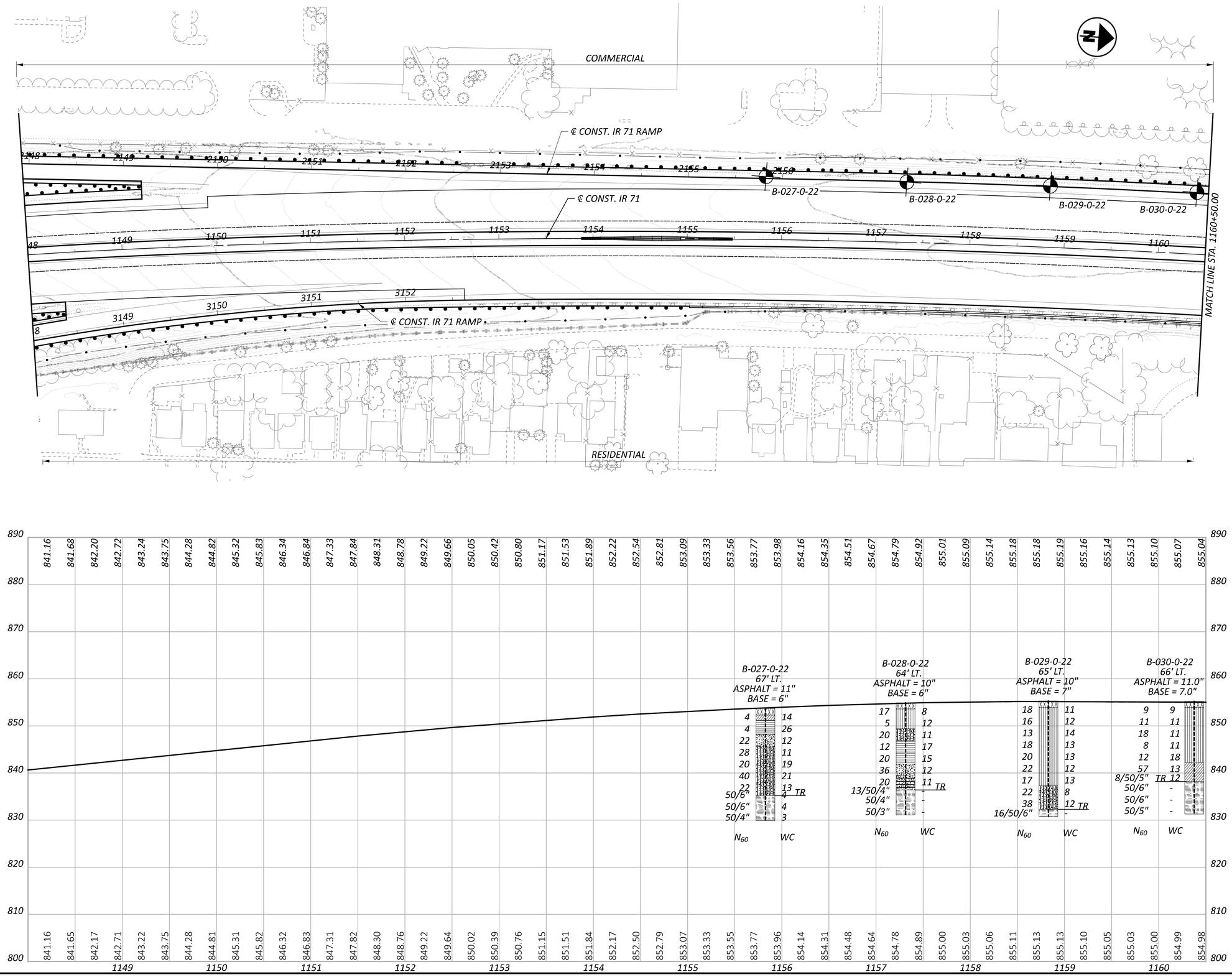

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1148+00 TO STA. 1160+50 IR 71 NORTHBOUND

DESIGN AGENCY
KEA Kleinfelder Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	19
TOTAL	69
SHEET	P.568
TOTAL	618

FRA-71-19.10

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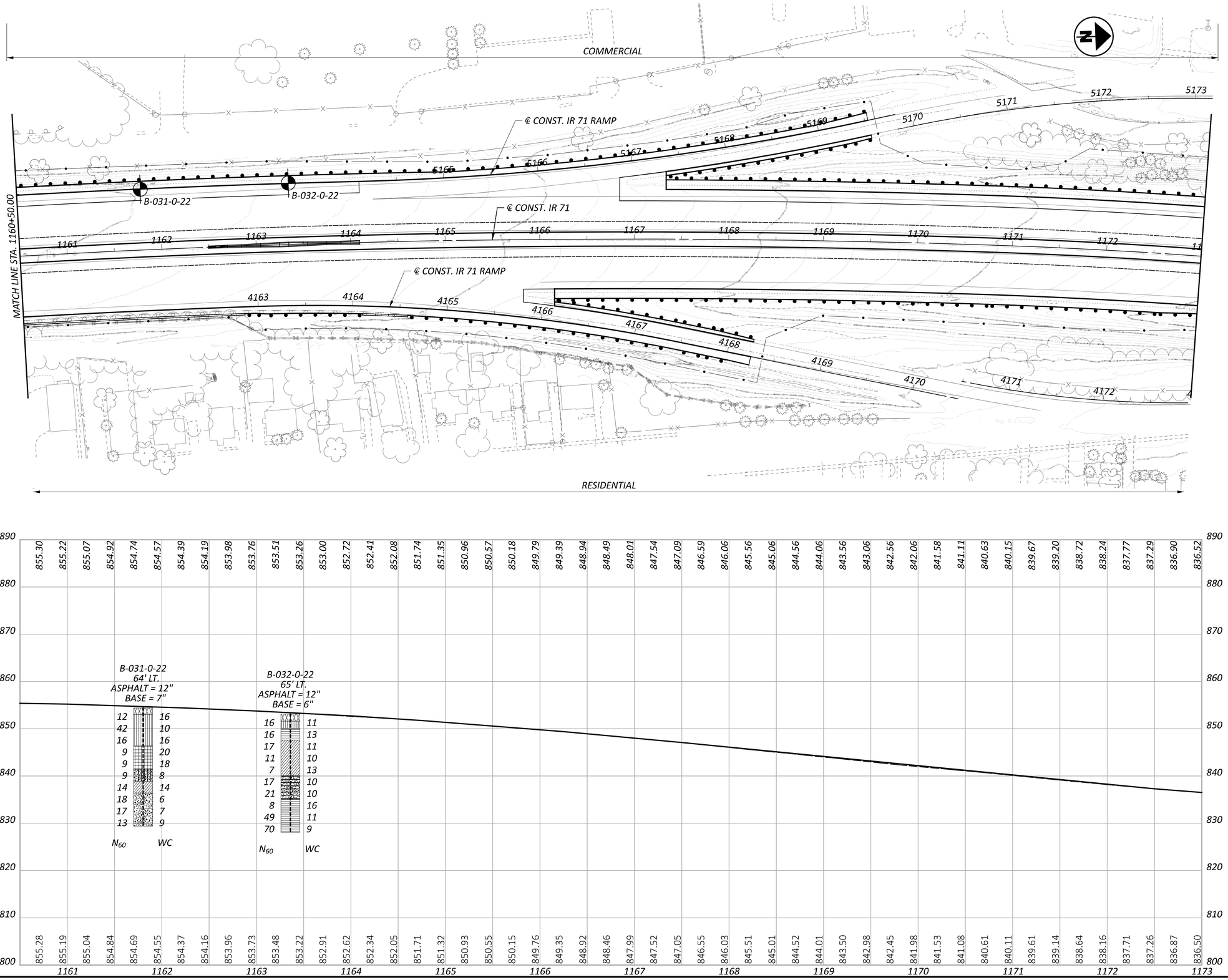

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1160+50 TO STA. 1173+00 IR 71 SOUTHBOUND

DESIGN AGENCY
HNTB National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	20
TOTAL	69
SHEET	P.569
TOTAL	618

FRA-71-19.10

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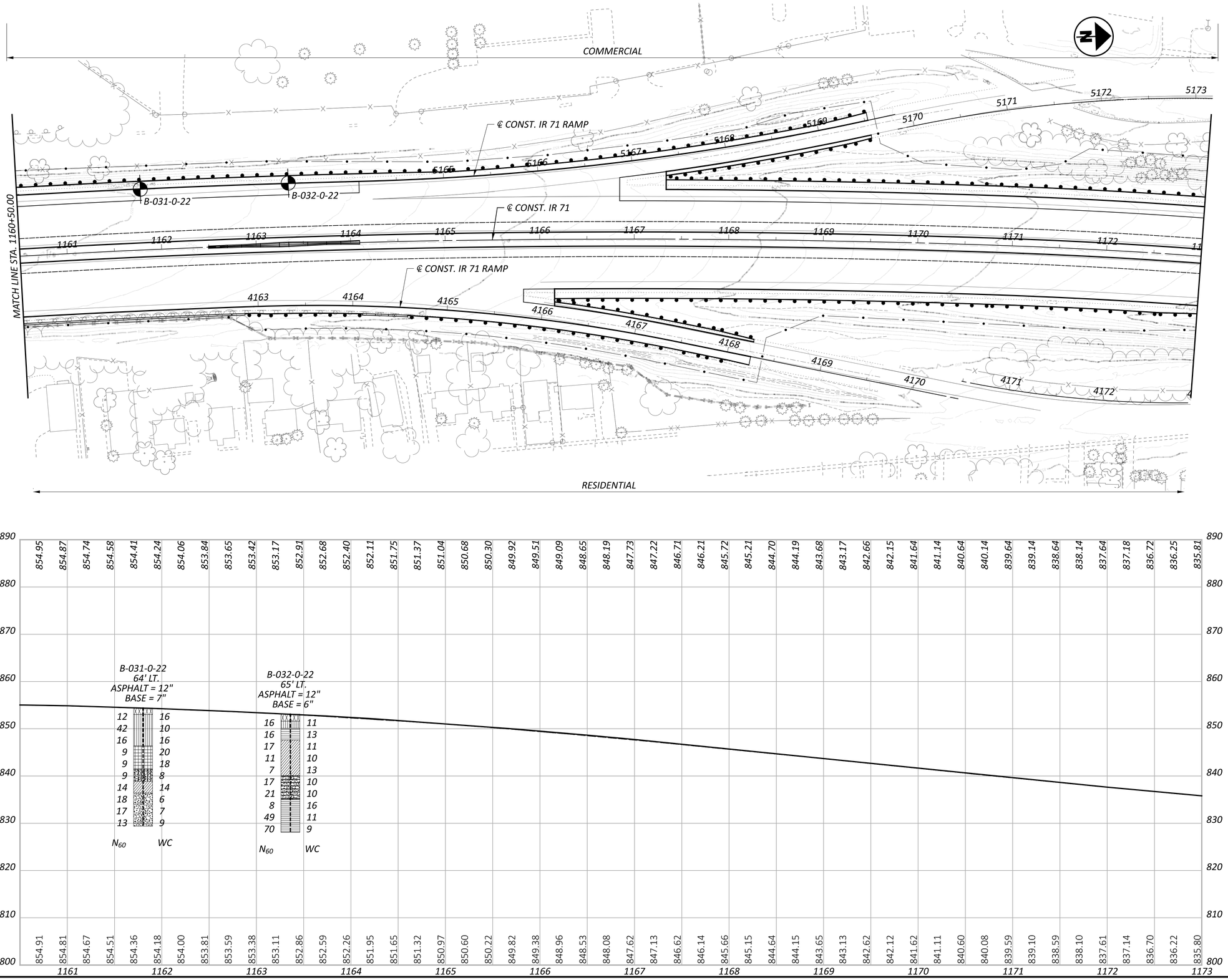

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1160+50 TO STA. 1173+00 IR 71 NORTHBOUND

DESIGN AGENCY
HNTB Engineering & Architectural Services for

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET / TOTAL	21 / 69
SHEET / TOTAL	P.570 / 618

FRA-71-19.10

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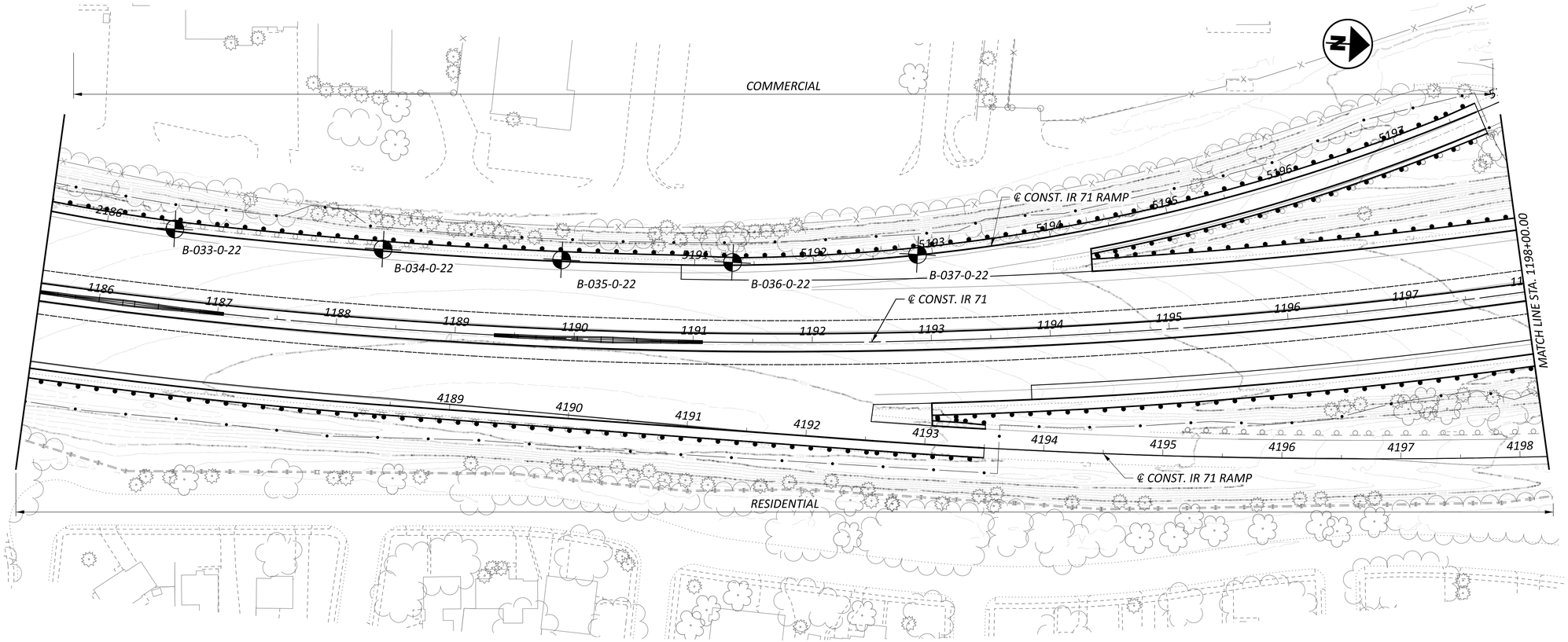

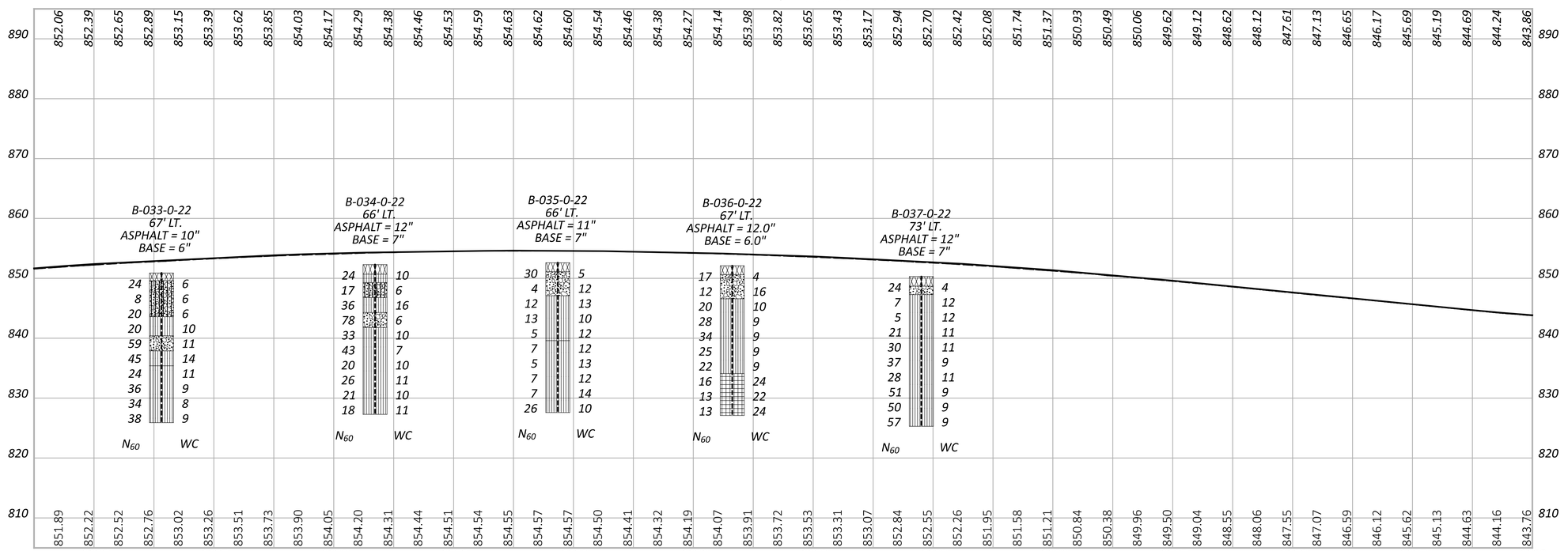

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1185+50 TO STA. 1198+00 IR 71 SOUTHBOUND

DESIGN AGENCY
AMEC Foster Wheeler Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	22
TOTAL	69
SHEET	P.571
TOTAL	618

