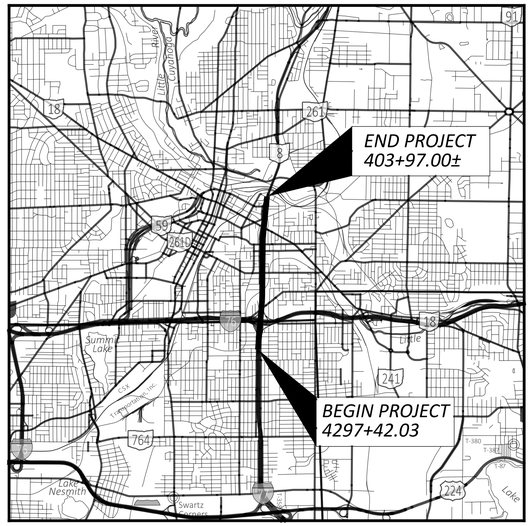
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
SUM-077/008-11.65/00.00

CITY OF AKRON

SUMMIT COUNTY



LOCATION MAP

LATITUDE: 41°04'15" N LONGITUDE: 81°30'15" W

SCALE: 1" = 1 MILES

PORTION TO BE IMPROVED

INTERSTATE HIGHWAY

FEDERAL ROUTES

STATE ROUTES

COUNTY & TOWNSHIP ROADS

OTHER ROADS

DESIGN DESIGNATION

	SR-8 NB	SR-8 SB	IR-77 NB	IR-77 SB	GOODKIRK
STRAIGHT LINE MILEAGE	(0.00 - 1.99)	(0.00 - 1.99)	(11.57 - 11.80)	(11.57 - 11.80)	
CURRENT ADT (2019)	60720	57700	60720	57700	11100
OPEN YEAR ADT (2032)	61810	54930	36410	33840	6490
DESIGN YEAR ADT (2052)	63160	55850	37330	34630	6550
DESIGN HOURLY VOLUME (2019)	4890	4870	4890	4870	
DIRECTIONAL DISTRIBUTION	53%	47%	52%	48%	N/A
TRUCKS (24 HOUR B&C)	4%	5%	4%	5%	4%
DESIGN SPEED	60 MPH	60 MPH	60 MPH	60 MPH	35 MPH
LEGAL SPEED	55 MPH	55 MPH	55 MPH	55 MPH	35 MPH

DESIGN FUNCTIONAL CLASSIFICATION: 02 - OTHER FREEWAY OR EXPRESSWAY

NHS PROJECT YES

DESIGN EXCEPTIONS

LANE WIDTH	08/25/26, P.005- P.019
SHOULDER WIDTH	08/25/26, P.005- P.019

ADA DESIGN WAIVERS

NONE REQUIRED

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:

ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

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STANDARD CONSTRUCTION DRAWINGS

SEE SHEET P.023

SUPPLEMENTAL SPECIFICATIONS

800-2023	7/17/26	904	7/15/22
804	1/16/26	905	1/17/25
807	1/17/25	908	1/17/25
808	7/17/26	909	7/17/26
809	7/17/26	913	4/16/21
813	7/21/23	1056	10/30/03
825	7/19/24	1120	7/15/22
832	7/17/26		
839	7/16/21		
840	1/16/26		
850	7/21/23		
899	1/16/26		

SPECIAL PROVISIONS

ASBESTOS REPORTS 06/27/25

ENVIRONMENTAL COMMITMENTS 08/31/26

FEDERAL PROJECT NUMBER

E220027

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

MAJOR REHABILITATION OF 1.93 MILES OF IR-77 AND SR-8 FROM LOVERS LANE TO PERKINS STREET INCLUDING RAMP AND SERVICE ROAD RECONFIGURATIONS. WORK INCLUDES NEW FULL DEPTH PAVEMENT, ASPHALT RESURFACING, STORM SEWERS, BRIDGES, RETAINING WALLS, LIGHTING, ITS, TRAFFIC CONTROL SIGNING AND PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 13.5 ACRE

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 2.0 ACRE

NOTICE OF INTENT EARTH DISTURBED AREA: N/A*

* - RUNOFF IS COLLECTED IN A COMBINED SEWER, THEREFORE A NOI IS NOT REQUIRED.

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, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS P.033 - P.035

Arthur G. Noirot Jr., P.E.
District 04 Deputy Director

Pamela Boratyn
Director, Department of Transportation

FINAL NOT FOR CONSTRUCTION
TRACINGS

TITLE SHEET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

DESIGNER SMG

REVIEWER KDK 5-19-26

PROJECT ID 114865

SHEET P.001 TOTAL 627

SUM-077/008-11.65/00.00

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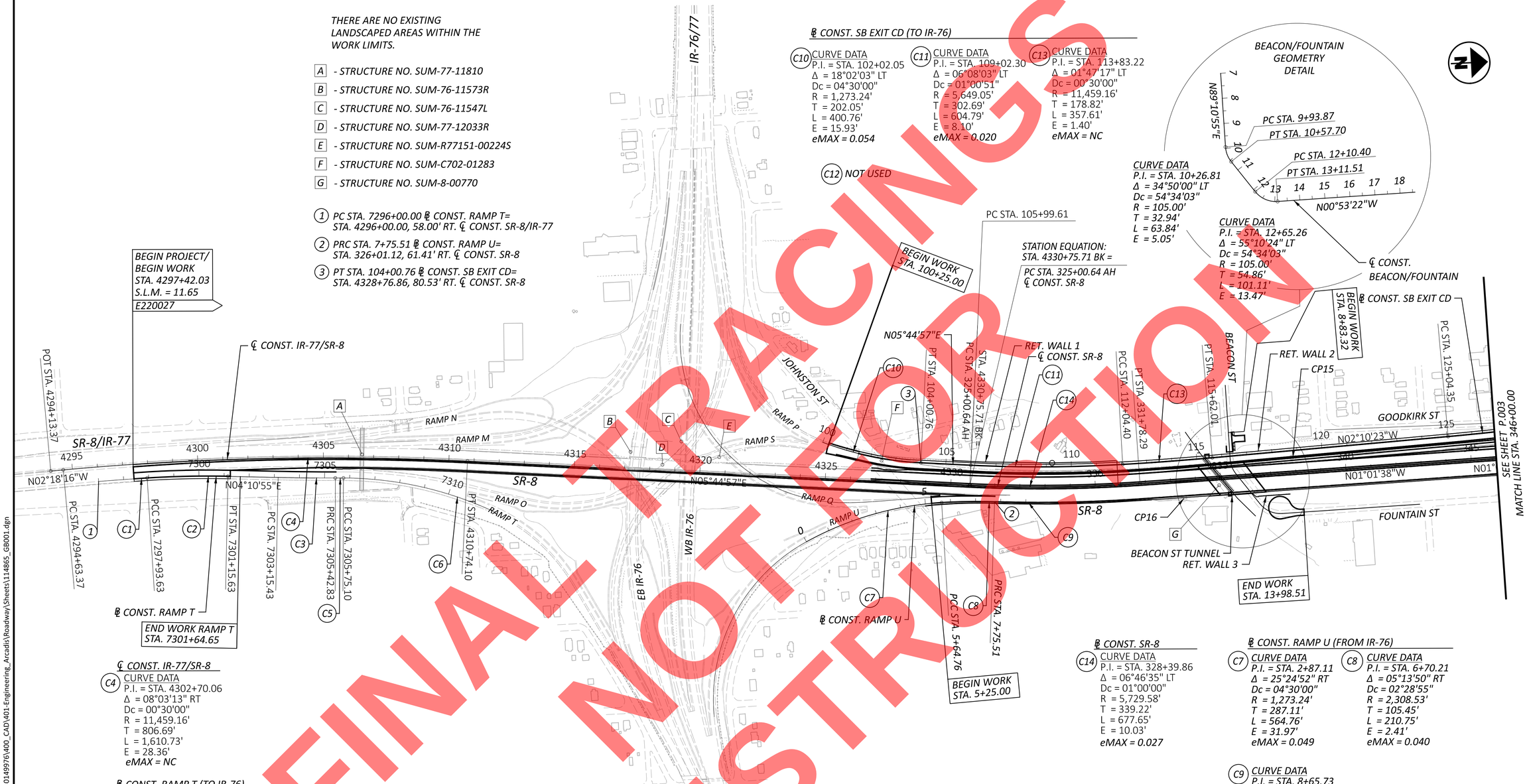

FINAL TRACINGS NOT FOR CONSTRUCTION

℄ CONST. IR-77/SR-8

C4 CURVE DATA
P.I. = STA. 4302+70.06
Δ = 08°03'13" RT
Dc = 00°30'00"
R = 11,459.16'
T = 806.69'
L = 1,610.73'
E = 28.36'
eMAX = NC

℄ CONST. RAMP T (TO IR-76)

C1 CURVE DATA
P.I. = STA. 7296+96.82
Δ = 00°58'23" RT
Dc = 00°30'09"
R = 11,401.16'
T = 96.82'
L = 193.63'
E = .41'
eMAX = NC

C2 CURVE DATA
P.I. = STA. 7299+54.73
Δ = 04°49'48" RT
Dc = 01°30'00"
R = 3,819.72'
T = 161.1'
L = 322'
E = 3.4'
eMAX = 0.037

C3 CURVE DATA
P.I. = STA. 7304+29.14
Δ = 01°08'13" LT
Dc = 00°30'00"
R = 11,459.16'
T = 113.70'
L = 227.40'
E = 0.56'
eMAX = NC

C5 CURVE DATA
P.I. = STA. 7305+58.97
Δ = 00°09'41" RT
Dc = 00°30'00"
R = 11,459.16'
T = 16.14'
L = 32.27'
E = .01'
eMAX = NC

C6 CURVE DATA
P.I. = STA. 7308+93.73
Δ = 25°04'55" RT
Dc = 04°00'00"
R = 1,432.39'
T = 318.63'
L = 627.05'
E = 35.01'
eMAX = 0.046

℄ CONST. SR-8

C14 CURVE DATA
P.I. = STA. 328+39.86
Δ = 06°46'35" LT
Dc = 01°00'00"
R = 5,729.58'
T = 339.22'
L = 677.65'
E = 10.03'
eMAX = 0.027

℄ CONST. RAMP U (FROM IR-76)

C7 CURVE DATA
P.I. = STA. 2+87.11
Δ = 25°24'52" RT
Dc = 04°30'00"
R = 1,273.24'
T = 287.11'
L = 564.76'
E = 31.97'
eMAX = 0.049

C8 CURVE DATA
P.I. = STA. 6+70.21
Δ = 05°13'50" RT
Dc = 02°28'55"
R = 2,308.53'
T = 105.45'
L = 210.75'
E = 2.41'
eMAX = 0.040

C9 CURVE DATA
P.I. = STA. 8+65.73
Δ = 01°47'06" LT
Dc = 00°59'22"
R = 5,790.98'
T = 90.22'
L = 180.42'
E = 0.70'
eMAX = 0.049

SURVEY CONTROL POINTS

PT. NAME	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
CP3	504281.37	2243184.96	---	---	1107.34	ALUMINUM DISC IN CONCRETE STAMPED "3"
CP4	504896.07	2243194.25	---	---	1109.19	ALUMINUM DISC IN CONCRETE STAMPED "4"
CP13	515969.52	2243234.92	373+64.86	75.46' LT	1040.17	ALUMINUM DISC IN CONCRETE STAMPED "13"
CP14	515468.51	2243200.52	368+65.88	72.95' LT	1042.88	ALUMINUM DISC IN CONCRETE STAMPED "14"
CP15	512390.99	2243240.14	337+92.58	60.83' LT	1050.87	ALUMINUM DISC IN CONCRETE STAMPED "15"
CP16	511949.58	2243380.50	333+48.72	71.59' RT	1063.68	ALUMINUM DISC IN CONCRETE STAMPED "16"
CP18	514608.49	2243326.68	360+08.16	65.45' RT	1033.60	ALUMINUM DISC IN CONCRETE STAMPED "18"
CP100	513949.36	2243102.21	353+53.17	170.80' LT	1049.91	¾" REBAR SET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-5955
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05-28-24
PROJECT ID 114865
SHEET P.002 TOTAL 627

SUM-077/008-11.65/00.00

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THERE ARE NO EXISTING LANDSCAPED AREAS WITHIN THE WORK LIMITS.

FOR STREETS (VINE, NASH, ORCHARD, AND CARROLL) SCHEMATIC INFORMATION, SEE SHEET P.004

FOR PROPOSED GOODKIRK STREET SCHEMATIC INFORMATION, SEE SHEET P.004

FOR PROPOSED SB ENTRANCE RAMP SCHEMATIC INFORMATION, SEE SHEET P.004

- H - STRUCTURE NO. SUM-8-00987
- I - STRUCTURE NO. SUM-C651-00110
- J - STRUCTURE NO. SUM-C645-00659
- K - STRUCTURE NO. SUM-18-10639
- L - STRUCTURE NO. SUM-8-01711
- M - STRUCTURE NO. SUM-59-03647
- N - STRUCTURE NO. SUM-8-01040

℄ CONST. SB EXIT CD

C15 CURVE DATA
P.I. = STA. 127+64.19
Δ = 02°35'52" LT
Dc = 00°30'00"
R = 11,459.16'
T = 259.84'
L = 519.58'
E = 2.95'
eMAX = NC

C17 CURVE DATA
P.I. = STA. 134+18.53
Δ = 10°48'46" RT
Dc = 04°00'00"
R = 1,432.39'
T = 135.56'
L = 270.32'
E = 6.4'
eMAX = 0.052

C18 CURVE DATA
P.I. = STA. 141+63.36
Δ = 05°09'46" LT
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'
eMAX = 0.020

C37 CURVE DATA
P.I. = STA. 145+75.31
Δ = 00°15'03" RT
Dc = 00°30'05"
R = 11,426.65'
T = 25'
L = 50'
E = .03'

4 PC STA. 0+00.00 ℄ CONST. RAMP S1= STA. 347+99.33, 61.41' RT. ℄ CONST. SR-8

5 PRC STA. 145+43.59 ℄ CONST. SB EXIT CD= STA. 364+53.12, 50.90' LT. ℄ CONST. SR-8

6 PC STA. 10+81.37 ℄ CONST. RAMP Q1= STA. 371+87.49, 115.02' RT. ℄ CONST. SR-8

7 PC STA. 35+23.59 ℄ CONST. RAMP P1= STA. 373+59.72, 98.88' LT. ℄ CONST. SR-8

℄ CONST. RAMP P

C25 CURVE DATA
P.I. = STA. 31+89.06
Δ = 15°02'16" RT
Dc = 04°00'00"
R = 1,432.39'
T = 189.06'
L = 375.94'
E = 12.42'

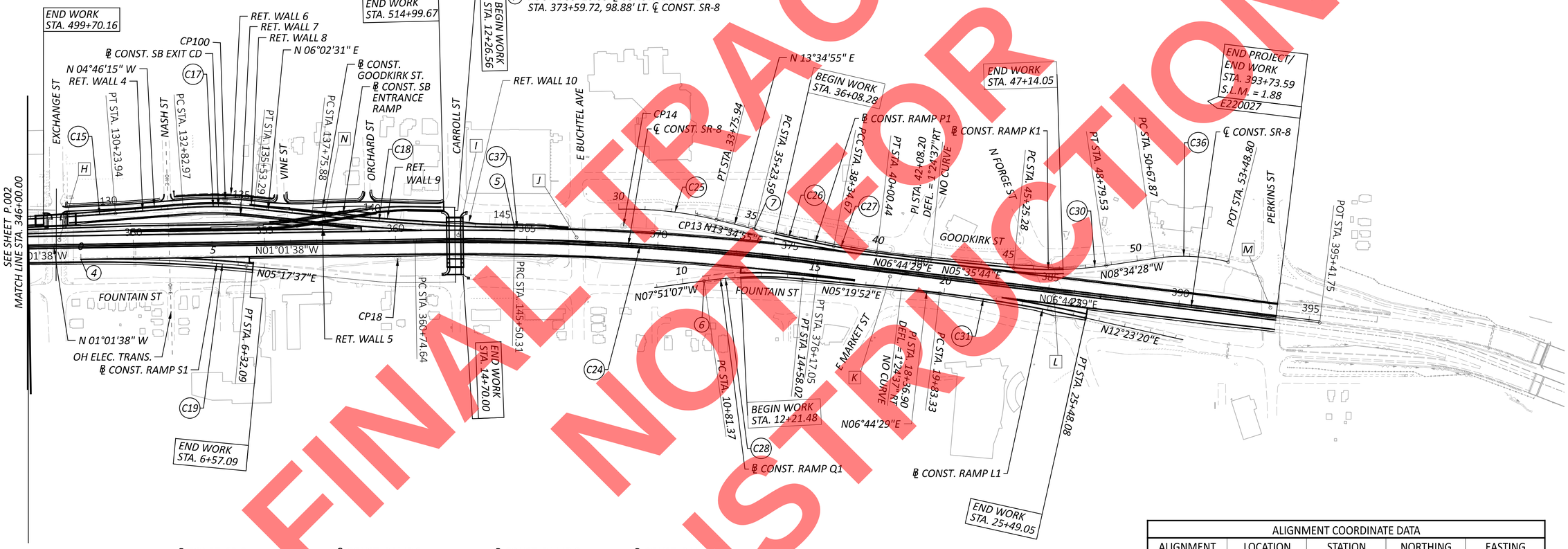
C26 CURVE DATA
P.I. = STA. 36+79.17
Δ = 03°06'39" LT
Dc = 01°00'00"
R = 5,729.58'
T = 155.58'
L = 311.08'
E = 2.11'
eMAX = 0.020

C27 CURVE DATA
P.I. = STA. 39+17.58
Δ = 03°43'47" LT
Dc = 02°15'00"
R = 2,546.48'
T = 82.91'
L = 165.77'
E = 1.35'
eMAX = 0.038

℄ CONST. RAMP K

C30 CURVE DATA
P.I. = STA. 47+03.31
Δ = 14°10'12" LT
Dc = 04°00'00"
R = 1,432.39'
T = 178.03'
L = 354.25'
E = 11.02'
eMAX = 0.052

C36 CURVE DATA
P.I. = STA. 52+10.16
Δ = 22°28'28" RT
Dc = 08°00'00"
R = 716.20'
T = 142.29'
L = 280.93'
E = 14'



℄ CONST. SR-8

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.39'
L = 1,542.41'
E = 26.19'
eMAX = NC

℄ CONST. RAMP S

C19 CURVE DATA
P.I. = STA. 3+16.37
Δ = 06°19'15" RT
Dc = 01°00'00"
R = 5,729.58'
T = 316.37'
L = 632.09'
E = 8.73'
eMAX = 0.027

℄ CONST. RAMP Q

C28 CURVE DATA
P.I. = STA. 12+70.61
Δ = 13°48'39" RT
Dc = 03°40'00"
R = 1,562.60'
T = 189.24'
L = 376.65'
E = 11.42'
eMAX = 0.049

℄ CONST. RAMP L

C31 CURVE DATA
P.I. = STA. 22+65.93
Δ = 05°38'51" RT
Dc = 01°00'00"
R = 5,729.58'
T = 282.6'
L = 564.75'
E = 6.97'
eMAX = 0.027

ALIGNMENT COORDINATE DATA

ALIGNMENT	LOCATION	STATION	NORTHING	EASTING
CONST. SR 8	POT	4294+13.37	507451.032	2243037.197
	PC	4294+63.37	507500.992	2243035.187
	HPI	4302+70.06	508307.031	2243002.751
	PT	4310+74.10	509109.665	2243083.561
	PC	325+00.64	511101.211	2243284.073
	HPI	328+39.86	511438.723	2243318.054
	PT	331+78.29	511777.887	2243311.973
	PC	360+74.64	514673.777	2243260.05
	HPI	368+47.03	515446.043	2243246.203
	PT	376+17.05	516213.093	2243336.873
	POT	395+41.75	518124.486	2243562.811

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1666
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05-28-24
PROJECT ID 114865
SHEET P.003 TOTAL 627

SUM-077/008-11.65/00.00

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THERE ARE NO EXISTING LANDSCAPED AREAS WITHIN THE WORK LIMITS.

SEE SHEETS P.208 - P.214 INTERSECTION ANGLES

SEE SHEET P.003 FOR STRUCTURE NO. INFORMATION

H I N

℄ CONST. SB EXIT CD
SEE SHEET P.003 FOR GEOMETRY INFORMATION

C15 C17 C18

℄ CONST. GOODKIRK ST

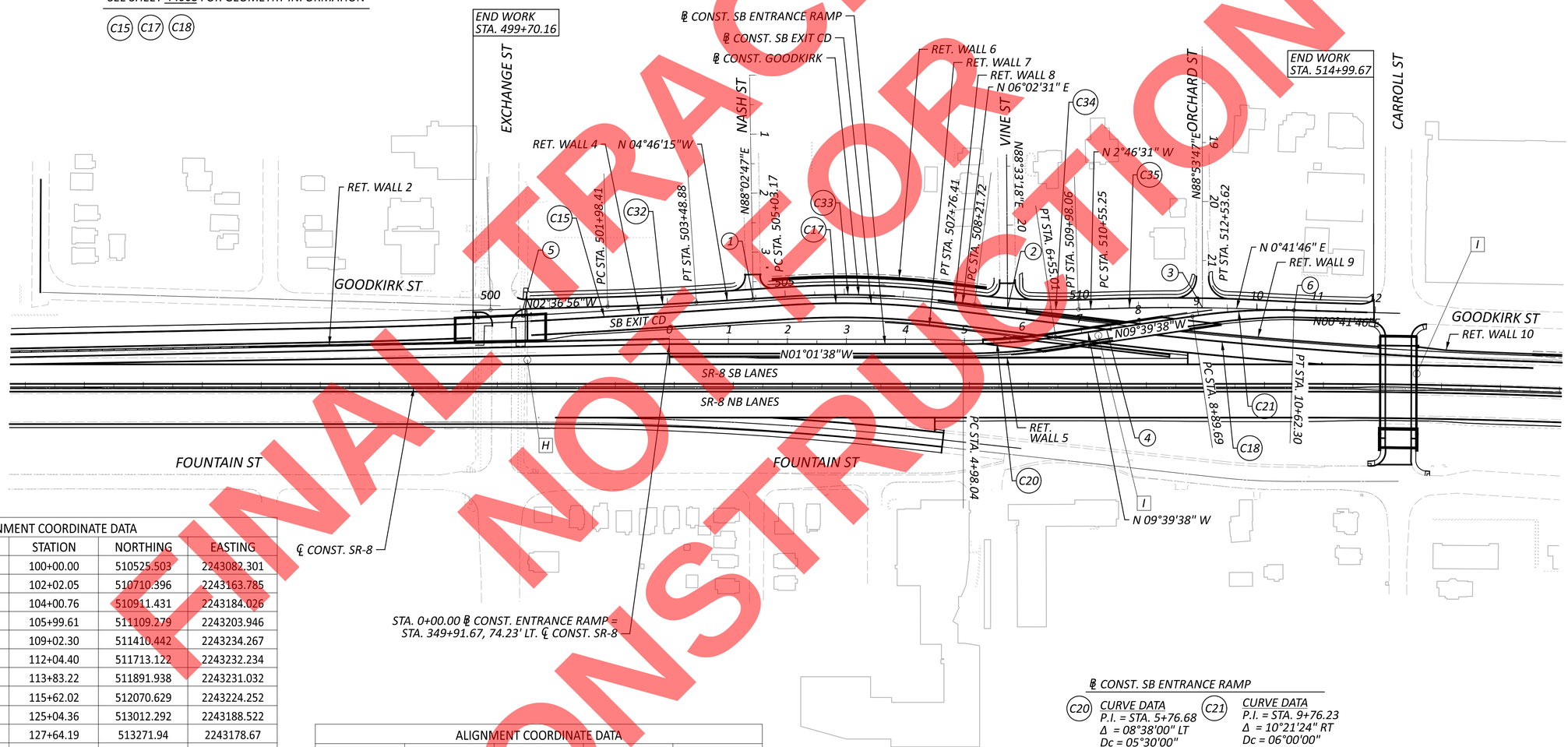
C32 CURVE DATA
P.I. = STA. 502+73.66
Δ = 02°09'19"
Dc = 01°25'57"
R = 4000.00'
T = 75.25'
L = 150.48'
E = 0.71'
eMAX = NC

C33 CURVE DATA
P.I. = STA. 506+40.20
Δ = 10°48'46"
Dc = 03°57'26"
R = 1447.89'
T = 137.03'
L = 273.24'
E = 6.47'
eMAX = NC

C34 CURVE DATA
P.I. = STA. 509+10.07
Δ = 08°49'02"
Dc = 05°00'00"
R = 1145.92'
T = 88.35'
L = 176.35'
E = 3.40'
eMAX = NC

C35 CURVE DATA
P.I. = STA. 511+54.47
Δ = 03°28'17"
Dc = 01°45'00"
R = 3274.05'
T = 99.22'
L = 198.37'
E = 1.50'
eMAX = NC

1. STA. 504+45.41 ℄ CONST. GOODKIRK ST = STA. 3+78.85 ℄ EX R/W NASH ST.
2. STA. 508+77.97 ℄ CONST. GOODKIRK ST = STA. 21+39.98 ℄ CONST. VINE ST.
3. STA. 512+08.26 ℄ CONST. GOODKIRK ST = STA. 21+79.79 ℄ EX R/W ORCHARD ST.
4. STA. 138+25.77 ℄ CONST. SB EXIT CD = STA. 7+42.40 ℄ CONST. ENTRANCE RAMP
5. STA. 500+55.00 ℄ CONST. GOODKIRK ST. = STA. 128+34.49, 14.50' ℄ CONST. SB CD EXIT
6. STA. 513+63.46 ℄ CONST. GOODKIRK ST. = PT STA. 10+62.30 ℄ CONST. SB ENTRANCE RAMP



ALIGNMENT COORDINATE DATA				
ALIGNMENT	LOCATION	STATION	NORTHING	EASTING
℄ CONST. SB EXIT CD	PC	100+00.00	510525.503	2243082.301
	HPI	102+02.05	510710.396	2243163.785
	PT	104+00.76	510911.431	2243184.026
	PC	105+99.61	511109.279	2243203.946
	HPI	109+02.30	511410.442	2243234.267
	PCC	112+04.40	511713.122	2243232.234
	HPI	113+83.22	511891.938	2243231.032
	PT	115+62.02	512070.629	2243224.252
	PC	125+04.36	513012.292	2243188.522
	HPI	127+64.19	513271.94	2243178.67
	PT	130+23.94	513530.876	2243157.059
	PC	132+82.97	513789.013	2243135.515
	HPI	134+18.53	513924.106	2243124.24
	PT	135+53.29	514058.915	2243138.509
	PC	137+75.88	514280.267	2243161.938
	HPI	141+63.36	514665.591	2243202.722
	PRC	145+50.31	515053.021	2243208.667
	HPI	145+75.31	515078.018	2243209.05
	PT	146+00.31	515103.013	2243209.543

ALIGNMENT COORDINATE DATA				
ALIGNMENT	LOCATION	STATION	NORTHING	EASTING
℄ CONST. SB ENTRANCE RAMP	POT	0+00.00	513589.646	2243205.243
	PC	4+98.04	514087.608	2243196.315
	HPI	5+76.68	514166.229	2243194.905
	PT	6+55.01	514243.749	2243181.709
	PC	8+89.69	514475.097	2243142.328
	HPI	9+76.23	514560.412	2243127.805
	PT	10+62.30	514646.947	2243128.856
	POT	12+41.41	514826.046	2243131.032

℄ CONST. SB ENTRANCE RAMP

C20 CURVE DATA
P.I. = STA. 5+76.68
Δ = 08°38'00" LT
Dc = 05°30'00"
R = 1,041.74'
T = 78.63'
L = 156.97'
E = 2.96'
eMAX = 0.053

C21 CURVE DATA
P.I. = STA. 9+76.23
Δ = 10°21'24" RT
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'
eMAX = 0.036

HORIZONTAL SCALE IN FEET
0 50 100 200

SCHEMATIC PLAN - BRAID

FINAL TRACINGS NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05-28-24
PROJECT ID 114865
SHEET P.004 TOTAL 627

SUM-077/008-11.65/00.00

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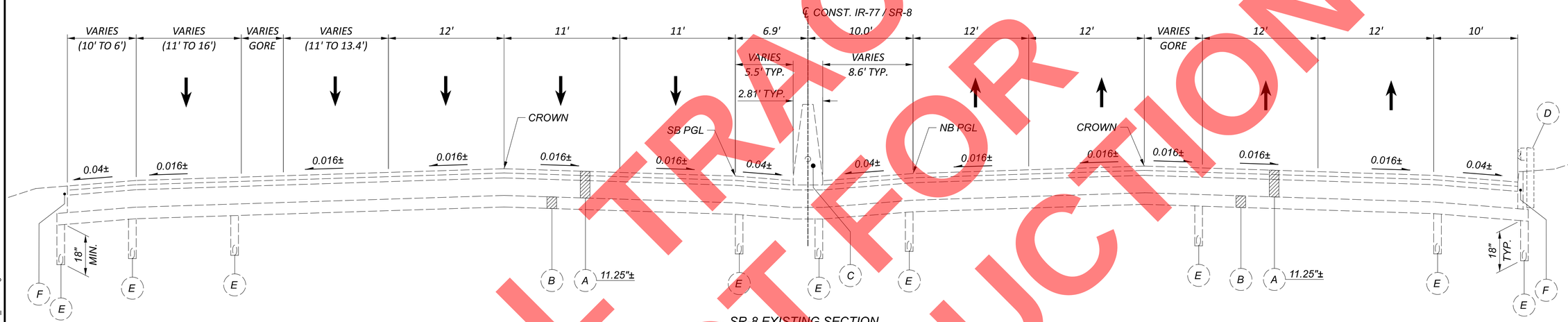
EXISTING LEGEND

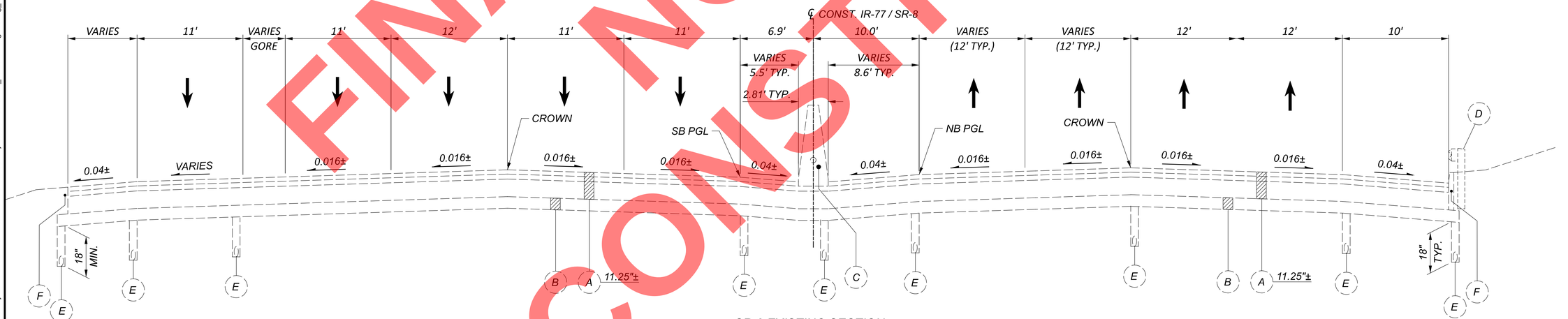
- (A) ASPHALT CONCRETE (THICKNESS AS NOTED)
- (B) 6"± SUBBASE
- (C) CONCRETE BARRIER
- (D) GUARDRAIL, STEEL BEAM
- (E) UNDERDRAIN
- (F) CURB, TYPE 4-C
- (G) 10"± REINFORCED CONCRETE PAVEMENT



SR-8 EXISTING SECTION

STA. 4298+00.00 TO STA. 4305+45.90 SR-8 SB LANES

STA. 4298+00.00 TO STA. 4305+77.68 SR-8 NB LANES



SR-8 EXISTING SECTION

STA. 4292+10.00 TO STA. 4298+00.00 SR-8 SB LANES

STA. 4292+10.00 TO STA. 4298+00.00 SR-8 NB LANES

FINAL TRACINGS
NOT FOR
CONSTRUCTION

EXISTING TYPICAL SECTIONS SR-8

SUM-077/008-11.65/00.00

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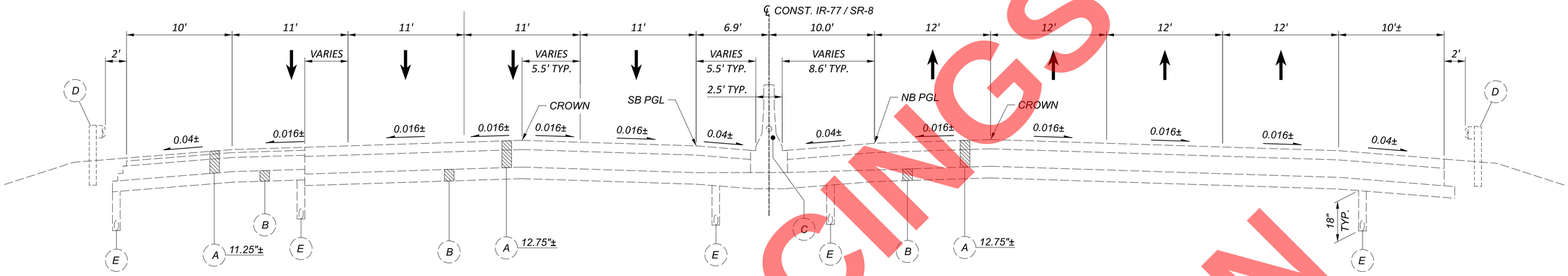
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1855
www.arcadis.com

DESIGNER	MAL
REVIEWER	SMG 05-28-24
PROJECT ID	114865
SHEET	P.005
TOTAL	627

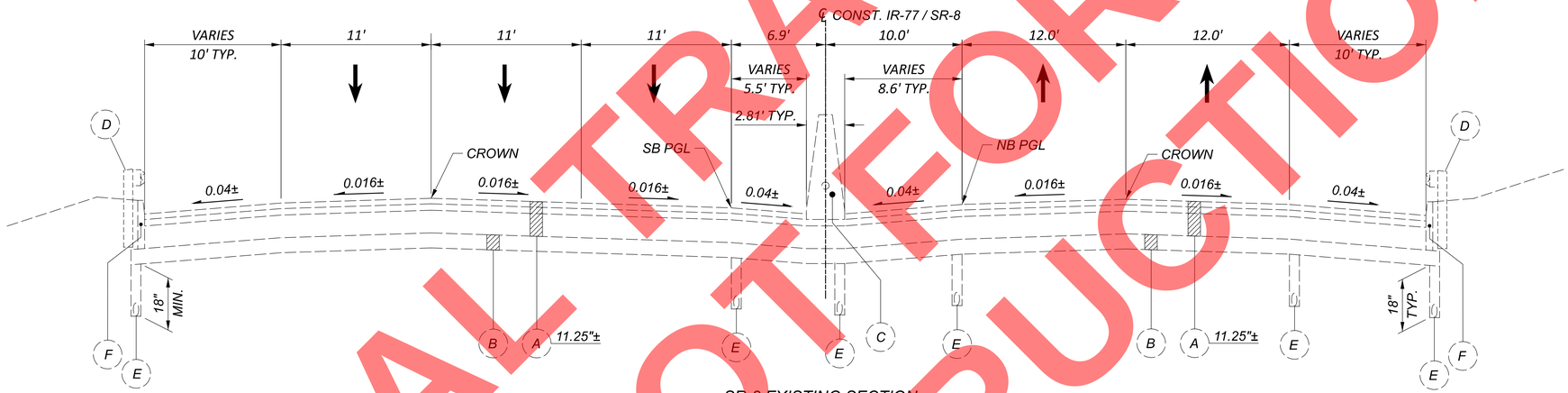
NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005



SR-8 EXISTING SECTION

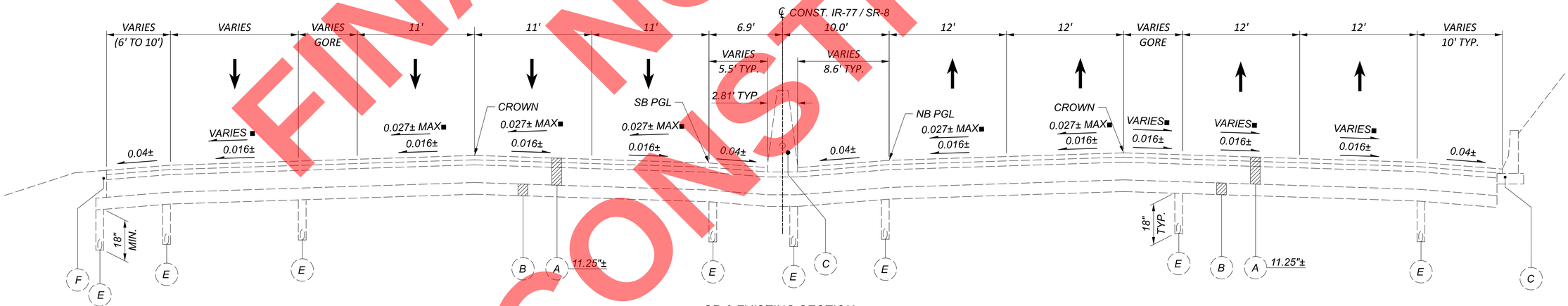
STA. 335+94.93 TO STA. 346+39.19



SR-8 EXISTING SECTION

STA. 4309+77.62 TO STA. 4327+57.04 SR-8 SB LANES

STA. 4305+77.68 TO STA. 4329+57.78 SR-8 NB LANES



SR-8 EXISTING SECTION

STA. 4305+45.90 TO STA. 4309+77.62 SR-8 SB LANES (NORMAL SECTION)

STA. 4327+57.04 TO STA. 4329+04.77 SR-8 SB LANES (NORMAL SECTION)
STA. 4329+04.77 TO STA. 333+70.10 SR-8 SB LANES (■ = SUPER. SECTION)
STA. 333+70.10 TO STA. 334+48.52 SR-8 SB LANES (NORMAL SECTION)

STA. 4329+57.78 TO STA. 333+70.10 SR-8 NB LANES (■ = SUPER. SECTION)
STA. 333+70.10 TO STA. 334+93.61 SR-8 NB LANES (NORMAL SECTION)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

EXISTING TYPICAL SECTIONS SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER MAL

REVIEWER SMG 05-28-24

PROJECT ID 114865

SHEET P.006 TOTAL 627

SUM-077/008-11.65/00.00

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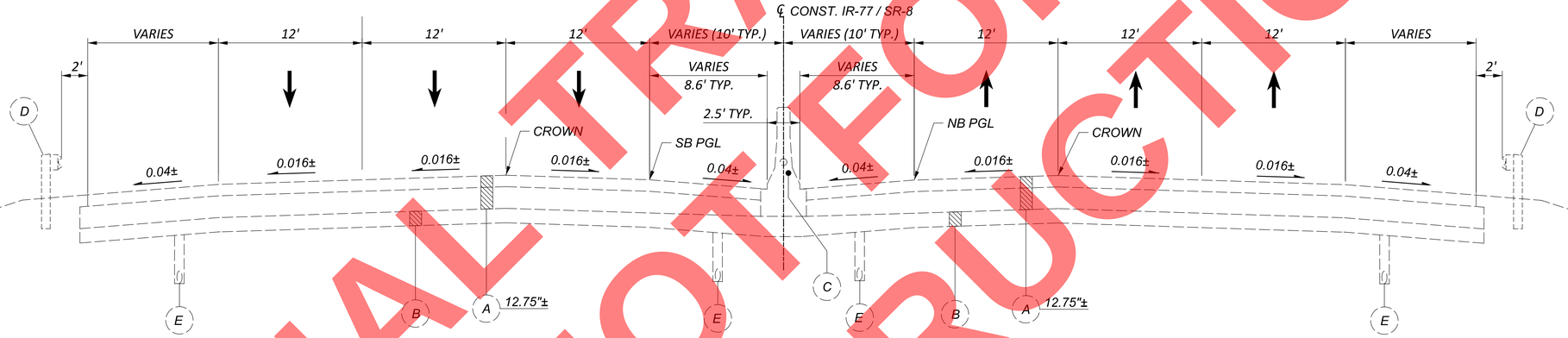
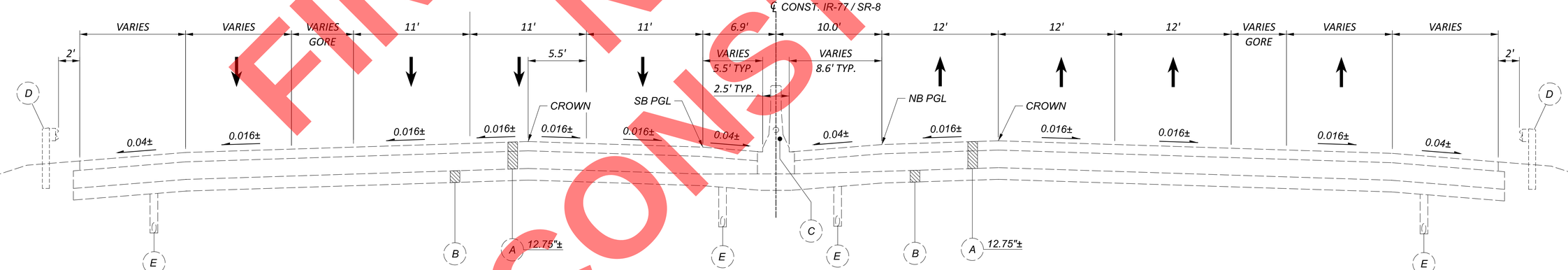
NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005



SR-8 EXISTING SECTION

STA. 354+24.91 TO STA. 393+54.11



SR-8 EXISTING SECTION

STA. 347+71.28 TO STA. 354+24.91

FINAL TRACINGS
NOT FOR CONSTRUCTION

EXISTING TYPICAL SECTIONS SR-8

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
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DESIGNER MAL

REVIEWER SMG 05-28-24

PROJECT ID 114865

SHEET P.007 | TOTAL 627

SUM-077/008-11.65/00.00

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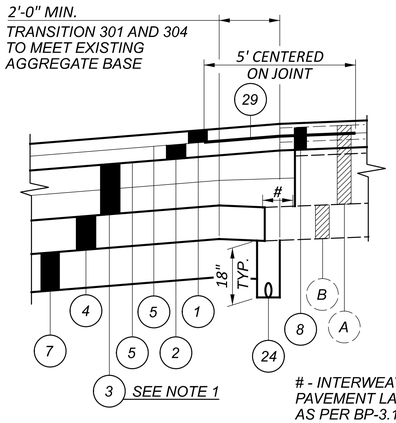
TYPICAL SECTION NOTES:

1. PLACE ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449) IN MULTIPLE LIFTS WHEN THE THICKNESS FOR ITEM 302 IS GREATER THAN 7.75 INCHES. LIFTS SHALL BE A MINIMUM 4 INCHES THICK. ITEM 407 - NON-TRACKING TACK COAT SHALL BE APPLIED BETWEEN LIFTS.

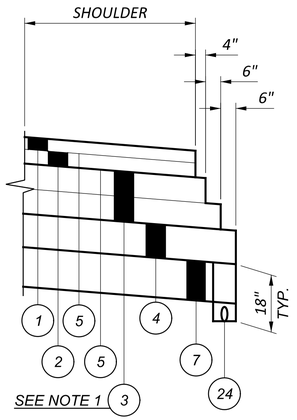
2. PLACE ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449) IN MULTIPLE LIFTS WHEN THE THICKNESS FOR ITEM 301 IS GREATER THAN 6 INCHES. LIFTS SHALL BE A MINIMUM 3 INCHES THICK. ITEM 407 - NON-TRACKING TACK COAT SHALL BE APPLIED BETWEEN LIFTS.

3. ALTHOUGH NOT SHOWN ON THE TYPICAL SECTIONS, RACEWAYS SHALL BE INCLUDED WHERE NECESSARY AS SHOWN ON SCD RM-4.3 AND RM-4.5.

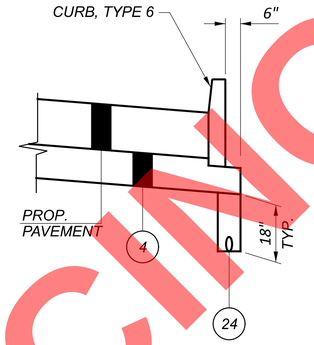


- INTERWEAVE PAVEMENT LAYERS AS PER BP-3.1

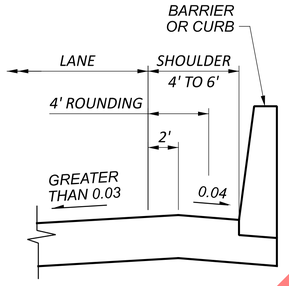
FULL-DEPTH TO RESURFACING SECTION



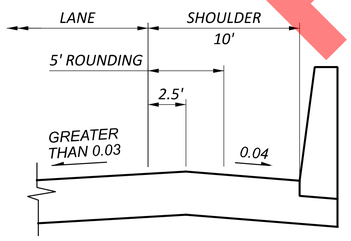
FULL-DEPTH PAVEMENT EDGE DETAIL



PROPOSED CURBED EDGE DETAIL



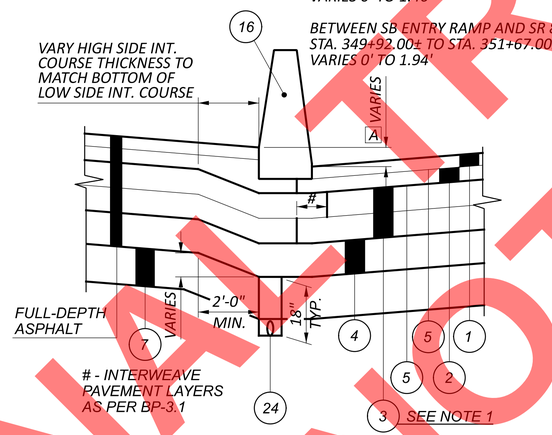
HIGH-SIDE SHOULDER DETAIL
(LESS THAN OR EQUAL TO 6' SHOULDER)



HIGH-SIDE SHOULDER DETAIL
(10' SHOULDER)

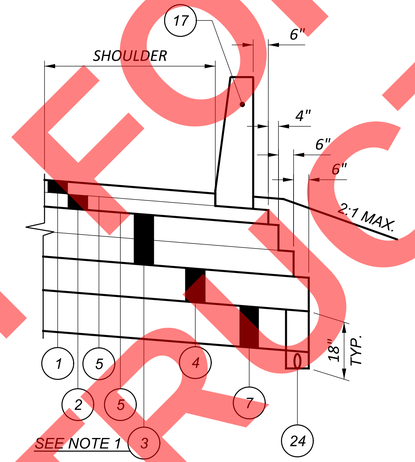
A BETWEEN SB EXIT CD AND SR 8 SB:
STA. 4328+26.00± TO STA. 346+32.00± - VARIES 0' TO 1.46'

BETWEEN SB ENTRY RAMP AND SR 8 SB:
STA. 349+92.00± TO STA. 351+67.00± - VARIES 0' TO 1.94'

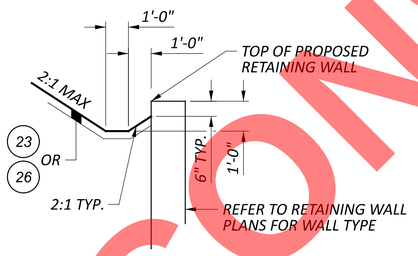


- INTERWEAVE PAVEMENT LAYERS AS PER BP-3.1

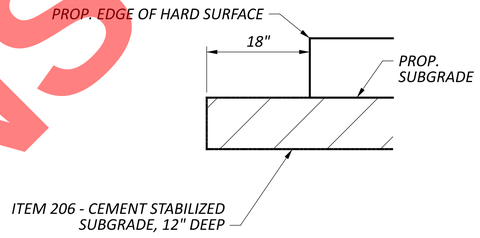
TYPE C BARRIER PAVEMENT DETAIL



PROPOSED BARRIER EDGE DETAIL



TYPICAL WALL DITCH DETAIL



SUBGRADE STABILIZATION

ALTHOUGH NOT SHOWN ON INDIVIDUAL TYPICAL SECTIONS, GLOBAL CHEMICAL STABILIZATION WILL BE PERFORMED AS DETAILED IN THE GENERAL NOTES

FOR EXISTING LEGEND, SEE SHEET P.005

PROPOSED LEGEND

1. ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447)
2. ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE A (446), AS PER PLAN
3. ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449) (THICKNESS, AS NOTED) [PLACE IN 2 LIFTS, SEE NOTE 1]
4. ITEM 304 - 6" AGGREGATE BASE (UNLESS OTHERWISE NOTED)
5. ITEM 407 - NON-TRACKING TACK COAT
6. ITEM 209 - LINEAR GRADING, AS PER PLAN/ ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), UNDER GUARDRAIL
7. ITEM 206 - CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP
8. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH, 1.5" MIN.)
9. ITEM 441 - 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG70-22M
10. ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
11. ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22, (449) [PLACE IN 2 LIFTS, SEE NOTE 2]
12. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=VAR., SEE BRIDGE PLANS)
13. ITEM 606 - GUARDRAIL, TYPE MGS
14. ITEM 622 - BARRIER MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB
15. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1
16. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C
17. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
18. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "A"
19. ITEM 609 - CURB, TYPE 4-C
20. ITEM 609 - CURB, TYPE 6
21. ITEM 608 - 4" CONCRETE WALK
22. NOT USED
23. ITEM 601 - CONCRETE SLOPE PROTECTION, AS PER PLAN
24. ITEM 605 - 6" BASE PIPE UNDERDRAIN WITH GEOTEXTILE FABRIC
25. ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN WITH GEOTEXTILE FABRIC
26. ITEM 659 - SEEDING AND MULCHING
27. PREFORMED EXPANSION JOINT FILLER (PEJF) PER 705.03, THICKNESS AS SHOWN, COST INCIDENTAL TO ITEM 609/622
28. ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1), AS PER PLAN
29. NOT USED
30. ITEM 609 - CURB, TYPE 2-A
31. ITEM 452 - 4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
32. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN, "B"
33. ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
34. ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)

FINAL TRACINGS NOT FOR CONSTRUCTION

PROPOSED TYPICAL SECTIONS - DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.008 TOTAL 627

SUM-077/008-11.65/00.00

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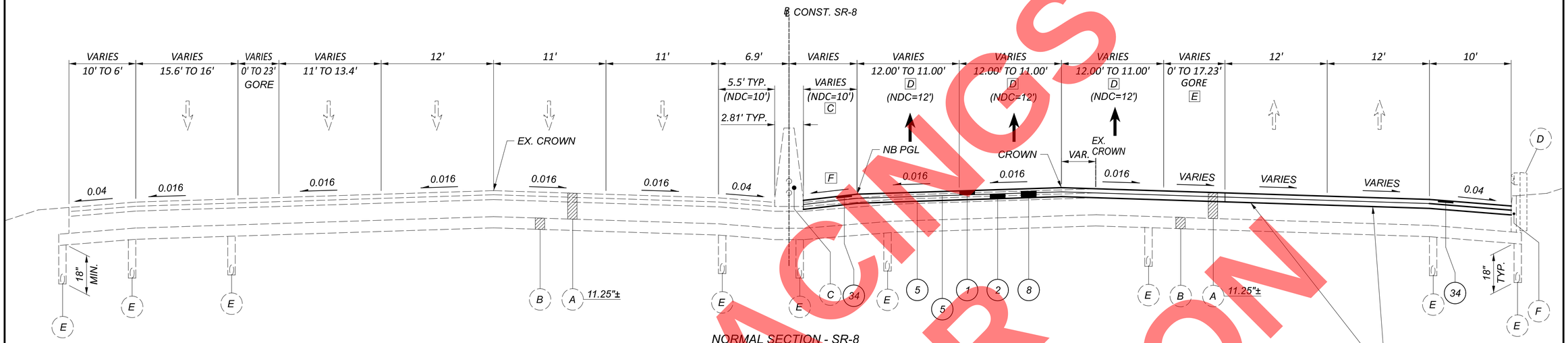
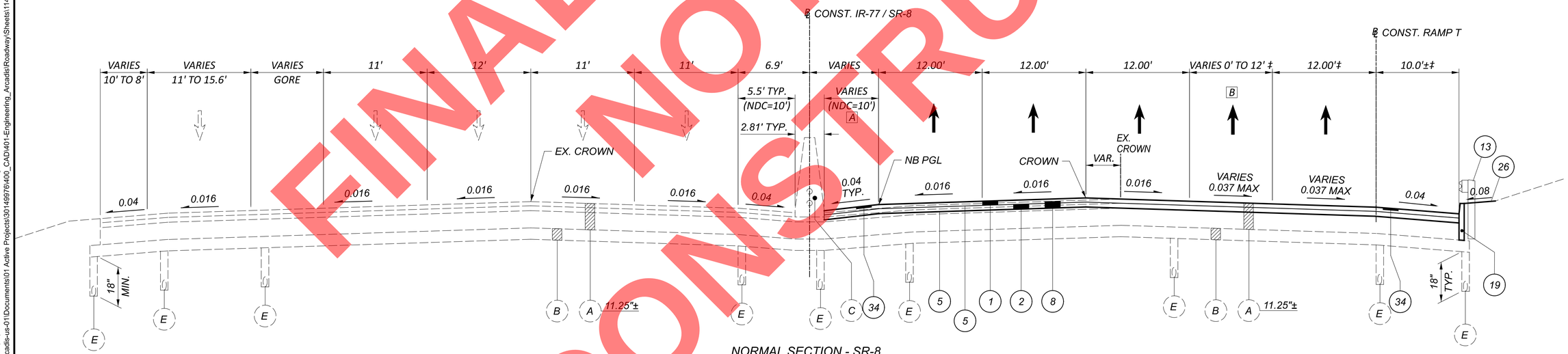


NORMAL SECTION - SR-8

STA. 4300+77.09 TO STA. 4305+45.90 SR-8 SB LANES

STA. 4301+29.39 TO STA. 4305+50.73 SR-8 NB LANES

C	STA. 4301+29.39 TO STA. 4303+20.00: VARIES 6.2' TO 5.0' STA. 4303+20.00 TO STA. 4305+50.73: 5.0'± TYPICAL (WIDTH VARIES ALONG FACE OF EXIST. BARRIER)
D	STA. 4301+29.39 TO STA. 4303+20.00: 12.00' STA. 4303+20.00 TO STA. 4305+00.00: VARIES 12.00' TO 11.00' STA. 4305+00.00 TO STA. 4305+50.73: 11.00'
E	STA. 4301+29.39 TO STA. 4305+50.73: VARIES 0.0' TO 17.3'
F	STA. 4301+29.39 TO STA. 4302+25.00: VARIES 0.04 TO 0.06 STA. 4302+25.00 TO STA. 4304+00.00: 0.06 STA. 4304+00.00 TO STA. 4304+25.00 STA. 4304+25.00 TO STA. 4305+50.73: 0.04



NORMAL SECTION - SR-8

STA. 4297+42.03 TO STA. 4300+77.09 SR-8 SB LANES

STA. 4297+42.03 TO STA. 4301+29.39 SR-8 NB LANES

A	STA. 4297+42.03 TO STA. 4301+29.39: VARIES 8.6' TO 6.2'
B	STA. 4297+42.03 TO STA. 4301+29.39: VARIES 0.0' TO 12.0'

‡ - MEASURED NORMAL TO RAMP BASELINE

NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008

FINAL TRACINGS
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CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER MAL

REVIEWER SMG 05-28-24

PROJECT ID 114865

SHEET P.009 TOTAL 627

SUM-077/008-11.65/00.00

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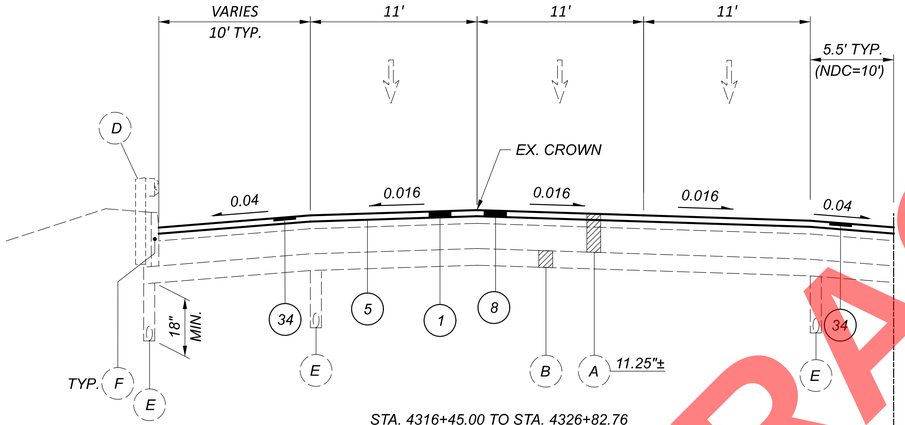
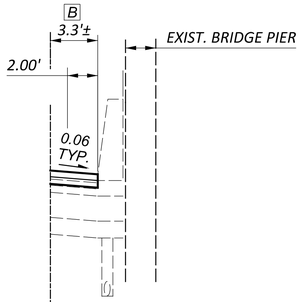
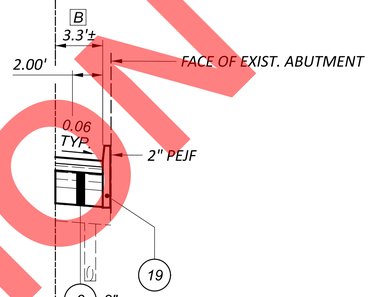
NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008



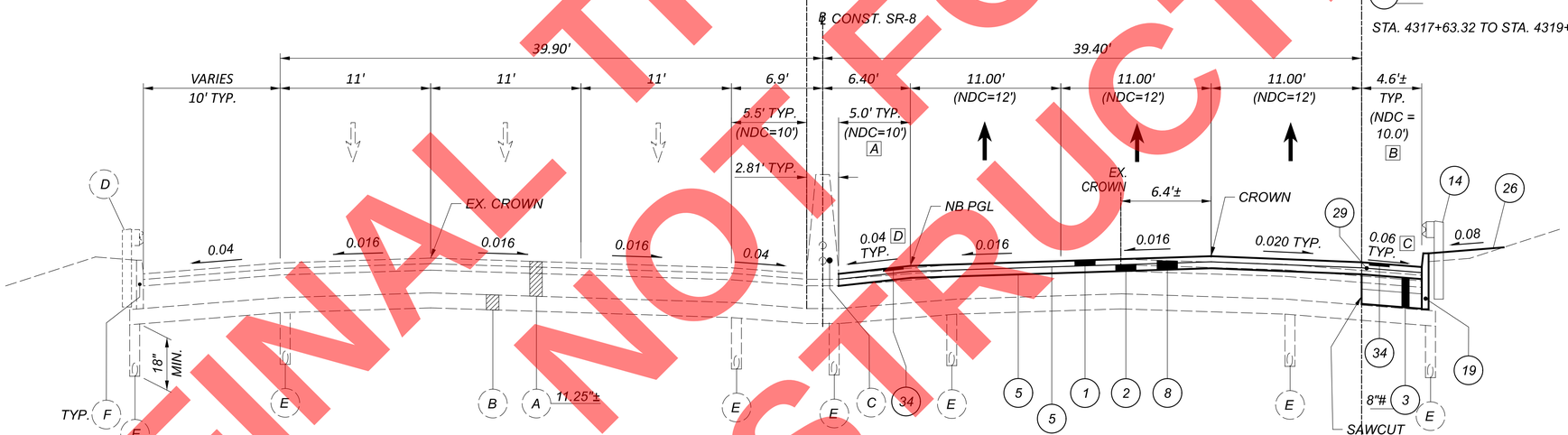
STA. 4316+45.00 TO STA. 4326+82.76



STA. 4319+05.46 TO STA. 4319+83.28



STA. 4317+63.32 TO STA. 4319+05.46



NORMAL SECTION - SR-8

STA. 4305+45.90 TO STA. 4326+82.76 SR-8 SB LANES

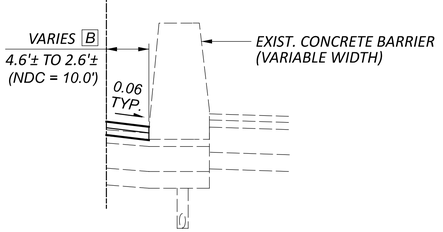
STA. 4305+50.73 TO STA. 4329+57.78 SR-8 NB LANES

STA. 4307+28.88 TO STA. 4317+63.32
STA. 4319+83.28 TO STA. 4329+57.78

♦ - REFER TO ROADWAY CROSS SECTIONS

- THICKEN 301 TO MATCH BOTTOM OF EXISTING 301, MIN. 8"

A STA. 4305+50.73 TO STA. 4309+34.01: 5.0'± STA. 4309+34.01 TO STA. 4310+50.89: VARIES (3.9'± MIN.) STA. 4310+50.89 TO STA. 4316+30.00: 5.0'± STA. 4316+30.00 TO STA. 4317+80.00: VARIES (1.6'± MIN.) STA. 4317+80.00 TO STA. 4320+00.57: VARIES (3.5'± TYP.) STA. 4320+00.57 TO STA. 4321+16.25: 5.0'± STA. 4321+16.25 TO STA. 4322+57.76: VARIES (1.9'± MIN.) STA. 4322+57.76 TO STA. 4326+40.00: 5.0'± STA. 4326+40.00 TO STA. 4328+45.00: VARIES (3.5' MIN.) STA. 4328+45.00 TO STA. 4329+57.78: 5.0'± TYP.	B STA. 4305+50.73 TO STA. 4307+00.00: VARIES (2.6'± MIN.) STA. 4307+00.00 TO STA. 4316+83.00: 4.6'± STA. 4316+83.00 TO STA. 4320+10.00: VARIES (3.3'± MIN.) STA. 4320+10.00 TO STA. 4329+57.78: 4.6'± C STA. 4305+50.73 TO STA. 4329+07.78: 0.06 TYP. STA. 4329+07.78 TO STA. 4329+57.78: VARIES 0.06 TO 0.02 D STA. 4305+50.73 TO STA. 4315+00.00: 0.04 TYP. STA. 4315+00.00 TO STA. 4316+00.00: VARIES 0.04 TO 0.06 STA. 4316+00.00 TO STA. 4318+50.00: 0.06 STA. 4318+50.00 TO STA. 4319+50.00: VARIES 0.06 TO 0.04 STA. 4319+50.00 TO STA. 4329+57.78: 0.04 TYP.



STA. 4305+78.30 TO STA. 4307+28.88

PROPOSED TYPICAL SECTIONS - SR-8

FINAL TRACINGS
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DESIGN AGENCY
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AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

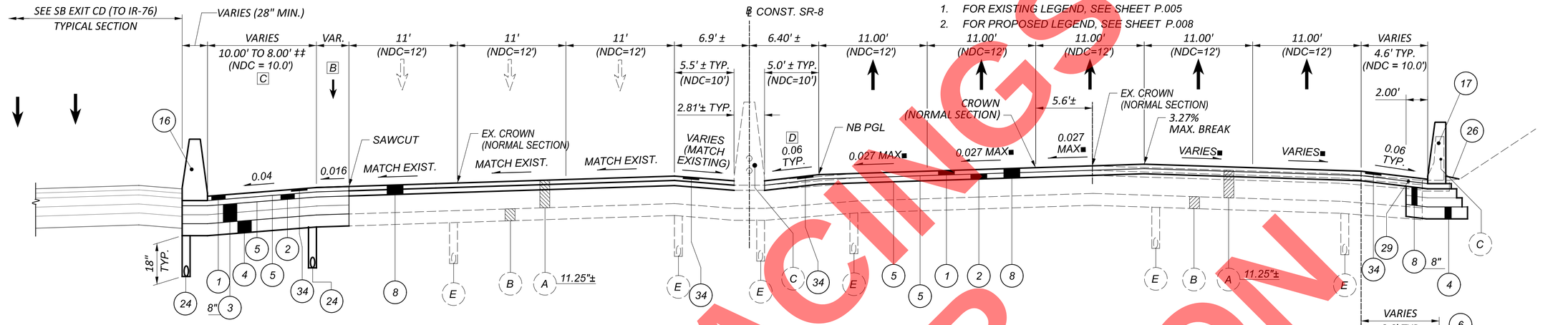
DESIGNER
MAL

REVIEWER
SMG 05-28-24

PROJECT ID
114865

SHEET P.010 | TOTAL 627

NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008



STA. 332+38.75 TO STA. 334+48.18▲

SUPERELEVATED / NORMAL SECTION - SR-8

SUPERELEVATED : STA. 326+01.11 TO STA. 333+70.10 SR-8 SB LANES
NORMAL : STA. 333+70.10 TO STA. 334+48.18▲ SR-8 SB LANES

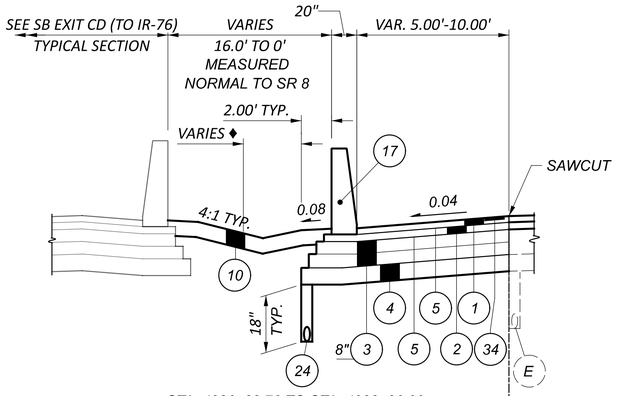
SUPERELEVATED : STA. 326+01.11 TO STA. 334+37.15 SR-8 NB LANES
NORMAL : STA. 334+37.15 TO STA. 334+48.18▲ SR-8 NB LANES

‡‡ MEASURED NORMAL TO RAMP BASELINE

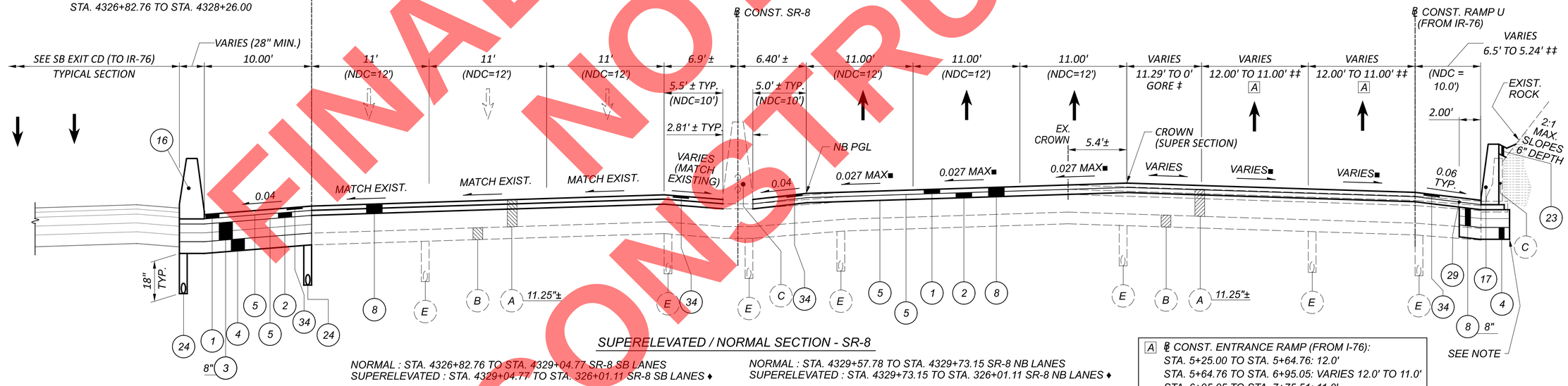
■ SEE SUPERELEVATION TABLES FOR DETAILS

▲ BEGINNING OF EXISTING APPR. SLAB MEASURED AT ℄ CONST. SR-8. REFER TO ROADWAY PLAN FOR SKEWED LIMITS OF PROPOSED PAVEMENT AND BARRIER

B	STA. 326+01.11 TO STA. 332+75.00: 0.0′ STA. 332+75.00 TO STA. 334+48.18: VARIES 0.0′ TO 3.46′
C	STA. 326+01.11 TO STA. 332+75.00: 10.0′ STA. 332+75.00 TO STA. 333+25.00: VARIES 10.0′ TO 8.00′ STA. 333+25.00 TO STA. 334+48.18: 8.00′
D	STA. 326+01.11 TO STA. 326+95.00: 0.04 STA. 326+95.00 TO STA. 327+20.00: VARIES 0.04 TO 0.06 STA. 327+20.00 TO STA. 334+48.18: 0.06



STA. 4326+82.76 TO STA. 4328+26.00



SUPERELEVATED / NORMAL SECTION - SR-8

NORMAL : STA. 4326+82.76 TO STA. 4329+04.77 SR-8 SB LANES
SUPERELEVATED : STA. 4329+04.77 TO STA. 326+01.11 SR-8 SB LANES ♦

NORMAL : STA. 4329+57.78 TO STA. 4329+73.15 SR-8 NB LANES
SUPERELEVATED : STA. 4329+73.15 TO STA. 326+01.11 SR-8 NB LANES ♦

A	℄ CONST. ENTRANCE RAMP (FROM I-76): STA. 5+25.00 TO STA. 5+64.76: 12.0′ STA. 5+64.76 TO STA. 6+95.05: VARIES 12.0′ TO 11.0′ STA. 6+95.05 TO STA. 7+75.51: 11.0′

♦ STATION EQUATION:
STA. 4330+75.71 BACK = STA. 325+00.64 AHEAD

■ SEE SUPERELEVATION TABLES FOR DETAILS
‡ MEASURED NORMAL TO SR 8
‡‡ MEASURED NORMAL TO RAMP BASELINE

NOTE:
EXCAVATE AND REMOVE EXISTING PAVEMENT TO THE LIMITS OF THE EXISTING BARRIER FOUNDATION TO MINIMIZE ROCK CUT OR AS DIRECTED BY THE ENGINEER.

FINAL NOT FOR CONSTRUCTION
TRACINGS

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.011 TOTAL 627

SUM-077/008-11.65/00.00

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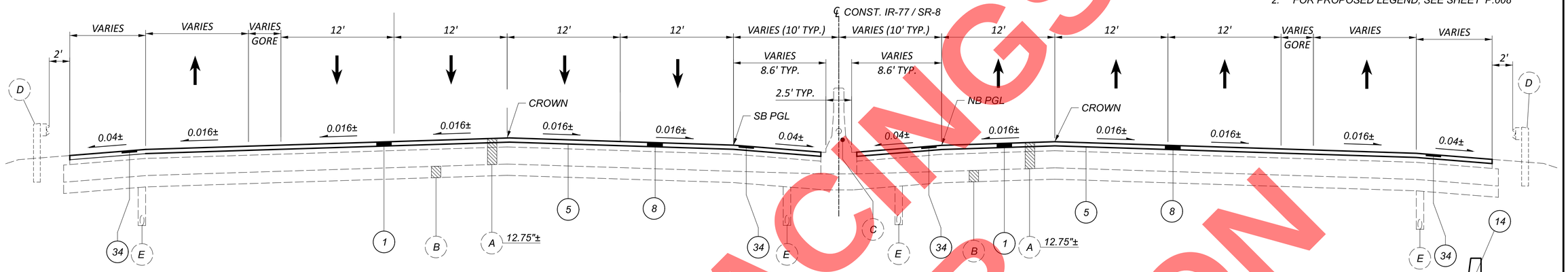
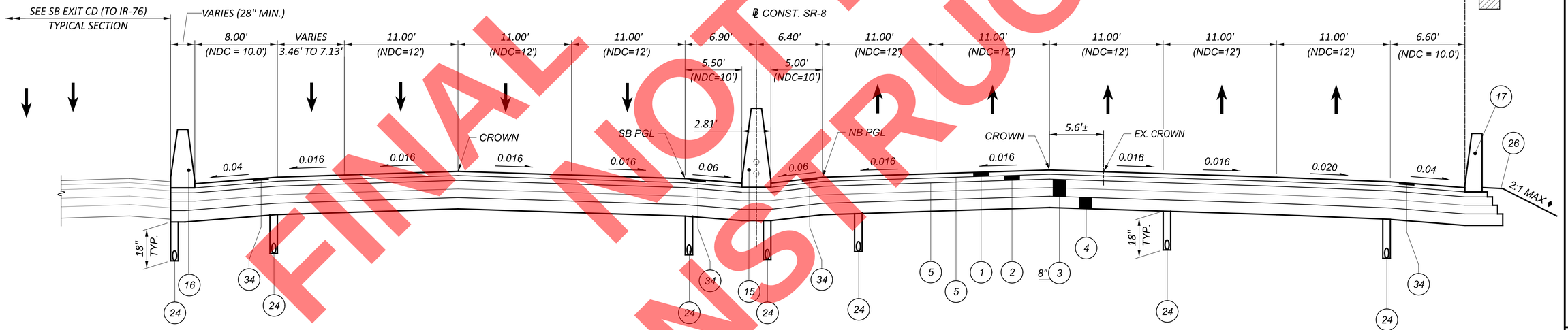
NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008



NORMAL SECTION - SR-8

STA. 393+73.59 TO STA. 403+65 ± (MEET EX. APPROACH SLAB)

STA. 393+73.59 TO STA. 403+97 ± (MEET EX. APPROACH SLAB)



NORMAL SECTION - SR-8

(LIMITS OF BEACON STREET BRIDGE REMOVAL)
STA. 334+48.18▲ TO STA. 336+31.58▲▲

♦ REFER TO ROADWAY CROSS SECTIONS

▲ BEGINNING OF EXISTING APPR. SLAB MEASURED AT ℄ CONST. SR-8.

▲▲ END OF EXISTING APPR. SLAB MEASURED AT ℄ CONST. SR-8.
REFER TO ROADWAY PLAN FOR SKEWED LIMITS OF PROPOSED PAVEMENT AND BARRIER

FINAL TRACINGS NOT FOR CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1855
www.arcadis.com

DESIGNER MAL

REVIEWER SMG 05-28-24

PROJECT ID 114865

SHEET P.012 | TOTAL 627

SUM-077/008-11.65/00.00

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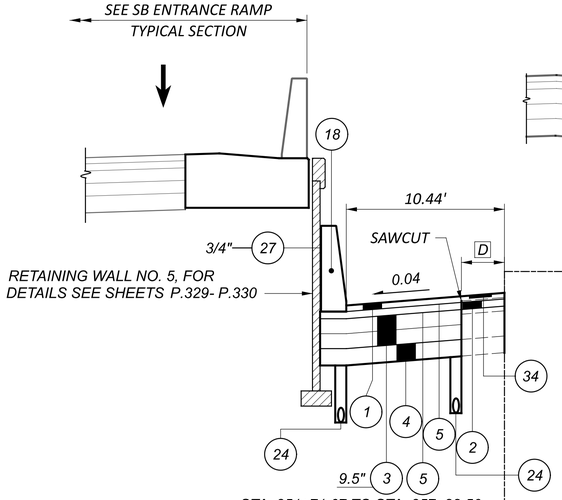
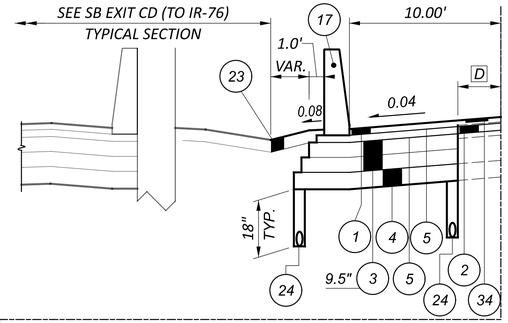
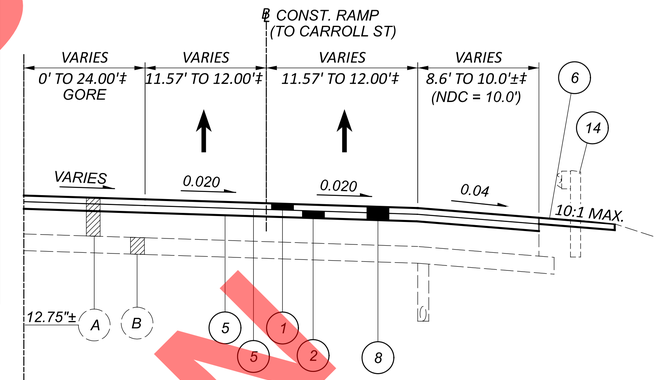


STA. 351+71.67 TO STA. 357+22.50

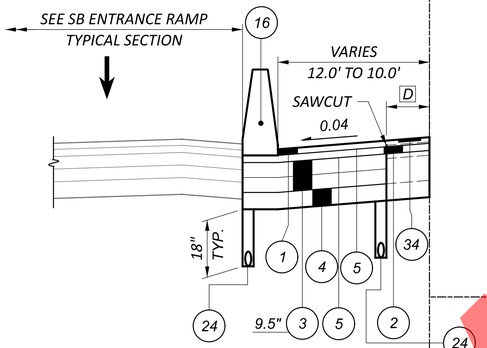


STA. 357+22.50 TO STA. 358+39.38

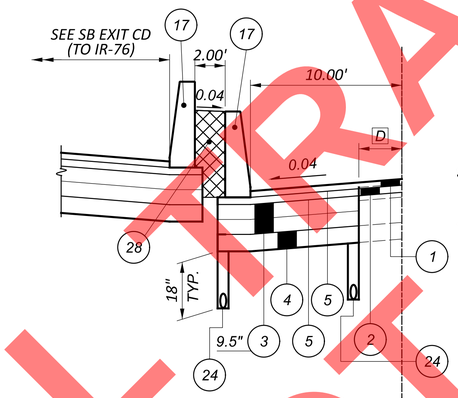
A	STA. 336+31.58 TO STA. 338+75.12: 0.0' STA. 338+75.12 TO STA. 349+91.67: VARIES 0.0' TO 18.33'
B	STA. 336+31.58▲▲ TO STA. 349+91.67: VARIES 7.13' TO 16.00'
C	EXIST. CROWN LOCATION VARIES: STA. 336+31.58 TO STA. 337+00.00: 0'± STA. 337+00.00 TO STA. 338+00.00: VARIES 0' TO 5.5'± STA. 338+00.00 TO STA. 345+00.00: 5.5'± STA. 345+00.00 TO STA. 346+00.00: VARIES 5.5' TO 6.9'± STA. 346+00.00 TO STA. 348+00.00: 6.9'± STA. 348+00.00 TO STA. 349+00.00: VARIES 6.9' TO 5.5'± STA. 349+00.00 TO STA. 354+24.91: 5.5'± STA. 354+24.91 TO STA. 355+24.91: VARIES 5.5' TO 6.9'± STA. 355+24.91 TO STA. 358+39.98: 6.9'±
D	STA. 336+31.58 TO STA. 337+00.00: VARIES 0' TO 5.6' STA. 337+00.00 TO STA. 349+00.00: 5.6' STA. 349+00.00 TO STA. 349+50.00: VARIES 5.6' TO 4.1' STA. 349+50.00 TO STA. 358+39.98: 4.1'



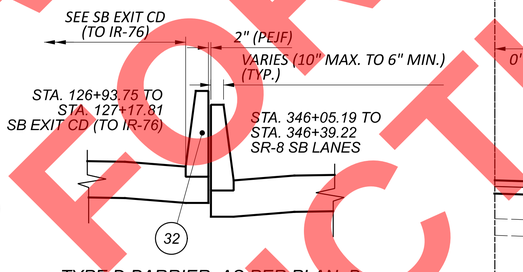
STA. 351+64.31 TO STA. 354+41.36



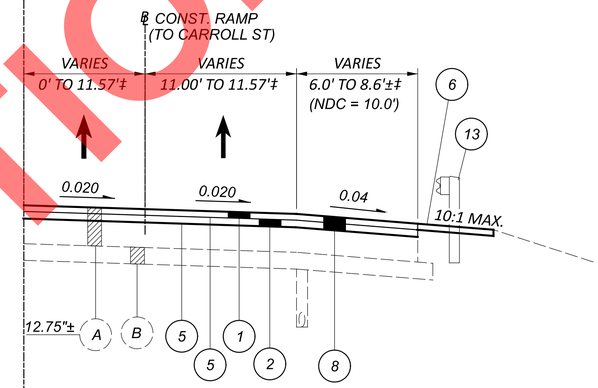
STA. 349+91.67 TO STA. 351+71.67



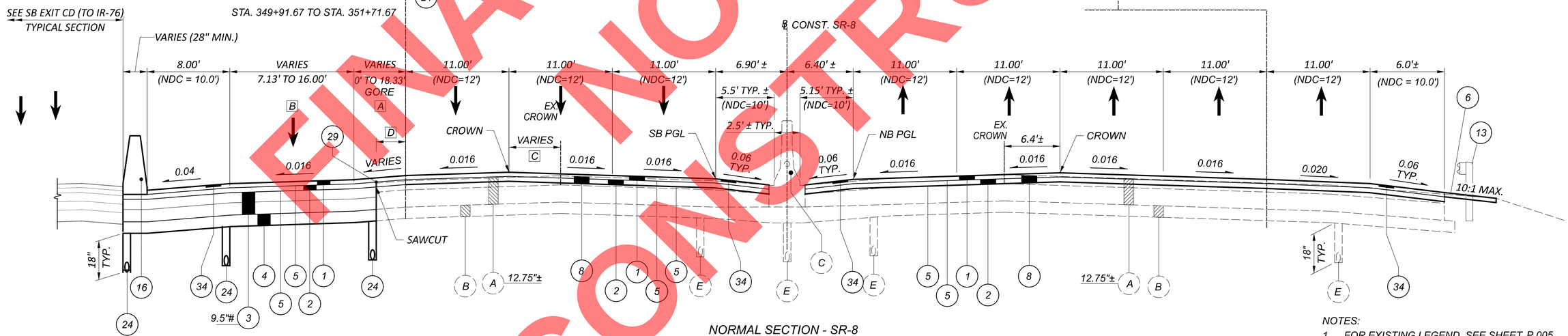
STA. 347+71.08 to 347+99.89 SR-8 SB LANES
STA. 347+81.04 to 347+99.86 SB EXIT CD (TO IR-76)



TYPE D BARRIER, AS PER PLAN, B
DETAIL - SR-8



STA. 347+99.33 TO STA. 351+64.31



NORMAL SECTION - SR-8

STA. 336+31.58▲▲ TO STA. 346+39.05 SR-8 SB LANES
STA. 347+71.28 TO STA. 358+39.98 SR-8 SB LANES

STA. 336+31.58▲▲ TO STA. 346+39.05 SR-8 NB LANES
STA. 347+71.28 TO STA. 354+41.36 SR-8 NB LANES

EXCHANGE STREET BRIDGE AND APPROACH SLAB LIMITS:
STA. 346+39.14 TO STA. 347+70.64

▲▲ END OF EXISTING APPR. SLAB MEASURED AT ℄ CONST. SR-8. REFER TO ROADWAY PLAN FOR SKEWED LIMITS OF PROPOSED PAVEMENT AND BARRIER

‡ MEASURED NORMAL TO RAMP BASELINE

- THICKEN 301 TO MATCH BOTTOM OF EXISTING 301, MIN. 8"

NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008

FINAL TRACINGS
NOT FOR
CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.013 TOTAL 627

SUM-077/008-11.65/00.00

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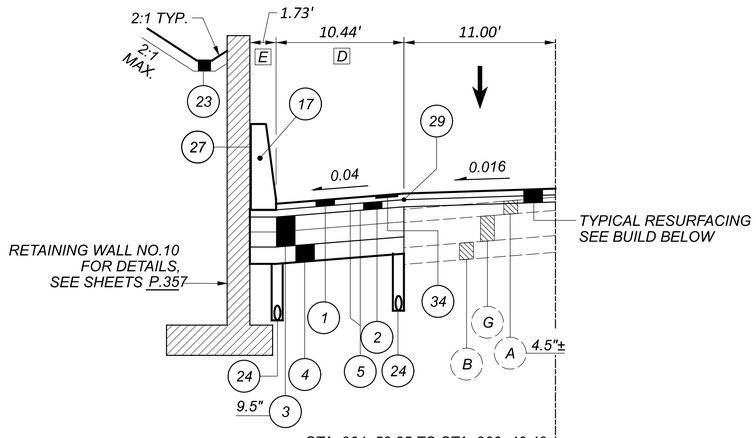
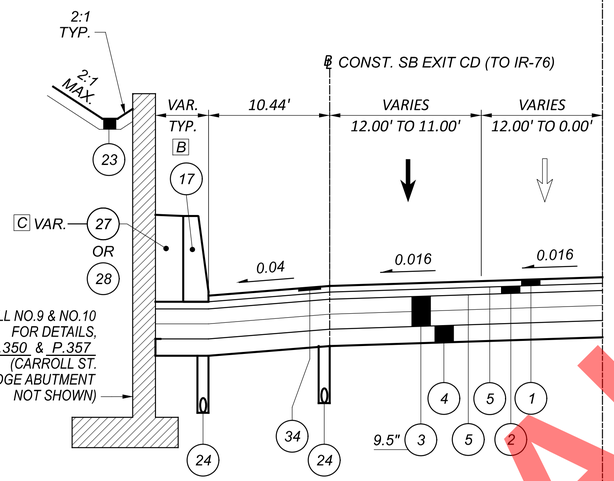
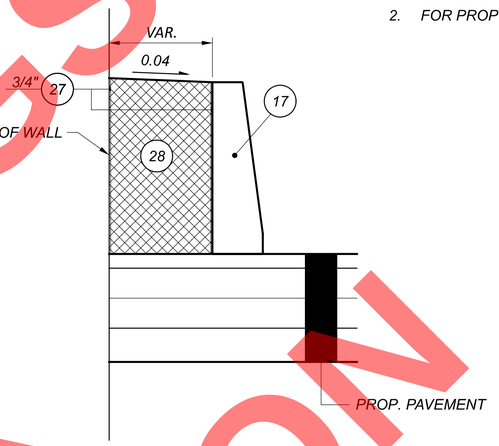


STA. 364+52.85 TO STA. 366+46.40



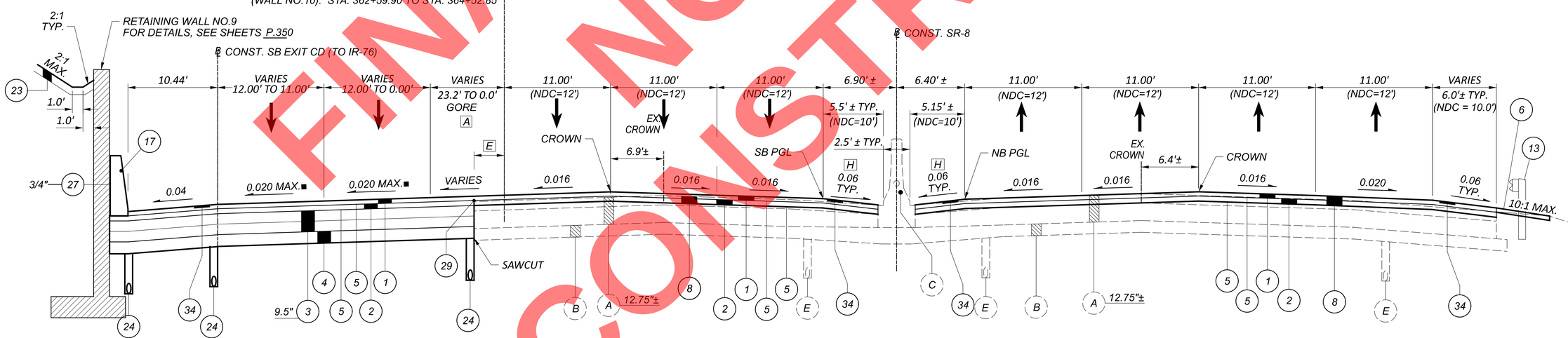
(PROP. CARROLL ST. BRIDGE): STA. 361+92.32 TO STA. 362+59.90
(WALL NO.10): STA. 362+59.90 TO STA. 364+52.85

A	STA. 358+39.98 TO STA. 360+98.05: VARIES 23.2' TO 0'
B	STA. 361+92.32 TO STA. 362+59.90: VARIES 1.73' TO 4.86' STA. 362+59.90 TO STA. 363+06.66: VARIES 4.86' TO 1.73' STA. 363+06.66 TO STA. 364+52.85: 1.73'
C	STA. 361+92.32 TO STA. 363+06.66: ITEM #28 PER LSM DETAIL, THIS SHEET STA. 363+06.66 TO STA. 364+52.85: 3/4" ITEM #27
D	STA. 364+52.85 TO STA. 365+46.40: 10.44' STA. 365+46.40 TO STA. 366+46.40: VARIES 10.44' TO 2.6' (MEET EXIST.)
E	STA. 358+39.98 TO STA. 358+50.00: 4.1' STA. 358+50.00 TO STA. 359+00.00: VARIES 4.1' TO 0' STA. 359+00.00 TO STA. 366+46.40: 0'



LSM DETAIL

NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008



■ SEE SUPERELEVATION TABLES FOR DETAILS

NORMAL SECTION - SR-8

(BRAID BRIDGE/WALL NO. 9): STA. 360+98.05 TO STA. 361+92.32

STA. 358+39.98 TO STA. 366+46.40 SR-8 SB LANES

STA. 354+41.36 TO STA. 366+46.40 SR-8 NB LANES

H STA. 354+41.36 NB / 358+39.98 SB TO STA. 361+50.00: 0.06
STA. 361+50.00 TO STA. 362+00.00: VARIES 0.06 TO 0.04
STA. 362+00.00 TO STA. 366+46.40: 0.04

FINAL PLANS
NOT FOR
CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3855
www.arcadis.com

DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.014 TOTAL 627

SUM-077/008-11.65/00.00

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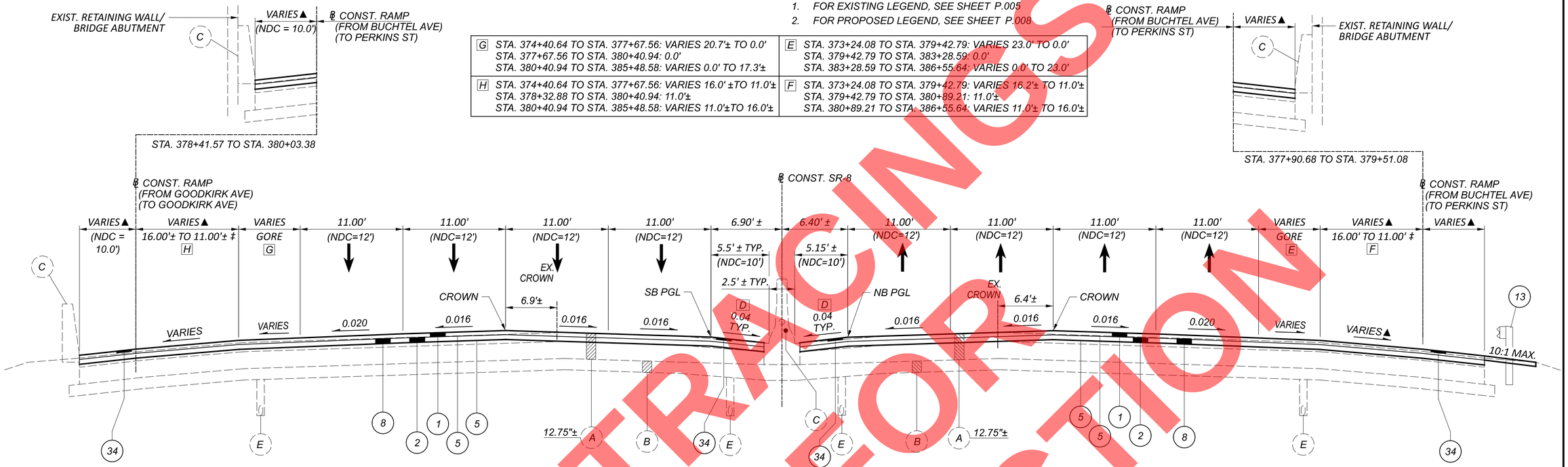
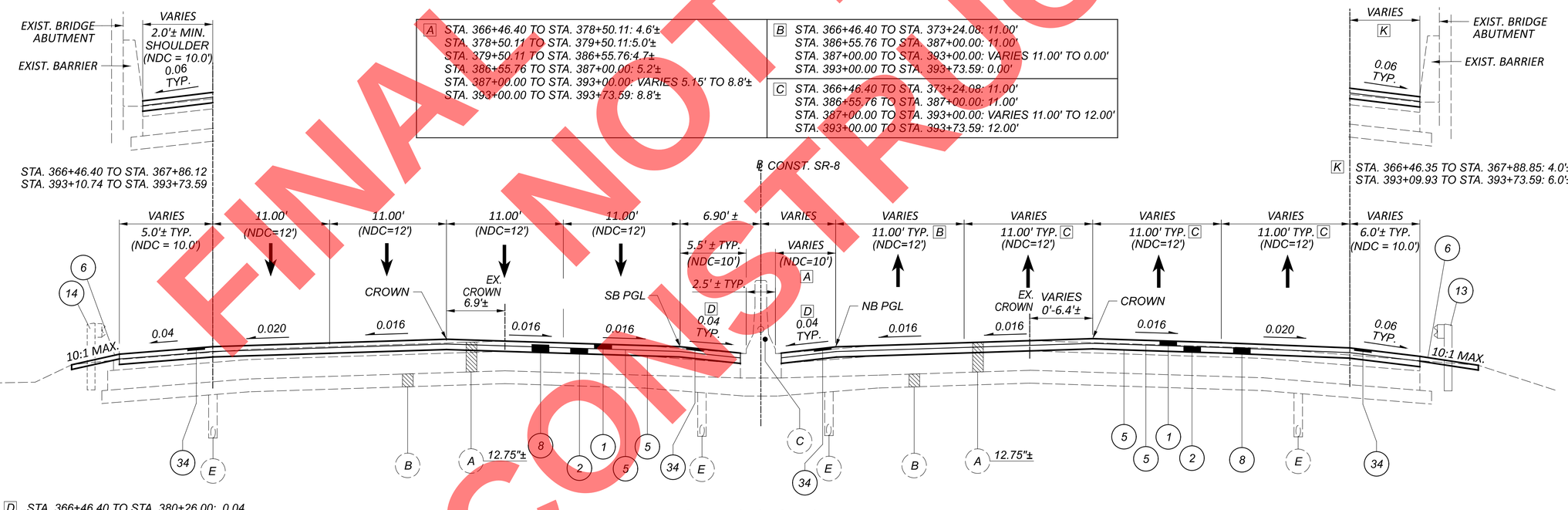
NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008

G STA. 374+40.64 TO STA. 377+67.56: VARIES 20.7'± TO 0.0' STA. 377+67.56 TO STA. 380+40.94: 0.0' STA. 380+40.94 TO STA. 385+48.58: VARIES 0.0' TO 17.3'±	E STA. 373+24.08 TO STA. 379+42.79: VARIES 23.0' TO 0.0' STA. 379+42.79 TO STA. 383+28.59: 0.0' STA. 383+28.59 TO STA. 386+55.64: VARIES 0.0' TO 23.0'
H STA. 374+40.64 TO STA. 377+67.56: VARIES 16.0' ±TO 11.0'± STA. 378+32.88 TO STA. 380+40.94: 11.0'± STA. 380+40.94 TO STA. 385+48.58: VARIES 11.0'±TO 16.0'±	F STA. 373+24.08 TO STA. 379+42.79: VARIES 16.2'± TO 11.0'± STA. 379+42.79 TO STA. 380+89.21: 11.0'± STA. 380+89.21 TO STA. 386+55.64: VARIES 11.0'± TO 16.0'±





FINAL NOT FOR CONSTRUCTION
TRACINGS

PROPOSED TYPICAL SECTIONS - SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4355
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DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.015 TOTAL 627

SUM-077/008-11.65/00.00
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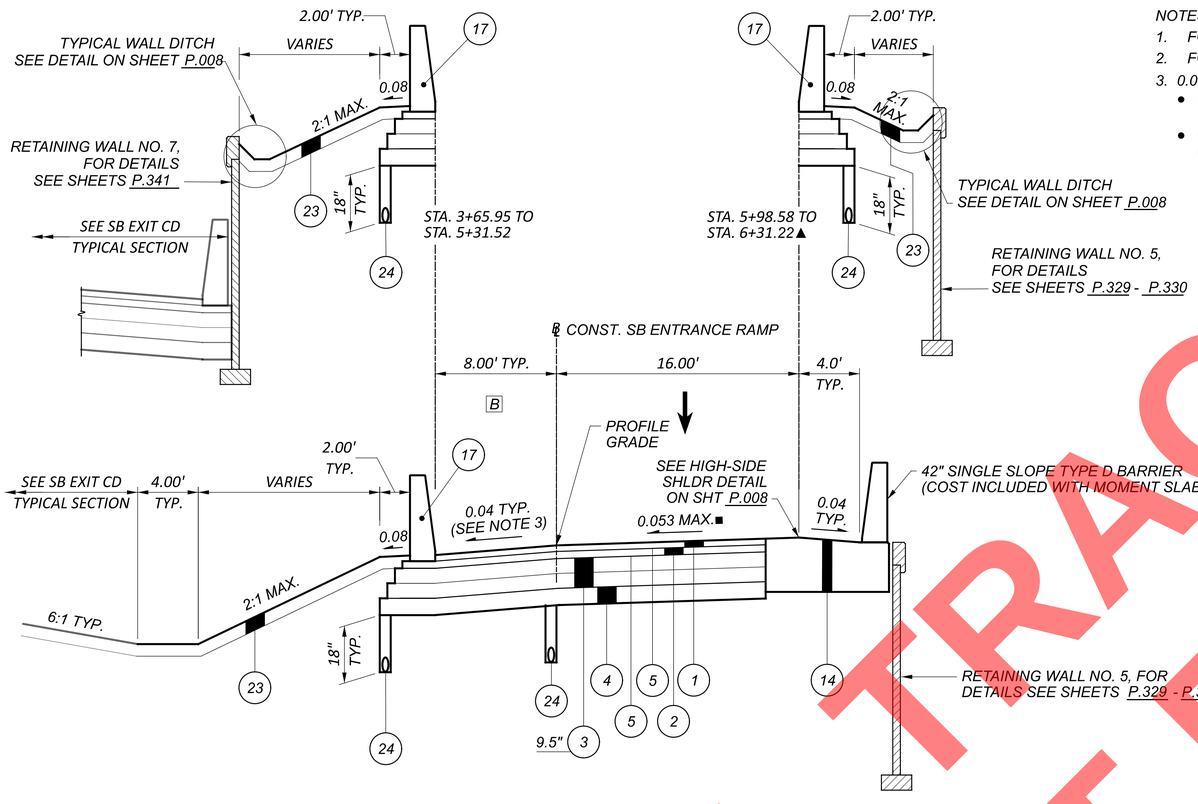
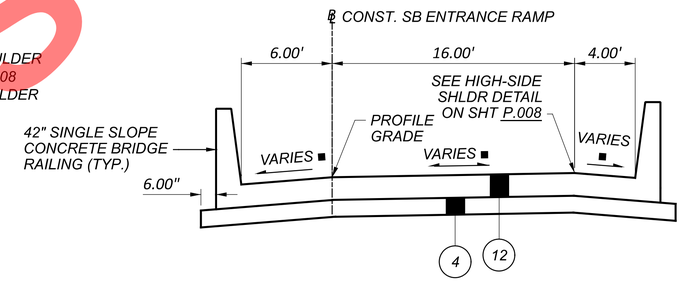


NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008
3. 0.04 TYPICAL SHOULDER CROSS SLOPE.
   - FOR >3% PAVEMENT SLOPE, ON HIGH SIDE SHOULDER SEE HIGH SIDE SHOULDER DETAIL ON SHEET P.008
   - FOR >4% PAVEMENT SLOPE, ON LOW SIDE SHOULDER CROSS SLOPE SHALL MATCH PAVEMENT SLOPE.



APPROACH SLAB SECTION - SB ENTRANCE RAMP

STA. 5+31.52 TO STA. 6+12.26▲▲
STA. 8+03.47 TO STA. 8+60.38▲▲

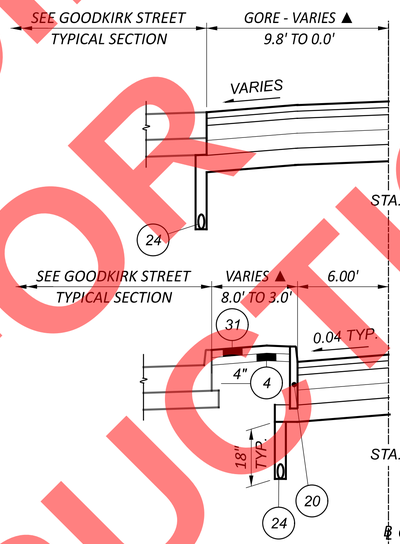
■ FOR SUPERELEVATION TABLES SEE SHEET P.194

▲▲ REFER TO ROADWAY PLAN FOR SKEWED LIMITS OF PROP. PAVEMENT AND BARRIER

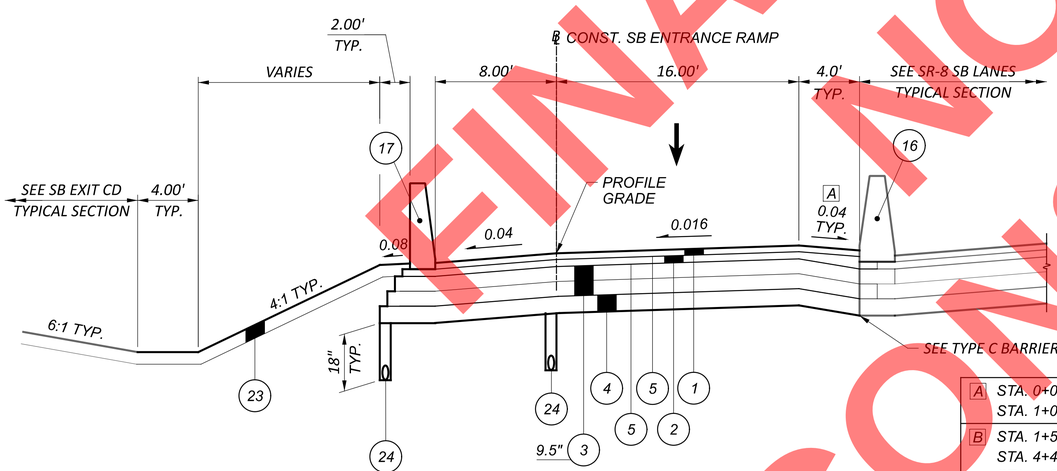
NORMAL / SUPERELEVATION SECTION - SB ENTRANCE RAMP

STA. 1+50.00 TO STA. 5+31.52▲

■ FOR SUPERELEVATION TABLES SEE SHEET P.194



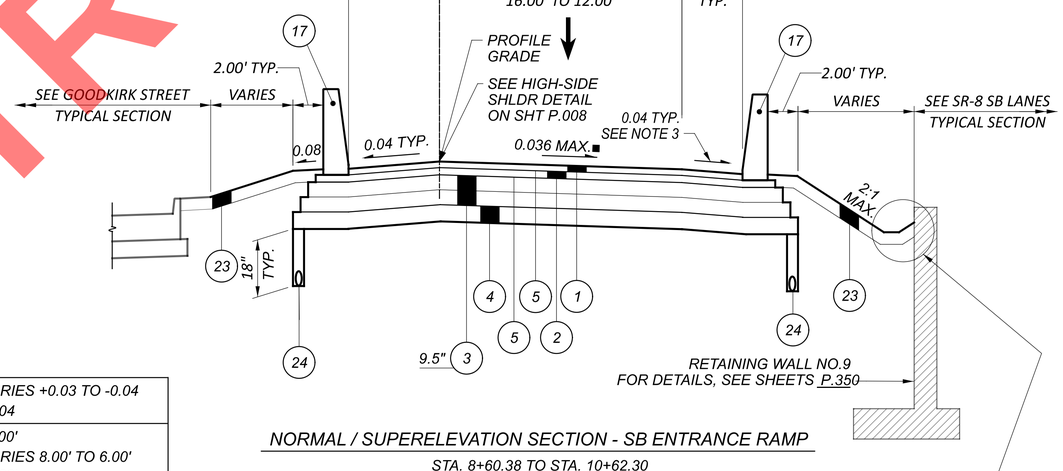
▲ REFER TO INTERSECTION DETAIL, SHEET P.213 FOR ADDITIONAL INFORMATION



NORMAL SECTION - SB ENTRANCE RAMP

STA. 0+00.00 TO STA. 1+50.00

A	STA. 0+00.00 TO STA. 1+00.00: VARIES +0.03 TO -0.04 STA. 1+00.00 TO STA. 1+50.00: -0.04
B	STA. 1+50.00 TO STA. 4+48.04: 8.00' STA. 4+48.04 TO STA. 4+98.04: VARIES 8.00' TO 6.00' STA. 4+98.04 TO STA. 5+31.52: 6.00'
C	STA. 8+60.38 TO STA. 9+08.14: 16.00' STA. 9+08.14 TO STA. 10+62.30: VARIES 16.00' TO 12.00'



NORMAL / SUPERELEVATION SECTION - SB ENTRANCE RAMP

STA. 8+60.38 TO STA. 10+62.30

■ FOR SUPERELEVATION TABLES SEE SHEET P.194

FINAL PLANS
NOT FOR
CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SB ENTRANCE RAMP

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4585
www.arcadis.com

DESIGNER: MAL
REVIEWER: SMG 05-28-24
PROJECT ID: 114865
SHEET: P.016 TOTAL: 627

SUM-077/008-11.65/00.00

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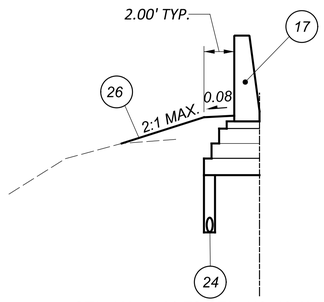
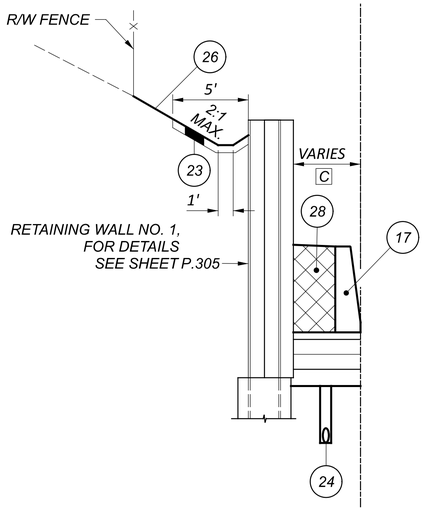
NOTES:
1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008
3. 0.04 TYPICAL SHOULDER CROSS SLOPE.
   - FOR >3% PAVEMENT SLOPE, ON HIGH SIDE SHOULDER SEE HIGH SIDE SHOULDER DETAIL ON SHEET P.008
   - FOR >4% PAVEMENT SLOPE, ON LOW SIDE SHOULDER CROSS SLOPE SHALL MATCH PAVEMENT SLOPE.

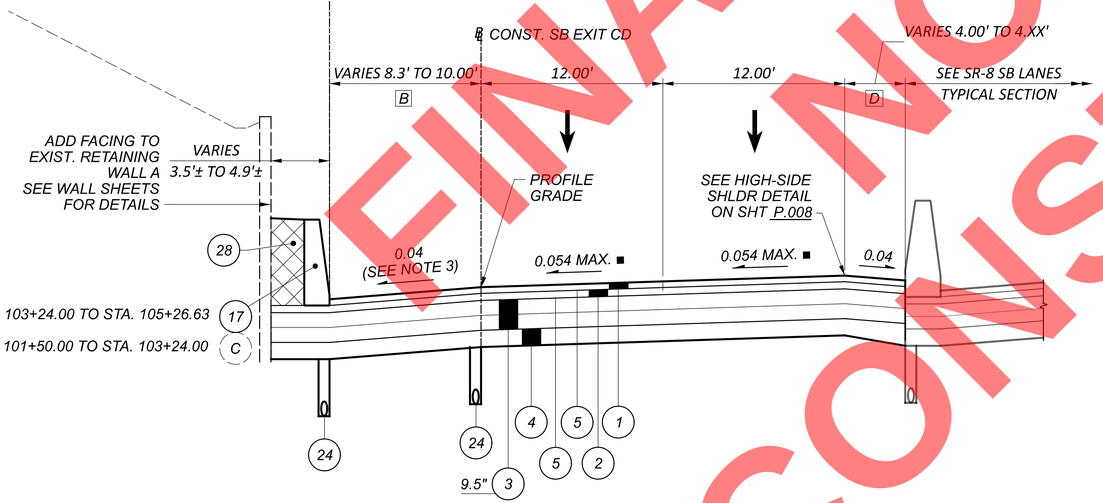


STA. 111+77.90 TO STA. 113+19.42



STA. 105+26.63 TO STA. 111+77.90

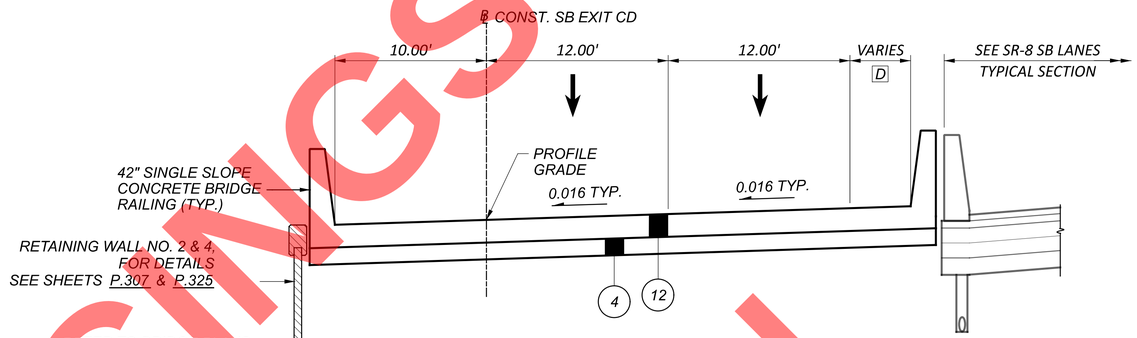
B	STA. 101+50.00 TO STA. 103+24.00: VARIES 8.3' TO 8.67' STA. 103+24.00 TO STA. 103+74.00: VARIES 8.67' TO 10.0' STA. 103+74.00 TO STA. 113+19.42: 10.0'
C	STA. 105+26.63 TO STA. 106+46.64: 4.9'± STA. 106+46.64 TO STA. 111+77.90: 5.7'± AVG.
C	STA. 103+70.00 TO STA. 106+00.00: VARIES 4.67' TO 4.00'



NORMAL / SUPERELEVATED SECTION - SB EXIT CD (TO IR-76)

STA. 101+50.00 TO STA. 113+19.42

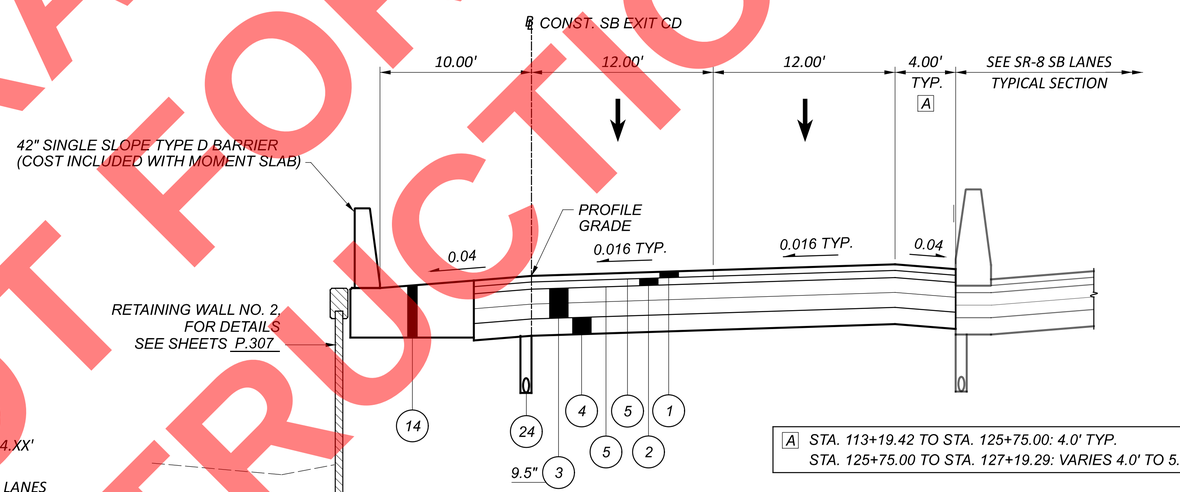
■ FOR SUPERELEVATION TABLES SEE SHEET P.195



D	STA. 127+19.29 TO STA. 127+49.29: VARIES 5.25' TO 7.56' STA. 128+40.90 TO STA. 128+70.90: VARIES 9.80' TO 10.87'

APPROACH SLAB SECTION - SB EXIT CD (TO IR-76)

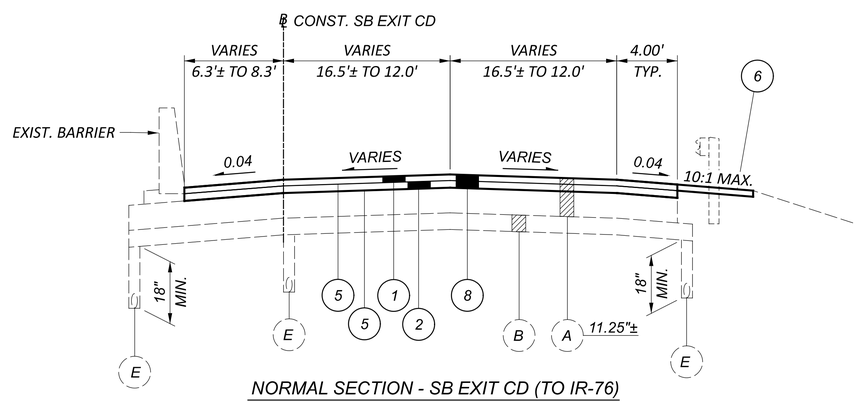
STA. 127+19.29 TO STA. 127+49.29
STA. 128+40.90 TO STA. 128+70.90



A	STA. 113+19.42 TO STA. 125+75.00: 4.0' TYP. STA. 125+75.00 TO STA. 127+19.29: VARIES 4.0' TO 5.25'

NORMAL SECTION - SB EXIT CD (TO IR-76)

STA. 113+19.42 TO STA. 127+19.29



NORMAL SECTION - SB EXIT CD (TO IR-76)

STA. 100+25.00 TO STA. 101+50.00

FINAL TRACINGS
NOT FOR CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SB EXIT CD

SUM-077/008-11.65/00.00

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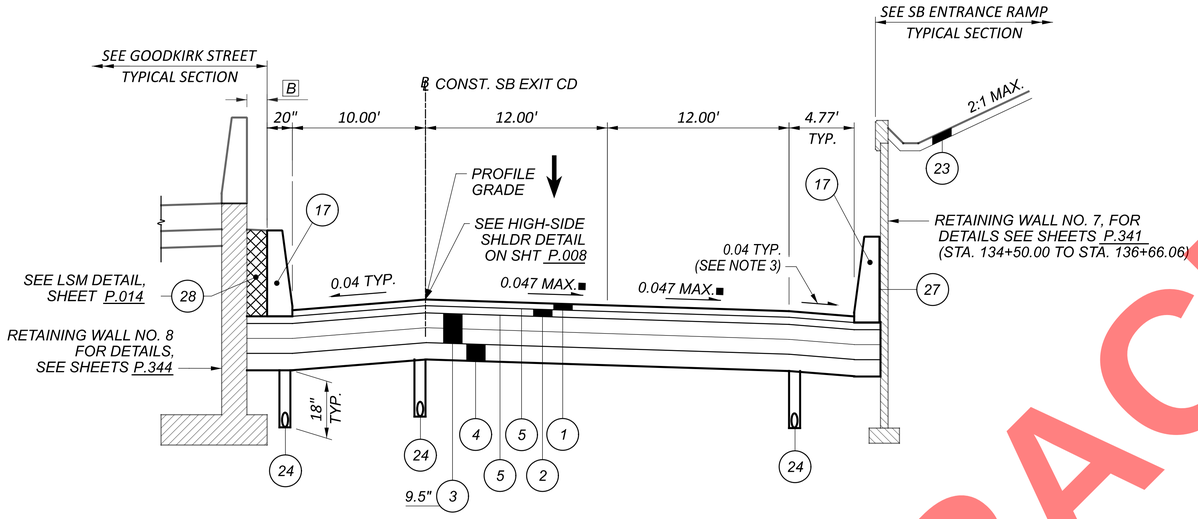
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

DESIGNER	MAL
REVIEWER	SMG 05-28-24
PROJECT ID	114865
SHEET	P.017
TOTAL	627



NORMAL / SUPERELEVATION SECTION - SB EXIT CD (TO IR-76)

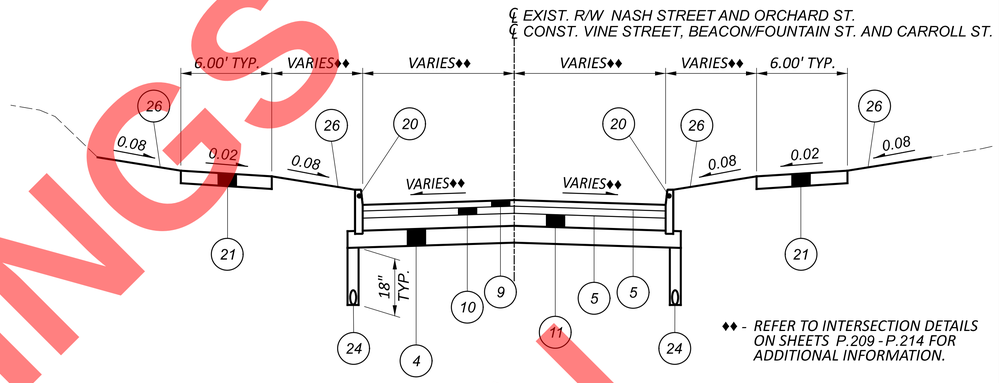
STA. 134+50.00 TO STA. 136+87.56

■ FOR SUPERELEVATION TABLES SEE SHEET P.195

B STA. 134+50.00 TO STA. 135+98.69: 1.16'
STA. 135+98.69 TO STA. 136+87.56: VARIES 1.16' TO 4.60'

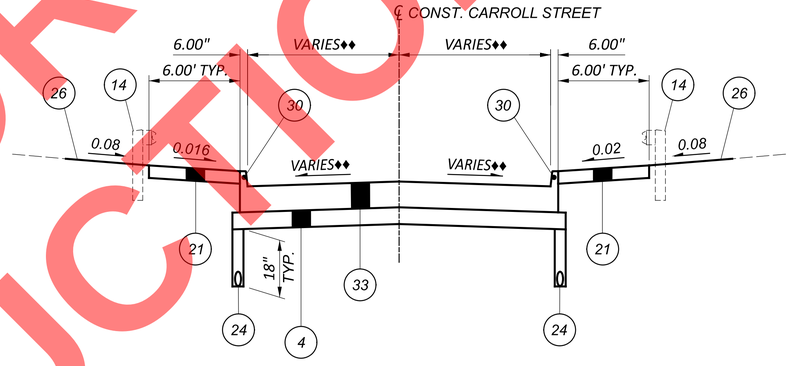
NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008
3. 0.04 TYPICAL SHOULDER CROSS SLOPE.
   - FOR >3% PAVEMENT SLOPE, ON HIGH SIDE SHOULDER SEE HIGH SIDE SHOULDER DETAIL ON SHEET P.008
   - FOR >4% PAVEMENT SLOPE, ON LOW SIDE SHOULDER CROSS SLOPE SHALL MATCH PAVEMENT SLOPE.



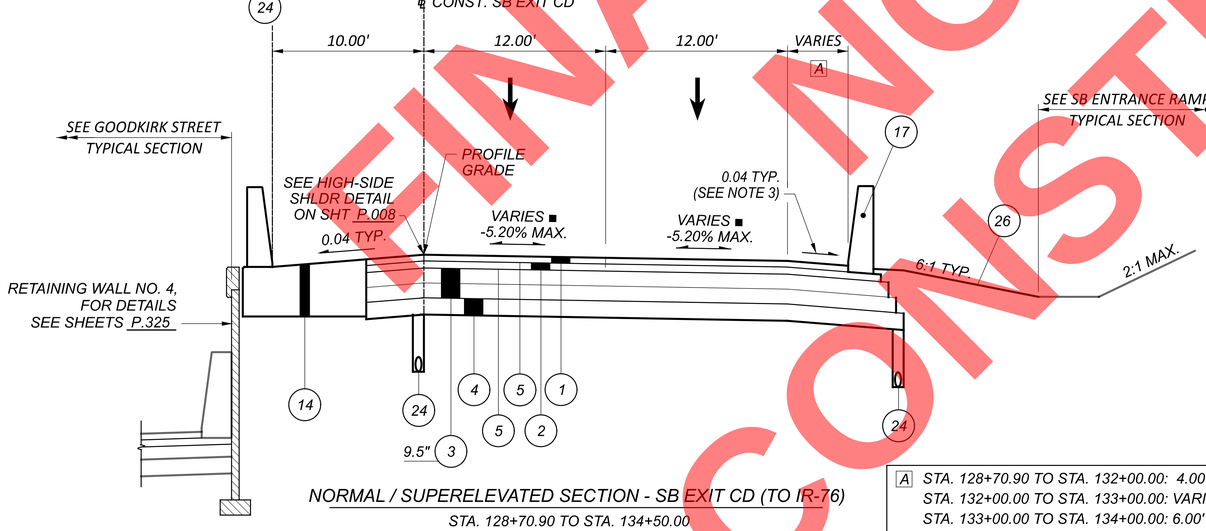
NORMAL SECTION - VARIOUS SIDE STREETS

STA. 3+37.83 TO STA. 3+62.85 NASH STREET
STA. 20+92.83 TO STA. 21+23.98 VINE STREET
STA. 21+27.00 TO STA. 21+63.79 ORCHARD STREET
STA. 8+88.32 TO STA. 9+65.13 BEACON STREET
STA. 12+38.50 TO STA. 13+98.51 FOUNTAIN STREET



NORMAL SECTION - CARROLL STREET

STA. 12+26.56 TO STA. 12+51.40
STA.14+42.40 TO STA. 14+70.00

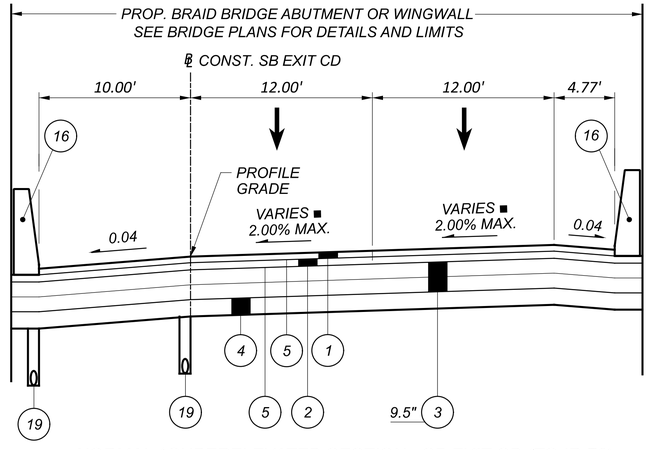


NORMAL / SUPERELEVATED SECTION - SB EXIT CD (TO IR-76)

STA. 128+70.90 TO STA. 134+50.00

■ FOR SUPERELEVATION TABLES SEE SHEET P.195

A STA. 128+70.90 TO STA. 132+00.00: 4.00'
STA. 132+00.00 TO STA. 133+00.00: VARIES 4.00' TO 6.00'
STA. 133+00.00 TO STA. 134+00.00: 6.00'
STA. 134+00.00 TO STA. 134+50.00: VARIES 6.00' TO 4.77'



NORMAL / SUPERELEVATED SECTION - SB EXIT CD (TO IR-76)

STA. 136+87.56 TO STA. 139+37.71

[SEE SR-8 SB LANES TYPICAL SECTION,
STA. 358+31.56 TO STA. 366+46.35 FOR CONTINUATION]

■ FOR SUPERELEVATION TABLES SEE SHEET P.195

FINAL TRACINGS
NOT FOR
CONSTRUCTION

PROPOSED TYPICAL SECTIONS - SB EXIT CD AND SIDE STREETS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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www.arcadis.com

DESIGNER MAL
REVIEWER SMG 05-28-24
PROJECT ID 114865
SHEET P.018 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 11:06:06 AM USER: sgault
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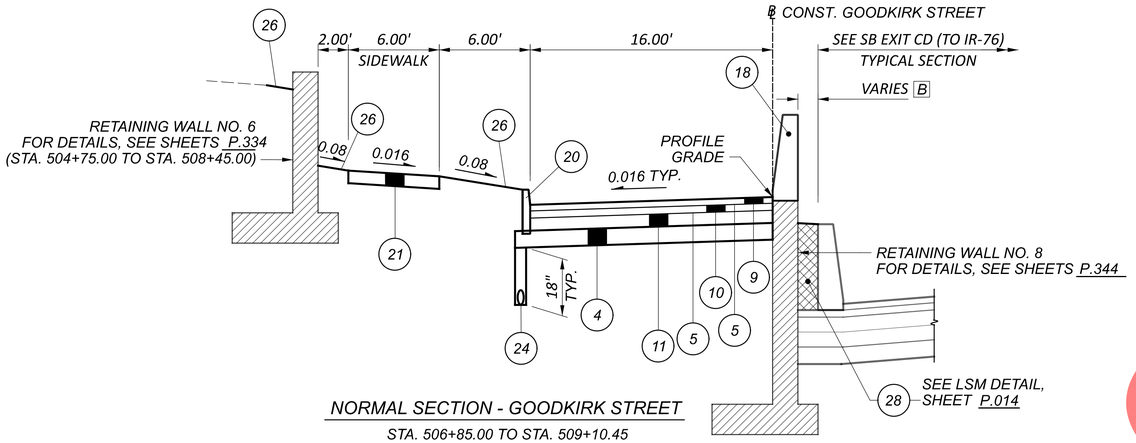
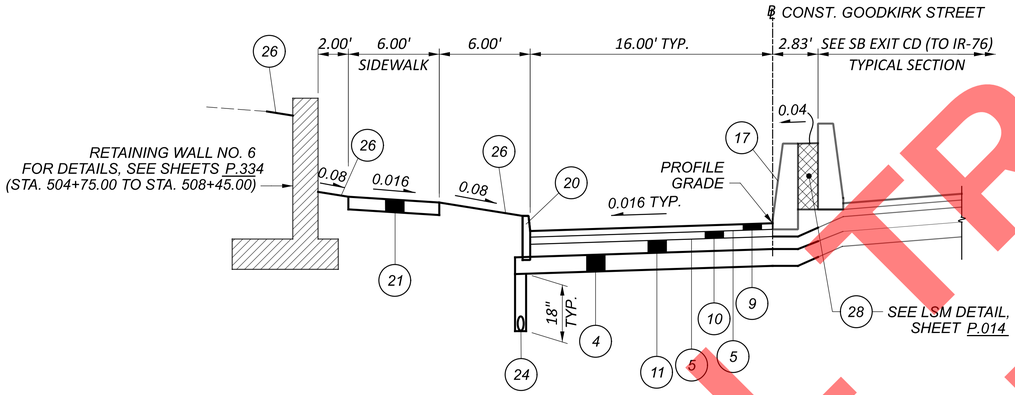


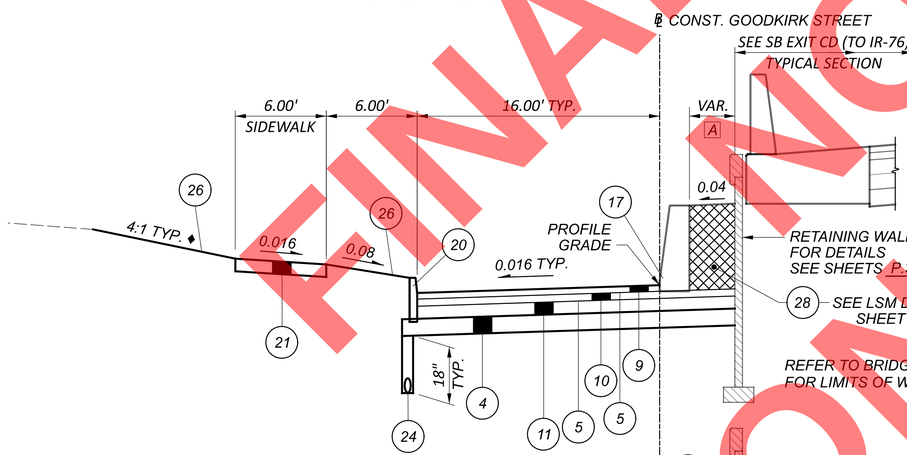
NORMAL SECTION - GOODKIRK STREET

STA. 506+85.00 TO STA. 509+10.45



NORMAL SECTION - GOODKIRK STREET

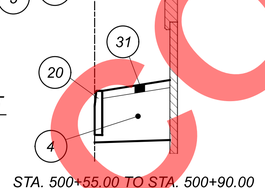
STA. 504+44.29 TO STA. 506+85.00



♦ REFER TO ROADWAY CROSS SECTIONS

NORMAL SECTION - GOODKIRK STREET

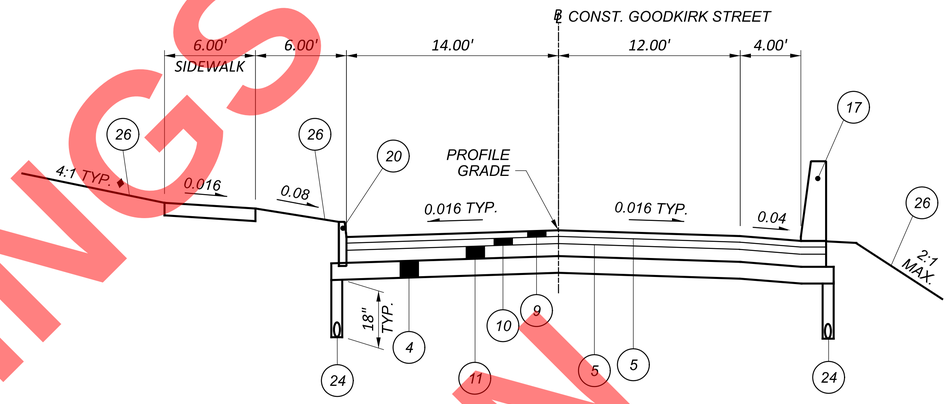
STA. 500+45.87 TO STA. 504+44.29



STA. 500+55.00 TO STA. 500+90.00

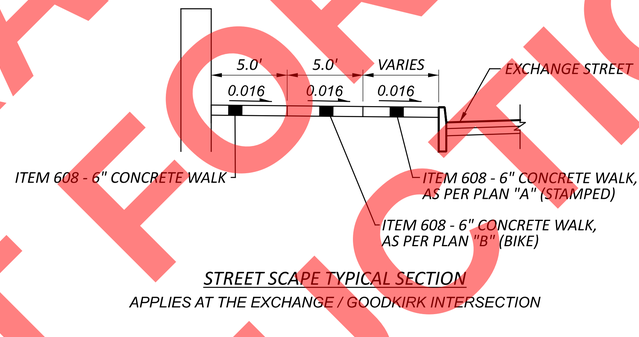
NOTES:

1. FOR EXISTING LEGEND, SEE SHEET P.005
2. FOR PROPOSED LEGEND, SEE SHEET P.008



NORMAL SECTION - ENTRANCE RAMP / GOODKIRK STREET

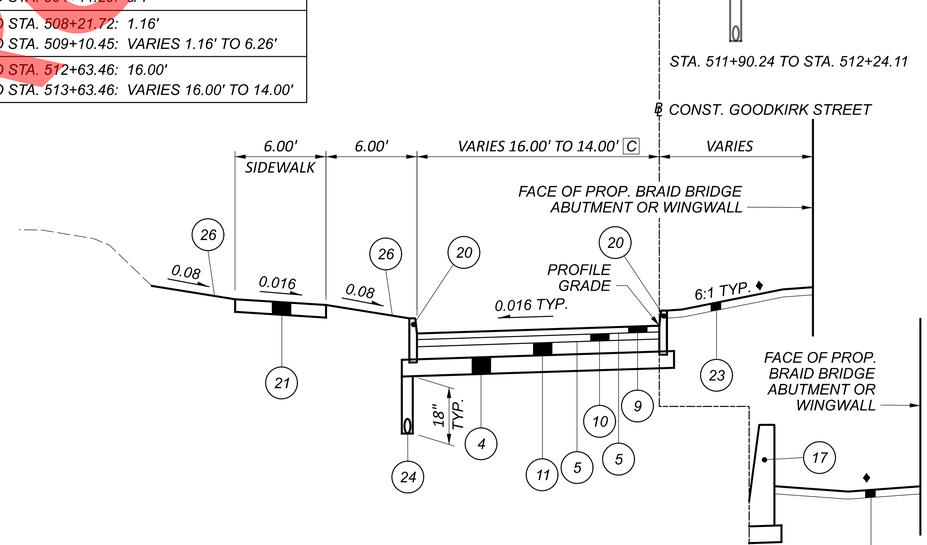
STA. 513+63.46 TO STA. 514+99.67 ℄ CONST. GOODKIRK ST.



STREET SCAPE TYPICAL SECTION

APPLIES AT THE EXCHANGE / GOODKIRK INTERSECTION

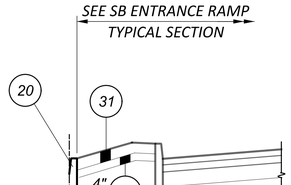
A	STA. 500+90.00 TO STA. 503+48.88: VARIES 5.9' TO 3/4" STA. 503+48.88 TO STA. 504+44.29: 3/4"
B	STA. 506+85.00 TO STA. 508+21.72: 1.16' STA. 508+21.72 TO STA. 509+10.45: VARIES 1.16' TO 6.26'
C	STA. 509+10.45 TO STA. 512+63.46: 16.00' STA. 512+63.45 TO STA. 513+63.46: VARIES 16.00' TO 14.00'



NORMAL SECTION - GOODKIRK STREET

STA. 509+10.45 TO STA. 513+63.46

♦ REFER TO ROADWAY CROSS SECTIONS



STA. 511+90.24 TO STA. 512+24.11

STA. 509+10.45 TO STA. 510+00.00

PROPOSED TYPICAL SECTIONS - GOODKIRK ST.

FINAL TRACINGS
NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER MAL

REVIEWER SMG 05-28-24

PROJECT ID 114865

SHEET P.019 TOTAL 627

SUM-077/008-11.65/00.00

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

ENBRIDGE GAS OHIO DBA DOMINION ENERGY
ATTN: GINO MINNITI
320 SPRINGSIDE DRIVE
AKRON, OH 44333
330-801-8299
330-608-2576 CELL
GINO.A.MINNITI@ENBRIDGE.COM

AT&T
ATTN: CHRIS EMRICH
50 W. BOWERY ST.
AKRON, OH 44308
330-384-3556
330-319-5239
CE3141@ATT.COM

SPECTRUM
ATTN: RON ICKES
1200 BROWNSTONE AVE.
AKRON, OH 44310
330-622-4106
RON.ICKES@CHARTER.COM

AKRON WATER - CITY OF
ATTN: BOB GEISER
1460 TRIPLETT BLVD
AKRON, OH 44306
330-375-2791
BGEISER@AKRONOHIO.GOV

AKRON SEWER - CITY OF
ATTN: JASON KLINE
2460 AKRON PENINSULA RD
AKRON, OH 44310
330-375-2028
JKLINE@AKRONOHIO.GOV

CITY OF AKRON, TRAFFIC
ATTN: MIKE LUPICA
1420 TRIPLETT BLVD
BLDG 2, AKRON, OH 44306
330-375-2851
MLUPICA@AKRONOHIO.GOV

LUMEN
ATTN: HALEY WOODS
3801 ELM ROAD
WARREN, OH 44502
HALEY.WOODS@LUMEN.COM
RELOCATIONS@LUMEN.COM

EVERSTREAM
ATTN: GIO REILLO
1228 EUCLID AVE.
SUITE 250
CLEVELAND, OH 44115
216-905-0780
GREILLO@EVERSTREAM.NET

VERIZON BUSINESS / MCI
ATTN: DANIEL ARZ
12300 RIDGE ROAD
NORTH ROYALTON, OH 44133
440-457-4832
216-570-9343
DANIEL.ARZ@VERIZON.COM

G & O RESOURCES
ATTN: LEE CARTER
96 E. CROSIER ST.
AKRON, OH 44311
330-253-2525 EXT: 307
GANDORESOURCES@AOL.COM

ODOT CENTRAL ITS
ATTN: BRYAN COMER
1980 W. BROAD ST.
COLUMBUS, OH 43223
614-387-1253
BRYAN.COMER@DOT.OHIO.GOV

ODOT D4 TRAFFIC
ATTN: MICHELLE CHANEY
2088 SOUTH ARLINGTON RD.
AKRON, OH 44306
330-786-2267
MICHELLE.CHANEY@DOT.OHIO.GOV

OHIO EDISON
ATTN: JEFFREY HEURING, PE
6326 LAKE AVE.
ELYRIA, OH 44035
440-653-1931
JHEURING@FIRSTENERGYCORP.COM

CITY OF FAIRLAWN
ATTN: ERNIE STATEN
3300 FAIRLAWN SERVICE DRIVE
FAIRLAWN, OH 44333
330-668-9500

ZAYO FIBER
ATTN: WAYLON HIGGINS
722 N High School Rd
INDIANAPOLIS, IN 46214
765-341-1199

ARKDNA
ATTN: RICH SCHRADER
419-689-6945
RSCHRADER@ARKDNA.COM

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.

UTILITIES SHOWN IN THE PLANS HAVE OWNERS AS DESIGNATED BELOW, UNLESS OTHERWISE NOTED:

ELECTRIC - FIRST ENERGY — — — —E— — —

TEL - ARKDNA — — — —T— — —

FO - EVERSTREAM — — — — —FO— —

TRAFFIC - CITY OF AKRON, TRAFFIC — — — — — —TR— —

GAS - ENBRIDGE GAS OHIO — — — —G— —

WATER - CITY OF AKRON, WATER — — — —W— — —

SANITARY - CITY OF AKRON, SEWER — — — —SAN— —

SURVEY PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET P.002 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

-POSITIONING METHOD: STATIC
MONUMENT TYPE: A

- VERTICAL POSITIONING -
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12B

- HORIZONTAL POSITIONING -
REFERENCE FRAME: NAD83 (2011) (EPOCH: 2010.0000)
ELLIPSOID: GRS 80
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 0.99989474882
ORIGIN OF COORDINATE SYSTEM: (0,0)

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 CMS 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.

ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1), AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT IT SHALL INCLUDE 3/4" OF PREFORMED EXPANSION JOINT FILLER PER 705.03 ADJACENT TO RETAINING WALLS AND CONCRETE BARRIER.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NO. RW.4 .

ITEM 623 - MONUMENT ASSEMBLY, TYPE C 6 EACH

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	8 SY
ITEM 611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	50 FT
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET	4 EACH
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	200 FT

ENVIRONMENTAL REQUIREMENTS

THIS PROJECT HAS BEEN DEVELOPED UNDER THE FEDERAL NATIONAL POLICY ACT. THE ENVIRONMENTAL COMMITMENTS SPECIAL PROVISION IN THIS PLAN PACKAGE INCLUDE ENVIRONMENTAL COMMITMENT REQUIREMENTS THAT ARE TO BE STRICTLY ADHERED TO DURING PROGRESS OF THE WORK.

SEEDING AND MULCHING

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

ITEM 659, SOIL ANALYSIS TEST,	2 EACH
ITEM 659, TOPSOIL,	1232 CY
ITEM 659, REPAIR SEEDING AND MULCHING,	555 SY
ITEM 659, INTER-SEEDING,	555 SY
ITEM 659, COMMERCIAL FERTILIZER,	1.55 TON
ITEM 659, LIME,	2.30 ACRE
ITEM 659, WATER,	62 MGAL
ITEM 659, MOWING,	25 MSF

FOR SEEDING AND MULCHING QUANTITIES SEE SHEET P.119.

APPLY SEEDING AND MULCHING 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.

ROUNDING

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

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT AS SHOWN IN THE DETAIL ON SHEETS P.234 - P.235 .

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT AS SHOWN IN THE DETAIL ON SHEET P.234 - P.235 .

ITEM 608 - CURB RAMP, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CITY OF AKRON STANDARDS AND SPECIFICATIONS SHOWN IN THE DETAILS ON SHEET P.238 - P.244.

ITEM 609 - CONCRETE MEDIAN, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT THE HEIGHT OF THE MEDIAN SHALL HAVE 0" REVEAL ABOVE THE TOP OF THE PROPOSED PAVEMENT AND A 4" DEPTH BELOW THE PROPOSED PAVEMENT SURFACE.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GENERAL NOTES

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DESIGNER SMG
REVIEWER KDK 5-28-24
PROJECT ID 114865
SHEET P.020 TOTAL 627

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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 77 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.

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LINEAR GRADING, AS PER PLAN

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION.

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF MATERIAL AND ADDITION OF ITEM 617, AS NECESSARY, TO PROVIDE A 0.08 POSITIVE SLOPE. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

THE CONTRACTOR IS REQUIRED TO PLACE ITEM 617 WITHIN A PERIOD NOT TO EXCEED 7 DAYS. REFER TO THE AS PER PLAN NOTE FOR REQUIREMENTS.

EXPOSED EARTH OUTSIDE OF THE LIMITS OF ITEM 617 ARE REQUIRED TO BE SEEDED AND MULCHED WITHIN 7 DAYS OF PLACEMENT OF ITEM 617. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 832.

THE QUANTITY OF ITEM 209 IS NOT PERMITED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

209, LINEAR GRADING, AS PER PLAN	165 STA.
617, COMPACTED AGGREGATE, AS PER PLAN	475 CY

ITEM 601 - CONCRETE SLOPE PROTECTION, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT THERE IS NO REQUIREMENT TO THICKEN THE BOTTOM 3 FEET OF THE SLAB AS STATED IN 601.07 WILL BE ELIMINATED.

ITEM 621 - RPM, AS PER PLAN

RAISED PAVEMENT MARKERS ON LANE LINES AND EDGE LINES ON FREEWAYS SHALL BE ONE-WAY WHITE SPACED AT 80'.

CHEMICAL STABILIZATION

GLOBAL CHEMICAL STABILIZATION SHALL BE PERFORMED ON THE PROJECT SUBGRADE USING CEMENT TO A DEPTH OF 12 INCHES, EXCEPT ALONG SR 8 WHERE UNSUITABLE A-4b MATERIAL IS ENCOUNTERED. IN THESE AREAS THE STABILIZATION DEPTH SHOULD BE INCREASED TO 14 INCHES. APPROXIMATE LOCATIONS FOR THIS INCREASED DEPTH ARE FROM STA. 329+96 TO STA. 331+97 AND FROM STA. 342+47 TO STA. 344+64.

THE MIX DESIGN SHOULD BE CONDUCTED IN ACCORDANCE WITH ODOT CMS SUPPLEMENT 1120, MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS.

IF SHALLOW ROCK IS ENCOUNTERED DURING EXCAVATION SUBGRADE TREATMENT SHALL BE PERFORMED AS DETAILED IN THE NOTE FOR ITEM 204 EXCAVATION OF SUBGRADE, AS PER PLAN.

AREAS WITHIN THE LIMITS OF SELECT GRANULAR BACKFILL FOR MSE WALLS DOES NOT REQUIRE CHEMICAL STABILIZATION.

ADDITIONALLY, AREAS WITH A FINISHED SUBGRADE MORE THAN THREE FEET ABOVE EXISTING GRADE DO NOT REQUIRE CHEMICAL STABILIZATION.

APPROXIMATE LIMITS OF THE CHEMICAL STABILIZATION IS SHOWN ON THE CROSS SECTIONS.

THE FOLLOWING QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO PERFORM THE ABOVE WORK.

ITEM 206 - CEMENT STABILIZATION, 12 INCHES DEEP	26290 SY
ITEM 206 - CEMENT STABILIZATION, 14 INCHES DEEP	1790 SY
ITEM 206 - CEMENT	734 TON
ITEM 206 - CURING COAT	28080 SY
ITEM 204 - PROOF ROLLING	14 HOUR

ITEM 204 – EXCAVATION OF SUBGRADE, AS PER PLAN

TO PREPARE AREAS FOR CHEMICAL STABILIZATION IN THE PRESENCE OF ANTICIPATED SHALLOW BEDROCK BETWEEN THE STATIONS SHOWN BELOW EXCAVATE ROCK, SHALE, OR COAL TO DEPTH OF 18 INCHES BELOW THE FINAL SUBGRADE AND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS, INCLUDING UNDER NEW CURBS AND GUTTERS. REPLACE WITH ODOT 204 - GRANULAR MATERIAL, TYPE B.

SR 8		GOODKIRK		EXIT CD	
326+00	327+96	505+99	508+18	101+83	112+40
360+41	363+88			132+46	134+77
373+35	376+02			141+93	145+44
387+48	393+74				

THE FOLLOWING QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO PERFORM THIS WORK.

ITEM 204 – GRANULAR MATERIAL, TYPE B	6314 CY
ITEM 204 – EXCAVATION OF SUBGRADE, AS PER PLAN	6314 CY

ITEM 209 - RESHAPING UNDER GUARDRAIL

TREATED SHOULDER WIDTH BEYOND THE LIMITS OF THE COMPACTED AGGREGATE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE INTO THE DITCH AND SHALL BE PERFORMED ONLY IN THE AREAS NECESSARY. RESHAPING SHALL BE ACCOMPLISHED BY THE REMOVAL OF, OR ADDITION OF MATERIAL TO PROVIDE A 0.08 SLOPE TO THE DITCH BREAK POINT. EXCESS MATERIAL SHALL BE WINDROWED ON THE SHOULDER. THE RESHAPED AREAS SHALL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING AS PER 659 IS PERFORMED. ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE BERMS AND NOT ALLOWED TO ENTER THE DITCH LINE AND SHALL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

THE METHOD OF MEASUREMENT OF ITEM 209 RESHAPING UNDER GUARDRAIL SHALL BE STATIONS, WITH ONE STATION EQUAL TO 100 LINEAR FEET. THE DISTANCE SHALL BE MEASURED ALONG EACH EDGE OF PAVEMENT. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 209 RESHAPING UNDER GUARDRAIL. IN AREAS WHERE GRADING IS NOT REQUIRED BEYOND THE 617 LIMIT, RESHAPING UNDER GUARDRAIL WILL BE NON-PERFORMED AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

209, RESHAPING UNDER GUARDRAIL,	68 STA

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, AS PER PLAN

ON THIS PROJECT SUPPLY A 19MM INTERMEDIATE COURSE MEETING THE REQUIREMENTS OF 422 EXCEPT AS MODIFIED BELOW. MODIFY TABLE 442.02-2 AS FOLLOWS:

SIEVE SIZE		9.5 MM MIX	12.5 MM MIX	19 MM MIX
		TOTAL PERCENT PASSING		
1½ INCH	(38 MM)			100
¾ INCH	(19 MM)		100	95 TO 100
½ INCH	(12.5 MM)	100	95 TO 100	90 TO 100
⅜ INCH	(9.5 MM)	90 TO 100	96 MAX	96 MAX
NO. 4	(4.75 MM)	70 MAX	52 TO 65	60 MAX
NO. 8	(2.36 MM)	34 TO 52	34 TO 45	34 TO 45
NO.200	(75 µM)	2 TO 8	2 TO 8	2 TO 8

MODIFY TABLE 442.02-3 AS FOLLOWS:
-APPLY 14.0 FOR A VMA (PERCENT MINIMUM) FOR A 19MM MIX.
-APPLY 5.3 PERCENT FOR THE MINIMUM TOTAL ASPHALT BINDER CONTENT FOR A 19MM MIX

MODIFY THE 442 INTERMEDIATE COURSE REQUIREMENTS OF TABLES 401.04-1 AND 401.04-2 AS FOLLOWS:
-APPLY 3.5 PERCENT FOR THE TOTAL VIRGIN ASPHALT BINDER CONTENT, MINIMUM.
-USE A PG 64-22 IF USING 25 PERCENT OR LESS RAP. USE PG 64-28 IF USING GREATER THAN 25 PERCENT RAP.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209, LINEAR GRADING, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING 441 ASHPALT CONCRETE INTERMEDIATE COURSE, TYPE 1,(448), UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING, AS PER PLAN SHALL CONSIST OF EXCAVATING, TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:
1. SET GUARDRAIL POSTS
2. PLACE ITEM 441

METHOD B:
1. PLACE ITEM 441
2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3. SET GUARDRAIL POSTS
4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS.FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROMTHE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAILPOSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441, ASPHALTCONCRETE, INTERMEDIATE COURSE, TYPE 1(448), UNDER GUARDRAIL, ASPER PLAN.

FINAL PLANS NOT FOR CONSTRUCTION

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DESIGNER SMG
REVIEWER KDK 5-28-24
PROJECT ID 114865
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PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 204 - SUBGRADE COMPACTION	217 SY
ITEM 304, AGGREGATE BASE	37 CY
ITEM 407, NON-TRACKING TACK COAT	36 GAL
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22,	48 CY

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

PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS

THE FOLLOWING QUANTITIES ARE PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

ITEM 204, SUBGRADE COMPACTION	430 SY
ITEM 301, ASPHALT CONCRETE BASE, PG64-22,	96 CY
ITEM 304, AGGREGATE BASE	72 CY
ITEM 407, NON-TRACKING TACK COAT	71 GAL

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 8 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.

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.

ITEM 608 - 6" CONCRETE WALK, AS PER PLAN "A"/"B"

ALL REQUIREMENTS OF SECTION 608 OF THE SPECIFICATIONS SHALL BE FOLLOWED EXCEPT THAT THE CONCRETE SHALL BE COLORED AND/OR STAMPED AS DIRECTED BY THE CITY OF AKRON. AT THE PRECONSTRUCTION MEETING THE CITY OF AKRON WILL PROVIDE THE COLOR AND STAMP PATTERN TO THE CONTRACTOR. 6" CONCRETE WALK, AS PER PLAN "A" SHALL BE USED FOR TREELAWNS IN DESGINATED AREAS AND 6" CONCRETE WALK, AS PER PLAN "B" SHALL BE USED FOR THE PROPOSED BIKEWAY.

ITEM 202-REMOVAL MISC.: RETAINING WALL

ALL ABOVE GROUND AND UNDERGROUND PORTIONS OF THE RETAINING WALL SHALL BE REMOVED ACCORDING TO THE PROVISIONS OF ITEM 202. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING REMAINING PORTIONS OF THE RETAINING WALL ARE STABLE AND FUNCTIONAL.

THE UNIT PRICE BID FOR ITEM 202 - REMOVAL MISC.: RETAINING WALL SHALL INCLUDE COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

ITEM 613 - LOW STRENGTH MORTAR BACKFILL, TYPE 1, AS PER PLAN

THIS ITEMS SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT IT SHALL INCLUDE PREFORMED EXPANSION JOINT FILLER (PEJF) PER 705.03 AS SHOWN ON THE TYPICAL SECTIONS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR BOTH THE LOW STRENGTH MORTART BACKFILL AND THE PEJF SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 613 - LOW STRENGTH MORTAR BACKFILL, TYPE 1, AS PER PLAN.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "A"
ITEM 609 - CURB, TYPE 4-C, AS PER PLAN

THESE ITEMS SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT THEY SHALL INCLUDE PREFORMED EXPANSION JOINT FILLER (PEJF) PER 705.03 AS SHOWN ON THE TYPICAL SECTIONS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR BOTH THE CONCRETE BARRIER/CURB AND THE PEJF SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN "A"/ITEM 609 - CURB, AS PER PLAN.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "B"

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT IT SHALL CONSIST OF TWO TYPE D BARRIER PLACED BACK TO BACK SEPARATED BYPREFORMED EXPANSION JOINT FILLER (PEJF) PER 705.03.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR BOTH THE CONCRETE BARRIER AND THE PEJF SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN "B".

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "C"

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT IT SHALL TAPER FROM FULL HEIGHT TO 6" HEIGHT AS SHOWN ON SHEET P.213.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR BOTH THE CONCRETE BARRIER AND THE PEJF SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN "C".

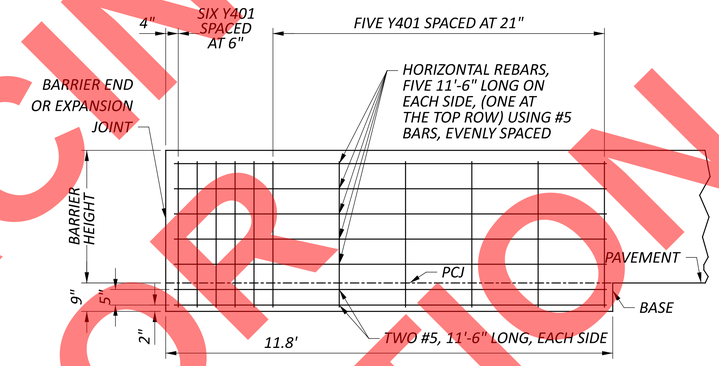
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THIS WORK.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "C"	25 FT

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS AND SCD RM-4.5 EXCEPT THAT IT SHALL HAVE A MODIFIED TOTAL LENGTH OF 11.8 FEET, AS SHOWN ON THE DETAIL BELOW.

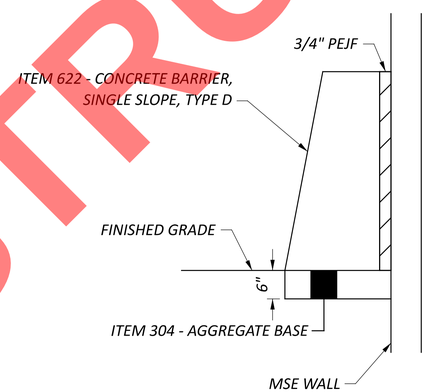
ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR THE CONCRETE BARRIER END ANCHORAGE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN



ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "D"

THIS ITEM SHALL BE CONSTRUCTED AS PER THE CMS EXCEPT THAT IT SHALL INCLUDE PREFORMED EXPANSION JOINT FILLER (PEJF) PER 705.03 AND 6" OF ITEM 304 - AGGREGATE BASE AS SHOWN ON THE DETAIL BELOW.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE FOR THE CONCRETE BARRIER, AGGREGATE BASE AND THE PEJF SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "D".



THIS WORK SHALL BE PERFORMED ADJACENT TO THE MSE WALL AT THE NEW DEAD END AT BEACON ST. IT SHALL EXTEND THE ENTIRE WIDTH OF THE ROADWAY.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THIS WORK.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "D"	30 FT

FINAL PLANS NOT FOR CONSTRUCTION

GENERAL NOTES

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DESIGNER SMG
REVIEWER KDK 5-28-24
PROJECT ID 114865
SHEET P.022 TOTAL 627

ITEM 619 FIELD OFFICE, TYPE C, AS PER PLAN

THIS WORK CONSISTS OF PROVIDING, MAINTAINING, AND SUBSEQUENTLY REMOVING A FIELD OFFICE FOR THE EXCLUSIVE USE OF THE DEPARTMENT FOR THE DURATION OF THE CONTRACT AT A LOCATION APPROVED BY THE ENGINEER.

FURNISH A COMPLETELY FUNCTIONAL FIELD OFFICE OF THE TYPE SPECIFIED IN THE CONTRACT PRIOR TO BEGINNING WORK.

THE FIELD OFFICE WILL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 3,000 SQUARE FEET AND AT GROUND LEVEL WITH A MINIMUM CEILING HEIGHT OF EIGHT (8) FEET. PROVIDE TWO (2) OUTSIDE DOORS, LOCKABLE VANDAL PROOF CYLINDER TYPE DEAD BOLTS AND LOCKABLE WINDOWS. THE FLOOR SPACE WILL BE DIVIDED INTO A RESTROOM, ONE GENERAL OFFICE AREA (MINIMUM 400 SQUARE FEET), NOT LESS THAN THREE INDIVIDUAL OFFICES (MINIMUM 300 SQUARE FEET EACH), AND ONE CONFERENCE ROOM (MINIMUM 500 SQUARE FEET), AS DEEMED NECESSARY BY THE ENGINEER.

FURNISH EACH FIELD OFFICE WITH A MEANS FOR MAINTAINING ROOM TEMPERATURE BETWEEN 68 DEGREES F AND 80 DEGREES F.

FURNISH ELECTRIC SERVICE FOR EACH FIELD OFFICE.

FURNISH NEAT, SANITARY, ENCLOSED TOILET ACCOMMODATIONS CONNECTED TO AN EXISTING SANITARY SEWER LINE FOR THE USE OF THE OCCUPANTS OF THE FIELD OFFICE, MEETING APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. FURNISH ASSOCIATED LAVATORY AND SANITARY SUPPLIES. POTABLE HOT AND COLD RUNNING WATER WILL BE PROVIDED IN THE RESTROOM FOR SANITARY PURPOSES.

FURNISH TRASH COLLECTION SERVICE / DUMPSTER.
FURNISH PROFESSIONAL, BONDED AND INSURED JANITORIAL SERVICE WITH A WEEKLY CLEANING OF THE ENTIRE OFFICE TO INCLUDE THE RESTROOM FACILITIES FOR THE DURATION OF THE PROJECT.

FURNISH BOTTLED DRINKING WATER SERVICE WITH A HOT AND COLD DISPENSER AND ASSOCIATED SUPPLIES.

PROVIDE A LOCKABLE WOOD OR METAL STORAGE BOX OF SUFFICIENT SIZE TO STORE A NUCLEAR DENSITY GAUGE AND AN ELECTRICAL CONNECTION FOR THE GAUGE. THE STORAGAGE BOX MUST BE AT LEAST 15 FEET FROM ANY OCCUPIED WORK AREA.

TELEPHONE SERVICE AND TELEPHONES, INCLUDING ALL NECESSARY WIRING, WILL BE SUPPLIED AT EACH DESK, THE CONFERENCE ROOM, AND THE GENERAL OFFICE AREA INTERCONNECTED BETWEEN TELEPHONES.

ALL TELEPHONES WILL BE EQUIPPED WITH SPEAKER PHONE AND TWO (2) LINE CAPABILITIES WITH TWO (2) LINE SERVICE AT EACH LOCATION. A TOTAL OF THREE (3) OUTSIDE LINES WILL BE PROVIDED, ONE OF WHICH WILL BE DEDICATED FOR THE USE OF THE FACSIMILE MACHINE.

THE TWO (2) LINES FOR THE TELEPHONE WILL HAVE THE ABILITY TO AUTOMATICALLY TRANSFER TO THE NEXT LINE IF ANOTHER LINE IS IN USE.

PROVIDE A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS GREATER THAN 10 MBPS, UPLOAD SPEEDS GREATER THAN 2 MBPS, AND NETWORK LATENCY LESS THAN 50 MILLISECONDS.

WHEN MULTIPLE BROADBAND SERVICES ARE AVAILABLE, THE FOLLOWING IS THE PREFERRED ORDER: CABLE, DSL, CELLULAR, AND WIRELESS RADIO.

SATELLITE COMMUNICATION IS NOT COMPATIBLE WITH ODOT VPN CONNECTION AND WILL NOT BE ACCEPTED.

ITEM 619 FIELD OFFICE, TYPE C, AS PER PLAN (CONT.)

SUPPLY ALL WIRING, ROUTERS, MODEMS (CAPABLE TO BE CONFIGURED IN BRIDGE MODE) , SOFTWARE, AND INCIDENTALS NECESSARY TO CONNECT FIVE (5) PERSONAL COMPUTERS AT SEPARATE LOCATIONS, DESIGNATED BY THE PROJECT ENGINEER, THROUGHOUT THE OFFICE TO THE SYSTEM.

PROVIDE THE FOLLOWING OFFICE FURNITURE AND EQUIPMENT:

1) SIX (6) TELEPHONES WITH SPEAKER PHONE AND TWO (2) LINE CONNECTION.
2) ONE (1) DIGITAL ANSWERING MACHINE WITH TIME / DATE STAMP.
3) ONE (1) MULTI-FUNCTION COLOR COPIER THAT IS SET UP FOR SCANNING, PRINTING, FAXING, AND COPYING WITH THE FOLLOWIN SPECIFICATIONS:
   a) COLOR PRINT/COPY/SCAN
   b) COPY/PRINT SPEED: 30 PPM (LETTER), 15 PPM (LEGAL), 15 PPM (LEDGER), OR HIGHER.
   c) DUPLEX PRINTING SUPPORT
   d) AUTOMATIC DOCUMENT FEEDER WITH 50 SHEET DUPLEXING DOCUMENT FEEDER
   e) COPIER MEMORY: 1 GB
   f) INSTALLED HDD: 40 GB
   g) DATA ENCRYPTION AND HDD ERASE SUPPORT INCLUDED WITH MACHINE
   h) INTERNAL STAPLER SUPPORT
   i) PAPER CAPACITY: 250 SHEET X 2 TRAYS, 50 SHEET BYPASS TRAY
   j) NETWORK INTERFACE: 10/100 BASE-TX, 1000 BASE-TX
   k) ANALOG FAX SUPPORT INCLUDED WITH MACHINE
   l) COLOR SCANNING WITH THE FOLLOWING REQUIREMENTS:
      i) RESOLUTION: 600 X 600 DPI
      ii) SCAN AREA UP TO 11" X 17"
      iii) SCANNING PROTOCOL SUPPORT: TCP/IP, SMTP, SMB, FTP, POP3, NCP
      iv) FILE SCAN TYPES SUPPORTED: SINGLE PAGE TIFF, JPEG, PDF, MULTI-PAGE TIFF, PDF, AND OCR PDF
      v) SCANNING SUPPORT FOR SCAN-TO-EMAIL, HDD, SMB (FOLDER), URL, AND TWAIN
   m) NETWORK PROTOCOL SUPPORT FOR TCP/IP
   n) CLIENT AND SERVER PRINT DRIVER SUPPORT FOR PCL PRINT DRIVERS
   o) SERVER OPERATING SYSTEM SUPPORT FOR WINDOWS SERVER 2008 AND WINDOWS SERVER 2008 R2 (32 BIT/64 BIT)
   p) CLIENT PRINT DRIVER SUPPORT FOR WINDOWS XP/WINDOWS 7 (BOTH PCL 32 BIT/64 BIT)
   q) MINIMUM PRINT/COPY RESOLUTION OF 600 X 600 DPI
   r) SECURE PRINTING WITH PASSWORD OR PIN FROM CLIENT TO COPIER
   s) PROVIDE THE COPIER WITH ALL NECESSARY TONER, PAPER SUPPLIES, AND A SERVICE CONTRACT WITH A RESPONSE TIME OF 24 HOURS OR LESS FOR MAINTENANCE AND SUPPLIES OF THE COPY MACHINE.
4) EIGHT (8) PRINTING DESK CALCULATORS WITH TAPE.
5) EIGHT (8) DESK AND CHAIR SETS.
6) TEN (10) STACKABLE CHAIRS.
7) EIGHT (8) WORK TABLES, 30" X 72"
8) ONE (1) DRAFTING/PLAN TABLE WITH A MINIMUM 36" X 60" WORKING SURFACE WITH AN APPROPRIATE ADJUSTABLE HEIGHT DRAFTING CHAIR.
9) THREE (3), 4-DRAWER, LOCKABLE, LEGAL SIZE METAL FILING CABINETS.
10) FOUR (4), 2-DRAWER, LOCKABLE, LEGAL SIZE METAL FILING CABINETS.
11) THREE (3) PORTABLE, TYPE 2-A:10-BC, FIVE POUND SIZE FIRE EXTINGUISHERS.
12) THREE (3) PLAN RACKS, EACH CAPABLE OF HANDLING THE BREAKDOWN OF 22 X 34 INCH SIZED PLANS INTO TEN SECTIONS.
13) TWENTY (20) ALL-WEATHER PARKING SPACES.
14) EIGHT (8) 24-QUART WASTE BASKETS WITH APPROPRIATE SIZED TRASH BAGS.

ITEM 619 FIELD OFFICE, TYPE C, AS PER PLAN (CONT.)

15) ONE NEW PROJECTOR TO BE USED BY THE PROJECT WITH THE FOLLOWING SPECIFICATIONS.
   a) NATIVE RESOLUTION – 1920 X 1080
   b) ENGINE TYPE – LCD
   c) ASPECT RATION – 16:9
   d) RATED CONTRAST RATIO – 70,000:1
   e) RATED BRIGHTNESS – 2500 ANSI LUMENS
   f) ZOOM – OPTICAL
   g) COMPUTER INTERFACES – ANALOG VGA, HDMI, MHL
   h) VIDEO INTERFACES – COMPONENT, COMPOSITE, HDMI, MHL
   i) SUPPORTED VIDEO FORMATS – 480P, 720P, 1080I, 576I, 576P, 480I, 1080P
   j) USB PORTS
   k) WIRELESS REMOTE CONTROL
   l) BUILT IN SPEAKERS
   m) ALL ACCESSORIES NECESSARY TO OPERATE
16) ONE NEW TELEVISION WITH THE FOLLOWING SPECIFICATIONS.
   a) DIAGONAL SCREEN SIZE – 55"
   b) NATIVE RESOLUTION – 1920 X 1080
   c) HDMI PORTS: 3
   d) VIDEO INTERFACES: COMPOSITE, HDMI, USB
   e) ALL ACCESSORIES NECESSARY TO OPERATE
   f) ALL HARDWARE NECESSARY TO HANG THE TELEVISION ON THE WALL

EXPENSES FOR THE OPERATION OF THE FIELD OFFICE TO INCLUDE BUT NOT BE LIMITED TO ELECTRICAL SERVICE, HEATING/COOLING, RUNNING WATER SERVICE, SEWER SERVICE, TELEPHONE SERVICE, JANITORIAL SERVICE, BOTTLED WATER SERVICE, HIGH SPEED ONLINE SERVICE, ETC. WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL ALSO PROVIDE ALL NECESSARY SUPPLIES AND MAINTENANCE FOR ALL EQUIPMENT THAT THE CONTRACTOR IS REQUIRED TO FURNISH.

FURNISH A CONCRETE CYLINDER CURING BOX CAPABLE OF HOLDING AT LEAST EIGHT 6X12 INCH (150X300MM) CYLINDERS AT 73 DEG F (23 DEG C) +/- 3 DEGREES NO MATTER WHAT THE AMBIENT TEMPERATURE IS WHEN CONSTRUCTING EITHER PORTLAND CEMENT CONCRETE PAVEMENT OVER 10,000 SQUARE YARDS (8000 SQUARE METERS) OR OVER 50 CUBIC YARDS (38 CUBIC METERS) OF BRIDGE STRUCTURE REPAIR OR REPLACEMENT CONCRETE. THE BOX WILL HAVE A SEALED LID.

THE CONTRACTOR WILL RETAIN RESPONSIBILITY FOR RISK OF LOSS OR DAMAGE TO SAID FIELD OFFICE, FURNISHINGS, AND EQUIPMENT WHILE THE OFFICE IS IN USE FOR THIS CONTRACT.

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE CONTRACT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
619	42 MONTH	FIELD OFFICE,TYPE C, AS PER PLAN

ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE B

THIS ITEM SHALL BE CONSTRUCTED AS PER STANDARD CONSTRUCTION DRAWING BP-2.4. ALL MATERIALS AND LABOR REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE B.

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	1/21/22	HL-10.11	7/17/26	I-3B1	1/17/25
BP-2.2	1/16/26	HL-10.12	1/16/26	I-3C	1/17/25
BP-2.4	7/19/13	HL-10.13	7/17/26	I-3C1	1/17/25
BP-3.1	1/19/24	HL-20.11	1/16/26	I-3D	7/19/24
BP-5.1	1/16/26	HL-20.13	7/17/26		
BP-9.1	1/18/19	HL-20.14	7/17/26	MT-95.30	7/17/26
		HL-20.24	7/17/26	MT-95.40	7/17/26
F-1.1	7/18/25	HL-30.11	7/17/26	MT-95.45	7/21/23
F-3.1	7/19/13	HL-30.21	4/17/20	MT-95.70	7/21/23
F-3.3	7/19/13	HL-30.22	1/17/25	MT-95.71	7/21/23
F-3.4	7/19/13	HL-30.31	7/17/26	MT-95.72	7/17/26
F-3.5	1/16/26	HL-30.41	7/17/26	MT-97.10	7/18/25
		HL-40.10	1/16/26	MT-97.12	1/16/26
MGS-2.1	7/17/26	HL-50.21	1/16/26	MT-98.10	1/17/20
MGS-3.1	1/16/26	HL-60.11	7/21/17	MT-98.11	1/17/20
MGS-3.2	7/18/25	HL-60.12	1/16/26	MT-98.21	7/21/23
		HL-60.31	1/16/26	MT-98.28	1/17/20
RM-1.1	1/16/26			MT-98.29	1/17/20
RM-3.1	7/20/18	TC-9.31	1/16/26	MT-99.20	7/17/26
RM-4.2	7/17/26	TC-15.116	7/17/26	MT-99.30	1/17/20
RM-4.3	7/17/26	TC-21.11	7/17/26	MT-99.50	7/17/26
RM-4.4	7/17/26	TC-21.21	7/18/25	MT-99.60	7/17/26
RM-4.5	1/16/26	TC-21.50	7/17/26	MT-100.00	1/19/24
RM-4.6	7/18/25	TC-22.20	7/18/25	MT-101.60	1/17/25
		TC-41.10	7/17/26	MT-101.70	7/19/24
DM-1.1	7/17/26	TC-41.20	10/18/13	MT-101.75	7/21/23
DM-1.2	1/17/25	TC-41.41	7/19/19	MT-101.80	1/17/20
DM-1.3	1/18/14	TC-42.10	10/18/13	MT-101.90	7/17/20
DM-4.3	1/15/16	TC-42.20	10/18/13	MT-102.10	7/17/26
DM-4.4	1/15/16	TC-51.11	7/17/26	MT-102.30	7/17/26
		TC-51.12	7/17/26	MT-103.10	7/18/25
CB-2-2B	7/19/24	TC-52.10	10/18/13	MT-103.20	1/16/26
CB-3	7/17/26	TC-52.20	7/17/26	MT-104.10	7/17/26
CB-3A	7/17/26	TC-61.30	7/19/24	MT-105.10	1/17/20
CB-6	7/19/24	TC-65.10	1/17/14	MT-110.10	7/19/13
CB-8	7/19/24	TC-65.11	7/17/26		
		TC-71.10	7/17/26	AS-1-15	1/20/23
ITS-10.11	7/18/25	TC-72.20	1/16/26	AS-1-81	4/20/21
ITS-11.10	1/17/25	TC-73.20	1/16/26	AS-2-15	7/21/23
ITS-12.10	1/16/26	TC-81.22	1/16/26	BR-2-15	7/19/24
ITS-12.11	1/16/26	TC-83.10	1/16/26	GSD-1-19	7/19/24
ITS-14.10	1/17/25	TC-83.20	1/16/26	PSID-1-13	7/18/25
ITS-14.11	1/16/26	TC-83.30	1/16/26	SBR-1-20	7/19/24
ITS-14.50	7/18/25	TC-85.20	4/21/23	SICD-1-21	1/19/24
ITS-14.60	1/16/26			SICD-2-14	1/15/21
ITS-15.11	1/16/26	MH-3	7/19/24	PCB-91	7/17/20
ITS-18.00	7/16/21			VPF-1-24	7/17/26
ITS-50.10	1/16/26				

FINAL PLANS NOT FOR CONSTRUCTION

GENERAL NOTES

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REVIEWER KDK 5-28-24
PROJECT ID 114865
SHEET P.023 TOTAL 627

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.

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 IS 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 611 – CATCH BASIN, NO. 6, AS PER PLAN

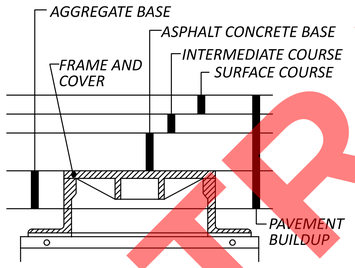
THIS ITEM SHALL PERTAIN TO THE PROPOSED CATCH BASINS ADJACENT TO THE MEDIAN BARRIER NEAR STA. 367+31. THESE CATCH BASINS ARE INTENDED TO CONNECT TO AN EXISTING STORM SEWER THAT CROSSES SR 8 AND OUTLETS INTO AN EXISTING MANHOLE IN THE WEST SHOULDER AT APPROXIMATE STA. 367+29, 50' LT. AT THE TIME OF SURVEY AND PLAN DEVELOPMENT, THE EXISTING MANHOLE WAS UNABLE TO BE ACCESSED. INVERTS OF THE EXISTING PIPE WERE ESTIMATED USING OLD PLAN INFORMATION AND AVAILABLE FIELD OBSERVATIONS. PRIOR TO ORDERING THE PROPOSED CATCH BASINS, THE CONTRACTOR SHALL ACCESS THE EXISTING MANHOLE TO VERIFY THE PIPES AND ELEVATIONS CAN ACCOMMODATE THE INTENDED DEPTHS OF THE PROPOSED CATCH BASINS. THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CATCH BASONS OR CONDUITS WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN THE CONTRACT PRICE FOR ITEM 611 CATCH BASIN, NO 6, AS PER PLAN.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER. CLEANOUT OF THE PIPE IS PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL, PIPE CLEANOUT. THIS PRICE INCLUDES THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

ITEM 611 MANHOLE, NO. 3, AS PER PLAN
ITEM 611 MANHOLE, NO. 3 (60"I.D.), AS PER PLAN
ITEM 611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

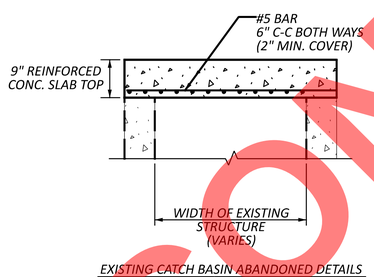
CONSTRUCT THE PROPOSED MANHOLE OR RECONSTRUCT THE EXISTING MANHOLE PER CMS 611 EXCEPT THAT THE FRAME AND COVER SHALL BE BURIED BENEATH THE LAYERS OF ASPHALT. SET THE COVER AND THE TOP OF THE FRAME FLUSH WITH THE TOP OF THE ADJACENT LAYER OF AGGREGATE BASE. THE COVER SHALL BE SOLID. RELEVANT INFORMATION ON THE PERTINENT STRUCTURES IS SHOWN THROUGHOUT THE PLANS AND ON P.120.



MANHOLE LID CONSTRUCTED TO TOP OF AGGREGATE BASE DETAIL (N.T.S.)

ITEM 202 - CATCH BASIN ABANDONED, AS PER PLAN

THE CATCH BASIN SHALL BE ABANDONED IN PLACE BUT LEFT INTACT AND FUNCTIONAL TO PERPETUATE THE STORM SEWER FLOW. FOLLOW THE REQUIREMENTS OF C&MS 202.11 EXCEPT THE UPPER SECTION OF THE CATCHBASIN SHALL BE REMOVED 2 FEET BELOW THE BOTTOM OF THE PAVEMENT SUBGRADE. CAP AND SEAL THE LOWER SECTION OF THE CATCH BASIN WITH A REINFORCED CONCRETE CAP WITH A NOMINAL THICKNESS OF 9 INCHES. PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, MATERIALS, SUBMITTALS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT BID PRICE PER EACH FOR ITEM 202 CATCH BASIN ABANDONED, AS PER PLAN.



EXISTING CATCH BASIN ABANDONED DETAILS (N.T.S.)

ITEM 611 - CONDUIT, TYPE B, AS PER PLAN
ITEM 611 - CONDUIT, TYPE F, AS PER PLAN

THIS ITEM PERTAINS TO STORM SEWER CONDUITS INSTALLED WITHIN THE LIMITS OF GRANULAR BACKFILL FOR THE MSE WALLS. PROVIDE REINFORCED CONCRETE PIPE ACCORDING TO C&MS 706.02. PROVIDE PREMIUM JOINTS ACCORDING TO C&MS 706.11 AND WRAP THE PIPE JOINTS IN GEOTEXTILE FABRIC, TYPE A ACCORDING TO C&MS 712.09.

ITEM 611 - CONDUIT, TYPE F, WITH TEE, AS PER PLAN

THIS ITEM PERTAINS TO STORM SEWER CONDUITS INSTALLED WITHIN THE LIMITS OF GRANULAR BACKFILL FOR THE MSE WALLS. PROVIDE REINFORCED CONCRETE PIPE ACCORDING TO C&MS 706.02. PROVIDE PREMIUM JOINTS ACCORDING TO C&MS 706.11 AND WRAP THE PIPE JOINTS IN GEOTEXTILE FABRIC, TYPE A ACCORDING TO C&MS 712.09.

INCLUDED WITH THIS ITEM IS THE TEE/CLEANOUT THAT IS SHOWN IN THE PIPE PROFILE. THE TEE/CLEANOUT SHALL BE THE SAME MATERIAL AS THE CONDUIT AND INCLUDE A CAP THAT IS FLUSH WITH THE GROUNDLINE.

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 15 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.

FINAL PLANS NOT FOR CONSTRUCTION

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ITEM 614, MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. RAMPS AND LOCAL ROADS: A MINIMUM OF ONE 11 FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK, EXCEPT AS NOTED IN THE PLANS.

2. A MINIMUM OF 3 LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED ALONG THE MAINLINE OF SR 8 AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC UNLESS APPROVED BY THE ENGINEER.

3. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

5. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-9AM AND 3-7PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE. THIS REQUIREMENT SHALL ALSO APPLY TO THOSE ROUTES INCLUDED ON THE PERMITTED LANE CLOSURE CHART WHICH ARE NOT DETAILED IN THE PLAN SET.

6. A QUANTITY OF 125 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

7. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

8. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 6F.32. PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC.

9. DRUMS UTILIZED ON THE HIGH SIDE OF A SUPERELEVATED INTERSTATE OR FREEWAYS SHALL BE FROM MANUFACTURERS ON THE OFFICE OF MATERIAL MANAGEMENT'S QUALIFIED PRODUCTS LIST (QPL) WITH A MINIMUM BALLAST WEIGHT OF 30 POUNDS. ALL BALLASTS USED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

10. NO WORK SHALL BE PERFORMED AND ALL AVAILABLE LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

NEW YEAR'S (OBSERVED)	GENERAL/REGULAR ELECTION DAY (NOV)
MEMORIAL DAY	THANKSGIVING
CHRISTMAS (OBSERVED)	FOURTH OF JULY (OBSERVED)
LABOR DAY	(OTHER HOLIDAY OR SPECIAL EVENT)

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:

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

DAY OF HOLIDAY	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)	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 IS 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 VALUE CONTRACT (PN 127).

11. 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.

12. NOTICE OF CLOSURE SIGNS (W20-H14) 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 FLATSHEET 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
RAMPS & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 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-H14 SIGN LISTS THE APPLICABLE AGENCY NAME IN WHICH A MOTORIST MAY CONTACT FOR ADDITIONAL INFORMATION.

13. 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.

MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

A MINIMUM OF ONE LANE OF TRAFFIC ALONG PROJECT RAMPS OR ROADWAYS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR PERIODS NOT TO EXCEED LISTED DURATION (CONSECUTIVE CALENDAR DAYS), WHEN AFFECTED ROADWAY OR RAMP TRAFFIC MAY BE DETOURED AS SHOWN ON THE FOLLOWING DETOUR SHEETS:

PHASE 1 - CARROLL ST (360 DAYS) - SHEET P.033
PHASE 2 - GOODKIRK ST (360 DAYS) - SHEET P.034
PHASE 2 - GOODKIRK ST ENTRANCE RAMP TO SR-8 SB (360 DAYS) - SHEET P.035
PHASE 3 - IR-76 EB/ IR77-SB TO SR-8 NB RAMP (30 DAYS) - SHEET P.036
PHASE 3 - SR-8 SB TO I-77 NB/I-76 WB RAMP (60 DAYS) - SHEET P.037
PHASE 4 - SR-8 NB TO CARROLL ST (30 DAYS) - SHEET P.040

CLOSURES SHALL NOT BE CONCURRENT. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT PER THE LANE VALUE CONTRACT TABLE ON SHEET P.031 FOR ROADWAYS AND RAMPS THAT REMAIN CLOSED BEYOND THE SPECIFIED TIME LIMIT.

ASPHALT PAVING LIMITATION

THE CONTRACTOR SHALL NOT ANTICIPATE OR SCHEDULE PLACING ASPHALT (ASPHALT SURFACE COURSE, ASPHALT INTERMEDIATE COURSE, ASPHALT CONCRETE BASE COURSE, ETC.) BETWEEN NOVEMBER 01 AND APRIL 01 WHEN SUBMITTING THEIR INITIAL BAR CHART PROGRESS SCHEDULE TO THE DISTRICT CONSTRUCTION ENGINEER (DCE) AS SPECIFIED IN CMS SECTION 108.02A. THIS LIMITATION SHALL ALSO INCLUDE INITIAL BASE LINE SCHEDULES AND ALL UPDATES IN A CPM SCHEDULE IS REQUIRED.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER AND THE CITY OF AKRON EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING. REFER TO DETOUR SIGNING NOTE ON SHEETS P.033TO P.040

TRENCH FOR WIDENING [SPEED LIMIT > 45MPH]

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. AS SHOWN ON MT-101.90. PLACEMENT OF PROPOSED BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE BASE WIDENING ON THIS PROJECT WILL BE COMPLETED TO A DEPTH OF 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF THE WORK DAY. NO TRENCH WILL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING WILL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMPS & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONST-RUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENT-ATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

FINAL NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.025 TOTAL 627

SUM-77/8-11.65/0.00

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SEQUENCE OF CONSTRUCTION

PHASE 1

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. REMOVAL AND RECONSTRUCTION OF THE CARROLL STREET BRIDGE.

MAINTAIN TRAFFIC AS FOLLOWS:
1. CARROLL STREET WILL BE CLOSED DURING THE ENTIRETY OF THIS PHASE, WITH TRAFFIC BEING DETOURED PER SHEET P.033
2. SR 8 WILL USE SHORT TERM CLOSURES PER SCD MT-99.50 AND MT-99.60 FOR THE BEAM REMOVAL AND PLACEMENT.
4. GOOD KIRK STREET AND FOUNTAIN STREET SHALL REMAIN OPEN DURING PHASE 1.
3. ALL RAMPS AND REMAINING SIDE ROADS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED.

PHASE 1A

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. REMOVAL OF EXISTING ABUTMENTS, SUPERSTRUCTURE, AND CONSTRUCTION OF WIDENED ABUTMENTS OF CARROLL STREET.
2. MISCELLANEOUS ITEMS ON THE OUTSIDE OF THE HIGHWAY SUCH AS DRAINAGE AND TRAFFIC CONTROL ITEMS.

MAINTAIN TRAFFIC AS FOLLOWS:
1. THE OUTSIDE LANE AND SHOULDER OF BOTH NORTHBOUND & SOUTHBOUND SR 8 WILL BE CLOSED WHILE MAINTAINING THREE LANES SHIFTED INTO THE MEDIAN.
2. ADDITIONAL SHOULDER CLOSURES SHALL BE PER MT-95.45.
3. ALL RAMPS AND REMAINING SIDE ROADS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED WITH THE EXCEPTION OF CARROLL STREET.