FRA-71-19.10

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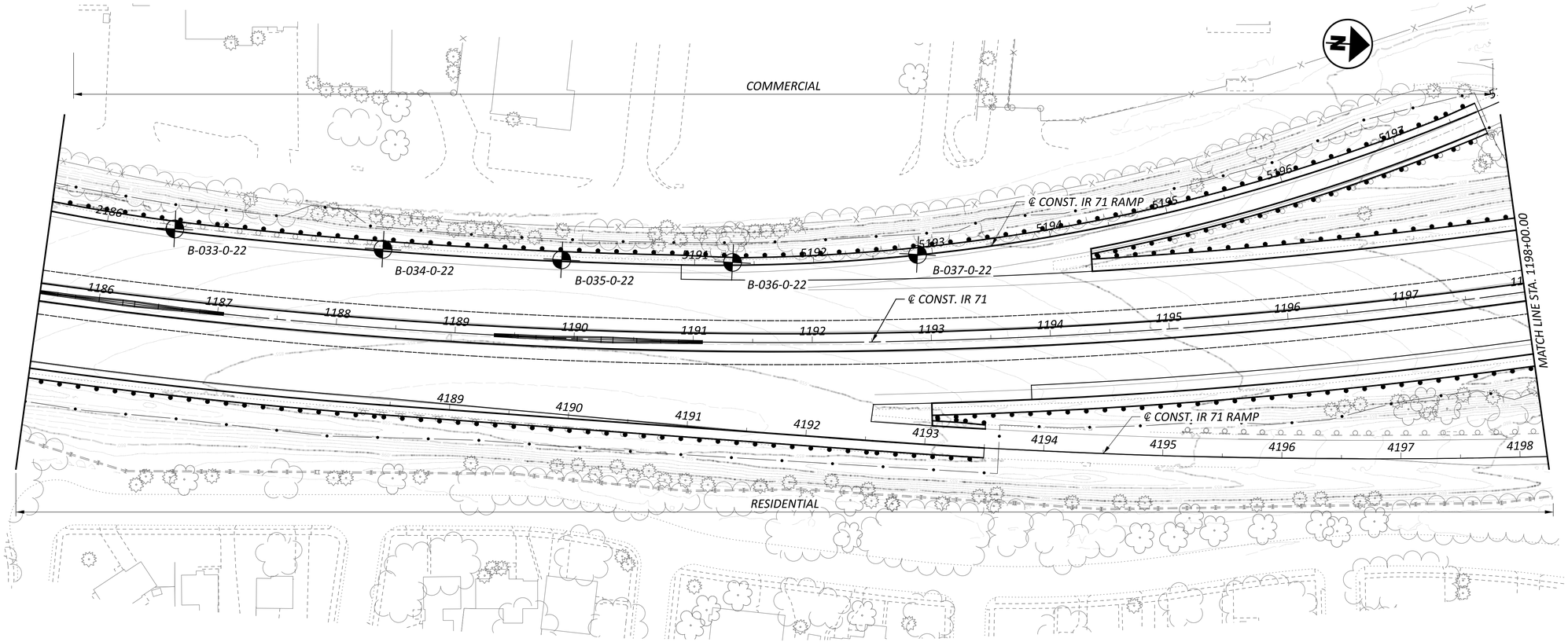

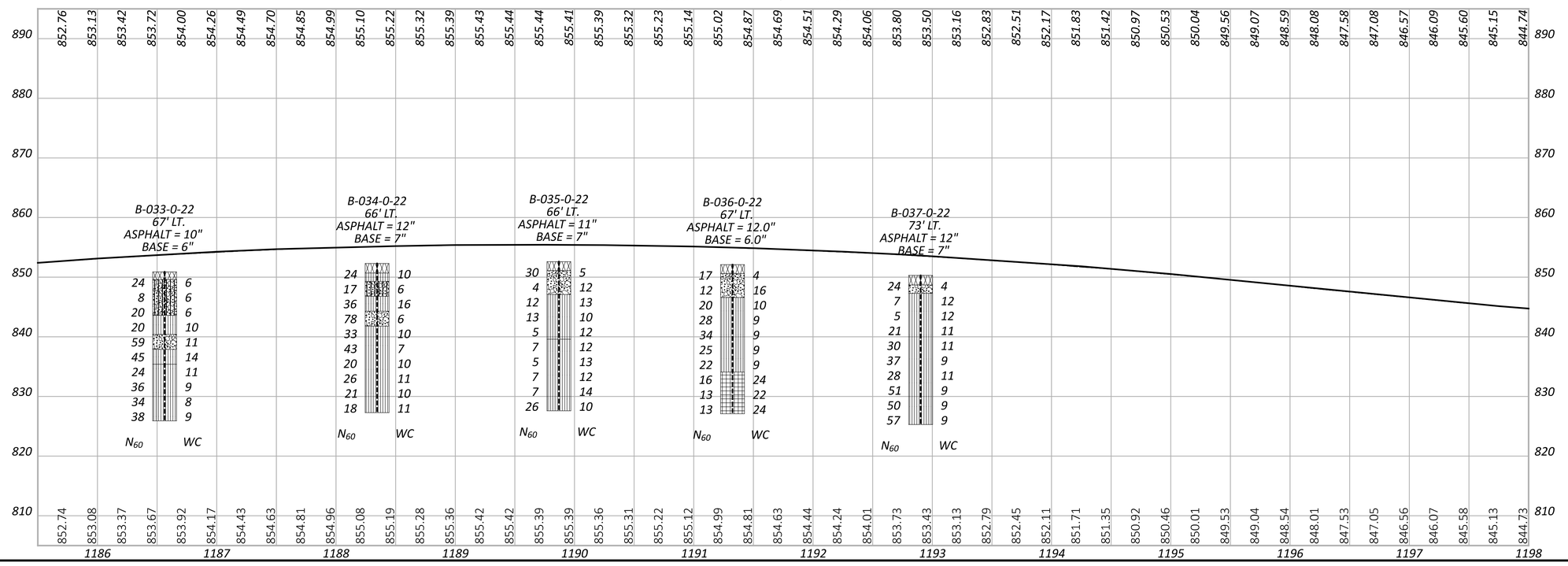

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1185+50 TO STA. 1198+00 IR 71 NORTHBOUND

DESIGN AGENCY
KEA National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	23
TOTAL	69
SHEET	P.572
TOTAL	618

FRA-71-19.10

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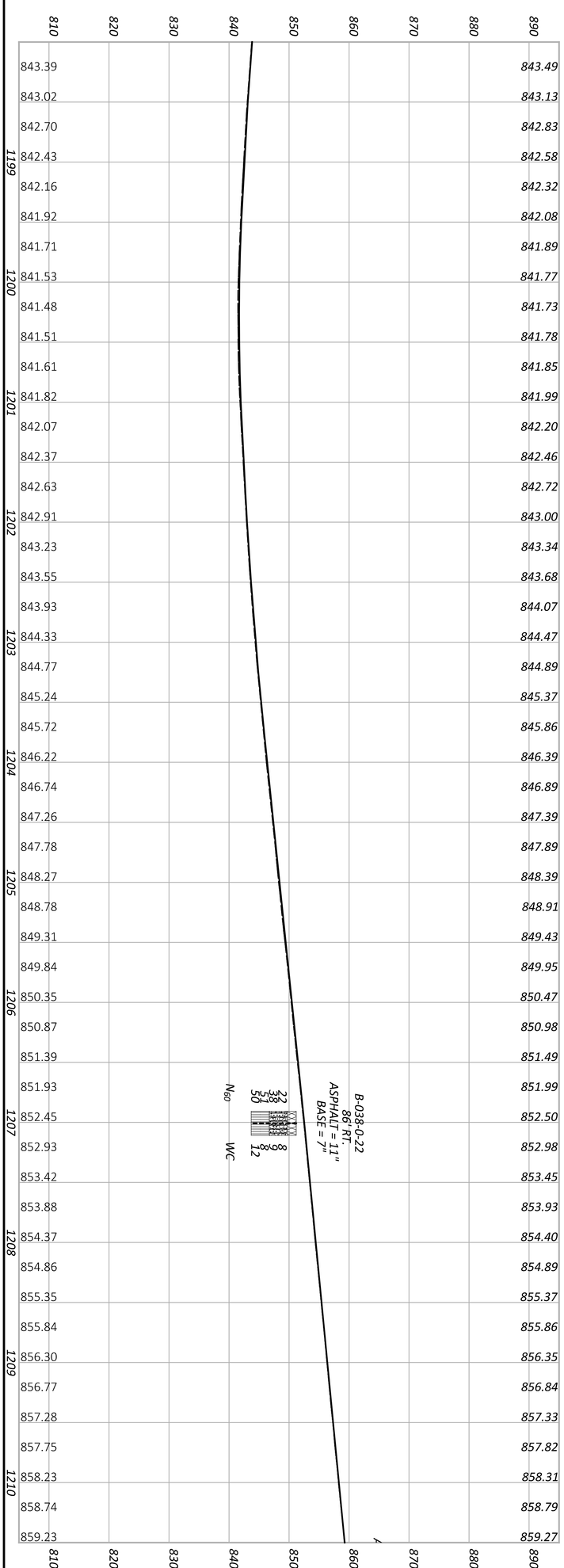
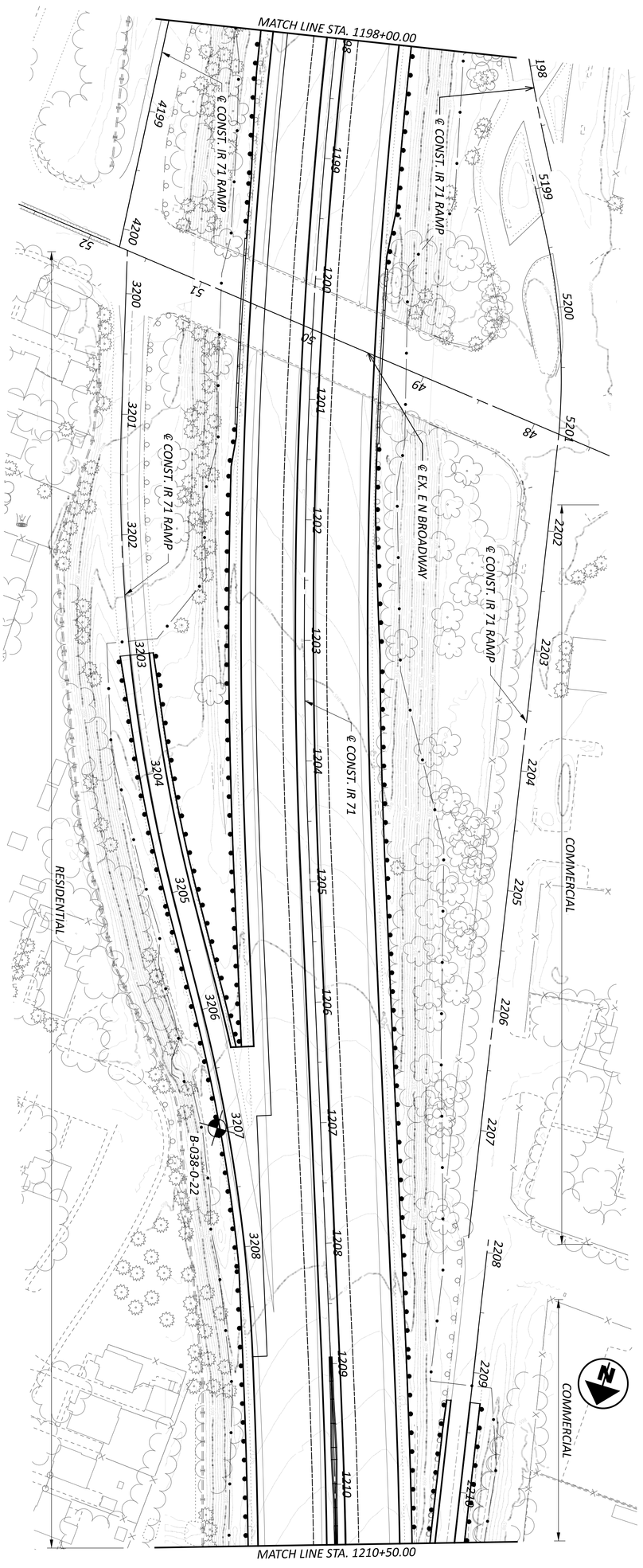
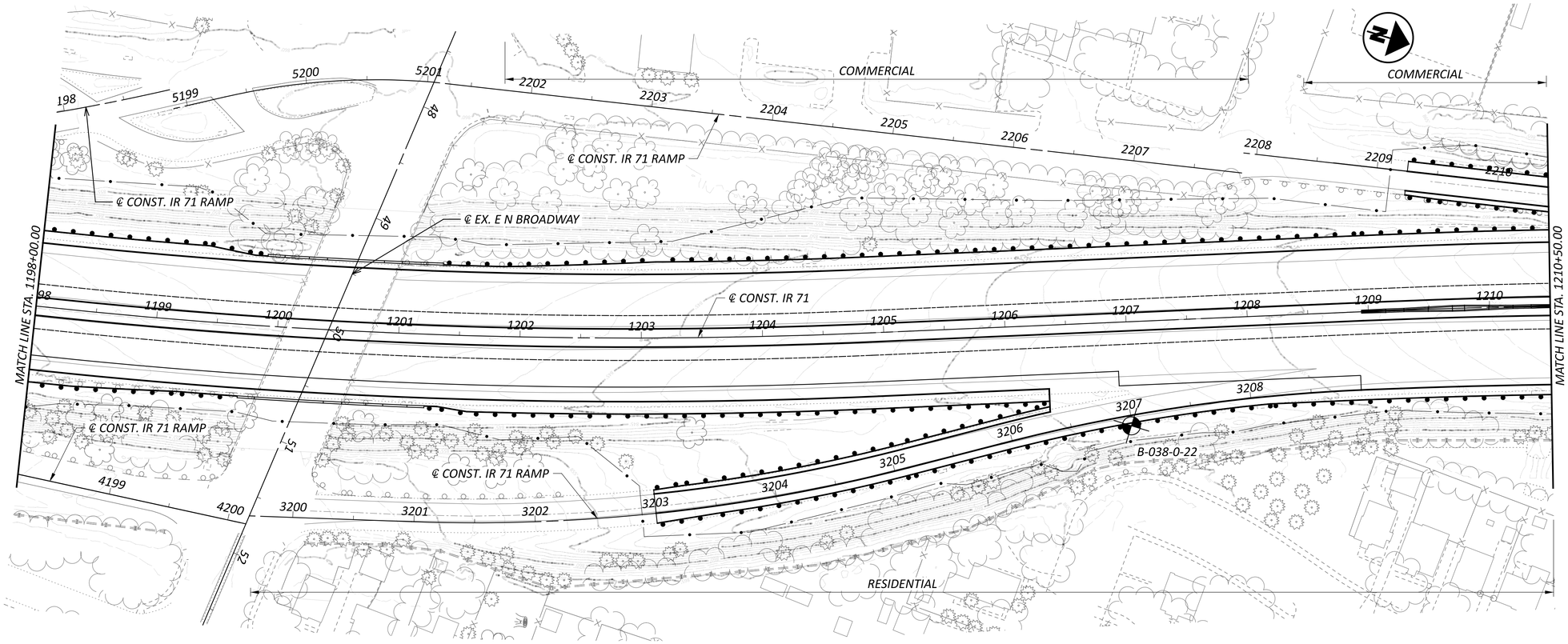


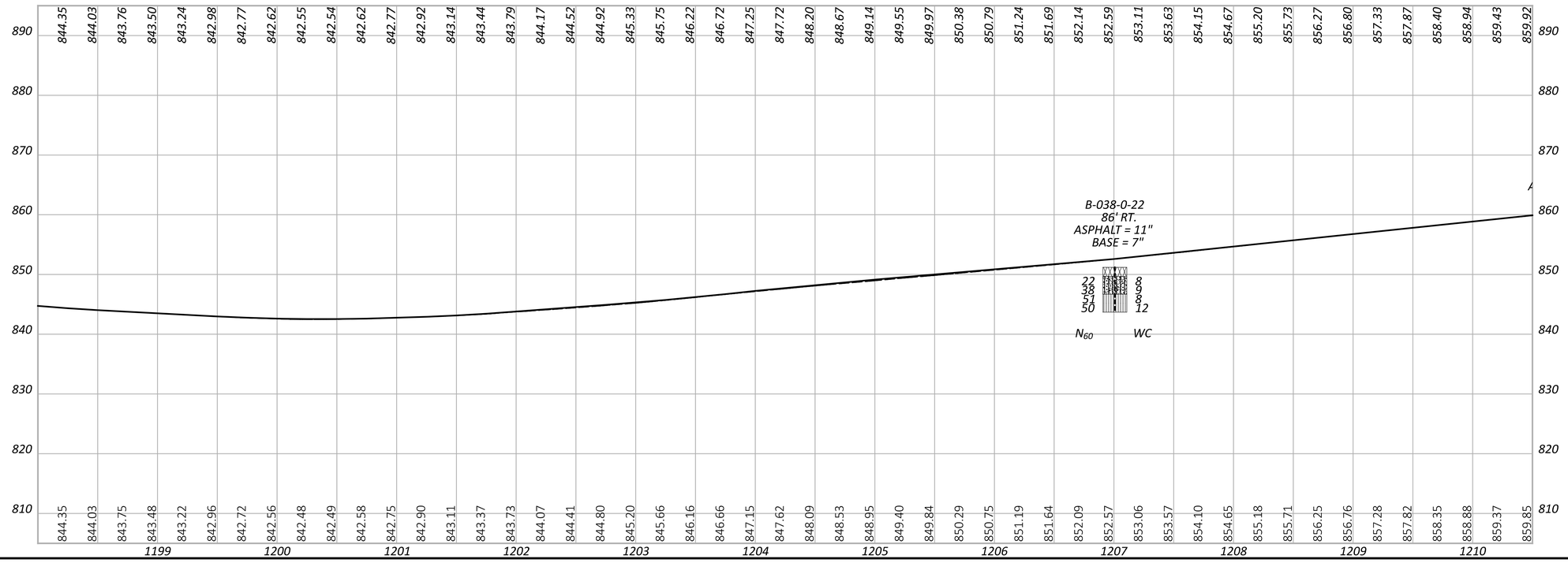


GEOTECHNICAL PROFILE - ROADWAY
STA. 1198+00 TO STA. 1210+50 IR 71 SOUTHBOUND

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGN AGENCY	DESIGNER	REVIEWER	PROJECT ID	SUBSET	SHEET
NEAS National Engineering & Architectural Services Inc.	ZM	CH 08-28-23	109164	24 TOTAL 69	P.573 TOTAL 618





HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1198+00 TO STA. 1210+50 IR 71 NORTHBOUND

DESIGN AGENCY
HNTB Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	25
TOTAL	69
SHEET	P.574
TOTAL	618

FRA-71-19.10

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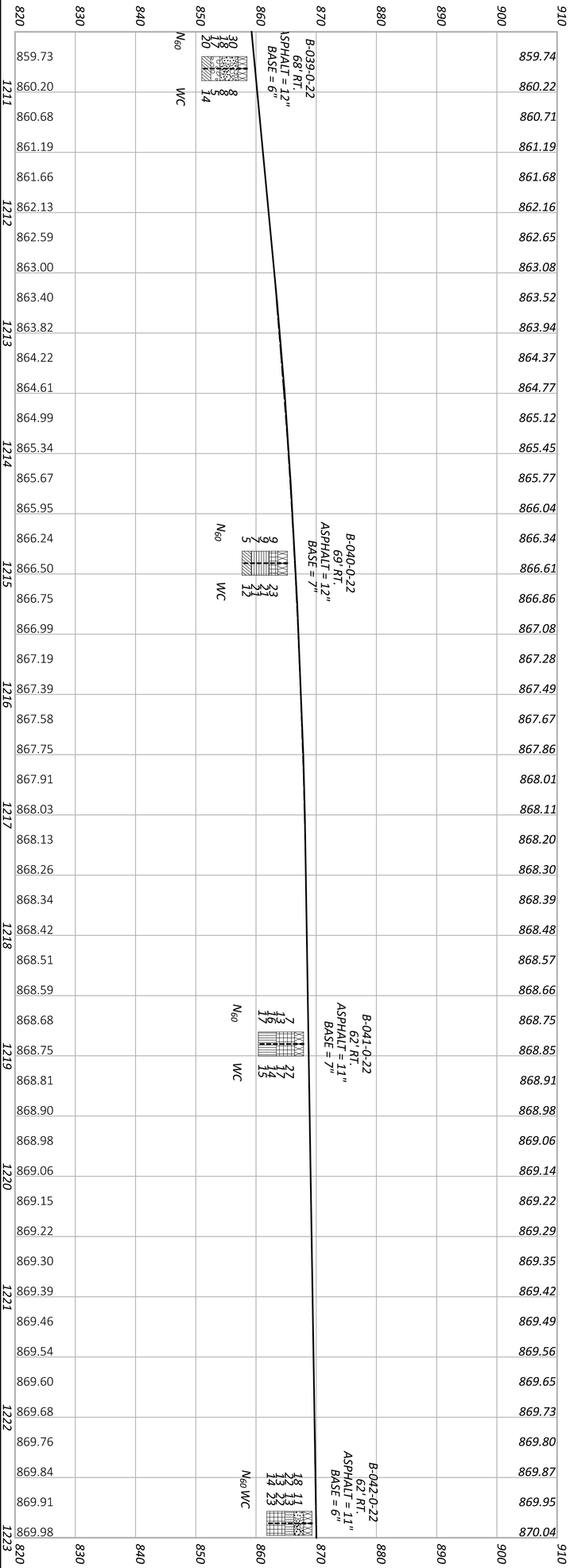
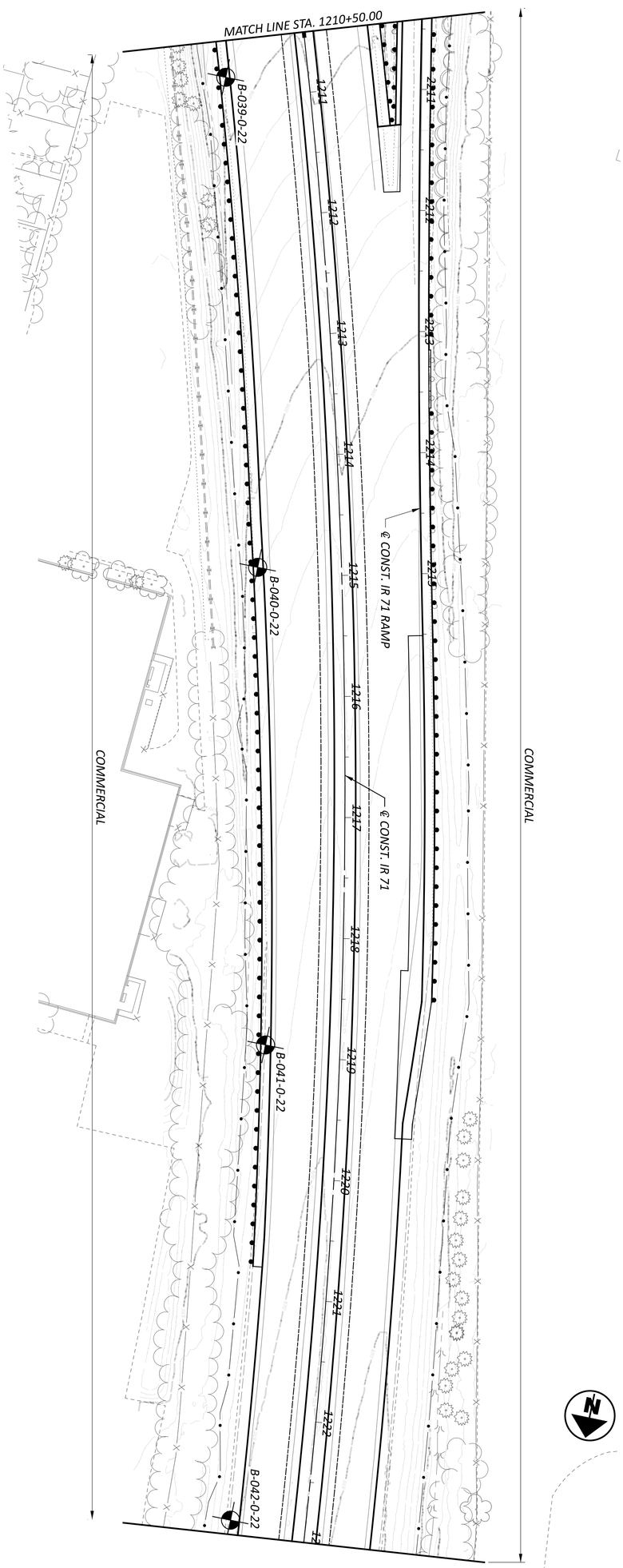


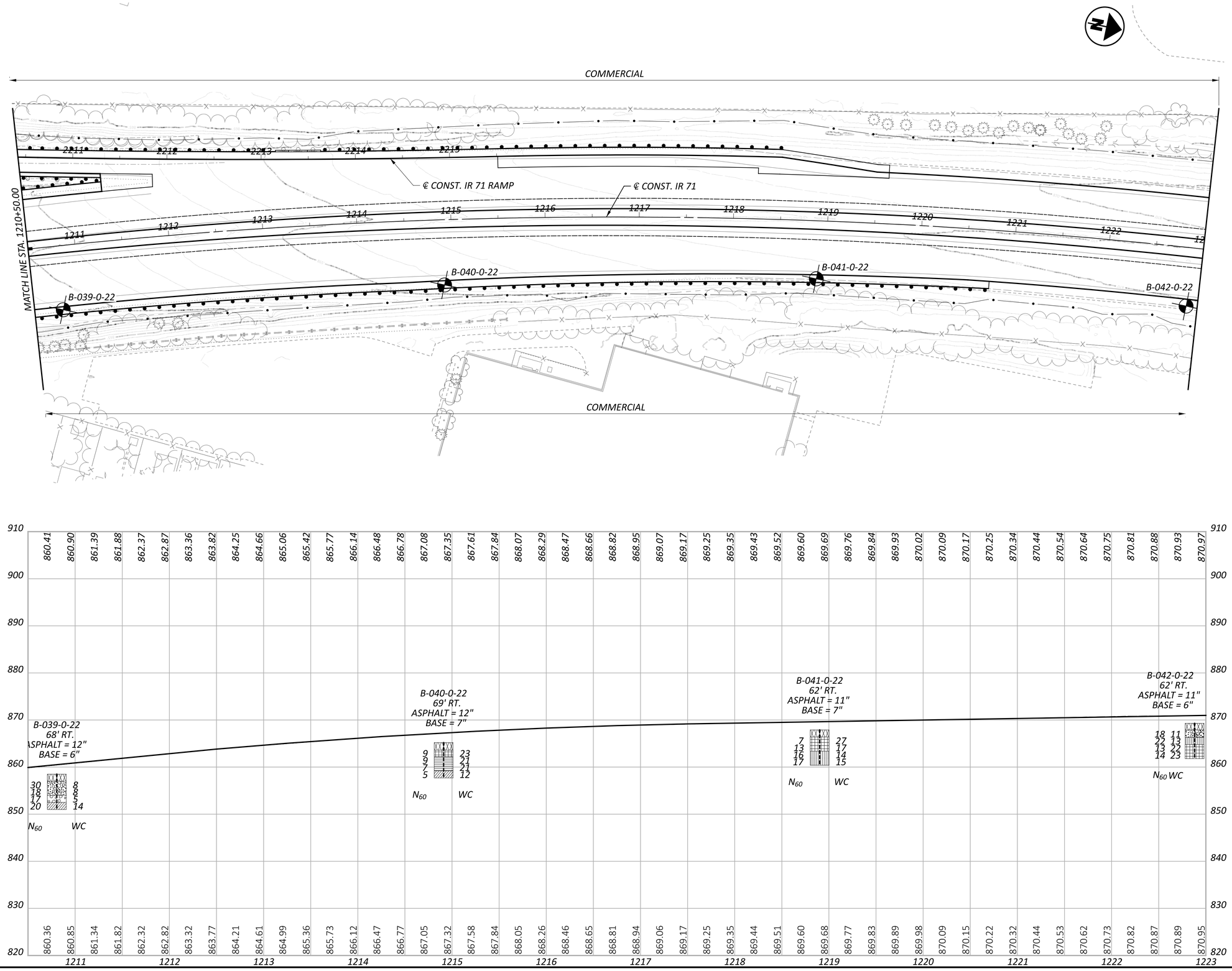


GEOTECHNICAL PROFILE - ROADWAY
STA. 1210+50 TO STA. 1223+00 IR 71 SOUTHBOUND

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGNER	DESIGN AGENCY
ZM	NEAS National Engineering & Architectural Services Inc.

REVIEWER	PROJECT ID	SUBSET	SHEET
CH 08-28-23	109164	26 TOTAL 69	P.575 TOTAL 618



HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
STA. 1210+50 TO STA. 1223+00 IR 71 NORTHBOUND

DESIGN AGENCY
HNTB National Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	27
TOTAL	69
SHEET	P.576
TOTAL	618

FRA-71-19.10

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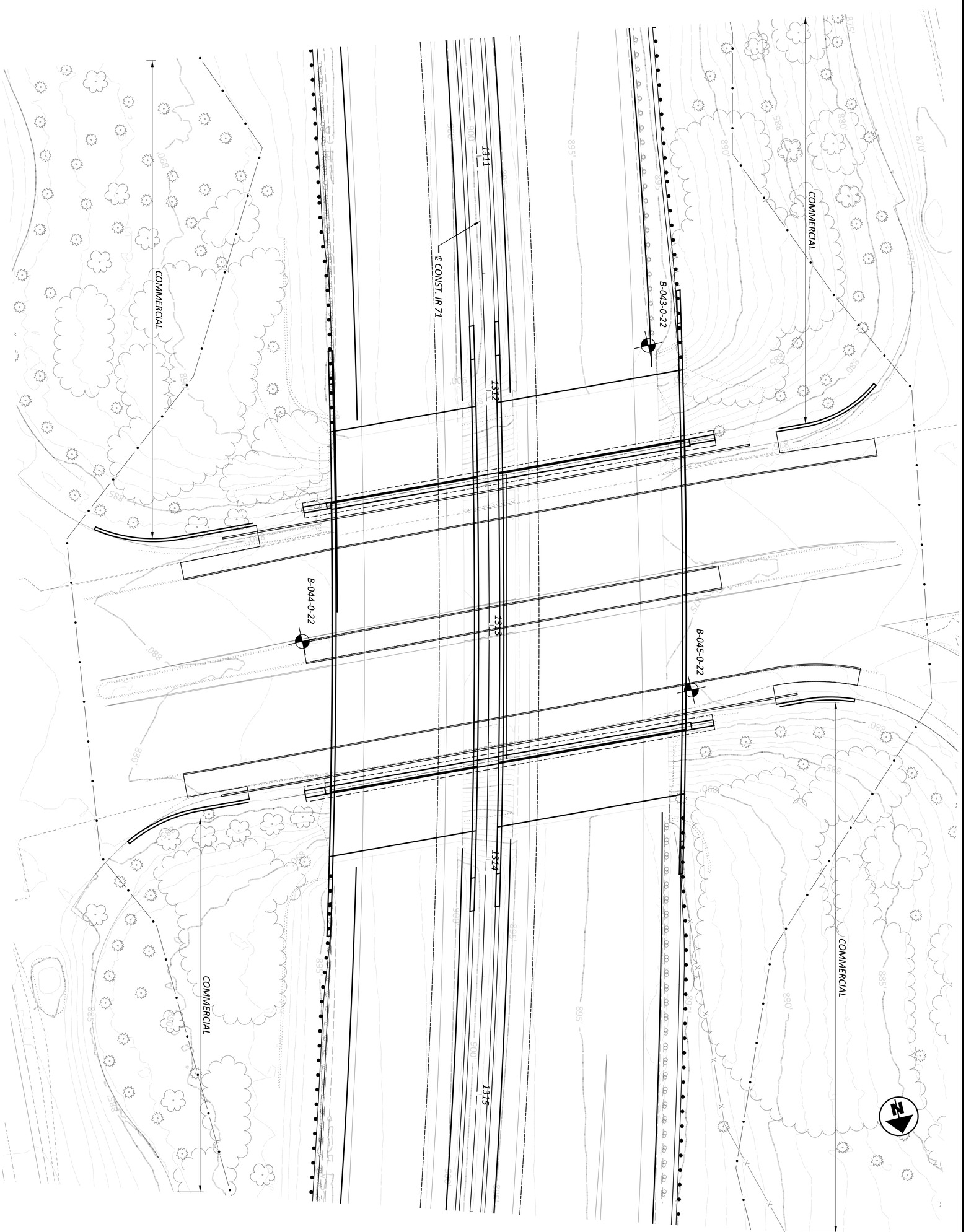


GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD

HORIZONTAL SCALE IN FEET
0 20
10 40

SHEET	TOTAL
P.577	618

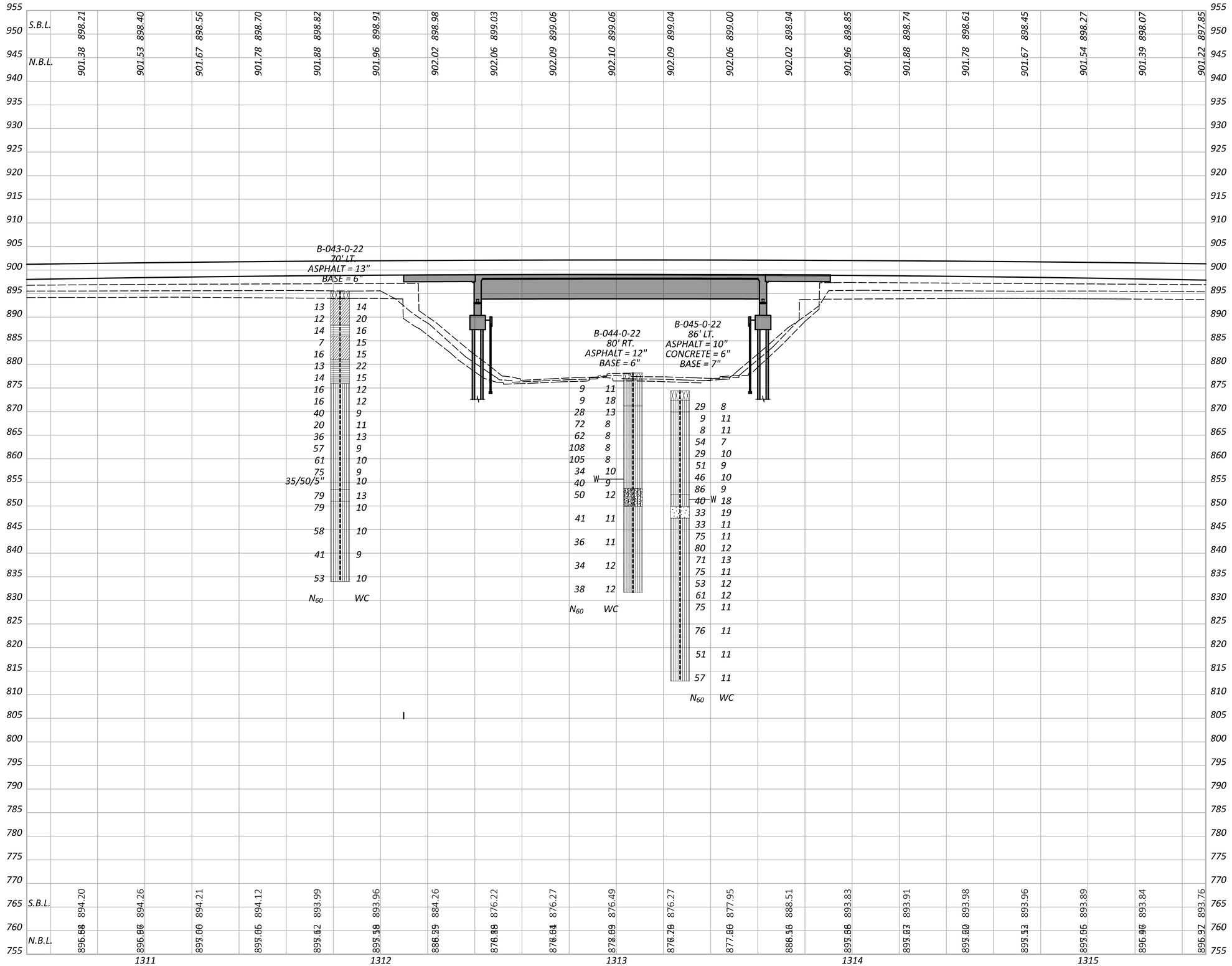
SUBSET	TOTAL
28	69

PROJECT ID: 109164

REVIEWER: CH 08-28-23

DESIGNER: ZM

DESIGN AGENCY: NEAS National Engineering & Architectural Services Inc.



HORIZONTAL
SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD

DESIGN AGENCY
KEA Kleinfelder Engineering & Architectural Services Inc.