PHASE 1B

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. REMOVAL OF EXISTING CENTER PIER AND CONSTRUCTION OF CENTER PIER OF CARROLL STREET.
2. REMOVAL OF EXISTING MEDIAN BARRIER AT CROSSOVER LOCATIONS, REMOVAL AND REPLACEMENT OF MEDIAN BARRIER FOR DRAINAGE AND TRAFFIC CONTROL, AND CONSTRUCTION OF TEMPORARY DRAINAGE THAT IS NEEDED THROUGHOUT THE DURATION OF THE PROJECT. REMOVED BARRIER WILL BE REPLACED WITH PORTABLE BARRIER UNTIL THE CROSSOVER IS NEEDED.

MAINTAIN TRAFFIC AS FOLLOWS:
1. THE INSIDE LANE AND SHOULDER OF BOTH NORTHBOUND AND SOUTHBOUND SR 8 WILL BE CLOSED WHILE MAINTAINING THREE LANES SHIFTED TO THE OUTSIDE.
2. ALL RAMPS AND REMAINING SIDE ROADS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED WITH THE EXCEPTION OF CARROLL STREET.
3. THE CARROLL ST BRIDGE MUST BE OPEN TO TRAFFIC BEFORE MOVING ONTO PHASE 2 OR ANY WORK WHICH CONFLICTS WITH THE CLOSURE OF THE CARROLL ST BRIDGE .

PHASE 2A AND 2B

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. WIDENING FOR THE BRAID CONSTRUCTION INCLUDING THE BEACON STREET TUNNEL AND BRIDGE REMOVAL, EXCHANGE STREET BRIDGE WIDENING AND OVERLAY, BRAID BRIDGE, RETAINING WALLS, RAMPS, GOODKIRK STREET, BARRIERS AND ASSOCIATED PAVEMENT WIDENING FROM I-76 RAMPS TO JUST NORTH OF BUCHTEL AVENUE.

MAINTAIN TRAFFIC AS FOLLOWS:
1. PHASE 2A: THREE SOUTHBOUND SR 8 LANES SHALL BE SHIFTED TO THE MEDIAN AROUND THE WORK AREA WITH SHIFTING CROSSOVERS.

2. PHASE 2B: TWO LANES OF SR 8 SOUTHBOUND WILL BE SHIFTED TO THE MEDIAN AND ONE LANE CROSSED OVER TO THE NORTHBOUND SIDE. THE NORTHBOUND THREE LANES WILL BE SHIFTED TO THE OUTSIDE TO ACCOMMODATE THE ADDITIONAL SOUTHBOUND LANE. THE NORTHBOUND AUXILIARY LANE FROM I-76 SHALL BE MAINTAINED AT ALL TIMES.

SEQUENCE OF CONSTRUCTION (CONTINUED)
PHASE 2A AND 2B

3. SIDE ROADS AND RAMPS:
   - GOODKIRK STREET WILL BE CLOSED BETWEEN CARROLL ST AND EXCHANGE ST AND DETOURED PER SHEET P.034
   - GOODKIRK STREET RAMP TO SR 8 SOUTHBOUND WILL BE CLOSED BECAUSE OF THE GOODKIRK ST CLOSURE AND BE DETOURED PER SHEET P.035
   - EXCHANGE STREET WILL BE CLOSED FOR SHORT DURATIONS DURING OFF PEAK TIMES. OUTSIDE LANE CLOSURES OF SR 8 FOR ABUTMENT WORK MAY BE REQUIRED. TRAFFIC SHALL BE MAINTAINED PER SCD MT-95.40.
   - ALL REMAINING RAMPS SHALL BE MAINTAINED DURING THIS PHASE.

PHASE 3

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. CONSTRUCTION OF THE AREA NEAR THE SR 8 SOUTHBOUND RAMP TO I-76 WESTBOUND/I-77 NORTHBOUND.
2. REMOVAL OF THE SR 8 SOUTHBOUND EASTERN PORTIONS AND WESTERN PORTIONS OF THE SR 8 NORTHBOUND BEACON STREET BRIDGE, PAVEMENT PLACEMENT AT BEACON STREET, AND THE EXCHANGE STREET BRIDGE OVERLAY.
3. TRENCH DRAINS AND TEMPORARY PAVEMENT SHALL BE INSTALLED AT LOCATIONS OF THE PROPOSED CONCRETE BARRIER THAT CANNOT BE CONSTRUCTED DUE TO MAINTAINING TRAFFIC.

MAINTAIN TRAFFIC AS FOLLOWS:
1. THREE SOUTHBOUND LANES SHALL BE SHIFTED TO THE WEST AROUND THE WORK AREA WITH SHIFTING CROSSOVERS.
2. THREE NORTHBOUND LANES SHALL BE SHIFTED TO THE EAST AROUND THE WORK AREA WITH SHIFTING CROSSOVERS.
3. ALL RAMPS AND REMAINING SIDE ROADS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED WITH THE EXCEPTION OF THE I-76 EASTBOUND ENTRANCE RAMP TO SR 8 NORTHBOUND AND THE SR 8 SOUTHBOUND RAMP TO I-76 WESTBOUND/I-77 NORTHBOUND. FOR THE I-76 EASTBOUND RAMP DETOUR PLAN, SEE SHEET P.036 . FOR THE SR 8 SOUTHBOUND RAMP DETOUR PLAN, SEE SHEET P.037

PHASE 4

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. REMOVAL OF THE SR 8 NORTHBOUND EASTERN PORTIONS OF THE BEACON STREET BRIDGE AND THE EXCHANGE STREET BRIDGE OVERLAY.

MAINTAIN TRAFFIC AS FOLLOWS:
1. THREE SOUTHBOUND LANES SHALL REMAIN AS STATED IN PHASE 3.
2. TWO NORTHBOUND LANES SHALL BE CROSSED OVER TO THE SOUTHBOUND SIDE AND THE TWO I-76 RAMPS TO NORTHBOUND SR 8 SHALL BE SHIFTED TO THE OUTSIDE OF SR 8.
3. ACCESS FROM NORTHBOUND SR 8 TO CARROLL STREET WILL BE DETOURED PER PLAN SHEET P.040
4. ALL OTHER RAMPS AND REMAINING SIDE ROADS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED.

POST-PHASE 4

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. CONSTRUCT THE PORTIONS OF THE BARRIER THAT WERE REMOVED FOR MAINTAINING TRAFFIC OR THAT COULD NOT BE CONSTRUCTED PREVIOUSLY.

MAINTAIN TRAFFIC AS FOLLOWS:
1. SHIFTING LANES AND RAMPS AROUND PER APPLICABLE SCDs, TRAFFIC ENGINEERING MANUAL OR OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FIGURES PER THE PERMITTED LANE CLOSURE CHARTS.

PHASE 5

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. RESURFACING AND SHIFTING THE CROWN POINT FROM APPROXIMATELY CARROLL STREET TO NORTH OF PERKINS STREET AND PLACEMENT OF THE FINAL SURFACE COURSE ON THE NEW BRAID CONSTRUCTION.

MAINTAIN TRAFFIC AS FOLLOWS:
1. ALL NB LANES SHALL REMAIN ON NORMAL ALIGNMENT.
2. SOUTHBOUND TRAFFIC SHALL BE MAINTAINED USING SCD MT-95.30, MT-99.20, OR OTHER APPLICABLE SCDS, TEM, OR OMUTCD FIGURES PER THE PERMITTED LANE CLOSURE CHARTS.
3. ALL RAMPS AND SIDE ROADS SHALL BE MAINTAINED.

SEQUENCE OF CONSTRUCTION (CONTINUED)
PHASE 6

WORK TO BE COMPLETED IN THIS PHASE IS AS FOLLOWS:
1. RESURFACING AND SHIFTING THE CROWN POINT FROM SOUTH OF THE CENTRAL INTERCHANGE TO PERKINS STREET.

MAINTAIN TRAFFIC AS FOLLOWS:
1. ALL SB LANES SHALL REMAIN ON NORMAL ALIGNMENT.
2. NORTHBOUND TRAFFIC SHALL BE MAINTAINED USING SCD MT-95.30 AND MT-99.20 PER THE PERMITTED LANE CLOSURE CHARTS.
3. ALL RAMPS AND SIDE ROADS SHALL BE MAINTAINED.

PORTABLE BARRIER PLACEMENT

DURING THE PLACEMENT OF THE PORTABLE BARRIER, TRAFFIC WILL BE PROHIBITED FROM OCCUPYING THE TRAVEL LANE ADJACENT TO THE BARRIER. THE BARRIER WILL BE PLACED AT NIGHT PER THE WORK HOUR RESTRICTION NOTE AND IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE MAP. THE CLOSURE OF THE ADJACENT LANE WILL BE PER THE STANDARD DRAWING MT-95.30.

THE CONTRACTOR WILL SUBMIT A PLAN TO THE ENGINEER FOR APPROVAL SEVEN (7) DAYS IN ADVANCE OF THE PLANNED LANE CLOSURE. WORK WILL NOT BEGIN UNTIL APPROVAL OF THE PLANS HAS BEEN GRANTED.

ALL COSTS INVOLVED IN PLACING THE PORTABLE CONCRETE BARRIER WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR THE PORTABLE BARRIER ITEM(S).

ITS MESSAGE BOARDS

ITS MESSAGE BOARDS THE EXISTING ITS MESSAGE BOARDS IN THE VICINITY OF THE PROJECT WILL BE UTILIZED TO PROVIDE SUPPLEMENTAL INFORMATION TO THE TRAVELING PUBLIC. THE CONTRACTOR WILL NOTIFY THE PROJECT ENGINEER ONE [1] WEEK IN ADVANCE OF ANY PHASE CHANGE. THE PROJECT ENGINEER WILL COORDINATE WITH THE CENTRAL OFFICE TRAFFIC CONTROL CENTER (EMAIL ADDRES STATEWIDETMC@DOT.OHIO.GOV) THE DISTRICT 4 PUBLIC INFORMATION OFFICER AT 330-786-2208 FOR ITS MESSAGE BOARD ADJUSTMENTS.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $ 3000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

WORK ZONE DELINEATION FOR CROSSOVERS OR LANE SHIFTS

THE SPACING OF RAISED PAVEMENT MARKERS PROVIDED FOR WORK ZONE DELINEATION AS INDICATED PER SCD MT-99.30 SHALL BE MODIFIED FOR THIS PROJECT. WITHIN THE LIMITS OF ALL TRANSITION AREA DELINEATION, RAISED PAVEMENT MARKER SPACING SHALL BE AT 10-FOOT INTERVALS. INCREASED QUANTITIES FOR ITEM 614, WORK ZONE RAISED PAVEMENT MARKER AND ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN HAVE BEEN PROVIDED.

ALTERNATE MAINTENANCE OF TRAFFIC PLANS

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLANS SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ODOT DISTRICT CONSTRUCTION ENGINEER.

CONTRAFLOW DURING PHASE 2B

THE CONTRA-FLOW LANE DURING PHASE 2B SHALL NOT BE PERMITTED BETWEEN OCTOBER 31ST AND APRIL 15TH.

FULL DEPTH SAW CUTTING

DURING SOME OR ALL PHASES OF CONSTRUCTION, IT WILL BE NECESSARY TO PROTECT THE ADJACENT EXISTING, TEMPORARY OR PROPOSED PAVEMENT THAT WILL BE UTILIZED TO MAINTAIN TRAFFIC DURING PART-WIDTH CONSTRUCTION FOR PAVEMENT REPLACEMENT OPERATIONS. THE CONTRACTOR SHALL PERFORM FULL DEPTH SAW CUTTING AS A MEANS TO PROTECT THE PAVEMENT ADJACENT TO THE ACTIVE WORK ZONE. ANY DAMAGE TO THE ADJACENT PAVEMENT THAT WILL BE USED TO MAINTAIN TRAFFIC SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. FULL DEPTH SAW CUTTING IS ANNOTATED ON MOT TYPICAL SECTION SHEETS.

PAYMENT FOR ALL WORK ASSOCIATED WITH FULL DEPTH SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 , WORK ZONE PAVEMENT MARKING, MISC.: (BY TYPE) SPRAY THERMOPLASTIC

THE CONTRACTOR SHALL PLACE THE WORK ZONE PAVEMENT MARKING, MISC.: (BY TYPE) SPRAY THERMOPLASTIC PER ODOT SPECIFICATION 614.11 AND ODOT SPECIFICATION 648 WITH THE EXCEPTION ODOT SPECIFICATION 648.05 SHALL BE MODIFIED TO ALLOW PLACEMENT OF THE MATERIAL AT A TEMPERATURE OF NOT LESS THAN 35 DEGREES FAHRENHEIT.

THE WORK ZONE PAVEMENT MARKING, MISC.: ARROW, SPRAY THERMOPLASTIC IS A LANE REDUCTION ARROW

ESTIMATED QUANTITIES OF ITEM 614 WORK ZONE PAVEMENT MARKING, MISC.: (BY TYPE) SPRAY THERMOPLASTIC TO BE USED IN ACCORDANCE OF THE REQUIREMENTS OF C&MS 614.11 HAVE BEEN QUANTIFIED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY.

DRAINAGE CONSTRUCTION AND MOT NEAR BEACON STREET

THE MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION ALLOWS FOR THE PHASED CONSTRUCTION OF THE PROJECT'S DRAINAGE IMPROVEMENTS. HOWEVER, THE DRAINAGE DESIGN REQUIRES PHASED WORK UNDERNEATH THE BEACON STREET BRIDGE. THIS IMPROVEMENT REQUIRES THE POTENTIAL OF TEMPORARILY SUPPORTING DRAINAGE PIPES AND/OR PROVIDING A TEMPORARY OUTLET UNTIL THE TUNNEL AND FILL ARE PLACED. REFER TO DRAINAGE, BRIDGE REMOVAL AND MOT SHEETS FOR DETAILS.

THE CONTRACTOR SHALL IMPLEMENT SCD MT-95.45 "CLOSING SHOULDER OF A MULTI-LANE DIVIDED HIGHWAY" TO INSTALL CERTAIN CONDUITS AND SHALL DO SO DURING PHASE 1A.

ALL COSTS ASSOCIATED WITH THE IMPLEMENTATION OF SCD MT-95.45 AND OTHER RELATED MOT COSTS FOR THE CONSTRUCTION OF THE DRAINAGE IMPROVEMENTS, NOT ALREADY QUANTIFIED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

DRAINAGE DURING MOT

IN ADDITION TO THE PROVISIONS IN CMS 105.14 AND CMS 614.02, THE CONTRACTOR MAY BE REQUIRED TO INSTALL TEMPORARY DRAINS AND/OR CONDUITS TO ENSURE POSITIVE DRAINAGE FROM THE BARRIER LOCATIONS NOT YET CONSTRUCTED, REMOVAL OF BARRIER LOCATIONS, EMERGENCY PULL-OFFS, SHIFTING CROSSOVER CONSTRUCTION, OR OTHER SCENARIOS AS DIRECTED BY THE ENGINEER UNTIL THE BARRIER OR PERMANENT DRAINAGE FACILITIES ARE CONSTRUCTED.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN PROVIDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 611 - 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN	150 FT
ITEM 611, 15" CONDUIT JACKED OR BORED, AS PER PLAN	75 FT
ITEM 611 - INLET, MISC.: TEMPORARY INLET MODIFICATION	1 EACH

FINAL - NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.026 TOTAL 627

SUM-77/8-11.65/0.00

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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 CON-RACTOR 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.

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.

WORKSITE TRAFFIC SUPERVISOR (CONTINUED)

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 LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORKDAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, 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 ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND 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 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.

WORKSITE TRAFFIC SUPERVISOR (CONTINUED)

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 TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS 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 AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY 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.

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, SHIFTING 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.

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.

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 AT APPROXIMATELY 10-FOOT INTERVALS.

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 AT APPROXIMATELY 25-FOOT INTERVALS.

THE FOLLOWING ITEMS ARE QUANTIFIED IN THE SUBSUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 2 (ONE-WAY)
ITEM 614, OBJECT MARKER, ONE-WAY

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, 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 15 THROUGH APRIL 01.

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 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 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 ITEM IS INCLUDED IN THE PLANS AND IS QUANTIFIED IN THE MOT SUBSUMMARY:

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

FINAL NOT TRACINGS CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.027 TOTAL 627

SUM-77/8-11.65/0.00

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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 BARRIER REFLECTOR SPACING SHALL BE AT APPROXIMATELY 10-FOOT INTERVALS. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT101.70 WITH THE MODIFICATION THAT OBJECT MARKER SPACING SHALL BE AT APPROXIMATELY 25-FOOT INTERVALS. 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 AT APPROXIMATELY 10-FOOT INTERVALS AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ITEMS ARE QUANTIFIED IN THE SUBSUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)
ITEM 614, BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL)
ITEM 614, OBJECT MARKER, ONE-WAY
ITEM 614, OBJECT MARKER, TWO-WAY
ITEM 614, INCREASED BARRIER DELINEATION

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.

LOCAL ACCESS
INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL RESIDENTIAL AND COMMERCIAL PROPERTIES AT ALL TIMES UNLESS SHOWN OTHERWISE IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING OWNERS, RESIDENTS, OR BUSINESS OPERATORS IN WRITING AT LEAST 48 HOURS BUT NOT MORE THAN 72 HOURS PRIOR TO CLOSURE. THE ENGINEER SHALL BE PROVIDED A LIST OF PERSONS/COMPANIES THAT WERE GIVEN NOTICES WITH THE DATE OF THE NOTICE INCLUDED. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THE US MAIL OR ANY DELIVERIES WITHIN THE PROJECT LIMITS ARE NOT DISRUPTED BY THE CONSTRUCTION OPERATIONS.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)
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 ROAD WAY 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.

EXISTING GUIDE SIGNS (OVERHEAD AND GROUND MOUNTED)
THE CONTRACTOR SHALL MAINTAIN EXISTING GUIDE SIGNS THOUGHOUT EACH PHASE OF CONSTRUCTION AS APPLICABLE. EXISTING OVERHEAD GUIDE SIGNS MAY BE REMOVED AND RE-ERECTED ON GROUND MOUNTS/POSTS. EXISTING GROUND MOUNTED GUIDE SIGNS MAY ALSO BE MOVED AND RE-ERECTED AS NECESSARY AND AS APPROVED BY THE ENGINEER.

TEMPORARY SIGN OVERLAYS NOT OTHERWISE DETAILED IN THE PLANS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

WHERE AN EXISTING GUIDE SIGN CANNOT BE USED OR RE-USED, THEN AN APPROPRIATE TEMPORARY REPLACEMENT SHALL BE CONSTRUCTED IN ACCORANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

UNLESS SEPARATELY ITEMIZED IN THE PLANS, ALL LABOR, EQUIPMENT, MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC
THIS WORK CONSISTS OF PROVIDING, MAINTAINING, AND SUBSEQUENTLY REMOVING ROADS AND APPURTENANCES AND PAVEMENTS FOR MAINTAINING TRAFFIC.

ADDITIONAL EXCAVATION AND EMBANKMENT IS REQUIRED BEYOND THE PHYSICAL LIMITS OF PROPOSED SHOULDER WIDTHS AT RAMP GORES, AT TAPERS AND CROSS OVER LOCATIONS. REQUIRED ADDITIONAL EARTHWORK IN THESE AREAS WILL BE PAID FOR UNDER THE LUMP SUM AMOUNT FOR ITEM 615, ROADS FOR MAINTAINING TRAFFIC.

REMOVE ALL PAVEMENT FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH THE PROVISIONS OF ITEM 615 UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PAYMENT FOR ABOVE REQUIREMENTS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 615, ROADS FOR MAINTAINING TRAFFIC.

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 WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 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:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED 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 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 ENGINEER. 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.

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

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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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 WHICH 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 1,500 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.

ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE), AS PER PLAN
THE CONTRACTOR SHALL MILL 2 INCHES DEEP BY 2 FEET WIDE OF EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS ALONG SR 8 IN THE AREA WHERE TRAFFIC IS SHIFTED ONTO THE SHOULER. THE CONTRACTOR SHALL THEN COAT ALL MILLED HORIZONTAL AND VERTICAL SURFACES WITH AN APPROVED AC LIQUID PER CMS 401.08. THE CONTRACTOR SHALL THEN PLACE 2 INCHES OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 PG64-28 IN THE MILLED AREA. IMMEDIATELY FOLLOWING COMPLETION OF MOT OPERATIONS AND RESTORING THE TRAFFIC TO ITS ORIGINAL POSITION, NEW RUMBLE STRIPS PER CMS 618 SHALL BE INSTALLED AT THE LOCATION WHERE THE EXISTING RUMBLE STRIPS WERE REMOVED. ALL COSTS ASSOCIATED WITH THE MILLING OF THE EXISTING PAVEMENT, PLACEMENT OF THE SURFACE COURSE, AND INSTALLATION OF THE RUMBLE STRIPS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT OF ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE), AS PER PLAN.

AN ESTIMATED QUANTITY OF 20,000 FEET HAS BEEN CARRIED TO THE GENERAL SUMMARY.

DUST CONTROL
THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS REQUIRED TO SUBMIT WATER LOGS ON A WEEKLY BASIS IN ADDITION TO OTHER CMS REQUIREMENTS FOR PAYMENT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 250 M. GAL.

FINAL - NOT FOR CONSTRUCTION
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MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.028 TOTAL 627

SUM-77/8-11.65/0.00

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MAINTENANCE OF TRAFFIC SIGNAL/INTERSECTION CONTROL BEACON INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/INTERSECTION CONTROL BEACON INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/INTERSECTION CONTROL BEACON (ICB) INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL/ICB INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE FOR POLICE SERVICES AND MAINTENANCE SERVICES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

MAINTENANCE OF TRAFFIC SIGNAL/INTERSECTION CONTROL BEACON INSTALLATION (CONTINUED)

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6 AM TO 9 AM AND 3 PM TO 6 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY POLICE, HIRED BY THE CONTRACTOR:

1. GOODKIRK ST AT EXCHANGE ST
2. GOODKIRK ST AT CARROLL ST
3. FOUNTAIN ST AT CARROLL ST
4. GOODKIRK ST AT BUCHTEL AVE
5. FOUNTAIN ST AT BUCHTEL AVE
6. FOUNTAIN ST AT PERKINS ST
7. GOODKIRK ST AT PERKINS ST

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;
2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

PERMITTED LANE CLOSURE SCHEDULE (PLCS)

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE.

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 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)).

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.

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

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 6I, 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.

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT (CONTINUED)

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 ONLINE.

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:
      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 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.

FINAL PLANS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.029 TOTAL 627

SUM-77/8-11.65/0.00

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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 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 8 EACH

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 NO.	COUNTY-ROUTE-SECTION	DIRECTION
WZ-26256	SUM-77-10.93-11.67	NB
WZ-26257	SUM-8-0.00-1.97	NB
WZ-26257	SUM-8-0.19-2.01	SB

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.

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.

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.

WORK ZONE SPEED ZONES (WZSZS) (CONTINUED)

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.

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		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	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 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
144 SIGN MONTHS (4 SIGNS FOR 36 MONTHS)

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

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

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.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (CONTINUED)

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 4 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, DE-ACTIVATED 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 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 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF 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
162 SNMT (4 CLASS A PCMS SIGNS FOR 36 MONTHS,
9 CLASS A PCMS SIGNS FOR 2 MONTHS)

FINAL NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.030 TOTAL 627

SUM-77/8-11.65/0.00

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PAVEMENT MARKINGS FOR POST-MOT ROADWAY CONDITION
THE FOLLOWING PAVEMENT MARKING QUANTITIES ARE PROVIDED FOR USE BY THE CONTRACTOR IN PLACING PAVEMENT MARKINGS IN THE FINAL LAYOUT CONDITION THROUGHOUT THE PROJECT AS DIRECTED BY THE ENGINEER. FOR PLACEMENT OF THESE PAVEMENT MARKINGS, REFER TO THE TRAFFIC CONTROL PLANS. NOT ALL MARKINGS SHOWN ON THE TRAFFIC CONTROL PLANS ARE INTENDED TO BE INSTALLED AT THIS TIME.

THE FOLLOWING CLASS I PAVEMENT MARKINGS ARE INTENDED TO BE USED ON THE INTERMEDIATE COURSE OF PAVEMENT:

WORK ZONE LANE LINE, CLASS I, 6"	2.0 MILE
WORK ZONE EDGE LINE, CLASS I, 6"	2.0 MILE
WORK ZONE CHANNELIZING LINE, CLASS I, 12"	2,000 FT
WORK ZONE DOTTED LINE, CLASS I	1,000 FT
WORK ZONE STOP LINE, CLASS I	250 FT

THE FOLLOWING CLASS III PAVEMENT MARKINGS ARE INTENDED TO BE USED ON THE SURFACE COURSE OF PAVEMENT:

WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	1.0 MILE
WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	1.0 MILE
WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	1,000 FT
WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	500 FT

THESE ITEMS AND QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY.

PAVEMENT MARKINGS FOR DETOUR DETAILS
THE FOLLOWING PAVEMENT MARKING QUANTITIES ARE PROVIDED FOR USE BY THE CONTRACTOR IN PLACING PAVEMENT MARKINGS WHEN THE FOLLOWING DETOURS ARE IN EFFECT AS SHOWN ON SHEET P.041.

I-76EB/E-77 SB EXIT RAMP TO SR 8 NB CLOSURE

ITEM 614 - WORK ZONE EDGE LINE, CLASS 1, 6", 807 PAINT	0.20 MILE
ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 6", 807 PAINT	720 FT

SR 8 SB RAMP TO I-76/I-77 NB RAMPS CLOSURE

ITEM 614 - WORK ZONE EDGE LINE, CLASS 1, 6", 807 PAINT	0.04 MILE

THESE ITEMS AND QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY.

PN127, LANE VALUE CONTRACT
THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED BELOW. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLAN.

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE $ PER TIME UNIT
SR 8 SB TO I-76 WB	AS PER THE PERMITTED LANE CLOSURE SCHEDULE	MINUTE	$50
SR 8 SB TO I-76 EB	AS PER THE PERMITTED LANE CLOSURE SCHEDULE	MINUTE	$50
I-76 EB TO SR 8 NB	AS PER THE PERMITTED LANE CLOSURE SCHEDULE	MINUTE	$50

ITEM 611, 15" CONDUIT JACKED OR BORED, AS PER PLAN
THE ITEM SHALL CONSIST OF THE CONTRACTOR FURNISHING, INSTALLING, AND SUBSEQUENTLY REMOVING A CONDUIT TO BE INSTALLED BY THE METHOD OF JACKING OR BORING, AND SHALL NOT HAVE ANY TRENCH EXCAVATION CLOSER THAN 20 FEET FROM THE OUTSIDE EDGE OF PAVEMENT. THE 15 INCH DIAMETER CONDUIT SHALL HAVING A CASING PIPE CONFORMING TO 748.06 HAVING JOINTS WITH A CIRCUMFERNCIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. THE INSTALLED CASING PIPE IS FOR STORM WATER CONVEYANCE CARRIER. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE. WHEN THE CONDUIT IS NO LONGER NEEDED, THE CONTRACTOR SHALL FILL AND PLUG THE CONDUIT AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ITEM 611 - 15" CONDUIT JACKED OR BORED, AS PER PLAN SHALL BE PER THE UNIT PRICE BID PER FOOT AND INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, CASING PIPE, FILL MATERIAL, AND INCIDENTALS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE STATED USE ABOVE:

ITEM 611, 15" CONDUIT JACKED OR BORED, AS PER PLAN	150 FT

ITEM 611, 15" SLOTTED DRAIN, TYPE 1, AS PER PLAN
THE ITEM SHALL CONSIST OF THE CONTRACTOR FURNISHING AND INSTALLING SLOTTED DRAIN AT THE LOCATIONS STATED BELOW DURING PHASE 1B PRIOR TO TRAFFIC SHIFTED TO THE MEDIAN BARRIER IN SUBSEQUENT PHASES. THE 15 INCH DIAMETER SLOTTED DRAIN SHALL BE ALUMINUM COATED STEEL CONDUIT 707.01 WITH A 6 INCH TRAPEZOIDAL GALVANIZED SOLID BAR GRATE AS APPROVED BY THE ENGINEER. CONSTRUCT THE SLOTTED DRAINS ADJACENT TO THE MEDIAN INLET AT STA. 361+80± AT THE PROFILE LOW POINT. DRAINS POSITIONS AND LENGTHS ARE AS FOLLOWS:

RIGHT (NB) MEDIAN SHOULDER: 4 FT NORTH AND 6 FT SOUTH OF THE INLET
LEFT (SB) MEDIAN SHOULDER: 5 FT NORTH AND 6 FT SOUTH OF THE INLET

PAYMENT FOR ITEM 611, 15" SLOTTED DRAIN, TYPE 1, AS PER PLAN SHALL BE PER THE UNIT PRICE BID PER FOOT AND INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, OUTLET CONDUIT TO INLET, ASPHALT PAVEMENT, AND INCIDENTALS TO INSTALL THE TRENCH DRAIN INCLUDING THE TYPE 2 BEDDING, AND BACKFILLING AS DETAILED ON ODOT STANDARD CONSTRUCTION DRAWING DM-1.3.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE STATED USE ABOVE:

ITEM 611, 15" SLOTTED DRAIN, TYPE 1, AS PER PLAN	21 FT

ITEM 611, 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN
THE ITEM SHALL CONSIST OF THE CONTRACTOR FURNISHING, INSTALLING, AND SUBSEQUENTLY REMOVING THE SLOTTED DRAIN. THE 15 INCH DIAMETER SLOTTED DRAIN SHALL BE ALUMINUM COATED STEEL CONDUIT 707.01 WITH A 6 INCH TRAPEZOIDAL GALVANIZED SOLID BAR GRATE THAT IS MOTORCYCLE SAFE AND APPROVED BY THE ENGINEER. THE SLOTTED DRAIN SHALL BE DRAINED TO THE NEAREST EXISTING OR PROPOSED INLET. THE COST FOR THE TEMPORARY CONDUIT TO TIE INTO THE INLET IS INCLUDED. IF THE SLOTTED DRAIN CAN'T BE OUTLET AT AN INLET, THE CONTRACTOR SHALL JACK OR BORE A CONDUIT FOR AN OUTLET THAT WILL BE PAID FOR SEPARATELY. THE SLOTTED DRAINS WILL BE INSTALLED IN PHASE 1B FOR THE MEDIAN BARRIER AND PHASE 2A/2B FOR THE CD ROAD BARRIER. THE REMOVALS SHALL BE DURING THE CONSTRUCTION OF THE BARRIER IN PHASE 4 AS DETAILED IN THE PLANS.

PAYMENT FOR ITEM 611 - 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN SHALL BE PER THE UNIT PRICE BID PER FOOT AND INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TEMPORARY CONDUIT, AND INCIDENTALS TO INSTALL THE TRENCH DRAIN INCLUDING THE TYPE 2 BEDDING, AND BACKFILLING AS DETAILED ON ODOT STANDARD CONSTRUCTION DRAWING DM-1.3 AND THE TRENCH DRAIN REMOVAL WHEN THE CONCRETE BARRIER IS INSTALLED. DETAILS OF THE LOCATION OF THE SLOT DRAINS AT CROSSOVERS AND LOCATIONS OF TEMPORARY INLETS ARE SHOWN ON SHEET P.084 AND LABELED IN THE MOT PLANS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR MAINTAINING DRAINAGE IN BARRIER LOCATIONS:

ITEM 611, 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN	985 FT
ITEM 611, INLET, MISC.:	
TEMPORARY INLET MODIFICATION (PER SHEET P.084)	6 EA

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 ALTERNATICE 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.

ITEM 614, DETOUR SIGNING
THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, AND REMOVE ALL DETOUR SIGNING. DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD AND RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP REOPENING TO TRAFFIC.

SIZE AND PLACEMENT OF DETOUR SIGNS SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL INCLUDE ANY TEMPORARY OVERLAYS (BLANK, ARROW, "CLOSED" PANELS) SHOWN IN THE PLANS.

PAYMENT FOR ALL MATERIALS, LABOR, INCIDENTALS, AND EQUIPMENT TO IMPLEMENT THE DETOUR AND INCLUDE FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ITEM 614, DETOUR SIGNING (LUMP SUM) HAS BEEN CARRIED TO THE GENERAL SUMMARY.

FINAL - NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.031 TOTAL 627

SUM-77/8-11.65/0.00
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ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 1:
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 2:
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 3:

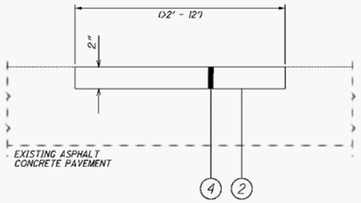
THIS ITEM SHALL BE UTILIZED FOR THE PAVEMENT REPAIRS NEEDED DURING THIS CONSTRUCTION PROCESS. ALL AREAS TO BE REPAIRED SHALL BE LOCATED BY THE ENGINEER. IT IS LIKELY THAT REPAIRS WILL BE NEEDED PRIOR TO EACH PHASE SWITCH. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AS WELL AS ALL LONGITUDINAL SLOPES. THE TYPE OF REPAIR SHALL BE DETERMINED BY THE PROJECT ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR MAINTENANCE OF TRAFFIC FOR PAVEMENT REPAIRS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

TYPE 1 – IS TO BE USED WHEN NECESSARY TO MILL & FILL AN AREA OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 2 FEET.

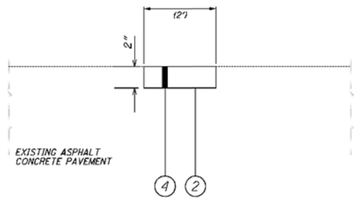
TYPE 2 – IS TO BE USED FOR FIXING THE LONGITUDINAL JOINT ISSUES OF VARYING LENGTH AND HAVE A CONSISTENT WIDTH OF 2 FEET.

TYPE 3 – IS TO BE USED FOR DEEPER REPAIRS (POTHOLES) OF VARYING LENGTH AND WILL HAVE AN AVERAGE WIDTH OF NOT LESS THAN 4 FEET.

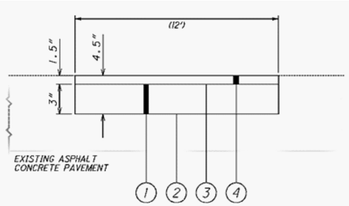
ALL COSTS ASSOCIATED WITH REMOVING AND REPLACING PAVEMENT AND TACK COAT FOR THE REPAIRS SHALL BE INCIDENTAL TO ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN.



TYPE 1 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 1



TYPE 2 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 2



TYPE 3 DETAIL
PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN TYPE 3

LEGEND:

1. ITEM 301 - ASPHALT CONCRETE BASE, PG64-22
2. ITEM 407 - TACK COAT @0.075 PER SY. YD.
3. ITEM 407- TACK COAT FOR INTERMEDIATE @ 0.05 PER SY.YD.
4. ITEM 441 -TYPE 1(AS DESCRIBED IN CMS 615.05)

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 1	*2,000 SY*
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 2	*2,000 SY*
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, APP, TYPE 3	*500 SY*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.032 TOTAL 627

SUM-77/8-11.65/0.00

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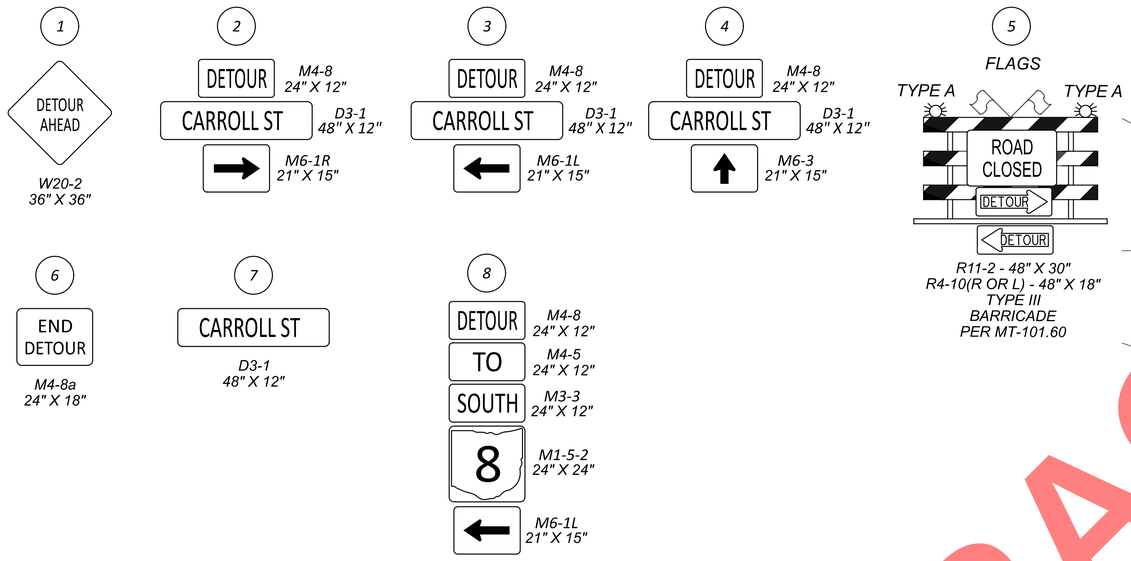

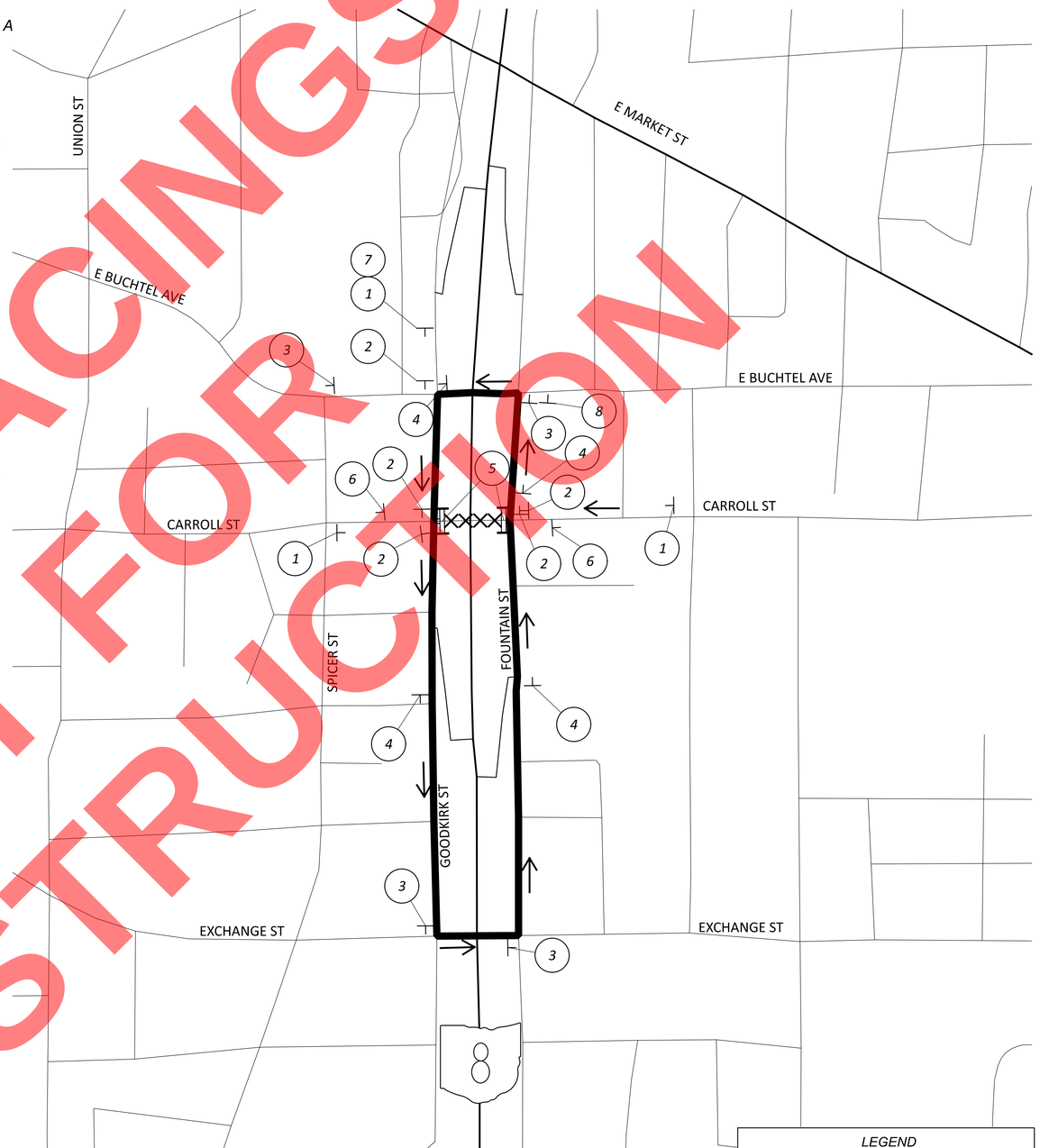

NOTES:

1. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
2. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
3. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025
4. FOR PEDESTRIAN DETOUR, SEE SHEET P.042
5. FOR FOUNTAIN STREET RAMP DETAIL, SEE SHEET P.060
6. IMPLEMENT THIS DETOUR PLAN WHEN THE CARROLL ST. BRIDGE IS CLOSED. THE CONTRACTOR HAS THE OPTION TO WORK ON GOODKIRK ST. SIMULTANEOUSLY WHEN THE CARROLL ST. BRIDGE IS CLOSED. IF THE CONTRACTOR SO CHOOSES TO DO THE GOODKIRK WORK DURING THIS TIME, ALL DETOUR SIGNING SHOWN ON THIS PLAN ALONG GOODKIRK ST. SHALL BE MOVED TO BE ALONG SPICER ST. GOODKIRK ST. SHALL BE DETOURED AS SHOWN ON SHEET P.034 IF CLOSED.

LEGEND

XXX	CLOSURE
▬	DETOUR ROUTE
⊢	SIGN
←	DIRECTION OF TRAVEL

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 1 - CARROLL ST BRIDGE

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.033 TOTAL 627

SUM-77/8-11.65/0.00

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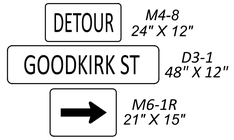
FINAL TRACINGS
NOT FOR
CONSTRUCTION

1



W20-2
36" X 36"

2

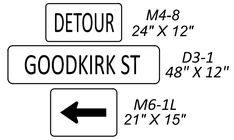


M4-8
24" X 12"

D3-1
48" X 12"

M6-1R
21" X 15"

3

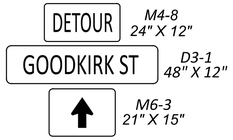


M4-8
24" X 12"

D3-1
48" X 12"

M6-1L
21" X 15"

4

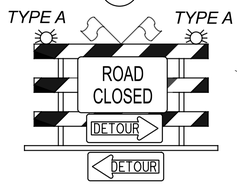


M4-8
24" X 12"

D3-1
48" X 12"

M6-3
21" X 15"

5



R11-2 - 48" X 30"
R4-10(R OR L) - 48" X 18"
TYPE III
BARRICADE
PER MT-101.60

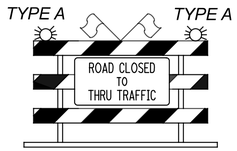
6

END
DETOUR

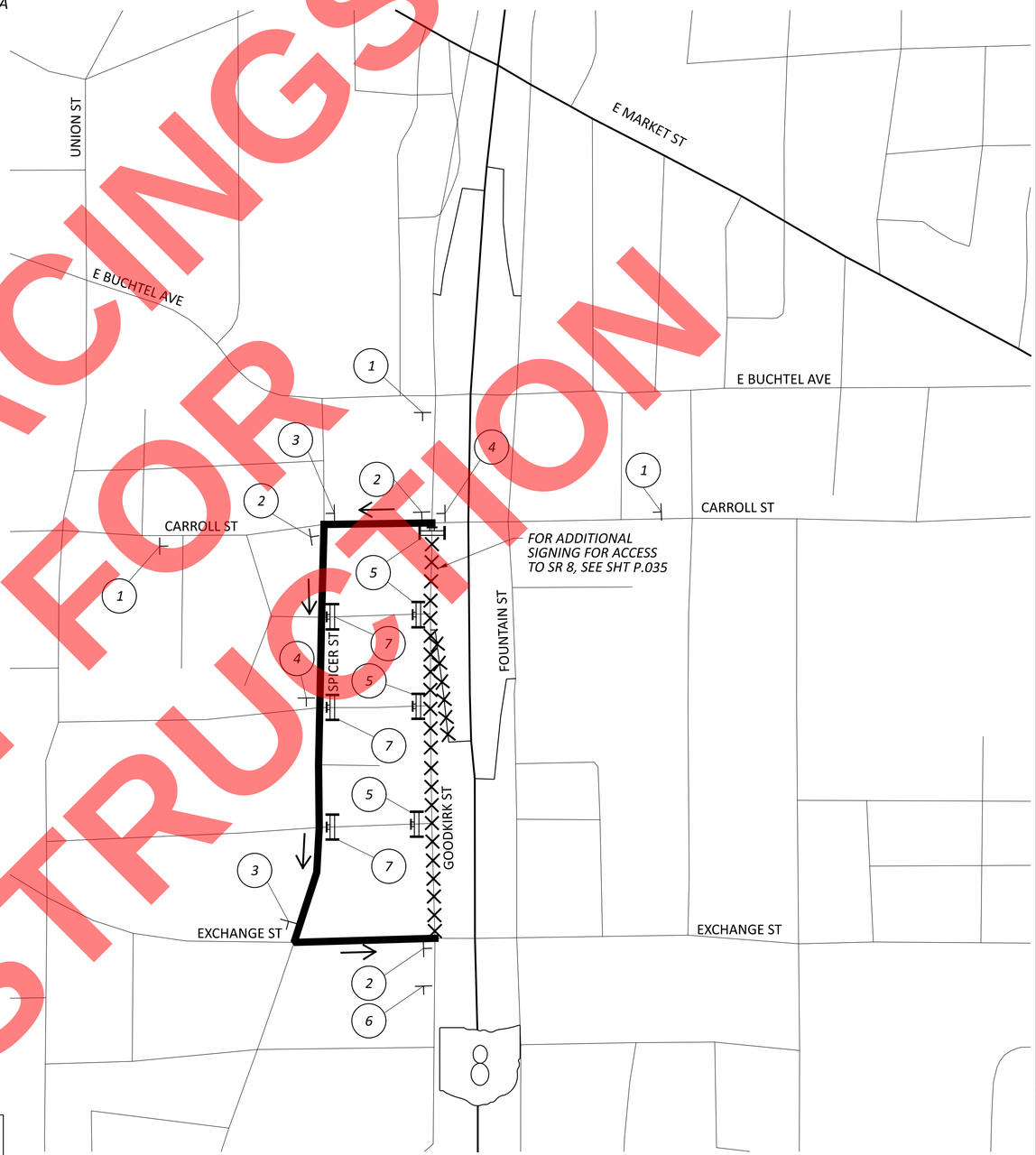
M4-8a
24" X 18"

7

FLAGS



R11-4
60" X 30"
TYPE III
BARRICADE
PER MT-101.60



NOTES:

1. *IMPLEMENT THIS DETOUR PLAN WHEN GOODKIRK ST IS CLOSED. THE GOODKIRK ST ENTRANCE RAMP TO SR 8 SOUTHBOUND IS CLOSED DURING THIS PHASE. FOR THE GOODKIRK ST ENTRANCE RAMP TO SR 8 SOUTHBOUND DETOUR PLAN, SEE SHEET P.035*
2. *COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.*
3. *SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".*
4. *FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025*

LEGEND

- *CLOSURE*
- *DETOUR ROUTE*
- *SIGN*
- *DIRECTION OF TRAVEL*

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 2 - GOODKIRK ST

DESIGN AGENCY
GFT

DESIGNER	TCW
REVIEWER	DRJ 9-18-26
PROJECT ID	114865
SHEET	P.034
TOTAL	627

SUM-77/8-11.65/0.00

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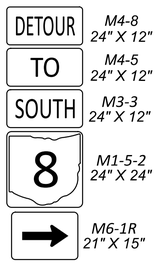
FINAL PLANS
NOT FOR
CONSTRUCTION

1



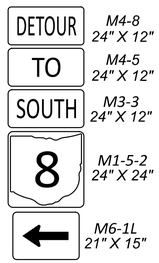
W20-2
36" X 36"

2



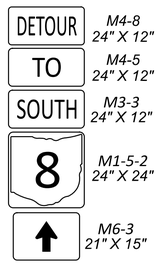
M4-8 24" X 12"
M4-5 24" X 12"
M3-3 24" X 12"
M1-5-2 24" X 24"
M6-1R 21" X 15"

3



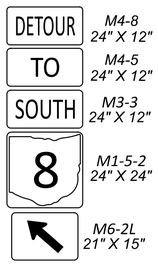
M4-8 24" X 12"
M4-5 24" X 12"
M3-3 24" X 12"
M1-5-2 24" X 24"
M6-1L 21" X 15"

4



M4-8 24" X 12"
M4-5 24" X 12"
M3-3 24" X 12"
M1-5-2 24" X 24"
M6-3 21" X 15"

5



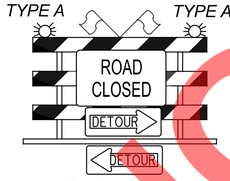
M4-8 24" X 12"
M4-5 24" X 12"
M3-3 24" X 12"
M1-5-2 24" X 24"
M6-2L 21" X 15"

6



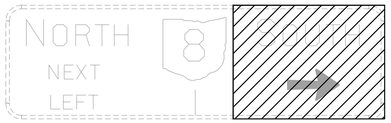
M4-8a
24" X 18"

7



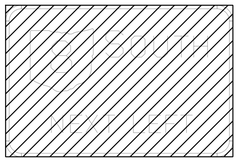
R11-2 - 48" X 30"
R4-10(R OR L) - 48" X 18"
TYPE III
BARRICADE
PER MT-101.60

A



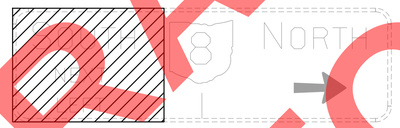
COVER
48" X 48"
OV-11, OV-12, OV-13

B



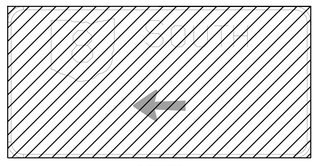
COVER
96" X 60"
OR
REMOVED
OV-14

C



COVER
48" X 48"
OV-15, OV-16

D



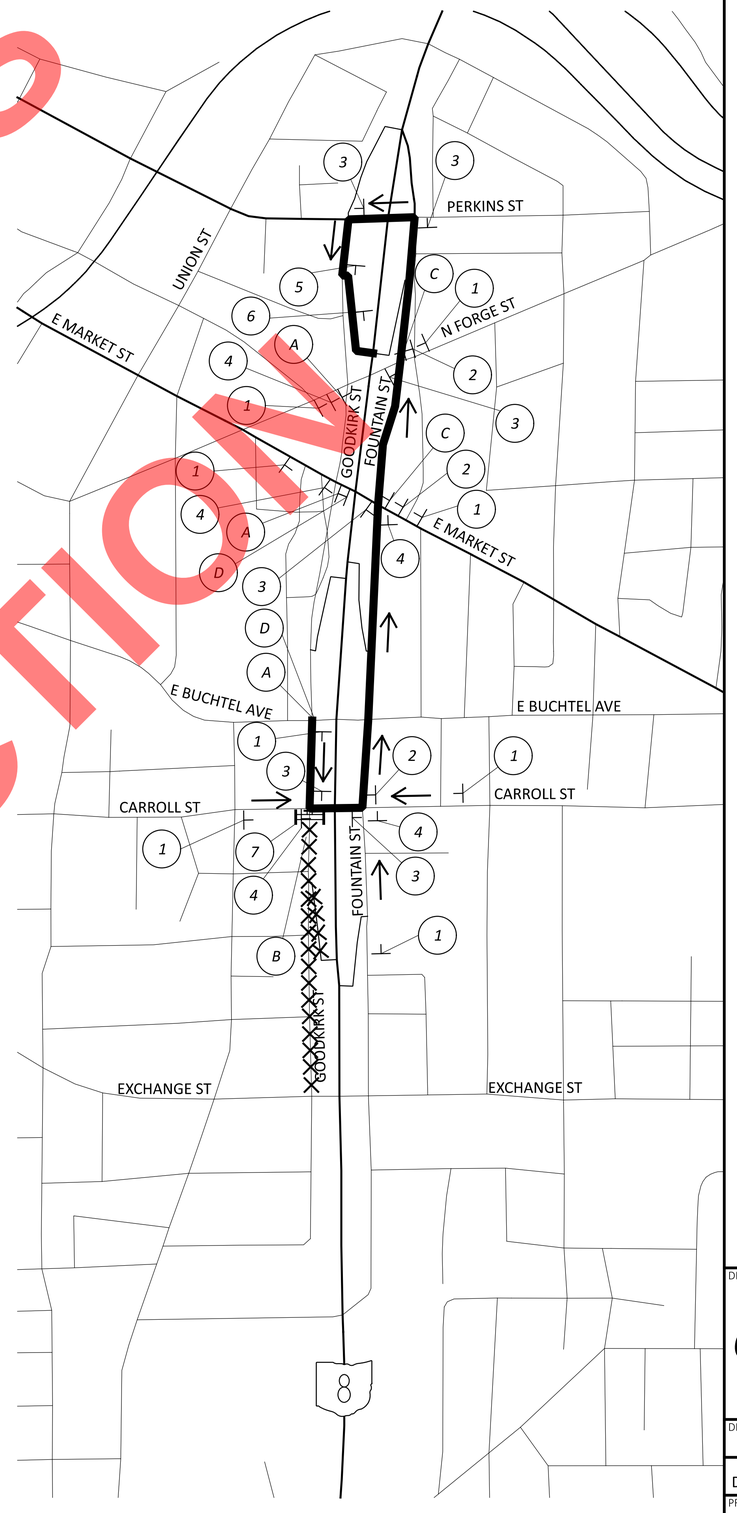
COVER
96" X 60"
OV-17, OV-18

NOTES:

1. IMPLEMENT THIS DETOUR PLAN WHEN THE GOODKIRK ST ENTRANCE RAMP TO SR 8 SOUTHBOUND IS CLOSED. GOODKIRK ST IS CLOSED BETWEEN CARROLL ST AND EXCHANGE ST DURING THIS PHASE. FOR THE GOODKIRK ST DETOUR PLAN, SEE SHEET P.034
2. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
3. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
4. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

LEGEND

XXX	CLOSURE
▬▬	DETOUR ROUTE
⊢	SIGN
←	DIRECTION OF TRAVEL



MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 2 - GOODKIRK ST ENTRANCE RAMP TO SR 8 SB

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.035 | TOTAL 627

SUM-77/8-11.65/0.00

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FINAL TRACINGS
NOT FOR
CONSTRUCTION

RAMPS TO SR-8 NB CLOSED
FOLLOW DETOUR
PROP. PCMS (A)

RAMPS TO SR-8 NB CLOSED
FOLLOW DETOUR
EX DMS (A)

RAMPS TO I-76/I-77 NB CLOSED
FOLLOW DETOUR
EX DMS (B)

DETOUR M4-8 30" X 15"
TO M4-8 30" X 15"
NORTH M3-1 30" X 15"
8 M1-5-2 30" X 30"

LEGEND
- XXX CLOSURE
- DETOUR ROUTE
- SIGN
- DIRECTION OF TRAVEL
- PORTABLE CHANGEABLE MESSAGE SIGN

EX. DMS SIGN NEAR MARTADALE DR. (NORTH OF THE GHENT RD EXIT)

NOTES:

1. IMPLEMENT THIS DETOUR PLAN WHEN I-76 EB/I-77 SB EXIT RAMP TO SR 8 NB IS CLOSED. CLOSE RAMP PER DETAIL ON SHEET P.041
2. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
3. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
4. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 3 - I-76 EB / I-77 SB TO SR 8 NB

SUM-77/8-11.65/0.00

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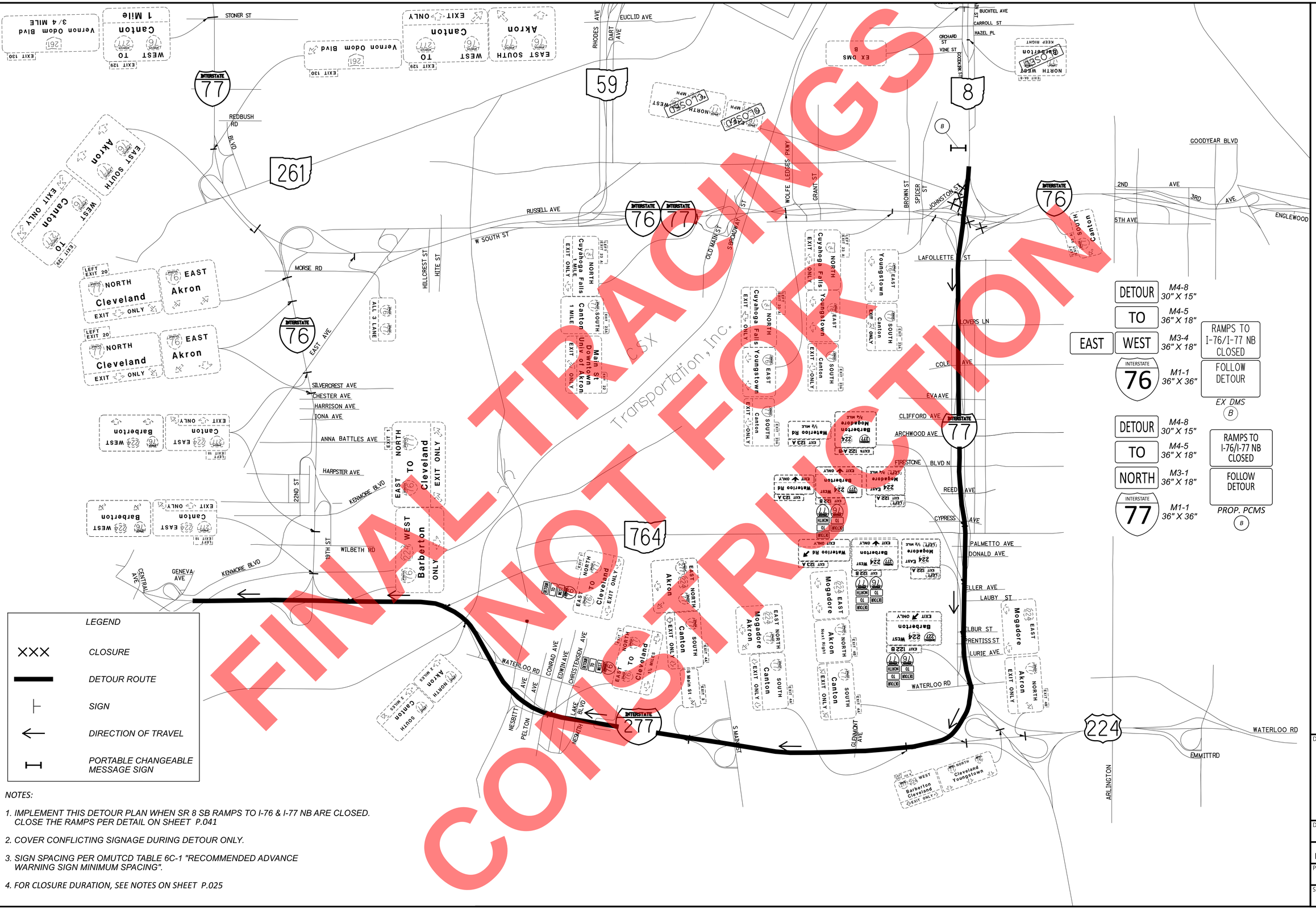
DESIGN AGENCY: GFT
DESIGNER: TCW
REVIEWER: DRJ 9-18-26
PROJECT ID: 114865
SHEET: P.036 TOTAL: 627



NOTES:

1. IMPLEMENT THIS DETOUR PLAN WHEN SR 8 SB RAMPS TO I-76 & I-77 NB ARE CLOSED. CLOSE THE RAMPS PER DETAIL ON SHEET P.041
2. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
3. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
4. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 3 - SR 8 SB RAMP TO I-76 WB

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.037 TOTAL 627

SUM-77/8-11.65/0.00

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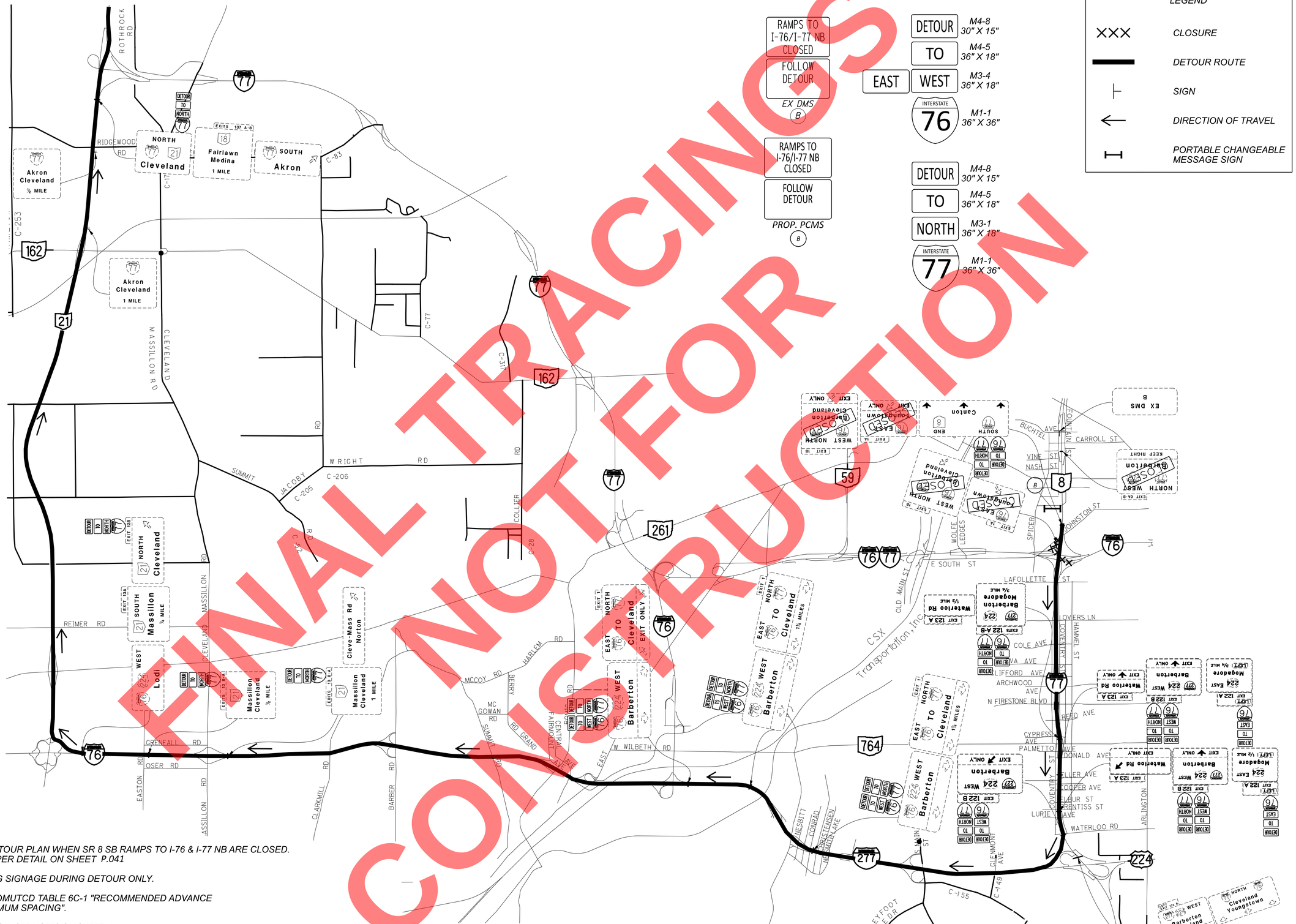
FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 3 - SR 8 SB RAMP TO I-77 NB



NOTES:

1. IMPLEMENT THIS DETOUR PLAN WHEN SR 8 SB RAMPS TO I-76 & I-77 NB ARE CLOSED. CLOSE THE RAMPS PER DETAIL ON SHEET P.041
2. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
3. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
4. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

DESIGN AGENCY: GFT

DESIGNER	TCW
REVIEWER	DRJ 9-18-26
PROJECT ID	114865
SHEET	P.038
TOTAL	627

SUM-77/8-11.65/0.00

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LEGEND

XXX — CLOSURE

DETOUR ROUTE

SIGN

DIRECTION OF TRAVEL

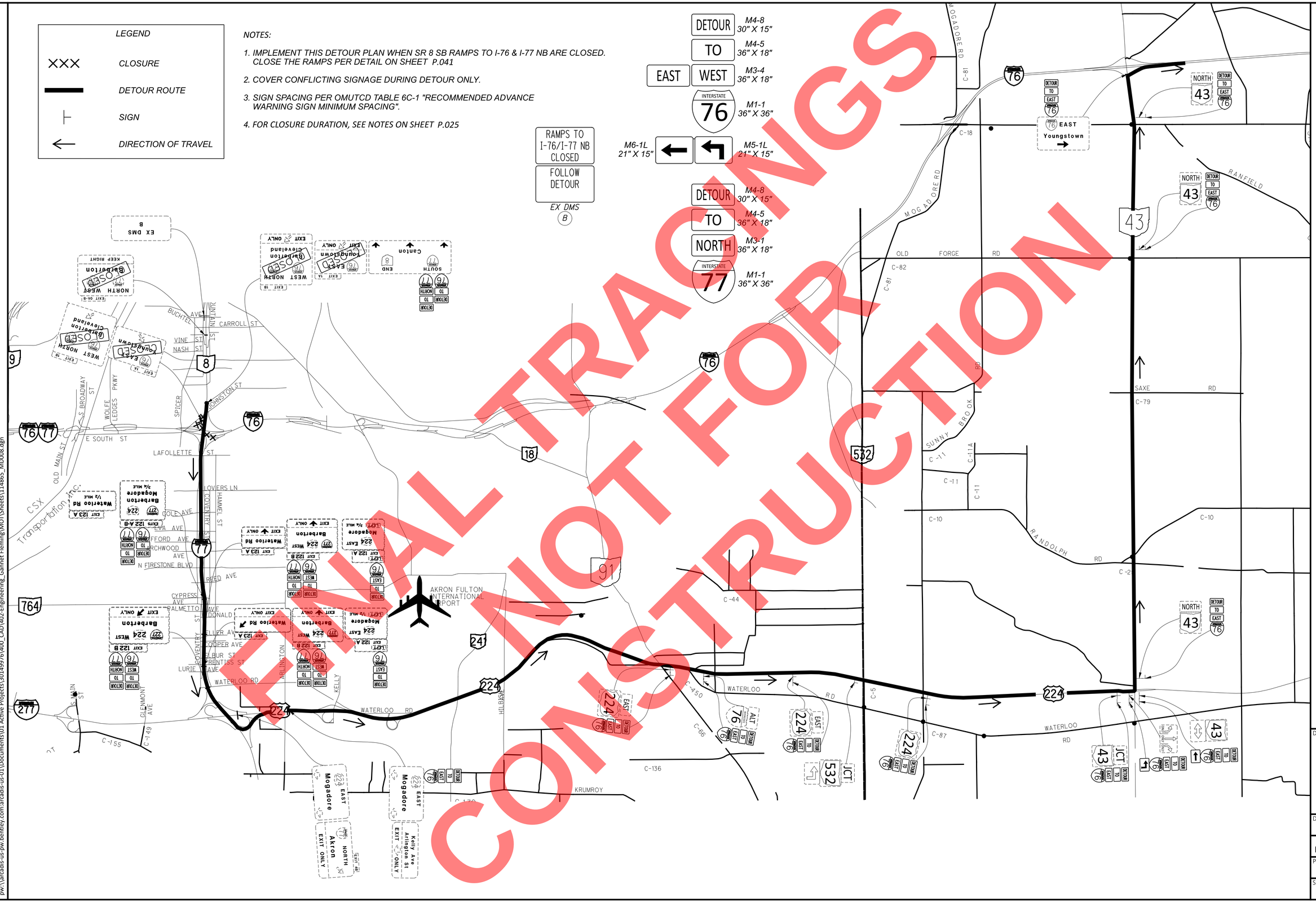
NOTES:

1. IMPLEMENT THIS DETOUR PLAN WHEN SR 8 SB RAMPS TO I-76 & I-77 NB ARE CLOSED. CLOSE THE RAMPS PER DETAIL ON SHEET P.041
2. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.
3. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".
4. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

RAMPS TO I-76/I-77 NB CLOSED
FOLLOW DETOUR
EX DMS B

DETOUR M4-8 30" X 15"
TO M4-5 36" X 18"
EAST WEST M3-4 36" X 18"
INTERSTATE 76 M1-1 36" X 36"
M6-1L 21" X 15" M5-1L 21" X 15"

DETOUR M4-8 30" X 15"
TO M4-5 36" X 18"
NORTH M3-1 36" X 18"
INTERSTATE 77 M1-1 36" X 36"



FINAL PLANS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 3 - SR 8 SB RAMP TO I-76 EB

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.039 TOTAL 627

SUM-77/8-11.65/0.00

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FINAL TRACINGS
NOT FOR
CONSTRUCTION

1

DETOUR AHEAD

W20-2
48" X 48"

2

DETOUR *M4-8 24" X 12"*
CARROLL ST *D3-1 48" X 12"*
M6-1L 21" X 15"

3

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M6-3 30" X 21"

4

DETOUR *M4-8 24" X 12"*
CARROLL ST *D3-1 48" X 12"*
M6-3 21" X 15"

5

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M5-2R 30" X 21"

6

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M6-2R 30" X 21"

7

DETOUR *M4-8 24" X 12"*
CARROLL ST *D3-1 48" X 12"*
M6-1R 21" X 15"

8

END DETOUR

M4-8a
24" X 18"

9

TYPE A TYPE A
ROAD CLOSED
DETOUR
DETOUR

R11-2 - 48" X 30"
R4-10(R OR L) - 48" X 18"
TYPE III BARRICADE
PER MT-101.60

10

U. OF AKRON
USE EXIT 1B

60" X 24"
SN-4

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M6-3 30" X 21"

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M6-3 30" X 21"

DETOUR *M4-8 30" X 15"*
CARROLL ST *D3-1 48" X 12"*
M6-2R 30" X 21"

NOTES:

1. IMPLEMENT THIS DETOUR DURING PHASE 4 WHEN 2 LANES ALONG SR 8 NB, LANES COMING FROM IR-77 NB, ARE CROSSED OVER TO THE SOUTHBOUND SIDE OF SR 8. THE ONLY ACCESS TO THE CARROLL ST. RAMP IS FROM LANES FROM I-76 RAMPS DURING PHASE 4.

2. PLACE "EXIT CLOSED" PLACARD DIAGONALLY ON OVERHEAD SIGNS AS SHOWN.

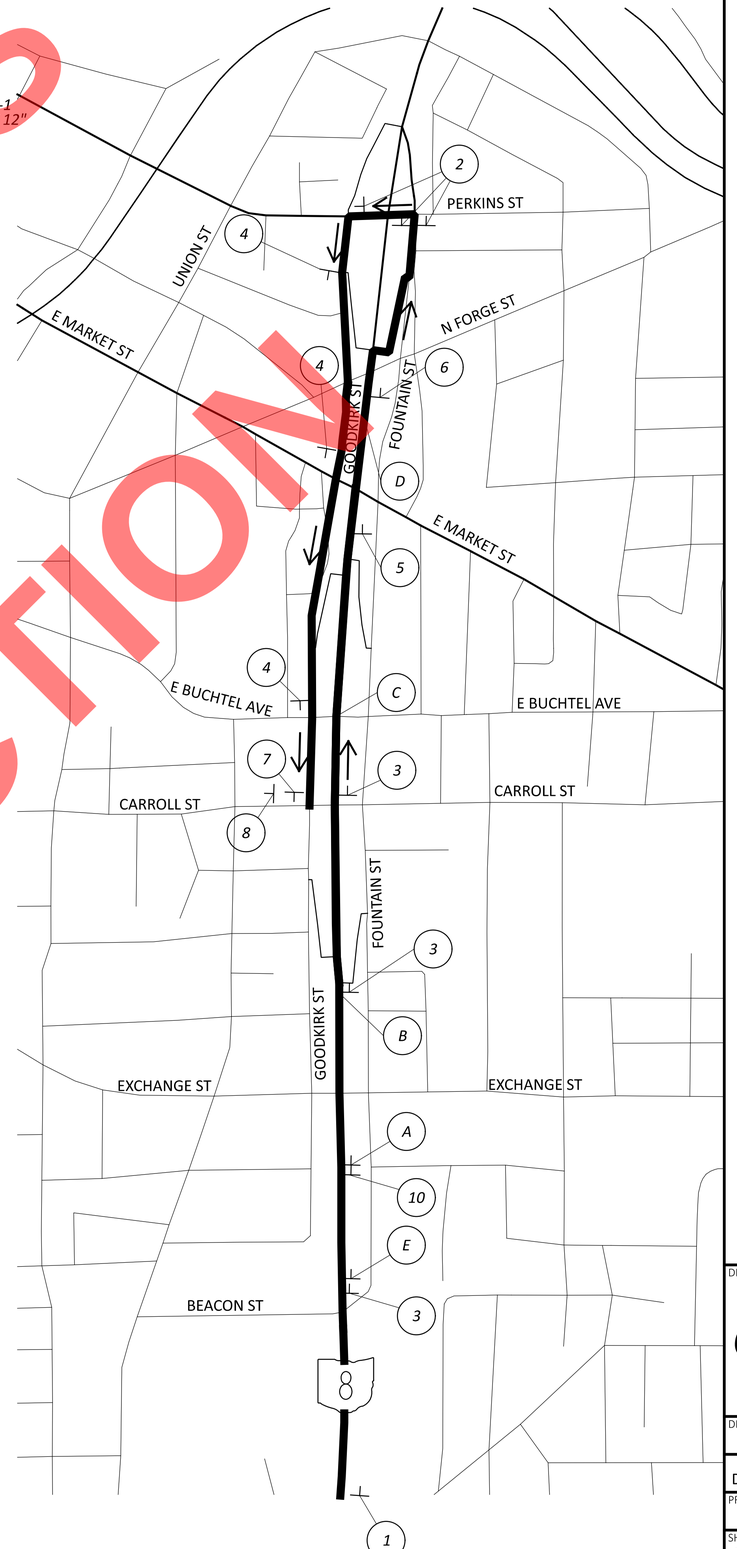
3. COVER CONFLICTING SIGNAGE DURING DETOUR ONLY.

4. SIGN SPACING PER OMUTCD TABLE 6C-1 "RECOMMENDED ADVANCE WARNING SIGN MINIMUM SPACING".

5. FOR CLOSURE DURATION, SEE NOTES ON SHEETP.025

LEGEND

XXX *CLOSURE*
DETOUR ROUTE
SIGN
DIRECTION OF TRAVEL



MAINTENANCE OF TRAFFIC DETOUR PLAN
PHASE 4 - SR 8 NB TO CARROLL ST

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.040 TOTAL 627

SUM-77/8-11.65/0.00

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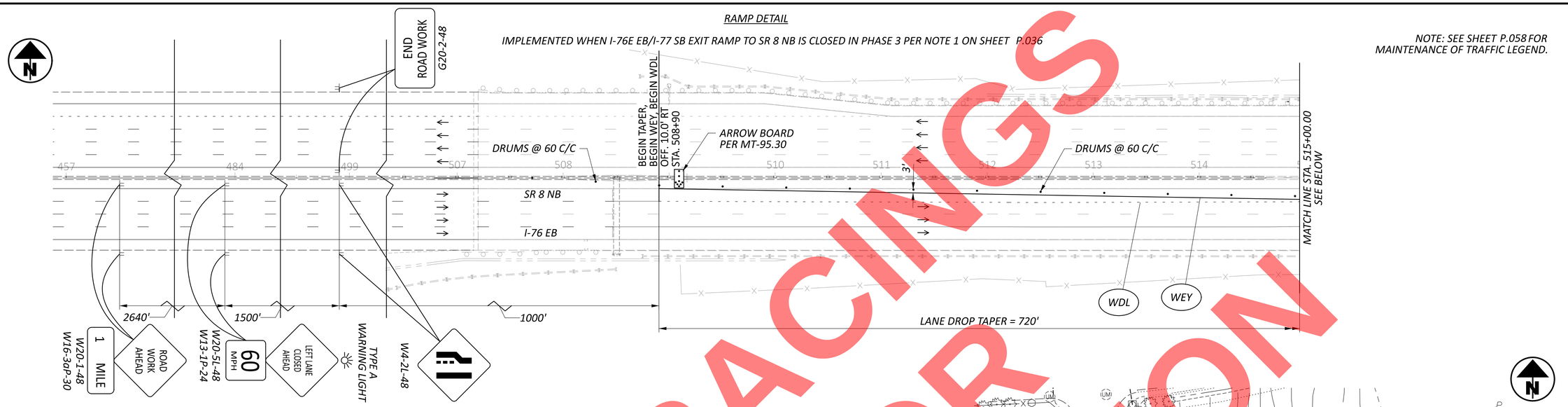
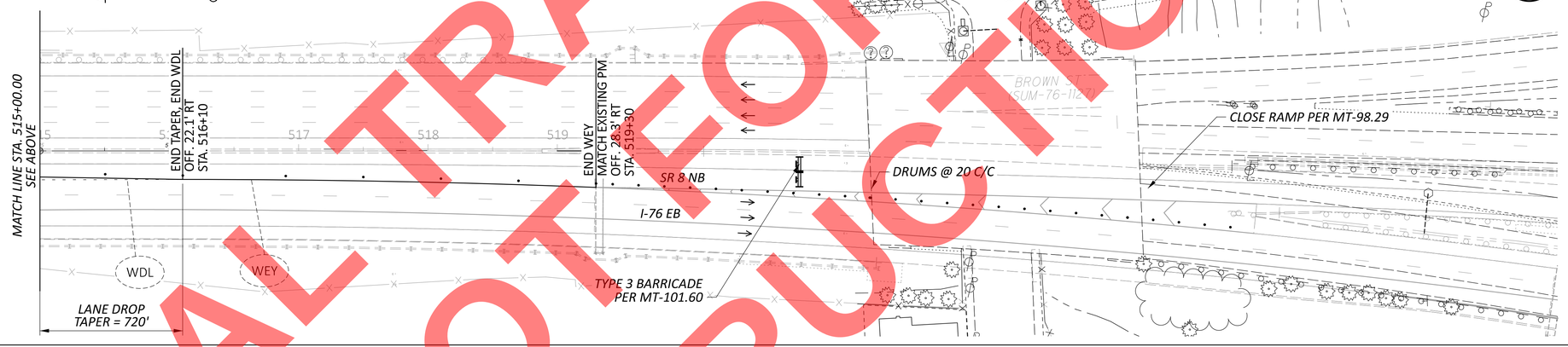
FINAL TRACINGS
NOT FOR CONSTRUCTION



PAVEMENT MARKINGS FOR DETOUR DETAILS
THE FOLLOWING QUANTITIES ARE CARRIED TO THE PAVEMENT MARKINGS FOR DETOUR DETAILS NOTE ON SHEET P.031

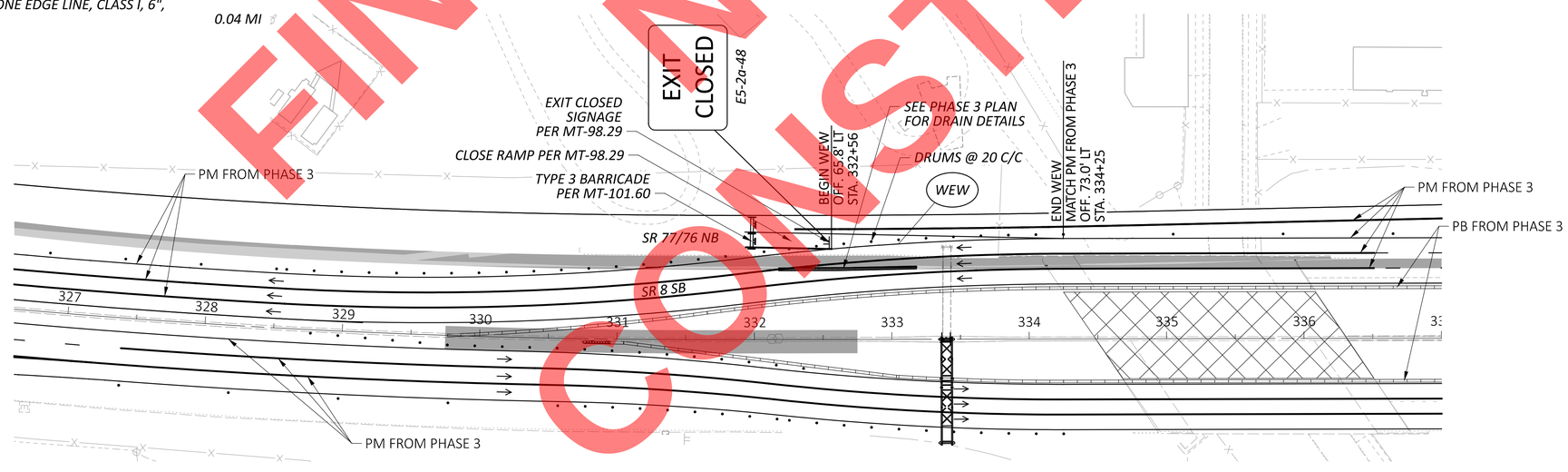
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) — 0.20 MI

ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT — 720 FT



PAVEMENT MARKINGS FOR DETOUR DETAILS
THE FOLLOWING QUANTITIES ARE CARRIED TO THE PAVEMENT MARKINGS FOR DETOUR DETAILS NOTE ON SHEET P.031

ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) — 0.04 MI



MAINTENANCE OF TRAFFIC DETOUR PLAN
MISCELLANEOUS DETAILS

DESIGN AGENCY
GFT

DESIGNER ALZ
REVIEWER BRO 9-18-26
PROJECT ID 114865
SHEET P.041 TOTAL 627

SUM-77/8-11.65/0.00

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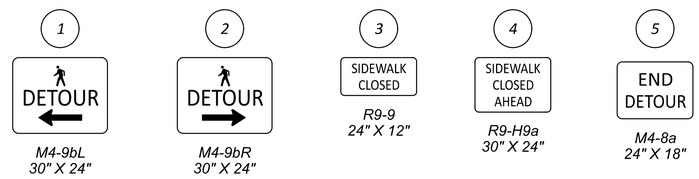

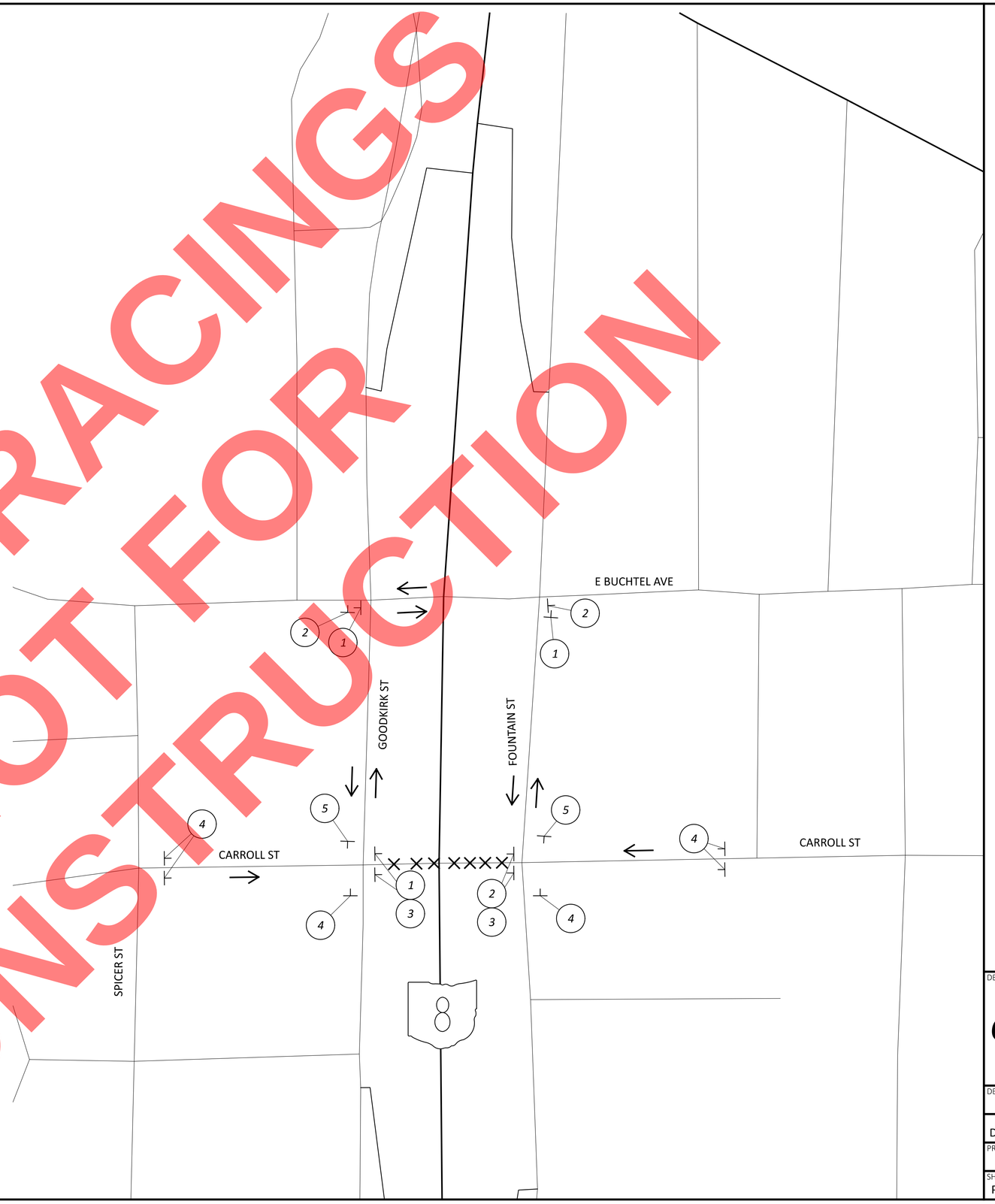

NOTES:

1. FOR CARROLL ST DETOUR PLAN, SEE SHEET P.033
2. COVER CONFLICTING SIGNAGE.
3. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

LEGEND

×	CLOSURE
⊥	SIGN POST
←	DIRECTION OF TRAVEL

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PEDESTRIAN DETOUR PLAN
PHASE 1 - CARROL ST BRIDGE

DESIGN AGENCY
GFT

DESIGNER
JTB

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.042 TOTAL 627

SUM-77/8-11.65/0.00

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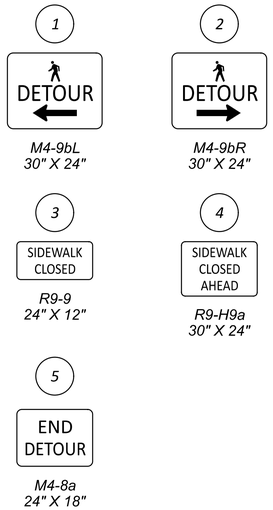

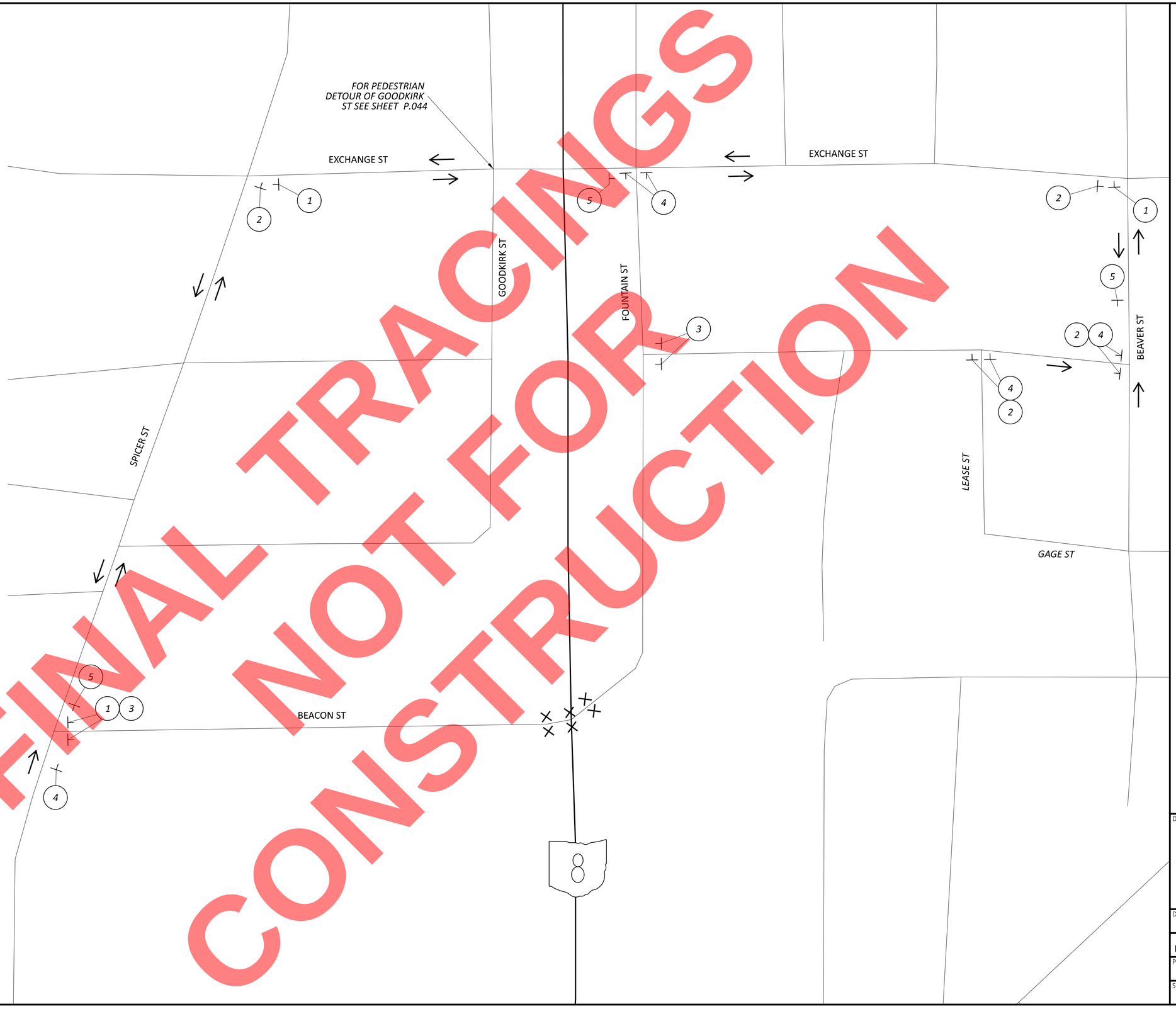

LEGEND

×	CLOSURE
⊥	SIGN POST
←	DIRECTION OF TRAVEL

NOTES:

1. FOR GOODKIRK ST DETOUR PLAN, SEE SHEET P.034
2. COVER CONFLICTING SIGNAGE.
3. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PEDESTRIAN DETOUR PLAN
PHASE 2 - BEACON ST TUNNEL

DESIGN AGENCY
GFT

DESIGNER
JTB

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.043 TOTAL 627

SUM-77/8-11.65/0.00

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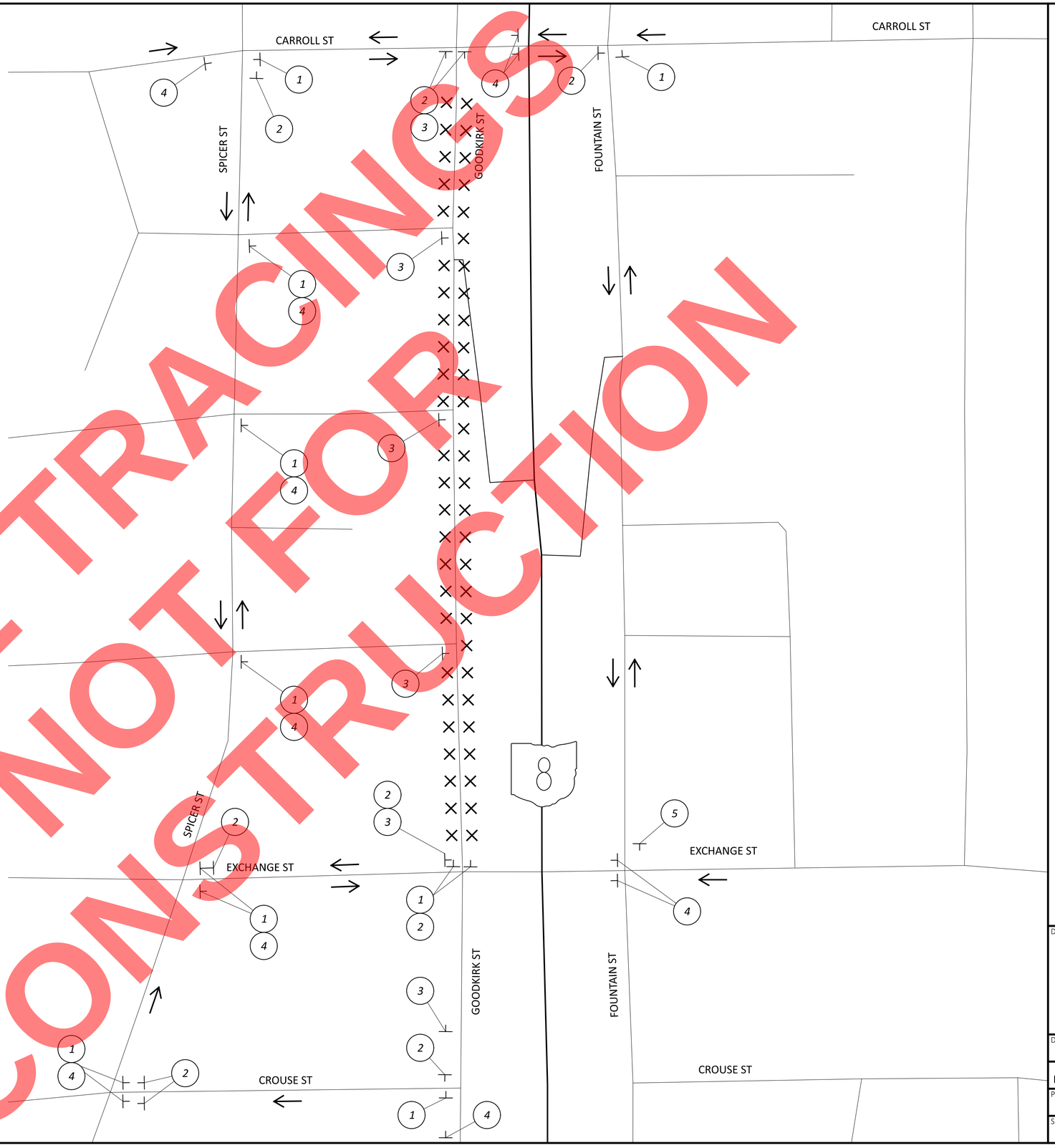
1 — DETOUR ← — *M4-9bL 30" X 24"*

2 — DETOUR → — *M4-9bR 30" X 24"*

3 — SIDEWALK CLOSED — *R9-9 24" X 12"*

4 — SIDEWALK CLOSED AHEAD — *R9-H9a 30" X 24"*

5 — END DETOUR — *M4-8a 24" X 18"*



FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES:

1. FOR GOODKIRK ST DETOUR PLAN, SEE SHEET P.034

2. COVER CONFLICTING SIGNAGE.

3. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

LEGEND

× CLOSURE

SIGN POST

← DIRECTION OF TRAVEL

MAINTENANCE OF TRAFFIC PEDESTRIAN DETOUR PLAN
PHASE 2 - GOODKIRK ST

DESIGN AGENCY: GFT

DESIGNER: TCW

REVIEWER: DRJ 9-18-26

PROJECT ID: 114865

SHEET: P.044 TOTAL: 627

SUM-77/8-11.65/0.00

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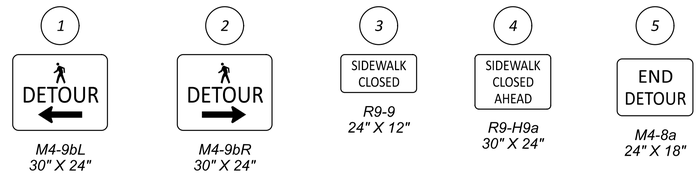

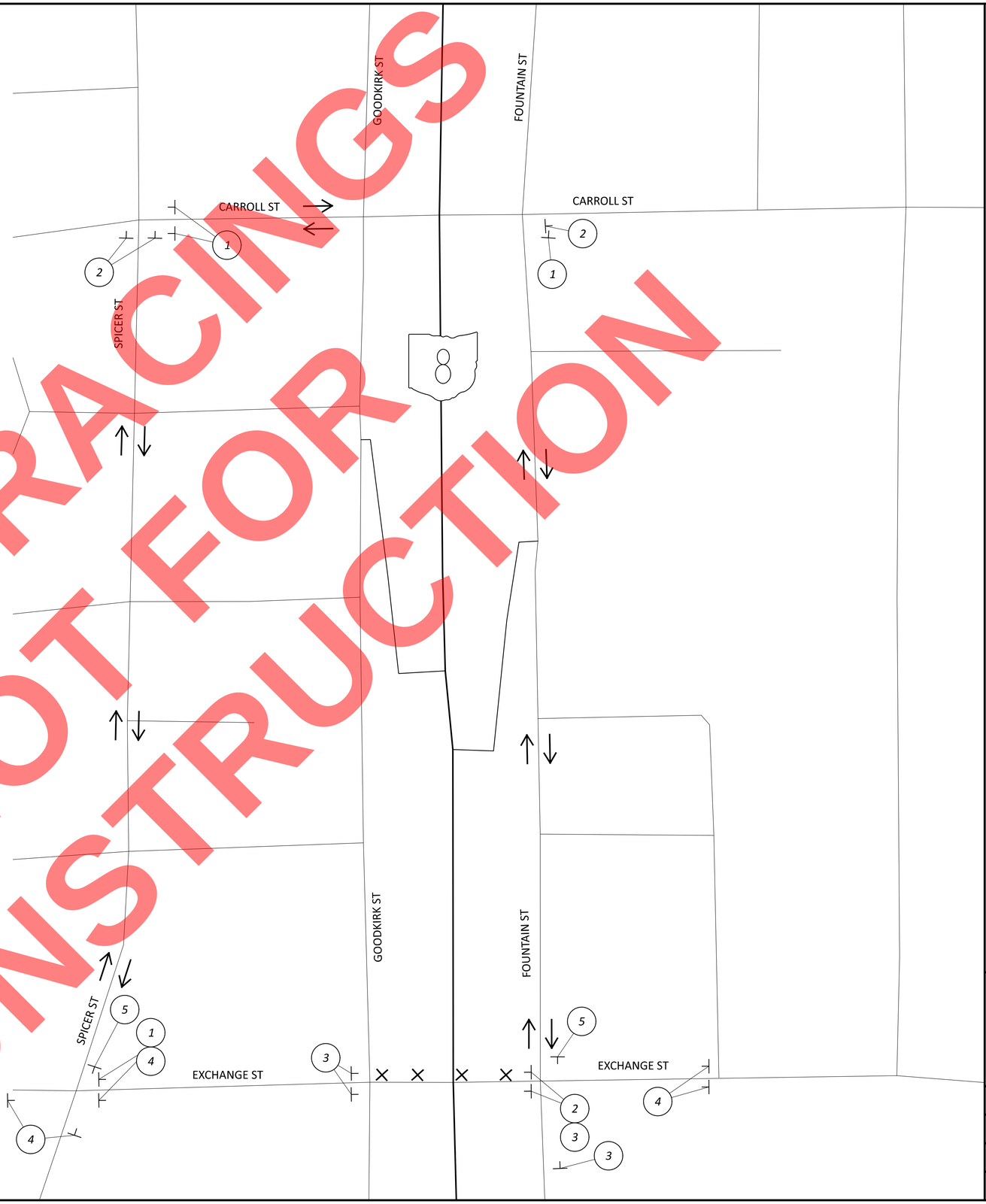

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES:

1. SIMULTANEOUS WORK WILL BE DONE ON GOODKIRK ST. FOR GOODKIRK PED DETOUR, SEE SHEET P.044
2. COVER CONFLICTING SIGNAGE.
3. FOR CLOSURE DURATION, SEE NOTES ON SHEET P.025

LEGEND

×	CLOSURE
⊥	SIGN POST
←	DIRECTION OF TRAVEL

MAINTENANCE OF TRAFFIC PEDESTRIAN DETOUR PLAN
PHASE 2 - EXCHANGE ST

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.045 TOTAL 627

SUM-77/8-11.65/0.00

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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

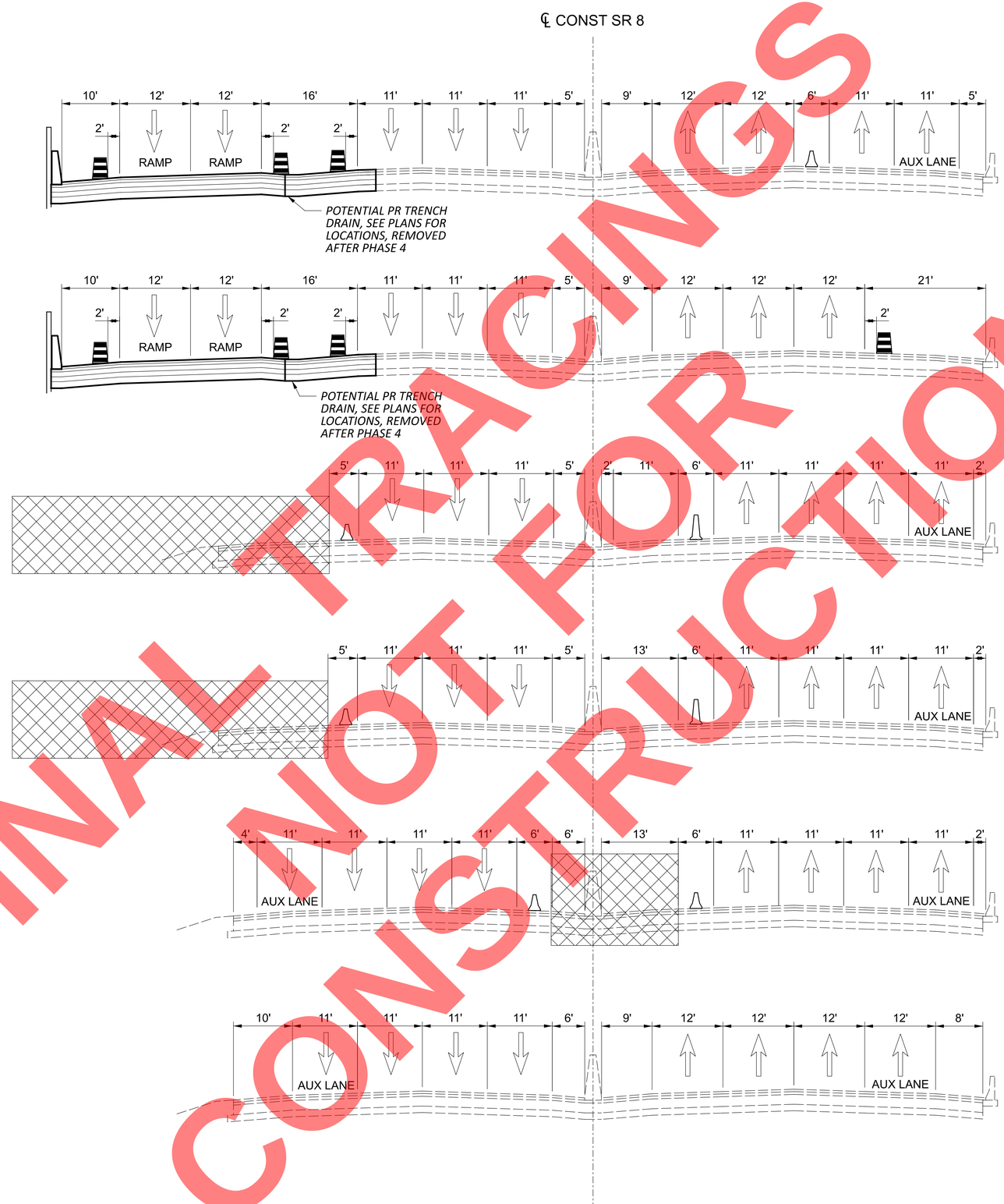
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 328+00 SECTION A-A

DESIGN AGENCY
GFT

DESIGNER DRJ
REVIEWER SSC 9-18-26
PROJECT ID 114865
SHEET P.046 TOTAL 627

SUM-77/8-11.85/0.00

MODEL: SECTION A VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:51 PM USER: mejohnson
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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

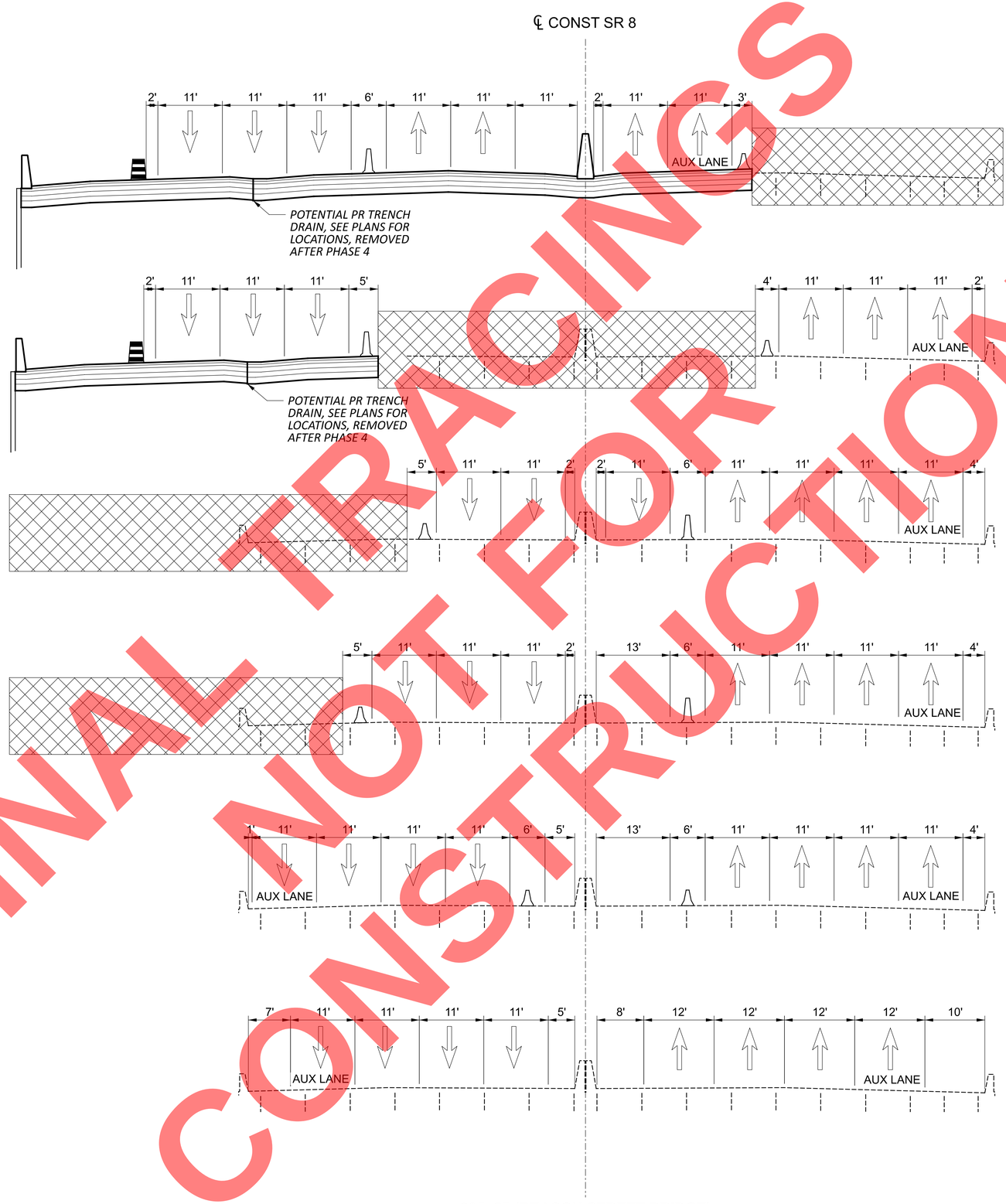
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



335+25 (BEACON STREET BRIDGE)

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 335+25 SECTION B-B

DESIGN AGENCY: GFT
DESIGNER: DRJ
REVIEWER: SSC 9-18-26
PROJECT ID: 114865
SHEET: P.047 TOTAL: 627

SUM-77/8-11.65/0.00

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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

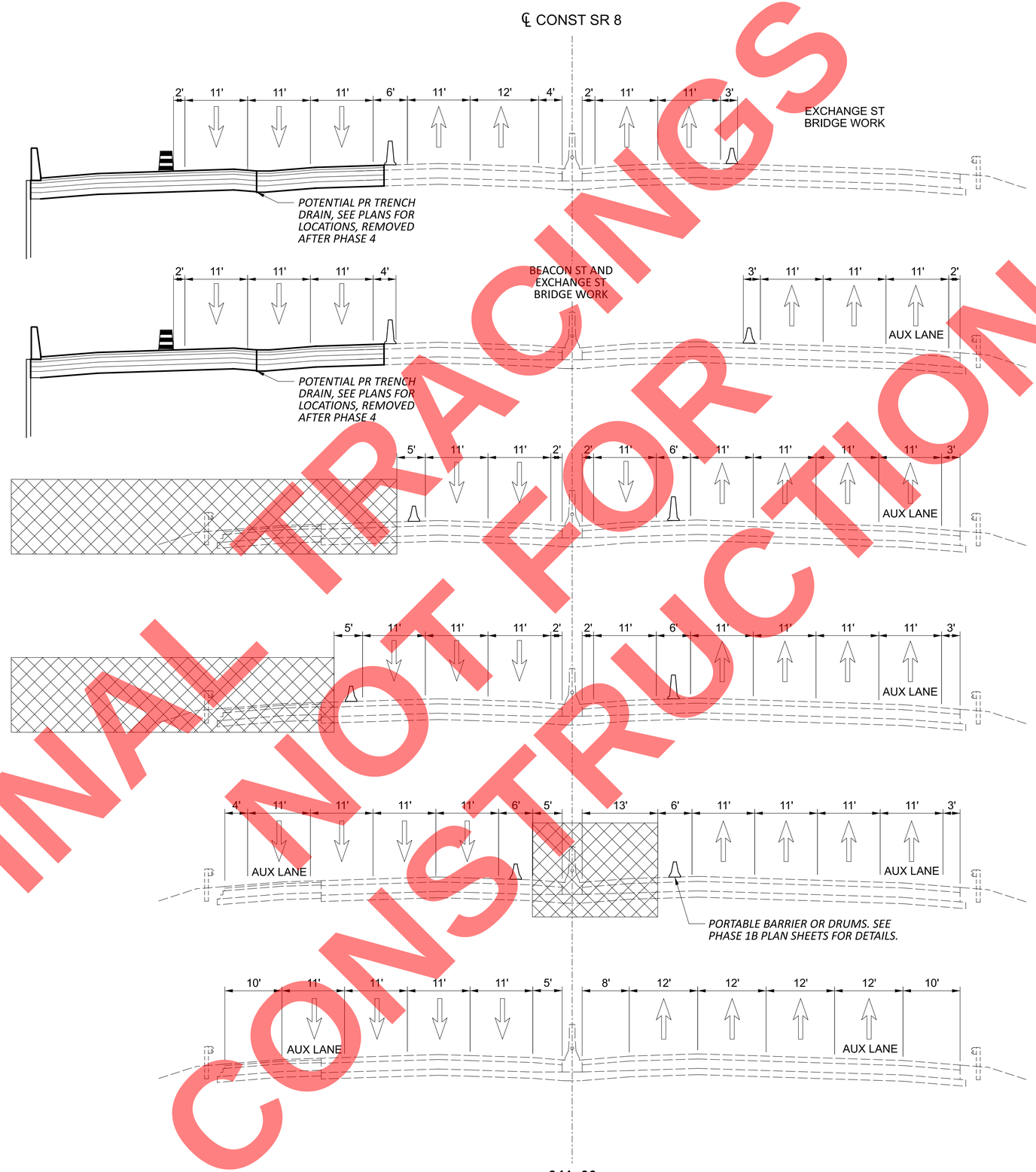
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 341+00 SECTION C-C

DESIGN AGENCY
GFT

DESIGNER DRJ
REVIEWER SSC 9-18-26
PROJECT ID 114865
SHEET P.048 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: SECTION C VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:53 PM USER: mejohnson
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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

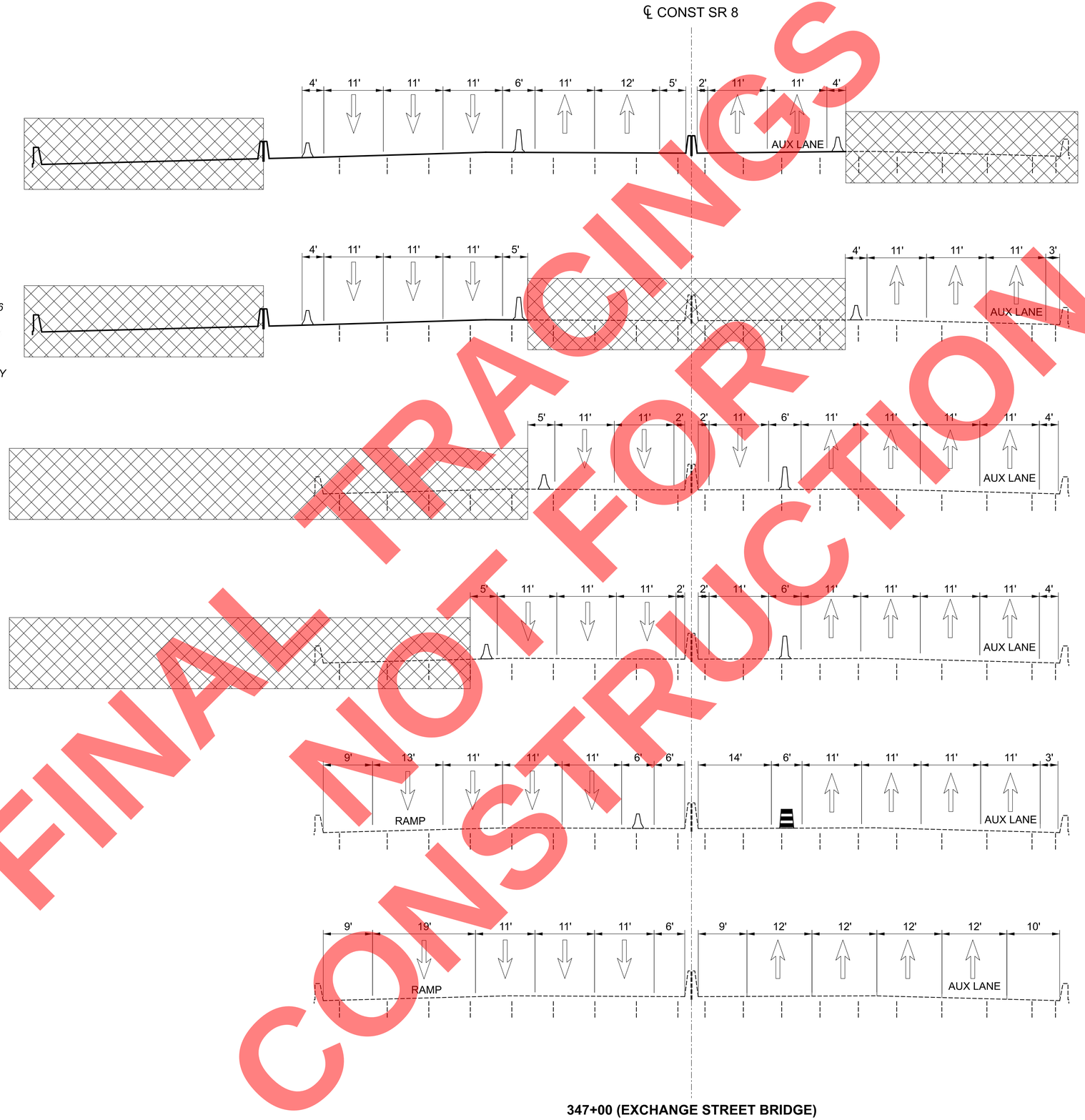
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



347+00 (EXCHANGE STREET BRIDGE)

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 347+00 SECTION D-D

DESIGN AGENCY
GFT

DESIGNER DRJ
REVIEWER SSC 9-18-26
PROJECT ID 114865
SHEET P.049 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: SECTION D VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:53 PM USER: mejohnson
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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

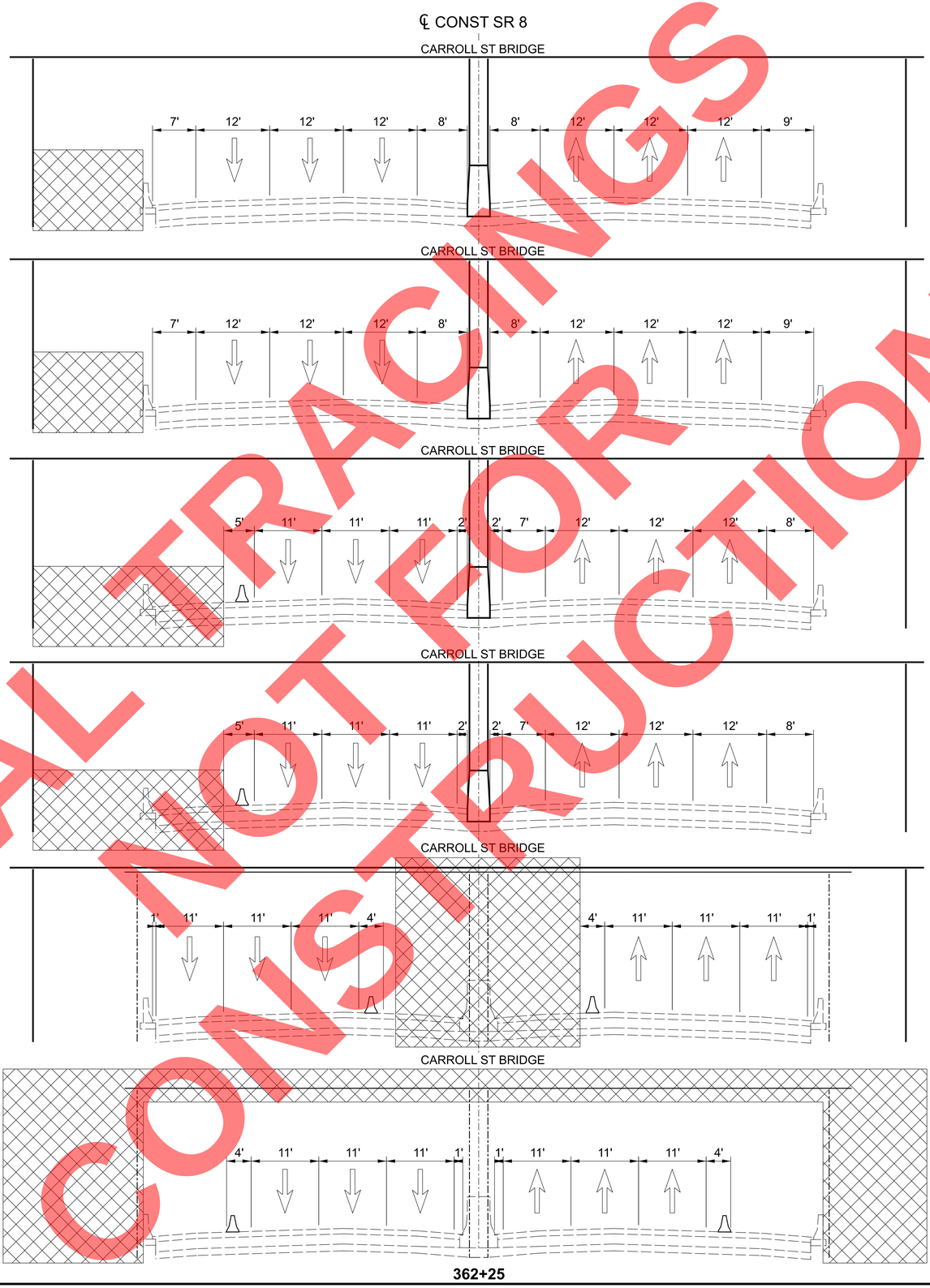
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 362+25 SECTION E-E

DESIGN AGENCY
GFT

DESIGNER DRJ
REVIEWER SSC 9-18-26
PROJECT ID 114865
SHEET P.050 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: SECTION E VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:54 PM USER: mejohnson
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MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

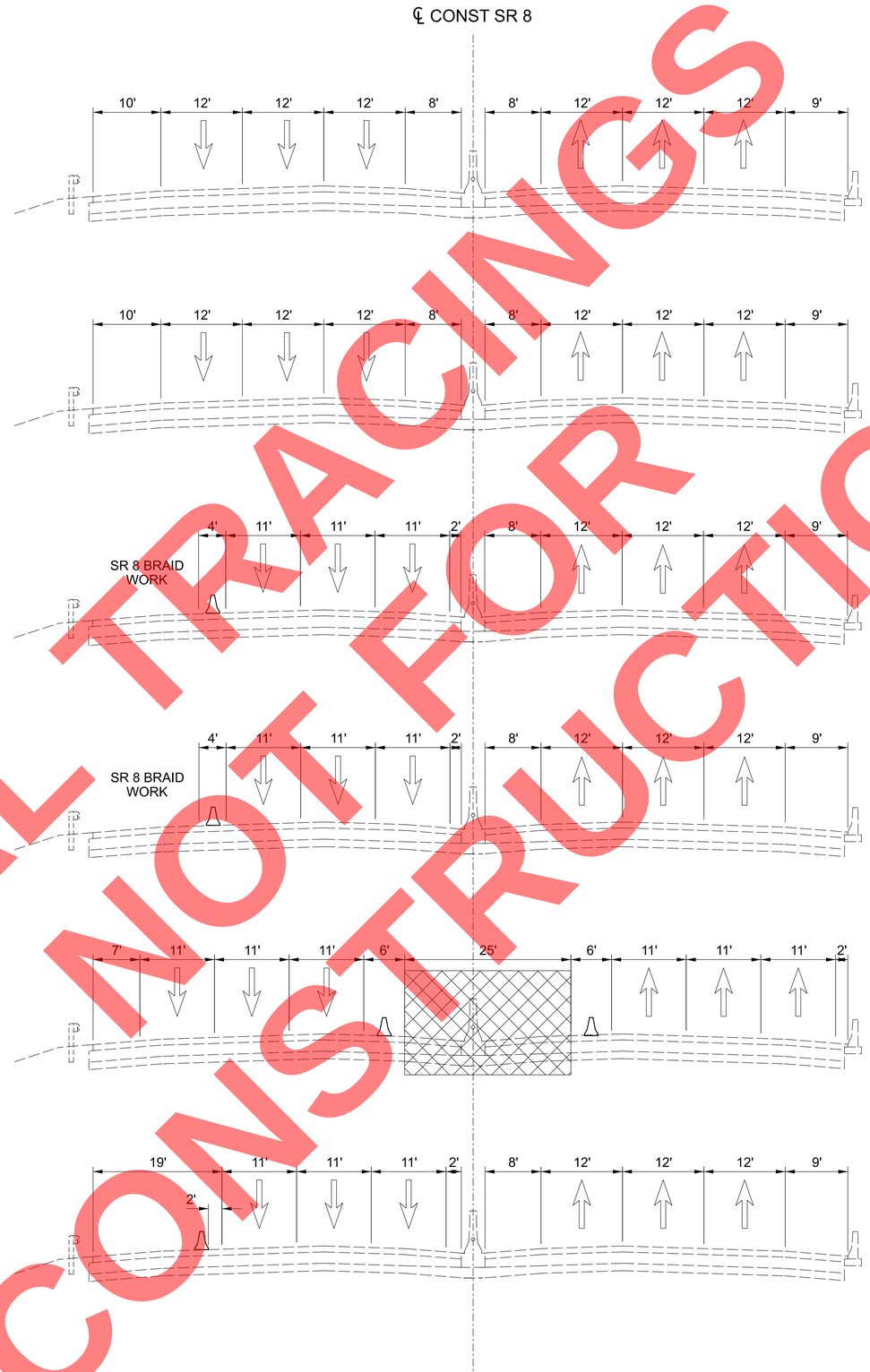
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 367+50 SECTION F-F

SUM-77/8-11.65/0.00

MODEL: SECTION F VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:54 PM USER: mejohnson
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DESIGN AGENCY
GFT

DESIGNER DRJ

REVIEWER SSC 9-18-26

PROJECT ID 114865

SHEET P.051 TOTAL 627

MOT TRANSVERSE SECTION LEGEND

PORTABLE BARRIER

WORK ZONE DRUM

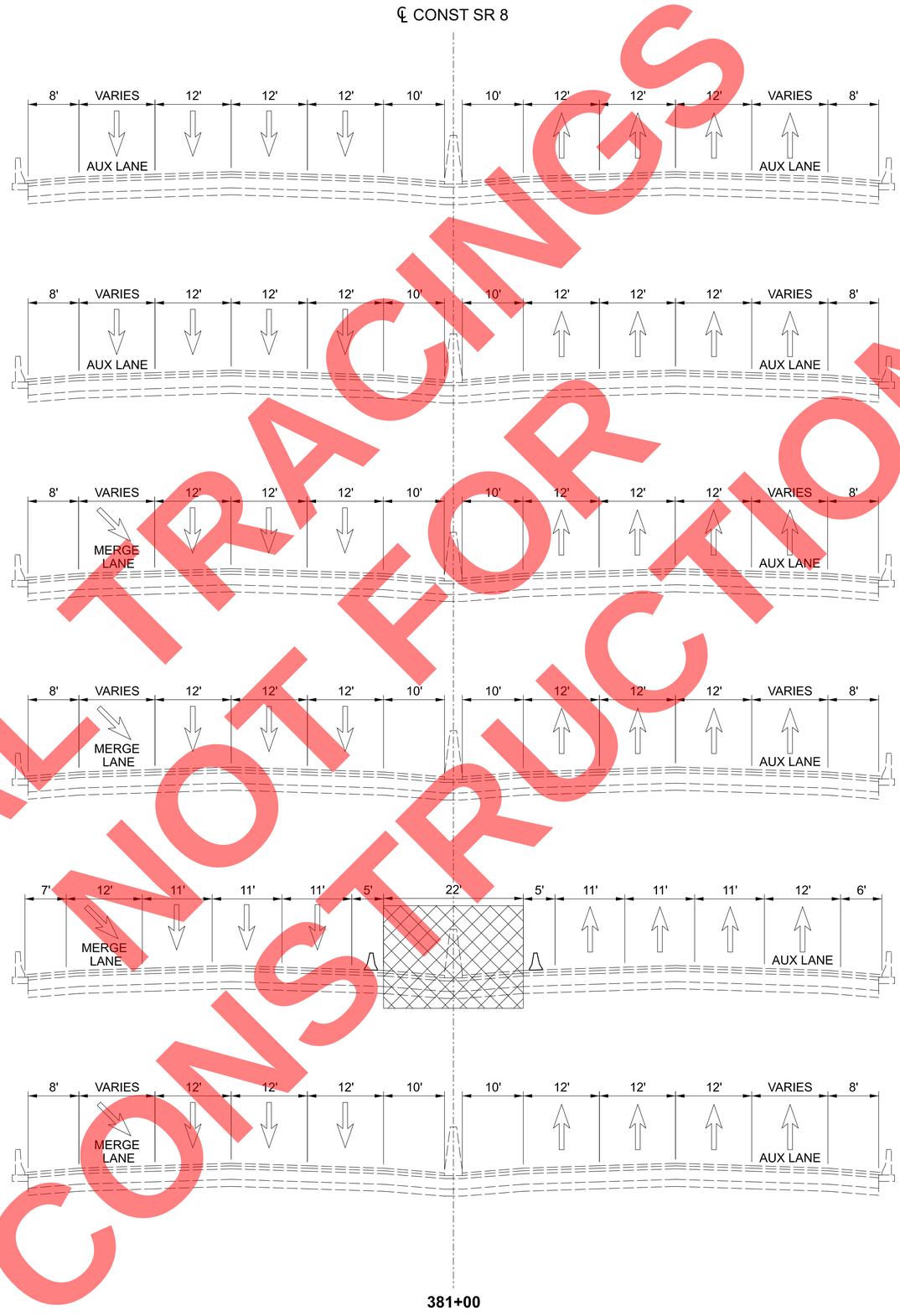
DIRECTION OF TRAVEL

ACTIVE WORK ZONE

NOTES:

1. PHASE 4 POST-PHASE, PHASE 5, AND PHASE 6 ARE NOT SHOWN AS THEY WILL UTILIZE ODOT STANDARD CONSTRUCTION DRAWINGS DURING PLCS TIMES.

2. PHASES CAN BE WORKED ON CONCURRENTLY AS LONG AS TRAFFIC IS NOT IMPACTED MORE THAN WHAT IS SHOWN ON THE PLANS OR PER THE PLCS.



FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC PHASED TYPICAL SECTIONS
STA. 367+50 SECTION G-G

DESIGN AGENCY
GFT

DESIGNER DRJ
REVIEWER SSC 9-18-26
PROJECT ID 114865
SHEET P.052 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: SECTION G VIEWS PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:07:55 PM USER: mejohnson
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REF NO.	SHEET NO.	LOCATION	STATION TO STATION				614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT FT	622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 PORTABLE BARRIER, UNANCHORED FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SY		614 INCREASED BARRIER DELINEATION FT	614 WORK ZONE CROSSOVER LIGHTING SYSTEM EACH		614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN EACH	614 BARRIER REFLECTOR, TYPE 1 ONE WAY EACH	614 BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL EACH		614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH		
PHASE 1A																										
WCH-1	P.059	SR-8	346+80.00	RT	357+50.00	RT					1070								107							
WCH-2	P.059	SR-8	346+80.00	RT	357+50.00	RT					1070								107							
WDL-1	P.059	SR-8	347+59.00	RT	350+95.00	RT						336														
WEY-1	P.059	SR-8	349+80.00	RT	368+75.00	RT				1895									152							
WCH-3	P.059	SR-8	350+95.00	RT	353+92.00	RT					297								30							
WCH-4	P.059	SR-8	350+95.00	RT	353+93.00	RT					298															
WBD-1	P.059	SR-8	352+50.00	CL	374+00.00	CL												2200				213		28		
WCH-5	P.059	SR-8	352+75.00	LT	363+75.00	LT					1100								110							
WCH-6	P.059	SR-8	352+75.00	LT	363+75.00	LT					1100								110							
WEW-1	P.059	SR-8	353+92.00	RT	368+75.00	RT			1483										116							
WEW-2	P.059	SR-8	355+75.00	LT	388+07.00	LT			3232										291							
WEY-2	P.059	SR-8	355+75.00	LT	374+80.00	LT				1905									158							
WEY-3	P.059	FOUNTAIN ST.	357+36.00	RT	359+26.00	RT				190																
WLL-1	P.059	FOUNTAIN ST.	357+36.00	RT	359+26.00	RT		190																		
WEW-3	P.059	FOUNTAIN ST.	357+36.00	RT	358+20.00	RT			84																	
WLL-2	P.060	SR-8	357+50.00	RT	360+75.00	RT		325											3							
WLL-3	P.060	SR-8	357+50.00	RT	360+75.00	RT		325											3							
WIA-1	P.060	SR-8	359+45.00	RT			1																			
PB-1	P.060	SR-8	359+65.00	RT	363+75.00	RT								410				410				41		16		
WIA-2	P.060	SR-8	360+50.00	RT			1																			
PB-2	P.060	FOUNTAIN ST.	360+69.00	RT	362+61.00	RT								200								20		8		
PB-3	P.060	SR-8	360+75.00	LT	364+64.00	LT								390				379				39		16		
WCH-7	P.060	SR-8	360+75.00	RT	371+75.00	RT					1100								110							
WCH-8	P.060	SR-8	360+75.00	RT	371+75.00	RT					1100								110							
WEY-4	P.060	CARROLL ST.	362+26.00	RT	362+37.00	RT				105																
WLL-4	P.060	SR-8	363+75.00	LT	367+00.00	LT		325											3							
WLL-5	P.060	SR-8	363+75.00	LT	367+00.00	LT		325											3							
WIA-3	P.060	FOUNTAIN ST.	364+63.00	RT			1																			
WCH-9	P.060	SR-8	367+00.00	LT	377+80.00	LT					1080								108							
WCH-10	P.060	SR-8	367+00.00	LT	377+80.00	LT					1080								108							
WDL-2	P.060	SR-8	375+00.00	RT	382+40.00	RT						740														
PHASE 1B																										
WCH-11	P.062	SR-8	4311+90.00	RT	4323+65.00	RT					1175								118							
WEY-5	P.062	SR-8	4314+90.00	RT	398+69.00	LT				8955									314							
WEW-4	P.062	SR-8	4314+90.00	RT	4329+08.00	RT			1418										88							
WCH-12	P.062	SR-8	4317+70.00	LT	4327+00.00	LT					930								93							
WCH-13	P.062	SR-8	4317+70.00	LT	4327+00.00	LT					930								93							
WEW-5	P.062	SR-8	4320+70.00	LT	4327+07.00	LT			637										51							
WEY-6	P.062	SR-8	4320+70.00	LT	392+00.00	LT				7706									243							
PB-4	P.062	SR-8	4324+00.00	LT	389+85.00	LT								7170				1980				717		287		
WLL-6	P.062	SR-8	4323+65.00	RT	360+75.00	RT		4286											36							
WIA-4	P.062	SR-8	4325+60.00	RT			1																			
WCH-14	P.062	SR-8	4325+61.00	LT	328+35.00	LT					850															
WLL-7	P.062	SR-8	4327+00.00	LT	355+75.00	LT		3451											29							
WLL-8	P.062	SR-8	4327+00.00	LT	355+75.00	LT		3451											29							
PB-5	P.062	SR-8	4321+80.00	RT	337+50.00	RT							2150								215			86		
WCH-15	P.062	SR-8	4326+10.00	LT	4329+61.00	LT					351															
WEW-6	P.062	SR-8	4326+54.00	LT	346+46.00	LT			2568																	
WCH-16	P.062	SR-8	4327+07.00	LT	4329+61.00	LT					254															
WCH-17	P.062	SR-8	4328+68.00	RT	325+65.00	RT					273															
WEW-7	P.062	SR-8	4328+68.00	RT	353+90.00	RT			3098																	
WCH-18	P.062	SR-8	4328+88.00	RT	325+65.00	RT					253															
WCH-19	P.062	SR-8	4329+08.00	RT	325+65.00	RT					233															
WLL-9	P.062	SR-8	325+65.00	RT	360+75.00	RT		3510											29							
WLL-10	P.062	SR-8	325+65.00	RT	336+62.00	RT		1097											9							
WLL-11	P.062	SR-8	328+35.00	LT	349+29.00	LT		2094											17							
WDL-3	P.062	SR-8	336+62.00	RT	352+18.00	RT						1556														
SUBTOTALS CARRIED TO SHEET P.057							4	19379	12520	20756	14544	2632	2150	8170			4969			2778	817	428		355	86		

FINAL TRACINGS
NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC SUBSUMMARY

DESIGN AGENCY
GFT

DESIGNER MGJ

REVIEWER BRO 9-18-26

PROJECT ID 114865

SHEET P.053 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: SUBSUMMARY - 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:08:04 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MS001.dgn

REF NO.	SHEET NO.	LOCATION	STATION TO STATION				614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	622 PORTABLE BARRIER, 50", AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		614 INCREASED BARRIER DELINEATION	614 WORK ZONE CROSSOVER LIGHTING SYSTEM		614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	614 BARRIER REFLECTOR, TYPE 1 ONE WAY	614 BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL		614 OBJECT MARKER, ONE WAY	614 OBJECT MARKER, TWO WAY		
							EACH	MILE	MILE	MILE	FT	FT	FT	FT	SY		FT	EACH		EACH	EACH	EACH		EACH	EACH		
PHASE 1B - CONTINUED																											
WIA-5	P.062	SR-8	347+75.00	RT			1																				
PB-6	P.062	SR-8	347+95.00	RT	354+00.00	RT							610								61				24		
WCH-20	P.062	SR-8	349+04.00	RT	353+90.00	RT					486																
WCH-21	P.062	SR-8	349+29.00	LT	351+04.00	LT					175																
WCH-22	P.062	SR-8	349+29.00	LT	354+25.00	LT					496																
WCH-23	P.062	SR-8	352+18.00	RT	353+90.00	RT					172																
WCH-24	P.062	SR-8	352+18.00	RT	353+92.00	RT					174																
PB-7	P.062	SR-8	354+00.00	RT	366+25.00	RT								1230			550				123				49		
WEW-8	P.062	SR-8	353+92.00	RT	373+48.00	RT			1956											85							
WEW-9	P.062	SR-8	354+25.00	LT	384+32.00	LT			3007											132							
WCH-25	P.062	SR-8	355+75.00	LT	368+95.00	LT					1320									132							
WCH-26	P.062	SR-8	355+75.00	LT	368+95.00	LT					1320									132							
WCH-27	P.063	SR-8	360+75.00	RT	369+25.00	RT					850									85							
WCH-28	P.063	SR-8	360+75.00	RT	369+25.00	RT					850									85							
WBD-2	P.063	SR-8	361+67.00	LT	365+00.00	LT											333				34				14		
WBD-3	P.063	SR-8	361+77.00	RT	362+79.00	RT											102				11				5		
WLL-12	P.063	SR-8	368+95.00	LT	386+00.00	LT		1705												14							
WLL-13	P.063	SR-8	368+95.00	LT	386+00.00	LT		1705												14							
WLL-14	P.063	SR-8	369+25.00	RT	384+50.00	RT		1525												13							
WLL-15	P.063	SR-8	369+25.00	RT	384+50.00	RT		1525												13							
WIA-6	P.063	SR-8	369+70.00	RT			1																				
PB-8	P.063	SR-8	369+90.00	RT	382+00.00	RT								1210							121				48		
WCH-29	P.063	SR-8	373+48.00	RT	376+48.00	RT					300																
WCH-30	P.063	SR-8	373+75.00	RT	376+48.00	RT					273																
WEW-10	P.063	SR-8	373+75.00	RT	386+21.00	RT			1246																		
WDL-4	P.063	SR-8	376+48.00	RT	382+12.00	RT						564															
WDL-5	P.063	SR-8	375+00.00	LT	382+40.00	LT						740															
WCH-31	P.063	SR-8	382+12.00	RT	386+21.00	RT					409									17							
WCH-32	P.063	SR-8	382+12.00	RT	386+21.00	RT					409																
WCH-33	P.063	SR-8	382+40.00	LT	384+06.00	LT					166																
WCH-34	P.063	SR-8	382+40.00	LT	385+51.00	LT					311																
WIA-7	P.063	SR-8	384+30.00	RT			1																				
PB-9	P.063	SR-8	384+50.00	RT	394+05.00	RT								960			960				96				38		
WCH-35	P.063	SR-8	384+50.00	RT	398+69.00	LT					1419							1		142							
WCH-36	P.063	SR-8	384+50.00	RT	398+69.00	RT					1419									142							
WEW-11	P.063	SR-8	385+51.00	LT	392+00.00	LT			649											60							
WCH-37	P.063	SR-8	386+00.00	LT	392+00.00	LT					600									60							
WCH-38	P.063	SR-8	386+00.00	LT	392+00.00	LT					600									60							
WEW-12	P.063	SR-8	386+21.00	RT	398+69.00	RT			1248											125							
WIA-8	P.063	SR-8	389+60.00	LT			1																				
WIA-9	P.063	SR-8	392+56.00	RT			1																				
PB-10	P.063	SR-8	392+75.00	RT	398+85.00	RT								610			540				61				24		
PHASE 2A																											
WLL-16	P.065	SR-8	4317+70.00	LT	327+00.00	LT		1506												13							
WLL-17	P.065	SR-8	4317+70.00	LT	327+00.00	LT		1506												13							
WEW-13	P.065	SR-8	4320+70.00	LT	4327+57.00	LT			687																		
WEY-7	P.065	SR-8	4320+70.00	LT	392+00.00	LT				7706										260							
WDL-6	P.065	SR-8	4325+60.00	LT	4329+84.00	LT						424															
WEW-14	P.065	SR-8	4325+72.00	LT	384+32.00	LT			6436											177							
PB-11	P.065	SR-8	4325+72.00	LT	372+68.00	LT								5280			1623			528				211		
WCH-39	P.065	SR-8	4327+21.00	LT	4328+69.00	LT					148																
WCH-40	P.065	SR-8	4327+57.00	LT	4328+69.00	LT					112																
WDL-7	P.065	SR-8	4328+69.00	LT	327+16.00	LT						423															
WCH-41	P.065	SR-8	327+00.00	LT	335+05.00	LT					805							1		81							
SUBTOTALS CARRIED TO SHEET P.057							5	9472	15229	7706	12814	2151	610	9290			4108	2		1855	974	61		389	24		

FINAL TRACINGS
NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC
SUBSUMMARY

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER BRO 9-18-26
PROJECT ID 114865
SHEET P.054 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: SUBSUMMARY - 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:08:05 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MS001.dgn

REF NO.	SHEET NO.	LOCATION	STATION TO STATION				614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT FT	622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 PORTABLE BARRIER, UNANCHORED FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SY		614 INCREASED BARRIER DELINEATION FT	614 WORK ZONE CROSSOVER LIGHTING SYSTEM EACH		614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN EACH	614 BARRIER REFLECTOR, TYPE 1 ONE WAY EACH	614 BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL EACH		614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH		
PHASE 2A (CONTINUED)																									
WCH-42	P.065	SR-8	327+00.00	LT	335+05.00	LT					805									81						
WBD-4	P.065	SR-8	330+00.00	CL	372+00.00	CL												505			420			168		
WLL-18	P.065	SR-8	335+05.00	LT	364+50.00	LT		2945												25						
WLL-19	P.065	SR-8	335+05.00	LT	364+50.00	LT		2945												25						
PB-12	P.065	SR-8	337+50.00	RT	348+45.00	RT							1100									110			44	
WCH-43	P.065	SR-8	352+19.00	RT	363+94.00	RT					1175									118						
WCH-44	P.065	SR-8	352+19.00	RT	363+94.00	RT					1175									118						
WEY-8	P.065	SR-8	355+19.00	RT	398+69.00	LT				4350										234						
WEW-15	P.065	SR-8	355+19.00	RT	373+48.00	RT			1829											88						
WLL-20	P.066	SR-8	363+94.00	RT	387+00.00	RT		2306												19						
WLL-21	P.066	SR-8	363+94.00	RT	387+00.00	RT		2306												19						
WCH-45	P.066	SR-8	364+50.00	LT	374+18.00	LT					968								1	97						
WCH-46	P.066	SR-8	364+50.00	LT	374+18.00	LT					968									97						
WIA-10	P.066	SR-8	372+68.00	LT			1																			
WCH-47	P.066	SR-8	373+48.00	RT	376+45.00	RT					297															
WCH-48	P.066	SR-8	373+48.00	RT	376+45.00	RT					297															
WEW-16	P.066	SR-8	373+48.00	RT	386+17.00	RT			1269																	
WLL-22	P.066	SR-8	374+18.00	LT	383+72.00	LT		954												8						
WLL-23	P.066	SR-8	374+18.00	LT	383+72.00	LT		954												8						
WDL-8	P.066	SR-8	376+45.00	RT	382+12.00	RT						567														
WDL-9	P.066	SR-8	375+00.00	LT	382+40.00	LT						740														
WCH-49	P.066	SR-8	382+12.00	RT	386+17.00	RT					405															
WCH-50	P.066	SR-8	382+12.00	RT	386+17.00	RT					405															
WCH-51	P.066	SR-8	382+40.00	LT	384+46.00	LT					206															
WCH-52	P.066	SR-8	382+40.00	LT	385+50.00	LT					310									18						
WCH-53	P.066	SR-8	383+72.00	LT	392+00.00	LT					828									83						
WCH-54	P.066	SR-8	383+72.00	LT	392+00.00	LT					828									83						
WEW-17	P.066	SR-8	385+50.00	LT	392+00.00	LT			650											65						
WEW-18	P.066	SR-8	386+17.00	RT	398+69.00	RT			1252											117						
WCH-55	P.066	SR-8	387+00.00	RT	398+69.00	RT					1169								1	117						
WCH-56	P.066	SR-8	387+00.00	RT	398+69.00	RT					1169									117						
PHASE 2B																										
WCH-57	P.069	SR-8	326+14.00	LT	337+05.00	LT					1091								1	109						
WCH-58	P.069	SR-8	326+14.00	LT	333+84.00	LT					770									77						
WCH-59	P.069	SR-8	329+14.00	LT	333+00.00	RT					386									39						
WEY-9	P.069	SR-8	329+14.00	LT	353+69.00	RT				2455										194						
WIA-11	P.069	SR-8	329+75.00	CL			1																			
TP-1	P.069	SR-8	329+75.00	CL	332+75.00	CL										564										
WEW-19	P.069	SR-8	330+01.00	LT	353+69.00	LT			2368											197						
PB-13	P.069	SR-8	330+66.00	LT	353+69.00	LT								2310				1517			231			92		
WBD-5	P.069	SR-8	331+80.00	RT	336+00.00	RT												420								
WBD-6	P.069	SR-8	332+75.00	CL	337+05.00	CL												525								
WEW-20	P.069	SR-8	333+00.00	RT	350+00.00	RT			1700											71						
WEY-10	P.069	SR-8	333+84.00	LT	350+71.00	LT				1687										70						
WLL-24	P.069	SR-8	337+05.00	LT	347+71.00	LT		1066												9						
WBD-7	P.069	SR-8	347+00.00	RT	351+25.00	RT												425								
WBD-8	P.069	SR-8	347+00.00	CL	350+15.00	CL												559								
WCH-60	P.069	SR-8	347+71.00	LT	356+49.00	LT					878									88						
WCH-61	P.069	SR-8	350+00.00	RT	353+69.00	LT					369								1	37						
WIA-12	P.069	SR-8	350+15.00	CL			1																			
TP-2	P.069	SR-8	350+15.00	CL	353+00.00	CL										536										
WCH-62	P.069	SR-8	350+71.00	LT	356+49.00	LT					578									58						
WBD-9	P.069	SR-8	353+00.00	LT	356+49.00	LT												349								
SUBTOTALS CARRIED TO SHEET P.057							3	13476	9068	8492	15077	1307	1100	2310	1100		4300	4		2486	651	110		260	44		

FINAL TRACINGS
NOT FOR CONSTRUCTION

MODEL: SUBSUMMARY - 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:08:06 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MS001.dgn

SUM-77/8-11.65/00.00

MAINTENANCE OF TRAFFIC
SUBSUMMARY

DESIGN AGENCY
GFT

DESIGNER MGJ

REVIEWER BRO 9-18-26

PROJECT ID 114865

SHEET P.055 TOTAL 627

REF NO.	SHEET NO.	LOCATION	STATION TO STATION				614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT FT	622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 PORTABLE BARRIER, UNANCHORED FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SY		614 INCREASED BARRIER DELINEATION FT	614 WORK ZONE CROSSOVER LIGHTING SYSTEM EACH		614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN EACH	614 BARRIER REFLECTOR, TYPE 1 ONE WAY EACH	614 BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL EACH		614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH		
PHASE 3																									
WLL-25	P.073	SR-8	4311+90.00	RT	327+41.00	RT		2127												18					
WEY-11	P.073	SR-8	4314+90.00	RT	360+94.00	RT				5180										200					
WEW-21	P.073	SR-8	4314+90.00	RT	4329+58.00	RT			1468																
WEW-22	P.073	SR-8	4325+06.00	LT	371+19.00	LT			5189											206					
WEY-12	P.073	SR-8	4325+46.00	LT	329+46.00	LT				976															
WCH-63	P.073	SR-8	4325+60.00	LT	4329+64.00	LT					404														
WCH-64	P.073	SR-8	4328+68.00	RT	337+25.00	RT					1741									98					
WEW-23	P.073	SR-8	4329+07.00	RT	351+39.00	RT			2808											162					
WCH-65	P.073	SR-8	4329+58.00	RT	327+20.00	RT					163														
WLL-26	P.073	SR-8	4329+64.00	LT	329+46.00	LT		558												5					
WEW-24	P.073	SR-8	4329+82.00	LT	332+56.00	LT			850											70					
WCH-66	P.073	SR-8	325+57.00	LT	336+51.00	LT					1094								1	109					
WCH-67	P.073	SR-8	325+57.00	LT	336+51.00	LT					1094									109					
TP-3	P.073	SR-8	326+50.00	LT	342+66.00	LT									1717										
WCH-68	P.073	SR-8	327+41.00	RT	337+25.00	RT					984								1	98					
WEY-13	P.073	SR-8	328+57.00	LT	371+19.00	RT				4262										214					
WCH-69	P.073	SR-8	329+46.00	LT	332+56.00	LT					310									31					
PB-14	P.073	SR-8	329+77.00	LT	353+00.00	LT							2330					1386				233		93	
WIA-13	P.073	SR-8	330+75.00	RT			1																		
PB-15	P.073	SR-8	330+95.00	RT	350+78.00	RT								1990				1053			199		80		
WLL-27	P.073	SR-8	336+51.00	LT	339+50.00	LT		299												2					
WLL-28	P.073	SR-8	336+51.00	LT	339+50.00	LT		299												2					
WLL-29	P.073	SR-8	337+25.00	RT	345+00.00	RT		775												6					
WLL-30	P.073	SR-8	337+25.00	RT	345+00.00	RT		775												6					
WCH-70	P.073	SR-8	339+50.00	LT	342+35.00	LT					285									29					
WCH-71	P.073	SR-8	339+50.00	LT	342+35.00	LT					285									29					
WLL-31	P.073	SR-8	342+35.00	LT	346+00.00	LT		365												3					
WLL-32	P.073	SR-8	342+35.00	LT	346+00.00	LT		365												3					
PB-16	P.073	SR-8	344+75.00	LT	367+00.00	LT								2230				1065			223		89		
WCH-72	P.073	SR-8	345+00.00	RT	355+11.00	RT					1011								1	101					
WCH-73	P.073	SR-8	345+00.00	RT	355+11.00	RT					1011									101					
WCH-74	P.073	SR-8	346+00.00	LT	356+65.00	LT					1065								1	107					
WCH-75	P.073	SR-8	346+00.00	LT	356+65.00	LT					1065									107					
WDL-10	P.073	SR-8	348+00.00	RT	350+17.00	RT						217								22					
WCH-76	P.073	SR-8	350+17.00	RT	353+93.00	RT					376									38					
WCH-77	P.073	SR-8	350+17.00	RT	352+40.00	RT					223														
WEW-25	P.073	SR-8	353+93.00	RT	360+94.00	RT			701											12					
WLL-33	P.073	SR-8	353+11.00	RT	363+94.00	RT		1083												9					
WLL-34	P.073	SR-8	353+11.00	RT	363+94.00	RT		1083												9					
WLL-35	P.073	SR-8	356+65.00	LT	374+18.00	LT		1753												15					
WLL-36	P.073	SR-8	356+65.00	LT	374+18.00	LT		1753												15					
WIA-14	P.074	SR-8	367+00.00	LT			1																		
WCH-78	P.074	SR-8	374+40.00	LT	377+97.00	LT					357														
WLL-37	P.074	SR-8	383+72.00	LT	392+00.00	LT		828												7					
WLL-38	P.074	SR-8	383+72.00	LT	392+00.00	LT		828												7					
WEW-26	P.074	SR-8	386+72.00	LT	392+00.00	LT			528																
WEY-14	P.074	SR-8	386+72.00	LT	392+00.00	LT				528															
WLL-39	P.074	SR-8	387+00.00	RT	398+69.00	RT		1169												10					
WLL-40	P.074	SR-8	387+00.00	RT	398+69.00	RT		1169												10					
WEW-27	P.074	SR-8	387+00.00	RT	398+69.00	RT			1169																
WEY-15	P.074	SR-8	393+94.00	RT	398+69.00	RT				475															
SUBTOTALS CARRIED TO SHEET P.057							2	15229	12713	11421	11468	217	2330	4220	1718		3504	4		1970	422	233		169	93	

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUM-77/8-11.65/00.00

MODEL: SUBSUMMARY - 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:08:07 PM USER: mejohnson
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MAINTENANCE OF TRAFFIC
SUBSUMMARY

DESIGN AGENCY
GFT

DESIGNER
MGJ

REVIEWER
BRO 9-18-26

PROJECT ID
114865

SHEET P.056 TOTAL 627

REF NO.	SHEET NO.	LOCATION	STATION TO STATION				614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	622 PORTABLE BARRIER, 50", AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		614 INCREASED BARRIER DELINEATION	614 WORK ZONE CROSSOVER LIGHTING SYSTEM		614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	614 BARRIER REFLECTOR, TYPE 1 ONE WAY	614 BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL		614 OBJECT MARKER, ONE WAY	614 OBJECT MARKER, TWO WAY		
							EACH	MILE	MILE	MILE	FT	FT	FT	FT	SY		FT	EACH		EACH	EACH	EACH		EACH	EACH		
PHASE 4																											
WEY-16	P.076	SR-8	4328+06.00	RT	350+45.00	RT				2815								1		169							
WCH-79	P.076	SR-8	4328+68.00	RT	337+25.00	RT					1433									119							
WEW-28	P.076	SR-8	4329+10.00	RT	353+51.00	RT			3017											200							
WIA-15	P.076	SR-8	4329+15.00	RT			1																				
PB-17	P.076	SR-8	4329+35.00	RT	332+75.00	RT								920			1235				92			37			
WCH-80	P.076	SR-8	4330+45.00	RT	342+35.00	LT					1766									177							
WEW-29	P.076	SR-8	326+47.00	RT	349+00.00	LT			2253											189							
WEY-17	P.076	SR-8	327+77.00	RT	354+45.00	RT				2668										230							
WBD-10	P.076	SR-8	329+77.00	RT	336+51.00	LT											674										
WIA-16	P.076	SR-8	331+00.00	RT			1																				
PB-18	P.076	SR-8	331+18.00	RT	348+00.00	RT								1690			857				169			68			
WBD-11	P.076	SR-8	333+00.00	RT	337+25.00	RT											425										
WEY-18	P.076	SR-8	336+51.00	LT	342+35.00	LT				584										58							
PB-19	P.076	SR-8	336+51.00	LT	342+35.00	LT							590				590					59			24		
WLL-41	P.076	SR-8	337+25.00	RT	345+50.00	RT		825												7							
WBD-12	P.076	SR-8	339+00.00	LT	342+35.00	LT											335										
WLL-42	P.076	SR-8	342+35.00	LT	346+00.00	LT		365												3							
WCH-81	P.076	SR-8	345+50.00	RT	356+42.00	RT					1092									109							
WBD-13	P.076	SR-8	345+50.00	CL	350+00.00	CL											750										
WBD-14	P.076	SR-8	346+00.00	LT	353+00.00	LT											700										
WCH-82	P.076	SR-8	346+00.00	LT	357+45.00	RT					1145							1		115							
WCH-83	P.076	SR-8	349+00.00	LT	354+52.00	RT					552									55							
WCH-84	P.076	SR-8	350+45.00	RT	357+45.00	RT					700									70							
WDL-11	P.076	SR-8	350+45.00	RT	351+94.00	RT						149															
WCH-85	P.076	SR-8	351+94.00	RT	352+94.00	RT					100									10							
WCH-86	P.076	SR-8	351+94.00	RT	353+37.00	RT					143									14							
SUBTOTALS CARRIED FROM THIS SHEET							2	1190	5270	6067	6931	149	590	2610			5566	2		1525	261	59		105	24		
SUBTOTALS CARRIED FROM SHEET P.053							4	19379	12520	20756	14544	2632	2150	8170			4969			2778	817	428		355	86		
SUBTOTALS CARRIED FROM SHEET P.054							5	9472	15229	7706	12814	2151	610	9290			4108	2		1855	974	61		389	24		
SUBTOTALS CARRIED FROM SHEET P.055							3	13476	9068	8492	15077	1307	1100	2310	1100		4300	4		2486	651	110		260	44		
SUBTOTALS CARRIED FROM SHEET P.056							2	15229	12713	11421	11468	217	2330	4220	1718		3504	4		1970	422	233		169	93		
LINEAR TOTALS						*FT*		58746	54800	54442	60834	6456	6780	26600			22447										
LINEAR TOTALS						*MI*		11.13	10.38	10.31																	
TOTALS CARRIED TO GENERAL SUMMARY							16	11.13	20.69		60834	6456	6780	26600	2818		22447	12		10614	3125	891		1278	271		

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-77/8-11.65/00.00

MODEL: SUBSUMMARY - 5 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:08:08 PM USER: mejohnson
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MAINTENANCE OF TRAFFIC
SUBSUMMARY

DESIGN AGENCY
GFT

DESIGNER MGJ

REVIEWER BRO 9-18-26

PROJECT ID 114865

SHEET P.057 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: 114865_SMY05_PAPERSIZE: 48x24 INCH DATE: 9/18/2026 TIME: 3:08:49 PM USER: mjohnson
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PAVEMENT MARKING LEGEND

WEW-XX WORK ZONE EDGE LINE, CLASS I (WHITE)	WCV-XX WORK ZONE GORE MARKING, CLASS I
WEY-XX WORK ZONE EDGE LINE, CLASS I (YELLOW)	WSL-XX WORK ZONE STOP LINE, CLASS I
WLL-XX WORK ZONE LANE LINE, CLASS I	WZA-XX WORK ZONE ARROW, CLASS I
WCH-XX WORK ZONE CHANNELIZING LINE, CLASS I	PB-XX PORTABLE BARRIER
WDL-XX WORK ZONE DOTTED LINE, CLASS I	WIA-XX IMPACT ATTENUATOR
WDY-XX WORK ZONE CENTERLINE, CLASS I (DOUBLE YELLOW)	TP-XX TEMPORARY PAVEMENT
WBD-XX BARRIER DELINEATION ON EXISTING OR PORTABLE BARRIER SET IN PREVIOUS PHASE	OV-XX TEMPORARY SIGN PLAQUE OR OVERLAY

SIGNING LEGEND

- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- (R) EXISTING SIGN TO BE REMOVED AND RE-ERECTED
- PROPOSED SIGN

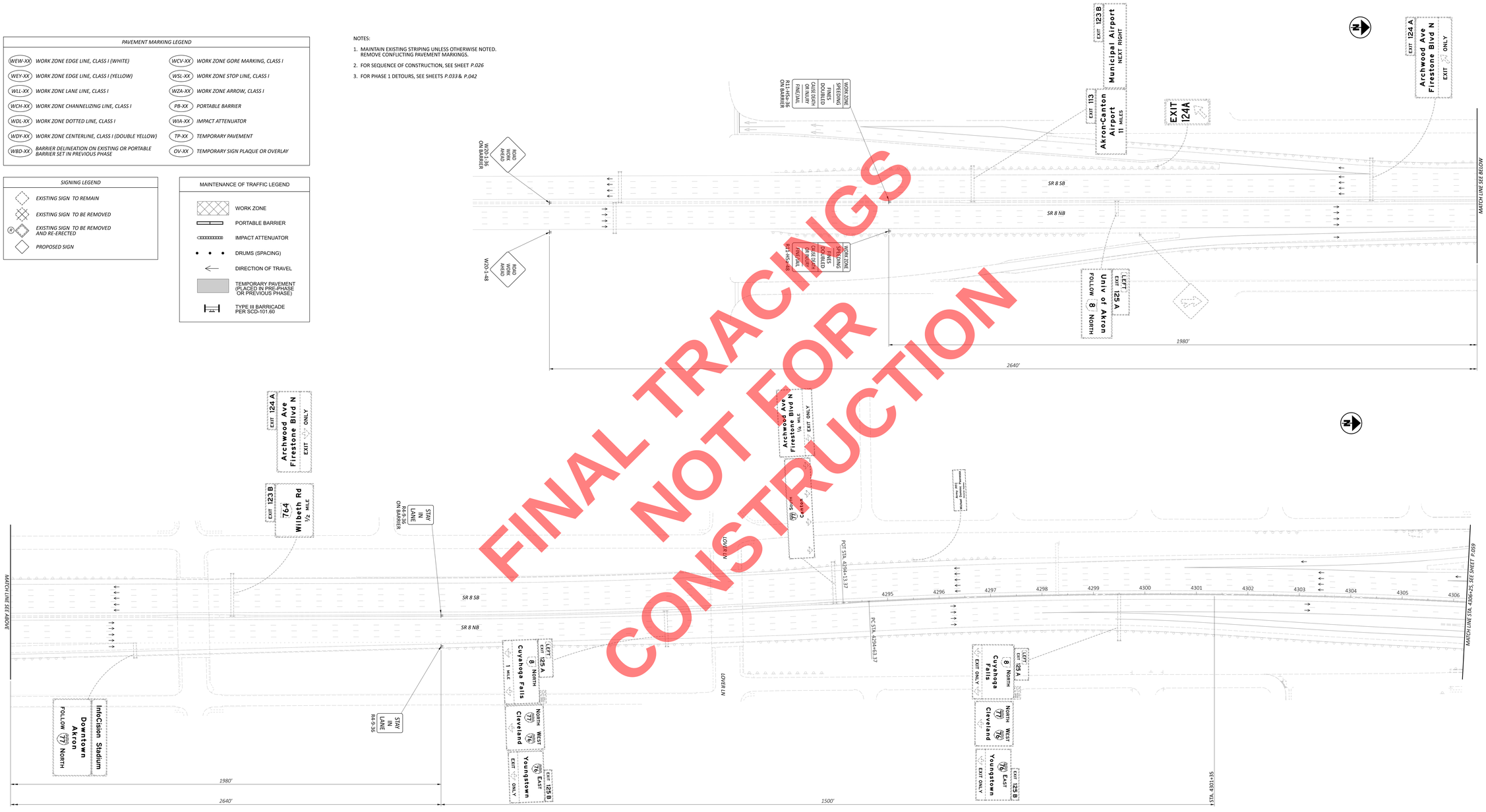
MAINTENANCE OF TRAFFIC LEGEND

- WORK ZONE
- PORTABLE BARRIER
- IMPACT ATTENUATOR
- DRUMS (SPACING)
- DIRECTION OF TRAVEL
- TEMPORARY PAVEMENT (PLACED IN PRE-PHASE OR PREVIOUS PHASE)
- TYPE III BARRICADE PER SCD-101.60

NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 1 DETOURS, SEE SHEETS *P.033* & *P.042*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

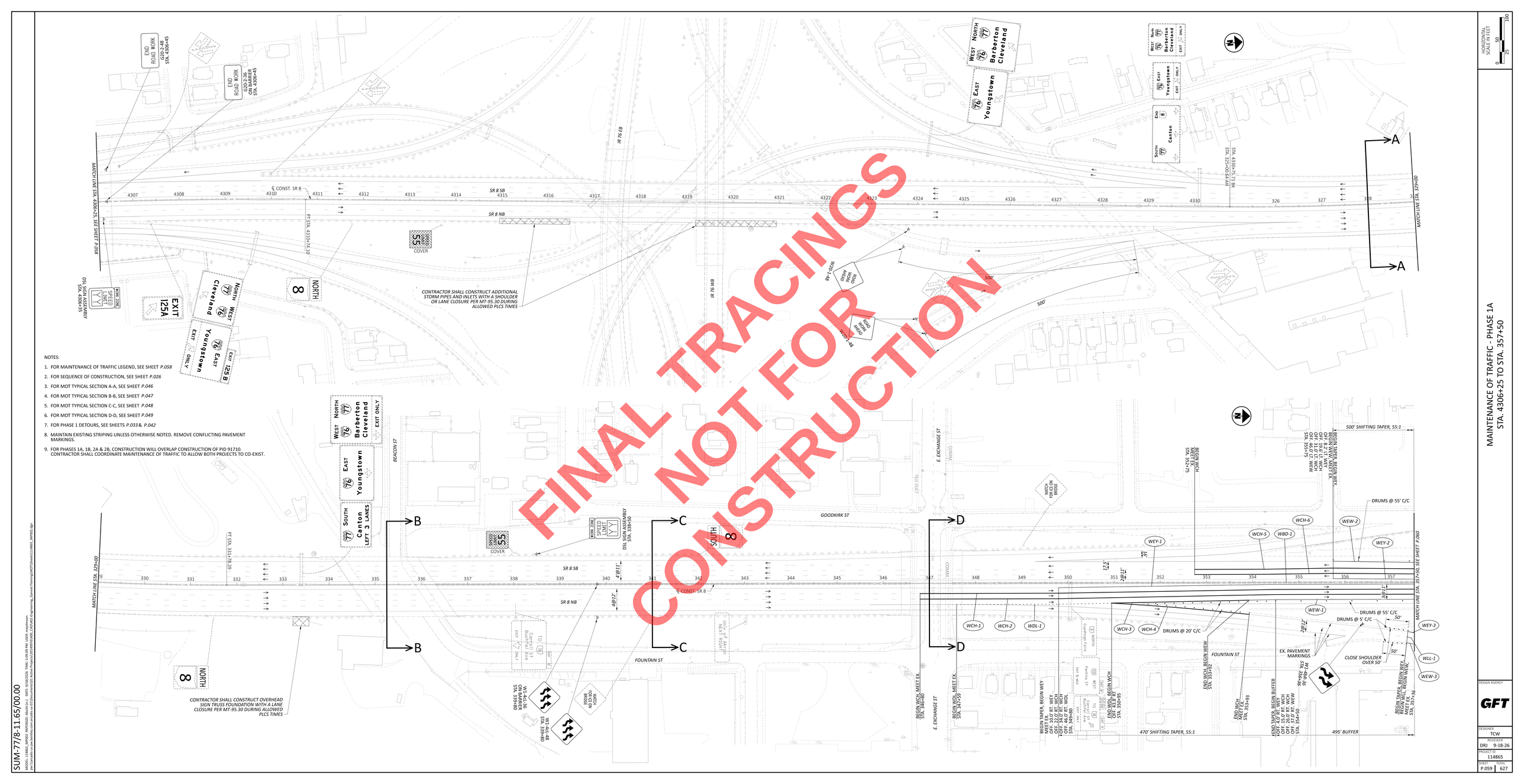


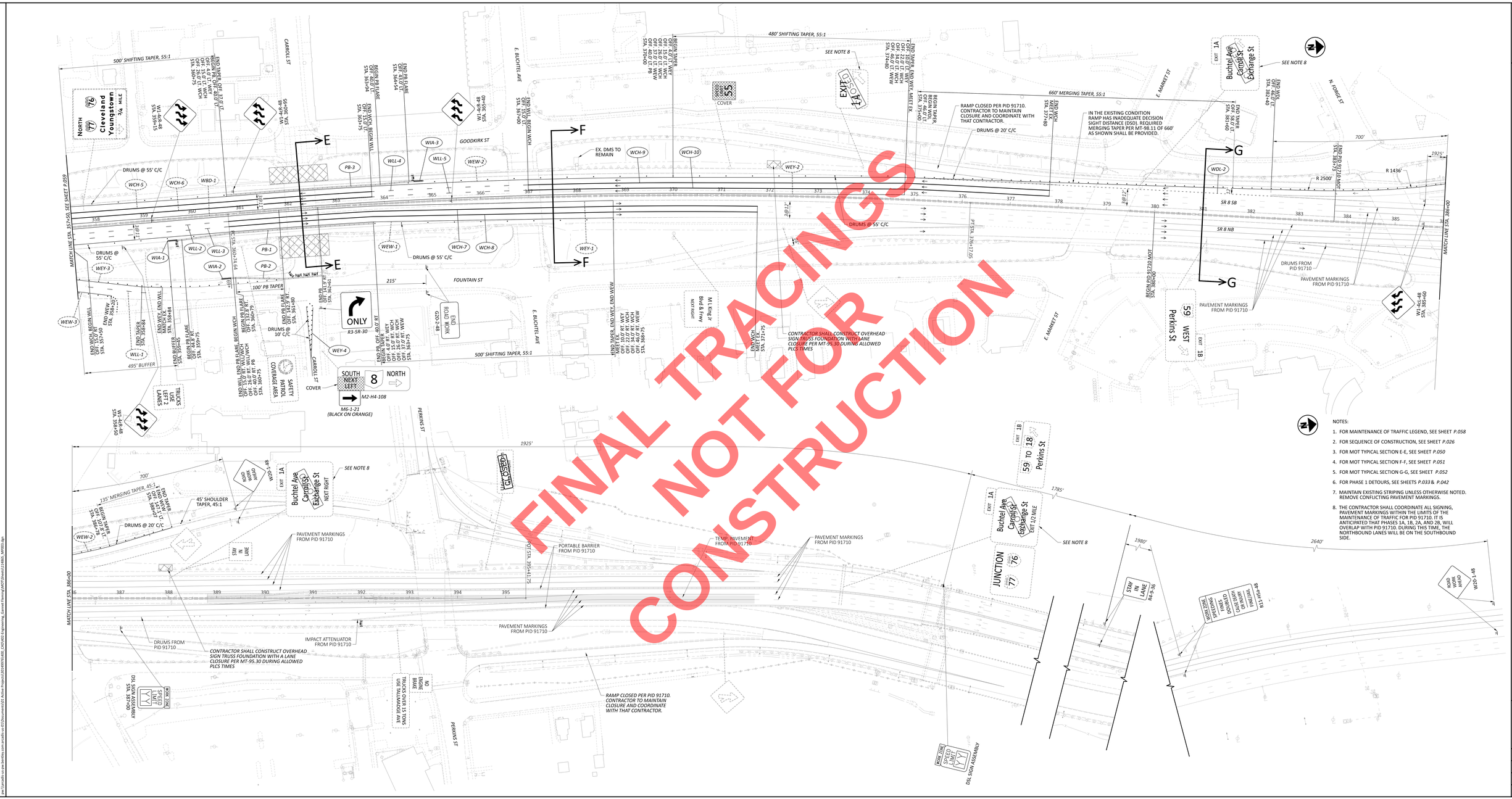
HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 1A
BEGIN WORK TO STA. 4306+25

DESIGN AGENCY
GFT

DESIGNER	TCW
REVIEWER	DRJ 9-18-26
PROJECT ID	114865
SHEET	P.058
TOTAL	627


MATCH LINE STA. 4306+25, SEE SHEET P.058
MATCH LINE STA. 329+00
MATCH LINE STA. 329+00
MATCH LINE STA. 357+50, SEE SHEET P.060
SR 8 SB
SR 8 NB
IR 76 EB
IR 76 WB
℄ CONST. SR 8
℄ EXCHANGE ST
BEACON ST
GOODKIRK ST
FOUNTAIN ST
CONRAIL
TELL CHIO
END ROAD WORK G20-2-48 STA. 4306+45
END ROAD WORK G20-2-36 ON BARRIER STA. 4306+45
CONTRACTOR SHALL CONSTRUCT ADDITIONAL STORM PIPES AND INLETS WITH A SHOULDER OR LANE CLOSURE PER MT-95.30 DURING ALLOWED PLCS TIMES
CONTRACTOR SHALL CONSTRUCT OVERHEAD SIGN TRUSS FOUNDATION WITH A LANE CLOSURE PER MT-95.30 DURING ALLOWED PLCS TIMES
DSL SIGN ASSEMBLY STA. 4306+55
DSL SIGN ASSEMBLY STA. 330+50
SPEED LIMIT 55
WORK ZONE
COVER
EXIT 125A
EXIT 125B
NORTH 8
SOUTH 8
WEST 77 NORTH 76 Cleveland
EAST 76 Youngstown EXIT ONLY
SOUTH 77 Canton LEFT 3 LANES
WEST 77 NORTH 76 Barberton Cleveland EXIT ONLY
Carroll St Bridge Ctr
Bridge Ctr
Bridge Ctr



NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR MOT TYPICAL SECTION E-E, SEE SHEET *P.050*
4. FOR MOT TYPICAL SECTION F-F, SEE SHEET *P.051*
5. FOR MOT TYPICAL SECTION G-G, SEE SHEET *P.052*
6. FOR PHASE 1 DETOURS, SEE SHEETS *P.033* & *P.042*
7. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
8. THE CONTRACTOR SHALL COORDINATE ALL SIGNING, PAVEMENT MARKINGS WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710. IT IS ANTICIPATED THAT PHASES 1A, 1B, 2A, AND 2B, WILL OVERLAP WITH PID 91710. DURING THIS TIME, THE NORTHBOUND LANES WILL BE ON THE SOUTHBOUND SIDE.

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 357+00 TO END OF WORK

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

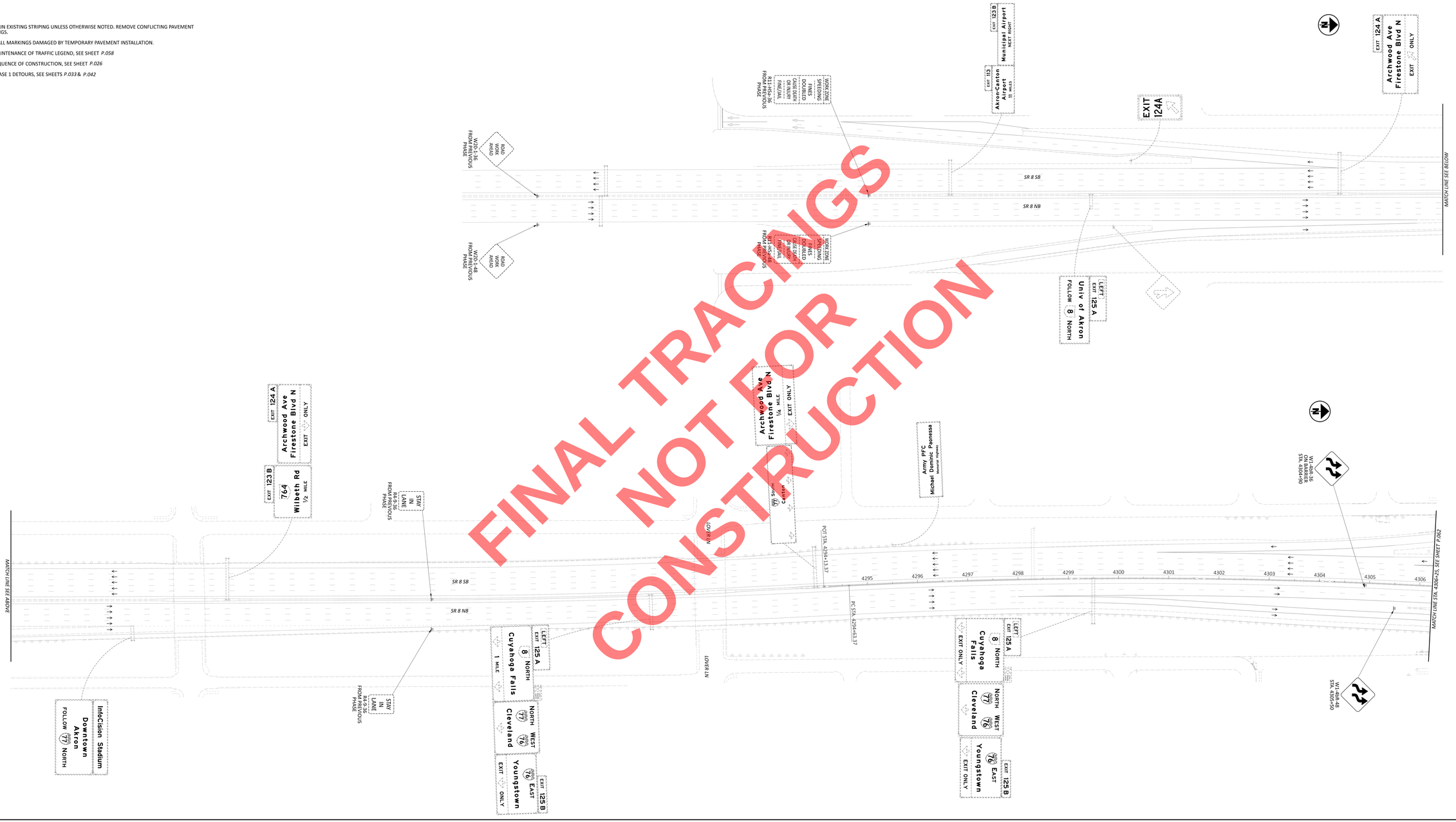
PROJECT ID
114865

SHEET P.060 TOTAL 627

SUM-77/8-11.65/00.00

NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. REINSTALL MARKINGS DAMAGED BY TEMPORARY PAVEMENT INSTALLATION.
3. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
4. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
5. FOR PHASE 1 DETOURS, SEE SHEETS *P.033* & *P.042*



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 1B
BEGIN WORK TO STA. 4306+25

DESIGN AGENCY
GFT

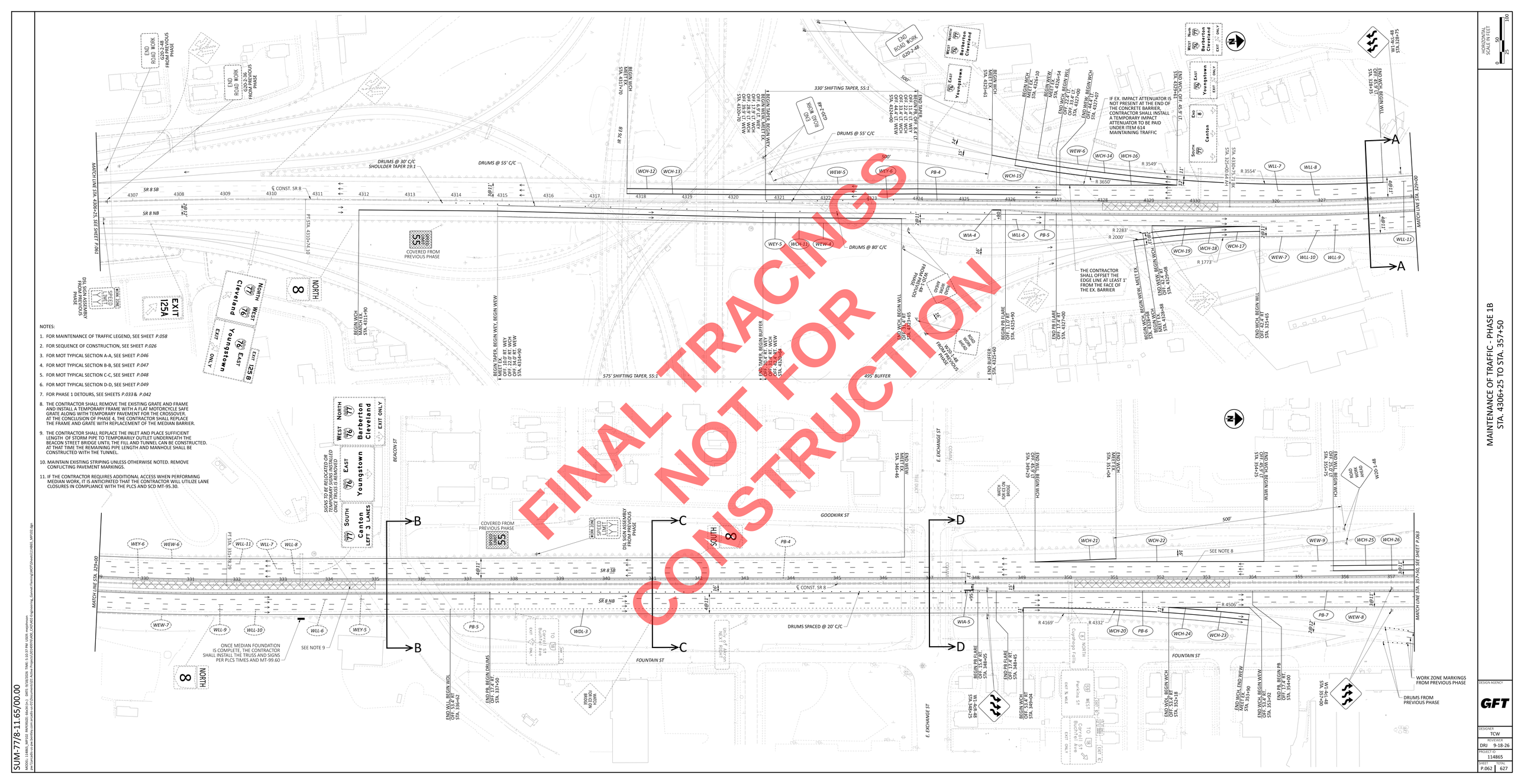
DESIGNER
TCW

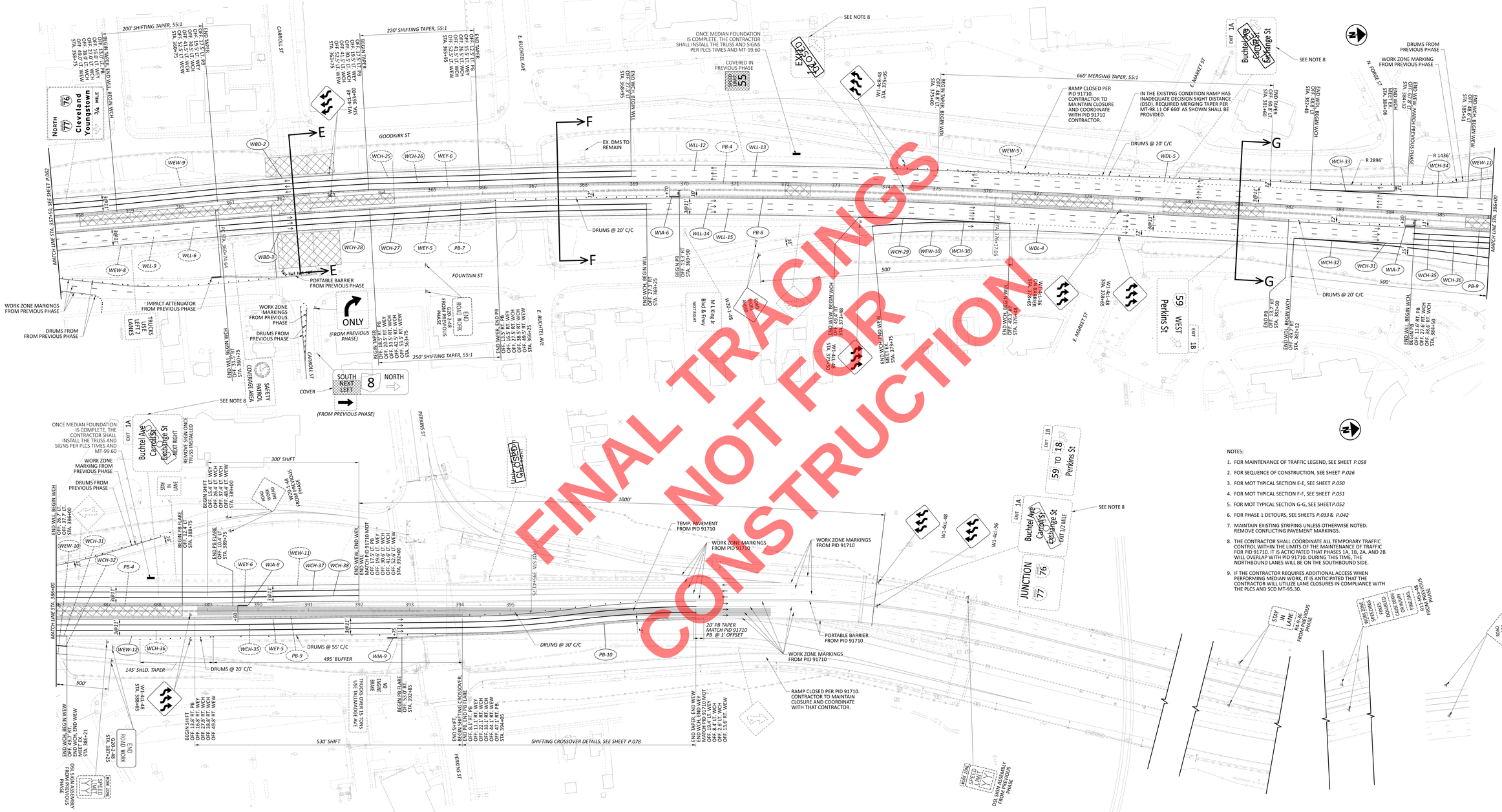
REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.061 TOTAL 627

SUM-77/8-11.65/00.00


FINAL TRACINGS
NOT FOR
CONSTRUCTION
MATCH LINE STA. 4306+25, SEE SHEET P.061
MATCH LINE STA. 329+00
MATCH LINE STA. 329+00
MATCH LINE STA. 357+50, SEE SHEET P.063
SR 8 SB
SR 8 NB
SR 8 SB
SR 8 NB
℄ CONST. SR 8
℄ CONST. SR 8
SR 8 NB
SR 8 SB
SR 8 NB
SR 8 SB
SR 8 NB
SR 8 SB



NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR MOT TYPICAL SECTION E-E, SEE SHEET *P.050*
4. FOR MOT TYPICAL SECTION F-F, SEE SHEET *P.051*
5. FOR MOT TYPICAL SECTION G-G, SEE SHEET *P.052*
6. FOR PHASE 1 DETOURS, SEE SHEETS *P.033* & *P.042*
7. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
8. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY TRAFFIC CONTROL WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710. IT IS ACTICIPATED THAT PHASES 1A, 1B, 2A, AND 2B WILL OVERLAP WITH PID 91710. DURING THIS TIME, THE NORTHBOUND LANES WILL BE ON THE SOUTHBOUND SIDE.
9. IF THE CONTRACTOR REQUIRES ADDITIONAL ACCESS WHEN PERFORMING MEDIAN WORK, IT IS ANTICIPATED THAT THE CONTRACTOR WILL UTILIZE LANE CLOSURES IN COMPLIANCE WITH THE PLCS AND SCD MT-95.30.