DESIGNER	ZM
REVIEWER	CH 08-28-23
PROJECT ID	109164
SUBSET	29
TOTAL	69
SHEET	P.578
TOTAL	618

FRA-71-19.10

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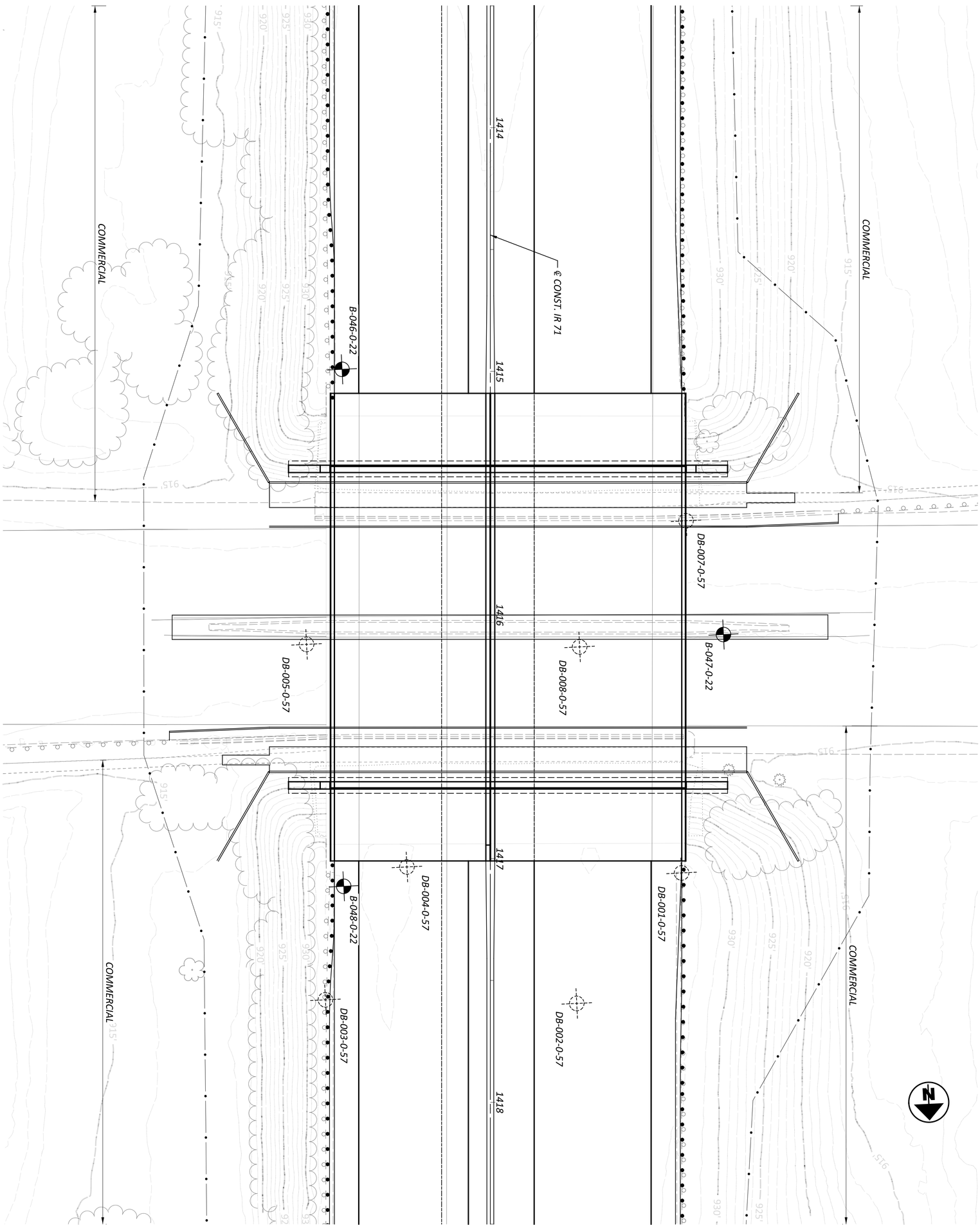
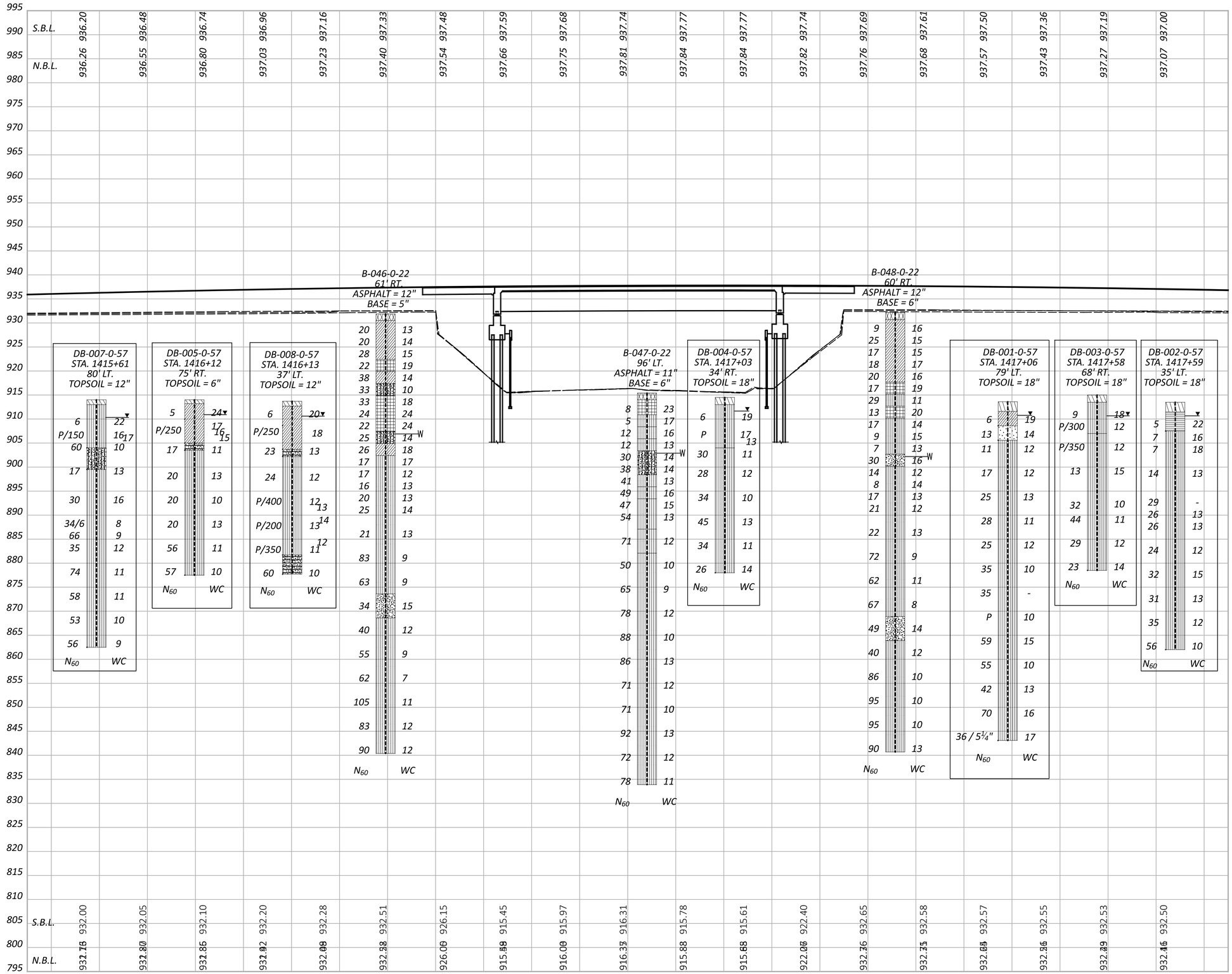


GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161

HORIZONTAL SCALE IN FEET
0 20
10 40

DESIGNER	DESIGN AGENCY
ZM	NEAS National Engineering & Architectural Services Inc.

REVIEWER	PROJECT ID	SUBSET	SHEET
CH 08-28-23	109164	30 TOTAL 69	P.579 TOTAL 618



HORIZONTAL
SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161

DESIGN AGENCY
KEA Infrastructure Engineering & Architectural Services Inc

DESIGNER ZM
REVIEWER CH 08-28-23
PROJECT ID 109164
SUBSET 31 TOTAL 69
SHEET P.580 TOTAL 618

FRA-71-19.10

MODEL: 109164_ZF002 PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:48:21 PM USER: ZLi
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MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:10:07 PM USER: zli
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STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:52 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / CP | DRILL RIG: CME 75T | STATION / OFFSET: 1062+63, 64' LT. | EXPLORATION ID B-003-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 827.1 (MSL) EOB: 21.5 ft.
START: 9/6/22 END: 9/6/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 39.996280, -82.985097

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	825.8																	
HARD, BROWN BECOMING GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, LITTLE TO SOME GRAVEL, GLACIAL TILL, DAMP		1																
		2																
		3	7 6 4	13	39	SS-1	4.50	22	23	15	28	12	22	16	6	7	A-4a (1)	
		4																
		5	3 4 5	12	28	SS-2	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		6																
		7	7 7 7	18	100	SS-3	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		8																
		9																
		10	6 7 10	22	44	SS-4	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		11																
		12																
		13	14 25 26	67	50	SS-5	4.25	11	15	17	34	23	24	15	9	12	A-4a (4)	
		14																
		15	15 26 30	74	83	SS-6	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		16																
		17																
		18	5 14 22	47	100	SS-7	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		19																
		20																
		21	10 12 25	49	100	SS-8	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	805.6	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:52 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / CP | DRILL RIG: CME 45B | STATION / OFFSET: 1064+19, 65' LT. | EXPLORATION ID B-004-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 831.2 (MSL) EOB: 21.5 ft.
START: 9/6/22 END: 9/6/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 72.6 | LAT / LONG: 39.996706, -82.985056

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	829.7																	
UNCONTROLLED FILL	827.2	1																
		2																
		3	15 14 30	53	17	SS-1	4.50	-	-	-	-	-	-	-	-	0	UCF (V)	
HARD, BROWN BECOMING GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		4																
		5	2 4 4	10	39	SS-2	4.25	7	11	17	36	29	22	15	7	14	A-4a (6)	
		6																
		7																
		8	6 7 9	19	33	SS-3	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		9																
		10																
		11	9 10 14	29	100	SS-4	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		12																
		13	15 12 14	31	50	SS-5	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		14																
		15																
		16	6 9 13	27	39	SS-6	4.50	15	13	16	36	20	23	15	8	11	A-4a (4)	
		17																
		18	6 8 12	24	83	SS-7	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		19																
		20																
		21	10 25 29	65	17	SS-8	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	809.7	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; SHOVELED SOIL CUTTINGS

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.581	32	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.
TOTAL 618	TOTAL 69				

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-003-0-22 & B-004-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:10:41 PM USER: zli
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PROJECT: FRA-71-19.10	DRILLING FIRM / OPERATOR: NEAS / CP	DRILL RIG: CME 75T	STATION / OFFSET: 1108+37, 52' LT.	EXPLORATION ID B-014-0-22
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / J. HODGES	HAMMER: CME AUTOMATIC	ALIGNMENT: IR-71	
PID: 109164 SFN:	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 1/24/22	ELEVATION: 856.6 (MSL) EOB: 46.5 ft.	PAGE 1 OF 1
START: 8/31/22 END: 8/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79	LAT / LONG: 40.008466, -82.986249	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	855.1																	
HARD, BROWN AND DARK GRAY, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP	847.1		5 8 8	21	100	SS-1	4.50	6	10	18	37	29	28	17	11	12	A-6a (7)	
			5 9 12	28	100	SS-2	4.50	-	-	-	-	-	-	-	-	16	A-6a (V)	
			6 9 10	25	100	SS-3	4.50	-	-	-	-	-	-	-	-	21	A-6a (V)	
MEDIUM DENSE, DARK GRAY AND GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP	844.6		4 5 11	21	100	SS-4	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
HARD, DARK GRAY AND BLACK, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, MODERATELY ORGANIC, MOIST	842.1		5 5 7	16	100	SS-5	4.25	1	2	9	42	46	54	25	29	27	A-7-6 (18)	
VERY STIFF, BROWN MOTTLED WITH ORANGISH BROWN AND GRAY, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, IRON STAINING, DAMP	837.1		3 5 6	14	100	SS-6	3.75	2	3	9	41	45	42	21	21	21	A-7-6 (13)	
			2 4 5	12	100	SS-7	3.50	-	-	-	-	-	-	-	-	17	A-7-6 (V)	
VERY STIFF, BROWN, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, DAMP	832.1		3 4 5	12	100	SS-8	3.75	13	14	18	32	23	27	15	12	12	A-6a (5)	
			2 4 6	13	100	SS-9	4.00	-	-	-	-	-	-	-	-	13	A-6a (V)	
VERY STIFF TO HARD, GRAY AND DARK GRAY, **CLAY**, SOME SILT, TRACE TO LITTLE SAND, TRACE GRAVEL, DAMP TO MOIST	827.1		7 10 12	29	100	SS-10	4.00	1	2	11	34	52	47	18	29	18	A-7-6 (17)	
			4 12 11	30	100	SS-11	4.25	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
VERY DENSE, DARK BROWNISH GRAY, **COARSE AND FINE SAND**, SOME SILT, LITTLE GRAVEL, TRACE CLAY, DAMP TO MOIST	822.8		18 24 23	62	100	SS-12	-	-	-	-	-	-	-	-	-	11	A-3a (V)	
			15 22 26	63	100	SS-13	-	-	-	-	-	-	-	-	-	14	A-3a (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP	810.1	EOB	9 10 16	34	56	SS-14	4.50	0	9	14	47	30	25	16	9	11	A-4a (8)	
			8 12 14	34	100	SS-15	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			5 9 18	36	83	SS-16	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 10 20	40	28	SS-17	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			14 10 19	38	50	SS-18	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:47 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.582	618	33	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-014-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:11:20 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL003.dgn

PROJECT: FRA-71-19.10	DRILLING FIRM / OPERATOR: NEAS / CP	DRILL RIG: CME 75T	STATION / OFFSET: 1109+85, 52' LT.
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / J. HODGES	HAMMER: CME AUTOMATIC	ALIGNMENT: IR-71
PID: 109164 SFN:	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 1/24/22	ELEVATION: 859.2 (MSL) EOB: 46.5 ft.
START: 8/30/22 END: 8/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79	LAT / LONG: 40.008779, -82.986568

EXPLORATION ID B-015-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	857.8																	
HARD, BROWN AND ORANGISH BROWN, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, IRON STAINING, DAMP **(FILL)**	849.7		6 7 11	24	100	SS-1	4.50	10	12	17	37	24	26	16	10	10	A-4a (5)	
			5 6 11	22	100	SS-2	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			6 8 9	22	44	SS-3	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
HARD, DARK GRAY AND BLACK, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, CONTAINS COAL AND BRICK FRAGMENTS, MOIST **(FILL)**	844.7		6 7 12	25	100	SS-4	4.50	-	-	-	-	-	-	-	-	21	A-4a (V)	
			5 6 22	37	100	SS-5	4.50	-	-	-	-	-	-	-	-	19	A-4a (V)	
HARD, ORANGISH BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, IRON STAINING, CONTAINS CONCRETE FRAGMENTS, DAMP **(FILL)**	839.7		4 4 5	12	83	SS-6	4.25	11	9	12	36	32	32	19	13	15	A-6a (8)	
			4 5 7	16	28	SS-7	4.50	-	-	-	-	-	-	-	-	17	A-6a (V)	
MEDIUM STIFF TO VERY STIFF, BROWN AND ORANGISH BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP			3 3 4	9	100	SS-8	2.50	7	12	19	37	25	27	17	10	15	A-4a (5)	
			3 4 4	11	100	SS-9	2.50	-	-	-	-	-	-	-	-	15	A-4a (V)	
			20 17 23	53	39	SS-10	2.25	-	-	-	-	-	-	-	-	14	A-4a (V)	
			17 20 28	63	28	SS-11	2.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		W 829.2																
			4 4 6	13	100	SS-12	1.00	-	-	-	-	-	-	-	-	17	A-4a (V)	
	827.2																	
MEDIUM DENSE, GRAY AND BROWN, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST	824.7		3 4 6	13	44	SS-13	-	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
HARD, GRAY AND ORANGISH BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, SS-14 CONTAINS IRON STAINING, GLACIAL TILL, DAMP			16 27 28	72	44	SS-14	4.25	8	12	19	40	21	23	16	7	13	A-4a (5)	
			15 22 21	57	56	SS-15	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			10 10 14	32	39	SS-16	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			9 15 15	40	100	SS-17	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
	812.7	EOB	12 15 17	42	50	SS-18	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER ENCOUNTERED AT 30' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:47 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.583 / 618 TOTAL	34 / 69 TOTAL	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-015-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:11:57 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL004.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/30/22 END: 8/30/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1111+45, 52' LT.
ALIGNMENT: IR-71
ELEVATION: 860.9 (MSL) EOB: 46.5 ft.
LAT / LONG: 40.009098, -82.986941

EXPLORATION ID B-016-0-22
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	859.6																	
HARD, BROWNISH GRAY, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, SS-3 IS SLIGHTLY ORGANIC, DAMP	848.9		7 6 5	14	100	SS-1	4.50	7	9	15	40	29	27	16	11	12	A-6a (7)	
			5 6 8	18	100	SS-2	4.50	-	-	-	-	-	-	-	-	10	A-6a (V)	
			7 9 10	25	100	SS-3	4.50	5	8	16	40	31	31	18	13	15	A-6a (8)	
			2 7 8	20	100	SS-4	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	
HARD, BROWN AND DARK GRAY, **SILT AND CLAY**, SOME SAND, SOME STONE FRAGMENTS, DAMP	846.4		10 9 6	20	100	SS-5	4.50	-	-	-	-	-	-	-	-	16	A-6a (V)	
VERY STIFF TO HARD, BROWN AND DARK GRAY, **SILTY CLAY**, LITTLE SAND, TRACE GRAVEL, MOIST TO DAMP	836.4		4 7 7	18	100	SS-6	4.50	1	5	12	36	46	40	18	22	20	A-6b (13)	
			5 6 7	17	100	SS-7	4.25	-	-	-	-	-	-	-	-	14	A-6b (V)	
			4 4 3	9	100	SS-8	2.50	-	-	-	-	-	-	-	-	16	A-6b (V)	
			3 4 4	11	100	SS-9	2.25	-	-	-	-	-	-	-	-	17	A-6b (V)	
LOOSE, GRAY, **GRAVEL AND STONE FRAGMENTS WITH SAND**, SOME SILT, TRACE CLAY, MOIST	833.9		5 3 3	8	100	SS-10	-	-	-	-	-	-	-	-	-	13	A-1-b (V)	
STIFF TO VERY STIFF, BROWN AND GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP TO MOIST	828.9	W 830.9	4 3 4	9	100	SS-11	2.00	17	15	19	31	18	23	14	9	12	A-4a (3)	
			3 2 5	9	100	SS-12	1.25	-	-	-	-	-	-	-	-	16	A-4a (V)	
MEDIUM DENSE, BROWN, **COARSE AND FINE SAND** SOME SILT, LITTLE GRAVEL, TRACE CLAY, MOIST	826.4		3 3 5	11	100	SS-13	-	-	-	-	-	-	-	-	-	16	A-3a (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP	814.4	EOB	7 8 10	24	100	SS-14	4.50	9	9	13	43	26	26	16	10	11	A-4a (7)	
			9 7 12	25	100	SS-15	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			13 14 15	38	100	SS-16	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			10 15 15	40	50	SS-17	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			10 14 15	38	50	SS-18	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER ENCOUNTERED AT 30' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:47 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.584 / TOTAL 618	35 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-016-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:12:35 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL005.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/25/22 END: 8/30/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1112+90, 52' LT.
ALIGNMENT: IR-71
ELEVATION: 861.8 (MSL) EOB: 46.5 ft.
LAT / LONG: 40.009371, -82.987304

EXPLORATION ID B-017-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	861.8																	
	860.3																	
VERY STIFF TO HARD, BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP		1																
		2																
		3	5 4 5	12	100	SS-1	4.00	4	8	14	42	32	30	18	12	15	A-6a (9)	
		4																
		5	5 10 6	21	100	SS-2	4.50	-	-	-	-	-	-	-	-	12	A-6a (V)	
		6																
		7																
		8	4 4 7	14	100	SS-3	4.50	-	-	-	-	-	-	-	-	16	A-6a (V)	
	852.3	9																
HARD, BROWN AND GRAY, **SILTY CLAY**, LITTLE SAND, TRACE GRAVEL, DAMP		10																
		11	4 5 5	13	100	SS-4	4.50	5	6	10	41	38	39	21	18	19	A-6b (11)	
		12																
		13	3 5 7	16	100	SS-5	4.50	-	-	-	-	-	-	-	-	21	A-6b (V)	
	847.3	14																
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP		15																
		16	9 17 25	55	50	SS-6	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
		17																
		18	4 15 22	49	44	SS-7	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
	842.3	19																
MEDIUM DENSE, BROWN AND GRAY, **STONE FRAGMENTS WITH SAND** SOME SILT, TRACE CLAY, CONTAINS A 2.25" STONE FRAGMENT, MOIST		20																
		21	6 6 4	13	78	SS-8	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
	839.8	22																
VERY STIFF, BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, TRACE IRON STAINING, DAMP		23	5 6 7	17	56	SS-9	3.75	7	8	15	37	33	34	19	15	19	A-6a (9)	
		24																
		25																
		26	19 8 8	21	100	SS-10	2.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
	834.8	27																
VERY STIFF TO HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP		28	7 8 8	21	39	SS-11	3.25	12	12	16	36	24	24	15	9	13	A-4a (5)	
		29																
		30																
		31	4 10 9	25	100	SS-12	4.50	-	-	-	-	-	-	-	-	15	A-4a (V)	
		32																
		33	3 10 8	24	89	SS-13	4.50	10	13	18	37	22	25	16	9	13	A-4a (5)	
		34																
		35																
		36	7 10 11	28	100	SS-14	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
	824.8	37																
VERY STIFF, BROWN AND GRAY, **SILT**, SOME SAND, LITTLE CLAY, TRACE GRAVEL, MOIST		38	6 9 16	33	100	SS-15	3.75	2	5	17	57	19	NP	NP	NP	17	A-4b (8)	
	822.8	39																
MEDIUM DENSE, BROWN AND GRAY, **COARSE AND FINE SAND**, SOME SILT, TRACE GRAVEL, TRACE CLAY, MOIST		40																
		41	6 8 14	29	100	SS-16	-	-	-	-	-	-	-	-	-	16	A-3a (V)	
	819.8	42																
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		43	20 50/3"	-	33	SS-17	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
		44																
		45																
		46	10 15 18	43	44	SS-18	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
	815.3	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:47 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1\ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.585 / TOTAL 618	36 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-017-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:13:12 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL006.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/25/22 END: 8/25/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1117+30, 52' LT.
ALIGNMENT: IR-71
ELEVATION: 861.5 (MSL) EOB: 46.5 ft.
LAT / LONG: 40.010087, -82.988532

EXPLORATION ID B-018-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 861.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	860.1	1																
HARD, BROWN, **SILT AND CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL, DAMP TO MOIST		2	23 10 13	30	100	SS-1	4.50	11	12	16	32	29	31	16	15	10	A-6a (7)	
		3																
		4	9 10 13	30	100	SS-2	4.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
		5	10 13 20	43	100	SS-3	4.50	-	-	-	-	-	-	-	-	20	A-6a (V)	
	855.5	6																
MEDIUM DENSE TO DENSE, GRAY, **STONE FRAGMENTS**, SOME SAND, TRACE SILT, TRACE CLAY, DAMP TO MOIST		7	17 19 15	45	33	SS-4	-	-	-	-	-	-	-	-	-	12	A-1-a (V)	
		8	15 17 9	34	6	SS-5	-	-	-	-	-	-	-	-	-	19	A-1-a (V)	
		9																
SS-6A CONTAINS A 2.0" STONE FRAGMENT	850.5	10																
		11	10 12 7	25	44	SS-6A	-	-	-	-	-	-	-	-	-	12	A-1-a (V)	
HARD, BROWNISH GRAY, **SILTY CLAY**, SOME SAND, TRACE GRAVEL, DAMP						SS-6B	4.50	5	9	14	39	33	38	21	17	20	A-6b (10)	
		12																
		13	6 6 7	17	100	SS-7	4.50	-	-	-	-	-	-	-	-	14	A-6b (V)	
	847.0	14																
HARD, BROWN MOTTLED WITH GRAY, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, DAMP TO MOIST		15																
		16	11 8 11	25	100	SS-8	4.50	4	5	11	41	39	41	19	22	18	A-7-6 (13)	
		17																
		18	1 4 5	12	100	SS-9	4.25	-	-	-	-	-	-	-	-	23	A-7-6 (V)	
	842.0	19																
VERY STIFF, BROWN MOTTLED WITH ORANGISH BROWN AND GRAY, **CLAY**, "AND" SILT, TRACE TO LITTLE SAND, TRACE GRAVEL, IRON STAINING, MOIST		20																
		21	3 4 6	13	100	SS-10	3.00	1	2	9	40	48	47	21	26	25	A-7-6 (16)	
		22																
		23	2 4 6	13	100	SS-11	2.75	-	-	-	-	-	-	-	-	22	A-7-6 (V)	
	837.0	24																
VERY STIFF TO HARD, BROWN AND BROWNISH GRAY, **SILT AND CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL, DAMP		25																
		26	5 5 5	13	100	SS-12	4.00	16	11	19	33	21	25	14	11	12	A-6a (4)	
		27																
		28	4 5 5	13	100	SS-13	3.75	-	-	-	-	-	-	-	-	13	A-6a (V)	
		29																
		30																
		31	4 5 6	14	78	SS-14	4.50	-	-	-	-	-	-	-	-	14	A-6a (V)	
	829.5	32																
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP		33	4 5 8	17	89	SS-15	4.50	0	10	15	43	32	26	16	10	12	A-4a (8)	
		34																
		35																
		36	5 11 13	32	94	SS-16	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		37																
		38	6 10 12	29	67	SS-17	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		39																
		40																
		41	20 23 34	75	56	SS-18	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		42																
		43	18 25 32	75	78	SS-19	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		44																
		45																
	815.0	46	12 16 20	47	67	SS-20	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET P.586 TOTAL 618
SUBSET 37 TOTAL 69
PROJECT ID 109164
REVIEWER CH 08-28-23
DESIGNER ZM
DESIGN AGENCY NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-018-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:13:50 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL007.dgn

PROJECT: FRA-71-19.10	DRILLING FIRM / OPERATOR: NEAS / CP	DRILL RIG: CME 75T	STATION / OFFSET: 1118+85, 51' LT.
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / J. HODGES	HAMMER: CME AUTOMATIC	ALIGNMENT: IR-71
PID: 109164 SFN:	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 1/24/22	ELEVATION: 860.0 (MSL) EOB: 46.5 ft.
START: 8/24/22 END: 8/24/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79	LAT / LONG: 40.010321, -82.988992

EXPLORATION ID: B-019-0-22
PAGE: 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	860.0																	
	858.6																	
MEDIUM DENSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP	856.1	3	13 9 7	21	100	SS-1	-	50	16	9	17	8	NP	NP	NP	6	A-1-b (0)	
HARD, BROWN AND GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, TRACE TO LITTLE CLAY, SS-2 CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP		6	4 6 6	16	100	SS-2	-	21	12	22	30	15	25	15	10	11	A-4a (2)	
		8	4 7 9	21	100	SS-3	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
	850.5																	
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP		11	9 14 13	36	100	SS-4	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		13	10 10 20	40	83	SS-5	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		16	4 4 6	13	100	SS-6	4.25	-	-	-	-	-	-	-	-	17	A-4a (V)	
	843.0																	
VERY STIFF TO HARD, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **SILTY CLAY**, SOME SAND, TRACE GRAVEL, IRON STAINING, DAMP		18	3 4 7	14	100	SS-7	4.25	3	6	16	35	40	38	20	18	19	A-6b (11)	
		21	2 3 6	12	100	SS-8	4.00	-	-	-	-	-	-	-	-	18	A-6b (V)	
		23	1 5 4	12	100	SS-9	3.50	-	-	-	-	-	-	-	-	19	A-6b (V)	
	835.5																	
DENSE, BROWN, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP		26	5 15 13	37	100	SS-10	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
	833.0																	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		28	4 13 15	37	100	SS-11	4.50	12	13	19	34	22	25	17	8	12	A-4a (4)	
		31	4 5 7	16	100	SS-12	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		33	3 5 7	16	100	SS-13	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		36	6 10 10	26	100	SS-14	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		38	4 8 11	25	100	SS-15	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		41	9 14 18	42	28	SS-16	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		43	7 16 17	43	50	SS-17	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	813.5	46	12 14 17	41	33	SS-18	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.587 / 618 TOTAL	38 / 69 TOTAL	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-019-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:14:27 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL008.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/24/22 END: 8/24/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1120+25, 53' LT.
ALIGNMENT: IR-71
ELEVATION: 858.2 (MSL) EOB: 41.5 ft.
LAT / LONG: 40.010529, -82.989411

EXPLORATION ID B-020-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV. 858.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	856.9	1																
VERY STIFF TO HARD, GRAY AND BROWN, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP TO MOIST		2	10 10 9	25	100	SS-1	4.50	11	17	20	35	17	21	14	7	9	A-4a (3)	
		3																
		4	10 8 4	16	28	SS-2	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		5	9 9 5	18	39	SS-3	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
SS-4 AND SS-5 BECOME SLIGHTLY ORGANIC, CONTAIN TRACE ROOTS		6																
		7	6 7 9	21	67	SS-4	4.00	-	-	-	-	-	-	-	-	22	A-4a (V)	
		8	7 8 10	24	100	SS-5	4.50	-	-	-	-	-	-	-	-	16	A-4a (V)	
		9																
		10																
		11	5 6 7	17	100	SS-6	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		12																
		13	8 16 11	36	100	SS-7	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
	843.7	14																
VERY STIFF TO HARD, BROWN MOTTLED WITH ORANGISH BROWN AND GRAY, **SILTY CLAY**, LITTLE TO SOME SAND, TRACE GRAVEL, IRON STAINING, MOIST TO DAMP		15																
		16	3 4 7	14	100	SS-8	3.25	5	7	14	40	34	36	18	18	19	A-6b (11)	
		17																
		18	3 5 7	16	100	SS-9	4.25	-	-	-	-	-	-	-	-	19	A-6b (V)	
		19																
		20																
		21	4 5 11	21	100	SS-10	4.00	-	-	-	-	-	-	-	-	17	A-6b (V)	
		22																
		23	3 6 13	25	56	SS-11	4.25	-	-	-	-	-	-	-	-	16	A-6b (V)	
	833.7	24																
HARD, BROWN BECOMING GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP		25																
		26	9 12 15	36	100	SS-12	4.50	6	9	22	38	25	25	16	9	13	A-4a (6)	
		27																
		28	8 13 14	36	100	SS-13	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		29																
		30																
		31	10 11 14	33	56	SS-14	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		32																
		33	10 12 13	33	67	SS-15	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		34																
		35																
		36	13 15 19	45	83	SS-16	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		37																
		38	12 13 20	43	67	SS-17	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
		39																
		40																
	816.7	41 EOB	13 14 17	41	100	SS-18	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.588 / TOTAL 618	39 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-020-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:15:04 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL009.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/23/22 END: 8/23/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1121+86, 56' LT.
ALIGNMENT: IR-71
ELEVATION: 856.2 (MSL) EOB: 41.5 ft.
LAT / LONG: 40.010763, -82.989898

EXPLORATION ID B-021-0-22
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 856.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	854.8																	
MEDIUM DENSE, BROWN AND GRAY, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP	851.7		12 6 5	14	100	SS-1	-	29	26	14	21	10	26	16	10	10	A-2-4 (0)	
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, DAMP TO MOIST			5 6 9	20	100	SS-2	4.50	-	-	-	-	-	-	-	-	17	A-4a (V)	
			2 7 7	18	100	SS-3	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			9 9 8	22	100	SS-4	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			5 6 7	17	100	SS-5	4.50	-	-	-	-	-	-	-	-	18	A-4a (V)	
	841.7																	
DENSE, BROWN, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, DAMP	839.2		9 16 20	47	100	SS-6	-	27	15	14	27	17	NP	NP	NP	11	A-4a (2)	
VERY STIFF TO HARD, BROWN, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, DAMP			11 7 10	22	100	SS-7	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			5 6 6	16	100	SS-8	3.75	-	-	-	-	-	-	-	-	16	A-4a (V)	
	834.2																	
HARD, BROWN, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, DAMP	831.7		4 6 7	17	100	SS-9	4.50	14	10	14	36	26	28	17	11	12	A-6a (6)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP			9 10 14	32	100	SS-10	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			8 10 12	29	100	SS-11	4.50	7	9	14	44	26	25	16	9	10	A-4a (7)	
			12 15 16	41	33	SS-12	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			10 12 19	41	50	SS-13	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		W 821.2																
			15 22 30	68	67	SS-14	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			12 25 35	79	83	SS-15	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			17 26 37	83	100	SS-16	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
	814.7	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 35' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.589	618	40	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-021-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:15:41 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL010.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/23/22 END: 8/23/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1123+32, 61' LT.
ALIGNMENT: IR-71
ELEVATION: 854.5 (MSL) EOB: 41.5 ft.
LAT / LONG: 40.010975, -82.990345

EXPLORATION ID B-022-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 854.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	853.1	1																
UNCONTROLLED FILL	852.0	2	10 6 5	14	17	SS-1	-	-	-	-	-	-	-	-	-	4	UCF (V)	
HARD, GRAY AND BROWN, **SILT AND CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL, DAMP		3	7 7 10	22	67	SS-2	4.50	11	13	17	34	25	27	16	11	12	A-6a (5)	
		4																
		5	4 5 6	14	44	SS-3	4.50	-	-	-	-	-	-	-	-	11	A-6a (V)	
		6	5 5 6	14	39	SS-4	4.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
		7																
		8	4 7 8	20	100	SS-5	4.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
	842.5	9																
HARD, BROWN AND GRAY, **CLAY**, SOME SILT, LITTLE SAND, TRACE GRAVEL, MOIST		10																
		11	4 4 7	14	100	SS-6	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	
	840.0	12																
HARD, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP		13	2 4 7	14	100	SS-7	4.50	2	4	12	31	51	53	22	31	25	A-7-6 (19)	
		14																
		15																
		16	11 10 14	32	100	SS-8	4.50	5	13	16	36	30	27	17	10	14	A-4a (6)	
	837.5	17																
MEDIUM DENSE, BROWN, **SILT**, SOME SAND, LITTLE CLAY, TRACE GRAVEL, WET		18	4 4 7	14	100	SS-9	-	2	4	29	52	13	NP	NP	NP	20	A-4b (6)	
	835.0	19																
HARD, GRAY, **SANDY SILT**, "AND" CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP		20																
		21	4 5 7	16	100	SS-10	4.50	5	6	7	41	41	28	18	10	18	A-4a (8)	
		22																
		23	3 6 6	16	100	SS-11	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
	830.0	24																
MEDIUM DENSE, GRAY, **GRAVEL WITH SAND** TRACE SILT, TRACE CLAY, GLACIAL TILL, WET		25																
		26	5 5 7	16	100	SS-12	-	4	46	35	10	5	NP	NP	NP	18	A-1-b (0)	
		27																
		28	5 6 7	17	100	SS-13	-	-	-	-	-	-	-	-	-	15	A-1-b (V)	
		29																
		30																
		31	7 8 10	24	100	SS-14	-	-	-	-	-	-	-	-	-	21	A-1-b (V)	
	822.5	32																
MEDIUM DENSE, GRAY, **GRAVEL WITH SAND** TRACE SILT, TRACE CLAY, GLACIAL TILL, MOIST		33																
		34	8 8 12	26	100	SS-15	-	45	29	13	10	3	NP	NP	NP	12	A-1-b (0)	
	819.3	35																
STIFF TO HARD, GRAY, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, GLACIAL TILL, DAMP		36	4 5 7	16	50	SS-16	2.00	-	-	-	-	-	-	-	-	17	A-6a (V)	
		37																
		38	2 6 8	18	39	SS-17	4.50	13	12	13	35	27	28	17	11	12	A-6a (6)	
		39																
		40																
	813.0	41	8 13 15	37	100	SS-18	4.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.590	618	41	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-022-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:16:19 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL011.dgn

PROJECT: FRA-71-19.10	DRILLING FIRM / OPERATOR: NEAS / CP	DRILL RIG: CME 75T	STATION / OFFSET: 1124+78, 65' LT.	EXPLORATION ID B-023-0-22
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / J. HODGES	HAMMER: CME AUTOMATIC	ALIGNMENT: IR-71	
PID: 109164 SFN:	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 1/24/22	ELEVATION: 853.5 (MSL) EOB: 41.5 ft.	PAGE 1 OF 1
START: 8/22/22 END: 8/22/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79	LAT / LONG: 40.011198, -82.990790	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	853.5																	
	852.2																	
HARD, GRAY AND BROWN, **SILT AND CLAY**, SOME SAND, SOME GRAVEL, DAMP		1																
		2																
		3	17 6 7	17	100	SS-1	4.50	22	14	12	29	23	30	16	14	8	A-6a (5)	
	849.0	4																
HARD, GRAY, **SILTY CLAY**, SOME SAND, TRACE GRAVEL, DAMP		5																
		6	3 4 4	11	100	SS-2	4.50	8	10	15	34	33	34	18	16	14	A-6b (9)	
	846.5	7																
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP		8	50	-	50	SS-3	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
	844.0	9																
VERY STIFF TO HARD, GRAY AND BROWN, **CLAY**, SOME SILT, SOME SAND, TRACE GRAVEL, GLACIAL TILL, MOIST TO DAMP		10																
		11	3 3 5	11	100	SS-4	4.50	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
		12																
		13	2 2 5	9	100	SS-5	3.25	7	7	16	32	38	41	20	21	21	A-7-6 (12)	
		14																
		15																
		16	2 3 4	9	100	SS-6	2.25	-	-	-	-	-	-	-	-	23	A-7-6 (V)	
		17																
		18	3 6 6	16	100	SS-7	4.50	-	-	-	-	-	-	-	-	14	A-7-6 (V)	
	834.0	19																
VERY STIFF TO HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		20																
		21	2 7 8	20	100	SS-8	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		22	W 831.0															
		23	12 15 16	41	100	SS-9	4.00	-	-	-	-	-	-	-	-	12	A-4a (V)	
		24																
		25																
		26	10 14 18	42	100	SS-10	4.00	-	-	-	-	-	-	-	-	13	A-4a (V)	
		27																
		28	14 18 15	43	100	SS-11	4.00	-	-	-	-	-	-	-	-	17	A-4a (V)	
		29																
		30																
		31	12 16 14	40	100	SS-12	4.25	4	10	17	41	28	25	16	9	13	A-4a (7)	
		32																
		33	11 16 23	51	100	SS-13	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		34																
		35																
		36	10 18 20	50	50	SS-14	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		37																
		38	10 13 21	45	39	SS-15	4.25	-	-	-	-	-	-	-	-	15	A-4a (V)	
		39																
		40																
	812.0	41	8 15 18	43	56	SS-16	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 22.5' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.591	618	42	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-023-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:16:56 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL012.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/22/22 END: 8/22/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1126+31, 64' LT.
ALIGNMENT: IR-71
ELEVATION: 852.3 (MSL) EOB: 36.5 ft.
LAT / LONG: 40.011460, -82.991232