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 1B
STA. 357+50 TO END WORK

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114863

SHEET P.063 TOTAL 627

SUM-77/8-11.65/00.00

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NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
3. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
4. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MATCH LINE SEE ABOVE

COLE AVE

LOVER LN

SR 8 NB

SR 8 SB

INFOCISION STADIUM
DOWNTOWN AKRON
FOLLOW 77 NORTH

EXIT 123 B
764
Wilbeth Rd
½ MILE

EXIT 124 A
Archwood Ave
Firestone Blvd N
EXIT ONLY

STAY IN LANE
R4-9-36
FROM PREVIOUS PHASE

STAY IN LANE
R4-9-36
FROM PREVIOUS PHASE

ROAD WORK AHEAD
W20-1-36
FROM PREVIOUS PHASE

ROAD WORK AHEAD
W20-1-48
FROM PREVIOUS PHASE

EXIT 125 A
LEFT
8 NORTH
Cuyahoga Falls
1 MILE

NORTH 77 WEST 76
Cleveland

EXIT 125 B
76 EAST
Youngstown
EXIT ONLY

Archwood Ave
Firestone Blvd N
¼ MILE
EXIT ONLY

76 South
Canton

POT STA 4294+13.37

PC STA 4294+63.37

4295
4296
4297
4298
4299
4300
4301
4302
4303
4304
4305
4306

Army PFC Michael Dominic Pannessa
Awarded Posthumously

5 CONST SR 8

W1-6R-48
FROM PREVIOUS PHASE

W1-6R-36
ON BARRIER
FROM PREVIOUS PHASE

MATCH LINE STA. 4306+25, SEE SHEET P.065

WORK ZONE
SPEEDING
FINES
DOUBLED
CASE DEATH OR INJURY
FINE/JAIL
R11-H5A-36
FROM PREVIOUS PHASE

EXIT 113
Akron-Canton Airport
11 MILES

EXIT 123 B
Municipal Airport
NEXT RIGHT

EXIT 125 A
LEFT
8 NORTH
FOLLOW
Univ of Akron

EXIT
124A

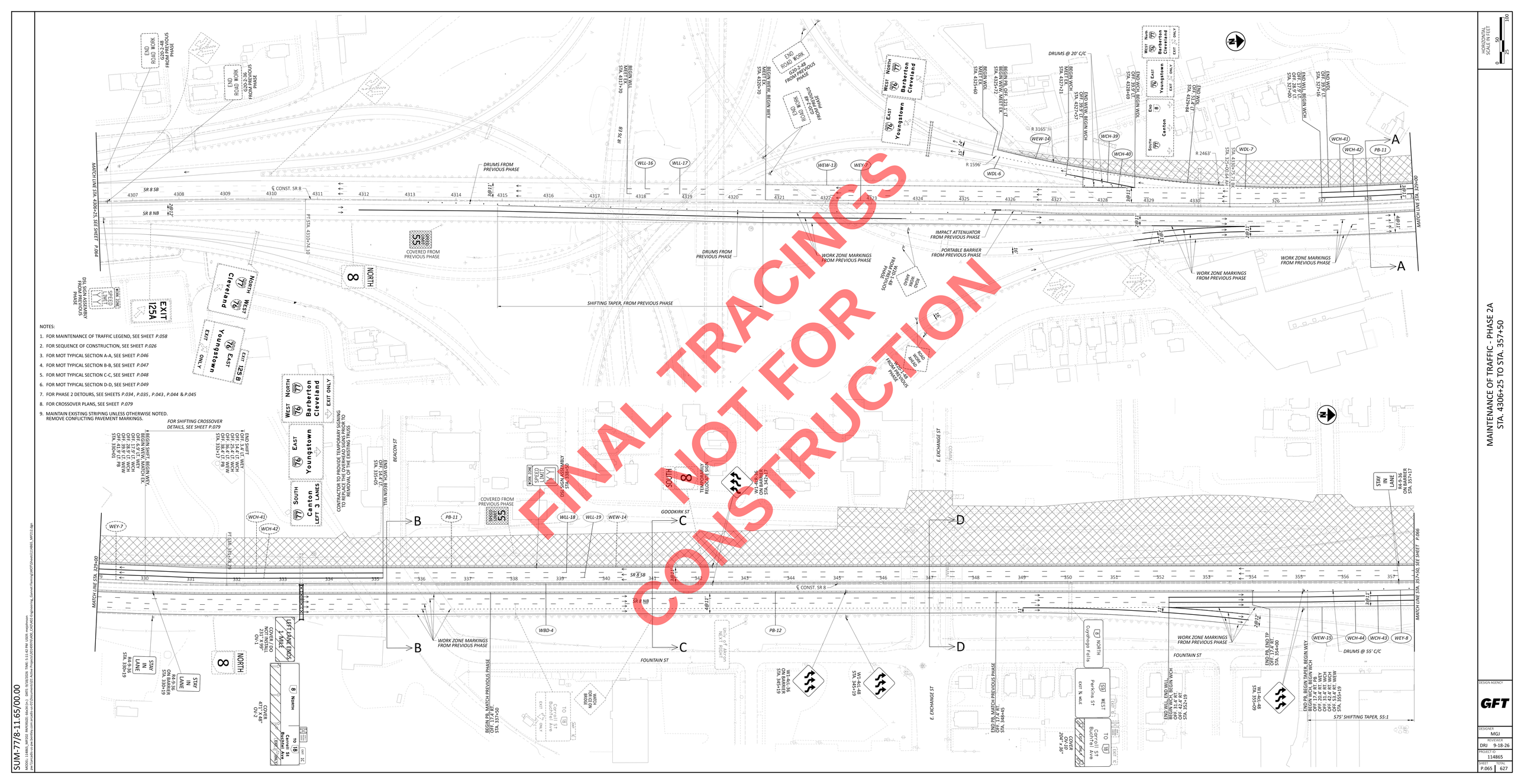
EXIT 124 A
Archwood Ave
Firestone Blvd N
EXIT ONLY

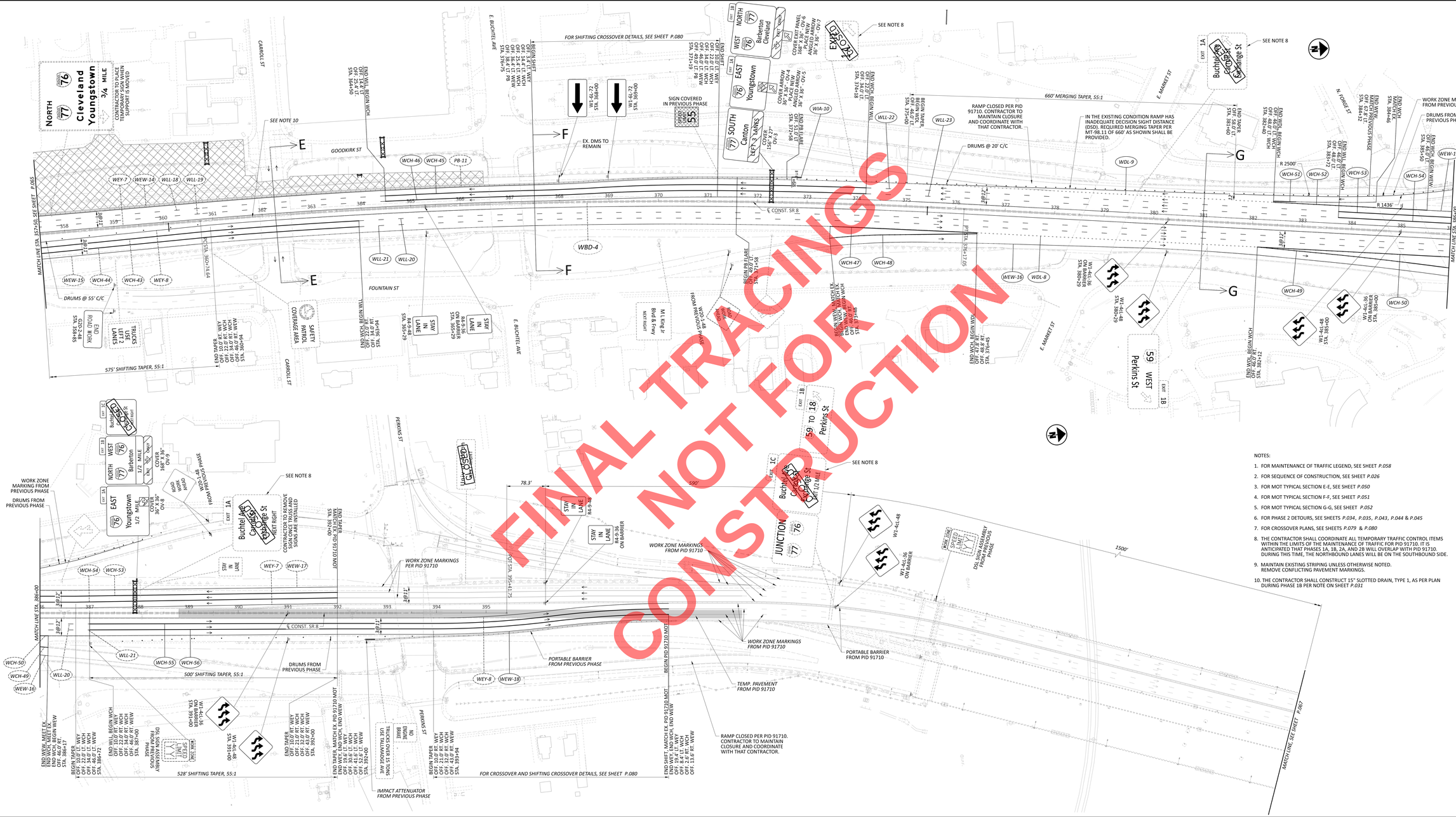
MATCH LINE SEE BELOW

MAINTENANCE OF TRAFFIC - PHASE 2A
BEGIN WORK TO STA. 4306+25

HORIZONTAL SCALE IN FEET
0 50
25 100

SHEET P.067 TOTAL	PROJECT 114865	DRN 9-18-26	REVISIONS 1 DATE	GFT	DESIGNED


NOTES:
1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET P.058
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET P.026
3. FOR MOT TYPICAL SECTION A-A, SEE SHEET P.046
4. FOR MOT TYPICAL SECTION B-B, SEE SHEET P.047
5. FOR MOT TYPICAL SECTION C-C, SEE SHEET P.048
6. FOR MOT TYPICAL SECTION D-D, SEE SHEET P.049
7. FOR PHASE 2 DETOURS, SEE SHEETS P.034 , P.035 , P.043 , P.044 &P.045
8. FOR CROSSOVER PLANS, SEE SHEET P.079
9. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
FINAL TRACINGS NOT FOR CONSTRUCTION
MAINTENANCE OF TRAFFIC - PHASE 2A
STA. 4306+25 TO STA. 357+50
SUM-77/8-11.65/00.00
HORIZONTAL SCALE IN FEET
DESIGN AGENCY
GFT
DESIGNER MGJ
REVISED DRJ 9-18-26
PROJECT ID 114865
SHEET P.065
TOTAL 627



NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR MOT TYPICAL SECTION E-E, SEE SHEET *P.050*
4. FOR MOT TYPICAL SECTION F-F, SEE SHEET *P.051*
5. FOR MOT TYPICAL SECTION G-G, SEE SHEET *P.052*
6. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
7. FOR CROSSOVER PLANS, SEE SHEETS *P.079* & *P.080*
8. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY TRAFFIC CONTROL ITEMS WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710. IT IS ANTICIPATED THAT PHASES 1A, 1B, 2A, AND 2B WILL OVERLAP WITH PID 91710. DURING THIS TIME, THE NORTHBOUND LANES WILL BE ON THE SOUTHBOUND SIDE.
9. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
10. THE CONTRACTOR SHALL CONSTRUCT 15" SLOTTED DRAIN, TYPE 1, AS PER PLAN DURING PHASE 1B PER NOTE ON SHEET *P.031*

HORIZONTAL SCALE IN FEET 0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 2A
STA. 357+50 TO NEXT SHEET

DESIGN AGENCY: GFT

DESIGNER: MGJ

REVIEWER: DRJ 9-18-26

PROJECT ID: 114865

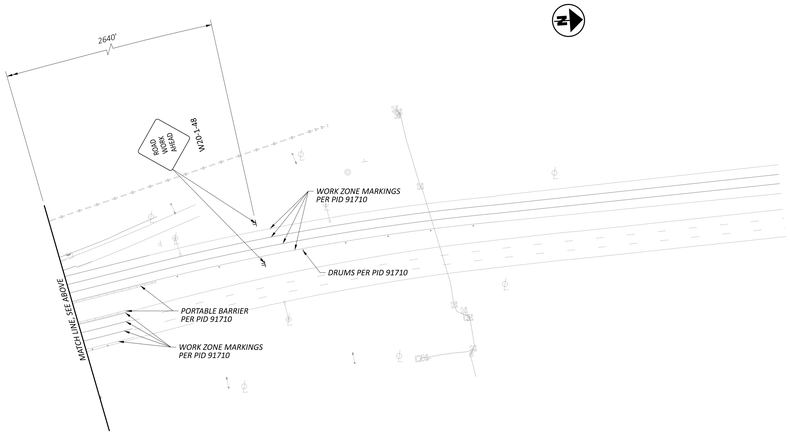
SHEET P.066 TOTAL 627

SUM-77/8-11.65/00.00



NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
4. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY TRAFFIC CONTROL ITEMS WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710. IT IS ANTICIPATED THAT PHASES 1A, 1B, 2A, AND 2B WILL OVERLAP WITH PID 91710. DURING THIS TIME, THE NORTHBOUND LANES WILL BE ON THE SOUTHBOUND SIDE.



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 2A
PREVIOUS SHEET TO END WORK

DESIGN AGENCY
GFT

DESIGNER
MGJ

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.067 TOTAL 627

SUM-77/8-11.65/00.00

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NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
3. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
4. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MATCH LINE SEE ABOVE

COLE AVE

LOVER LN

SR 8 NB

SR 8 SB

EXIT 123 B
764
Wilbeth Rd
½ MILE

EXIT 124 A
Archwood Ave
Firestone Blvd N
EXIT ONLY

Infoclision Stadium
Downtown
Akron
(77) NORTH
FOLLOW

STAY IN LANE
R4-9-36 FROM PREVIOUS PHASE

ROAD WORK AHEAD
W20-1-36 FROM PREVIOUS PHASE

ROAD WORK AHEAD
W20-1-48 FROM PREVIOUS PHASE

EXIT 125 A
LEFT
8 NORTH
Cuyahoga Falls
1 MILE

NORTH (77) WEST (76)
Cleveland

EXIT 125 B
(76) EAST
Youngstown
EXIT ONLY

Archwood Ave
Firestone Blvd N
¼ MILE
EXIT ONLY

(76) South
Canton

POT STA 4294+13.37

PC STA 4294+63.37

WORK ZONE
SPEEDING
DOUBLED
FINES
CASE DEATH OR INJURY
FINE/JAIL
R11-HS-36 FROM PREVIOUS PHASE

4295
4296
4297
4298
4299
4300
4301
4302
4303
4304
4305
4306

Army PFC Michael Dominic Pannella

5 CONST SR 8

EXIT 125 A
LEFT
8 NORTH
Univ of Akron
FOLLOW

EXIT 113
Akron-Canton Airport
11 MILES

EXIT 123 B
Municipal Airport
NEXT RIGHT

EXIT 124A

W1-6R-36 ON BARRIER FROM PREVIOUS PHASE

W1-6R-48 FROM PREVIOUS PHASE

EXIT 124 A
Archwood Ave
Firestone Blvd N
EXIT ONLY

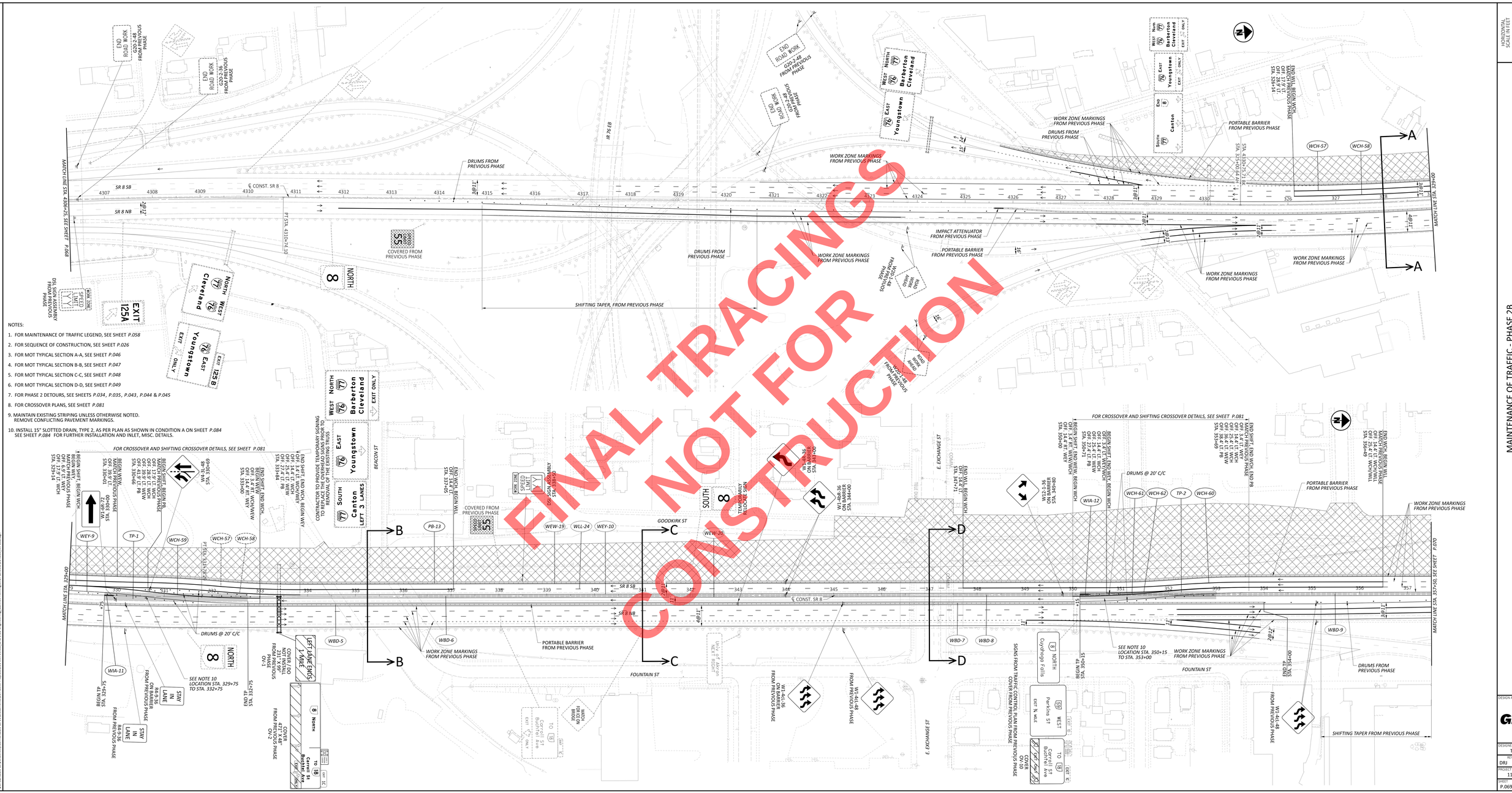
MATCH LINE STA. 4306+25, SEE SHEET P.069

MATCH LINE SEE BELOW

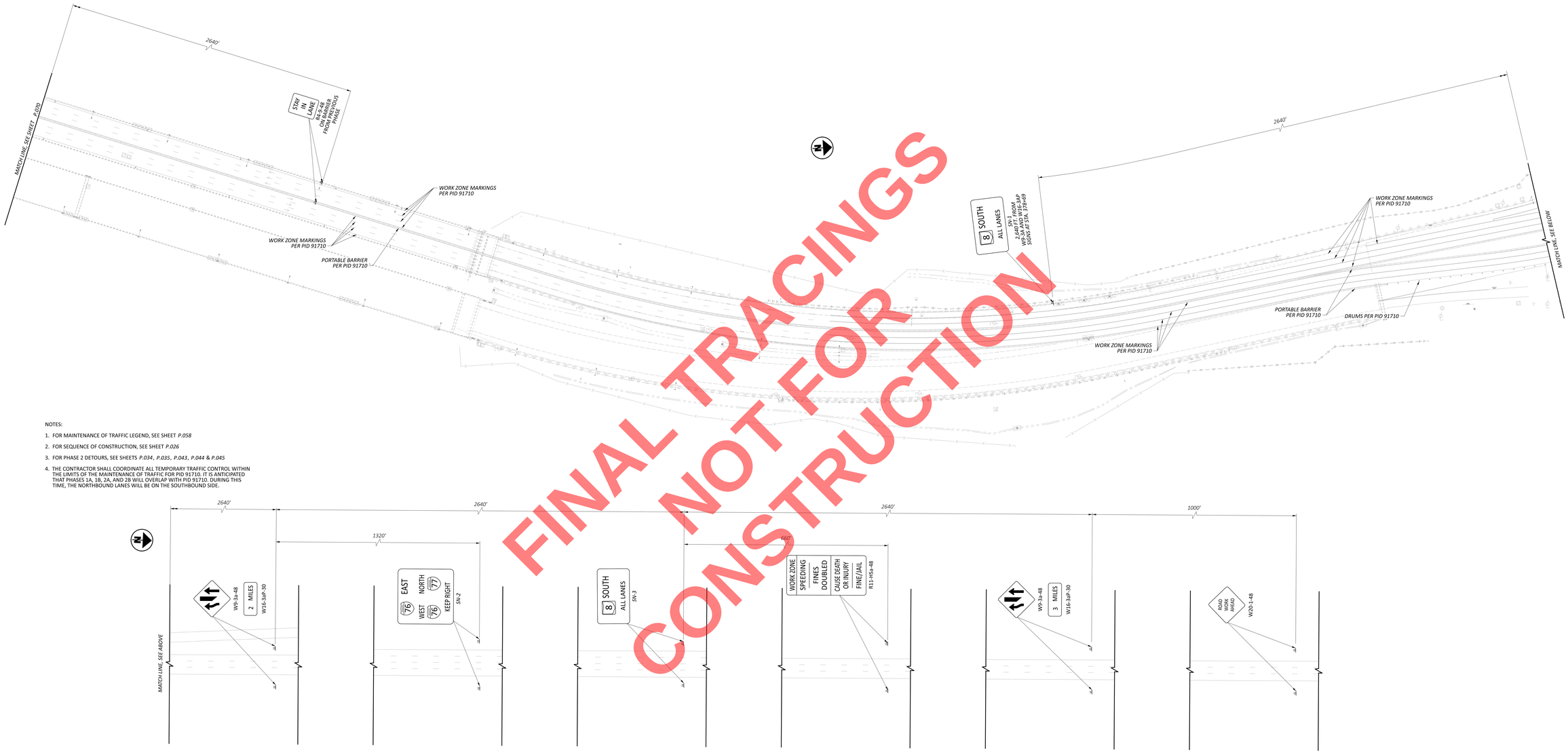
MAINTENANCE OF TRAFFIC - PHASE 2B
BEGIN WORK TO STA. 4306+25

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGNED	DRAWN	CHECKED	QUANTITY	DRI	PROJECT NO.
KAT	KAT	TCM		9-18-26	114865


NOTES:
1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET P.058
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET P.026
3. FOR MOT TYPICAL SECTION A-A, SEE SHEET P.046
4. FOR MOT TYPICAL SECTION B-B, SEE SHEET P.047
5. FOR MOT TYPICAL SECTION C-C, SEE SHEET P.048
6. FOR MOT TYPICAL SECTION D-D, SEE SHEET P.049
7. FOR PHASE 2 DETOURS, SEE SHEETS P.034, P.035, P.043, P.044 & P.045
8. FOR CROSSOVER PLANS, SEE SHEET P.081
9. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
10. INSTALL 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN AS SHOWN IN CONDITION A ON SHEET P.084 SEE SHEET P.084 FOR FURTHER INSTALLATION AND INLET, MISC. DETAILS.
FINAL TRACINGS
NOT FOR
CONSTRUCTION
MAINTENANCE OF TRAFFIC - PHASE 2B
STA. 4306+25 TO STA. 357+50
HORIZONTAL SCALE IN FEET
0 25 50 100
SUM-77/8-11.65/00.00
DESIGN AGENCY
GFT
DESIGNER TCW
REVISED DRJ 9-18-26
PROJECT ID 114865
SHEET P.069
TOTAL 627


NORTH 77 Cleveland Youngstown 3/4 MILE
CONTRACTOR TO PLACE TEMPORARY SIGN WHEN SUPPORT IS MOVED
WORK ZONE MARKINGS FROM PREVIOUS PHASE
GOODKIRK ST
GARROLL ST
E BUCHTEL AVE
STAY IN LANE R4-9-36 ON BARRIER FROM PREVIOUS PHASE
SHIFTING CROSSOVER FROM PREVIOUS PHASE
W1-6L-72 FROM PREVIOUS PHASE
SIGN COVERED IN PREVIOUS PHASE
EX. DMS TO REMAIN
OV-4 & OV-5
OV-5 TO REMOVE AFTER COMPLETION OF ALL SIGNS AND OVERLAYS FROM PREVIOUS PHASE
CONTRACTOR TO REMOVE OVERHEAD SIGNS
EXIT 55
WEST 76 Barberton Cleveland
EAST 76 Youngstown
SOUTH 77 Canton
NEXT 3 LANES
EXIT 1B
EXIT 1A
SEE NOTE 8
RAMP CLOSED PER PID 91710. CONTRACTOR TO MAINTAIN CLOSURE AND COORDINATE WITH THAT CONTRACTOR.
DRUMS FROM PREVIOUS PHASE
MATCH LINE STA. 357+50, SEE SHEET P.069
MATCH LINE STA. 386+00
MATCH LINE SEE SHEET P.071
E. MARKET ST
N. FORGE ST
Buchtel Ave Canton Exchange St
59 WEST Perkins St
59 TO 18 Perkins St
JUNCTION 77 76
W9-3a-48 1/2 MILE
W16-3aP-30 STA. 378+69
W16-3aP-30 STA. 379+69
W16-3aP-30 1 MILE
W1-4cL-48 STA. 385+40
W1-4cL-36 STA. 385+60
W1-4cL-48 FROM PREVIOUS PHASE
W1-4cL-48 FROM PREVIOUS PHASE
W1-4cL-48 FROM PREVIOUS PHASE



NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
4. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY TRAFFIC CONTROL WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710. IT IS ANTICIPATED THAT PHASES 1A, 1B, 2A, AND 2B WILL OVERLAP WITH PID 91710. DURING THIS TIME, THE NORTHBOUND LANES WILL BE ON THE SOUTHBOUND SIDE.

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 2B
PREVIOUS SHEET TO END WORK

DESIGN AGENCY
GFT

DESIGNER: TCW
REVISED: DRJ 9-18-26
PROJECT ID: 114865
SHEET: P.071 TOTAL: 627

SUM-77/8-11.65/00.00

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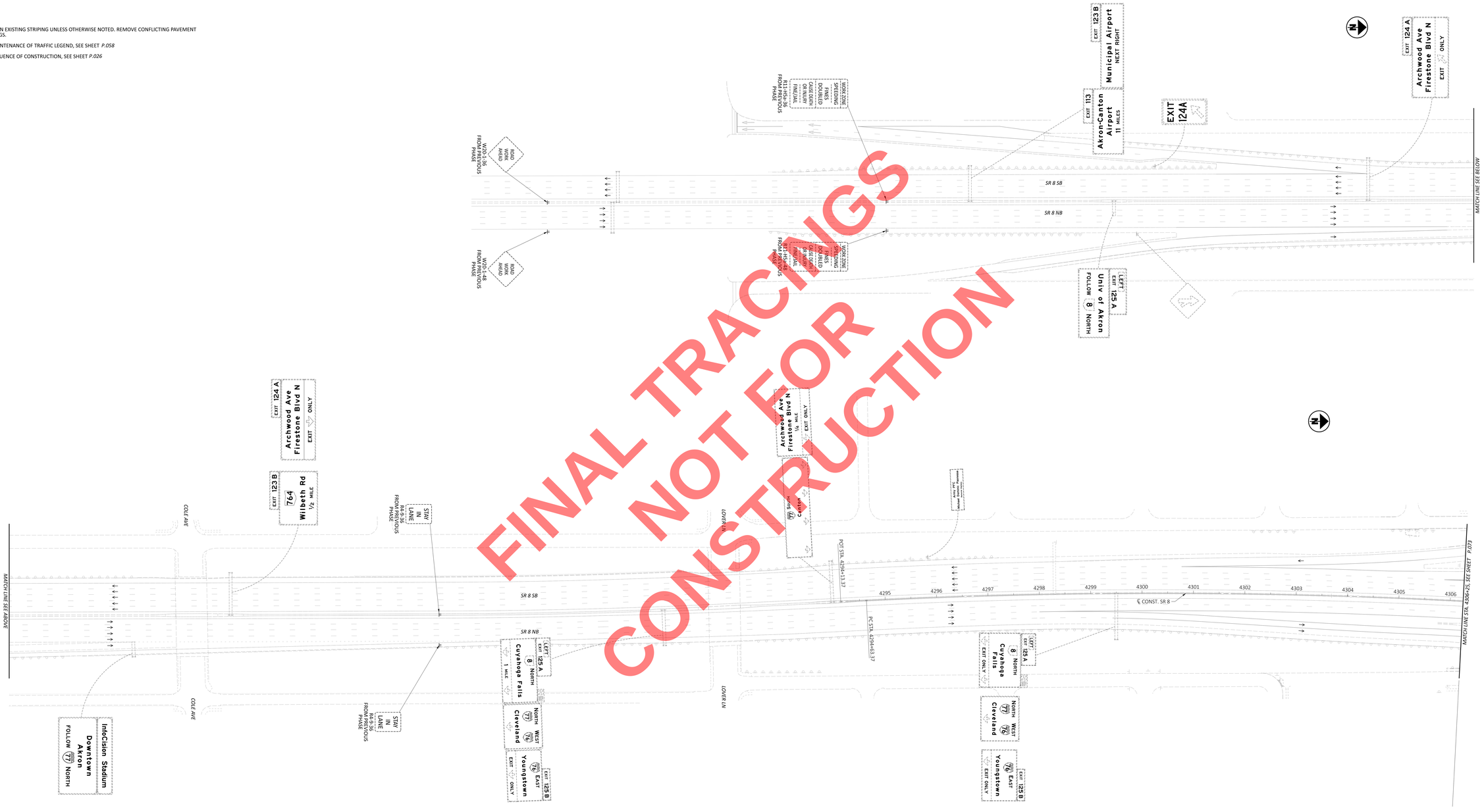
NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
3. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 3
BEGIN WORK TO STA. 4306+25

DESIGN AGENCY
GFT

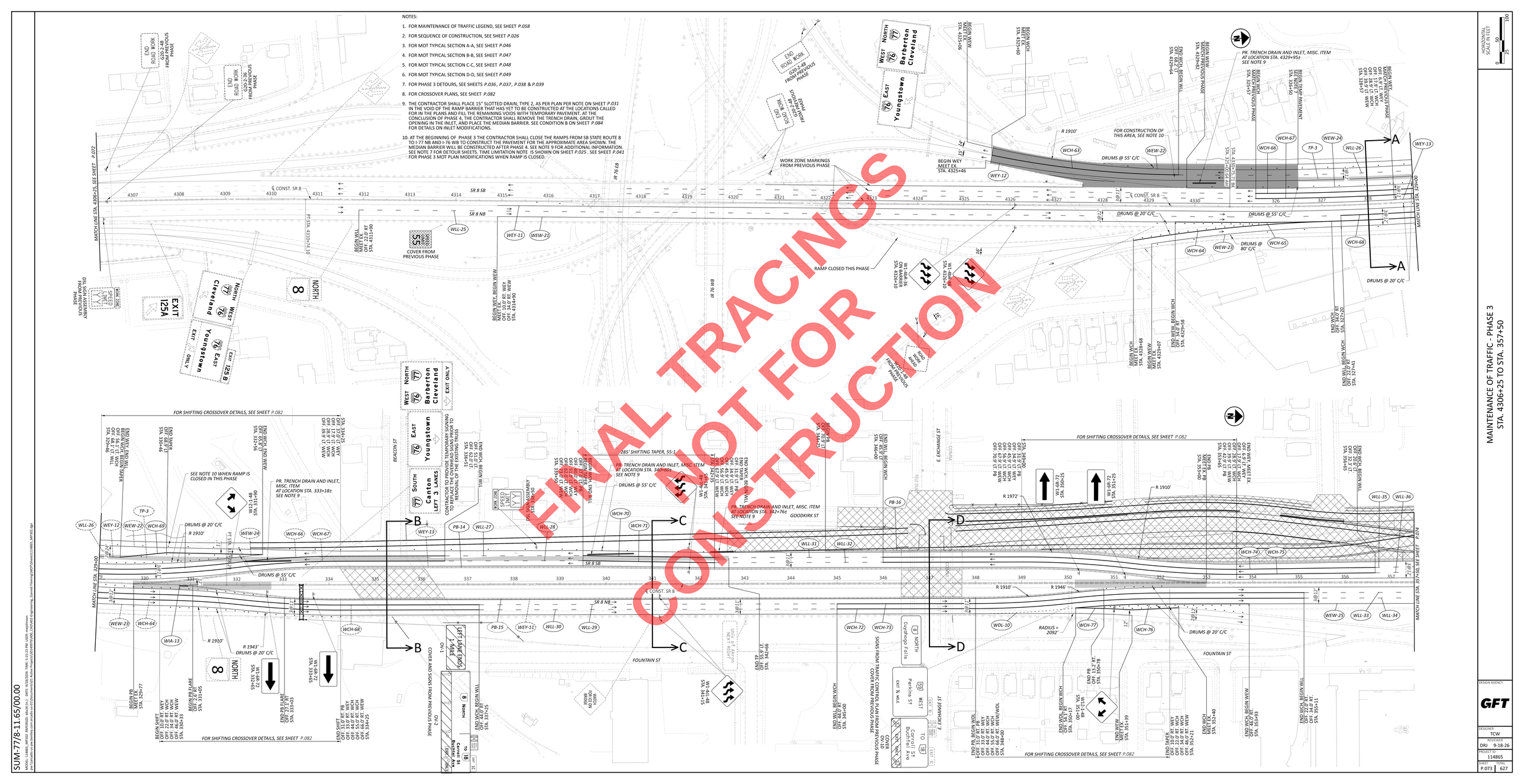
DESIGNER
TCW

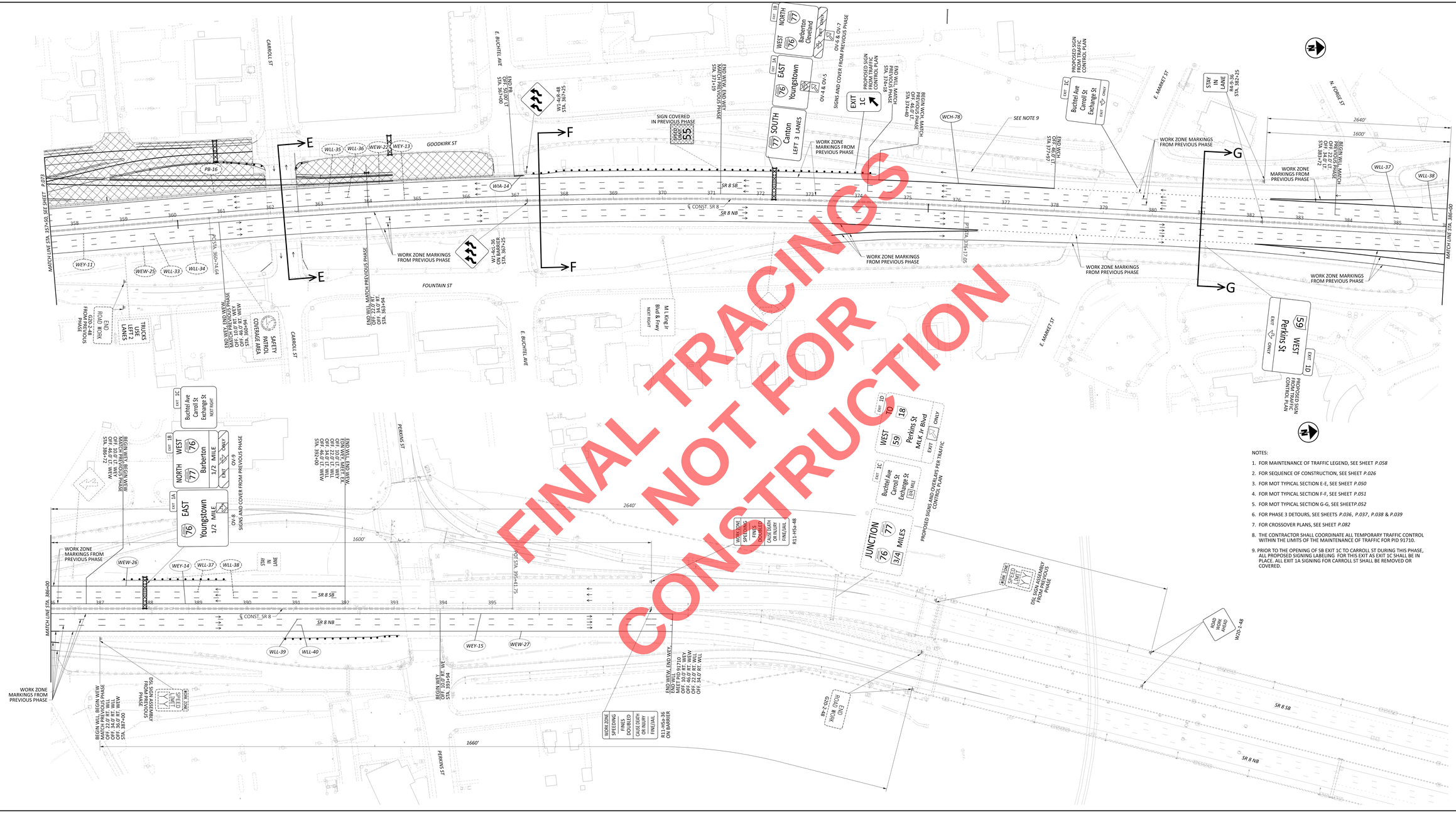
REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.072 TOTAL 627

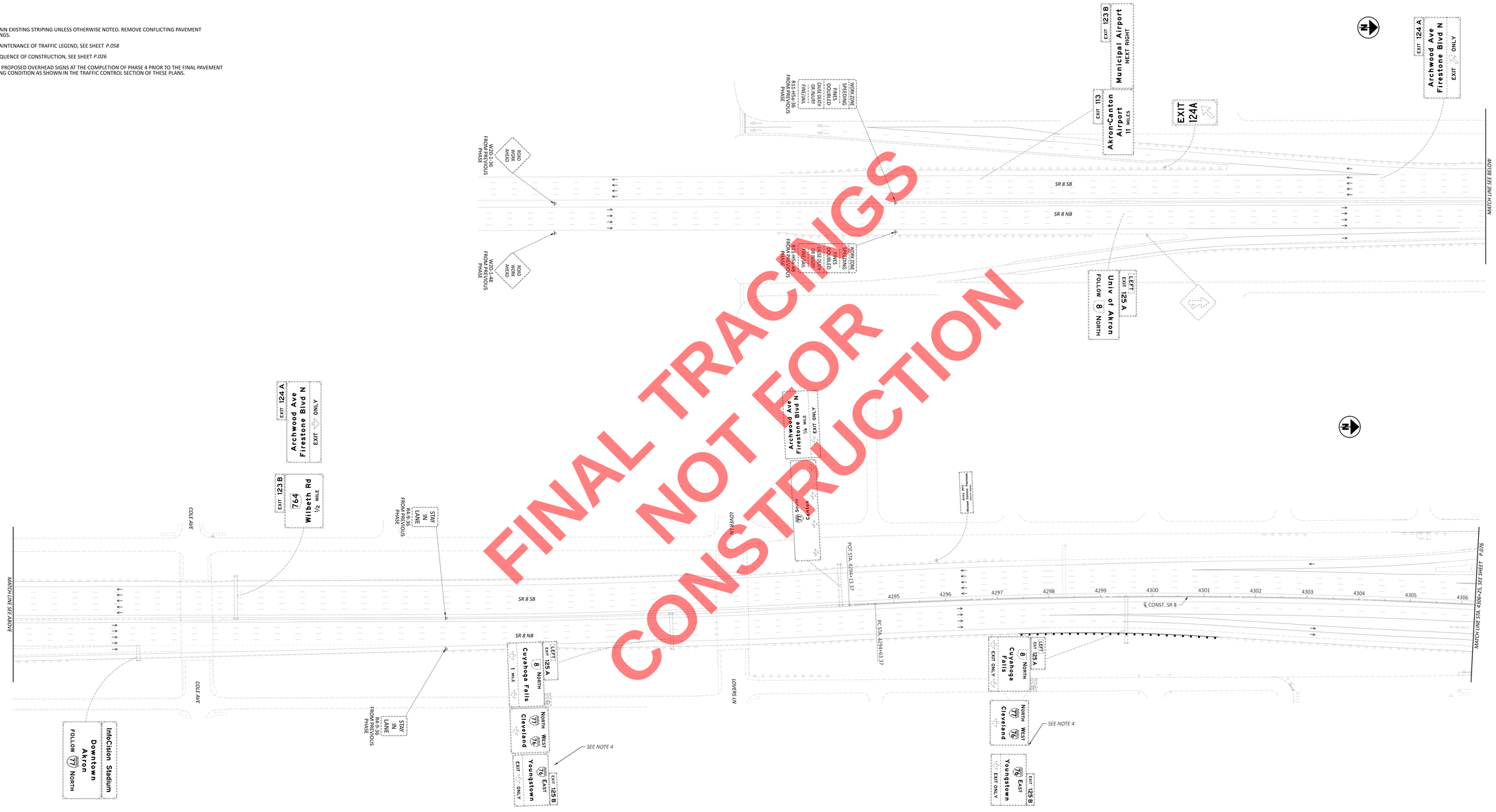
SUM-77/8-11.65/00.00


NOTES:
1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET P.058
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET P.026
3. FOR MOT TYPICAL SECTION A-A, SEE SHEET P.046
4. FOR MOT TYPICAL SECTION B-B, SEE SHEET P.047
5. FOR MOT TYPICAL SECTION C-C, SEE SHEET P.048
6. FOR MOT TYPICAL SECTION D-D, SEE SHEET P.049
7. FOR PHASE 3 DETOURS, SEE SHEETS P.036, P.037, P.038 & P.039
8. FOR CROSSOVER PLANS, SEE SHEET P.082
9. THE CONTRACTOR SHALL PLACE 15" SLOTTED DRAIN, TYPE 2, AS PER PLAN PER NOTE ON SHEET P.031 IN THE VOID OF THE RAMP BARRIER THAT HAS YET TO BE CONSTRUCTED AT THE LOCATIONS CALLED FOR IN THE PLANS AND FILL THE REMAINING VOIDS WITH TEMPORARY PAVEMENT. AT THE CONCLUSION OF PHASE 4, THE CONTRACTOR SHALL REMOVE THE TRENCH DRAIN, GROUT THE OPENING IN THE INLET, AND PLACE THE MEDIAN BARRIER. SEE CONDITION B ON SHEET P.084 FOR DETAILS ON INLET MODIFICATIONS.
10. AT THE BEGINNING OF PHASE 3 THE CONTRACTOR SHALL CLOSE THE RAMPS FROM SB STATE ROUTE 8 TO I-77 NB AND I-76 WB TO CONSTRUCT THE PAVEMENT FOR THE APPROXIMATE AREA SHOWN. THE MEDIAN BARRIER WILL BE CONSTRUCTED AFTER PHASE 4. SEE NOTE 9 FOR ADDITIONAL INFORMATION. SEE NOTE 7 FOR DETOUR SHEETS. TIME LIMITATION NOTE IS SHOWN ON SHEET P.025 . SEE SHEET P.041 FOR PHASE 3 MOT PLAN MODIFICATIONS WHEN RAMP IS CLOSED.
FINAL TRACINGS
NOT FOR
CONSTRUCTION
MAINTENANCE OF TRAFFIC - PHASE 3
STA. 4306+25 TO STA. 357+50
HORIZONTAL SCALE IN FEET
0 25 50 100
DESIGN AGENCY
GFT
DESIGNER TCW
REVISED DRJ 9-18-26
PROJECT ID 114865
SHEET P.073 TOTAL 627
SUM-77/8-11.65/00.00
MATCH LINE STA. 4306+25, SEE SHEET P.072
MATCH LINE STA. 329+00
MATCH LINE STA. 357+50, SEE SHEET P.074
SR 8 SB
SR 8 NB
I-77 NB
I-76 WB
EXIT 125A
EXIT 125B
NORTH Cleveland
WEST Youngstown
EAST Youngstown
SOUTH Canton
EXIT ONLY
LEFT 3 LANES
END ROAD WORK G20-2-48 FROM PREVIOUS PHASE
WORK ZONE SPEED LIMIT
DRUMS @ 55' C/C
DRUMS @ 20' C/C
DRUMS @ 80' C/C
R 1910'
R 1946'
R 1972'
R 1943'
RADIUS = 2092'
SEE NOTE 10 WHEN RAMP IS CLOSED IN THIS PHASE
PR. TRENCH DRAIN AND INLET, MISC. ITEM AT LOCATION STA. 333+18± SEE NOTE 9
PR. TRENCH DRAIN AND INLET, MISC. ITEM AT LOCATION STA. 346+06± SEE NOTE 9
PR. TRENCH DRAIN AND INLET, MISC. ITEM AT LOCATION STA. 342+76± SEE NOTE 9
PR. TRENCH DRAIN AND INLET, MISC. ITEM AT LOCATION STA. 4329+95± SEE NOTE 9
285' SHIFTING TAPER, 55:1
FOR SHIFTING CROSSOVER DETAILS, SEE SHEET P.082
FOR CONSTRUCTION OF THIS AREA, SEE NOTE 10
WORK ZONE MARKINGS FROM PREVIOUS PHASE
RAMP CLOSED THIS PHASE
COVER FROM PREVIOUS PHASE
COVER SIGNS FROM PREVIOUS PHASE
SIGNS FROM TRAFFIC CONTROL PLAN PREVIOUS PHASE
REMOVE PREVIOUS PHASE
REMOVE TEMP PAVEMENT
CONTRACTOR TO PROVIDE TEMPORARY SIGNING TO REPLACE THE OVERHEAD SIGNS PRIOR TO REMOVAL OF THE EXISTING TRUSS
LEFT LANE ENDS 1 MILE
BEGIN WEY MEET EX STA. 4325+46
BEGIN WCH MEET EX STA. 4352+69
END WCH BEGIN WEW STA. 4354+00
BEGIN WEW MEET EX STA. 4329+07
END WEW, BEGIN WCH STA. 4329+68
BEGIN WCH STA. 4326+68
END WCH, BEGIN WLL STA. 327+41
END WCH STA. 327+20
BEGIN WLL MEET EX STA. 4310+74.10
BEGIN WEL MEET EX STA. 2107 RT STA. 4311+06
BEGIN WEW, BEGIN WCH MEET EX OFF. 34.0 RT WEW STA. 4314+90
END WEL, BEGIN WEW STA. 4315+50
END WCH, BEGIN WEW STA. 4316+51
END WCH, BEGIN WLL STA. 4316+51
END WEW, BEGIN WCH STA. 4317+00
END WCH, BEGIN WEW STA. 4317+96
END WEW, BEGIN WCH STA. 4318+46
END WCH, BEGIN WLL STA. 4318+46
END WLL, BEGIN WCH STA. 4319+46
END WCH, BEGIN WEW STA. 4320+00
END WEW, BEGIN WCH STA. 4320+46
END WCH, BEGIN WEW STA. 4321+00
END WEW, BEGIN WCH STA. 4321+46
END WCH, BEGIN WEW STA. 4322+00
END WEW, BEGIN WCH STA. 4322+46
END WCH, BEGIN WEW STA. 4323+00
END WEW, BEGIN WCH STA. 4323+46
END WCH, BEGIN WEW STA. 4324+00
END WEW, BEGIN WCH STA. 4324+46
END WCH, BEGIN WEW STA. 4325+00
END WEW, BEGIN WCH STA. 4325+47
BEGIN WCH MEET EX STA. 4325+50
END WCH, BEGIN WEW STA. 4326+50
BEGIN WEW STA. 4326+57
END WEW, BEGIN WCH STA. 4327+00
END WCH, BEGIN WEW STA. 4327+50
END WEW, BEGIN WCH STA. 4328+00
END WCH, BEGIN WEW STA. 4328+50
END WEW, BEGIN WCH STA. 4329+00
END WCH, BEGIN WEW STA. 4329+50
END WEW, BEGIN WCH STA.


FINAL TRACINGS
NOT FOR
CONSTRUCTION
MAINTENANCE OF TRAFFIC - PHASE 3
STA. 357+50 TO END WORK
NOTES:
1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET P.058
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET P.026
3. FOR MOT TYPICAL SECTION E-E, SEE SHEET P.050
4. FOR MOT TYPICAL SECTION F-F, SEE SHEET P.051
5. FOR MOT TYPICAL SECTION G-G, SEE SHEETP.052
6. FOR PHASE 3 DETOURS, SEE SHEETS P.036, P.037, P.038 & P.039
7. FOR CROSSOVER PLANS, SEE SHEET P.082
8. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY TRAFFIC CONTROL WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710.
9. PRIOR TO THE OPENING OF SB EXIT 1C TO CARROLL ST DURING THIS PHASE, ALL PROPOSED SIGNING LABELING FOR THIS EXIT AS EXIT 1C SHALL BE IN PLACE. ALL EXIT 1A SIGNING FOR CARROLL ST SHALL BE REMOVED OR COVERED.
SUM-77/8-11.65/00.00
DESIGNER TCW
REVISED DRJ 9-18-26
PROJECT ID 114865
SHEET P.074
TOTAL 627
DESIGN AGENCY GFT

NOTES:

1. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED. REMOVE CONFLICTING PAVEMENT MARKINGS.
2. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
3. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
4. INSTALL PROPOSED OVERHEAD SIGNS AT THE COMPLETION OF PHASE 4 PRIOR TO THE FINAL PAVEMENT MARKING CONDITION AS SHOWN IN THE TRAFFIC CONTROL SECTION OF THESE PLANS.



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 4
BEGIN WORK TO STA. 4306+25

DESIGN AGENCY
GFT

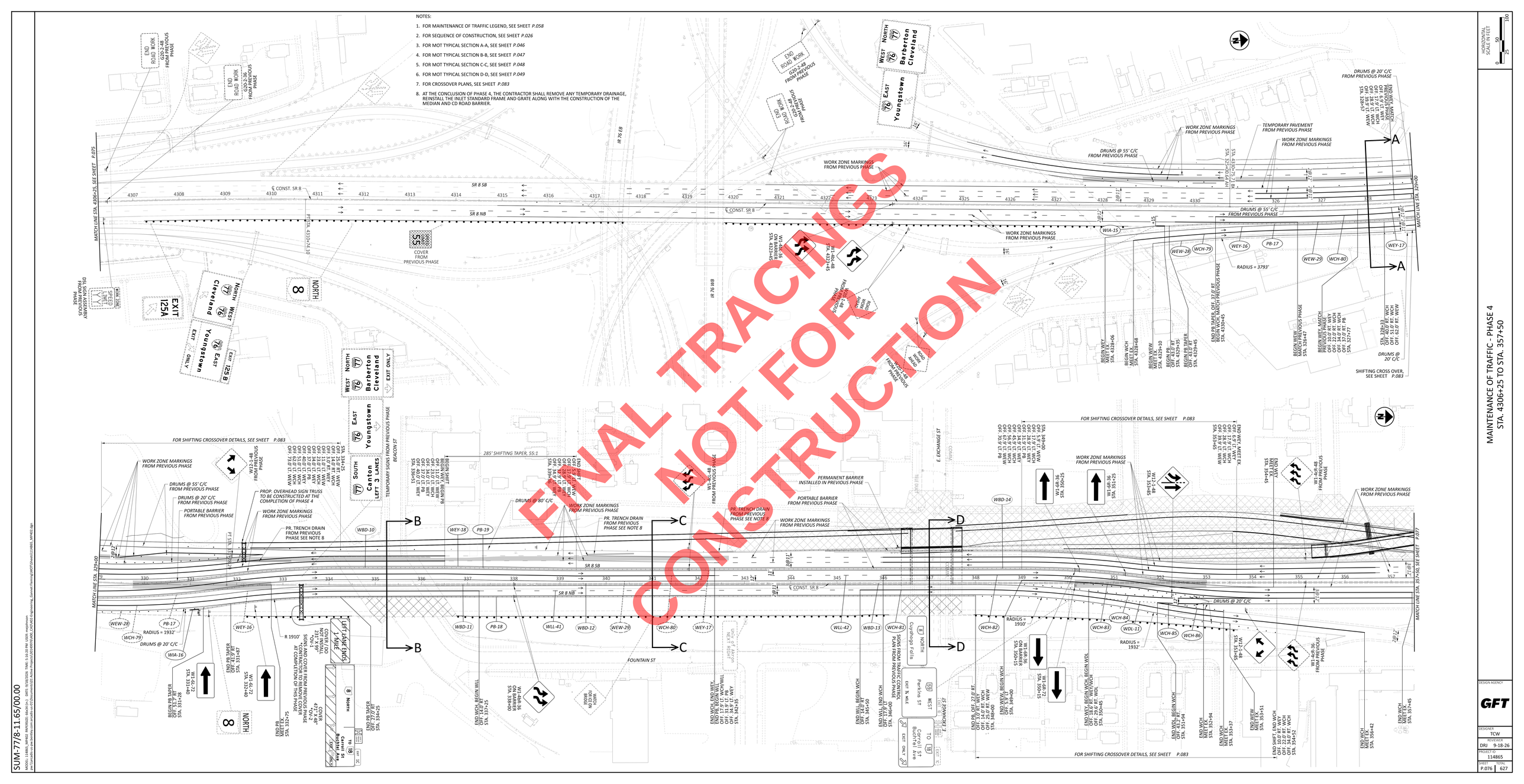
DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.075 TOTAL 627

SUM-77/8-11.65/00.00


NOTES:
1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET P.058
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET P.026
3. FOR MOT TYPICAL SECTION A-A, SEE SHEET P.046
4. FOR MOT TYPICAL SECTION B-B, SEE SHEET P.047
5. FOR MOT TYPICAL SECTION C-C, SEE SHEET P.048
6. FOR MOT TYPICAL SECTION D-D, SEE SHEET P.049
7. FOR CROSSOVER PLANS, SEE SHEET P.083
8. AT THE CONCLUSION OF PHASE 4, THE CONTRACTOR SHALL REMOVE ANY TEMPORARY DRAINAGE, REINSTALL THE INLET STANDARD FRAME AND GRATE ALONG WITH THE CONSTRUCTION OF THE MEDIAN AND CD ROAD BARRIER.
FINAL TRACINGS
NOT FOR CONSTRUCTION
MAINTENANCE OF TRAFFIC - PHASE 4
STA. 4306+25 TO STA. 357+50
HORIZONTAL SCALE IN FEET
0 25 50 100
DESIGN AGENCY
GFT
DESIGNER TCW
REVISED DRJ 9-18-26
PROJECT ID 114865
SHEET P.076 TOTAL 627
SUM-77/8-11.65/00.00
MATCH LINE STA. 4306+25, SEE SHEET P.075
MATCH LINE STA. 329+00
MATCH LINE STA. 357+50, SEE SHEET P.077
SR 8 SB
SR 8 NB
IR 76 EB
IR 76 WB
℄ CONST. SR 8
EXIT 125A
EXIT 125 B
NORTH
WEST 77 76 Barberton Cleveland
EAST 76 Youngstown
SOUTH 77 Canton
LEFT 3 LANES
EXIT ONLY
TEMPORARY SIGNS FROM PREVIOUS PHASE
BEACON ST
E. EXCHANGE ST
FOUNTAIN ST
Cuyahoga Falls
Perkins St
Carroll St
Buchtel Ave
Carroll Blvd/Mull Ave
TO IB
TO IB 8 North
1 MILE
LEFT LANE ENDS
COVER, DO NOT REMOVE
SEE SHEET P.077 FOR CONTINUATION
CONTRACTOR TO REMOVE COVER AT COMPLETION OF THIS PHASE
PROP. OVERHEAD SIGN TRUSS TO BE CONSTRUCTED AT THE COMPLETION OF PHASE 4
PR. TRENCH DRAIN FROM PREVIOUS PHASE SEE NOTE 8
PERMANENT BARRIER INSTALLED IN PREVIOUS PHASE
PORTABLE BARRIER FROM PREVIOUS PHASE
WORK ZONE MARKINGS FROM PREVIOUS PHASE
DRUMS @ 55' C/C FROM PREVIOUS PHASE
DRUMS @ 20' C/C FROM PREVIOUS PHASE
DRUMS @ 80' C/C
285' SHIFTING TAPER, 55:1
SHIFTING CROSS OVER, SEE SHEET P.083
FOR SHIFTING CROSSOVER DETAILS, SEE SHEET P.083
RADIUS = 1932'
RADIUS = 1910'
RADIUS = 3793'
RADIUS = 1932'
SPEED LIMIT 35 MPH
DSS SIGN ASSEMBLY FROM PREVIOUS PHASE
COVER FROM PREVIOUS PHASE
END ROAD WORK G20-2-48 FROM PREVIOUS PHASE
END MOVE LANE G20-2-48 FROM PREVIOUS PHASE
ROAD WORK AHEAD
W1-4R-48 FROM PREVIOUS PHASE
W1-6L-48 FROM PREVIOUS PHASE
W1-6R-36 STA. 350+25
W1-6R-36 STA. 351+25
W1-6L-72 STA. 333+40
W1-6L-72 STA. 332+40
W1-4L-48 STA. 353+45
W1-4R-48 STA. 353+45
W1-4L-48 STA. 354+45
W1-4R-48 STA. 354+45
W1-4L-48 STA. 353+45
W1-4R-48 STA. 353+45
W1-4L-48 STA. 352+45
W1-4R-48 STA. 352+45
W1-4L-48 STA. 351+45
W1-4R-48 STA. 351+45
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W1-4R-48 STA. 318+45
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W1-4R-48 STA. 307+45
W1-4L-48 STA. 306+45
W1-4R-48 STA. 306+45
WEW-28
WCH-79
WEY-16
PB-17
WEW-29
WCH-80
WEY-17
WIA-15
WIA-16
WBD-10
WEY-18
PB-19
WBD-11
PB-18
WLL-41
WBD-12
WEW-29
WCH-80
WEY-17
WLL-42
WBD-13
WCH-81
WBD-14
WCH-82
WCH-83
WDL-11
WCH-84
WCH-85
WCH-86
END PB TAPER STA. 331+25
BEGIN PB TAPER STA. 333+25
END PB TAPER STA. 334+25
END WCH, BEGIN WLL STA. 337+45
END WCH, BEGIN WEY, END PB, BEGIN WLL STA. 338+00
END WLL, BEGIN WCH STA. 343+50
END WLL, END WCH STA. 345+50
END PB TAPER STA. 346+40
END PB, BEGIN WCH STA. 348+00
END WCH, BEGIN WDL STA. 349+00
END WDL, BEGIN WCH STA. 350+15
END WCH, BEGIN WEW STA. 351+72
END WEW, BEGIN WCH STA. 352+72
END WCH, BEGIN WEW STA. 353+72
END WEW, BEGIN WCH STA. 354+72
END WCH, BEGIN WEW STA. 355+72
END WEW, BEGIN WCH STA. 356+72
END WCH, BEGIN WEW STA. 357+72
END WCH, MEET EX STA. 356+42
END WCH, MEET EX STA. 357+45
END WCH, MEET EX STA. 353+94
END WCH, MEET EX STA. 353+37
END WCH, MEET EX STA. 352+94
END WCH, MEET EX STA. 353+64
END WEW, MEET EX STA. 353+51
END SHIFT, END WCH OFF. 10.0' RT. WEY OFF. 34.0' RT. WCH STA. 354+52
END WCH, MEET EX STA. 357+45
END PB, BEGIN PB TAPER STA. 4330+45
END PB TAPER, OFF. 37.0' RT. BEGIN WCH, MATCH PREVIOUS PHASE STA. 4330+45
BEGIN WEW, MEET EX STA. 4329+10
BEGIN WCH, MEET EX STA. 4328+48
END WEY, MEET EX STA. 4328+06
BEGIN WEW, MATCH PREVIOUS PHASE STA. 326+47
BEGIN WEY, MATCH PREVIOUS PHASE STA. 327+77
END WCH, MEET EX STA. 328+33
OFF. 43.0' RT. WCH
OFF. 10.0' RT. WEY
OFF. 61.0' RT. WEW
DRUMS @ 20' C/C
BEGIN WCH, MEET EX STA. 4329+45
BEGIN PB TAPER OFF. 37.0' RT. STA. 4329+45
BEGIN WCH, MEET EX STA. 4329+48
BEGIN WEW, MEET EX STA. 4329+10
END WEW, MEET EX STA. 4329+45
END WCH, MEET EX STA. 4329+06
END WEW, MEET EX STA. 4329+65
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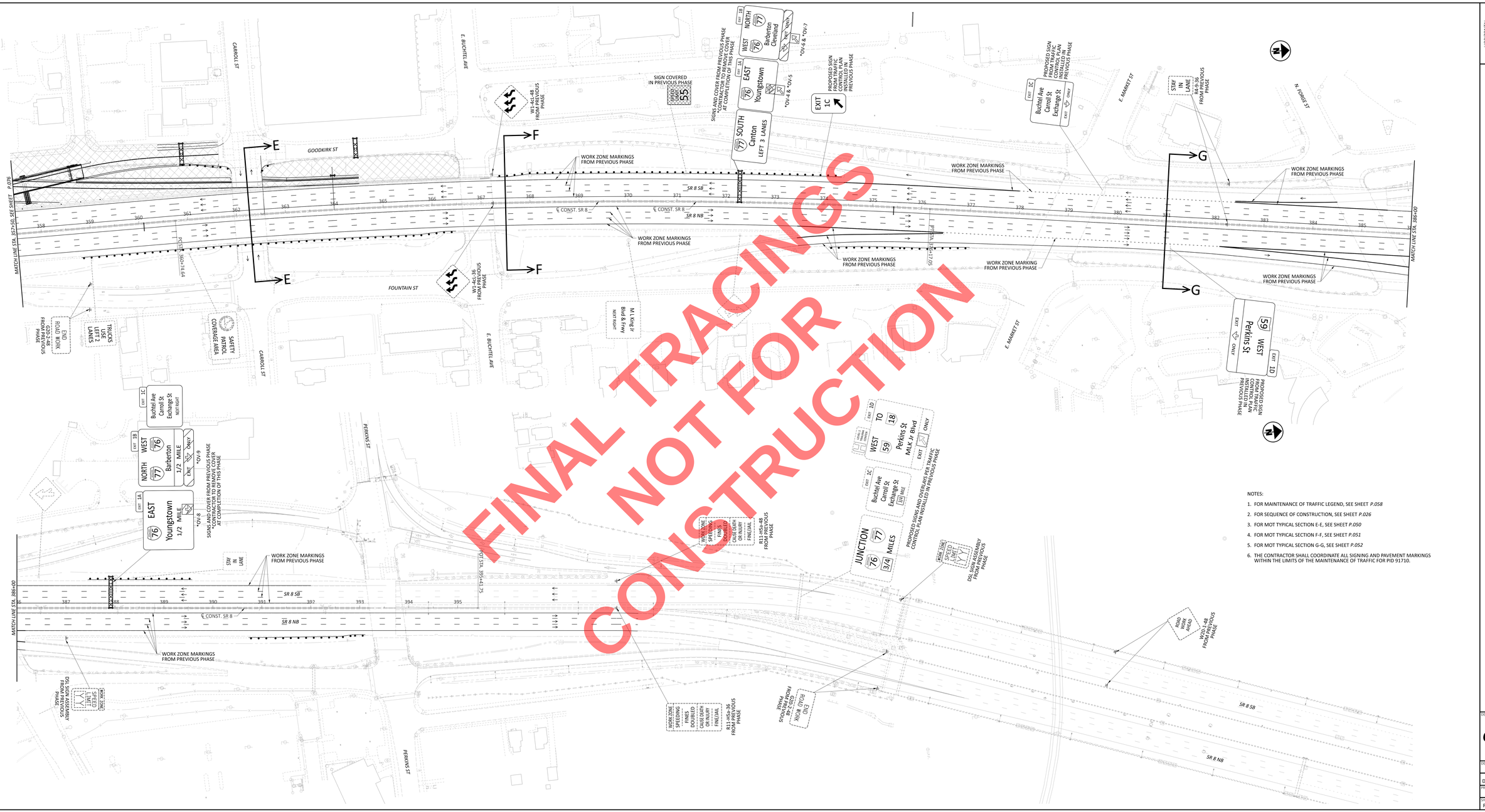

NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR MOT TYPICAL SECTION E-E, SEE SHEET *P.050*
4. FOR MOT TYPICAL SECTION F-F, SEE SHEET *P.051*
5. FOR MOT TYPICAL SECTION G-G, SEE SHEET *P.052*
6. THE CONTRACTOR SHALL COORDINATE ALL SIGNING AND PAVEMENT MARKINGS WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC FOR PID 91710.

HORIZONTAL SCALE IN FEET 0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 4
STA. 357+50 TO END WORK

DESIGN AGENCY: GFT

DESIGNER: TCW

REVIEWER: DRJ 9-18-26

PROJECT ID: 114865

SHEET: P.077 TOTAL: 627

SUM-77/8-11.65/00.00



X-1 *CURVE DATA*
P.I. = STA. 151+60.92
Δ = 06°38'51" LT
Dc = 02°59'59"
R = 1,910.00'
T = 110.92'
L = 221.60'
E = 3.22'

X-2 *CURVE DATA*
P.I. = STA. 153+93.39
Δ = 07°17'49" RT
Dc = 02°59'59"
R = 1,910.00'
T = 121.79'
L = 243.25'
E = 3.88'

NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 1 DETOURS, SEE SHEETS *P.033* & *P.042*
4. FOR PHASE 1B MOT PLANS, SEE SHEETS *P.061*, *P.062* & *P.063*
5. THE CONTRACTOR SHALL ADJUST THE SHIFTING CROSSOVERS IF FIELD CONDITIONS CHANGE FROM THE PLAN DUE TO THE CONTRACTOR OPERATIONS FOR THE MAINTENANCE OF TRAFFIC SCHEME FOR PID 91710.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 1B - SHIFTING CROSSOVER PLAN

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.078 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: CLP_XOS - Plan 1-1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:17:04 PM USER: mejohnson
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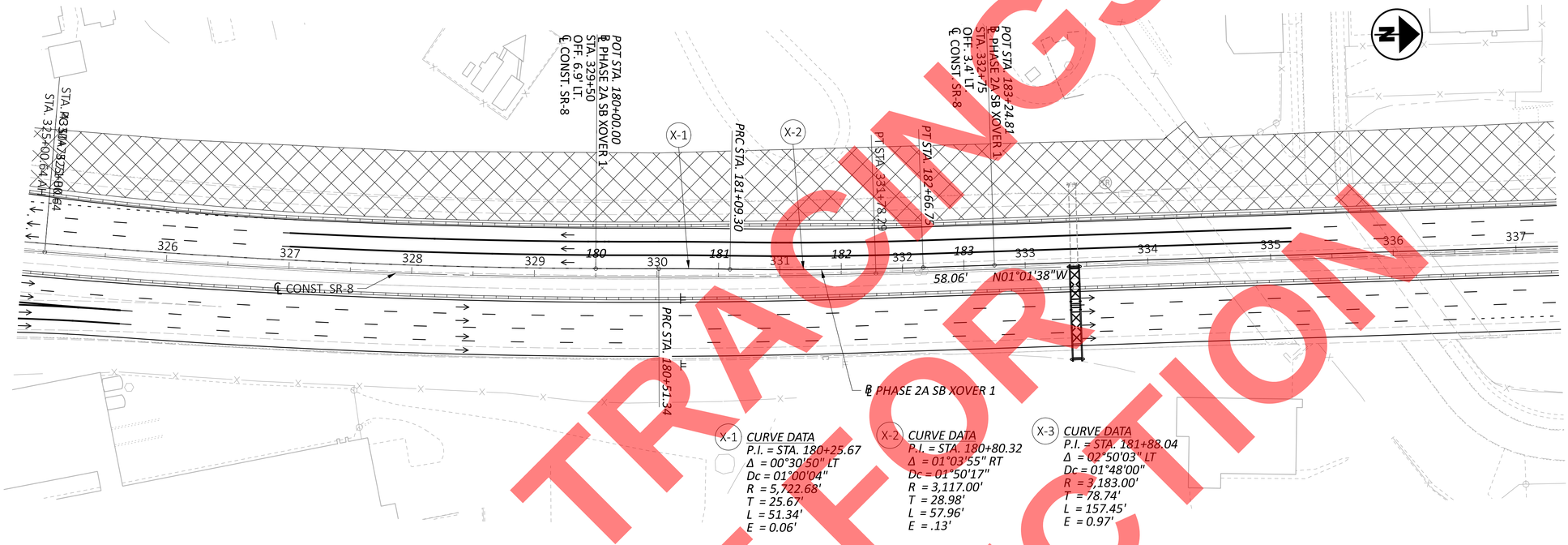

NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
4. FOR PHASE 2A MOT PLANS, SEE SHEETS *P.064*, *P.065*, *P.066* & *P.067*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 2A - SHIFTING CROSSOVER PLAN

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.079 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: Phase 2B - XO18 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:17:22 PM USER: mejohnson
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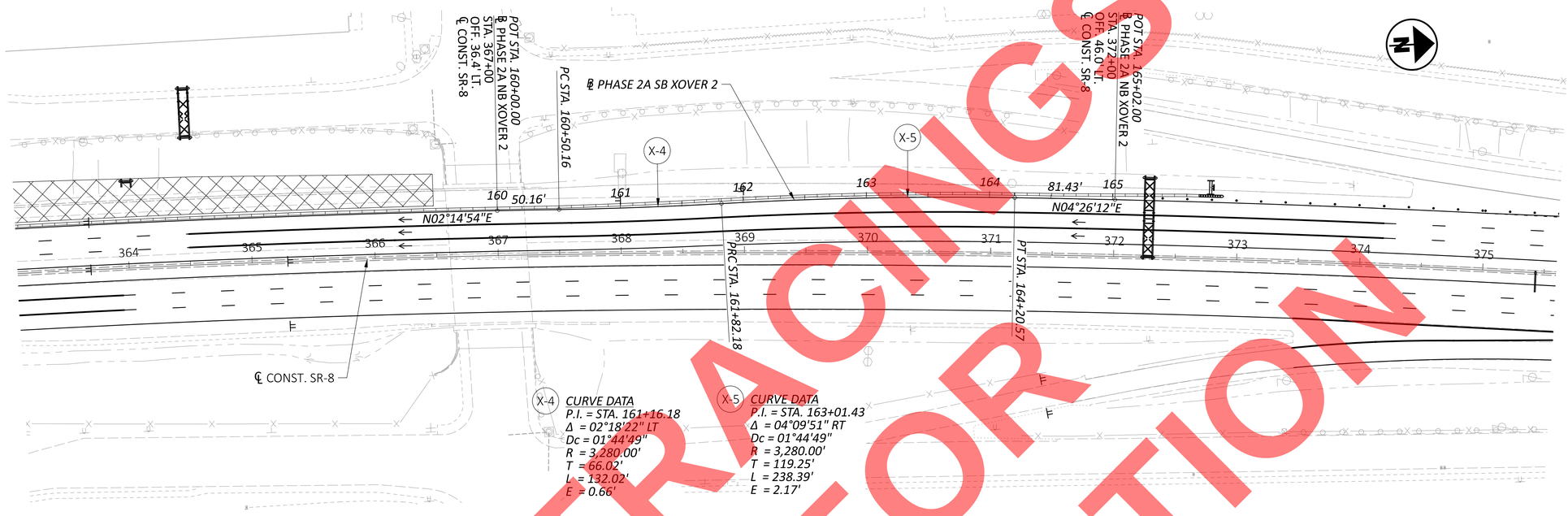
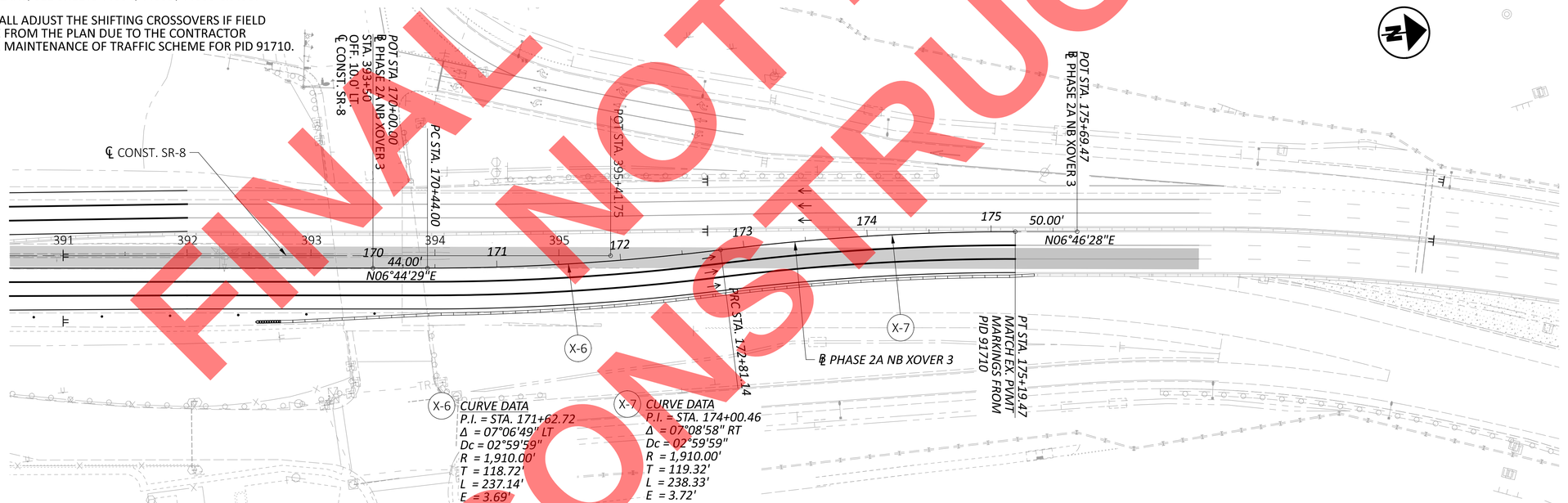


NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
4. FOR PHASE 2A MOT PLANS, SEE SHEETS *P.064*, *P.065*, *P.066* & *P.067*
5. THE CONTRACTOR SHALL ADJUST THE SHIFTING CROSSOVERS IF FIELD CONDITIONS CHANGE FROM THE PLAN DUE TO THE CONTRACTOR OPERATIONS FOR THE MAINTENANCE OF TRAFFIC SCHEME FOR PID 91710.



FINAL PLANS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 2A - CROSSOVER AND SHIFTING CROSSOVER PLANS

DESIGN AGENCY
GFT

DESIGNER	MGJ
REVIEWER	DRJ 9-18-26
PROJECT ID	114865
SHEET	P.080
TOTAL	627

SUM-77/8-11.65/00.00

MODEL: Phase 2A - XO5-XO6 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:17:39 PM USER: mejohnson
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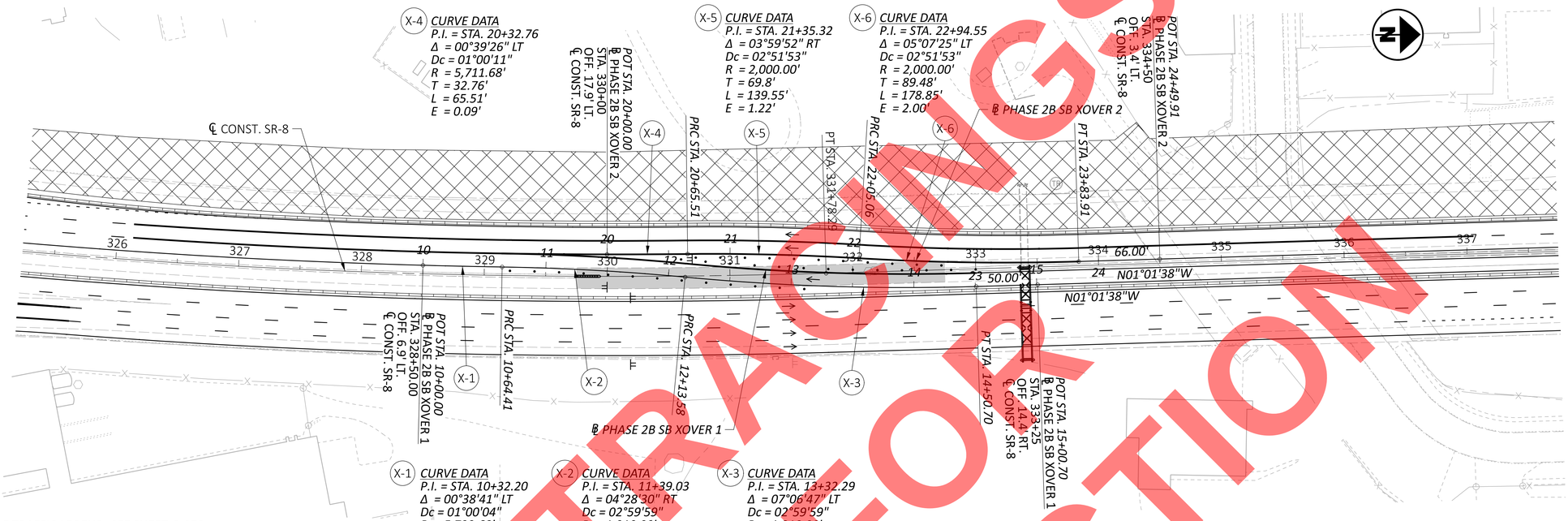
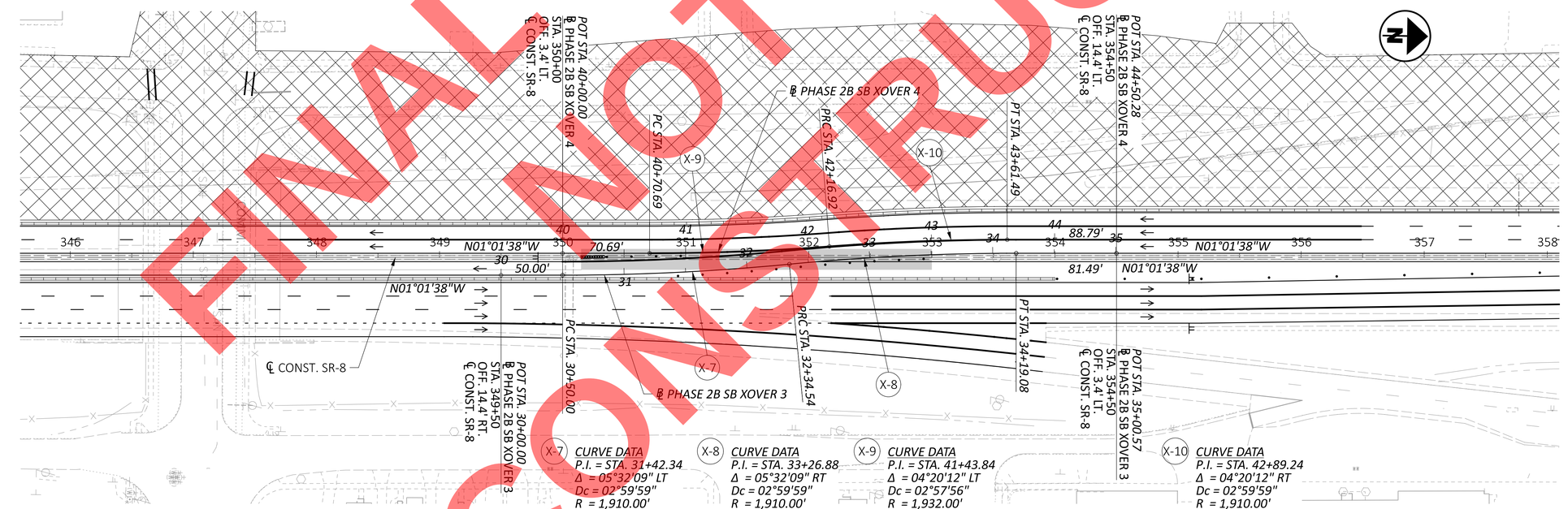


NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 2 DETOURS, SEE SHEETS *P.034*, *P.035*, *P.043*, *P.044* & *P.045*
4. FOR PHASE 2B MOT PLANS, SEE SHEETS *P.068*, *P.069* , *P.070* & *P.071*



FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 2B - CROSSOVER AND SHIFTING CROSSOVER PLANS

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.081 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: Phase 2A - XO1-XO4 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:17:41 PM USER: mejohnson
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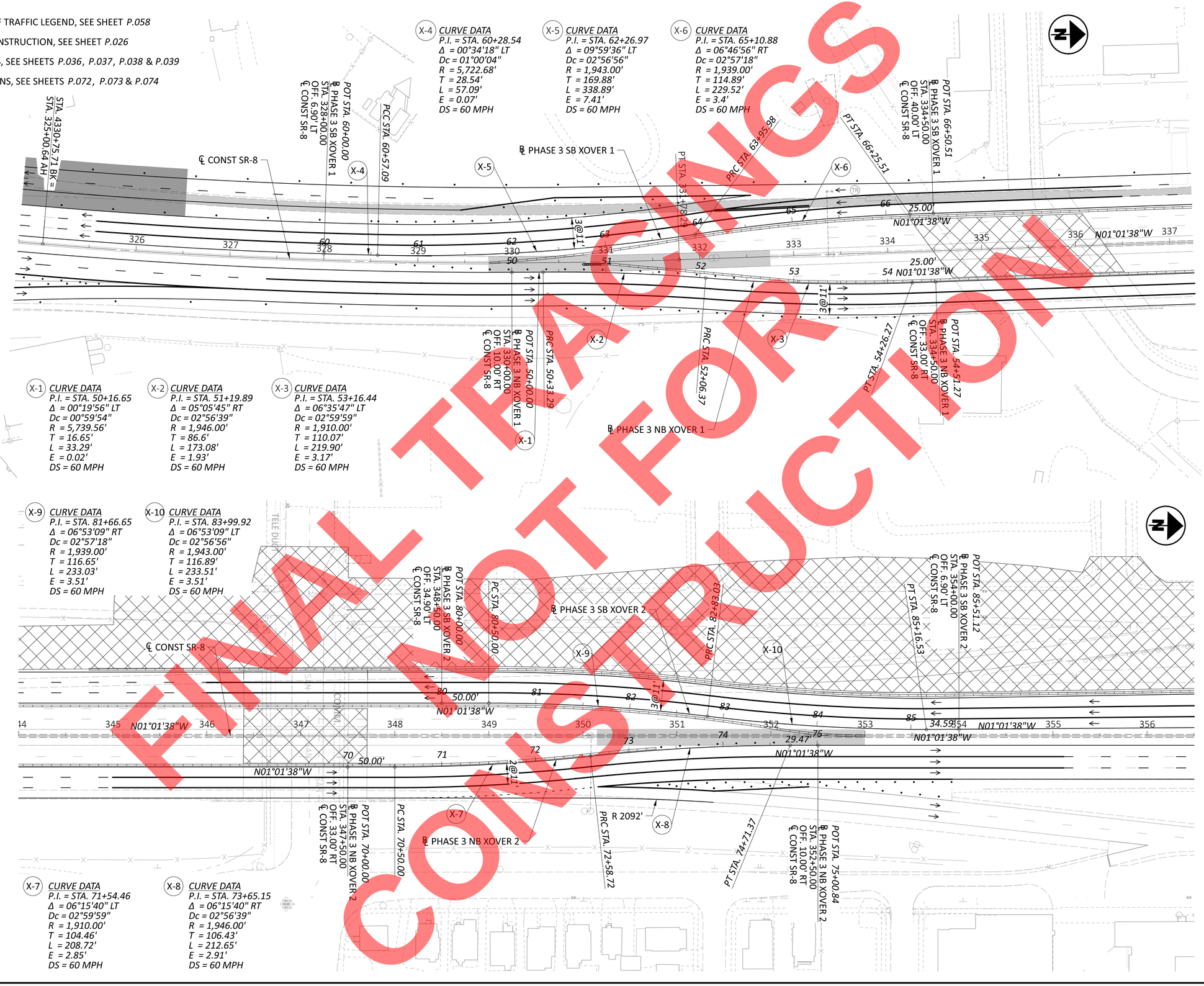
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 3 DETOURS, SEE SHEETS *P.036*, *P.037*, *P.038* & *P.039*
4. FOR PHASE 3 MOT PLANS, SEE SHEETS *P.072*, *P.073* & *P.074*



FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 3 - SHIFTING CROSSOVER PLANS

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.082 TOTAL 627

SUM-077/008-11.65/00.00

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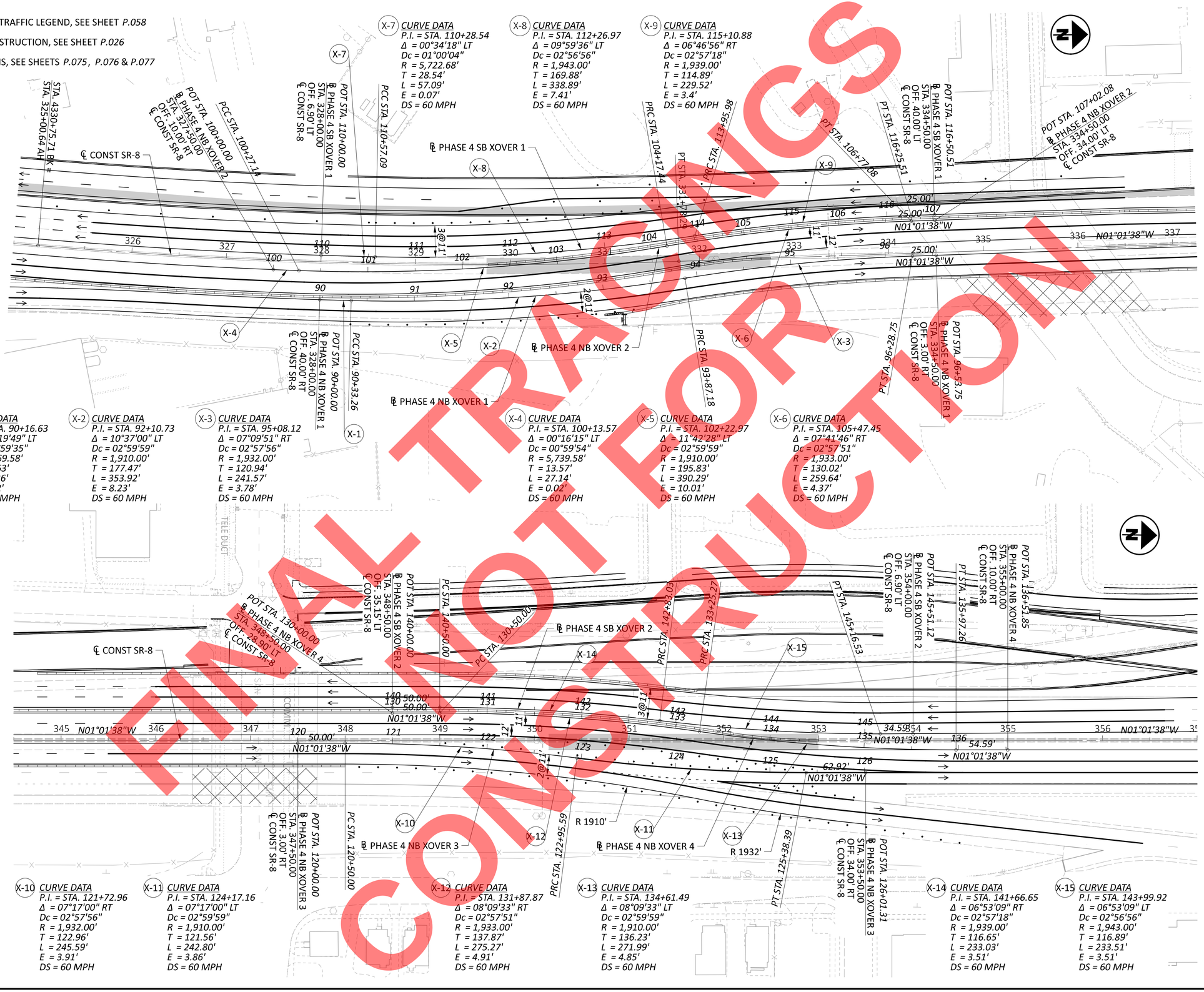
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET *P.058*
2. FOR SEQUENCE OF CONSTRUCTION, SEE SHEET *P.026*
3. FOR PHASE 4 MOT PLANS, SEE SHEETS *P.075*, *P.076* & *P.077*



FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - CROSSOVER DETAIL
PHASE 4 - SHIFTING CROSSOVER PLANS

DESIGN AGENCY
GFT

DESIGNER	TCW
REVIEWER	DRJ 9-18-26
PROJECT ID	114865
SHEET	P.083
TOTAL	627

SUM-077/008-11.65/00.00
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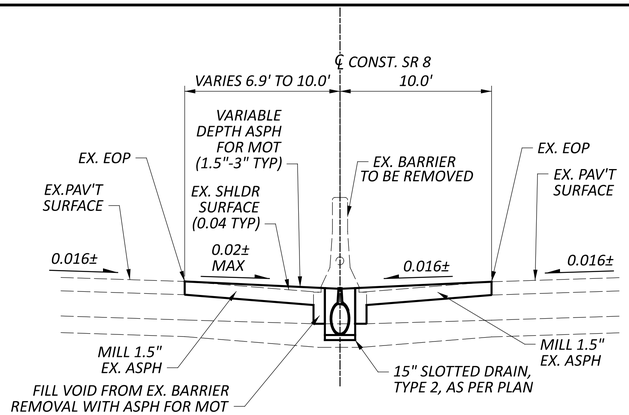
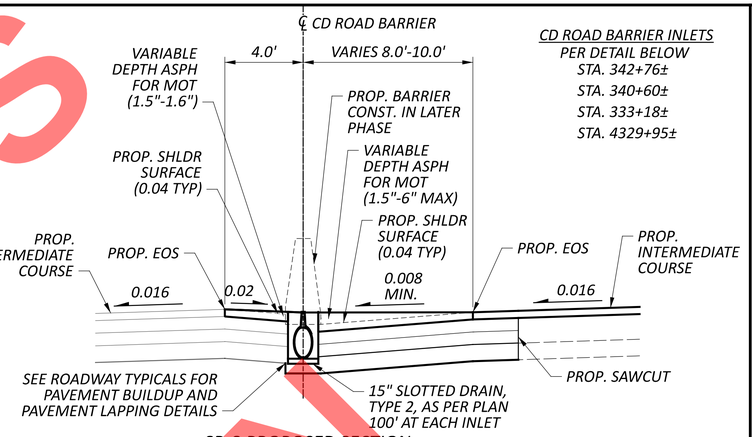


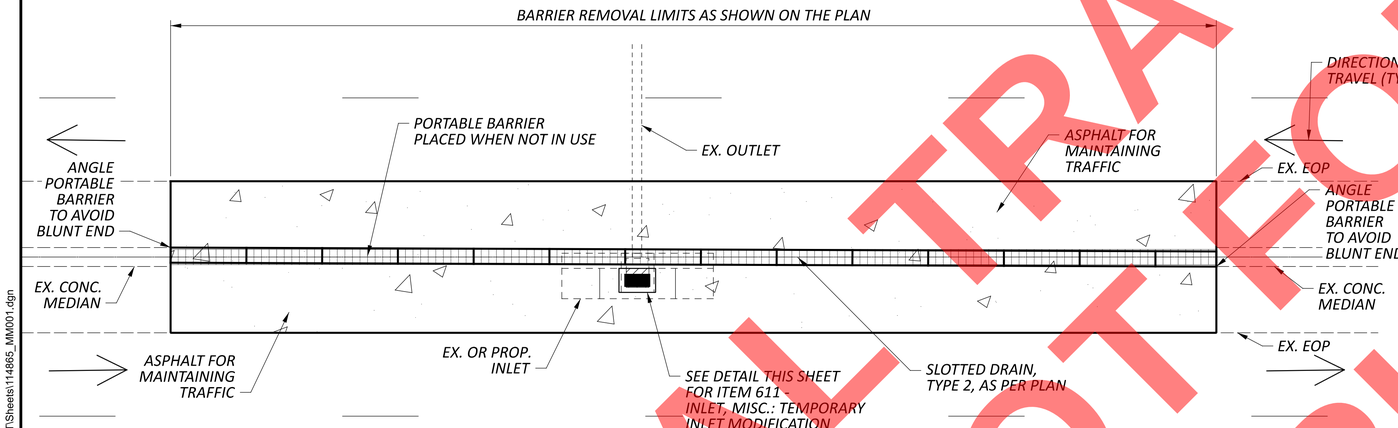
SR-8 EXISTING SECTION
CONDITION A

STA. 329+75 TO STA. 332+75
STA. 350+15 TO STA. 353+00

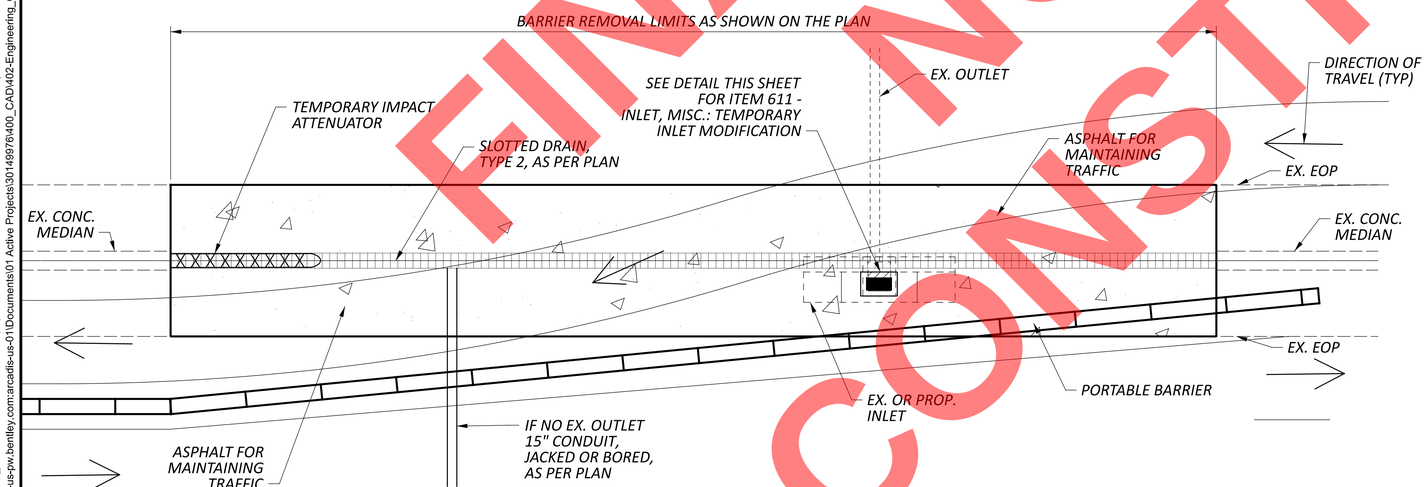


CD ROAD BARRIER INLETS
PER DETAIL BELOW
STA. 342+76±
STA. 340+60±
STA. 333+18±
STA. 4329+95±

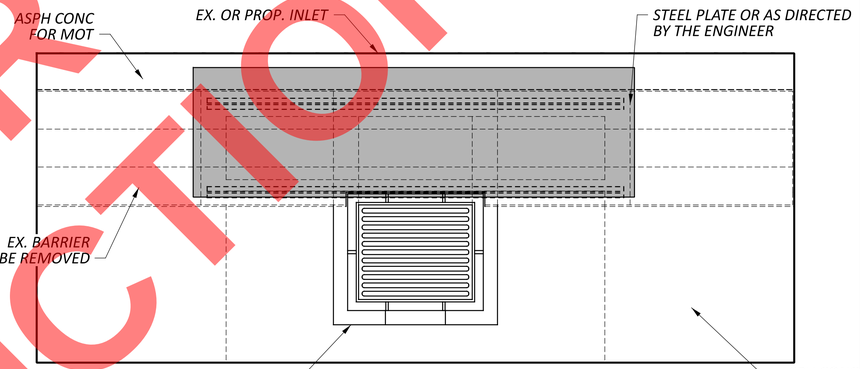
SR-8 PROPOSED SECTION
CONDITION B

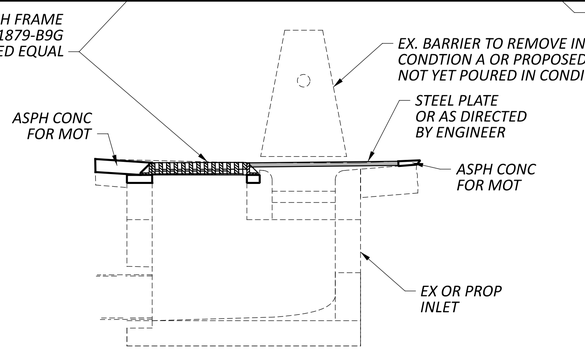


MEDIAN CROSSOVER LOCATION WHEN CLOSED
SEE MOT PLANS AND CROSSOVER DETAILS FOR ADDITIONAL INFORMATION



MEDIAN CROSSOVER LOCATION WHEN OPEN
SEE MOT PLANS AND CROSSOVER DETAILS FOR ADDITIONAL INFORMATION





ITEM 611 - INLET, MISC.: TEMPORARY INLET MODIFICATION

AT THE CONCLUSION OF THE EXISTING BARRIER REMOVAL AT INLET LOCATIONS AS SHOWN IN CONDITION A, OR THE CONSTRUCTION OF THE BASE OF THE PROPOSED STRUCTURE PRIOR TO POURING THE PROPOSED BARRIER AS SHOWN IN CONDITION B, THE CONTRACTOR SHALL PLACE A 1" STEEL PLATE OR OTHER MEANS APPROVED BY THE ENGINEER OVER THE INLET OPENING. THE CONTRACTOR SHALL ANCHOR THE STEEL PLATE WITH 3/4 " COUNTER SINK EXPANSION ANCHOR BOLTS (MIN. 6) WITH 4 1/2 " EMBEDMENT AND PLACE ASPHALT FOR MAINTAINING TRAFFIC ON ALL FOUR SIDES WITH THE EXCEPTION OVER THE GRATE. THE CONTRACTOR SHALL REPLACE THE FRAME AND GRATE WITH A FLAT NEENAH FRAME AND GRATE R-1879-B9G OR APPROVED EQUAL AND STORE THEM UNTIL THE BARRIER IS REPLACED, AT WHICH TIME THE STANDARED FRAME AND COVER SHALL BE INSTALLED. THE CONTRACTOR SHALL ENSURE THAT THE PLATE REMAINS ANCHORED UNTIL THE BARRIER IS CONSTRUCTED. WHEN THE PLATE IS REMOVED THE CONTRACTOR SHALL GROUT THE HOLES LEFT BY THE ANCHOR BOLTS WITH NON-SHRINK, NONMETALLIC GROUT PER 705.20 OF THE CMS.

PAYMENT FOR THIS ITEM SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR TO FURNISH, INSTALL, REMOVE, AND REINSTALL THE ITEMS STATED ABOVE AND SHALL BE PAID FOR THE UNIT PRICE BID FOR EACH OF ITEM 611 - INLET, MISC.: TEMPORARY INLET MODIFICATION. FOR ADDITIONAL DETAILS OF THE INLET SEE STANDARD CONSTRUCTION DRAWING I-3B AND I-3C.

FINAL - NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC - MISCELLANEOUS DETAILS

DESIGN AGENCY
GFT

DESIGNER
TCW

REVIEWER
DRJ 9-18-26

PROJECT ID
114865

SHEET P.084 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:18:35 PM USER: mejohnson
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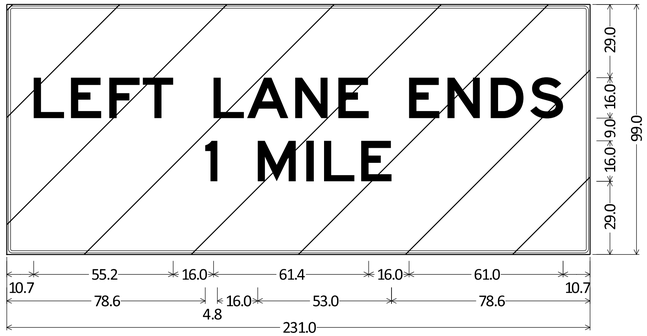
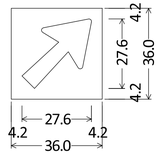
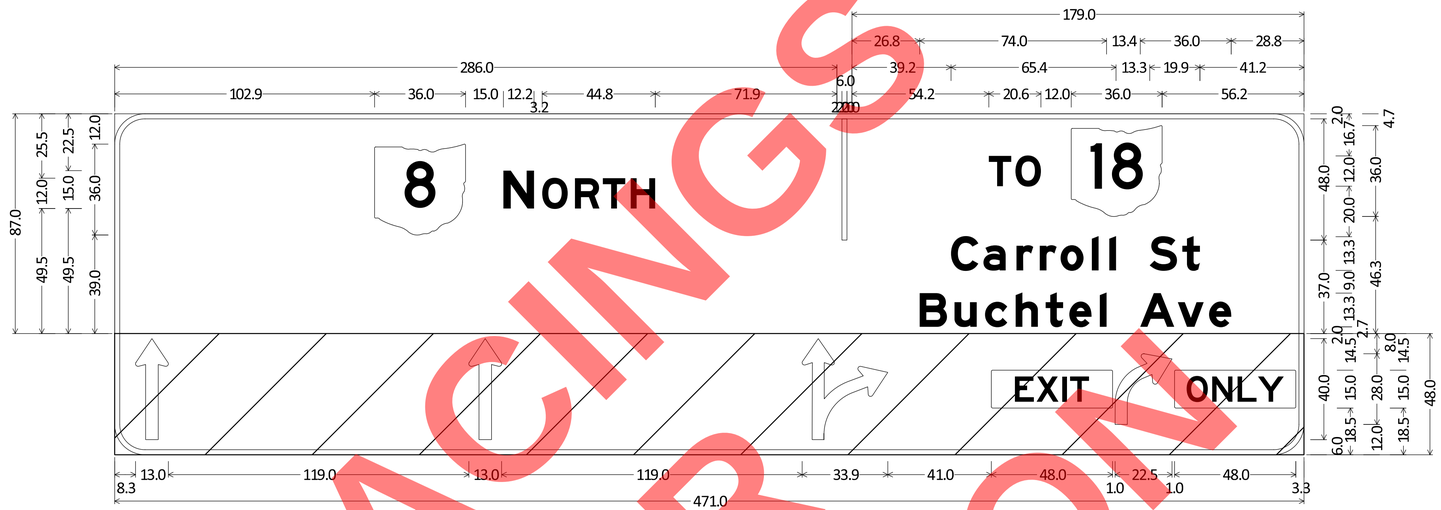


0.9" Border, 0.6" Indent, Black on Yellow;
"LEFT LANE ENDS", E 2K; "1 MILE", E 2K;
OV-1
COVER/DO NOT INSTALL
231" x 99"
NO BORDER
BLANK ORANGE OVERLAY

NOTE:
PAYMENT FOR ALL MATERIALS, LABOR, INCIDENTALS, EQUIPMENT, AND REMOVAL OF TEMPORARY OVERLAYS PER ITEM 614, DETOUR SIGNING PER NOTE ON SHEET P.031



No border, Orange;
Arrow A-1 - 35.0" 45° Black;
OV-5 & OV-7

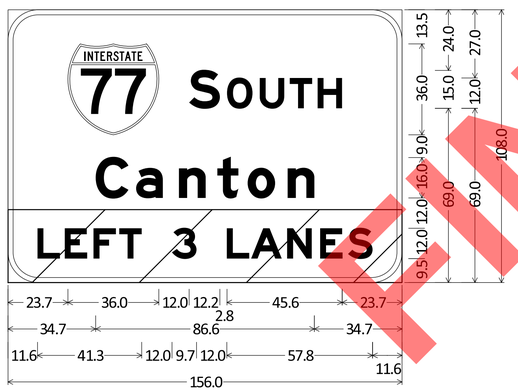


12.0" Radius, 2.0" Border, White on Green;
State Highway 8 M1-H5-36-2; "NORTH", E Mod 2K;

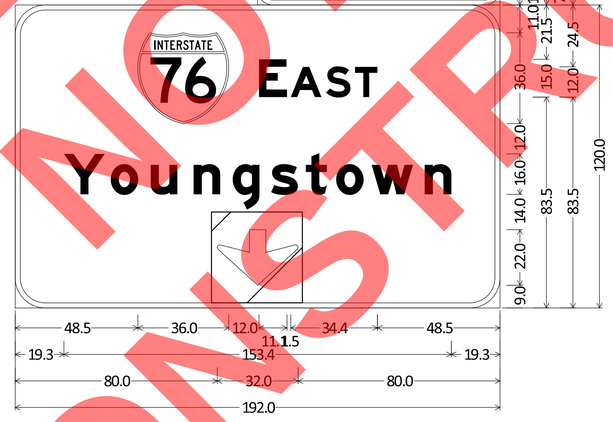
12.0" Radius, 2.0" Border, White on Green;

12.0" Radius, 2.0" Border, White on Green;
"TO", E Mod 2K; State Highway 18 M1-H5-36-2; "Carroll St", E Mod 2K 80% spacing; "Buchtel Ave", E Mod 2K 80% spacing;

12.0" Radius, 2.0" Border, White on Green;
Standard Arrow Custom 40.0" X 13.0" 90°; Standard Arrow Custom 40.0" X 13.0" 90°; thru-right arrow; Rounded Rectangle 0.5" Radius Yellow; right arrow; Rounded Rectangle 0.5" Radius Yellow;
OV-2
471" x 48"
NO BORDER
BLANK ORANGE OVERLAY

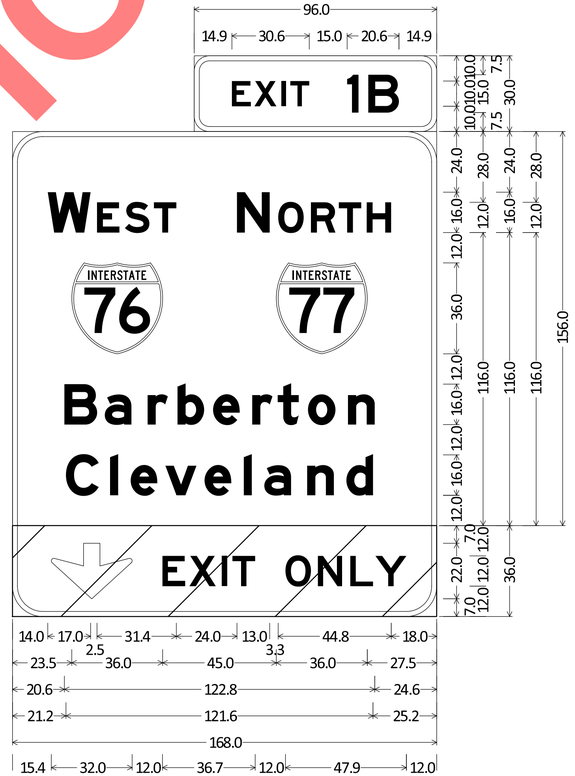


12.0" Radius, 2.0" Border, White on Green;
Interstate 77 M1-1; "SOUTH", E Mod 2K; "Canton", E Mod 2K;
"LEFT 3 LANES", E Mod 2K;
OV-3
156" x 27"
NO BORDER
BLANK ORANGE OVERLAY



6.0" Radius, 2.0" Border, White on Green;
"EXIT", E 2K; "1A", E 2K;

12.0" Radius, 2.0" Border, White on Green;
Interstate 76 M1-1; "EAST", E Mod 2K; "Youngstown", E Mod 2K;
Down Arrow C-1 - 22.0" 270°;
OV-4
36" x 36"
NO BORDER
BLANK ORANGE OVERLAY



6.0" Radius, 2.0" Border, White on Green;
"EXIT", E 2K; "1B", E 2K;

OV-6
168" x 36"
NO BORDER
BLANK ORANGE OVERLAY

12.0" Radius, 2.0" Border, White on Green;
"WEST", E Mod 2K; "NORTH", E Mod 2K; Interstate 76 M1-1;
Interstate 77 M1-1; "Barberton", E Mod 2K; "Cleveland", E Mod 2K;

12.0" Radius, 2.0" Border, Black on Yellow;
Down Arrow C-1 - 22.0" 270°; "EXIT", E 2K; "ONLY", E 2K;

FINAL PLANS
NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC SIGNING DETAILS

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER BRO 9-18-26
PROJECT ID 114865
SHEET P.085 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: SignCAD Sheet 1 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:18:46 PM USER: mejohnson
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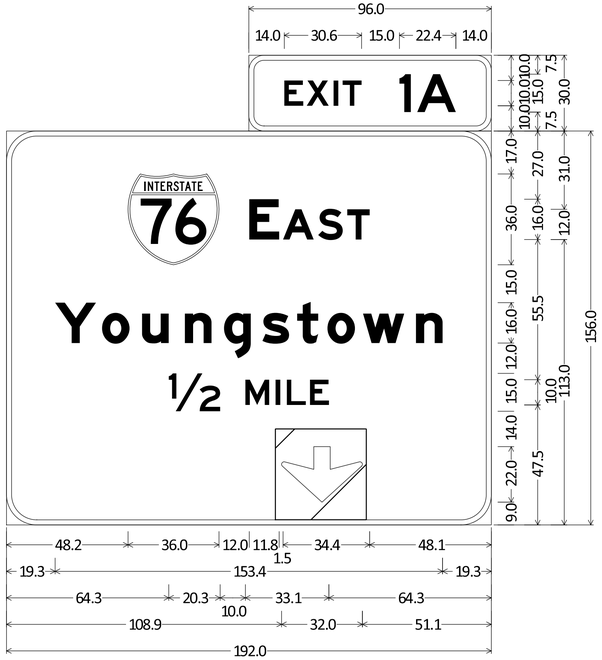
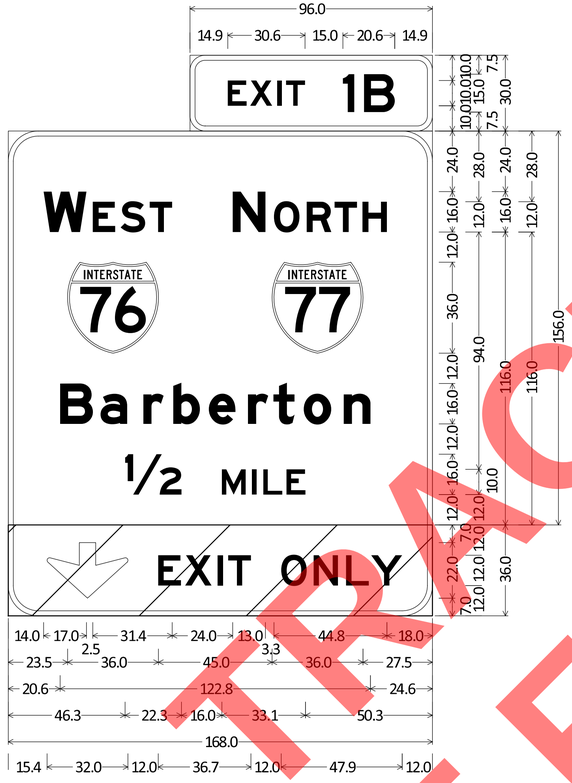


6.0" Radius, 2.0" Border, White on Green;
"EXIT", E 2K; "1A", E 2K;

12.0" Radius, 2.0" Border, White on Green;
Interstate 76 M1-1; "EAST", E Mod 2K; "Youngstown", E Mod 2K; "½", E 2K;
"MILE", E 2K; " ", Highway SignCAD Plus; Down Arrow C-1 - 22.0" 270°;
OV-8
36" x 36"
NO BORDER
BLANK ORANGE OVERLAY



6.0" Radius, 2.0" Border, White on Green;
"EXIT", E 2K; "1B", E 2K;

12.0" Radius, 2.0" Border, White on Green;
"WEST", E Mod 2K; "NORTH", E Mod 2K; Interstate 76 M1-1;
Interstate 77 M1-1; "Barberton", E Mod 2K; "½", E Mod 2K;
"MILE", E 2K;

12.0" Radius, 2.0" Border, Black on Yellow;
Down Arrow C-1 - 22.0" 270°; "EXIT", E 2K; "ONLY", E 2K;
OV-9
168" x 36"
NO BORDER
BLANK ORANGE OVERLAY

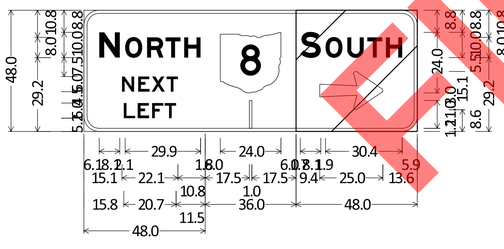


6.0" Radius, 2.0" Border, White on Green;
"EXIT", E 2K; "1C", E 2K;

12.0" Radius, 2.0" Border, White on Green;
"TO", E 2K; State Highway 18 M1-H5-36-2; "Carroll St", E Mod 2K;
"Buchtel Ave", E Mod 2K;

12.0" Radius, 2.0" Border, Black on Yellow;
Arrow A-1 - 35.0" 45°; "EXIT ONLY", E 2K; Arrow A-1 - 35.0" 45°;
OV-10
204" x 36"
NO BORDER
BLANK ORANGE OVERLAY

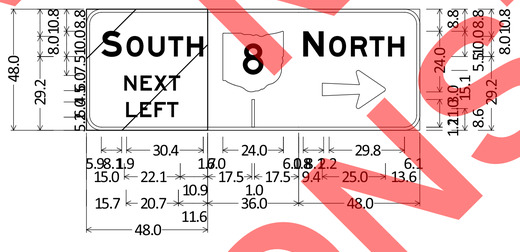
NOTE:
PAYMENT FOR ALL MATERIALS, LABOR, INCIDENTALS, EQUIPMENT, AND REMOVAL OF TEMPORARY OVERLAYS PER ITEM 614, DETOUR SIGNING PER NOTE ON SHEET P.031



6.0" Radius, 1.3" Border, White on Green;
"NORTH", E Mod 2K; "NEXT", E 2K; "LEFT", E 2K;

12.0" Radius, 1.3" Border, White on Green;
State Highway 8 M1-H5-24-2;

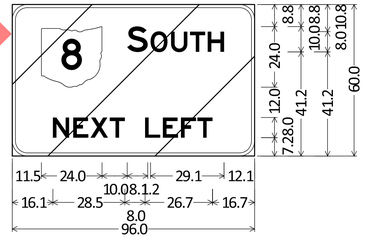
6.0" Radius, 1.3" Border, White on Green;
"SOUTH", E Mod 2K; Arrow A-4 - 25.0" 0°;
OV-11, OV-12, OV-13
48" x 48"
NO BORDER
BLANK ORANGE OVERLAY



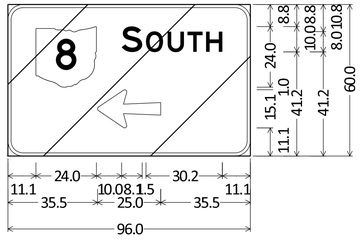
6.0" Radius, 1.3" Border, White on Green;
"SOUTH", E Mod 2K; "NEXT", E 2K; "LEFT", E 2K;

12.0" Radius, 1.3" Border, White on Green;
State Highway 8 M1-H5-24-2;

6.0" Radius, 1.3" Border, White on Green;
"NORTH", E Mod 2K; Arrow A-4 - 25.0" 0°;
OV-15, OV-16
48" x 48"
NO BORDER
BLANK ORANGE OVERLAY



1.3" Border, White on Green;
State Highway 8 M1-H5-24-2;
"SOUTH", E 2K 75% spacing;
"NEXT LEFT", E 2K 75% spacing;
OV-14
96" x 60"
NO BORDER
BLANK ORANGE OVERLAY



1.3" Border, White on Green;
State Highway 8 M1-H5-24-2;
"SOUTH", E 2K; Arrow A-4 - 25.0" 180°;
OV-17, OV-18
96" x 60"
NO BORDER
BLANK ORANGE OVERLAY

FINAL TRACINGS NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC SIGNING DETAILS

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER BRO 9-18-26
PROJECT ID 114865
SHEET P.086 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: SignCAD Sheet 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:18:47 PM USER: mejohnson
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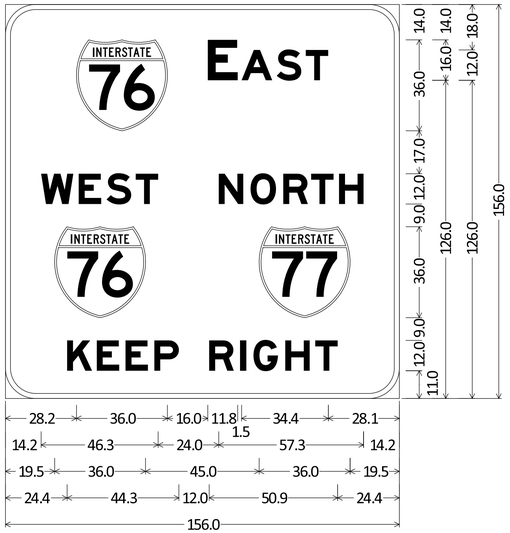
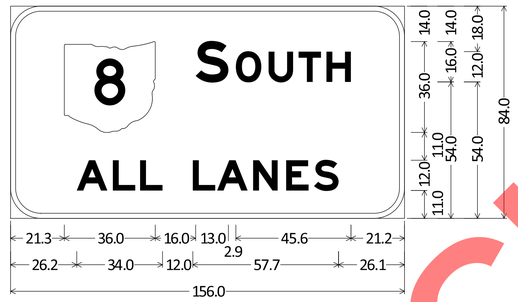
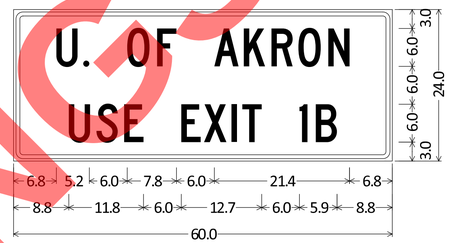


12.0" Radius, 2.0" Border, Black on Orange;
Interstate 76 M1-1; "EAST", E Mod 2K; "WEST", E Mod 2K;
"NORTH", E Mod 2K; Interstate 76 M1-1; Interstate 77 M1-1;
"KEEP RIGHT", E Mod 2K;
SN-2



12.0" Radius, 2.0" Border, Black on Orange;
State Highway 8 M1-H5-36-2; "SOUTH", E Mod 2K;
"ALL LANES", E Mod 2K;
SN-1, SN-3



0.6" Border, 0.4" Indent, Black on Orange;
"U. OF AKRON", C 2K; "USE EXIT 1B", C 2K;
SN-4

NOTE:
PAYMENT FOR ALL MATERIALS, LABOR, INCIDENTALS, EQUIPMENT, AND REMOVAL OF DETOUR SIGNS PER ITEM 614, DETOUR SIGNING PER NOTE ON SHEET P.031

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC SIGNING DETAILS

DESIGN AGENCY
GFT

DESIGNER MGJ
REVIEWER BRO 9-18-26
PROJECT ID 114865
SHEET P.087 TOTAL 627

SUM-77/8-11.65/00.00

MODEL: SignCAD Sheet 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:18:48 PM USER: mejohnson
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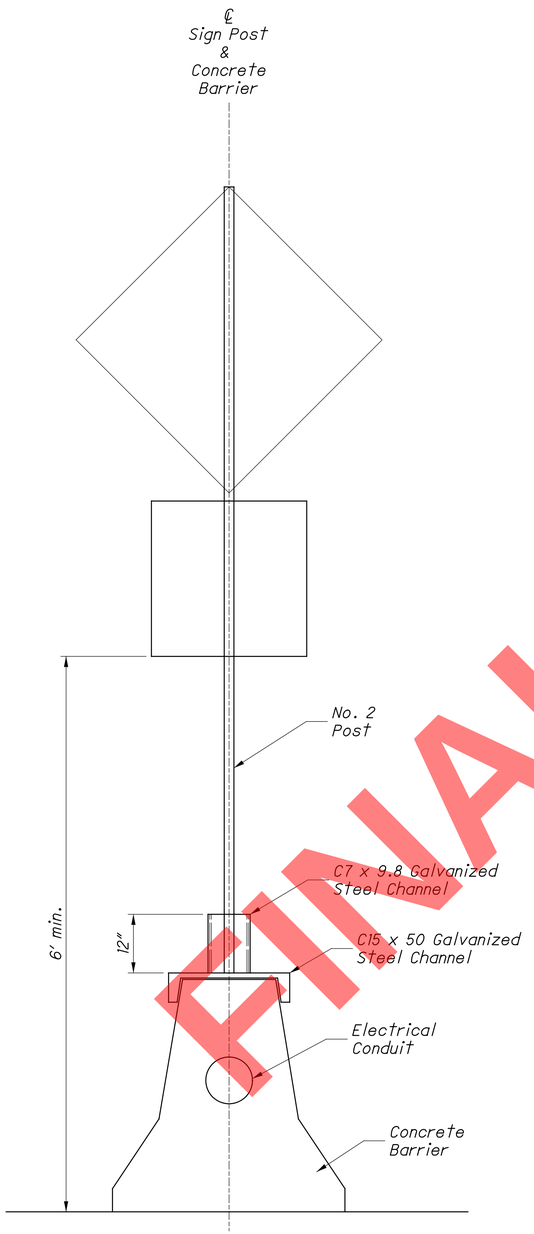
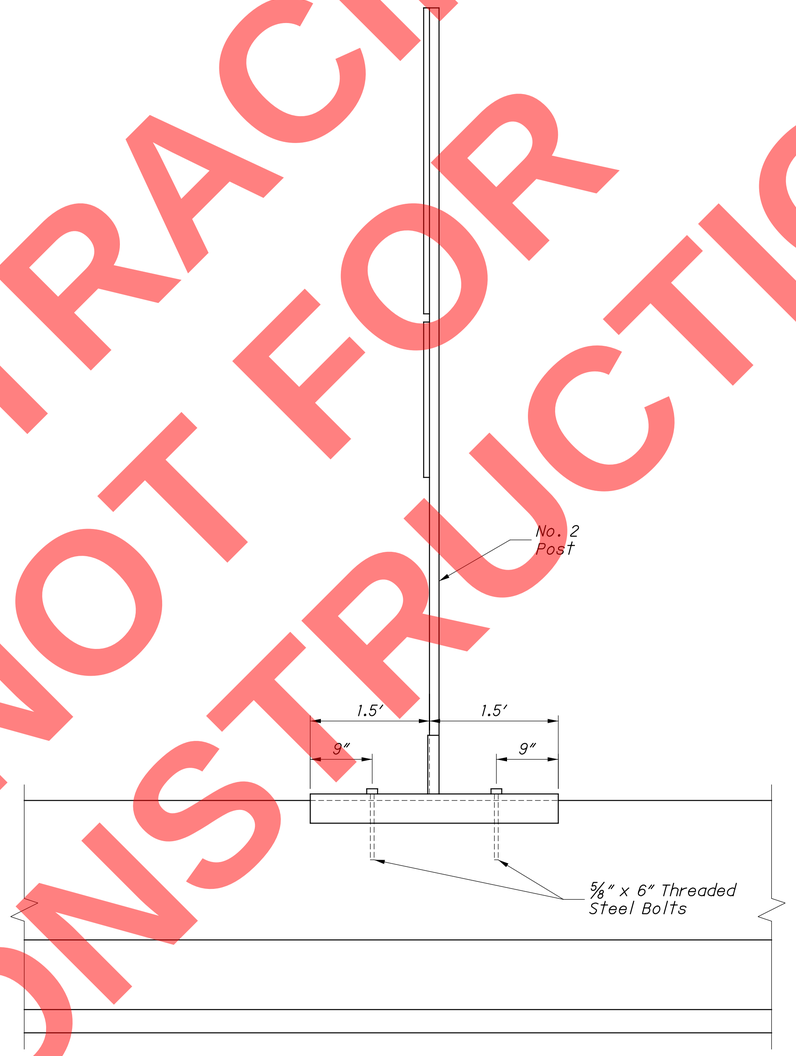


REAR VIEW



SIDE VIEW

NOTES:

1. The C7 x 9.8 galvanized steel channel shall be welded to the C15 x 50 galvanized steel channel.
2. The No. 2 post shall be attached to the C7 x 9.8 galavanized steel channel with two 5/16" steel hex head bolts. The holes in the C7 x 9.8 steel channel shall be drilled before galvanizing. The holes shall be 9" center to center.
3. The 5/8" threaded steel bolts shall be attached to the concrete barrier with grout meeting the requirements of CMS 255.02.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

THIS DRAWING REPLACES PIS 202020 DATED 11-27-2006.

PLAN INSERT SHEET

CONCRETE BARRIER MOUNTED SIGN SUPPORT DETAIL, METHOD A

PIS 202020

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 07-18-2014
CHECKED CHECKED

MAINTENANCE OF TRAFFIC - PLAN INSERT SHEET

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.088 TOTAL 627

1 / 1

0
0

SUM-77/8-11.65/0.00

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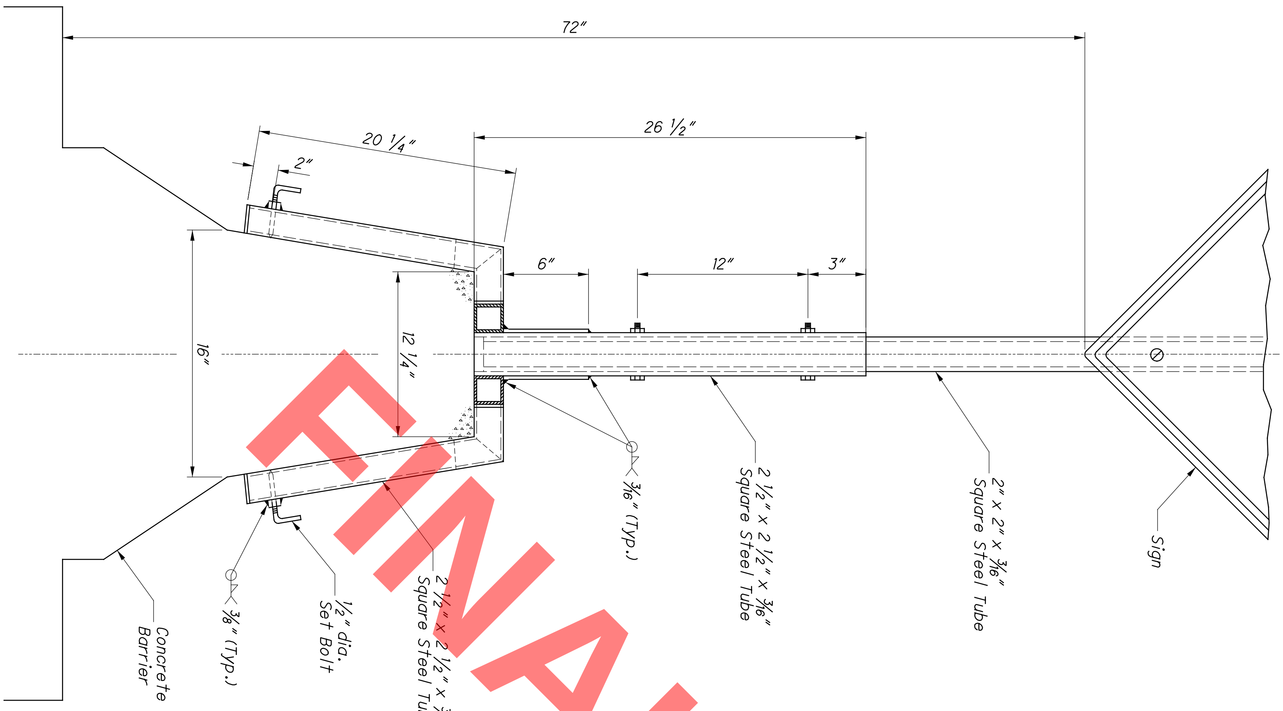
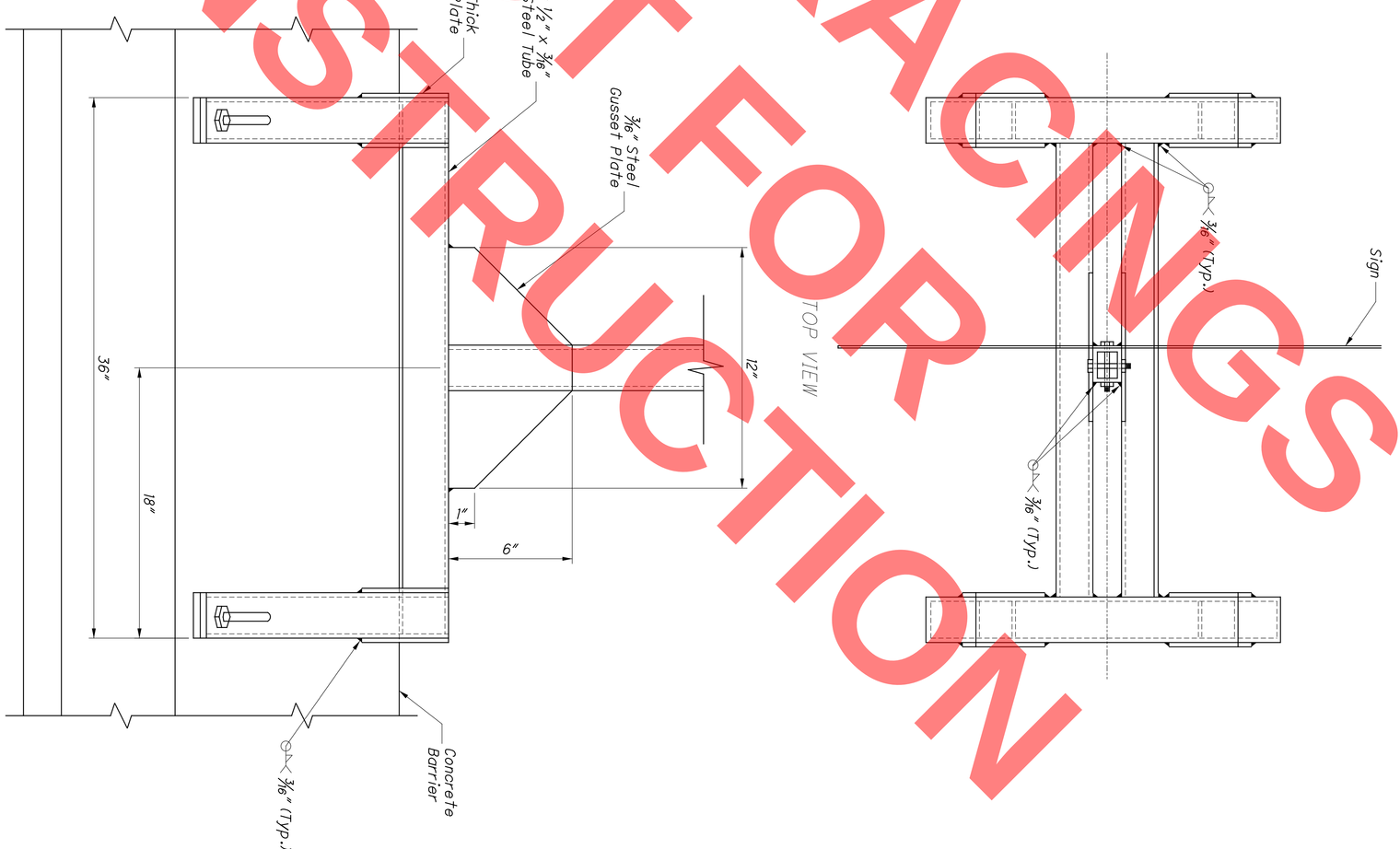
FINAL TRACINGS
NOT FOR
CONSTRUCTION



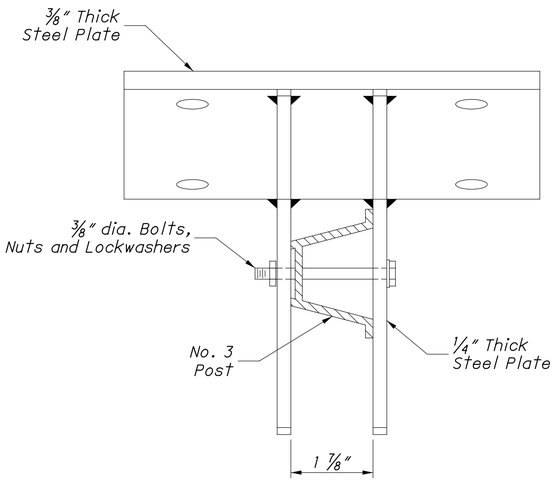


THIS DRAWING REPLACES PIS 202021 DATED 11-27-2006.

0 0	1 / 1	PIS 202021	PLAN INSERT SHEET CONCRETE BARRIER MOUNTED SIGN SUPPORT DETAIL, METHOD B	REVISION DATE 07-18-2014	DESIGNED XXX	OFFICE OF ROADWAY ENGINEERING
				CHECKED CHECKED	REVIEWED XXX	

SHEET P.089	PROJECT ID 114865	REVIEWER DRJ 9-18-26	DESIGNER TCW	DESIGN AGENCY GFT

MAINTENANCE OF TRAFFIC - PLAN INSERT SHEET



FINAL TRACINGS NOT FOR CONSTRUCTION

NOTES:

1. Unit shall be galvanized after fabrication.

THIS DRAWING REPLACES PIS 202022 DATED 11-27-2006.

SUM-77/8-11.65/0.00

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OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
CHECKED CHECKED
REVISION DATE 07-18-2014

PLAN INSERT SHEET
CONCRETE BARRIER MOUNTED SIGN SUPPORT DETAIL, METHOD C

PIS 202022

MAINTENANCE OF TRAFFIC - PLAN INSERT SHEET

DESIGN AGENCY GFT
DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.090 TOTAL 627
1 / 1
0 / 0

CARROLL STREET
PHASE 1

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES			-	-	-	-	

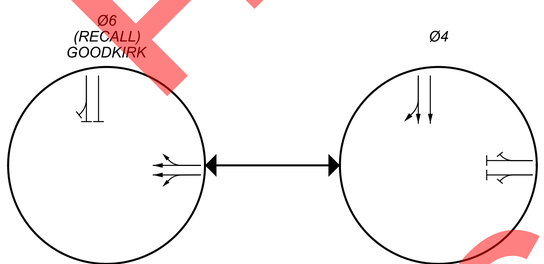
INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	-
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	-
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	-
MAXIMUM GREEN I		(SEC.)	-	-	-	23	-	34	-	-
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	-
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	-
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES			-	-	-	-	

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	-
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	-
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	-
MAXIMUM GREEN I		(SEC.)	-	-	-	34	-	43	-	-
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	-
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	-
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



THE CONTRACTOR SHALL WORK WITH THE CITY OF AKRON TO ADJUST SIGNAL TIMING AND PHASING ALONG SPICER STREET AT BUCHTEL AVENUE, CARROLL STREET, AND EXCHANGE STREET DURING THE PHASE 1 CLOSURE OF CARROLL STREET.

FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES			-	-	-	-	

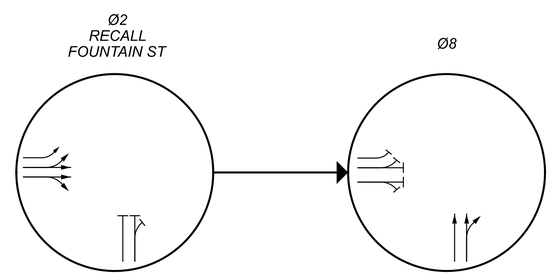
INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	NB	-	-	-	-	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	10	-	-	-	-	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	-	-	-	-	3.0
MAXIMUM GREEN I		(SEC.)	-	39	-	-	-	-	-	18
YELLOW CHANGE		(SEC.)	-	3.0	-	-	-	-	-	3.0
ALL RED CLEARANCE		(SEC.)	-	3.0	-	-	-	-	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES			-	-	-	-	

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION				NB	-	-	-	-	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)		10	-	-	-	-	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)		-	-	-	-	-	-	3.0
MAXIMUM GREEN I		(SEC.)		48	-	-	-	-	-	23
YELLOW CHANGE		(SEC.)		3.0	-	-	-	-	-	3.0
ALL RED CLEARANCE		(SEC.)		3.0	-	-	-	-	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.091 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:07 PM USER: mejohnson
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BUCHTEL AVENUE
PHASE 1

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION:	GOODKIRK ST / BUCHTEL AVE
MAINTAINING AGENCY:	CITY OF AKRON

START UP		DUAL ENTRY: YES	PHASES:	4 & 8		
		REST IN RED:	RING 1 -		RING 2 -	
START IN:	ALL-RED FLASH	OVERLAP	A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6					
FIRST PHASE(S):	Ø4 & Ø8					
COLOR DISPLAYED:	GREEN	PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	-	38	-	30	-	38
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

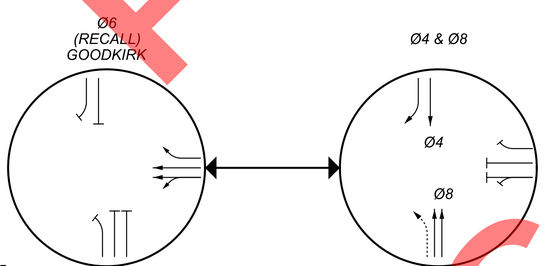
6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION:	GOODKIRK ST / BUCHTEL AVE
MAINTAINING AGENCY:	CITY OF AKRON

START UP		DUAL ENTRY: YES	PHASES:	4 & 8		
		REST IN RED:	RING 1 -		RING 2 -	
START IN:	ALL-RED FLASH	OVERLAP	A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6					
FIRST PHASE(S):	Ø4 & Ø8					
COLOR DISPLAYED:	GREEN	PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	-	48	-	40	-	48
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



THE CONTRACTOR SHALL WORK WITH THE CITY OF AKRON TO ADJUST SIGNAL TIMING AND PHASING ALONG SPICER STREET AT BUCHTEL AVENUE, CARROLL STREET, AND EXCHANGE STREET DURING THE PHASE 1 CLOSURE OF CARROLL STREET.

FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION:	FOUNTAIN ST / BUCHTEL AVE
MAINTAINING AGENCY:	CITY OF AKRON

START UP		DUAL ENTRY: YES	PHASES:	4 & 8		
		REST IN RED:	RING 1 -		RING 2 -	
START IN:	ALL-RED FLASH	OVERLAP	A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6					
FIRST PHASE(S):	Ø4 & Ø8					
COLOR DISPLAYED:	GREEN	PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)	-	32	-	17	-	-	13	17
YELLOW CHANGE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

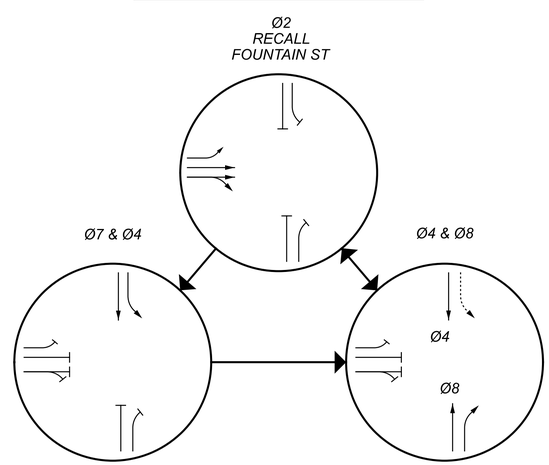
6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION:	FOUNTAIN ST / BUCHTEL AVE
MAINTAINING AGENCY:	CITY OF AKRON

START UP		DUAL ENTRY: YES	PHASES:	4 & 8		
		REST IN RED:	RING 1 -		RING 2 -	
START IN:	ALL-RED FLASH	OVERLAP	A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6					
FIRST PHASE(S):	Ø4 & Ø8					
COLOR DISPLAYED:	GREEN	PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION				NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)		10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)		(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)		38	-	24	-	-	20	24
YELLOW CHANGE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.092 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt - 2 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:08 PM USER: mejohnson
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CARROLL STREET
PHASE 2

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

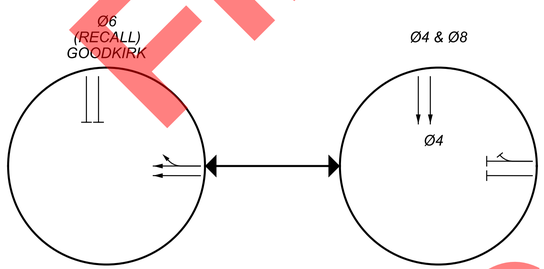
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / CARROLL ST										
MAINTAINING AGENCY: CITY OF AKRON										
START UP		DUAL ENTRY: YES			PHASES:			4 & 8		
		REST IN RED:			RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6									
FIRST PHASE(S):	Ø4 & Ø8									
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8	
DIRECTION		-	-	-	EB	-	SB	-		
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	-	7	-	10	-		
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	3.0	-		
MAXIMUM GREEN I	(SEC.)	-	-	-	23	-	34	-		
YELLOW CHANGE	(SEC.)	-	-	-	3.0	-	3.0	-		
ALL RED CLEARANCE	(SEC.)	-	-	-	3.0	-	3.0	-		
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-	
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-	
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-	
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-	

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / CARROLL ST										
MAINTAINING AGENCY: CITY OF AKRON										
START UP		DUAL ENTRY: YES			PHASES:			4 & 8		
		REST IN RED:			RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6									
FIRST PHASE(S):	Ø4 & Ø8									
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8	
DIRECTION		-	-	-	EB	-	SB	-		
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	-	7	-	10	-		
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	3.0	-		
MAXIMUM GREEN I	(SEC.)	-	-	-	34	-	43	-		
YELLOW CHANGE	(SEC.)	-	-	-	3.0	-	3.0	-		
ALL RED CLEARANCE	(SEC.)	-	-	-	3.0	-	3.0	-		
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-	
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-	
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-	
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-	

TEMPORARY PHASING DIAGRAM



THE CONTRACTOR SHALL WORK WITH THE CITY OF AKRON TO ADJUST SIGNAL TIMING AND PHASING ALONG SPICER STREET AT CARROLL STREET AND EXCHANGE STREET DURING THE PHASE 2 CLOSURE OF GOODKIRK STREET.

FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

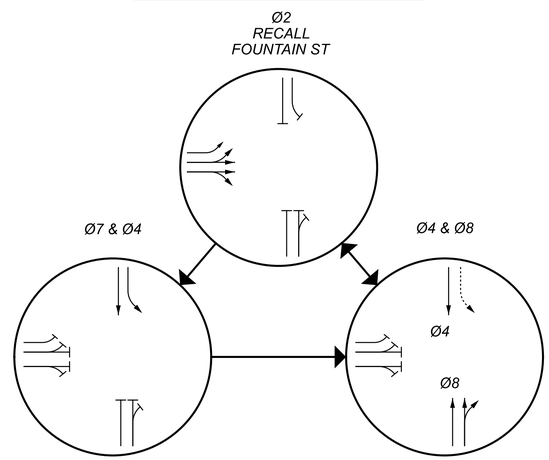
ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / CARROLL ST										
MAINTAINING AGENCY: CITY OF AKRON										
START UP		DUAL ENTRY: YES			PHASES:			4 & 8		
		REST IN RED:			RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6									
FIRST PHASE(S):	Ø4 & Ø8									
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8	
DIRECTION		-	NB	-	EB	-	-	EB LT	WB	
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	7	-	-	5	7	
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	-	3.0	3.0	
MAXIMUM GREEN I	(SEC.)	-	39	-	18	-	-	5	18	
YELLOW CHANGE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0	
ALL RED CLEARANCE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0	
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-	
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-	
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-	
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-	

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / CARROLL ST										
MAINTAINING AGENCY: CITY OF AKRON										
START UP		DUAL ENTRY: YES			PHASES:			4 & 8		
		REST IN RED:			RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6									
FIRST PHASE(S):	Ø4 & Ø8									
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8	
DIRECTION			NB	-	EB	-	-	EB LT	WB	
MINIMUM GREEN (INITIAL)	(SEC.)		10	-	7	-	-	5	7	
PASSAGE TIME (PRESET GAP)	(SEC.)		-	-	3.0	-	-	3.0	3.0	
MAXIMUM GREEN I	(SEC.)		48	-	23	-	-	11	23	
YELLOW CHANGE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0	
ALL RED CLEARANCE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0	
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-	
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-	
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-	
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-	

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.093 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt - 3 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:09 PM USER: mejohnson
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BUCHTEL AVENUE
PHASE 2

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

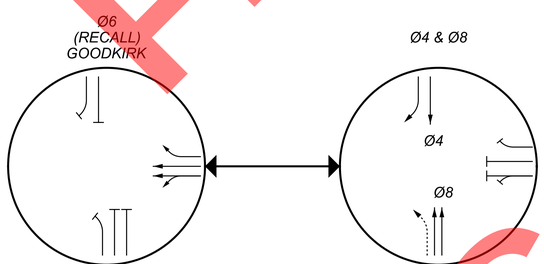
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / BUCHTEL AVE									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES			PHASES:			4 & 8	
		REST IN RED:			RING 1	-		RING 2	-
START IN: ALL-RED FLASH		OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES				-	-	-	-
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	-	36	-	32	-	36
YELLOW CHANGE	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL — MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL — MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
RECALL — PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / BUCHTEL AVE									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES			PHASES:			4 & 8	
		REST IN RED:			RING 1	-		RING 2	-
START IN: ALL-RED FLASH		OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES				-	-	-	-
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	-	46	-	42	-	46
YELLOW CHANGE	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL — MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL — MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
RECALL — PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

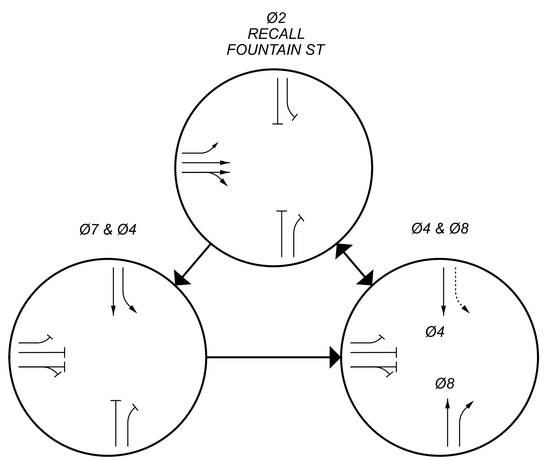
ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / BUCHTEL AVE									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES			PHASES:			4 & 8	
		REST IN RED:			RING 1	-		RING 2	-
START IN: ALL-RED FLASH		OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES				-	-	-	-
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)	-	29	-	20	-	-	13	20
YELLOW CHANGE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL — MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL — MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
RECALL — PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / BUCHTEL AVE									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES			PHASES:			4 & 8	
		REST IN RED:			RING 1	-		RING 2	-
START IN: ALL-RED FLASH		OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES				-	-	-	-
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION			NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)		10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)	(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)		35	-	27	-	-	20	27
YELLOW CHANGE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL — MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL — MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
RECALL — PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.094 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt - 4 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:09 PM USER: mejohnson
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PERKINS STREET
PHASE 2

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

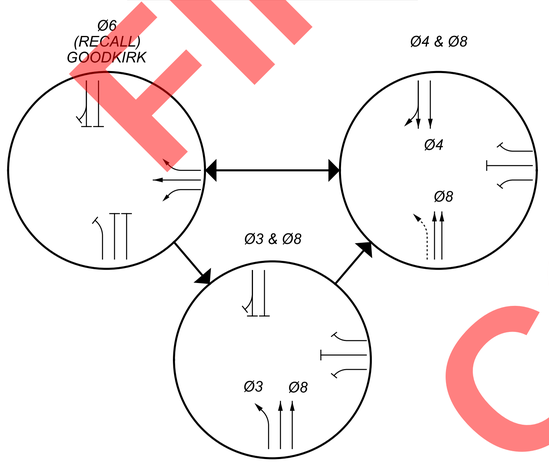
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / PERKINS ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8									
COLOR DISPLAYED: GREEN		PHASES			-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	5	10	-	10	-	10
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	10	41	-	11	-	41
YELLOW CHANGE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / PERKINS ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8									
COLOR DISPLAYED: GREEN		PHASES			-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	5	10	-	10	-	10
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	12	59	-	11	-	59
YELLOW CHANGE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

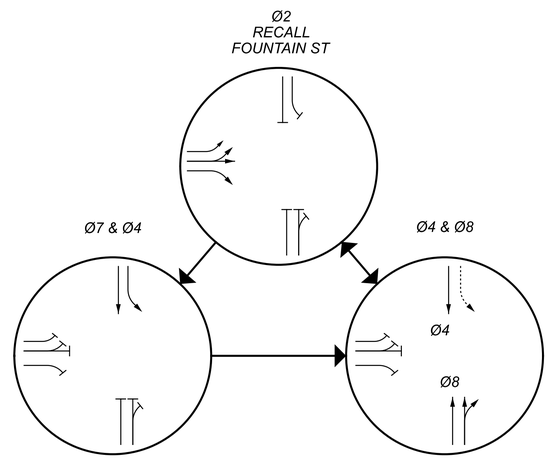
ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / PERKINS ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8									
COLOR DISPLAYED: GREEN		PHASES			-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	7	-	-	10	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)	-	26	-	16	-	-	20	16
YELLOW CHANGE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / PERKINS ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8									
COLOR DISPLAYED: GREEN		PHASES			-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION			NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)		10	-	7	-	-	10	7
PASSAGE TIME (PRESET GAP)	(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)		34	-	16	-	-	32	16
YELLOW CHANGE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.095 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt - 5 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:10 PM USER: mejohnson
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CARROLL STREET
PHASE 4

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

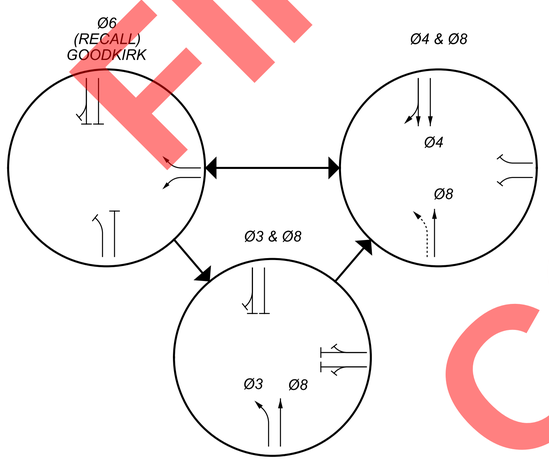
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	5	7	-	10	-	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	5	33	-	24	-	33
YELLOW CHANGE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	-	5	7	-	10	-	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	-	5	44	-	33	-	44
YELLOW CHANGE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE	(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

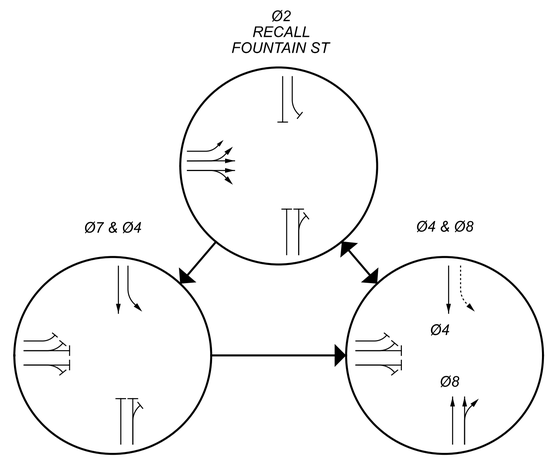
ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)	(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)	-	39	-	18	-	-	5	18
YELLOW CHANGE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / CARROLL ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			4 & 8		
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP				A	B	C	D
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	Ø4 & Ø8								
COLOR DISPLAYED:	GREEN	PHASES				-	-	-	-
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION			NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)	(SEC.)		10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)	(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I	(SEC.)		44	-	23	-	-	15	23
YELLOW CHANGE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE	(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.096 TOTAL 627

SUM-77/8-11.65/0.00
MODEL: Sheet_SurvFt - 6 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:10 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MC001.dgn

BUCHTEL AVENUE
PHASE 4

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / BUCHTEL AVE
MAINTAINING AGENCY: CITY OF AKRON

START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	-	40	-	28	-	40
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / BUCHTEL AVE
MAINTAINING AGENCY: CITY OF AKRON

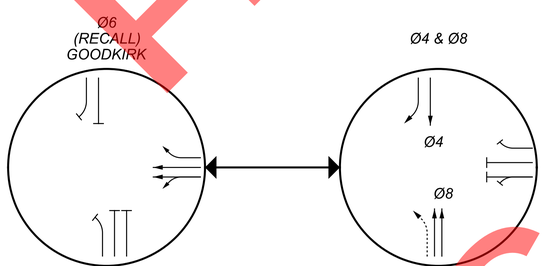
START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	-	7	-	10	-	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	-	50	-	38	-	50
YELLOW CHANGE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	-	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / BUCHTEL AVE
MAINTAINING AGENCY: CITY OF AKRON

START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)	-	25	-	20	-	-	17	20
YELLOW CHANGE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / BUCHTEL AVE
MAINTAINING AGENCY: CITY OF AKRON

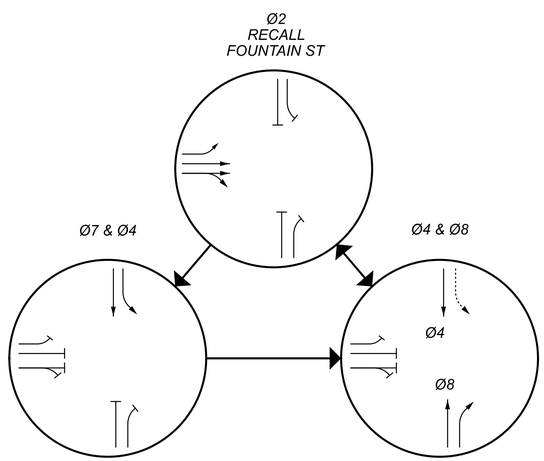
START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION				NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)		10	-	7	-	-	5	7
PASSAGE TIME (PRESET GAP)		(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)		31	-	27	-	-	24	27
YELLOW CHANGE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.097 TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt - 7 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:11 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MC001.dgn

PERKINS STREET
PHASE 4

GOODKIRK ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / PERKINS ST
MAINTAINING AGENCY: CITY OF AKRON

START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	5	10	-	10	-	10
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	10	41	-	11	-	41
YELLOW CHANGE		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / PERKINS ST
MAINTAINING AGENCY: CITY OF AKRON

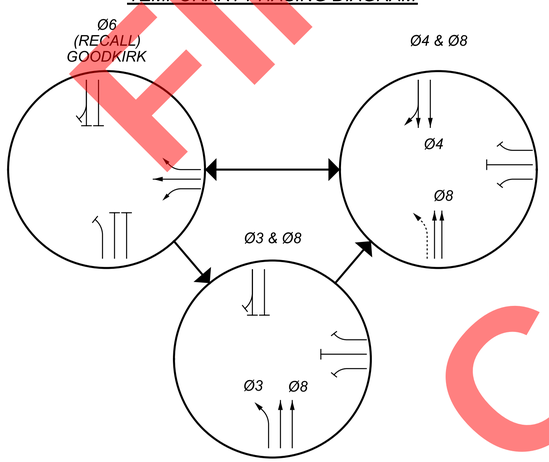
START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	-	WB LT	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	-	5	10	-	10	-	10
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
MAXIMUM GREEN I		(SEC.)	-	-	12	59	-	11	-	59
YELLOW CHANGE		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
ALL RED CLEARANCE		(SEC.)	-	-	3.0	3.0	-	3.0	-	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	-	-	-	-	YES	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FOUNTAIN ST

TEMPORARY SIGNAL TIMING CHART

ALL HOURS EXCEPT BELOW

INTERSECTION: FOUNTAIN ST / PERKINS ST
MAINTAINING AGENCY: CITY OF AKRON

START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)	-	10	-	7	-	-	10	7
PASSAGE TIME (PRESET GAP)		(SEC.)	-	-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)	-	19	-	19	-	-	24	19
YELLOW CHANGE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)	-	3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: FOUNTAIN ST / PERKINS ST
MAINTAINING AGENCY: CITY OF AKRON

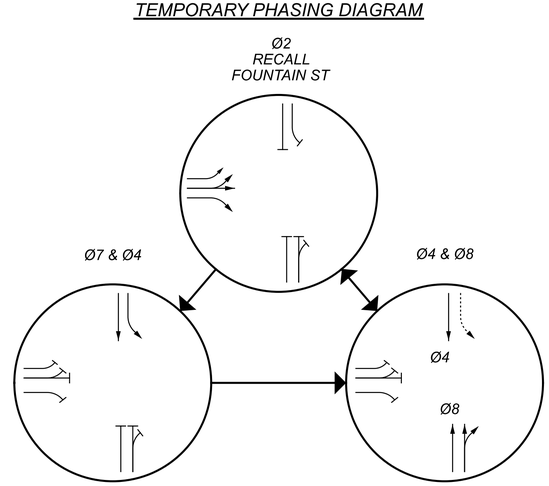
START UP
START IN: ALL-RED FLASH
TIME FOR: FLASH , ALL RED (SEC.): 9, 6
FIRST PHASE(S): Ø4 & Ø8
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 4 & 8
REST IN RED: RING 1 - | RING 2 -

	A	B	C	D
OVERLAP				
PHASES	-	-	-	-

INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION				NB	-	EB	-	-	EB LT	WB
MINIMUM GREEN (INITIAL)		(SEC.)		10	-	7	-	-	10	7
PASSAGE TIME (PRESET GAP)		(SEC.)		-	-	3.0	-	-	3.0	3.0
MAXIMUM GREEN I		(SEC.)		35	-	19	-	-	28	19
YELLOW CHANGE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
ALL RED CLEARANCE		(SEC.)		3.0	-	3.0	-	-	3.0	3.0
RECALL	MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM	(ON/OFF)	-	YES	-	-	-	-	-	-
	PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY		(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.098 | TOTAL 627

SUM-77/8-11.65/0.00

MODEL: Sheet_Surv!Ft -8 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:12 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MC001.dgn

EXCHANGE STREET / GOODKIRK STREET

PHASE 1

TEMPORARY SIGNAL TIMING CHART

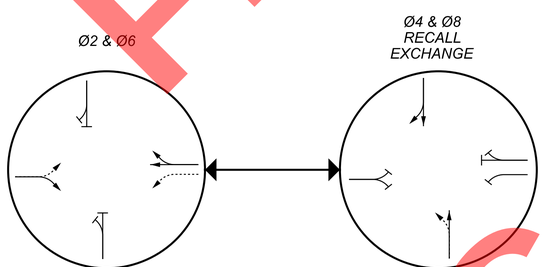
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / EXCHANGE ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES			-	-	-	-	
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	20	-	10	-	20
PASSAGE TIME (PRESET GAP)	(SEC.)	-	3.0	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	35	-	33	-	35	-	33
YELLOW CHANGE	(SEC.)	-	3.6	-	4.5	-	3.6	-	4.5
ALL RED CLEARANCE	(SEC.)	-	1.0	-	1.0	-	1.0	-	1.0
RECALL MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL MINIMUM	(ON/OFF)	-	-	-	YES	-	-	-	YES
RECALL PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / EXCHANGE ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES			-	-	-	-	
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	SB	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	20	-	10	-	20
PASSAGE TIME (PRESET GAP)	(SEC.)	-	3.0	-	3.0	-	3.0	-	3.0
MAXIMUM GREEN I	(SEC.)	-	35	-	55	-	35	-	55
YELLOW CHANGE	(SEC.)	-	3.6	-	4.5	-	3.6	-	4.5
ALL RED CLEARANCE	(SEC.)	-	1.0	-	1.0	-	1.0	-	1.0
RECALL MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL MINIMUM	(ON/OFF)	-	-	-	YES	-	-	-	YES
RECALL PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



THE CONTRACTOR SHALL WORK WITH THE CITY OF AKRON TO ADJUST SIGNAL TIMING AND PHASING ALONG SPICER STREET AT BUCHTEL AVENUE, CARROLL STREET, AND EXCHANGE STREET DURING THE PHASE 1 CLOSURE OF CARROLL STREET.