EXPLORATION ID B-024-0-22
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	851.0																	
HARD, BROWN AND GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, DAMP	849.8	1	19 14 7	28	39	SS-1	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
HARD, BROWN AND GRAY, **SILTY CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL, DAMP		2																
		3	4 4 4	11	22	SS-2	4.50	-	-	-	-	-	-	-	-	13	A-6b (V)	
		4																
		5	4 3 3	8	33	SS-3	4.50	8	10	15	35	32	37	17	20	17	A-6b (10)	
		6	4 4 4	11	100	SS-4	4.50	-	-	-	-	-	-	-	-	14	A-6b (V)	
		7																
		8	2 3 4	9	100	SS-5	4.50	-	-	-	-	-	-	-	-	13	A-6b (V)	
	842.8	9																
VERY STIFF, BROWN AND GRAY, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, MOIST		10																
		11	2 3 5	11	100	SS-6	3.50	6	6	10	37	41	44	20	24	22	A-7-6 (14)	
	840.3	12																
HARD, BROWN BECOMING GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		13	1 6 14	26	100	SS-7	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		14																
		15																
		16	8 8 10	24	100	SS-8	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		17																
		18	6 15 15	40	100	SS-9	4.50	9	11	17	38	25	26	16	10	11	A-4a (6)	
		19																
		20																
		21	8 11 13	32	100	SS-10	4.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
		22																
		23	10 17 18	46	100	SS-11	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		24																
		25																
		26	8 15 20	46	100	SS-12	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		27																
		28	13 13 20	43	100	SS-13	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		29																
		30																
		31	10 12 18	40	100	SS-14	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		32																
		33	11 17 22	51	100	SS-15	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		34																
		35																
	815.8	36	10 20 20	53	100	SS-16	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-024-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:17:33 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL013.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/18/22 END: 8/18/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1127+72, 66' LT.
ALIGNMENT: IR-71
ELEVATION: 851.3 (MSL) EOB: 35.0 ft.
LAT / LONG: 40.011712, -82.991626

EXPLORATION ID B-025-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV. 851.3	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	849.9																	
HARD, GRAY AND BROWN, **SANDY SILT**, LITTLE TO SOME GRAVEL, LITTLE TO SOME CLAY, CONTAINS ASPHALT FRAGMENTS, DAMP		1	3 5 4	12	67	SS-1	4.50	23	13	16	29	19	24	15	9	9	A-4a (3)	
		2																
		3																
		4	7 11 15	34	100	SS-2	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		5																
		6																
		7	4 7 10	22	100	SS-3	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
	843.3	8																
VERY STIFF, GRAY AND DARK BROWN, **SILT**, SOME CLAY, LITTLE SAND, TRACE GRAVEL, SLIGHTLY ORGANIC (LOI: 2.7%), MOIST		9	4 2 4	8	100	SS-4	3.50	4	5	14	50	27	31	22	9	23	A-4b (8)	
	840.8	10																
VERY STIFF, BROWN, **SILTY CLAY**, SOME STONE FRAGMENTS, LITTLE SAND, DAMP		11																
		12	4 10 13	30	100	SS-5	3.75	21	7	10	29	33	39	19	20	15	A-6b (9)	
	838.3	13																
HARD, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP		14	8 8 15	30	100	SS-6	4.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
	835.8	15																
VERY STIFF, GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, SOME SAND, CONTAINS NO INTACT SOIL FOR HP READINGS, GLACIAL TILL, DAMP		16																
		17	7 9 10	25	100	SS-7	-	29	16	13	24	18	26	16	10	8	A-4a (1)	
	833.3	18																
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL AND STONE FRAGMENTS, GLACIAL TILL, DAMP		19	9 14 12	34	39	SS-8	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		20																
		21																
		22	6 9 10	25	50	SS-9	4.50	5	9	16	41	29	25	16	9	11	A-4a (7)	
		23																
		24	5 10 12	29	44	SS-10	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		25																
		26																
		27	15 16 18	45	33	SS-11	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		28																
		29	20 21 17	50	33	SS-12	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		30																
		31																
		32	8 10 13	30	44	SS-13	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		33																
		34	9 14 14	37	33	SS-14	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
	816.3 EOB	35																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.593	618	44	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-025-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:18:09 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL014.dgn

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/18/22 END: 8/18/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1129+19, 75' LT.
ALIGNMENT: IR-71
ELEVATION: 851.2 (MSL) EOB: 35.0 ft.
LAT / LONG: 40.011978, -82.992039

EXPLORATION ID B-026-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	849.7																	
HARD, BROWNISH GRAY AND GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, DAMP	845.2		7 6 4	13	28	SS-1	4.50	14	16	19	33	18	22	15	7	10	A-4a (3)	
			4 5 6	14	100	SS-2	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			2 3 5	11	100	SS-3	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
VERY STIFF, GRAY, **SILTY CLAY**, LITTLE TO SOME GRAVEL, SOME SAND, DAMP	840.7		3 3 5	11	100	SS-4	4.00	27	9	12	27	25	33	17	16	14	A-6b (6)	
			3 1 2	4	100	SS-5	2.75	-	-	-	-	-	-	-	-	13	A-6b (V)	
VERY STIFF, BROWN AND BLACK, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, SLIGHTLY ORGANIC (LOI: 3.4%), MOIST	838.2		2 3 2	7	100	SS-6	2.25	5	10	14	42	29	35	21	14	26	A-6a (9)	
VERY STIFF TO HARD, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, SOME SILT, LITTLE TO SOME SAND, TRACE GRAVEL, IRON STAINING, MOIST TO DAMP	833.2		3 4 9	17	100	SS-7	3.00	8	4	10	30	48	54	22	32	25	A-7-6 (19)	
			3 5 6	14	100	SS-8	4.50	-	-	-	-	-	-	-	-	15	A-7-6 (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP			11 15 18	43	100	SS-9	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			7 10 13	30	100	SS-10	4.50	4	7	12	47	30	26	18	8	12	A-4a (8)	
			5 8 12	26	100	SS-11	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 10 16	34	100	SS-12	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			5 12 16	37	100	SS-13	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		W 820.2	9 10 14	32	100	SS-14	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	816.2	EOB	10 15 16	41	100	SS-15	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER ENCOUNTERED AT 31' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.594	618	45	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-026-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:18:46 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL015.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1155+83, 67' LT. | EXPLORATION ID B-027-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 853.7 (MSL) EOB: 23.8 ft.
START: 8/17/22 END: 8/17/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.018791, -82.995292

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	853.7																	
VERY STIFF, BROWN AND DARK GRAY, **SILT AND CLAY**, "AND" SAND, SOME STONE FRAGMENTS, DAMP	852.3		4 2 1	4	56	SS-1	3.00	24	23	13	23	17	31	19	12	14	A-6a (2)	
STIFF, BROWN AND DARK GRAY, **SILTY CLAY**, SOME SAND, LITTLE STONE FRAGMENTS, MOIST	851.2		1 1 2	4	89	SS-2	1.75	20	11	10	27	32	40	23	17	26	A-6b (8)	
MEDIUM DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND**, SOME SILT, TRACE CLAY, IRON STAINING, DAMP	848.2		9 10 7	22	100	SS-3	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
MEDIUM DENSE TO DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, STONE FRAGMENTS ARE WEAK SHALE, DAMP TO MOIST	845.7		6 7 14	28	100	SS-4	-	43	19	12	14	12	NP	NP	NP	11	A-2-4 (0)	
			5 7 8	20	100	SS-5	-	-	-	-	-	-	-	-	-	19	A-2-4 (V)	
			5 8 22	40	100	SS-6	-	-	-	-	-	-	-	-	-	21	A-2-4 (V)	
			4 9 8	22	100	SS-7	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	
	835.2	TR																
SHALE, GRAY, SLIGHTLY WEATHERED, WEAK TO SLIGHTLY STRONG, FISSILE.			50	-	50	SS-8	-	-	-	-	-	-	-	-	-	4	Rock (V)	
			50	-	50	SS-9	-	-	-	-	-	-	-	-	-	4	Rock (V)	
	829.9	EOB	50/4"	-	50	SS-10	-	-	-	-	-	-	-	-	-	3	Rock (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1157+31, 64' LT. | EXPLORATION ID B-028-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 854.9 (MSL) EOB: 23.8 ft.
START: 8/17/22 END: 8/17/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.019201, -82.995311

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	854.9																	
HARD, BROWNISH GRAY, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, DAMP	853.6		6 6 7	17	44	SS-1	4.50	26	21	12	26	15	25	16	9	8	A-4a (1)	
	849.4		2 1 3	5	39	SS-2	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
MEDIUM DENSE, DARK BROWNISH GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, STONE FRAGMENTS ARE WEAK SHALE, DAMP	846.9		6 7 8	20	100	SS-3	-	47	22	11	12	8	25	16	9	11	A-2-4 (0)	
VERY STIFF, BROWNISH GRAY AND ORANGISH BROWN, **SILTY CLAY**, SOME SAND, SOME GRAVEL, IRON STAINING, DAMP	844.4		3 4 5	12	100	SS-4	3.50	23	14	14	25	24	39	20	19	17	A-6b (6)	
VERY STIFF, DARK GRAY, **SILTY CLAY**, SOME STONE FRAGMENTS, SOME SAND, STONE FRAGMENTS ARE WEAK SHALE, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	841.9		2 3 12	20	100	SS-5	-	35	18	11	18	18	40	23	17	15	A-6b (2)	
DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, STONE FRAGMENTS ARE WEAK SHALE, DAMP	839.4		8 13 14	36	100	SS-6	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
HARD, DARK GRAY, **STONE FRAGMENTS WITH SAND, SILT, AND CLAY**, STONE FRAGMENTS ARE WEAK SHALE, DAMP	836.4		6 10 5	20	100	SS-7	4.50	45	18	11	13	13	36	23	13	11	A-2-6 (0)	
		TR																
SHALE, GRAY, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, SILTY.			13 50/4"	-	30	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/4"	-	75	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	831.1	EOB	50/3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.595	46	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.
TOTAL 618	TOTAL 69				

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-027-0-22 & B-028-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:19:21 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL016.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1158+83, 65' LT. | EXPLORATION ID B-029-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 855.3 (MSL) EOB: 24.5 ft.
START: 8/17/22 END: 8/17/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.019619, -82.995336

MATERIAL DESCRIPTION AND NOTES	ELEV. 855.3	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	853.9																	
HARD, BROWNISH GRAY, **SANDY SILT**, LITTLE TO SOME GRAVEL AND STONE FRAGMENTS, LITTLE TO SOME CLAY, DAMP		1	4 6 8	18	61	SS-1	4.25	27	15	16	29	13	25	17	8	11	A-4a (1)	
		2																
		3																
		4	5 6 6	16	67	SS-2	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		5																
		6	6 4 6	13	100	SS-3	4.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
		7																
		8																
		9	5 5 9	18	100	SS-4	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		10																
		11																
		12	4 6 9	20	100	SS-5	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		13																
		14	14 8 9	22	44	SS-6	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		15																
		16																
		17	7 7 6	17	100	SS-7	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
	837.3	18																
MEDIUM DENSE TO DENSE, GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP		19	3 7 10	22	78	SS-8	-	46	21	10	13	10	31	21	10	8	A-2-4 (0)	
		20																
		21	7 12 17	38	33	SS-9	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
	832.3	22																
		23	TR															
SHALE, GRAY, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, SILTY.	830.8	24	16 50	-	58	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			EOB															

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1160+38, 66' LT. | EXPLORATION ID B-030-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 855.2 (MSL) EOB: 23.9 ft.
START: 8/16/22 END: 8/16/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.020046, -82.995352

MATERIAL DESCRIPTION AND NOTES	ELEV. 855.2	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	853.9																	
HARD, GRAY AND BROWN, **SANDY SILT**, SOME CLAY, LITTLE TO SOME GRAVEL AND STONE FRAGMENTS, DAMP TO MOIST		1	4 4 3	9	22	SS-1	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		2																
		3																
		4	5 4 4	11	89	SS-2	4.50	9	13	17	36	25	25	15	10	11	A-4a (5)	
		5																
		6																
		7	4 8 6	18	100	SS-3	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		8																
		9	4 3 3	8	22	SS-4	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		10																
		11																
		12	3 4 5	12	72	SS-5	4.50	-	-	-	-	-	-	-	-	18	A-4a (V)	
	842.2	13																
HARD, GRAY AND BROWN, **SILT AND CLAY**, "AND" SAND, SOME STONE FRAGMENTS, CONTAINS A RELIC SHALE ROCK STRUCTURE, DAMP		14	5 11 32	57	100	SS-6	4.50	22	21	15	24	18	38	25	13	13	A-6a (2)	
		15																
		16																
	838.2	17	8 50/5"	-	55	SS-7	4.50	-	-	-	-	-	-	-	-	12	A-6a (V)	
		18	TR															
SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK TO WEAK, FISSILE.		19	50	-	67	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																
		21	50	-	67	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																
	831.3	23																
			EOB	50/5"	-	60	SS-10	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.596	618	47	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-029-0-22 & B-030-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:19:57 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL017.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1161+80, 64' LT. | EXPLORATION ID B-031-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 854.4 (MSL) EOB: 25.0 ft.
START: 8/16/22 END: 8/16/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.020440, -82.995355

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	854.4																	
	853.0																	
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, CONTAINS BRICK FRAGMENTS, DAMP **(FILL)**		1	3 5 4	12	28	SS-1	4.50	8	13	17	40	22	23	16	7	16	A-4a (5)	
		2																
		3																
		4	9 17 15	42	39	SS-2	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		5																
		6																
		7	13 6 6	16	50	SS-3	4.50	-	-	-	-	-	-	-	-	16	A-4a (V)	
	846.4																	
VERY STIFF, BROWN AND DARK GRAY, **CLAY**, SOME SILT, SOME SAND, LITTLE GRAVEL, SLIGHTLY ORGANIC, DAMP		8																
		9	5 4 3	9	83	SS-4	2.50	17	11	11	31	30	41	21	20	20	A-7-6 (9)	
		10																
		11																
		12	3 4 3	9	100	SS-5	2.50	-	-	-	-	-	-	-	-	18	A-7-6 (V)	
	841.4	13																
LOOSE, DARK GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP		14	6 4 3	9	100	SS-6	-	53	22	10	9	6	33	25	8	8	A-2-4 (0)	
	838.9	15																
VERY STIFF, BROWN AND DARK GRAY, **SILT AND CLAY**, "AND" SAND, SOME STONE FRAGMENTS, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP		16																
		17	3 5 6	14	100	SS-7	-	26	20	17	21	16	38	25	13	14	A-6a (1)	
	836.4	18																
MEDIUM DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP		19	7 6 8	18	100	SS-8	-	-	-	-	-	-	-	-	-	6	A-1-b (V)	
		20																
		21																
		22	6 7 6	17	33	SS-9	-	-	-	-	-	-	-	-	-	7	A-1-b (V)	
		23																
		24	9 6 4	13	39	SS-10	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
	829.4	EOB 25																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1163+36, 65' LT. | EXPLORATION ID B-032-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 853.1 (MSL) EOB: 25.0 ft.
START: 8/16/22 END: 8/16/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.020870, -82.995357

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	853.1																	
	851.6																	
HARD, BROWNISH GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, DAMP **(FILL)**	850.1	1	3 4 8	16	67	SS-1	4.50	12	16	16	38	18	23	16	7	11	A-4a (4)	
HARD, BROWN AND GRAY, **SILTY CLAY**, SOME SAND, LITTLE GRAVEL AND STONE FRAGMENTS, DAMP **(FILL)**		2																
		3	2 5 7	16	72	SS-2	4.50	20	10	13	30	27	35	18	17	13	A-6b (7)	
	847.6	4																
HARD, BROWN AND GRAY, **SILT AND CLAY**, SOME STONE FRAGMENTS, SOME SAND, DAMP **(FILL)**		5																
		6	4 8 5	17	89	SS-3	4.50	32	15	13	21	19	33	19	14	11	A-6a (2)	
		7																
		8																
		9	3 4 4	11	78	SS-4	4.50	35	16	12	21	16	31	19	12	10	A-6a (1)	
		10																
		11																
		12	3 2 3	7	56	SS-5	4.25	-	-	-	-	-	-	-	-	13	A-6a (V)	
	840.1	13																
MEDIUM DENSE, BROWNISH GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, CONTAINS CONCRETE FRAGMENTS, DAMP **(FILL)**		14	5 3 10	17	61	SS-6	-	49	18	10	13	10	34	23	11	10	A-2-6 (0)	
		15																
		16																
		17	3 9 7	21	100	SS-7	-	-	-	-	-	-	-	-	-	10	A-2-6 (V)	
	835.1	18																
STIFF TO HARD, BROWN AND GRAY, **SILTY CLAY**, SOME SAND, LITTLE TO SOME GRAVEL, DAMP		19	3 3 3	8	44	SS-8	2.00	21	14	13	29	23	35	19	16	16	A-6b (6)	
		20																
		21																
		22	5 12 25	49	28	SS-9	4.50	-	-	-	-	-	-	-	-	11	A-6b (V)	
		23																
		24	6 16 37	70	33	SS-10	4.50	-	-	-	-	-	-	-	-	9	A-6b (V)	
	828.1	EOB 25																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	TOTAL
P.597	618

SUBSET	TOTAL
48	69

PROJECT ID: 109164

REVIEWER	DESIGNER
CH 08-28-23	ZM

DESIGN AGENCY: NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-031-0-22 & B-032-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:20:32 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL018.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1186+56, 67' LT. | EXPLORATION ID B-033-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 850.9 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 8/16/22 END: 8/16/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.027203, -82.994484

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	850.9 / 849.6																	
LOOSE TO MEDIUM DENSE, BROWN, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, DAMP **(FILL)**	843.6		8 9 9	24	28	SS-1	-	31	29	11	19	10	NP	NP	NP	6	A-2-4 (0)	
			5 3 3	8	33	SS-2	-	-	-	-	-	-	-	-	-	6	A-2-4 (V)	
			11 7 8	20	44	SS-3	-	-	-	-	-	-	-	-	-	6	A-2-4 (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	840.4		6 7 8	20	83	SS-4	4.50	9	14	16	33	28	22	15	7	10	A-4a (5)	
VERY DENSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP	837.9		10 22 23	59	100	SS-5	-	-	-	-	-	-	-	-	-	11	A-1-b (V)	
DENSE, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, GLACIAL TILL, MOIST	835.4		7 14 20	45	100	SS-6	-	4	12	29	42	13	NP	NP	NP	14	A-4a (4)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP	825.9		3 9 9	24	100	SS-7	4.50	19	8	12	28	33	25	15	10	11	A-4a (5)	
			7 12 15	36	44	SS-8	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
			8 11 15	34	39	SS-9	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
		EOB	7 13 16	38	28	SS-10	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1188+34, 66' LT. | EXPLORATION ID B-034-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 852.3 (MSL) EOB: 25.0 ft. | PAGE 1 OF 1
START: 8/15/22 END: 8/15/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.027684, -82.994456