PHASE 2

TEMPORARY SIGNAL TIMING CHART

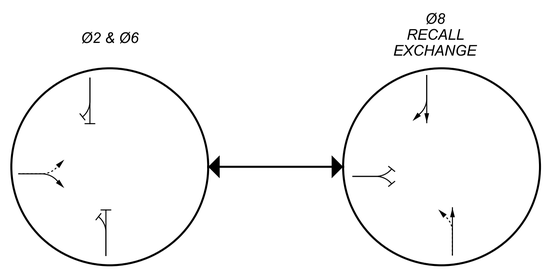
ALL HOURS EXCEPT BELOW

INTERSECTION: GOODKIRK ST / EXCHANGE ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES			-	-	-	-	
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	-	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	20	-	-	-	20
PASSAGE TIME (PRESET GAP)	(SEC.)	-	3.0	-	3.0	-	-	-	3.0
MAXIMUM GREEN I	(SEC.)	-	35	-	33	-	-	-	33
YELLOW CHANGE	(SEC.)	-	3.6	-	4.5	-	-	-	4.5
ALL RED CLEARANCE	(SEC.)	-	1.0	-	1.0	-	-	-	1.0
RECALL MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL MINIMUM	(ON/OFF)	-	-	-	YES	-	-	-	YES
RECALL PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

6 AM - 9 AM & 4 PM - 7 PM

INTERSECTION: GOODKIRK ST / EXCHANGE ST									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:		4 & 8			
		REST IN RED:		RING 1	-	RING 2	-		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): Ø4 & Ø8		PHASES			-	-	-	-	
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	EB	-	-	-	WB
MINIMUM GREEN (INITIAL)	(SEC.)	-	10	-	20	-	-	-	20
PASSAGE TIME (PRESET GAP)	(SEC.)	-	3.0	-	3.0	-	-	-	3.0
MAXIMUM GREEN I	(SEC.)	-	35	-	55	-	-	-	55
YELLOW CHANGE	(SEC.)	-	3.6	-	4.5	-	-	-	4.5
ALL RED CLEARANCE	(SEC.)	-	1.0	-	1.0	-	-	-	1.0
RECALL MAXIMUM	(ON/OFF)	-	-	-	-	-	-	-	-
RECALL MINIMUM	(ON/OFF)	-	-	-	YES	-	-	-	YES
RECALL PEDESTRIAN	(ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

TEMPORARY PHASING DIAGRAM



THE CONTRACTOR SHALL WORK WITH THE CITY OF AKRON TO ADJUST SIGNAL TIMING AND PHASING ALONG SPICER STREET AT CARROLL STREET AND EXCHANGE STREET DURING THE PHASE 2 CLOSURE OF GOODKIRK STREET.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MAINTENANCE OF TRAFFIC TEMPORARY TRAFFIC SIGNAL TIMING AND PHASING

SUM-77/8-11.65/0.00

MODEL: Sheet_SurvFt -9 PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 5:19:12 PM USER: mejohnson
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\MOT\Sheets\114865_MC001.dgn

DESIGN AGENCY
GFT

DESIGNER TCW
REVIEWER DRJ 9-18-26
PROJECT ID 114865
SHEET P.099 TOTAL 627

SHEET NUMBER												PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.020	P.021	P.022	P.108	P.109	P.110	P.111	P.112	P.119	P.126	P.511	Office Calcs	01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																							ROADWAY	
		LS										LS							201	11000	LS		CLEARING AND GRUBBING	
				1,119							13,296	8,001		362	4,734	1,318			202	23000	14,415	SY	PAVEMENT REMOVED	
				15,116								9,372				5,744			202	30000	15,116	SF	WALK REMOVED	
			2,564	651								955		1,128	1,132				202	30700	3,215	FT	CONCRETE BARRIER REMOVED	
			2,605	4,830								3,726			2,586	1,123			202	32000	7,435	FT	CURB REMOVED	
									2,148			1,439		220	358	131			202	35100	2,148	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
									110			106			4				202	35200	110	FT	PIPE REMOVED, OVER 24" DIAMETER	
			6,215	1,078								3,337		312	3,509	135			202	38000	7,293	FT	GUARDRAIL REMOVED	
			11	1								5		2	5				202	42206	12	EACH	ANCHOR ASSEMBLY REMOVED	
			17	5								11		2	9				202	47000	22	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
			1												1				202	47800	1	EACH	IMPACT ATTENUATOR REMOVED	
									12			9		2		1			202	58000	12	EACH	MANHOLE REMOVED	
									25			21			2	2			202	58100	25	EACH	CATCH BASIN REMOVED	
									5			1		1	3				202	58200	5	EACH	INLET REMOVED	
									1						1				202	58401	1	EACH	INLET ABANDONED, AS PER PLAN	
									2			2							202	58501	2	EACH	CATCH BASIN ABANDONED, AS PER PLAN	P.024
									379			274			105				SPECIAL	20270000	379	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P.024
									428			160		268					SPECIAL	20270110	428	FT	PIPE CLEANOUT, 24" AND UNDER	P.024
									1,545			1,545							SPECIAL	20270120	1,545	FT	PIPE CLEANOUT, 27" TO 48"	P.024
										2,210		2,210							202	75000	2,210	FT	FENCE REMOVED	
										1						1			202	75250	1	EACH	GATE REMOVED	
				48												48			202	98200	48	FT	REMOVAL MISC.::RETAINING WALL	P.022
								27,271				15,209		2,219	8,459	1,384			203	10000	27,271	CY	EXCAVATION	
								54,358				12,880		1,337	5,958	34,183			203	20000	54,358	CY	EMBANKMENT	
		647						356			7,355	5,898		88	2,131	241			204	10000	8,358	SY	SUBGRADE COMPACTION	
	6,314											6,314							204	13001	6,314	CY	EXCAVATION OF SUBGRADE, AS PER PLAN	P.021
	6,314											6,314							204	30010	6,314	CY	GRANULAR MATERIAL, TYPE B	
	14											14							204	45000	14	HOUR	PROOF ROLLING	
	734											589		29	101	15			206	10500	734	TON	CEMENT	
	28,080											22,449		1,126	3,942	563			206	11000	28,080	SY	CURING COAT	
	26,290											21,016		1,055	3,692	527			206	15010	26,290	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
	1,790											1,431		72	251	36			206	15020	1,790	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
	68											2	4	10	52				209	15000	68	STA	RESHAPING UNDER GUARDRAIL	
	165											2	12	21	130				209	60201	165	STA	LINEAR GRADING, AS PER PLAN	P.021
					3,463	2,413	126					113	388	775	4,713	13			606	15050	6,002	FT	GUARDRAIL, TYPE MGS	
						5								2	3				606	26150	5	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
					1	2								1	2				606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					3	4	3					2		1	6	1			606	35002	10	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					4	1	1								5	1			606	35102	6	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
						1						1							606	60040	1	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL	
										1,261		1,261							607	23000	1,261	FT	FENCE, TYPE CLT	
										1		1							607	61200	1	EACH	GATE, TYPE CLT	
										1,261		1,261							607	70000	1,261	FT	FENCELINE SEEDING AND MULCHING	
						3,247	7,611					1,141				9,717			608	13000	10,858	SF	6" CONCRETE WALK	
						23						23							608	13001	23	SF	6" CONCRETE WALK, AS PER PLAN "A"	P.022
						593						593							608	13001	593	SF	6" CONCRETE WALK, AS PER PLAN "B"	P.022
						345	756					935				166			608	52000	1,101	SF	CURB RAMP	
											534	534							613	41251	534	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 1), AS PER PLAN	P.022
					236									236					622	10100	236	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	

GENERAL SUMMARY

FINAL TRACINGS
NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 11485

SHEET P.100 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 2:50:27 PM USER: burnsk1837
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\1114865_GG001.dgn

SHEET NUMBER										PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.020	P.022	P.110	P.111	P.112	P.119	P.126	P.130	P.131	Office Calcs	01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																					ROADWAY (CONT.)	
			698									698					622	10101	698	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN	P.022
		2,115								2,115							622	10140	2,115	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
		1,457	2,012	2,965						4,297		320	1,817				622	10161	6,434	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN"A"	P.022
		44								44							622	10161	44	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN"B"	P.022
	25									25							622	10161	25	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN"C"	P.022
	30													30			622	10161	30	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN"D"	P.022
		4	2	1								2	5				622	25000	7	EACH	CONCRETE BARRIER END SECTION, TYPE D	
		6										6					622	25006	6	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1	
		14								14							622	25014	14	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	
		13	17	34						53			11				622	25050	64	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
		1								1							622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "A"	
		198	389	1,520						1,909			198				622	90000	2,107	FT	BARRIER, MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB	P.022
6										6							623	38500	6	EACH	MONUMENT ASSEMBLY, TYPE C	
										LS							623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
										LS							623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
																					EROSION CONTROL	
									3,115	2,469			646				601	21001	3,115	SY	CONCRETE SLOPE PROTECTION, AS PER PLAN	P.021
8												4	4				601	21050	8	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
2										1				1			659	00100	2	EACH	SOIL ANALYSIS TEST	
1,232										246		246	616	124			659	00300	1,232	CY	TOPSOIL	
					16,851					8,196		1,875	5,936	844			659	10000	16,851	SY	SEEDING AND MULCHING	
555										111		111	278	55			659	14000	555	SY	REPAIR SEEDING AND MULCHING	
555										111		111	278	55			659	15000	555	SY	INTER-SEEDING	
1.55										..31		0.31	0.78	0.46			659	20000	1.55	TON	COMMERCIAL FERTILIZER	
2.3										0.46		0.46	1.15	0.23			659	31000	2.3	ACRE	LIME	
62										12		12	31	7			659	35000	62	MGAL	WATER	
25										5		5	13	2			659	40000	25	MSF	MOWING	
								LS		LS							832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
								LS		LS							832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
								LS		LS							832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
								910,000		682,500			227,500				832	30000	910,000	EACH	EROSION CONTROL	
																					DRAINAGE	
200							201			191		105	105				605	13410	401	FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
							19,980			16,515		183	3,221	61			605	14020	19,980	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
50							902			766		36	150				611	00510	952	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
						1,300				1,225		13		62			611	04400	1,300	FT	12" CONDUIT, TYPE B	
						174				167		7					611	04600	174	FT	12" CONDUIT, TYPE C	
						76								76			611	05200	76	FT	12" CONDUIT, TYPE F	
						2,622				1,521		684	417				611	05900	2,622	FT	15" CONDUIT, TYPE B	
						44				44							611	05901	44	FT	15" CONDUIT, TYPE B, AS PER PLAN	P.024
						287				283			4				611	06100	287	FT	15" CONDUIT, TYPE C	
						76						66		10			611	07400	76	FT	18" CONDUIT, TYPE B	
						258				258							611	07600	258	FT	18" CONDUIT, TYPE C	
						93				93							611	08201	93	FT	18" CONDUIT, TYPE F, AS PER PLAN	P.024
						51				51							611	08201	51	FT	18" CONDUIT, TYPE F, AS PER PLAN, WITH TEE	P.024
						32					32						611	08900	32	FT	21" CONDUIT, TYPE B	
						51				51							611	09701	51	FT	21" CONDUIT, TYPE F, AS PER PLAN	P.024

FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL SUMMARY

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 11485

SHEET P.101 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 2:50:43 PM USER: burnsk1837
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SHEET NUMBER											PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.020	P.021	P.022	P.023	P.110	P.111	P.112	P.119	P.126	P.127	Office Calcs	01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																						DRAINAGE (CONT.)	
								4						4				611	10400	4	FT	24" CONDUIT, TYPE B	
								106			106							611	16400	106	FT	36" CONDUIT, TYPE B	
								23			18			3	2			611	98150	23	EACH	CATCH BASIN, NO. 3	
								4			3			1				611	98180	4	EACH	CATCH BASIN, NO. 3A	
								4			4							611	98370	4	EACH	CATCH BASIN, NO. 6	
4											3			1				611	99710	4	EACH	PRECAST REINFORCED CONCRETE OUTLET	
								2						2				611	98371	2	EACH	CATCH BASIN, NO. 6, AS PER PLAN	P.024
								3			3							611	98410	3	EACH	CATCH BASIN, NO. 8	
								5			4		1					611	98470	5	EACH	CATCH BASIN, NO. 2-2B	
								7						7				611	98630	7	EACH	CATCH BASIN ADJUSTED TO GRADE	
								1			1							611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
								10					9	1				611	99100	10	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	
								5			5							611	99104	5	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C	
								1			1							611	99110	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1	
									20		18		1	1				611	99114	20	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
									3		2			1				611	99150	3	EACH	INLET ADJUSTED TO GRADE	
									12		10				2			611	99574	12	EACH	MANHOLE, NO. 3	
									1		1							611	99574	1	EACH	MANHOLE, NO. 3 (60" ID)	
									6		5		1					611	99575	6	EACH	MANHOLE, NO. 3, AS PER PLAN	P.024
									2		2							611	99575	2	EACH	MANHOLE, NO. 3, AS PER PLAN (60" I.D.)	P.024
									2		2							611	99654	2	EACH	MANHOLE ADJUSTED TO GRADE	
									29		2		15	12				611	99661	29	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	P.024
									1,103		1,103							899	10000	1,103	FT	CURED-IN-PLACE PIPE LINER 36" DIAMETER	
									43				43					899	10000	43	FT	CURED-IN-PLACE PIPE LINER 15" DIAMETER	
																						PAVEMENT	
										120,677	1,513	3,068	26,335	89,761				254	01000	120,677	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VAR. DEPTH (0"-3")	
		144					16			1,170	1,043				287			301	56000	1,330	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
										7,525	6,272		106	1,147				302	56000	7,525	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
		109					60			6,033	5,009		76	824	293			304	20000	6,202	CY	AGGREGATE BASE	
		107					11			16,023	4,720	393	2,312	8,526	190			407	20000	16,141	GAL	NON-TRACKING TACK COAT	
										768	22	46	109	591				408	10000	768	GAL	PRIME COAT	
										8,839	1,808	140	1,495	5,396				441	00100	8,839	CY	ANTI-SEGREGATION EQUIPMENT	
							3			183	138				48			441	70101	186	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN	
							3			228	175				56			441	70300	231	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
										82	3	5	12	62				441	70800	82	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL)	
										10,952	1,277	166	1,517	7,992				442	10101	10,952	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446), AS PER PLAN	P.021
										6,536	1,375	128	1,114	3,919				442	10300	6,536	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	
										88				88				SPECIAL	45131000	88	FT	PRESSURE RELIEF JOINT, TYPE B	P.023
										22	22							452	09010	22	SY	4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
										274					274			452	12010	274	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
				2,045										2,045				609	24510	2,045	FT	CURB, TYPE 4-C	
					945	1,325					120			869	1,281			609	26000	2,270	FT	CURB, TYPE 6	
						226									226			609	71000	226	SF	CONCRETE MEDIAN	
					94	188									282			609	71001	282	SF	CONCRETE MEDIAN, AS PER PLAN	P.020
	475										4	35	56	380				617	10101	475	CY	COMPACTED AGGREGATE, AS PER PLAN	P.021
										8	1	1	3	3				618	40600	8	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	

TRACINGS FOR FINAL NOT FOR CONSTRUCTION

GENERAL SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_Surv1 PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 2:50:57 PM USER: burnsk1837
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DESIGN AGENCY
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DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 11485

SHEET P.102 TOTAL 627

SHEET NUMBER									PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.233	P.246	P.289							01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																				WATER WORK	
100									100							202	35100	100	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
6									6							202	75610	6	EACH	VALVE BOX REMOVED	
7									5				2			638	08706	7	EACH	8" CUTTING-IN SLEEVE	
6									4				2			638	10480	6	EACH	FIRE HYDRANT REMOVED	
1,162									793				369			SPECIAL	63820088	1,162	FT	8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS (CITY OF AKRON)	P.226
196													196			SPECIAL	63820458	196	FT	18" STEEL PIPE ENCASEMENT, OPEN CUT (CITY OF AKRON)	P.230
11									7				4			SPECIAL	63820554	11	EACH	8" GATE VALVE WITH VALVE BOX (CITY OF AKRON)	P.226
5									4				1			SPECIAL	63820750	5	EACH	6" FIRE HYDRANT (CITY OF AKRON)	P.226
																				SANITARY SEWER	
60									60							202	35100	60	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
2									2							202	58000	2	EACH	MANHOLE REMOVED	
441													441			611	01800	441	FT	8" CONDUIT, TYPE B (FOR SANITARY)	
579									579							611	04400	579	FT	12" CONDUIT, TYPE B (FOR SANITARY)	
3									3							611	99571	3	EACH	MANHOLE, NO. 2, AS PER PLAN	P.231
1									1							611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE (FOR SANITARY)	
																				LIGHTING	
		34							34							625	00450	34	EACH	CONNECTION, FUSED PULL APART	
		10							10							625	00480	10	EACH	CONNECTION, UNFUSED PERMANENT	
		11							11							625	10490	11	EACH	LIGHT POLE, CONVENTIONAL, A12B35	
		1							1							625	10494	1	EACH	LIGHT POLE, LOW MAST, ALM40	
		5							5							625	10494	5	EACH	LIGHT POLE, LOW MAST, ALM50	
		24							24							625	10600	24	EACH	LIGHT POLE ANCHOR L-BOLTS	
		4							4							625	14100	4	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
		13							13							625	14306	13	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP	
		8,973							8,973							625	23201	8,973	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE, AS PER PLAN (ALUMINUM WIRE)	P.288
		3,120							3,120							625	23401	3,120	FT	NO. 10 AWG POLE AND BRACKET CABLE, AS PER PLAN (ALUMINUM WIRE)	P.288
		575							575							625	25200	575	FT	CONDUIT, 1-1/4", 725.04	
		2,566							2,566							625	25400	2,566	FT	CONDUIT, 2", 725.04	
		28							28							625	25500	28	FT	CONDUIT, 3", 725.04	
		11							11							625	26253	11	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V)	P.288
		6							6							625	26273	6	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V)	P.288
		2							2							625	27502	2	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED) (TYPE II, 240V)	
		5							5							625	27505	5	EACH	LUMINAIRE, TUNNEL, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V)	P.288
		891							891							625	29400	891	FT	TRENCH IN PAVED AREA	
		7							7							625	29900	7	EACH	JUNCTION BOX	
		11							11							625	29930	11	EACH	MEDIAN JUNCTION BOX	
		2							2							625	30700	2	EACH	PULL BOX, 725.08, 18"	
	11	18							29							625	32000	29	EACH	GROUND ROD	
		2							2							625	34001	2	EACH	POWER SERVICE, AS PER PLAN	P.288
		841							841							625	36011	841	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	P.288
		LS											LS			625	37000	LS		SERVICE TO UNDERPASS LIGHTING	
		10							10							625	75400	10	EACH	LIGHT POLE REMOVED	
		10							10							625	75500	10	EACH	LIGHT POLE FOUNDATION REMOVED	
		1							1							625	75510	1	EACH	POWER SERVICE REMOVED	
		1							1							625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL, LCC-GK	
		2							2							625	98000	2	EACH	LIGHTING, MISC.: CONTROL CENTER, REUSE CIRCUIT	P.288

FINAL TRACINGS
NOT FOR CONSTRUCTION

GENERAL SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_Surv1 PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 2:51:10 PM USER: burnsk1837
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DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 11485

SHEET P.103 | TOTAL 627

SHEET NUMBER							PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.246	P.247	P.248	P.282				01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																		TRAFFIC SURVEILLANCE	
			80				80							625	29400	80	FT	TRENCH IN PAVED AREA	
			1				1							625	30700	1	EACH	PULL BOX, 725.08, 18"	
			2				2							625	31510	2	EACH	PULL BOX REMOVED	
			552				552							625	36010	552	FT	UNDERGROUND WARNING MARKING TAPE	
			7				7							809	00500	7	EACH	ITS JUNCTION BOX, 17x30x12 INCHES	
			3				3							809	02000	3	EACH	32" ITS PULL BOX WITH PAD AND STANDARD LID ASSEMBLY, TYPE 2	
			338				338							809	24000	338	FT	CONDUIT, MULTICELL, JACKED OR DRILLED	
			3,160				3,160							809	24510	3,160	FT	CONDUIT, 2", MULTICELL, WITH 4 - 10/8MM INNERDUCTS	
			1				1							809	56000	1	EACH	ITS POWER SERVICE, POLE MOUNTED, 240/480V, 60 AMP	
			1				1							809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, PTZ	
			1				1							809	61040	1	EACH	CCTV POLE, 70' TALL	
			1				1							809	61090	1	EACH	CCTV LOWERING UNIT	
			1				1							809	65000	1	EACH	ITS CABINET - GROUND MOUNTED	
			1				1							809	69122	1	EACH	ATC CONTROLLER	
																		TRAFFIC CONTROL	
		1,514					1,514							621	00101	1,514	EACH	RPM, AS PER PLAN	P.021
		1,407					1,407							621	54000	1,407	EACH	RAISED PAVEMENT MARKER REMOVED	
	180						180							630	02100	180	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
104							104							630	03100	104	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
138							138							630	06400	138	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
8							8							630	09000	8	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
30							30							630	09102	30	EACH	SURFACE PREPARATION, NEW SUPPORT SECTION	
30							30							630	09106	30	EACH	COATING, EPOXY INTERMEDIATE COAT, SUPPORT SECTION	
30							30							630	09108	30	EACH	COATING, URETHANE TOP COAT, SUPPORT SECTION	
30							30							630	09120	30	EACH	COATING, ORGANIC ZINC PRIME COAT, SUPPORT SECTION	
2							2							630	72220	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-9.31, DESIGN 4	
8							8							630	72410	8	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 1	
404							404							630	80100	404	SF	SIGN, FLAT SHEET	
	24						24							630	80100	24	SF	SIGN, FLAT SHEET, 730.20	
88							88							630	80200	88	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
5,653							5,653							630	80224	5,653	SF	SIGN, OVERHEAD EXTRUSHEET	
28							28							630	80300	28	SF	SIGN, OVERLAY	
14							14							630	81020	14	EACH	CONCRETE MEDIAN BARRIER SIGN BRACKET	
9							9							630	84010	9	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50	
8							8							630	84500	8	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
9							9							630	84510	9	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
7							7							630	84900	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
23							23							630	86002	23	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
7							7							630	87000	7	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE	
4							4							630	87100	4	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	
17							17							630	87400	17	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
1							1							630	87500	1	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
6							6							630	89702	6	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	
2							2							630	89804	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	
		0.02					0.02							646	10110	0.02	MILE	LANE LINE, 6"	
		0.01					0.01							646	10200	0.01	MILE	CENTER LINE	
		12,055					12,055							646	10310	12,055	FT	CHANNELIZING LINE, 12"	
		64					64							646	10400	64	FT	STOP LINE	
		64					64							646	10520	64	FT	CROSSWALK LINE, 24"	
		4					4							646	20300	4	EACH	LANE ARROW	
		6,711					6,711							646	20504	6,711	FT	DOTTED LINE, 6"	
		9.81					9.81							807	99110	9.81	MILE	PAVEMENT MARKING, MISC.: WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 8"	
		9.65					9.65							807	99110	9.65	MILE	PAVEMENT MARKING, MISC.:WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 8"	
		9.65					9.65							850	10020	9.65	MILE	GROOVING FOR 8" RECESSED PAVEMENT MARKING, (ASPHALT) EDGE LINE	
		9.81					9.81							850	10020	9.81	MILE	GROOVING FOR 8" RECESSED PAVEMENT MARKING, (ASPHALT) LANE LINE	

FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 2:51:25 PM USER: burnsk1837
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DESIGN AGENCY
ARCADIS
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AKRON, OHIO 44308
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DESIGNER
SMG

REVIEWER
KDK 05/21/26

PROJECT ID
11485

SHEET P.104 | TOTAL 627

SHEET NUMBER									PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.267	P.268								01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																				TRAFFIC SIGNALS	
2									2							625	00450	2	EACH	CONNECTION, FUSED PULL APART	
431									431							625	23200	431	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
329	256								585							625	25408	585	FT	CONDUIT, 2", 725.051	
473	14								487							625	25504	487	FT	CONDUIT, 3", 725.051	
	16								16							625	25604	16	FT	CONDUIT, 4", 725.051	
611	185								796							625	29400	796	FT	TRENCH IN PAVED AREA	
	2								2							625	29920	2	EACH	STRUCTURE JUNCTION BOX	
5	1								6							625	30700	6	EACH	PULL BOX, 725.08, 18"	
4	1								5							625	32000	5	EACH	GROUND ROD	
344	164								508							625	36010	508	FT	UNDERGROUND WARNING MARKING TAPE	
6	2								8							632	03900	8	EACH	VEHICULAR SIGNAL HEAD, INSTALLATION ONLY	
4	1								4	1						632	20731	5	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	
6	1								7							632	25000	7	EACH	COVERING OF VEHICULAR SIGNAL HEAD	P.264
4	1								5							632	25010	5	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
3	1								4							632	26001	4	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN	P.264
235	645								880							632	40200	880	FT	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	
664	645								1,309							632	40500	1,309	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
417	581								998							632	40700	998	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
2	1								3							632	64010	3	EACH	SIGNAL SUPPORT FOUNDATION	
2									2							632	64020	2	EACH	PEDESTAL FOUNDATION	
2	1								3							632	64950	3	EACH	TEST HOLE PERFORMED	
76	100								176							632	68200	176	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
100	100								200							632	69800	200	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
1									1							632	70000	1	EACH	POWER SERVICE	
	1								1							632	79131	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	P.264
2									2							632	89901	2	EACH	PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN	
1	1								2							632	90100	2	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	
3	1								4							632	90104	4	EACH	REUSE OF TRAFFIC CONTROL ITEM, PREEMPTION	
3	1								4							632	90104	4	EACH	REUSE OF TRAFFIC CONTROL ITEM, STREET NAME SIGN	
3	1								4							632	90104	4	EACH	REUSE OF TRAFFIC CONTROL ITEM, VIDEO DETECTION	
	2								2							632	90200	2	EACH	REUSE OF VEHICULAR SIGNAL HEAD	
2									2							632	90207	2	EACH	REUSE OF SIGNAL SUPPORT, AS PER PLAN	P.264
1	9								10							632	90400	10	EACH	SIGNALIZATION, MISC.: PULL BOX, POLYMER CONCRETE, 24"X36"X24"	
	1								1							632	90400	1	EACH	SIGNALIZATION, MISC.: PULL BOX, POLYMER CONCRETE, 30"X48"X24"	
1	1								2							632	90400	2	EACH	SIGNALIZATION, MISC.:SIGNAL PERFORMANCE TEST AND SYSTEM CHECKS	P.264
552	1,981								2,533							632	90500	2,533	FT	SIGNALIZATION, MISC.: 3" SCHEDULE 40 PVC CONDUIT, ENCASED & NOT ENCASED	
	1								1							633	67100	1	EACH	CABINET FOUNDATION	
	1								1							633	67200	1	EACH	CONTROLLER WORK PAD	
	1								1							633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	P.266
	1								1							633	99000	1	EACH	CONTROLLER ITEM, MISC.:SIGNAL CONTROLLER WITH CABINET	P.265
																				RETAINING WALL 1 SEE SHEET P.302	
																				RETAINING WALL 2 SEE SHEET P.308	
																				RETAINING WALL 3 SEE SHEET P.315	
																				RETAINING WALL 4 SEE SHEET P.324	
																				RETAINING WALL 5 SEE SHEET P.329	
																				RETAINING WALL 6 SEE SHEET P.333	
																				RETAINING WALL 7 SEE SHEET P.340	
																				RETAINING WALL 8 SEE SHEET P.343	
																				RETAINING WALL 9 SEE SHEET P.349	
																				RETAINING WALL 10 SEE SHEET P.356	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GENERAL SUMMARY

SUM-077/008-11.65/00.00

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REVIEWER
KDK 05/21/26

PROJECT ID
11485

SHEET P.105 TOTAL 627

SHEET NUMBER							PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.025	P.026	P.028	P.030	P.031	P.032	P.057	01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																		STRUCTURE 20 FOOT SPAN AND UNDER (SFN 7700091) SEE SHEET P.365	
																		STRUCTURE OVER 20 FOOT SPAN (SFN 7700156) SEE SHEET P.381	
																		STRUCTURE OVER 20 FOOT SPAN (SFN 7700180) SEE SHEET P. 418	
																		STRUCTURE OVER 20 FOOT SPAN (SFN 7700372) SEE SHEET P.440	
																		MAINTENANCE OF TRAFFIC	
	75			150			225							611	96601	225	FT	CONDUIT, BORED OR JACKED, AS PER PLAN, 15"	P.031
				21			17		4					611	97001	21	FT	SLOTTED DRAIN, TYPE 1, AS PER PLAN, 15"	P.031
	150			985			1,135							611	97011	1,135	FT	SLOTTED DRAIN, TYPE 2, AS PER PLAN, 15"	P.031
	1			6			7							611	99500	7	EACH	INLET, MISC.: TEMPORARY INLET MODIFICATION	P.084
		1,500					1,200		300					614	11110	1,500	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						22,447	17,958		4,489					614	11630	22,447	FT	INCREASED BARRIER DELINEATION	
						16	13		3					614	12380	16	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	P.028
				LS			LS		LS					614	12420	LS		DETOUR SIGNING	P.031
			8				7		1					614	12484	8	EACH	WORK ZONE INCREASED PENALTIES SIGN	
						12	10		2					614	12756	12	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
						10,642	8,514		2,128					614	12801	10,642	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	P.027
125							100		25					614	13000	125	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
						891	713		178					614	13310	891	EACH	BARRIER REFLECTOR, TYPE 1 BI-DIRECTIONAL	P.028
						3,137	2,510		627					614	13310	3,137	EACH	BARRIER REFLECTOR, TYPE 1 ONE WAY	P.028
						1,283	1,025		258					614	13350	1,283	EACH	OBJECT MARKER, ONE WAY	P.027
						271	217		54					614	13360	271	EACH	OBJECT MARKER, TWO WAY	
			162				130		32					614	18601	162	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.030
				2			1.6		0.4					614	20010	2	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
						11.22	9		2.22					614	20056	11.22	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
				1			0.8		0.2					614	20560	1	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
				2			1.6		0.4					614	22010	2	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
				0.24		20.78	16.9		4.12					614	22056	21.02	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
				1			0.8		0.2					614	22360	1	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
				2,000			1,600		400					614	23010	2,000	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
						60,834	48,668		12,166					614	23110	60,834	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
				1,000			800		200					614	23690	1,000	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
				1,000			800		200					614	24000	1,000	FT	WORK ZONE DOTTED LINE, CLASS I	
				720		6,456	5,741		1,435					614	24102	7,176	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
				500			400		100					614	24610	500	FT	WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	
				250			200		50					614	26000	250	FT	WORK ZONE STOP LINE, CLASS I	
														615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	P.028
						2,818	2,254.4		563.6					615	20000	2,818	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
					2,000		1,600		400					615	25001	2,000	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 1	P.032
					2,000		1,600		400					615	25001	2,000	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 2	P.032
					500		400		100					615	25001	500	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 3	P.032
		250					200		50					616	10000	250	MGAL	WATER	
		20,000					16,000		4,000					618	40101	20,000	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	P.028
						6,780	5,419		1,361					622	41011	6,780	FT	PORTABLE BARRIER, 50", AS PER PLAN	P.031
						26,720	21,382		5,338					622	41100	26,720	FT	PORTABLE BARRIER, UNANCHORED	
			144				116		28					808	18700	144	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	P.030

FINAL NOT FOR CONSTRUCTION
TRACINGS

GENERAL SUMMARY

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DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 11485

SHEET NUMBER							PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.023							01/IMS	02/IMS	03/NHS	04/NHS	05/IMS	06/NHS	07/NHS						
																		INCIDENTALS	
							125,000							100	51100	125,000	EACH	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION BOARD	
							LS												
							LS							108	10000	LS		CPM PROGRESS SCHEDULE	
							6,250							SPECIAL	11110100	6,250	EACH	DEPARTMENTS SHARE FACILITATED PARTNERING COSTS	
							LS							614	11000	LS		MAINTAINING TRAFFIC	
42							42							619	16021	42	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN	P.023
							LS							623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
							LS							624	10000	LS		MOBILIZATION	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GENERAL SUMMARY

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DESIGNER
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REVIEWER
KDK 05/21/26

PROJECT ID
11485

SHEET P.107 TOTAL 627

REF NO.	SHEET RANGE		STATION RANGE		LOCATION	202 PAVEMENT REMOVED	202 WALK REMOVED	202 CONCRETE BARRIER REMOVED	202 GUARDRAIL REMOVED	202 ANCHOR ASSEMBLY REMOVED	202 BRIDGE TERMINAL ASSEMBLY REMOVED	202 IMPACT ATTENUATOR REMOVED	202 CURB REMOVED	202 REMOVAL MISC.: RETAINING WALL
						SY	SF	FT	FT	EACH	EACH	EACH	FT	FT
R-1	P.134		7297+41.00	7301+25.00	RT BL RAMP T								384	
R-2	P.134		7297+41.00	7301+25.00	RT BL RAMP T				384					
R-3	P.135	P.136	4307+28.88	4317+64.50	RT CL SR8				936		2			
R-4	P.135	P.136	4307+28.88	4319+21.75	RT CL SR8								1193	
R-5	P.136	P.137	4319+82.38	4329+49.33	RT CL SR8								967	
R-6	P.136	P.137	4319+81.00	4328+93.75	RT CL SR8				813	1	1			
R-10	P.137		4327+95.00	4328+10.00	CL SR8			15						
R-11	P.137		4328+30.00	4328+45.00	CL SR8			15						
R-16	P.137	P.138	499+46.00	332+19.72	RT RAMP U			914						
R-7	P.137		4327+57.00		LT CL SR8							1		
R-8	P.137		4326+83.00	4327+83.28	LT CL SR8			100						
R-20	P.138		332+81.00	333+36.00	CL SR8			60						
R-21	P.138		333+46.00	334+01.00	CL SR8			60						
R-23	P.138		332+36.75	335+11.75	RT CL SR8				250	1	1			
R-24	P.138		334+76.00	335+18.00	RT CL SR8								42	
R-25	P.138		335+03.00	335+19.00	RT CL SR8			16						
R-26	P.138		335+66.00	336+19.00	LT CL SR8			53						
R-27	P.138	P.139	336+77.00	346+12.00	RT CL SR8				835		2			
R-28	P.138		336+19.00	346+17.00	LT CL SR8				898		2			
R-29	P.138		336+19.00	336+38.00	LT CL SR8								19	
R-31	P.139		347+94.00	352+43.00	LT CL SR8				374	1	1			
R-32	P.140		-0+03.25	5+73.81	RT RAMP S				502	1	1			
R-33	P.140	P.141	357+56.00	358+93.00	LT CL SR8				37	2				
R-36	P.141		358+64.00	366+45.00	RT CL SR8			102	479	1	3			
R-36A	P.141		359+65.00	360+55.00	CL SR8			90						
R-37	P.141	P.142	367+23.00	370+47.00	LT CL SR8				224	1	1			
R-38	P.141		361+67.00	366+58.00	LT CL SR8			491						
R-40	P.141		363+00.00	363+20.00	CL SR8			20						
R-41	P.141		363+51.00	364+41.00	CL SR8			90						
R-42	P.142		371+93.00	372+78.00	CL SR8			85						
R-43	P.142		375+08.00	375+93.00	CL SR8			85						
R-43A	P.142		376+90.00	377+99.69	CL SR8			110						
R-44	P.142		13+11.46	15+93.67	RT RAMP Q				182	1	1			
R-45	P.143		387+77.00	389+65.00	LT CL SR8				88	1	1			
R-46	P.143		387+11.33	388+02.00	CL SR8			91						
R-46A	P.143		386+13.90	386+91.33	CL SR8			77						
R-47A	P.143		380+00.30	380+90.00	CL SR8			90						
R-48	P.144		389+97.00	393+09.00	RT CL SR8				212	1	1			
01/IMS FUNDING SPLIT TOTALS								544	2144	3	5		19	
03/NHS FUNDING SPLIT TOTALS								888	562	3	3			
04/NHS FUNDING SPLIT TOTALS								1132	3509	5	9	1	2586	
TOTALS CARRIED TO GENERAL SUMMARY								2564	6215	11	17	1	2605	

TRACINGS
NOT FOR
CONSTRUCTION
FINAL

ROADWAY SUB SUMMARY

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REVIEWER KDK 06-01-26

PROJECT ID 114865

SHEET P.108 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 1:41:06 PM USER: burnsk1837
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REF NO.	SHEET RANGE		STATION RANGE		LOCATION	202 PAVEMENT REMOVED	202 WALK REMOVED	202 CONCRETE BARRIER REMOVED	202 GUARDRAIL REMOVED	202 ANCHOR ASSEMBLY REMOVED	202 BRIDGE TERMINAL ASSEMBLY REMOVED	202 IMPACT ATTENUATOR REMOVED	202 CURB REMOVED	202 REMOVAL MISC.: RETAINING WALL
						SY	SF	FT	FT	EACH	EACH	EACH	FT	FT
R-49	P.150		502+14.00	502+42.00	LT BL GOODKIRK	53								
R-50	P.150	P.151	500+62.00	504+30.00	LT BL GOODKIRK		2095							
R-51	P.150	P.151	500+61.00	504+35.00	LT BL GOODKIRK								401	
R-52	P.150		40+92.00	41+48.00	RT CL EXCHANGE		1113						46	
R-53	P.150	P.151	500+35	509+04.00	RT BL GOODKIRK								876	
R-55	P.151	P.152	504+60.00	508+60.00	LT BL GOODKIRK								448	
R-56	P.151	P.152	504+64.00	508+57.00	LT BL GOODKIRK		2272							
R-57	P.152		510+77.00	511+16.00	LT BL GOODKIRK	60								
R-58	P.152		508+88.00	511+97.00	LT BL GOODKIRK								339	
R-59	P.152		508+96.00	511+95.00	LT BL GOODKIRK		1730							
R-60	P.152	P.153	512+20.00	514+96.00	LT BL GOODKIRK		1497							
R-61	P.152	P.153	512+18.00	514+94.00	LT BL GOODKIRK								303	
R-63	P.153		514+91.00	515+11.00	RT BL GOODKIRK		305							
R-12	P.145		103+46.00	106+98.00	RT CD				252		2			
R-13	P.145	P.146	106+98.00	111+66.00	RT CD			468						
R-14	P.145		103+46.00	106+98.00	RT CD								352	
R-15	P.145		103+25.00	103+46.00	RT CD			21						
R-9	P.145		102+10.00	102+83.86	RT CD			77						
R-18	P.146		111+66.12	114+37.50	LT CD				171		2			
R-19	P.146		111+66.12	114+37.50	LT CD								271	
R-22	P.146		114+37.00	115+22.00	LT CL SR8			85						
R-34	P.148	P.149	5+08.00	11+27.00	LT SB ENT				519	1	1			
R-35	P.148	P.149	5+24.00	11+95.00	LT SB ENT								671	
R-62	P.154		514+30.00	515+11.31	RT CL GOODKIRK				100					
R-62A	P.154		12+40.21	12+57.69	LT CL CARROLL				35					
R-64	P.154		14+47.00	14+72.00	RT CL CARROLL								43	
R-65	P.154		14+46.00	14+88.00	LT CL CARROLL		786							
R-66	P.154		14+46.00	14+72.00	RT CL CARROLL		675							
R-75	P.154		14+01.50	14+70.00	LT CL CARROLL								69	
R-76	P.154		12+32.05	12+68.89	LT CL CARROLL								48	
R-77	P.154		12+31.88	12+51.65	LT CL CARROLL		475							
R-67	P.155		8+86.00	9+61.00	LT CL BEACON		450							
R-68	P.155		9+33.00	9+60.00	RT CL BEACON									48
R-70	P.155	P.156	9+62.00	13+83.00	LT CL BEACON		3533							
R-71	P.155	P.156	8+88.00	13+99.00	LT CL BEACON								489	
R-72	P.155	P.156	9+42.00	13+98.00	RT CL BEACON								474	
R-73	P.155		9+54.00	9+83.00	RT CL BEACON		185							
R-69	P.156		11+21.00	12+67.00	RT CL BEACON	906								
R-74	P.156		12+81.00	13+33.00	RT CL BEACON	98								
R-17			NOT USED											
R-30			NOT USED											
R-47			NOT USED											
01/IMS FUNDING SPLIT TOTALS						114	9012	651	943	1	5		3707	
05/IMS FUNDING SPLIT TOTALS						1005	6104	0	135	0	0		1123	48
TOTALS CARRIED TO GENERAL SUMMARY						1119	15116	651	1078	1	5		4830	48

FINAL TRACINGS
NOT FOR
CONSTRUCTION

ROADWAY SUB SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvF1 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 1:41:19 PM USER: burnsk1837
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DESIGNER
SMG

REVIEWER
KDK 06-01-26

PROJECT ID
114865

SHEET P.109 | TOTAL 627

ROADWAY SUB SUMMARY

REF NO.	SHEET RANGE		STATION RANGE		LOCATION	606 GUARDRAIL, TYPE MGS FT	606 ANCHOR ASSEMBLY, MGS TYPE E EACH	606 ANCHOR ASSEMBLY, MGS TYPE T EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	606 IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL EACH	608 6" CONCRETE WALK SF	608 6" CONCRETE WALK, AS PER PLAN "A" SF	608 6" CONCRETE WALK, AS PER PLAN "B" SF	608 CURB RAMP SF	609 CURB, TYPE 4-C FT	609 CURB, TYPE 6 FT	609 CONCRETE MEDIAN SF	609 CONCRETE MEDIAN, AS PER PLAN SF	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN (NJ SHAPE) FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "A" FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "B" FT	622 CONCRETE BARRIER END SECTION, TYPE D EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "A" EACH	622 BARRIER, MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB FT
GR-1	P.134		7297+40.00	7301+27.50	RT RAMP T	387.5																									
C-1	P.135	P.136	4307+28.88	4319+04.54	RT CL SR8											1176															
GR-2	P.135	P.136	4307+27.00	4317+64.50	RT CL SR8	1012.5			1	1																					
C-2	P.136	P.137	4319+82.38	4328+50.90	RT CL SR8											869															
GR-3	P.136	P.137	4319+81.00	4328+56.00	RT CL SR8	862.5		1		1																					
B-1	P.137		4327+95.00	4328+10.00	CL-SR8																						1				
B-12	P.137		4328+25.99	4329+85.10	LT-SR8																129							2			
B-13	P.137		4330+05.10	328+60.00	LT-SR8																400							2			
B-2	P.137		4328+30.00	4328+45.00	CL-SR8																						1				
BD-1	P.137		4+88.57	5+03.57	RT RAMP U																								1		
BD-10	P.137		4326+82.76	4328+25.99	LT CL SR8																			115		1			1		
BD-2	P.137		5+23.57	5+52.89	RT RAMP U																			15					1		
BD-3	P.137		5+52.89	5+95.18	RT RAMP U																			28					1		
BD-4	P.137		6+15.18	7+18.46	RT RAMP U																			89					1		
BD-5	P.137		7+18.46	8+45.34	RT RAMP U																			127							
BD-6	P.137	P.138	8+53.34	329+03.64	RT CL SR8																			235							
B-14	P.138		328+60.00	333+08.00	LT-SR8																418							2			
B-15	P.138		333+28.00	336+67.84	LT-SR8																325							1			
B-16	P.138		336+75.84	338+52.44	LT-SR8																177										
B-3	P.138		332+81.00	333+36.00	CL-SR8														40								1				
B-4	P.138		333+46.00	334+01.00	CL-SR8														40								1				
B-5	P.138		334+56.60	336+42.32	CL-SR8														156								2				
BD-7	P.138		329+03.64	329+55.69	RT CL SR8																			37					1		
BD-8	P.138		329+75.69	331+31.41	RT CL SR8																			141					1		
BD-9	P.138		331+31.41	331+89.75	RT CL SR8																			44					1		
BD-9A	P.138		332+09.75	332+38.75	RT CL SR8																					1			1		
GR-4	P.138		332+36.75	335+11.75	RT CL SR8	250.0			1	1																					
BD-33	P.138		334+49.25	336+74.89	RT CL SR8																					2					198
GR-4A	P.138	P.139	336+37.14	346+11.14	RT CL SR8	950.0			1	1																					
B-17	P.139		338+60.44	339+98.56	LT-SR8																138										
B-18	P.139		340+06.56	340+50.00	LT-SR8																29							1			
B-19	P.139		340+70.00	341+36.72	LT-SR8																52							1			
B-20	P.139		341+44.72	342+41.55	LT-SR8																97										
B-21	P.139		342+49.55	342+66.04	LT-SR8																1							1			
B-22	P.139		342+86.04	343+01.04	LT-SR8																56							1			
B-23	P.139		343+64.51	344+72.55	LT-SR8																108										
B-24	P.139		344+80.55	345+85.00	LT-SR8																90							1			
B-25	P.139		346+05.00	346+09.85	LT-SR8																5										
B-25A	P.139		346+17.85	346+27.43	LT-SR8																				10						
B-25B	P.139		345+95.19	346+29.26	LT-SR8																				34						
B-26	P.140		0+00.00	0+11.80	LT SB ENT																								1		
B-27	P.140		0+31.80	1+50.00	LT SB ENT																89							2			
BD-11	P.140		348+10.00	0+11.82	LT CL SR8																			164					2		
BD-12	P.140		0+31.82	4+31.86	RT SB ENT																			385					1		
BD-13	P.140		4+39.86	5+31.52	RT SB ENT																			77					1		
01/IMS FUNDING SPLIT TOTALS						0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2115	626	44	0	0	14	4	1	0	
02/IMS FUNDING SPLIT TOTALS						388.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03/NHS FUNDING SPLIT TOTALS						0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	236	0	0	0	0	0	6	0	0	0	0	
04/NHS FUNDING SPLIT TOTALS						3075.0	0	1	3	4	0	0	0	0	0	2045	0	0	0	0	0	0	831	0	4	0	0	9	0	198	
TOTALS CARRIED TO GENERAL SUMMARY						3463	0	1	3	4	0	0	0	0	0	2045	0	0	0	236	0	2115	1457	44	4	6	14	13	1	198	

FINAL TRACINGS
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REVIEWER
KDK 06-01-26

PROJECT ID
114865

SHEET P.110 TOTAL 627

REF NO.	SHEET RANGE		STATION RANGE		LOCATION	606 GUARDRAIL, TYPE MGS FT	606 ANCHOR ASSEMBLY, MGS TYPE E EACH	606 ANCHOR ASSEMBLY, MGS TYPE T EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	608 6" CONCRETE WALK SF	606 IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL EACH	608 6" CONCRETE WALK, AS PER PLAN "A" SF	608 6" CONCRETE WALK, AS PER PLAN "B" SF	608 CURB RAMP SF	609 CURB, TYPE 4-C FT	609 CURB, TYPE 6 FT	609 CONCRETE MEDIAN SF	609 CONCRETE MEDIAN, AS PER PLAN SF	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "A" FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "B" FT	622 CONCRETE BARRIER END SECTION, TYPE D EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "A" EACH	622 BARRIER, MISC.; SINGLE SLOPE, TYPE D, MOMENT SLAB FT
BD-15	P.140		1+50.00	6+31.22	RT SB ENT																							2		389
BD-18	P.140		351+41.67	357+24.00	LT CL SR 8																			63						
BD-19	P.140	P.141	357+44.00	358+40.00	LT CL SR 8							1												553						
GR-5	P.140		-0+03.25	5+73.81	RT RAMP S	562.5		1		1														67						
B-28	P.141		359+65.00	360+05.00	CL-SR8															40										
B-29	P.141		360+15.00	360+55.00	CL-SR8															40										
B-6	P.141		363+55.00	363+95.00	CL-SR8															40										
B-7	P.141		364+05.00	364+45.00	CL-SR8															40										
BD-14	P.141		8+38.42	8+89.69	RT SB ENT																			22				2		
BD-16	P.141		9+63.99	9+90.00	LT SB ENT																			12				1		
BD-17	P.141		10+10.00	11+06.50	LT SB ENT																			68				2		
BD-31	P.141		364+71.80	366+46.35	LT CL SR8																			145				2		
GR-6	P.141		358+71.38	366+46.38	RT CL SR8	700.0	1		1																					
GR-7	P.141	P.142	367+34.26	374+34.26	LT CL SR8	625.0	1		1																					
B-30	P.142		374+98.00	375+38.00	CL-SR8															40										
B-31	P.142		375+43.00	375+83.00	CL-SR8															40										
B-32	P.142		376+90.00	377+99.69	CL-SR8															110										
B-8	P.142		371+83.00	372+23.00	CL-SR8															40										
B-9	P.142		372+28.00	372+68.00	CL-SR8															40										
GR-8	P.142		13+07.73	15+95.23	RT RAMP Q	212.5	1		1																					
B-10	P.143		387+11.33	387+91.13	CL-SR8															80										
B-10A	P.143		386+13.90	386+91.33	CL-SR8															78										
B-11	P.143	P.144	388+01.13	388+41.13	CL-SR8															40										
B-33	P.143		380+00.30	380+37.00	CL-SR8															37										
B-34	P.143		380+57.00	380+90.00	CL-SR8															33										
BD-34	P.143		378+00.00	381+50.00	LT CL SR8																			320		2				
GR-9	P.143		387+45.00	389+57.50	LT CL SR8	150.0	1	1																						
GR-10	P.144		390+73.51	393+11.01	RT CL SR8	162.5	1		1																					
BD-35	P.150	P.151	500+90.00	506+85.00	RT BL GOODKIRK																			565				2		
BD-36	P.151	P.152	507+73.00	510+00.00	RT BL GOODKIRK																			197				2		
C-3	P.150		40+92.00	41+15.00	RT CL EXCHANGE												46													
C-4	P.150		40+84.00	41+17.00	LT CL EXCHANGE												74													
C-5	P.150	P.151	500+61.00	504+35.00	LT BL GOODKIRK												389													
CR-1	P.150		40+93.00	40+99.00	RT CL EXCHANGE										37															
CR-2	P.150		40+85.00	41+00.00	LT CL EXCHANGE										122															
CR-3	P.150		500+62.00	500+69.00	LT BL GOODKIRK										38															
SW-1	P.150		40+92.00	41+48.00	RT CL EXCHANGE						797		279																	
SW-2	P.150		40+84.00	41+48.00	LT CL EXCHANGE						344	22	314																	
SW-3	P.150	P.151	500+68.00	504+19.00	LT BL GOODKIRK						2106																			
C-6	P.151	P.152	504+60.00	508+61.00	LT BL GOODKIRK												436													
C-7	P.151		504+40.00	504+54.00	LT BL GOODKIRK													94												
CR-4	P.151		504+16.00	504+32.00	LT BL GOODKIRK										148															
01/IMS FUNDING SPLIT TOTALS						0.0	0	0	0	0	1141	1	23	593	345	0	120	0	0	0	0	0	1547	0	0	0	0	15	0	389
03/NHS FUNDING SPLIT TOTALS						775.0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	698	0	320	0	2	0	0	0	0
04/NHS FUNDING SPLIT TOTALS						1638.0	3	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	145	0	0	0	0	2	0	0
05/IMS FUNDING SPLIT TOTALS						0.0	0	0	0	0	2106	0	0	0	0	0	825	0	94	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						2413	5	2	4	1	3247	1	23	593	345	0	945	0	94	0	698	0	2012	0	2	0	0	17	0	389

FINAL TRACINGS
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ROADWAY SUB SUMMARY

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DESIGNER SMG

REVIEWER KDK 06-01-26

PROJECT ID 114865

SHEET P.111 TOTAL 627

ROADWAY SUB SUMMARY

REF NO.	SHEET RANGE		STATION RANGE		LOCATION	606 GUARDRAIL, TYPE MGS FT	606 ANCHOR ASSEMBLY, MGS TYPE E EACH	606 ANCHOR ASSEMBLY, MGS TYPE T EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	606 IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL EACH	608 6" CONCRETE WALK SF	608 6" CONCRETE WALK, AS PER PLAN "A" SF	608 6" CONCRETE WALK, AS PER PLAN "B" SF	608 CURB RAMP SF	609 CURB, TYPE 4-C FT	609 CURB, TYPE 6 FT	609 CONCRETE MEDIAN SF	609 CONCRETE MEDIAN, AS PER PLAN Flush SF	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1" FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN (NJ SHAPE) FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "A" FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN "B" FT	622 CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D EACH	622 CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN "A" EACH	622 BARRIER, MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB FT
CR-5	P.151		504+61.00	504+73.00	LT BL GOODKIRK										108															
SW-4	P.151		504+71.00	508+55.00	LT BL GOODKIRK							2304																			
C-10	P.152		512+18.00	514+98.00	LT BL GOODKIRK												303														
C-11	P.152		510+00.00	511+93.00	RT BL GOODKIRK												91	226													
C-12	P.152		512+01.00	512+15.00	LT BL GOODKIRK														94												
C-8	P.152	P.153	508+69.00	508+83.00	LT BL GOODKIRK														94												
C-9	P.152		508+88.00	511+97.00	LT BL GOODKIRK												345														
CR-6	P.152		508+40.00	508+57.00	LT BL GOODKIRK										100																
CR-7	P.152		508+96.00	509+05.00	LT BL GOODKIRK										130																
CR-8	P.152		511+82.00	511+90.00	LT BL GOODKIRK										145																
CR-9	P.152		512+26.00	512+34.00	LT BL GOODKIRK										23																
SW-5	P.152		508+96.00	511+95.00	LT BL GOODKIRK							1936																			
SW-6	P.152	P.153	512+20.00	514+96.00	LT BL GOODKIRK							1750																			
CR-10	P.153		514+89.00	514+96.00	LT BL GOODKIRK										46																
CR-11	P.153		514+91.00	514+97.00	RT BL GOODKIRK										38																
GR-11	P.153		514+20.50	12+52.53	RT GOODKIRK ST.	112.5			2																						
SW-7	P.153		514+91.00	515+11.00	RT BL GOODKIRK							255																			
BD-20	P.145		103+24.59	105+18.00	LT CD																									1	
BD-21	P.145	P.146	105+38.00	113+97.00	LT CD																									3	63
BD-32	P.145		102+09.68	103+51.06	LT CD																									1	
BD-22	P.146		114+17.00	123+55.00	LT CD																									3	893
BD-23	P.147		123+75.00	126+54.00	LT CD																									2	249
BD-24	P.147		126+74.00	127+19.93	LT CD																									2	16
BD-24A	P.147		128+71.39	128+88.60	LT CD																									1	3
BD-25	P.147	P.148	129+08.60	132+34.24	LT CD																									2	296
BD-26	P.148		132+54.00	139+66.80	LT CD																									2	
BD-27	P.148	P.149	139+86.80	141+94.00	LT CD																									2	
BD-28	P.149		142+14.00	142+70.00	LT CD																									2	
BD-29	P.149		142+90.00	143+30.00	LT CD																									2	
BD-30	P.149		143+50.00	145+49.00	LT CD																									2	
C-13	P.154		14+47.00	14+72.00	RT BL CARROLL												43														
C-17	P.154		14+40.65	14+70.00	LT CL CARROLL												30														
CR-12	P.154		14+82.00	14+88.00	LT CL CARROLL										30																
CR-13	P.154		14+66.00	14+72.00	RT CL CARROLL										30																
SW-11	P.154		12+31.88	12+51.74	LT CL CARROLL							185																			
SW-8	P.154		14+46.00	14+88.00	LT CL CARROLL							442																			
SW-9	P.154		14+46.00	14+72.00	RT CL CARROLL							299																			
GR-12	P.154		12+40.21	12+57.69	LT CL CARROLL	12.5			1	1																					
C-14	P.155		8+88.00	9+66.00	LT/RT BL BEACON												126														
C-16	P.154		12+31.88	12+51.74	LT CL CARROLL												31														
CR-14	P.155		9+55.00	9+62.00	LT CL BEACON										51																
CR-15	P.154		12+31.88	12+40.04	LT CL CARROLL										55																
SW-10	P.155		8+86.00	9+61.00	LT CL BEACON							440																			
C-15	P.156		12+40.00	13+99.00	BL BEACON												356														
BD-37	P.147		128+69.06	132+03.10	RT CD																									2	
BD-38	P.148		132+23.10	133+58.00	RT CD																									2	
BD-39	P.148		133+78.00	135+10.00	RT CD																									2	
BD-40	P.148		135+30.00	136+48.00	RT CD																									2	
BD-41	P.148		136+83.00	139+37.65	RT CD																							1		1	
01/IMS FUNDING SPLIT TOTALS						113.0	0	0	2	0	0	0	0	0	590	0	0	0	0	0	0	0	2965	0	1	0	0	34	0	1520
05/IMS FUNDING SPLIT TOTALS						13.0	0	0	1	1	0	7611	0	0	166	0	1325	226	188	0	0	0	0	0	0	0	0	0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						126	0	0	3	1	0	7611	0	0	756	0	1325	226	188	0	0	0	2965	0	1	0	0	34	0	1520

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:53:40 PM USER: burnsk1837
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DESIGN AGENCY
ARCADIS
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DESIGNER
SMG

REVIEWER
KDK 06-01-26

PROJECT ID
114865

SHEET P.112 | TOTAL 627

SHEET NUMBERS	END STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.187	395+00.00	0		0		0	
			0		0		0
	394+50.00	0		0		0	
			0		0		0
P.186	394+00.00	0		0		0	
			0		0		14
	393+50.00	0		0		5	
			0		0		28
	393+00.00	0		0		5	
			0		5		28
	392+50.00	0		5		5	
			0		10		34
	392+00.00	0		6		7	
			0		10		41
	391+50.00	0		5		7	
			0		9		41
	391+00.00	0		5		7	
			0		10		41
	390+50.00	0		6		7	
			0		13		58
	390+00.00	0		8		13	
			0		12		68
P.185	389+50.00	0		5		11	
			0		7		57
	389+00.00	0		3		9	
			0		6		54
	388+50.00	0		3		10	
			0		6		57
	388+00.00	0		4		11	
			0		6		60
	387+50.00	0		3		11	
			0		11		74
	387+00.00	0		9		16	
			0		10		62
	386+50.00	0		2		7	
			0		2		36
	386+00.00	0		0		6	
			0		0		31
	385+50.00	0		0		5	
			0		0		14
	385+48.58	0		0		5	
			0		0		14
P.184	385+00.00	0		0		0	
			0		0		0
	384+50.00	0		0		0	
			0		0		0
	384+00.00	0		0		0	
			0		0		0
	383+50.00	0		0		0	
			0		0		0
	383+00.00	0		0		0	
			0		0		0
	382+50.00	0		0		0	
			0		0		0
	382+00.00	0		0		0	
			0		0		0
	381+50.00	0		0		0	
			0		0		0

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.183	381+00.00	0		0		0	
			0		0		0
	380+50.00	0		0		0	
			0		0		0
	380+00.00	0		0		0	
			0		0		0
	379+50.00	0		0		0	
			0		0		0
	379+00.00	0		0		0	
			0		0		0
	378+50.00	0		0		0	
			0		0		0
	378+00.00	0		0		0	
			0		0		0
	377+50.00	0		0		0	
			0		0		0
P.182	377+00.00	0		0		0	
			0		0		15
	376+50.00	0		0		5	
			0		0		15
	376+00.00	0		0		0	
			0		1		10
	375+50.00	0		1		4	
			0		5		24
	375+00.00	0		4		5	
			0		5		20
	374+50.00	0		2		2	
			0		3		15
	374+00.00	0		2		3	
			0		3		20
	373+50.00	0		2		4	
			0		6		46
	373+00.00	0		5		12	
			0		8		68
TOTALS CARRIED TO SHEET $GS006			0		148		1045

FINAL TRACINGS
NOT FOR CONSTRUCTION

ROADWAY SUB SUMMARY

SUM-077/008-11.65/00.00

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DESIGNER
IJF

REVIEWER
SMG MM-DD-YY

PROJECT ID
114865

SHEET P.113 | TOTAL 627

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
		SR 8/CD EXIT					
P.181	372+50.00	0		4		12	
			0		6		68
	372+00.00	0		3		13	
			0		5		67
	371+50.00	0		3		11	
			0		5		64
	371+00.00	0		3		12	
			0		8		65
	370+50.00	0		6		12	
			0		9		65
	370+00.00	0		3		12	
			0		5		62
	369+50.00	0		2		11	
			0		5		62
	369+00.00	0		4		12	
			0		6		64
	368+50.00	0		3		11	
			0		4		63
P.180	368+00.00	0		1		11	
			0		1		34
	367+50.00	0		0		1	
			0		0		17
	367+00.00	0		0		5	
			0		0		22
	366+60.00	0		0		5	
			0		0		0
	366+60.00	0		51		14	
			0		19		16
	366+50.00	0		51		14	
			0		8		6
	366+46.00	0		51		14	
			0		0		0
	366+46.00	32		14		14	
			32		60		78
	366+00.00	37		19		16	
			57		52		83
	365+50.00	25		37		14	
			47		53		75
P.179	365+00.00	26		20		13	
			55		37		75
	364+50.00	33		20		14	
			64		41		76
	364+00.00	36		24		14	
			71		47		77
	363+50.00	41		27		14	
			83		57		84
	363+00.00	49		35		16	
			55		28		51
	362+57.33	20		0		5	
			0		0		0
	362+57.00	38		0		0	
			8		0		4
P.178	362+50.00	38		0		5	
			74		0		28
	362+00.00	42		0		5	
			8		0		6
	361+94.44	36		0		16	
			0		0		0
	361+94.00	37		4		0	
			91		44		150
	361+50.00	74		54		45	
			106		94		201
	361+00.00	41		48		28	
			112		112		205
	360+50.00	80		73		46	
			134		152		143
	360+00.00	65		91		5	
			133		227		30

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
		SR 8/CD EXIT					
	359+50.00	79		154		5	
			161		299		28
	359+00.00	95		169		5	
			215		279		54
	358+50.00	137		132		15	
			252		231		109
	358+00.00	135		118		25	
			412		158		144
	357+97.00	231		72		25	
			0		0		0
P.177	357+97.00	310		53		27	
			1173		445		353
	357+50.00	310		53		27	
			1156		378		178
	357+00.00	343		195		39	
			608		320		122
	356+50.00	314		151		5	
			538		316		29
	356+00.00	267		190		5	
			492		431		31
	355+50.00	265		275		6	
			398		537		35
	355+00.00	165		305		6	
			260		629		18
	354+50.00	115		374		0	
			214		655		0
	354+00.00	117		333		0	
			186		530		0
	353+57.00	117		333		0	
			0		0		0
P.176	353+57.00	103		270		6	
			343		810		71
	353+50.00	100		270		6	
			182		431		33
	353+00.00	97		196		6	
			155		310		33
	352+50.00	70		139		6	
			102		204		33
	352+00.00	39		81		6	
			50		119		64
	351+50.00	15		48		17	
			4		14		5
	351+42.00	15		48		6	
			0		0		0
	351+42.00	9		103		27	
			14		160		126
	351+00.00	9		103		27	
			24		243		139
	350+50.00	17		159		23	
P.175			39		349		119
	350+00.00	26		218		20	
			50		427		106
	349+50.00	28		243		18	
			48		486		86
	349+00.00	24		282		13	
			46		498		56
	348+50.00	26		256		7	
			34		522		36
	348+00.00	11		308		6	
			7		194		11
TOTALS CARRIED TO SHEET $GS006			8293		11060		4060

FINAL TRACINGS
NOT FOR CONSTRUCTION

ROADWAY SUB SUMMARY

SUM-077/008-11.65/00.00
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DESIGN AGENCY
ARCADIS
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DESIGNER
IJF

REVIEWER
SMG MM-DD-YY

PROJECT ID
114865

SHEET P.114 | TOTAL 627

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.174	347+83.00	11		308		6	
			7		523		24
	347+47.00	0		476		6	
			0		0		0
	347+47.00	0		0		0	
			0		0		0
	346+63.00	0		0		0	
			0		0		0
	346+63.00	0		385		0	
			0		334		5
	346+39.43	0		381		4	
			10		432		18
	346+00.00	14		210		4	
			13		361		22
P.173	345+50.00	0		180		4	
			0		319		22
	345+00.00	0		165		4	
			0		303		22
	344+50.00	0		162		4	
			4		299		22
	344+00.00	4		161		4	
			5		289		22
	343+50.00	1		151		4	
			3		286		25
	343+00.00	2		158		5	
			11		273		28
P.172	342+50.00	9		137		5	
			19		243		31
	342+00.00	11		125		6	
			19		231		31
	341+50.00	10		125		5	
			17		213		25
	341+00.00	9		105		4	
			18		178		22
	340+50.00	11		87		4	
			21		169		22
	340+00.00	12		95		4	
			20		172		22
P.171	339+50.00	10		91		4	
			19		157		22
	339+00.00	11		79		4	
			19		145		22
	338+50.00	10		78		4	
			23		138		22
	338+00.00	15		71		4	
			16		72		6
	337+72.08	16		68		0	
			0		0		0
	337+72.08	16		78		0	
			13		64		0
	337+50.00	16		78		0	
			34		161		0
	337+00.00	21		96		0	
			35		141		42
P.170	336+50.00	17		56		15	
			16		194		42
	336+00.00	0		154		0	
			0		148		22
	335+50.00	0		6		8	
			38		139		155
	335+28.55	0		6		8	
			1		6		25
	335+00.00	1		6		8	
			83		72		39
	334+50.00	89		72		6	
			76		219		22

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.169	334+12.37	20		242		4	
			48		547		31
	333+50.00	22		232		4	
			39		410		22
	333+00.00	21		211		4	
			52		203		16
P.168	332+50.00	35		8		2	
			25		19		19
	332+29.99	31		44		15	
			0		0		0
	332+29.99	31		55		15	
			118		105		124
	332+00.00	40		17		15	
			82		30		78
	331+50.00	49		16		13	
			183		23		89
	331+00.00	149		9		19	
			74		5		19
	330+87.37	169		13		8	
			0		0		0
	330+87.37	200		7		7	
			424		10		29
P.167	330+50.00	412		7		7	
			713		14		47
	330+00.00	358		8		10	
			610		16		36
	329+50.00	301		9		3	
			572		13		25
	329+00.00	317		5		6	
			580		8		33
	328+50.00	309		4		6	
			563		7		33
	328+00.00	300		4		6	
			551		8		33
P.166	327+50.00	295		5		6	
			556		10		33
	327+00.00	305		6		6	
			555		14		39
	326+50.00	294		9		8	
			482		11		47
	326+00.00	227		4		9	
			393		7		50
	325+50.00	198		4		9	
			346		16		58
	325+00.00	176		13		12	
	4330+75.71	176		13		12	
			167		12		34
	4330+50.00	176		13		12	
			298		23		39
	4330+02.73	165		13		3	
			17		1		1
	4330+00.00	168		10		5	
			217		18		29
TOTALS CARRIED TO SHEET $GS006			8205		7811		1746

FINAL TRACINGS
NOT FOR CONSTRUCTION

ROADWAY SUB SUMMARY

DESIGN AGENCY
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DESIGNER
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REVIEWER
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PROJECT ID
114865

SHEET P.115 | TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:10:14 PM USER: sgault
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SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.165	4329+50.00	66		9		6	
			66		9		17
	4329+23.00	66		9		6	
			0		0		0
	4329+23.00	54		0		6	
			46		0		14
	4329+00.00	54		0		6	
			97		1		31
	4328+50.00	51		1		6	
			94		1		31
	4328+00.00	51		1		6	
			89		1		31
	4327+50.00	45		1		6	
			78		1		31
	4327+00.00	40		1		6	
			25		0		10
	4326+83.00	40		1		6	
			0		0		0
	4326+83.00	41		1		6	
			51		1		20
	4326+50.00	41		1		6	
			41		1		16
	4326+23.02	41		1		6	
			0		0		0
	4326+23.00	7		1		6	
			3		0		14
P.164	4326+00.00	1		1		6	
			1		1		31
	4325+50.00	1		1		6	
			1		1		31
	4325+00.00	1		1		6	
			1		1		31
P.163	4324+50.00	1		1		6	
			1		1		31
	4324+00.00	1		1		6	
			1		1		31
	4323+50.00	1		1		6	
			1		1		31
	4323+00.00	1		1		6	
			1		1		31
	4322+50.00	1		1		6	
			1		1		31
	4322+00.00	1		1		6	
			1		1		31
	4321+50.00	1		1		6	
			1		1		31
P.162	4321+00.00	1		1		6	
			1		1		31
	4320+50.00	1		1		6	
			1		1		31
	4320+00.00	1		1		6	
			1		1		31
	4319+50.00	0		0		6	
			1		0		31
	4319+00.00	1		0		6	
			1		0		31
	4318+50.00	1		0		6	
			1		0		31
	4318+00.00	1		0		6	
			1		1		31
	4317+50.00	1		1		6	
			1		1		31

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.161	4317+00.00	1		0		6	
			1		0		31
	4316+50.00	1		1		6	
			1		1		31
	4316+00.00	1		1		6	
			1		1		31
	4315+50.00	1		1		6	
			1		1		31
	4315+00.00	1		1		6	
			1		1		31
	4314+50.00	1		1		6	
			1		1		31
	4314+00.00	1		1		6	
			1		1		31
	4313+50.00	1		1		6	
			1		1		31
P.160	4313+00.00	1		1		6	
			1		1		31
	4312+50.00	0		1		6	
			1		1		31
	4312+00.00	1		1		6	
			1		1		31
	4311+50.00	1		1		6	
			1		1		31
	4311+00.00	1		1		6	
			1		1		31
	4310+50.00	1		1		6	
			1		1		31
	4310+00.00	1		1		6	
			1		1		31
	4309+50.00	1		1		6	
			1		1		31
P.159	4309+00.00	1		1		6	
			1		1		31
	4308+50.00	1		1		6	
			1		1		31
	4308+00.00	1		1		6	
			1		1		31
	4307+50.00	1		1		6	
			1		1		31
	4307+00.00	0		0		6	
			0		0		31
	4306+50.00	0		0		6	
			0		0		31
	4306+00.00	0		0		6	
			0		0		31
	4305+50.00	0		0		6	
			0		0		15
P.158	4305+00.00	0		0		0	
			0		0		0
	4304+50.00	0		0		0	
			0		0		0
	4304+00.00	0		0		0	
			0		0		0
	4303+50.00	0		0		0	
			0		0		0
	4303+00.00	0		0		0	
			0		0		0
	4302+50.00	0		0		0	
			0		0		0
	4302+00.00	0		0		0	
			0		0		8
	4301+50.00	0		0		3	
			0		0		17
	4301+00.00	0		0		3	
			0		0		17
TOTALS CARRIED TO SHEET $GS006			628		49		1543

FINAL TRACINGS
NOT FOR CONSTRUCTION

ROADWAY SUB SUMMARY

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER
IJF

REVIEWER
SMG 08-14-26

PROJECT ID
114865

SHEET P.116 | TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:10:25 PM USER: sgault
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GS010.dgn

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
SR 8/CD EXIT							
P.157	4300+50.00	0		0		3	
			0		0		17
	4300+00.00	0		0		3	
			0		0		17
	4299+50.00	0		0		3	
			0		0		17
	4299+00.00	0		0		3	
			0		0		17
	4298+50.00	0		0		3	
			0		0		17
	4298+00.00	0		0		3	
			0		0		17
	4297+50.00	0		0		3	
			0		0		8
	4297+00.00	0		0		0	
			0		0		0
	4296+50.00	0		0		0	
			0		0		0
	4296+00.00	0		0		0	
TOTALS CARRIED TO SHEET $GS006			0		0		110

FINAL TRACINGS
NOT FOR
CONSTRUCTION

ROADWAY SUB SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:10:37 PM USER: sgault
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DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER
IJF

REVIEWER
SMG 08-14-26

PROJECT ID
114865

SHEET P.117 TOTAL 627

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
P.193	514+99.00	0		0		24	
			44		2		116
	514+50.00	24		3		24	
			40		4		156
P.192	514+00.00	23		2		24	
			30		5		133
	513+50.00	9		3		24	
			12		10		92
	513+00.00	4		8		9	
			4		9		56
	512+50.00	0		2		11	
			2		13		61
	512+00.00	2		12		11	
P.191			7		31		90
	511+50.00	6		21		21	
			19		70		146
	511+00.00	15		55		31	
			27		117		172
	510+50.00	14		71		31	
			13		76		145
	510+00.00	10		11		21	
			13		78		90
P.190	509+50.00	4		73		11	
			45		87		61
	509+00.00	45		21		11	
			70		34		56
	508+50.00	31		16		9	
			29		15		25
	508+25.00	31		16		9	
			0		0		0
	508+25.00	110		10		9	
			92		9		25
	508+00.00	89		10		9	
			273		13		50
	507+50.00	206		4		9	
			475		7		50
	507+00.00	307		4		9	
			534		4		46

SHEET NUMBERS	STATION	ITEM 203 - EXCAVATION		ITEM 203 - EMBANKMENT		ITEM 659 - SEEDING AND MULCHING	
		SF	CY	SF	CY	FT	SY
P.189	506+50.00	270		0		8	
			467		0		42
	506+00.00	234		0		8	
			365		0		42
	505+50.00	160		0		8	
			246		1		42
	505+00.00	106		1		8	
			118		1		25
	504+70.00	106		1		8	
			0		0		0
	504+70.00	2		0		8	
			1		0		18
	504+50.00	2		0		8	
			27		0		65
	504+00.00	27		0		15	
			47		0		84
	503+50.00	24		0		15	
			50		0		94
P.188	503+00.00	30		0		19	
			44		2		116
	502+50.00	18		2		23	
			40		4		156
	502+00.00	25		2		34	
			42		3		151
	501+50.00	20		1		21	
			37		2		103
	501+00.00	20		0		16	
			17		0		81
	500+54.36	0		0		16	
TOTALS CARRIED TO SHEET $GS006			3230		597		2589

FINAL TRACINGS
NOT FOR CONSTRUCTION

ROADWAY SUB SUMMARY

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:11:00 PM USER: sgault
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DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9800
www.arcadis.com

DESIGNER
IJF

REVIEWER
SMG 08-14-26

PROJECT ID
114865

SHEET P.118 | TOTAL 627

SHEET NO.	ITEM 203- EXCAVATION	ITEM 203- EMBANKMENT	ITEM 659- SEEDING AND MULCHING
	CY	CY	SY
SR 8/CD EXIT			
P.113	0	148	1045
P.114	8293	11060	4060
P.115	8205	7811	1746
P.116	628	49	1543
P.117	0	0	110
ADD FOR BEACON TUNNEL	0	27163	0
GOODKIRK ST.			
P.118	3230	597	2589
TOTALS CARRIED TO GENERAL SUMMARY	20356	46828	11093

REF NO.	SHEET NO.	STATION RANGE		LOCATION	304 AGGREGATE BASE	407 NON-TRACKING TACK COAT	204 SUBGRADE COMPACTION	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (449)	301 ASPHALT CONCRETE BASE, PG64-22, (449)
					CY	GAL	SY	CY	CY	CY
DW-1	P.155	8+88.32	9+42.41	LT CL BEACON	25		147			
DW-2	P.155	0+54.20	0+89.14	BEACON CONNECTOR	15		92			
DW-3	P.156	12+12.37	12+48.24	FOUNTAIN	11	11	64	3	3	16
DW-4	P.156	12+80.23	13+21.95	RT CL FOUNTAIN	9		53			
TOTALS CARRIED TO GENERAL SUMMARY					60	11	356	3	3	16

FINAL TRACINGS
NOT FOR
CONSTRUCTION

ROADWAY SUB SUMMARY

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

DESIGNER
SMG

REVIEWER
KDK 06-01-26

PROJECT ID
114865

SHEET P.119 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:11:11 PM USER: sgault
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SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202							SPECIAL			611																						
					PIPE REMOVED, 24" DIAMETER AND UNDER	PIPE REMOVED, OVER 24" DIAMETER	MANHOLE REMOVED	CATCH BASIN REMOVED	INLET REMOVED	INLET ABANDONED, AS PER PLAN	CATCH BASIN ABANDONED, AS PER PLAN	FILL AND PLUG EXISTING CONDUIT, 15" DIAMETER	PIPE CLEANOUT, 24" AND UNDER	PIPE CLEANOUT, 27" TO 48"	12" CONDUIT, TYPE B	12" CONDUIT, TYPE C	12" CONDUIT, TYPE F	15" CONDUIT, TYPE B	15" CONDUIT, TYPE B, AS PER PLAN'	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	18" CONDUIT, TYPE F, AS PER PLAN	18" CONDUIT, TYPE F, WITH TEE, AS PER PLAN	21" CONDUIT, TYPE B	21" CONDUIT, TYPE F, AS PER PLAN	24" CONDUIT, TYPE B	36" CONDUIT, TYPE B	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 6	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN, NO. 8	CATCH BASIN, NO. 2-2B	CATCH BASIN ADJUSTED TO GRADE	CATCH BASIN RECONSTRUCTED TO GRADE	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1
					FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
		S.R. 8																																			
P.135	D-1	4309+12.14		RT																															1				
P.135	D-2	4309+13.58		RT																																			
P.135	D-3	4312+15.31		RT	8			1												4					4			1										
P.136	D-4	4315+00.00	4316+40.92	RT														141										1										
P.136	D-5	4316+40.92		RT																															1				
P.136	D-6	4316+80.00	4317+29.00	RT														49																					
P.136	D-7	4317+29.00		RT																															1				
P.136	D-8	4318+43.00		RT																															1				
P.136	D-9	4320+16.00	4320+88.00	RT														72										1										
P.136	D-10	4320+88.00		RT																															1				
P.136	D-11	4321+79.37		RT																																			
P.136	D-12	4321+90.00		RT																																			
P.136	D-13	4322+60.00		RT																															1				
P.137	D-14	4324+84.00		RT																															1				
P.137	D-15	4328+14.00	4328+38.00	CL	24		1														24																	
P.137	D-16	4328+20.00	4328+20.00	RT														9																			1		
P.137	D-16A	4329+17.00		RT	8				1									8																					
P.137	D-17	4329+87.55		RT																																			
P.137	D-18	4329+93.00	4329+95.00	LT														8																					1
P.137	D-19	4330+07.81		RT																																			
P.138	D-20	329+62.66	331+99.69	RT	240				1																														
P.138	D-21	331+99.69	332+09.40	RT	10				1																														
P.138	D-22	333+18.00	333+28.00	LT														10																				1	
P.138	D-23	334+37.00	335+49.28	CL/LT	10													124																		1			
P.138	D-24	334+46.60	334+42.89	CL/LT						1		105																											
P.138	D-25	335+30.37	335+67.90	RT	63			1																															
P.138	D-26	335+42.89	335+67.90	LT/RT	59		1																																
P.138	D-27	335+42.89	116+32.60	CL/LT	81		1																																
P.138	D-28	335+49.28	116+32.46	LT																					63														
P.139	D-29	340+60.00	342+76.00	LT														216																				1	
P.139	D-30.	342+76.00	343+01.50	LT														26																				1	
P.139	D-31	343+01.50	3+76.31	LT																					30	51													
P.139	D-32	343+01.51	3+76.31	LT	98		1																																
P.139	D-33	343+01.51		LT																																			
P.139	D-34	343+01.51	345+75.00	LT														273																					
P.139	D-35	343+01.51	345+75.00	LT			1					274																											
P.139																																							
P.139	D-36	345+75.00	345+75.00	LT	6													16																					
P.139	D-37	345+75.00	345+95.02	LT														21																				1	
P.139, P.140	D-38	348+00.00	348+00.00	LT	7		1											7																					
P.140	D-39	348+00.03	129+08.16	LT														21																					
P.140	D-40	357+34.00	357+34.00	LT												7																		1					
P.140	D-41	357+34.00	358+24.00	LT														90																					
P.141	D-42	358+24.00	358+44.00	LT														20												1								
P.141	D-43	358+44.00	139+42.00	RT														13												1								
P.141	D-44	358+42.00	361+42.00	CL														300																		1			
P.141	D-45	361+42.00	361+79.99	CL														38																		1			
P.141	D-46	363+10.00	363+10.00	LT/RT	40																42															1		
P.141	D-47	366+41.61	367+29.24	LT	51								88													51												
P.141	D-48	367+29.24		LT																																			
SUBTOTALS CARRIED TO SHEET P.126					705	0	6	2	3	1		379	88			7		1462		4	66		93	51		51	4		3	1	2	0		1	7		5	4	1

FINAL TRACINGS
NOT FOR
CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS001 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:40 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.120 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	611 INLET ADJUSTED TO GRADE	611 MANHOLE, NO. 3	611 MANHOLE, NO. 3 (60" I.D.)	611 MANHOLE, NO. 3, AS PER PLAN	611 MANHOLE, NO. 3 (60" I.D.), AS PER PLAN	611 MANHOLE ADJUSTED TO GRADE	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	899 CURED-IN-PLACE PIPE LINER (15" DIAMETER)	899 CURED-IN-PLACE PIPE LINER (36" DIAMETER)
					EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT
		S.R. 8												
P.135	D-1	4309+12.14		RT										
P.135	D-2	4309+13.58		RT								1		
P.135	D-3	4312+15.31		RT										
P.136	D-4	4315+00.00	4316+40.92	RT										
P.136	D-5	4316+40.92		RT										
P.136	D-6	4316+80.00	4317+29.00	RT										
P.136	D-7	4317+29.00		RT										
P.136	D-8	4318+43.00		RT										
P.136	D-9	4320+16.00	4320+88.00	RT										
P.136	D-10	4320+88.00		RT										
P.136	D-11	4321+79.37		RT								1		
P.136	D-12	4321+90.00		RT								1		
P.136	D-13	4322+60.00		RT										
P.137	D-14	4324+84.00		RT										
P.137	D-15	4328+14.00	4328+38.00	CL					1					
P.137	D-16	4328+20.00	4328+20.00	RT										
P.137	D-16A	4329+17.00		RT	1									
P.137	D-17	4329+87.55		RT								1		
P.137	D-18	4329+93.00	4329+95.00	LT										
P.137	D-19	4330+07.81		RT		1								
P.138	D-20	329+62.66	331+99.69	RT										
P.138	D-21	331+99.69	332+09.40	RT										
P.138	D-22	333+18.00	333+28.00	LT										
P.138	D-23	334+37.00	335+49.28	CL/LT										
P.138	D-24	334+46.60	334+42.89	CL/LT										
P.138	D-25	335+30.37	335+67.90	RT										
P.138	D-26	335+42.89	335+67.90	LT/RT										
P.138	D-27	335+42.89	116+32.60	CL/LT										
P.138	D-28	335+49.28	116+32.46	LT			1							
P.139	D-29	340+60.00	342+76.00	LT										
P.139	D-30.	342+76.00	343+01.50	LT										
P.139	D-31	343+01.50	3+76.31	LT					1					
P.139	D-32	343+01.51	3+76.31	LT										
P.139	D-33	343+01.51		LT								1		
P.139	D-34	343+01.51	345+75.00	LT					1					
P.139	D-35	343+01.51	345+75.00	LT										
P.139														
P.139	D-36	345+75.00	345+75.00	LT										
P.139	D-37	345+75.00	345+95.02	LT										
P.139, P.140	D-38	348+00.00	348+00.00	LT										
P.140	D-39	348+00.03	129+08.16	LT	1									
P.140	D-40	357+34.00	357+34.00	LT										
P.140	D-41	357+34.00	358+24.00	LT	1									
P.141	D-42	358+24.00	358+44.00	LT										
P.141	D-43	358+44.00	139+42.00	RT										
P.141	D-44	358+42.00	361+42.00	CL										
P.141	D-45	361+42.00	361+79.99	CL										
P.141	D-46	363+10.00	363+10.00	LT/RT										
P.141	D-47	366+41.61	367+29.24	LT								1		
P.141	D-48	367+29.24		LT								1		
SUBTOTALS CARRIED TO SHEET P.127					3	1	1		3			7	0	

FINAL TRACINGS
NOT FOR CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS002 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:41 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER
MSD

REVIEWER
SAC 05-08-26

PROJECT ID
114865

SHEET P.121 | TOTAL 627

DRAINAGE SUBSUMMARY

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" DIAMETER AND UNDER FT	202 PIPE REMOVED, OVER 24" DIAMETER FT	202 MANHOLE REMOVED EACH	202 CATCH BASIN REMOVED EACH	202 INLET REMOVED EACH	202 INLET ABANDONED, AS PER PLAN EACH	202 CATCH BASIN ABANDONED, AS PER PLAN EACH	SPECIAL FILL AND PLUG EXISTING CONDUIT, 15" DIAMETER FT	SPECIAL PIPE CLEANOUT, 24" AND UNDER FT	SPECIAL PIPE CLEANOUT, 27" TO 48" FT	611 12" CONDUIT, TYPE B FT	611 12" CONDUIT, TYPE C FT	611 12" CONDUIT, TYPE F FT	611 15" CONDUIT, TYPE B FT	611 15" CONDUIT, TYPE B, AS PER PLAN' FT	611 15" CONDUIT, TYPE C FT	611 18" CONDUIT, TYPE B FT	611 18" CONDUIT, TYPE C FT	611 18" CONDUIT, TYPE F, AS PER PLAN FT	611 18" CONDUIT, TYPE F, WITH TEE, AS PER PLAN FT	611 21" CONDUIT, TYPE B FT	611 21" CONDUIT, TYPE F, AS PER PLAN FT	611 24" CONDUIT, TYPE B FT	611 36" CONDUIT, TYPE B EACH	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 3A EACH	611 CATCH BASIN, NO. 6 EACH	611 CATCH BASIN, NO. 6, AS PER PLAN EACH	611 CATCH BASIN, NO. 8 EACH	611 CATCH BASIN, NO. 2-2B EACH	611 CATCH BASIN ADJUSTED TO GRADE EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1 EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1 EACH
P.141	D-48A	367+29.24	367+71.14	LT																																		
P.141	D-49	367+30.87	367+31.26	LT/RT	17													17														1						
P.141	D-49A	367+31.26	367+31.48	LT/RT	6													6														1						
P.142	D-50	374+76.48		RT																																		
P.142	D-51	375+62.01		LT																																		
P.142	D-52	376+52.85		RT																																		
P.142, P.143	D-53	376+80.00	378+09.69	CL														130																			1		
P.143	D-54	376+96.98		LT																																		
P.143	D-55	378+04.03	378+09.69	LT/RT	32																				32												1		
P.143	D-56	378+04.30		RT																																		
P.143	D-57	378+04.50		LT																																		
P.143	D-58	379+06.48		LT																																		
P.143	D-59	379+52.04		RT																																		
P.143	D-60	379+90.30	380+46.92	CL														57																			1		
P.143	D-61	380+46.41		RT																																		
P.143	D-62	380+46.92	381+00.00	CL														53																			1		
P.143	D-63	381+80.71		LT																																		
P.143	D-64	381+82.34		RT																																		
P.143	D-65	382+62.10		RT																																		
P.143	D-66	382+71.10		LT																																		
P.143	D-67	383+41.85		RT																																		
P.143	D-68	384+02.36		LT																																		
P.143	D-69	384+20.98		RT																																		
P.143	D-70	385+02.20		RT																																		
P.143	D-71	385+24.72		LT																																		
P.143	D-72	386+03.90	387+01.33	CL														97																			1		
P.144	D-73	392+98.79		LT																																		
		Exit Ramp (to I.R. 76)																																				
P.145	D-74	101+92.68		LT																																		
P.145	D-75	101+99.64		RT																																		
P.145	D-76	103+23.74		LT																																		
P.145	D-77	105+23.98	4329+93.40	RT	33			1																														
P.145	D-78	105+28.00	4329+95.00	LT/RT														42																					
P.146	D-79	111+64.23	113+39.44	RT	175			1																														
P.146	D-80	113+39.44	113+87.40	RT	48			1																														
P.146	D-81	113+87.40	333+27.70	RT	32		1																															
P.146	D-82	114+07.00	333+18.00	LT/RT														42																					
P.146	D-83	116+32.46	116+32.60	LT																			10															
P.147	D-84	123+65.00	342+76.00	LT/RT														41																					
P.147	D-85	126+64.00	345+75.00	LT/RT														44																					
P.147	D-86	500+63.43	128+54.17	LT	22			1																														
P.147	D-87	128+54.17	348+00.00	LT/RT	50			1																														
P.147	D-88	500+76.00	131+00.05	LT/RT																											22							
P.147																																						
P.147	D-89	128+98.60	129+08.16	LT/RT																44																		
P.140, P.147	D-90	129+08.16	131+01.41	RT																	194																	
P.148	D-91	131+00.05	133+62.33	RT						1																												
P.148	D-92	131+00.05	131+95.96	RT	98		1																															
P.148	D-93	131+01.41	132+13.10	RT																				112										1				
P.148	D-94	131+95.72	131+95.96	RT	6			1																														
P.148	D-95	131+95.96	132+72.35	LT/RT	78			1																														
P.148	D-96	132+13.10	132+13.10	RT																	11																	
SUBTOTALS CARRIED TO SHEET P.126					597		2	7		1								529	44	205	10	112		32			22				2	1			5		

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUM-077/008-11.65/0.00

MODEL: DS003 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:42 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.122 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D EACH	611 INLET ADJUSTED TO GRADE EACH	611 MANHOLE, NO. 3 EACH	611 MANHOLE, NO. 3 (60" I.D.) EACH	611 MANHOLE, NO. 3, AS PER PLAN EACH	611 MANHOLE, NO. 3 (60" I.D.), AS PER PLAN EACH	611 MANHOLE ADJUSTED TO GRADE EACH	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN EACH	899 CURED-IN-PLACE PIPE LINER (15" DIAMETER) FT	899 CURED-IN-PLACE PIPE LINER (36" DIAMETER) FT
P.141	D-48A	367+29.24	367+71.14	LT									43	
P.141	D-49	367+30.87	367+31.26	LT/RT										
P.141	D-49A	367+31.26	367+31.48	LT/RT										
P.142	D-50	374+76.48		RT								1		
P.142	D-51	375+62.01		LT								1		
P.142	D-52	376+52.85		RT								1		
P.142, P.143	D-53	376+80.00	378+09.69	CL										
P.143	D-54	376+96.98		LT								1		
P.143	D-55	378+04.03	378+09.69	LT/RT										
P.143	D-56	378+04.30		RT								1		
P.143	D-57	378+04.50		LT								1		
P.143	D-58	379+06.48		LT								1		
P.143	D-59	379+52.04		RT								1		
P.143	D-60	379+90.30	380+46.92	CL										
P.143	D-61	380+46.41		RT								1		
P.143	D-62	380+46.92	381+00.00	CL										
P.143	D-63	381+80.71		LT								1		
P.143	D-64	381+82.34		RT								1		
P.143	D-65	382+62.10		RT								1		
P.143	D-66	382+71.10		LT								1		
P.143	D-67	383+41.85		RT								1		
P.143	D-68	384+02.36		LT								1		
P.143	D-69	384+20.98		RT								1		
P.143	D-70	385+02.20		RT								1		
P.143	D-71	385+24.72		LT								1		
P.143	D-72	386+03.90	387+01.33	CL										
P.144	D-73	392+98.79		LT								1		
		Exit Ramp (to I.R. 76)												
P.145	D-74	101+92.68		LT		1								
P.145	D-75	101+99.64		RT		1								
P.145	D-76	103+23.74		LT								1		
P.145	D-77	105+23.98	4329+93.40	RT										
P.145	D-78	105+28.00	4329+95.00	LT/RT	1									
P.146	D-79	111+64.23	113+39.44	RT										
P.146	D-80	113+39.44	113+87.40	RT										
P.146	D-81	113+87.40	333+27.70	RT										
P.146	D-82	114+07.00	333+18.00	LT/RT	1									
P.146	D-83	116+32.46	116+32.60	LT			1							
P.147	D-84	123+65.00	342+76.00	LT/RT	1									
P.147	D-85	126+64.00	345+75.00	LT/RT	1									
P.147	D-86	500+63.43	128+54.17	LT										
P.147	D-87	128+54.17	348+00.00	LT/RT										
P.147	D-88	500+76.00	131+00.05	LT/RT				1						250
P.147														
P.147	D-89	128+98.60	129+08.16	LT/RT	1									
P.140, P.147	D-90	129+08.16	131+01.41	RT			1							
P.148	D-91	131+00.05	133+62.33	RT										262
P.148	D-92	131+00.05	131+95.96	RT										
P.148	D-93	131+01.41	132+13.10	RT										
P.148	D-94	131+95.72	131+95.96	RT										
P.148	D-95	131+95.96	132+72.35	LT/RT										
P.148	D-96	132+13.10	132+13.10	RT	1									
SUBTOTALS CARRIED TO SHEET P.127					6	2	2	1	0			20	43	512

FINAL TRACINGS
NOT FOR CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS004 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:43 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER
MSD

REVIEWER
SAC 05-08-26

PROJECT ID
114865

SHEET P.123 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" DIAMETER AND UNDER	202 PIPE REMOVED, OVER 24" DIAMETER	202 MANHOLE REMOVED	202 CATCH BASIN REMOVED	202 INLET REMOVED	202 INLET ABANDONED, AS PER PLAN	202 CATCH BASIN ABANDONED, AS PER PLAN	SPECIAL FILL AND PLUG EXISTING CONDUIT, 15" DIAMETER	SPECIAL PIPE CLEANOUT, 24" AND UNDER	SPECIAL PIPE CLEANOUT, 27" TO 48"	611 12" CONDUIT, TYPE B	611 12" CONDUIT, TYPE C	611 12" CONDUIT, TYPE F	611 15" CONDUIT, TYPE B	611 15" CONDUIT, TYPE B, AS PER PLAN'	611 15" CONDUIT, TYPE C	611 18" CONDUIT, TYPE B	611 18" CONDUIT, TYPE C	611 18" CONDUIT, TYPE F, AS PER PLAN	611 18" CONDUIT, TYPE F, WITH TEE, AS PER PLAN	611 21" CONDUIT, TYPE B	611 21" CONDUIT, TYPE F, AS PER PLAN	611 24" CONDUIT, TYPE B	611 36" CONDUIT, TYPE B	611 CATCH BASIN, NO. 3	611 CATCH BASIN, NO. 3A	611 CATCH BASIN, NO. 6	611 CATCH BASIN, NO. 6, AS PER PLAN	611 CATCH BASIN, NO. 8	611 CATCH BASIN, NO. 2-2B	611 CATCH BASIN ADJUSTED TO GRADE	611 CATCH BASIN RECONSTRUCTED TO GRADE	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1
					FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
P.148	D-97	132+13.10	133+62.33	RT																		146										1						
P.148	D-98	132+13.10	132+20.00	CL/RT														29																				
		Exit Ramp (to I.R. 76)																																					
P.148	D-99	132+20.00	132+44.24	LT/CL														25																				
P.148	D-100	132+13.10	133+68.00	RT																14																		
P.148	D-101	133+62.33	136+34.47	LT/RT																																1			
P.148	D-102	133+62.33	135+18.95	RT	159		1																																
P.148	D-103	133+62.33	134+16.83	LT																54														1					
P.148	D-104	134+16.00	134+16.83	CL/RT														11																				
P.148	D-105	134+16.00	135+20.00	RT														102																				
P.148	D-106	135+16.58	135+18.95	LT/RT	21			1																															
P.148	D-107	135+18.95	135+19+52	RT	7			1																															
P.148	D-108	136+23.90	136+34.47	RT	13			1																															
P.148	D-109	136+34.47	139+57.00	LT/RT							1																												
P.148	D-110	136+34.47	136+37.00	RT														26																				
P.148	D-111	136+37.00	136+58.00	RT														21																				
P.148	D-112	139+42.00	139+57.00	RT														21															1					
P.148	D-113	139+45.00	139+69.00	RT		24		1																						24								
P.148	D-114	139+57.00	139+76.00	LT/RT														29															1					
P.148	D-115	139+57.00	141+21.00	CL/RT										164																								
P.149	D-116	141+09.00	141+33.00	CL		24		1																						24								
P.149	D-117	141+21.00	142+83.05	CL/RT										162																								
P.149	D-118	142+04.00	142+04.00	LT											7																				1			
P.149	D-119	142+04.00	142+80.00	LT											76																								
P.149	D-120	142+77.89	142+83.05	RT	7				1																														
P.149	D-121	142+80.00	142+83.05	LT/RT											19																								
P.149	D-122	142+80.00	143+40.00	LT											60																								
P.149	D-123	142+83.05	143+98.96	RT										116																								
P.149	D-124	143+98.70	145+59.00	LT												160																				1			
P.149	D-124A	143+98.77		LT	30			1																															
P.149	D-125	143+98.96	145+59.19	LT									160																										
P.149	D-126	145+59.00	145+59.19	LT												7																				1			
P.149	D-127	145+59.00	145+59.19	LT/RT	14				1						13																								
P.149	D-128	145+59.19	366+41.61	LT									180																										
		Entrance Ramp (to S.R. 8 SB)																																					
P.148	D-129	0+21.82	0+21.82	LT/RT														25																				1
P.148	D-130	0+21.82	131+01.41	LT																10																		
P.148	D-131	9+13.93	511+80.00	LT/RT											37																		1					
P.148	D-132	9+48.50	512+48.01	LT/RT														32																				
P.148, P.149	D-133	9+48.50	10+00.00	RT														51																				
		Goodkirk St																																					
P.150	D-134	500+40.00	500+97.00	RT		58	1																						36								
P.150	D-135	500+58.45	500+63.43	LT/RT	21			1																															
P.150	D-136	500+66.00	500+76.00	LT/RT											27																		1					
P.150	D-137	500+66.00	501+24.00	LT											58																		1					
P.150	D-138	501+24.00	502+18.00	LT											94																		1					
P.150	D-139	502+18.00	503+06.00	LT											88																		1					
P.151	D-140	504+34.10	131+95.96	LT/RT	53			1																															
P.151	D-141	504+33.06	132+20.00	LT/RT											46																		1					
P.151	D-142	504+33.06	504+59.91	LT											26																		1					
SUBTOTALS CARRIED TO SHEET P.126					325	106	2	8	2		1		340	442	551	167		372		78		146							84	7	0	2		2	3		1		1

FINAL TRACINGS
NOT FOR
CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS005 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:45 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.124 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	611 INLET ADJUSTED TO GRADE	611 MANHOLE, NO. 3	611 MANHOLE, NO. 3 (60" I.D.)	611 MANHOLE, NO. 3, AS PER PLAN	611 MANHOLE, NO. 3 (60" I.D.), AS PER PLAN	611 MANHOLE ADJUSTED TO GRADE	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	899 CURED-IN-PLACE PIPE LINER (15" DIAMETER)	899 CURED-IN-PLACE PIPE LINER (36" DIAMETER)
					EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT
P.148	D-97	132+13.10	133+62.33	RT										
P.148	D-98	132+13.10	132+20.00	CL/RT					1					
		Exit Ramp (to I.R. 76)												
P.148	D-99	132+20.00	132+44.24	LT/CL	1									
P.148	D-100	132+13.10	133+68.00	RT	1									
P.148	D-101	133+62.33	136+34.47	LT/RT										266
P.148	D-102	133+62.33	135+18.95	RT										
P.148	D-103	133+62.33	134+16.83	LT										
P.148	D-104	134+16.00	134+16.83	CL/RT					1					
P.148	D-105	134+16.00	135+20.00	RT	1									
P.148	D-106	135+16.58	135+18.95	LT/RT										
P.148	D-107	135+18.95	135+19+52	RT										
P.148	D-108	136+23.90	136+34.47	RT										
P.148	D-109	136+34.47	139+57.00	LT/RT										325
P.148	D-110	136+34.47	136+37.00	RT					1					
P.148	D-111	136+37.00	136+58.00	RT	1									
P.148	D-112	139+42.00	139+57.00	RT										
P.148	D-113	139+45.00	139+69.00	RT						1				
P.148	D-114	139+57.00	139+76.00	LT/RT										
P.148	D-115	139+57.00	141+21.00	CL/RT										
P.149	D-116	141+09.00	141+33.00	CL						1				
P.149	D-117	141+21.00	142+83.05	CL/RT										
P.149	D-118	142+04.00	142+04.00	LT										
P.149	D-119	142+04.00	142+80.00	LT	1									
P.149	D-120	142+77.89	142+83.05	RT										
P.149	D-121	142+80.00	142+83.05	LT/RT	1									
P.149	D-122	142+80.00	143+40.00	LT	1									
P.149	D-123	142+83.05	143+98.96	RT								1		
P.149	D-124	143+98.70	145+59.00	LT										
P.149	D-124A	143+98.77		LT										
P.149	D-125	143+98.96	145+59.19	LT										
P.149	D-126	145+59.00	145+59.19	LT										
P.149	D-127	145+59.00	145+59.19	LT/RT	1									
P.149	D-128	145+59.19	366+41.61	LT								1		
		Entrance Ramp (to S.R. 8 SB)												
P.148	D-129	0+21.82	0+21.82	LT/RT										
P.148	D-130	0+21.82	131+01.41	LT	1									
P.148	D-131	9+13.93	511+80.00	LT/RT										
P.148	D-132	9+48.50	512+48.01	LT/RT	1									
P.148, P.149	D-133	9+48.50	10+00.00	RT	1									
		Goodkirk St												
P.150	D-134	500+40.00	500+97.00	RT										
P.150	D-135	500+58.45	500+63.43	LT/RT										
P.150	D-136	500+66.00	500+76.00	LT/RT										
P.150	D-137	500+66.00	501+24.00	LT										
P.150	D-138	501+24.00	502+18.00	LT										
P.150	D-139	502+18.00	503+06.00	LT										
P.151	D-140	504+34.10	131+95.96	LT/RT										
P.151	D-141	504+33.06	132+20.00	LT/RT										
P.151	D-142	504+33.06	504+59.91	LT										
SUBTOTALS CARRIED TO SHEET P.127					11				3	2		2		591

FINAL TRACINGS
NOT FOR CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00
MODEL: DS006 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:46 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group
DESIGNER MSD
REVIEWER SAC 05-08-26
PROJECT ID 114865
SHEET P.125 TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" DIAMETER AND UNDER	202 PIPE REMOVED, OVER 24" DIAMETER	202 MANHOLE REMOVED	202 CATCH BASIN REMOVED	202 INLET REMOVED	202 INLET ABANDONED, AS PER PLAN	202 CATCH BASIN ABANDONED, AS PER PLAN	SPECIAL FILL AND PLUG EXISTING CONDUIT, 15" DIAMETER	SPECIAL PIPE CLEANOUT, 24" AND UNDER	SPECIAL PIPE CLEANOUT, 27" TO 48"	611 12" CONDUIT, TYPE B	611 12" CONDUIT, TYPE C	611 12" CONDUIT, TYPE F	611 15" CONDUIT, TYPE B	611 15" CONDUIT, TYPE B, AS PER PLAN'	611 15" CONDUIT, TYPE C	611 18" CONDUIT, TYPE B	611 18" CONDUIT, TYPE C	611 18" CONDUIT, TYPE F, AS PER PLAN	611 18" CONDUIT, TYPE F, WITH TEE, AS PER PLAN	611 21" CONDUIT, TYPE B	611 21" CONDUIT, TYPE F, AS PER PLAN	611 24" CONDUIT, TYPE B	611 36" CONDUIT, TYPE B	611 CATCH BASIN, NO. 3	611 CATCH BASIN, NO. 3A	611 CATCH BASIN, NO. 6	611 CATCH BASIN, NO. 6, AS PER PLAN	611 CATCH BASIN, NO. 8	611 CATCH BASIN, NO. 2-2B	611 CATCH BASIN ADJUSTED TO GRADE	611 CATCH BASIN RECONSTRUCTED TO GRADE	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1
		FT	FT		FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
P.151	D-143	504+59.91	504+79.58	LT											26															1										
P.151	D-144	506+20.00	506+76.88	LT											58															1										
P.151	D-145	506+76.88	506+76.88	LT											8															1										
		Goodkirk St																																						
P.151	D-146	506+76.88	134+16.00	LT/RT														62																						
P.151	D-147	506+76.88	507+30.00	LT											54															1										
P.152	D-148	508+68.35	136+34.47	LT/RT	97																																			
P.152	D-149	508+68.35	508+73.00	LT/RT											23																									
P.152	D-150	508+73.00	136+37.00	LT/RT														50																						
P.152	D-151	508+83.00	508+90.12	LT	7			1							7															1										
P.152	D-152	508+73.00	509+20.00	LT														47																						
P.152	D-153	509+20.00	509+20.00	LT											10															1										
P.152	D-154	509+20.00	510+20.00	LT														100																						
P.152	D-155	510+20.00	510+20.00	LT/RT											14																						1			
P.152	D-156	510+20.00	510+20.00	LT											10																	1								
P.152	D-157	510+20.00	511+00.00	LT											80																									
P.152	D-158	511+00.00	511+00.00	LT											10																	1								
P.152	D-159	511+00.00	511+80.00	LT											80																									
P.152	D-160	511+59.20	511+75.26	RT	20			1																																
P.152	D-161	511+75.26	139+56.89	RT	60			1																																
P.152	D-162	511+75.26	511+88.00	LT	16										6																									
P.152	D-163	511+75.26	512+50.41	LT/RT	77		1																																
P.152	D-164	511+80.00	512+48.00	LT/RT											68																									
P.152	D-165	511+97.19	512+03.18	LT	6			1							6															1										
P.152	D-166	512+03.18		LT																																				
P.152	D-167	512+12.04	512+18.04	LT	6			1							6															1										
P.152	D-168	512+48.00	512+59.00	LT											15															1										
P.152, P.153	D-169	512+48.00	513+08.00	LT											60																									
P.153	D-170	513+08.00	513+08.00	LT											10															1										
P.153	D-171	513+08.00	513+74.00	LT											66															1										
P.153	D-172	514+13.57	141+21.00	LT/RT	105			1																																
P.153	D-173	513+74.00	514+44.00	LT											70															1										
		Carroll St																																						
P.154	D-174	14+39.66	14+55.45	LT	17			1																																
P.154	D-175	14+40.05	14+55.45	LT/RT	39			1																																
P.154	D-176	14+55.45	363+03.60	LT	75		1																																
P.154	D-177	14+47.00	14+64.50	LT/RT											44															1										
P.154	D-178	14+47.00	14+64.50	LT											18															1										
P.154	D-179	14+64.50	363+03.60	LT												76																								
SUBTOTALS THIS SHEET					525	0	2	8	0	0	0	0	0	0	749	0	76	259	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	1	0	0	0	0	0
SUBTOTALS CARRIED FROM SHEET P.120					705	0	6	2	3	1	0	379	88	0	0	7	0	1462	0	4	66	0	93	51	0	51	4	0	3	1	2	0	0	1	7	0	5	4	1
SUBTOTALS CARRIED FROM SHEET P.122					597	0	2	7	0	0	1	0	0	0	0	0	0	529	44	205	10	112	0	0	32	0	0	22	0	0	0	2	1	0	0	0	5	0	0
SUBTOTALS CARRIED FROM SHEET P.124					325	106	2	8	2	0	1	0	340	442	551	167	0	372	0	78	0	146	0	0	0	0	0	84	7	0	2	0	2	3	0	1	0	1	0
TOTALS CARRIED TO GENERAL SUMMARY					**2152**	**106**	**12**	**25**	**5**	**1**	**2**	**379**	**428**	**442**	**1300**	**174**	**76**	**2622**	**44**	**287**	**76**	**258**	**93**	**51**	**32**	**51**	**4**	**106**	**23**	**4**	**4**	**2**	**3**	**5**	**7**	**1**	**10**	**5**	**1**

FINAL TRACINGS
NOT FOR
CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS007 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:47 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group
DESIGNER MSD
REVIEWER SAC 05-08-26
PROJECT ID 114865
SHEET P.126 TOTAL 627

SHEET NO.	REFERENCE NO.	STATION		SIDE	611								899	
					INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	INLET ADJUSTED TO GRADE	MANHOLE, NO. 3	MANHOLE, NO. 3 (60" I.D.)	MANHOLE, NO. 3, AS PER PLAN	MANHOLE, NO. 3 (60" I.D.), AS PER PLAN	MANHOLE ADJUSTED TO GRADE	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	CURED-IN-PLACE PIPE LINER (15" DIAMETER)	CURED-IN-PLACE PIPE LINER (36" DIAMETER)
		FROM	TO		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT
P.151	D-143	504+59.91	504+79.58	LT										
P.151	D-144	506+20.00	506+76.88	LT										
P.151	D-145	506+76.88	506+76.88	LT										
		Goodkirk St												
P.151	D-146	506+76.88	134+16.00	LT/RT			1							
P.151	D-147	506+76.88	507+30.00	LT										
P.152	D-148	508+68.35	136+34.47	LT/RT										
P.152	D-149	508+68.35	508+73.00	LT/RT							1			
P.152	D-150	508+73.00	136+37.00	LT/RT			1							
P.152	D-151	508+83.00	508+90.12	LT										
P.152	D-152	508+73.00	509+20.00	LT			1							
P.152	D-153	509+20.00	509+20.00	LT										
P.152	D-154	509+20.00	510+20.00	LT			1							
P.152	D-155	510+20.00	510+20.00	LT/RT										
P.152	D-156	510+20.00	510+20.00	LT										
P.152	D-157	510+20.00	511+00.00	LT			1							
P.152	D-158	511+00.00	511+00.00	LT										
P.152	D-159	511+00.00	511+80.00	LT			1							
P.152	D-160	511+59.20	511+75.26	RT										
P.152	D-161	511+75.26	139+56.89	RT										
P.152	D-162	511+75.26	511+88.00	LT										
P.152	D-163	511+75.26	512+50.41	LT/RT										
P.152	D-164	511+80.00	512+48.00	LT/RT			1							
P.152	D-165	511+97.19	512+03.18	LT										
P.152	D-166	512+03.18		LT							1			
P.152	D-167	512+12.04	512+18.04	LT										
P.152	D-168	512+48.00	512+59.00	LT										
P.152, P.153	D-169	512+48.00	513+08.00	LT			1							
P.153	D-170	513+08.00	513+08.00	LT										
P.153	D-171	513+08.00	513+74.00	LT										
P.153	D-172	514+13.57	141+21.00	LT/RT										
P.153	D-173	513+74.00	514+44.00	LT										
		Carroll St												
P.154	D-174	14+39.66	14+55.45	LT										
P.154	D-175	14+40.05	14+55.45	LT/RT										
P.154	D-176	14+55.45	363+03.60	LT										
P.154	D-177	14+47.00	14+64.50	LT/RT										
P.154	D-178	14+47.00	14+64.50	LT										
P.154	D-179	14+64.50	363+03.60	LT			1							
SUBTOTALS THIS SHEET					0	0	9	0	0	0	2	0	0	0
SUBTOTALS CARRIED FROM SHEET P.121					3	1	1	0	3	0	0	7	0	0
SUBTOTALS CARRIED FROM SHEET P.123					6	2	2	1	0	0	0	20	43	512
SUBTOTALS CARRIED FROM SHEET P.125					11	0	0	0	3	2	0	2	0	591
TOTALS CARRIED TO GENERAL SUMMARY					**20**	**3**	**12**	**1**	**6**	**2**	**2**	**29**	**43**	**1103**

EXISTING MANHOLES TO BE RECONSTRUCTED TO GRADE, AS PER PLAN

	S.R. 8			PROP. RIM		
REF. NO.	STATION	OFFSET	SIDE	ELEVATION	NORTHING (Y)	EASTING (X)
D-2	4309+13.58	6.61	RT	1066.30	508949.29	2243075.19
D-11	4321+79.37	39.23	RT	1058.13	510205.45	2243233.31
D-12	4321+90.00	7.00	RT	1058.12	510219.25	2243202.31
D-17	4329+87.55	37.13	RT	1075.30	511009.77	2243312.18
D-47	366+41.61	50.12	LT	1039.15	515242.27	2243213.91
D-48	367+29.24	50.16	LT	1040.29	515330.23	2243217.02
D-50	374+76.48	75.41	RT	1034.74	516065.46	2243396.23
D-51	375+62.01	76.88	LT	1033.36	516167.07	2243254.15
D-52	376+52.85	69.08	RT	1030.92	516240.53	2243409.68
D-54	376+96.98	66.25	LT	1029.66	516300.25	2243280.46
D-55	378+04.03	65.10	RT	1027.14	516391.40	2243423.51
D-57	378+04.50	62.66	LT	1027.16	516406.60	2243296.66
D-58	379+06.48	52.18	LT	1025.90	516506.64	2243319.03
D-59	379+52.04	59.98	RT	1025.16	516538.72	2243435.76
D-61	380+46.41	59.39	RT	1024.92	516632.51	2243446.26
D-63	381+80.71	66.50	LT	1025.40	516780.66	2243337.00
D-64	381+82.34	63.01	RT	1025.36	516767.08	2243465.81
D-65	382+62.10	65.74	RT	1025.84	516845.96	2243477.88
D-66	382+71.10	66.80	LT	1026.01	516870.46	2243347.31
D-67	383+41.85	68.47	RT	1026.26	516924.84	2243489.95
D-68	384+02.36	73.75	LT	1025.90	517001.63	2243355.82
D-69	384+20.98	73.10	RT	1026.69	517002.88	2243503.84
D-70	385+02.20	79.40	RT	1027.18	517082.80	2243519.63
D-71	385+24.72	70.12	LT	1027.13	517122.71	2243373.79
D-73	392+98.79	52.58	LT	1032.45	517889.37	2243482.07

THE ABOVE INFORMATION IS PROVIDED FOR RELEVANT STRUCTURES WHOSE INFORMATION IS NOT SHOWN ELSEWHERE IN THE PLANS. TOTAL IS ALREADY INCLUDED IN SUBSUMMARY QUANTITIES.

EXISTING CATCH BASINS ADJUSTED TO GRADE

	S.R. 8			PROP. GRATE
REF. NO.	STATION	OFFSET	SIDE	ELEVATION
D-1	4309+12.14	43.99	RT	1067.06
D-8	4318+43.00	42.75	RT	1054.97
D-13	4322+60.00	44.00	RT	1060.02
D-14	4324+84.00	44.00	RT	1064.78
D-19	4330+07.81	75.63	RT	1075.48

THE ABOVE INFORMATION IS PROVIDED FOR RELEVANT STRUCTURES WHOSE INFORMATION IS NOT SHOWN ELSEWHERE IN THE PLANS. TOTAL IS ALREADY INCLUDED IN SUBSUMMARY QUANTITIES.

FINAL TRACINGS
NOT FOR CONSTRUCTION

DRAINAGE SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS008 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:49 AM USER: cwuethrich
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DESIGN AGENCY
EDG Environmental Design Group
DESIGNER MSD
REVIEWER SAC 05-08-26
PROJECT ID 114865
SHEET P.127 TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	605 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	605 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	BENDS AND BRANCHES FOR INFORMATION ONLY: END CAP	6"X6" TEE	6" 90° BEND	6" 45° BEND	6"X6" WYE		6" UNDERDRAIN CONNECTION AT OUTLET: OUTLET STRUCTURE REFERENCE NO.	UNDERDRAIN DIRECTION 1	UNDERDRAIN INVERT 1	UNDERDRAIN DIRECTION 2	UNDERDRAIN INVERT 2	UNDERDRAIN DIRECTION 3	UNDERDRAIN INVERT 3
					FT	FT	EACH	EACH	EACH	EACH	EACH	EACH								
		S.R. 8																		
P.135	UD-1	4312+15.19		RT			10							D-3	S	1056.70	SW	1057.27		
P.136	UD-2	4314+90.00	4315+00.00	RT			8							D-4	S	1053.00				
P.136	UD-3	4315+08.00	4316+40.92	RT		123	15	1				1		D-5	S	1051.86	SW	1052.35		
P.136	UD-4	4316+74.00	4316+80.00	RT			6							D-6	S	1051.80				
P.136	UD-5	4316+84.00	4317+29.00	RT		35	10	1						D-7	S	1051.76	SW	1052.18		
P.136	UD-6	4320+16.00	4320+76.00	RT		50	10	1						D-9	N	1053.90				
P.137	UD-7	4326+83.00	4329+83.00	LT		300		1						CONNECT TO EXISTING UNDERDRAIN						
P.137	UD-8	4326+83.00	4329+93.00	LT		312								CONNECT TO EXISTING UNDERDRAIN						
P.137	UD-9	4328+20.00	4328+40.00	LT		10	10				1			D-15	N	1053.90				
P.137	UD-10	4328+20.00	4328+32.00	RT			12							D-16	N	1053.90				
P.137	UD-11	4329+95.00	326+70.00	LT		240	10							D-18	N	1072.54	E	1072.72		
P.137	UD-12	4329+95.00	326+70.00	LT		250	8			1				D-18						
P.137, P.138	UD-13	326+70.00	333+18.00	LT		638	10							D-22	S	1062.00	E	1062.00		
P.137, P.138	UD-14	326+70.00	333+18.00	LT		648	8			1				D-22						
P.138, P.139	UD-15	333+28.00	340+60.00	LT		722	10	1		1				D-29	S	1044.24	E	1044.64		
P.138	UD-16	333+20.00	335+49.28	LT		219	10	1						D-28	S	1054.78				
P.138, P.139	UD-17	335+54.00	340+60.00	LT		505	8	1	1					D-29						
P.138	UD-18	333+08.00	333+18.00	CL			27			1				D-24	S	1058.08	E	1058.28		
P.138	UD-19	334+43.89	336+26.67	LT		184								CONNECT TO EXISTING UNDERDRAIN						
P.138	UD-20	334+56.00	336+32.55	CL		177								CONNECT TO EXISTING UNDERDRAIN						
P.138	UD-21	334+54.68	336+37.39	RT		183								CONNECT TO EXISTING UNDERDRAIN						
P.138	UD-22	334+75.95	336+72.48	RT		176	30				1			CONNECT TO EXISTING UNDERDRAIN						
P.138	UD-23	334+89.44	336+72.48	RT		183								CONNECT TO EXISTING UNDERDRAIN						
P.138, P.139	UD-24	336+04.94	340+60.00	LT		455	10	1		1				D-29						
P.139	UD-25	340+62.00	342+76.00	LT		214	7	1	1					D-30	S	1042.82	E	1042.72		
P.139	UD-26	340+70.00	342+76.00	LT		196	10	1		1				D-30						
P.139	UD-27	340+62.00	342+76.00	LT		214	14	1		1				D-30						
P.139	UD-28	342+78.00	345+95.00	LT		316	6	1	1					D-37	S	1040.73	E	1040.83	N	1040.73
P.139	UD-29	342+78.00	345+95.00	LT		316	21	1		1				D-37						
P.139	UD-30	342+86.00	345+95.00	LT		299	10	1						D-37						
P.139	UD-31	345+95.00	346+27.00	LT	22		10	1						D-37						
P.139	UD-32	345+95.00	346+39.00	LT	34		10	1						D-37						
P.139	UD-33	345+95.00	346+39.00	LT	34		10	1						D-37						
P.139, P.140	UD-34	347+72.00	348+00.00	LT		20	8	1						D-38	S	1039.20	E	1039.80		
P.139, P.140	UD-35	347+72.00	348+00.00	LT		28	6	1	1					D-38						
P.139, P.140	UD-36	347+72.00	348+00.00	LT		28	25	1		1				D-38						
P.140	UD-37	348+24.00	0+21.82	LT		181	8	1	1					D-130	E	1038.02	W	1037.73		
P.140	UD-38	348+02.00	0+21.82	LT		203	8	1	1					D-130						
P.140	UD-39	348+02.00	0+21.82	LT		211	10	1		1				D-129	E	1038.30	N	1038.15		
P.140	UD-40	350+15.48	357+34.00	LT		719	8	1		1				D-41	E	1033.53	S	1033.41		
P.140	UD-41	350+25.48	357+34.00	LT		699	10	1						D-41						
P.140, P.141	UD-42	357+44.00	358+24.00	LT		70	10	1			1			D-42	E	1032.95	S	1032.85		
P.140, P.141	UD-43	357+36.00	358+24.00	LT		88	8	1		1				D-42						
P.141	UD-44	358+29.00	358+44.00	LT		7	8	1			1			D-43	E	1032.81	S	1032.81		
P.141	UD-45	358+26.00	358+44.00	LT		18	8	1		1				D-43						
SUBTOTALS CARRIED TO SHEET P.130					90	9237	427	29	6	13	4	1								

FINAL TRACINGS
NOT FOR CONSTRUCTION

UNDERDRAIN SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS009 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:52 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.128 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	605 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT	605 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT	611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS EACH	BENDS AND BRANCHES FOR INFORMATION ONLY: END CAP EACH	6"X6" TEE EACH	6" 90° BEND EACH	6" 45° BEND EACH	6"X6" WYE EACH		6" UNDERDRAIN CONNECTION AT OUTLET: OUTLET STRUCTURE REFERENCE NO.	UNDERDRAIN DIRECTION 1	UNDERDRAIN INVERT 1	UNDERDRAIN DIRECTION 2	UNDERDRAIN INVERT 2	UNDERDRAIN DIRECTION 3	UNDERDRAIN INVERT 3
		EXIT RAMP (TO I.R. 76)																		
P.145	UD-46	101+50.00	101+82.00	LT		22	10	1						EX. CB	N	1065.29	NE	1065.29		
P.145	UD-47	101+50.00	101+90.00	CL		36	8	1			1			EX. CB						
P.145	UD-48	101+92.00	105+18.00	LT		316	10	1						D-74	N	1065.87	NE	1065.87		
P.145	UD-49	101+92.00	103+19.00	CL		118	8	1			1			D-74						
P.145	UD-50	103+23.75	105+26.00	CL		193	10	1						D-76	N	1068.01				
P.145	UD-51	105+28.00	107+47.31	LT		214	8				1			D-78	E	1071.90	N	1071.61		
P.145	UD-52	105+28.00	107+47.31	CL		219	8			1				D-78						
P.145, P.146	UD-53	107+47.31	113+19.42	LT		559	16				1	1		CONNECT TO UD-54						
P.145, P.146	UD-54	107+47.31	114+07.00	CL		660	8			1				D-82	E	1061.07				
P.146, P.147	UD-55	114+09.00	123+65.00	CL		958	8	1		1				D-84	E	1042.32				
P.147	UD-56	123+67.00	126+64.00	CL		297	8	1	1	1				D-85	E	1040.88	NE	1040.88		
P.147	UD-57	126+64.00	127+17.31	CL	53			1						D-85						
P.147	UD-58	128+72.93	128+98.60	CL		16	10	1		1				D-89	E	1039.64				
P.148	UD-59	128+87.00	129+08.16	RT		15	6	1			1			D-90	S	1039.95				
P.148	UD-60	129+01.00	132+20.00	CL		309	10	1						D-98	S	1036.80				
P.140, P.141	UD-61	129+19.00	132+13.10	RT		287	7	1			1			D-96	S	1036.35				
P.148	UD-62	132+15.00	133+68.00	RT		147	7	1			1			D-100	S	1034.09				
P.148	UD-63	132+25.00	132+44.24	CL		19	10	1		1				D-99	E	1036.55				
P.148	UD-64	132+46.00	139+76.00	CL		730	10	1		1				D-114	S	1031.24	E	1031.35		
P.148	UD-65	132+54.00	139+76.00	LT		716	10	1						D-114						
P.148	UD-66	133+70.00	134+16.83	RT		47	5	1	1		1			D-103	W	1033.35				
P.148	UD-67	134+16.83	134+50.00	RT	34			1			1			D-103						
P.148	UD-68	134+50.00	135+20.00	RT		70	4	1		1				D-105	W	1033.36				
P.148	UD-69	135+22.00	136+37.00	RT		107	8	1						D-110	S	1032.87				
P.148	UD-70	136+41.00	136+58.00	RT		17	4	1		1				D-111	W	1033.05	NW	1032.80		
P.148	UD-71	136+58.00	136+87.56	RT	24		6	1			1			D-111						
P.148, P.149	UD-72	358+46.00	142+83.05	RT		334	8	1			1			D-123	SE	1030.69	NE	1030.69		
P.148, P.149	UD-73	139+78.00	141+21.00	CL		133	10	1						D-116	SE	1030.95				
P.148, P.149	UD-74	139+86.00	142+04.00	LT		213	10	1						D-119	S	1030.52	E	1030.86		
P.149	UD-75	141+33.00	142+04.00	CL		71	10	1		1				D-119						
P.149	UD-76	142+06.00	142+80.00	CL		74	10	1	1					D-121	S	1030.24	N	1030.24	E	1030.57
P.149	UD-77	142+14.00	142+80.00	LT		56	10	1						D-121						
P.149	UD-78	142+80.00	143+30.00	LT		40	10	1						D-121						
P.149	UD-79	142+80.00	143+38.00	CL		58		1						D-121						
P.149	UD-80	142+83.00	145+50.31	RT		260	8	1			1			D-123						
P.149	UD-81	143+40.00	145+48.00	LT		200	8	1						D-122	N	1030.39	E	1030.73		
P.149	UD-82	143+40.00	145+57.00	CL		217	10	1		1				D-122						
P.149	UD-83	145+59.00	366+46.40	LT		175	10	1						D-127	N	1033.22	NE	1033.58		
P.149	UD-84	145+59.00	366+38.00	CL		177	10	1			1			D-127						
SUBTOTALS CARRIED TO SHEET P.130					111	8080	313	35	3	11	13	1								

FINAL TRACINGS
NOT FOR
CONSTRUCTION

UNDERDRAIN SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS010 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:53 AM USER: cwuethrich
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\404-Engineering_EDG\Drainage\Sheets\114865_DS001.dgn

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.129 | TOTAL 627

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	605 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	605 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	BENDS AND BRANCHES FOR INFORMATION ONLY: END CAP	6"X6" TEE	6" 90° BEND	6" 45° BEND	6"X6" WYE		6" UNDERDRAIN CONNECTION AT OUTLET: OUTLET STRUCTURE REFERENCE NO.	UNDERDRAIN DIRECTION 1	UNDERDRAIN INVERT 1	UNDERDRAIN DIRECTION 2	UNDERDRAIN INVERT 2	UNDERDRAIN DIRECTION 3	UNDERDRAIN INVERT 3
					FT	FT	EACH	EACH	EACH	EACH	EACH	EACH								
		ENTRANCE RAMP (TO S.R. 8 SB)																		
P.148	UD-85	0+21.82	5+31.50	LT		506	4	1						D-130						
P.148	UD-86	0+21.82	5+31.50	CL		510		1						D-130						
P.148	UD-87	9+36.50	9+48.50	RT		12	4	1	1					D-132	E	1051.55				
P.148, P.149	UD-88	9+48.50	10+00.00	RT		52								D-132						
P.149	UD-89	10+00.00	10+62.30	RT		62	4							D-133	E	1051.91				
		GOODKIRK ST.																		
P.149	UD-90	500+66.00	501+20.00	LT		54	2	1		1				D-136	W	1020.80				
P.149	UD-91	501+24.00	502+14.00	LT		90	2	1		1				D-137	W	1022.13				
P.149	UD-92	502+18.00	503+02.00	LT		84	2	1		1				D-138	W	1026.24				
P.150, P.151	UD-93	503+06.00	504+31.00	LT		117	10	1						D-139	N	1030.17				
P.151	UD-94	504+61.00	504+79.58	LT		14	10	1						D-143	S	1034.96	N	1034.96		
P.151	UD-95	504+79.58	505+30.50	LT		41	10							D-143						
P.151	UD-95A	505+30.50	506+20.00	LT		80	10							D-144	S	1034.76				
P.151	UD-96	506+24.00	506+76.88	LT		53	2	1	1					D-145	W	1034.56				
P.151	UD-97	506+76.88	507+24.00	LT		49	10	1						D-145						
P.151, P.152	UD-98	507+30.00	508+60.00	LT		135	10	1						D-147	W	1034.78				
P.152	UD-99	508+90.12	509+16.00	LT		18	10	1						D-151	E	1037.38				
P.152	UD-100	509+20.00	510+16.00	LT		86	10	1						D-153	N	1039.18				
P.152	UD-101	510+20.00	510+96.00	LT		66	10	1						D-156	N	1043.53				
P.152	UD-102	511+00.00	511+97.00	LT		100	10	1						D-158	N	1047.09				
P.152	UD-103	512+18.04	512+55.00	LT		43	10	1						D-167	E	1051.89				
P.152, P.153	UD-104	512+59.00	513+04.00	LT		35	10	1		1				D-168	N	1052.08				
P.153	UD-105	513+08.00	513+70.00	LT		62	2	1						D-170	W	1052.51				
P.153	UD-106	513+74.00	514+40.00	LT		66	2	1		1				D-171	W	1052.92				
P.153	UD-107	514+44.00	514+98.26	LT		46	10	1						D-173	N	1053.34				
P.153	UD-108	513+63.46	515+19.00	RT		205		1						CONNECT TO UD-89						
P.153	UD-109	515+64.00	515+98.60	RT		33	8	1						EX. CB	S	1054.34				
		CARROLL ST.																		
P.154	UD-110	14+47.00	14+70.00	LT		20		1						CONNECT TO EXISTING UNDERDRAIN						
P.154	UD-111	14+47.00	14+70.00	RT		24		1						CONNECT TO EXISTING UNDERDRAIN						
SUBTOTALS THIS SHEET						2663	162	24	2	5										
SUBTOTALS CARRIED FROM SHEET P.128					90	9237	427	29	6	13	4	1								
SUBTOTALS CARRIED FROM SHEET P.129					111	8080	313	35	3	11	13	1								
TOTALS CARRIED TO GENERAL SUMMARY					**201**	**19980**	**902**	88	11	29	17	2								

FINAL TRACINGS
NOT FOR CONSTRUCTION

UNDERDRAIN SUBSUMMARY

SUM-077/008-11.65/0.00

MODEL: DS011 PAPERSIZE: 34x22 (in.) DATE: 9/16/2026 TIME: 8:48:54 AM USER: cwuethrich
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DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD

REVIEWER SAC 05-08-26

PROJECT ID 114865

SHEET P.130 | TOTAL 627

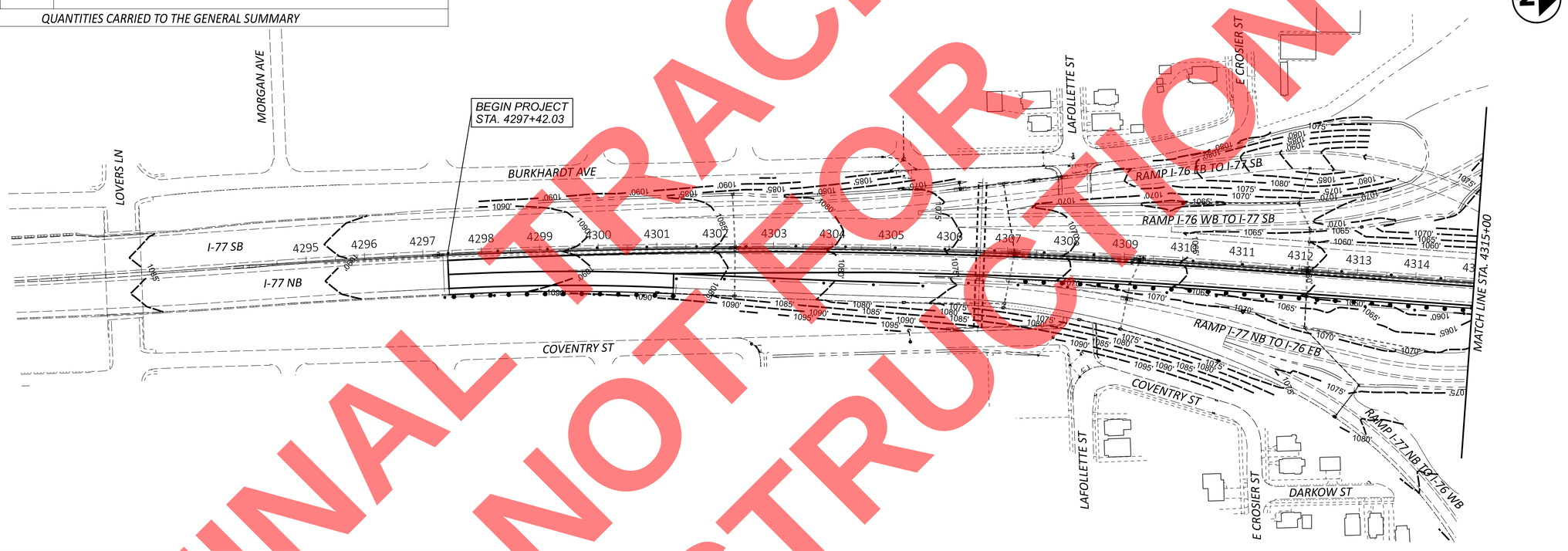
** PER L&D VOL. 2, SEC. 1112.1, A NOI IS NOT REQUIRED BECAUSE RUNOFF IS COLLECTED IN A COMBINED SEWER. PER L&D VOL. 2, SEC. 1115.2 IF A NOI IS NOT REQUIRED, THEN POST CONSTRUCTION BMP'S ARE NOT NEEDED.*

USGS QUADRANGLE MAP
AKRON WEST, OH
USGS QUADRANGLE MAP
LATITUDE: 41°04'15"N
LONGITUDE: 81°30'15"W

ESTIMATED QUANTITIES			
ITEM	QUAN.	UNIT	DESCRIPTION
832	LS		STORM WATER POLLUTION PREVENTION PLAN
832	910,000	EACH	EROSION CONTROL
832	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS
832	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE
QUANTITIES CARRIED TO THE GENERAL SUMMARY			

PROJECT DESCRIPTION

MAJOR REHABILITATION OF 1.86 MILES OF IR-77 AND SR-8 FROM LOVERS LANE TO PERKINS STREET INCLUDING RAMP AND SERVICE ROAD RECONFIGURATIONS. WORK INCLUDES NEW FULL DEPTH PAVEMENT, ASPHALT RESURFACING, STORM SEWERS, BRIDGES, RETAINING WALLS, LIGHTING, ITS, TRAFFIC CONTROL SIGNING AND PAVEMENT MARKINGS.



PROJECT DATA			
TOTAL AREA (RIGHT OF WAY):	89.2 ACRES	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE:	0.70
TOTAL PROJECT EARTH DISTURBED AREA:	13.5 ACRES	RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE:	0.79
PROJECT EARTH DISTURBED AREA DRAINING TO COMBINED SEWERS:	13.5 ACRES	POST CONSTRUCTION BMP: THE PROJECT DRAINS TO THE CITY OF AKRON COMBINED SEWER SYSTEM. THEREFORE, BMPs ARE NOT REQUIRED. HOWEVER, VEGETATED BIOFILTERS HAVE BEEN PROVIDED WHERE FEASIBLE.	
EARTH DISTURBED AREA NOT DRAINING TO COMBINED SEWERS:	0.0 ACRES		
EARTH DISTURBED AREA FOR POST-CONSTRUCTION BMP:	* 0.0 ACRES		
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	2.0 ACRES	IMMEDIATE RECEIVING WATERS:	CITY OF AKRON WATER RECLAMATION FACILITY
NOTICE OF INTENT EARTH DISTURBED AREA:	* N/A ACRES	SUBSEQUENT RECEIVING WATERS:	CUYAHOGA RIVER
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE:	27.7 ACRES		
IMPERVIOUS (PAVED) AREA FOR POST-CONSTRUCTION SITE:	31.4 ACRES		

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 50 100 200

PROJECT SITE PLAN
STA. 4295+00.00 TO STA. 4315+00.00

DESIGN AGENCY
EDG Environmental Design Group
DESIGNER MSD
REVIEWER SAC 05-08-26
PROJECT ID 114865
SHEET P.131 TOTAL 627

SUM-077/008-11.65/0.00

MODEL: 114865_DE001 PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:16:51 AM USER: cwuethrich
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FINAL TRADINGS
NOT FOR
CONSTRUCTION

DESIGN AGENCY: EDG Environmental Design Group	DESIGNER: MSD	REVIEWER: SAC 05-08-26	PROJECT ID: 114865
SHEET: P.132	TOTAL: 627		

PROJECT SITE PLAN
STA. 4315+00.00 TO STA. 358+00.00

HORIZONTAL SCALE IN FEET
0 50 100 200

SUM-077/008-11.65/0.00

MODEL: 114865_DE003 PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:17:48 AM USER: cwuethrich
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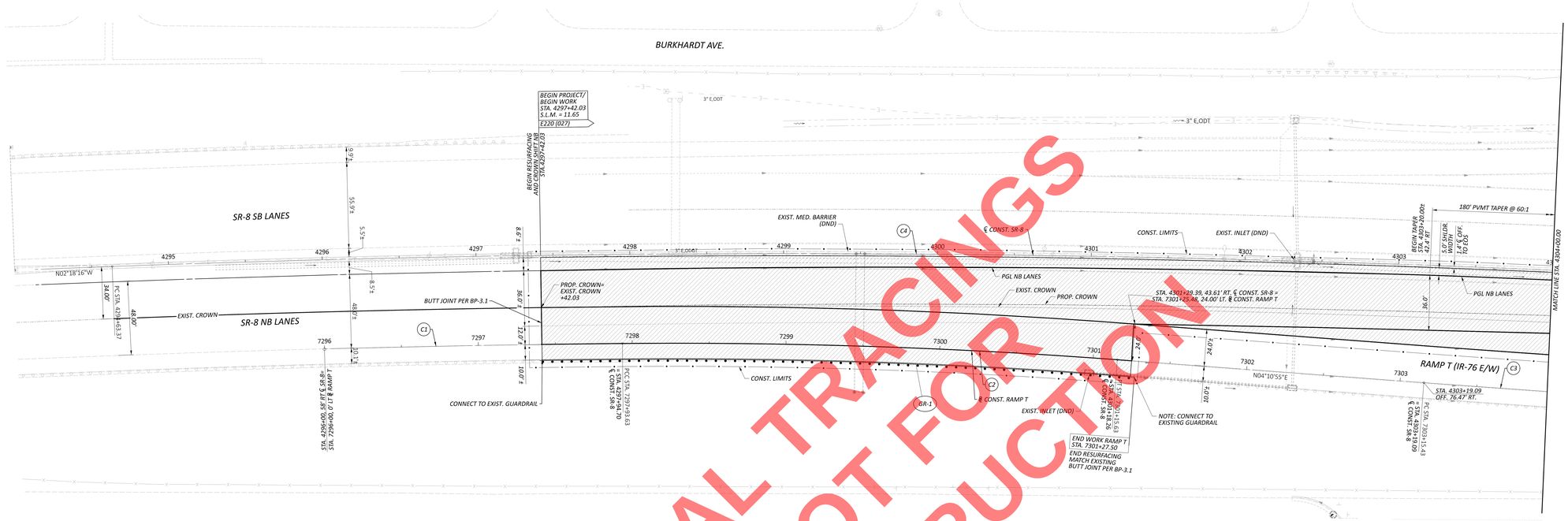
FINAL TRACINGS
NOT FOR
CONSTRUCTION

DESIGN AGENCY: EDG Environmental Design Group	DESIGNER: MSD	REVIEWER: SAC 05-08-26	PROJECT ID: 114865
SHEET: P.133	TOTAL: 627		

PROJECT SITE PLAN
STA. 358+00 TO STA. 395+00

HORIZONTAL SCALE IN FEET
0 100
50 200



C1 CURVE DATA
P.I. = STA. 7296+96.82
Δ = 00°58'23" RT
Dc = 00°30'00"
R = 11,401.16'
T = 96.82'
L = 193.63'
E = .41'

C2 CURVE DATA
P.I. = STA. 7299+54.73
Δ = 04°49'48" RT
Dc = 01°30'00"
R = 3,819.72'
T = 161.1'
L = 322'
E = 3.4'

C3 CURVE DATA
P.I. = STA. 7304+29.14
Δ = 01°08'13" LT
Dc = 00°30'00"
R = 11,459.16'
T = 113.70'
L = 227.40'
E = 0.56'

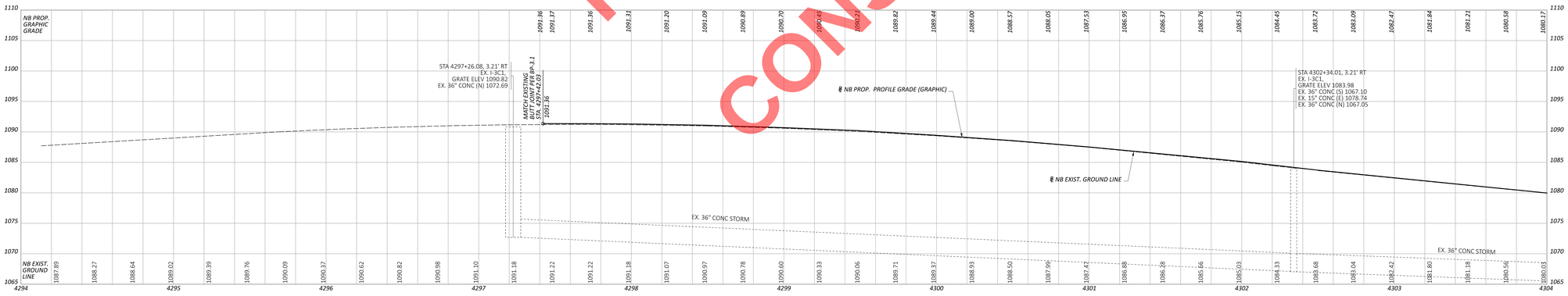
C4 CURVE DATA
P.I. = STA. 4302+70.06
Δ = 08°03'13" RT
Dc = 00°30'00"
R = 11,459.16'
T = 806.69'
L = 1,610.73'
E = 28.36'

GR-1	
DESC.	STA.
MEET EX. GR	7297+40.00
MEET EX. GR	7301+27.50

FOR ROADWAY CROSS SECTIONS, SEE SHEETSP.157 -P.158
FOR INTERCHANGE DETAILS, SEE SHEETS P.199
FOR TRAFFIC CONTROL, SEE SHEET P.249

♦ - PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.
▨ - PROPOSED RESURFACING

- D-0 DRAINAGE
- R-0 REMOVAL
- SA-0 SANITARY
- W-0 WATERWORK
- GR-0 GUARDRAIL
- B-0 BARRIER TYPE B OR C
- BD-0 BARRIER TYPE D
- F-0 FENCE
- C-0 CURB
- SW-0 SIDEWALK
- DW-0 DRIVEWAY
- CR-0 CURB RAMP



FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL
SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/SR-8
STA. 4295+00 TO STA. 4304+00

DESIGN AGENCY
ARCADIS
222 SOUTHMS STREET, SUITE 30
AKRON, OHIO 44308
330.434.4080

DESIGNED SMG
REVIEWED KDK 05-19-26
PROJECT ID 114865
SHEET P.134 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: C3-5_5008 - SR8 Part 1 - PAVEMENT - 4X4.4.dgn | DATE: 9/23/2026 TIME: 1:56:33 PM | USER: Bennett837
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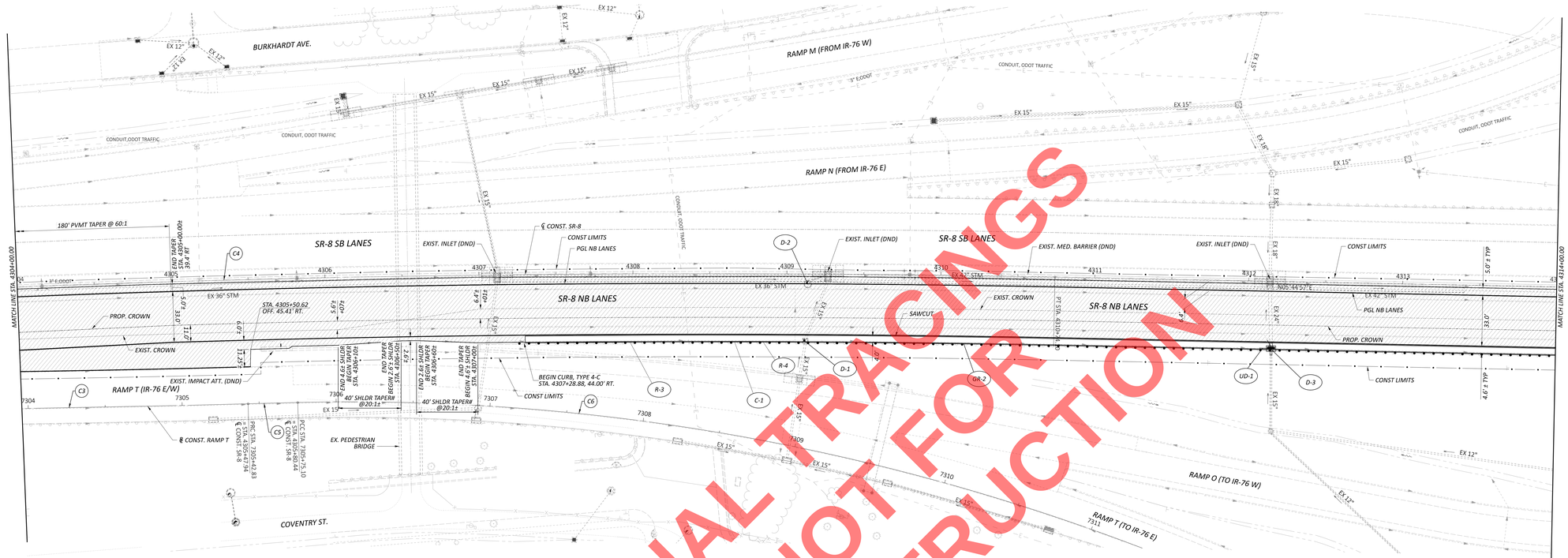

C3 CURVE DATA
P.I. = STA. 7304+29.14
Δ = 01°08'13" LT
Dc = 00°30'00"
R = 11,459.16'
T = 113.70'
L = 227.40'
E = 0.56'

C5 CURVE DATA
P.I. = STA. 7305+58.97
Δ = 00°09'41" RT
Dc = 00°30'00"
R = 11,459.16'
T = 16.14'
L = 32.27'
E = .01'

C6 CURVE DATA
P.I. = STA. 7308+93.73
Δ = 25°04'55" RT
Dc = 04°00'00"
R = 1,432.39'
T = 318.63'
L = 627.05'
E = 35.01'

C4 CURVE DATA
P.I. = STA. 4302+70.06
Δ = 08°03'13" RT
Dc = 00°30'00"
R = 11,459.16'
T = 806.69'
L = 1,610.73'
E = 28.36'

FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.158 - P.161
FOR STORM SEWER PROFILES, SEE SHEETS P.216
FOR INTERCHANGE DETAILS, SEE SHEETS P.199
FOR TRAFFIC CONTROL, SEE SHEET P.249

- PROPOSED RESURFACING

D-0 DRAINAGE
R-0 REMOVAL
SA-0 SANITARY
W-0 WATERWORK
GR-0 GUARDRAIL
B-0 BARRIER TYPE B OR C
BD-0 BARRIER TYPE D
F-0 FENCE
C-0 CURB
SW-0 SIDEWALK
DW-0 DRIVEWAY
CR-0 CURB RAMP

GR-2	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	4307+27.00
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	4307+27.00
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	4317+39.50
END BRIDGE TERMINAL ASS'Y, TYPE 1	4317+64.50

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/SR-8
STA. 4304+00 TO STA. 4314+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET, SUITE 20
AVON, OH 44011
440.934.9000

DESIGNER: SMG
REVIEWER: KDK 05-19-26
PROJECT #: 114865
SHEET: P.135 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: C3_008 SR Plan 2 PRINTED: 05-14-26 DATE: 9/23/2026 TIME: 1:57:23 PM USER: Bonnie1837
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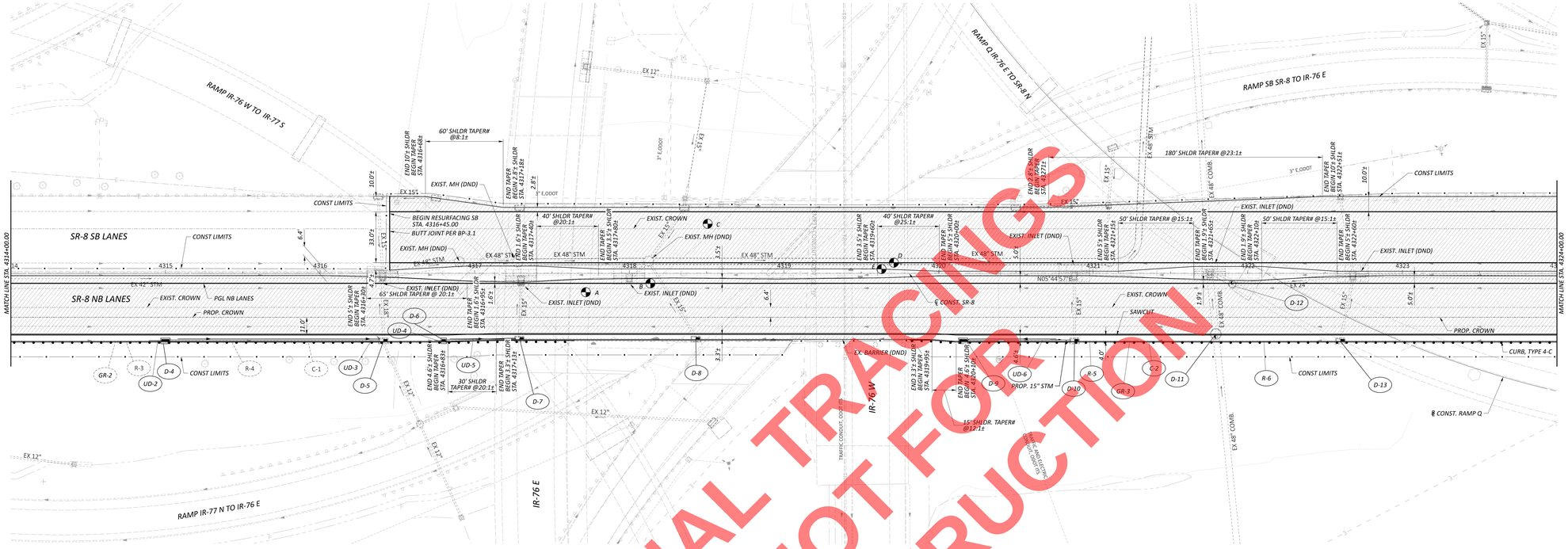



#-TAPER LOCATIONS GIVEN ARE APPROXIMATE. ACTUAL LOCATIONS TO MATCH EXISTING.

℄ -MIN. VERTICAL CLEARANCE LOCATIONS (APPROXIMATE)
A-34.6'±
B-15.6'±
C-15.7'±
D-17.0'±
E-17.0'±

FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.161-P.163
FOR STORM SEWER PROFILES, SEE SHEETS P.216
FOR TRAFFIC CONTROL, SEE SHEETS P.249-P.250

♦ - *PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.*
▨ - *PROPOSED RESURFACING*

- D-0 DRAINAGE
- R-0 REMOVAL
- SA-0 SANITARY
- W-0 WATERWORK
- GR-0 GUARDRAIL
- B-0 BARRIER TYPE B OR C
- BD-0 BARRIER TYPE D
- F-0 FENCE
- C-0 CURB
- SW-0 SIDEWALK
- DW-0 DRIVEWAY
- CR-0 CURB RAMP

GR-2	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	4307+27.00
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	4307+27.00
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	4317+39.50
END BRIDGE TERMINAL ASS'Y, TYPE 1	4317+64.50

GR-3	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	4319+81.00
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	4319+81.00
END MGS GR/BEGIN TYPE T ANCHOR ASS'Y	4328+43.50
END TYPE T ANCHOR ASS'Y	4328+56.00

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/SR-8
STA. 4314+00 TO STA. 4324+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET STE 20
AVON, MA 02322
(508) 588-6888

DESIGNER: SMG
REVIEWER: KDK 05-19-26
PROJECT ID: 114865
SHEET: P.136 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: C3-_SMB - SR8 Plan 3 PRINTED: 4th:44.4m.1 DATE: 9/23/2026 TIME: 1:58:18 PM USER: lbonnell837
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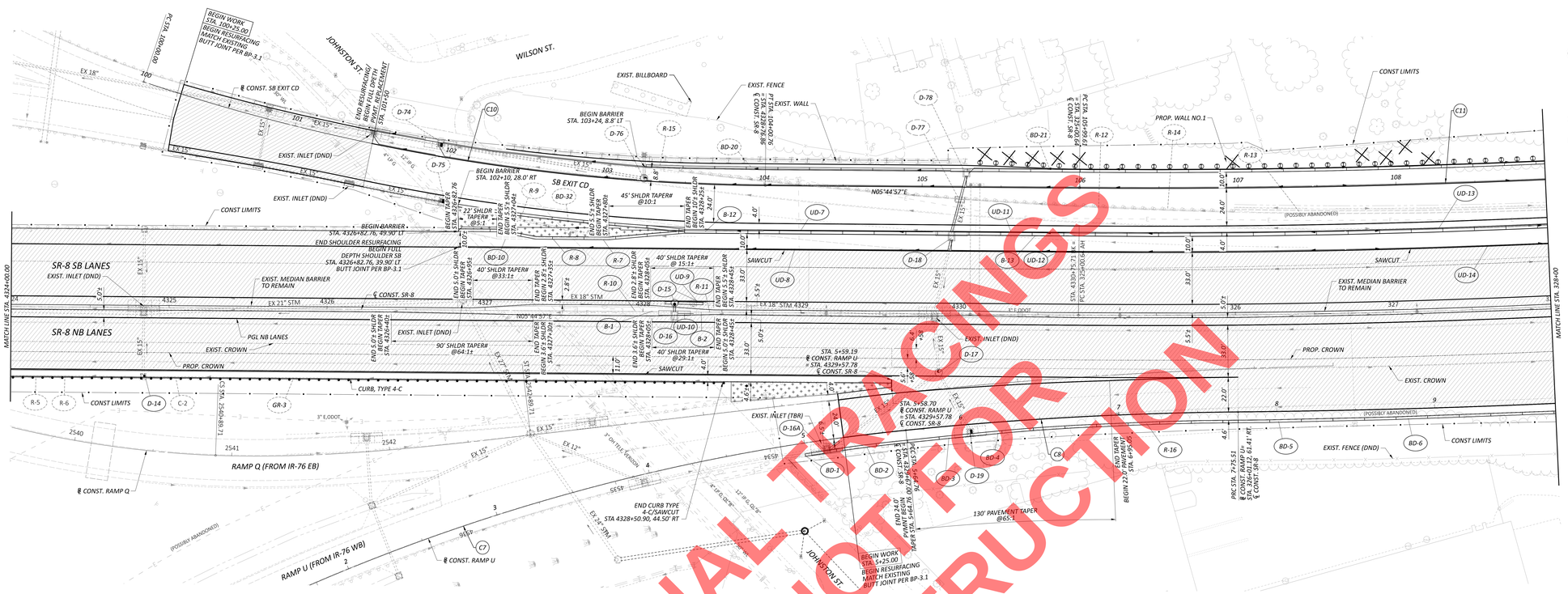

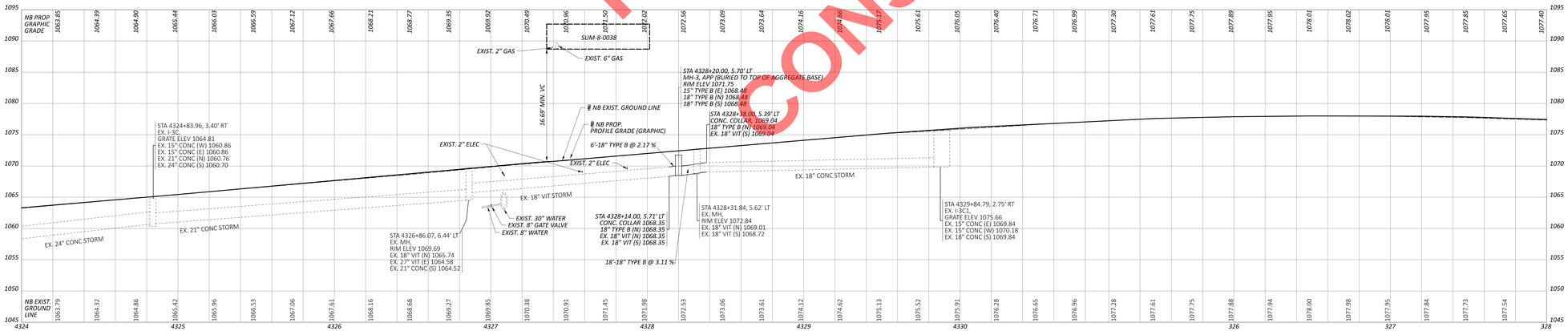

FINAL TRACINGS
NOT FOR
CONSTRUCTION

C7 CURVE DATA
P.I. = STA. 2+87.11
Δ = 25°24'52" RT
Dc = 04°30'00"
R = 1,273.24'
T = 287.11'
L = 564.76'
E = 31.97'

C8 CURVE DATA
P.I. = STA. 6+70.21
Δ = 05°13'50" RT
Dc = 02°28'55"
R = 2,308.53'
T = 105.45'
L = 210.75'
E = 2.41'

C9 NOT USED

C10 CURVE DATA
P.I. = STA. 102+02.05
Δ = 18°02'03" LT
Dc = 04°30'00"
R = 1,273.24'
T = 202.05'
L = 400.76'
E = 15.93'

C11 CURVE DATA
P.I. = STA. 109+02.30
Δ = 06°08'03" LT
Dc = 01°00'51"
R = 5,649.05'
T = 302.69'
L = 604.79'
E = 8.10'

FOR SB EXIT CD / SB ENTRANCE RAMP PLAN AND PROFILE, SEE SHEETS P.145
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.163-P.167
FOR STORM SEWER PROFILES, SEE SHEETS P.216
FOR INTERCHANGE DETAILS, SEE SHEETS P.200
FOR RETAINING WALL 1 PLANS, SEE SHEETS P.302 - P.303
FOR TRAFFIC CONTROL, SEE SHEETS P.250

♦ - PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.
- PROPOSED RESURFACING
- PROPOSED ASPHALT

D-0 DRAINAGE
R-0 REMOVAL
SA-0 SANITARY
W-0 WATERWORK
GR-0 GUARDRAIL
B-0 BARRIER TYPE B OR C
BD-0 BARRIER TYPE D
F-0 FENCE
C-0 CURB
SW-0 SIDEWALK
DW-0 DRIVEWAY
CR-0 CURB RAMP

GR-3	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	4319+81.00
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	4319+81.00
END MGS GR/BEGIN TYPE T ANCHOR ASS'Y	4328+43.50
END TYPE T ANCHOR ASS'Y	4328+56.00

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/SR-8
STA. 4324+00 TO STA. 4330+75.71 BK/
STA. 325+00.64 AHD TO STA. 328+00

DESIGN AGENCY
ARCADIS
222 SOUTHMAIN STREET,SUITE 30
AKRON, OHIO 44308
330.434.4080

DESIGNED SMG
REVIEWED KDK 05-19-26
PROJECT ID 114865
SHEET P.137 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: C3_008 - SB Plan # PAVEMENT: 4X4.4 dw: 1 DATE: 9/23/2026 TIME: 1:59:21 PM USER: tbrink1837
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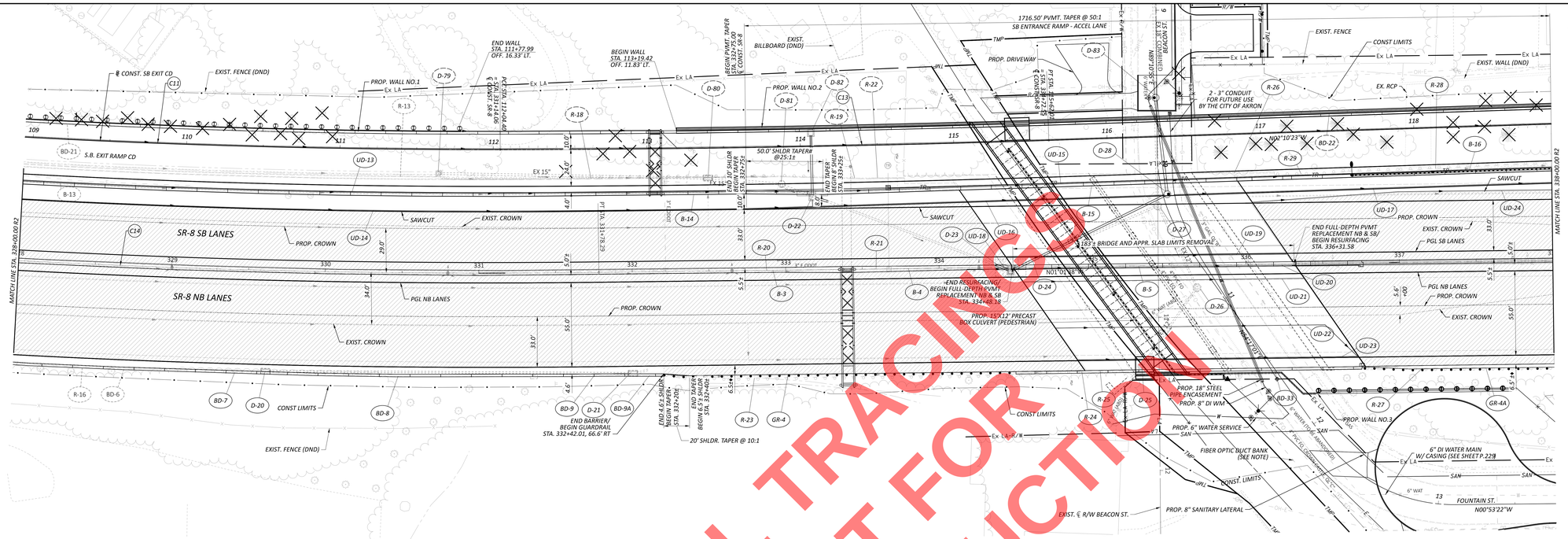
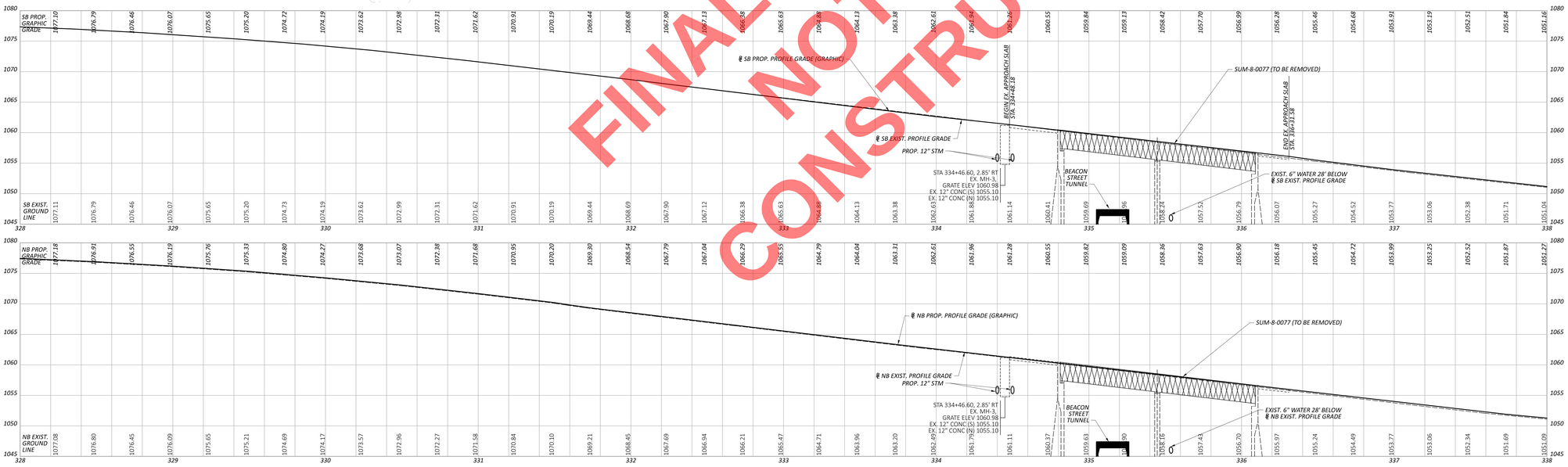


FINAL TRACING NOT FOR CONSTRUCTION



GR-4	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	332+36.75
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	332+36.75
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	345+87.14
END BRIDGE TERMINAL ASS'Y, TYPE 1	346+12.14

GR-4A	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	336+37.14
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	336+37.14
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	345+87.14
END BRIDGE TERMINAL ASS'Y, TYPE 1	346+12.14

NOTE:
THE FIBER OPTIC DUCT BANK ON BEACON ST. CONTAINS CONDUIT FROM THE FOLLOWING UTILITIES:

ZAYO
ARKONA
LUMEN

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/SR-8
STA. 328+00 TO STA. 338+00

DESIGN AGENCY
ARCADIS
ARCADIS U.S., INC.
222 SOUTHMAIN STREET, SUITE 305
AKRON, OHIO 44308
330.434.4383

DESIGNED: SMG
REVIEWED: KDK 05-19-26
PROJECT ID: 114865
SHEET: P.138 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: C3_0808 - SR8 Plan 3 PMP.dgn DATE: 9/23/2026 TIME: 1:59:37 PM USER: lbarnett837
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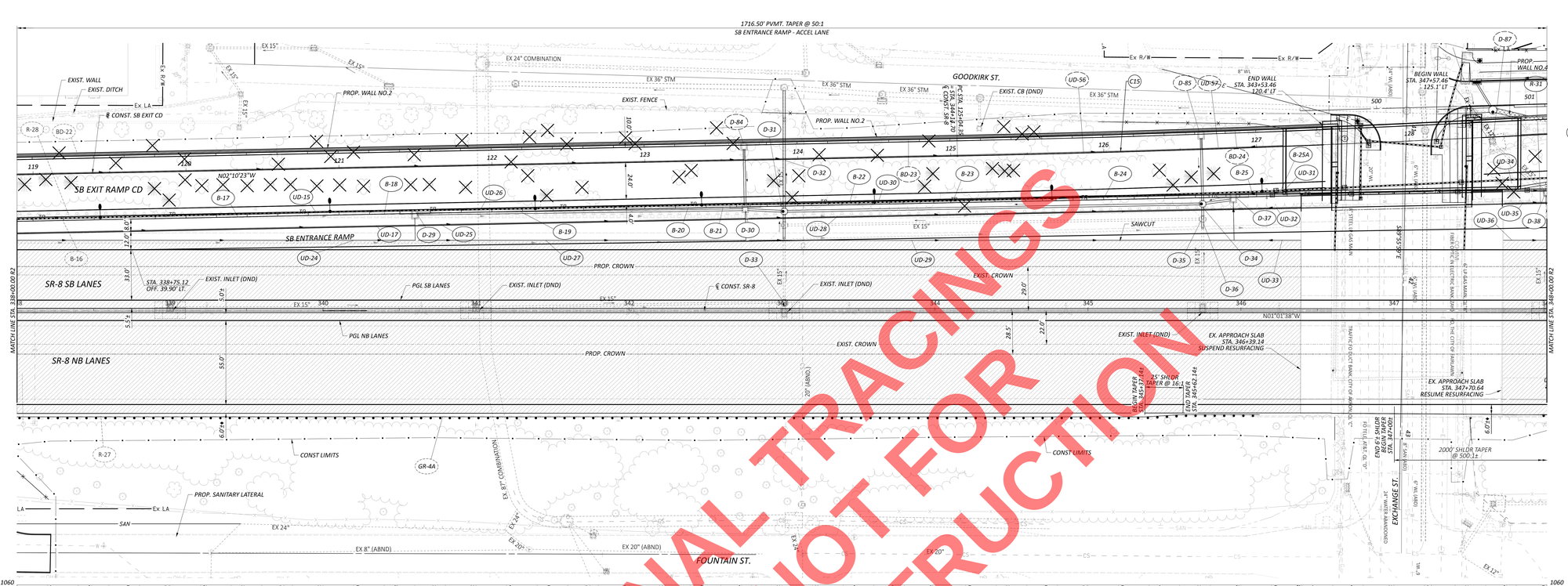

FINAL TRACINGS
NOT FOR CONSTRUCTION

C15 CURVE DATA
P.I. = STA. 127+64.19
Δ = 02°35'52" LT
Dc = 00°30'00"
R = 11,459.16'
T = 259.84'
L = 519.58'
E = 2.95'

FOR SB EXIT CD / SB ENTRANCE RAMP PLAN AND PROFILE, SEE SHEETS P.146 -P.147
FOR GOODKIRK STREET PLAN AND PROFILE, SEE SHEETS P.150
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.171 -P.175
FOR STORM SEWER PROFILES, SEE SHEETS P.217
FOR INTERCHANGE DETAILS, SEE SHEETS P.204 -P.205
FOR RETAINING WALL 2 PLANS, SEE SHEETS P.307 -P.309
FOR RETAINING WALL 4 PLANS, SEE SHEETS P.325
FOR TRAFFIC CONTROL, SEE SHEETS P.250 -P.251

♦ - PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.
▨ - PROPOSED RESURFACING

D-0	DRAINAGE
R-0	REMOVAL
SA-0	SANITARY
W-0	WATERWORK
GR-0	GUARDRAIL
B-0	BARRIER TYPE B OR C
BD-0	BARRIER TYPE D
F-0	FENCE
C-0	CURB
SW-0	SIDEWALK
DW-0	DRIVEWAY
CR-0	CURB RAMP

GR-4	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	332+18.39
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	332+18.39
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	345+87.14
END BRIDGE TERMINAL ASS'Y, TYPE 1	346+12.14

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/ SR-8
STA. 338+00 TO STA. 348+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET STE 2B
AVON, MA 02322
(508) 588-2690

DESIGNED: SMG
REVIEWED: KDK 05-19-26
PROJECT #: 114865
SHEET: P.139 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: C3_0000_SB Plan & PROFILE2 - 49x144.dwg | DATE: 9/23/2026 | TIME: 2:00:13 PM | USER: lbonnell837
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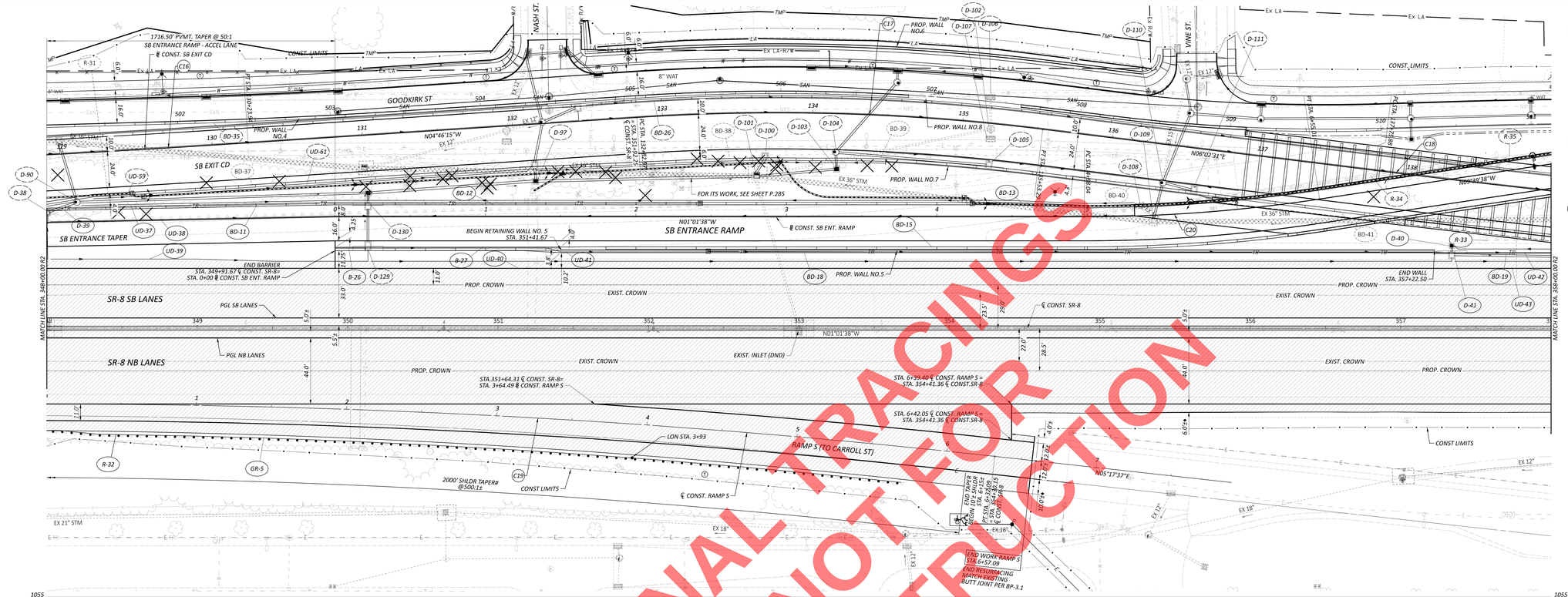

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

C16 CURVE DATA
P.I. = STA. 127+64.19
Δ = 02°35'52" LT
Dc = 00°30'00"
R = 11,459.16'
T = 259.84'
L = 519.58'
E = 2.95'

C17 CURVE DATA
P.I. = STA. 134+18.53
Δ = 10°48'46" RT
Dc = 04°00'00"
R = 1,432.39'
T = 135.56'
L = 270.32'
E = 6.4'

C18 CURVE DATA
P.I. = STA. 141+63.36
Δ = 05°09'46" LT
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

C19 CURVE DATA
P.I. = STA. 3+16.37
Δ = 06°19'15" RT
Dc = 01°00'00"
R = 5,729.58'
T = 316.37'
L = 632.09'
E = 8.73'

C20 CURVE DATA
P.I. = STA. 5+76.68
Δ = 08°38'00" LT
Dc = 05°30'00"
R = 1,041.74'
T = 78.63'
L = 156.97'
E = 2.96'

FOR SB EXIT CD / SB ENTRANCE RAMP
PLAN AND PROFILE, SEE SHEETS P.147 -P.148
FOR GOODKIRK STREET PLAN
AND PROFILE, SEE SHEETS P.150 - P.152
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.175- P.177
FOR STORM SEWER PROFILES, SEE SHEETS P.219- P.221
FOR INTERCHANGE DETAILS, SEE SHEETS P.201
FOR NASH INTERSECTION DETAILS, SEE SHEET P.211
FOR VINE INTERSECTION DETAILS, SEE SHEET P.212
FOR RETAINING WALL 4 PLANS, SEE SHEETS P.325
FOR RETAINING WALL 6 PLANS, SEE SHEETS P.334
FOR RETAINING WALL 7 PLANS, SEE SHEETS P.341
FOR RETAINING WALL 8 PLANS, SEE SHEETS P.344
FOR TRAFFIC CONTROL, SEE SHEETS P.251

♦ - PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.

- PROPOSED RESURFACING
- PIPE TO BE LINED

D-0 DRAINAGE
R-0 REMOVAL
SA-0 SANITARY
W-0 WATERWORK
GR-0 GUARDRAIL
B-0 BARRIER TYPE B OR C
BD-0 BARRIER TYPE D
F-0 FENCE
C-0 CURB
SW-0 SIDEWALK
DW-0 DRIVEWAY
CR-0 CURB RAMP

GR-5	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	-0+03.25
END BRIDGE TERMINAL ASS'Y, TYPE 2/BEGIN MGS GR	-0+03.25
END MGS GR/BEGIN ANCHOR ASS'T, TYPE T	5+59.25
END ANCHOR ASS'Y, TYPE T	5+71.75

PLAN AND PROFILE - IR-77/ SR-8
STA. 348+00 TO STA. 358+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET SUITE 20
AVON, OHIO 44011
440.930.4600

DESIGNED SMG
REVIEWED KDK 05-19-26
PROJECT ID 114865
SHEET P.140 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: C3_0000_SB Plan 7 PRINTED: 05-14-26 | DATE: 9/27/2026 TIME: 2:55:41 PM USER: bsmith837
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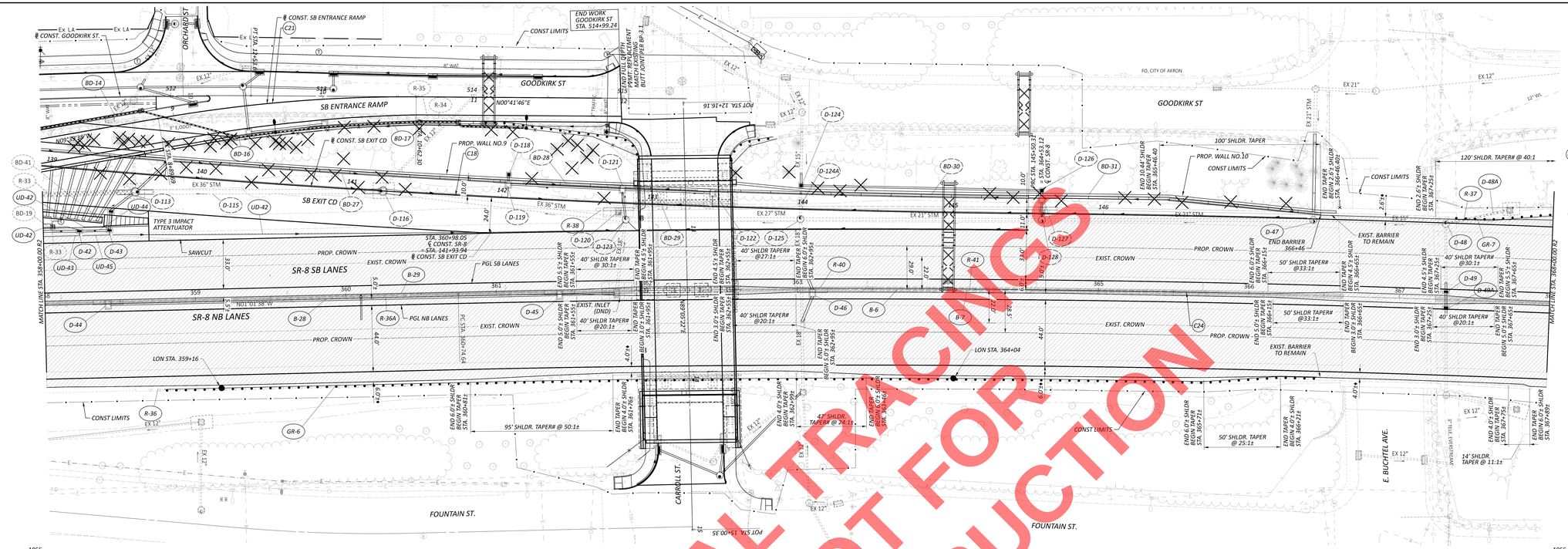


FINAL TRACINGS
NOT FOR
CONSTRUCTION

C18 CURVE DATA
P.I. = STA. 141+63.36
Δ = 05°09'46" LT
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

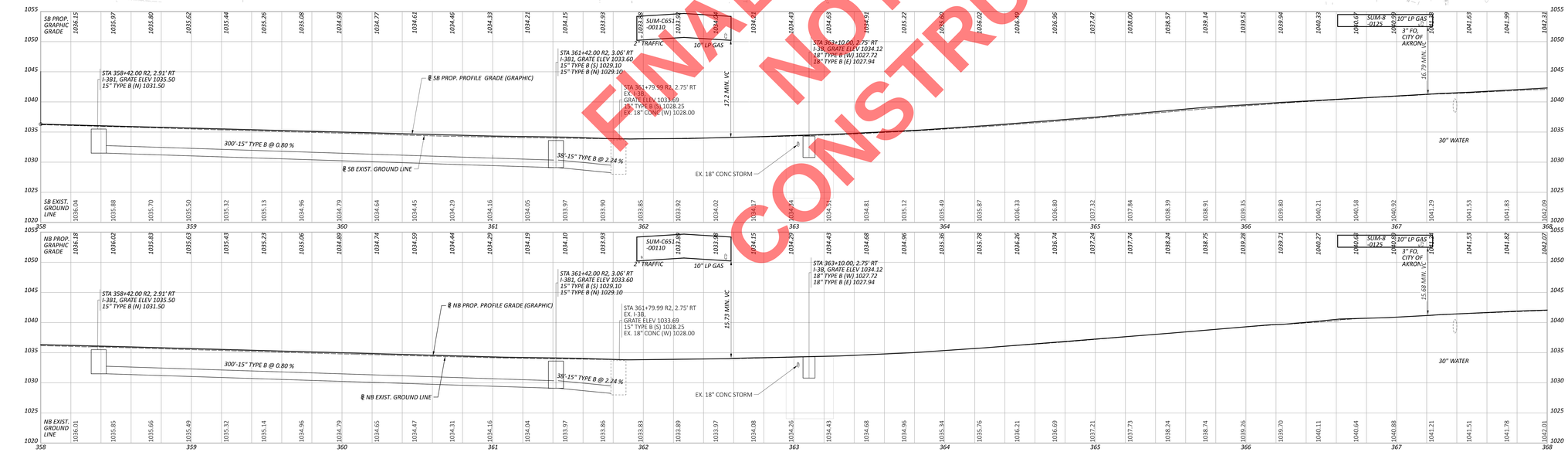
C22 CURVE DATA
P.I. = STA. 9+76.23
Δ = 10°21'24" RT
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.32'
L = 1,542.41'
E = 26.19'

C22 NOT USED

GR-6	
DESC.	STA.
BEGIN ANCHOR ASS'Y, TYPE E	358+71.38
END ANCHOR ASS'Y, TYPE E/BEGIN MGS GR	359+21.38
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	366+21.38
END BRIDGE TERMINAL ASS'Y, TYPE 1	366+46.38

GR-7	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	367+34.26
END BRIDGE TERMINAL ASS'Y, TYPE 1/BEGIN MGS GR	367+59.26
END MGS GR/BEGIN ANCHOR ASS'Y, TYPE E	373+84.26
END ANCHOR ASS'Y, TYPE E	374+34.26



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MODEL: C3_008 - SR8 Plan 7 - PWP.dgn - DATE: 9/23/2026 - TIME: 2:03:19 PM - USER: tkimball37
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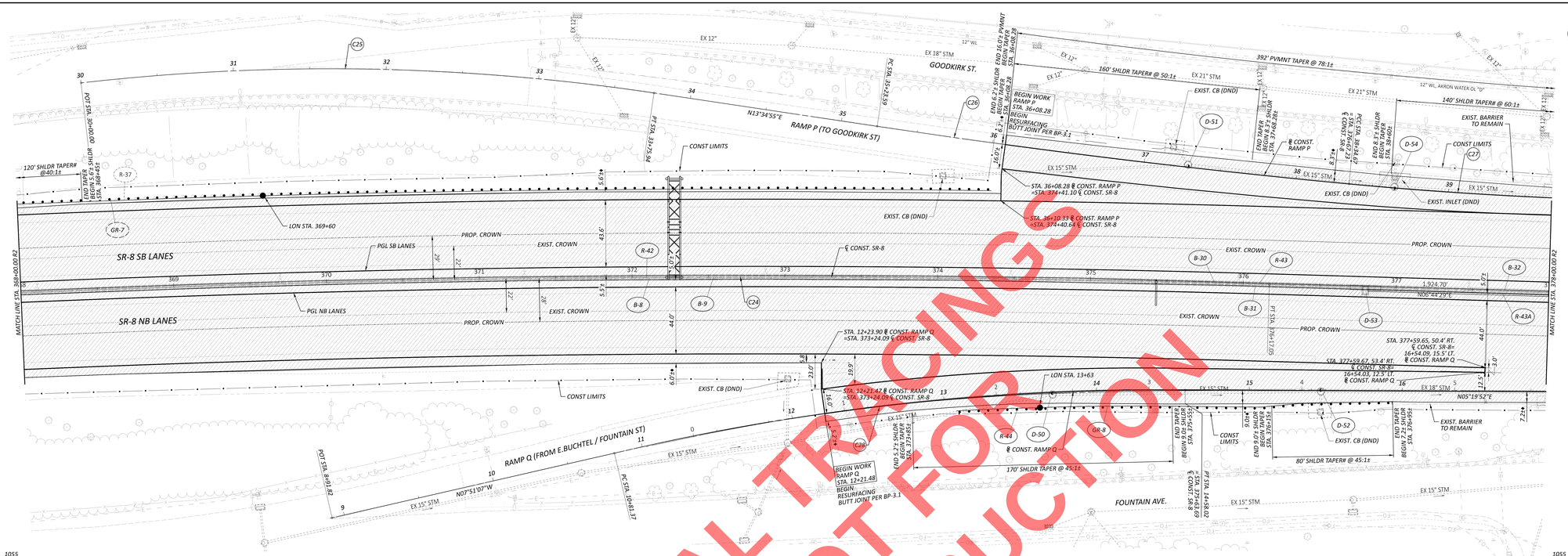
HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/ SR-8
STA. 358+00 TO STA. 368+00

DESIGN AGENCY
ARCADIS
22 SOUTHAIN STREET, SUITE 20
AKRON, OHIO 44308
330.434.4080

DESIGNER: SMG
REVIEWER: KDK 05-19-26
PROJECT ID: 114865
SHEET P.141 TOTAL 627



FINAL TRACINGS
NOT FOR
CONSTRUCTION

C25 CURVE DATA
P.I. = STA. 31+89.06
Δ = 15°02'16" RT
Dc = 04°00'00"
R = 1,432.39'
T = 189.06'
L = 375.94'
E = 12.42'

C26 CURVE DATA
P.I. = STA. 36+79.17
Δ = 03°06'39" LT
Dc = 01°00'00"
R = 5,729.58'
T = 155.58'
L = 311.08'
E = 2.11'

C27 CURVE DATA
P.I. = STA. 39+17.58
Δ = 03°43'47" LT
Dc = 02°15'00"
R = 2,546.48'
T = 82.91'
L = 165.77'
E = 1.35'

C28 CURVE DATA
P.I. = STA. 12+70.61
Δ = 13°48'39" RT
Dc = 03°40'00"
R = 1,562.60'
T = 189.24'
L = 376.65'
E = 11.42'

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.39'
L = 1,542.41'
E = 26.19'

C29 (NOT USED)

FOR ROADWAY CROSS SECTIONS, SEE SHEETSP.180-P.183
FOR STORM SEWER PROFILES, SEE SHEETS SDF009
FOR INTERCHANGE DETAILS, SEE SHEETS P.202 &P.207
FOR TRAFFIC CONTROL, SEE SHEETSP.251-P.252

♦ - *PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.*

▨ - *PROPOSED RESURFACING*

D-0 DRAINAGE
R-0 REMOVAL
SA-0 SANITARY
W-0 WATERWORK
GR-0 GUARDRAIL
B-0 BARRIER TYPE B OR C
BD-0 BARRIER TYPE D
F-0 FENCE
C-0 CURB
SW-0 SIDEWALK
DW-0 DRIVEWAY
CR-0 CURB RAMP

GR-7	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	367+34.26
END BRIDGE TERMINAL ASS'Y, TYPE 1/BEGIN MGS GR	367+59.26
END MGS GR/BEGIN ANCHOR ASS'Y, TYPE E	373+84.26
END ANCHOR ASS'Y, TYPE E	374+34.26

GR-8	
DESC.	STA.
BEGIN ANCHOR ASS'Y, TYPE E	13+07.73
END ANCHOR ASS'Y, TYPE E/BEGIN MGS GR	13+57.73
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	15+70.23
END BRIDGE TERMINAL ASS'Y, TYPE 1	15+95.23

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - IR-77/ SR-8
STA. 368+00 TO STA. 378+00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 300
AKRON, OHIO 44308
330.434.4383

DESIGNED SMG
REVIEWED KDK 05-19-26
PROJECT ID 114865
SHEET P.142 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: C3I_SR8 - SR8 Plan > PWPP001 49x144.dwt DATE: 9/23/2026 TIME: 2:03:13 PM USER: tbarnett837
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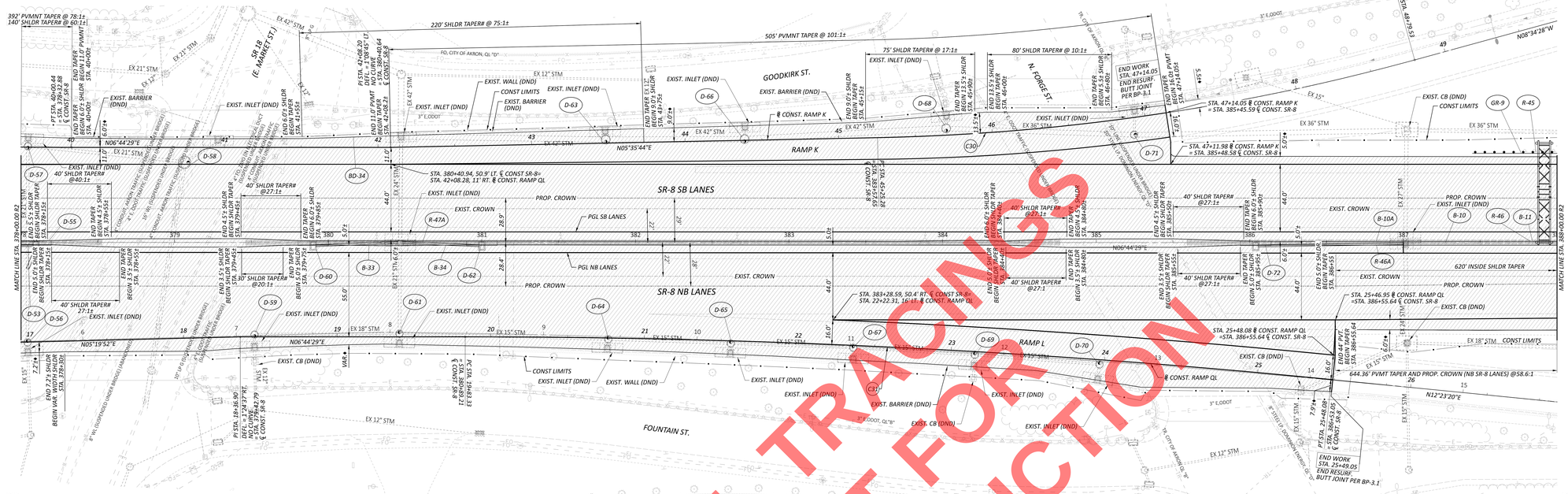
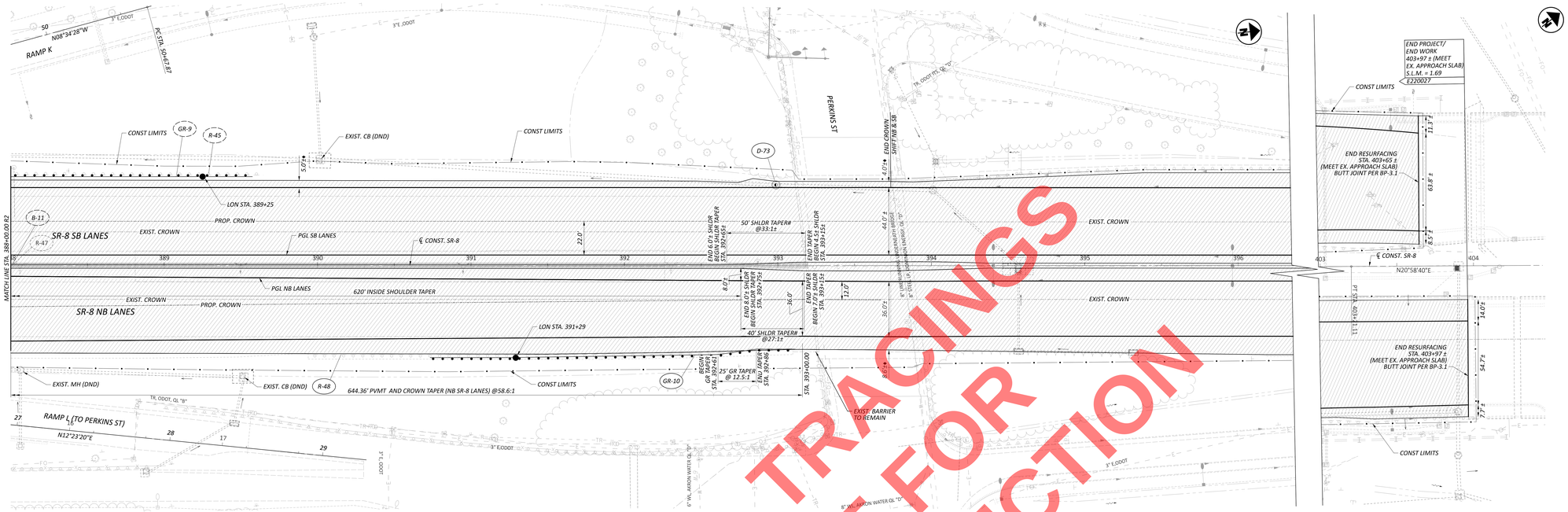

SR-18 (E. MARKET ST.)
GOODKIRK ST.
N. FORGE ST.
FOUNTAIN ST.
RAMP K
RAMP L
SR-8 SB LANES
SR-8 NB LANES
392' PVMNT TAPER @ 78:1±
140' SHLDR TAPER@ 60:1±
220' SHLDR TAPER# @ 75:1±
505' PVMNT TAPER @ 101:1±
75' SHLDR TAPER# @ 17:1±
80' SHLDR TAPER# @ 10:1±
STA. 47+14.05 ℄ CONST. RAMP K = STA. 385+45.59 ℄ CONST. SR-8
STA. 47+11.98 ℄ CONST. RAMP K = STA. 385+48.58 ℄ CONST. SR-8
STA. 380+40.94, 50.9' LT. ℄ CONST.SR-8= STA. 42+08.28, 11' RT. ℄ CONST. RAMP QL
STA. 383+28.59, 50.4' RT. ℄ CONST.SR-8= STA. 22+22.31, 16' LT. ℄ CONST. RAMP QL
STA. 25+48.08 ℄ CONST. RAMP QL =STA. 386+55.64 ℄ CONST. SR-8
644.36' PVMT TAPER AND PROP. CROWN (NB SR-8 LANES) @58.6:1
620' INSIDE SHLDR TAPER
MATCH LINE STA. 378+00.00 R1
MATCH LINE STA. 388+00.00 R2
N06°44'29"E
N05°35'44"E
N05°19'52"E
N12°23'20"E
N08°34'28"W
EXIST. WALL (DND)
EXIST. BARRIER (DND)
EXIST. INLET (DND)
EXIST. CB (DND)
CONST LIMITS
PROP. CROWN
EXIST. CROWN
PGL SB LANES
PGL NB LANES
END WORK STA. 47+14.05 END RESURF. BUTT JOINT PER BP-3.1
END WORK STA. 25+49.05 END RESURF. BUTT JOINT PER BP-3.1
PT STA. 48+79.55
PT STA. 25+49.09
PT STA. 386+63.05
CONST. SR-8
PT STA. 42+08.20
NO CURVE
PT STA. 42+08.64
℄ CONST. SR-8
PT STA. 18+56.90
DEFL = 1°24'37"RT
R = 2,729.79'
NO CURVE
℄ CONST. SR-8
STA. 380+39.21
℄ CONST. SR-8
STA. 386+55.64
℄ CONST. SR-8
D-57
D-58
D-59
D-60
D-61
D-62
D-63
D-64
D-65
D-66
D-67
D-68
D-69
D-70
D-71
D-72
D-53
D-55
D-56
BD-34
B-33
B-34
R-47A
(C30)
(C31)
GR-9
R-45
B-10A
B-10
R-46
B-11
R-46A
40' SHLDR TAPER# @27:1±
40' SHLDR TAPER# @20:1±
40' SHLDR TAPER# @40:1±
30' SHLDR TAPER# @20:1±
END 5.5'± SHLDR BEGIN SHLDR TAPER STA. 379+15±
END TAPER BEGIN 4.5'± SHLDR STA. 379+65±
END 4.5'± SHLDR BEGIN SHLDR TAPER STA. 379+85±
END TAPER BEGIN 3.5'± SHLDR STA. 378+55±
END 3.5'± SHLDR BEGIN SHLDR TAPER STA. 378+30±
END 7.2'± SHLDR BEGIN VAR. WIDTH SHLDR STA. 378+00
END 5.0'± SHLDR BEGIN SHLDR TAPER STA. 379+75±
END TAPER BEGIN 5.0'± SHLDR STA. 379+75±
END 4.5'± SHLDR BEGIN SHLDR TAPER STA. 384+40±
END TAPER BEGIN 4.5'± SHLDR STA. 384+60±
END 4.5'± SHLDR BEGIN SHLDR TAPER STA. 385+35±
END TAPER BEGIN 5.0'± SHLDR STA. 385+50±
END 5.0'± SHLDR BEGIN SHLDR TAPER STA. 386+55
END TAPER BEGIN 6.0'± SHLDR STA. 385+40±
END 44' PVMT TAPER STA. 386+55.64
END PVMT TAPER BEGIN 47+14.05±
END TAPER BEGIN 5.5'± SHLDR STA. 46+48±
END TAPER BEGIN 13.5'± SHLDR STA. 44+52±
END 9.0'± SHLDR BEGIN TAPER STA. 43+52±
END TAPER BEGIN 5.5'± SHLDR STA. 43+75±
END 11.0' PVMT NO CURVE PT STA. 42+08.64 ℄ CONST. SR-8
END TAPER BEGIN 5.5'± SHLDR STA. 42+08.22
END 6.0'± SHLDR BEGIN TAPER STA. 41+55±
END TAPER BEGIN 5.5'± SHLDR STA. 40+40±
PT STA. 40+00.44
℄ CONST. SR-8
END TAPER BEGIN 11.0'± PVMT STA. 40+00±
EXIST. BARRIER (DND)
EXIST. INLET (DND)
EXIST. WALL (DND)
CONST LIMITS
EXIST. BARRIER (DND)
℄ CONST. RAMP K
EXIST. CROWN
PROP. CROWN
EXIST. INLET (DND)
EXIST. CB (DND)
CONST LIMITS
EXIST. WALL (DND)
EXIST. INLET (DND)
EXIST. BARRIER (DND)
EXIST. CB (DND)
℄ CONST. RAMP QL
EXIST. CB (DND)
CONST LIMITS
EXIST. CROWN
PROP. CROWN
EXIST. INLET (DND)
EXIST. CB (DND)
EXIST. INLET (DND)
EXIST. INLET (DND)
EXIST. INLET

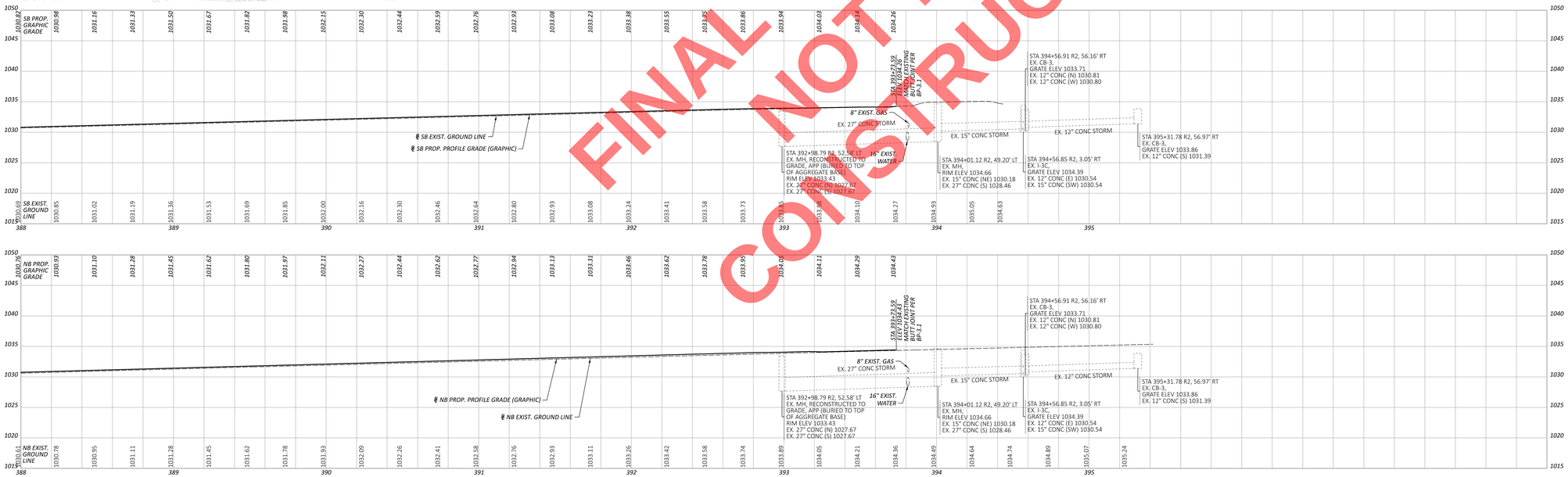


FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.185 -P.187
FOR TRAFFIC CONTROL, SEE SHEET P.252

♦ - PROPOSED SHOULDER WIDTH VARIES. MATCH TO EXISTING SHOULDER. MEET EXISTING CURB OR BARRIER WHERE PRESENT.

▨ - PROPOSED RESURFACING

D-0	DRAINAGE
R-0	REMOVAL
SA-0	SANITARY
W-0	WATERWORK
GR-0	GUARDRAIL
B-0	BARRIER TYPE B OR C
BD-0	BARRIER TYPE D
F-0	FENCE
C-0	CURB
SW-0	SIDEWALK
DW-0	DRIVEWAY
CR-0	CURB RAMP



GR-9	
DESC.	STA.
BEGIN ANCHOR ASS'Y, TYPE T	387+70.00
END ANCHOR ASS'Y, TYPE T/BEGIN MGS GR	387+82.50
END MGS GR/BEGIN ANCHOR ASS'Y, TYPE E	389+07.50
END ANCHOR ASS'Y, TYPE E	389+57.50

GR-10	
DESC.	STA.
BEGIN ANCHOR ASS'Y, TYPE E	390+73.51
END ANCHOR ASS'Y, TYPE E/BEGIN MGS GR	391+23.51
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	392+86.01
END BRIDGE TERMINAL ASS'Y, TYPE 1	393+11.01

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

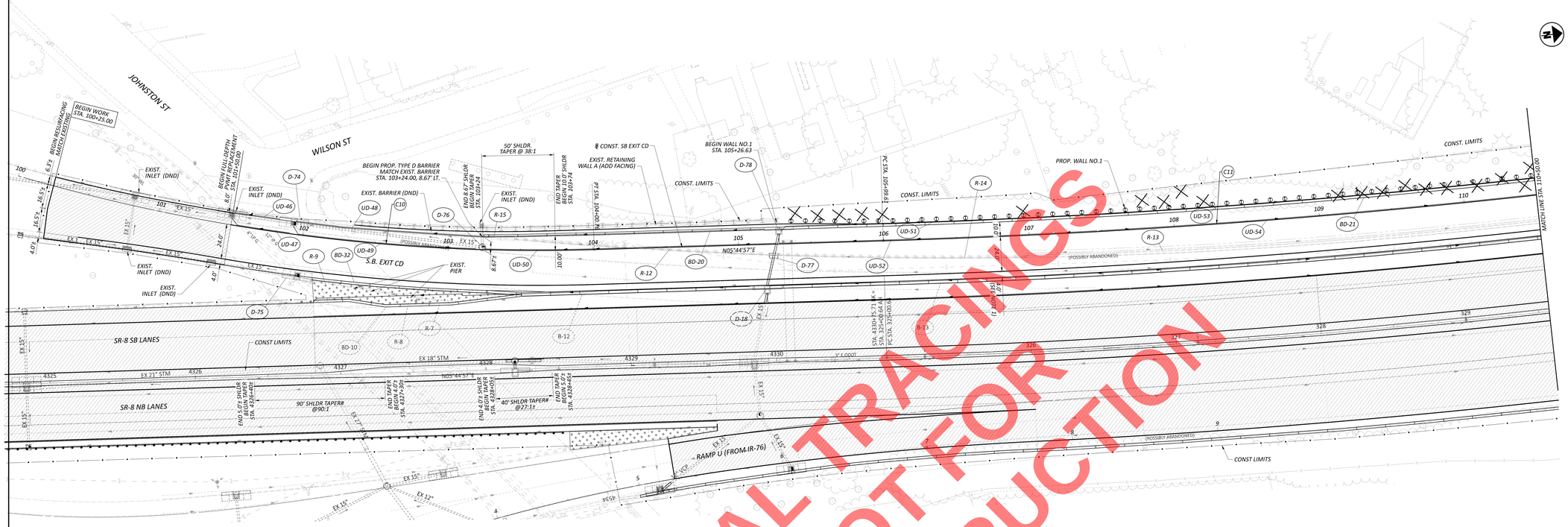
PLAN AND PROFILE - IR-77/ SR-8
STA. 388+00 TO END

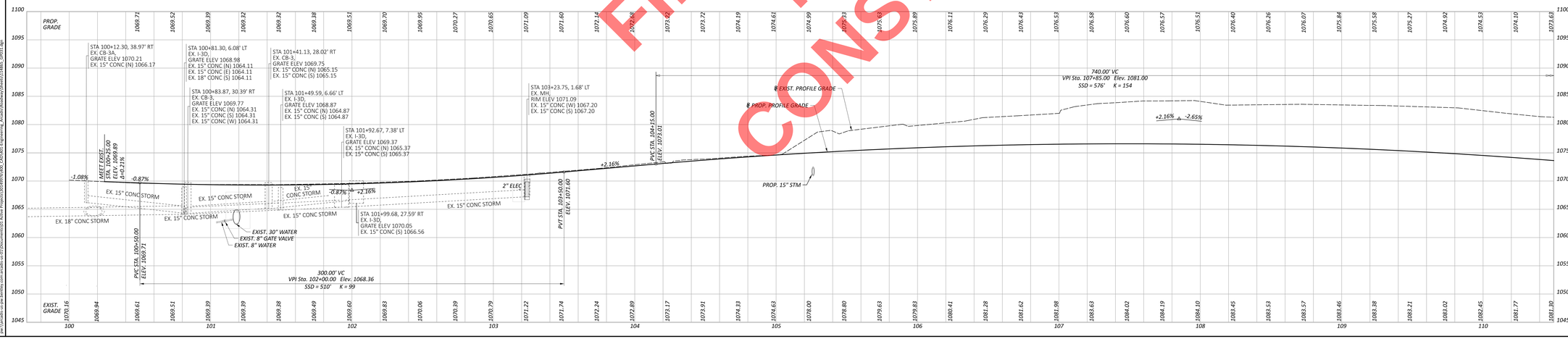
DESIGN AGENCY
ARCADIS
22 SOUTHAMPTON STREET, SUITE 200
ATHENS, GA 30606
706.548.4000

DESIGNED: SMG
REVIEWED: KDK 05-19-26
PROJECT ID: 114865
SHEET: P.144 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: CL4_0808 - SR8 Plan-10 (MKP8025 - 66x44 (in.) - SAM) - 9/23/2026 - TIME: 2:05:58 PM - USER: lburnside3@
ACTIVE: C:\Users\lburnside3\Documents\ProjectWise Documents\Active\114865_PDOT\Roadway\Sheets\114865_SDP011.dgn





FINAL TRACINGS
NOT FOR
CONSTRUCTION

C10 CURVE DATA
P.I. = STA. 102+02.05
Δ = 18°02'03" LT
Dc = 04°30'00"
R = 1,273.24'
T = 202.05'
L = 400.76'
E = 15.93'

C11 CURVE DATA
P.I. = STA. 109+02.30
Δ = 06°08'03" LT
Dc = 01°00'51"
R = 5,649.05'
T = 302.69'
L = 604.79'
E = 8.10'

C12 NOT USED

NOTES:

1. 4' SHOULDER WIDTH VARIES ADJACENT TO TYPE C BARRIER. MATCH SHOULDER WIDTH TO MEET TOE OF BARRIER.