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	852.3 / 850.7																	
HARD, GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, DAMP	849.3		12 8 10	24	67	SS-1	4.50	15	16	15	29	25	23	15	8	10	A-4a (4)	
MEDIUM DENSE, GRAY, **GRAVEL WITH SAND AND SILT**, LITTLE CLAY, DAMP	846.8		6 6 7	17	28	SS-2	-	44	16	10	17	13	22	15	7	6	A-2-4 (0)	
DENSE, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, CONTAINS INTERBEDDED SILT SEAMS, MOIST	844.3		14 15 12	36	100	SS-3	-	2	8	23	49	18	NP	NP	NP	16	A-4a (6)	
VERY DENSE, GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE GRAVEL, ENCOUNTER WITH LIMESTONE COBBLE, DAMP	841.8		40 38 21	78	50	SS-4	-	-	-	-	-	-	-	-	-	6	A-1-b (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP	827.3		12 12 13	33	100	SS-5	4.50	14	14	16	30	26	23	14	9	10	A-4a (4)	
			25 23 10	43	28	SS-6	4.50	-	-	-	-	-	-	-	-	7	A-4a (V)	
			6 6 9	20	89	SS-7	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			6 9 11	26	44	SS-8	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 8 8	21	100	SS-9	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		EOB	5 6 8	18	100	SS-10	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	TOTAL	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.598	618	49 / 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-033-0-22 & B-034-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:21:08 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL019.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1189+87, 66' LT. | EXPLORATION ID B-035-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 852.6 (MSL) EOB: 25.0 ft.
START: 8/15/22 END: 8/15/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.028097, -82.994452

MATERIAL DESCRIPTION AND NOTES	ELEV. 852.6	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	851.1																	
VERY LOOSE TO MEDIUM DENSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, CONTAINS BRICK FRAGMENTS, DAMP TO MOIST **(FILL)**	847.1	1	6 11 12	30	22	SS-1	-	-	-	-	-	-	-	-	-	5	A-1-b (V)	
		2																
		3	2 1 2	4	28	SS-2	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
		4																
		5																
VERY STIFF TO HARD, BROWNISH GRAY, **SANDY SILT**, LITTLE TO SOME GRAVEL, LITTLE TO SOME CLAY, DAMP		6	3 4 5	12	33	SS-3	2.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		7																
		8																
		9	3 3 7	13	100	SS-4	4.50	21	14	16	30	19	21	14	7	10	A-4a (3)	
		10																
		11																
		12	2 2 2	5	100	SS-5	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
	839.6	13																
STIFF TO HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		14	2 2 3	7	83	SS-6	2.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		15																
		16																
		17	1 2 2	5	100	SS-7	2.50	13	15	18	31	23	20	14	6	13	A-4a (4)	
		18																
		19	1 2 3	7	100	SS-8	2.25	-	-	-	-	-	-	-	-	12	A-4a (V)	
		20																
		21																
		22	2 2 3	7	100	SS-9	1.75	-	-	-	-	-	-	-	-	14	A-4a (V)	
		23																
	827.6	24																
	EOB	25	6 8 12	26	100	SS-10	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-

PROJECT: FRA-71-19.10 | DRILLING FIRM / OPERATOR: NEAS / J. HODGES | DRILL RIG: CME 75T | STATION / OFFSET: 1191+32, 67' LT. | EXPLORATION ID B-036-0-22
TYPE: RETAINING WALL | SAMPLING FIRM / LOGGER: NEAS / J. HODGES | HAMMER: CME AUTOMATIC | ALIGNMENT: IR-71 | PAGE 1 OF 1
PID: 109164 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 1/24/22 | ELEVATION: 852.1 (MSL) EOB: 25.0 ft.
START: 8/15/22 END: 8/15/22 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79 | LAT / LONG: 40.028490, -82.994470

MATERIAL DESCRIPTION AND NOTES	ELEV. 852.1	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	850.6																	
MEDIUM DENSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, CONTAINS BRICK FRAGMENTS, DAMP		1	5 7 6	17	28	SS-1	-	48	28	8	11	5	NP	NP	NP	4	A-1-b (0)	
		2																
		3																
SS-2 BECOMES WET		4	8 5 4	12	78	SS-2	-	-	-	-	-	-	-	-	-	16	A-1-b (V)	
	846.6	5																
HARD, BROWNISH GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP		6	7 7 8	20	100	SS-3	4.50	8	10	19	35	28	23	14	9	10	A-4a (6)	
		7																
		8																
		9	5 9 12	28	100	SS-4	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		10																
		11																
		12	8 12 14	34	100	SS-5	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		13																
		14	7 9 10	25	100	SS-6	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		15																
		16																
		17	5 8 9	22	100	SS-7	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	834.1	18																
HARD, BROWNISH GRAY AND GRAY, **CLAY**, LITTLE TO SOME SILT, TRACE SAND, TRACE GRAVEL, DAMP TO MOIST		19	4 5 7	16	100	SS-8	4.50	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
		20																
		21																
		22	3 5 5	13	61	SS-9	4.50	2	3	5	12	78	48	22	26	22	A-7-6 (16)	
		23																
	827.1	24																
	EOB	25	3 4 6	13	100	SS-10	4.50	-	-	-	-	-	-	-	-	24	A-7-6 (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.599	618	50	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BORING LOGS B-035-0-22 & B-036-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:21:43 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL020.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 7/21/23 13:53 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-

PROJECT: FRA-71-19.10
TYPE: RETAINING WALL
PID: 109164 SFN:
START: 8/15/22 END: 8/15/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1192+90, 73' LT.
ALIGNMENT: IR-71
ELEVATION: 850.3 (MSL) EOB: 25.0 ft.
LAT / LONG: 40.028915, -82.994522

EXPLORATION ID B-037-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 7.0" BASE (DRILLERS DESCRIPTION)	850.3																	
MEDIUM DENSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP **(FILL)**	848.7		7 11 7	24	44	SS-1	-	-	-	-	-	-	-	-	-	4	A-1-b (V)	
VERY STIFF TO HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP	847.3		2 3 2	7	100	SS-2	2.50	11	16	20	34	19	19	14	5	12	A-4a (4)	
			4 1 3	5	100	SS-3	2.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			4 8 8	21	100	SS-4	4.25	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 9 14	30	100	SS-5	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 13 15	37	100	SS-6	4.50	8	14	20	31	27	21	14	7	9	A-4a (5)	
			8 10 11	28	100	SS-7	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			6 17 22	51	100	SS-8	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
			8 15 23	50	100	SS-9	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	825.3	EOB	8 18 25	57	100	SS-10	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.600 TOTAL 618	51 TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BORING LOG B-037-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:22:05 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL021.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/7/22 END: 9/7/22

DRILLING FIRM / OPERATOR: NEAS / CP
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1311+83, 70' LT.
ALIGNMENT: IR-71
ELEVATION: 895.5 (MSL) EOB: 61.5 ft.
LAT / LONG: 40.061323, -82.998253

EXPLORATION ID B-043-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV. 895.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
13.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	893.9																	
HARD, BROWN, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP TO MOIST	888.5		4 4 6	13	100	SS-1	4.50	8	11	17	35	29	29	17	12	14	A-6a (7)	
			3 4 5	12	100	SS-2	4.50	-	-	-	-	-	-	-	-	20	A-6a (V)	
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, SOME SAND, TRACE GRAVEL, DAMP	886.0		2 4 7	14	100	SS-3	3.50	4	9	15	38	34	35	18	17	16	A-6b (10)	
HARD, BROWN, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, SS-5 CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	881.0		4 3 2	7	50	SS-4	4.25	15	14	13	34	24	32	19	13	15	A-6a (6)	
			3 5 7	16	17	SS-5	-	-	-	-	-	-	-	-	-	15	A-6a (V)	
VERY STIFF, BROWN MOTTLED WITH ORANGISH BROWN AND GRAY, **SILTY CLAY**, LITTLE SAND, TRACE GRAVEL, IRON STAINING, MOIST TO DAMP	876.0		2 3 7	13	100	SS-6	2.25	8	6	12	35	39	40	20	20	22	A-6b (12)	
			2 3 8	14	100	SS-7	2.50	-	-	-	-	-	-	-	-	15	A-6b (V)	
VERY STIFF TO HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP			3 5 7	16	100	SS-8	4.25	8	13	17	38	24	22	15	7	12	A-4a (5)	
			2 4 8	16	100	SS-9	4.00	-	-	-	-	-	-	-	-	12	A-4a (V)	
			11 17 13	40	100	SS-10	4.25	13	16	16	36	19	21	14	7	9	A-4a (4)	
			10 7 8	20	100	SS-11	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			8 8 19	36	100	SS-12	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			13 19 24	57	100	SS-13	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
			19 24 22	61	100	SS-14	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			12 27 30	75	17	SS-15	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
	853.5		35 50/5"	-	27	SS-16	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
VERY DENSE, GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, GLACIAL TILL, DAMP	851.0		15 28 32	79	56	SS-17	-	-	-	-	-	-	-	-	-	13	A-4a (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP			27 30 30	79	78	SS-18	4.50	8	14	20	36	22	22	14	8	10	A-4a (5)	
			14 22 22	58	50	SS-19	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			8 14 17	41	33	SS-20	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.601	618	52	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-043-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:22:43 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL022.dgn

PID: 109164	SFN:	PROJECT: FRA-71-19.10	STATION / OFFSET: 1311+83, 70' LT.	START: 9/7/22	END: 9/7/22	PG 2 OF 2	B-043-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, GLACIAL TILL, DAMP *(continued)*	835.5		10															
	834.0	EOB 61	20 20	53	44	SS-21	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET P.602 TOTAL 618
SUBSET 53 TOTAL 69
PROJECT ID 109164
REVIEWER CH 08-28-23
DESIGNER ZM
DESIGN AGENCY NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-043-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:23:17 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL023.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/8/22 END: 9/8/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1313+07, 80' RT.
ALIGNMENT: IR-71
ELEVATION: 878.2 (MSL) EOB: 46.5 ft.
LAT / LONG: 40.061567, -82.997636

EXPLORATION ID B-044-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV. 878.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	876.7																	
HARD, BROWNISH GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, DAMP TO MOIST			3 2 5	9	33	SS-1	4.25	16	15	17	31	21	26	16	10	11	A-4a (3)	
			3 4 3	9	100	SS-2	4.25	-	-	-	-	-	-	-	-	18	A-4a (V)	
HARD, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE TO LITTLE GRAVEL AND STONE FRAGMENTS, DAMP	871.2		6 7 14	28	100	SS-3	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			9 22 33	72	100	SS-4	4.50	12	12	21	37	18	20	14	6	8	A-4a (4)	
			7 21 26	62	78	SS-5	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
			7 39 43	108	100	SS-6	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
			18 38 42	105	100	SS-7	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
			6 12 14	34	61	SS-8	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		W 855.7																
			8 13 17	40	44	SS-9	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
DENSE, GRAY, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, MOIST	853.7		17 22 16	50	100	SS-10	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, GLACIAL TILL, DAMP	849.9		10 15 16	41	100	SS-11	4.25	11	12	16	35	26	24	15	9	11	A-4a (5)	
			8 9 18	36	100	SS-12	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			7 12 14	34	100	SS-13	4.25	11	11	16	36	26	23	15	8	12	A-4a (5)	
	831.7	EOB	9 13 16	38	100	SS-14	4.25	-	-	-	-	-	-	-	-	12	A-4a (V)	

NOTES: GROUNDWATER ENCOUNTERED AT 22.5' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED .5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.603	618	54	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-044-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:23:55 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL024.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/12/22 END: 9/12/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1313+27, 86' LT.
ALIGNMENT: IR-71
ELEVATION: 874.4 (MSL) EOB: 61.5 ft.
LAT / LONG: 40.061727, -82.998195

EXPLORATION ID B-045-0-22
PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV. 874.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
10.0" ASPHALT AND 6.0" CONCRETE AND 7.0" BASE (DRILLERS DESCRIPTION)	872.4																	
MEDIUM DENSE, GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, CONCRETE FRAGMENTS, DAMP	869.9		14 12 10	29	44	SS-1	-	24	13	15	29	19	NP	NP	NP	8	A-4a (3)	
VERY STIFF TO HARD, GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, DAMP			3 4 3	9	100	SS-2	3.25	11	14	20	37	18	19	14	5	11	A-4a (4)	
			2 3 3	8	100	SS-3	3.00	-	-	-	-	-	-	-	-	11	A-4a (V)	
			8 18 23	54	100	SS-4	4.50	15	19	23	29	14	19	14	5	7	A-4a (2)	
			4 7 15	29	100	SS-5	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			12 15 24	51	83	SS-6	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
			3 17 18	46	28	SS-7	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
	852.4		8 31 34	86	33	SS-8	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
VERY STIFF, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, WET		W 851.4	6 13 17	40	100	SS-9	4.00	-	-	-	-	-	-	-	-	18	A-4a (V)	
DENSE, GRAY, **COARSE AND FINE SAND** LITTLE GRAVEL, TRACE SILT, TRACE CLAY, WET	849.9		5 11 14	33	100	SS-10	-	-	-	-	-	-	-	-	-	19	A-3a (V)	
HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP	847.4		7 10 15	33	50	SS-11	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			9 17 40	75	61	SS-12	4.50	14	16	18	32	20	22	14	8	11	A-4a (3)	
			11 20 41	80	50	SS-13	4.25	-	-	-	-	-	-	-	-	12	A-4a (V)	
			10 16 38	71	100	SS-14	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			13 17 40	75	100	SS-15	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			14 17 23	53	100	SS-16	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			15 21 25	61	100	SS-17	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			20 22 35	75	39	SS-18	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			17 21 37	76	50	SS-19	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
			12 15 24	51	100	SS-20	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.604	618	55	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-045-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:24:33 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL025.dgn

PID: 109164 | SFN: | PROJECT: FRA-71-19.10 | STATION / OFFSET: 1313+27, 86' LT. | START: 9/12/22 | END: 9/12/22 | PG 2 OF 2 | B-045-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP *(continued)*	814.4	61	12 18 25	57	100	SS-21	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
	812.9	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 23.0' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; PUMPED 50 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-24.46 OVER MORSE ROAD
BORING LOG B-045-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:25:07 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL026.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/14/22 END: 9/14/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1414+99, 61' RT.
ALIGNMENT: IR-71
ELEVATION: 931.9 (MSL) EOB: 91.5 ft.
LAT / LONG: 40.087293, -82.987079

EXPLORATION ID B-046-0-22
PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 5.0" BASE (DRILLERS DESCRIPTION)	930.5																	
HARD, BROWN, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP	922.4		5 6 9	20	72	SS-1	4.50	5	10	16	39	30	28	17	11	13	A-6a (7)	
			2 5 10	20	56	SS-2	4.50	8	10	15	37	30	31	17	14	14	A-6a (8)	
			5 9 12	28	100	SS-3	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	
VERY STIFF, BROWNISH GRAY MOTTLED WITH GRAY, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, DAMP	919.9		5 6 11	22	100	SS-4	3.75	2	3	10	41	44	43	20	23	19	A-7-6 (14)	
HARD, BROWN, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP	917.4		4 11 18	38	44	SS-5	4.50	8	9	15	36	32	31	18	13	14	A-6a (8)	
DENSE, BROWN AND GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	914.9		13 12 13	33	17	SS-6	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
VERY STIFF TO HARD, BROWNISH GRAY BECOMING DARK GRAY MOTTLED WITH GREENISH GRAY, **CLAY**, "AND" SILT, TRACE SAND, TRACE GRAVEL, SS-8 IS SLIGHTLY ORGANIC, DAMP TO MOIST	907.4		10 11 14	33	33	SS-7	4.25	-	-	-	-	-	-	-	-	18	A-7-6 (V)	
			4 7 11	24	33	SS-8	3.25	0	2	7	44	47	51	22	29	24	A-7-6 (18)	
			5 8 9	22	28	SS-9	3.25	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
MEDIUM DENSE, BROWN AND ORANGISH BROWN, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, IRON STAINING, MOIST	904.9	W 906.9	5 6 13	25	100	SS-10	-	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
VERY STIFF, BROWN MOTTLED WITH ORANGISH BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, LITTLE GRAVEL, IRON STAINING, DAMP	902.4		6 8 12	26	50	SS-11	2.25	14	12	15	34	25	31	19	12	18	A-6a (6)	
VERY STIFF TO HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, MOIST TO DAMP			5 5 8	17	28	SS-12	2.75	-	-	-	-	-	-	-	-	17	A-4a (V)	
			7 6 7	17	33	SS-13	3.00	12	13	16	34	25	24	15	9	12	A-4a (5)	
			6 5 7	16	39	SS-14	4.00	-	-	-	-	-	-	-	-	13	A-4a (V)	
			7 7 8	20	44	SS-15	2.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
			5 8 11	25	100	SS-16	2.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
			5 7 9	21	100	SS-17	4.00	-	-	-	-	-	-	-	-	13	A-4a (V)	
			15 28 35	83	28	SS-18	4.25	3	9	22	40	26	21	12	9	9	A-4a (6)	
			16 24 24	63	39	SS-19	4.25	-	-	-	-	-	-	-	-	9	A-4a (V)	
	873.6																	
DENSE, GRAY, **GRAVEL WITH SAND**, SOME SILT, TRACE CLAY, WET																		

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.606 / TOTAL 618	57 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
BORING LOG B-046-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:25:45 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL027.dgn

PID: 109164 | SFN: | PROJECT: FRA-71-19.10 | STATION / OFFSET: 1414+99, 61' RT. | START: 9/14/22 | END: 9/14/22 | PG 2 OF 2 | B-046-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
DENSE, GRAY, **GRAVEL WITH SAND** SOME SILT, TRACE CLAY, WET *(continued)*	871.9	61	6 12 14	34	39	SS-20	-	-	-	-	-	-	-	-	-	15	A-1-b (V)	
	868.6	62																
VERY STIFF TO HARD, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		63																
		64																
		65																
		66	7 13 17	40	33	SS-21	4.00	13	20	19	29	19	20	14	6	12	A-4a (3)	
		67																
		68																
		69																
		70																
		71	10 19 23	55	28	SS-22	4.50	-	-	-	-	-	-	-	-	9	A-4a (V)	
		72																
		73																
		74																
		75																
		76	9 21 26	62	44	SS-23	4.50	-	-	-	-	-	-	-	-	7	A-4a (V)	
		77																
		78																
		79																
		80																
		81	23 37 43	105	39	SS-24	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
		82																
		83																
		84																
		85																
		86	21 26 37	83	78	SS-25	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		87																
		88																
		89																
		90																
		91	22 29 39	90	56	SS-26	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
	840.4	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 25.0' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; PUMPED 100 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:49 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.607	618	58	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
BORING LOG B-046-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:26:21 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL028.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/15/22 END: 9/15/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1416+08, 96' LT.
ALIGNMENT: IR-71
ELEVATION: 915.4 (MSL) EOB: 81.5 ft.
LAT / LONG: 40.087613, -82.987619