FOR SR-8 PLAN AND PROFILES, SEE SHEETSP.137 -P.138
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.164 - P.167
FOR STORM SEWER PROFILES, SEE SHEETS P.216
FOR RETAINING WALL 1 PLANS, SEE SHEETS P.302 - P.303
FOR TRAFFIC CONTROL, SEE SHEETS P.250

- PROPOSED RESURFACING
- PROPOSED ASPHALT

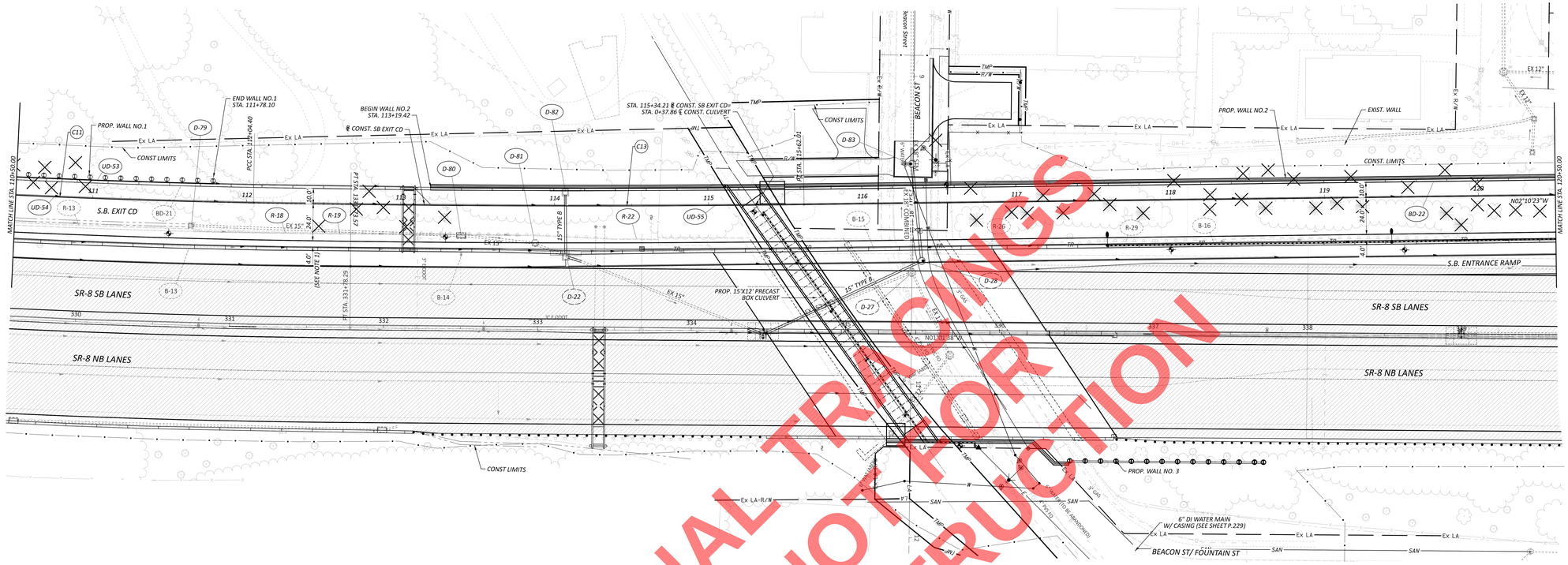
HORIZONTAL SCALE IN FEET
0 10 20 40

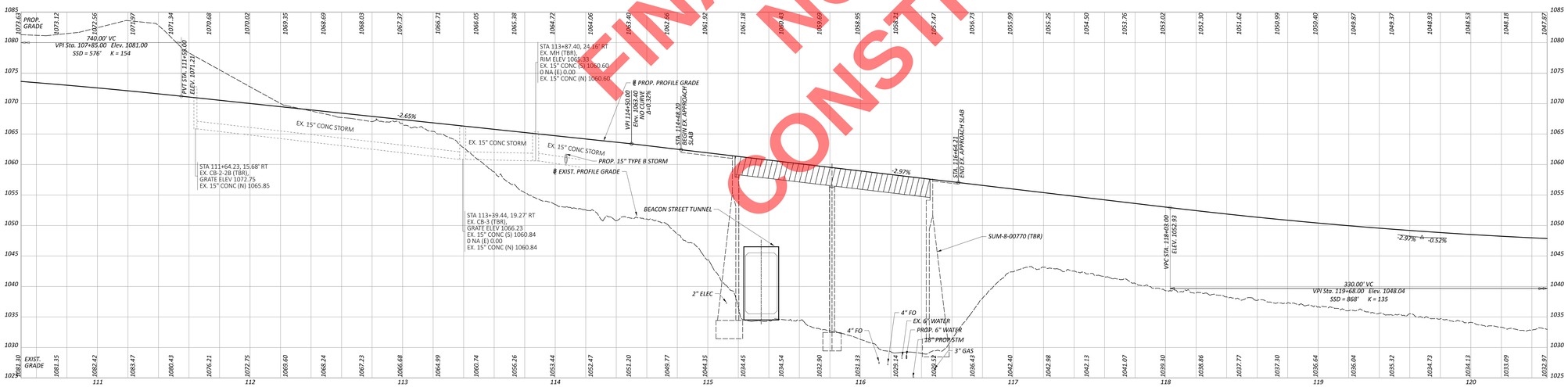
PLAN AND PROFILE - EXIT RAMP (TO IR-76) STA. 100+00 TO STA. 110+50

SUM-077/008-11.65/00.00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET 5TH FLOOR
ARCADIS.COM
800.346.4900

DESIGNER SMG
REVIEWER KDK 5-28-24
PROJECT ID 114865
SHEET P.145 TOTAL 627





C11 CURVE DATA
P.I. = STA. 109+02.30
Δ = 06°08'03" LT
Dc = 01°00'51"
R = 5,649.05'
T = 302.69'
L = 604.79'
E = 8.10'

C13 CURVE DATA
P.I. = STA. 113+83.22
Δ = 01°47'17" LT
Dc = 00°30'00"
R = 11,459.16'
T = 178.82'
L = 357.61'
E = 1.40'

C12 NOT USED

NOTES:

1. 4' SHOULDER WIDTH VARIES ADJACENT TO TYPE C BARRIER. MATCH SHOULDER WIDTH TO MEET TOE OF BARRIER.

FOR SR-8 PLAN AND PROFILES, SEE SHEETS P.138 -P.139
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.167-P.171
FOR STORM SEWER PROFILES, SEE SHEET P.217
FOR RETAINING WALL 1 PLANS, SEE SHEET P.303
FOR RETAINING WALL 2 PLANS, SEE SHEETS P.307 -P.309
FOR RETAINING WALL 3 PLANS, SEE SHEET P.316
FOR BEACON ST. PRECAST CULVERT PLANS, SEE SHEET P.364
FOR BEACON ST. INTERSECTION DETAILS, SEE SHEET P.206
FOR TRAFFIC CONTROL, SEE SHEET P.250

- PROPOSED RESURFACING

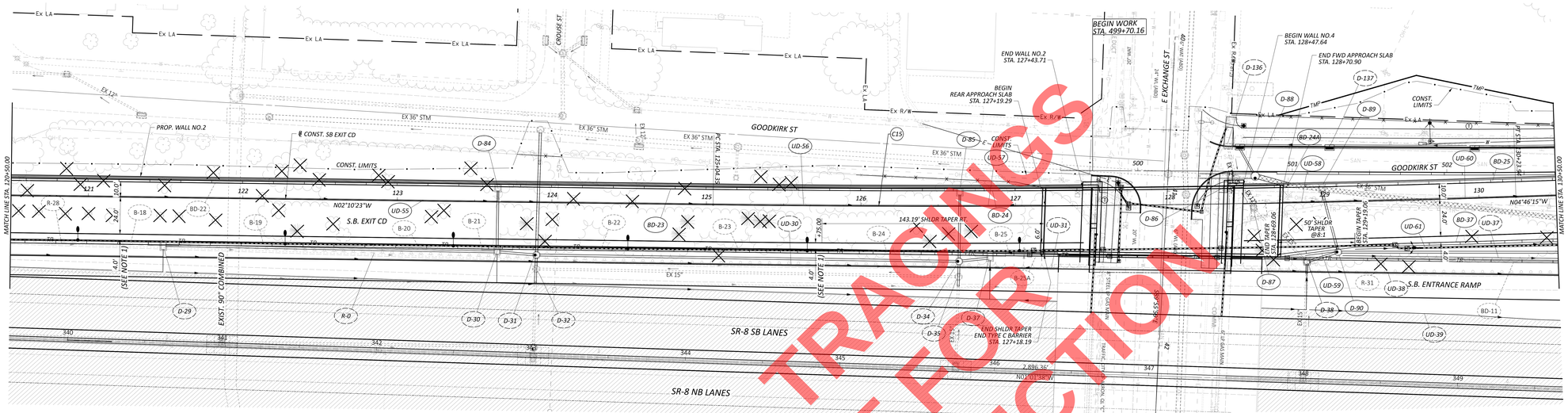
FINAL TRACINGS
NOT FOR
CONSTRUCTION

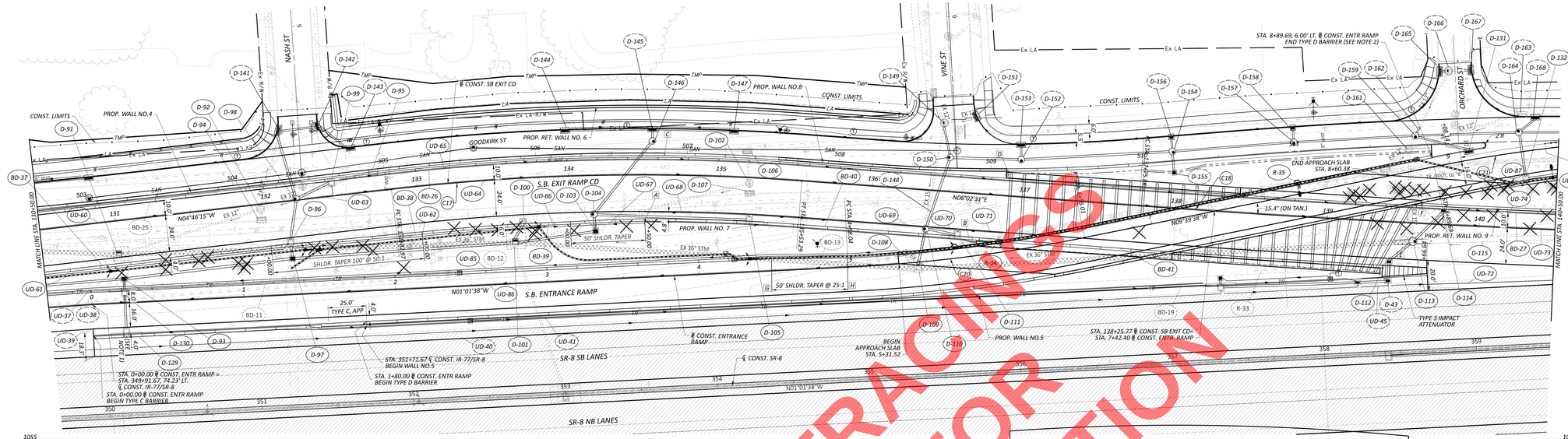
HORIZONTAL SCALE IN FEET
0 10 20 40

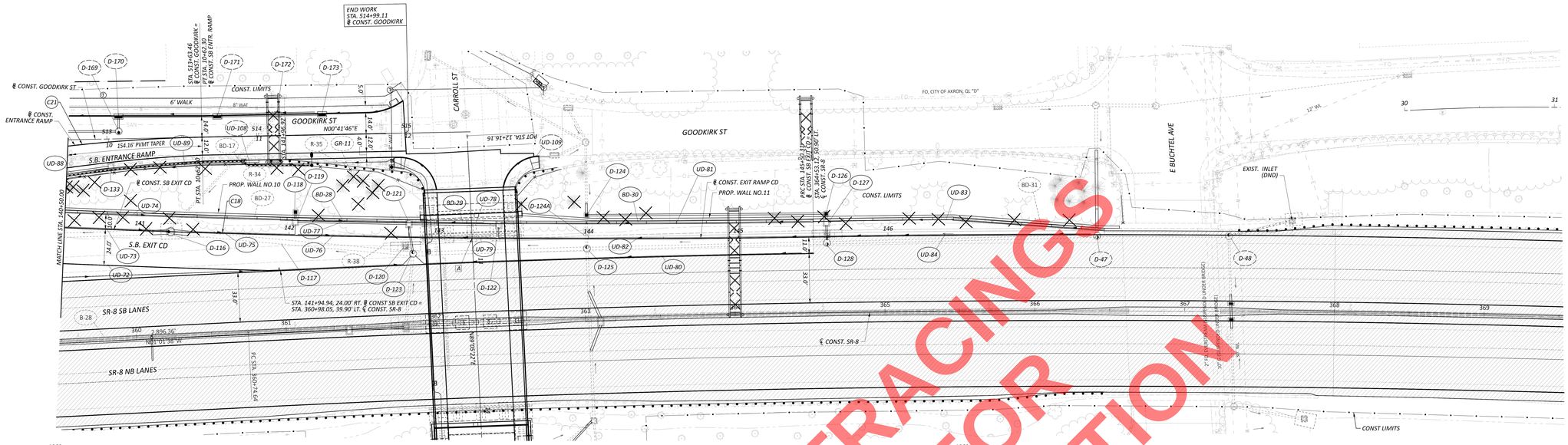
PLAN AND PROFILE - EXIT RAMP (TO IR-76)
STA. 110+50 TO STA. 120+50

SUM-077/008-11.65/00.00

DESIGN AGENCY
ARCADIS
DESIGNER SMG
REVIEWER KDK 05-28-24
PROJECT ID 114865
SHEET P.146 TOTAL 627


BEGIN WORK
STA. 499+70.16
END WALL NO.2
STA. 127+43.71
BEGIN
REAR APPROACH SLAB
STA. 127+19.29
BEGIN WALL NO.4
STA. 128+47.64
END FWD APPROACH SLAB
STA. 128+70.90
E EXCHANGE ST
GOODKIRK ST
CROUSE ST
PROP. WALL NO.2
℄ CONST. SB EXIT CD
CONST. LIMITS
S.B. EXIT CD
N02°10'23"W
143.19' SHLDR TAPER RT.
50' SHLDR TAPER @8:1
BEGIN TAPER STA. 129+19.06
END TAPER STA. 129+69.06
S.B. ENTRANCE RAMP
N04°46'15"W
SR-8 SB LANES
SR-8 NB LANES
END SHLDR TAPER
END TYPE C BARRIER
STA. 127+18.19
2,896.36'
N01°01'38"W
MATCH LINE STA. 120+50.00
MATCH LINE STA. 130+50.00
EXIST. 90° COMBINED
4.0' (SEE NOTE 1)
Ex LA
Ex R/W
EX 36" STM
EX 15"
EX 12"
EX 8" SAN
EX 8" WAT
EX 6" GAS
EX 4" GAS
EX 2" GAS
EX 2" ELEC
EX 2" TELE
EX 2" CATV
EX 2" COMM
EX 2" INTERCONNECTED CABLE
EX 2" CONDUIT
EX 6" WAT
EX 20" WAT
EX 24" WAT
EX 30" WAT
EX 8" SAN
EX 12" SAN
EX 15" SAN
EX 24" SAN
EX 30" SAN
EX 36" SAN
EX 8" STM
EX 12" STM
EX 15" STM
EX 18" STM
EX 24" STM
EX 30" STM
EX 36" STM
EX 42" STM
EX 48" STM
EX 54" STM
EX 60" STM
EX 72" STM
EX 84" STM
EX 96" STM
EX 108" STM
EX 120" STM
EX 132" STM
EX 144" STM
EX 156" STM
EX 168" STM
EX 180" STM
EX 192" STM
EX 204" STM
EX


NASH ST
VINE ST
ORCHARD ST
GOODKIRK ST
S.B. EXIT RAMP CD
S.B. ENTRANCE RAMP
SR-8 SB LANES
SR-8 NB LANES
PROP. RET. WALL NO. 6
PROP. WALL NO.4
PROP. WALL NO.8
PROP. WALL NO. 7
PROP. WALL NO.5
PROP. RET. WALL NO. 9
CONST. LIMITS
MATCH LINE STA. 130+50.00
MATCH LINE STA. 140+50.00
END APPROACH SLAB STA. 8+60.38
154.16' PVMT TAPER
TYPE 3 IMPACT ATTENUATOR
50' SHLDR. TAPER @ 25:1
SHLDR. TAPER 100' @ 50:1
25.0' TYPE C, APP
N04°46'15"W
N01°01'38"W
N06°02'31"E
N09°39'38"W
STA. 0+00.00 ℄ CONST. ENTR RAMP = STA. 349+91.67, 74.23' LT. ℄ CONST. IR-77/SR-8
STA. 0+00.00 ℄ CONST. ENTR RAMP BEGIN TYPE C BARRIER
STA. 351+71.67 ℄ CONST. IR-77/SR-8 BEGIN WALL NO.5
STA. 1+80.00 ℄ CONST. ENTR RAMP BEGIN TYPE D BARRIER
STA. 8+89.69, 6.00' LT. ℄ CONST. ENTR RAMP END TYPE D BARRIER (SEE NOTE 2)
STA. 138+25.77 ℄ CONST. SB EXIT CD= STA. 7+42.40 ℄ CONST. ENTR. RAMP
BEGIN APPROACH SLAB STA. 5+31.52
℄ CONST. ENTRANCE RAMP
℄ CONST. SR-8
℄ CONST. SB EXIT CD
℄ CONST. IR-77
℄ CONST. SR-8
℄ CONST. SB EXIT CD
℄ CONST. SR-8
℄ CONST. SB EXIT CD
℄ CONST. SR-8
℄ CONST. SB EXIT CD



C21 CURVE DATA
P.I. = STA. 9+76.23
Δ = 10°21'24" RT
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'

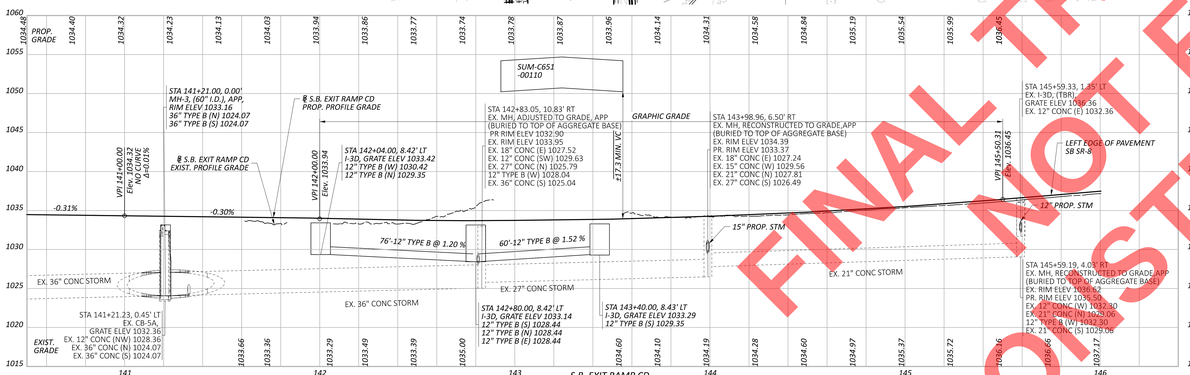
C18 CURVE DATA
P.I. = STA. 141+63.36
Δ = 05°09'46" LT
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

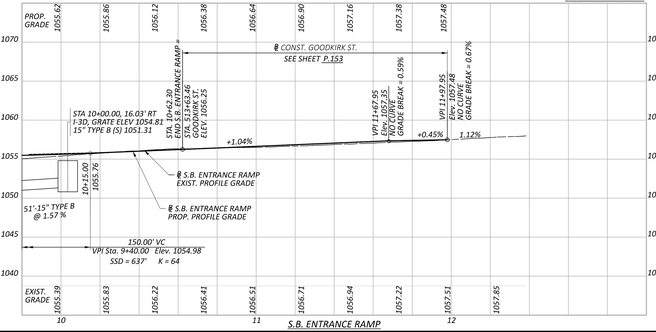
C22 NOT USED

A STA. 143+22.33 ℄ CONST. SB EXIT CD =
STA. 12+68.62 ℄ CONST. CARROLL ST.

FOR SR-8 PLAN AND PROFILES, SEE SHEETS P.141 -P.142
FOR GOODKIRK STREET PLAN AND PROFILE, SEE SHEETS P.150 -P.153
FOR GOODKIRK CROSS SECTIONS, SEE SHEETS P.192-P.193
FOR ROADWAY CROSS SECTIONS, SEE SHEETS P.178-P.181
FOR STORM SEWER PROFILES, SEE SHEETS P.221- SDF009
FOR INTERCHANGE DETAILS, SEE SHEETS P.206
FOR RETAINING WALL 10 PLANS, SEE SHEET P.357
FOR CARROLL STREET BRIDGE PLANS, SEE SHEETS P.480
FOR CARROLL STREET INTERSECTION DETAILS, SEE SHEET P.214
FOR TRAFFIC CONTROL, SEE SHEETS P.251-P.252

- PROPOSED RESURFACING





FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

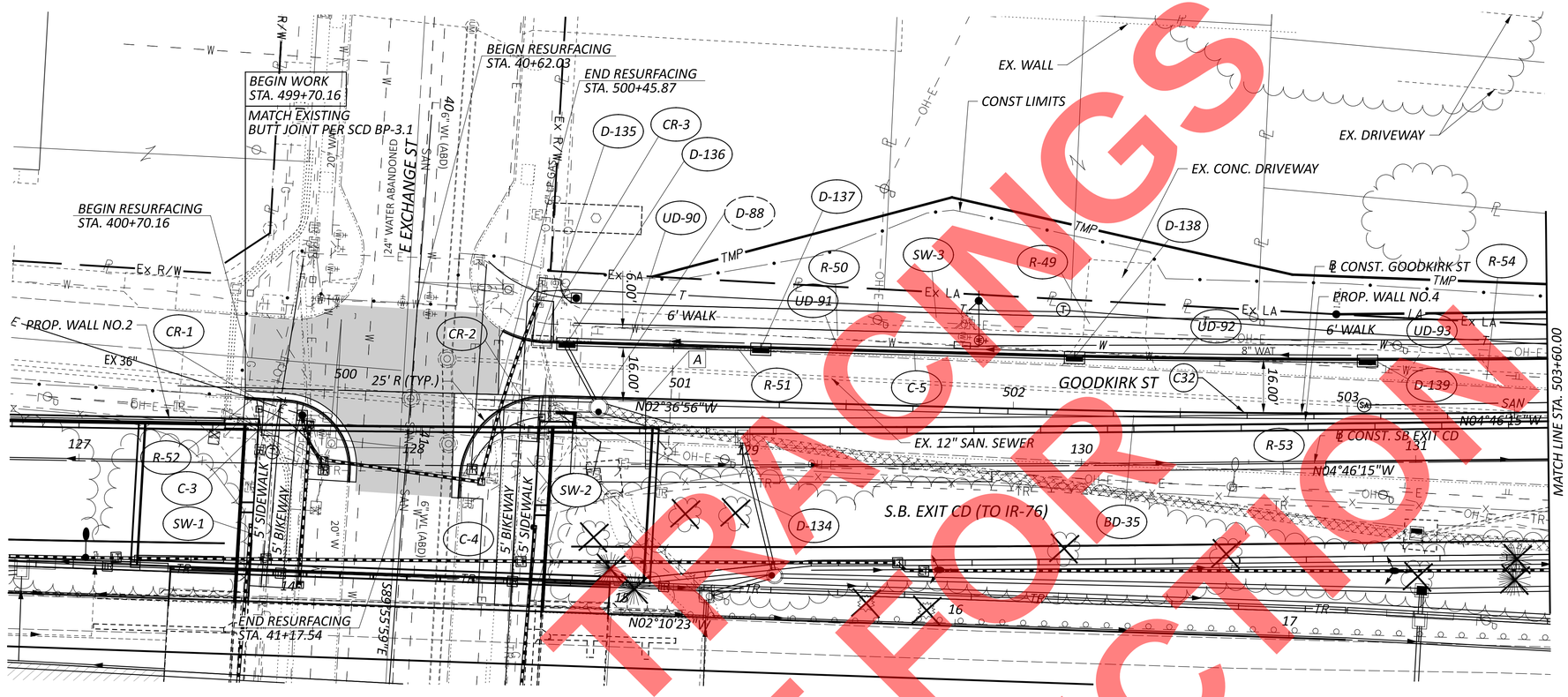
PLAN AND PROFILE - EXIT RAMP (TO IR-76) AND ENTRANCE RAMP (TO SB SR-8/IR-77)
STA. 140+50 TO STA. 145+50.03 (EXIT RAMP) / STA. 9+80 TO STA. 10+62.30 (ENTRANCE RAMP)

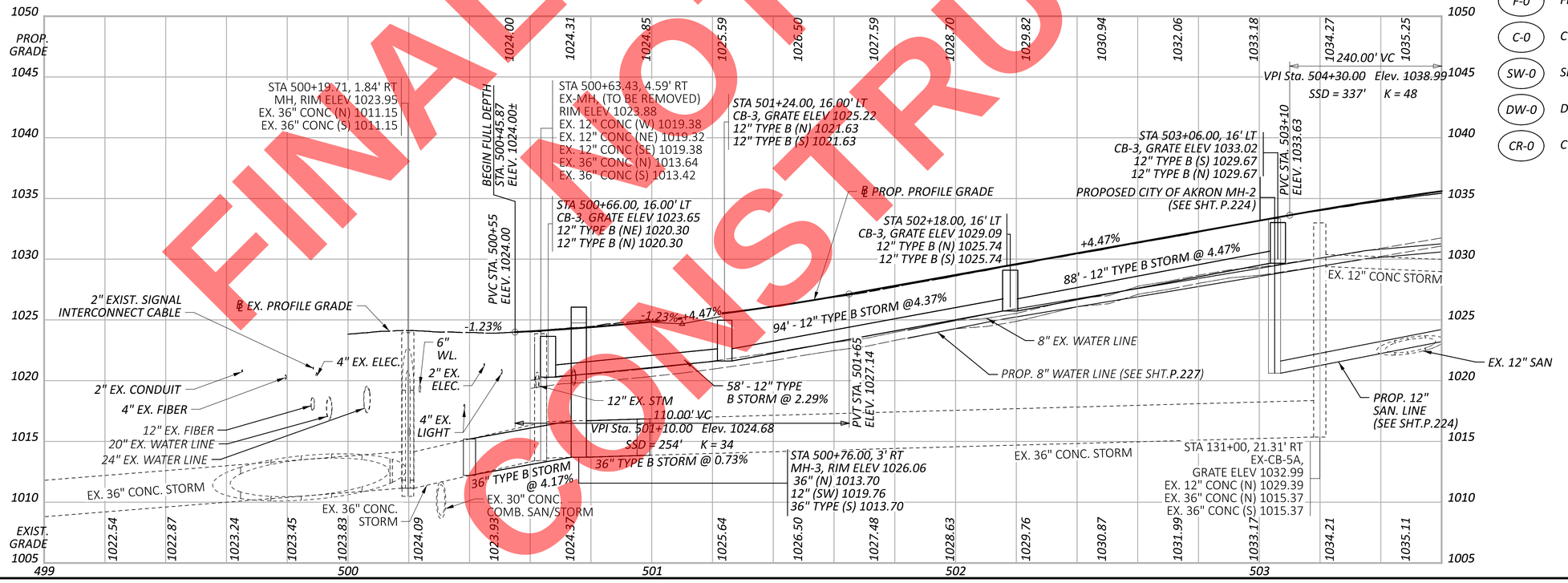
DESIGN AGENCY
ARCADIS
ONE AKRON SQUARE
22 SOUTH FIRST STREET, SUITE 20
AKRON, OHIO 44308
330.434.4080

DESIGNER: SMG
REVIEWER: KDK 05-28-24
PROJECT ID: 114865
SHEET: P.149 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: BU - 300dB Exit Ramp Sheet 4 PAPERSIZE: 66x34 in | DATE: 11/21/2023 - 7:04E - 2:08:13 PM USER: burnsa1197
MICROSTATION V8i (SELECTSERIES 6) 08.11.09.443 C:\Users\BurnsA\Desktop\114865_SDF015.dgn





FINAL PLANS
NOT FOR
CONSTRUCTION

C32 CURVE DATA
P.I. = STA. 502+73.66
Δ = 02°09'19" LT
Dc = 01°25'57"
R = 4,000.00'
T = 75.25'
L = 150.48'
E = 0.71'

LEGEND:

PAVEMENT RESURFACING

PIPE TO BE LINED

A STA. 128+69.50 ℄ CONST. SB EXIT CD
BEGIN PROP. WALL NO. 4

FOR WORK ON EXCHANGE STREET AND INTERSECTION, SEE INTERSECTION DETAILS P.210

FOR FENCE PLAN, SEE SHEET P.511

FOR SIGNAL PLAN, SEE SHEET P.269

FOR SB EXIT CD BRIDGE, SEE SHEETS P.415

FOR TRAFFIC CONTROL, SEE SHEETS P.251

FOR SANITARY AND WATER PLAN, SEE SHEETS P.224 & P.227

- D-0 DRAINAGE
- R-0 REMOVAL
- SA-0 SANITARY
- W-0 WATERWORK
- GR-0 GUARDRAIL
- B-0 BARRIER TYPE B OR C
- BD-0 BARRIER TYPE D
- F-0 FENCE
- C-0 CURB
- SW-0 SIDEWALK
- DW-0 DRIVEWAY
- CR-0 CURB RAMP

HORIZONTAL SCALE IN FEET
0 10 20 40

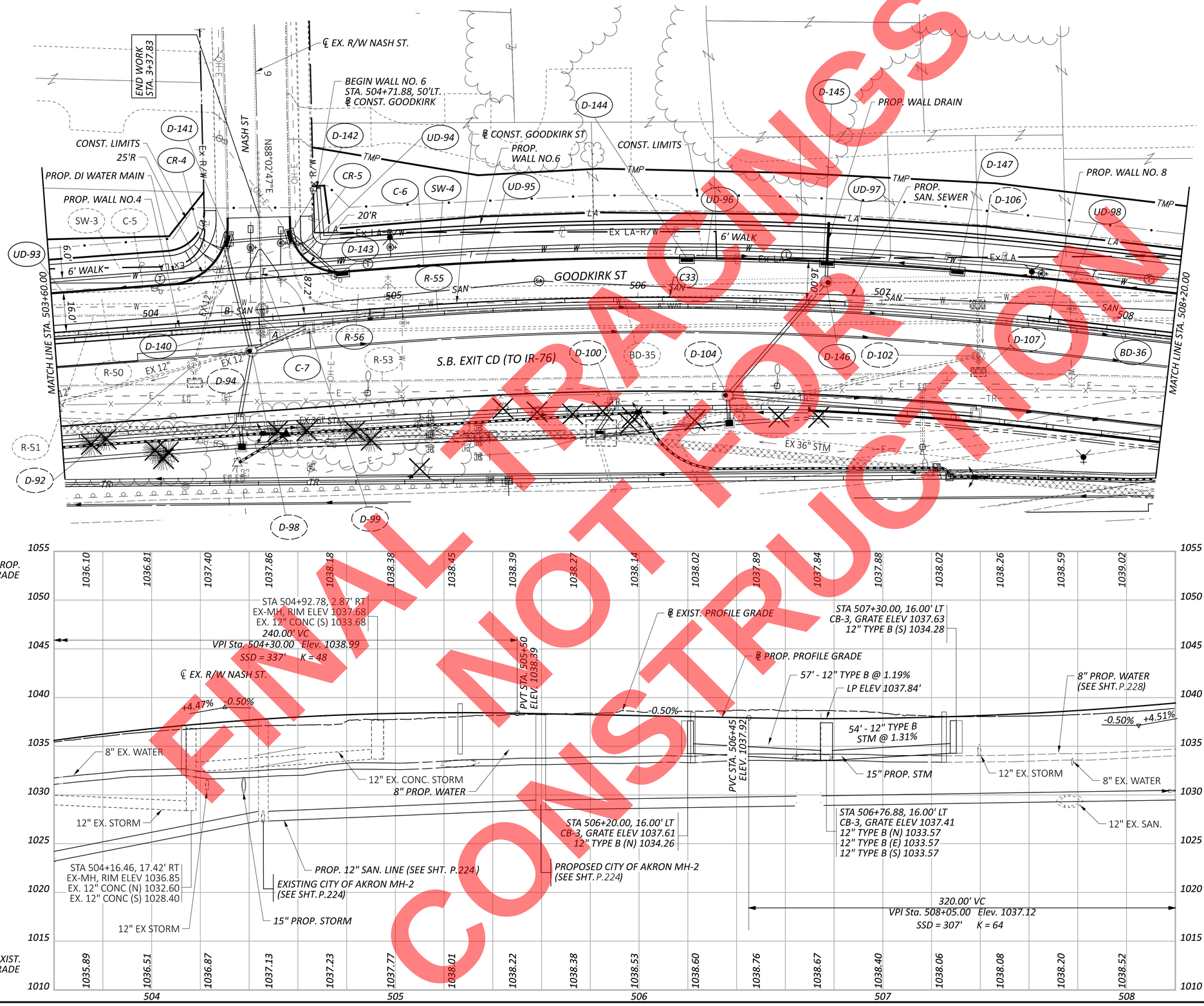
PLAN AND PROFILE - GOODKIRK STREET
STA. 499+00 TO STA. 503+60

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.150 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: BLP_GOODK-1 - Goodkirk Plan PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 3:57:23 PM USER: burnsk1837
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GP021.dgn



C33 CURVE DATA
P.I. = STA. 506+40.20
Δ = 10°48'46" RT
Dc = 03°57'26"
R = 1,447.89'
T = 137.03'
L = 273.24'
E = 6.47'

LEGEND:

PIPE TO BE LINED

A STA. 504+45.41 ℄ CONST. GOODKIRK = STA. 3+78.85 ℄ EX. R/W NASH

B STA. 132+20.00 ℄ CONST. SB EXIT CD END PROP. WALL NO.4

FOR NASH INTERSECTION DETAILS, SEE SHEET P.211

FOR SIGNAL PLAN, SEE SHEET P.269

FOR WALL 4 PLAN, SEE SHEET P.325

FOR WALL 6 PLAN, SEE SHEET P.334

FOR WALL 8 PLAN, SEE SHEET P.344

FOR TRAFFIC CONTROL, SEE SHEETS P.251

FOR SANITARY AND WATER PLAN, SEE SHEETS P.224 - P.228

D-0	DRAINAGE
R-0	REMOVAL
SA-0	SANITARY
W-0	WATERWORK
GR-0	GUARDRAIL
B-0	BARRIER TYPE B OR C
BD-0	BARRIER TYPE D
F-0	FENCE
C-0	CURB
SW-0	SIDEWALK
DW-0	DRIVEWAY
CR-0	CURB RAMP

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - GOODKIRK STREET STA. 503+60 TO STA. 508+20

FINAL PLANS NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.151 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: BLP_GOODK-1 - Goodkirk Plan-1 PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 4:20:08 PM USER: burnsk1837
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\d00_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GP022.dgn

FINAL NOT FOR CONSTRUCTION

C34 CURVE DATA
P.I. = STA. 509+10.07
Δ = 08°49'02" LT
Dc = 05°00'00"
R = 1,145.92'
T = 88.35'
L = 176.35'
E = 3.40'

C35 CURVE DATA
P.I. = STA. 511+54.47
Δ = 03°28'17" RT
Dc = 01°45'00"
R = 3,274.05'
T = 99.21'
L = 198.37'
E = 1.5'

℄ CONST. VINE ST
℄ EX. R/W VINE ST
VINE ST
N88°33'18"E
END WORK STA. 20+92.83
EX. CB (DND)
PROP. DI WATER MAIN
PROP. WALL NO.8
PROP. WALL NO.6
EX. CONC. DRIVEWAY (TO BE REMOVED)
EX. 12" SAN. SEWER
℄ CONST. GOODKIRK ST
CONST. LIMITS
30'R
20'R
6' WALK
94.5° (ON TAN.)
GOODKIRK ST
PROP. SAN. SEWER
S.B. EXIT CD
S.B. ENTRANCE RAMP
EX 36" STM
MATCH LINE STA. 508+20.00
℄ EX. R/W ORCHARD ST
END WORK STA. 21+27.00
ORCHARD ST
N88°53'47"E
35'R TYP.
91.2° (ON TAN.)
MATCH LINE STA. 512+80.00
100' PVMT. TAPER

NOTES:

1. TRANSITION BARRIER HEIGHT FROM FULL HEIGHT-42" TO 6" HEIGHT OVER 25'.

LEGEND:

PIPE TO BE LINED

FOR INTERSECTION DETAILS, SEE SHEETS P.213 - P.212

FOR SB ENTRANCE RAMP PLAN AND PROFILE, SEE SHEET P.148

FOR SIGNAL PLAN, SEE SHEET P.269

FOR WALL 6 PLAN, SEE SHEET P.334

FOR WALL 8 PLAN, SEE SHEET P.344

FOR SB EXIT CD BRIDGE, SEE SHEETS P.439

FOR TRAFFIC CONTROL, SEE SHEETS P.251

FOR SANITARY AND WATER PLAN, SEE SHEETS P.225 &P.228

A STA. 508+77.97 ℄ CONST. GOODKIRK = STA. 21+39.98 ℄ CONST. VINE

B STA. 512+08.26 ℄ CONST. GOODKIRK = STA. 21+79.79 ℄ EX. RW ORCHARD

C STA. 509+10.45 ℄ CONST. GOODKIRK END WALL NO.8 AND WALL MOUNTED BARRIER BEGIN TYPE D BARRIER

D STA. 510+00.00 ℄ CONST. GOODKIRK END TYPE D BARRIER (SEE NOTE 1)

PROP. GRADE
EXIST. GRADE
℄ PROP. PROFILE GRADE
℄ EXIST. PROFILE GRADE

STA 508+73.00, 7.00' LT
MH-3, RIM ELEV 1040.39
12" TYPE B (N) 1035.64
12" TYPE B (W) 1031.72
12" TYPE B (E) 1028.50

EXISTING CITY OF AKRON MH-2 (SEE SHT. P.225)

STA 509+20.00, 6.00' LT
MH-3, GRATE ELEV 1042.20
15" TYPE B (S) 1037.45
15" TYPE B (N) 1037.45
12" TYPE B (W) 1038.63

STA 511+00.00, 6.00' LT
MH-3, GRATE ELEV 1050.32
12" TYPE B (S) 1044.40
12" TYPE B (N) 1044.40
12" TYPE B (W) 1046.56

170.00' VC
VPI Sta. 512+05.00 Elev. 1055.15
SSD = 353' K = 42

PVC STA. 511+20.00
ELEV. 1051.32

12" PROP. STORM
+4.51%
+0.48%
+4.51%

8" EX. WATER LINE
8" EX. WATER
PROP. 8" DI WATER MAIN (SEE SHT.P.228)
12" EX. STORM
15" PROP. STORM

96' - 12" TYPE B STM @ 4.38%
43' - 12" TYPE B STM @ 4.21%
70' - 12" TYPE B STM @ 3.29%
70' - 12" TYPE B STM @ 3.21%
64' - 12" TYPE B STM @ 4.73%
56' - 12" TYPE B STM @ 2.80%

320.00' VC
VPI Sta. 508+05.00 Elev. 1037.12
SSD = 307' K = 64

PVT STA. 509+65.00
ELEV. 1044.33

STA 510+20.00, 6.00' LT
MH-3, RIM ELEV 1046.71
12" TYPE B (N) 1041.90
15" TYPE B (S) 1041.65
12" TYPE B (SE) 1043.00
12" TYPE B (W) 1043.00

STA 511+59.20. 15.44' RT
EX. CB-3
GRATE ELEV 1052.81
EX. 12" (NW) 1048.81

STA 511+75.26, 2.57' RT
EX. MH, RIM ELEV 1052.95
EX. 12" CONC (SE) 1046.03
EX. 12" CONC (E) 1045.90

STA 511+80.00, 6.00' LT
MH-3, RIM ELEV 1053.52
12" TYPE B (S) 1046.84
12" TYPE B (N) 1046.84
12" TYPE B (NW) 1047.15
12" TYPE B (NE) 1048.34

STA 512+48.01, 6.00' LT
MH-3, RIM ELEV 1055.03
12" TYPE B (S) 1049.87
12" TYPE B (N) 1046.87
12" TYPE B (NW) 1051.33
15" TYPE B (E) 1049.87

STA 512+50.39, 18.15' LT
EX. CB-3, GRATE ELEV 1054.84
EX. 12" CONC (S) 1051.84

509 510 511 512

D-0 DRAINAGE
R-0 REMOVAL
SA-0 SANITARY
W-0 WATERWORK
GR-0 GUARDRAIL
B-0 BARRIER TYPE B OR C
BD-0 BARRIER TYPE D
F-0 FENCE
C-0 CURB
SW-0 SIDEWALK
DW-0 DRIVEWAY
CR-0 CURB RAMP

HORIZONTAL SCALE IN FEET 0 10 20 40

PLAN AND PROFILE - GOODKIRK STREET STA. 508+20 TO STA. 512+20

SUM-077/008-11.65/00.00

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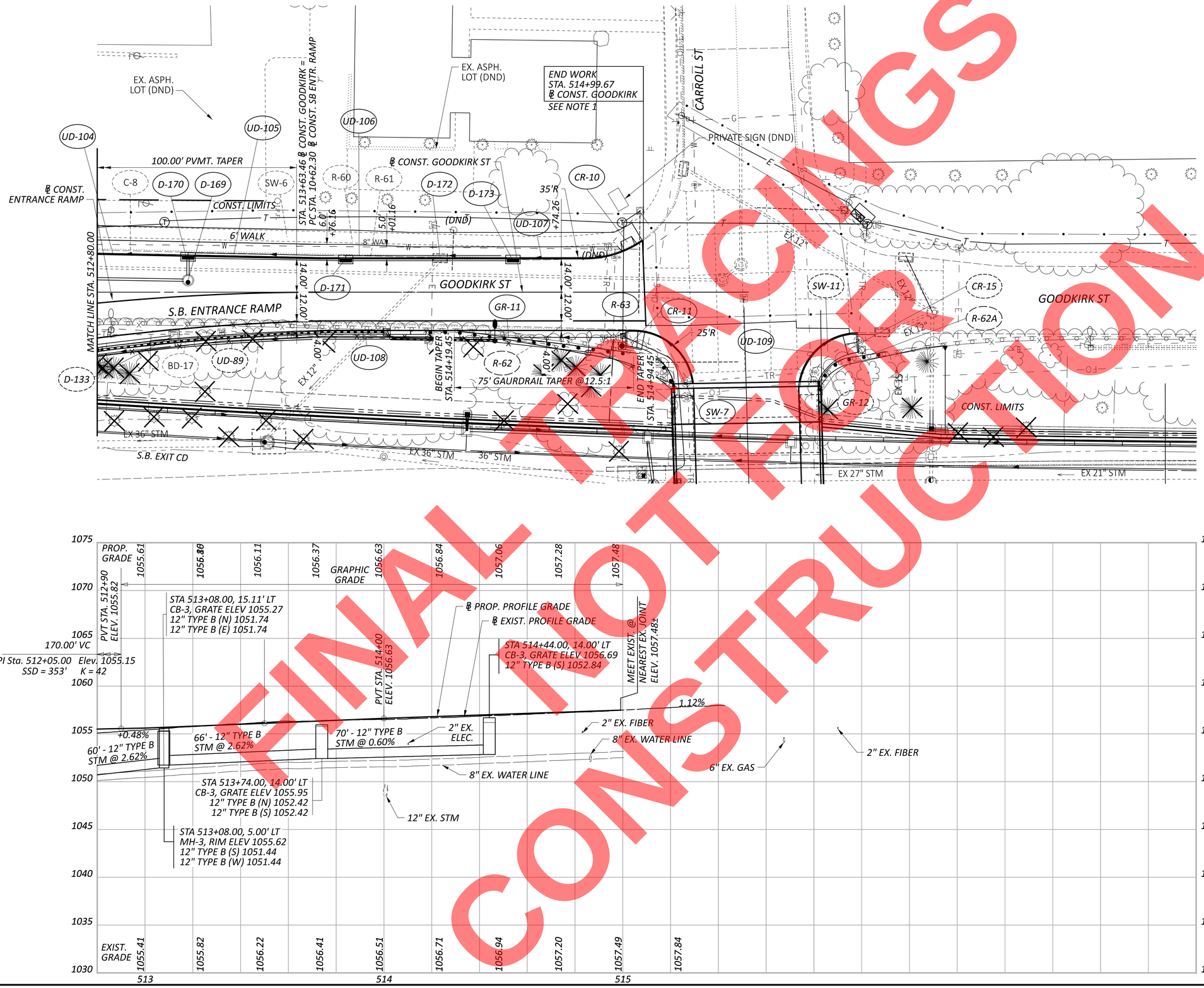
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1855
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.152 TOTAL 627



FINAL PLANS NOT FOR CONSTRUCTION

FOR CARROLL ST INTERSECTION DETAILS, SEE SHEET P.214

FOR CARROLL ST PLAN AND PROFILE DETAILS, SEE SHEET P.154

FOR CARROLL ST BRIDGE PLANS, SEE SHEET P.480

FOR SB ENTRANCE RAMP PLAN AND PROFILE, SEE SHEET P.149

FOR SIGNAL PLAN, SEE SHEET P.269

FOR TRAFFIC CONTROL, SEE SHEETS P.251

NOTES:

1.FIELD LOCATE EXISTING CONCRETE JOINT. END FULL-DEPTH PAVEMENT AND CURB REPLACEMENT AT LOCATION OF EXISTING CONCRETE JOINT.

LEGEND:

FULL DEPTH CONC. PAVEMENT

- D-0 DRAINAGE
- R-0 REMOVAL
- SA-0 SANITARY
- W-0 WATERWORK
- GR-0 GUARDRAIL
- B-0 BARRIER TYPE B OR C
- BD-0 BARRIER TYPE D
- F-0 FENCE
- C-0 CURB
- SW-0 SIDEWALK
- DW-0 DRIVEWAY
- CR-0 CURB RAMP

GR-11	
DESC.	STA.
BEGIN BRIDGE TERMINAL ASS'Y, TYPE 1	514+07.16
END BRIDGE TERMINAL ASS'Y, TYPE 1/BEGIN MGS GR	514+98.45
END MGS GR/BEGIN BRIDGE TERMINAL ASS'Y, TYPE 2	12+52.53
END BRIDGE TERMINAL ASS'Y, TYPE 2	12+52.53

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - GOODKIRK STREET STA. 512+80 TO STA. 516+00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.153 TOTAL 627

SUM-077/008-11.65/00.00

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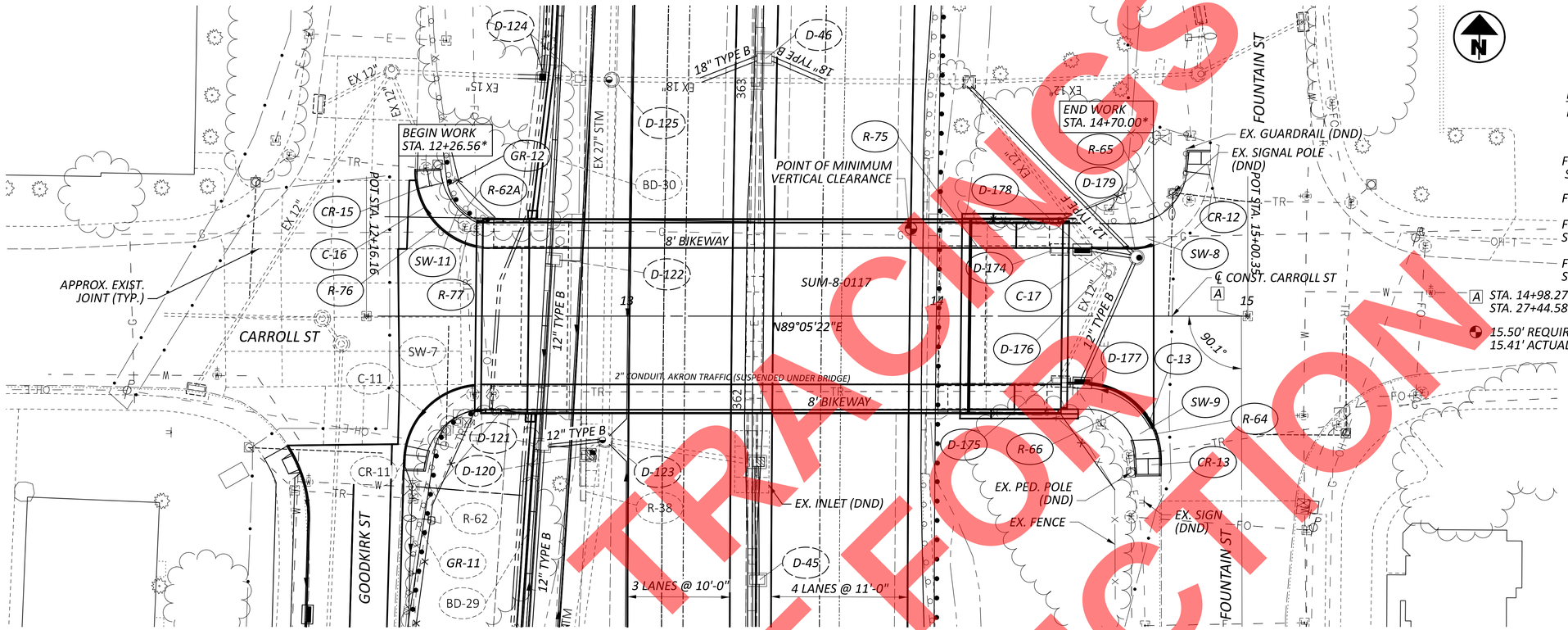

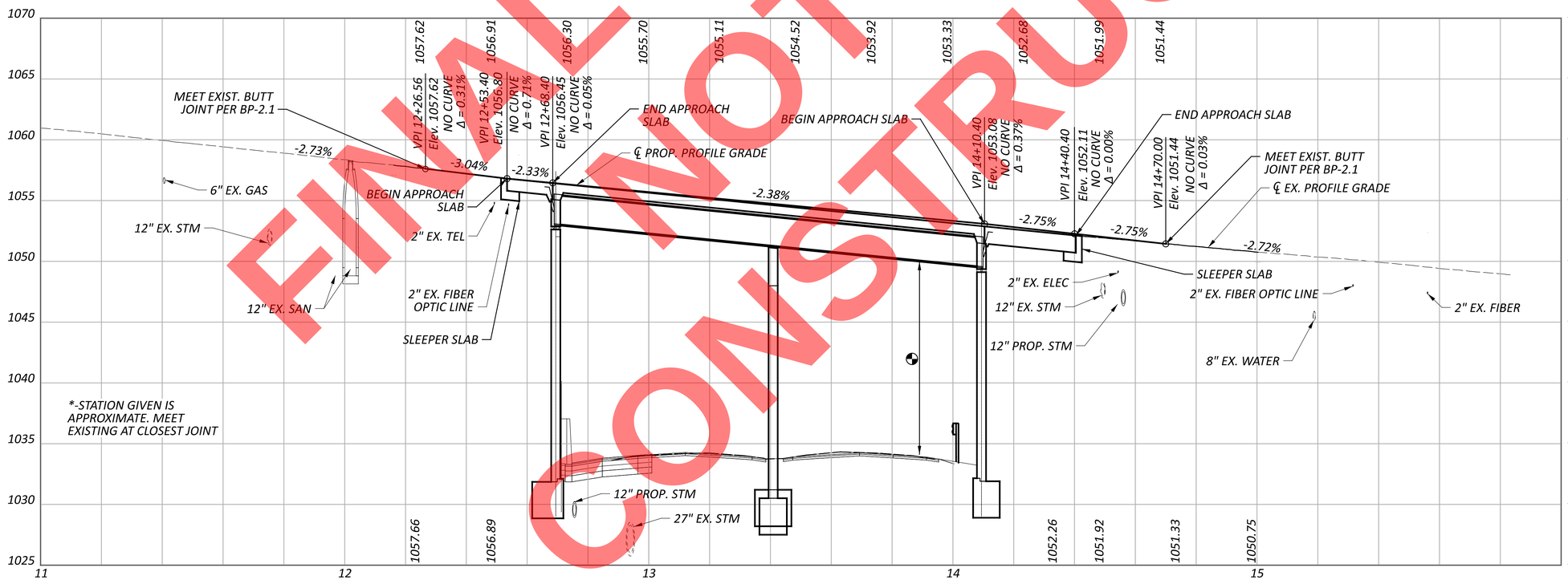

FINAL - NOT FOR CONSTRUCTION

LEGEND:

FULL DEPTH CONC. PAVEMENT

FOR INTERSECTION DETAILS, SEE SHEET P.214

FOR SIGNAL PLAN, SEE SHEET P.269

FOR CARROLL BRIDGE PLANS, SEE SHEET P.480

FOR TRAFFIC CONTROL, SEE SHEET P.251

D-0	DRAINAGE
R-0	REMOVAL
SA-0	SANITARY
W-0	WATERWORK
GR-0	GUARDRAIL
B-0	BARRIER TYPE B OR C
BD-0	BARRIER TYPE D
F-0	FENCE
C-0	CURB
SW-0	SIDEWALK
DW-0	DRIVEWAY
CR-0	CURB RAMP

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - CARROLL STREET
STA. 12+00 TO 15+00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER SGM
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.154 TOTAL 627

SUM-077/008-11.65/00.00

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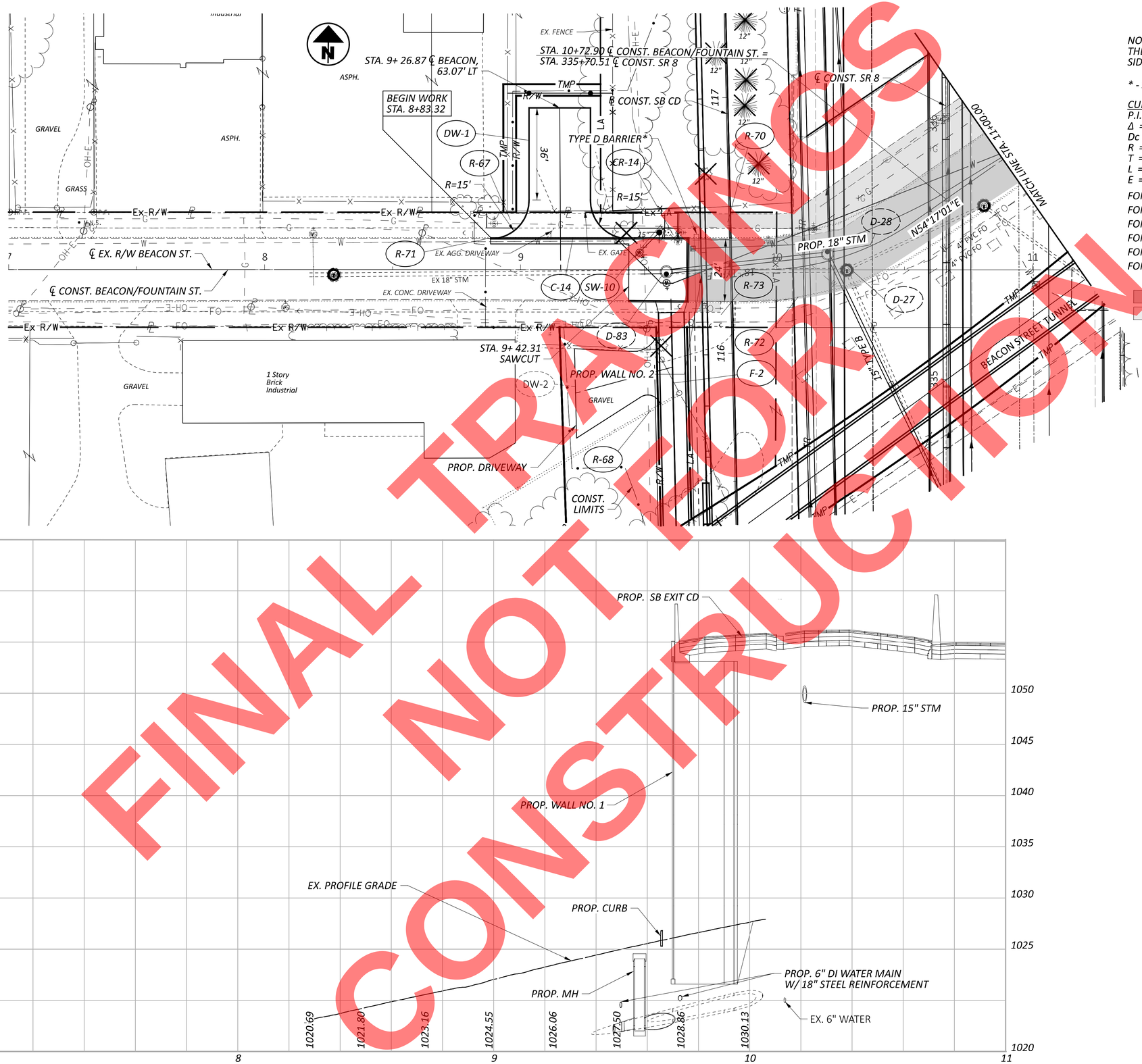

NOTE: FOR DRIVEWAY BUILD UP SEE THE NORMAL SECTION - VARIOUS SIDE STREETS TYPICAL ON SHEET P.018

* - SEE GENERAL NOTES FOR DETAILS

CURVE DATA
P.I. = STA. 10+26.81, ℄ CONST. BEACON/FOUNTAIN ST.
Δ = 34°50'00" LT
Dc = 54°34'03"
R = 105.00'
T = 32.94'
L = 63.84'
E = 5.05'

FOR BEACON TURNAROUND DETAILS, SEE SHEET P.208
FOR FENCE PLAN, SEE SHEET P.510
FOR BEACON STREET TUNNEL, SEE SHEETS P.364 - P.376
FOR WATERWORK, SEE SHEETS P.229
FOR LIGHTING PLANS, SEE SHEETS P.291 & P.295
FOR CONNECTOR DETAILS, SEE SHEET P.236

EXIST. PVT. TO BE REMOVED AND NOT REPLACED

EXIST. SIDEWALK TO BE REMOVED AND NOT REPLACED

D-0	DRAINAGE
R-0	REMOVAL
SA-0	SANITARY
W-0	WATERWORK
GR-0	GUARDRAIL
B-0	BARRIER TYPE B OR C
BD-0	BARRIER TYPE D
F-0	FENCE
C-0	CURB
SW-0	SIDEWALK
DW-0	DRIVEWAY
CR-0	CURB RAMP

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - BEACON/FOUNTAIN STREET
STA. 7+00 TO 11+00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4585
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DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.155 TOTAL 627

SUM-077/008-11.65/00.00

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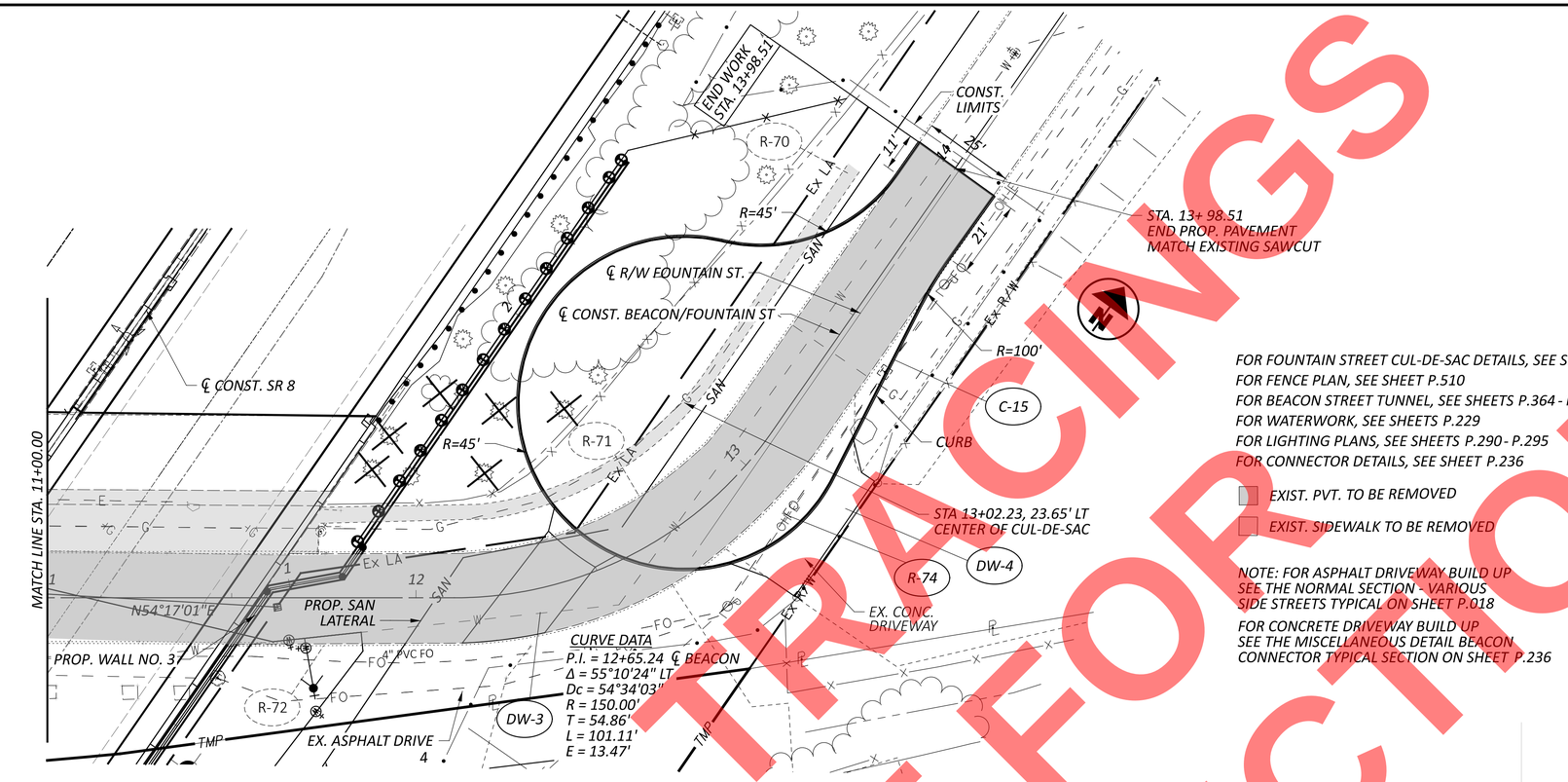
FINAL PLANS
NOT FOR
CONSTRUCTION



FOR FOUNTAIN STREET CUL-DE-SAC DETAILS, SEE SHEET P.209
FOR FENCE PLAN, SEE SHEET P.510
FOR BEACON STREET TUNNEL, SEE SHEETS P.364 - P.376
FOR WATERWORK, SEE SHEETS P.229
FOR LIGHTING PLANS, SEE SHEETS P.290 - P.295
FOR CONNECTOR DETAILS, SEE SHEET P.236

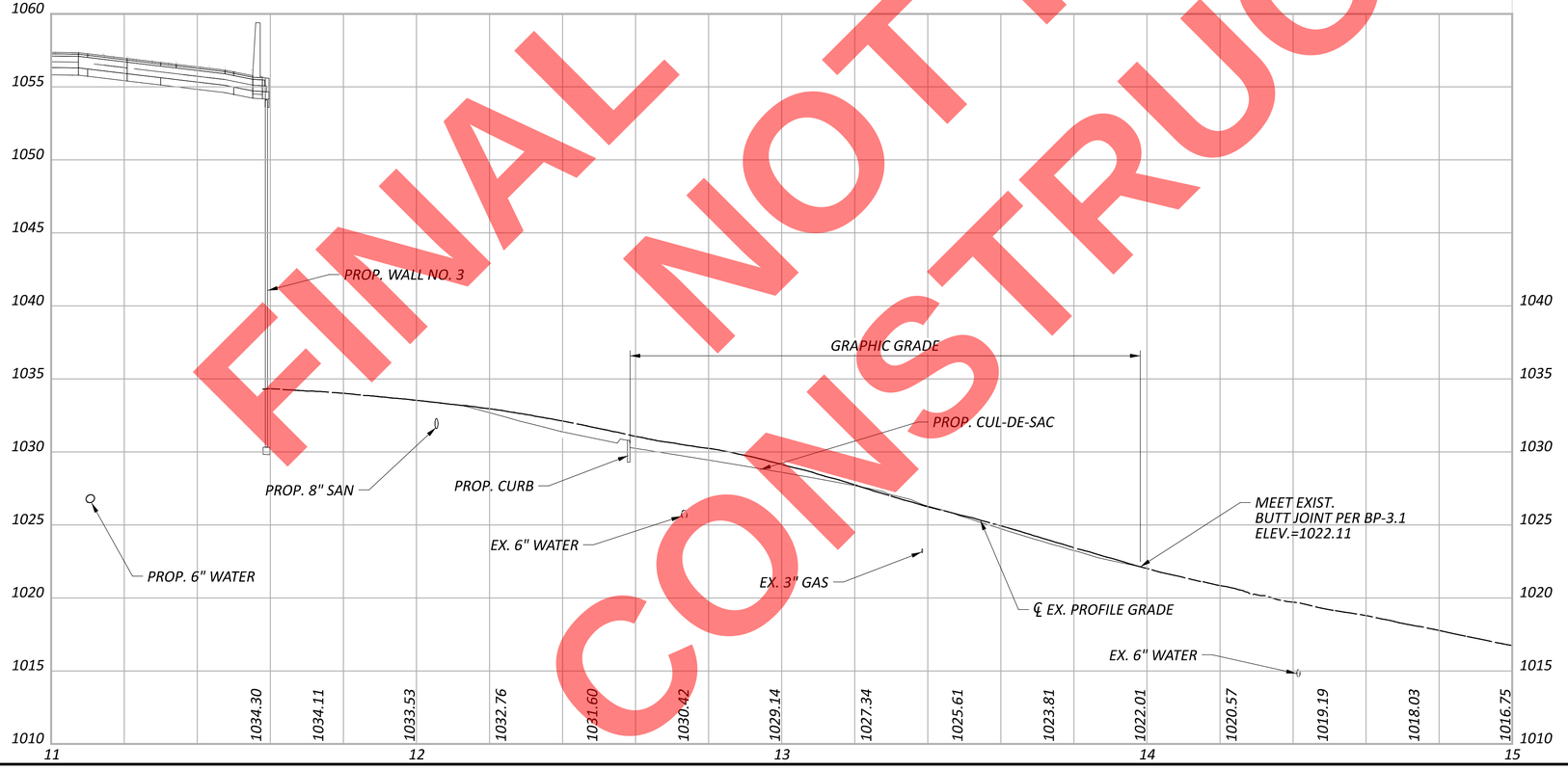
EXIST. PVT. TO BE REMOVED

EXIST. SIDEWALK TO BE REMOVED

NOTE: FOR ASPHALT DRIVEWAY BUILD UP SEE THE NORMAL SECTION - VARIOUS SIDE STREETS TYPICAL ON SHEET P.018

FOR CONCRETE DRIVEWAY BUILD UP SEE THE MISCELLANEOUS DETAIL BEACON CONNECTOR TYPICAL SECTION ON SHEET P.236

- D-0 DRAINAGE
- R-0 REMOVAL
- SA-0 SANITARY
- W-0 WATERWORK
- GR-0 GUARDRAIL
- B-0 BARRIER TYPE B OR C
- BD-0 BARRIER TYPE D
- F-0 FENCE
- C-0 CURB
- SW-0 SIDEWALK
- DW-0 DRIVEWAY
- CR-0 CURB RAMP



FINAL PLANS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - BEACON/FOUNTAIN STREET
STA. 11+00 TO 14+50

DESIGN AGENCY
ARCADIS
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AKRON, OHIO 44308
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DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.156 TOTAL 627

SUM-077/008-11.65/00.00

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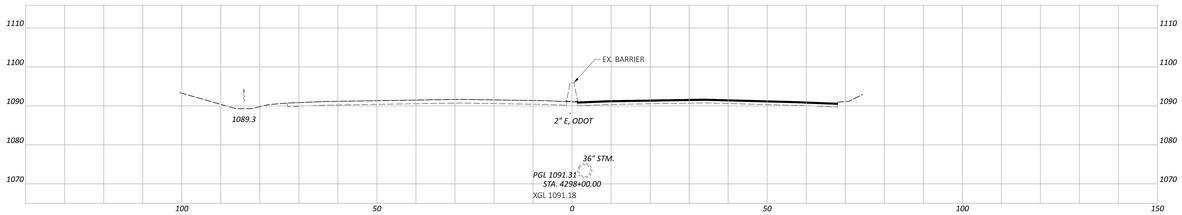
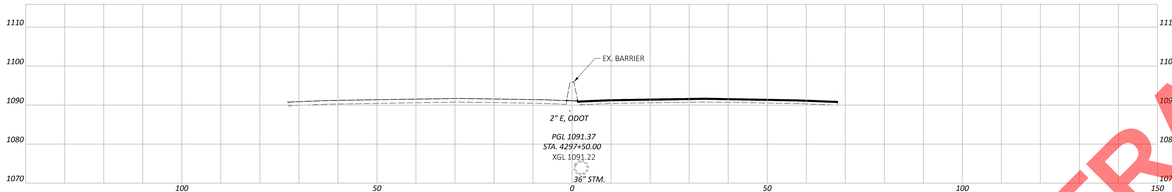
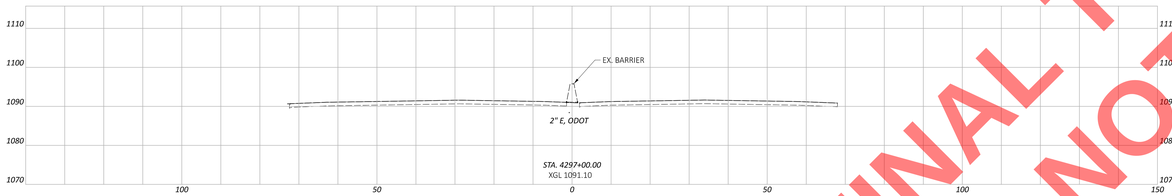
LEGEND

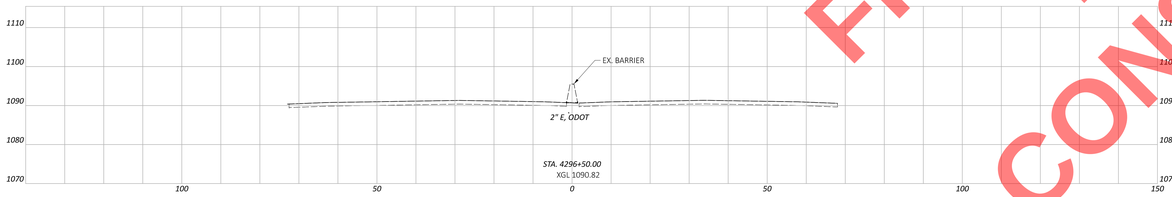
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

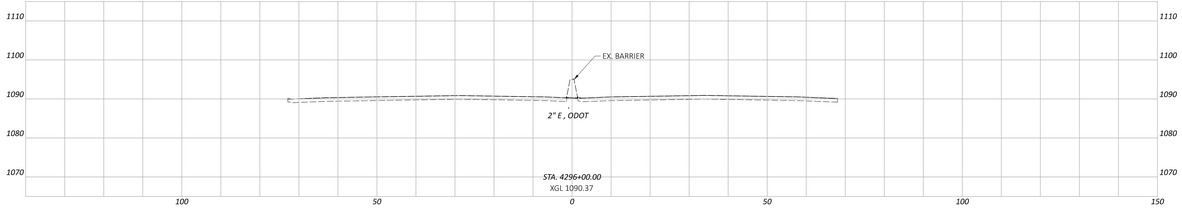
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

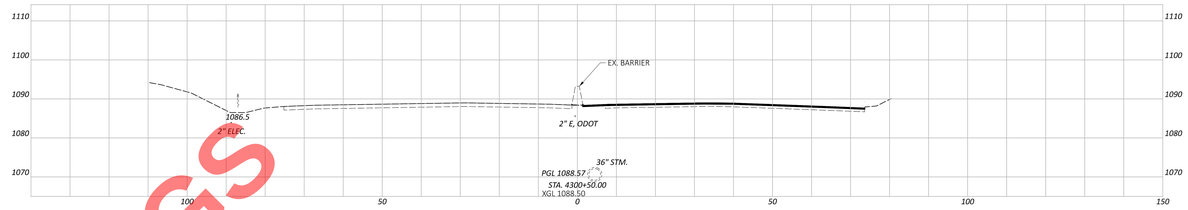


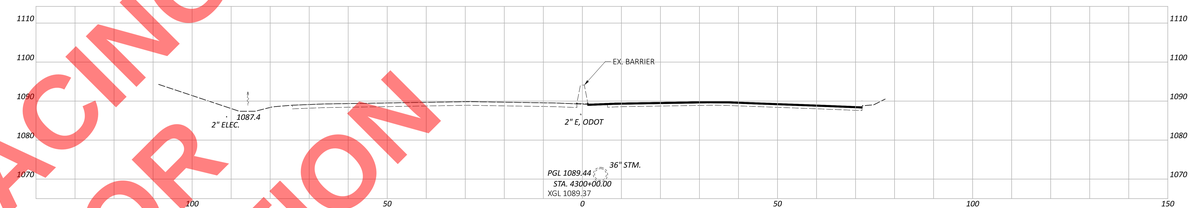


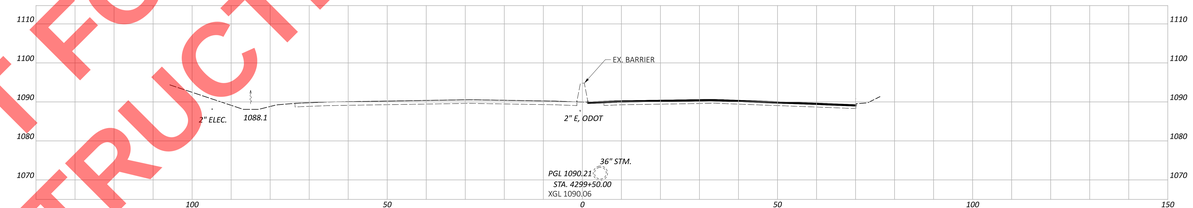


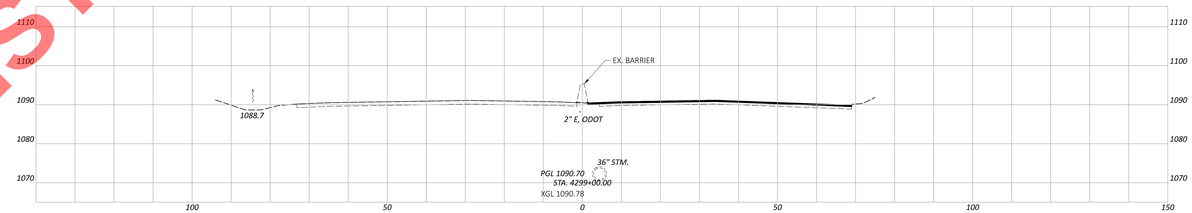


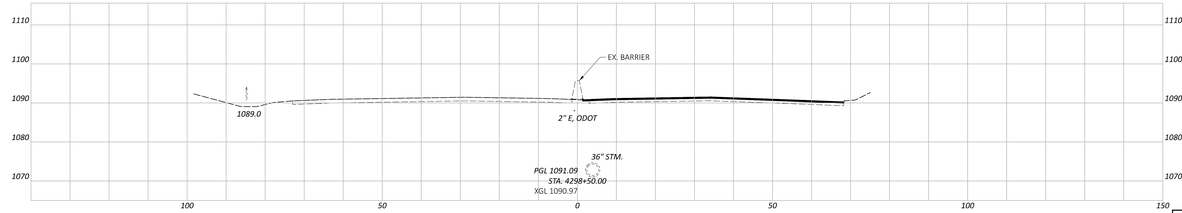












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4296+00 TO STA. 4300+50

DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC.
221 SOUTH FIFTH STREET, SUITE 300
COLUMBUS, OHIO 43215
PH: 614.486.4383
FAX: 614.486.4384

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.157	627

SUM-77/8-11.65/0.00

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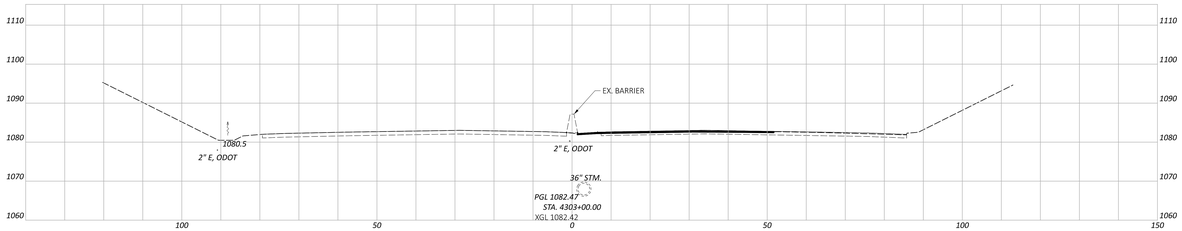
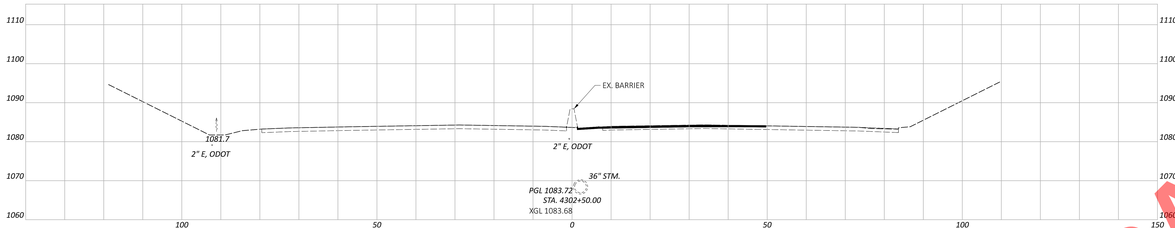
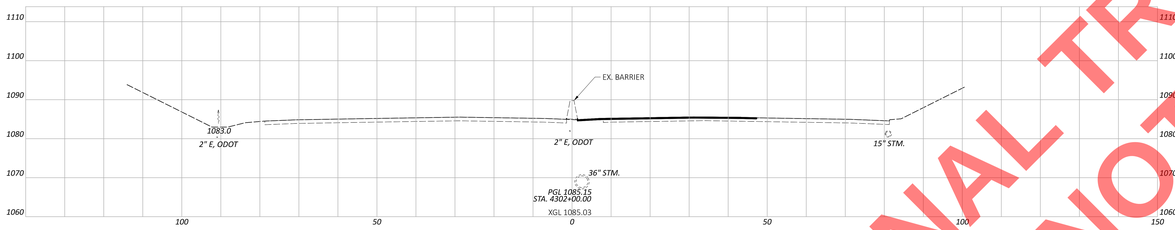
LEGEND

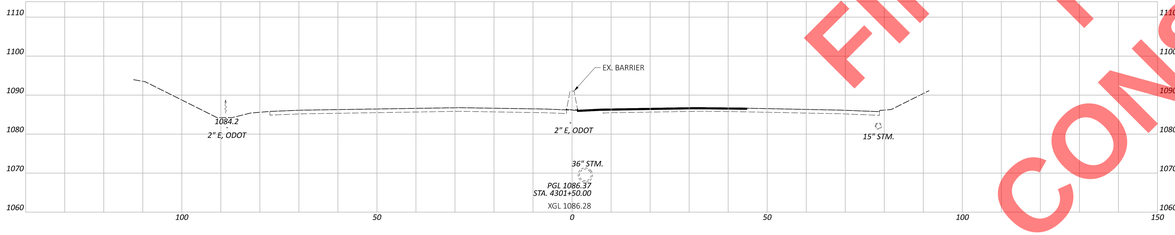
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

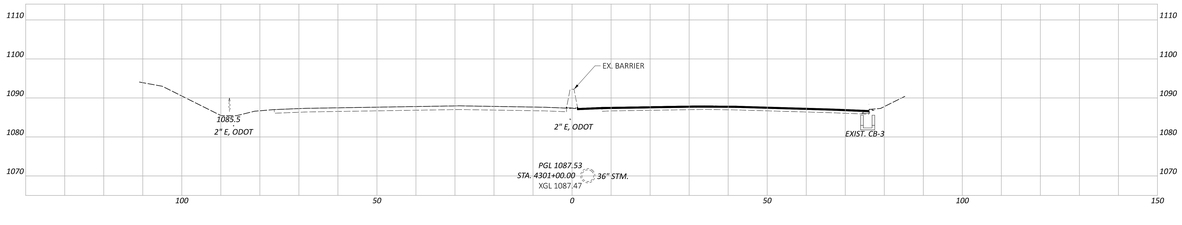
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

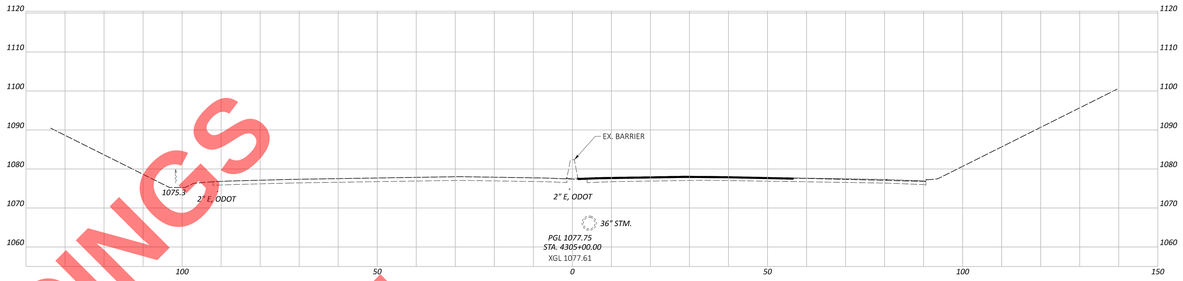


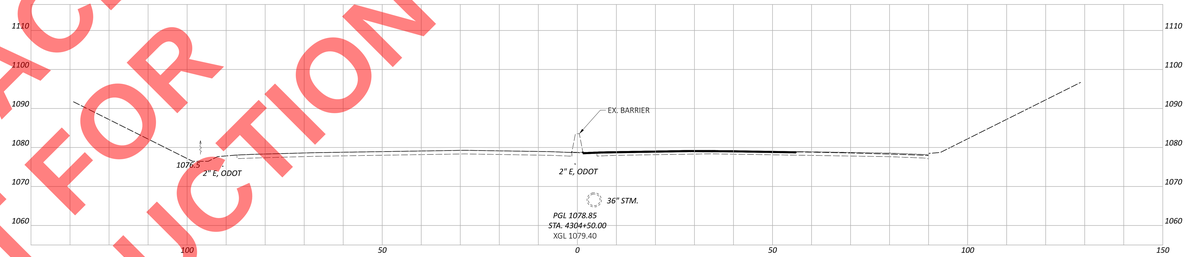


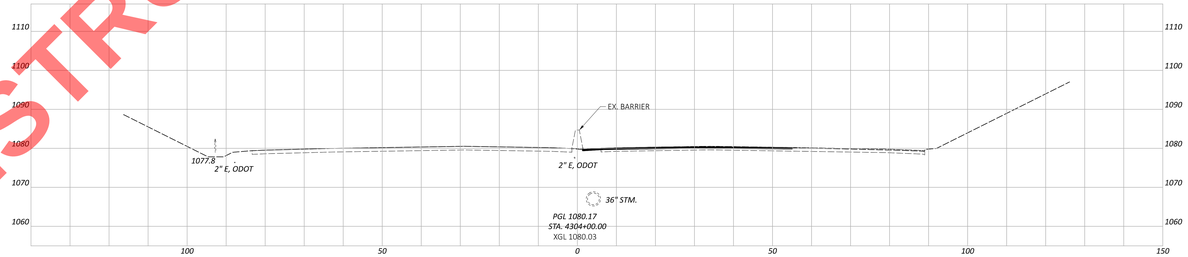


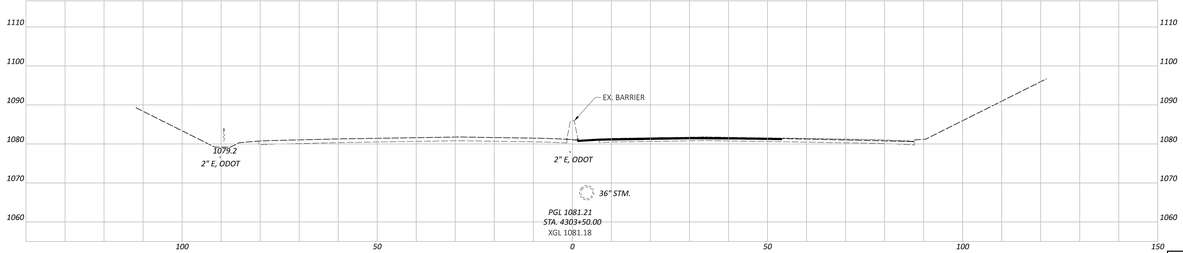












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4301+00 TO STA. 4305+00

SUM-77/8-11.65/0.00

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FILE NAME: C:\Users\bamus2218\Desktop\Working Folder\Projects\SUM-77-11.65\Roadway\Sheets\114865_X0001.dgn

DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC.
221 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
PH: 330.434.4000
DESIGNER
MAL
REVIEWER
SMG 05/21/26

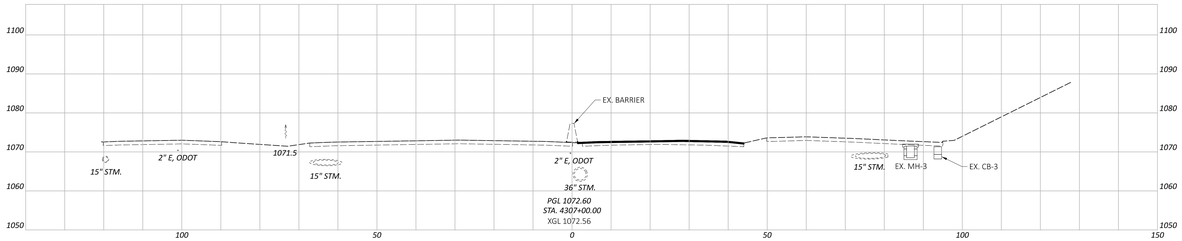
PROJECT ID
114865

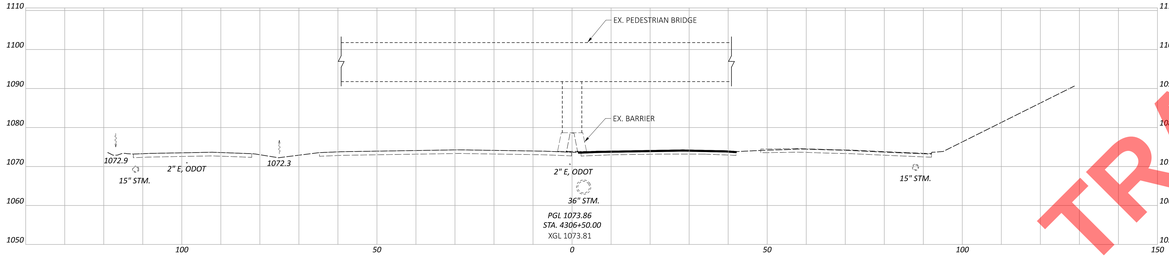
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.158	627

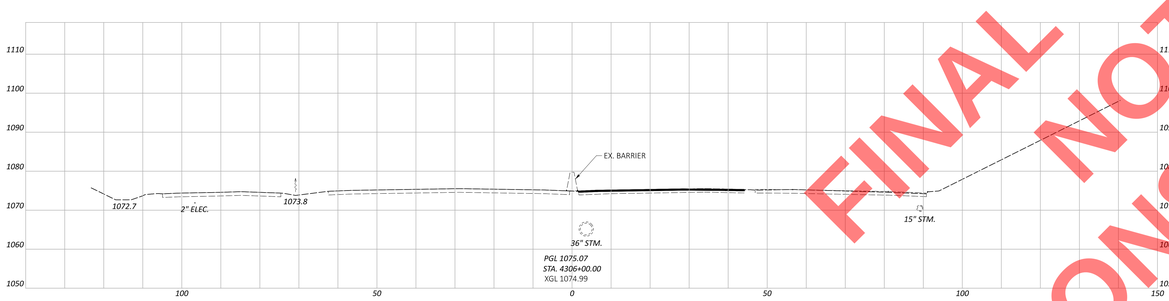
LEGEND

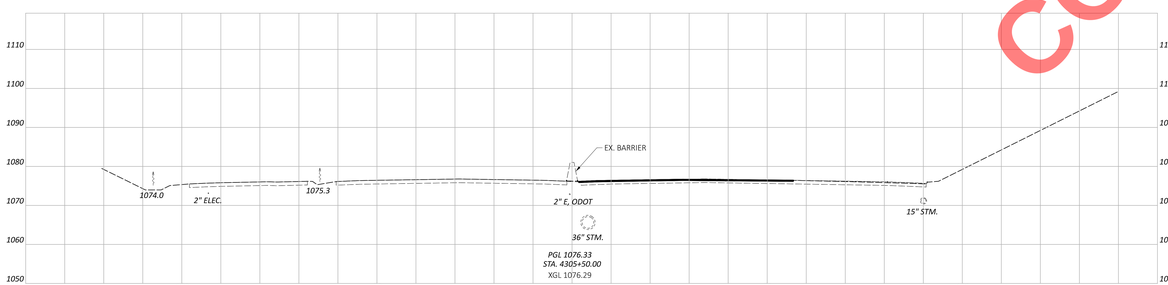
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

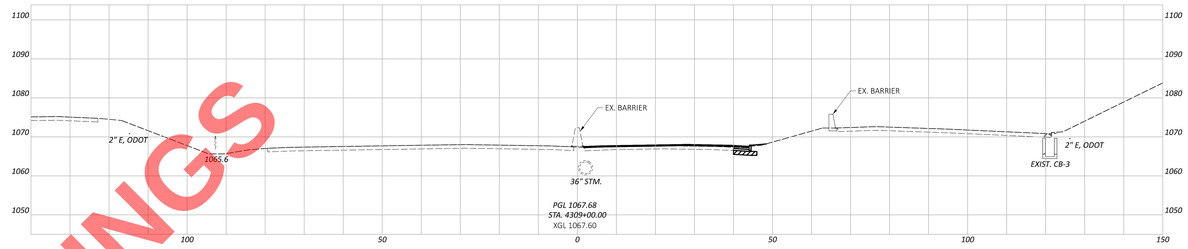
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

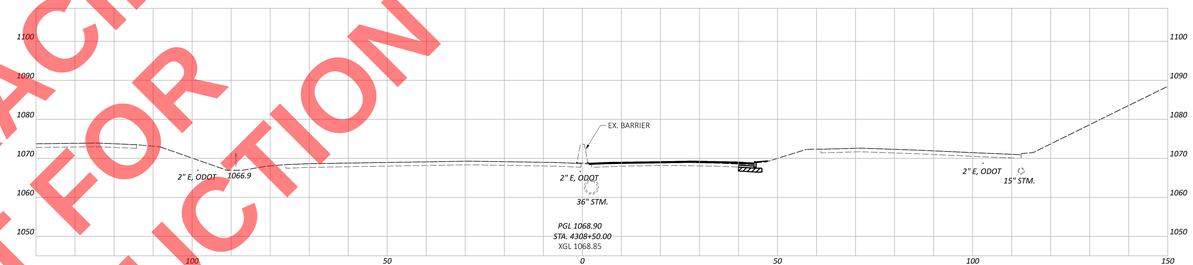


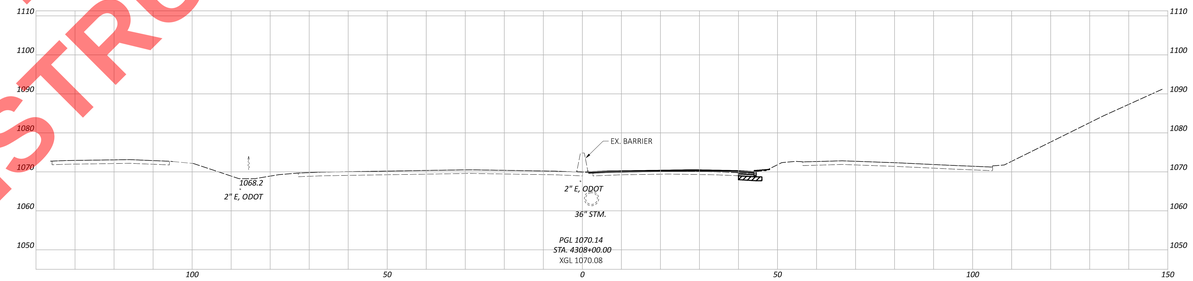


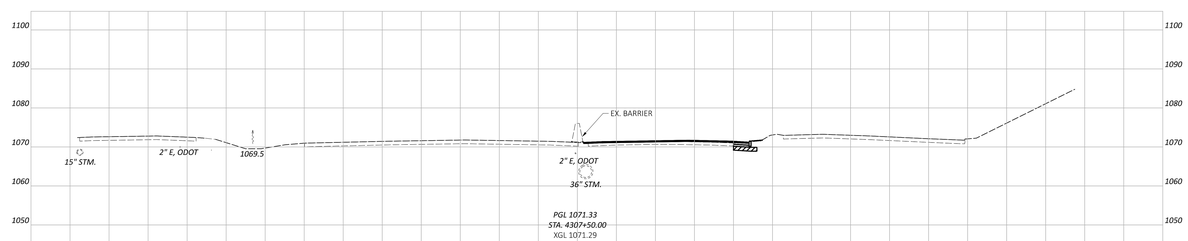












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4305+50 TO STA. 4309+00

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
222 SOUTHAN STREET, SUITE 300
HOLLAND, OHIO 43528
419.724.3600

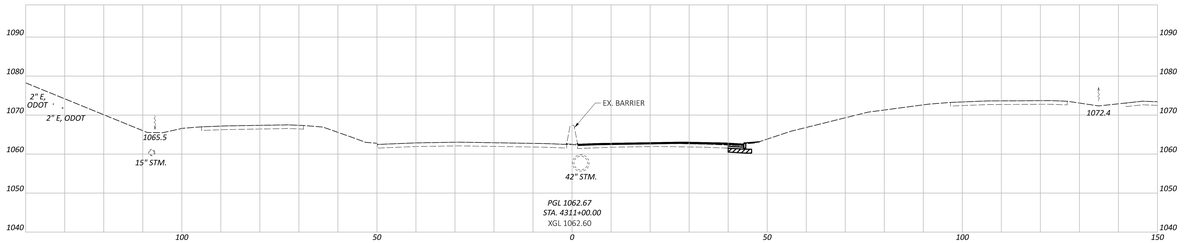
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

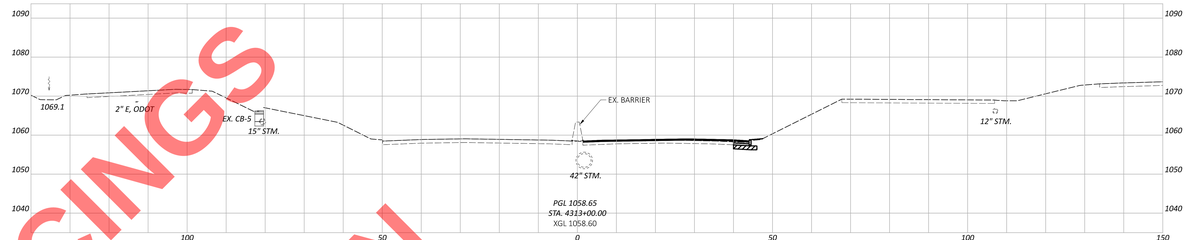
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.159	627

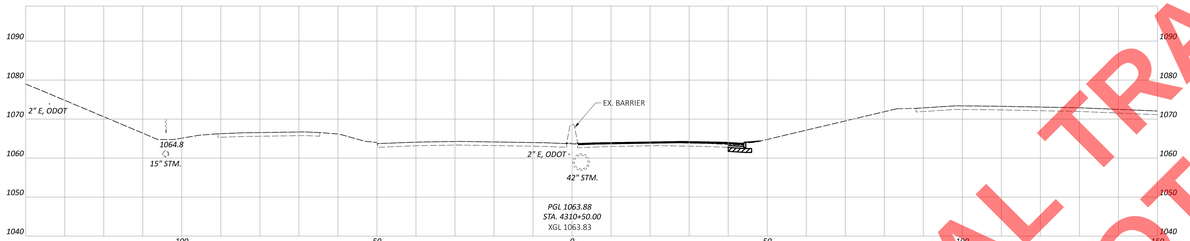
LEGEND

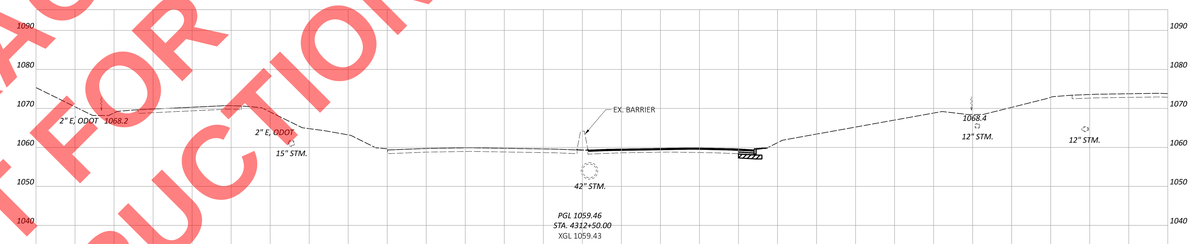
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

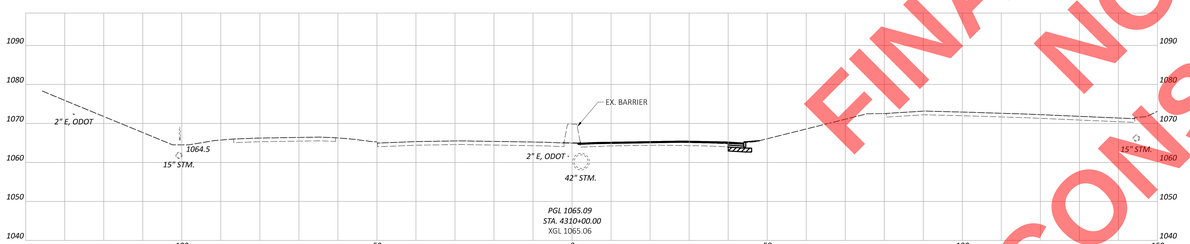
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

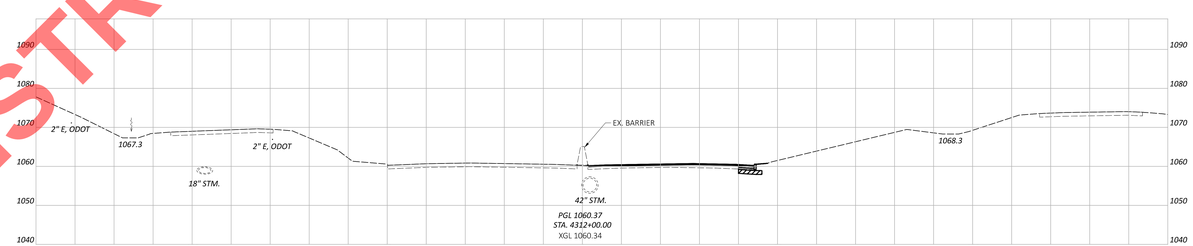


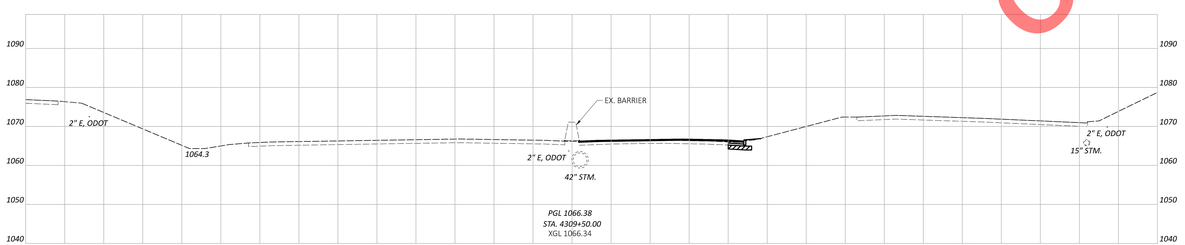


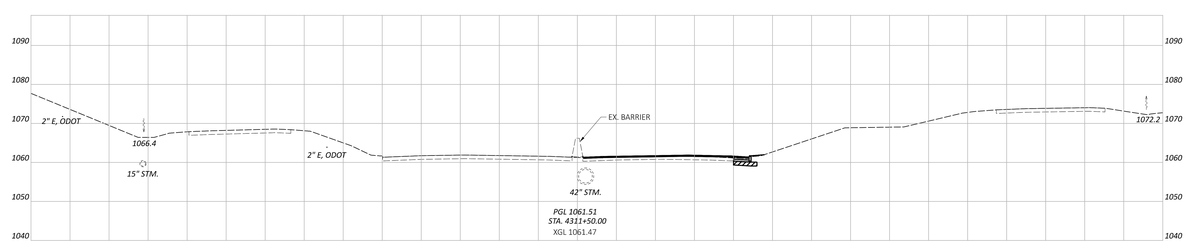












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4309+50 TO STA. 4313+00

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
22 SOUTH PARK STREET SUITE 300
ANN ARBOR, MI
48104-2085
734.994.4000

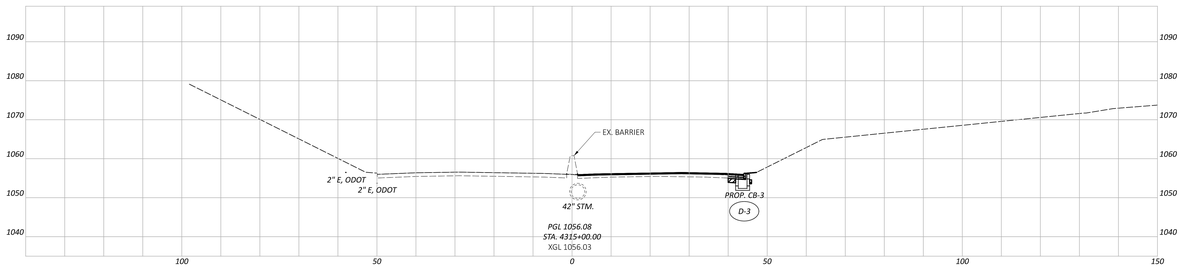
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

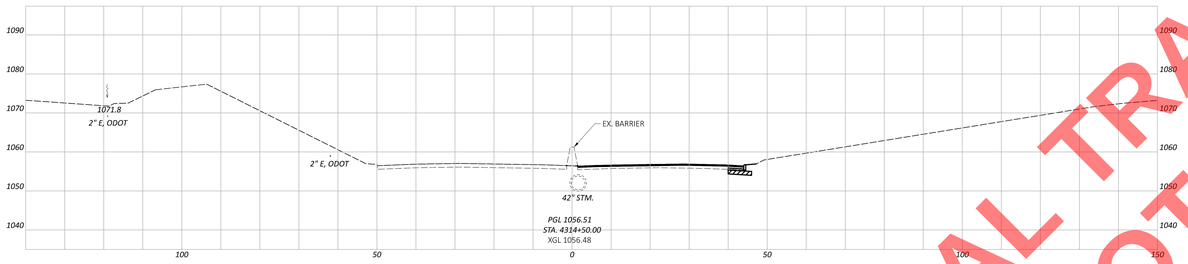
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.160	627

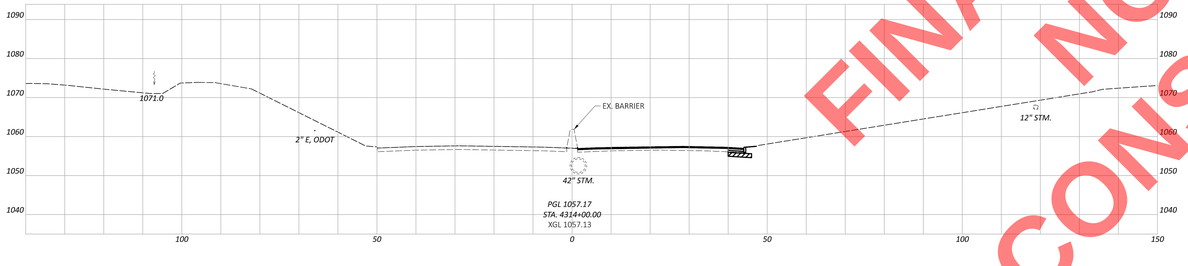
LEGEND

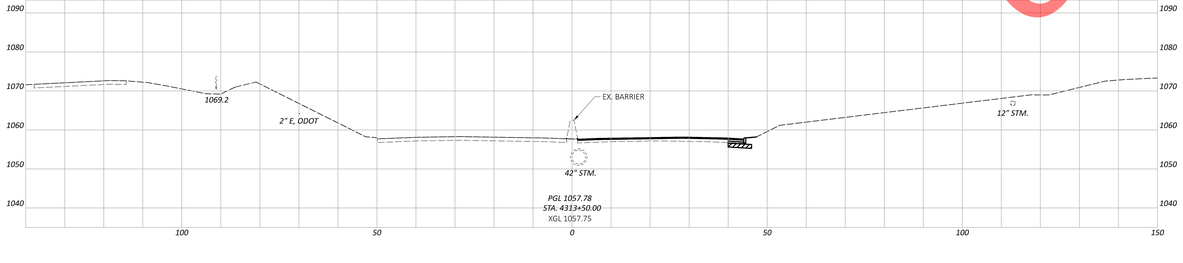
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

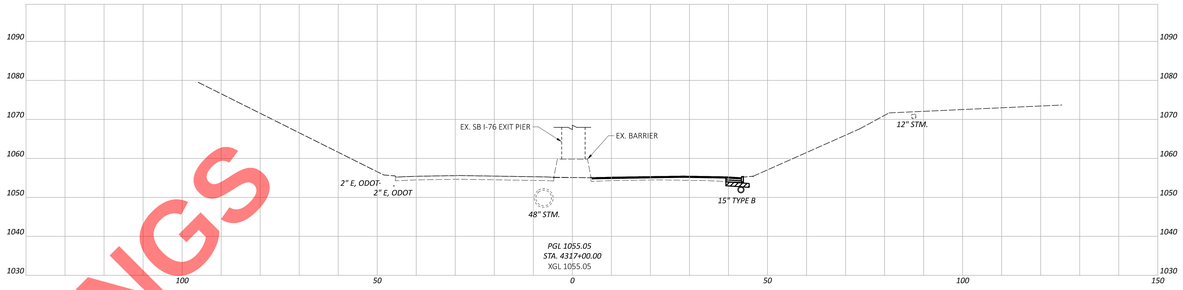
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

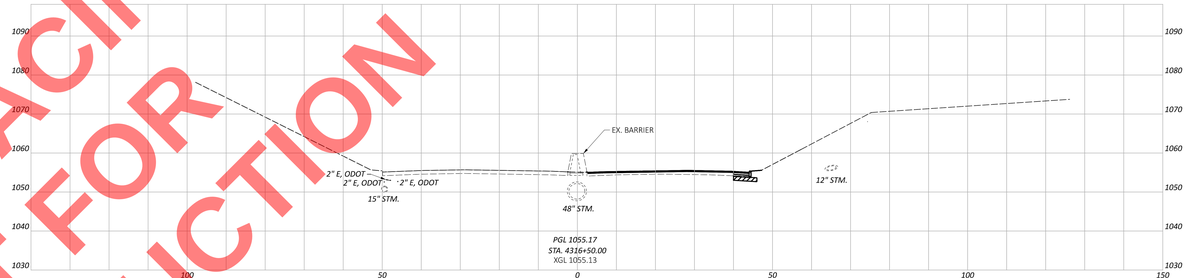


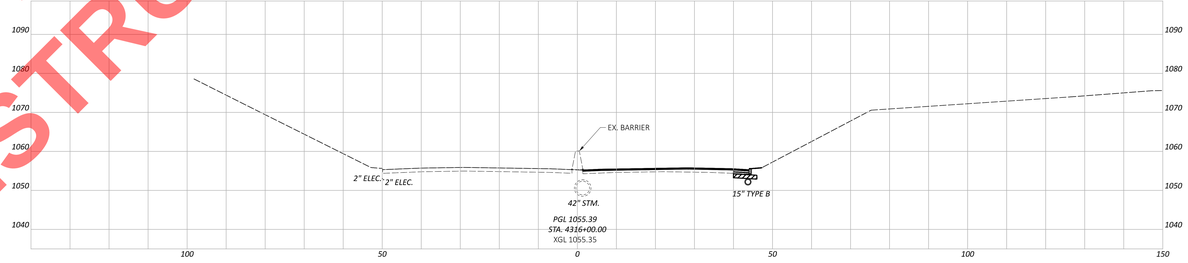


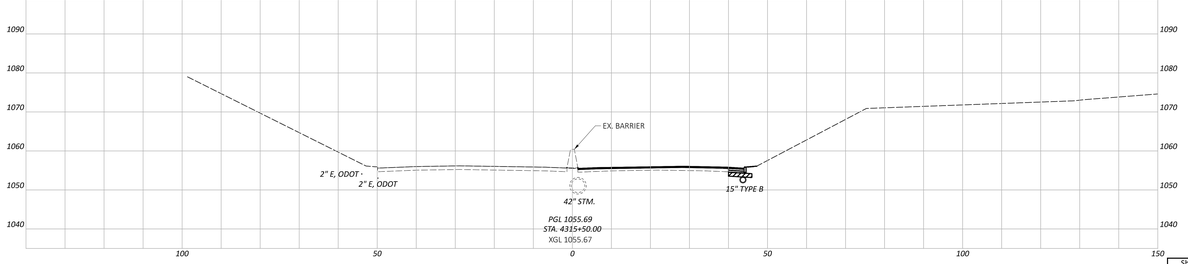












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4313+50 TO STA. 4317+00

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
22 SOUTH THIRD STREET 3RD
FLOOR COLUMBUS OH
614.464.4500
FAX 614.486.7330

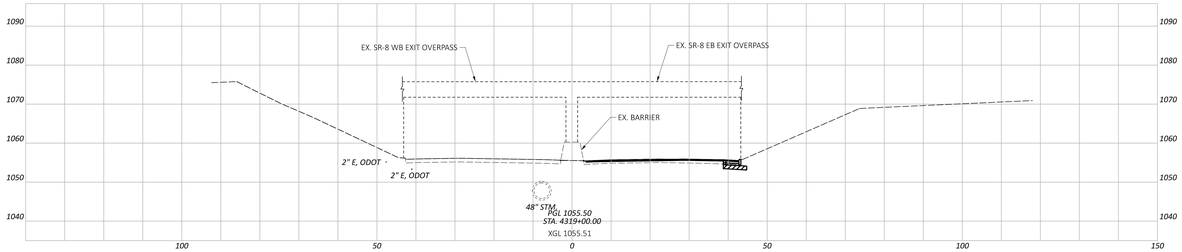
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

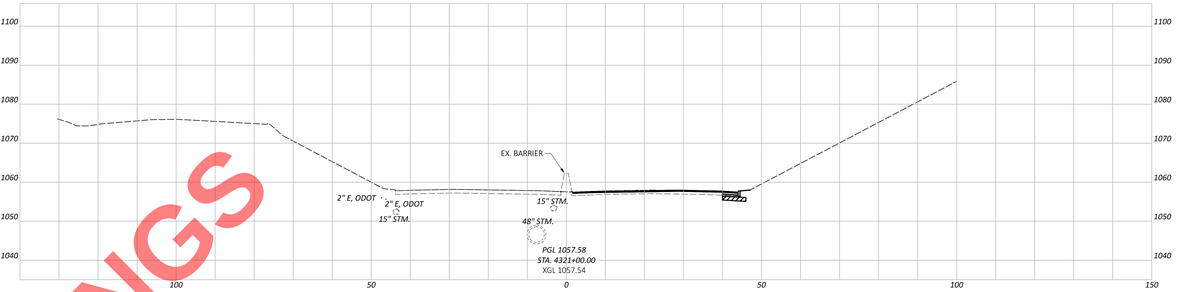
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.161	627

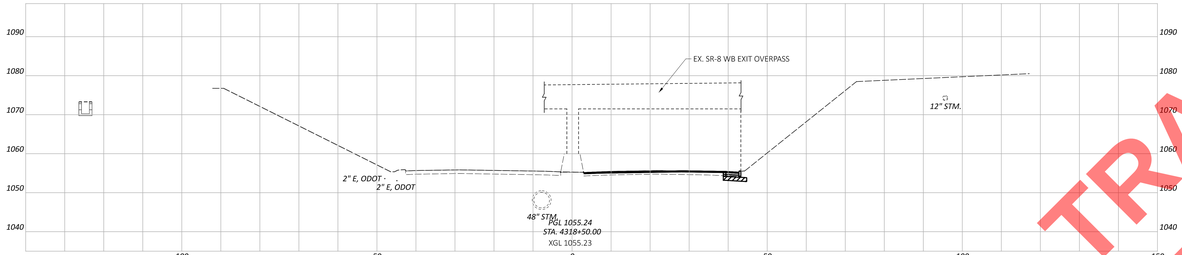
LEGEND

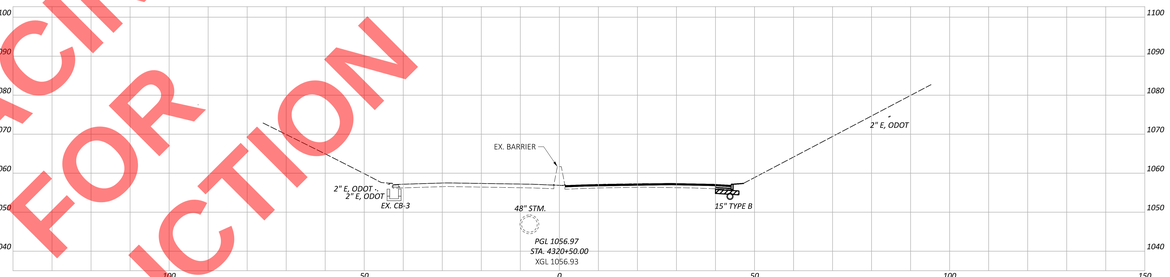
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

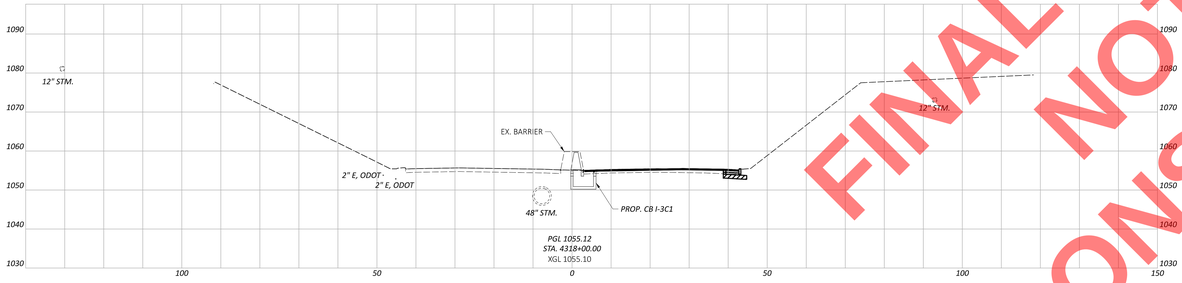
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

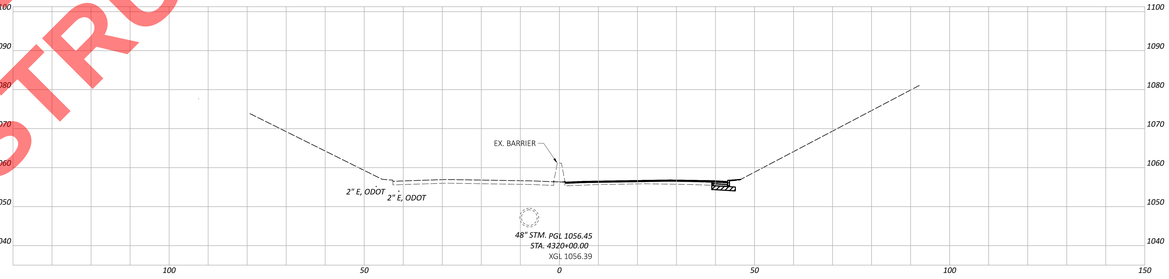


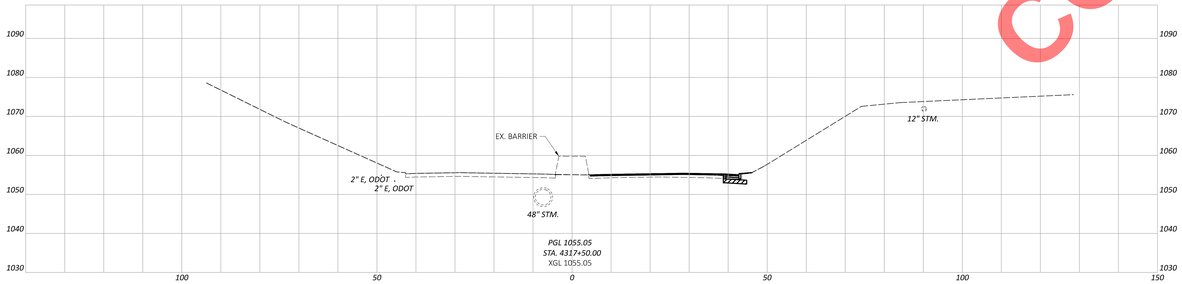


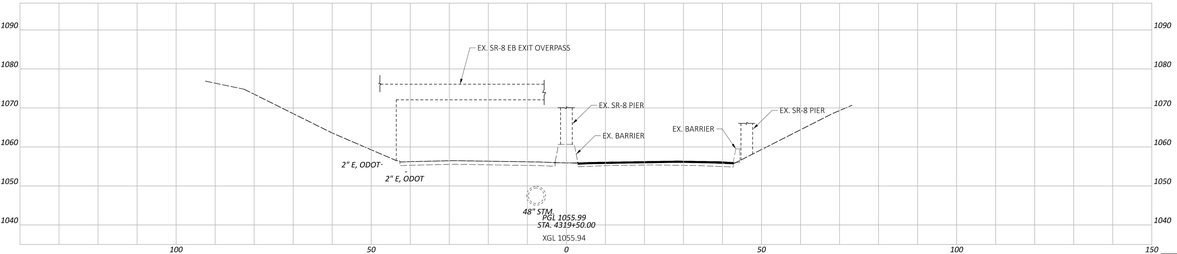












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4317+50 TO STA. 4321+00

SUM-77/8-11.65/0.00

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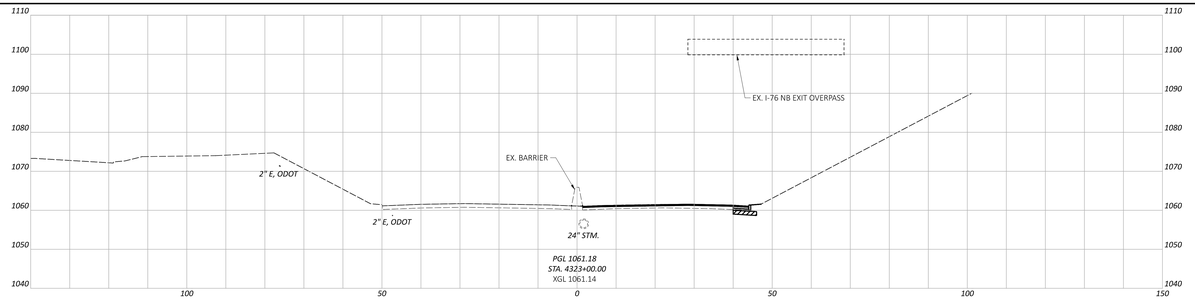
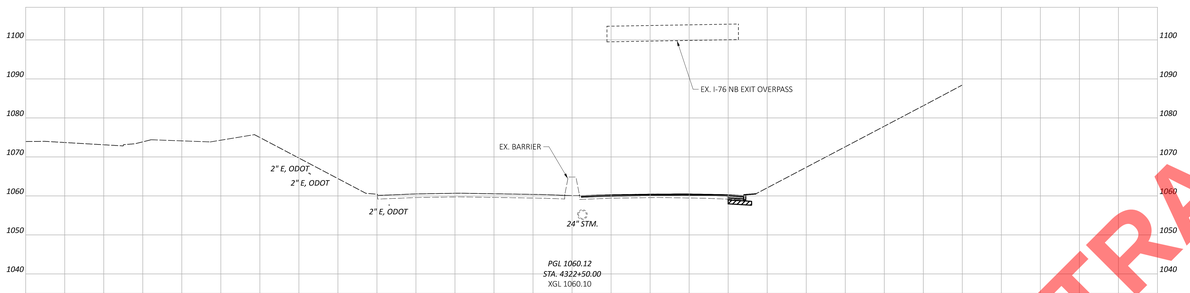
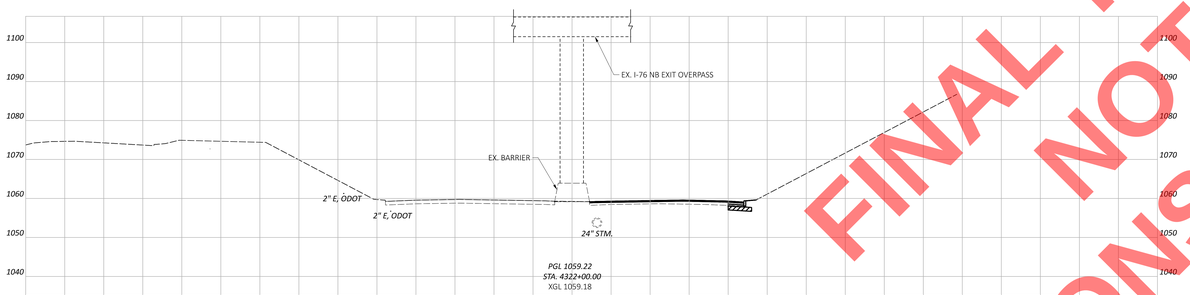
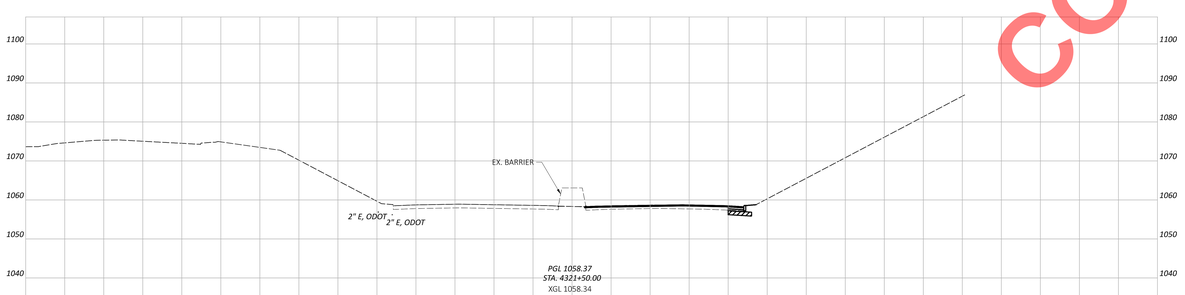
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET STE 300
AKRON, OHIO 44308
330.434.4383
DESIGNER
MAL
REVIEWER
SMG 05/21/26
PROJECT ID
114865

Sheet Totals					
Seeding	Cut		Fill	SHEET	TOTAL
				P.162	627







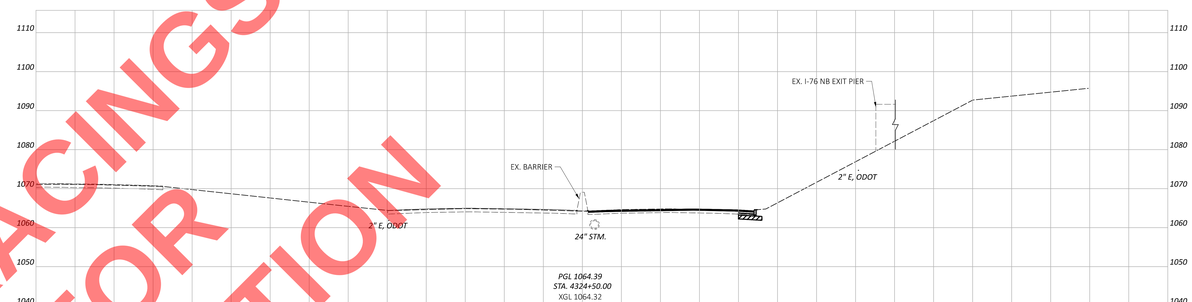


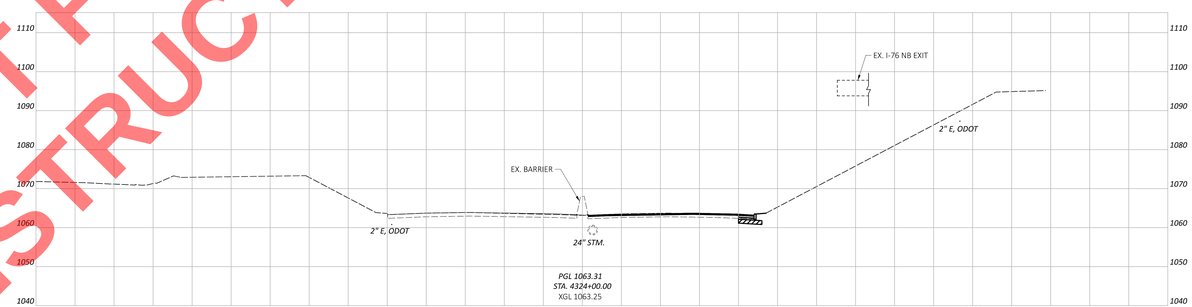
LEGEND

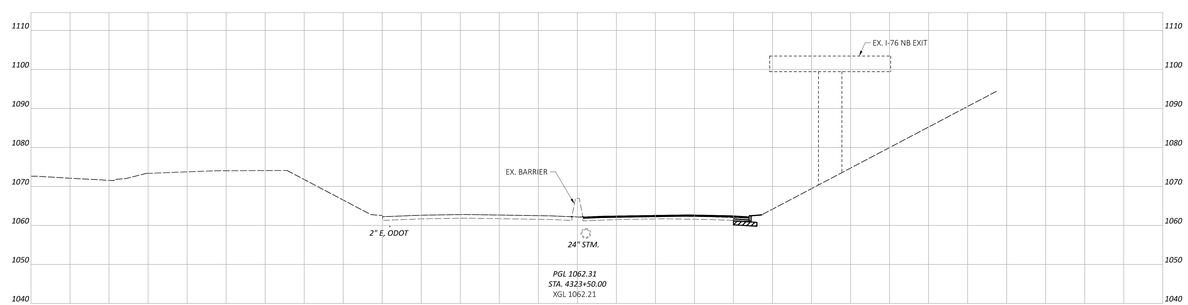
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

FINAL TRACINGS
NOT FOR
CONSTRUCTION







CROSS SECTIONS SR-8
STA. 4321+50 TO STA. 4324+50

SUM-77/8-11.65/0.00

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ACTIVE CONFIG: Alternate 1 - Mainline Only | XREF: Proposed Mainline.dgn, Proposed Roadway.dgn, Proposed Roadway Sheets 114865_00001.dgn

DESIGN AGENCY
ARCADIS
222 SOUTHAN STREET SUITE 300
AKRON, OHIO 44333
330.434.4080
www.arcadis.com

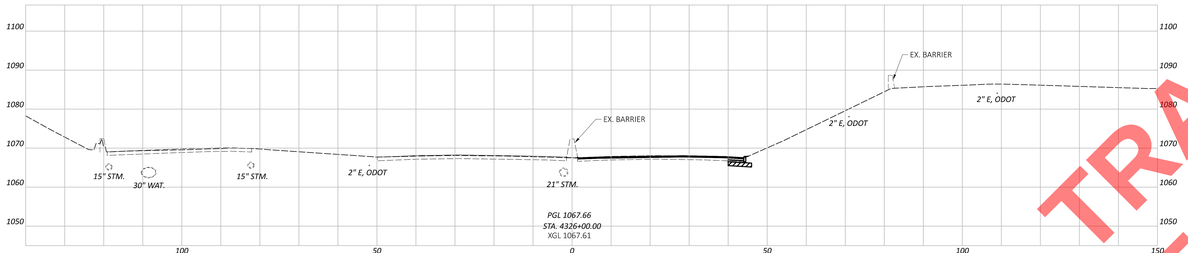
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

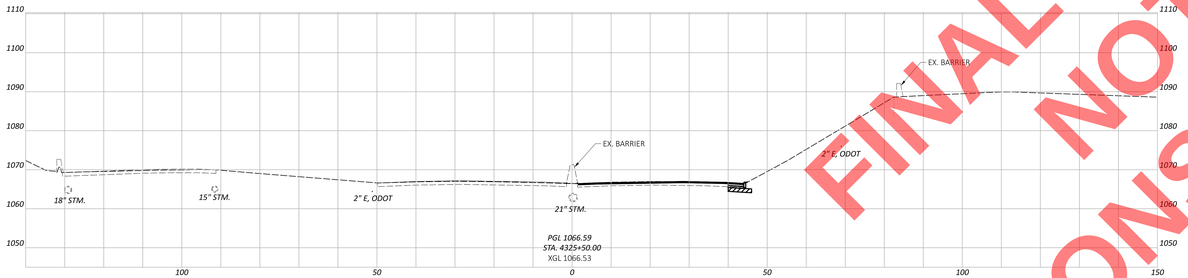
Sheet Totals			
Seeding	Cut	Fill	SHEET: P.163
			TOTAL: 627

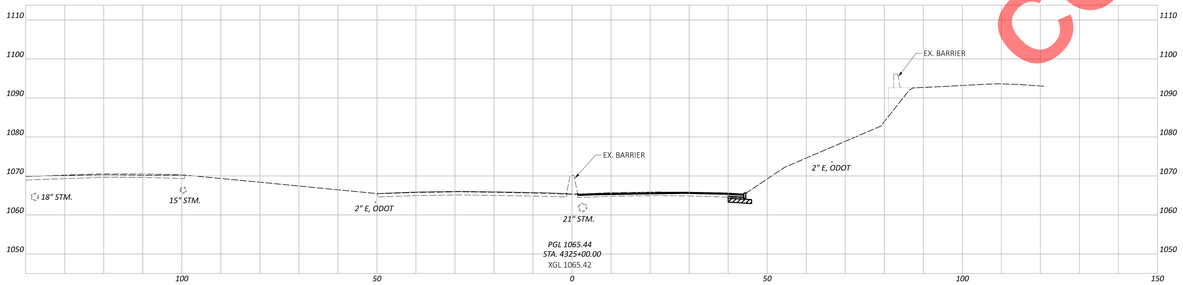
LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-







FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4325+00 TO STA. 4326+00

DESIGN AGENCY
ARCADIS
22 SOUTH PARK STREET, SUITE 3B
AKRON, OHIO 44308
PHONE: 330.434.4585
FAX: 330.434.4585

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.164	627

SUM-77/8-11.65/0.00

MODEL: C:\...\0068-1-435+00.00-1 [Sheet] 114865(02) 66x34.dgn | DATE: 5/12/2026 TIME: 2:13:29 PM USER: bamus2218
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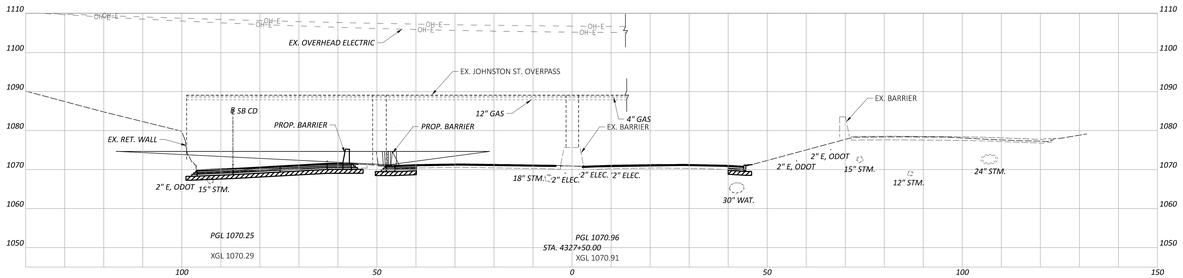
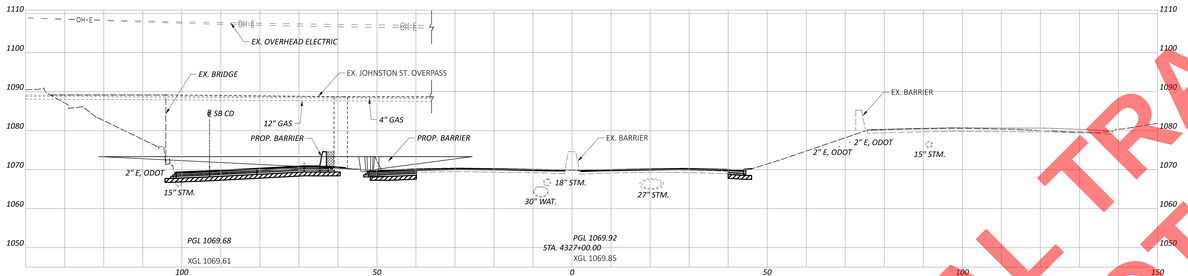
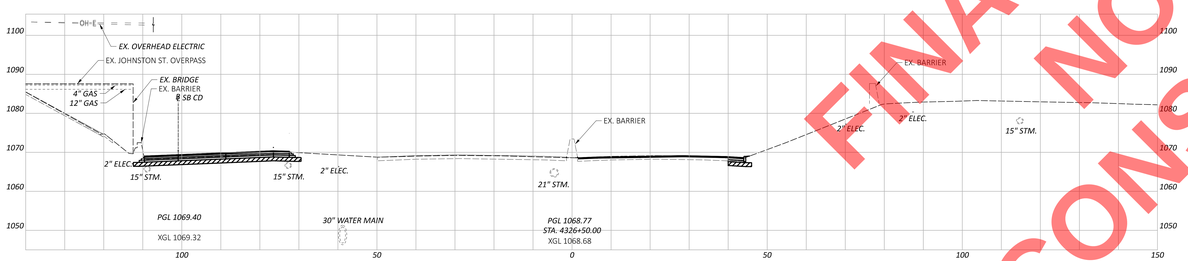
LEGEND

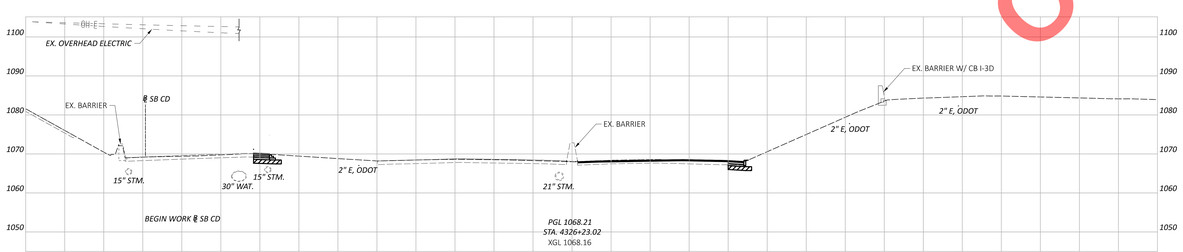
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

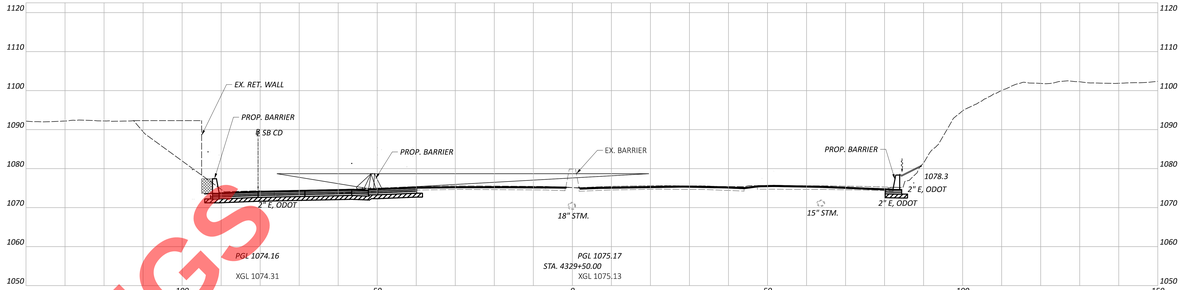
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

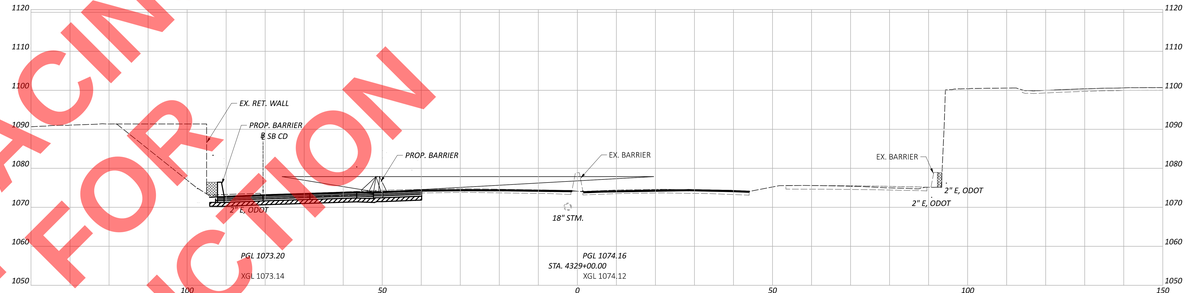


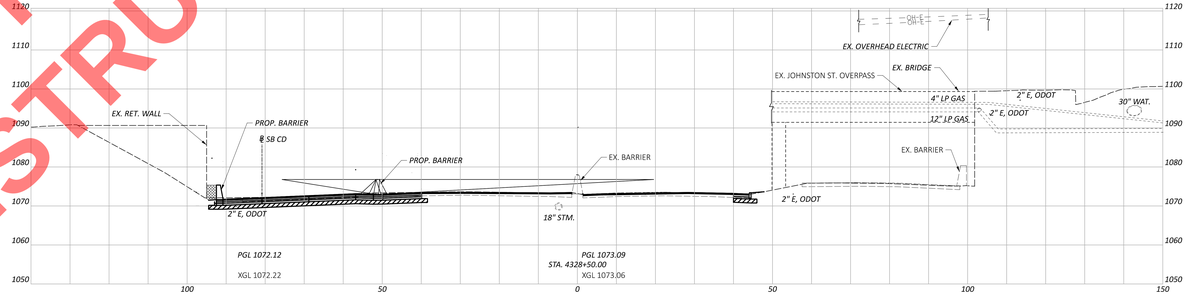


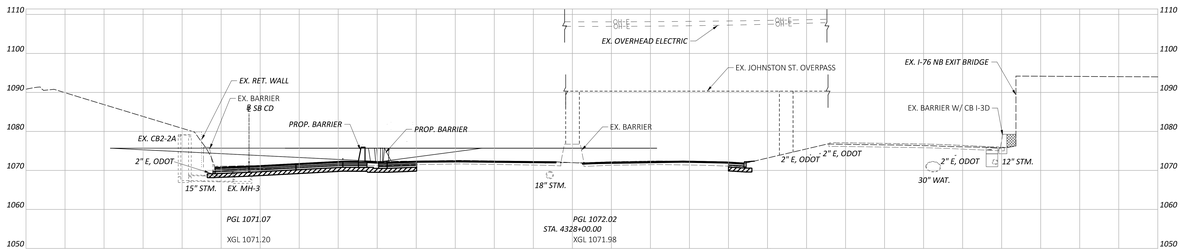












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4326+23.02 TO STA. 4329+50

SUM-77/8-11.65/0.00

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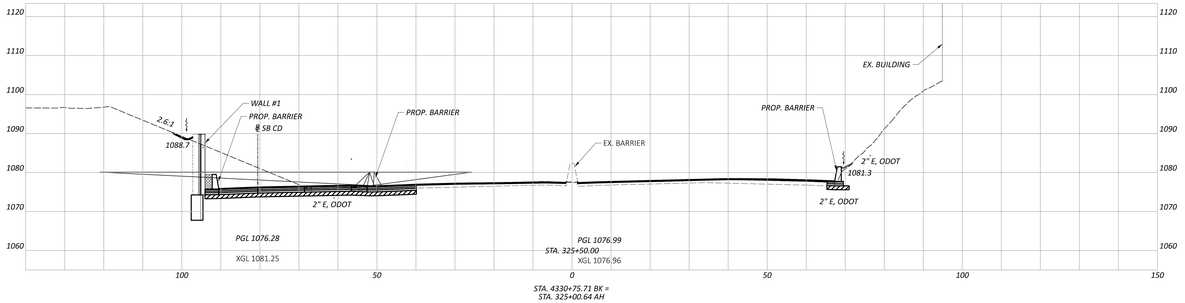
DESIGN AGENCY
ARCADIS
22 SOUTHAN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080
DESIGNER
MAL
REVIEWER
SMG 05/21/26
PROJECT ID
114865
SHEET
P.165
TOTAL
627
Sheet Totals
Seeding | Cut | Fill

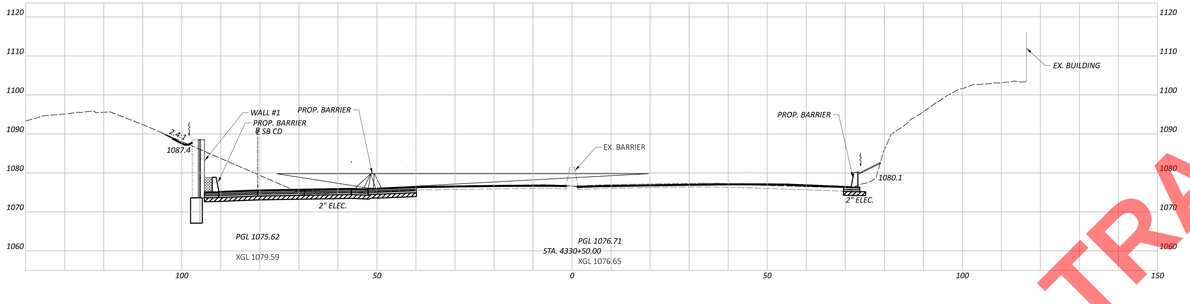
LEGEND

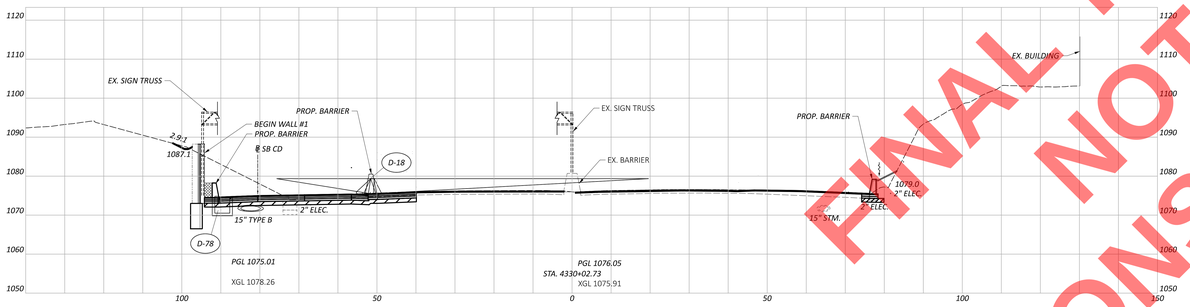
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

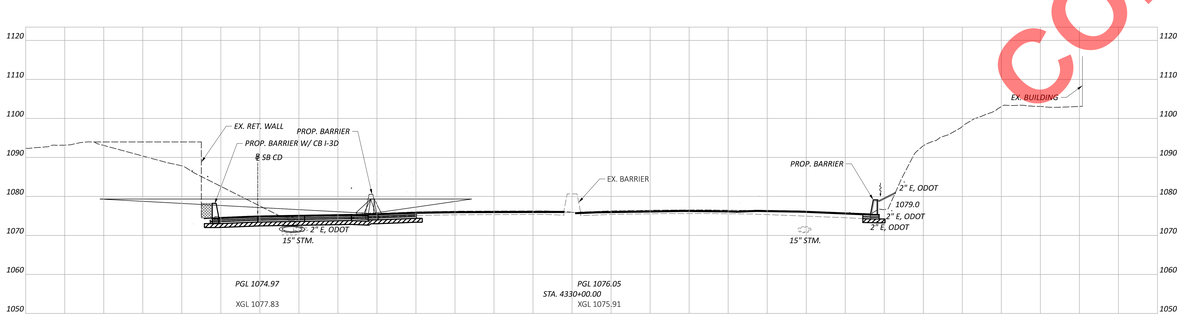
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

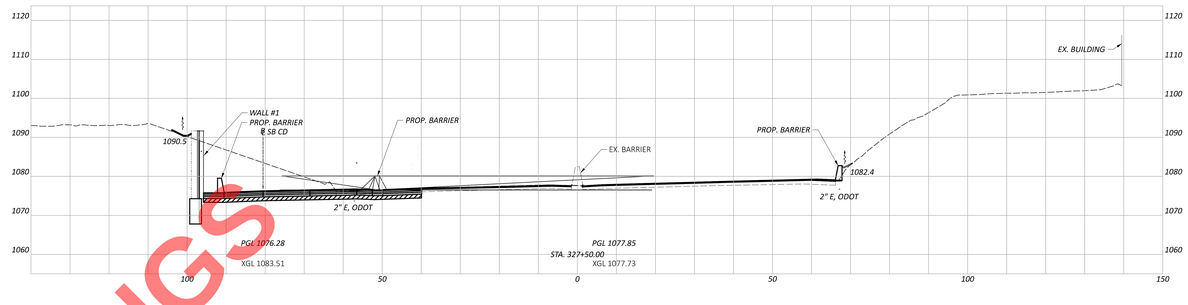


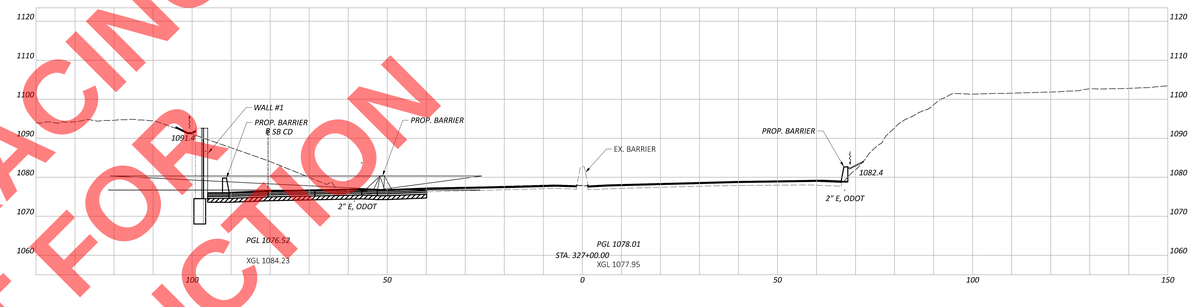
STA. 4330+75.71 BK =
STA. 325+00.64 AH

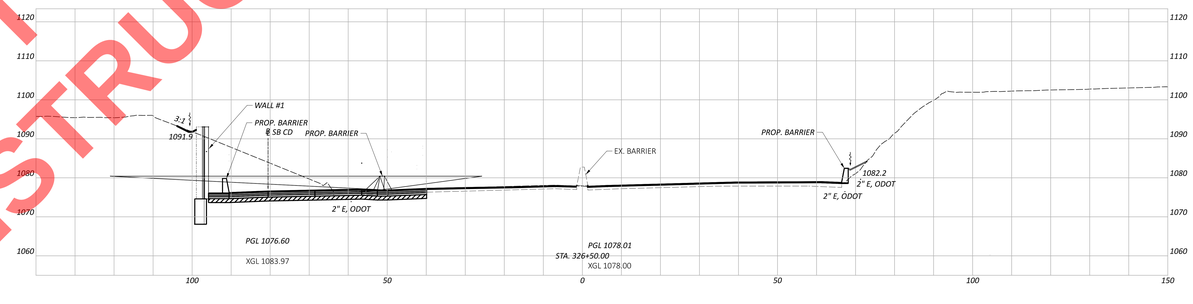


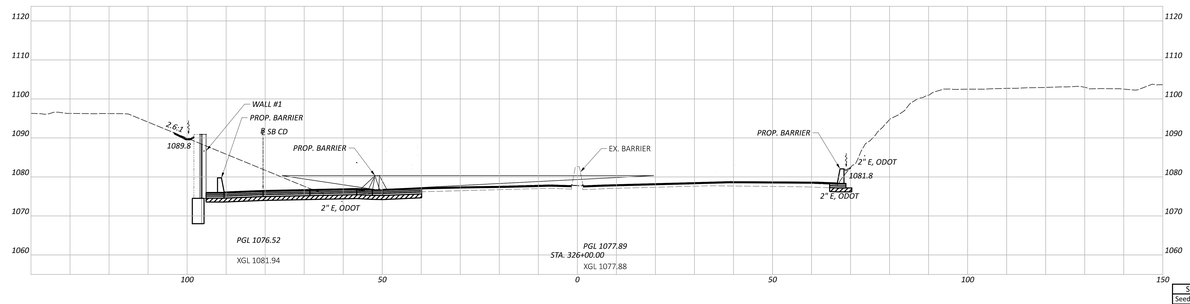












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 4330+00 TO STA. 327+50

DESIGN AGENCY
ARCADIS
222 SOUTHAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4383

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.166	627

SUM-77/8-11.65/0.00

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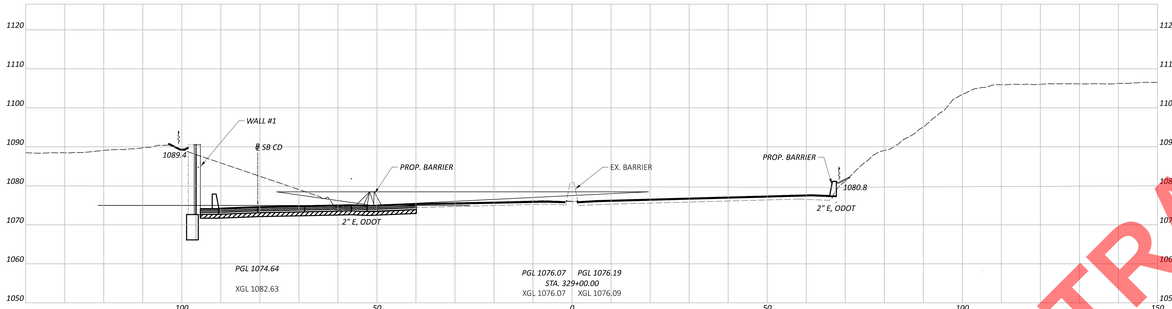
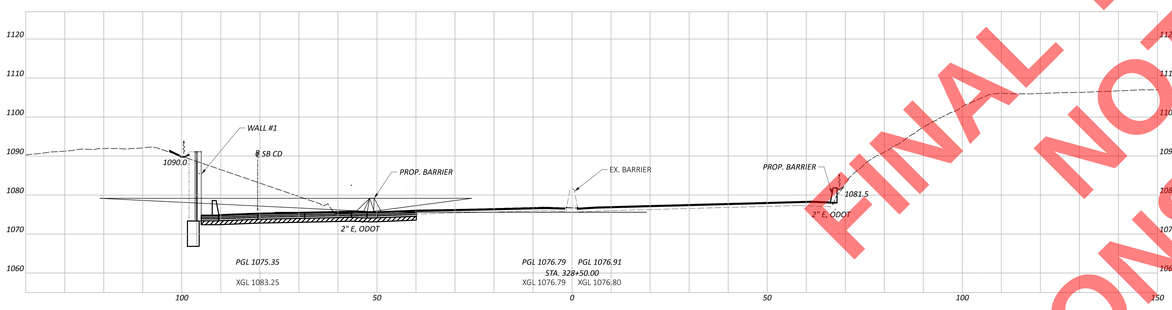
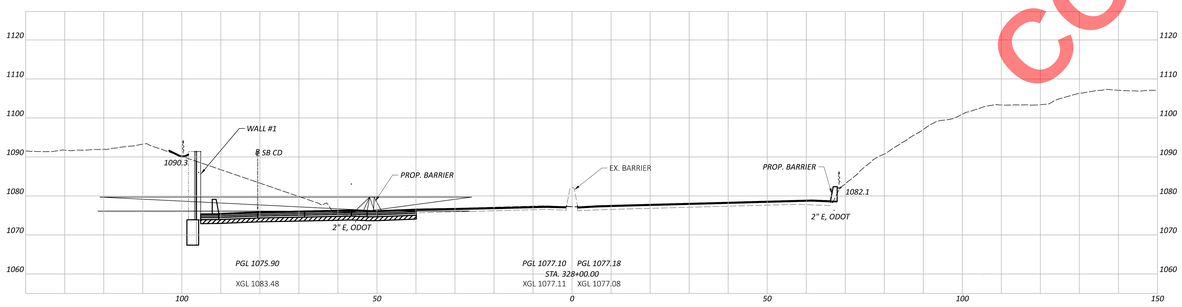
LEGEND

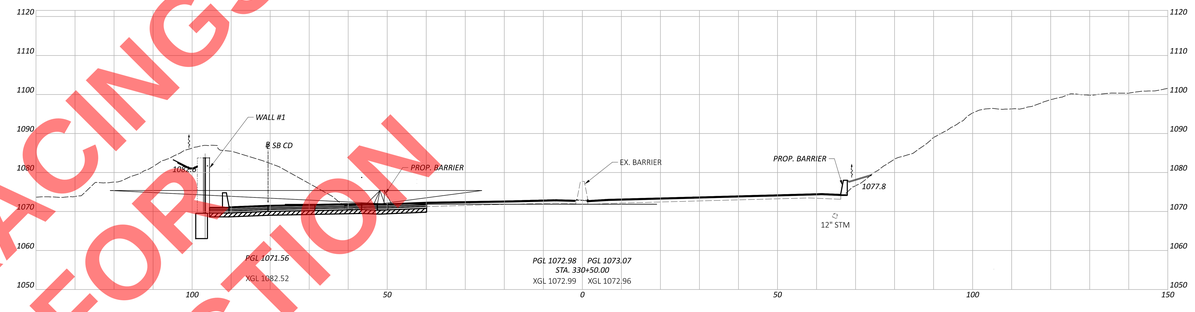
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

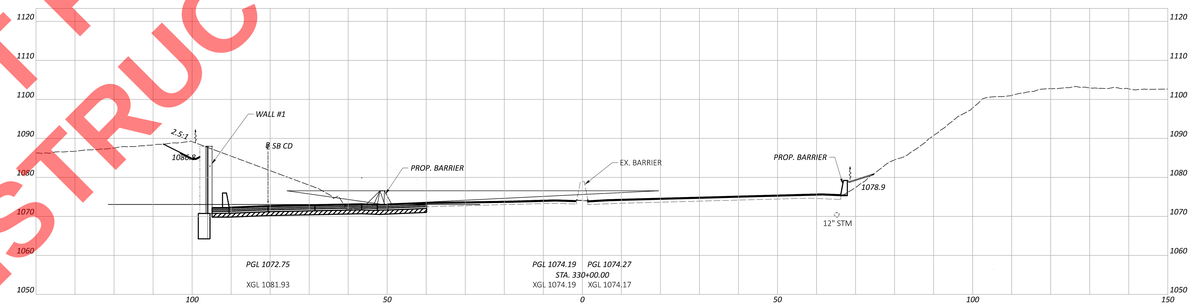
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

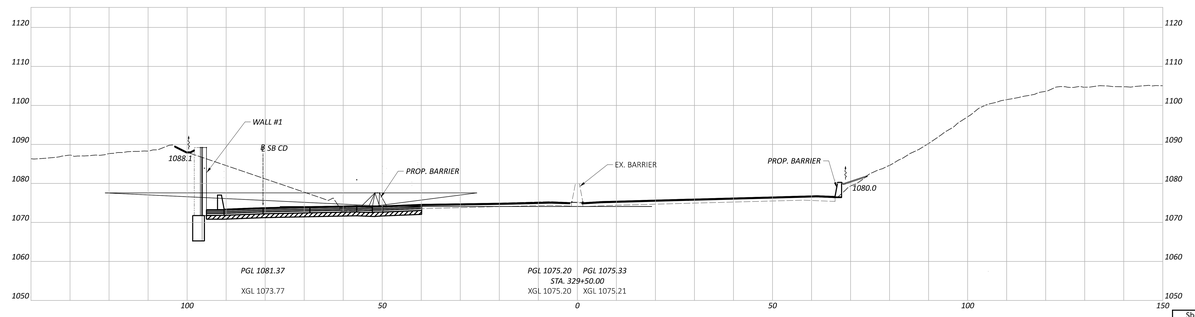












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 328+00 TO STA. 330+50

DESIGN AGENCY
ARCADIS
22 SOUTHAN STREET, SUITE 300
AKRON, OHIO 44333
330.434.4080
FAX 330.434.4085

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.167	627

SUM-77/8-11.65/0.00

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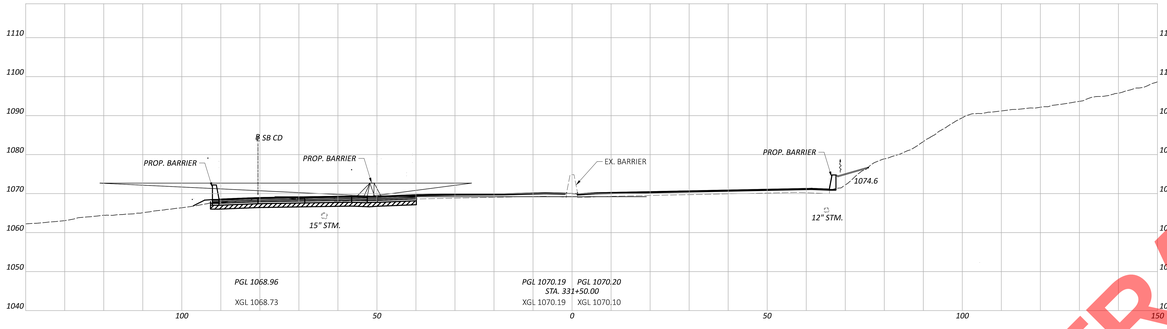
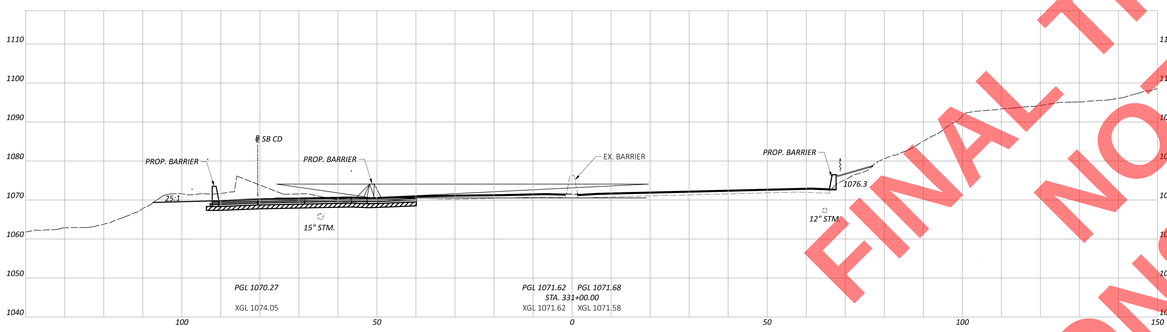
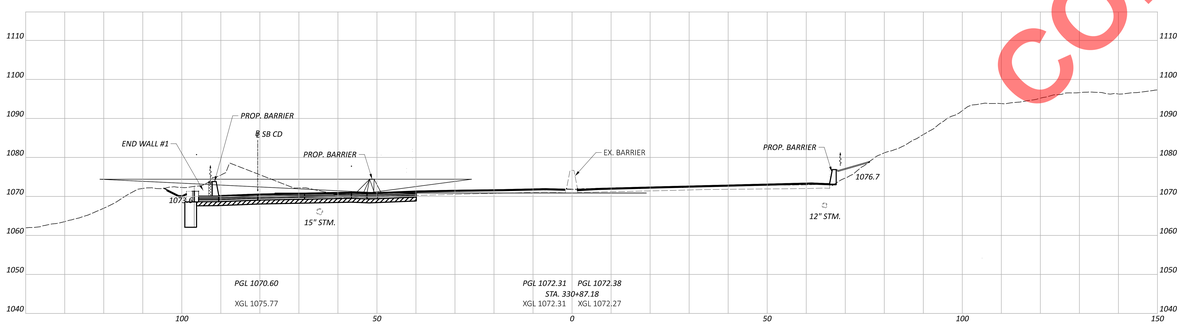
LEGEND

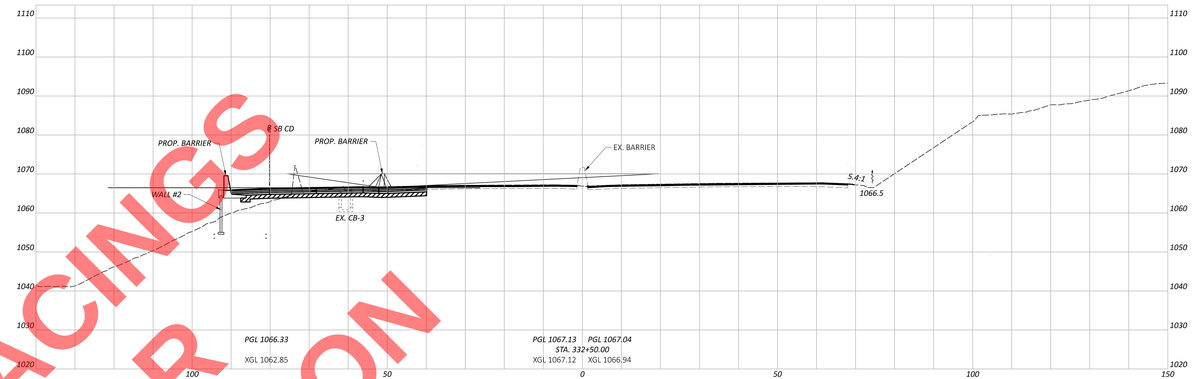
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

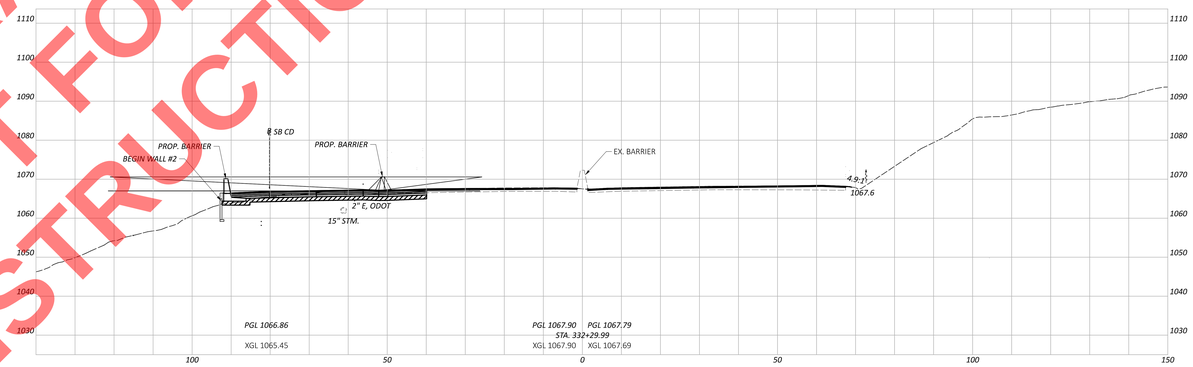
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

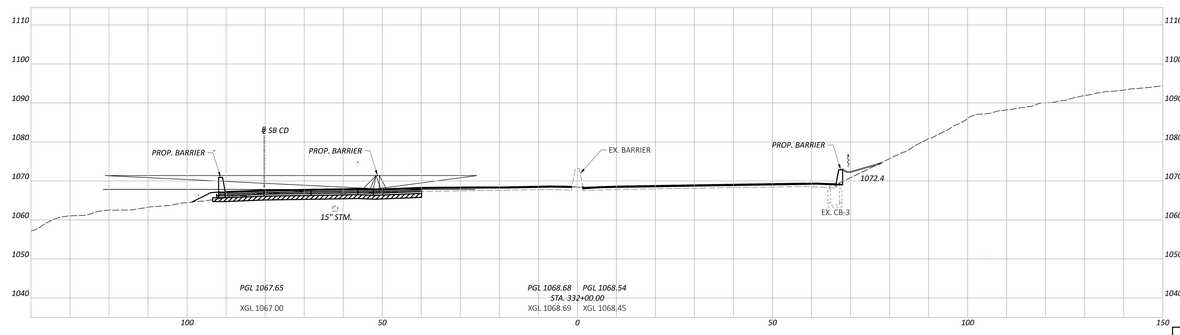












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 330+87.37 TO STA. 332+50

DESIGN AGENCY
ARCADIS
222 SOUTHAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.168	627

SUM-77/8-11.65/0.00

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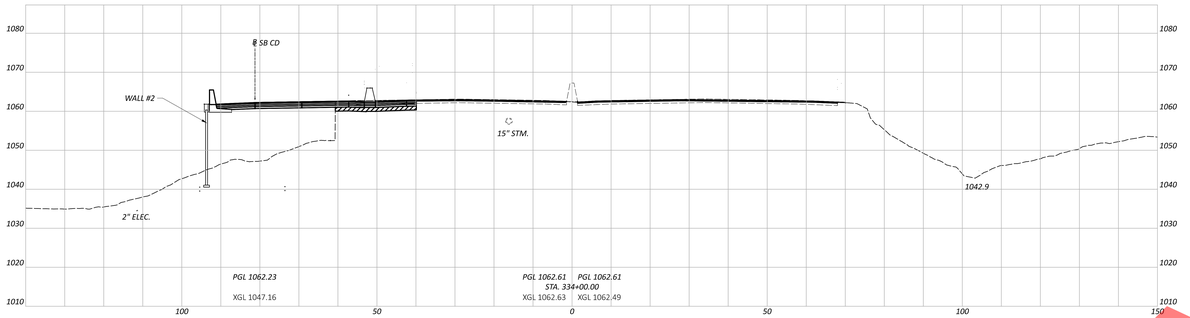
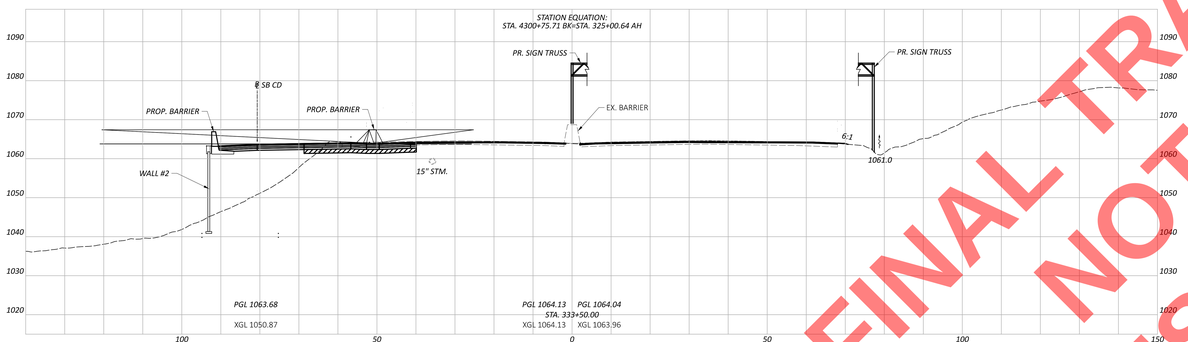
MICROSTATION: c:\projects\2022\114865\roadway\sheets\114865_X0002.dgn

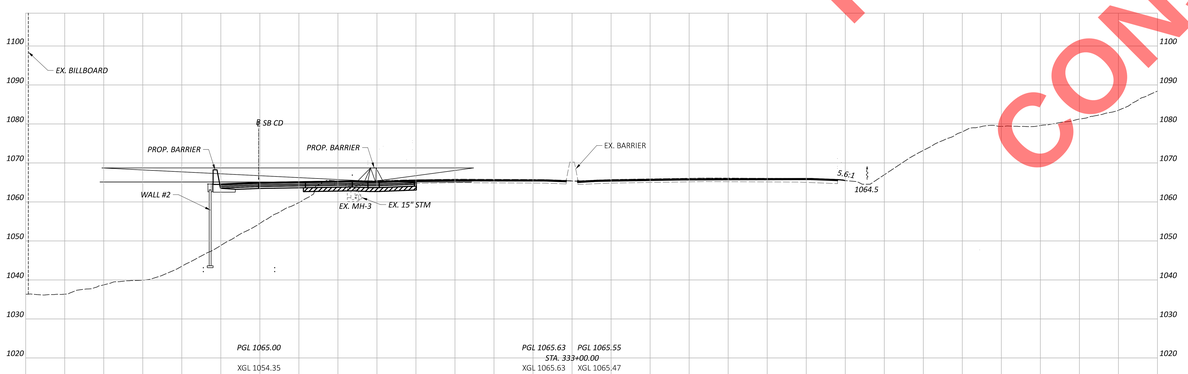
LEGEND

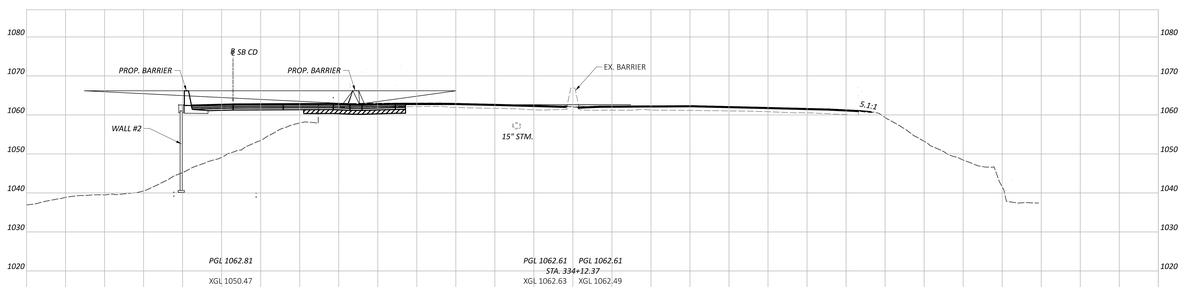
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL









FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 333+00 TO STA. 334+12.37

SUM-77/8-11.65/0.00

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FILE NAME: c:\users\kmoss2218\appdata\local\temp\acpublish_15244\sum-77-08-11.65-0.00_pavedgs_000002.dgn

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4383
WWW.ARCADIS.COM

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

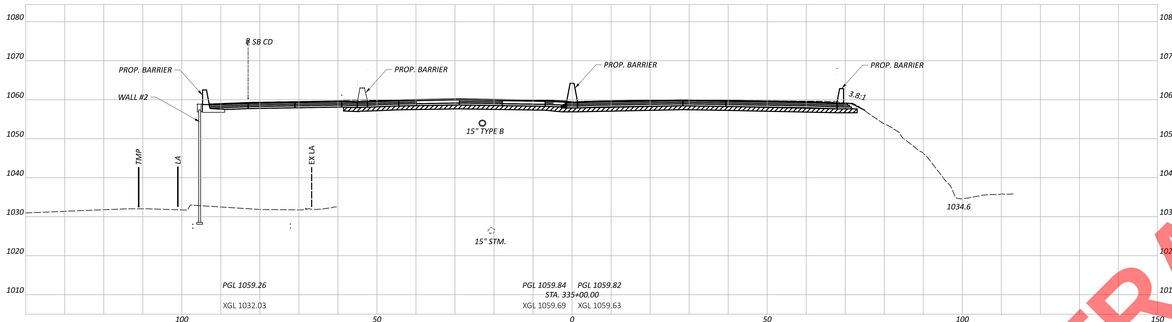
Sheet Totals		
Seeding	Cut	Fill

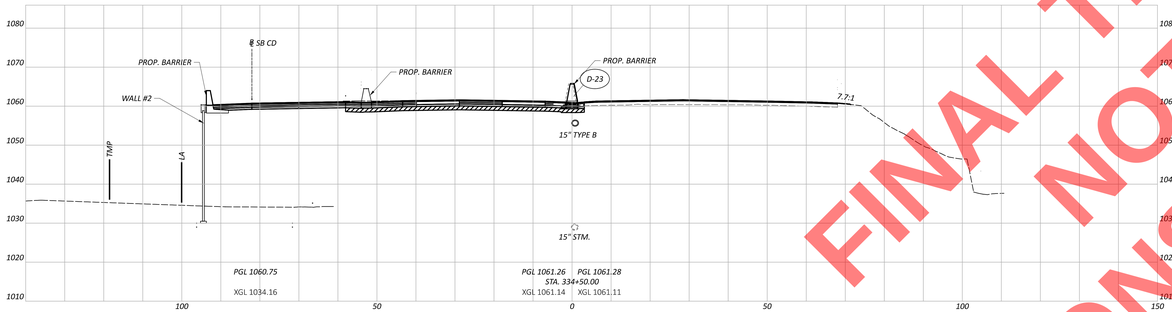
SHEET: P.169
TOTAL: 627

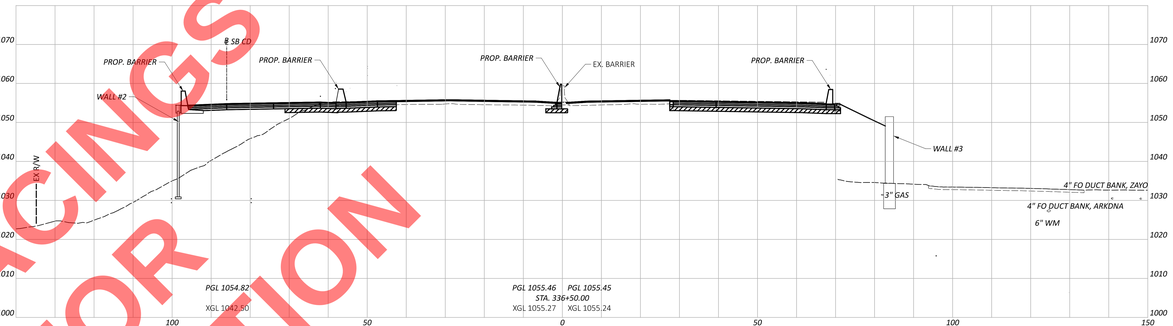
LEGEND

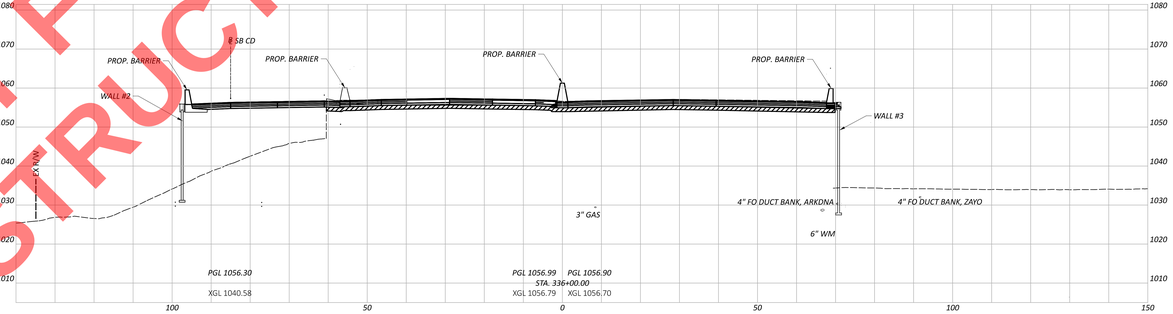
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

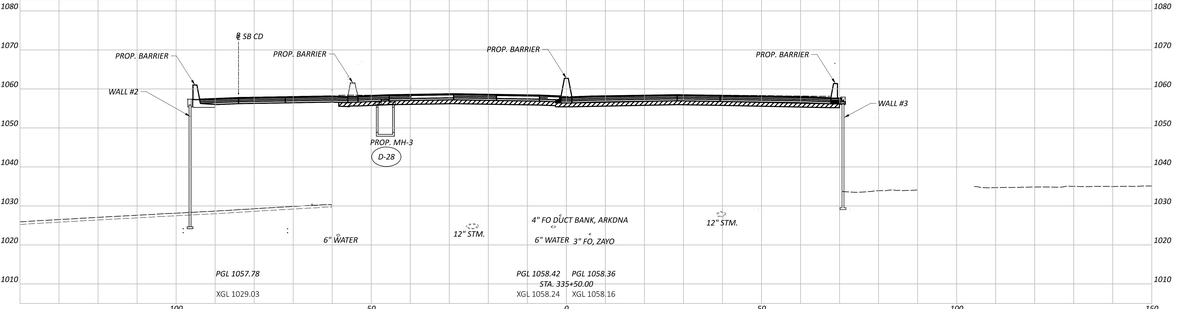
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL











FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 334+50 TO STA. 336+50

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC
22 CROWN STREET, SUITE 200
AKRON, OHIO 44308
PH: 330.434.4545

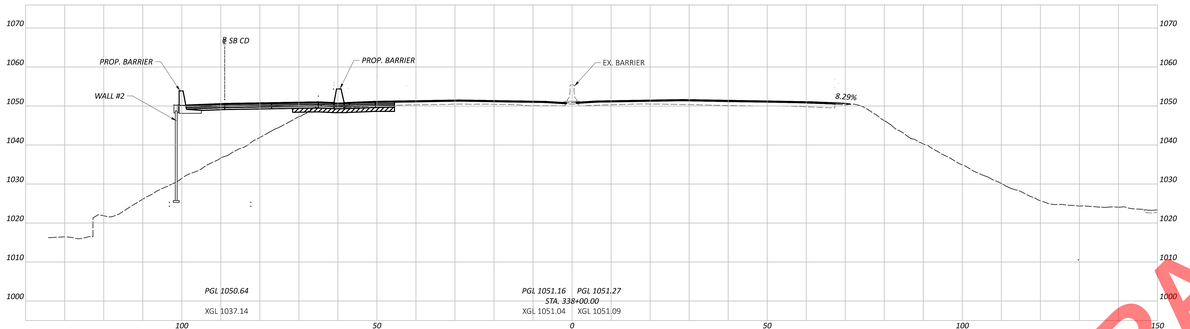
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

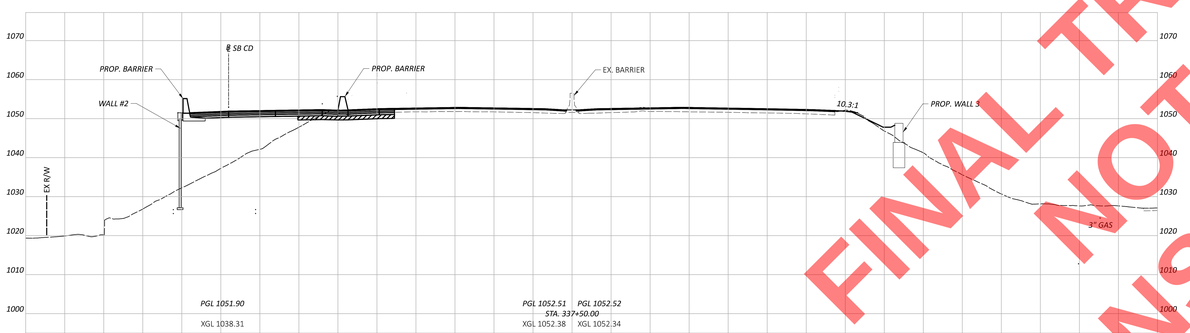
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.170	627

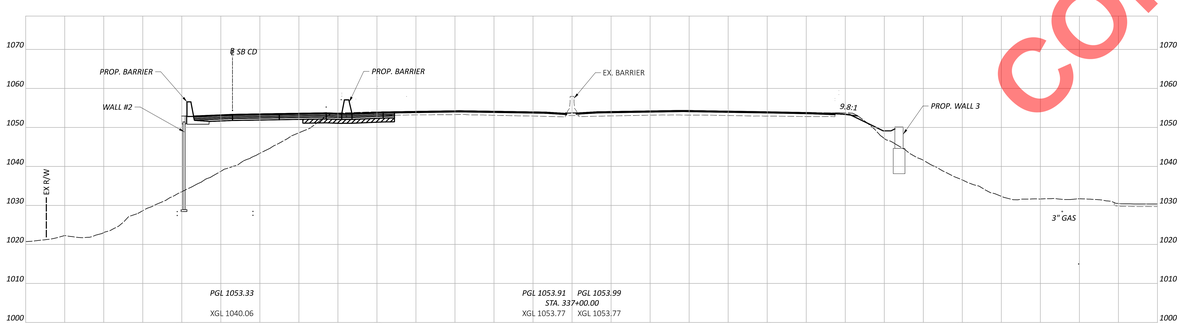
LEGEND

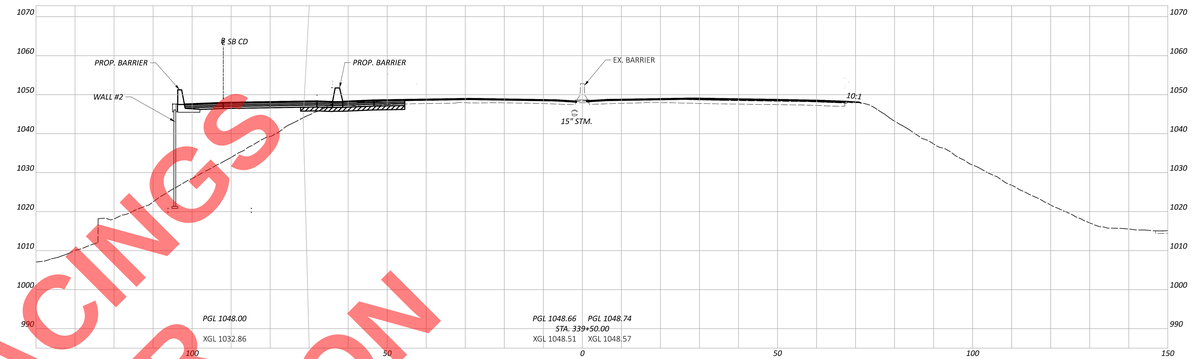
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

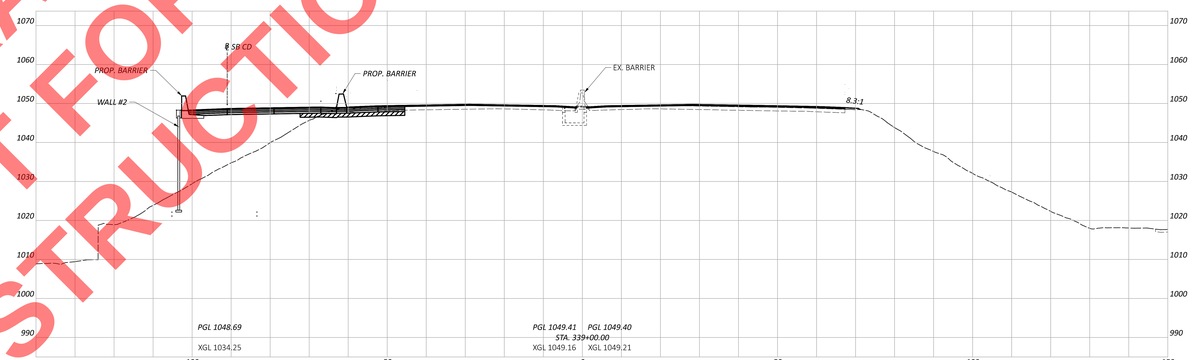
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

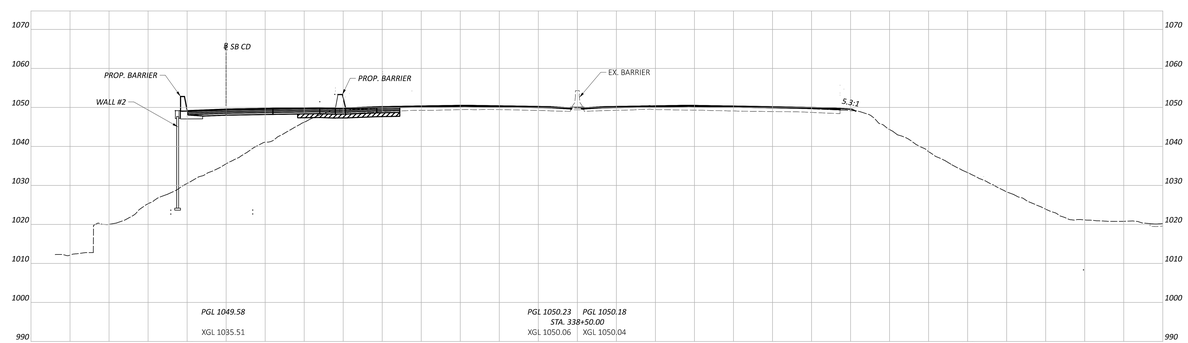












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 337+00 TO STA. 339+50

SUM-77/8-11.65/0.00

MODEL: CS_0008-3 - 337+00.00 #2-1 | Sheet: PAVEDGS | 66x34 (in) | DATE: 4/21/2026 TIME: 1:02:38 PM USER: kmetz2218
MICROSTATION FILE: C:\Projects\114865\Roadway\Sheets\114865_SS001.dgn

DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC.
221 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
PH: 330.434.4000
FAX: 330.434.4085

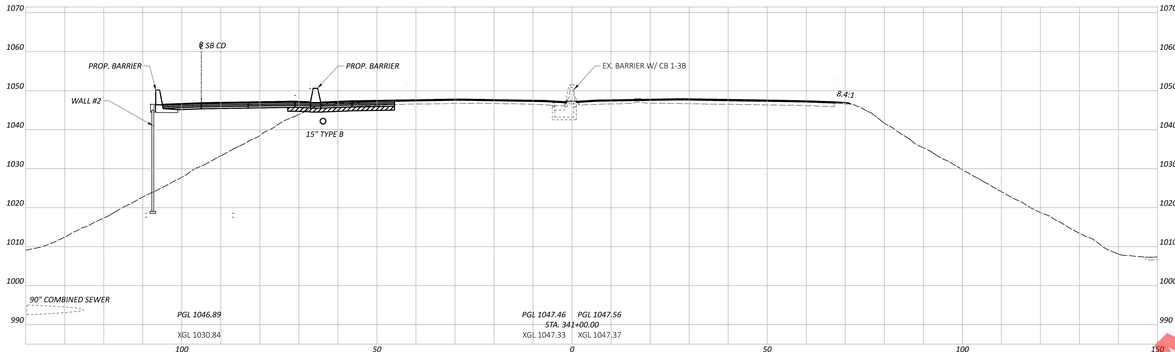
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

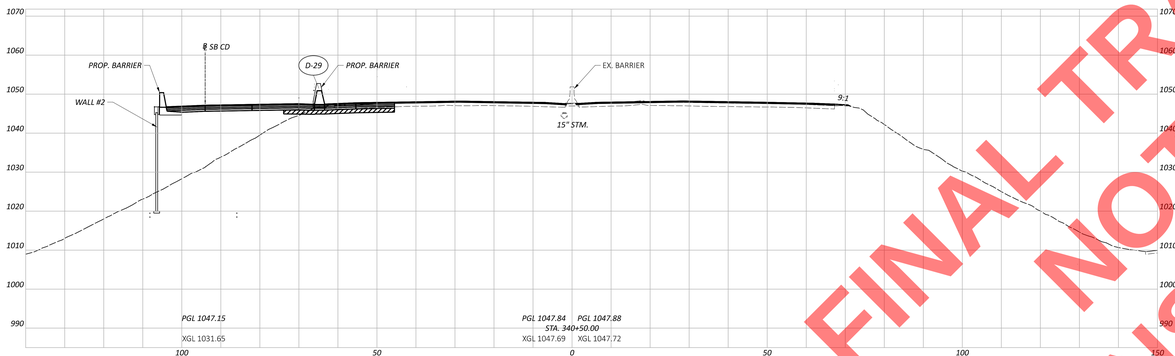
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.171	627

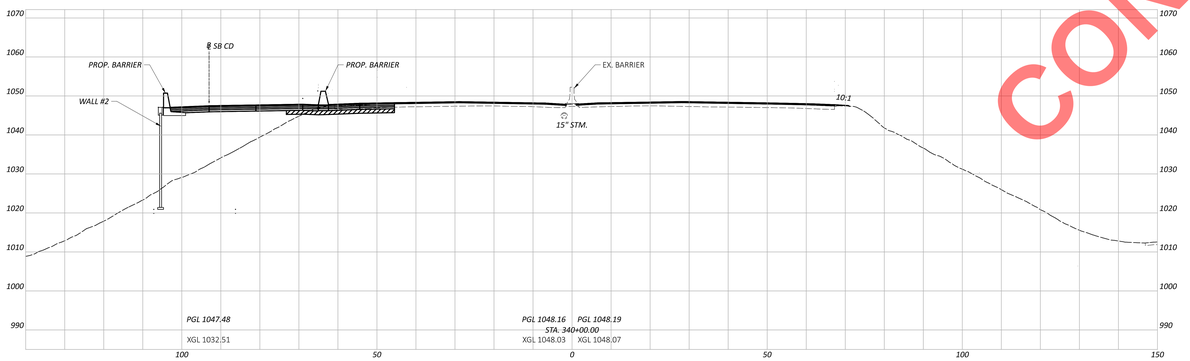
LEGEND

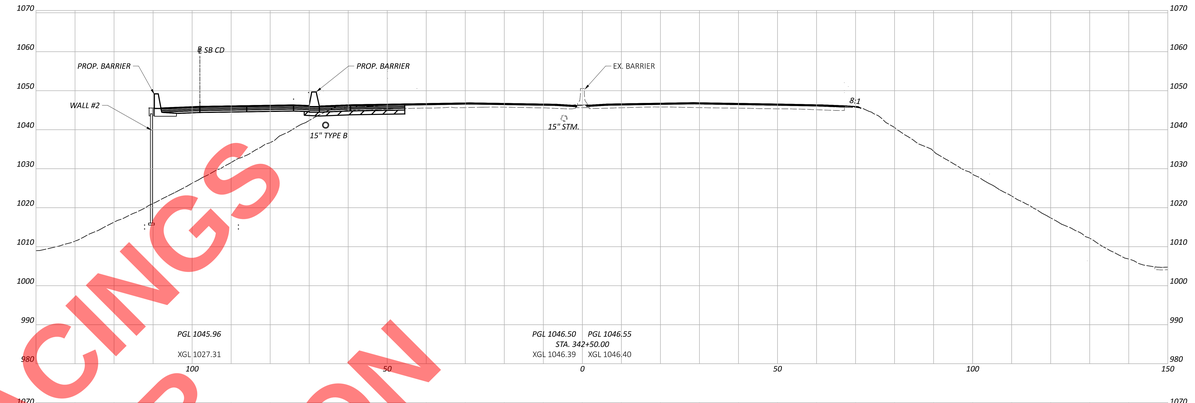
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

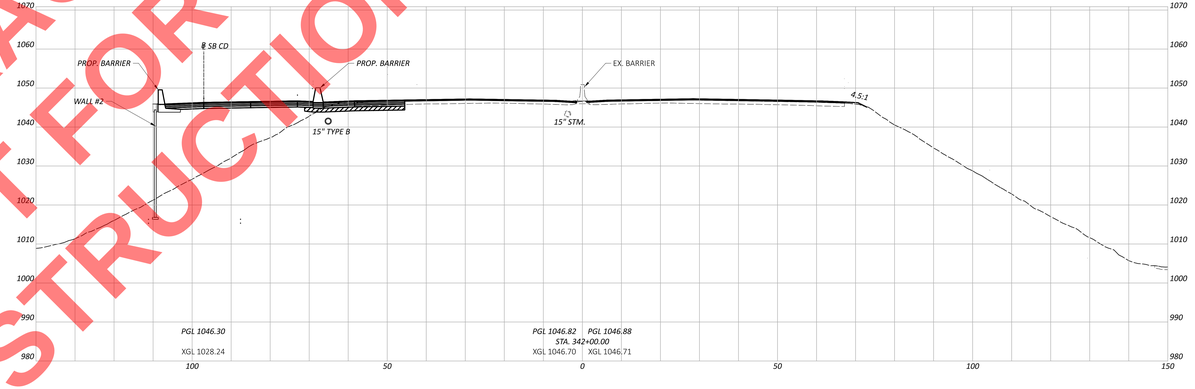
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

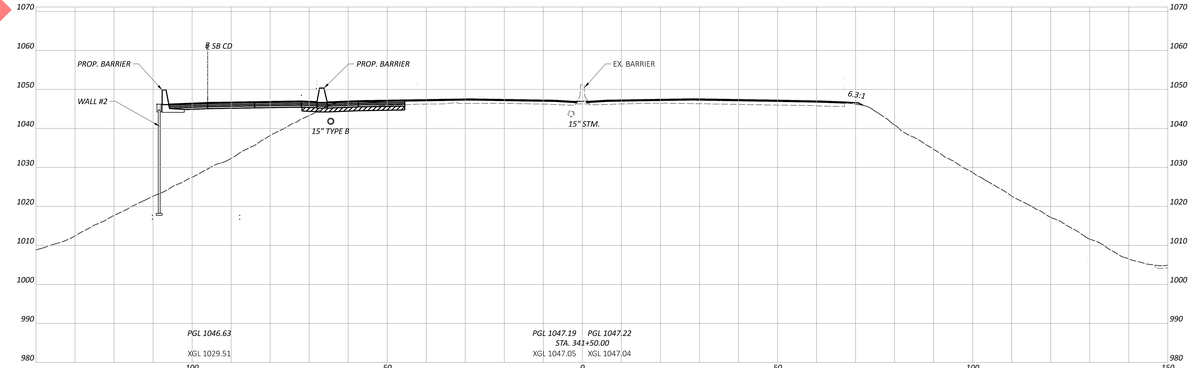












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 340+00 TO STA. 342+50

SUM-77/8-11.65/0.00

MODEL: CS_0008-3 - 340+00.00 #2-1 [Sheet] PAYPOSIS: 6648 Ea] DATE: 9/15/2026 TIME: 1:02:03 PM USER: kmoss218
FILE: C:\Users\kmoss218\Desktop\Projects\SUM-77-11.65-0.00 Roadway\Sheets\1114865_X0001.dgn

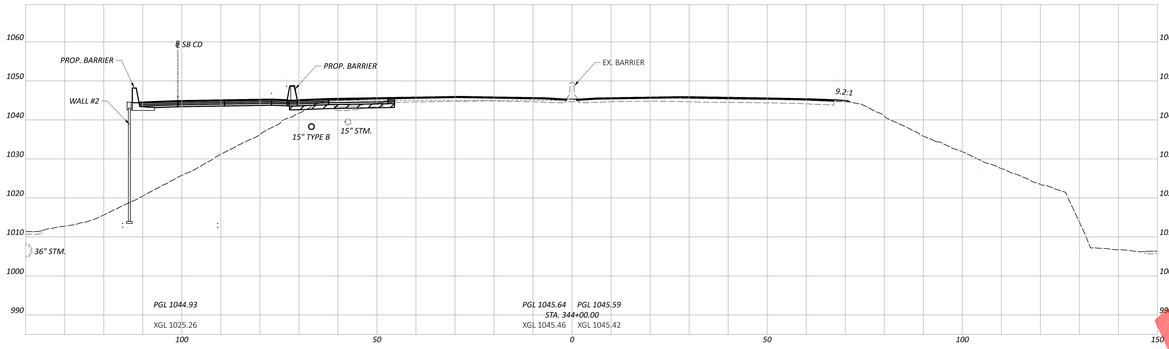
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, STE 300
AKRON, OHIO 44308
330.434.4000
DESIGNER
MAL
REVIEWER
SMG 05/21/26
PROJECT ID
114865

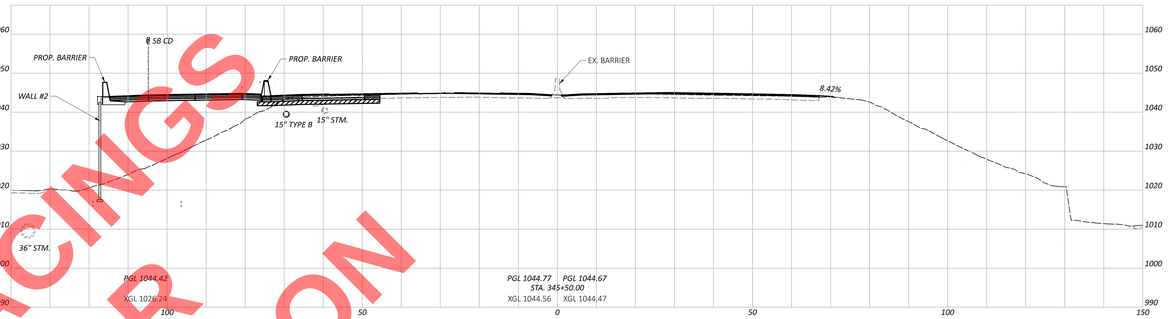
Sheet Totals			
Seeding	Cut	Fill	SHEET P.172 / TOTAL 627

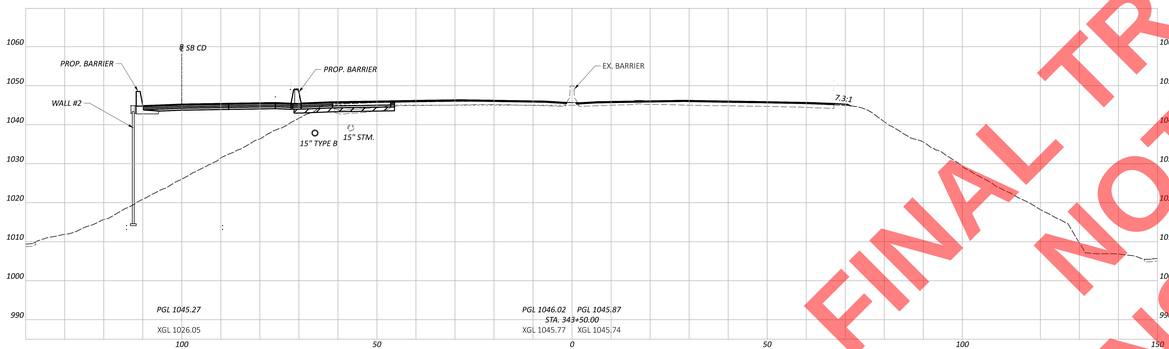
LEGEND

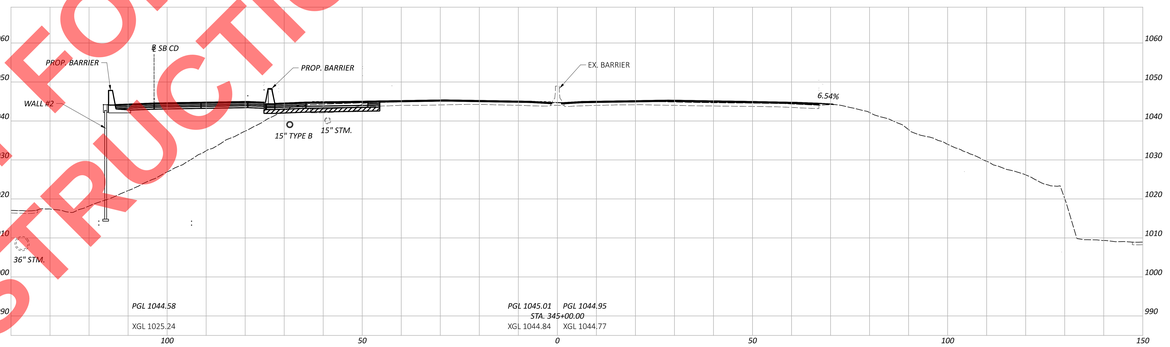
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

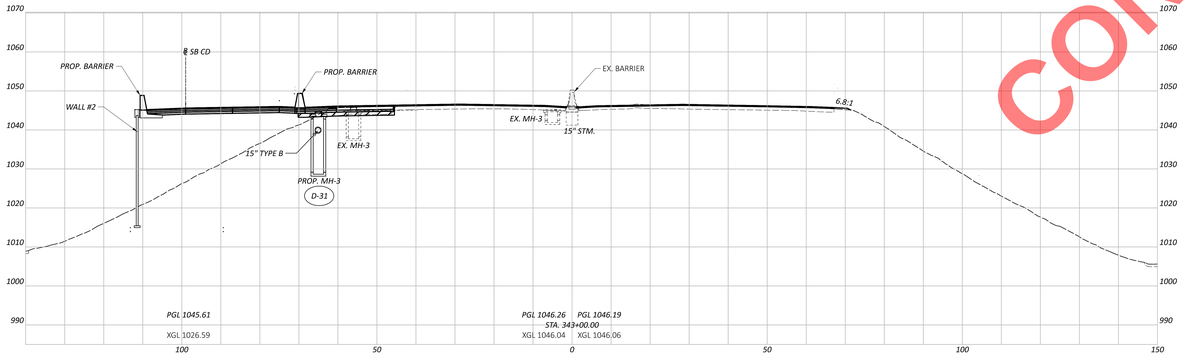
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

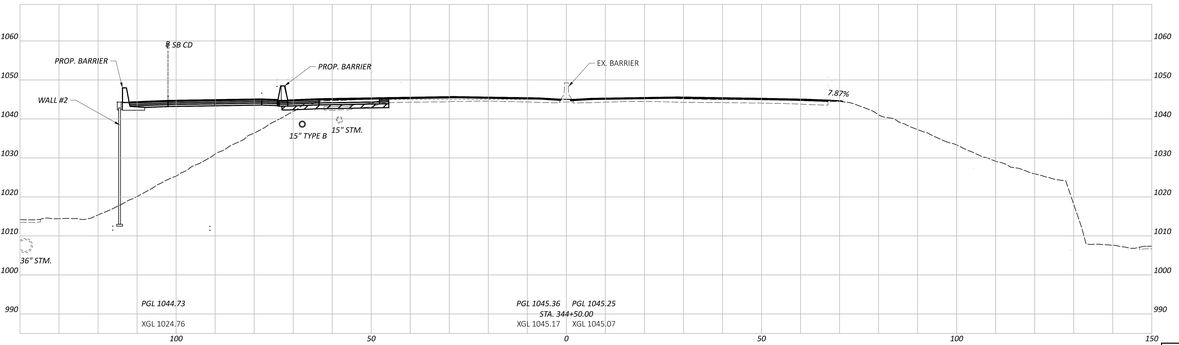












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 343+00 TO STA. 345+50

SUM-77/8-11.65/0.00

MODEL: CS_0008-3 - 343+00.00 #2-1 | Sheet: PAVEMENT | DATE: 4/15/2026 TIME: 1:03:05 PM USER: kmoss2218
FILENAME: C:\Users\kmoss2218\Desktop\Projects\114865_SUM-77-8-11.65-0.00_Roadway\Sheets\114865_SS001.dgn

DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC.
221 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
P: 330.434.4000

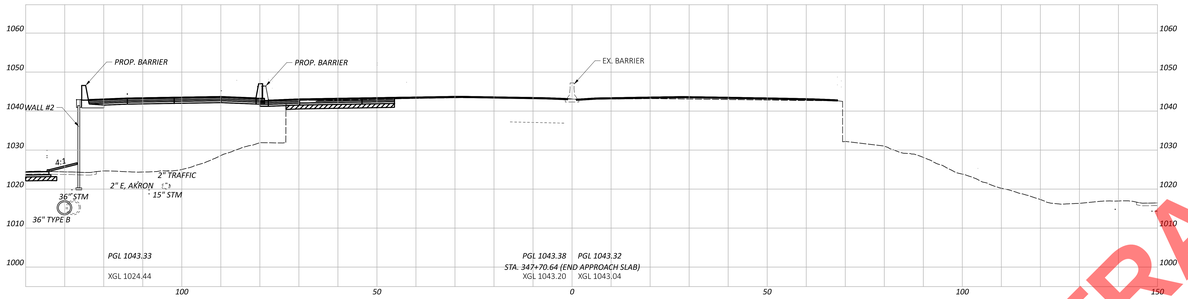
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

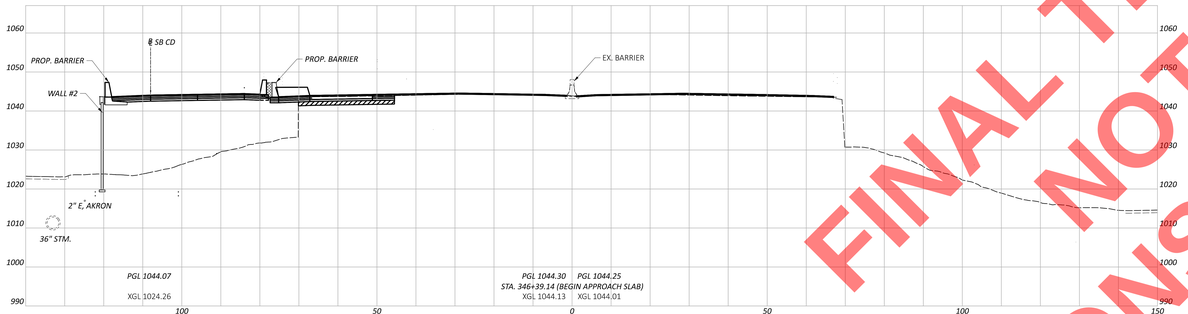
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.173	627

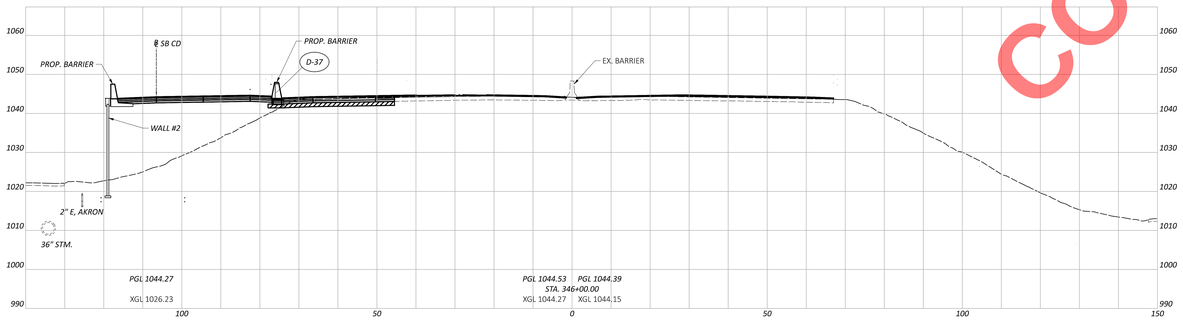
LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL







FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 346+00 TO STA. 346+39.14

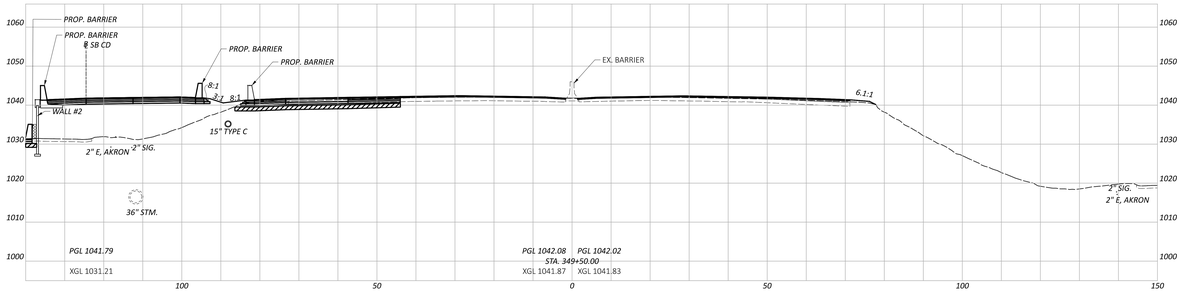
SUM-77/8-11.65/0.00

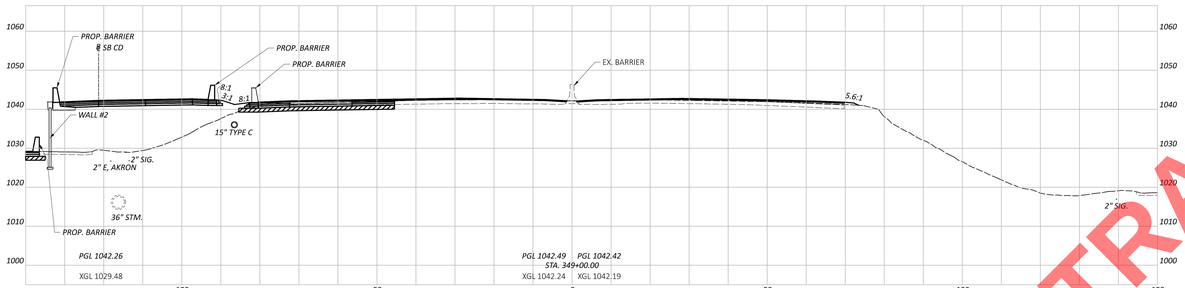
MODEL: CS_0008-3 - 346+00.00 AS-1 | Sheet: PAVEMENT | DATE: 4/21/2026 TIME: 1:03:03 PM USER: kmetz2218
FILE NAME: C:\Users\kmetz2218\Desktop\SUM-77-8-11.65-0.00_346+00 TO 346+39.14_XS001.dgn

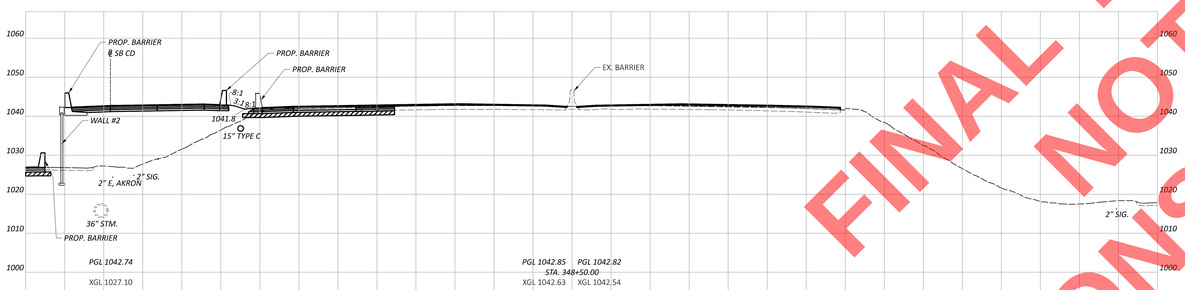
DESIGN AGENCY
ARCADIS
22 SOUTH MAIN STREET, STE 101
AKRON, OHIO 44308
330.434.4080
WWW.ARCADIS.COM

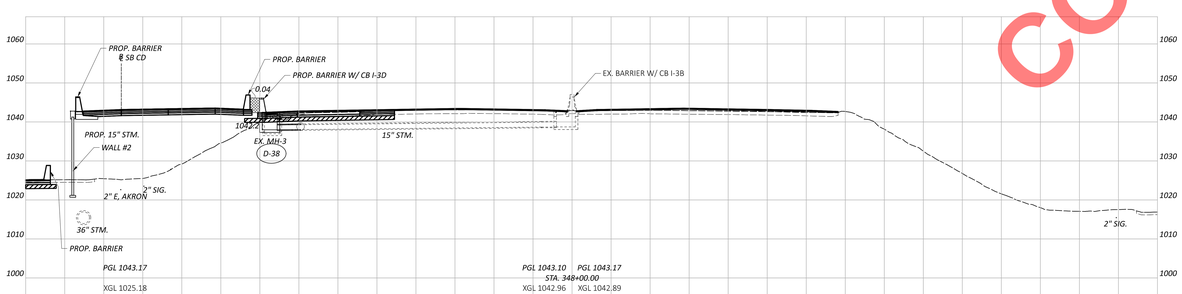
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.174	627





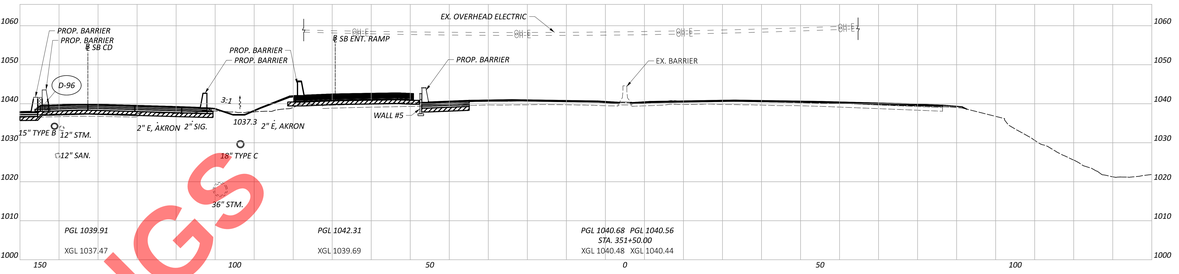


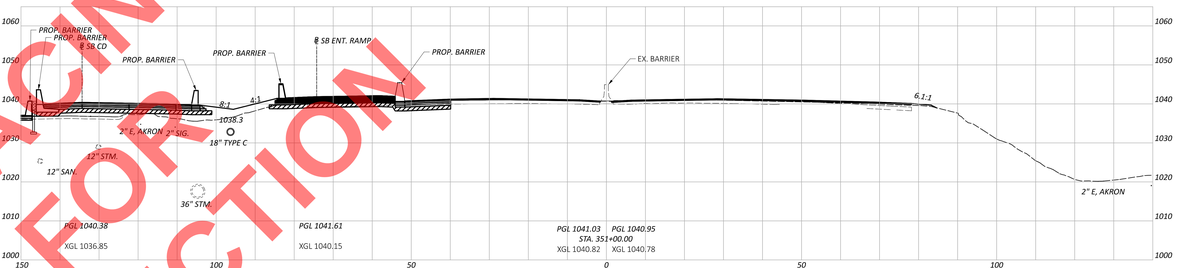


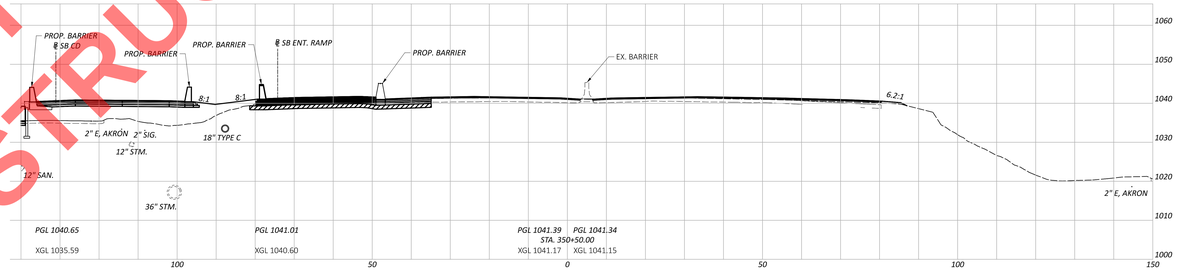
LEGEND

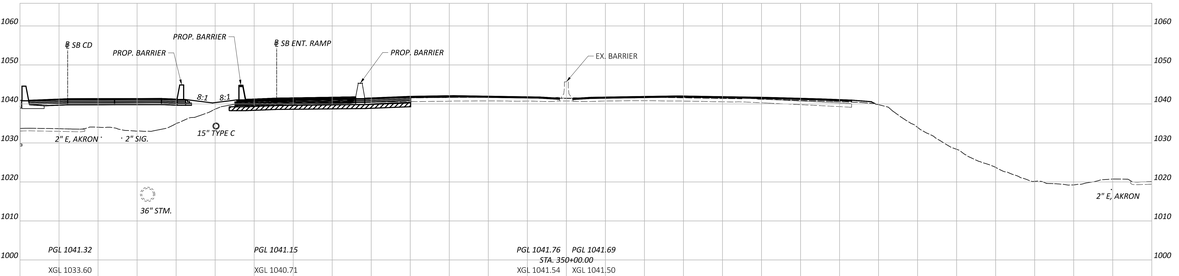
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-









FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 348+00 TO STA. 351+50

SUM-77/8-11.65/0.00

MODEL: CS_0008-4 - 348+00.00 #2-1 [Sheet] PAVEMENT: 6643A [In] DATE: 11/21/2025 TIME: 1:08:51 PM USER: kmetz2218
FILE: C:\Users\kmetz2218\Desktop\Projects\114865_Final Plans\Roadway\Sheets\114865_X0004.dgn

DESIGN AGENCY
ARCADIS
22 SOUTHAN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080

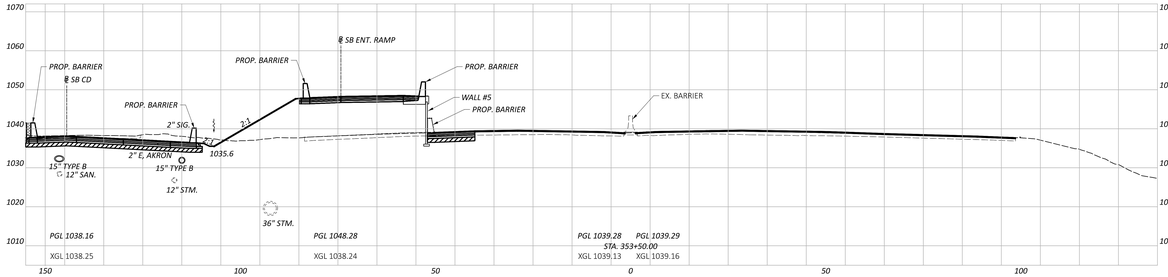
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

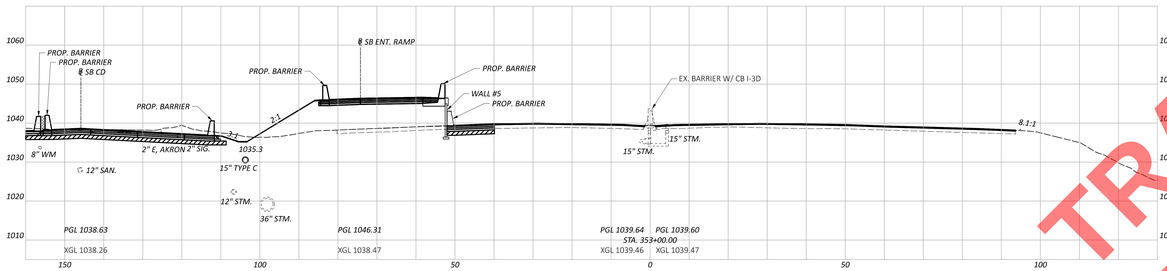
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.175	627

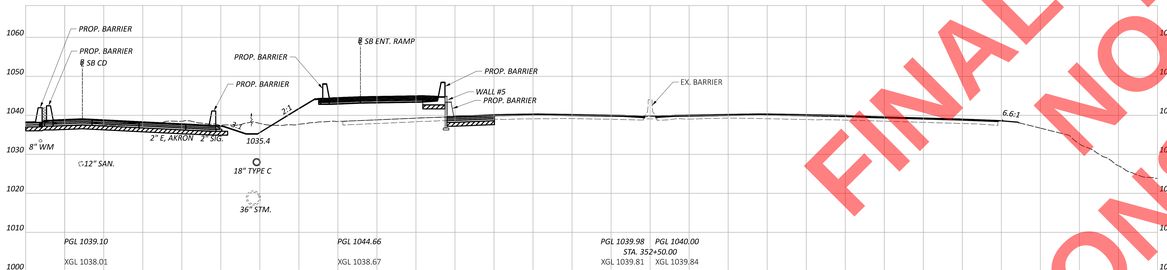
LEGEND

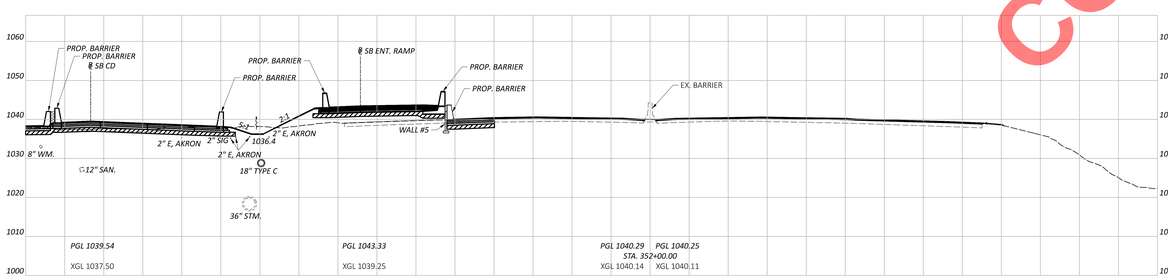
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

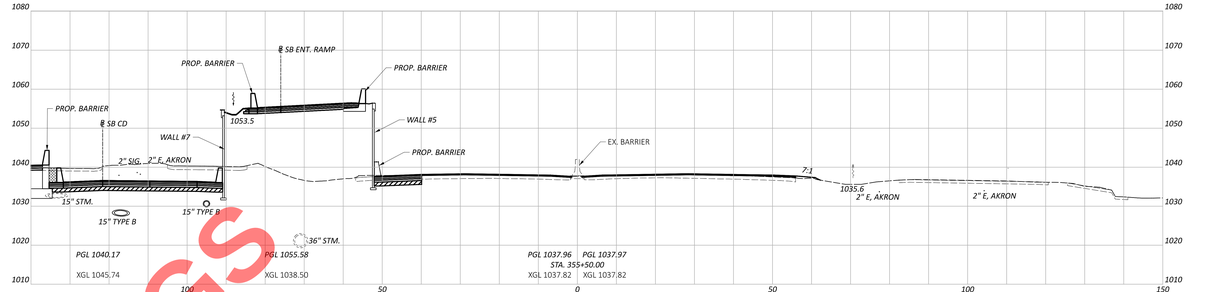
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

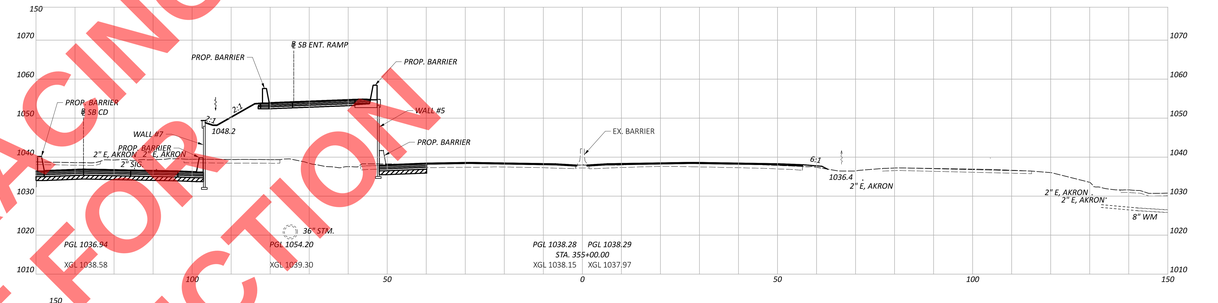


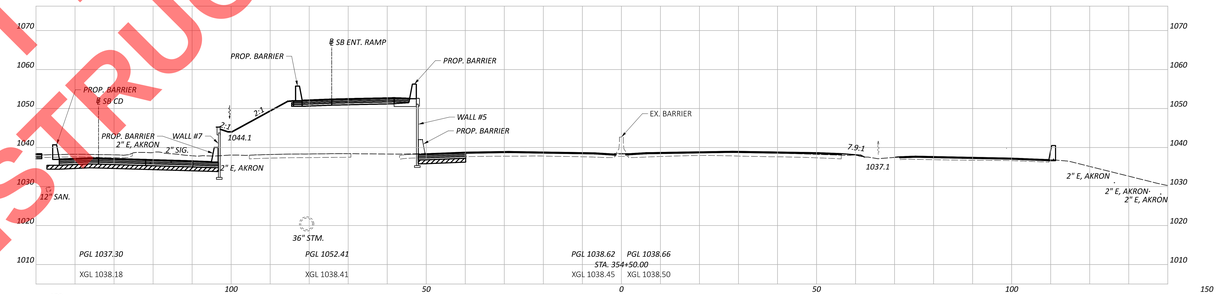


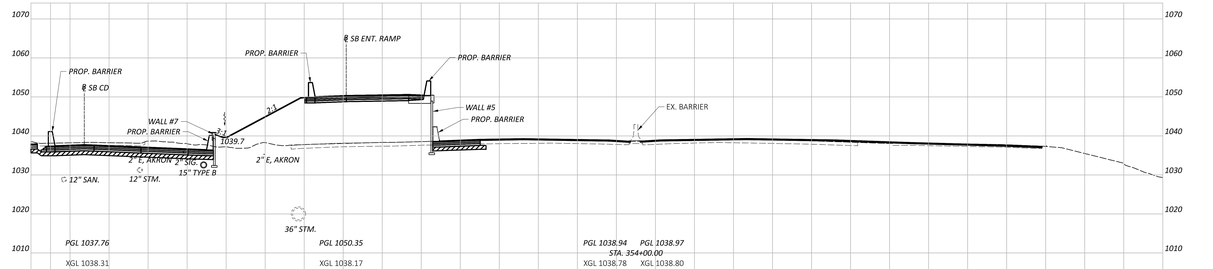












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 352+00 TO STA. 355+50

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET SUITE 300
AKRON, OHIO 44333
330.434.4383

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals			
Seeding	Cut	Fill	SHEET: P.176 / TOTAL: 627

SUM-77/8-11.65/0.00

MICROSTATION CONNECTION CLIENT(Version 10.00.04.01) DATE: 5/21/2026 TIME: 1:09:53 PM USER: kmetz218
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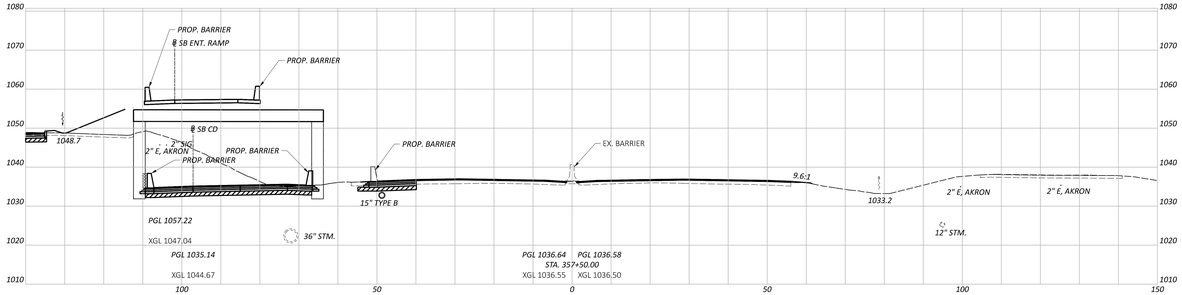
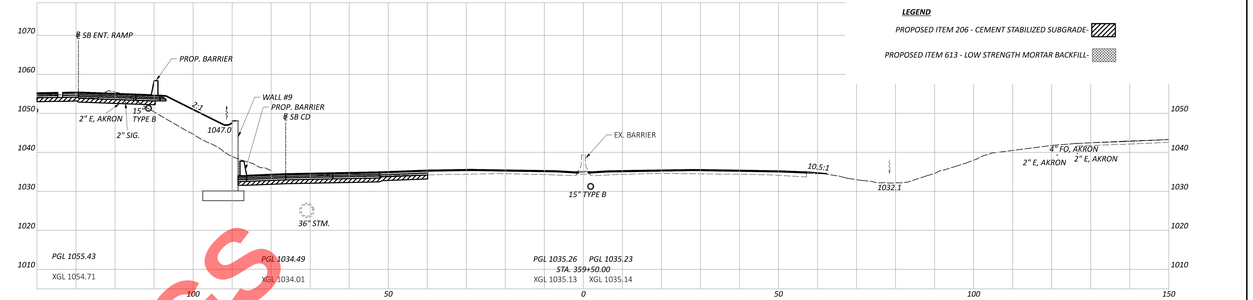
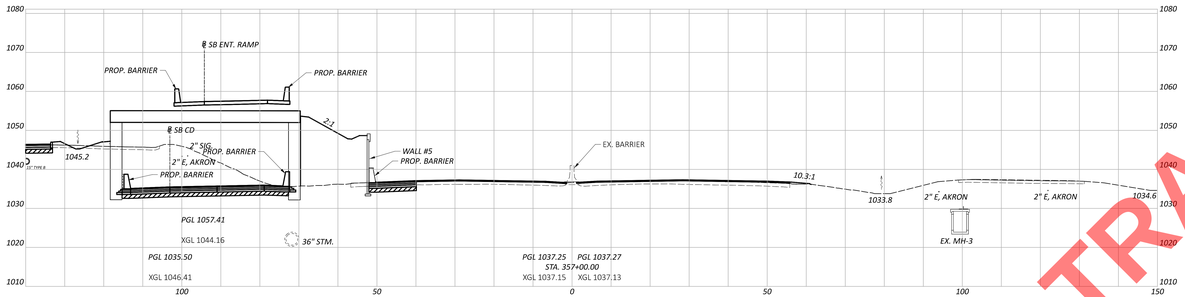
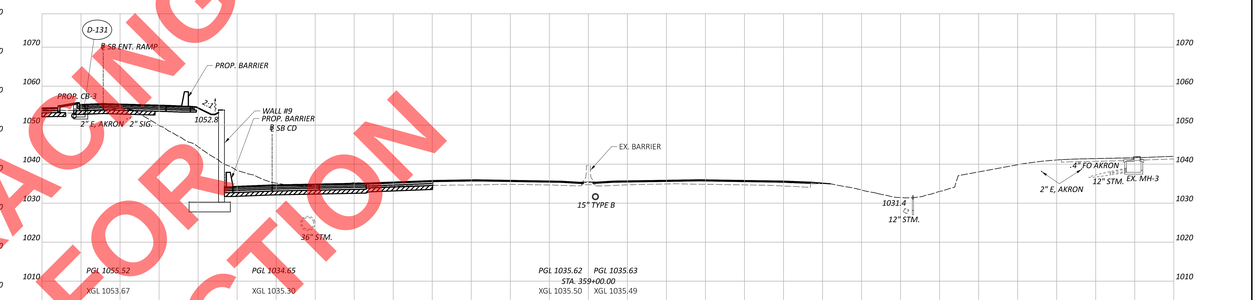
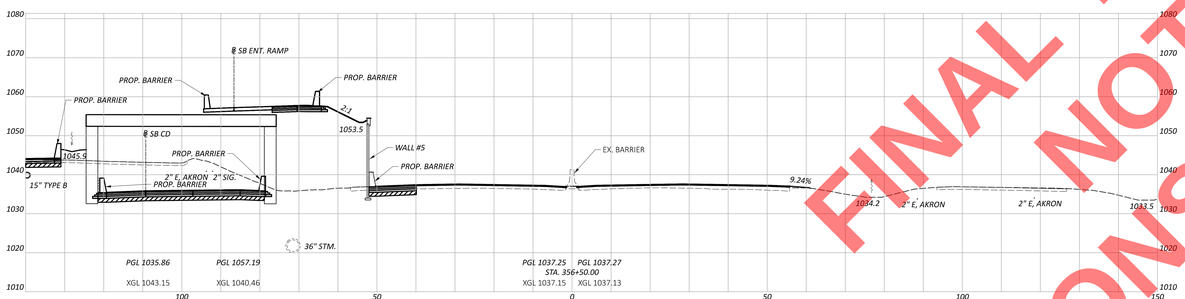
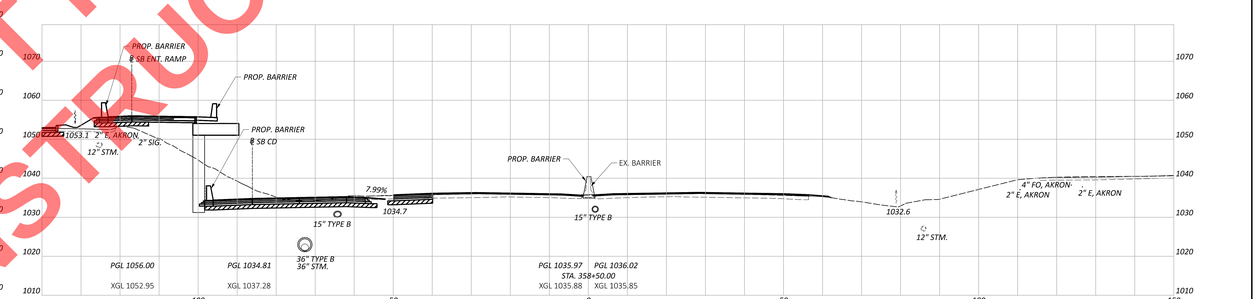


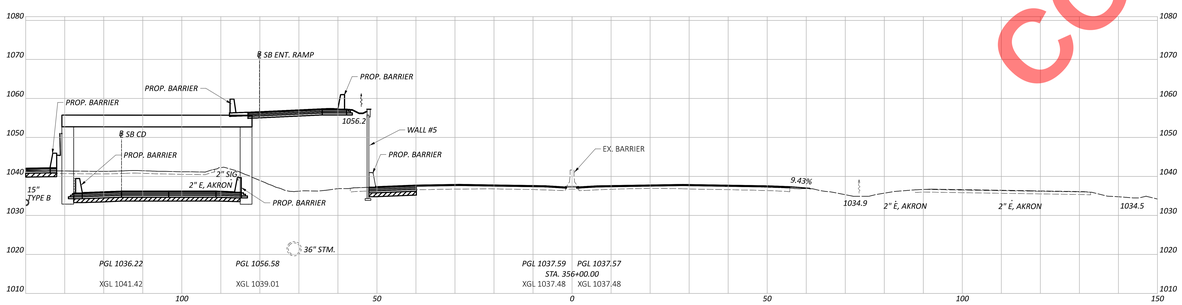


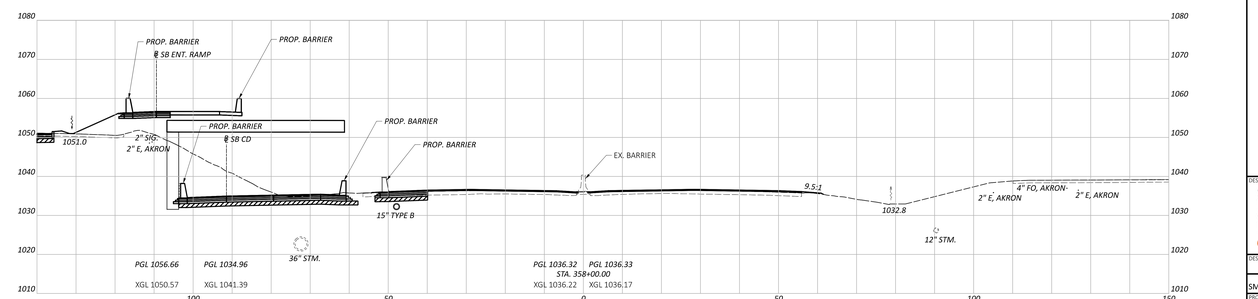












LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 356+00 TO STA. 359+50

SUM-77/8-11.65/0.00

MODEL: CS_0808-1 - 9546-00.00 #2-1 [Sheet] - PAVEDGE: 6648 [Eq.] - DATE: 11/21/2025 - TIME: 1:10:00 PM - USER: ksmith2218
DATA: C:\Users\ksmith2218\Desktop\Projects\SUM-77-0808-1 Tallmadge\Sheets\114865_0004.dgn

DESIGN AGENCY
ARCADIS
ARCADIS OHIO, INC.
22 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080

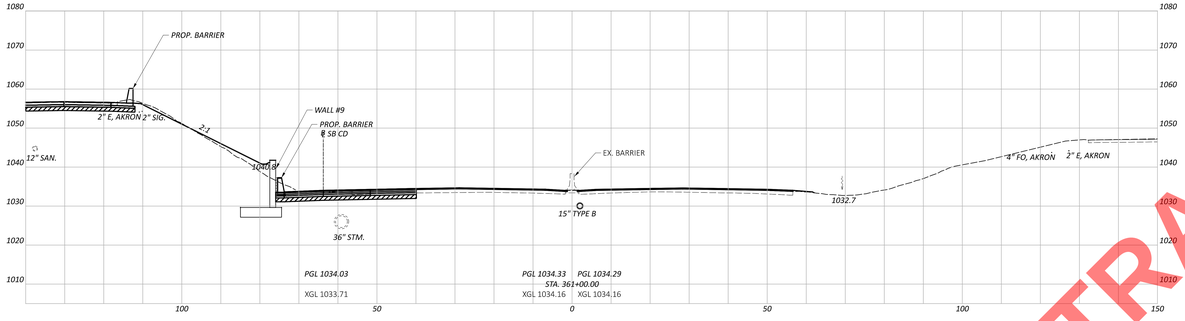
DESIGNER: MAL
REVIEWER: SMG 5/21/26
PROJECT ID: 114865

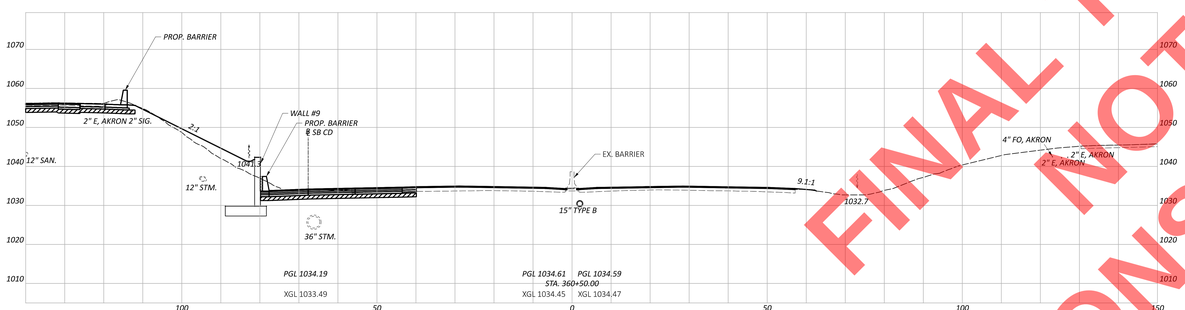
Sheet Totals			
Seeding	Cut	Fill	SHEET: P.177
			TOTAL: 627

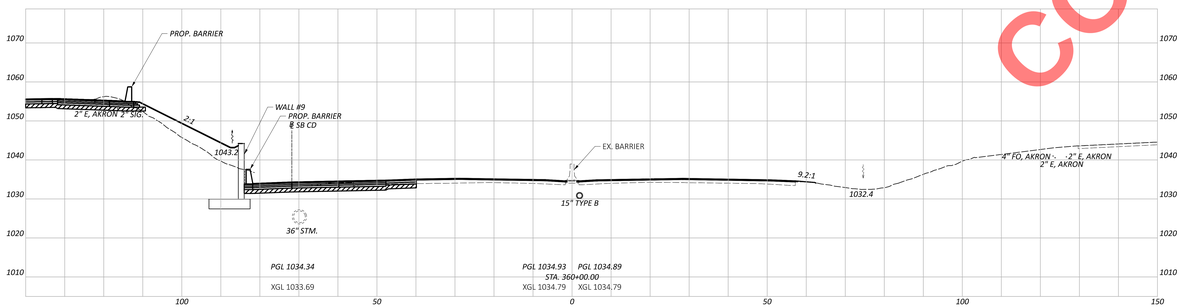
LEGEND

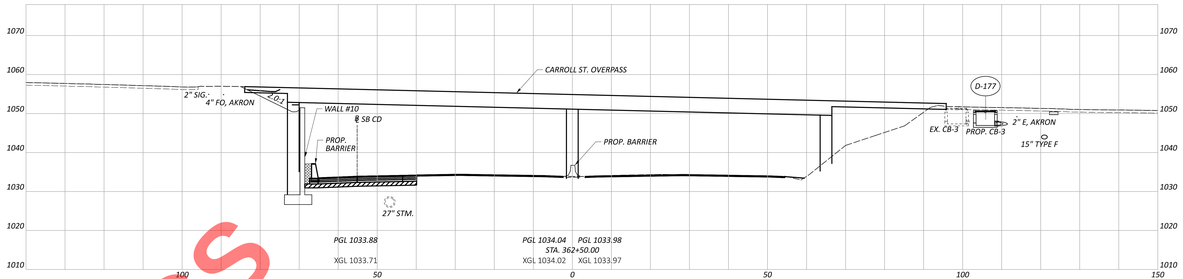
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

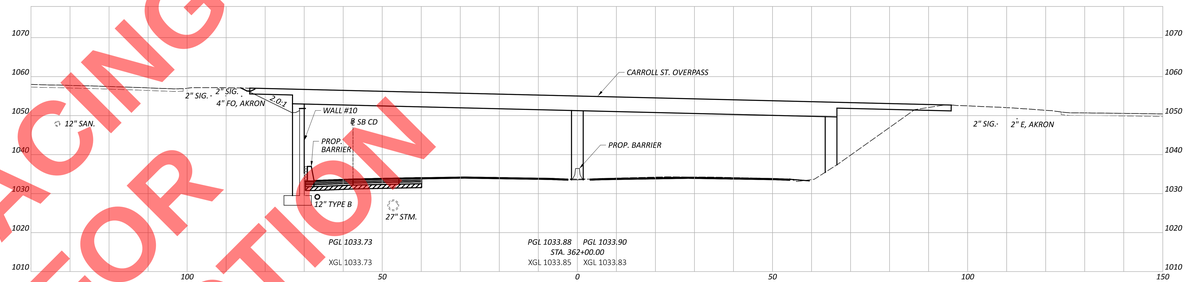
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

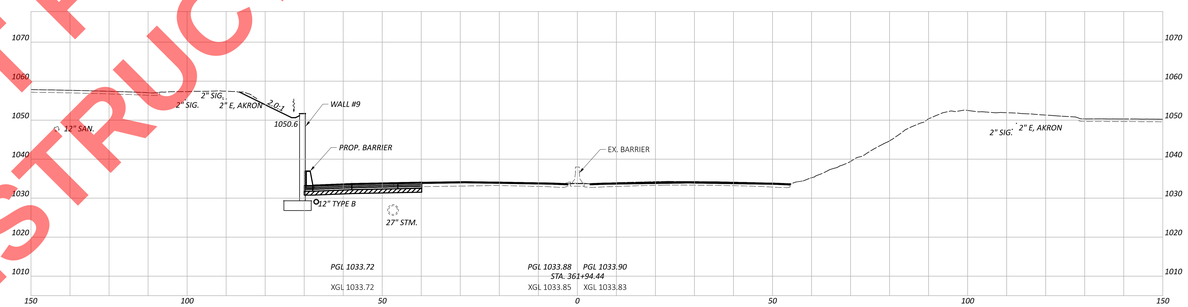


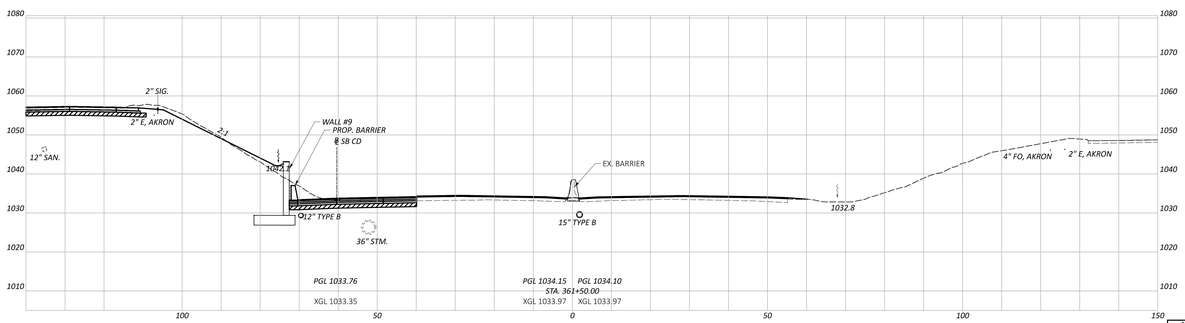












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 360+00 to STA. 362+50

DESIGN AGENCY
ARCADIS
22 SOUTH THIRD STREET 3RD FLOOR COLUMBUS, OHIO 43215 614.481.7683

DESIGNER: MAL
REVIEWER: SMG 5/21/26
PROJECT ID: 114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.178	627

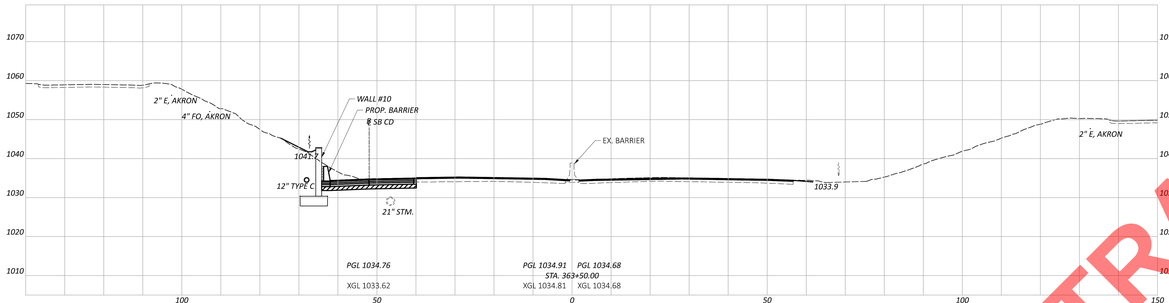
SUM-77/8-11.65/0.00

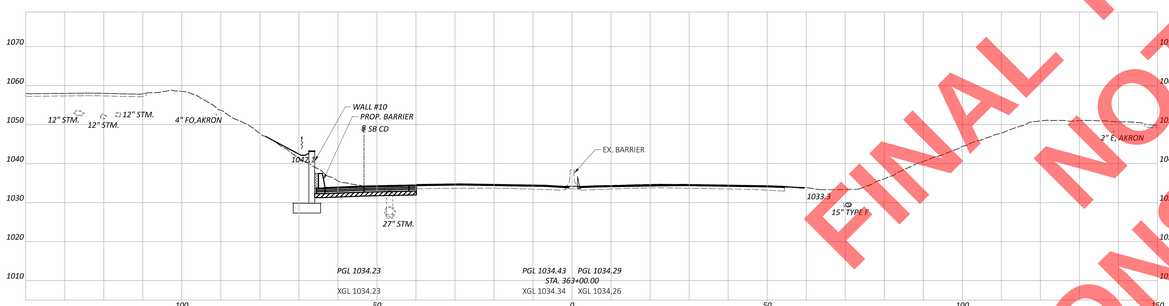
MODEL: CS_0008-4 - 360+00.00 #2-1 | Sheet: PAVEMENT - 6664 (Ins) | DATE: 11/21/2025 TIME: 1:10:51 PM USER: kmetz2218
FILE: C:\Users\kmetz2218\Desktop\Projects\PID 114865\Roadway\Sheets\114865_XS004.dgn

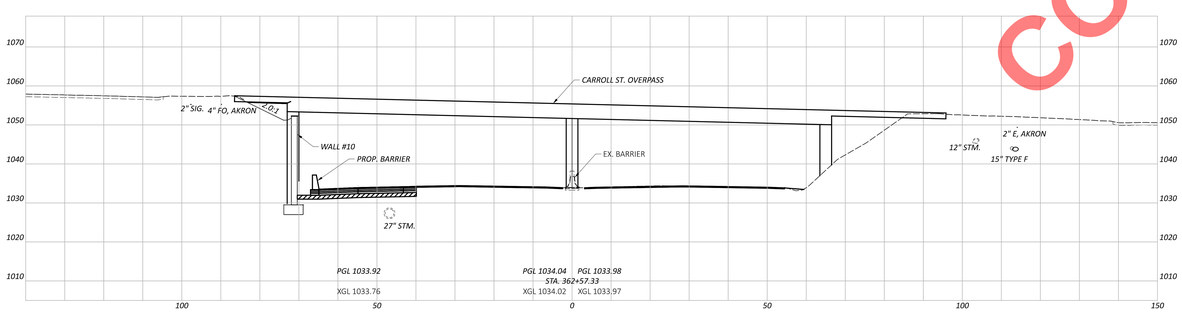
LEGEND

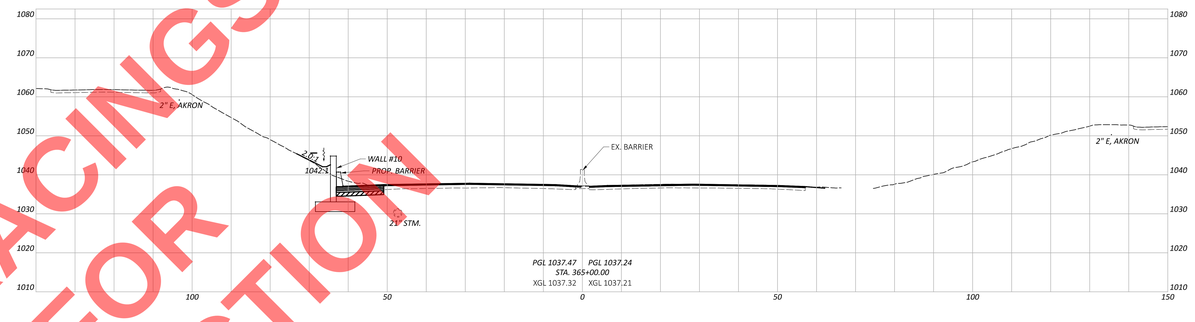
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

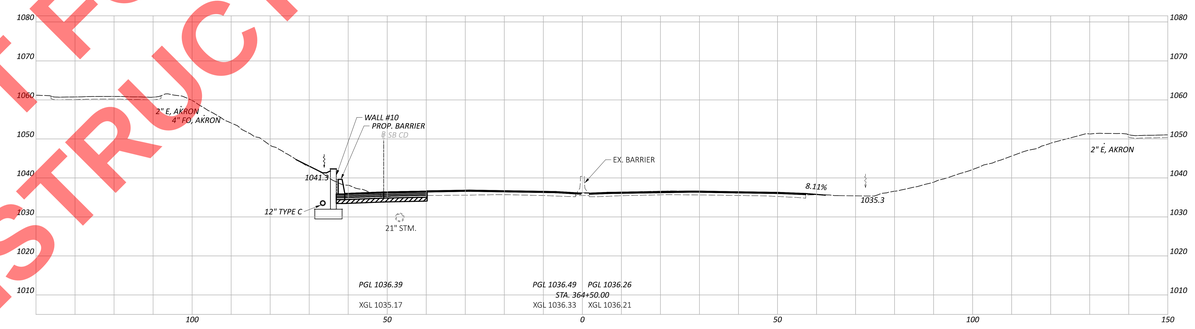
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

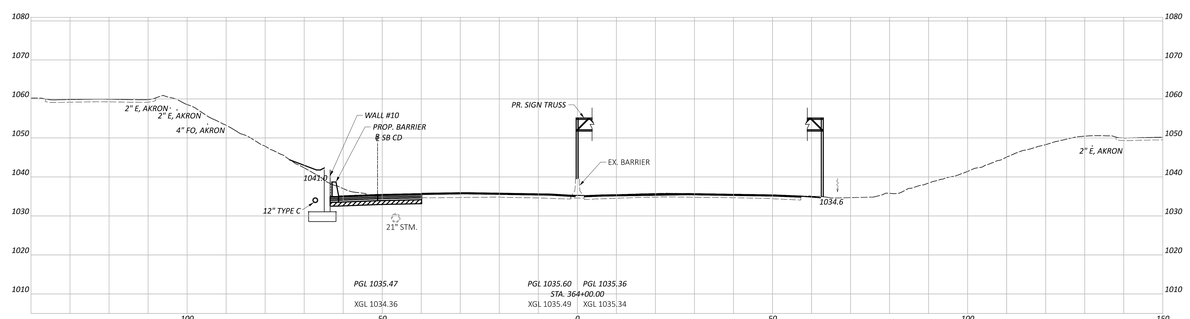












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 362+57.33 TO STA. 365+00

DESIGN AGENCY
ARCADIS
22 SOUTH MAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.179	627

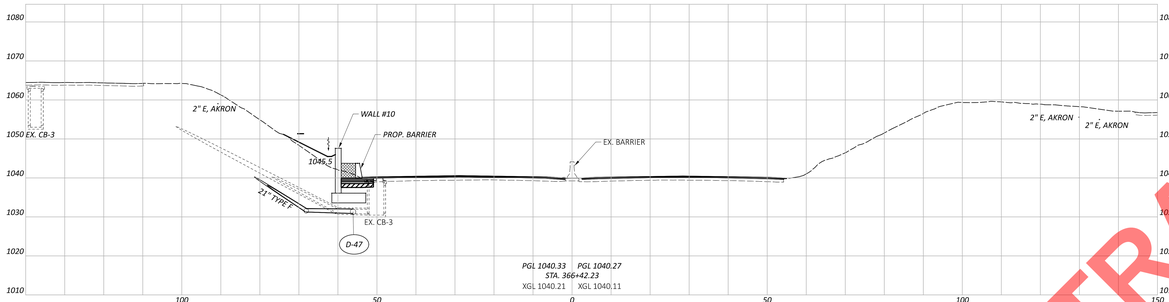
SUM-77/8-11.65/0.00

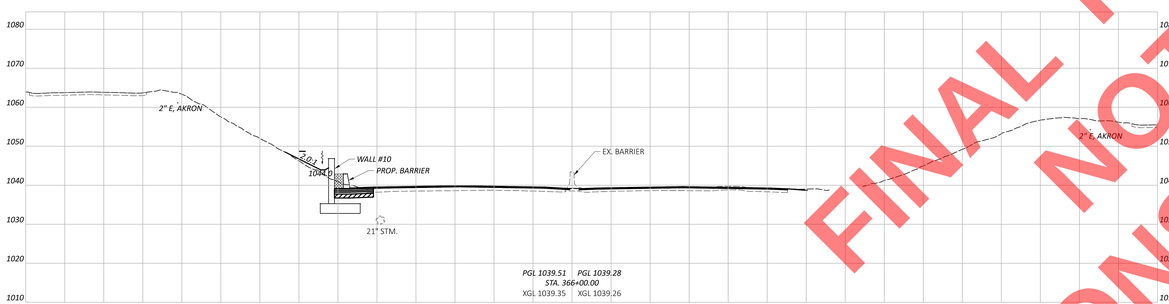
MODEL: C:\...\0058-4 - 362+57.33 TO 365+00 - PROFILES - 114865.dgn | DATE: 5/21/2026 TIME: 1:10:47 PM USER: kmoss2218
DATA SOURCE: C:\Users\kmoss2218\Desktop\Projects\114865 - SR 8 Widening, Roundabout, Bridge\Roadway\Sheets\114865_X0004.dgn

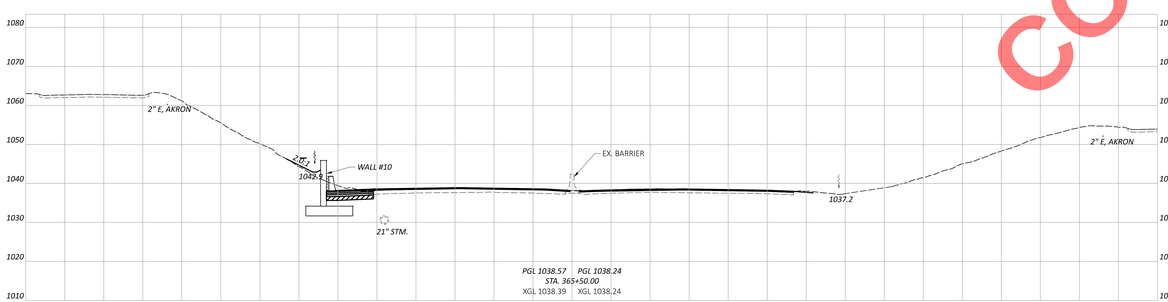
LEGEND

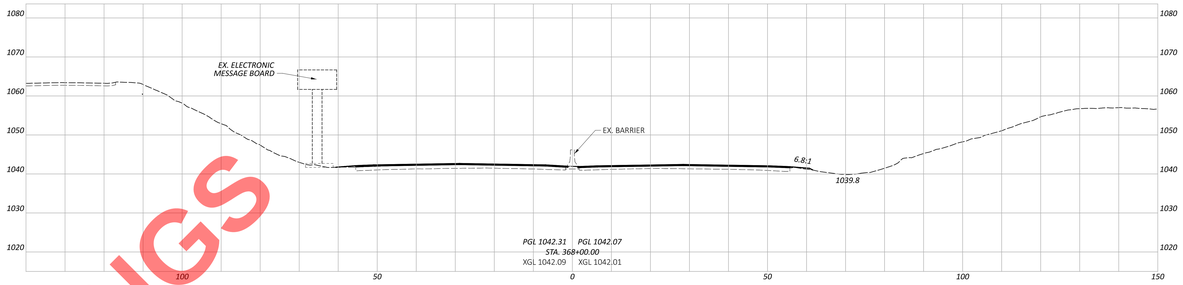
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

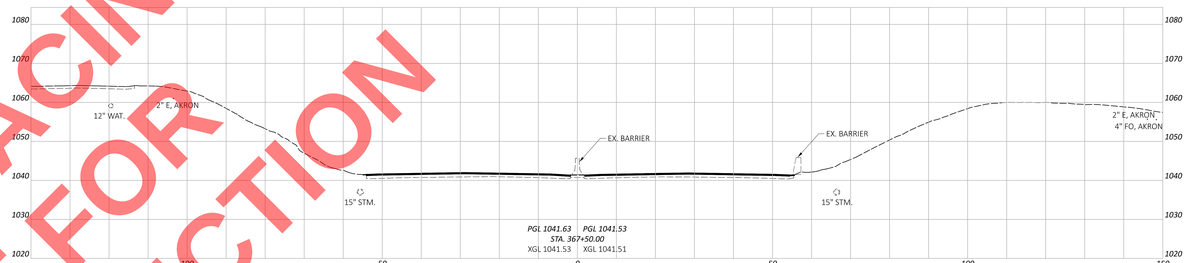
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

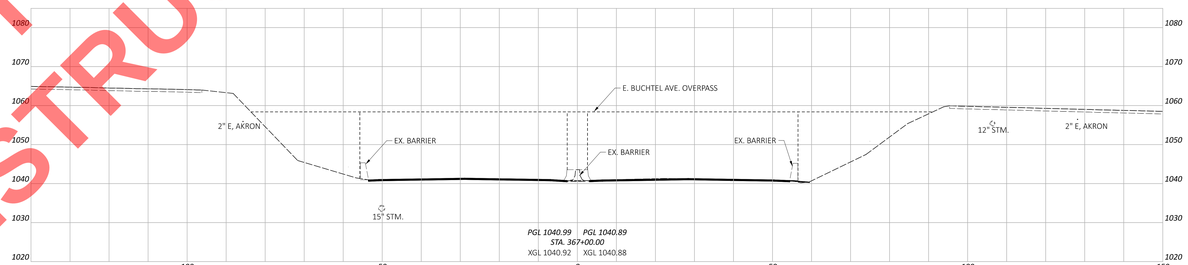


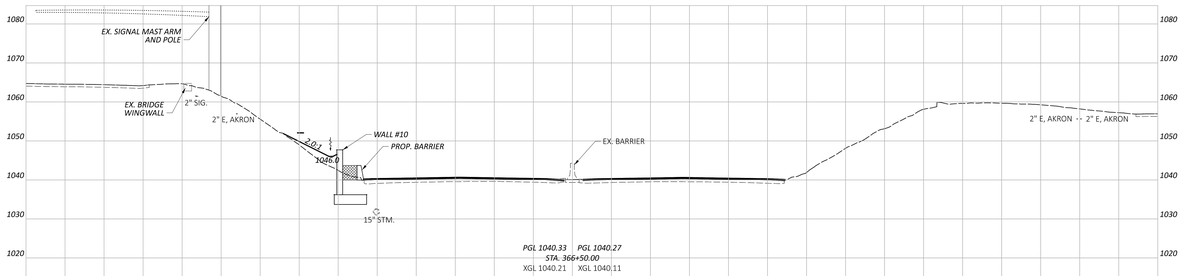












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 365+50 TO STA. 368+00

SUM-77/8-11.65/0.00

MODEL: CIV_0008-4 - 365+50.00 #2-1 | Sheet: PAVEMENT | DATE: 4/17/2026 TIME: 11:57:07 PM USER: kmetz2218
FILE PATH: K:\Projects\SUM\77\8\114865\Design\Roadway\Sheets\114865_0004.dgn

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, STE 300
AKRON, OHIO 44308
PH: 330.434.4000

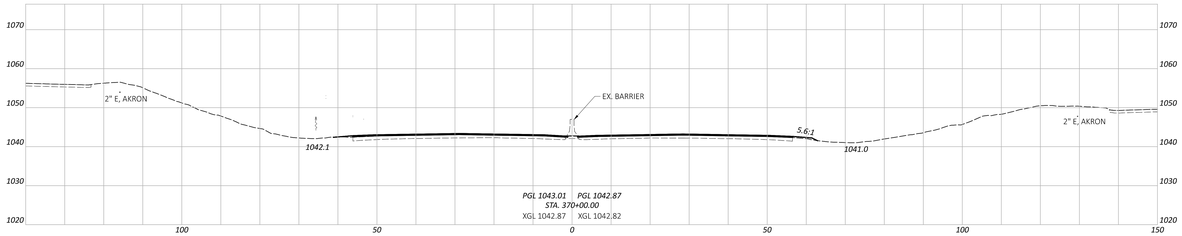
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

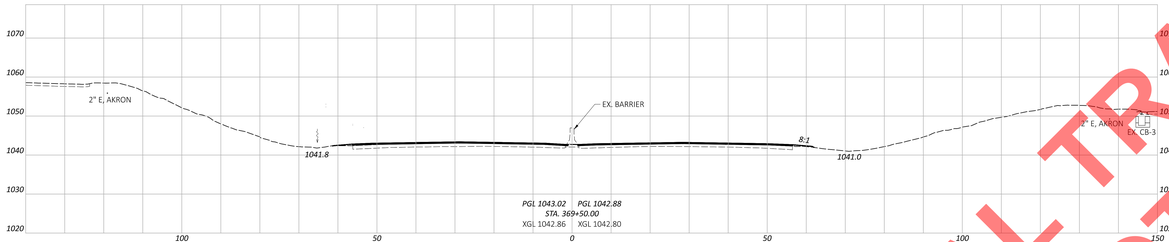
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.180	627

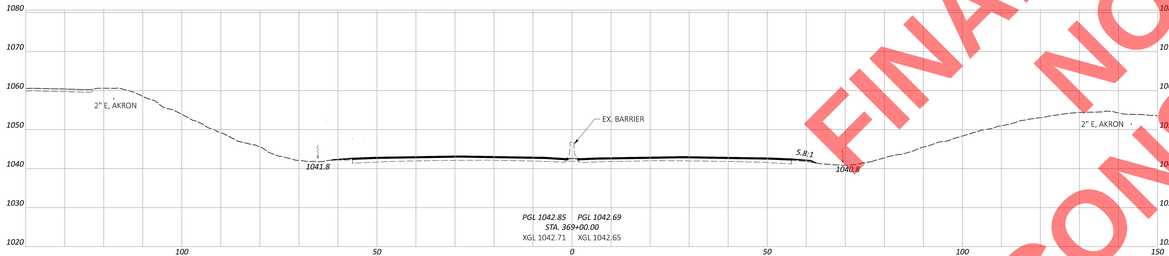
LEGEND

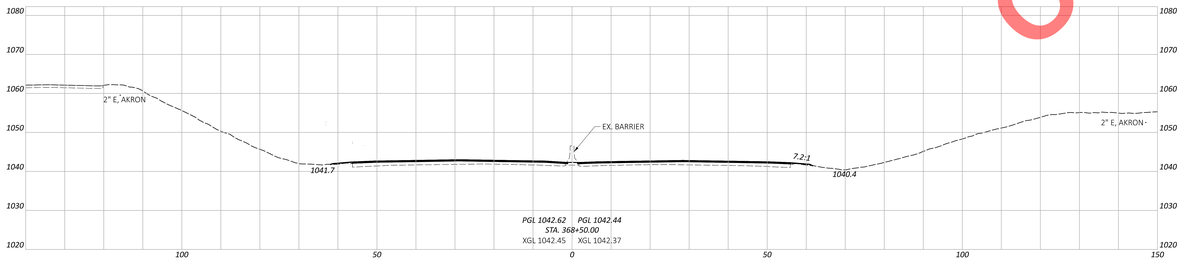
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

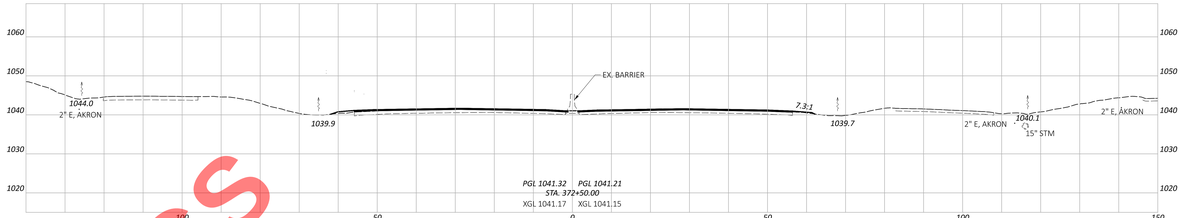
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

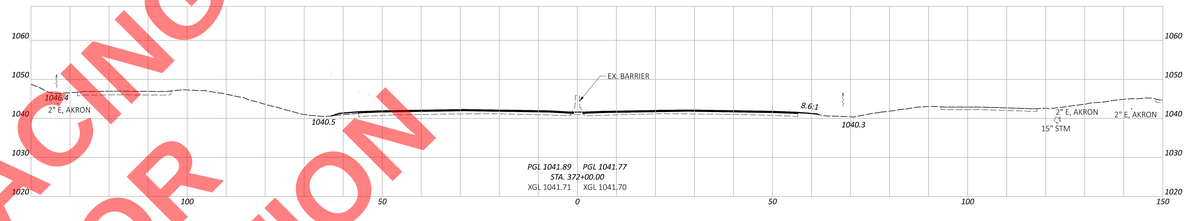


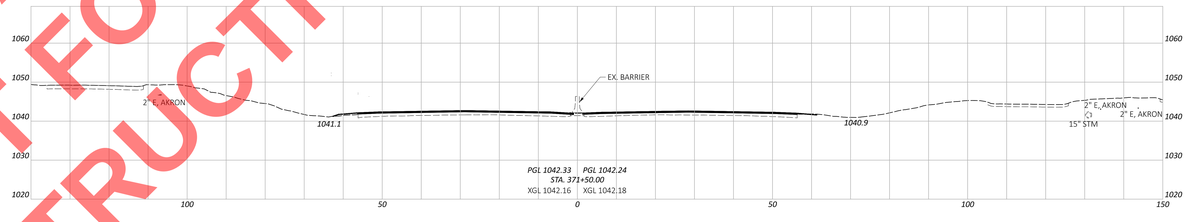


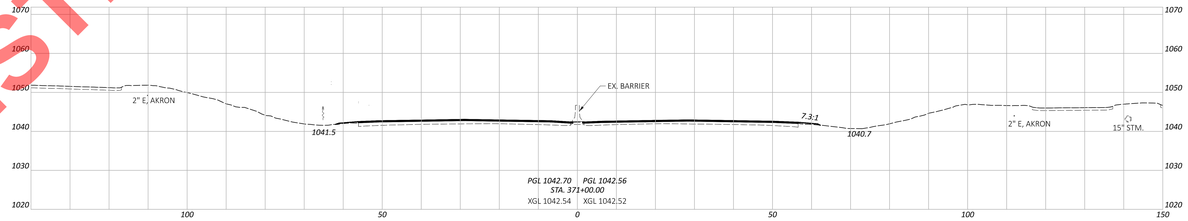


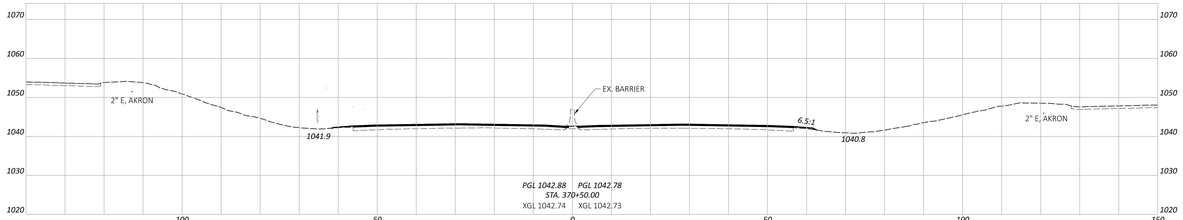












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 368+50 TO STA. 372+50

SUM-77/8-11.65/0.00

MODEL: CS_0065 - 984+50.00 #2 | Sheet: PAVEMENT | DATE: 4/15/2026 TIME: 1:12:21 PM USER: kmetz2218
DATA: C:\Projects\2025\114865\Roadway\Pavement\Plans\Pavement Plans.dwg, Xrefs\Roadway\Sheets\114865_0005.dgn

DESIGN AGENCY
ARCADIS
222 SOUTHMAIN STREET, STE 305
AKRON, OHIO 44308
330.434.4000

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

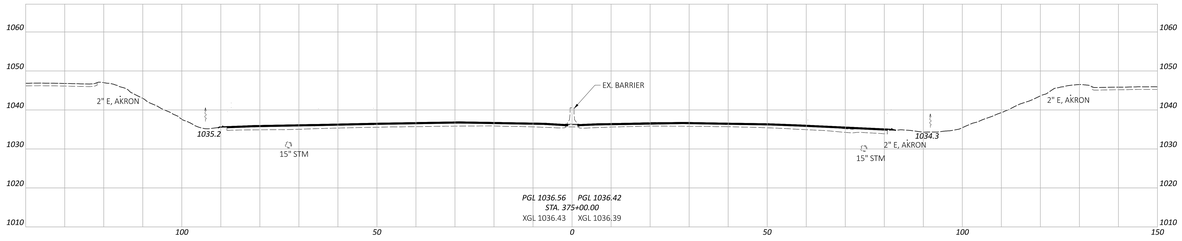
Sheet Totals			
Seeding	Cut	Fill	SHEET: P.181 / TOTAL: 627

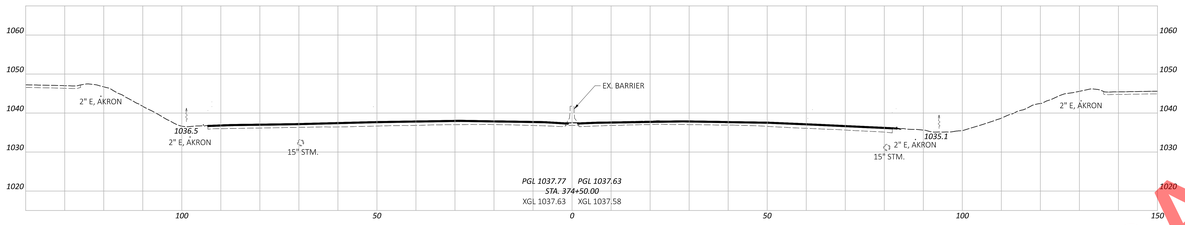
MODEL: C0L_0008-5 - 373+00.00 AS-1 | Sheet: PAVEMENT 66x34 (In) | DATE: 9/15/2026 TIME: 1:13:03 PM USER: kmetz2218
FILENAME: C:\Users\kmetz2218\Desktop\Projects\114865_SUM-77-8-11.65-0.00_Roadway\Sheets\114865_0005.dgn

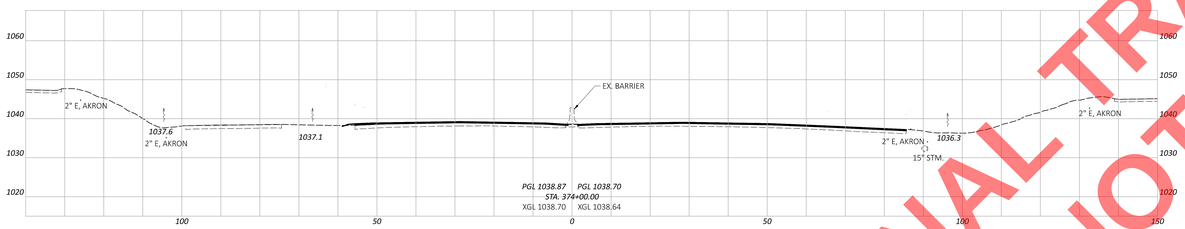
LEGEND

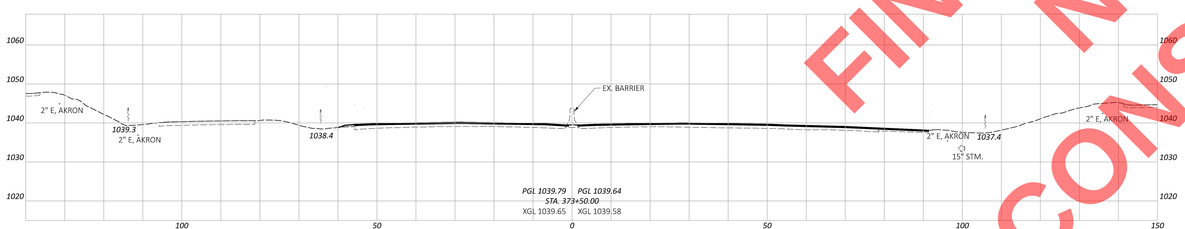
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

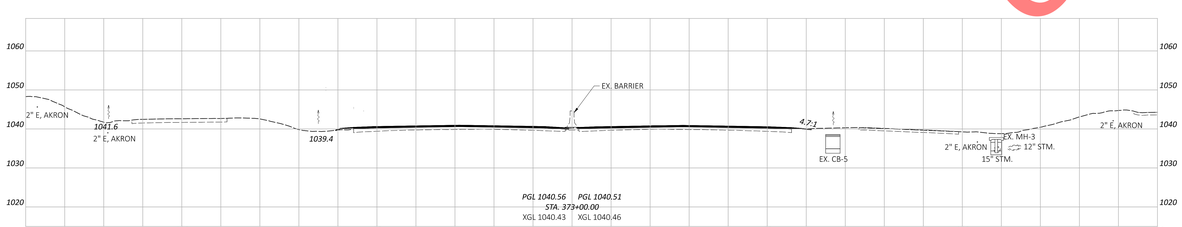
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

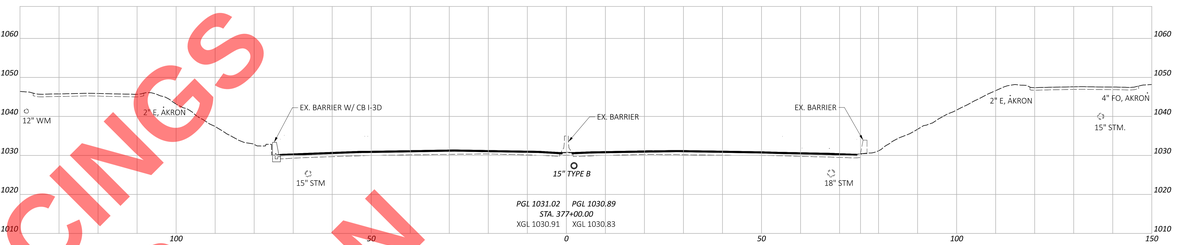


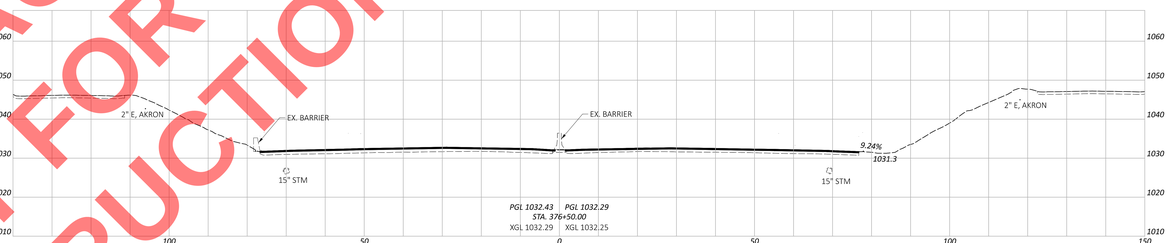


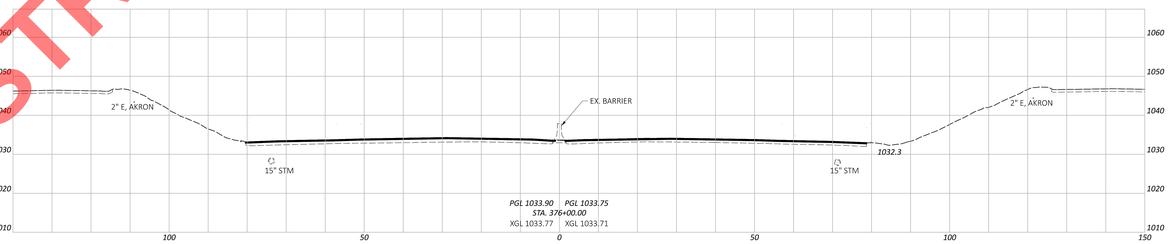


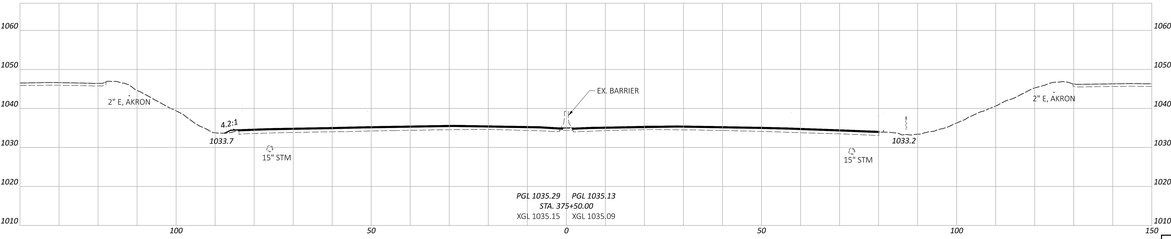












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 373+00 TO STA. 377+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET STE 3B
AKRON, OHIO 44308
330.434.4080

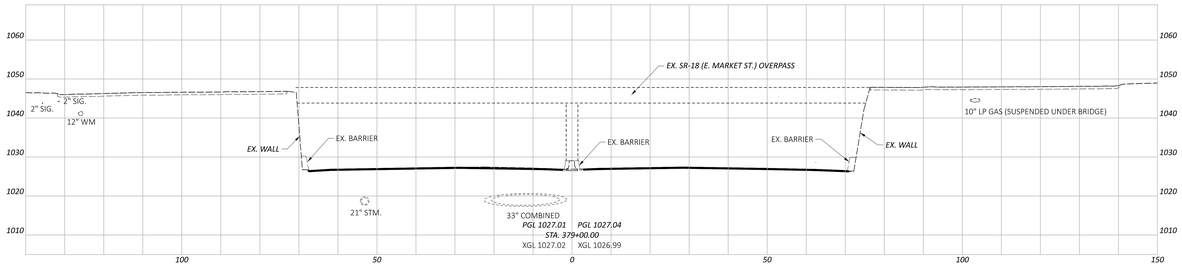
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

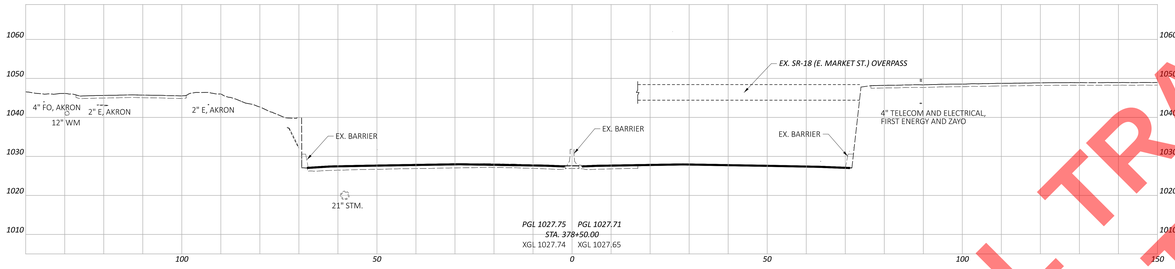
Sheet Totals				
Seeding	Cut	Fill	SHEET	TOTAL
			P.182	627

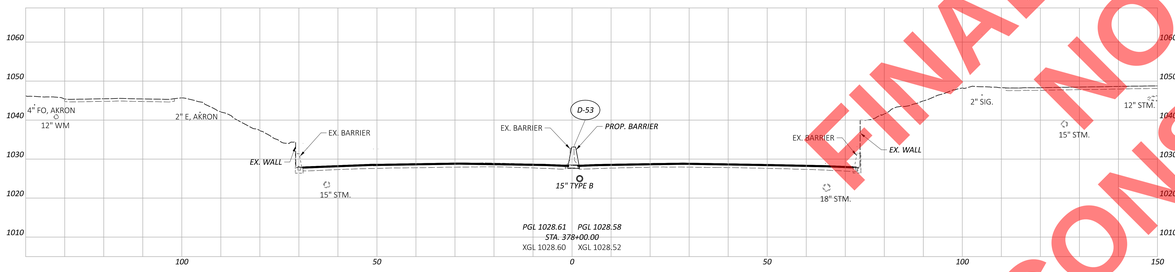
LEGEND

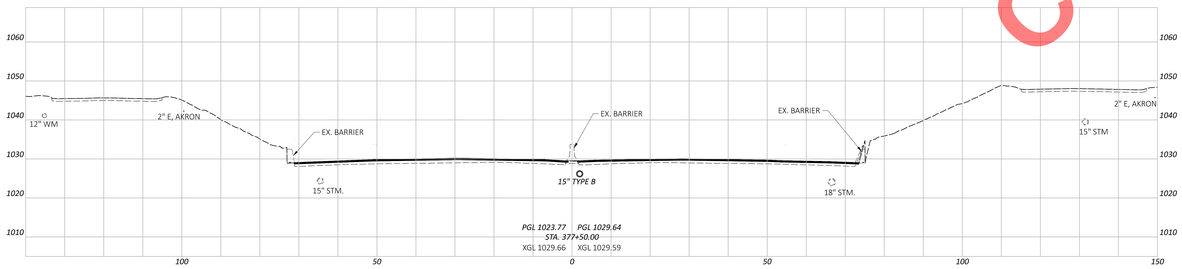
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

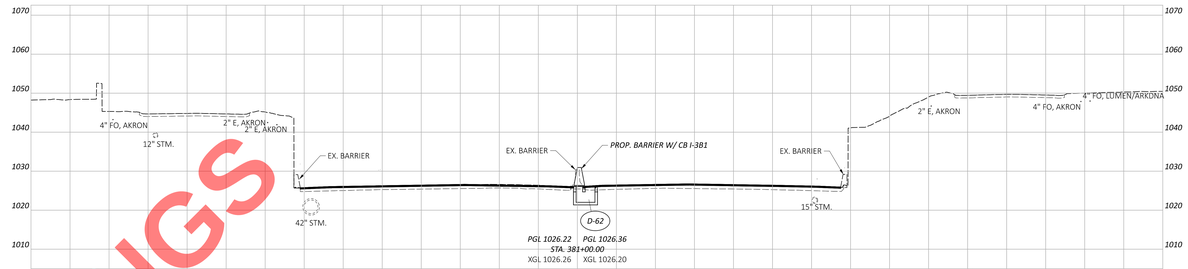
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

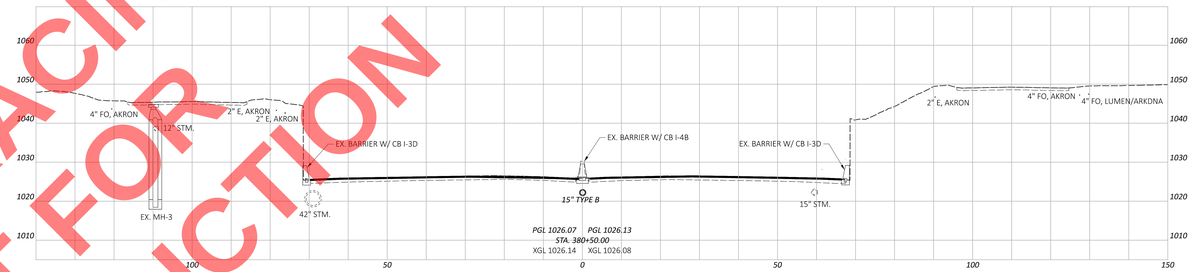


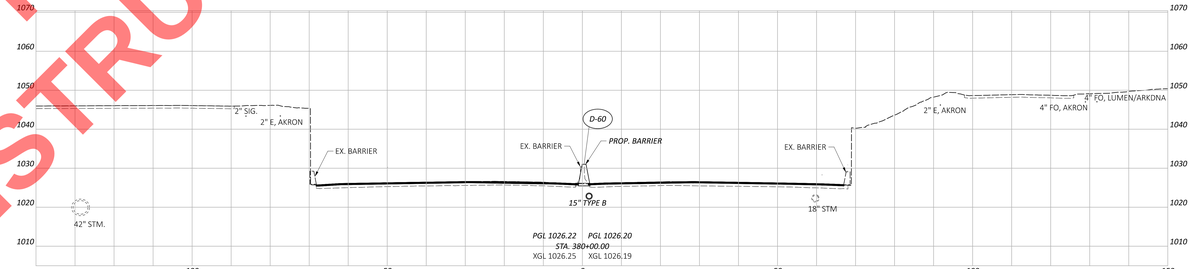


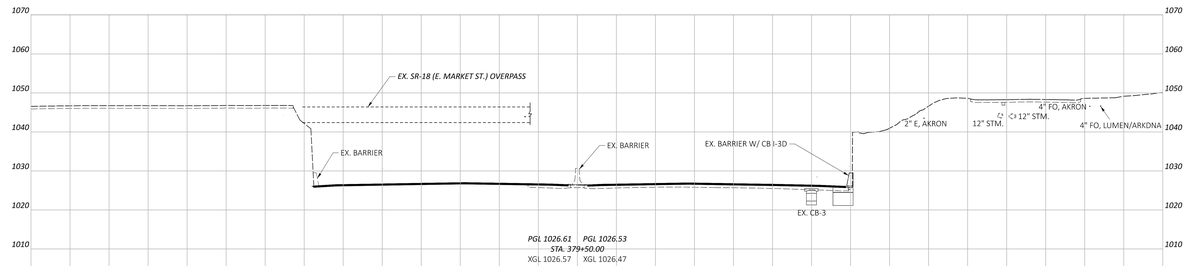












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 377+50 TO STA. 381+00

SUM-77/8-11.65/0.00

MODEL: CIV_0065 - 377+50.00 #2-1 | Sheet: PAVEMENT | DATE: 5/21/2026 TIME: 1:13:47 PM USER: kmetz2218
FILE NAME: C:\Users\kmetz2218\Desktop\Projects\114865_SUM-77-8-11.65-0.00_Kmetz\Roadway\Sheets\114865_X0065.dgn

DESIGN AGENCY
ARCADIS
222 SOUTHAIN STREET, SUITE 300
AKRON, OHIO 44308
PH: 330.434.4383

DESIGNER
MAL

REVIEWER
SMG 05/21/26

PROJECT ID
114865

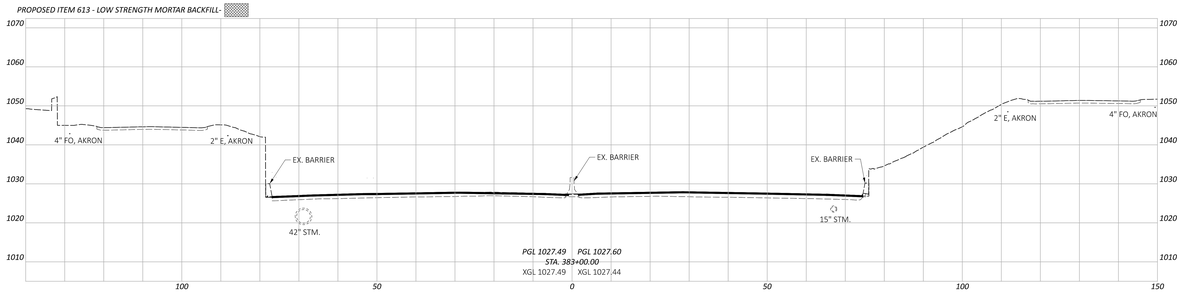
Sheet Totals			
Seeding	Cut	Fill	

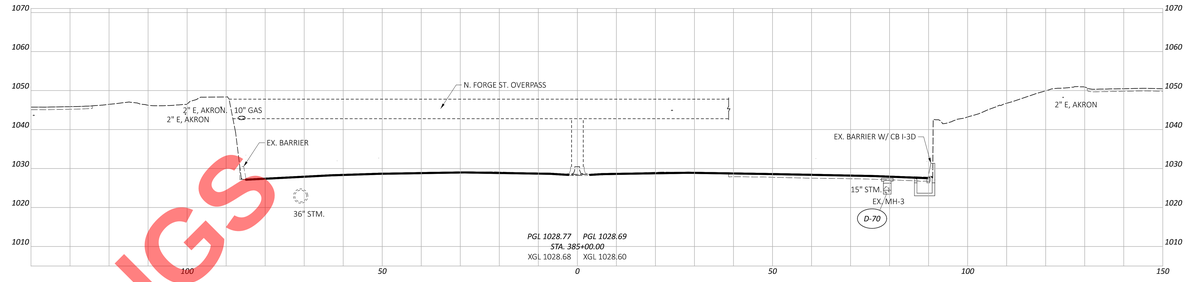
SHEET P.183 TOTAL 627

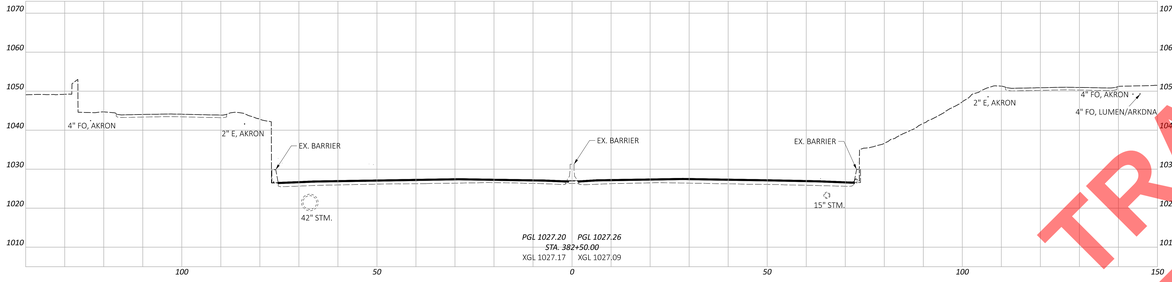
LEGEND

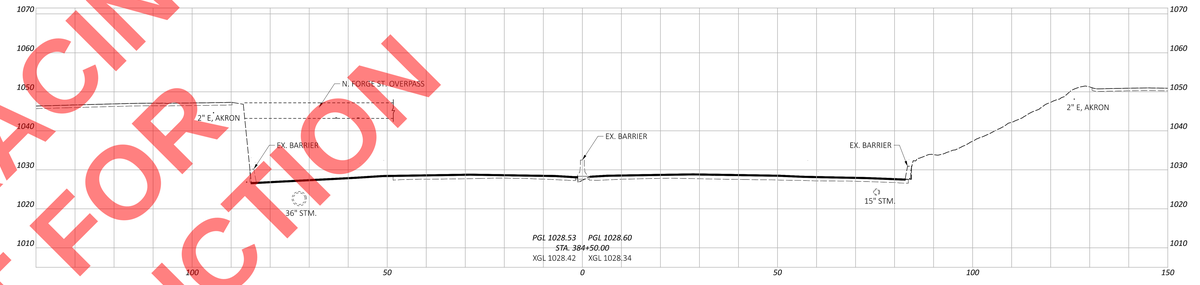
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

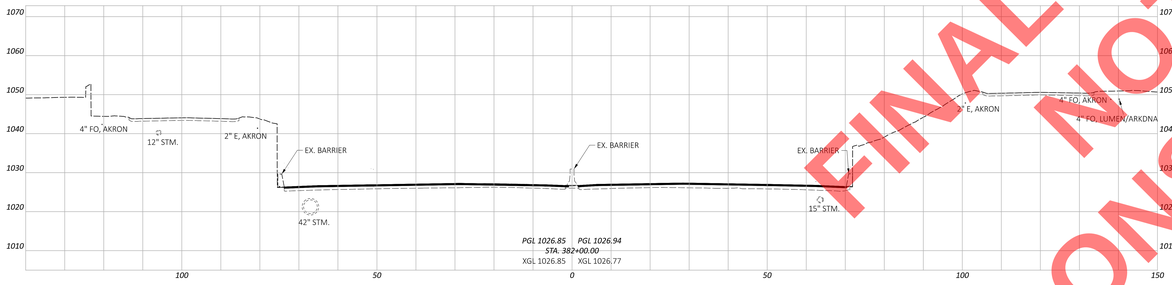
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

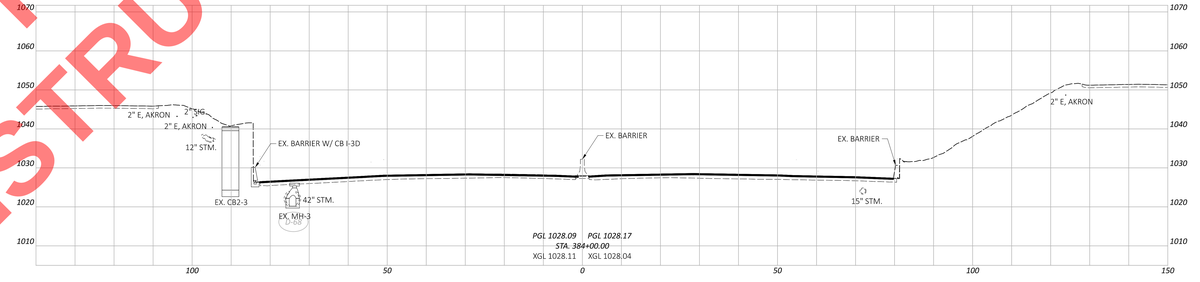


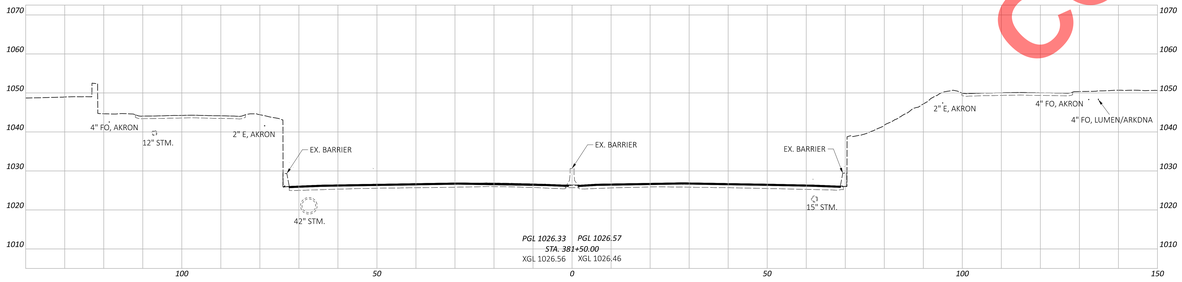


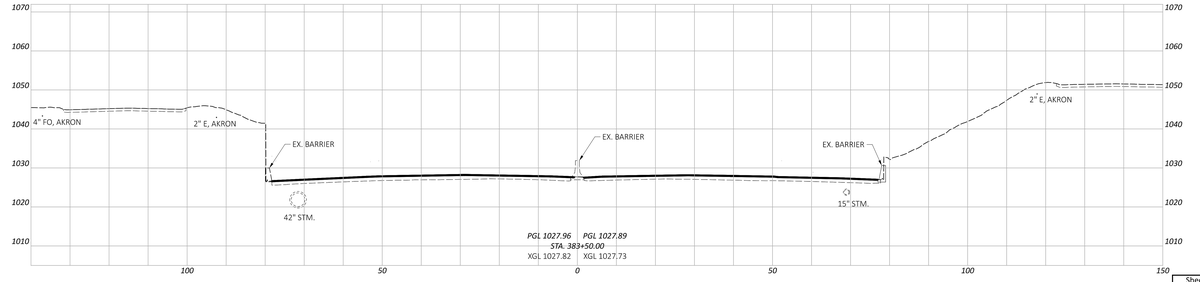












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 381+50 TO STA. 385+00

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET STE 300
AKRON, OHIO 44308
P: 330.434.4000

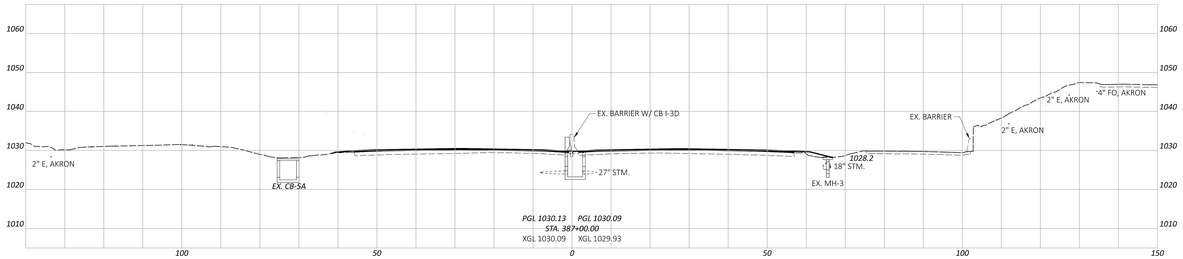
DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

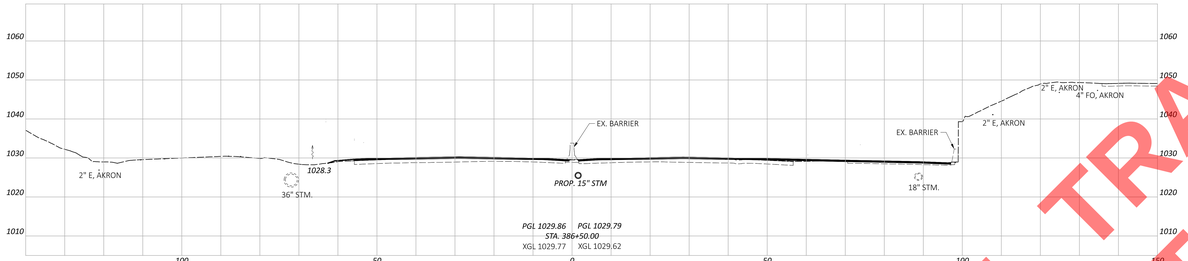
Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.184	627

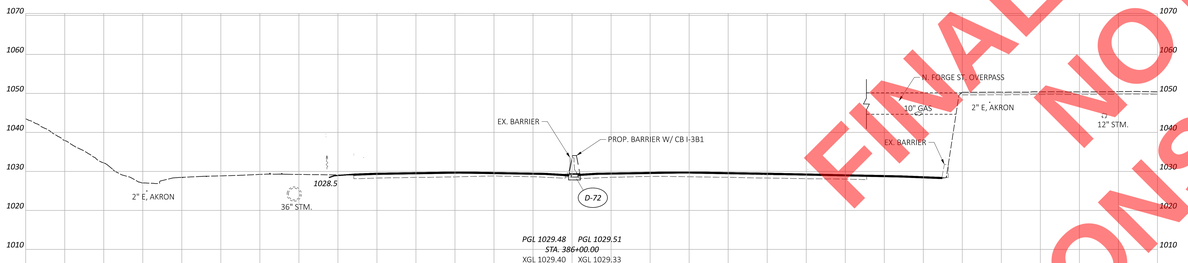
LEGEND

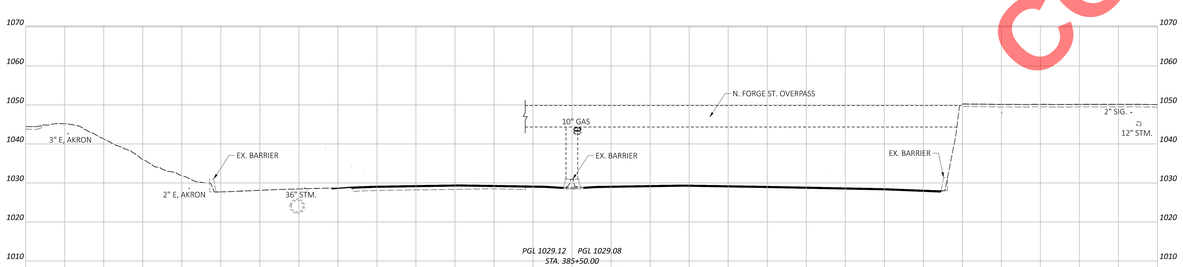
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

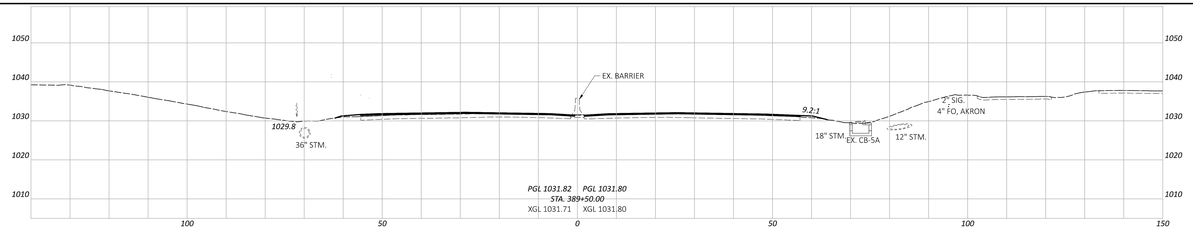
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

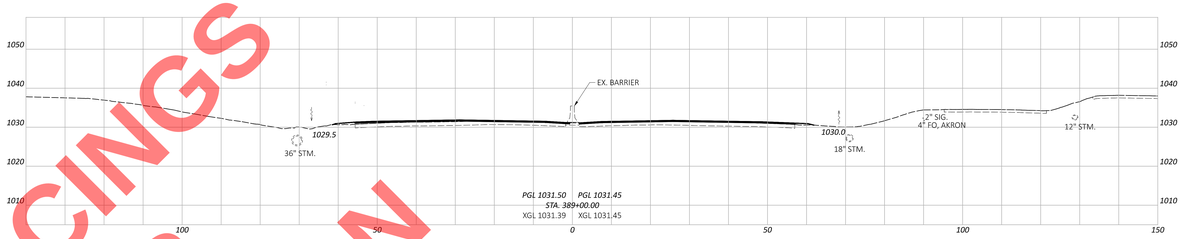


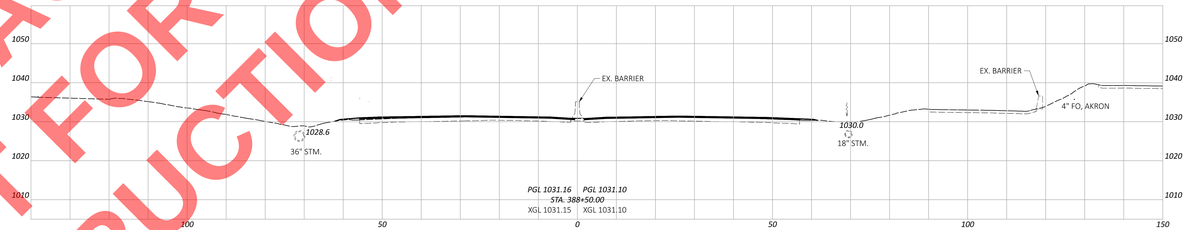


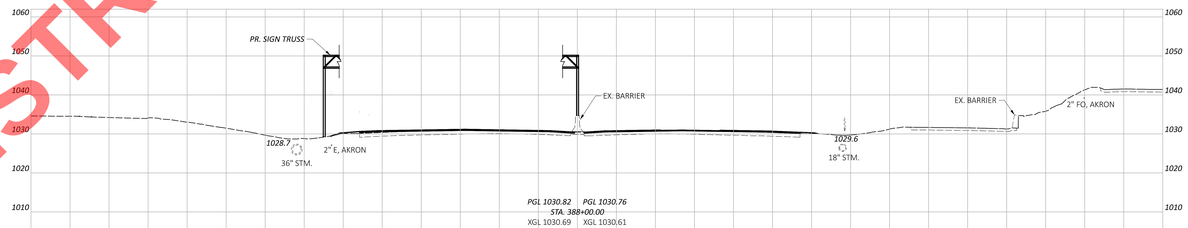


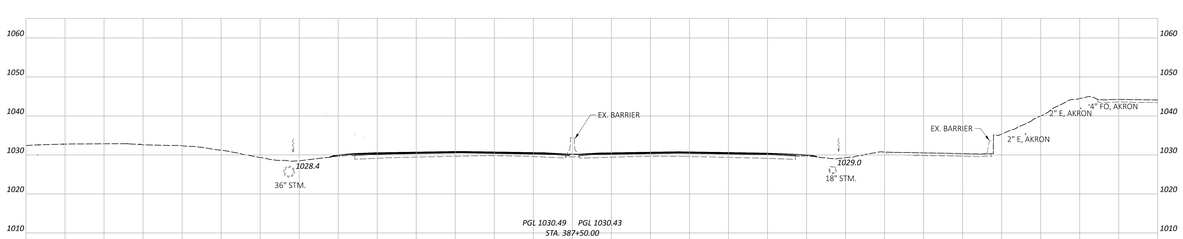












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 385+50 TO STA. 389+50

DESIGN AGENCY
ARCADIS
222 SOUTHMAIN STREET, SUITE 300
AKRON, OHIO 44308
PH: 330.434.4000

DESIGNER: MAL
REVIEWER: SMG 05/21/26
PROJECT ID: 114865

Sheet Totals			
Seeding	Cut	Fill	SHEET: P.185 / TOTAL: 627

SUM-77/8-11.65/0.00

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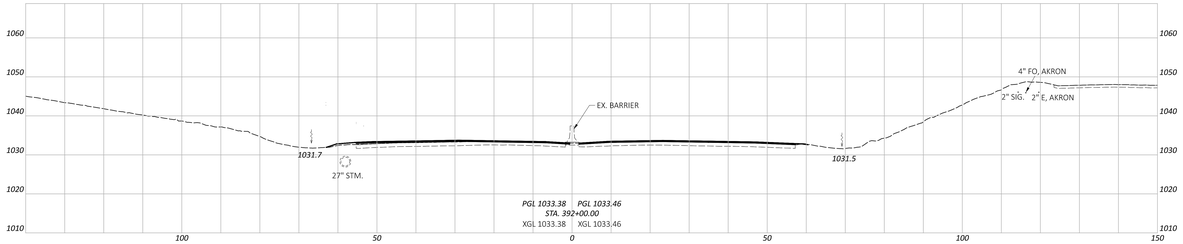
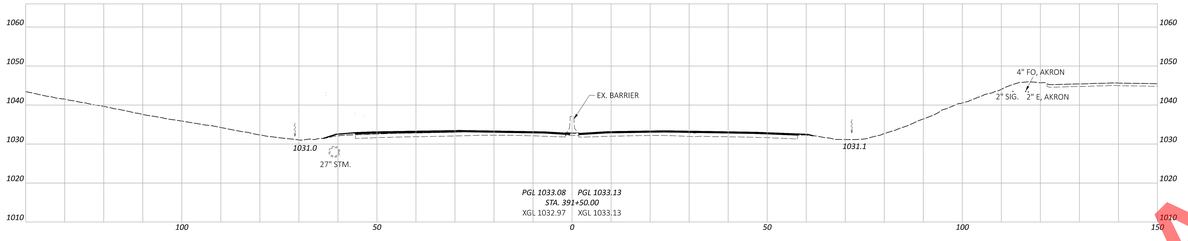
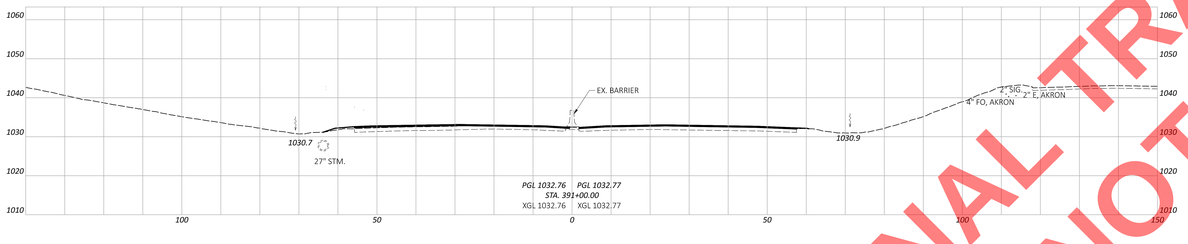
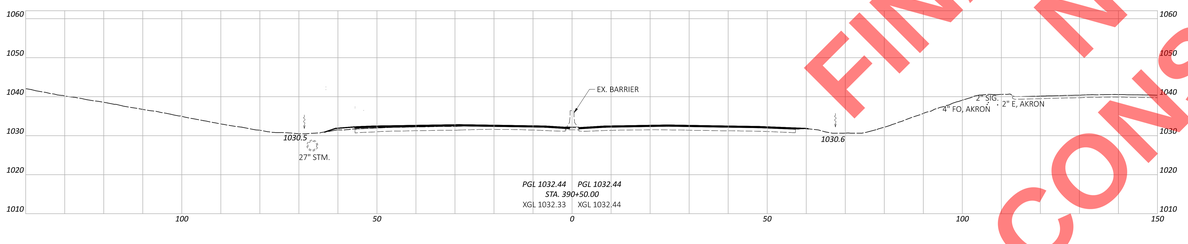
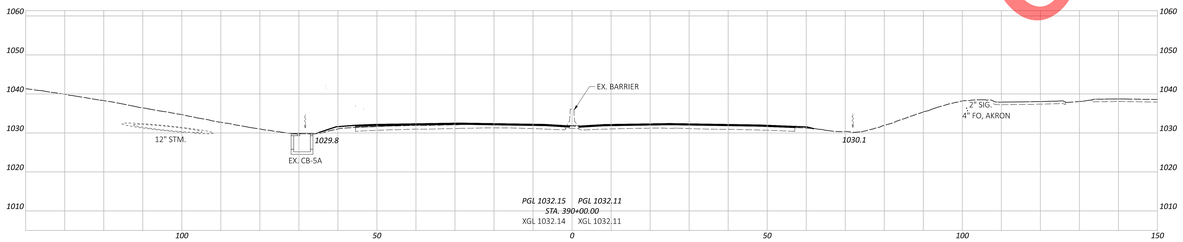






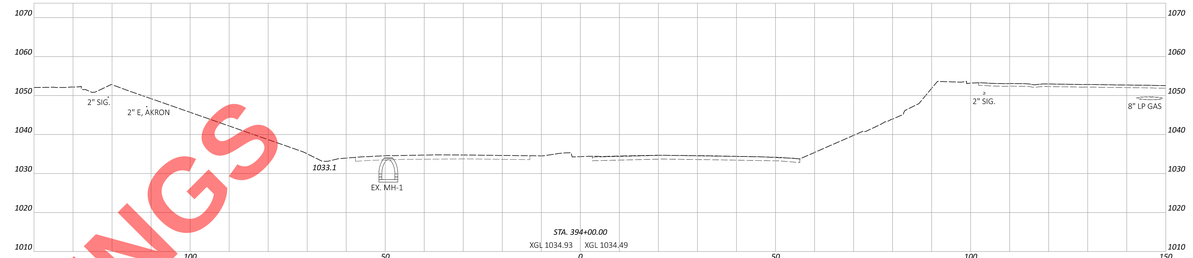


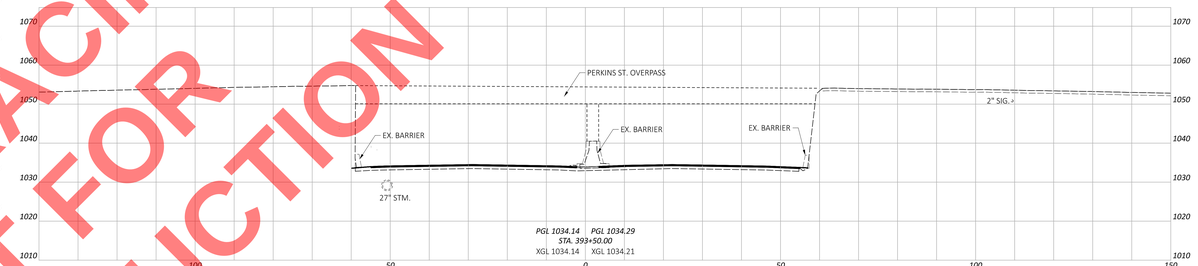


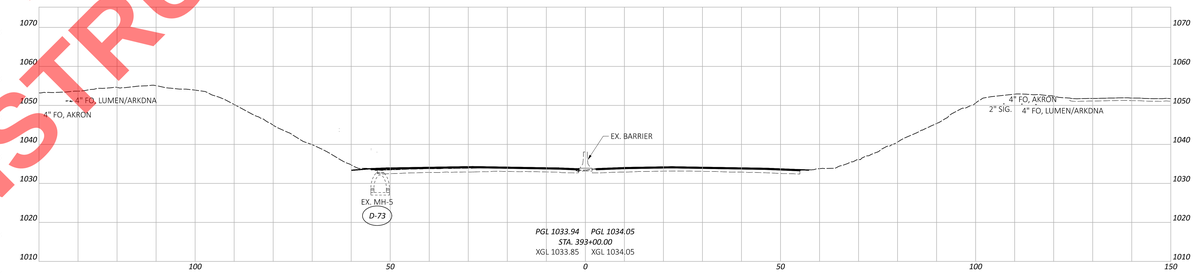
LEGEND

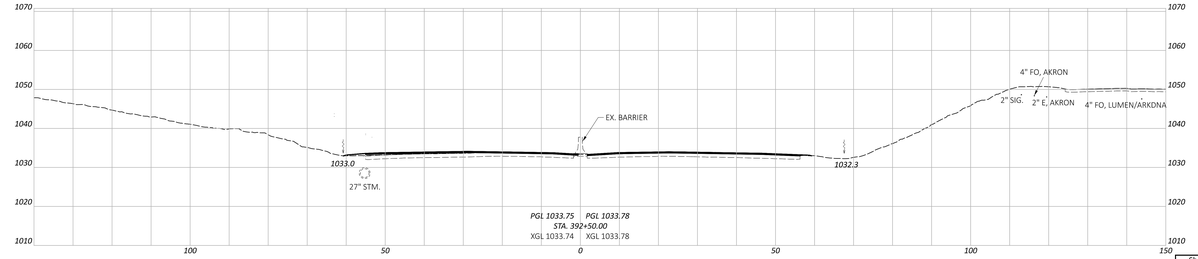
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-









FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 390+00 TO STA. 394+00

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET 3RD
AKRON, OHIO 44308
330.434.4585

DESIGNER
MAL

REVIEWER
SMG 05/21/26

PROJECT ID
114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.186	627

SUM-77/8-11.65/0.00

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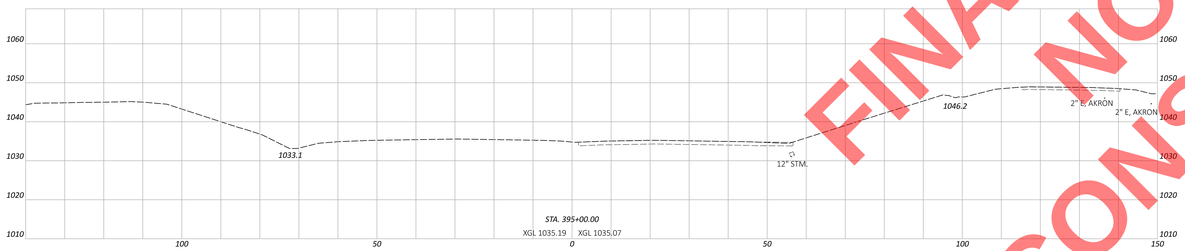
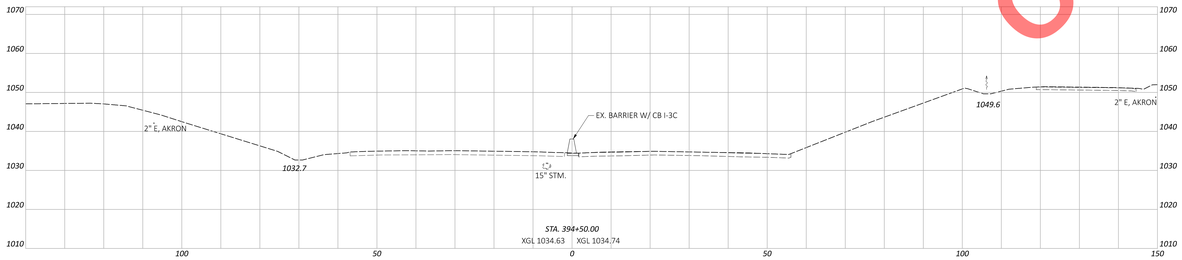
ENGINEER'S SEAL: Kathryn Metz | SURVEYOR'S SEAL: Kevin Hall | Name: C:\Users\kmetz2218\Desktop\Sheets\114865_0005.dgn

LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-





FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS SR-8
STA. 394+50 TO STA. 395+00

SUM-77/8-11.65/0.00

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DESIGN AGENCY
ARCADIS
222 SOUTHWAY STREET SUITE 200
MIDDLE ORANGE
CITY, OHIO 44108
www.arcadis.com

DESIGNER
MAL

REVIEWER
SMG 04/29/24

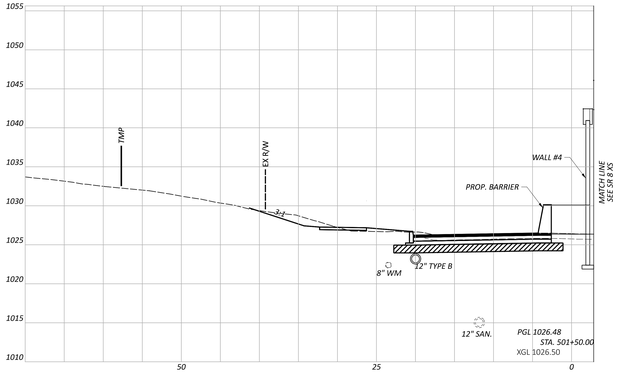
PROJECT ID
114865

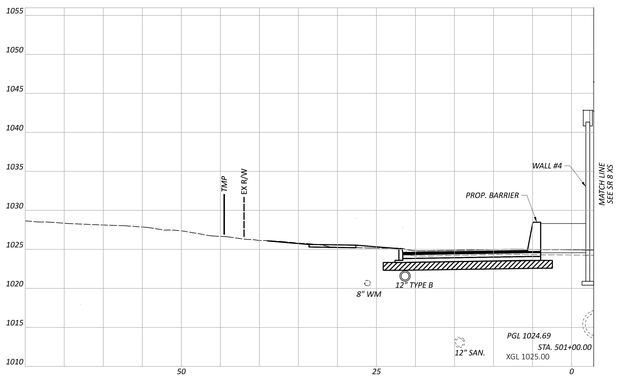
Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL	
			P.187	627	

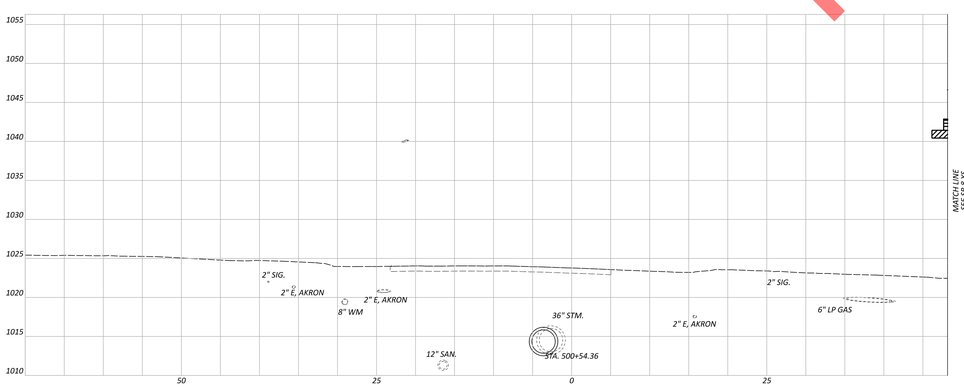
LEGEND

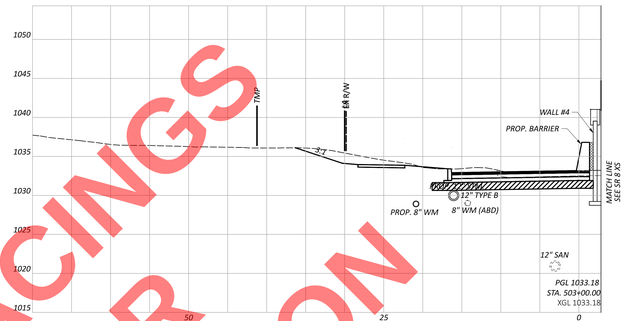
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

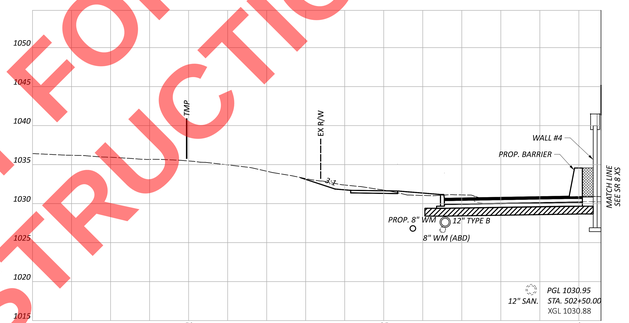
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

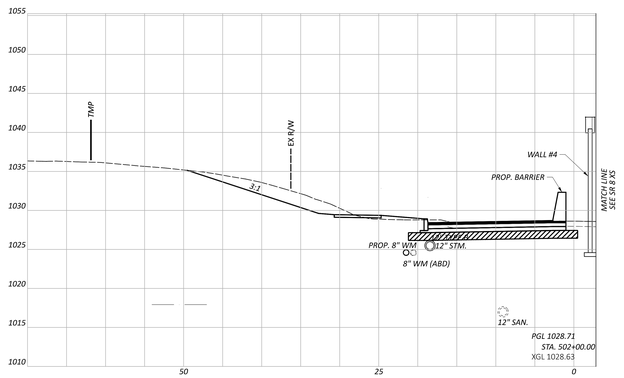












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS - GOODKIRK ST.
STA. 500+54.36 TO STA. 503+00

DESIGN AGENCY
ARCADIS
222 SOUTHARK STREET, SUITE 300
INDIANAPOLIS, IN 46204
PH: 317.636.4682

DESIGNER: MAL
REVIEWER: SMG 04/29/24
PROJECT ID: 114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.188	627

SUM-77/8-11.65/0.00

MODEL: BU_GOOK - 500+54.36 [Sheet] PAYPOINT: 654x514 in] DATE: 9/15/2026 TIME: 2:56:18 PM USER: bwood2218
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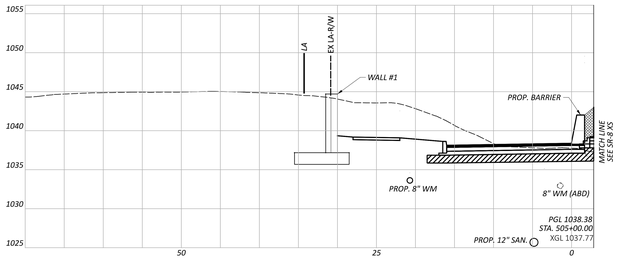
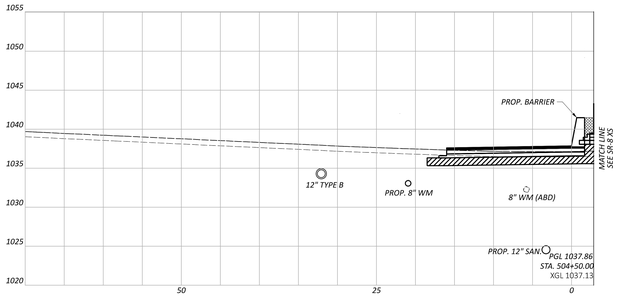
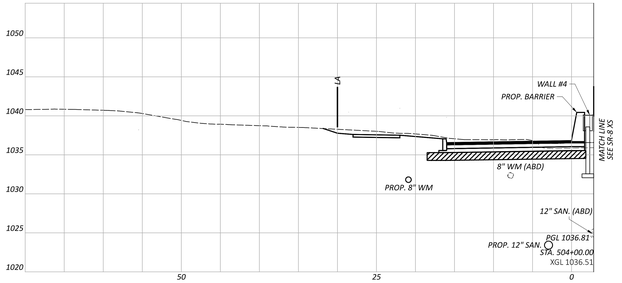
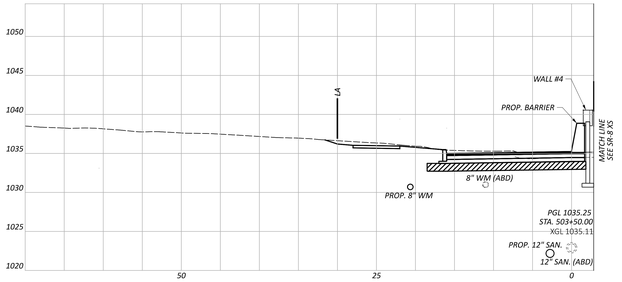
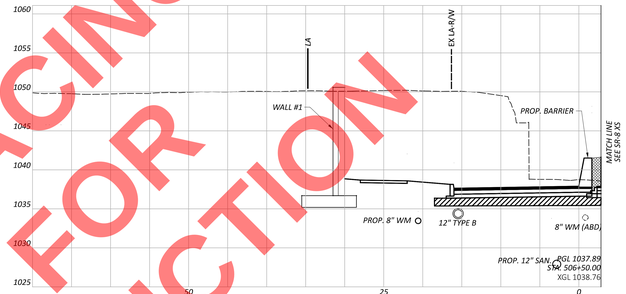
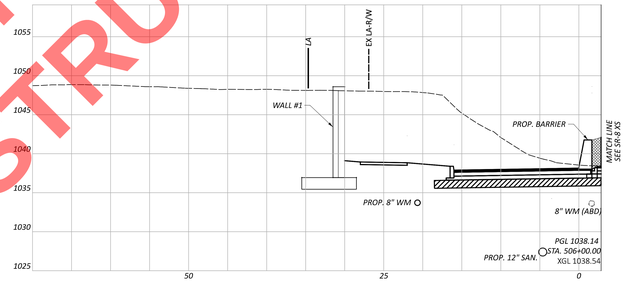


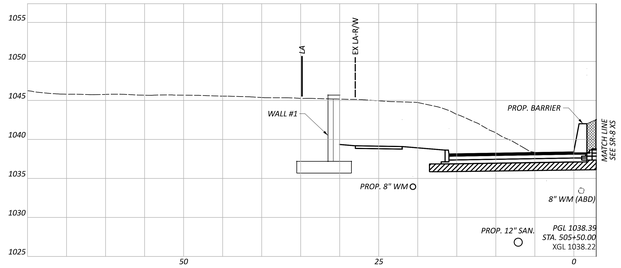












FINAL TRACINGS
NOT FOR
CONSTRUCTION

LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL

CROSS SECTIONS - GOODKIRK ST.
STA. 503+50 TO STA. 506+50

SUM-77/8-11.65/0.00

MODEL: BU_GOOK - SSI=50.00 [Sheet] PAYSHEET: 65x14 in.] DATE: 9/15/2026 TIME: 1:36:19 PM USER: bwood2218
FILE NAME: c:\projects\114865 - 77 Summit\Roadway\Sheets\114865_SS100.dgn

DESIGN AGENCY
ARCADIS
222 SOUTHAIN STREET, SUITE 300
AKRON, OHIO 44308
330.434.4080
WWW.ARCADIS.COM

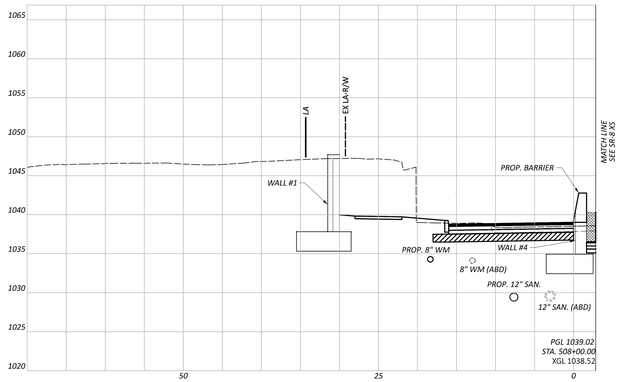
DESIGNER: MAL
REVIEWER: SMG 04/29/24
PROJECT ID: 114865

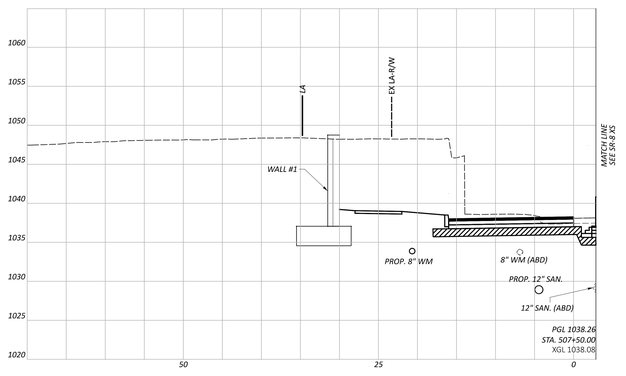
Sheet Totals					
Seeding	Cut	Fill	SHEET	TOTAL
			P.189	627

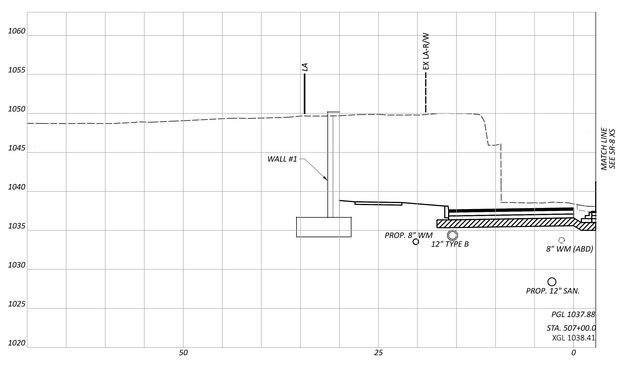
LEGEND

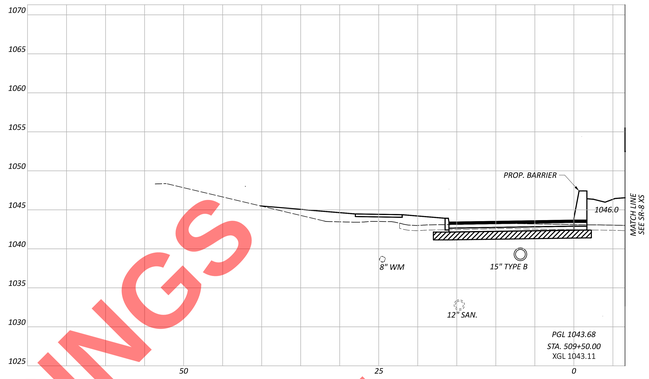
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

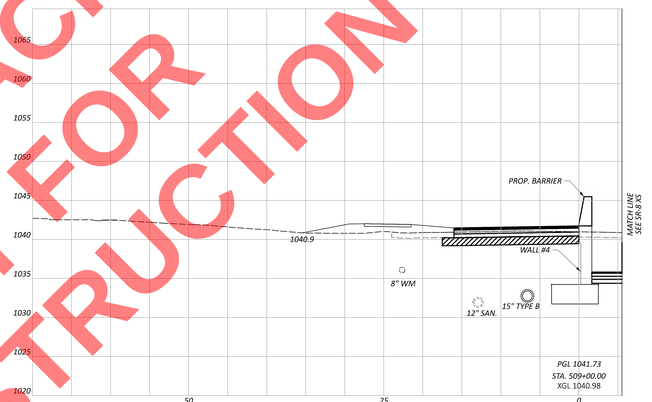
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-

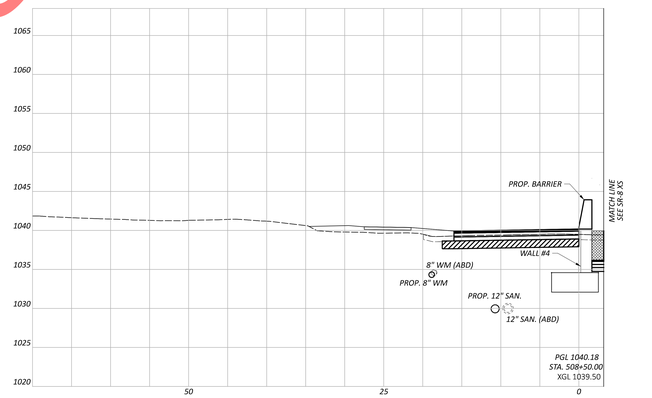












FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS - GOODKIRK ST.
STA. 507+00 TO STA. 509+50

SUM-77/8-11.65/0.00

MODEL: BU_GOOK - 507+00.00 [Sheet] PAYPOINT: 114865 [114865] DATE: 9/25/2024 TIME: 3:54:48 PM USER: bwest2218
FILE: C:\Users\bwest2218\Desktop\Projects\114865_PID\Roadway\Sheets\114865_XS100.dgn

DESIGN AGENCY
ARCADIS
222 SOUTHAM STREET, SUITE 300
LONDON, ONTARIO
N6C 5W8
519.963.5800
www.arcadis.com

DESIGNER
MAL

REVIEWER
SMG 04/29/24

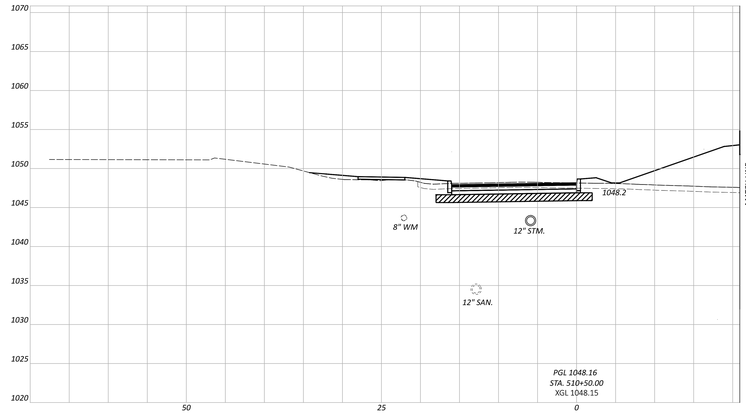
PROJECT ID
114865

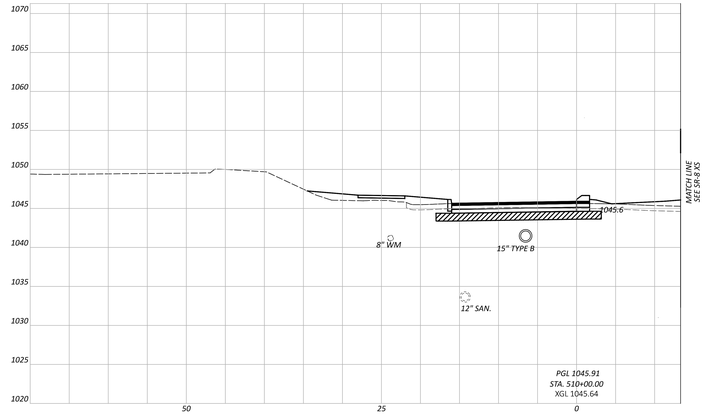
Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.190	627

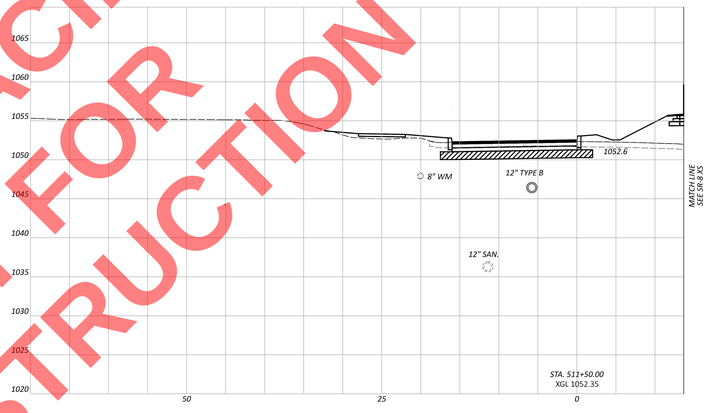
LEGEND

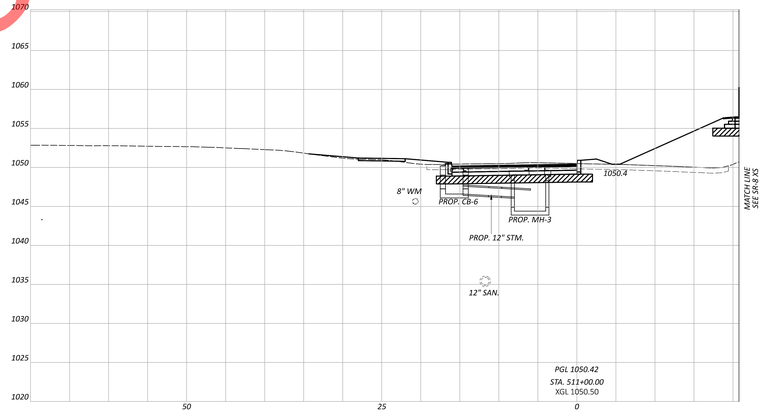
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-









FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS - GOODKIRK ST.
STA. 510+00 TO STA. 511+50

DESIGN AGENCY
ARCADIS
22 SOUTHPARK STREET, SUITE 301
ANNAPOLIS, MD
410.224.4000
FAX 410.224.4092

DESIGNER: MAL
REVIEWER: SMG 04/29/24
PROJECT ID: 114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.191	627

SUM-77/8-11.65/0.00

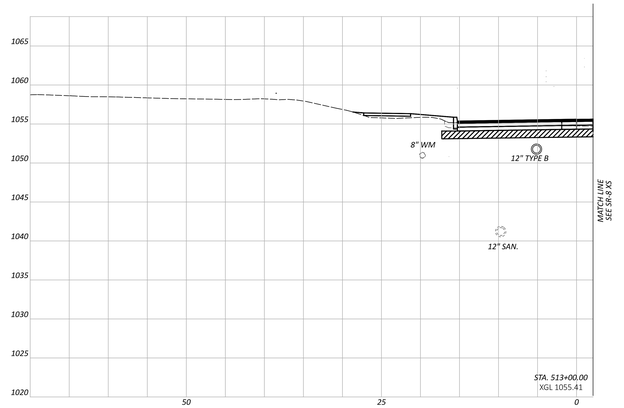
MODEL: BU_GOOK_510+00.00 | Sheet: PAYSHEET | 6x14 in | DATE: 9/15/2026 TIME: 12:55:05 PM | USER: bwest218
FILE NAME: P:\Projects\Baltimore\Active\114865_Goodkirk Road Improvements\Design\Roadway\Sheets\114865_GOOK.dgn

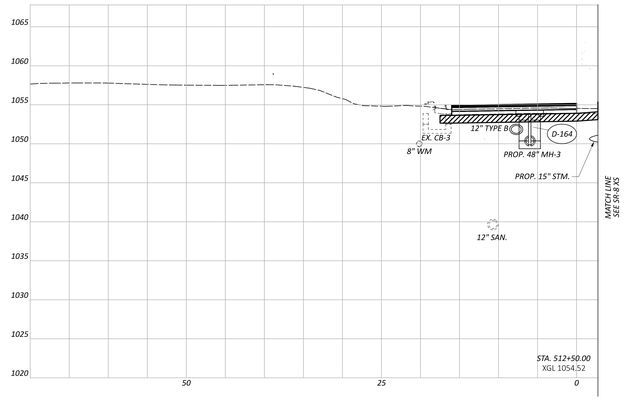
FINAL TRACINGS
NOT FOR
CONSTRUCTION

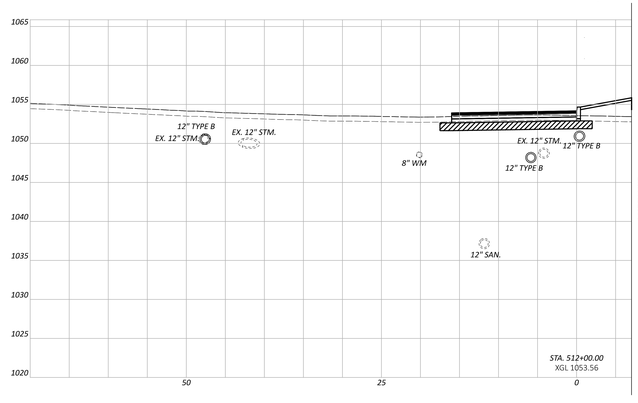
LEGEND

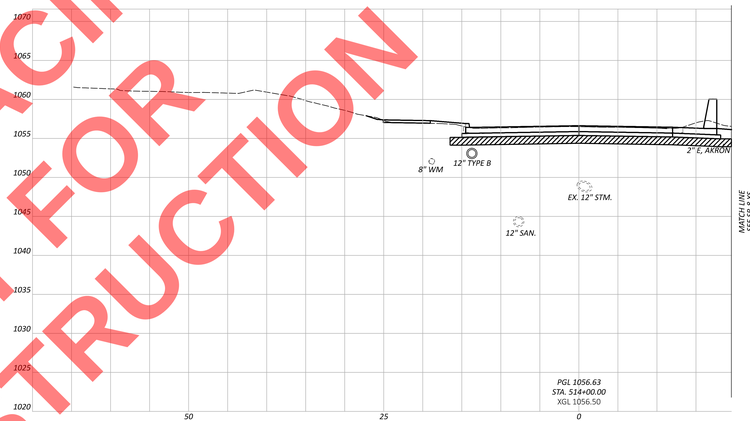
PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE:

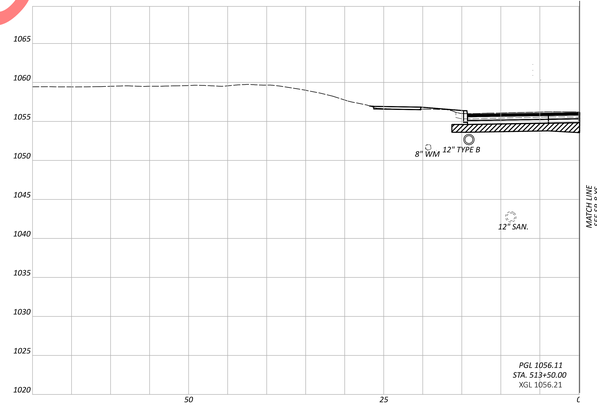
PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL:











CROSS SECTIONS - GOODKIRK ST.
STA. 512+00 TO STA. 514+00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, STE 300
AKRON, OHIO 44308
330.434.4080
WWW.ARCADIS.COM

DESIGNER
XXX

REVIEWER
SMG 04/29/24

PROJECT ID
114865

Sheet Totals				SHEET	TOTAL
Seeding	Cut	Fill		P.192	627

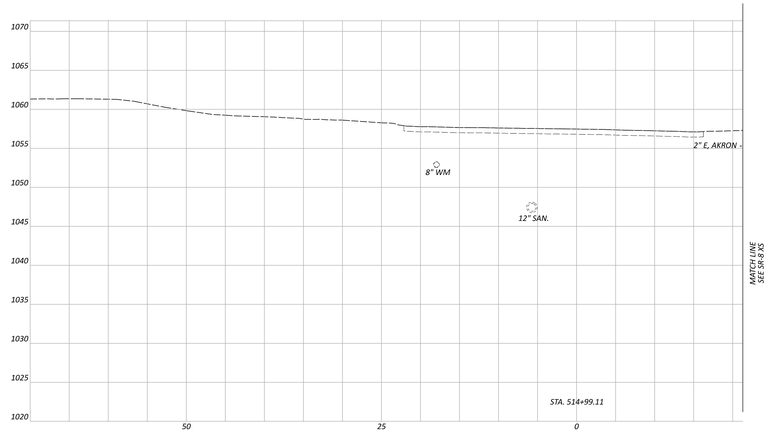
SUM-77/8-11.65/0.00

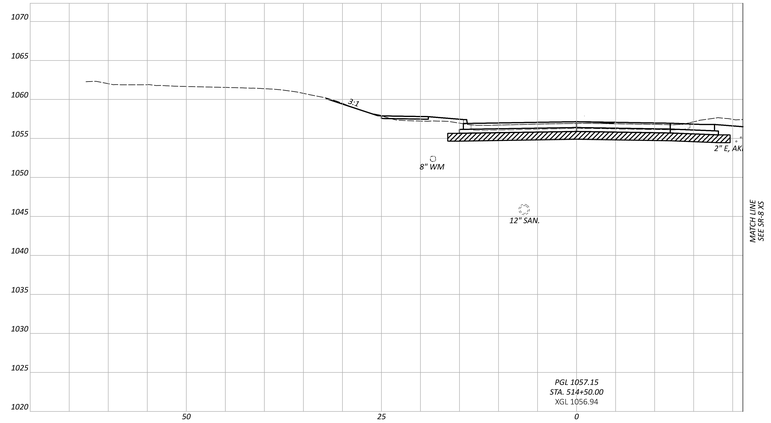
MODEL: BU_GOOK_ 512+00.00 [Sheet] PAYPEGE 66x34 in.] DATE: 9/15/2026 TIME: 12:17:17 PM USER: bwreed2218
FILE NAME: P:\Projects\Ohio\Akron\Goodkirk Rd Phase 1\Design\Roadway\Sheets\114865_GS00.dgn

LEGEND

PROPOSED ITEM 206 - CEMENT STABILIZED SUBGRADE-

PROPOSED ITEM 613 - LOW STRENGTH MORTAR BACKFILL-





FINAL TRACINGS
NOT FOR
CONSTRUCTION

CROSS SECTIONS - GOODKIRK ST.
STA. 514+50 TO STA. 514+99.11

SUM-77/8-11.65/0.00

MODEL: BLP_GOODK - 514+50.00 [Sheet] PAPERSIZE: 66x34 (in.) DATE: 9/15/2026 TIME: 3:27:28 PM USER: banas2218
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DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-7888
www.arcadis.com

DESIGNER
XXX

REVIEWER
XXX MM-DD-YY

PROJECT ID
114865

Sheet Totals				
Seeding	Cut	Fill	SHEET P.193	TOTAL 627

SOUTHBOUND ENTRANCE RAMP (TO SB IR-77/SR-8)

LEFT SHOULDER (Outside in direction of travel)			LEFT SHOULDER GRADE BREAK (Outside in direction of travel)			STATION	PROFILE GRADE	PAVEMENT					RIGHT SHOULDER GRADE BREAK (Inside in direction of travel)			RIGHT SHOULDER (Inside in direction of travel)			REMARKS
SHOULDER/ INSIDE ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE	SHOULDER GRADE BREAK ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE			CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	SHOULDER/GUTTER CROSS SLOPE	SHOULDER/GUTTER WIDTH	SHOULDER GRADE BREAK ELEVATION	SHOULDER/GUTTER CROSS SLOPE	SHOULDER/GUTTER WIDTH	SHOULDER EDGE OR TOE OF CURB ELEVATION	
1040.67	8.00	-4.00%				0+00.00	1040.99	1.60%	16.00	0.26		1041.24				GORE AREA SEE INTERCHANGE DETAILS			
1040.56	8.00	-4.00%				0+25.00	1040.88	1.60%	16.00	0.26		1041.13							
1040.54	8.00	-4.00%				0+50.00	1040.86	1.60%	16.00	0.26		1041.11							
1040.61	8.00	-4.00%				0+75.00	1040.93	1.60%	16.00	0.26		1041.19							
1040.78	8.00	-4.00%				1+00.00	1041.10	1.60%	16.00	0.26		1041.36							
1041.05	8.00	-4.00%				1+25.00	1041.37	1.60%	16.00	0.26		1041.63							
1041.41	8.00	-4.00%				1+50.00	1041.73	1.60%	16.00	0.26		1041.98							
1041.86	8.00	-4.00%				1+75.00	1042.18	1.60%	16.00	0.26		1042.44							
1042.41	8.00	-4.00%				2+00.00	1042.73	1.60%	16.00	0.26		1042.99				-4.00%	4.00	1042.83	
1043.06	8.00	-4.00%				2+25.00	1043.38	1.60%	16.00	0.26		1043.63				-4.00%	4.00	1043.47	
1043.80	8.00	-4.00%				2+50.00	1044.12	1.60%	16.00	0.26		1044.37				-4.00%	4.00	1044.21	
1044.63	8.00	-4.00%				2+75.00	1044.95	1.60%	16.00	0.26		1045.21				-4.00%	4.00	1045.05	
1045.56	8.00	-4.00%				3+00.00	1045.88	1.60%	16.00	0.26		1046.13				-4.00%	4.00	1045.97	
1046.58	8.00	-4.00%				3+25.00	1046.90	1.60%	16.00	0.26		1047.15				-4.00%	4.00	1046.99	
1047.61	8.00	-4.00%				3+50.00	1047.93	1.60%	16.00	0.26		1048.19				-4.00%	4.00	1048.03	
1048.65	8.00	-4.00%				3+75.00	1048.97	1.60%	16.00	0.26		1049.23				-4.00%	4.00	1049.07	
1049.69	8.00	-4.00%				4+00.00	1050.01	1.60%	16.00	0.26		1050.26				-4.00%	4.00	1050.10	
1050.73	8.00	-4.00%				4+25.00	1051.05	1.60%	16.00	0.26		1051.30				-4.00%	4.00	1051.14	
1051.17	8.00	-4.00%				4+35.58	1051.48	1.60%	16.00	0.26		1051.74				-4.00%	4.00	1051.58	NC
1051.68	8.00	-4.00%				4+48.00	1052.00	2.02%	16.00	0.32	185	1052.32				-4.00%	4.00	1052.16	
1051.76	7.92	-4.00%				4+50.00	1052.08	2.09%	16.00	0.33	185	1052.42				-4.00%	4.00	1052.26	
1052.77	6.92	-4.00%				4+75.00	1053.05	2.93%	16.00	0.47	185	1053.52				-4.00%	4.00	1053.36	
1053.62	6.00	-4.00%				4+98.04	1053.86	3.71%	16.00	0.59	185	1054.45				-3.29%	4.00	1054.32	PC
1053.68	6.00	-4.00%				5+00.00	1053.92	3.78%	16.00	0.60	185	1054.53				-3.22%	4.00	1054.40	
1054.42	6.00	-4.62%				5+25.00	1054.70	4.62%	16.00	0.74	185	1055.44				-2.38%	4.00	1055.35	
1054.93	6.00	-5.30%				5+45.10	1055.25	5.30%	16.00	0.85		1056.10				-1.70%	4.00	1056.03	FS
1055.06	6.00	-5.30%				5+50.00	1055.37	5.30%	16.00	0.85		1056.22				-1.70%	4.00	1056.15	
1055.64	6.00	-5.30%				5+75.00	1055.95	5.30%	16.00	0.85		1056.80				-1.70%	4.00	1056.73	
1055.86	6.00	-5.30%				5+86.17	1056.18	5.30%	16.00	0.85		1057.03				-1.70%	4.00	1056.96	FS
1056.14	6.00	-4.95%				6+00.00	1056.44	4.95%	16.00	0.79	246	1057.23				-2.05%	4.00	1057.15	
1056.56	6.00	-4.31%				6+25.00	1056.82	4.31%	16.00	0.69	246	1057.51				-2.69%	4.00	1057.40	
1056.87	6.00	-4.00%				6+50.00	1057.11	3.68%	16.00	0.59	246	1057.70				-3.32%	4.00	1057.57	
1056.92	6.00	-4.00%				6+55.01	1057.16	3.55%	16.00	0.57	246	1057.73				-3.45%	4.00	1057.59	PT
1057.06	6.00	-4.00%				6+75.00	1057.30	3.04%	16.00	0.49	246	1057.79				-3.96%	4.00	1057.63	
1057.16	6.00	-4.00%				7+00.00	1057.40	2.41%	16.00	0.39	246	1057.78				-4.00%	4.00	1057.62	
1057.15	6.00	-4.00%				7+25.00	1057.39	1.77%	16.00	0.28	246	1057.68				-4.00%	4.00	1057.52	
1057.13	6.00	-4.00%				7+32.00	1057.37	1.59%	16.00	0.26	246	1057.63				-4.00%	4.00	1057.47	
1057.05	6.00	-4.00%				7+50.00	1057.29	1.14%	16.00	0.18	246	1057.47				-4.00%	4.00	1057.31	
1056.85	6.00	-4.00%				7+75.00	1057.09	0.50%	16.00	0.08	246	1057.17				-4.00%	4.00	1057.01	
1056.63	6.00	-4.00%				7+94.78	1056.87	0.00%	16.00	0.00	246	1056.87				-4.00%	4.00	1056.71	FLAT
1056.56	6.00	-4.00%				8+00.00	1056.80	-0.13%	16.00	-0.02	246	1056.78				-4.00%	4.00	1056.62	
1056.23	6.00	-4.00%				8+25.00	1056.47	-0.77%	16.00	-0.12	246	1056.35				-4.00%	4.00	1056.19	
1055.91	6.00	-4.00%				8+50.00	1056.15	-1.40%	16.00	-0.22	246	1055.92				-4.00%	4.00	1055.76	
1055.80	6.00	-4.00%				8+58.00	1056.04	-1.61%	16.00	-0.26	246	1055.79				-4.00%	4.00	1055.63	
1055.59	6.00	-4.00%				8+75.00	1055.83	-2.04%	16.00	-0.33	246	1055.50				-4.00%	4.00	1055.34	
1055.44	6.00	-4.00%				8+89.69	1055.68	-2.41%	16.00	-0.39	246	1055.29				-4.00%	4.00	1055.13	PC
1055.35	6.00	-4.00%				9+00.00	1055.59	-2.67%	15.76	-0.42	250	1055.17				-4.00%	4.00	1055.01	
1055.23	6.00	-3.69%				9+25.00	1055.45	-3.31%	15.18	-0.50	259	1054.95				-4.00%	4.00	1054.79	
1055.22	6.00	-3.40%				9+36.72	1055.42	-3.60%	14.92	-0.54	264	1054.89				-4.00%	4.00	1054.73	FS
1055.21	6.00	-3.40%				9+50.00	1055.41	-3.60%	14.60	-0.53		1054.89				-4.00%	4.00	1054.73	
1055.26	6.00	-3.40%				9+75.00	1055.47	-3.60%	14.02	-0.50		1054.96				-4.00%	4.00	1054.80	
1055.42	6.00	-3.40%				10+00.00	1055.62	-3.60%	13.44	-0.48		1055.13				-4.00%	4.00	1054.97	
1055.66	6.00	-3.40%				10+25.00	1055.86	-3.60%	12.86	-0.46		1055.40				-4.00%	4.00	1055.24	
1055.81	6.00	-3.40%				10+33.41	1056.01	-3.60%	12.52	-0.45		1055.56				-4.00%	4.00	1055.40	FS
1055.88	6.00	-4.00%				10+50.00	1056.12	-3.06%	12.29	-0.38	155	1055.74				-4.00%	4.00	1055.58	
1056.01	6.00	-4.00%				10+62.30	1056.25	-2.41%	12.00	-0.29	158	1055.96				-4.00%	4.00	1055.80	PT

C20: Dc = 5°30'00" R = 1041.74'

C21: Dc = 6°00'00" R = 954.93'

FINAL NOT FOR CONSTRUCTION

SUPERELEVATION TABLE
SOUTHBOUND ENTRANCE RAMP (TO SB IR-77/SR-8)

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4366
www.arcadis.com

DESIGNER: PMM
REVIEWER: KDK 05-10-24
PROJECT ID: 114865
SHEET: P.194 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:29:24 PM USER: banass2218
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GE001.dgn

SOUTHBOUND EXIT RAMP (TO IR-76)

LEFT SHOULDER (Outside in direction of travel)					PAVEMENT					PAVEMENT					RIGHT SHOULDER (Inside in direction of travel)				
SHOULDER/ INSIDE ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE	STATION	PROFILE GRADE	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	SHOULDER/GUTTER CROSS SLOPE	SHOULDER/GUTTER WIDTH	SHOULDER EDGE OR TOE OF CURB ELEVATION	REMARKS	
1068.99	8.30	-3.97%	**101+50.00**	**1069.32**	3.59%	12.00	0.43		1069.75	3.59%	12.00	0.43		1070.18	-3.74%	4.00	1070.03	MATCH EXISTING	
1069.03	8.49	-4.11%	**101+75.00**	**1069.38**	4.11%	12.00	0.49	200	1069.88	4.11%	12.00	0.49	200	1070.37	-2.89%	4.00	1070.25		
1069.11	8.68	-4.63%	**102+00.00**	**1069.51**	4.63%	12.00	0.56	200	1070.06	4.63%	12.00	0.56	200	1070.62	-2.37%	4.00	1070.53		
1069.24	8.87	-5.15%	**102+25.00**	**1069.70**	5.15%	12.00	0.62	200	1070.32	5.15%	12.00	0.62	200	1070.94	-1.85%	4.00	1070.87		
1069.33	8.96	-5.40%	**102+36.88**	**1069.81**	5.40%	12.00	0.65	200	1070.46	5.40%	12.00	0.65	200	1071.11	-1.60%	4.00	1071.05		
1069.46	9.06	-5.40%	**102+50.00**	**1069.95**	5.40%	12.00	0.65		1070.60	5.40%	12.00	0.65		1071.25	-1.60%	4.00	1071.19		
1069.77	9.24	-5.40%	**102+75.00**	**1070.27**	5.40%	12.00	0.65		1070.92	5.40%	12.00	0.65		1071.57	-1.60%	4.00	1071.51		
1070.14	9.43	-5.40%	**103+00.00**	**1070.65**	5.40%	12.00	0.65		1071.30	5.40%	12.00	0.65		1071.95	-1.60%	4.00	1071.89		
1070.40	9.55	-5.40%	**103+15.22**	**1070.91**	5.40%	12.00	0.65		1071.56	5.40%	12.00	0.65		1072.21	-1.60%	4.00	1072.15	FS	
1070.59	9.62	-5.20%	**103+25.00**	**1071.09**	5.20%	12.00	0.62	200	1071.72	5.20%	12.00	0.62	200	1072.34	-1.80%	4.00	1072.27		
1071.14	9.81	-4.68%	**103+50.00**	**1071.60**	4.68%	12.00	0.56	200	1072.16	4.68%	12.00	0.56	200	1072.72	-2.32%	4.00	1072.63		
1071.73	10.00	-4.15%	**103+75.00**	**1072.14**	4.15%	12.00	0.50	200	1072.64	4.15%	12.00	0.50	200	1073.14	-2.85%	4.00	1073.03		
1072.28	10.00	-4.00%	**104+00.00**	**1072.68**	3.63%	12.00	0.44	200	1073.12	3.63%	12.00	0.44	200	1073.56	-3.37%	4.00	1073.43		
1072.30	10.00	-4.00%	**104+00.76**	**1072.70**	3.62%	12.00	0.43	200	1073.13	3.62%	12.00	0.43	200	1073.56	-3.38%	4.00	1073.43	PT	
1072.82	10.00	-4.00%	**104+25.00**	**1073.22**	3.11%	12.00	0.37	200	1073.59	3.11%	12.00	0.37	200	1073.96	-3.89%	4.00	1073.81		
1073.32	10.00	-4.00%	**104+50.00**	**1073.72**	2.59%	12.00	0.31	200	1074.03	2.59%	12.00	0.31	200	1074.34	-4.00%	4.00	1074.18		
1073.79	10.00	-4.00%	**104+75.00**	**1074.18**	2.07%	12.00	0.25	200	1074.43	2.07%	12.00	0.25	200	1074.68	-4.00%	4.00	1074.52		
1074.17	10.00	-4.00%	**104+97.62**	**1074.57**	1.60%	12.00	0.19	200	1074.76	1.60%	12.00	0.19	200	1074.95	-4.00%	4.00	1074.79	NC	
1074.21	10.00	-4.00%	**105+00.00**	**1074.61**	1.60%	12.00	0.19		1074.80	1.60%	12.00	0.19		1074.99	-4.00%	4.00	1074.83		
1074.59	10.00	-4.00%	**105+25.00**	**1074.99**	1.60%	12.00	0.19		1075.18	1.60%	12.00	0.19		1075.37	-4.00%	4.00	1075.21		
1074.93	10.00	-4.00%	**105+50.00**	**1075.33**	1.60%	12.00	0.19		1075.52	1.60%	12.00	0.19		1075.71	-4.00%	4.00	1075.55		
1075.23	10.00	-4.00%	**105+75.00**	**1075.63**	1.60%	12.00	0.19		1075.82	1.60%	12.00	0.19		1076.01	-4.00%	4.00	1075.85		
1075.36	10.00	-4.00%	**105+87.13**	**1075.76**	1.60%	12.00	0.19		1075.95	1.60%	12.00	0.19		1076.14	-4.00%	4.00	1075.98	NC	
1075.49	10.00	-4.00%	**105+99.61**	**1075.89**	1.86%	12.00	0.22	200	1076.11	1.86%	12.00	0.22	200	1076.33	-4.00%	4.00	1076.17	PC	
1075.49	10.00	-4.00%	**106+00.00**	**1075.89**	1.87%	12.00	0.22	200	1076.12	1.87%	12.00	0.22	200	1076.34	-4.00%	4.00	1076.18		
1075.55	10.00	-4.00%	**106+06.33**	**1075.95**	2.00%	12.00	0.24		1076.19	2.00%	12.00	0.24		1076.43	-4.00%	4.00	1076.27	FS	
1075.71	10.00	-4.00%	**106+25.00**	**1076.11**	2.00%	12.00	0.24		1076.35	2.00%	12.00	0.24		1076.59	-4.00%	4.00	1076.43		
1075.89	10.00	-4.00%	**106+50.00**	**1076.29**	2.00%	12.00	0.24		1076.53	2.00%	12.00	0.24		1076.77	-4.00%	4.00	1076.61		
1076.03	10.00	-4.00%	**106+75.00**	**1076.43**	2.00%	12.00	0.24		1076.67	2.00%	12.00	0.24		1076.91	-4.00%	4.00	1076.75		
1076.13	10.00	-4.00%	**107+00.00**	**1076.53**	2.00%	12.00	0.24		1076.77	2.00%	12.00	0.24		1077.01	-4.00%	4.00	1076.85		
1076.18	10.00	-4.00%	**107+25.00**	**1076.58**	2.00%	12.00	0.24		1076.82	2.00%	12.00	0.24		1077.06	-4.00%	4.00	1076.90		
1076.20	10.00	-4.00%	**107+50.00**	**1076.60**	2.00%	12.00	0.24		1076.84	2.00%	12.00	0.24		1077.08	-4.00%	4.00	1076.92		
1076.17	10.00	-4.00%	**107+75.00**	**1076.57**	2.00%	12.00	0.24		1076.81	2.00%	12.00	0.24		1077.05	-4.00%	4.00	1076.89		
1076.11	10.00	-4.00%	**108+00.00**	**1076.51**	2.00%	12.00	0.24		1076.75	2.00%	12.00	0.24		1076.99	-4.00%	4.00	1076.83		
1076.00	10.00	-4.00%	**108+25.00**	**1076.40**	2.00%	12.00	0.24		1076.64	2.00%	12.00	0.24		1076.88	-4.00%	4.00	1076.72		
1075.86	10.00	-4.00%	**108+50.00**	**1076.26**	2.00%	12.00	0.24		1076.50	2.00%	12.00	0.24		1076.74	-4.00%	4.00	1076.58		
1075.67	10.00	-4.00%	**108+75.00**	**1076.07**	2.00%	12.00	0.24		1076.31	2.00%	12.00	0.24		1076.55	-4.00%	4.00	1076.39		
1075.44	10.00	-4.00%	**109+00.00**	**1075.84**	2.00%	12.00	0.24		1076.08	2.00%	12.00	0.24		1076.32	-4.00%	4.00	1076.16		
1075.18	10.00	-4.00%	**109+25.00**	**1075.58**	2.00%	12.00	0.24		1075.82	2.00%	12.00	0.24		1076.06	-4.00%	4.00	1075.90		
1074.87	10.00	-4.00%	**109+50.00**	**1075.27**	2.00%	12.00	0.24		1075.51	2.00%	12.00	0.24		1075.75	-4.00%	4.00	1075.59		
1074.52	10.00	-4.00%	**109+75.00**	**1074.92**	2.00%	12.00	0.24		1075.16	2.00%	12.00	0.24		1075.40	-4.00%	4.00	1075.24		
1074.13	10.00	-4.00%	**110+00.00**	**1074.53**	2.00%	12.00	0.24		1074.77	2.00%	12.00	0.24		1075.01	-4.00%	4.00	1074.85		
1073.70	10.00	-4.00%	**110+25.00**	**1074.10**	2.00%	12.00	0.24		1074.34	2.00%	12.00	0.24		1074.58	-4.00%	4.00	1074.42		
1073.23	10.00	-4.00%	**110+50.00**	**1073.63**	2.00%	12.00	0.24		1073.87	2.00%	12.00	0.24		1074.11	-4.00%	4.00	1073.95		
1072.72	10.00	-4.00%	**110+75.00**	**1073.12**	2.00%	12.00	0.24		1073.36	2.00%	12.00	0.24		1073.60	-4.00%	4.00	1073.44		
1072.17	10.00	-4.00%	**111+00.00**	**1072.56**	2.00%	12.00	0.24		1072.80	2.00%	12.00	0.24		1073.04	-4.00%	4.00	1072.88		
1071.57	10.00	-4.00%	**111+25.00**	**1071.97**	2.00%	12.00	0.24		1072.21	2.00%	12.00	0.24		1072.45	-4.00%	4.00	1072.29		
1070.94	10.00	-4.00%	**111+50.00**	**1071.34**	2.00%	12.00	0.24		1071.58	2.00%	12.00	0.24		1071.82	-4.00%	4.00	1071.66		
1070.28	10.00	-4.00%	**111+75.00**	**1070.68**	2.00%	12.00	0.24		1070.92	2.00%	12.00	0.24		1071.16	-4.00%	4.00	1071.00		
1069.68	10.00	-4.00%	**111+97.68**	**1070.08**	2.00%	12.00	0.24		1070.32	2.00%	12.00	0.24		1070.56	-4.00%	4.00	1070.40	FS	
1069.62	10.00	-4.00%	**112+00.00**	**1070.02**	1.95%	12.00	0.23	200	1070.25	1.95%	12.00	0.23	200	1070.48	-4.00%	4.00	1070.32		
1069.50	10.00	-4.00%	**112+04.40**	**1069.90**	1.86%	12.00	0.22	200	1070.12	1.86%	12.00	0.22	200	1070.34	-4.00%	4.00	1070.18	PCC	
1069.17	10.00	-4.00%	**112+16.88**	**1069.57**	1.60%	12.00	0.19	200	1069.76	1.60%	12.00	0.19	200	1069.95	-4.00%	4.00	1069.79	NC	
1068.96	10.00	-4.00%	**112+25.00**	**1069.35**	1.60%	12.00	0.19		1069.55	1.60%	12.00	0.19		1069.74	-4.00%	4.00	1069.58		
1068.29	10.00	-4.00%	**112+50.00**	**1068.69**	1.60%	12.00	0.19		1068.89	1.60%	12.00	0.19		1069.08	-4.00%	4.00	1068.92		
1067.63	10.00	-4.00%	**112+75.00**	**1068.03**	1.60%	12.00	0.19		1068.22	1.60%	12.00	0.19		1068.41	-4.00%	4.00	1068.25		
1066.97	10.00	-4.00%	**113+00.00**	**1067.37**	1.60%	12.00	0.19		1067.56	1.60%	12.00	0.19		1067.75	-4.00%	4.00	1067.59		
1066.31	10.00	-4.00%	**113+25.00**	**1066.71**	1.60%	12.00	0.19		1066.90	1.60%	12.00	0.19		1067.09	-4.00%	4.00	1066.93		
1065.65	10.00	-4.00%	**113+50.00**	**1066.05**	1.60%	12.00	0.19		1066.24	1.60%	12.00	0.19		1066.43	-4.00%	4.00	1066.27		
1064.99	10.00	-4.00%	**113+75.00**	**1065.38**	1.60%	12.00	0.19		1065.58	1.60%	12.00	0.19		1065.77	-4.00%	4.00	1065.61		
1064.32	10.00	-4.00%	**114+00.00**	**1064.72**	1.60%	12.00	0.19		1064.92	1.60%	12.00	0.19		1065.11	-4.00%	4.00	1064.95		
1063.66	10.00	-4.00%	**114+25.00**	**1064.06**	1.60%	12.00	0.19		1064.25	1.60%	12.00	0.19		1064.44	-4.00%	4.00	1064.28		
1063.00	10.00	-4.00%	**114+50.00**	**1063.40**	1.60%	12.00	0.19		1063.59	1.60%	12.00	0.19		1063.78	-4.00%	4.00	1063.62		
1062.26	10.00	-4.00%	**114+75.00**	**1062.66**	1.60%	12.00	0.19		1062.85	1.60%	12.00	0.19		1063.04	-4.00%	4.00	1062.88		