EXPLORATION ID B-047-0-22
PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV. 915.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
11.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	914.0																	
VERY STIFF, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, IRON STAINING, MOIST	910.9		3 3 3	8	78	SS-1	2.25	5	7	9	40	39	42	20	22	23	A-7-6 (13)	
VERY STIFF, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	908.4		2 2 2	5	100	SS-2	3.75	5	9	16	41	29	27	18	9	17	A-4a (7)	
VERY STIFF, BROWN, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, DAMP	905.9		3 4 5	12	100	SS-3	3.25	14	23	22	25	16	22	17	5	16	A-4a (1)	
VERY STIFF, GRAY AND BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	903.4		3 6 3	12	100	SS-4	2.75	9	13	17	36	25	23	15	8	13	A-4a (5)	
MEDIUM DENSE TO DENSE, GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, WET	898.4	W 902.9	9 10 13	30	39	SS-5	-	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
			12 17 12	38	28	SS-6	-	-	-	-	-	-	-	-	-	14	A-2-4 (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	895.9		10 15 16	41	39	SS-7	-	17	14	16	32	21	22	15	7	13	A-4a (4)	
STIFF, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, CONTAINS INTERBEDDED SAND SEAMS, GLACIAL TILL, MOIST	893.4		11 17 20	49	83	SS-8	1.25	-	-	-	-	-	-	-	-	16	A-4a (V)	
HARD, GRAY, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, GLACIAL TILL, MOIST TO DAMP	887.1		10 14 22	47	33	SS-9	4.50	31	11	14	29	15	22	14	8	15	A-4a (2)	
			13 16 25	54	39	SS-10	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
VERY DENSE, GRAY, **SANDY SILT**, TRACE CLAY, TRACE GRAVEL, CONTAINS INTERBEDDED SAND SEAMS, GLACIAL TILL, DAMP	882.1		15 27 27	71	100	SS-11	-	-	-	-	-	-	-	-	-	12	A-4a (V)	
HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP			10 15 23	50	100	SS-12	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			16 16 33	65	100	SS-13	4.50	15	14	24	30	17	20	13	7	9	A-4a (2)	
			15 19 40	78	100	SS-14	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
			27 30 37	88	67	SS-15	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
			14 25 40	86	100	SS-16	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:50 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.608	618	59	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR-161
BORING LOG B-047-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:26:59 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL029.dgn

PID: 109164 | SFN: | PROJECT: FRA-71-19.10 | STATION / OFFSET: 1416+08, 96' LT. | START: 9/15/22 | END: 9/15/22 | PG 2 OF 2 | B-047-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
HARD, GRAY, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP *(continued)*	855.4	61	16 21 33	71	100	SS-17	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		62																
		63																
		64																
		65																
		66	14 22 32	71	100	SS-18	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		67																
		68																
		69																
		70																
		71	20 29 41	92	100	SS-19	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
		72																
		73																
		74																
		75																
		76	15 18 37	72	100	SS-20	4.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		77																
		78																
		79																
		80																
		81	17 23 36	78	72	SS-21	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
	833.9	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 12.5' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; PUMPED 100 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:50 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.609 / TOTAL 618	60 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
BORING LOG B-047-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:27:34 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL030.dgn

PROJECT: FRA-71-19.10
TYPE: BRIDGE
PID: 109164 SFN:
START: 9/13/22 END: 9/13/22

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 75T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 1417+11, 60' RT.
ALIGNMENT: IR-71
ELEVATION: 932.2 (MSL) EOB: 91.5 ft.
LAT / LONG: 40.087875, -82.987044

EXPLORATION ID B-048-0-22
PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
12.0" ASPHALT AND 6.0" BASE (DRILLERS DESCRIPTION)	930.7																	
VERY STIFF TO HARD, BROWN, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, DAMP	917.7		1 4 3	9	56	SS-1	3.00	9	9	15	37	30	31	17	14	16	A-6a (8)	
			4 9 10	25	100	SS-2	4.25	-	-	-	-	-	-	-	-	15	A-6a (V)	
			5 5 8	17	100	SS-3	3.75	-	-	-	-	-	-	-	-	15	A-6a (V)	
			5 6 8	18	100	SS-4	4.50	-	-	-	-	-	-	-	-	17	A-6a (V)	
			4 7 8	20	100	SS-5	4.25	6	9	15	37	33	33	18	15	16	A-6a (9)	
HARD, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, DAMP	915.2		4 6 7	17	100	SS-6	4.50	2	4	11	39	44	44	21	23	19	A-7-6 (14)	
HARD, BROWNISH GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	912.7		3 9 13	29	100	SS-7	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
VERY STIFF, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, "AND" SILT, LITTLE SAND, TRACE GRAVEL, DAMP	910.2		2 3 7	13	100	SS-8	3.75	2	5	14	38	41	42	20	22	20	A-7-6 (13)	
STIFF TO HARD, BROWN BECOMING GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	902.7		4 6 7	17	100	SS-9	4.50	5	12	19	37	27	26	16	10	14	A-4a (6)	
			2 3 4	9	100	SS-10	4.25	-	-	-	-	-	-	-	-	15	A-4a (V)	
			2 2 3	7	100	SS-11	1.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
MEDIUM DENSE, DARK GRAY, **GRAVEL WITH SAND**, TRACE SILT, TRACE CLAY, WET	900.2	W 902.2	17 17 6	30	39	SS-12	-	-	-	-	-	-	-	-	-	16	A-1-b (V)	
STIFF TO HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP			8 5 6	14	100	SS-13	1.75	17	14	17	31	21	22	14	8	12	A-4a (3)	
			2 2 4	8	100	SS-14	1.75	-	-	-	-	-	-	-	-	14	A-4a (V)	
			3 5 8	17	100	SS-15	2.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
			3 7 9	21	100	SS-16	4.25	-	-	-	-	-	-	-	-	12	A-4a (V)	
			7 7 10	22	100	SS-17	4.25	-	-	-	-	-	-	-	-	13	A-4a (V)	
			12 23 32	72	33	SS-18	4.50	7	8	21	40	24	20	13	7	9	A-4a (6)	
			15 21 26	62	56	SS-19	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:50 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\FRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.610 / TOTAL 618	61 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
BORING LOG B-048-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:28:12 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL031.dgn

PID: 109164 | SFN: | PROJECT: FRA-71-19.10 | STATION / OFFSET: 1417+11, 60' RT. | START: 9/13/22 | END: 9/13/22 | PG 2 OF 2 | B-048-0-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
STIFF TO HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP *(continued)*	872.2	61	13 22 29	67	78	SS-20	4.50	-	-	-	-	-	-	-	-	8	A-4a (V)	
	868.9	62–63																
DENSE, GRAY, **GRAVEL AND STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, GLACIAL TILL, WET		64–65																
		66	12 17 20	49	33	SS-21	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
	863.9	67–68																
STIFF TO HARD, GRAY, **SANDY SILT**, LITTLE CLAY, TRACE TO LITTLE GRAVEL, GLACIAL TILL, DAMP		69–70																
		71	8 15 15	40	39	SS-22	1.75	16	17	20	31	16	19	13	6	12	A-4a (2)	
		72–75																
		76	21 27 38	86	44	SS-23	4.25	-	-	-	-	-	-	-	-	10	A-4a (V)	
		77–80																
		81	20 32 40	95	50	SS-24	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		82–85																
		86	19 31 41	95	100	SS-25	4.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		87–90																
		91	18 28 40	90	67	SS-26	4.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
	840.7	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 30.0' DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; PUMPED 100 GAL. BENTONITE GROUT; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 7/21/23 13:50 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\1ARCHIVE BY YEAR\2022 ARCHIVE\FRA-71-19.10\GINT FILES\XFRA-71-19.10.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.611 / TOTAL 618	62 / TOTAL 69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
BORING LOG B-048-0-22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:28:48 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL032.dgn

LOG OF BORING NO DB-1

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

1½" I.D. Split-barrel
DATE 6-18, 6-19-57 TYPE 3" I.D. Shelby Tube
LOC S.R. 161 44+11 78' L

SURFACE ELEVATION 913.6

DEPTH, FEET	Sample NO.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT. LB/CU.FT.	T.S.F. Penetrom.
0	1		6	Topsoil-Dark brown silt & clay		1.2
	2		13	Firm to very stiff light brown silt and clay, some sand, trace gravel		2.5
10	3		11	Medium-dense to dense brown * coarse and fine sand, some silt, some gravel, trace clay, with black shale fragments		1.5
	4		17			2.7
20	5		25	- @ 18.0' hard to very hard		4.5
	6		28	Very stiff dark gray sandy silt, some clay, little gravel with black shale fragments		4.5
30	7		25			4.5
	8		35			4.5
40	9		35			4.0
	10		P	- @ 48.0' to 49.0' layer fine to medium gravel	132	4.5
	10A					
50	11		59	- @ 49.0' very hard to extremely hard		4.5+
	12		55			4.5+
60	13		42	- from 60.0' small pockets dark brown weathered fine sandstone and shale		4.5+
	14		70			4.5+
70	15		36/5½"			4.5+

Mud Method.

4 3/4" fish tail bit.
140-pound hammer
30" drop
Used 30" of 5" casing.

*5.0'-5.5' cobble; lost drilling fluid; used heavier mud.

COMPLETION DEPTH 70.5' WATER DEPTH 34" DATE 36 Hours
APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 6

7-10-01, II, 1.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-001-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:29:23 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL033.dgn

LOG OF BORING NO DB-2

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-19-57 TYPE 1½" I.D. Split-barrel [illegible] S.R. 161 44+66 36' L

SURFACE ELEVATION 913.5

DEPTH, FEET	Sample No.	SAMPLES BLOWS PER FOOT	DESCRIPTION	T.S.F. Penetrom.
0			Topsoil-dark brown silt and clay	
	1	5	Very stiff gray-brown silty clay,	1.5
	2	7	little sand, trace gravel	2.5
10	3	7	Very stiff to hard dark gray sandy silt, some clay, little gravel	2.5
	4	14		3.0
20	-	29	- @ 20.0' drove on large	-
	5	26	gravel.	4.5
	6	26	- from 22.0' hard to very hard.	4.5
30	7	24		4.5+
	8	32		4.5+
40	9	31		4.0
	10	35		3.5
50	11	56		4.5+
60			Mud Method 3 7/8" fish tail bit 140-pound hammer 30" drop Used no casing	
70				
80				
90				

COMPLETION DEPTH 51.5' WATER DEPTH 34" DATE 36 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 7

7-1-01, II-1.

SHEET	TOTAL
P.613	618

SUBSET	TOTAL
64	69

PROJECT ID 109164

REVIEWER CH 08-28-23

DESIGNER ZM

DESIGN AGENCY NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-002-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:30:01 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL034.dgn

LOG OF BORING NO. DB-3

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-20-57 TYPE 1½" and 2" I.D. Split-barrel; 3" I.D. Shelby tube LOC S.R. 161 44+66 68' R

SURFACE ELEVATION 915.0

DEPTH, FEET	Sample No.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT LB/FT³	SHEARING STRENGTHS/FT² (0 0.5 1.0 1.5 2.0 2.5) MOISTURE CONTENT % NATURAL (PL — ● — LL)	T.S.F. Penetrom.
0				Topsoil-Soft dark brown silty clay			
	1		9	Very stiff brown sandy silt, some clay, trace gravel, with black shale fragments			2.5
5	2		P/300		121		3.5
	2A						
	3		P/350	Very stiff dark gray sandy silt, some clay, trace gravel - from 11.2' to 12.0' lenses of water bearing silty fine sand	110		-
10	3A						
	3B						
15	4		13				2.5
20			23	- @ 20.0' gravel too large for 1½" ϕ sampler.			-
	5		32 2-s	- @ 24.0' hard			4.5
25	6		44				4.5+
30	7		29				3.7
35	8		23				3.0
				Mud Method 3 7/8" fish tail bit 140-pound hammer 30" drop Used 5.0' of 4" casing			
40							
45							

COMPLETION DEPTH 36.5' WATER DEPTH 52" DATE 36 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 8

7-1-01, II, 1.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-003-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:30:37 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL035.dgn

7-1-01, II, 1.

LOG OF BORING NO. DB-4

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-20-57 TYPE 1½" and 2" I.D. Split-barrel 3" I.D. Shelby tube LOC S.R. 161 44+11 36' R

SURFACE ELEVATION 914.5

DEPTH, FEET	Sample No.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT. LB/FT³	SHEARING STRENGTH TONS/FT² / MOISTURE CONTENT % NATURAL (PL, LL)	T.S.F. Penetrom.
0				Topsoil-Soft dark brown silty clay			
	1		6	Very stiff to hard brown sandy silt, some gravel, little clay			2.0
5	2 2A		P	- from 8.5' to 16.0' some medium to large gravel - @ 10.0' refused on gravel	124		1.7
10	-	H	S				-
	3		30 2-8	Very stiff to very hard dark gray sandy silt, some clay, little gravel - @ 15.0' gravel too large for 1½" ϕ sampler			4.0
15	-						-
	4		28 2-8				4.5
20							-
	5		34 2-8				
25							4.5
	6		45				
30	-	H	P/450	- @ 30.0' too hard to push			-
	7		34				4.0
35							3.5
	8		26				
40				Mud Method 3 7/8" fish tail bit 140-pound hammer 30" drop Used 6.0' of 4" casing			
45							

COMPLETION DEPTH 36.5' WATER DEPTH 34" DATE 36 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 9

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.615	618	66	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-004-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:31:12 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL037.dgn

7-1-01, II, 1.

LOG OF BORING NO. DB-5

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-26-57 TYPE 1½" and 2" I.D. Split-barrel; 3" I.D. Shelby tube LOC S.R. 161 43+20 78' R

DEPTH, FEET	Sample No.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT. LB/FT³	SHEARING STRENGTH TONS/FT² (0 0.5 1.0 1.5 2.0 2.5) / MOISTURE CONTENT % NATURAL (PL ×—● LL) (10 15 20 25 30)	T.S.F. Penetrom.
0				SURFACE ELEVATION 914.0			
				Topsoil-Loose silt, with sod			
				Firm to very stiff brown silt and clay, some sand, trace gravel			
5	1		5				0.7
	2		P/250		114		2.0
	2A				121		
	2B						
				Dense fine to medium gravel with stiff gray clayey silt binder			
10	3		17 (2-8)				3.5
				Very stiff to hard dark gray sandy silt, some clay, little gravel			
15	4		20 (2-8)				4.0
20	5		20 (2-8)				2.7
				- @ 24.0' to 28.0' with less gravel			
25	6		20 (2-8)				1.3
				- @ 28.0' hard to very hard			
				Note: Shelby tried at 10.0' and 20.0' but refused on gravel			
30	7		56				4.5+
35	8		57				4.5+
				Mud Method			
				3 7/8" Fish tail bit			
				140-pound hammer			
				30" drop			
				Used 30" of 5" casing			
40							
45							

COMPLETION DEPTH 36.5' WATER DEPTH 37" DATE 48 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 10

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.616	618	67	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-005-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:31:47 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL038.dgn

LOG OF BORING NO. DB-7

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-25, 6-26-57 TYPE 1½" and 2" I.D. Split-barrel; 3" I.D. Shelby tube LOC S.R.161 42+66 78' L

SURFACE ELEVATION 914.0

DEPTH, FEET	Sample No.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT LB/FT³	SHEARING STRENGTH TONS/FT² (0 0.5 1.0 1.5 2.0 2.5) / MOISTURE CONTENT % NATURAL (P_L — ✕ — ● — ✕ — LL) (10 15 20 25 30)	T.S.F. Penetrom.
0				Topsoil-soft brown clay			
	1		6	Very stiff to hard silty clay, becoming sandy silt, some clay, trace gravel with depth	115		2.0
	2		P/150				2.5
	2A						
	2B						
10	3		60 (2-8)	Very dense layered brown fine to coarse sand and fine to medium gravel with gray silt binder			3.5
	4		17 (2-8)				3.5
20	5*		30 (2-8)	Hard dark gray sandy silt, some clay, little gravel			4.0
	6*		3½/6 (2-8)	- @ 16.0' hard to very hard			-
	7		66 (2-8)	- @ 27.0' very hard			4.5+
30	8		35 (2-8)				4.5+
	9		74 (2-8)				4.5+
40	10		58 (2-8)				4.5+
	11		53 (2-8)				4.5+
50	12		56	- @ 50.0' several fine to coarse sand lenses			4.5+
60				Mud Method 3 7/8" fish tail bit 140-pound hammer 30" drop Used 30" of 5" casing.			
70				*Note (a) Sample #5 had 10" of cuttings (b) Sample #6 had 12" of cuttings, drove on piece of gravel			
80							
90							

COMPLETION DEPTH 51.5' WATER DEPTH 44" DATE 24 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 11

7-1-01, II-1.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-007-0-57

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 8/29/2023 TIME: 5:32:26 PM USER: zli
pw:\\jacobs-us-va-pw.bentley.com:jacobs-us-va-pw-02\Documents\C6A20100 - FRA-071-1910 I-71 HSR\30 WIP\109164\400-Engineering\Geotechnical\Sheets\109164_ZL039.dgn

7-1-01, II, 1.

LOG OF BORING NO. DB-8

OHIO INTERSTATE SYSTEM - DESIGN SECTION D-12

DATE 6-27-57 TYPE 1½" and 2" I.D. Split-barrel 3" I.D. Shelby tube LOC S.R. 161 43+20 36' L

SURFACE ELEVATION 913.7

DEPTH, FEET	Sample No.	SAMPLES	BLOWS PER FOOT	DESCRIPTION	UNIT DRY WT LB/FT³	SHEARING STRENGTH TONS/FT² (0 0.5 1.0 1.5 2.0 2.5) / MOISTURE CONTENT % NATURAL (PL — ○ — LL)	T.S.F. Penetrom.
0				Topsoil-Soft brown silt and sod			
	1		6	Firm, becoming very stiff with depth, brown silt and clay, some sand, trace gravel			0.7
5	2		W/250				1.7
	2A						
10	3		23 2-s	Dense fine to medium gravel with medium to coarse sand with silty clay binder			2.25
				Very stiff to hard dark gray sandy silt, some clay, trace to little gravel			
15	4		24 2-s	- @ 18.0' hard			3.0
20	5		P/400		126		4.5
	5A						
				- @ 24.0' very stiff to hard	125		
25	6		P/200				2.0
	6A						
30	7		P/350	- @ 30.5' hard			4.5
	7A						
	7B						
				Very dense dark gray gravel with sand, little silt, trace clay			
35	8		60 2-s				-
	8A						
40				Mud Method 3 7/8" Fish tail bit 140-pound hammer 30" drop Used 30" of 5" casing			
45							

COMPLETION DEPTH 36.0' WATER DEPTH 37" DATE 48 Hours

APPLIED ENERGY 4200 INCH POUNDS PER BLOW

PLATE 12

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.618	618	69	69	109164	CH 08-28-23	ZM	NEAS National Engineering & Architectural Services Inc.

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. FRA-71-26.46 OVER SR 161
HISTORICAL BORING LOG DB-008-0-57