Dc = 4°30'00" R = 1273.24' C10

Dc = 1°00'50.4" R = 5649.05' C11

Dc = 0°30'00" R = 11459.16" C13, NO SUPER

SUPERELEVATION TABLE
SOUTHBOUND EXIT RAMP (TO IR-76)

FINAL PLANS
NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER PMM
REVIEWER KDK 05-10-24
PROJECT ID 114865
SHEET P.195 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:29:36 PM USER: banass2218
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GE002.dgn

SOUTHBOUND EXIT RAMP (TO IR-76)

LEFT SHOULDER (Outside in direction of travel)					PAVEMENT					PAVEMENT					RIGHT SHOULDER (Inside in direction of travel)			
SHOULDER/ INSIDE ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE	STATION	PROFILE GRADE	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	SHOULDER/GUTTER CROSS SLOPE	SHOULDER/GUTTER WIDTH	SHOULDER EDGE OR TOE OF CURB ELEVATION	REMARKS
1041.77	10.00	-4.00%	**130+00.00**	**1042.17**	1.60%	12.00	0.19		1042.36	1.60%	12.00	0.19		1042.55	-4.00%	4.00	1042.39	
1041.58	10.00	-4.00%	**130+20.47**	**1041.98**	1.60%	12.00	0.19		1042.17	1.60%	12.00	0.19		1042.36	-4.00%	4.00	1042.20	
1041.54	10.00	-4.00%	**130+25.00**	**1041.94**	1.51%	12.00	0.18	200	1042.12	1.51%	12.00	0.18	200	1042.30	-4.00%	4.00	1042.14	
1041.30	10.00	-4.00%	**130+50.00**	**1041.70**	0.98%	12.00	0.12	200	1041.82	0.98%	12.00	0.12	200	1041.94	-4.00%	4.00	1041.78	
1041.07	10.00	-4.00%	**130+75.00**	**1041.47**	0.46%	12.00	0.06	200	1041.52	0.46%	12.00	0.06	200	1041.58	-4.00%	4.00	1041.42	
1040.86	10.00	-4.00%	**130+97.27**	**1041.26**	0.00%	12.00	0.00	200	1041.26	0.00%	12.00	0.00	200	1041.26	-4.00%	4.00	1041.10	FLAT
1040.83	10.00	-4.00%	**131+00.00**	**1041.23**	-0.06%	12.00	-0.01	200	1041.22	-0.06%	12.00	-0.01	200	1041.21	-4.00%	4.00	1041.05	
1040.60	10.00	-4.00%	**131+25.00**	**1041.00**	-0.58%	12.00	-0.07	200	1040.93	-0.58%	12.00	-0.07	200	1040.86	-4.00%	4.00	1040.70	
1040.36	10.00	-4.00%	**131+50.00**	**1040.76**	-1.10%	12.00	-0.13	200	1040.63	-1.10%	12.00	-0.13	200	1040.50	-4.00%	4.00	1040.34	
1040.13	10.00	-4.00%	**131+75.00**	**1040.53**	-1.62%	12.00	-0.19	200	1040.33	-1.62%	12.00	-0.19	200	1040.14	-4.00%	4.00	1039.98	
1039.89	10.00	-4.00%	**132+00.00**	**1040.29**	-2.14%	12.00	-0.26	200	1040.03	-2.14%	12.00	-0.26	200	1039.77	-4.00%	4.00	1039.61	
1039.66	10.00	-4.00%	**132+25.00**	**1040.06**	-2.66%	12.00	-0.32	200	1039.74	-2.66%	12.00	-0.32	200	1039.42	-4.00%	4.00	1039.26	
1039.42	10.00	-4.00%	**132+50.00**	**1039.82**	-3.18%	12.00	-0.38	200	1039.44	-3.18%	12.00	-0.38	200	1039.06	-4.00%	4.00	1038.90	
1039.26	10.00	-3.30%	**132+75.00**	**1039.59**	-3.70%	12.00	-0.44	200	1039.14	-3.70%	12.00	-0.44	200	1038.70	-4.00%	4.00	1038.54	
1039.20	10.00	-3.13%	**132+82.97**	**1039.51**	-3.87%	12.00	-0.46	200	1039.05	-3.87%	12.00	-0.46	200	1038.59	-4.00%	4.00	1038.43	PC
1039.07	10.00	-2.78%	**133+00.00**	**1039.35**	-4.22%	12.00	-0.51	200	1038.84	-4.22%	12.00	-0.51	200	1038.33	-4.00%	4.00	1038.17	
1038.89	10.00	-2.26%	**133+25.00**	**1039.12**	-4.74%	12.00	-0.57	200	1038.55	-4.74%	12.00	-0.57	200	1037.98	-4.74%	4.00	1037.79	
1038.73	10.00	-1.80%	**133+46.87**	**1038.91**	-5.20%	12.00	-0.62		1038.29	-5.20%	12.00	-0.62		1037.67	-5.20%	4.00	1037.46	
1038.70	10.00	-1.80%	**133+50.00**	**1038.88**	-5.20%	12.00	-0.62		1038.26	-5.20%	12.00	-0.62		1037.64	-5.20%	4.00	1037.43	
1038.47	10.00	-1.80%	**133+75.00**	**1038.65**	-5.20%	12.00	-0.62		1038.02	-5.20%	12.00	-0.62		1037.40	-5.20%	4.00	1037.19	
1038.23	10.00	-1.80%	**134+00.00**	**1038.41**	-5.20%	12.00	-0.62		1037.79	-5.20%	12.00	-0.62		1037.17	-5.20%	4.00	1036.96	
1038.00	10.00	-1.80%	**134+25.00**	**1038.18**	-5.20%	12.00	-0.62		1037.55	-5.20%	12.00	-0.62		1036.93	-5.20%	4.00	1036.72	
1037.88	10.00	-1.80%	**134+36.98**	**1038.06**	-5.20%	12.00	-0.62		1037.44	-5.20%	12.00	-0.62		1036.82	-5.20%	4.00	1036.61	FS
1037.73	10.00	-2.07%	**134+50.00**	**1037.94**	-4.93%	12.00	-0.59	200	1037.35	-4.93%	12.00	-0.59	200	1036.76	-4.93%	4.00	1036.56	
1037.50	10.00	-2.59%	**134+75.00**	**1037.77**	-4.41%	12.00	-0.53	200	1037.23	-4.41%	12.00	-0.53	200	1036.70	-4.41%	4.00	1036.52	
1037.27	10.00	-3.11%	**135+00.00**	**1037.59**	-3.89%	12.00	-0.47	200	1037.12	-3.89%	12.00	-0.47	200	1036.65	-4.00%	4.00	1036.49	
1037.04	10.00	-3.63%	**135+25.00**	**1037.41**	-3.37%	12.00	-0.40	200	1037.00	-3.37%	12.00	-0.40	200	1036.60	-4.00%	4.00	1036.44	
1036.83	10.00	-4.00%	**135+50.00**	**1037.23**	-2.85%	12.00	-0.34	200	1036.89	-2.85%	12.00	-0.34	200	1036.55	-4.00%	4.00	1036.39	
1036.81	10.00	-4.00%	**135+53.29**	**1037.21**	-2.78%	12.00	-0.33	200	1036.87	-2.78%	12.00	-0.33	200	1036.54	-4.00%	4.00	1036.38	PT
1036.65	10.00	-4.00%	**135+75.00**	**1037.05**	-2.33%	12.00	-0.28	200	1036.77	-2.33%	12.00	-0.28	200	1036.49	-4.00%	4.00	1036.33	
1036.48	10.00	-4.00%	**136+00.00**	**1036.88**	-1.81%	12.00	-0.22	200	1036.66	-1.81%	12.00	-0.22	200	1036.44	-4.00%	4.00	1036.28	
1036.30	10.00	-4.00%	**136+25.00**	**1036.70**	-1.29%	12.00	-0.15	200	1036.54	-1.29%	12.00	-0.15	200	1036.39	-4.00%	4.00	1036.23	
1036.12	10.00	-4.00%	**136+50.00**	**1036.52**	-0.76%	12.00	-0.09	200	1036.43	-0.76%	12.00	-0.09	200	1036.34	-4.00%	4.00	1036.18	
1035.94	10.00	-4.00%	**136+75.00**	**1036.34**	-0.24%	12.00	-0.03	200	1036.31	-0.24%	12.00	-0.03	200	1036.28	-4.00%	4.00	1036.12	
1035.86	10.00	-4.00%	**136+86.58**	**1036.26**	0.00%	12.00	0.00	200	1036.26	0.00%	12.00	0.00	200	1036.26	-4.00%	4.00	1036.10	FLAT
1035.77	10.00	-4.00%	**137+00.00**	**1036.16**	0.28%	12.00	0.03	200	1036.20	0.28%	12.00	0.03	200	1036.23	-4.00%	4.00	1036.07	
1035.59	10.00	-4.00%	**137+25.00**	**1035.99**	0.80%	12.00	0.10	200	1036.08	0.80%	12.00	0.10	200	1036.18	-4.00%	4.00	1036.02	
1035.41	10.00	-4.00%	**137+50.00**	**1035.81**	1.32%	12.00	0.16	200	1035.97	1.32%	12.00	0.16	200	1036.13	-4.00%	4.00	1035.97	
1035.32	10.00	-4.00%	**137+63.40**	**1035.71**	1.60%	12.00	0.19	200	1035.91	1.60%	12.00	0.19	200	1036.10	-4.00%	4.00	1035.94	CR
1035.23	10.00	-4.00%	**137+75.00**	**1035.63**	1.84%	12.00	0.22	200	1035.85	1.84%	12.00	0.22	200	1036.07	-4.00%	4.00	1035.91	
1035.23	10.00	-4.00%	**137+75.88**	**1035.63**	1.86%	12.00	0.22	200	1035.85	1.86%	12.00	0.22	200	1036.07	-4.00%	4.00	1035.91	PC
1035.18	10.00	-4.00%	**137+82.60**	**1035.58**	2.00%	12.00	0.24		1035.82	2.00%	12.00	0.24		1036.06	-4.00%	4.00	1035.90	FS
1035.06	10.00	-4.00%	**138+00.00**	**1035.45**	2.00%	12.00	0.24		1035.70	2.00%	12.00	0.24		1035.94	-4.00%	4.00	1035.78	
1034.88	10.00	-4.00%	**138+25.00**	**1035.27**	2.00%	12.00	0.24		1035.52	2.00%	12.00	0.24		1035.76	-4.00%	4.00	1035.60	
1034.70	10.00	-4.00%	**138+50.00**	**1035.10**	2.00%	12.00	0.24		1035.34	2.00%	12.00	0.24		1035.58	-4.00%	4.00	1035.42	
1034.62	10.00	-4.00%	**138+75.00**	**1035.02**	2.00%	12.00	0.24		1035.26	2.00%	12.00	0.24		1035.50	-4.00%	4.00	1035.34	
1034.54	10.00	-4.00%	**139+00.00**	**1034.94**	2.00%	12.00	0.24		1035.18	2.00%	12.00	0.24		1035.42	-4.00%	4.00	1035.26	
			(CONTINUE FULL SUPERELEVATION)															
1033.64	10.00	-4.00%	**141+75.00**	**1034.03**	2.00%	12.00	0.24		1034.28	2.00%	12.00	0.24		1034.52	-4.00%	4.00	1034.36	
1033.56	10.00	-4.00%	**141+94.91**	**1033.96**	2.00%	12.00	0.24		1034.20	2.00%	12.00	0.24		1034.44	-4.00%	4.00	1034.28	
1033.54	10.00	-4.00%	**142+00.00**	**1033.94**	2.00%	12.00	0.24		1034.18	2.00%	11.76	0.24		1034.42	-4.00%	4.00	1034.26	
1033.46	10.00	-4.00%	**142+25.00**	**1033.86**	2.00%	12.00	0.24		1034.10	2.00%	10.58	0.21		1034.31	-4.00%	4.00	1034.15	
1033.37	10.00	-4.00%	**142+50.00**	**1033.77**	2.00%	12.00	0.24		1034.01	2.00%	9.41	0.19		1034.20	-4.00%	4.00	1034.04	
1033.38	10.00	-4.00%	**142+75.00**	**1033.74**	2.00%	12.00	0.24		1034.02	2.00%	8.23	0.16		1034.18	-4.00%	4.00	1034.02	
1033.38	10.00	-4.00%	**143+00.00**	**1033.78**	2.00%	12.00	0.24		1034.02	2.00%	7.06	0.14		1034.16	-4.00%	4.00	1034.00	
1033.47	10.00	-4.00%	**143+25.00**	**1033.87**	2.00%	12.00	0.24		1034.11	2.00%	5.88	0.12		1034.23	-4.00%	4.00	1034.07	
1033.56	10.00	-4.00%	**143+50.00**	**1033.96**	2.00%	12.00	0.24		1034.20	2.00%	4.70	0.09		1034.29	-4.00%	4.00	1034.13	
1033.74	10.00	-4.00%	**143+75.00**	**1034.14**	2.00%	12.00	0.24		1034.38	2.00%	3.53	0.07		1034.45	-4.00%	4.00	1034.29	
1033.91	10.00	-4.00%	**144+00.00**	**1034.31**	2.00%	12.00	0.24		1034.55	2.00%	2.35	0.05		1034.60	-4.00%	4.00	1034.44	
1034.18	10.00	-4.00%	**144+25.00**	**1034.58**	2.00%	12.00	0.24		1034.82	2.00%	1.18	0.02		1034.84	-4.00%	4.00	1034.68	
1034.44	10.00	-4.00%	**144+50.00**	**1034.84**	2.00%	11.80	0.24		1035.08						-4.00%	4.00	1034.92	
1034.79	10.00	-4.00%	**144+75.00**	**1035.19**	2.00%	11.60	0.23		1035.42						-4.00%	4.00	1035.26	
1035.14	10.00	-4.00%	**145+00.00**	**1035.54**	2.00%	11.40	0.23		1035.77						-4.00%	4.00	1035.61	
1035.59	10.00	-4.00%	**145+25.00**	**1035.99**	2.00%	11.20	0.22		1036.22						-4.00%	4.00	1036.06	
1036.00	10.00	-4.00%	**145+47.45**	**1036.40**	2.00%	11.02	0.22		1036.62						-4.00%	4.00	1036.46	FS
1036.04	10.00	-4.00%	**145+50.00**	**1036.45**	1.88%	11.00	0.21	200	1036.65						-4.00%	4.00	1036.49	
1036.05	10.00	-4.00%	**145+50.31**	**1036.45**	1.87%	11.00	0.21	200	1036.66						-4.00%	4.00	1036.50	PT

C17: Dc = 4°00'00" R = 1432.39'

C18: Dc = 0°40'00" R = 8594.37'

SUPERELEVATION TABLE
SOUTHBOUND EXIT RAMP (TO IR-76)

SUM-077/008-11.65/00.00

FINAL NOT FOR CONSTRUCTION
CONTRACTOR

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:29:51 PM USER: banass2218
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GE003.dgn

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1666
www.arcadis.com

DESIGNER: PMM
REVIEWER: KDK 05-10-24
PROJECT ID: 114865
SHEET: P.196 TOTAL: 627

NORTHBOUND LANES IR-77/SR-8

STATION	LEFT SHOULDER			PROFILE GRADE	PAVEMENT					PAVEMENT					PAVEMENT					RIGHT SHOULDER			REMARKS
	SHOULDER / EDGE OF BARRIER ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE		CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE/CROWN ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	SHOULDER CROSS SLOPE	SHOULDER WIDTH	SHOULDER OR TOE OF CURB-BARRIER ELEVATION	
4327+00.00	1069.75	5.00	-6.00%	**1070.05**	1.60%	11.00	0.18		1070.23	1.60%	11.00	0.18		1070.41	-2.00%	11.00	-0.22		1070.19	-6.00%	4.5	1069.92	
4327+50.00	1070.84	5.00	-6.00%	**1071.14**	1.60%	11.00	0.18		1071.31	1.60%	11.00	0.18		1071.49	-2.00%	11.00	-0.22		1071.27	-6.00%	4.5	1071.00	
4328+00.00	1071.92	5.00	-6.00%	**1072.22**	1.60%	11.00	0.18		1072.40	1.60%	11.00	0.18		1072.58	-2.00%	11.00	-0.22		1072.36	-6.00%	4.5	1072.09	
4328+50.00	1073.01	5.00	-6.00%	**1073.31**	1.60%	11.00	0.18		1073.48	1.60%	11.00	0.18		1073.66	-2.00%	11.00	-0.22		1073.44	-6.00%	4.5	1073.17	
4329+00.00	1074.09	5.00	-6.00%	**1074.39**	1.60%	11.00	0.18		1074.57	1.60%	11.00	0.18		1074.75	-2.00%	11.00	-0.22		1074.53	-6.00%	4.5	1074.26	
4329+45.21	1075.01	5.00	-6.00%	**1075.31**	1.60%	11.00	0.18		1075.49	1.60%	11.00	0.18		1075.67	-2.00%	11.00	-0.22		1075.45	-6.00%	4.5	1075.18	
4329+50.00	1075.10	5.00	-6.00%	**1075.40**	1.60%	11.00	0.18		1075.58	1.60%	11.00	0.18		1075.76	-2.00%	11.00	-0.22		1075.54	-6.00%	4.5	1075.27	
4329+56.41	1075.22	5.00	-6.00%	**1075.52**	1.60%	11.00	0.18		1075.69	1.60%	11.00	0.18		1075.87	-2.00%	11.00	-0.22		1075.65	-6.00%	4.5	1075.38	BEGIN GORE
4329+57.78	1075.24	5.00	-5.97%	**1075.54**	1.60%	11.00	0.18		1075.72	1.60%	11.00	0.18		1075.90	-2.00%	11.00	-0.22		1075.68				
4329+75.00	1075.56	5.00	-5.63%	**1075.84**	1.60%	11.00	0.18		1076.02	1.60%	11.00	0.18		1076.20	-1.80%	11.00	-0.20	803	1076.00				
4329+93.10	1075.88	5.00	-5.27%	**1076.14**	1.60%	11.00	0.18		1076.31	1.60%	11.00	0.18		1076.49	-1.60%	11.00	-0.18	803	1076.31				NC
4330+00.00	1075.99	5.00	-5.13%	**1076.25**	1.60%	11.00	0.18		1076.42	1.60%	11.00	0.18		1076.60	-1.22%	11.00	-0.13	164	1076.47	GORE AREA			
4330+21.99	1076.33	5.00	-4.69%	**1076.56**	1.60%	11.00	0.18		1076.74	1.60%	11.00	0.18		1076.92	0.00%	11.00	0.00	164	1076.92				HL
4330+25.00	1076.38	5.00	-4.63%	**1076.61**	1.60%	11.00	0.18		1076.78	1.60%	11.00	0.18		1076.96	0.12%	11.00	0.01	222	1076.97	SEE			
4330+50.00	1076.72	5.00	-4.13%	**1076.93**	1.60%	11.00	0.18		1077.10	1.60%	11.00	0.18		1077.28	1.15%	11.00	0.13	222	1077.41	DETAILS			
4330+61.06	1076.86	5.00	-3.91%	**1077.06**	1.60%	11.00	0.18		1077.23	1.60%	11.00	0.18		1077.41	1.60%	11.00	0.18	222	1077.59				CR
4330+75.00	1077.01	5.00	-4.00%	**1077.21**	1.79%	11.00	0.20	222	1077.40	1.79%	11.00	0.20	222	1077.60	1.79%	11.00	0.20	222	1077.80				
325+00.64	1077.00	5.00	-4.00%	**1077.20**	1.80%	11.00	0.20	222	1077.40	1.80%	11.00	0.20	222	1077.60	1.80%	11.00	0.20	222	1077.80				PC STA. / STA. EQUATION
325+25.00	1077.23	5.00	-4.00%	**1077.43**	2.13%	11.00	0.23	222	1077.66	2.13%	11.00	0.23	222	1077.89	2.13%	11.00	0.23	222	1078.12				
325+50.00	1077.42	5.00	-4.00%	**1077.62**	2.47%	11.00	0.27	222	1077.89	2.47%	11.00	0.27	222	1078.16	2.47%	11.00	0.27	222	1078.43				FS
325+66.57	1077.53	5.00	-4.00%	**1077.73**	2.70%	11.00	0.30		1078.02	2.70%	11.00	0.30		1078.32	2.70%	11.00	0.30		1078.62				
325+75.00	1077.57	5.00	-4.00%	**1077.77**	2.70%	11.00	0.30		1078.07	2.70%	11.00	0.30		1078.37	2.70%	11.00	0.30		1078.67				
326+00.00	1077.72	5.00	-4.00%	**1077.92**	2.70%	11.00	0.30		1078.21	2.70%	11.00	0.30		1078.51	2.70%	11.00	0.30		1078.81				
326+01.11	1077.72	5.00	-4.00%	**1077.92**	2.70%	11.00	0.30		1078.22	2.70%	11.00	0.30		1078.51	2.70%	11.00	0.30		1078.81				END GORE / BEGIN 5-LANE

FOR CONTINUATION - NORTHBOUND 5-LANE SECTION, SEE SHEET P.198

Dc = 1°00'00"
R = 5729.58', C14

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUPERELEVATION TABLE
NORTHBOUND LANES IR-77/SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 05-10-24
PROJECT ID 114865
SHEET P.197 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:30:05 PM USER: banass2218
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Roadway\Sheets\114865_GE004.dgn

NORTHBOUND LANES IR-77/SR-8

STATION	LEFT SHOULDER			PROFILE GRADE	PAVEMENT (2 LANES)					PAVEMENT					PAVEMENT					PAVEMENT					RIGHT SHOULDER			REMARKS
	SHOULDER/ INSIDE ELEVATION	SHOULDER WIDTH	SHOULDER CROSS SLOPE		CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE/CROWN ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	CROSS SLOPE	WIDTH	ELEVATION CORRECTION	TRANSITION RATE	LANE ELEVATION	SHOULDER CROSS SLOPE	SHOULDER WIDTH	SHOULDER OUTSIDE ELEVATION	
326+01.11	1077.69	5.00	-4.00%	**1077.89**	2.70%	22.00	0.59		1078.48	2.70%	11.00	0.30		1078.78	-0.57%	11.00	-0.06		1078.72	-0.57%	11.00	-0.06		1078.66	-6.00%	4.5	1078.39	FS-I.R. 77/SR 8 LANES
326+25.00	1077.76	5.00	-4.00%	**1077.96**	2.70%	22.00	0.59		1078.55	2.70%	11.00	0.30		1078.85	-0.08%	11.00	-0.01	222	1078.84	-0.08%	11.00	-0.01	222	1078.83	-6.00%	4.5	1078.56	
326+50.00	1077.79	5.00	-4.00%	**1077.99**	2.70%	22.00	0.59		1078.58	2.70%	11.00	0.30		1078.88	0.43%	11.00	0.05	222	1078.93	0.43%	11.00	0.05	222	1078.98	-6.00%	4.5	1078.71	
326+95.00	1077.75	5.00	-4.00%	**1077.95**	2.70%	22.00	0.59		1078.54	2.70%	11.00	0.30		1078.84	1.35%	11.00	0.15	222	1078.99	1.35%	11.00	0.15	222	1079.14	-6.00%	4.5	1078.87	
327+00.00	1077.71	5.00	-4.40%	**1077.93**	2.70%	22.00	0.59		1078.53	2.70%	11.00	0.30		1078.83	1.45%	11.00	0.16	222	1078.99	1.45%	11.00	0.16	222	1079.15	-6.00%	4.5	1078.88	
327+20.00	1077.57	5.00	-6.00%	**1077.86**	2.70%	22.00	0.59		1078.46	2.70%	11.00	0.30		1078.76	1.86%	11.00	0.21	222	1078.97	1.86%	11.00	0.21	222	1079.18	-6.00%	4.5	1078.91	
327+50.00	1077.42	5.00	-6.00%	**1077.71**	2.70%	22.00	0.59		1078.31	2.70%	11.00	0.30		1078.61	2.48%	11.00	0.27	222	1078.88	2.48%	11.00	0.27	222	1079.15	-6.00%	4.5	1078.88	
327+60.82	1077.35	5.00	-6.00%	**1077.65**	2.70%	22.00	0.59		1078.24	2.70%	11.00	0.30		1078.54	2.70%	11.00	0.30	222	1078.84	2.70%	11.00	0.30	222	1079.14	-6.00%	4.5	1078.87	FS-ALL LANES
327+75.00	1077.25	5.00	-6.00%	**1077.55**	2.70%	22.00	0.59		1078.14	2.70%	11.00	0.30		1078.44	2.70%	11.00	0.30		1078.74	2.70%	11.00	0.30		1079.04	-6.00%	4.5	1078.77	
328+00.00	1077.04	5.00	-6.00%	**1077.34**	2.70%	22.00	0.59		1077.93	2.70%	11.00	0.30		1078.23	2.70%	11.00	0.30		1078.53	2.70%	11.00	0.30		1078.83	-6.00%	4.5	1078.56	
328+25.00	1076.79	5.00	-6.00%	**1077.09**	2.70%	22.00	0.59		1077.68	2.70%	11.00	0.30		1077.98	2.70%	11.00	0.30		1078.28	2.70%	11.00	0.30		1078.58	-6.00%	4.5	1078.31	
328+50.00	1076.50	5.00	-6.00%	**1076.80**	2.70%	22.00	0.59		1077.39	2.70%	11.00	0.30		1077.69	2.70%	11.00	0.30		1077.99	2.70%	11.00	0.30		1078.29	-6.00%	4.5	1078.02	
328+75.00	1076.17	5.00	-6.00%	**1076.47**	2.70%	22.00	0.59		1077.06	2.70%	11.00	0.30		1077.36	2.70%	11.00	0.30		1077.66	2.70%	11.00	0.30		1077.96	-6.00%	4.5	1077.69	
329+00.00	1075.80	5.00	-6.00%	**1076.10**	2.70%	22.00	0.59		1076.69	2.70%	11.00	0.30		1076.99	2.70%	11.00	0.30		1077.29	2.70%	11.00	0.30		1077.59	-6.00%	4.5	1077.32	
329+25.00	1075.38	5.00	-6.00%	**1075.68**	2.70%	22.00	0.59		1076.28	2.70%	11.00	0.30		1076.58	2.70%	11.00	0.30		1076.88	2.70%	11.00	0.30		1077.18	-6.00%	4.5	1076.91	
329+50.00	1074.93	5.00	-6.00%	**1075.23**	2.70%	22.00	0.59		1075.83	2.70%	11.00	0.30		1076.13	2.70%	11.00	0.30		1076.43	2.70%	11.00	0.30		1076.73	-6.00%	4.5	1076.46	
329+75.00	1074.44	5.00	-6.00%	**1074.74**	2.70%	22.00	0.59		1075.34	2.70%	11.00	0.30		1075.64	2.70%	11.00	0.30		1075.94	2.70%	11.00	0.30		1076.24	-6.00%	4.5	1075.97	
330+00.00	1073.91	5.00	-6.00%	**1074.21**	2.70%	22.00	0.59		1074.80	2.70%	11.00	0.30		1075.10	2.70%	11.00	0.30		1075.40	2.70%	11.00	0.30		1075.70	-6.00%	4.5	1075.43	
330+25.00	1073.34	5.00	-6.00%	**1073.64**	2.70%	22.00	0.59		1074.23	2.70%	11.00	0.30		1074.53	2.70%	11.00	0.30		1074.83	2.70%	11.00	0.30		1075.13	-6.00%	4.5	1074.86	
330+50.00	1072.73	5.00	-6.00%	**1073.03**	2.70%	22.00	0.59		1073.62	2.70%	11.00	0.30		1073.92	2.70%	11.00	0.30		1074.22	2.70%	11.00	0.30		1074.52	-6.00%	4.5	1074.25	
330+68.40	1072.25	5.00	-6.00%	**1072.55**	2.70%	22.00	0.59		1073.14	2.70%	11.00	0.30		1073.44	2.70%	11.00	0.30		1073.74	2.70%	11.00	0.30		1074.04	-6.00%	4.5	1073.77	FS-ALL LANES
330+75.00	1072.08	5.00	-6.00%	**1072.37**	2.65%	22.00	0.58	222	1072.96	2.65%	11.00	0.29		1073.25	2.65%	11.00	0.29		1073.54	2.65%	11.00	0.29	222	1073.83	-6.00%	4.5	1073.56	
331+00.00	1071.38	5.00	-6.00%	**1071.68**	2.44%	22.00	0.54	222	1072.22	2.44%	11.00	0.27		1072.49	2.44%	11.00	0.27		1072.76	2.44%	11.00	0.27	222	1073.03	-6.00%	4.5	1072.76	
331+25.00	1070.65	5.00	-6.00%	**1070.95**	2.24%	22.00	0.49	222	1071.44	2.24%	11.00	0.25		1071.69	2.24%	11.00	0.25		1071.94	2.24%	11.00	0.25	222	1072.19	-6.00%	4.5	1071.92	
331+50.00	1069.91	5.00	-6.00%	**1070.21**	2.03%	22.00	0.45	222	1070.66	2.03%	11.00	0.22		1070.88	2.03%	11.00	0.22		1071.10	2.03%	11.00	0.22	222	1071.32	-6.00%	4.5	1071.05	
331+75.00	1069.17	5.00	-6.00%	**1069.47**	1.83%	22.00	0.40	222	1069.87	1.83%	11.00	0.20		1070.07	1.83%	11.00	0.20		1070.27	1.83%	11.00	0.20	222	1070.47	-6.00%	4.5	1070.20	
331+78.29	1069.08	5.00	-6.00%	**1069.37**	1.80%	22.00	0.40	222	1069.77	1.80%	11.00	0.20		1069.97	1.80%	11.00	0.20		1070.17	1.80%	11.00	0.20	222	1070.37	-6.00%	4.5	1070.10	PT STA.
332+00.00	1068.43	5.00	-6.00%	**1068.73**	1.62%	22.00	0.36	222	1069.09	1.62%	11.00	0.18		1069.27	1.62%	11.00	0.18		1069.45	1.62%	11.00	0.18	222	1069.63	-6.00%	4.5	1069.36	
332+02.71	1068.35	5.00	-6.00%	**1068.65**	1.60%	22.00	0.35		1069.00	1.60%	11.00	0.18		1069.18	1.60%	11.00	0.18		1069.36	1.60%	11.00	0.18	222	1069.54	-6.00%	4.5	1069.27	CR
332+25.00	1067.69	5.00	-6.00%	**1067.99**	1.60%	22.00	0.35		1068.34	1.30%	11.00	0.14		1068.48	1.30%	11.00	0.14		1068.62	1.30%	11.00	0.14	222	1068.76	-6.00%	4.5	1068.49	
332+50.00	1066.95	5.00	-6.00%	**1067.25**	1.60%	22.00	0.35		1067.60	0.95%	11.00	0.10		1067.70	0.95%	11.00	0.10		1067.80	0.95%	11.00	0.10	222	1067.90	-6.00%	4.5	1067.63	
332+75.00	1066.21	5.00	-6.00%	**1066.51**	1.60%	22.00	0.35		1066.86	0.61%	11.00	0.07		1066.93	0.61%	11.00	0.07		1067.00	0.61%	11.00	0.07	222	1067.07	-6.00%	4.5	1066.80	
333+00.00	1065.47	5.00	-6.00%	**1065.77**	1.60%	22.00	0.35		1066.12	0.27%	11.00	0.03		1066.15	0.27%	11.00	0.03		1066.18	0.27%	11.00	0.03	222	1066.21	-6.00%	4.5	1065.94	
333+19.93	1064.88	5.00	-6.00%	**1065.18**	1.60%	22.00	0.35		1065.53	0.00%	11.00	0.00		1065.53	0.00%	11.00	0.00		1065.53	0.00%	11.00	0.00	222	1065.53	-6.00%	4.5	1065.26	HL
333+25.00	1064.73	5.00	-6.00%	**1065.03**	1.60%	22.00	0.35		1065.38	-0.07%	11.00	-0.01		1065.37	-0.07%	11.00	-0.01		1065.36	-0.07%	11.00	-0.01	222	1065.35	-6.00%	4.5	1065.08	
333+50.00	1063.99	5.00	-6.00%	**1064.29**	1.60%	22.00	0.35		1064.64	-0.41%	11.00	-0.05		1064.59	-0.41%	11.00	-0.05		1064.54	-0.41%	11.00	-0.05	222	1064.49	-6.00%	4.5	1064.22	
333+75.00	1063.25	5.00	-6.00%	**1063.55**	1.60%	22.00	0.35		1063.90	-0.75%	11.00	-0.08		1063.82	-0.75%	11.00	-0.08		1063.74	-0.75%	11.00	-0.08	222	1063.66	-6.00%	4.5	1063.39	
334+00.00	1062.51	5.00	-6.00%	**1062.81**	1.60%	22.00	0.35		1063.16	-1.09%	11.00	-0.12		1063.04	-1.09%	11.00	-0.12		1062.92	-1.09%	11.00	-0.12	222	1062.80	-6.00%	4.5	1062.53	
334+25.00	1061.77	5.00	-6.00%	**1062.07**	1.60%	22.00	0.35		1062.43	-1.43%	11.00	-0.16		1062.27	-1.43%	11.00	-0.16		1062.11	-1.43%	11.00	-0.16	222	1061.95	-6.00%	4.5	1061.68	
334+37.15	1061.41	5.00	-6.00%	**1061.71**	1.60%	22.00	0.35		1062.07	-1.60%	11.00	-0.18		1061.89	-1.60%	11.00	-0.18		1061.71	-1.60%	11.00	-0.18	222	1061.53	-6.00%	4.5	1061.26	NC
334+46.92	1061.12	5.00	-6.00%	**1061.42**	1.60%	22.00	0.35		1061.78	-1.60%	11.00	-0.18		1061.60	-1.60%	11.00	-0.18		1061.42	-2.00%	11.00	-0.22	222	1061.20	-6.00%	4.5	1060.93	
334+50.00	1061.03	5.00	-6.00%	**1061.33**	1.60%	22.00	0.35		1061.69	-1.60%	11.00	-0.18		1061.51	-1.60%	11.00	-0.18		1061.33	-2.00%	11.00	-0.22		1061.11	-6.00%	4.5	1060.84	
334+75.00	1060.29	5.00	-6.00%	**1060.59**	1.60%	22.00	0.35		1060.95	-1.60%	11.00	-0.18		1060.77	-1.60%	11.00	-0.18		1060.59	-2.00%	11.00	-0.22		1060.37	-6.00%	4.5	1060.10	
335+00.00	1059.55	5.00	-6.00%	**1059.85**	1.60%	22.00	0.35		1060.21	-1.60%	11.00	-0.18		1060.03	-1.60%	11.00	-0.18		1059.85	-2.00%	11.00	-0.22		1059.63	-6.00%	4.5	1059.36	
335+25.00	1058.81	5.00	-6.00%	**1059.11**	1.60%	22.00	0.35		1059.47	-1.60%	11.00	-0.18		1059.29	-1.60%	11.00	-0.18		1059.11	-2.00%	11.00	-0.22		1058.89	-6.00%	4.5	1058.62	
335+50.00	1058.07	5.00	-6.00%	**1058.37**	1.60%	22.00	0.35		1058.73	-1.60%	11.00	-0.18		1058.55	-1.60%	11.00	-0.18		1058.37	-2.00%	11.00	-0.22		1058.15	-6.00%	4.5	1057.88	
335+75.00	1057.33	5.00	-6.00%	**1057.63**	1.60%	22.00	0.35		1057.99	-1.60%	11.00	-0.18		1057.81	-1.60%	11.00	-0.18		1057.63	-2.00%	11.00	-0.22		1057.41	-6.00%	4.5	1057.14	
336+25.00	1055.85	5.15	-6.00%	**1056.15**	1.60%	22.00	0.35		1056.51	-1.60%	11.00	-0.18		1056.33	-1.60%	11.00	-0.18		1056.15	-2.00%	11.00	-0.22		1055.93	-6.00%	4.5	1055.66	
336+75.00	1054.37	5.15	-6.00%	**1054.67**	1.60%	22.00	0.35		1055.03	-1.60%	11.00	-0.18		1054.85	-1.60%	11.00	-0.18		1054.67	-2.00%	11.00	-0.22		1054.45	-6.00%	4.5	1054.18	
337+25.00	1052.91	5.15	-6.00%	**1053.22**	1.60%	22.00	0.35		1053.57	-1.60%	11.00	-0.18		1053.39	-1.60%	11.00	-0.18		1053.21	-2.00%	11.00	-0.22		1052.99	-6.00%	4.5	1052.72	
337+50.00	1052.23	5.15	-6.00%	**1052.54**	1.60%	22.00	0.35		1052.89	-1.60%	11.00	-0.18		1052.71	-1.60%	11.00	-0.18		1052.53	-2.00%	11.00	-0.22		1052.31	-6.00%	4.5	1052.04	

Dc = 1°00'00" R = 5729.58' C14

FINAL NOT FOR CONSTRUCTION

SUPERELEVATION TABLE
NORTHBOUND LANES IR-77/SR-8

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4696
www.arcadis.com

DESIGNER MAL

REVIEWER KDK 05-10-24

PROJECT ID 114865

SHEET P.198 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:30:16 PM USER: banass2218
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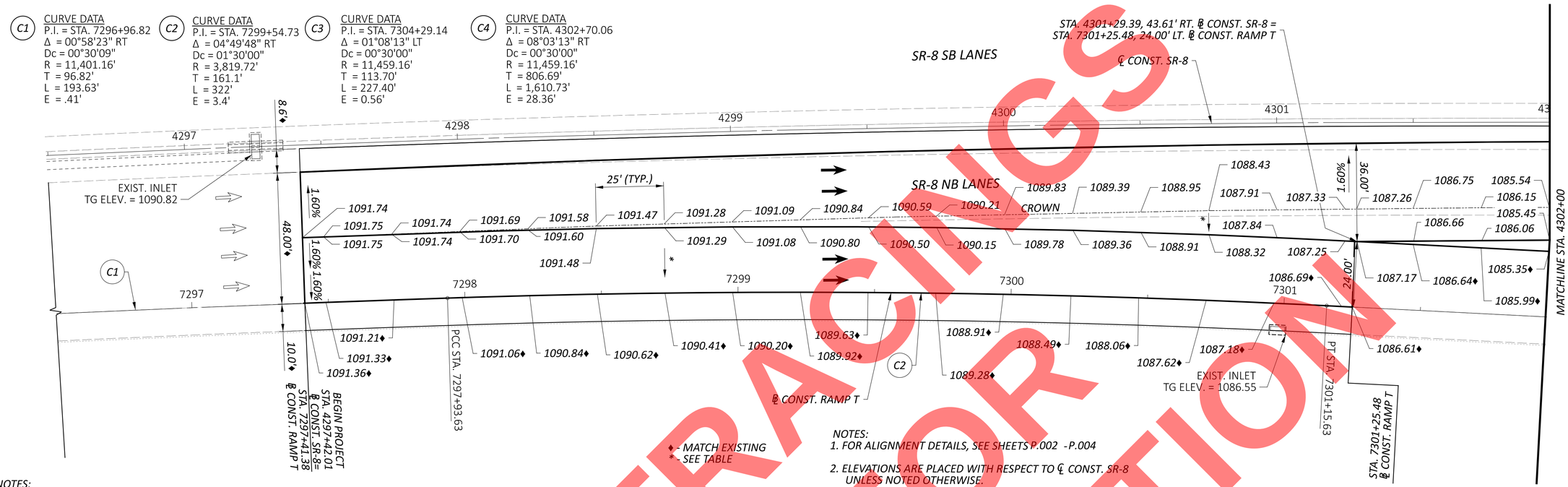
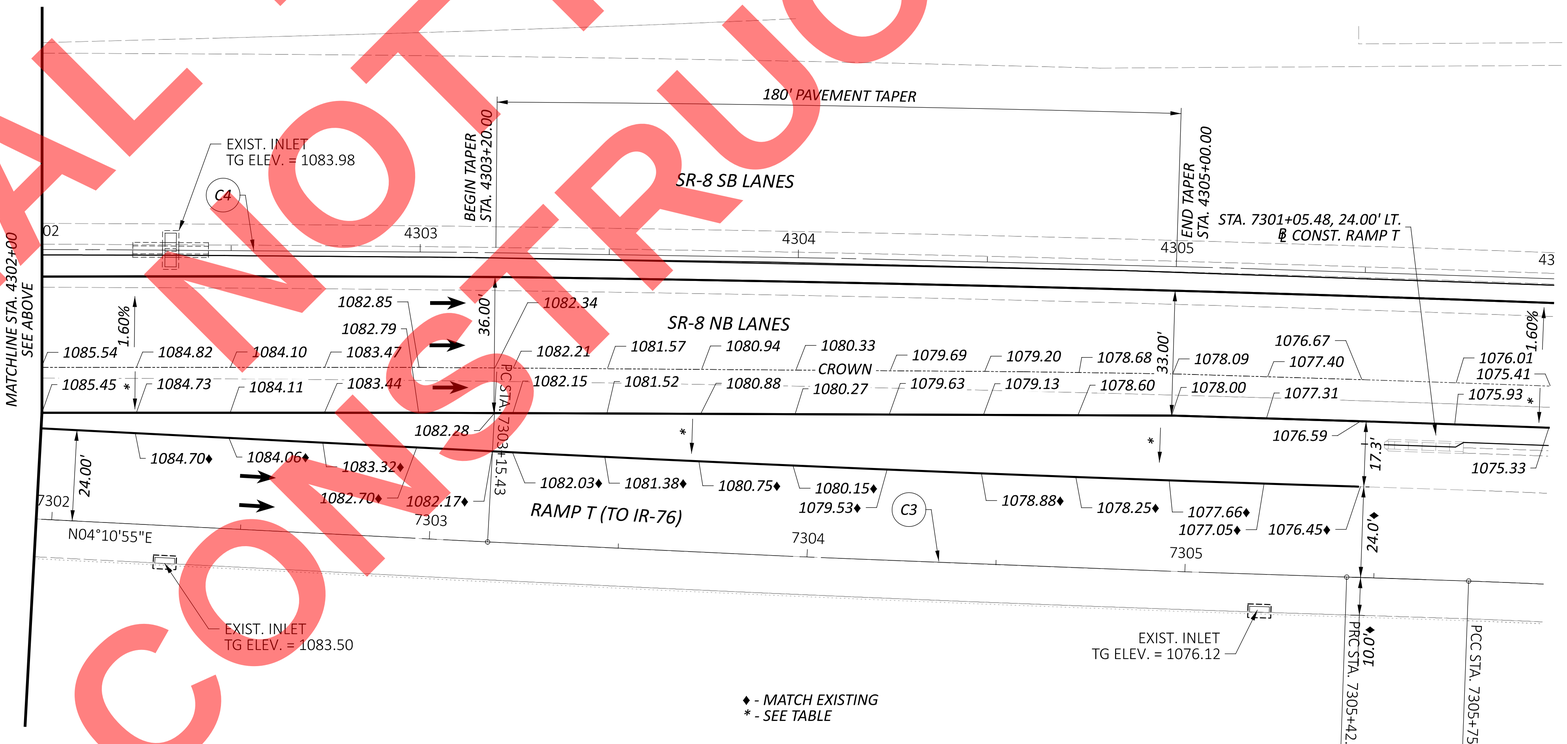


NOTES:

1. ALL STATIONS REFERENCE ℄ CONST. SR-8 UNLESS OTHERWISE NOTED

STA SR 8	LANE 3 WIDTH	LANE 3 SLOPE	GORE WIDTH	GORE SLOPE	RAMP T WIDTH	RAMP T SLOPE
4297+42.01	0.00'				24.00'	-1.58%
4297+50.00	0.07'				24.00'	-1.75%
4297+75.00	0.23'				24.00'	-2.21%
4298+00.00	0.36'	-2.78%			24.00'	-2.67%
4298+25.00	0.59'	-3.39%			24.00'	-3.17%
4298+50.00	0.93'	-1.08%			24.00'	-3.58%
4298+75.00	1.38'	-0.72%			24.00'	-3.67%
4299+00.00	1.93'	0.52%			24.00'	-3.67%
4299+25.00	2.59'	1.54%			24.00'	-3.67%
4299+50.00	3.36'	2.68%			24.00'	-3.62%
4299+75.00	4.24'	1.42%			24.00'	-3.63%
4300+00.00	5.22'	0.96%			24.00'	-3.62%
4300+25.00	6.31'	0.48%			24.00'	-3.62%
4300+50.00	7.51'	0.53%			24.00'	-3.54%
4300+75.00	8.81'	0.45%			24.00'	-3.21%
4301+00.00	10.23'	0.68%			24.00'	-2.75%
4301+25.00	11.74'	0.69%			24.00'	-2.32%
4301+28.51	12.00'	0.75%			24.00'	-2.31%
4301+50.00	12.00'	0.75%	1.28'	-1.56%		
4301+75.00	12.00'	0.75%	2.72'	-2.57%		
4302+00.00	12.00'	0.75%	4.12'	-2.43%		
4302+25.00	12.00'	0.75%	5.45'	-0.55%		
4302+50.00	12.00'	-0.08%	6.75'	-0.74%		
4302+75.00	12.00'	0.25%	7.97'	-1.51%		
4303+00.00	12.00'	0.50%	9.18'	-0.98%		
4303+20.00	12.00'	0.50%	10.09'	-1.09%		
4303+25.00	11.97'	0.50%	10.36'	-1.14%		
4303+50.00	11.83'	0.50%	11.65'	-1.16%		
4303+75.00	11.69'	0.50%	12.81'	-1.04%		
4304+00.00	11.56'	0.50%	13.92'	-0.88%		
4304+25.00	11.42'	0.50%	14.86'	-0.70%		
4304+50.00	11.28'	0.62%	15.75'	-1.57%		
4304+75.00	11.14'	0.75%	16.48'	-2.11%		
4305+00.00	11.00'	0.75%	17.15'	-2.00%		
4305+25.00	11.00'	0.75%	17.28'	-1.53%		
4305+50.00	11.00'	0.75%	17.31'	-0.78%		
4305+75.00	11.00'	0.75%				
4306+00.00	11.00'	0.75%				



FINAL TRACINGS
NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
RAMP T (TO IR-76) EXIT TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 05-10-24
PROJECT ID 114865
SHEET P.199 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:31:22 PM USER: banass2218
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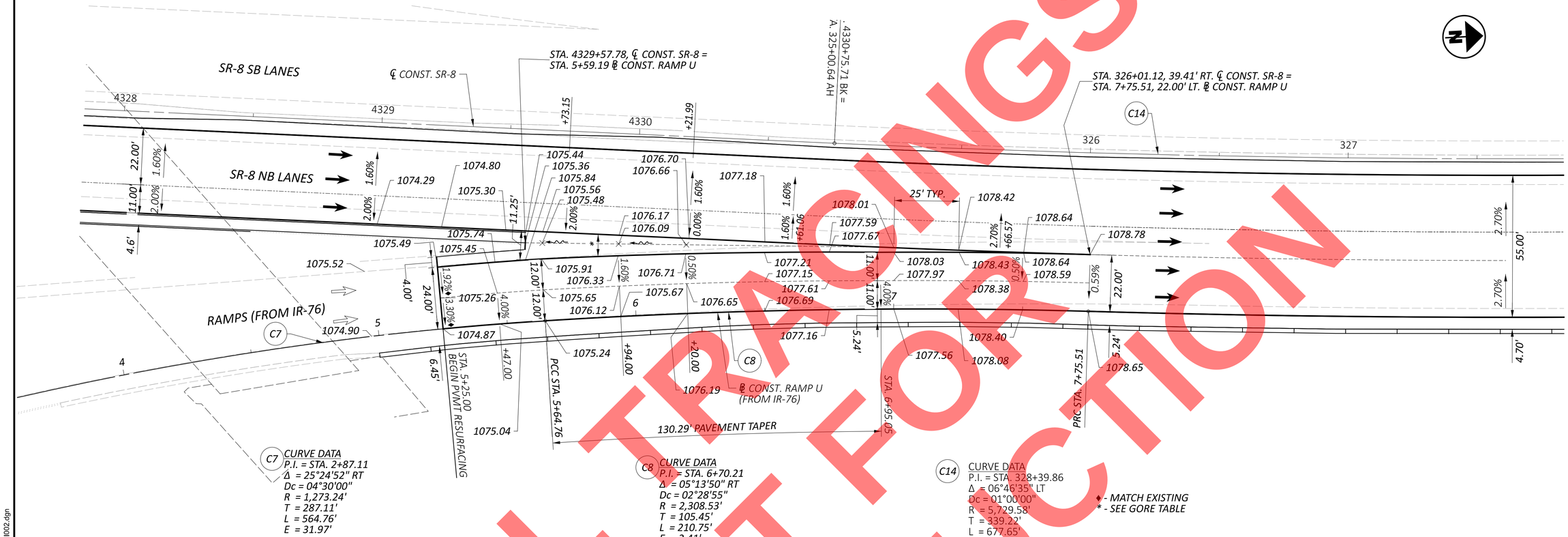

C7 CURVE DATA
P.I. = STA. 2+87.11
Δ = 25°24'52" RT
Dc = 04°30'00"
R = 1,273.24'
T = 287.11'
L = 564.76'
E = 31.97'

C8 CURVE DATA
P.I. = STA. 6+70.21
Δ = 05°13'50" RT
Dc = 02°28'55"
R = 2,308.53'
T = 105.45'
L = 210.75'
E = 2.41'

C14 CURVE DATA
P.I. = STA. 328+39.86
Δ = 06°46'35" LT
Dc = 01°00'00"
R = 5,729.58'
T = 339.22'
L = 677.65'
E = 10.03'

♦ - MATCH EXISTING
* - SEE GORE TABLE

STA SR 8	GORE WIDTH LT	GORE SLOPE LT	GORE WIDTH RT	GORE SLOPE RT
4329+57.78	4.6'	-1.74%	6.7'	6.27%
4329+64.35	4.4'	-1.82%	6.2'	6.13%
4329+94.00	3.4'	-2.35%	4.6'	4.78%
4330+21.99	2.4'	-1.67%	3.4'	2.35%
4330+50.00	1.4'	0.75%	2.6'	0.75%
4330+75.71	0.6'	2.96%	2.1'	2.96%
325+00.64				
325+25.00	0.0'		1.7'	1.18%
325+50.00	0.0'		0.8'	1.25%
325+75.00	0.0'		0.2'	0.00%
326+01.11	0.0'		0.0'	

NOTE:
1. FOR ALIGNMENT DETAILS, SEE SHEETS P.002 - P.004
2. ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.
3. ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.
5. FOR SUPERELEVATION TABLE, SEE SHEET P.198

FINAL PLANS
NOT FOR
CONSTRUCTION

INTERCHANGE DETAILS
RAMP U (FROM IR-76) ENTRANCE TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 05-10-24
PROJECT ID 114865
SHEET P.200 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:31:37 PM USER: banass2218
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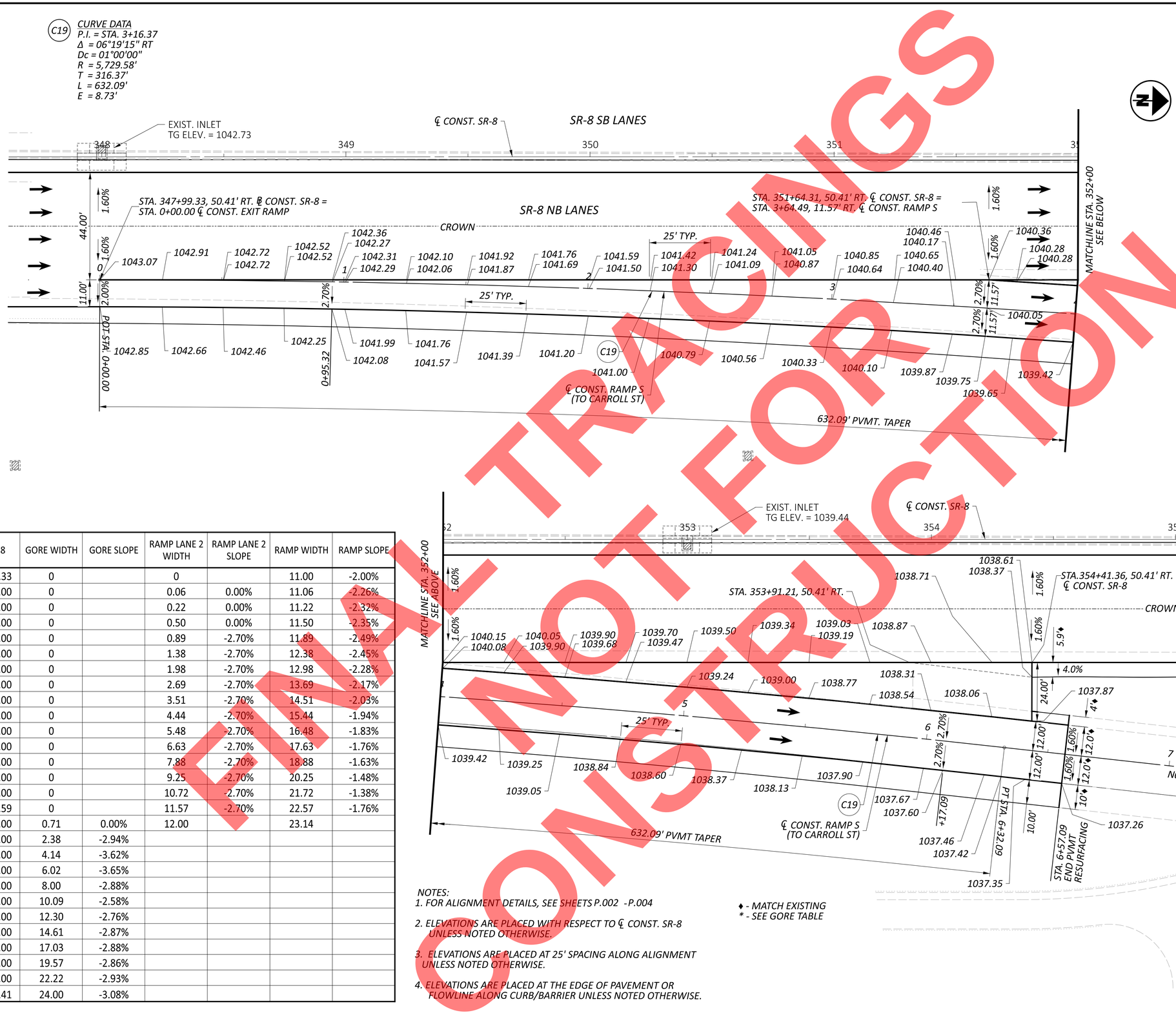

STA SR 8	GORE WIDTH	GORE SLOPE	RAMP LANE 2 WIDTH	RAMP LANE 2 SLOPE	RAMP WIDTH	RAMP SLOPE
347+99.33	0		0		11.00	-2.00%
348+25.00	0		0.06	0.00%	11.06	-2.26%
348+50.00	0		0.22	0.00%	11.22	-2.32%
348+75.00	0		0.50	0.00%	11.50	-2.35%
349+00.00	0		0.89	-2.70%	11.89	-2.49%
349+25.00	0		1.38	-2.70%	12.38	-2.45%
349+50.00	0		1.98	-2.70%	12.98	-2.28%
349+75.00	0		2.69	-2.70%	13.69	-2.17%
350+00.00	0		3.51	-2.70%	14.51	-2.03%
350+25.00	0		4.44	-2.70%	15.44	-1.94%
350+50.00	0		5.48	-2.70%	16.48	-1.83%
350+75.00	0		6.63	-2.70%	17.63	-1.76%
351+00.00	0		7.88	-2.70%	18.88	-1.63%
351+25.00	0		9.25	-2.70%	20.25	-1.48%
351+50.00	0		10.72	-2.70%	21.72	-1.38%
351+63.59	0		11.57	-2.70%	22.57	-1.76%
351+75.00	0.71	0.00%	12.00		23.14	
352+00.00	2.38	-2.94%				
352+25.00	4.14	-3.62%				
352+50.00	6.02	-3.65%				
352+75.00	8.00	-2.88%				
353+00.00	10.09	-2.58%				
353+25.00	12.30	-2.76%				
353+50.00	14.61	-2.87%				
353+75.00	17.03	-2.88%				
354+00.00	19.57	-2.86%				
354+25.00	22.22	-2.93%				
354+41.41	24.00	-3.08%				

NOTES:
1. FOR ALIGNMENT DETAILS, SEE SHEETS P.002 -P.004
2. ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.
3. ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.

♦ - MATCH EXISTING
* - SEE GORE TABLE

FINAL PLANS
NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
RAMP S (TO CARROLL ST) EXIT TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER: MAL
REVIEWER: KDK 5-10-24
PROJECT ID: 114865
SHEET: P.201 TOTAL: 627

SUM-077/008-11.65/00.00
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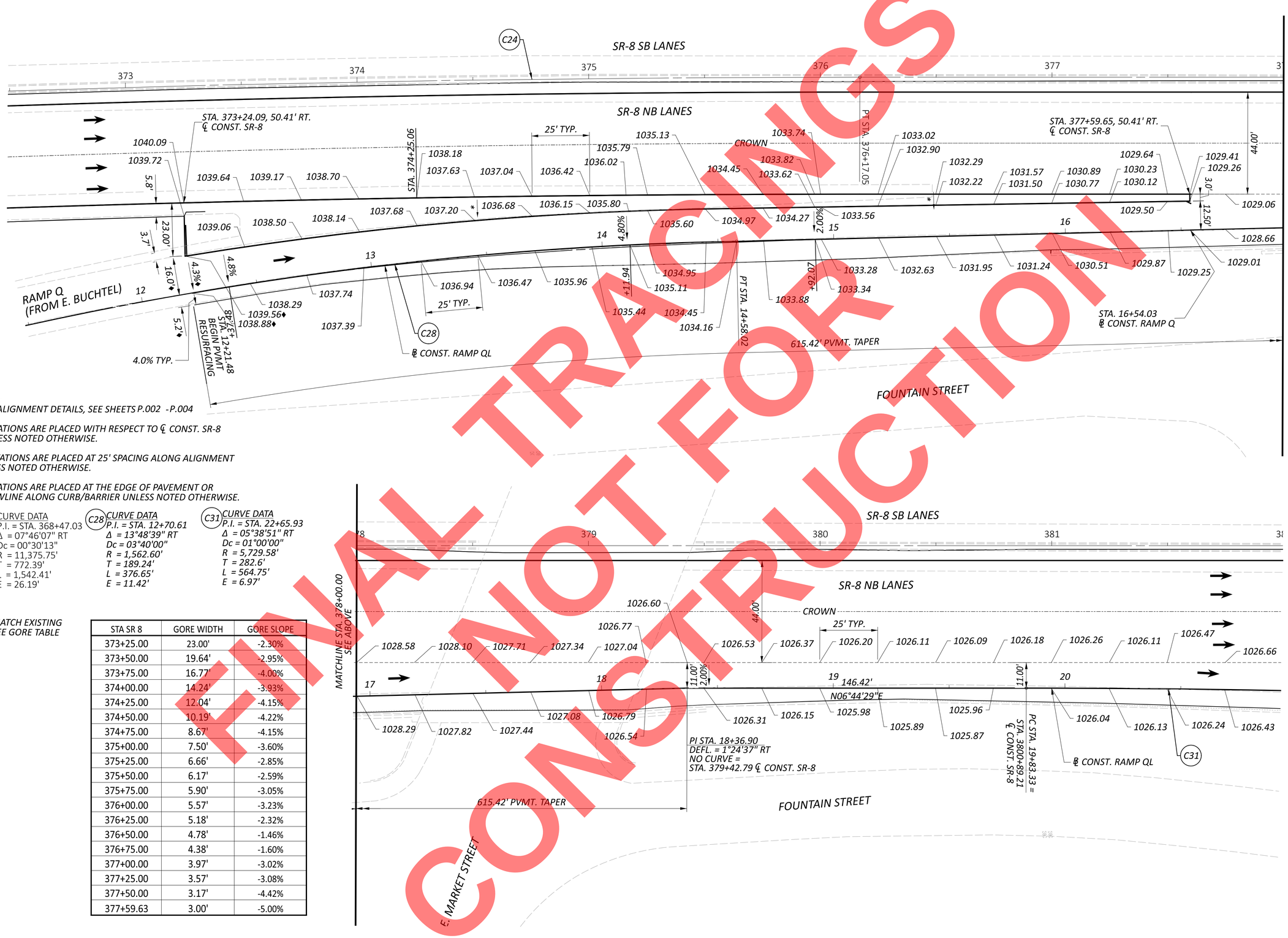

NOTES:
1. FOR ALIGNMENT DETAILS, SEE SHEETS P.002 - P.004
2. ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.
3. ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.39'
L = 1,542.41'
E = 26.19'

C28 CURVE DATA
P.I. = STA. 12+70.61
Δ = 13°48'39" RT
Dc = 03°40'00"
R = 1,562.60'
T = 189.24'
L = 376.65'
E = 11.42'

C31 CURVE DATA
P.I. = STA. 22+65.93
Δ = 05°38'51" RT
Dc = 01°00'00"
R = 5,729.58'
T = 282.6'
L = 564.75'
E = 6.97'

♦ - MATCH EXISTING
* - SEE GORE TABLE

STA SR 8	GORE WIDTH	GORE SLOPE
373+25.00	23.00'	-2.30%
373+50.00	19.64'	-2.95%
373+75.00	16.77'	-4.00%
374+00.00	14.24'	-3.93%
374+25.00	12.04'	-4.15%
374+50.00	10.19'	-4.22%
374+75.00	8.67'	-4.15%
375+00.00	7.50'	-3.60%
375+25.00	6.66'	-2.85%
375+50.00	6.17'	-2.59%
375+75.00	5.90'	-3.05%
376+00.00	5.57'	-3.23%
376+25.00	5.18'	-2.32%
376+50.00	4.78'	-1.46%
376+75.00	4.38'	-1.60%
377+00.00	3.97'	-3.02%
377+25.00	3.57'	-3.08%
377+50.00	3.17'	-4.42%
377+59.63	3.00'	-5.00%

FINAL TRACINGS NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
RAMP Q (FROM BUCHTEL AVE) ENTRANCE TERMINAL

SUM-077/008-11.65/00.00

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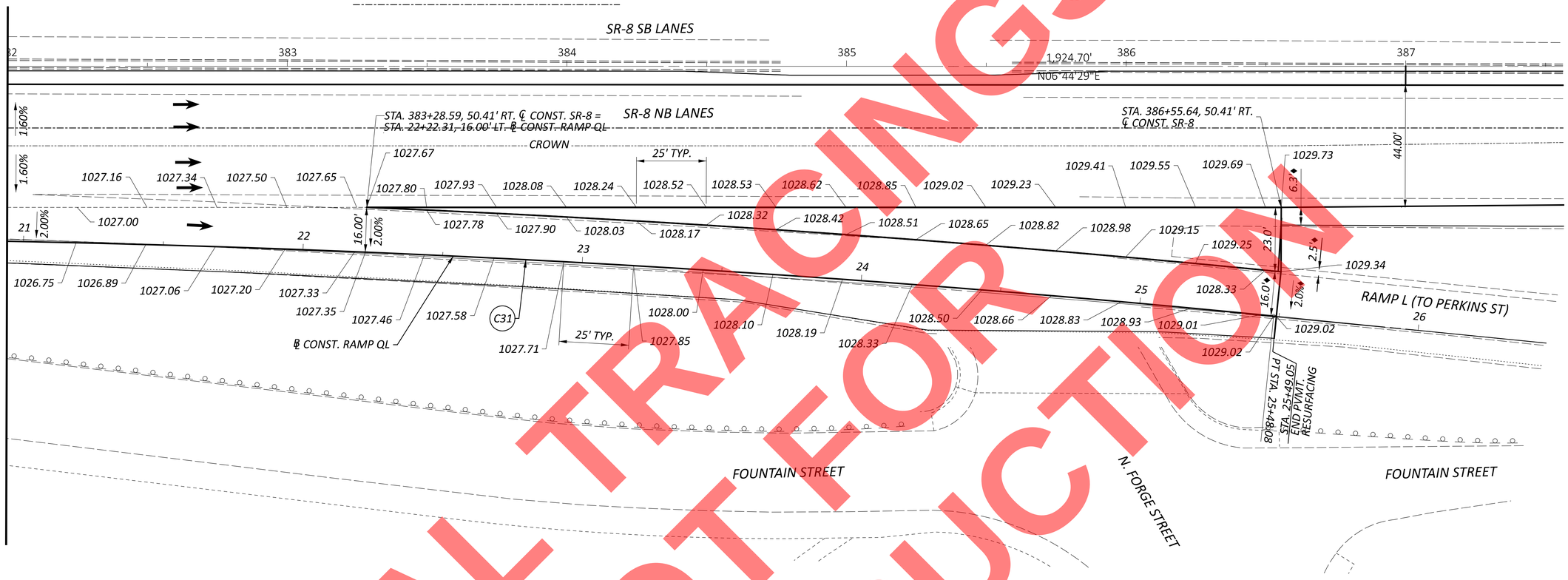
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4585
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 5-10-24
PROJECT ID 114865
SHEET P.202 TOTAL 627



C31 *CURVE DATA*
P.I. = STA. 22+65.93
Δ = 05°38'51" RT
Dc = 01°00'00"
R = 5,729.58'
T = 282.6'
L = 564.75'
E = 6.97'

♦ - *MATCH EXISTING*
* - *SEE GORE TABLE*

STA SR 8	GORE WIDTH	GORE SLOPE
383+50.00	9.3	-0.22%
383+75.00	2.12	-1.42%
384+00.00	3.42	-1.46%
384+25.00	4.83	-1.45%
384+50.00	6.35	-3.15%
384+75.00	7.98	-1.38%
385+00.00	9.72	-1.13%
385+25.00	11.56	-1.73%
385+50.00	13.52	-1.48%
385+75.00	15.59	-1.60%
386+00.00	17.76	-1.46%
386+25.00	20.05	-1.50%
386+50.00	22.44	-1.60%
386+55.64	23	-1.70%

NOTES:
1. *FOR ALIGNMENT DETAILS, SEE SHEETS P.002 -P.004*
2. *ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.*
3. *ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.*
4. *ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.*

FINAL TRACINGS
NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
RAMP L (TO PERKINS ST) EXIT TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER
MAL

REVIEWER
KDK 5-10-24

PROJECT ID
114865

SHEET P.203 TOTAL 627

SUM-077/008-11.65/00.00
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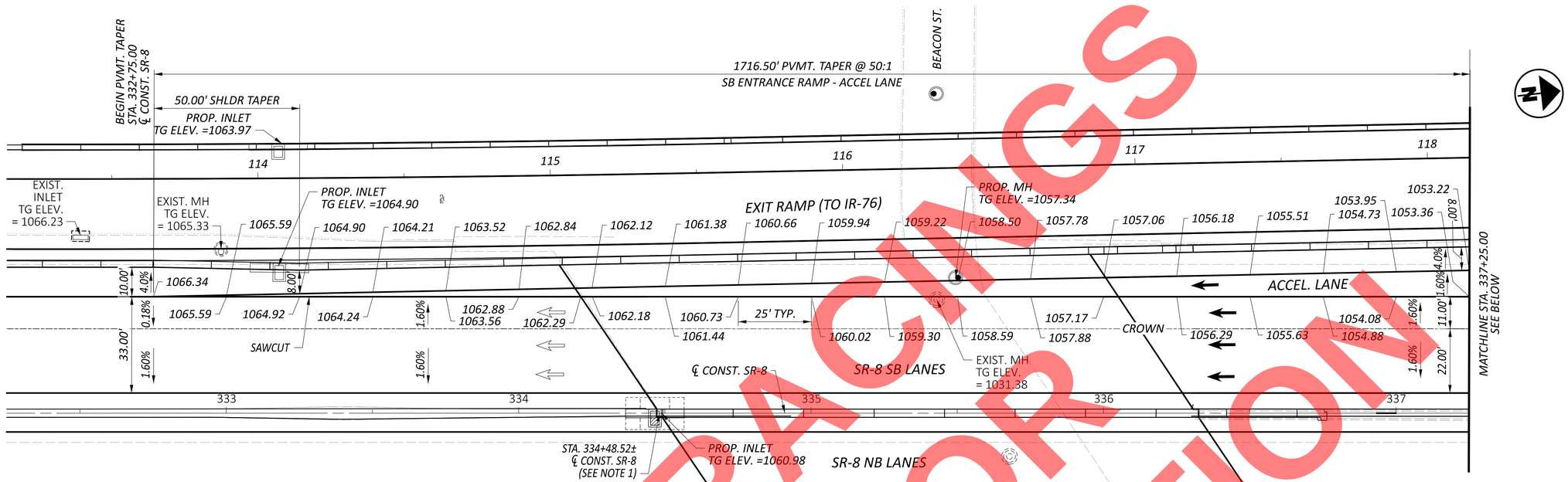


NOTE:

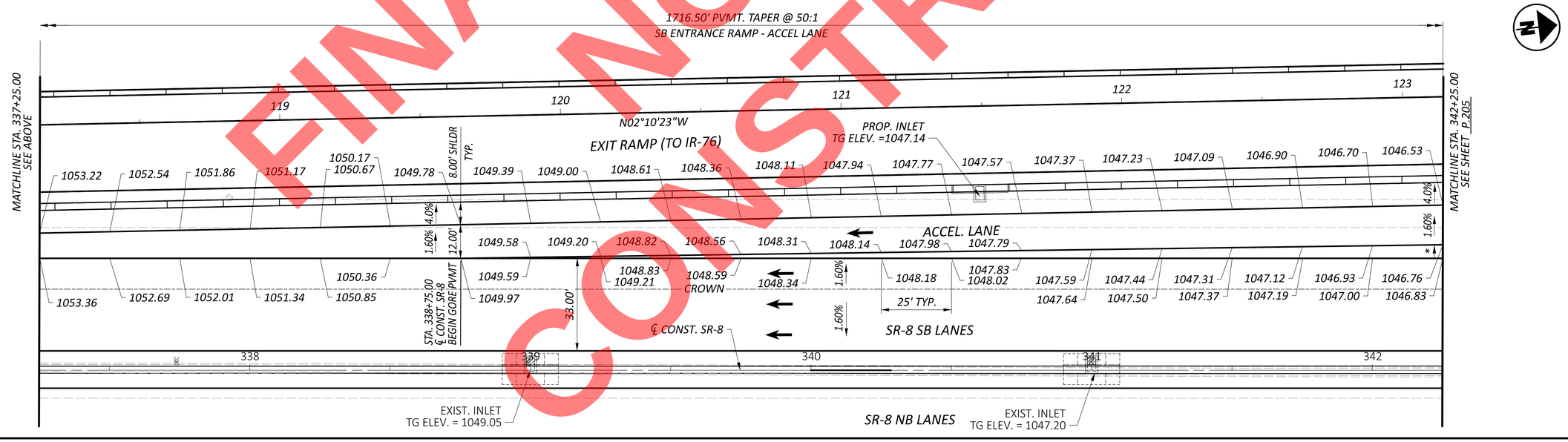
1. LIMIT OF EXISTING SKEWED APPROACH SLAB MEASURED AT ℄ CONST. SR-8. BEGIN FULL DEPTH PAVEMENT REPLACEMENT, REMOVAL OF APPROACH SLAB AND BRIDGE DECK.
2. FOR ALIGNMENT DETAILS, SEE SHEETS P.002 -P.004
3. ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.
5. ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.

* - SEE GORE TABLE

STA SR 8	RAMP WIDTH	RAMP SLOPE
332+75.00	0.00'	
333+00.00	0.05'	0.00%
333+25.00	1.00'	1.60%
333+50.00	1.50'	1.60%
333+75.00	2.00'	1.60%
334+00.00	2.50'	1.60%
334+25.00	3.00'	1.60%
334+50.00	3.50'	1.60%
334+75.00	4.00'	1.60%
335+00.00	4.50'	1.60%
335+25.00	5.00'	1.60%
335+50.00	5.50'	1.60%
335+75.00	6.00'	1.60%

STA SR 8	RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE
336+00.00	6.50'	1.60%	0.00'	
336+25.00	7.00'	1.60%	0.00'	
336+50.00	7.50'	1.60%	0.00'	
336+75.00	8.00'	1.60%	0.00'	
337+00.00	8.50'	1.60%	0.00'	
337+25.00	9.00'	1.60%	0.00'	
337+50.00	9.50'	1.60%	0.00'	
337+75.00	10.00'	1.60%	0.00'	
338+00.00	10.50'	1.60%	0.00'	
338+25.00	11.00'	1.60%	0.00'	
338+50.00	11.50'	1.60%	0.00'	
338+75.00	12.00'	1.60%	0.00'	
339+00.00	12.16'	1.60%	0.34'	2.91%

STA SR 8	RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE
339+25.00	12.31'	1.60%	0.74'	1.35%
339+50.00	12.46'	1.60%	1.04'	0.97%
339+75.00	12.62'	1.60%	1.38'	2.17%
340+00.00	12.77'	1.60%	1.73'	1.74%
340+25.00	12.92'	1.60%	2.08'	1.93%
340+50.00	13.08'	1.60%	2.42'	1.65%
340+75.00	13.23'	1.60%	2.77'	1.45%
341+00.00	13.39'	1.60%	3.11'	1.61%
341+25.00	13.54'	1.60%	3.46'	1.73%
341+50.00	13.69'	1.60%	3.81'	1.58%
341+75.00	13.85'	1.60%	4.15'	1.69%
342+00.00	14.00'	1.60%	4.50'	1.56%
342+25.00	14.15'	1.60%	4.84'	1.45%



FINAL NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
SOUTHBOUND SR-8 ENTRANCE RAMP TERMINAL

SUM-077/008-11.65/00.00

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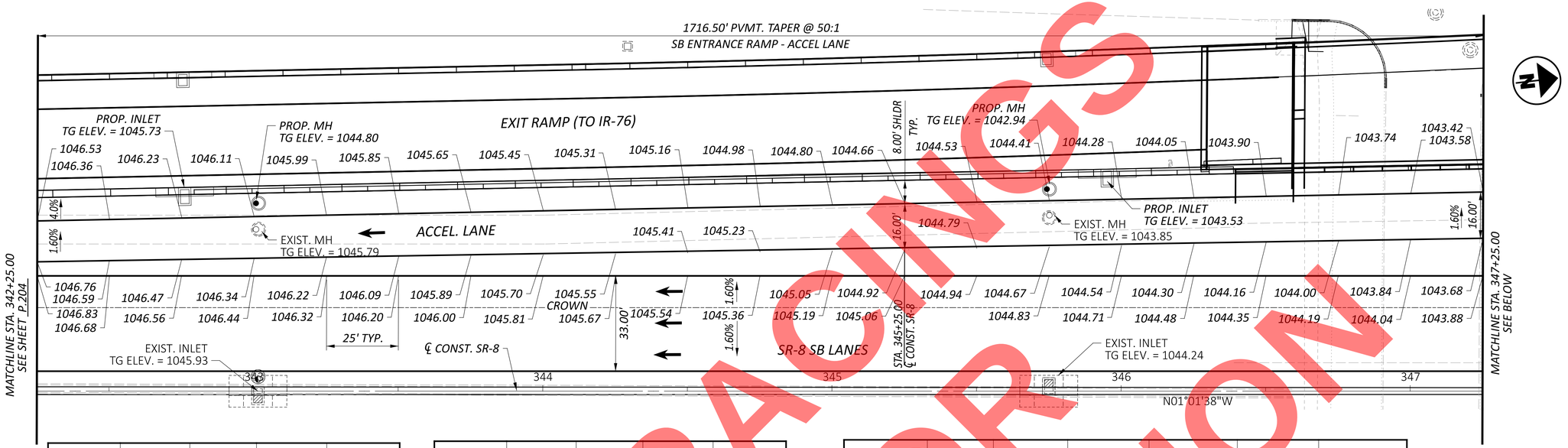
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1555
www.arcadis.com

DESIGNER
MAL

REVIEWER
KDK 5-10-24

PROJECT ID
114865

SHEET P.204 | TOTAL 627



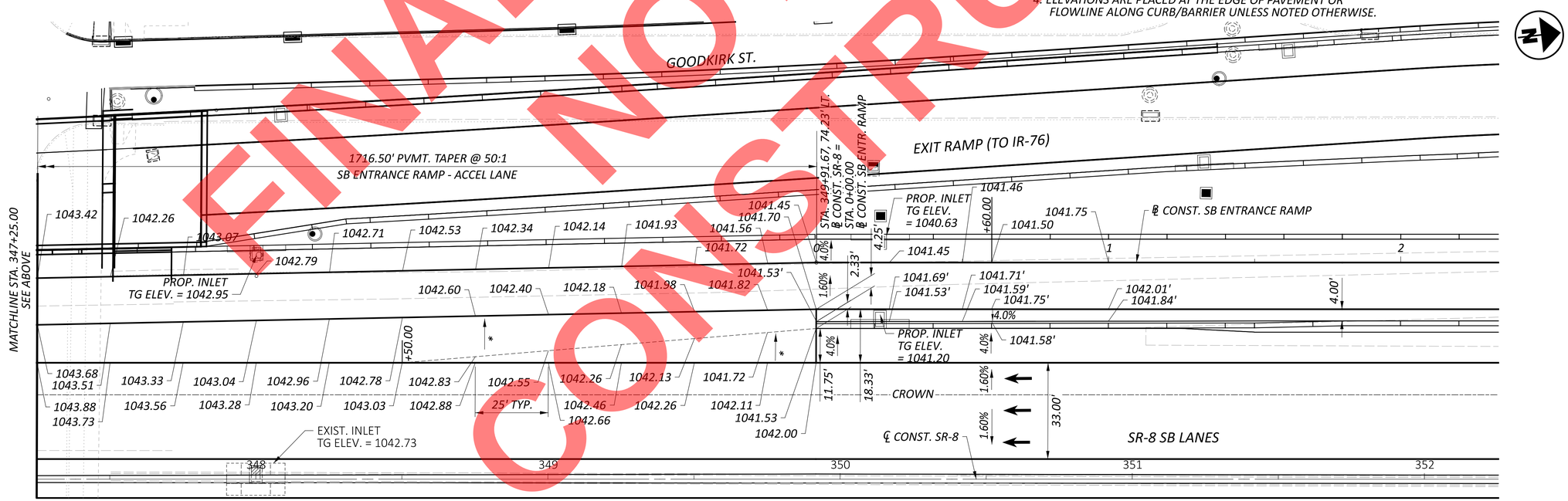
STA SR 8	RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE
342+25.00	14.15'	1.60%	4.84'	1.45%
342+50.00	14.31'	1.60%	5.19'	1.60%
342+75.00	14.47'	1.60%	5.54'	1.61%
343+00.00	14.62'	1.60%	5.88'	1.60%
343+25.00	14.77'	1.60%	6.23'	1.59%
343+50.00	14.93'	1.60%	6.57'	1.60%
343+75.00	15.08'	1.60%	6.92'	1.60%
344+00.00	15.23'	1.60%	7.27'	1.60%
344+25.00	15.39'	1.60%	7.61'	1.60%
344+50.00	15.54'	1.60%	7.96'	1.60%
344+75.00	15.70'	1.60%	8.31'	1.54%
345+00.00	15.85'	1.60%	8.65'	1.60%
345+25.00	16.00'	1.60%	9.00'	1.60%

STA SR 8	RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE
345+50.00	16.00'	1.60%	9.50'	1.60%
345+75.00	16.00'	1.60%	10.00'	1.60%
346+00.00	16.00'	1.60%	10.50'	1.61%
346+25.00	16.00'	1.60%	11.00'	1.60%
346+50.00	16.00'	1.60%	11.50'	1.60%
346+75.00	16.00'	1.60%	12.00'	1.60%
347+00.00	16.00'	1.60%	12.50'	1.60%
347+25.00	16.00'	1.60%	13.00'	1.60%
347+50.00	16.00'	1.60%	13.50'	1.60%
347+75.00	16.00'	1.60%	14.00'	1.60%
348+00.00	16.00'	1.60%	14.50'	1.60%
348+25.00	16.00'	1.60%	15.00'	1.60%
348+50.00	16.00'	1.60%	15.50'	1.60%

STA SR 8	RAMP WIDTH	RAMP SLOPE	GORE WIDTH RT	GORE SLOPE RT	GORE WIDTH RT	GORE SLOPE RT
348+75.00	16.00'	1.60%	16.00'	1.71%	16.00'	1.71%
349+00.00	16.00'	1.60%	16.50'	1.60%	16.50'	1.60%
349+25.00	16.00'	1.60%	17.00'	1.59%	17.00'	1.59%
349+50.00	16.00'	1.60%	17.50'	1.60%	17.50'	1.60%
349+75.00	16.00'	1.60%	18.00'	1.60%	18.00'	1.60%
349+91.67	16.00'	1.60%	18.33'	1.60%	18.33'	1.60%

* - SEE GORE TABLE

NOTE:
1. FOR ALIGNMENT DETAILS, SEE SHEETS P.002 - P.004
2. ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.
3. ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.
4. ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.



FINAL PLANS
NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
SOUTHBOUND SR-8 ENTRANCE RAMP TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

DESIGNER: MAL
REVIEWER: KDK 5-10-24
PROJECT ID: 114865
SHEET: P.205 TOTAL: 627

SUM-077/008-11.65/00.00

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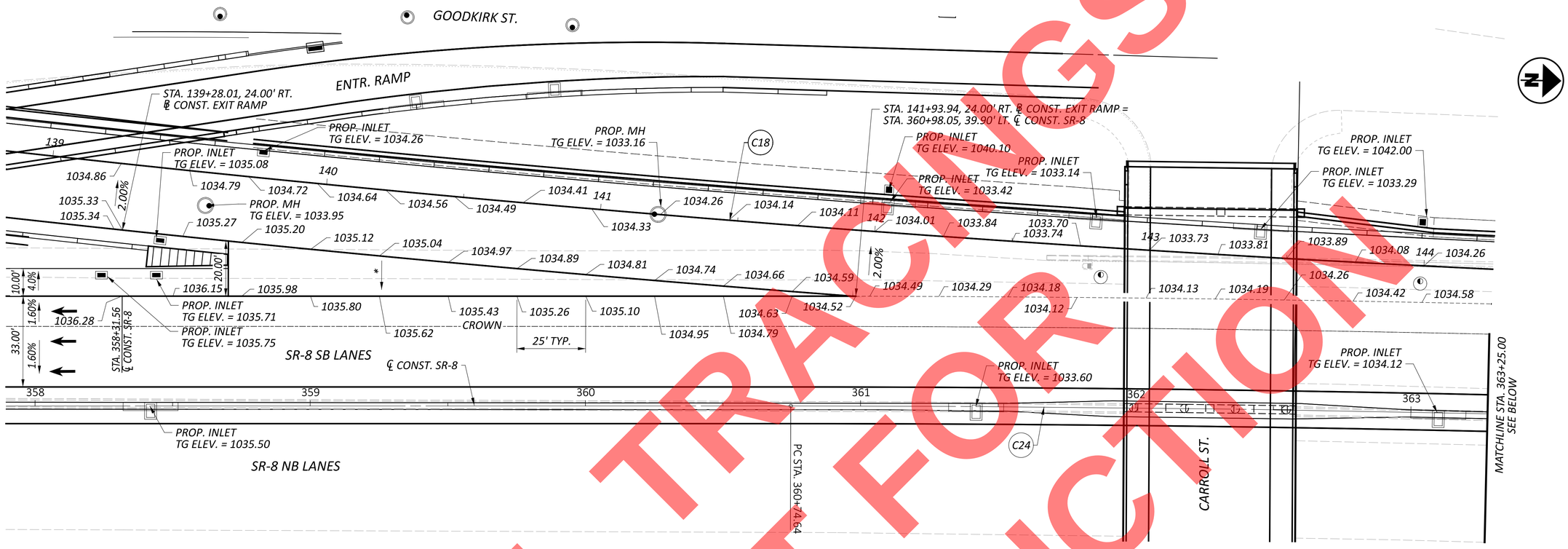

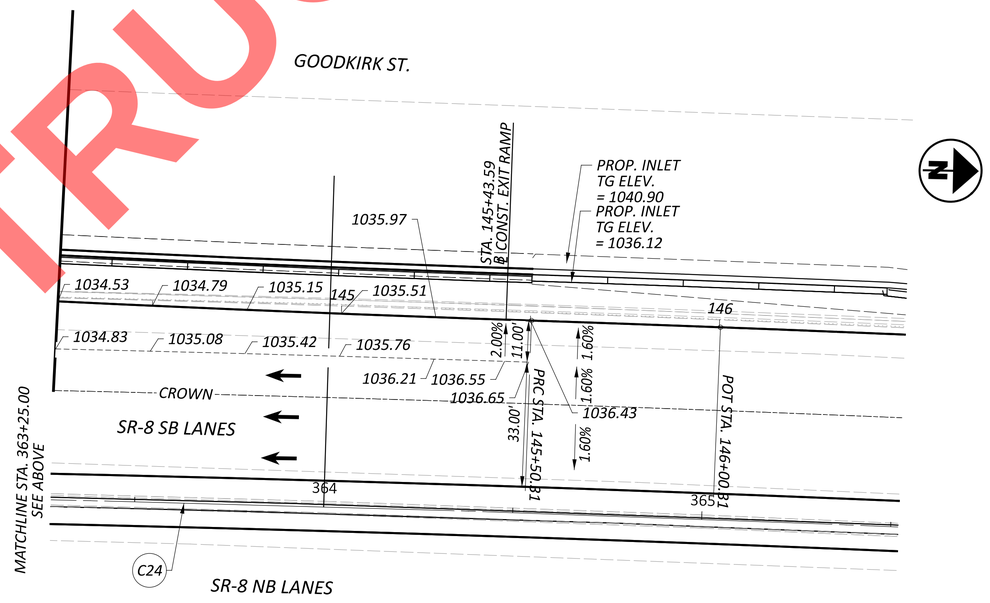

C18 *CURVE DATA*
P.I. = STA. 141+63.36
Δ = 05°09'46" LT
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.39'
L = 1,542.41'
E = 26.19'

♦ - *MATCH EXISTING*
* - *SEE GORE TABLE*

GORE WIDTH	GORE SLOPE	STA SR 8
19.50'	4.00%	358+75.00
17.02'	4.00%	359+00.00
14.60'	3.97%	359+25.00
12.26'	3.75%	359+50.00
10.00'	3.70%	359+75.00
7.80'	3.72%	360+00.00
5.68'	3.70%	360+25.00
3.64'	3.57%	360+50.00
1.66'	2.41%	360+75.00
0.00'		361+00.00

NOTE:
1. *FOR ALIGNMENT DETAILS, SEE SHEETS P.002 -P.004*
2. *ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.*
3. *ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.*
4. *ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.*

FINAL TRACINGS
NOT FOR CONSTRUCTION

INTERCHANGE DETAILS SOUTHBOUND SR-8 (TO IR-76) EXIT TERMINAL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 5-10-24
PROJECT ID 114865
SHEET P.206 TOTAL 627

SUM-077/008-11.65/00.00

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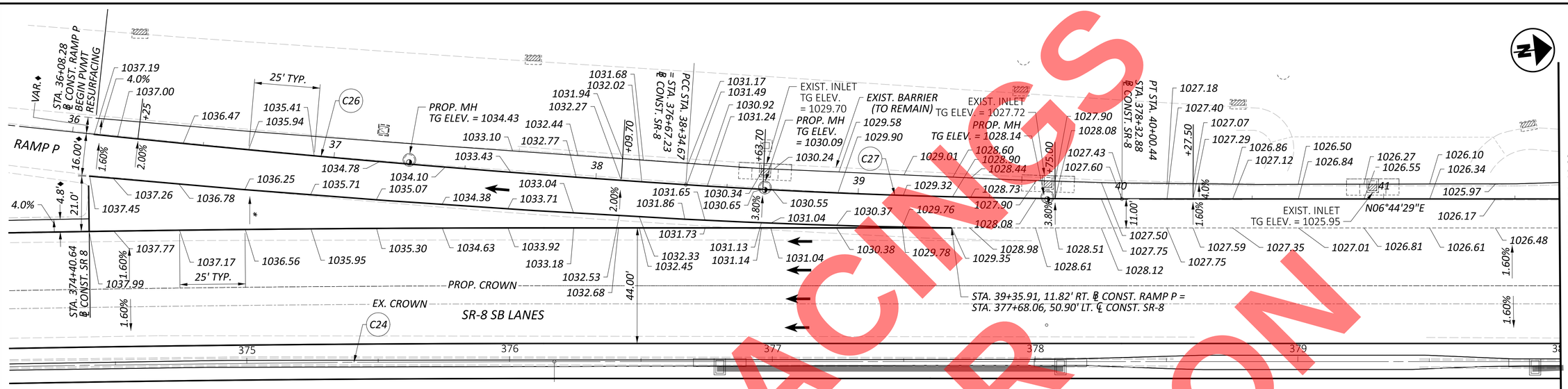


RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE	STA SR 8
11.00'	1.60%	0		380+40.94
11.09'	1.60%	0.09	0.00%	380+50.00
11.34'	1.60%	0.35	0.18%	380+75.00
11.58'	1.60%	0.6	1.67%	381+00.00
11.83'	1.60%	0.85	1.26%	381+25.00
12.07'	1.60%	1.11	1.80%	381+50.00
12.32'	1.60%	1.36	1.68%	381+75.00
12.57'	1.60%	1.61	1.86%	382+00.00
12.81'	1.60%	1.86	1.34%	382+25.00
13.06'	1.60%	2.12	1.94%	382+50.00
13.31'	1.85%	2.37	2.95%	382+75.00
13.55'	2.75%	2.62	2.56%	383+00.00
13.80'	3.65%	2.88	1.60%	383+25.00
14.04'	4.55%	3.13	3.86%	383+50.00
14.29'	5.20%	3.48	1.15%	383+75.00
14.54'	5.20%	4.25	5.51%	384+00.00
14.78'	5.20%	5.45	6.45%	384+25.00
15.03'	5.20%	7.08	6.33%	384+50.00
15.28'	5.20%	9.15	4.32%	384+75.00
15.52'	5.20%	11.66	3.11%	385+00.00
15.77'	5.20%	14.61	2.60%	385+25.00
16.00'	5.20%	17.71	2.26%	385+48.53

RAMP WIDTH	RAMP SLOPE	GORE WIDTH	GORE SLOPE	STA SR 8
16.00'	1.62%	21.07'	2.56%	374+40.64
15.89'	1.64%	20.08'	2.54%	374+50.00
15.57'	1.99%	17.53'	2.22%	374+75.00
15.25'	2.03%	15.14'	2.05%	375+00.00
14.93'	2.01%	12.92'	1.86%	375+25.00
14.61'	1.98%	10.86'	2.12%	375+50.00
14.29'	1.96%	8.97'	2.79%	375+75.00
13.97'	2.00%	7.24'	2.90%	376+00.00
13.65'	1.98%	5.68'	2.46%	376+25.00
13.43'	1.94%	5.68'	2.64%	376+41.30
13.34'	2.32%	4.24'	2.83%	376+50.00
13.02'	3.15%	2.91'	2.75%	376+75.00
12.74'	3.77%	2.91'	0.34%	376+95.69
12.70'	3.86%	1.80'	0.00%	377+00.00
12.38'	3.80%	0.93'	1.08%	377+25.00
12.06'	3.81%	0.31'	0.00%	377+50.00
11.82'	3.81%	0.00'		377+68.06

C24 CURVE DATA
P.I. = STA. 368+47.03
Δ = 07°46'07" RT
Dc = 00°30'13"
R = 11,375.75'
T = 772.39'
L = 1,542.41'
E = 26.19'

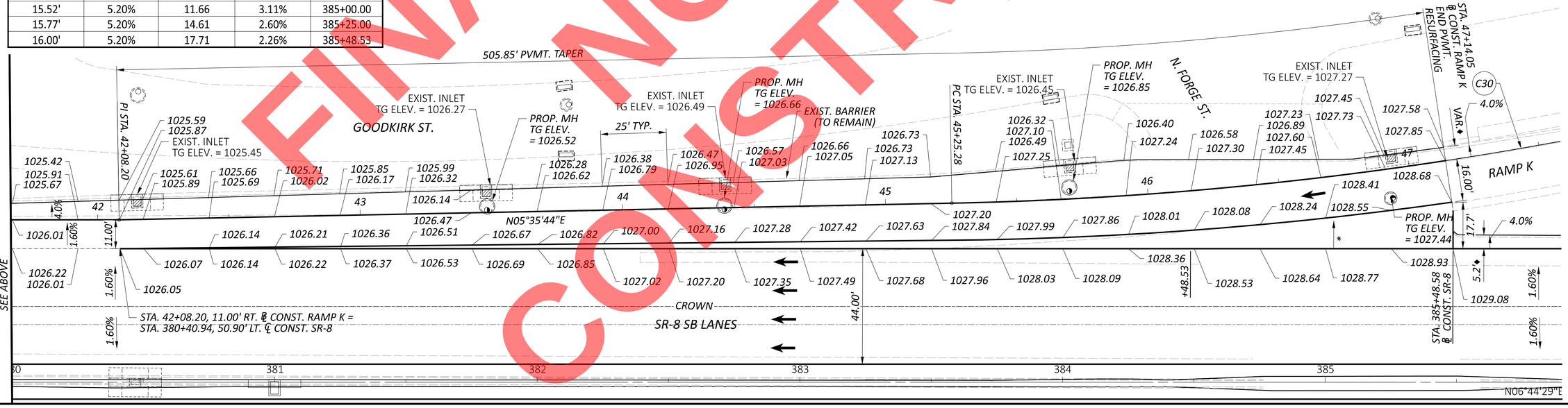
C26 *CURVE DATA*
P.I. = STA. 36+79.17
Δ = 03°06'39" LT
Dc = 01°00'00"
R = 5,729.58'
T = 155.58'
L = 311.08'
E = 2.11'

C27 *CURVE DATA*
P.I. = STA. 39+17.58
Δ = 03°43'47" LT
Dc = 02°15'00"
R = 2,546.48'
T = 82.91'
L = 165.77'
E = 1.35'

C30 *CURVE DATA*
P.I. = STA. 47+03.31
Δ = 14°10'12" LT
Dc = 04°00'00"
R = 1,432.39'
T = 178.03'
L = 354.25'
E = 11.02'

♦ - *MATCH EXISTING*
* - *SEE GORE TABLE*

NOTE:
1. *FOR ALIGNMENT DETAILS, SEE SHEETS P.002 -P.004*
2. *ELEVATIONS ARE PLACED WITH RESPECT TO ℄ CONST. SR-8 UNLESS NOTED OTHERWISE.*
3. *ELEVATIONS ARE PLACED AT 25' SPACING ALONG ALIGNMENT UNLESS NOTED OTHERWISE.*
4. *ELEVATIONS ARE PLACED AT THE EDGE OF PAVEMENT OR FLOWLINE ALONG CURB/BARRIER UNLESS NOTED OTHERWISE.*



FINAL NOT FOR CONSTRUCTION

INTERCHANGE DETAILS
RAMP P EXIT TERMINAL AND RAMP K ENTRANCE TERMINAL (FOR GOODKIRK ST)

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4355
www.arcadis.com

DESIGNER MAL
REVIEWER KDK 5-10-24
PROJECT ID 114865
SHEET P.207 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 3:33:27 PM USER: banass2218
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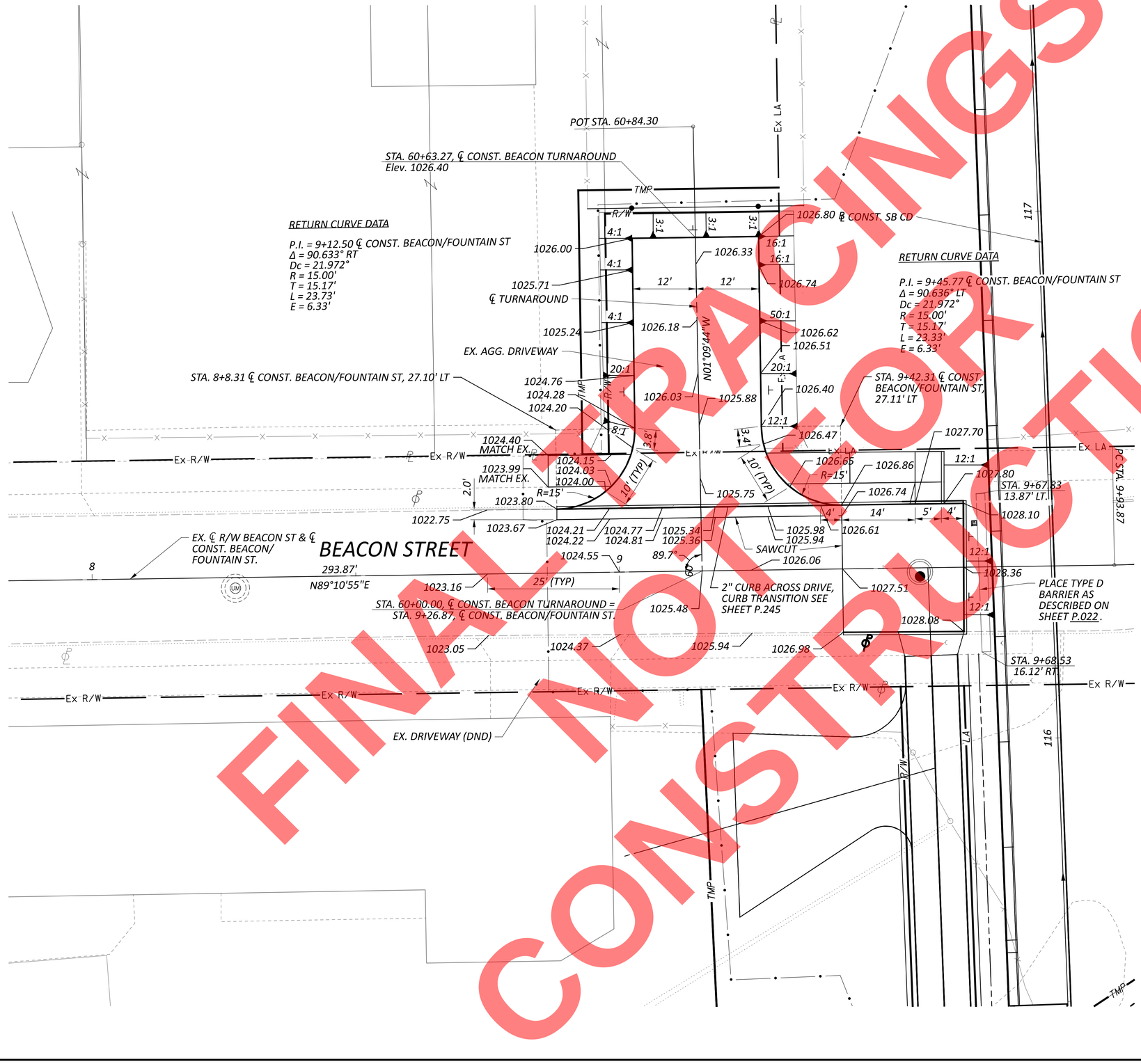

NOTE: ELEVATIONS ARE SHOWN AT EDGE OF PAVEMENT OR GUTTER FLOWLINE.

FOR BEACON PLAN AND PROFILE, SEE SHEETS P.155 - P.156

FOR FENCE PLAN, SEE SHEETS P.510 - P.511

FOR BEACON CONNECTOR DETAIL, SEE SHEET P.236

FOR TRAFFIC CONTROL DETAILS, SEE SHEET P.250

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION DETAIL
BEACON TURNAROUND (WEST)

FINAL TRACINGS
NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4355
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.208 TOTAL 627

SUM-077/008-11.65/00.00
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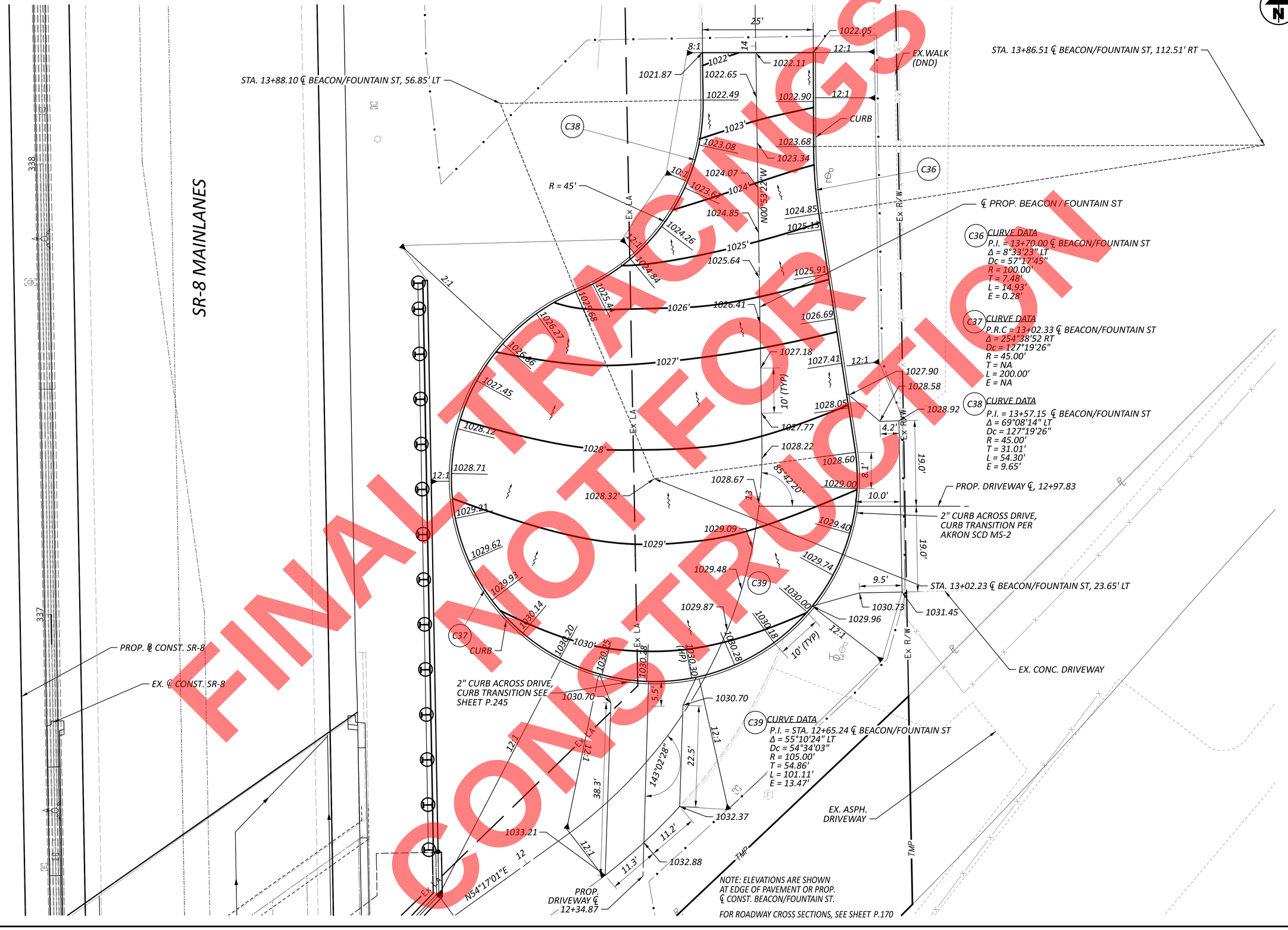

FINAL PLANS
NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00

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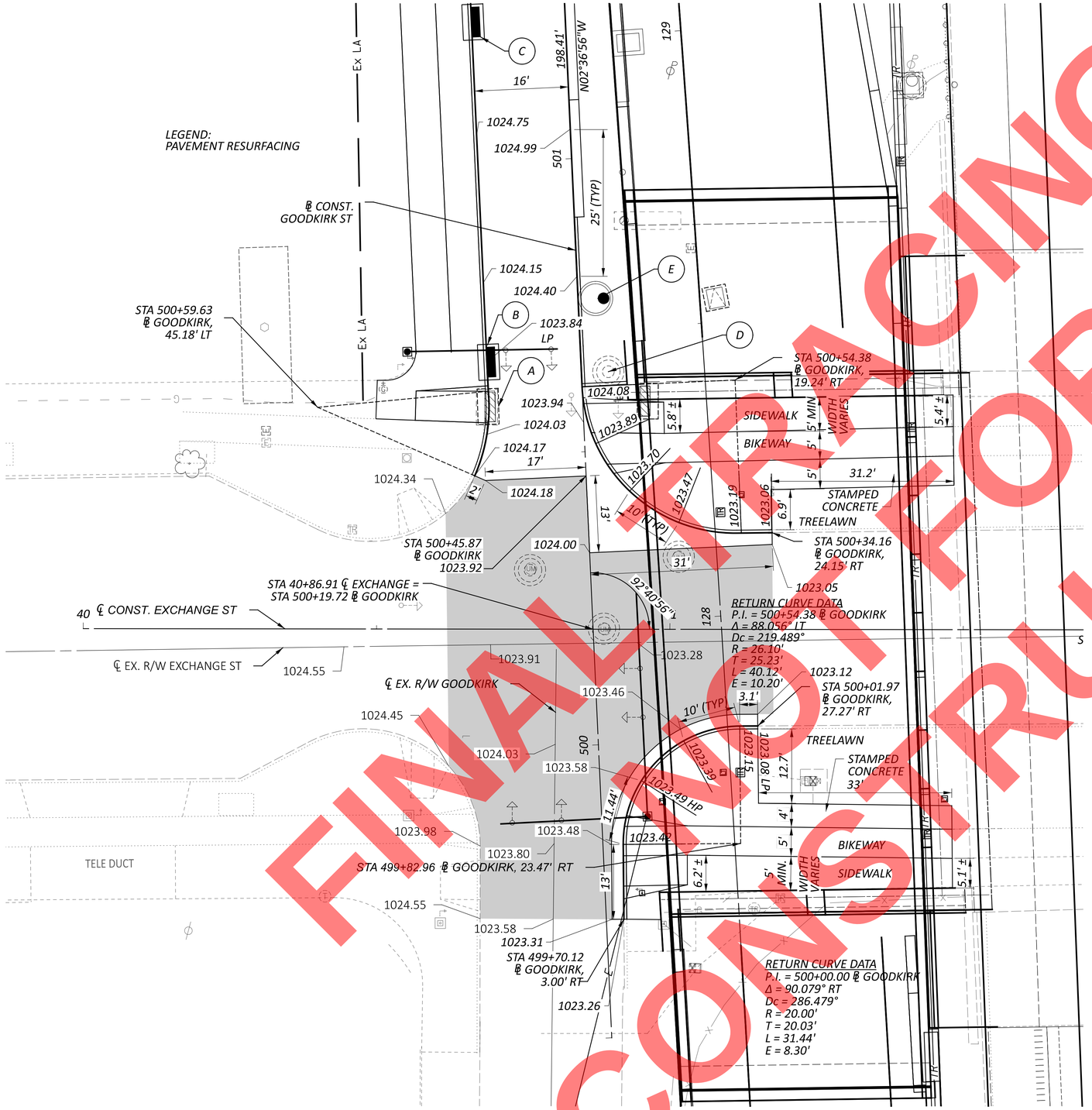
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.209 TOTAL 627



DRAINAGE STRUCTURES

POINT	STA (BL GOODKIRK)	OFFSET	EXIST ELEV.	PROP ELEV.	DESCRIPTION
A	500+58.45	16.44' LT	1024.83	-	EXIST INLET TBR
B	500+66.00	16.00' LT	-	1023.65	PROP INLET
C	501+24.00	16.00' LT	-	1025.22	PROP INLET
D	500+63.43	4.59' RT	1023.88	1024.12	EXIST MANHOLE ATG
E	500+76.00	3.00' RT	-	1024.75	PROP MANHOLE

FOR STREET SCAPE DETAIL, SEE SHEET P.019

FOR GOODKIRK PLAN AND PROFILE, SEE SHEET P.150

FOR SB EXIT CD BRIDGE, SEE SHEETS P.415 -P.438

NOTE: ELEVATIONS ARE TAKEN FROM EDGE OF PAVEMENT OR GUTTER FLOWLINE.

LEGEND:
ATG - ADJUST TO GRADE
TBR - TO BE REMOVED

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION DETAILS EXCHANGE STREET

FINAL TRACINGS NOT FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.210 TOTAL 627

SUM-077/008-11.65/00.00

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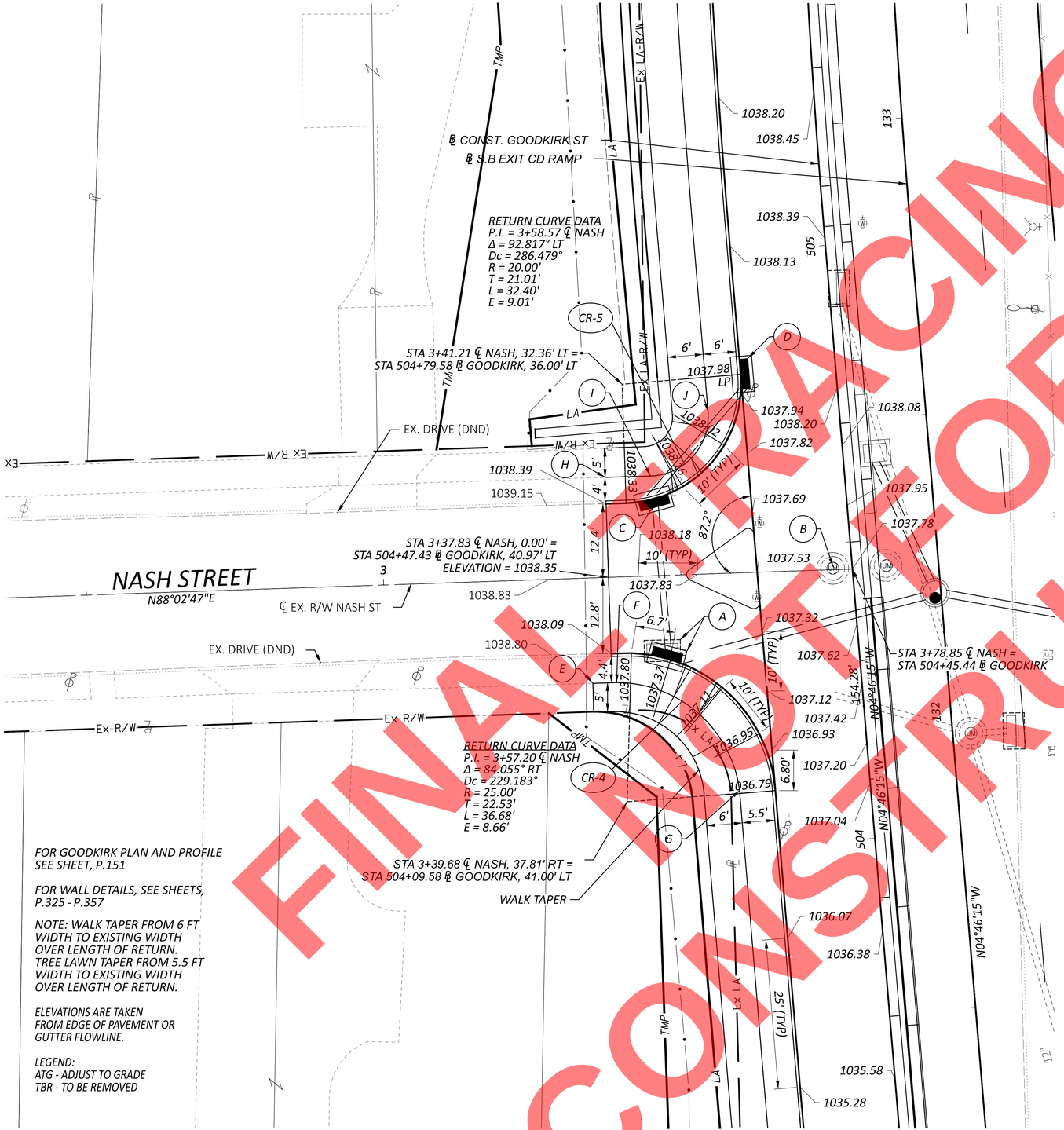


FOR GOODKIRK PLAN AND PROFILE SEE SHEET, P.151

FOR WALL DETAILS, SEE SHEETS, P.325 - P.357

NOTE: WALK TAPER FROM 6 FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN. TREE LAWN TAPER FROM 5.5 FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN.

ELEVATIONS ARE TAKEN FROM EDGE OF PAVEMENT OR GUTTER FLOWLINE.

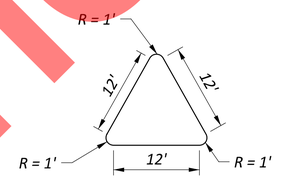
LEGEND:
ATG - ADJUST TO GRADE
TBR - TO BE REMOVED

DRAINAGE STRUCTURES

POINT	STA (BL GOODKIRK)	OFFSET	EXIST ELEV.	PROP ELEV.	DESCRIPTION
A	504+34.10	32.99' LT	1037.65	1037.20	PROP INLET
B	504+54.80	3.28' LT	1037.05	1037.73	EXIST MANHOLE ATG
C	504+59.91	32.38' LT	-	1038.06	PROP INLET
D	504+79.58	16.00' LT	-	1037.81	PROP INLET

SIDEWALK DETAILS

POINT	STA (BL GOODKIRK)	OFFSET	PROP ELEV.	DESCRIPTION
E	504+29.90	45.07' LT	1038.76	TIE TO EXIST
F	504+29.69	41.08' LT	1038.44	BEGIN SW CURVE, R=21'
G	504+09.90	22.00' LT	1038.03	END SW CURVE, R=21'
H	504+64.23	40.17' LT	1039.21	TIE TO EXIST
I	504+63.82	32.53' LT	1038.72	BEGIN SW CURVE, R=10'
J	504+73.81	22.00' LT	10398.85	END SW CURVE, R=10'



ISLAND DETAIL

TYPICAL ON SIDE STREETS WITH ISLAND

NOTE: FOR ISLAND BUILD UP SEE GENERAL NOTES SHEET P.023

FINAL DRAFT NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET 0 5 10 20

INTERSECTION DETAILS NASH STREET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.211 TOTAL 627

SUM-077/008-11.65/00.00

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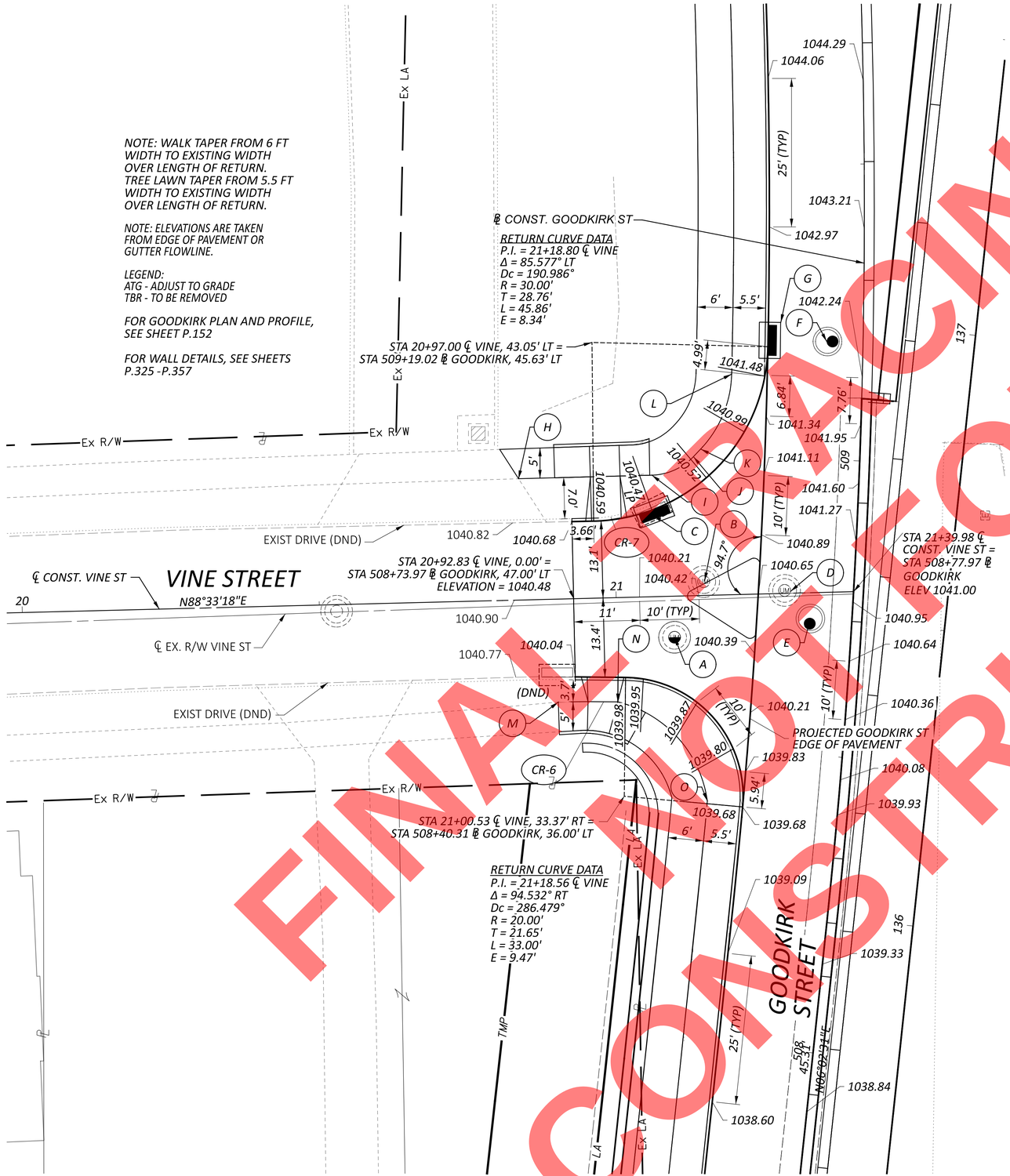
NOTE: WALK TAPER FROM 6 FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN. TREE LAWN TAPER FROM 5.5 FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN.

NOTE: ELEVATIONS ARE TAKEN FROM EDGE OF PAVEMENT OR GUTTER FLOWLINE.

LEGEND:
ATG - ADJUST TO GRADE
TBR - TO BE REMOVED

FOR GOODKIRK PLAN AND PROFILE, SEE SHEET P.152

FOR WALL DETAILS, SEE SHEETS P.325 -P.357



DRAINAGE STRUCTURES

POINT	STA (BL GOODKIRK)	OFFSET	EXIST ELEV.	PROP ELEV.	DESCRIPTION
A	508+68.35	29.62' LT	1039.93	1040.07	EXIST MANHOLE ATG
B	508+78.24	25.29' LT	1040.11	1040.26	EXIST MANHOLE ATG
C	508+90.39	34.85' LT	1040.63	1040.01	PROP INLET
D	508+77.52	11.60' LT	1040.21	1040.68	EXIST MANHOLE ATG
E	508+73.00	7.00' LT	-	1040.71	PROP MANHOLE
F	509+20.00	6.00' LT	-	1042.38	PROP MANHOLE
G	509+20.00	16.00' LT	-	1042.03	PROP INLET

SIDEWALK DETAILS

POINT	STA (BL GOODKIRK)	OFFSET	PROP ELEV.	DESCRIPTION
H	508+94.61	57.27' LT	1042.12	TIE TO EXIST
I	508+96.16	34.86' LT	1040.72	BEGIN SW CURVE, R=10'
J	508+99.67	28.00' LT	1041.16	END SW CURVE, R=10'
K	509+01.03	26.83' LT	1041.33	BEGIN SW CURVE, R=19'
L	509+14.07	22.00' LT	1042.75	END SW CURVE, R=19'
M	508+57.14	40.06' LT	1040.89	TIE TO EXIST
N	508+57.51	37.78' LT	1040.29	BEGIN SW CURVE, R=20'
O	508+53.45	28.06' LT	1040.64	END SW CURVE, R=20'

FINAL NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION DETAILS VINE STREET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.212 TOTAL 627

SUM-077/008-11.65/00.00

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NOTE: ELEVATIONS ARE SHOWN AT EDGE OF PAVEMENT OR GUTTER FLOWLINE.

LEGEND:
ATG - ADJUST TO GRADE
TBR - TO BE REMOVED
* - SEE GORE TABLE

NOTE: WALK TAPER FROM 6FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN.
TREE LAWN TAPER FROM 5.5 FT WIDTH TO EXISTING WIDTH OVER LENGTH OF RETURN.

FOR GOODKIRK PLAN AND PROFILE, SEE SHEET P.152

FOR CD PLAN AND PROFILE, SEE SHEETS P.145 -P.149

FOR SUPER TABLES, SEE SHEETS P.194 -P.198

DRAINAGE STRUCTURES

POINT	STA (BL GOODKIRK)	OFFSET	EXIST ELEV.	PROP ELEV.	DESCRIPTION
A	511+80.00	6.00' LT	-	1053.52	PROP MANHOLE
B	512+06.39	11.93' LT	1053.64	1054.51	EXIST MANHOLE ATG
C	512+06.63	19.15' LT	1053.53	1054.46	EXIST MANHOLE ATG
D	512+48.01	6.00' LT	-	1055.03	PROP MANHOLE
E	512+59.00	16.00' LT	-	1054.86	PROP INLET
F	513+08.00	15.11' LT	-	1055.27	PROP INLET
G	513+08.00	5.00' LT	-	1055.62	PROP MANHOLE
H	513+74.00	14.00' LT	-	1055.95	PROP INLET
I	511+97.19	47.47' LT	1053.97	1053.89	PROP INLET
J	512+03.18	47.80' LT	1054.17	1054.25	EXIST MANHOLE ATG
K	512+18.04	47.85' LT	1054.24	1054.09	PROP INLET
L	512+50.39	18.15' LT	1054.84	-	EXIST INLET TBR

SIDEWALK DETAILS

POINT	STA (BL GOODKIRK)	OFFSET	PROP ELEV.	DESCRIPTION
M	511+63.07	22.00' LT	1053.77	END SW CURVE, R=30'
N	511+92.40	44.66' LT	1054.48	BEGIN SW CURVE, R=30'
O	511+94.93	54.51' LT	1054.72	TIE TO EXIST
P	512+19.57	53.03' LT	1054.92	TIE TO EXIST
Q	512+19.57	53.03' LT	1055.45	BEGIN SW CURVE, R=23'
R	512+23.94	36.74' LT	1056.00	END SW CURVE, R=23'

STA ENTRANCE RAMP CD ROAD	GORE WIDTH FROM CD ROAD TO CROWN	CD ROAD TO CROWN SLOPE	GORE WIDTH FROM CROWN TO GOODKIRK	CROWN TO GOODKIRK SLOPE
9+36.72	4.10'	2.40%	4.10'	8.30%
9+50.00	3.32'	2.40%	3.32'	4.22%
9+75.00	2.00'	0.00%	2.00'	0.00%

A STA. 9+23.65, 8.00' LT. ℄ CONST. ENTR. RAMP = STA. 512+24.16, 2.00' RT. ℄ CONST. GOODKIRK ST.

B ITEM 622 - SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN.
TRANSITION BARRIER FROM 42" TO 6" OVER 25'-0"

C ITEM 452 - 4" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P

C21 CURVE DATA
P.I. = STA. 9+76.23
Δ = 10°21'24" RT
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'

C35 CURVE DATA
P.I. = STA. 511+54.47
Δ = 03°28'17" RT
Dc = 01°45'00"
R = 3,274.05'
T = 99.21'
L = 198.37'
E = 1.5'

FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION DETAILS
ORCHARD STREET AND SB ENTRANCE RAMP - GOODKIRK ST INTERCHANGE

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4965
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.213 TOTAL 627

SUM-077/008-11.65/00.00
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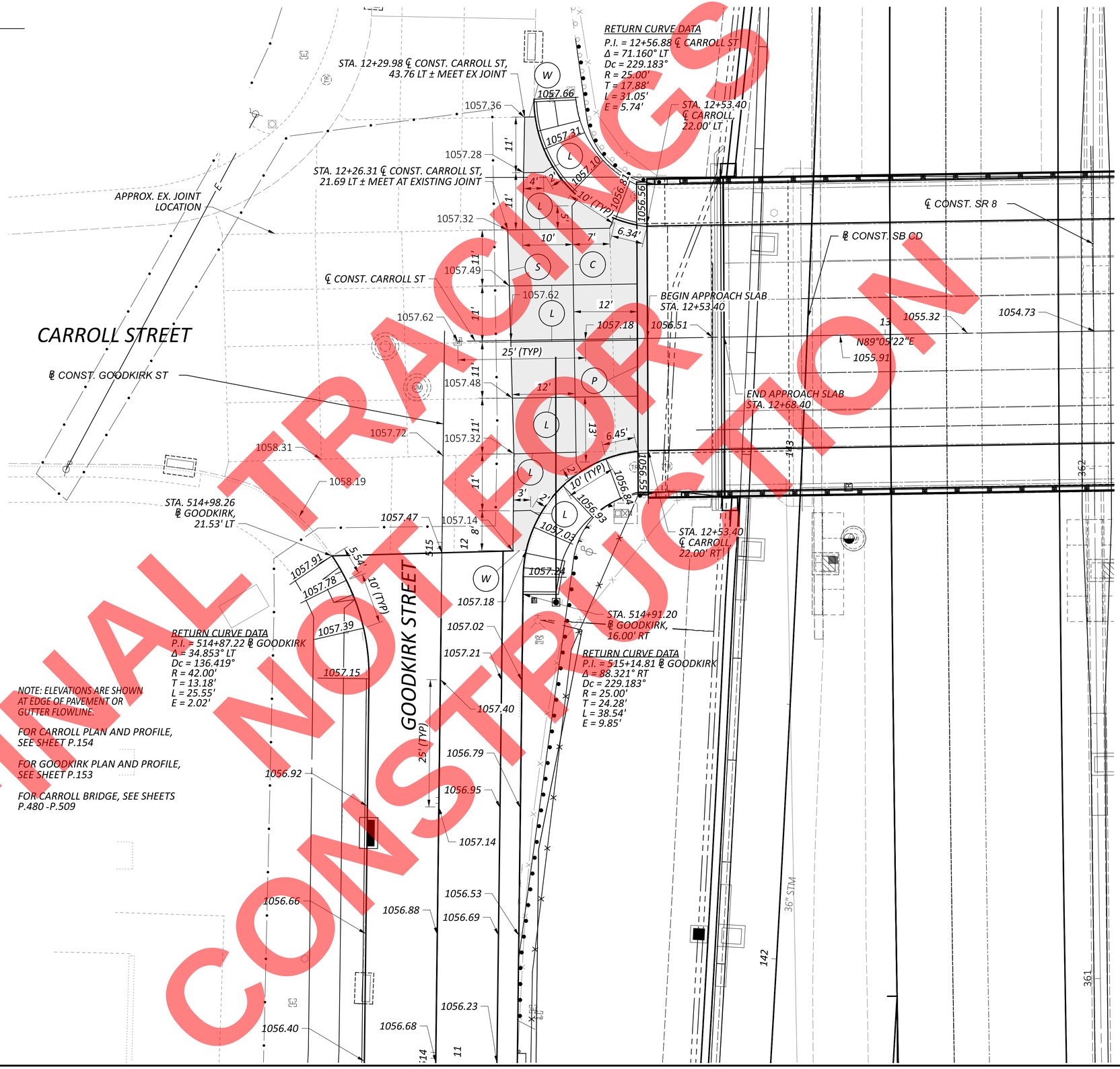
LEGEND

- (P) STANDARD PRESSURE RELIEF JOINT AS PER AS-2-15
- (L) STANDARD LONGITUDINAL JOINT AS PER BP-2.1
- (C) STANDARD CONTRACTION JOINT AS PER BP-2.2
- (S) STANDARD LONGITUDINAL JOINT AS PER BP-2.1 WITHOUT TIE BARS
- (W) EXPANSION JOINT AS PER BP-2.2 WITHOUT DOWEL BARS

FULL DEPTH CONC. PAVEMENT



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION AND JOINT DETAIL CARROLL STREET AND GOODKIRK STREET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4965
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.214 TOTAL 627

SUM-077/008-11.65/00.00

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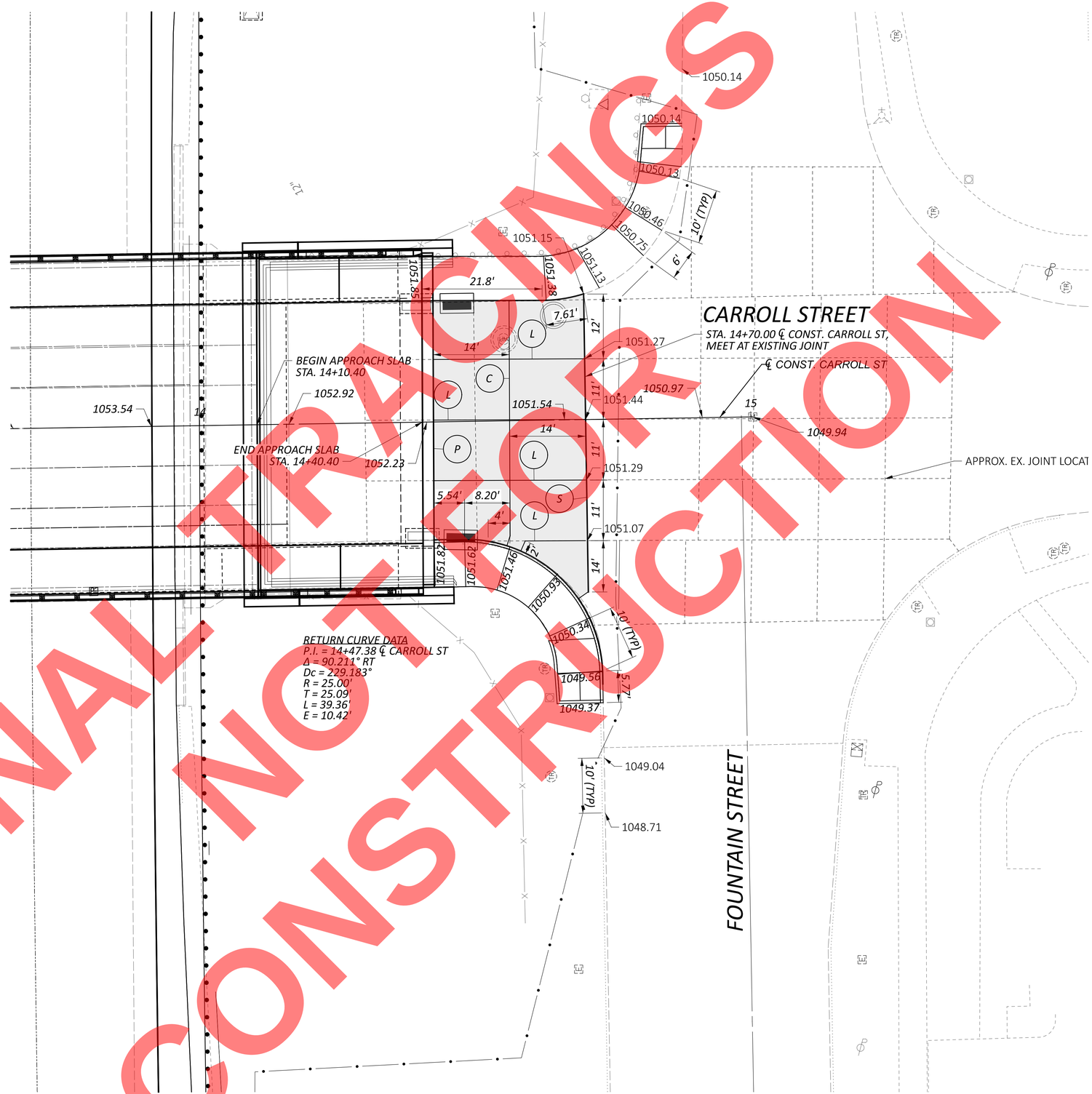
LEGEND

- (P) STANDARD PRESSURE RELIEF JOINT AS PER AS-2-15
- (L) STANDARD LONGITUDINAL JOINT AS PER BP-2.1
- (C) STANDARD CONTRACTION JOINT AS PER BP-2.2
- (S) STANDARD LONGITUDINAL JOINT AS PER BP-2.1 WITHOUT TIE BARS
- (W) EXPANSION JOINT AS PER BP-2.2 WITHOUT DOWEL BARS

FULL DEPTH CONC. PAVEMENT



NOTE: ELEVATIONS ARE SHOWN AT EDGE OF PAVEMENT OR GUTTER FLOWLINE.

FOR CARROLL PLAN AND PROFILE, SEE SHEET P.154

FOR GOODKIRK PLAN AND PROFILE, SEE SHEET P.153

FOR CARROLL BRIDGE, SEE SHEETS P.480 -P.509

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION AND JOINTDETAIL
CARROLL STREET AND FOUNTAIN STREET

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 5-19-26
PROJECT ID 114865
SHEET P.215 TOTAL 627

SUM-077/008-11.65/00.00

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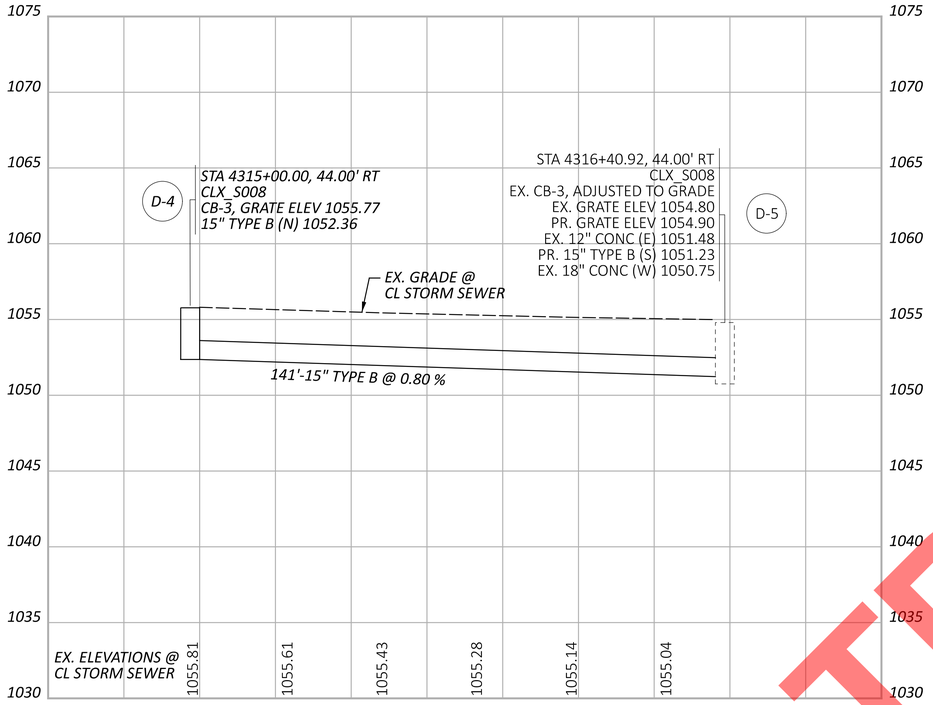

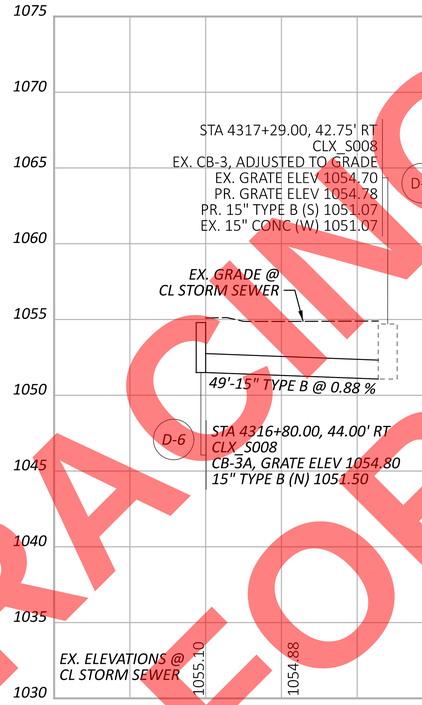

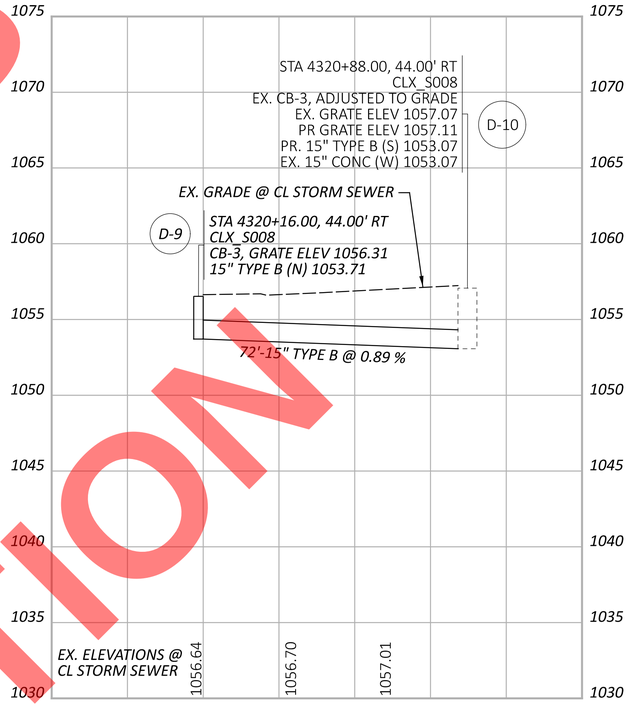

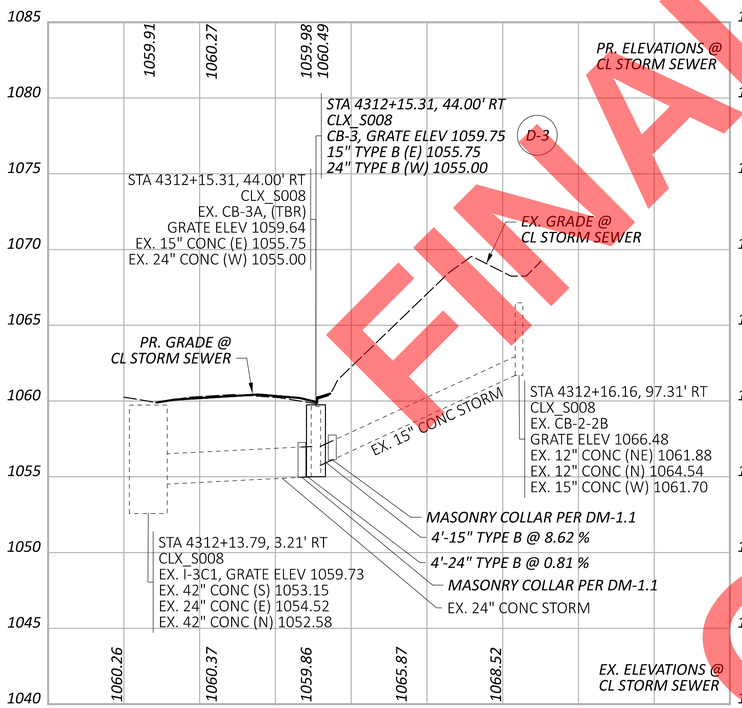

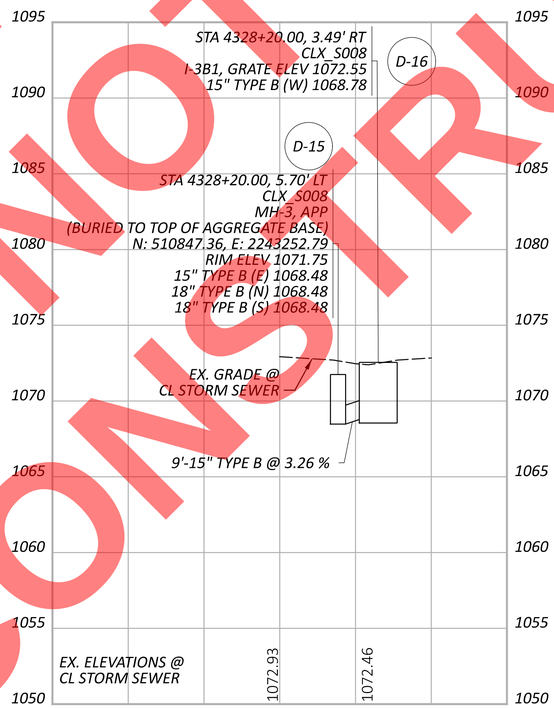

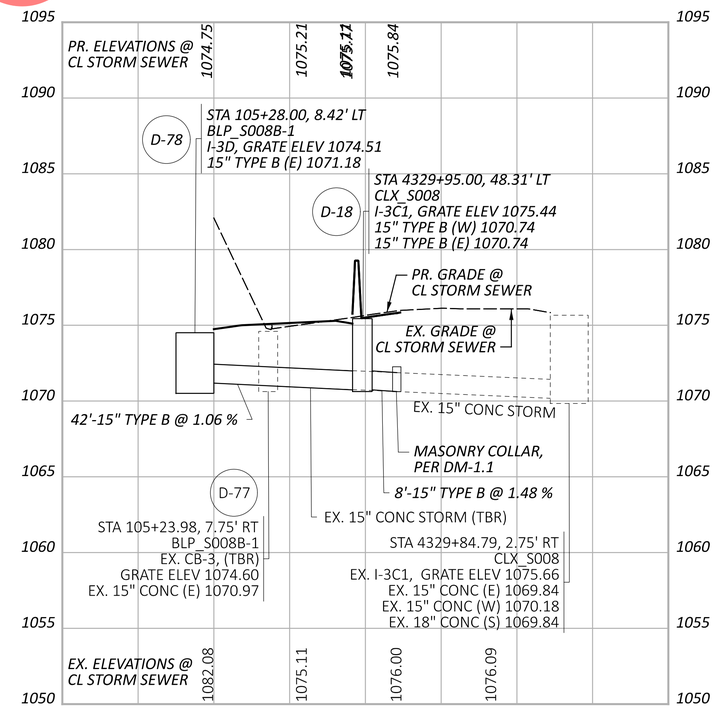

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

SUM-077/008-11.65/0.00

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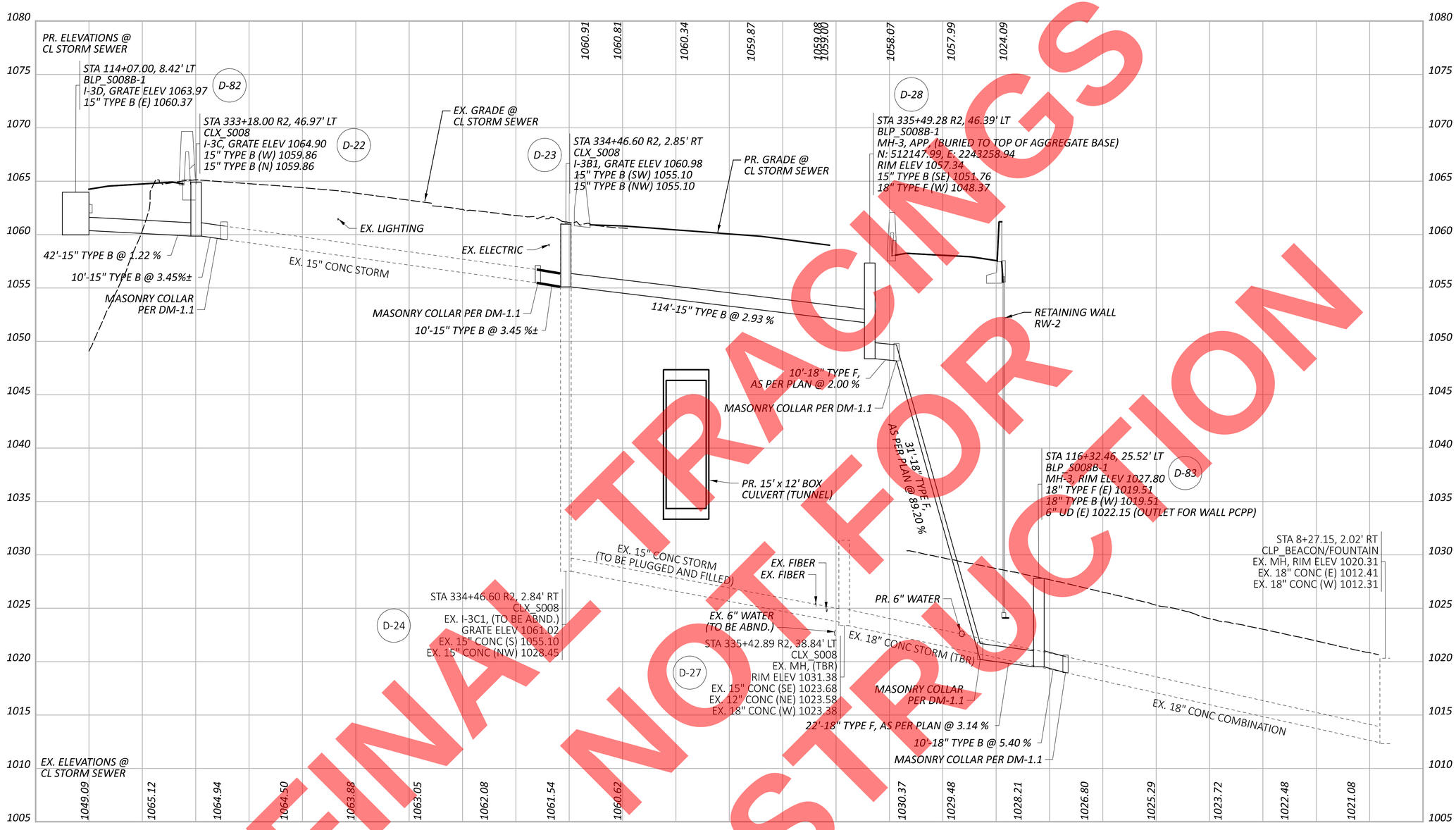
DESIGN AGENCY
EDG Environmental Design Group

DESIGNER
MSD

REVIEWER
SAC 04-30-26

PROJECT ID
114865

SHEET P.216 | TOTAL 627



FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

SUM-077/008-11.65/0.00

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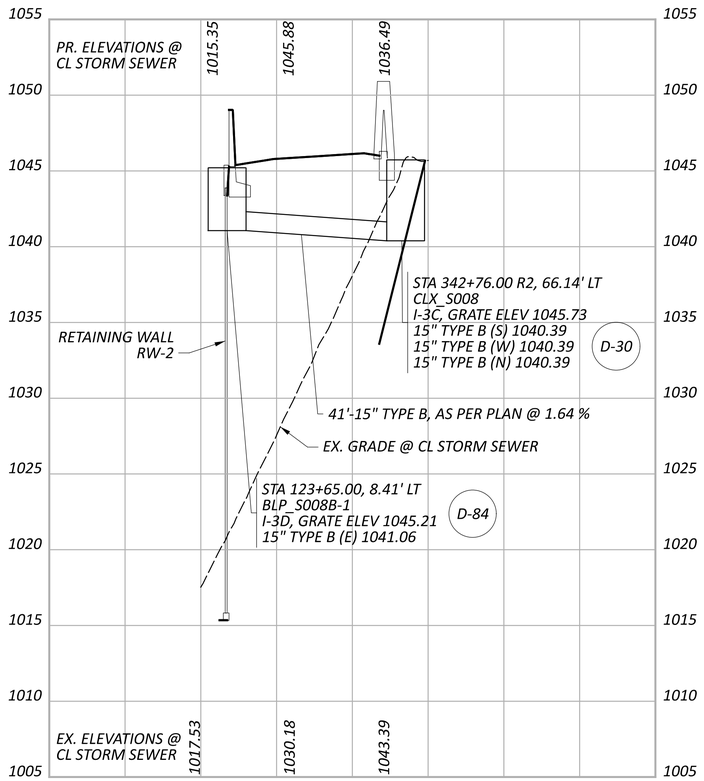
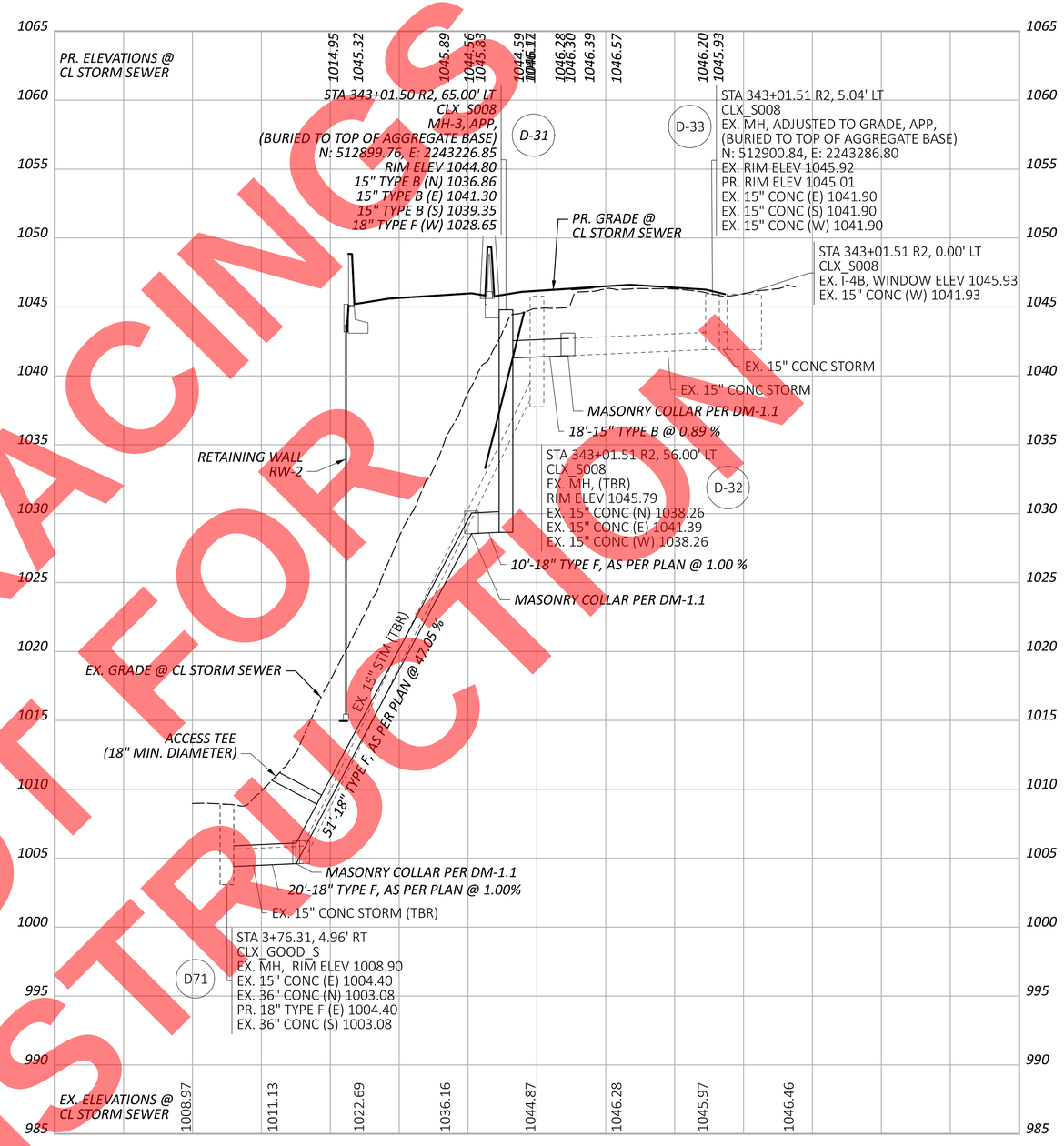
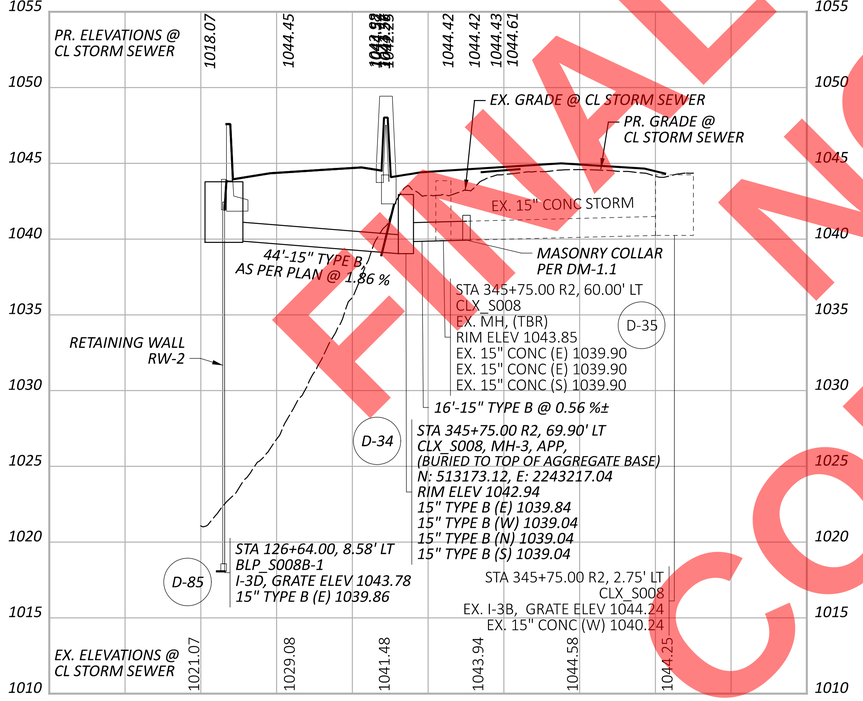
DESIGN AGENCY
EDG Environmental Design Group

DESIGNER	MSD
REVIEWER	SAC 04-30-26
PROJECT ID	114865
SHEET	P.217
TOTAL	627







FINAL - NOT FOR CONSTRUCTION
TRACINGS

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD
REVIEWER SAC 04-30-26
PROJECT ID 114865
SHEET P.218 TOTAL 627

SUM-077/008-11.65/0.00

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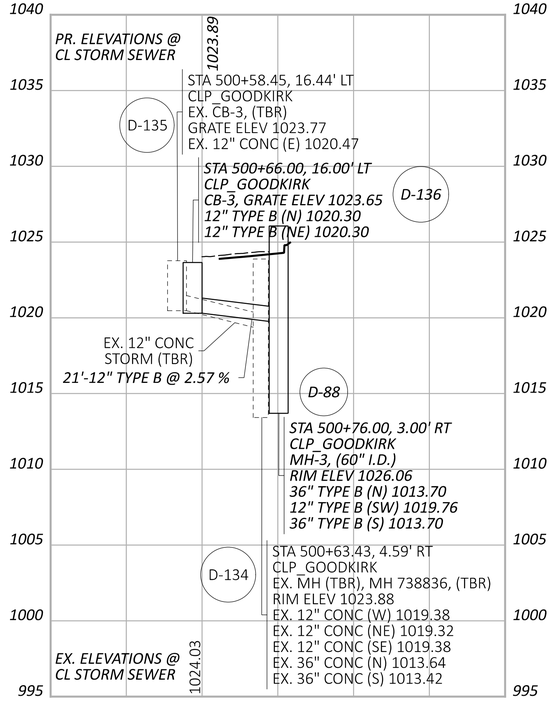

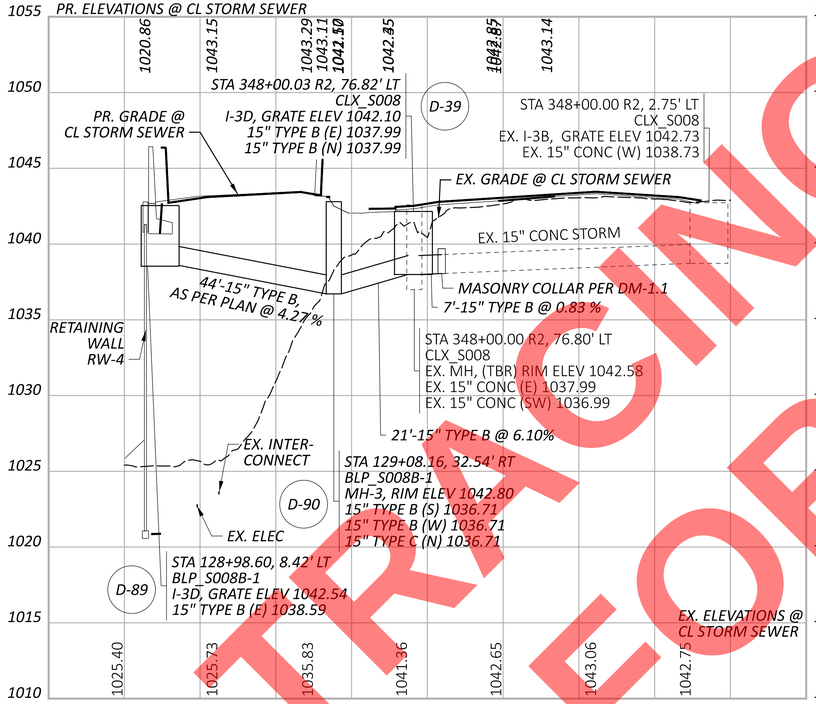

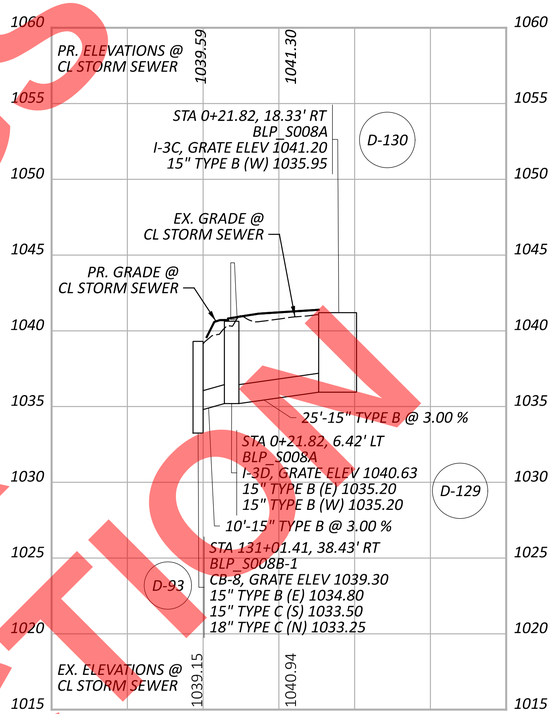

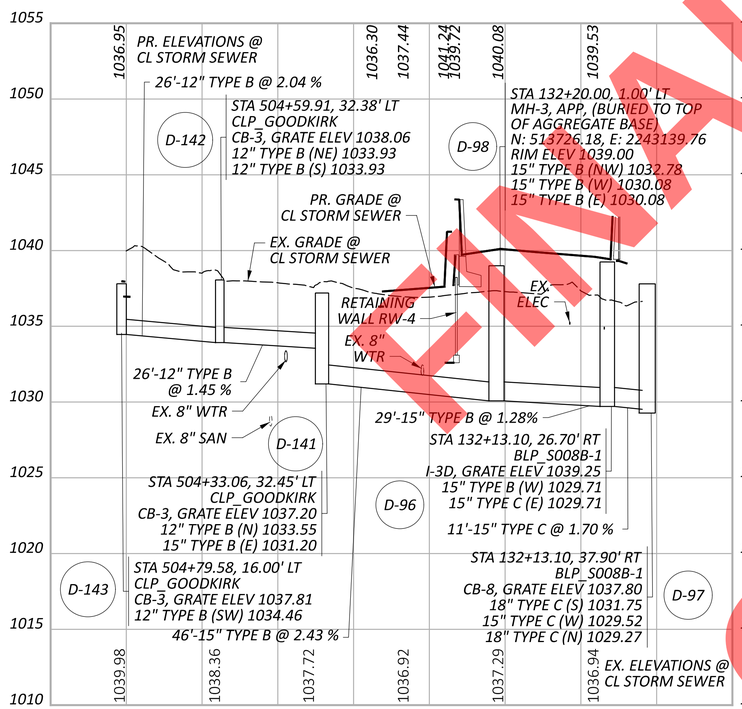

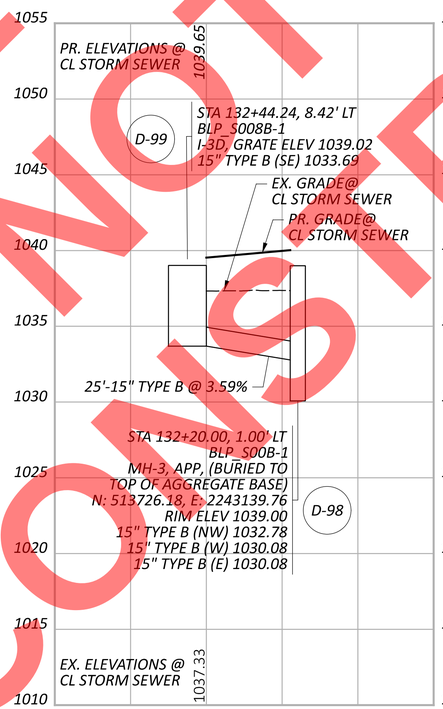

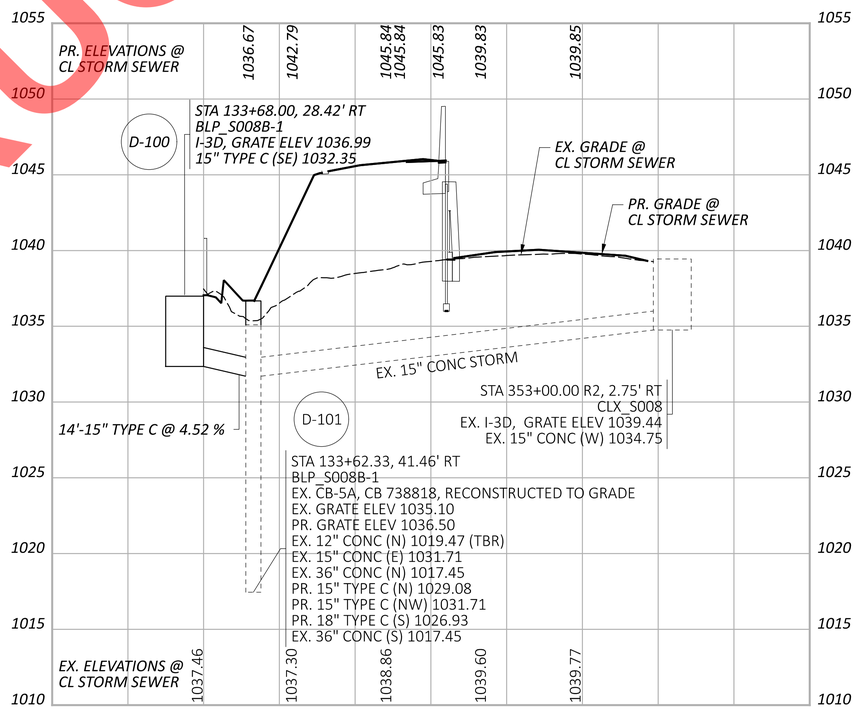

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

SUM-077/008-11.65/0.00

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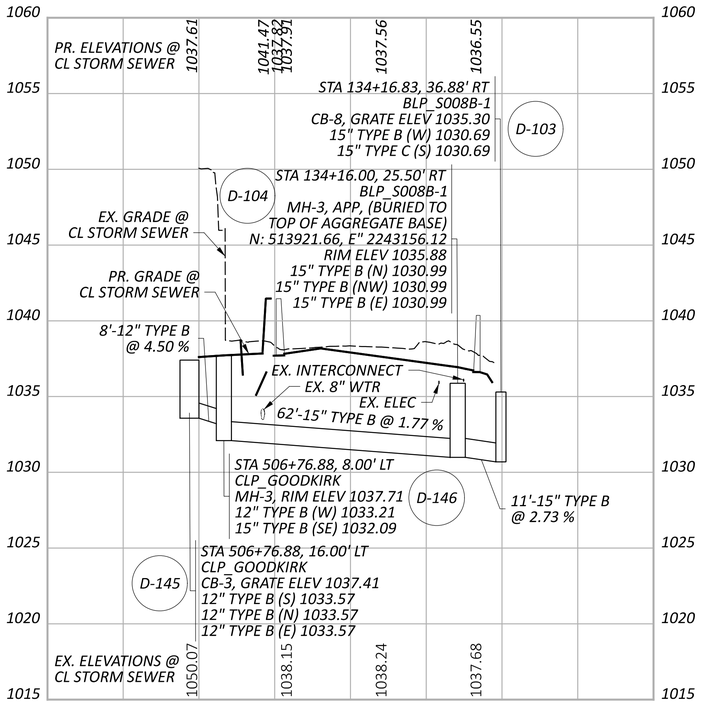
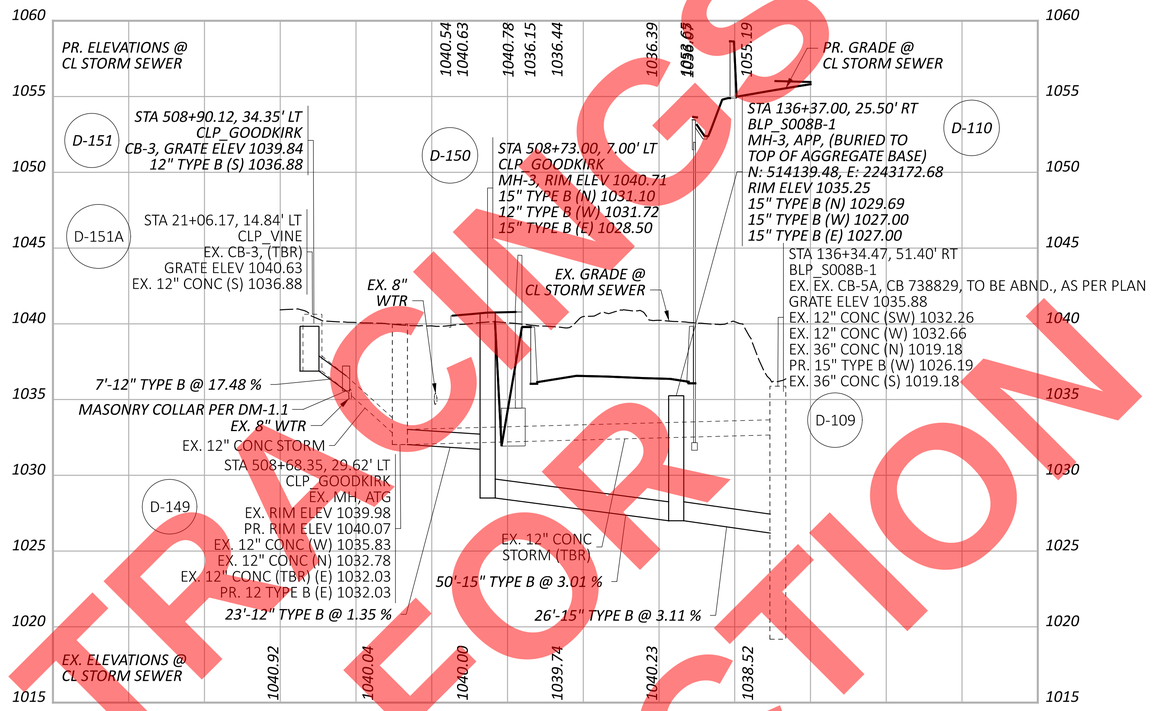
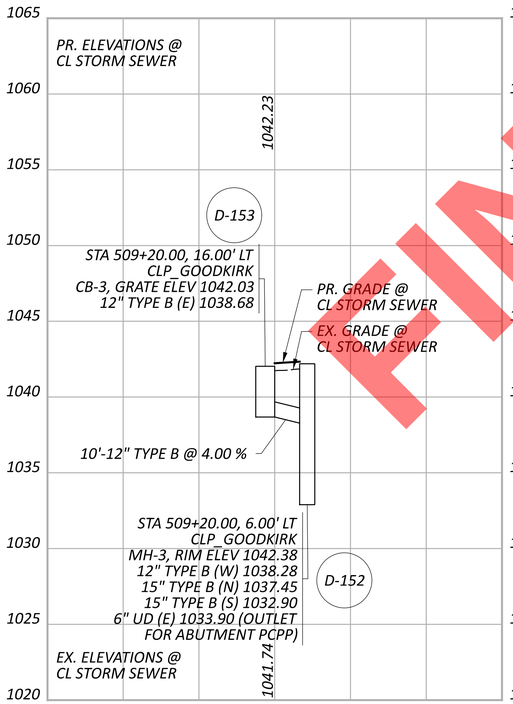
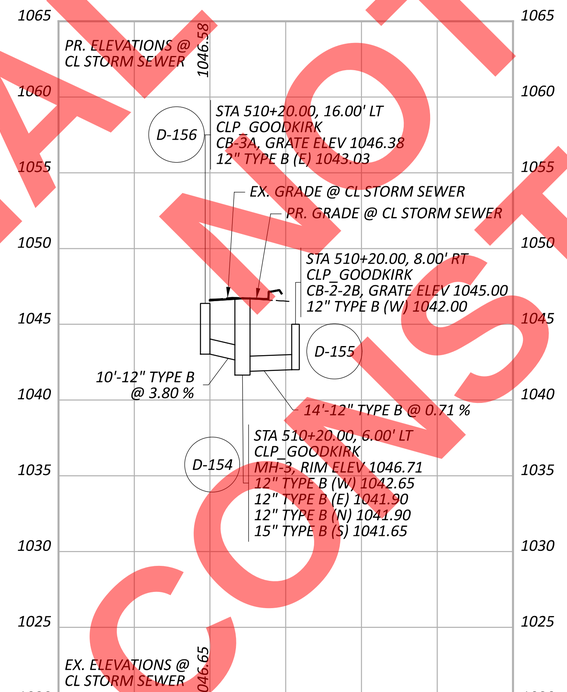
DESIGN AGENCY
EDG Environmental Design Group

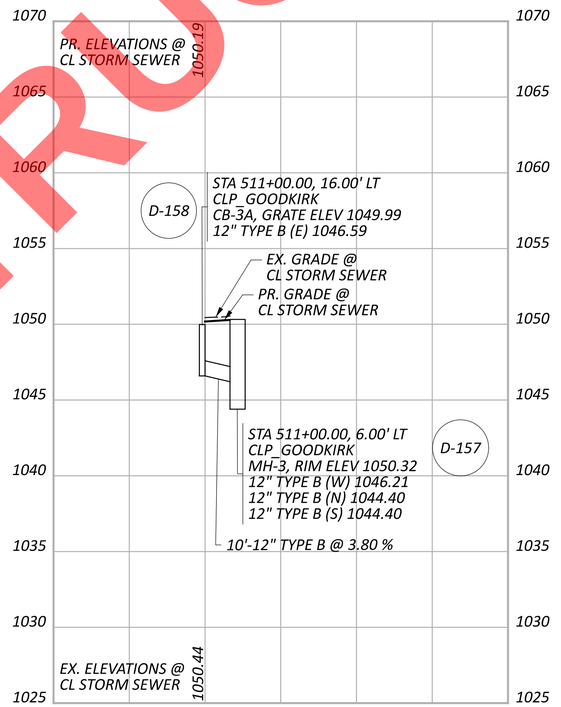
DESIGNER	MSD
REVIEWER	SAC 04-30-26
PROJECT ID	114865
SHEET	P.219
TOTAL	627











FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD
REVIEWER SAC 04-30-26
PROJECT ID 114865
SHEET P.220 TOTAL 627

SUM-077/008-11.65/0.00

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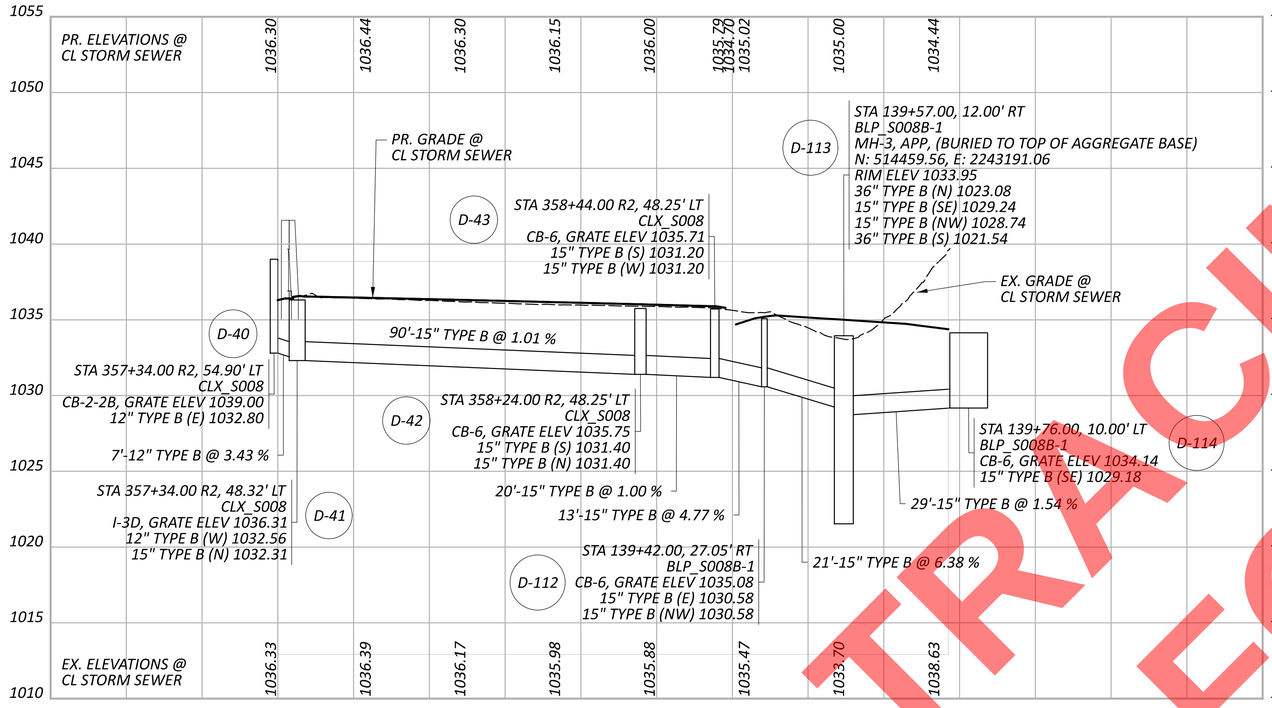

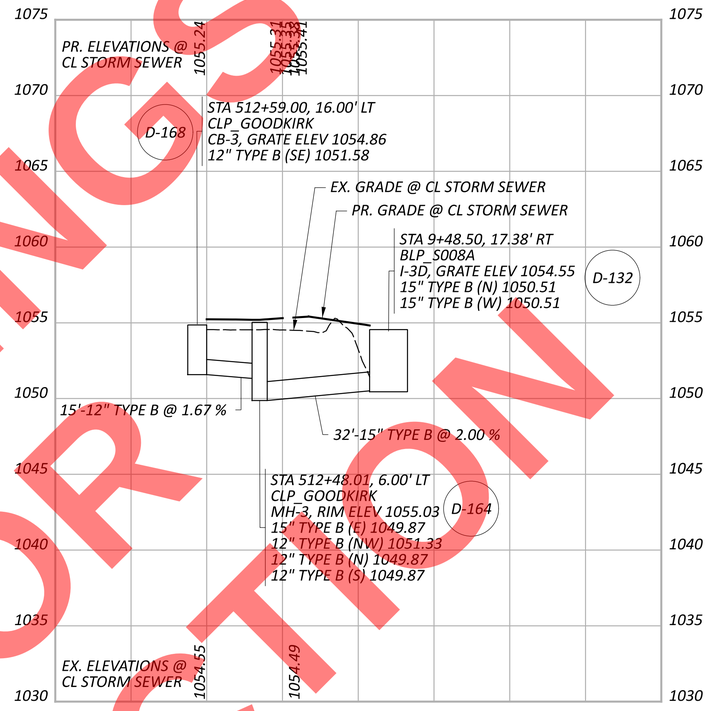

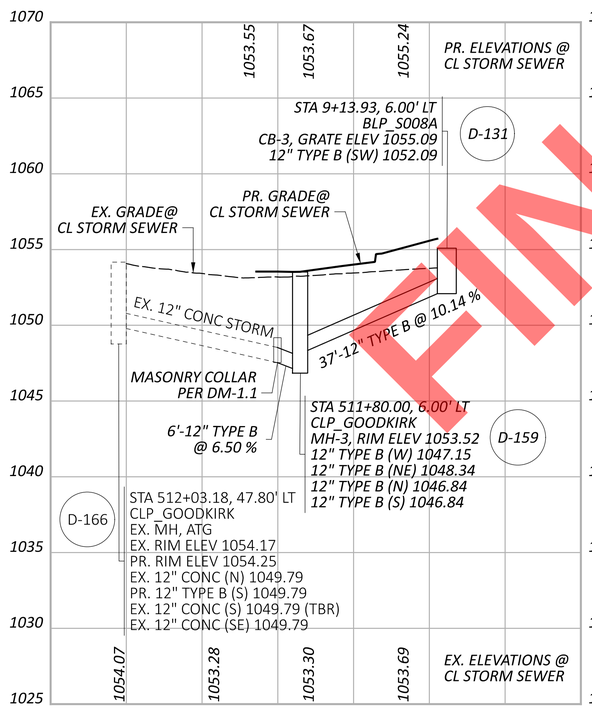

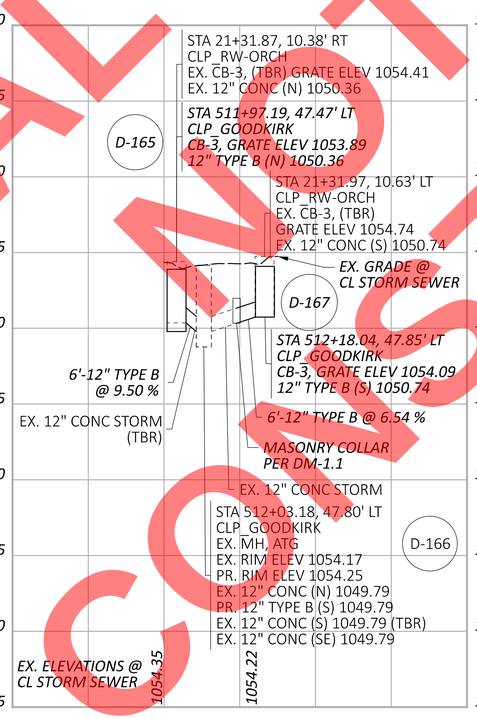

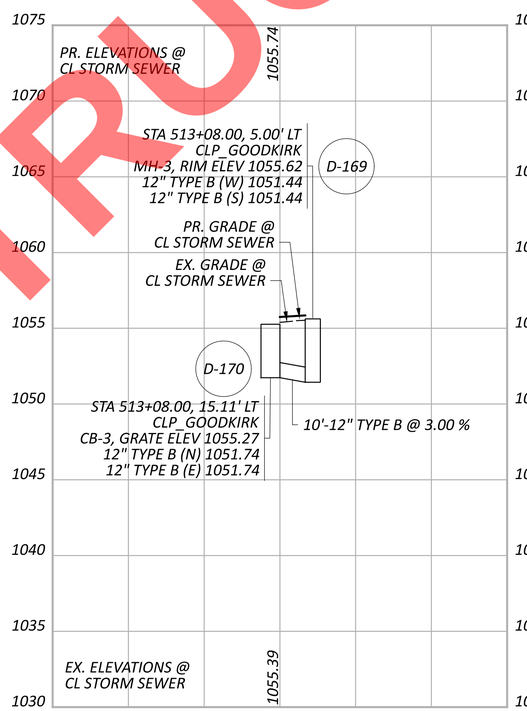

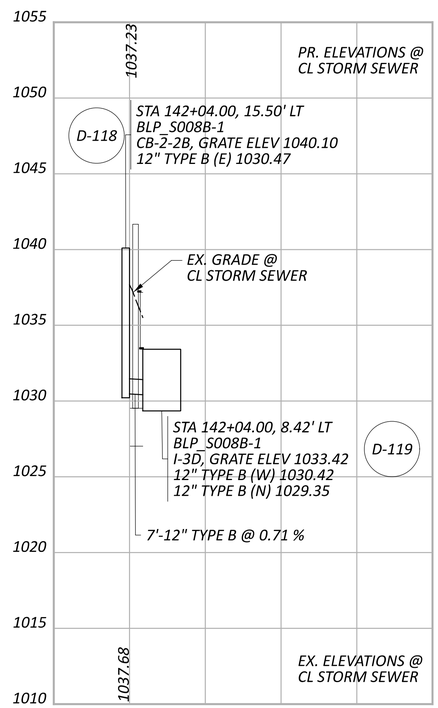

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

SUM-077/008-11.65/0.00

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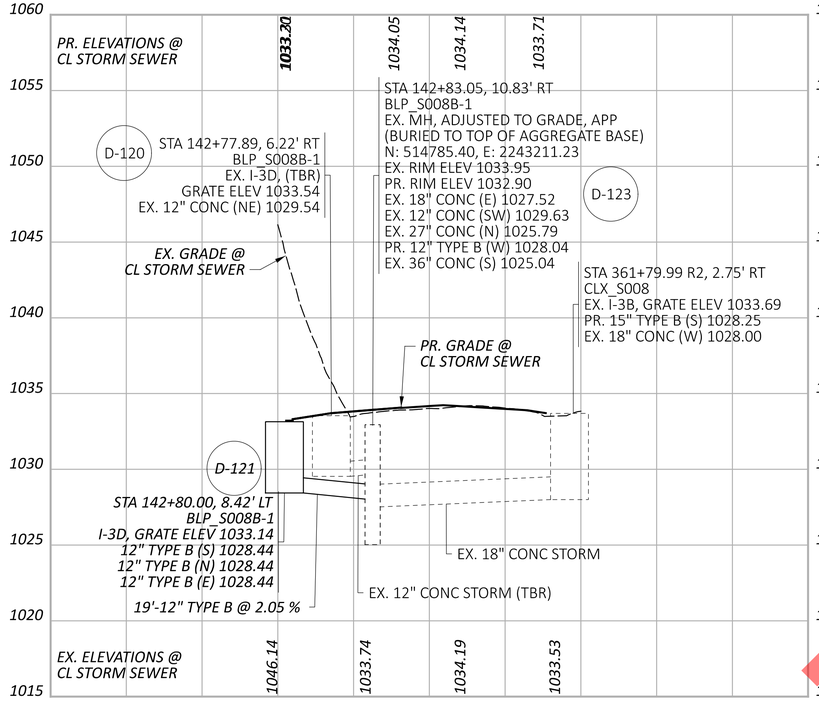
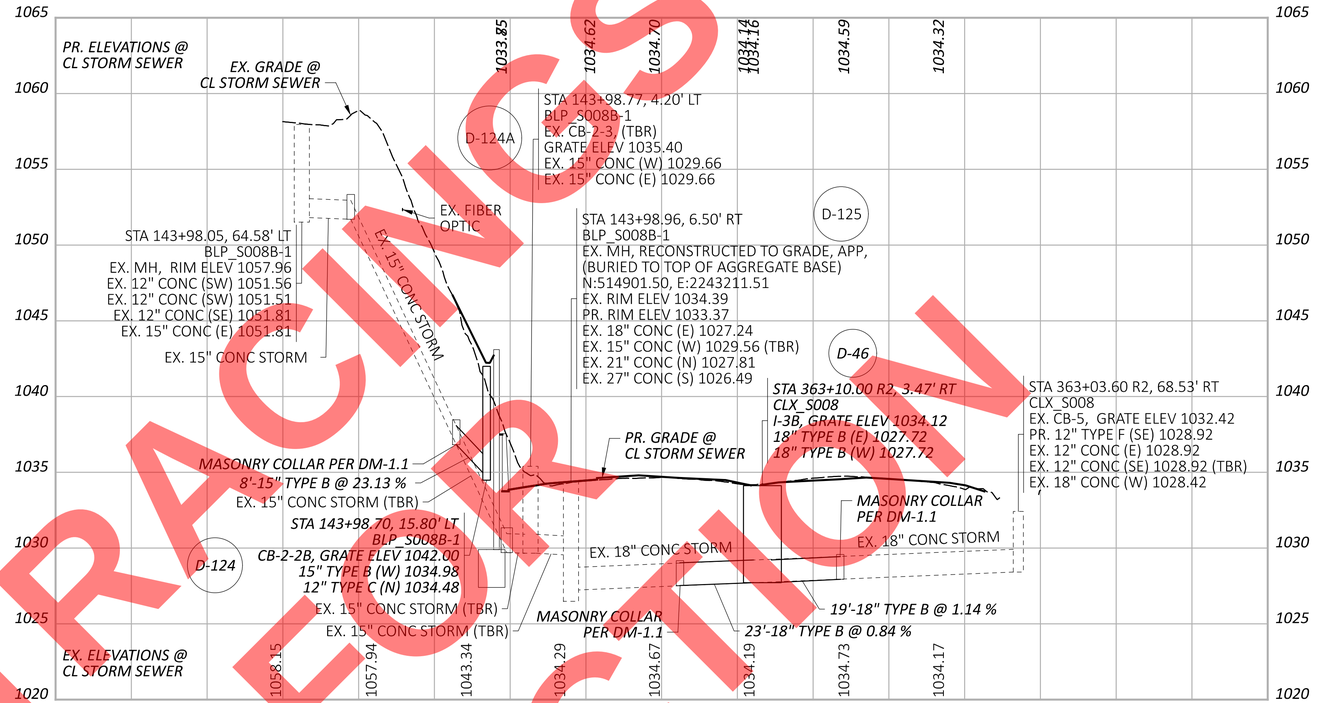
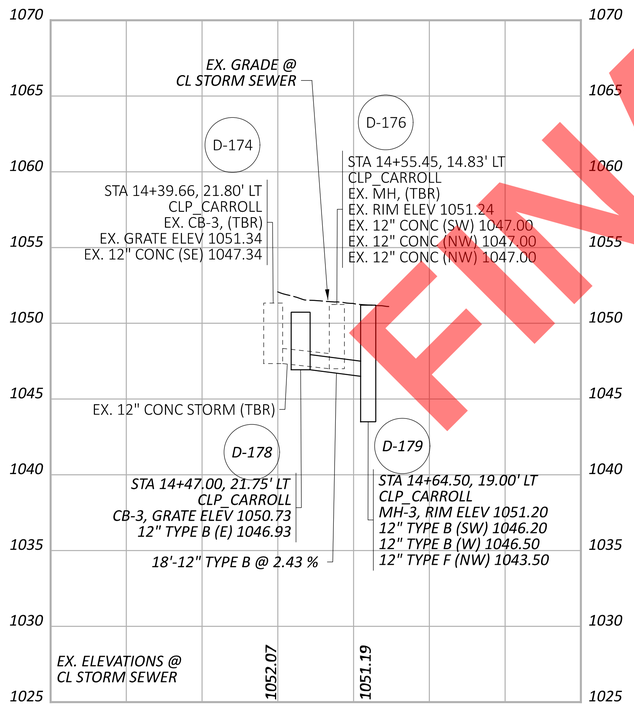
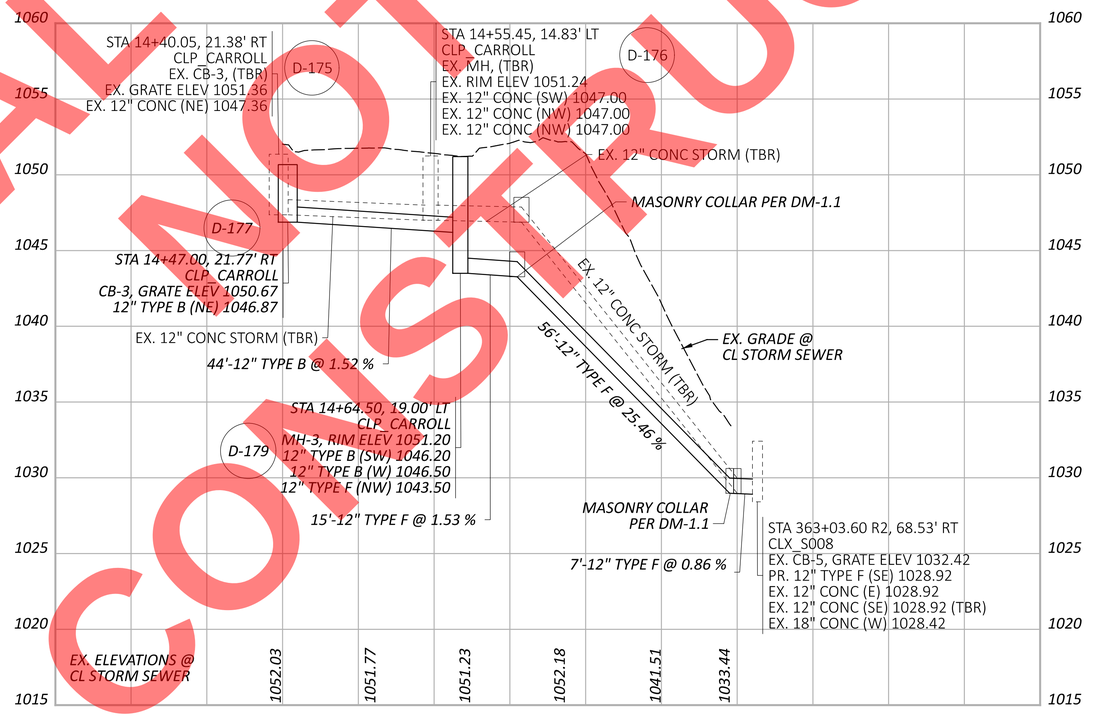
DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD
REVIEWER SAC 04-30-26
PROJECT ID 114865
SHEET P.221 TOTAL 627









FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

DESIGN AGENCY
EDG Environmental Design Group

DESIGNER MSD
REVIEWER SAC 04-30-26
PROJECT ID 114865
SHEET P.222 TOTAL 627

SUM-077/008-11.65/0.00

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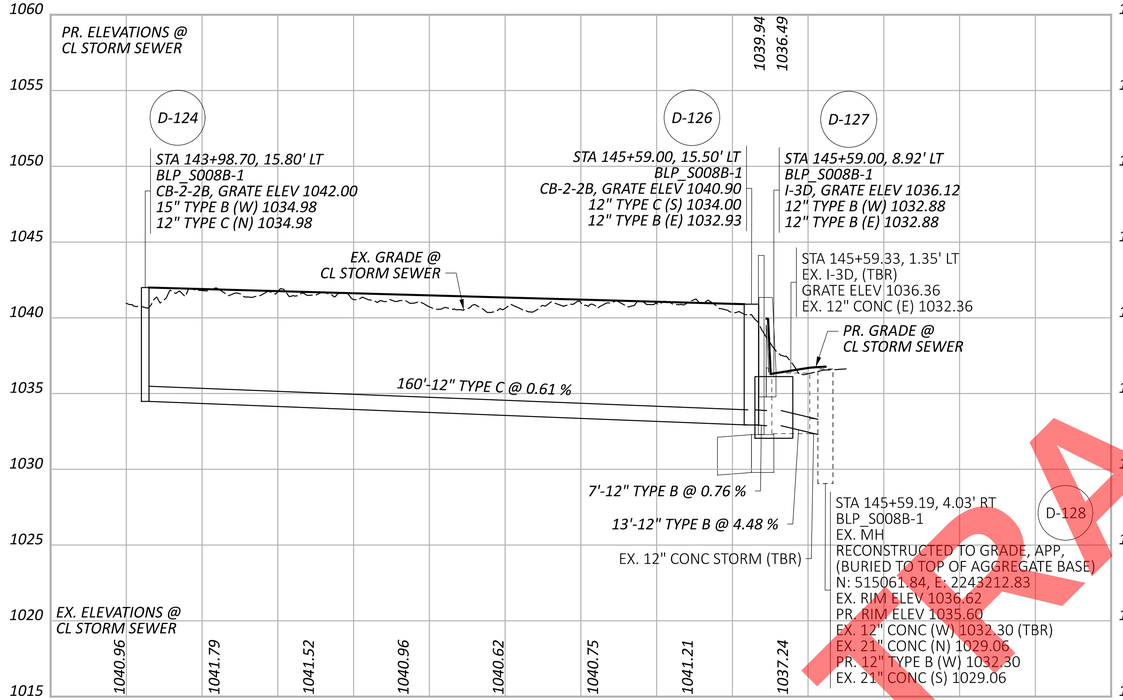

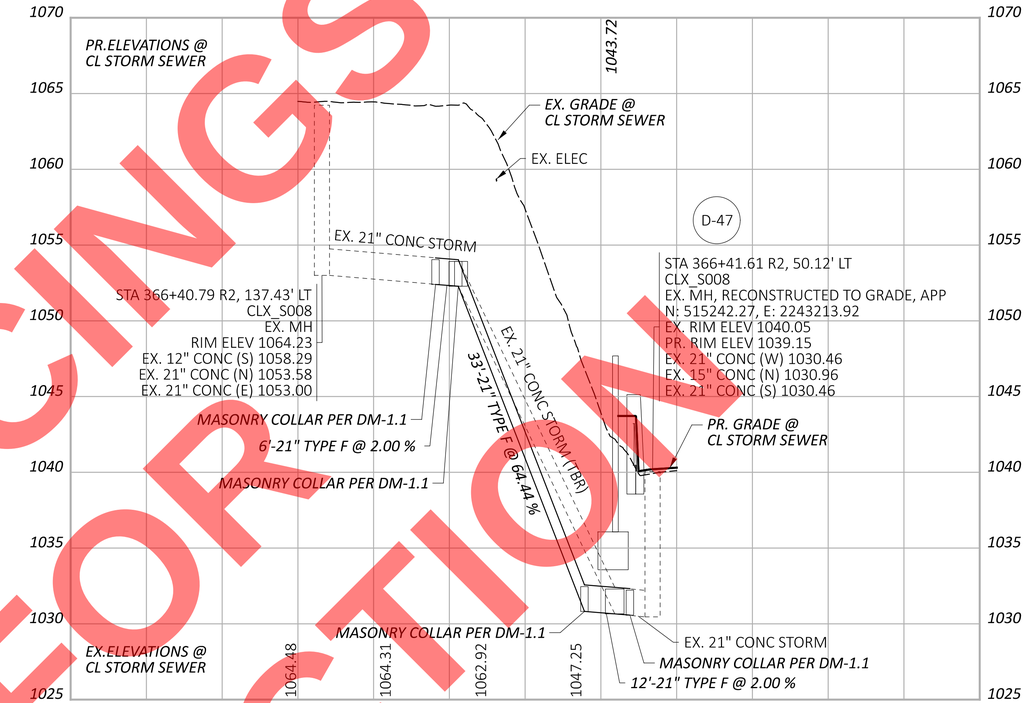

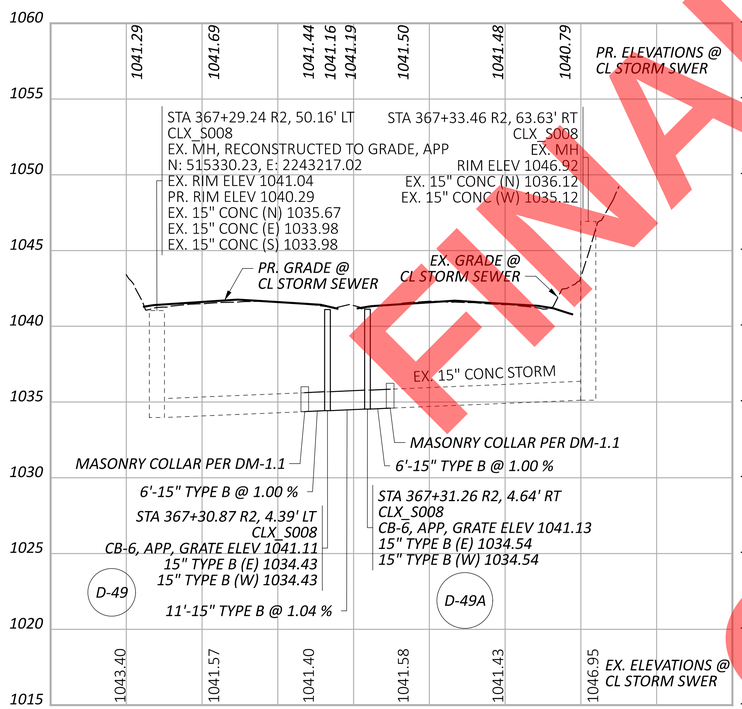

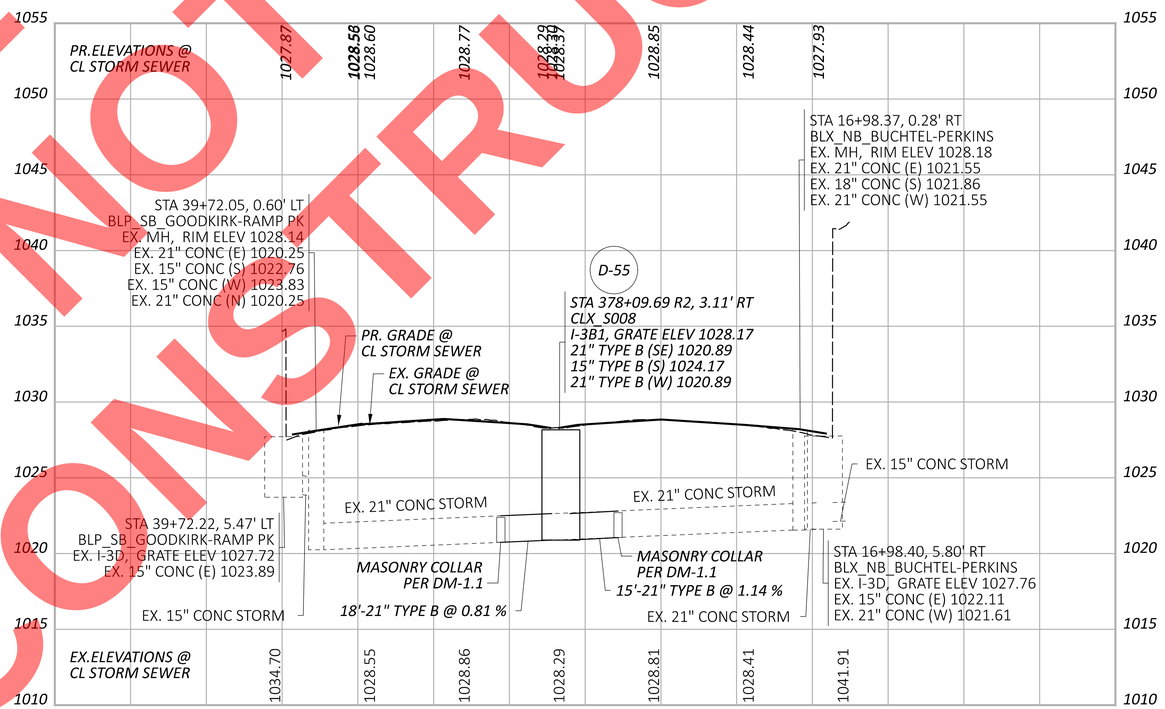

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

SUM-077/008-11.65/0.00

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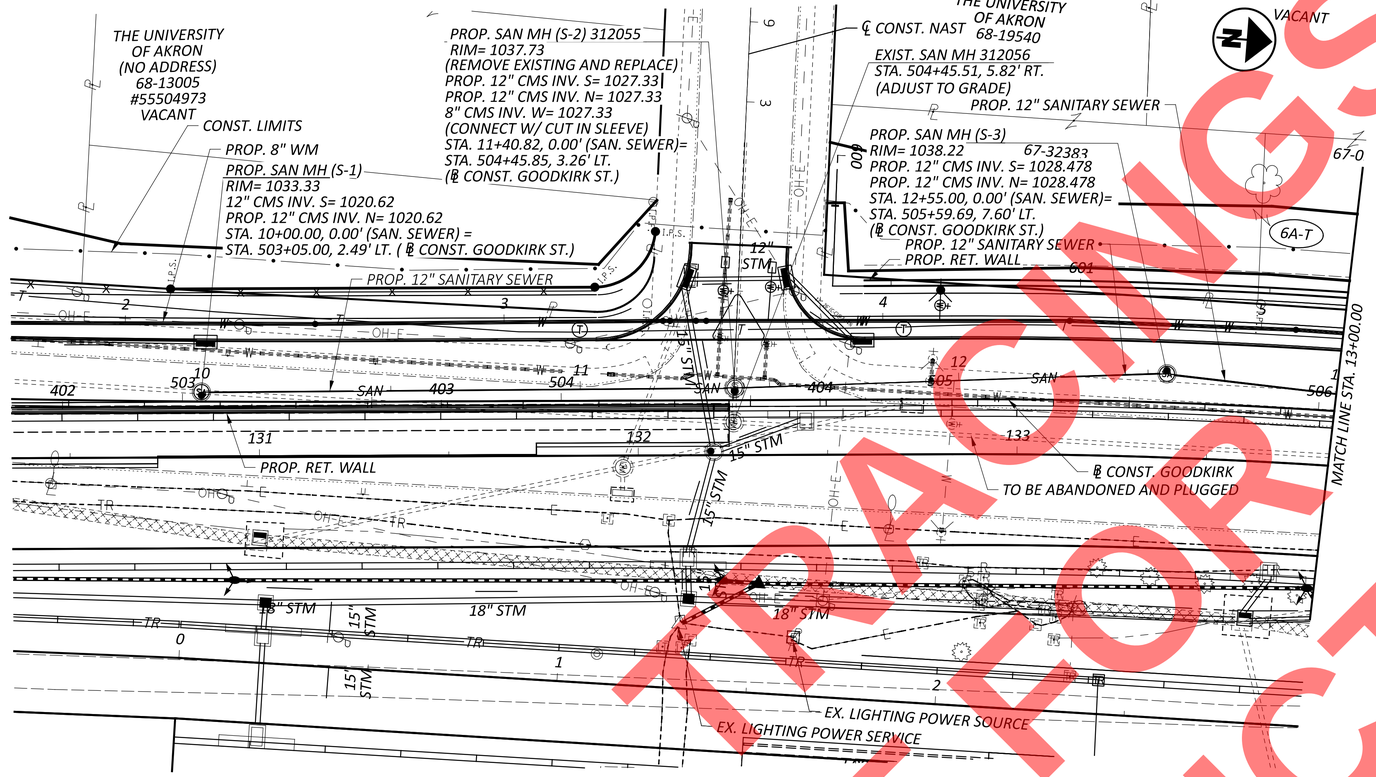
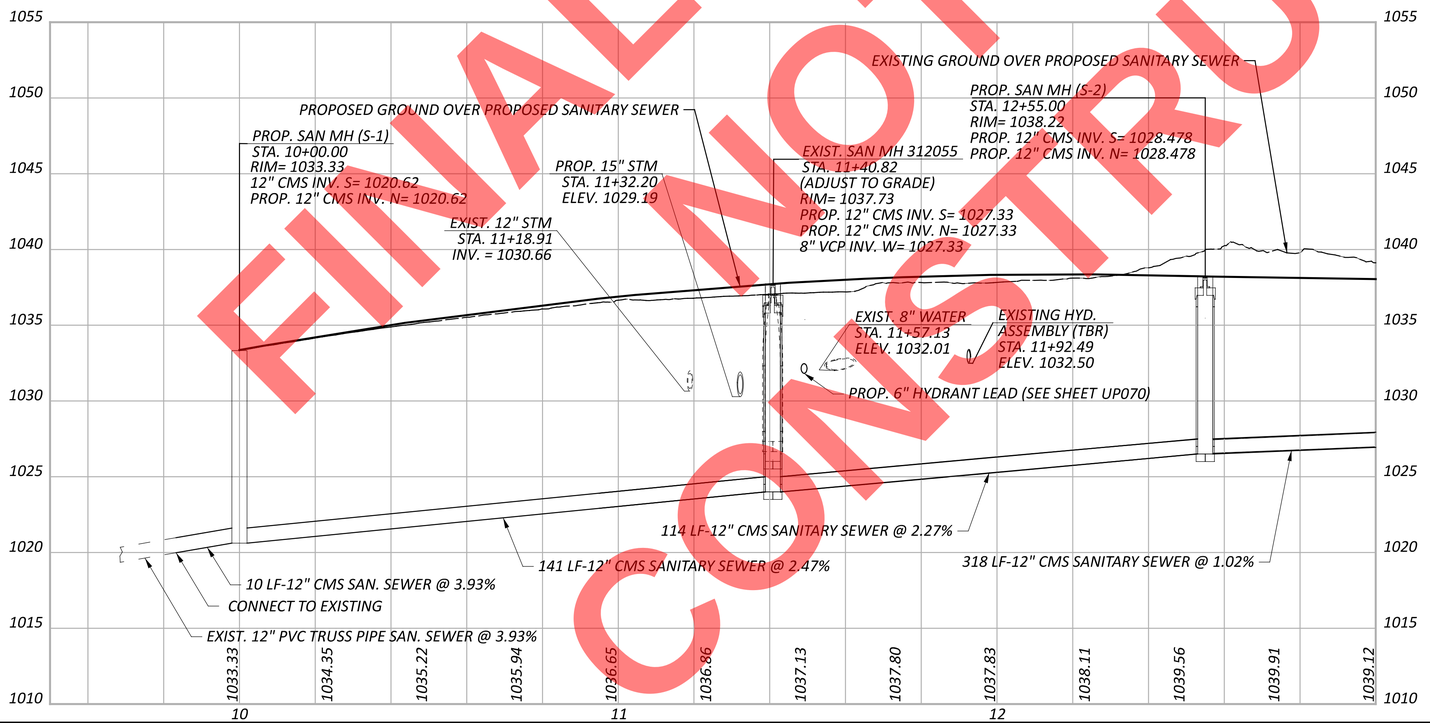
DESIGN AGENCY
EDG Environmental Design Group
DESIGNER MSD
REVIEWER SAC 04-30-26
PROJECT ID 114865
SHEET P.223 TOTAL 627





NOTE 1 : SANITARY MANHOLES SHALL BE CITY OF AKRON MH-2

NOTE 2 : AKRON CMS 557 SANITARY SEWERS

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GOODKIRK ST. PROPOSED SANITARY SEWER PLAN AND PROFILE BEGINNING TO STA. 13+00.00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER IJF
REVIEWER SMG 12-02-25
PROJECT ID 114865
SHEET P.224 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: SanSewer1 - Goodkirk WL PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 3:25:52 PM USER: burnsk1837
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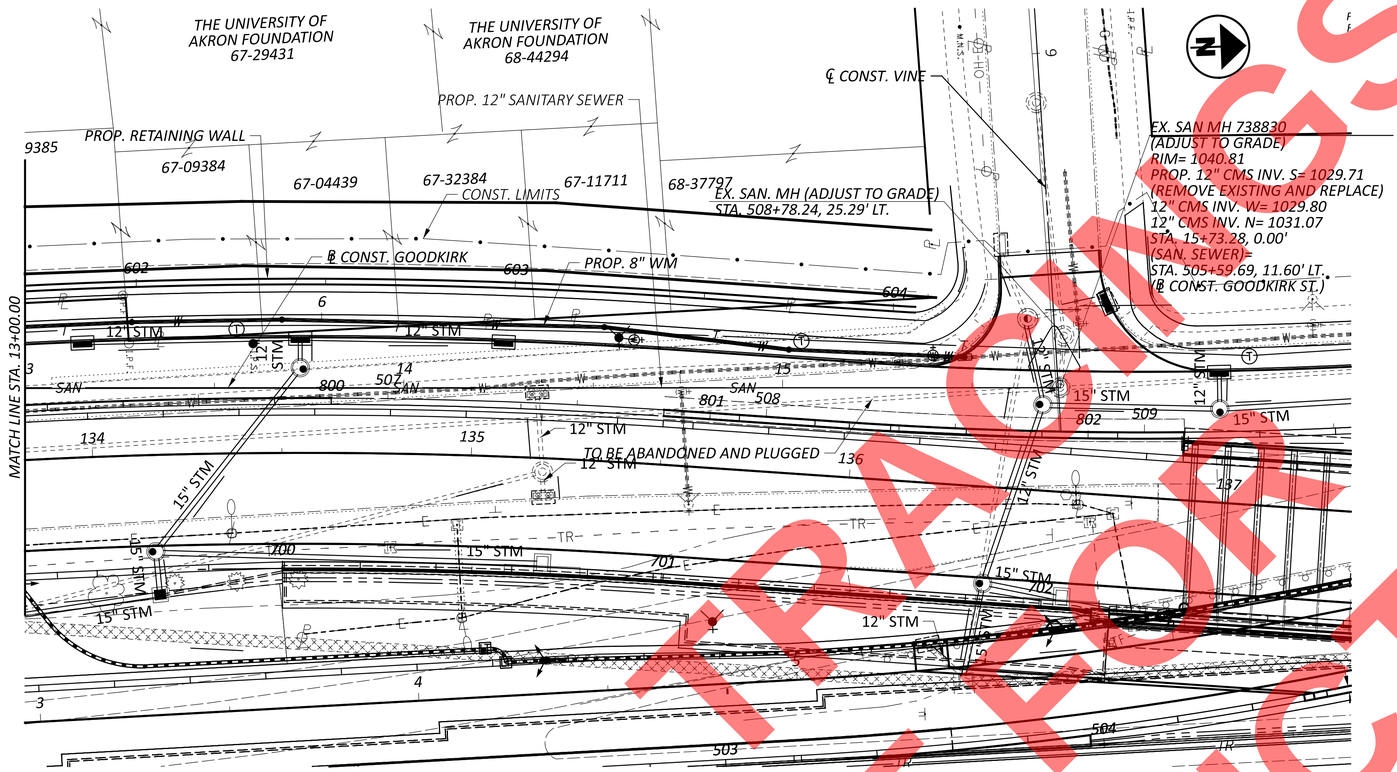

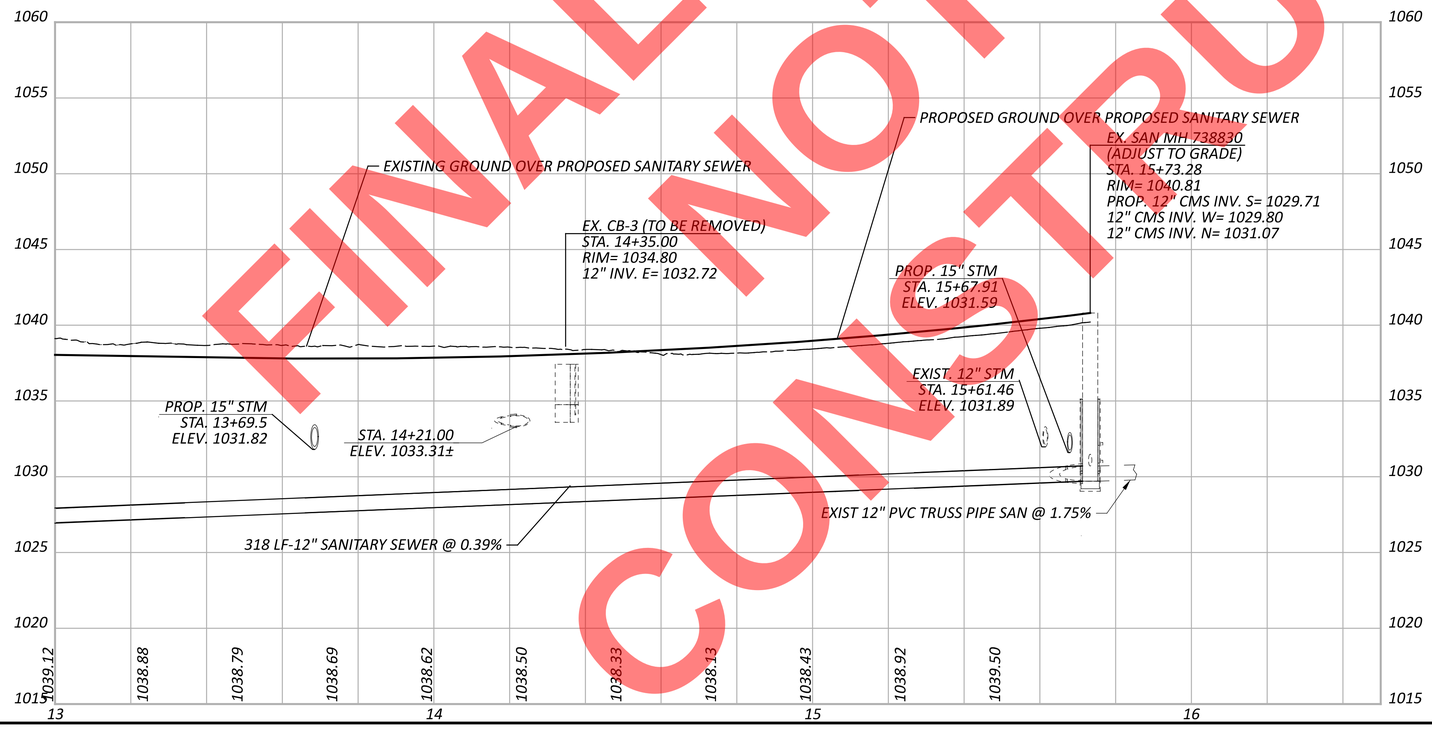

NOTE 1 : SANITARY MANHOLES SHALL BE CITY OF AKRON MH-2

NOTE 2 : AKRON CMS 557 SANITARY SEWERS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GOODKIRK ST. PROPOSED SANITARY SEWER PLAN AND PROFILE 13+00.00 TO END

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1555
www.arcadis.com

DESIGNER IJF
REVIEWER SMG 12-02-25
PROJECT ID 114865
SHEET P.225 TOTAL 627

SUM-077/008-11.65/00.00

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WATER MAIN NOTES

1. THE CONTRACTOR SHALL SUPPLY ALL OF THE WATER MAIN MATERIALS, INCLUDING THE DUCTILE IRON PIPE, FITTINGS AND FITTING RESTRAINTS, HYDRANTS AND VALVES, POLYETHYLENE ENCASEMENT, AND ALL OTHER APPURTENANCES AND ANY ITEMS SPECIALLY ITEMIZED AS REQUIRED FOR THE WATER MAIN INSTALLATION. ALL WATER MAIN MATERIALS SHALL COMPLY WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND THE CITY OF AKRON ENGINEERING BUREAU, CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION) ITEM 715, WATER MAIN MATERIALS. INSTALLATION OF ALL WATER MAIN MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 250, WATER MAINS AND PER CITY OF AKRON WATER SUPPLY BUREAU (AWSB) STANDARD CONSTRUCTION DRAWINGS (HTTP://WWW.AKRONOHIO.GOV/WATER). SUBMITTALS OF MATERIAL SPECIFICATIONS ARE TO BE MADE TO THE AWSB PRIOR TO PURCHASING MATERIAL. SUBMIT TO BOB GEISER, P.E. (BGEISER@AKRONOHIO.GOV).

2. THE CONTRACTOR MUST MAINTAIN A TEN-FOOT MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL SANITARY AND STORM SEWER PIPES AND/OR FORCE MAIN PIPES.

3. THE CONTRACTOR MUST MAINTAIN AN 18-INCH MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE AND/OR SERVICE LINES TO EDGE OF ALL SANITARY SEWER AND STORM PIPES WHERE THEY CROSS.

4. THE CONTRACTOR MUST MAINTAIN A 12-INCH MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPES TO THE EDGE OF ALL DIRECT BURIAL CONDUITS, CONCRETE ENCASED ELECTRICAL CONDUITS, LIGHT POLE BASES, AND HAND HOLE PULL BOXES.

5. THE CONTRACTOR MUST MAINTAIN A 36-INCH MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL DIRECT BURIAL CONDUITS, CONCRETE ENCASED ELECTRICAL CONDUITS, LIGHT POLE BASES, AND HAND HOLE PULL BOXES.

6. WHERE WATER MAINS CROSS SEWER TRENCHES, THE TRENCH IS TO BE BACKFILLED WITH APPROVED GRANULAR MATERIAL.
7. APPROVED PIPE FITTINGS, BOLTS, ETC., FOR AKRON SYSTEM WATER MAIN INSTALLATION:

PIPE: MINIMUM THICKNESS CLASS 53 DUCTILE IRON PER AWWA C151 SPECIFICATIONS, WITH CEMENT-LINING PER AWWA C104. LABELED V-BIO ENHANCED POLYETHYLENE ENCASEMENT PER AWWA C105 IS REQUIRED ON ALL PIPE, FITTINGS, AND VALVES. ONLY DOMESTICALLY MANAUFACTURED DUCTILE IRON PIPE CAN BE UTILIZED WITH THESE MANUFACTURERS BEING MEMBERS IN GOOD STANDING WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION.

PIPE JOINTS: PUSH-ON JOINTS (TYTON, FASTITE, ETC.), PER AWWA C151 SPECIFICATIONS WITH PLAIN OR RESTRAINING RUBBER GASKETS PER AWWA C111 SPECIFICATIONS.

FITTINGS: CLASS 350 DUCTILE IRON COMPACT FITTINGS PER AWWA C153, WITH MECHANICAL JOINT ENDS AND DUCTILE IRON FOLLOWER GLANDS SEE STANDARD CONSTRUCTION DRAWING W-5.0 MECHANICAL JOINT DUCTILE IRON RESTRAINING GLANDS. ANCHOR TEES OR ANCHOR PIPE ARE REQUIRED ON ALL HYDRANT RUNS BETWEEN THE TEE AND HYDRANT RUN VALVE.

RESTRAINED FITTING DEVICES: ALL VALVES, BENDS, OFFSETS, HYDRANT INLETS, CAPS, PLUGS, AND BRANCHES OF TEES AND WYES MUST BE RESTRAINED USING MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS OR RESTRAINING GASKETS. HARDWOOD BLOCKING IS REQUIRED FOR ALL DIAMETERS 4 THROUGH 10-INCH, CONCRETE BLOCKING AND STRAPPING FOR ALL DIAMETERS 12-INCH AND LARGER.

RESTRAINED JOINTS FOR ALL DIAMETERS SHALL BE INSTALLED FOR A LENGTH OF 30 FEET ON EACH SIDE OF A VALVE, BEND OR OFFSET USING FIELD-LOCK OR FAST-GRIP RESTRAINING GASKETS OR MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS.

RESTRAINED JOINT PIPE SYSTEMS:
- PUSH-ON JOINT WITH FIELD LOCK (4 THROUGH 24-INCH ONLY).
- SURE STOP 350 RESTRAINT GASKETS (4 THROUGH 24-INCH ONLY).
- FAST GRIP GASKETS (4 THROUGH 16-INCH ONLY).
- MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS AND 6 OUNCE ZINC ANODE CAPS ON EVERY BOLT THREAD.
- TR FLEX OR FLEX-RING PIPE AND FITTINGS ARE REQUIRED ON ALL PIPE DIAMETERS LARGER THAN 24-INCH OR WHERE SPECIFIED.

CONCRETE BLOCKING IS REQUIRED ON ALL FIRE LINES (REGARDLESS OF PRESSURE) AND ON ALL DIAMETERS IN AREAS 100 PSI AND OVER SEE STANDARD CONSTRUCTION DRAWING W-8.0 TYPICAL CONCRETE THRUST BLOCKING.

MECHANICAL JOINT T-HEAD BOLTS: ALL MECHANICAL JOINTS SHALL BE MADE WITH COR-TEN OR CONSTRUCTION-GRADE ALLOYED DUCTILE IRON BOLTS. T-HEAD BOLTS SHALL BE ½-INCH LONGER THAN STANDARD LENGTH AND MUST INCLUDE A 6 OZ. ZINC ANODE CAP ON EVERY BOLT THREAD SEE STANDARD CONSTRUCTION DRAWING W-4.0 T-HEAD BOLT AND NUT.

HYDRANTS: AKRON-STYLE MUELLER "CENTURIAN" MODEL A423; KENNEDY "GUARDIAN" MODEL K-81A; EJ “FLOWMASTER” CD250; AMERICAN FLOW CONTROL MODEL B62B WITH 6-INCH INLET, AMERICAN FLOW CONTROL MODEL B84B WITH 8-INCH INLET SEE STANDARD CONSTRUCTION DRAWING W-7.0 HYDRANT RUN AND INSTALLATION. THREADS SHALL BE AKRON, OHIO, FIRE DEPARTMENT STANDARD HOSE COUPLING AS SHOWN ON STANDARD CONSTRUCTION DRAWING W-7.1 HYDRANT STANDARD HOSE COUPLING. HYDRANTS MUST BE LEAD-FREE PER NSF 61-G.

GATE VALVES: RESILIENT-SEAT WEDGE (RSW) VALVES WITH RESTRAINED MECHANICAL JOINTS. VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN TO THE RIGHT (CLOCKWISE) SEE STANDARD CONSTRUCTION DRAWING W-6.1 GATE VALVE INSTALLATION.

BUTTERFLY VALVES, 16-INCH AND UP: RESTRAINED MECHANICAL JOINT OR SHOULDERED (NOT GROOVED) VICTAULIC ENDS WITH STYLE 44N COUPLINGS AND STAINLESS STEEL 316 BOLTS. RUBBER SEALS IN THE VALVE MUST BE REPLACEABLE. FLANGED END OR WAFER-STYLE VALVES ARE NOT ACCEPTABLE.

VALVE BOXES: BIBBY, TYLER, STAR (HEAVY DUTY ONLY), OR EAST JORDAN BRANDS ARE ACCEPTABLE FOR COMPATIBILITY SEE STANDARD CONSTRUCTION DRAWING W-6.0 STANDARD VALVE BOX.

CURB BOXES: RISER PIPE MUST BE OF STAINLESS STEEL MATERIAL. PLUG MUST BE CAST IRON AND THREAD INTO A BRASS RING SEE STANDARD CONSTRUCTION DRAWING S-3.0 STANDARD CURB BOX.

8. COMPACTED PREMIUM BACKFILL IS REQUIRED FOR UNDERGROUND CONSTRUCTION UNDER OR WITHIN THREE FEET OF ANY PROPOSED OR EXISTING SIDEWALK OR PAVEMENT. THE BACKFILLING SHALL CONFORM TO SECTION 551.09 OF THE CITY OF AKRON CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST EDITION.

9. ANY EXISTING WATER MAINS, HYDRANTS, VALVES, VALVE BOXES, METER VAULTS, SERVICE LINES, OR CURB BOXES THAT ARE DAMAGED, OR MUST BE ADJUSTED, AND/OR MOVED, MUST BE REPAIRED, ADJUSTED, MOVED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTACT BOB LEACH AT (330) 375-2420 TO SCHEDULE THIS WORK.

10. NO TAPS FOR WATER SERVICES SHALL BE MADE UNTIL AFTER THE MAINLINE HAS BEEN TESTED AND DISINFECTED. ALL TAPS 2-INCH AND SMALLER SHALL BE MADE BY THE CONTRACTOR AND INSPECTED BY AWSB. ALL BRASS FITTINGS USED SHALL BE LEAD-FREE PER NSF 61-G.

11. ALL WATER MAIN CONSTRUCTION SHALL BE INSPECTED BY AWSB. NOTIFY DOMINIC WRAY AT (330) 375-2549 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

12. PRIOR TO ACCEPTANCE, THE WATER LINE SHALL BE PRESSURE TESTED, AS SPECIFIED IN AWWA C600, AND DISINFECTED AS SPECIFIED IN AWWA C651 LATEST REVISIONS, BY THE CONTRACTOR.

13. USE EXTREME CAUTION WHEN EXCAVATING IN THE AREA OF EXISTING WATER MAIN PIPES, VALVES, HYDRANTS AND THRUST BLOCKS.

14. THE CONTRACTOR SHALL SUPPLY A TEMPORARY SAFE WATER SERVICE TO ALL HOMES THAT WILL HAVE THEIR WATER SERVICE INTERRUPTED BY THIS CONSTRUCTION.

15. THE PROPOSED FACILITIES MUST MAINTAIN A MINIMUM OF 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.

16. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.

17. ANY CONNECTION TO EXISTING DUCTILE IRON WATER MAIN SHALL BE MADE WITH A DUCTILE IRON SOLID SLEEVE WITH RESTRAINING GLAND. ANY CONNECTION TO EXISTING CAST IRON WATER MAIN MAY BE MADE WITH A CAST COUPLING OR DUCTILE IRON SOLID SLEEVE WITH RESTRAINING GLAND.

18. ALL HYDRANTS, VALVES, PLUGS, CAPS, AND OTHER SPECIFIED FITTINGS SHOWN TO BE REMOVED BY THE CONTRACTOR ARE TO BE SALVAGED AND DELIVERED TO THE AKRON WATER DEPARTMENT STORE YARD AT 1460 TRIPLETT BLVD. COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 202.

19. FOR ANY CUT AND CAP OF AN ACTIVE WATER MAIN, THE CAP SHALL BE PROPERLY RESTRAINED PER AWSB DIRECTION.

20. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI (140 kPa) AT GROUND LEVEL AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

21. PER HYDRANT RUN & INSTALLATION DETAIL, NOTE NEAR BOTTOM INDICATES TO TAP THE DRAIN PLUG AND USING 1/2" TYPE K COPPER TUBING, RELOCATE DRAIN BED GREATER THAN 10 FEET AWAY FROM AN EXISTING SEWER WHEN HYDRANT IS LOCATED LESS THAN 10 FEET TO ANY SEWER SEE STANDARD CONSTRUCTION DRAWING W-7.0 HYDRANT RUN AND INSTALLATION.

FINAL PLANS
NOT FOR
CONSTRUCTION

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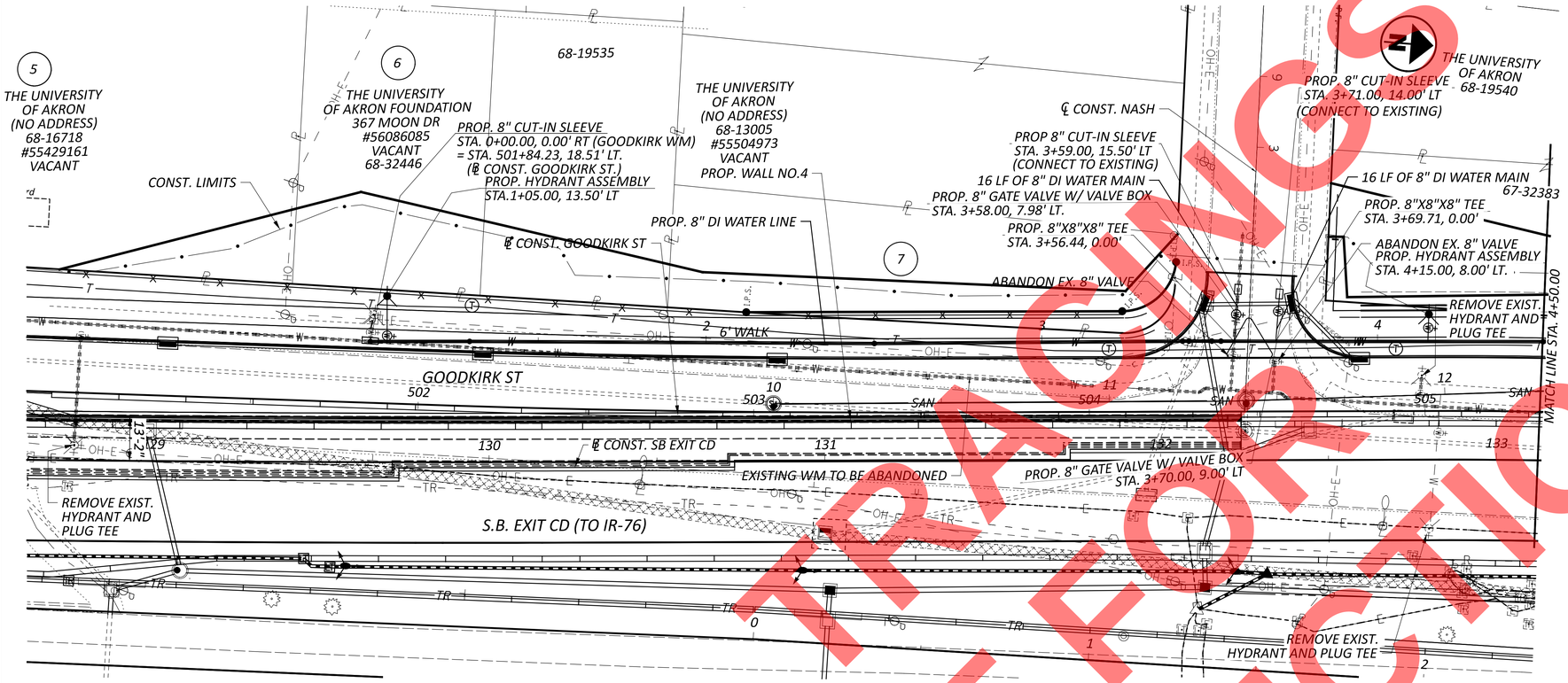
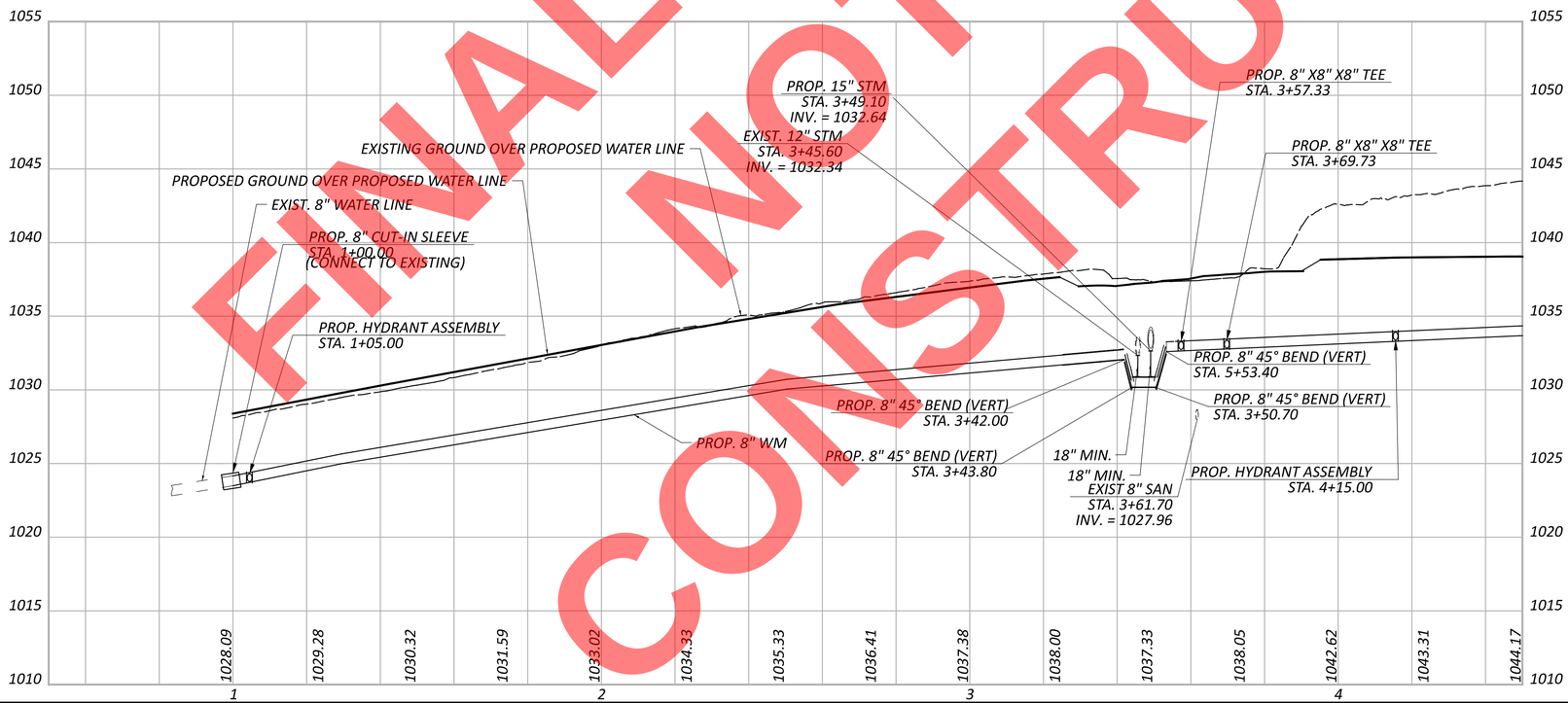
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER IJF
REVIEWER SMG 8-14-26
PROJECT ID 114865
SHEET P.226 TOTAL 627





FINAL PLANS NOT FOR CONSTRUCTION

GOODKIRK ST. PLAN AND PROFILE PROPOSED WATER LINE BEGINNING TO STA. 4+50.00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

DESIGNER: IJF
REVIEWER: SMG 12-02-25
PROJECT ID: 114865
SHEET: P.227 TOTAL: 627

SUM-077/008-11.65/00.00

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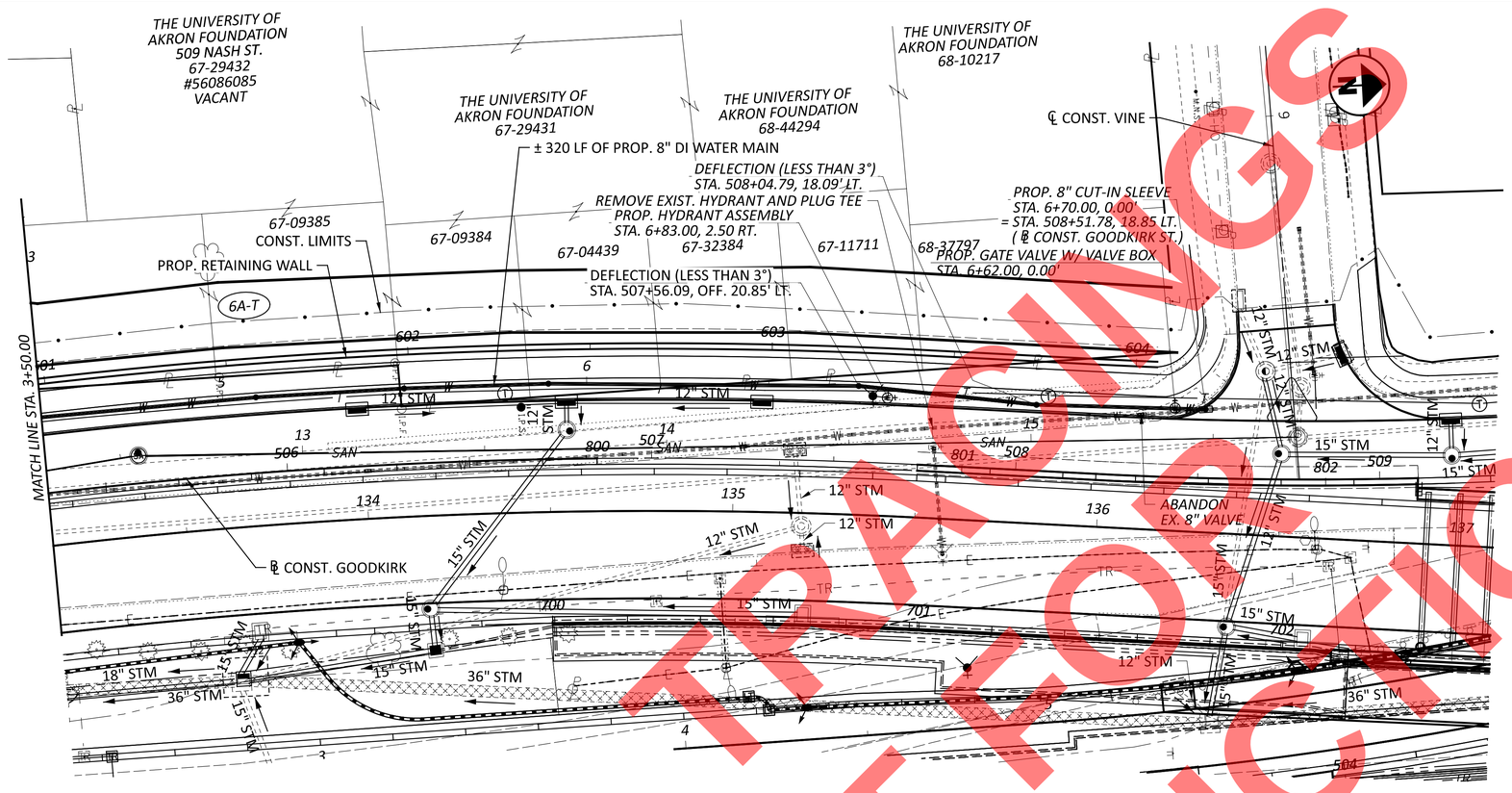

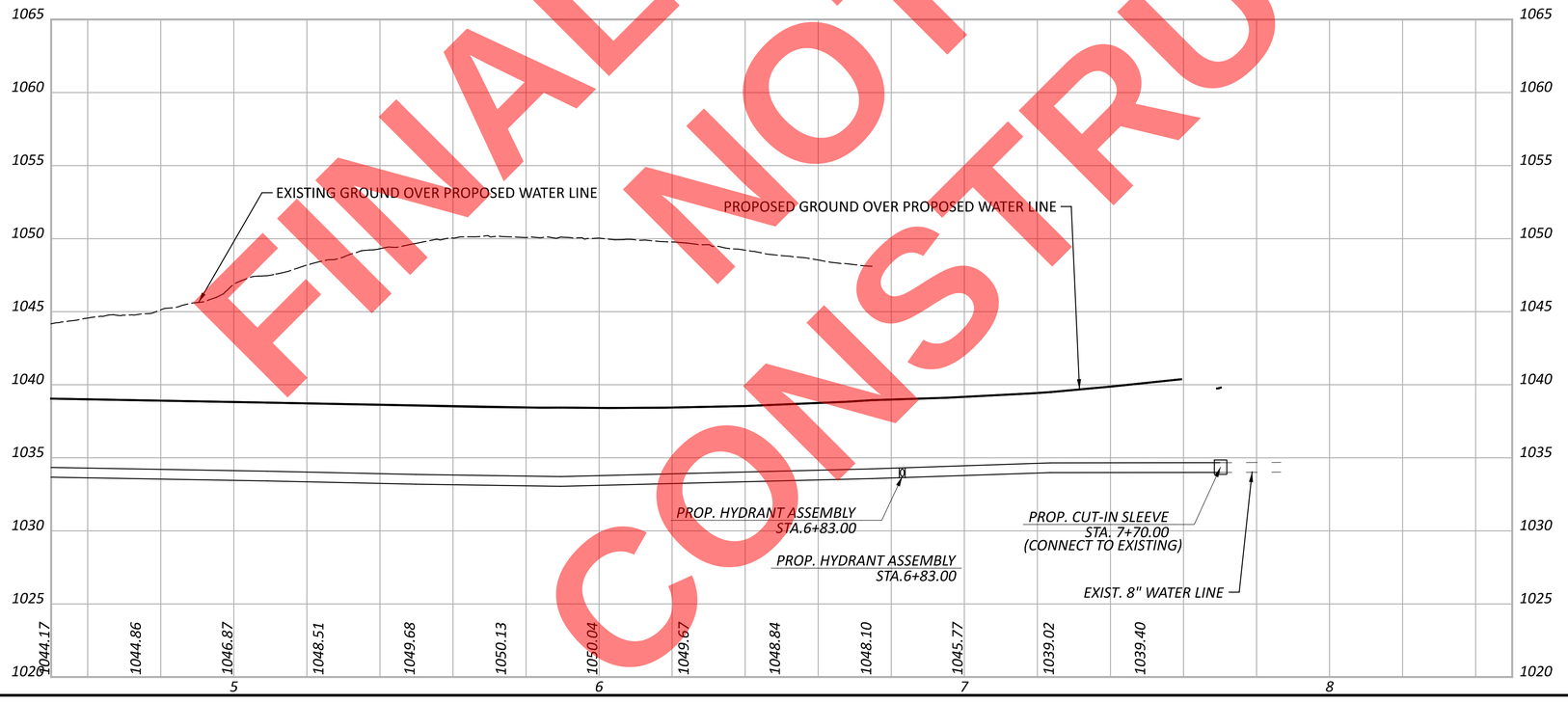

FINAL PLANS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GOODKIRK ST. PROPOSED WATER LINE PLAN AND PROFILE
4+50.00 TO END

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER IJF
REVIEWER SMG 12-02-25
PROJECT ID 114865
SHEET P.228 TOTAL 627

SUM-077/008-11.65/00.00

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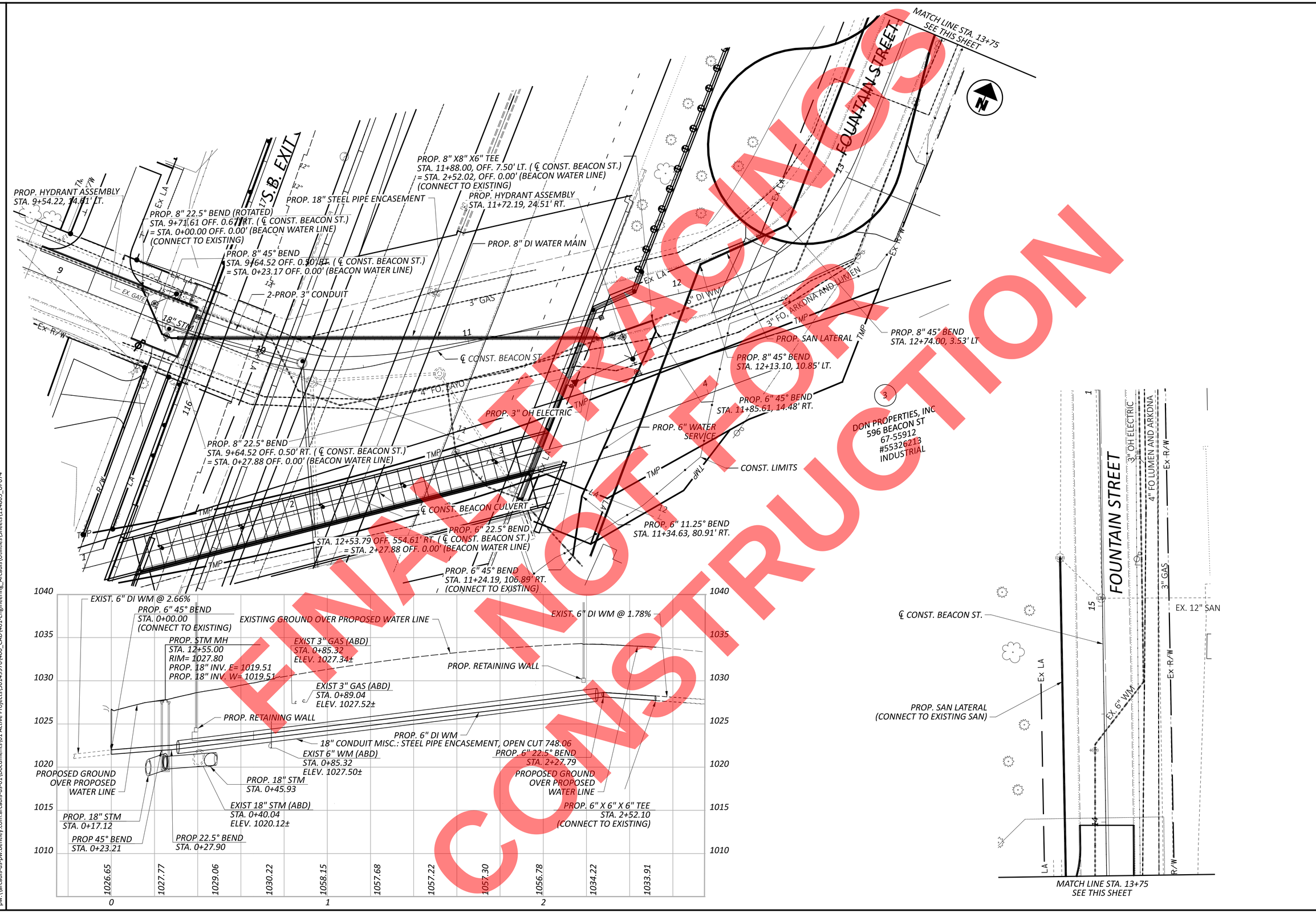

FINAL PLACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

BEACON ST. WATER LINE PLAN AND PROFILE

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

DESIGNER
IJF

REVIEWER
SMG 12-02-25

PROJECT ID
114865

SHEET P.229 TOTAL 627

SUM-077/008-11.65/00.00

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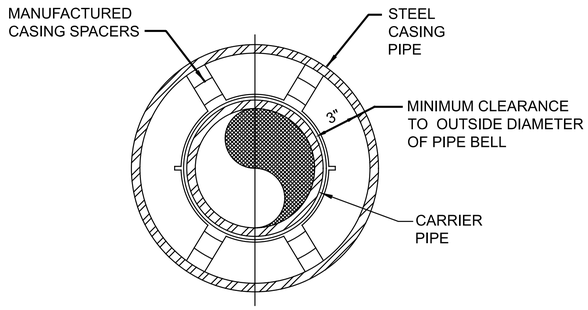
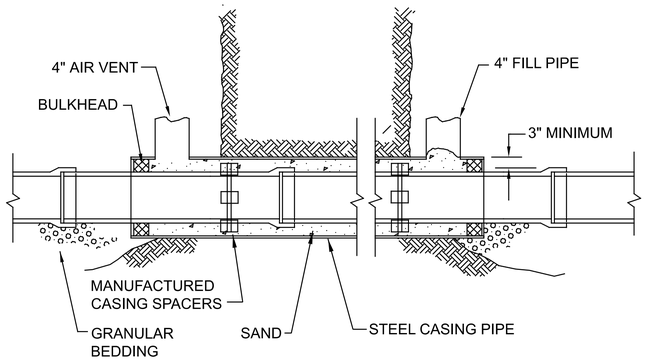


CROSS SECTION



SECTION

STEEL CASING DETAIL FOR WATER MAIN

NOTES

1. WATER MAIN TO BE CENTERED IN CASING PIPE. FILL FROM ONE END.
2. STEEL CASING SHALL BE INSTALLED AS TO PREVENT FORMATION OF A WATERWAY UNDER THE CHANNEL BED AND WITH AN EVEN BEARING THROUGHOUT ITS LENGTH AND SLOPE TO ONE END. THE CASING PIPE JOINTS ARE TO BE WELDED WATER TIGHT.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES:

1. *MANHOLES WILL BE BUILT IN ACCORDANCE WITH CITY OF AKRON STANDARD DRAWING MH-2(10/12/2018)*
2. *LATERALS WILL BE BUILT IN ACCORDANCE WITH CITY OF AKRON STANDARD DRAWING S-1.1(10/22/2018)*

WATER MAIN DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1855
www.arcadis.com

DESIGNER
IJF

REVIEWER
SMG 8-14-26

PROJECT ID
114865

SHEET P.230 | TOTAL 627

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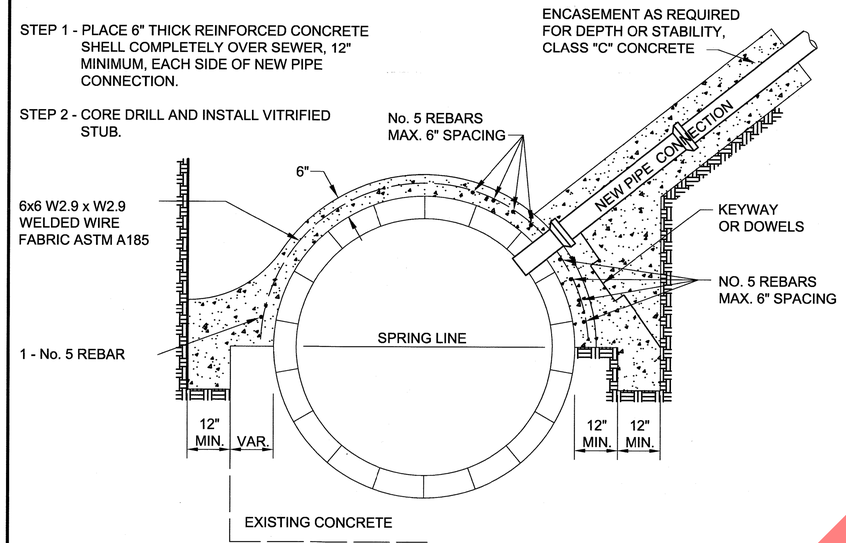
TYPICAL CONNECTION TO EXISTING SEGMENTAL BLOCK SEWER. TYPICAL OF CONNECTION TO EXISTING BRICK SEWER, EXCEPT CONCRETE SHELL IS N0T REQUIRED IF SEWER IS IN GOOD CONDITION. ONLY ENCASEMENT OF STUB AND CONNECTION IS REQUIRED.

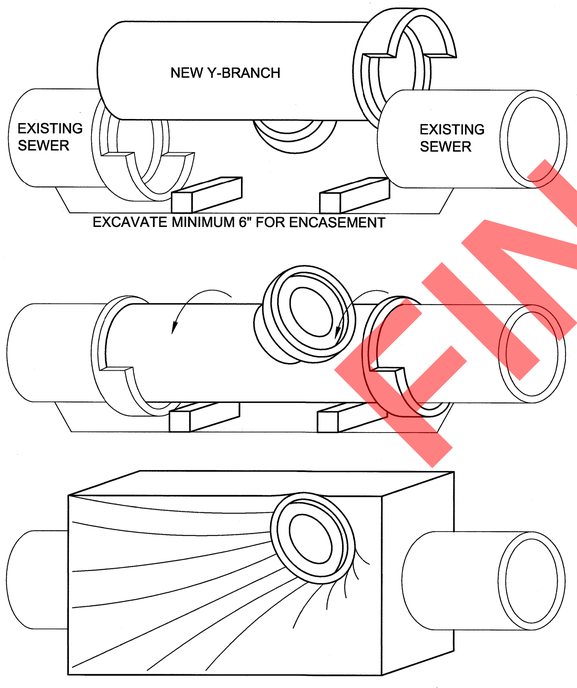
STEP 1 - PLACE 6" THICK REINFORCED CONCRETE SHELL COMPLETELY OVER SEWER, 12" MINIMUM, EACH SIDE OF NEW PIPE CONNECTION.

STEP 2 - CORE DRILL AND INSTALL VITRIFIED STUB.



WHERE A CONCRETE HAUNCH DOES EXIST, THICKEN REINFORCED CONCRETE SHELL TO UNDISTURBED GROUND. DO NOT DISTURB CONCRETE HAUNCH.

WHERE NO CONCRETE HAUNCH EXISTS, THICKEN REINFORCED CONCRETE SHELL TO UNDISTURBED GROUND. DO NOT DISTURB GROUND BELOW SPRING LINE.



SAWCUT AND REMOVE THE UPPER HALF OF THE BELL OF THE NEW Y-BRANCH. SAWCUT AND REMOVE THE UPPER HALF OF THE BELL OF THE EXISTING SEWER PIPE OR NEW SHORT.

PLACE THE NEW Y-BRANCH ON SUITABLE BLOCKING WITH THE "Y" ON THE OPPOSITE SIDE OF THE SEWER FROM THE PROPOSED LATERAL.

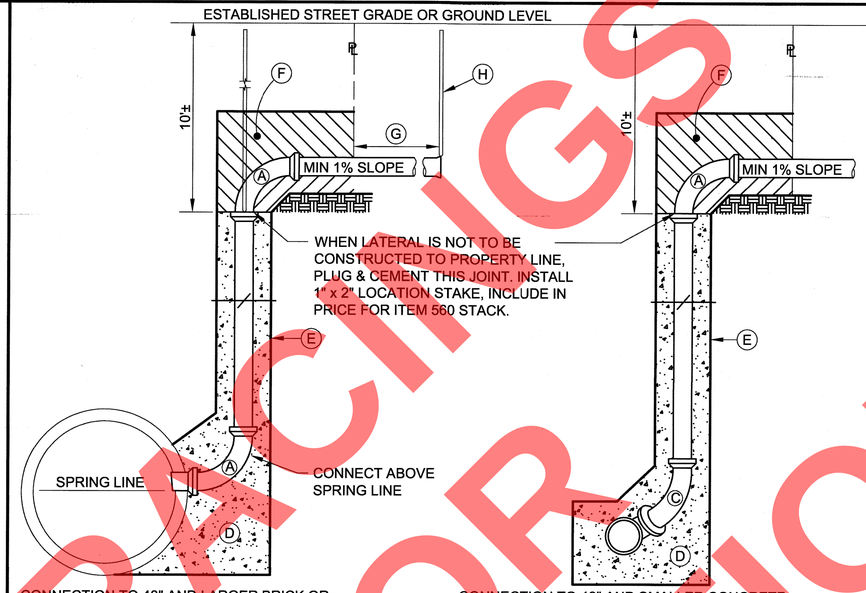
ROTATE THE Y-BRANCH 180°, BRINGING THE "Y" INTO THE CORRECT POSITION FOR THE PROPOSED LATERAL, WITH THE STUB TURNED SLIGHTLY UPWARDS. THE GOOD PORTION OF THE BELL OF EACH PIPE WILL NOW BE AT THE BOTTOM OF EACH JOINT.

ALIGN INVERTS OF ALL PIPE AND PLACE JUTE PACKING INTO VOID AREAS IN THE BELLS.

FULLY ENCASE THE NEW Y-BRANCH WITH CLASS "C" CONCRETE 6" THICK, COMPLETEY COVERING BOTH BELLS OF THE SEWER AND THE BARREL AND BELL OF THE STUB.

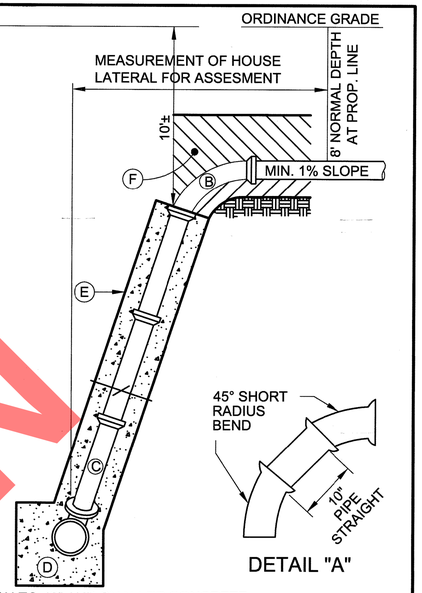
STANDARD FOR INSTALLING Y-BRANCH IN VITRIFIED PIPE FOR SANITARY OR STORM LATERAL. AN ACCEPTABLE ALTERNATE IS TO USE MANUFACTURED RUBBER COUPLINGS AS SUPPLIED BY LOGAN CLAY PIPE CO., OR EQUAL

TYPICAL Y-BRANCH INSTALLATION OR SEWER RECONSTRUCTION REPAIR METHOD



CONNECTION TO 48" AND LARGER BRICK OR CONCRETE SEWER WHEN LATERAL STACK IS BEING CONSTRUCTED WITH MAIN SEWER.

CONNECTION TO 42" AND SMALLER CONCRETE, VITRIFIED, ABS OR PVC TRUSS SEWER WHEN LATERAL STACK IS BEING CONSTRUCTED WITH MAIN SEWER.



DETAIL "A"

CONNECTION TO 42" AND SMALLER CONCRETE AND VITRIFIED SEWER WHEN LATERAL IS BEING CONSTRUCTED ON EXISTING SEWER.

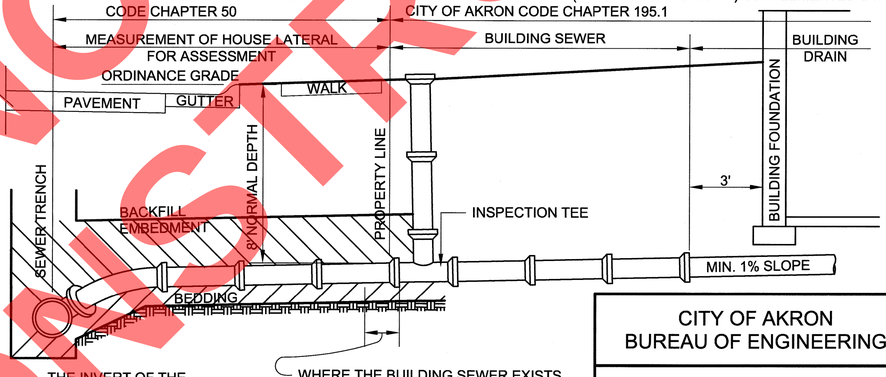
	VCP	PVC OR ABS
A	90° LONG RADIUS BEND	90° LONG RADIUS BEND OR AS PER DETAIL A
B	45° LONG RADIUS BEND	45° LONG OR SHORT RADIUS BEND
C	LONG RADIUS BEND	LONG RADIUS OR SHORT RADIUS BENDS NOT TO EXCEED 45°
D	CONCRETE ENCASEMENT (MIN. 6" THICKNESS)	#57 STONE ENCASEMENT,MINIMUM 6" THICKNESS
E	SONOTUBE (OPTIONAL) INCLUDE IN COST OF 560 STACK	SONOTUBE (REQUIRED) INCLUDE IN COST OF 560 STACK
F	BEDDING IN ACCORDANCE WITH 551.05, INCLUDED IN COST OF 560 STACK.	
G	MINIMUM 3' LENGTH BEHIND PROPERTY LINE	
H	WHEN LATERAL IS NOT TO BE CONNECTED TO AN EXISTING LATERAL, FINISH WITH A BELL END, USE A REMOVABLE PLUG IN THE END, AND INSTALL A 1" x 2" LOCATION STAKE, INCLUDE IN THE COST OF ITEM 560 STACK.	

NOTE:
SONOTUBES MAY BE USED TO FORM CONCRETE ENCASEMENT PROVIDED THE MINIMUM 6" THICKNESSS IS MAINTAINED. CLASS "C" CONCRETE ENCASEMENT SHOULD BE STOPPED ONLY AT BELLS. STACKS SHALL BE CONSTRUCTED TO WITHIN 10'± OF ESTABLISHED STREET GRADE OR GROUND LEVEL. ENCASEMENT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 560 STACK, WHEN NOT CONSTRUCTED TO PROPERTY LINE OR ITEM 560 HOUSE LATERAL, WHEN CONSTRUCTED TO PROPERTY LINE.

METHODS OF CONSTRUCTING SANITARY LATERALS WHEN DEPTH OF SEWER IS 14' OR GREATER

TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF AKRON CODE CHAPTER 50

TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4101:2-51 OHIO ADMINISTRATIVE CODE (OHIO PLUMBING CODE) SUPPLEMENTED BY CITY OF AKRON CODE CHAPTER 195.1



THE INVERT OF THE LATERAL SHALL BE AT THE SAME LEVEL AS THE CROWN OF THE SEWER.

WHERE THE BUILDING SEWER EXISTS THIS CONNECTION SHALL BE MADE BY THE CONTRACTOR AT NO EXTRA COST. WHERE THE BUILDING SEWER DOES NOT EXIST THE END OF THE LATERAL SHALL BE PLUGGED AT THE PROPERTY LINE AND MARKED WITH A STAKE TO THE GROUND SURFACE.

ALL CONCRETE SHALL BE CLASS "C" , TYPE II OR TYPE I/II CEMENT.

ALL REINFORCING STEEL SHALL HAVE A MINIMUM 2" COVER.

ALL BEDDING SHALL BE CLASS 'B' MEETING THE REQUIREMENTS OF 703.04, AS PER 551.05.

ALL EMBEDMENT SHALL MEET THE REQUIREMENTS OF 604.02 FOR VITRIFIED PIPE, AND 703.04 FOR PVC AND ABS PIPE.

ALL BACKFILL SHALL MEET THE REQUIREMENTS OF 551.09.

WHERE THE SAME PIPE MATERIAL IS NOT USED FOR THE ENTIRE LATERAL LENGTH, MANUFACTURED FITTINGS MUST BE USED TO CONNECT DIFFERENT MATERIALS.

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON
BUREAU OF ENGINEERING

Mina A Teodecki 10/16/2018
DESIGN DIVISION MANAGER
10/18/18
CONSTRUCTION DIVISION MANAGER
10/22/18
CITY ENGINEER

CONSTRUCTION STANDARD DWG. No. S - 1.1

Y-BRANCH
LATERAL STACK

October 16, 2018

REVISIONS:

SANITARY DETAILS

FINAL PLANS FOR CONSTRUCTION

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4955
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DESIGNER IJF
REVIEWER SMG 8-14-26
PROJECT ID 114865
SHEET P.231 TOTAL 627

SUM-077/008-11.65/00.00
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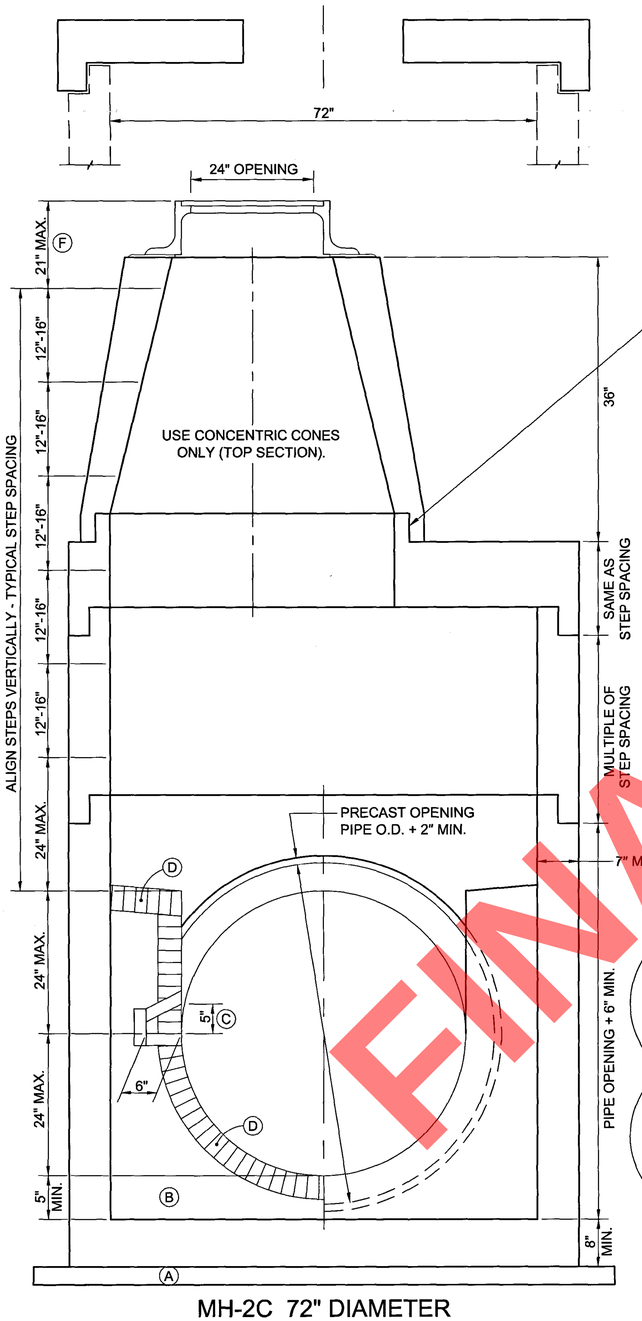
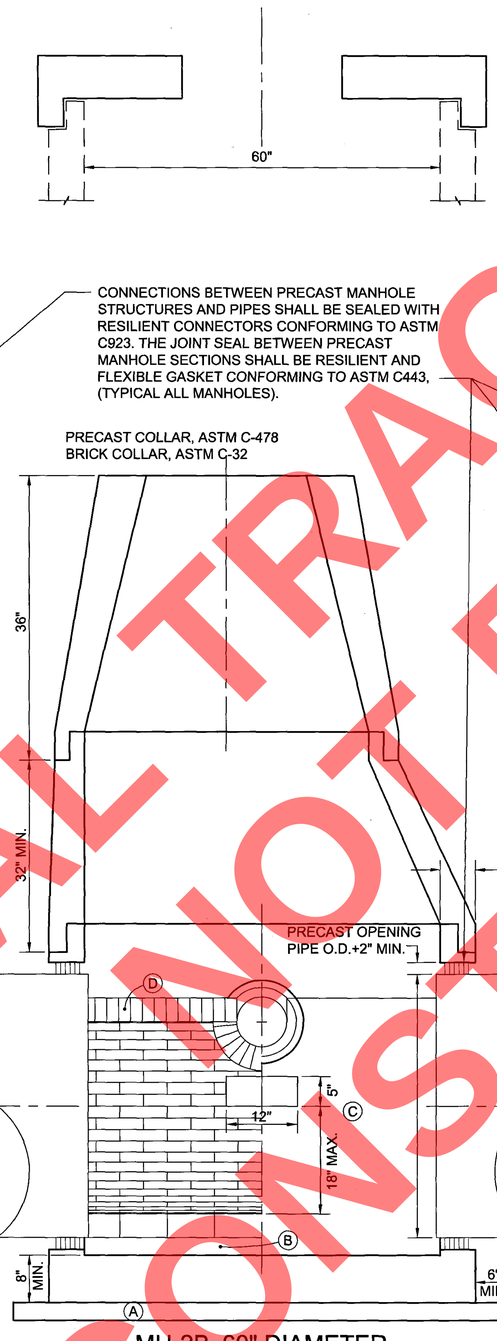
ALTERNATE 72" SLAB TOP



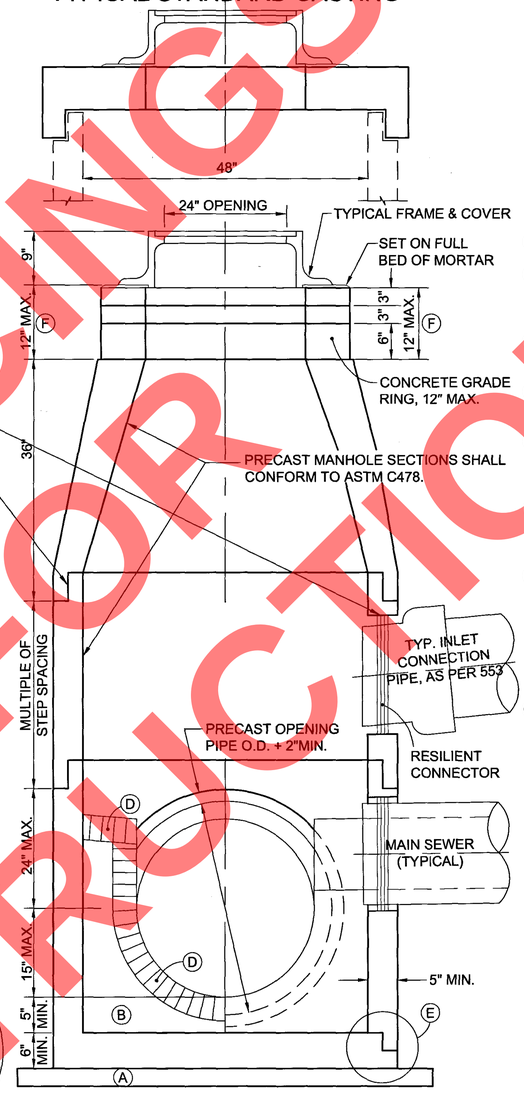
MH-2C 72" DIAMETER
30"-36" DIAMETER PIPE

ALTERNATE 60" SLAB TOP



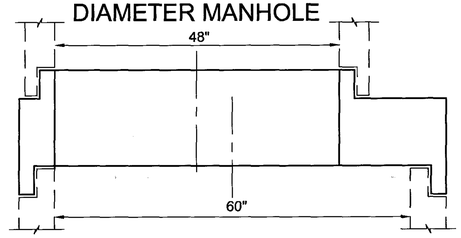
MH-2B 60" DIAMETER
21"-27" DIAMETER PIPE

ALTERNATE 48" SLAB TOP WITH TYPICAL STANDARD CASTING



MH-2A 48" DIAMETER
8"-18" DIAMETER PIPE

ALTERNATE SLAB REDUCER FOR 60" DIAMETER MANHOLE



(A) NO. 57 SLAG OR LIMESTONE,

(B) 3" THICK CLASS "C" CONCRETE, TYPE II CEMENT OR BRICK AND MORTAR, AFTER MANHOLE AND PIPE ARE IN PLACE. THE USE OF "DRYMIX" IS PROHIBITED.

(C) WHEN PIPE DIAMETER IS MORE THAN 24", CONSTRUCT TOE HOLES IN CHANNEL TO FORM STEPS.

(D) CONSTRUCT BRICK CHANNEL AND BENCH IN SANITARY AND COMBINATION MANHOLES. SLOPE BENCH 1"/FOOT.

(E) BASES ARE SHOWN AS BEING ONE-PIECE. A PERMISSIBLE ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BARREL SEPARATELY.

(F) MANHOLES SHOULD BE DESIGNED AND CONSTRUCTED SO THAT UNDER NORMAL CIRCUMSTANCES CONSTRUCTION OF A CHIMNEY WOULD NOT BE REQUIRED.

(G) OPENINGS IN BASE SECTIONS AND RISER SECTIONS FOR MAIN SEWER PIPES SHALL BE PROVIDED WHEN THE UNIT IS CAST TO MEET PROJECT REQUIREMENTS. OPENINGS IN RISER SECTIONS FOR INLET CONNECTIONS MAY BE PREFABRICATED OR CORED IN THE FIELD. IN BOTH CASES THE PIPE MUST BE PLACED OR TRIMMED SO IT DOES NOT PROJECT INTO THE MANHOLE.

(H) ON ROADWAYS WITH GRADES STEEPER THAN 5%, BRICK MAY BE USED TO ADJUST THE MANHOLE TO GRADE IN ORDER TO LEVEL THE CASTING WITH THE PROPOSED PAVEMENT. NON-SHRINK GROUT WILL BE USED IN CONJUNCTION WITH THIS METHOD OF MANHOLE ADJUSTMENT.

GENERAL NOTES:

1. WITH NORMAL SOIL AND SITE CONDITIONS THIS STANDARD PRECAST MANHOLE MAY BE USED FOR ANY REQUIRED MANHOLE DEPTH. SECTIONS OF THE PRECAST MANHOLE SHALL BE CAST AND ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP. LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.
2. PRECAST MANHOLES SHALL BE COATED IN ACCORDANCE WITH SECTION 706.13 ON SANITARY SEWERS.
3. DROP PIPE, WHEN SPECIFIED ON THE PLANS, SHALL BE CONSTRUCTED AS SHOWN ON MH-9.
4. STEPS, FRAMES AND COVERS SHALL CONFORM WITH THE REQUIREMENTS SET FORTH ON MH-8.
5. ALL CONCRETE USED IN THE CONSTRUCTION OF THE MANHOLES SHALL BE TYPE II OR TYPE I/II CEMENT

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON
BUREAU OF ENGINEERING

CONSTRUCTION STANDARD DWG. No. MH - 2

9-28-2018
DESIGN DIVISION MANAGER

10/10/18
CONSTRUCTION DIVISION MANAGER

10/12/18
CITY ENGINEER

SANITARY OR STORM SEWER
PRECAST CONCRETE MANHOLE
48", 60", 72" DIAMETER

September 26, 2018

REVISIONS:

FINAL TRACINGS
NOT FOR CONSTRUCTION

SANITARY SEWER DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER IJF
REVIEWER SMG 8-14-26
PROJECT ID 114865
SHEET P.232 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 3:03:00 PM USER: burnsk1837
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SHEET NUMBER	STATIONING		202	202	202	611	611	611	611	638	638	SPECIAL	SPECIAL	SPECIAL	SPECIAL	BENDS & BRANCHES				SPECIAL INSTRUCTIONS
	FROM	TO	PIPE REMOVED, 24" AND UNDER	MANHOLE REMOVED	VALVE BOX REMOVED	8" CONDUIT, TYPE B	12" CONDUIT, TYPE B	MANHOLE, NO. 2, AS PER PLAN	MANHOLE ADJUSTED TO GRADE	8" CUTTING-IN SLEEVE	FIRE HYDRANT REMOVED	8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS	18" STEEL PIPE ENCASEMENT, OPEN CUT	8" GATE VALVE WITH VALVE BOX	6" FIRE HYDRANT	TEE	45° BEND	22.5° BEND	SLEEVE	
			FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	FT	FT	EACH	EACH	EA	EA	EA	EA	
GOODKIRK STREET																				
P.227	501+84	505+35	70		5					4	4	472		4	2	5			1	CITY OF AKRON
P.228	505+35	508+52	30		1					1	1	321		2	1	1			1	CITY OF AKRON
P.224	503+05	506+04	30	2			305	3												CITY OF AKRON
P.225	506+04	508+78	30				274		1											CITY OF AKRON
BEACON STREET																				
P.229	9+38	11+85								2	1	369		5	2	3	2	2		CITY OF AKRON
P.229	9+60	11+61											196							CITY OF AKRON
P.229	12+00	12+00				441										1	2			CITY OF AKRON
TOTALS CARRIED TO GENERAL SUMMARY			160	2	6	441	579	3	1	7	6	1162	196	11	5	10	4	2	2	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00

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UTILITY SUB-SUMMARY

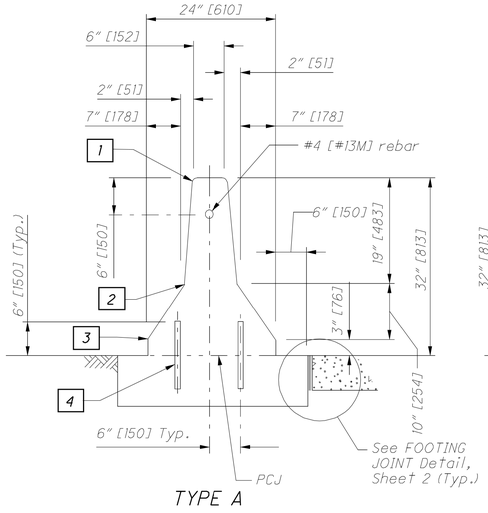
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER IJF

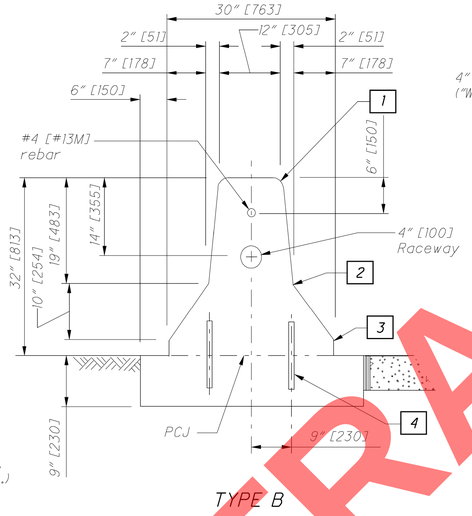
REVIEWER KDK 8-14-26

PROJECT ID 114865

SHEET P.233 TOTAL 627



TYPE A



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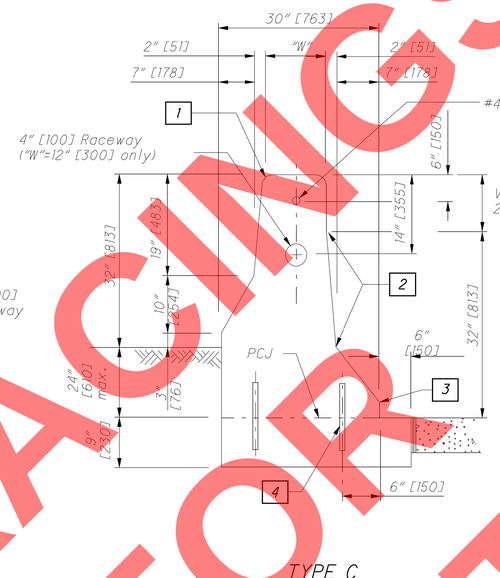

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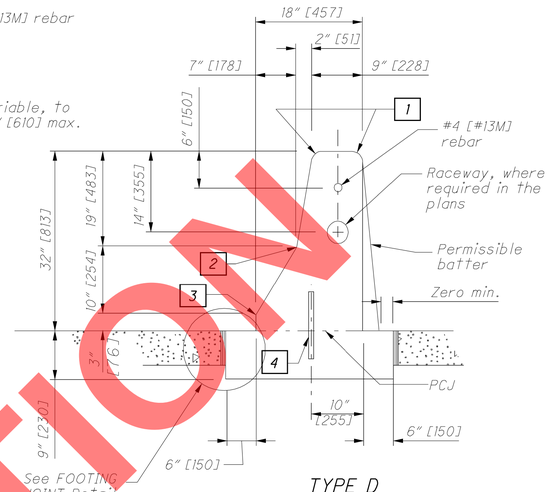
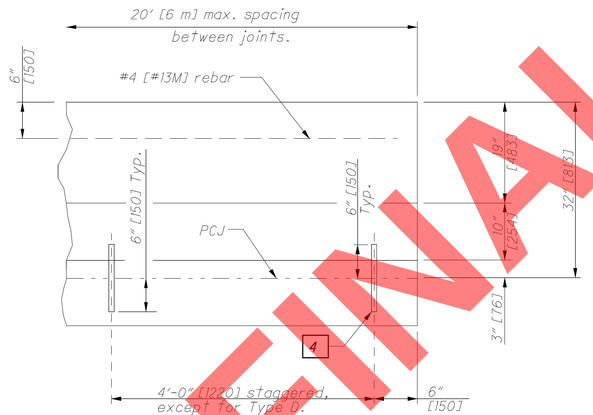


TYPE D

NORMAL SECTIONS

"W" = 6" [152] or 12" [305] barrier width, as specified in the plans.



32" [813-mm] BARRIER
BARRIER ELEVATION

NOTES

JOINTS: Unsealed contraction joints spaced at 20' [6 m] maximum shall be constructed throughout the run of Concrete Barrier except that expansion joints shall be used at the center line of and around each bridge pier column and on either side of overhead sign supports, inlets and light pole foundations. If the inlet top is slip formed, the expansion joints adjacent to it may be omitted.

Contraction joints may be constructed with metal inserts inside the forms, preformed full width joint filler, a grooving tool, or by sawing. Inserts, tooled joints, and sawed joints shall have a 3" [75] minimum depth. All joints shall be constructed for the full height of the barrier including the footing. Sawing shall be done as soon as curing will allow, to prevent spalling.

FOOTING JOINTS: The vertical walls between the barrier footing and a concrete pavement or concrete base shall be provided with a sealed joint as shown on Sheet 2. Sealing material shall conform to CMS 705.04.

PCJ = Permissible Construction Joint

MEASUREMENT: Item 622, Concrete Barrier, including transitions and pier sections as detailed on the New Jersey Shape Barrier Transition drawing, is paid for in linear feet [meters] as one of the four Types (A, B, C or D) or as Type A1 and B1, (for 50" [1270] high barrier), with appropriate deductions for other items such as:

Item 604 - I-3 Median Inlet	20 Lin Ft. [6 Meters].
Item 625 - Light Pole Foundation or Pullbox	2.5 Lin. Ft. [1 Meter].
Item 630 - Overhead Sign Support Foundation	10 Lin. Ft. [3 Meters].
Item 630 - Barrier Wall Assembly	10 Lin. Ft. [3 Meters].

TRANSITIONS: Linear transitions between the different types of barrier detailed on this Standard Drawing shall occur between contraction joints spaced no closer than 10' [3 m].

RACEWAY: The contractor shall ensure that the electrical raceway is clear of internal obstructions. Cost of the 4" [100] polyvinyl chloride raceway and No. 10 AWG copper-clad or aluminum-clad wire if needed for future installation of circuits shall be included in the unit cost per Linear Foot [Meter] for Item 622 - Concrete Barrier, Type ____ .

STATION MARKING: The Station marking shall be impressed in the "green" concrete on both sides of the top of the barrier if specified in the plans. The cost shall be incidental to the unit cost per Linear Foot [Meter] bid for Item 622 - Concrete Barrier, Type ____ .

REFLECTORIZATION: Barrier reflectorization shall be installed in accordance with CMS 626.

LEGEND

1. 1" [25] radius or ¾" [19] chamfer.
2. Permissible 10" [250] radius.
3. Permissible 1" [25] radius.
4. #8 [#25M] epoxy coated Deformed Steel Bars, 1'-0" [305] long, spaced 4'-0" [1220] between successive Bars on a staggered pattern except in Type D. Omit Dowels when the top is constructed integrally with the Base.

All metric dimensions (in brackets []) are in millimeters unless otherwise noted.

FINAL TRACINGS NOT FOR CONSTRUCTION

OFFICE OF ROADWAY ENGINEERING

DESIGNED | REVIEWED

REVISION DATE 10-20-06 | CHECKED

PLAN INSERT SHEET

NEW JERSEY SHAPE CONCRETE BARRIER

BARRIER DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 114865

SHEET P.234 | TOTAL 627

1 / 2

SUM-077/008-11.65/00.00

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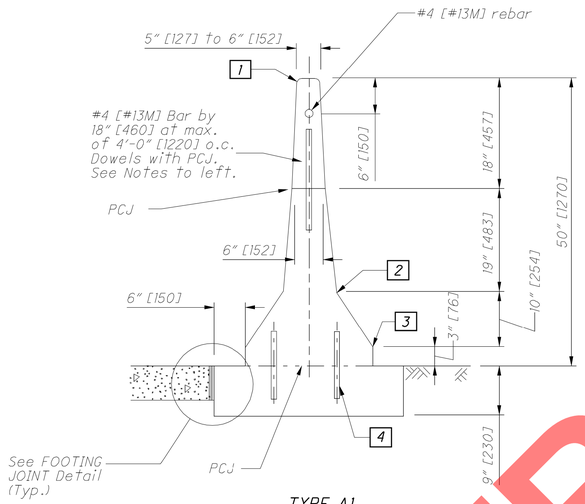
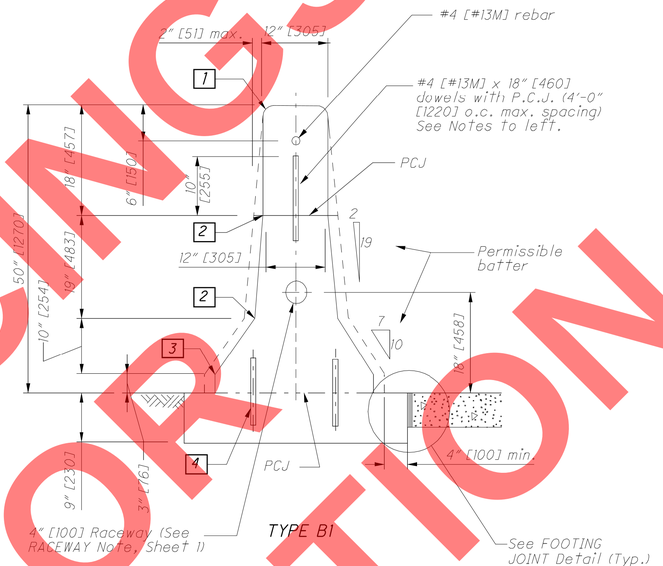


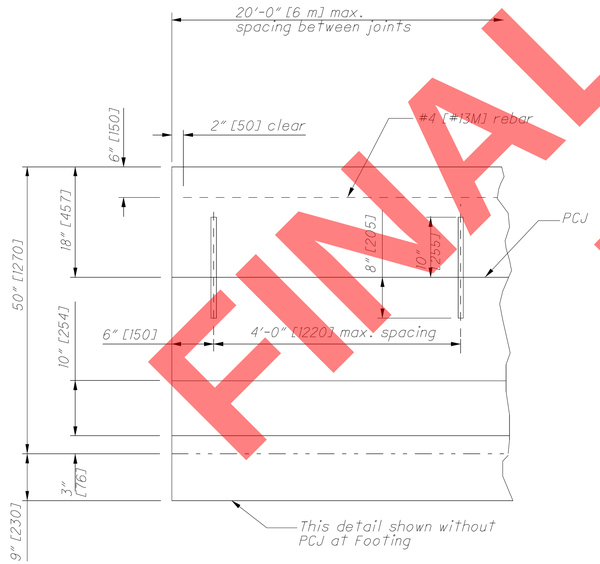
TYPE A1



TYPE B1

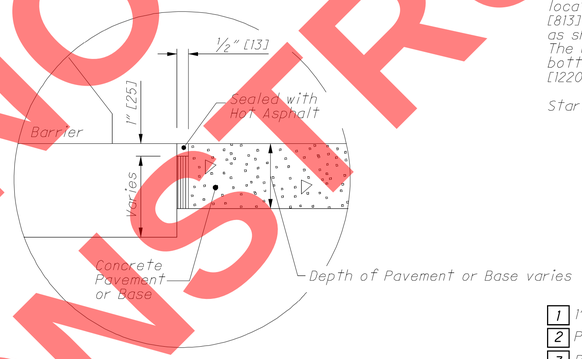
50" [1270-mm] BARRIERS - TYPICAL SECTIONS

See Type A and Type B Normal Section Details (Sheet 1) for dimensions that are not shown.



50" [1270-mm] BARRIER

BARRIER ELEVATION



FOOTING JOINT DETAIL

See FOOTING NOTE on Sheet 1.

All metric dimensions (in brackets [] are in millimeters unless otherwise noted.

NOTES

50" [1270-mm] BARRIER: High barrier shall be built in locations specified in the plans. Construct the lower 32" [813] of the barrier base using the same dimensions as as shown in the corresponding Normal Section on Sheet 1. The upper 18" [457] may be constructed integrally with the bottom, or separately with #4 [#13M] rebar dowels at 4'-0" [1220] maximum spacing.

Start and end dowels 6" [150] from barrier contraction joints.

LEGEND

1. 1" [25] radius or ¾" [19] chamfer.
2. Permissible 10" [250] radius.
3. Permissible 1" [25] radius.
4. #8 [#25M] epoxy coated deformed Steel Bars, 1'-0" [305] long, spaced 4'-0" [1220] between successive Bars on a staggered pattern except in Type D. Omit Dowels when the top is constructed integrally with the Base.

FINAL TRACINGS
NOT FOR CONSTRUCTION

OFFICE OF ROADWAY ENGINEERING

DESIGNED | REVIEWED

REVISION DATE 10-20-06 | CHECKED

PLAN INSERT SHEET

NEW JERSEY SHAPE CONCRETE BARRIER

BARRIER DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 114865

SHEET P.235 | TOTAL 627

2 / 2

SUM-077/008-11.65/00.00

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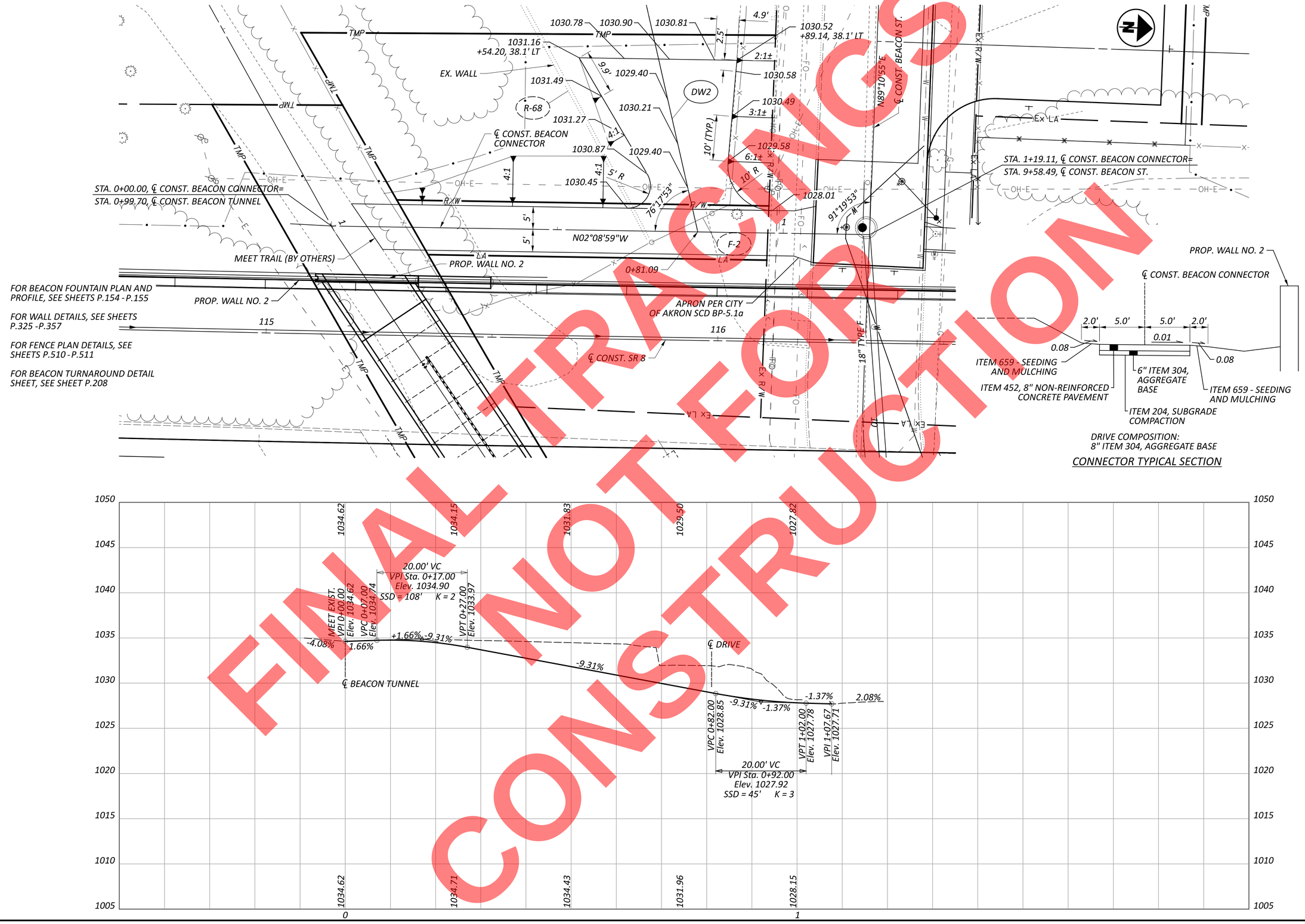

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

MISCELLANEOUS DETAIL
BEACON CONNECTOR

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
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DESIGNER SMG
REVIEWER KDK MM-DD-YY
PROJECT ID 114865
SHEET P.236 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Beacon St Drive 1 - Plan 3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 6:46:30 PM USER: burnsk1837
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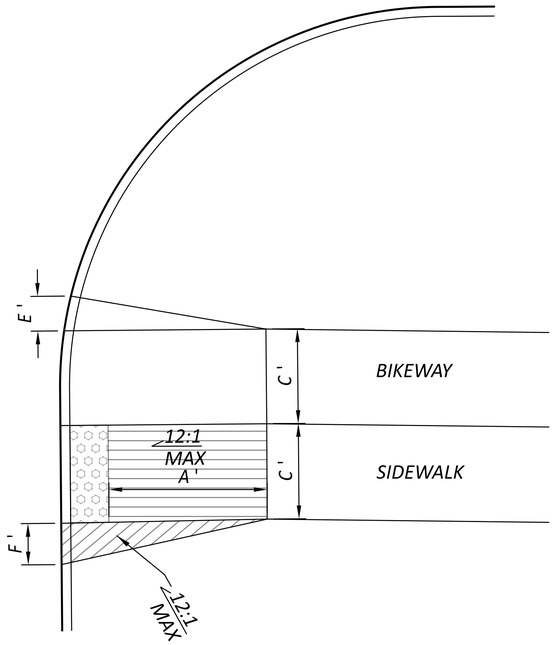
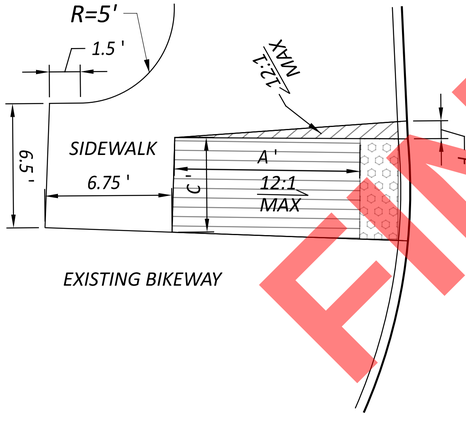


EXCHANGE & GOODKIRK RAMPS

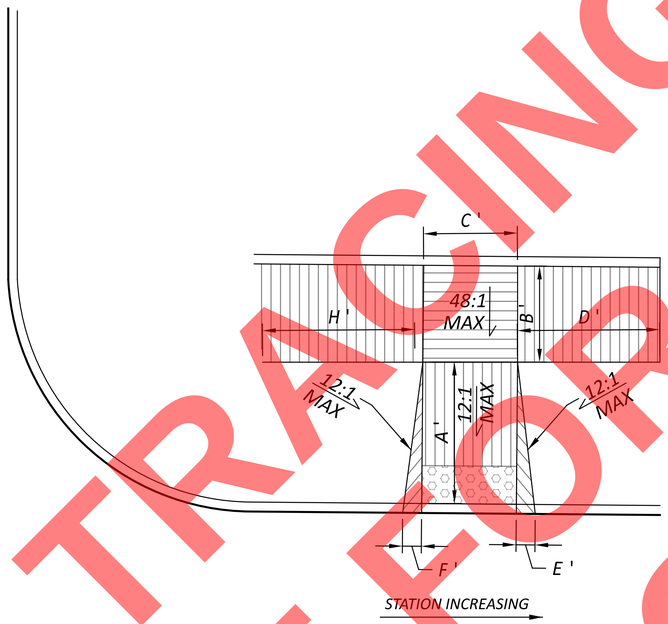
CR-1,CR-2



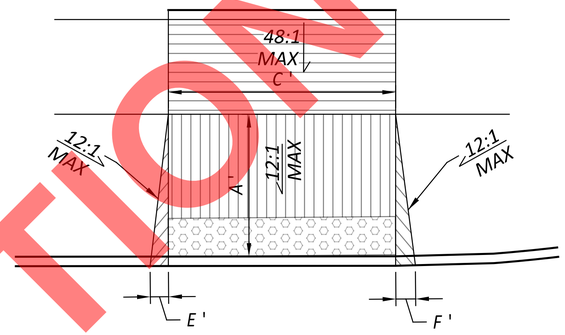
EXISTING BIKEWAY

EXCHANGE & GOODKIRK RAMPS

CR-3



CITY OF AKRON TYPE 3

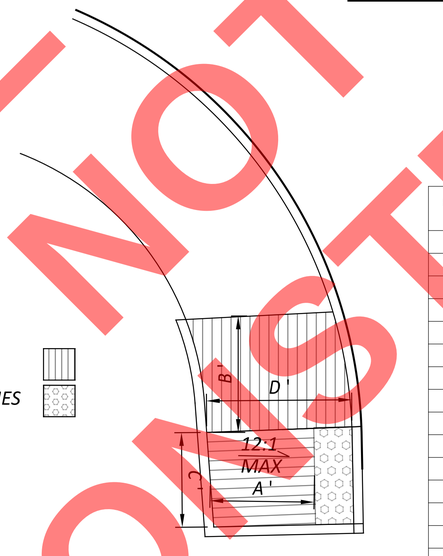


CITY OF AKRON TYPE 5

LEGEND:

CURB RAMP

TRUNCATED DOMES



CARROLL STREET RAMPS

CR-11, CR-12, CR-13, CR-15

CURB RAMP NO.	STATION	OFFSET	TYPE	A	B	C	D	E	F	G	H
CR-1	499+78.85	15.40' RT		8.00		5.00		2.00	2.00		
CR-2	500+55.59	1.10' RT		10.00		5.00		1.00	2.00		
CR-3	500+58.56	16.49' LT		10.00		5.00			1.00	`	
CR-4	504+29.37	26.64' LT	3	5.20	5.35	5.00	14.00	1.00	1.00		6.00
CR-5	504+62.71	26.26' LT	3	3.20	5.50	4.00	10.00	1.00	1.00		6.00
CR-6	508+60.05	41.20' LT	3	3.50	5.50	5.00	5.00				5.00
CR-7	508+88.47	42.08' LT	3	7.00	5.20	5.00	6.00				5.00
CR-8	511+92.42	33.88' LT	3	4.00	5.50	6.00	10.00	1.00	1.00		6.00
CR-9	512+22.61	34.29' LT	5	3.50		4.00		1.00	1.00		
CR-10	514+92.87	18.94' LT	5	6.00		4.00		1.00	1.00		
CR-11	514+94.00	16.39' RT		4.50	2.50	4.00	7.00				
CR-12	14+88.30	49.17' LT		4.50	3.00	4.00	7.50				
CR-13	14+72.36	45.80' RT		3.50	6.00	4.00	8.00				
CR-14	9+58.85	12.635' LT	5	4.00		5.00		1.00	0.50		
CR-15	12+32.55	43.85' LT		5.00		4.00					

FINAL TRACINGS NOT FOR CONSTRUCTION

CURB RAMP DETAILS AND DIMENSIONS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER KMB

REVIEWER KDK MM-DD-YY

PROJECT ID 114865

SHEET P.237 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Curb Ramp Details PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:13:51 PM USER: sgault
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GENERAL NOTES FOR SIDEWALKS, CURB RAMPS, AND DRIVEWAYS

GENERAL

1. ALL AREAS, ELEMENTS, AND FACILITIES FOR PEDESTRIAN ACCESS, CIRCULATION AND USE THAT ARE CONSTRUCTED, INSTALLED OR ALTERED IN THE PUBLIC RIGHT-OF-WAY AND WHICH ARE SUBJECT TO TITLE II OF THE AMERICANS WITH DISABILITIES ACT (ADA) SHALL COMPLY WITH ALL CURRENT FEDERAL REGULATIONS INCLUDING THE ADA ACCESSIBILITY GUIDELINES (ADAAG).

2. NEWLY CONSTRUCTED AND ALTERED STREETS OR PEDESTRIAN WALKWAYS MUST CONTAIN CURB RAMPS AT INTERSECTIONS. (28 CFR 35.151(d)) ALTERATIONS INCLUDE RESURFACING AND ANY WORK THAT IMPACTS THE MAJORITY OF THE STREET OR WALKWAY. THE ENTIRE INTERSECTION EFFECTED MUST BE BROUGHT INTO COMPLIANCE.

3. ALL MATERIALS SHALL CONFORM TO THE "CONSTRUCTION AND MATERIAL SPECIFICATIONS" OF THE CITY OF AKRON, DEPARTMENT OF PUBLIC SERVICE, AKRON ENGINEERING BUREAU, LATEST EDITION.

4. ALL SLOPES REFERRED TO ARE REFERENCED TO A HORIZONTAL PLANE.

5. FOR SIDEWALKS, CURB RAMPS, AND DRIVEWAYS THE "PREFERRED" DIMENSION SHALL BE THE NORMAL STANDARD TO BE MET, UNLESS EXISTING ROW WIDTH OR FEATURES MAKE COMPLIANCE INFEASIBLE. IN THIS CASE THE "MINIMUM" STANDARD MUST BE MET.

6. FOR WALK AREAS OF BRICK OR STAMPED CONCRETE, THE BRICK PATTERN IS TO BE PERPENDICULAR TO THE ROADWAY.

PUBLIC SIDEWALKS

1. MINIMUM WIDTH OF NEW SIDEWALKS SHALL BE FIVE FEET.

2. PREFERRED CLEAR WIDTH OF A CONTINUOUS PASSAGE SHALL BE 48"; FOR ALTERATIONS TO EXISTING ROWS, WHERE THE PREFERRED CLEAR WIDTH CANNOT BE MET, THE MINIMUM CLEAR WIDTH OF A CONTINUOUS PASSAGE SHALL BE 36".

3. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 48:1 (2%).

CURB RAMPS

1. A TYPICAL CURB RAMP IS COMPOSED OF THE FOLLOWING ELEMENTS: RAMP, LANDING, SIDES, SURFACE, AND INTERSECTION WITH THE ROADWAY.

2. RAMP: THE CURB RAMP MUST HAVE A SLOPE OF NO GREATER THAN 12:1 IN THE DIRECTION OF TRAVEL AND A CROSS SLOPE OF NO MORE THAN 48:1. THE MINIMUM WIDTH FOR A RAMP IS 48" (NOT INCLUDING SIDES).

3. THE LANDING IS THE LEVEL AREA AT THE TOP OF A RAMP AND MUST NOT HAVE A SLOPE MORE THAN 48:1 IN ANY DIRECTION. THE LANDING AREA IS USED FOR TURNING AND MUST MAINTAIN A PREFERRED LENGTH AND WIDTH OF 60" X 60" FOR ALTERATIONS IN EXISTING ROWS WHERE PREFERRED CLEAR WIDTH CANNOT BE MET, THE MINIMUM LENGTH AND WIDTH SHALL BE 48" X 48". IN ALL CASES, THE TYPE 2 CURB RAMP (PARALLEL) MUST HAVE A LANDING LENGTH OF 60".

4. SIDES: THE CURB RAMP SHALL BE FLARED WHEN PEDESTRIANS ARE TO CROSS THE RAMP, OR HAVE CURBING IF THE ADJACENT AREA IS A NON-PEDESTRIAN SURFACE SUCH AS A LAWN STRIP, BRICKWORK, OR OBSTACLE. MAXIMUM FLARE SLOPES ARE 12:1 OR AS DIRECTED BY THE ENGINEER. DIAGONAL CURB RAMPS MUST HAVE WELL DEFINED EDGES THAT ARE TO BE PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. A DIAGONAL CURB RAMP MUST ALSO HAVE A MINIMUM 24" SEGMENT OF FULL HEIGHT CURB ON EACH SIDE OF THE RAMP WHICH IS WITHIN THE CROSSWALK LINES OR PEDESTRIAN RIGHT-OF-WAY.

5. FLARE TREATMENTS: VARIOUS FLARE TREATMENT ARE SHOWN IN THE DRAWINGS. IN GENERAL A 12:1 FLARE INCLUDING CONCRETE TO EXTENDED SIDEWALK LINE IS PREFERRED OVER SHORT ROLLED CURBING WHERE POSSIBLE. THIS PROVIDES A CONCRETE WALKING SURFACE THE ENTIRE SIDEWALK WIDTH IN THE DIRECTION OF TRAVEL. ROLLED CURBING ON DIAGONAL CURB RAMPS IS INTENDED TO ACCOMMODATE OBSTACLES OTHER THAN GRASS OR BRICK STRIPS.

6. SURFACE: THE CURB RAMP SURFACE MUST BE STABLE, FIRM, AND SLIP-RESISTANT. CHANGE IN LEVEL UP TO 0.25" MAY BE VERTICAL WITHOUT EDGE TREATMENT. CHANGES BETWEEN 0.25 AND 0.5" MUST BE BEVELED WITH A SLOPE OF NO GREATER THAN 12:1. CHANGES IN LEVEL ABOVE 0.5" MUST BE ACCOMPLISHED BY A RAMP. THE FINAL SURFACE TEXTURE SHALL BE ROUGHER THAN THE ADJACENT WALK AND SHALL BE OBTAINED BY COARSE BROOMING OR OTHER METHODS APPROVED BY THE ENGINEER TO OBTAIN STRIATIONS TRANSVERSE TO THE RAMP SLOPE. BROOM FINISH TOOLED JOINTS WITHOUT FILLING IN THE JOINT.

7. LIP: THE INTERSECTION OF THE RAMP WITH THE ROADWAY SHALL BE PERPENDICULAR AND EDGES SHALL BE FLUSH. THE COUNTER SLOPE FROM THE END OF RAMP UP THE CROSS SLOPE OF THE ROADWAY SHALL BE NO MORE THAN 20:1 FOR THE FIRST 24".

8. NO OBSTACLES OR PROTRUSIONS SHALL BE PLACED WITHIN THE CURB RAMP AREA. EXISTING MANHOLE COVERS, VALVE BOXES SHALL BE FLUSH MOUNTED WITH WALKING SURFACE.

9. THE THICKNESS OF ALL NEW CURB RAMPS SHALL BE SIX INCHES.

10. TRANSITIONAL SECTIONS OF SIDEWALK SHALL BE INSTALLED TO CONNECT NEW OR REPLACED CURB RAMPS WITH EXISTING SIDEWALKS THAT DO NOT MEET CURRENT STANDARDS AND SPECIFICATIONS. THESE TRANSITION SEGMENTS OF SIDEWALK SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW CONCRETE. MAXIMUM WARPING (ROTATION) RATE SHALL BE 1/8" VERTICAL CHANGE PER LINEAR FOOT HORIZONTAL DISTANCE TRAVELED AND MINIMUM DISTANCE SHALL BE ONE FULL SIDEWALK BLOCK.

11. FOR PARALLEL AND COMBINATION RAMPS WHERE A RAMP IS LOCATED WITHIN THE PUBLIC SIDEWALK, THE MINIMUM LENGTH FOR THE RAMPS SHALL BE ONE SIDEWALK BLOCK LENGTH; AND THE MAXIMUM LENGTH SHALL BE WHAT IS REQUIRED TO MAINTAIN A 12:1 SLOPE TO MEET EXISTING SIDEWALK GRADE. WHEN THIS IS DETERMINED INFEASIBLE DUE TO STEEP PITCH OF EXISTING ROADWAY, IN NO CASE SHALL THE RAMP BE LESS THAN FIFTEEN FEET.

12. STEEP SLOPES: ALL RAMPS LOCATED ON STREETS WITH A RUNNING PROFILE GRADE GREATER THAN 5% MUST BE REVIEWED AND APPROVED BY THE ENGINEER.

13. SLOPE AND CROSS-SLOPE CONVERSION TABLE:

RATIO	PERCENT	INCH/FOOT	DEGREES	WHERE UTILIZED
1:12	8.3	1	4.8	MAXIMUM SLOPE FOR RAMPS AND FLARES
1:20	5.0	3/4	2.9	AT THE FOOT OF THE RAMP, THE TRANSITION FROM THE RAMP TO THE GUTTER COUNTER SLOPE SHALL BE NO MORE THAN 1:20 FOR A MINIMUM DISTANCE OF 24".
1:48	2.0	1/4	1.1	MAXIMUM SLOPE FOR LANDING AND CROSS SLOPE OF LANDINGS, RAMPS AND SIDEWALK

14. FOR CURB RAMP STANDARD DRAWINGS TYPICAL DIMENSIONS ARE USED BASED ON A FULL CURB HEIGHT OF 6". ADJUSTMENTS MAY BE MADE TO LENGTH OF RAMPS AND FLARES BASED ON ACTUAL CURB REVEAL HEIGHT. REQUIRED SLOPES MUST BE MAINTAINED.

15. WHEN TWO RAMPS ARE USED AT A CORNER IF THE SPACE BETWEEN IS TO BE AN UNWALKABLE SURFACE IT MAY BE GRASSED IF GREATER THAN 20 S.F., OTHERWISE IT SHALL BE FILLED IN WITH BRICK PAVERS.

16. TYPES 2 & 3 RAMPS: WHEN BACK CURB HEIGHT IS 4" OR GREATER INSTALL SEPARATE 6"x18" CURB AT THE BACK OF WALK. IF LESS THAN 4" UTILIZE ROLLED INTEGRAL CURB. ROLLED CURB PAID AS 6" WALK.

17. DETECTABLE WARNING IS REQUIRED FOR ALL CURB RAMPS. TRUNCATED DOMES SHALL HAVE A DIAMETER OF 0.9" AT THE BOTTOM, A DIAMETER OF 0.4" AT THE TOP, A HEIGHT OF 0.2" AND A CENTER-TO-CENTER SPACING OF 2.35" MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.

18. DOME ALIGNMENT: DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.

19. DETECTABLE WARNING SHALL BE A PREFORMED MATERIAL AS APPROVED BY THE CITY OF AKRON. THE USE OF CONCRETE STAMPING IS NOT PERMITTED. APPROVED DETECTABLE WARNING PRODUCTS ARE:

    A. ARMORTILE (HERCULITE SERIES, #33538 - YELLOW OR #22144 - BRICK RED) REPLACEABLE TILE - BY ENGINEERED PLASTICS, INC., 300 INTERNATIONAL DRIVE, SUITE 100, WILLIAMSVILLE, NY 14221.

    B. COMPOSITE TACTILE WARNING PAVER UNIT (CAST-IN-PLACE REPLACEABLE #33538 - YELLOW OR #20109 - BRICK RED) - BY ADA SOLUTIONS, INC. 323 ANDOVER ST. SUITE 3, WILMINGTON, MA 01887.

    C. EQUALTILE CAST IN PLACE PANELS, BY ADVANCED ROADWAY MFG. INC., 121 ORANGE AVE., ORLANDO, FL. 32801.

    D. APPROVED EQUAL.

20. DRAINAGE: ALL CURB RAMPS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE POSITIVE DRAINAGE SO AS TO PREVENT PONDING. PARTICULAR ATTENTION IS TO BE GIVEN TO RAMPS LOCATED IN EITHER FLAT OR STEEP AREAS, AND CURB RAMP TYPES 2 & 4 THAT HAVE LANDINGS AT STREET LEVEL..

21. MATERIAL: ALL CURB RAMPS SHALL BE CONSTRUCTED WITH FIBER REINFORCEMENT TO CONCRETE, PLACING AND FINISHING AND CURING SHALL CONFORM TO 456.03. THE FINAL SURFACE TEXTURE SHALL BE OBTAINED BY COARSE BROOMING OR OTHER METHOD APPROVED BY THE ENGINEER. THIS ITEM INCLUDES FURNISHING AND INSTALLING APPROVED DETECTABLE WARNINGS, UNLESS PAID FOR UNDER A SEPARATE ITEM. ALL CURB RAMPS SHALL CONFORM TO ALL REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA). SYNTHETIC MACRO FIBER REINFORCEMENT SHALL BE ADDED TO CLASS C CONCRETE USED FOR THE PURPOSE OF CONTROLLING TEMPERATURE AND DRYING SHRINKAGE CRACKING. FIBERS SHALL PROVIDE A MINIMUM POST-CRACK RESIDUAL STRENGTH CAPACITY OF 250 PSI AS MEASURED BY ASTM C1399 AND SHALL MEET THE REQUIREMENTS OF ASTM C 1116 FOR TYPE III SYNTHETIC FIBERS. FIBERS SHALL BE 100 PERCENT VIRGIN POLYPROPYLENE FIBRILLATED FIBERS CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED TO AN OPTIMUM GRADATION FOR USE AS CONCRETE SECONDARY REINFORCEMENT. FIBERS SHALL HAVE A SPECIFIC GRAVITY: 0.91, TENSILE STRENGTH: 70,000 TO 110,000 POUNDS PER SQUARE INCH IN ACCORDANCE WITH ASTM D2256, FIBER LENGTH: 1-1/2 INCH MINIMUM, AND ASPECT RATIO: 0.7 MINIMUM. VOLUME OF FIBERS SHALL BE AS RECOMMENDED BY THE FIBER MANUFACTURER, OR MINIMUM 4 LBS./C.Y.

    ALL COST ASSOCIATED WITH ADDING FIBER REINFORCING, PLACING, AND FINISHING, IN THE RAMP AREA IS TO BE INCLUDED IN THE COST OF THE CURB RAMP.

DRIVEWAYS:

1. DRIVEWAY LOCATIONS ARE GOVERNED BY CITY OF AKRON ORDINANCES.

2. THE SIDEWALK WIDTH AT TOP OF DRIVE SHALL BE PREFERRED WIDTH OF 48"; FOR ALTERATIONS TO EXISTING RIGHT-OF-WAY WHERE THE PREFERRED WIDTH CANNOT BE MET, THE MINIMUM WIDTH SHALL BE 36".

3. LIP AT BOTTOM OF APRON SHALL BE ONE INCH TYPICAL.

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. BP - 5
7-9-25 DESIGN DIVISION MANAGER 7-9-25 CONSTRUCTION DIVISION MANAGER 7.10.25 CITY ENGINEER	GENERAL NOTES FOR SIDEWALKS, CURB RAMPS, AND DRIVEWAY APPROACHES 2025 REVISIONS: Brick pattern direction & Curb Ramp material notes 4/28/21 Added new approved supplier 3/04/24 REVISED NOTE 19. 2/21/2025

FINAL TRACINGS
NOT FOR CONSTRUCTION

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.238 TOTAL 627

SUM-077/008-11.65/0.00

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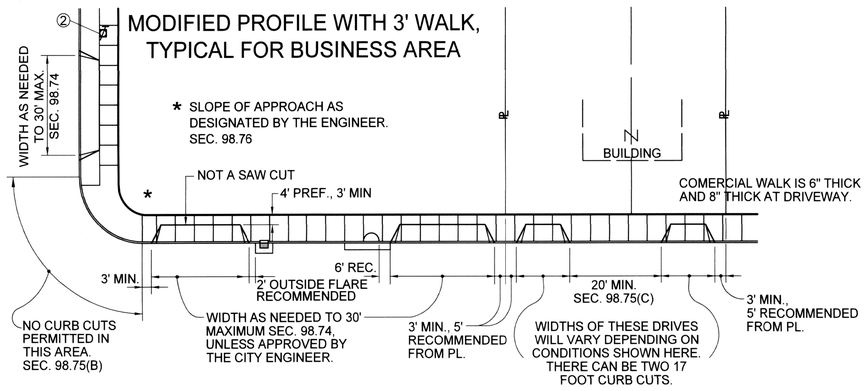
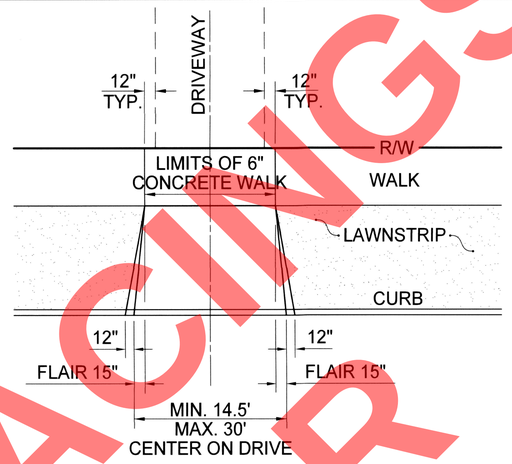
FINAL TRACINGS
NOT FOR CONSTRUCTION

MODIFIED PROFILE WITH 3' WALK, TYPICAL FOR BUSINESS AREA

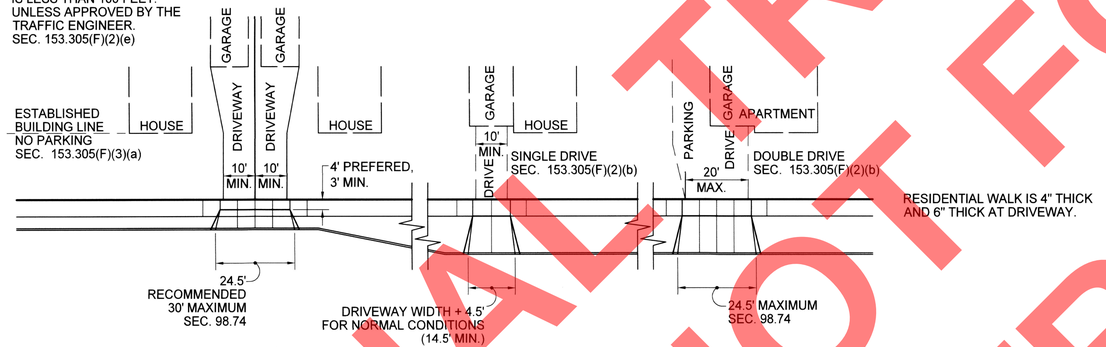


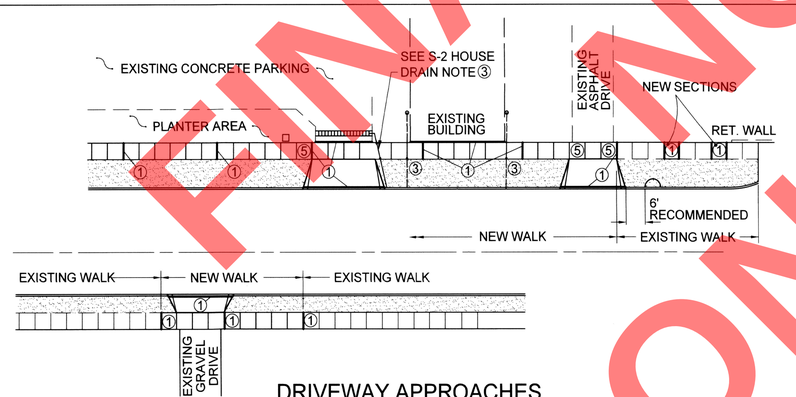


DRIVEWAY APPROACHES

TYPICAL FOR RESIDENTIAL AREA

ONLY ONE DRIVEWAY PERMITTED WHEN FRONTAGE IS LESS THAN 100 FEET. UNLESS APPROVED BY THE TRAFFIC ENGINEER. SEC. 153.305(F)(2)(e)





DRIVEWAY APPROACHES EXPANSION JOINTS HOUSE DRAINS

NOTES:
ALL SECTION (SEC.) REFERENCES ARE FROM THE CITY OF AKRON "CODE OF ORDINANCES".

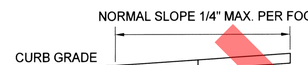
* SEE STANDARD DRAWINGS (BP-5.0 THRU 5.6) FOR SIDEWALKS, CURB RAMPS, AND DRIVEWAYS FOR ADDITIONAL REQUIREMENTS.

WHERE TOTAL CROSS SLOPE IS LESS THAN 1/4" PER FOOT - SLOPE ENTIRE DISTANCE AT THAT CROSS SLOPE

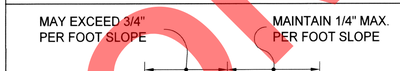


VARIABLE SIDEWALK CROSS SLOPE WITH LOW SIDEWALK

NORMAL SLOPE 1/4" MAX. PER FOOT



STANDARD SIDEWALK CROSS SLOPE



VARIABLE SIDEWALK CROSS SLOPE WITH HIGH SIDEWALK

① PROVIDE 1/2" PREFORMED EXPANSION JOINT FILLER THE FULL DEPTH OF THE WALK AS FOLLOWS:
AT 30' INTERVALS. AGAINST ALL EXISTING CONCRETE CURBS, DRIVES, WALKS, AND INLETS. AGAINST ALL BUILDING WALLS & OTHER FIXED OBJECTS. AT THE CURB END OF EACH DRIVEWAY APPROACH. WHERE DIRECTED BY THE ENGINEER.

② CONCRETE SURROUNDING POSTS, POLES, HYDRANTS, GRATES, CASTINGS, ETC. SHALL BE SEPARATED FROM THE REMAINING CONCRETE BY MEANS OF 1/2" PREFORMED EXPANSION JOINT FILLER ARRANGED IN SQUARES OR RECTANGLES PLACED APPROXIMATELY SIX INCHES FROM THESE ITEMS, AND EXTENDING THROUGH THE FULL DEPTH OF THE CONCRETE. CURB RAMP SIDE SLOPES MAY BE ALTERED TO MEET CONCRETE SURROUNDING POSTS.

③ HOUSE DRAINS NOT EMBEDDED IN CONCRETE MAY BE INSTALLED SKEWED, AS NECESSARY. WHERE ANY PORTION OF THE PIPE IS EMBEDDED IN THE CONCRETE, A PERPENDICULAR CONSTRUCTION JOINT SHALL BE SAWCUT 2" INTO THE WALK DIRECTLY OVER THE PIPE. A 1" DIAMETER CIRCLE SHALL BE CAST IN THE TOP OF THE WALK OVER EACH PIPE. TWO 1" DIAMETER CIRCLES (ONE ON EACH SIDE OF THE SIDEWALK) SHALL BE CAST IN THE TOP OF THE WALK OVER EACH SKEWED PIPE.

④ WHERE DIRECTED, THE WALK AT CORNERS MAY BE WIDENED BEYOND THE EXTENDED PROPERTY LINE. DEPTH OF WALK WITHIN THE INTERSECTION, INCLUDING RAMPS, SHALL BE SIX INCHES.

⑤ WHERE PRACTICAL, ALIGN JOINTS IN WALK WITH OUTSIDE OF DRIVEWAY APPROACH.

⑥ SIDEWALKS IN COMMERCIAL AREAS AND/OR ABUTTING THE BACK OF CURB OR BRICKSTRIP SHALL BE SIX INCHES THICK UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON
BUREAU OF ENGINEERING

7-9-25
DESIGN DIVISION MANAGER
7-9-25
CONSTRUCTION DIVISION MANAGER
7.10.25
CITY ENGINEER

CONSTRUCTION STANDARD DWG. No. **BP - 5.1a**

SIDEWALKS CURB RAMPS DRIVEWAY APPROACHES

2025

REVISIONS:
Revised drive aprons and house drain joints — March 4, 2024
Added Ordinance Codes — December 4, 2024
Revised Sheet Dwg. No. — February 21, 2025

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.239 TOTAL 627

SUM-077/008-11.65/0.00

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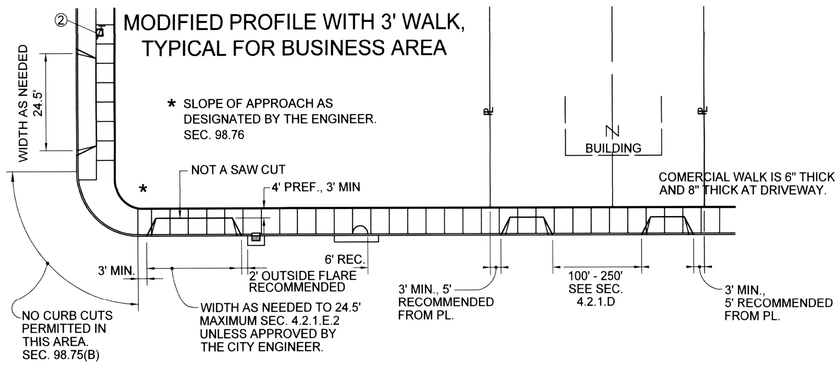
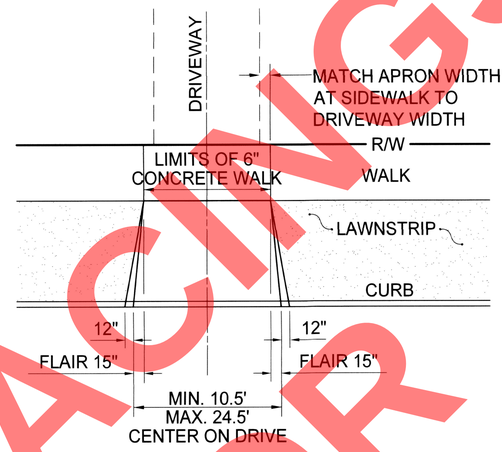
FINAL TRACINGS
NOT FOR CONSTRUCTION

MODIFIED PROFILE WITH 3' WALK, TYPICAL FOR BUSINESS AREA

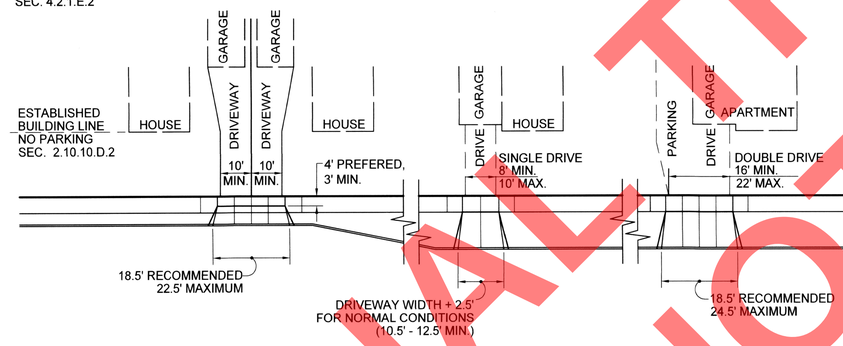


DRIVEWAY APPROACHES



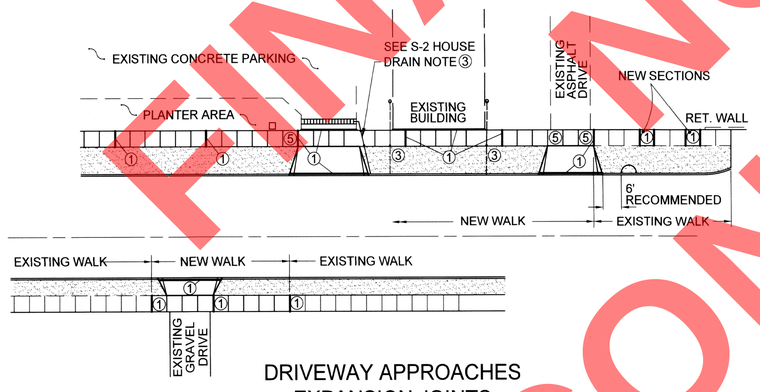
TYPICAL FOR RESIDENTIAL AREA

ONLY ONE DRIVEWAY PER SITE IS PERMITTED. SEC. 4.2.1.E.2



FOR DRIVEWAY WIDTH REQUIREMENTS, SEE SECTION 4.2.1.E.2

RESIDENTIAL WALK IS 4" THICK AND 6" THICK AT DRIVEWAY.



DRIVEWAY APPROACHES EXPANSION JOINTS HOUSE DRAINS

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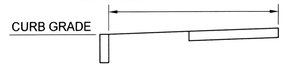
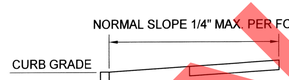
WHERE TOTAL CROSS SLOPE IS LESS THAN 1/4" PER FOOT - SLOPE ENTIRE DISTANCE AT THAT CROSS SLOPE

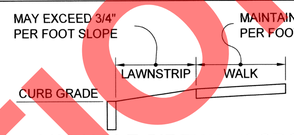


VARIABLE SIDEWALK CROSS SLOPE WITH LOW SIDEWALK

NORMAL SLOPE 1/4" MAX. PER FOOT



STANDARD SIDEWALK CROSS SLOPE



VARIABLE SIDEWALK CROSS SLOPE WITH HIGH SIDEWALK

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⑤ WHERE PRACTICAL, ALIGN JOINTS IN WALK WITH OUTSIDE OF DRIVEWAY APPROACH.

⑥ SIDEWALKS IN COMMERCIAL AREAS AND/OR ABUTTING THE BACK OF CURB OR BRICKSTRIP SHALL BE SIX INCHES THICK UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON
BUREAU OF ENGINEERING

7-9-25
DESIGN DIVISION MANAGER

7-9-25
CONSTRUCTION DIVISION MANAGER

7.10.25
CITY ENGINEER

CONSTRUCTION STANDARD DWG. No. **BP - 5.1b**

SIDEWALKS CURB RAMPS DRIVEWAY APPROACHES IN AKRON FORM-BASED ZONING CODE DISTRICTS 2025

REVISIONS:

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.240 TOTAL 627

SUM-077/008-11.65/0.00
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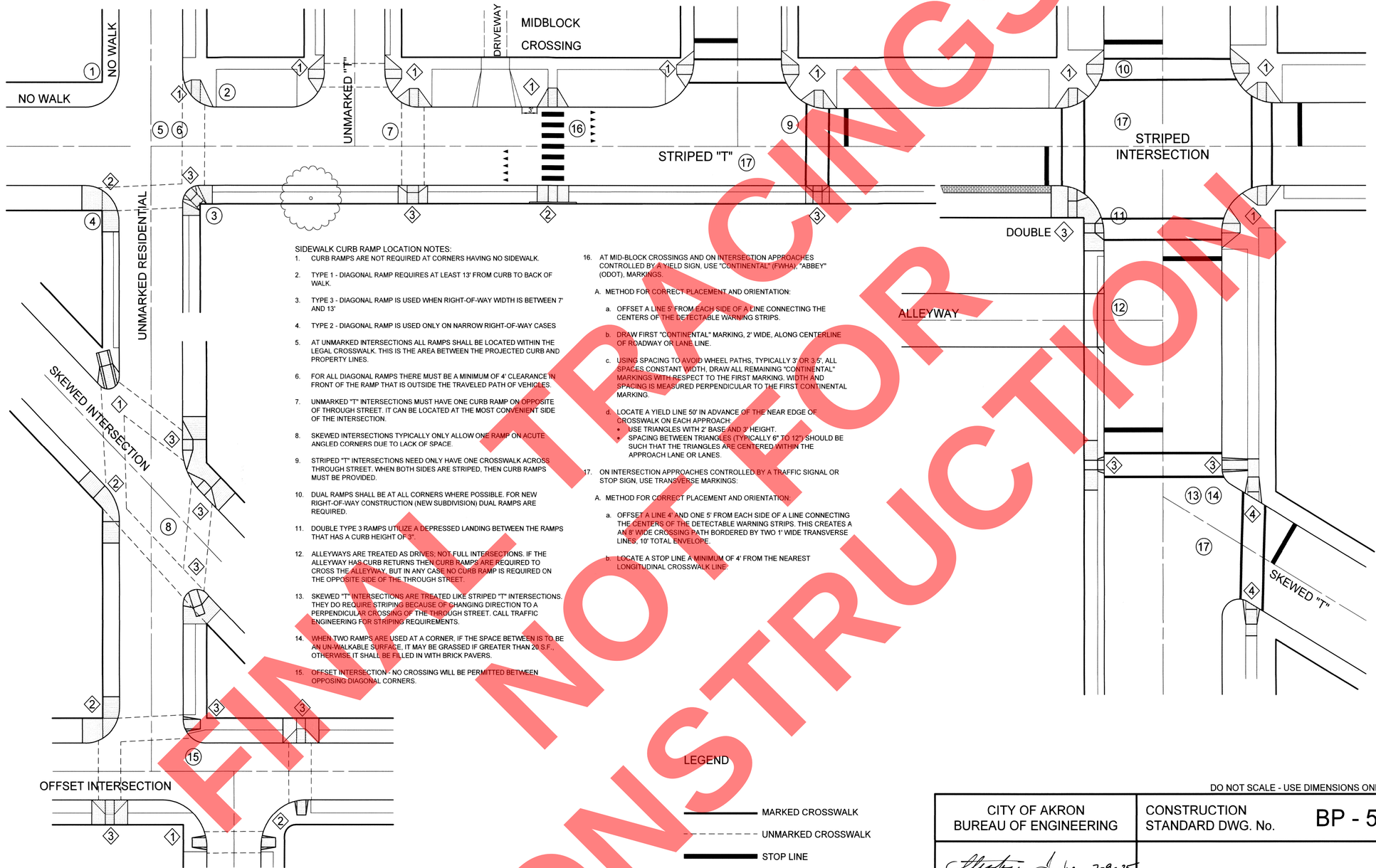

SIDEWALK CURB RAMP LOCATION NOTES:

1. CURB RAMPS ARE NOT REQUIRED AT CORNERS HAVING NO SIDEWALK.
2. TYPE 1 - DIAGONAL RAMP REQUIRES AT LEAST 13' FROM CURB TO BACK OF WALK.
3. TYPE 3 - DIAGONAL RAMP IS USED WHEN RIGHT-OF-WAY WIDTH IS BETWEEN 7' AND 13'
4. TYPE 2 - DIAGONAL RAMP IS USED ONLY ON NARROW RIGHT-OF-WAY CASES
5. AT UNMARKED INTERSECTIONS ALL RAMPS SHALL BE LOCATED WITHIN THE LEGAL CROSSWALK. THIS IS THE AREA BETWEEN THE PROJECTED CURB AND PROPERTY LINES.
6. FOR ALL DIAGONAL RAMPS THERE MUST BE A MINIMUM OF 4' CLEARANCE IN FRONT OF THE RAMP THAT IS OUTSIDE THE TRAVELED PATH OF VEHICLES.
7. UNMARKED "T" INTERSECTIONS MUST HAVE ONE CURB RAMP ON OPPOSITE OF THROUGH STREET. IT CAN BE LOCATED AT THE MOST CONVENIENT SIDE OF THE INTERSECTION.
8. SKEWED INTERSECTIONS TYPICALLY ONLY ALLOW ONE RAMP ON ACUTE ANGLED CORNERS DUE TO LACK OF SPACE.
9. STRIPED "T" INTERSECTIONS NEED ONLY HAVE ONE CROSSWALK ACROSS THROUGH STREET. WHEN BOTH SIDES ARE STRIPED, THEN CURB RAMPS MUST BE PROVIDED.
10. DUAL RAMPS SHALL BE AT ALL CORNERS WHERE POSSIBLE. FOR NEW RIGHT-OF-WAY CONSTRUCTION (NEW SUBDIVISION) DUAL RAMPS ARE REQUIRED.
11. DOUBLE TYPE 3 RAMPS UTILIZE A DEPRESSED LANDING BETWEEN THE RAMPS THAT HAS A CURB HEIGHT OF 3".
12. ALLEYWAYS ARE TREATED AS DRIVES; NOT FULL INTERSECTIONS. IF THE ALLEYWAY HAS CURB RETURNS THEN CURB RAMPS ARE REQUIRED TO CROSS THE ALLEYWAY, BUT IN ANY CASE NO CURB RAMP IS REQUIRED ON THE OPPOSITE SIDE OF THE THROUGH STREET.
13. SKEWED "T" INTERSECTIONS ARE TREATED LIKE STRIPED "T" INTERSECTIONS. THEY DO REQUIRE STRIPING BECAUSE OF CHANGING DIRECTION TO A PERPENDICULAR CROSSING OF THE THROUGH STREET. CALL TRAFFIC ENGINEERING FOR STRIPING REQUIREMENTS.
14. WHEN TWO RAMPS ARE USED AT A CORNER, IF THE SPACE BETWEEN IS TO BE AN UN-WALKABLE SURFACE, IT MAY BE GRASSED IF GREATER THAN 20 S.F., OTHERWISE IT SHALL BE FILLED IN WITH BRICK PAVERS.
15. OFFSET INTERSECTION - NO CROSSING WILL BE PERMITTED BETWEEN OPPOSING DIAGONAL CORNERS.
16. AT MID-BLOCK CROSSINGS AND ON INTERSECTION APPROACHES CONTROLLED BY A YIELD SIGN, USE "CONTINENTAL" (FWHA), "ABBEY" (ODOT), MARKINGS.

A. METHOD FOR CORRECT PLACEMENT AND ORIENTATION:

a. OFFSET A LINE 5' FROM EACH SIDE OF A LINE CONNECTING THE CENTERS OF THE DETECTABLE WARNING STRIPS.

b. DRAW FIRST "CONTINENTAL" MARKING, 2' WIDE, ALONG CENTERLINE OF ROADWAY OR LANE LINE.

c. USING SPACING TO AVOID WHEEL PATHS, TYPICALLY 3' OR 3.5', ALL SPACES CONSTANT WIDTH, DRAW ALL REMAINING "CONTINENTAL" MARKINGS WITH RESPECT TO THE FIRST MARKING. WIDTH AND SPACING IS MEASURED PERPENDICULAR TO THE FIRST CONTINENTAL MARKING.

d. LOCATE A YIELD LINE 50' IN ADVANCE OF THE NEAR EDGE OF CROSSWALK ON EACH APPROACH.
- USE TRIANGLES WITH 2' BASE AND 3' HEIGHT.
- SPACING BETWEEN TRIANGLES (TYPICALLY 6" TO 12") SHOULD BE SUCH THAT THE TRIANGLES ARE CENTERED WITHIN THE APPROACH LANE OR LANES.

17. ON INTERSECTION APPROACHES CONTROLLED BY A TRAFFIC SIGNAL OR STOP SIGN, USE TRANSVERSE MARKINGS:

A. METHOD FOR CORRECT PLACEMENT AND ORIENTATION:

a. OFFSET A LINE 4' AND ONE 5' FROM EACH SIDE OF A LINE CONNECTING THE CENTERS OF THE DETECTABLE WARNING STRIPS. THIS CREATES A AN 8' WIDE CROSSING PATH BORDERED BY TWO 1' WIDE TRANSVERSE LINES, 10' TOTAL ENVELOPE.

b. LOCATE A STOP LINE A MINIMUM OF 4' FROM THE NEAREST LONGITUDINAL CROSSWALK LINE.

LEGEND

- MARKED CROSSWALK
- UNMARKED CROSSWALK
- STOP LINE
- (#) CURB RAMP TYPE #
- (#) NOTE #

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. BP - 5.2
7-9-25 DESIGN DIVISION MANAGER 7-9-25 CONSTRUCTION DIVISION MANAGER 7/10/25 CITY ENGINEER	SIDEWALK CURB RAMP LOCATIONS 2025
	REVISIONS: Revised curb ramp locations 11/1/23 Added Dim. from curb to driveway 8/7/24

FINAL - NOT FOR CONSTRUCTION

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 114865

SHEET P.241 TOTAL 627

SUM-077/008-11.65/0.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/24/2026 TIME: 4:17:25 PM USER: sgault
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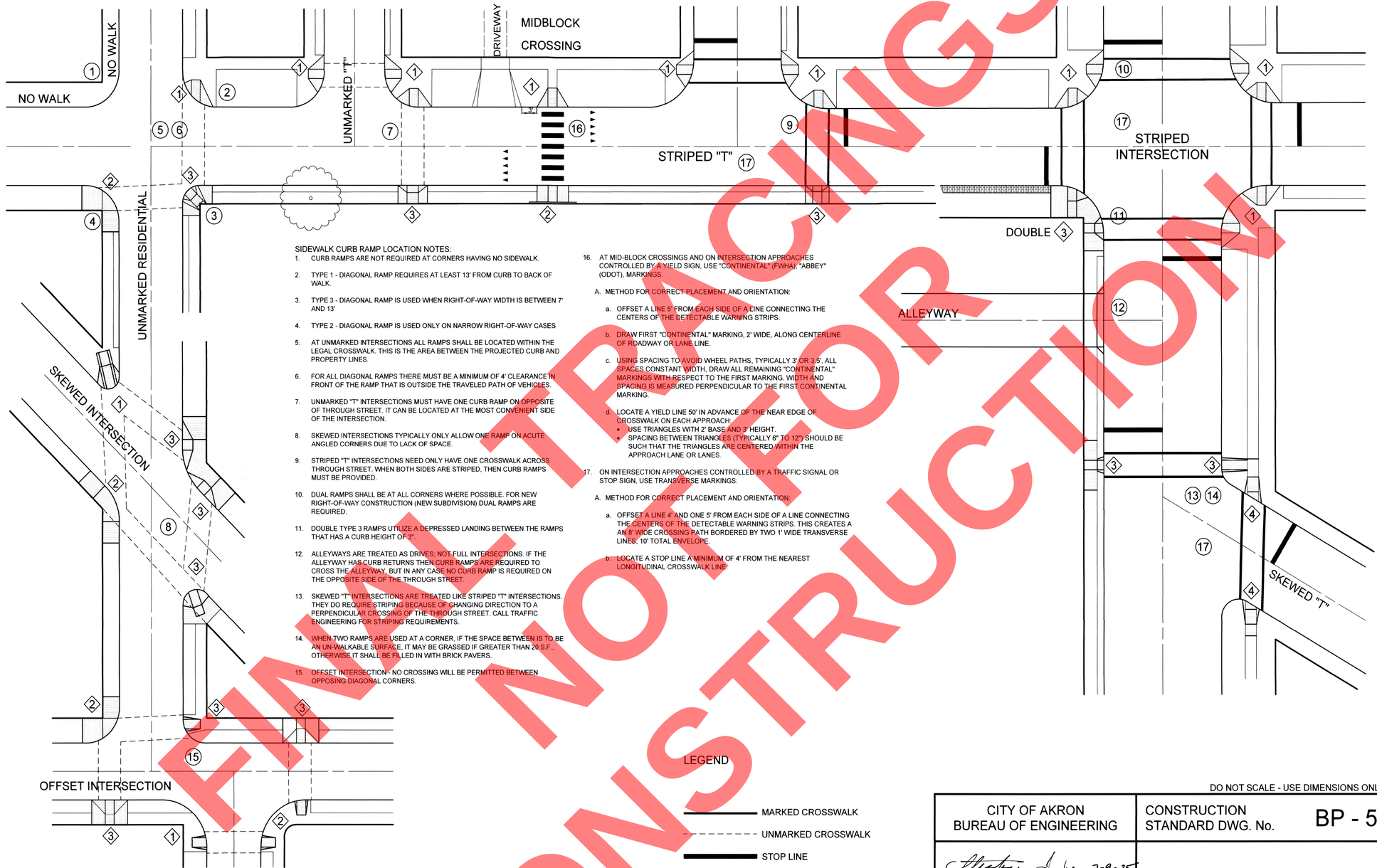

SIDEWALK CURB RAMP LOCATION NOTES:

1. CURB RAMPS ARE NOT REQUIRED AT CORNERS HAVING NO SIDEWALK.
2. TYPE 1 - DIAGONAL RAMP REQUIRES AT LEAST 13' FROM CURB TO BACK OF WALK.
3. TYPE 3 - DIAGONAL RAMP IS USED WHEN RIGHT-OF-WAY WIDTH IS BETWEEN 7' AND 13'
4. TYPE 2 - DIAGONAL RAMP IS USED ONLY ON NARROW RIGHT-OF-WAY CASES
5. AT UNMARKED INTERSECTIONS ALL RAMPS SHALL BE LOCATED WITHIN THE LEGAL CROSSWALK. THIS IS THE AREA BETWEEN THE PROJECTED CURB AND PROPERTY LINES.
6. FOR ALL DIAGONAL RAMPS THERE MUST BE A MINIMUM OF 4' CLEARANCE IN FRONT OF THE RAMP THAT IS OUTSIDE THE TRAVELED PATH OF VEHICLES.
7. UNMARKED "T" INTERSECTIONS MUST HAVE ONE CURB RAMP ON OPPOSITE OF THROUGH STREET. IT CAN BE LOCATED AT THE MOST CONVENIENT SIDE OF THE INTERSECTION.
8. SKEWED INTERSECTIONS TYPICALLY ONLY ALLOW ONE RAMP ON ACUTE ANGLED CORNERS DUE TO LACK OF SPACE.
9. STRIPED "T" INTERSECTIONS NEED ONLY HAVE ONE CROSSWALK ACROSS THROUGH STREET. WHEN BOTH SIDES ARE STRIPED, THEN CURB RAMPS MUST BE PROVIDED.
10. DUAL RAMPS SHALL BE AT ALL CORNERS WHERE POSSIBLE. FOR NEW RIGHT-OF-WAY CONSTRUCTION (NEW SUBDIVISION) DUAL RAMPS ARE REQUIRED.
11. DOUBLE TYPE 3 RAMPS UTILIZE A DEPRESSED LANDING BETWEEN THE RAMPS THAT HAS A CURB HEIGHT OF 3".
12. ALLEYWAYS ARE TREATED AS DRIVES; NOT FULL INTERSECTIONS. IF THE ALLEYWAY HAS CURB RETURNS THEN CURB RAMPS ARE REQUIRED TO CROSS THE ALLEYWAY, BUT IN ANY CASE NO CURB RAMP IS REQUIRED ON THE OPPOSITE SIDE OF THE THROUGH STREET.
13. SKEWED "T" INTERSECTIONS ARE TREATED LIKE STRIPED "T" INTERSECTIONS. THEY DO REQUIRE STRIPING BECAUSE OF CHANGING DIRECTION TO A PERPENDICULAR CROSSING OF THE THROUGH STREET. CALL TRAFFIC ENGINEERING FOR STRIPING REQUIREMENTS.
14. WHEN TWO RAMPS ARE USED AT A CORNER, IF THE SPACE BETWEEN IS TO BE AN UN-WALKABLE SURFACE, IT MAY BE GRASSED IF GREATER THAN 20 S.F., OTHERWISE IT SHALL BE FILLED IN WITH BRICK PAVERS.
15. OFFSET INTERSECTION - NO CROSSING WILL BE PERMITTED BETWEEN OPPOSING DIAGONAL CORNERS.
16. AT MID-BLOCK CROSSINGS AND ON INTERSECTION APPROACHES CONTROLLED BY A YIELD SIGN, USE "CONTINENTAL" (FWHA), "ABBEY" (ODOT), MARKINGS.

A. METHOD FOR CORRECT PLACEMENT AND ORIENTATION:

a. OFFSET A LINE 5' FROM EACH SIDE OF A LINE CONNECTING THE CENTERS OF THE DETECTABLE WARNING STRIPS.

b. DRAW FIRST "CONTINENTAL" MARKING, 2' WIDE, ALONG CENTERLINE OF ROADWAY OR LANE LINE.

c. USING SPACING TO AVOID WHEEL PATHS, TYPICALLY 3' OR 3.5', ALL SPACES CONSTANT WIDTH, DRAW ALL REMAINING "CONTINENTAL" MARKINGS WITH RESPECT TO THE FIRST MARKING. WIDTH AND SPACING IS MEASURED PERPENDICULAR TO THE FIRST CONTINENTAL MARKING.

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- USE TRIANGLES WITH 2' BASE AND 3' HEIGHT.
- SPACING BETWEEN TRIANGLES (TYPICALLY 6" TO 12") SHOULD BE SUCH THAT THE TRIANGLES ARE CENTERED WITHIN THE APPROACH LANE OR LANES.

17. ON INTERSECTION APPROACHES CONTROLLED BY A TRAFFIC SIGNAL OR STOP SIGN, USE TRANSVERSE MARKINGS:

A. METHOD FOR CORRECT PLACEMENT AND ORIENTATION:

a. OFFSET A LINE 4' AND ONE 5' FROM EACH SIDE OF A LINE CONNECTING THE CENTERS OF THE DETECTABLE WARNING STRIPS. THIS CREATES A AN 8' WIDE CROSSING PATH BORDERED BY TWO 1' WIDE TRANSVERSE LINES, 10' TOTAL ENVELOPE.

b. LOCATE A STOP LINE A MINIMUM OF 4' FROM THE NEAREST LONGITUDINAL CROSSWALK LINE.

LEGEND

- MARKED CROSSWALK
- UNMARKED CROSSWALK
- STOP LINE
- (#) CURB RAMP TYPE #
- (#) NOTE #

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. BP - 5.2
DESIGN DIVISION MANAGER 7-9-25 CONSTRUCTION DIVISION MANAGER 7-9-25 CITY ENGINEER 7/10/25	SIDEWALK CURB RAMP LOCATIONS 2025
	REVISIONS: Revised curb ramp locations 11/1/23 Added Dim. from curb to driveway 8/7/24

FINAL - NOT FOR CONSTRUCTION

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG

REVIEWER KDK 05/21/26

PROJECT ID 114865

SHEET P.242 | TOTAL 627

SUM-077/008-11.65/0.00

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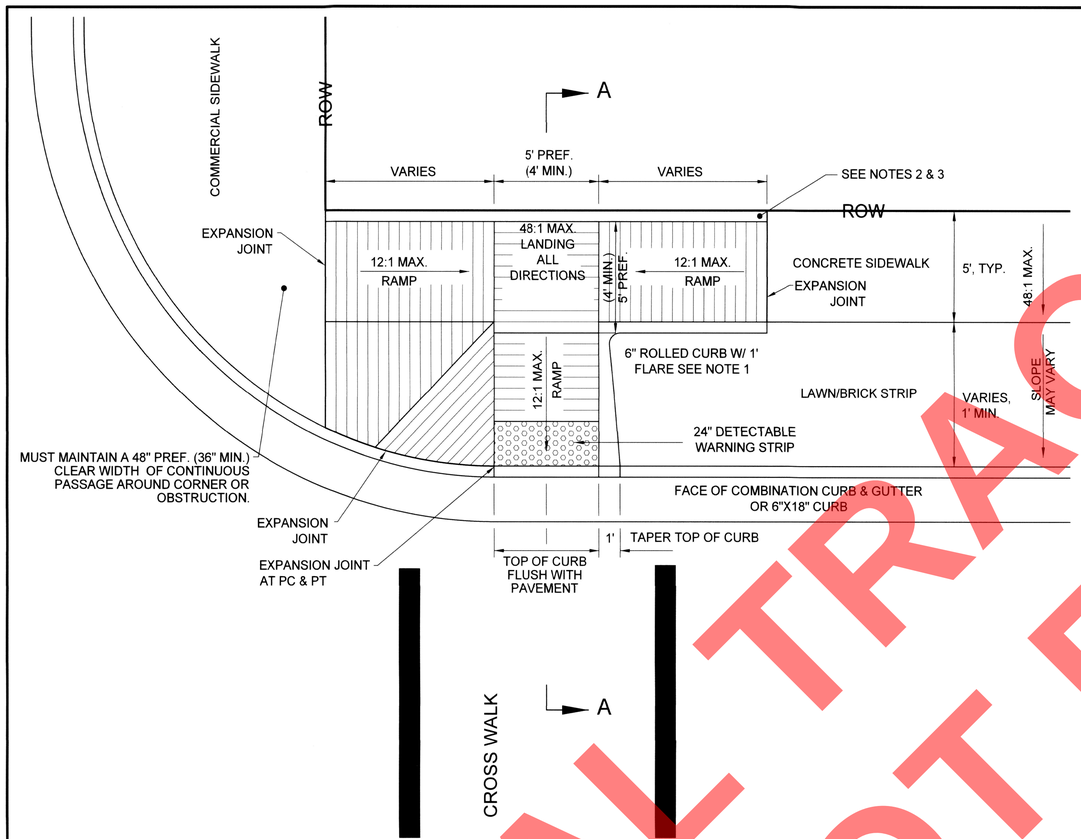
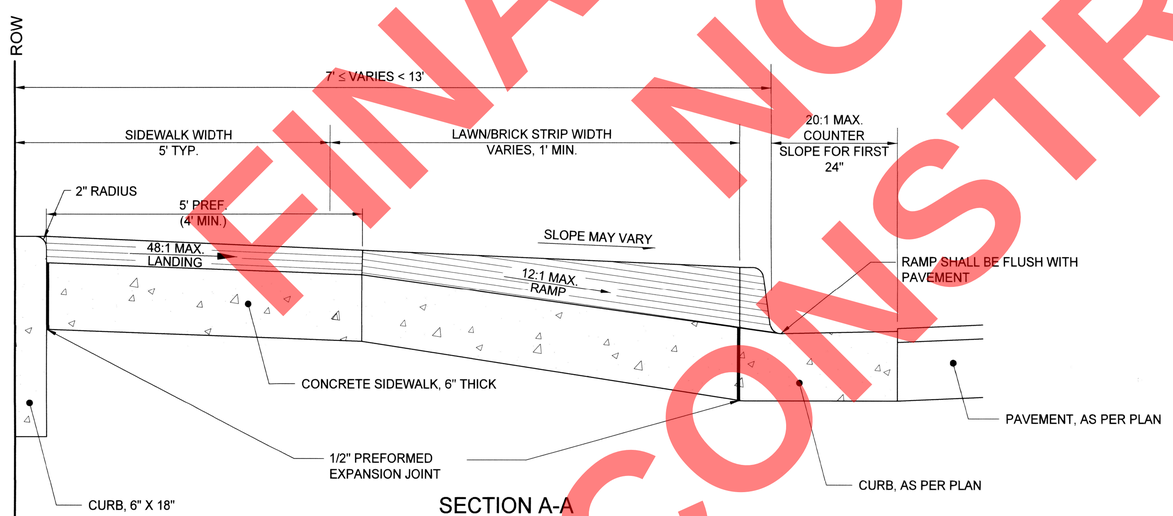


CURB RAMP TYPE 3



SECTION A-A

NOTES:

1. ALTERNATE FLARE TREATMENTS MAY BE USED UPON APPROVAL BY THE ENGINEER, AS FOLLOWS:
   A. INTEGRAL ROLLED CURBING AT 6" WIDTH
   B. NO CURBING OR FLARE TREATMENT
   C. CORNER SIDE FLARE MAY BE 12:1 TO CONCRETE WALK; PROVIDE MIN. 3' CONCRETE AT TOP OF FLARE TO EXTENDED SIDEWALK LINE.
2. CURB AT BACK OF SIDEWALK IS FLUSH AT TOP OF SIDEWALK RAMPS. REVEAL GREATEST AT LANDING AND BASED ON RAMP'S EDGE SLOPES AND LENGTHS.
   A. 6"X18" CURB IF REVEAL IS > 4".
   B. ROLLED INTEGRAL CURB IF REVEAL IS < 4".
3. CURB AT BACK OF WALK MAY OR MAY NOT BE REQUIRED BASED ON GRADING. BACK CURBING WILL BE AS DIRECTED BY THE ENGINEER.
4. EXPANSION JOINT IS REQUIRED IN THE CURB AT ALL POINTS OF CURVATURE AND POINT OF TANGENCY.
5. DIAGONAL RAMPS WILL BE CONSIDERED IF PARALLEL OR PERPENDICULAR RAMPS ARE INFEASIBLE.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. BP - 5.5
7-9-25 DESIGN DIVISION MANAGER 7-9-25 CONSTRUCTION DIVISION MANAGER 7.10.25 CITY ENGINEER	CURB RAMP TYPE 3 COMBINATION 2025

REVISIONS:
Added Expansion Joint notes to curb details. 8/21/24
Removed Diagonal Ramp Details and added "Note 5" 2/21/25

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.243 TOTAL 627

SUM-077/008-11.65/0.00

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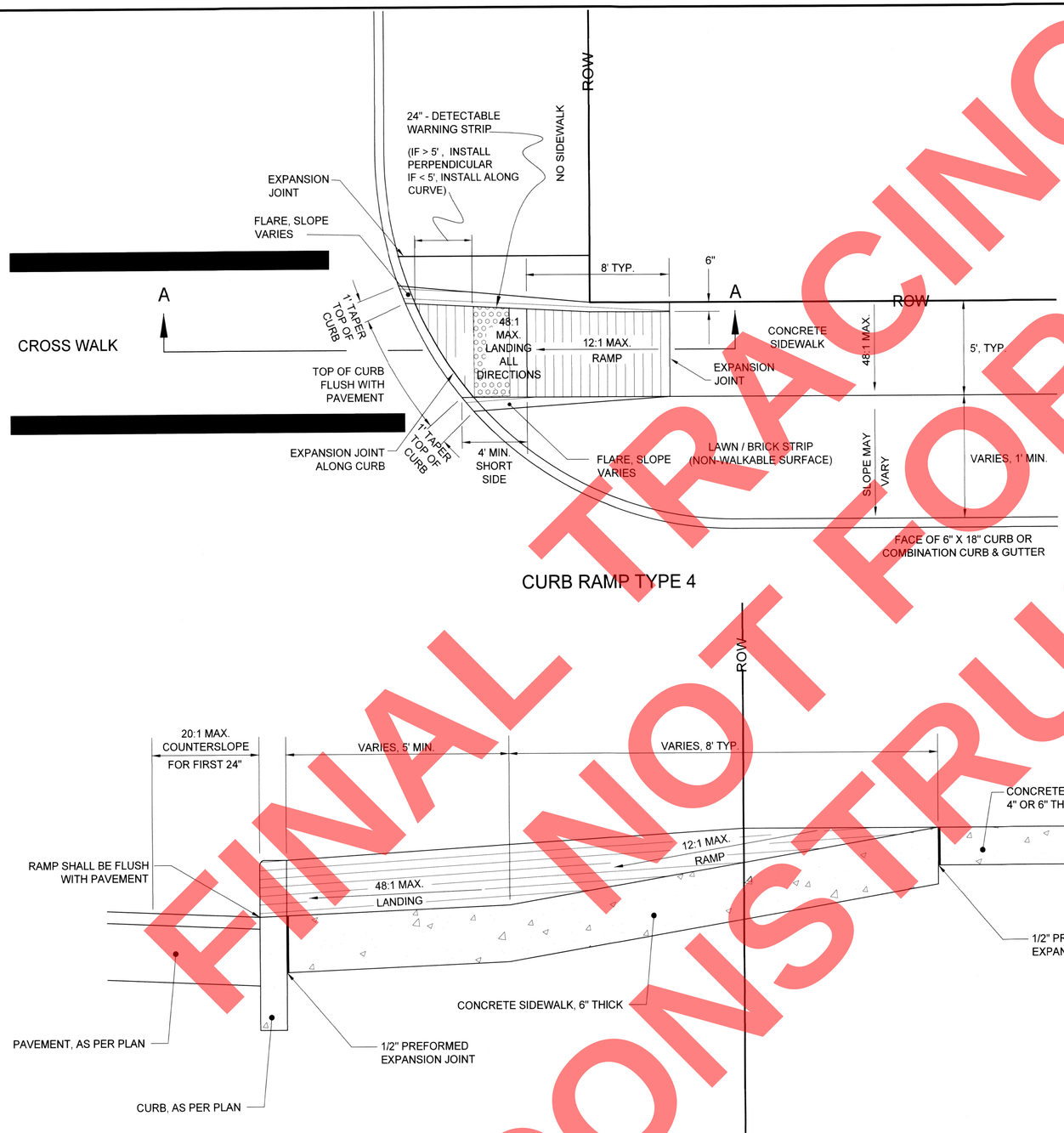

CURB RAMP TYPE 4

SECTION A-A

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. BP - 5.6
7-9-25 DESIGN DIVISION MANAGER 7-9-25 CONSTRUCTION DIVISION MANAGER 7/10/25 CITY ENGINEER	CURB RAMP TYPE 4 IN-LINE 2025

REVISIONS:
- Labeled non-walkable surface — 11/1/23
- Added Note #6 and labeled "Expansion Joints" — 8/12/24
- Updated Detectable Warning Strip details — 2/21/25

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.244 TOTAL 627

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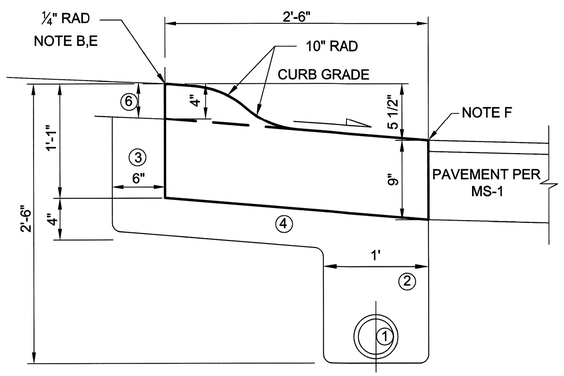
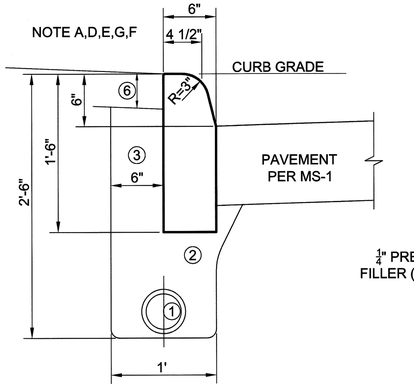
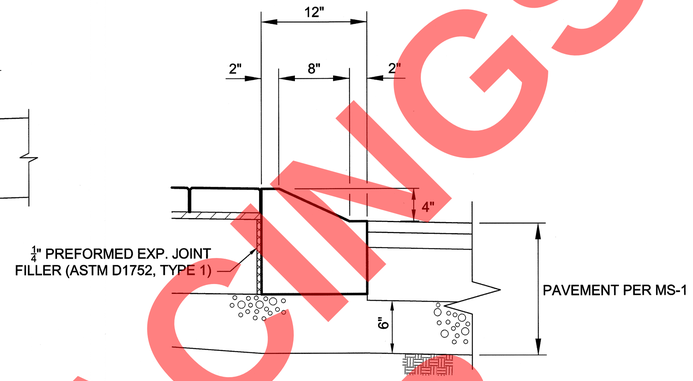


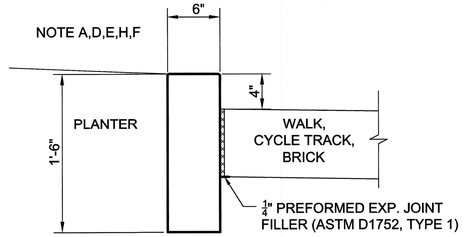
SPLITER ISLAND
COMBINATION CURB
AND GUTTER



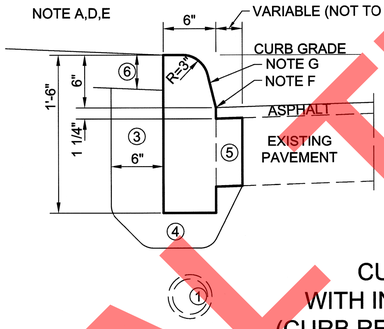
CURB, 6"x18"



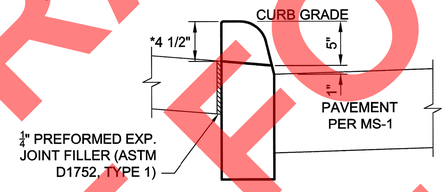
MOUNTABLE CURB
USED AT ROUNDABOUT CENTRAL
ISLAND TRUCK APRON



PLANTER CURB
4 INCH REVEAL



CURB, 6"x18"
WITH INTEGRAL BASE
(CURB RECONSTRUCTION)



CURB, 6"x18"
DRIVE APRON CURB
DROP DETAIL

REFERENCE:

1. 6" PIPE UNDERDRAIN, ITEM 564
2. No. 8 WASHED GRAVEL, COST INCLUDED IN PRICE OF UNDERDRAIN.
3. GRANULAR BACKFILL MATERIAL AS PER 203.02 TO BOTTOM OF (6) COST INCLUDED IN THE PRICE OF CURB.
4. SUBBASE IN ACCORDANCE WITH 310, COST INCLUDED IN PRICE OF CURB.
5. AREA OF EXISTING PAVEMENT TO BE REMOVED AND NEW INTEGRAL BASE TO BE CONSTRUCTED, COST INCLUDED IN PRICE OF CURB WHEN HAND FORMING CURB. POUR SEPARATE WHEN SLIP FORMING CURB, COST INCLUDED IN PRICE OF CURB.

   FOR EXISTING BRICK PAVEMENT, UNRAVEL AND THOROUGHLY CLEAN AROUND BRICKS.

   FOR EXISTING CONCRETE PAVEMENT OR BASE, AND ASPHALT SURFACE, SAWCUT AT LIMITS OF REMOVAL.

   REMOVE ALL LOOSE MATERIAL FROM AREA OF NEW CONCRETE.
6. MAY BE 6" WALK, BRICK, TOPSOIL, APRON.

SPECIAL NOTES:

A. PLACE 1/4" CONTRACTION JOINTS AT 10' INTERVALS, BY DIVIDER PLATES OR BY SAWCUT.

B. PLACE 1/4" CONTRACTION JOINTS AT INTERVALS OF NOT LESS THAN 10' UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

C. JOINTS IN INTEGRAL CURB SHALL BE OF THE SAME TYPE AND AT THE SAME SPACING AS JOINTS IN THE PAVEMENT.

D. BOTTOM OF SAW KERF SHALL BE SLOPED TOWARD THE PAVEMENT, AND CUT 2" DEEP FOR COMBINATION CURB & GUTTER AND 4" DEEP FOR 6"x18" CURB. SAWING SHALL BE COMPLETED AS SOON AS CONDITIONS ALLOW.

E. PLACE 1/2" EXPANSION JOINTS AT P.C.'s, P.T.'s, INLET APPROACHES (EXCEPT 1" IN CONC. PVMT.) AND MAX. 300' INTERVALS.

F. APPLY SEALER IN ACCORDANCE WITH 451.14.

G. FACE OF CURB SHALL BE BROOM FINISHED FOR A MINIMUM OF 7 1/4" FROM THE TOP OF CURB.

H. FOR SPECIAL CURB CUT REQUIREMENTS AT CURB RAMPS, SEE DWG No. BP-5.0

GENERAL NOTES:

INTERNAL VIBRATORS SHALL BE USED IN ALL CURB.

UNLESS OTHERWISE SPECIFIED ALL EDGES SHALL BE FINISHED TO A 1/4" RADIUS.

APPROVED FLEXIBLE STEEL OR WOOD FORMS SHALL BE USED FOR CIRCULAR CURB RADIUS OF 100' OR LESS.

ALL CONCRETE FOR CURBS SHALL BE CLASS C, UNIFORM IN SURFACE TEXTURE AS FINISHED WITH LONGITUDINAL LIGHT BROOMING.

CURING SHALL BE IN ACCORDANCE WITH 451.11 OR 455.03(e.).

COLD WEATHER PROTECTION SHALL BE PER 451.07.

DO NOT SCALE - USE DIMENSIONS ONLY

CITY OF AKRON BUREAU OF ENGINEERING	CONSTRUCTION STANDARD DWG. No. MS-2
4-18-22 DESIGN DIVISION MANAGER 4-20-22 CONSTRUCTION DIVISION MANAGER 4.25.22 CITY ENGINEER	MAIN STREET CONCRETE CURBS AND COMBINED CURB AND GUTTERS February 11, 2022 REVISIONS:

FINAL TRACINGS
NOT FOR
CONSTRUCTION

MISCELLANEOUS DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER SMG
REVIEWER KDK 05/21/26
PROJECT ID 114865
SHEET P.245 TOTAL 627

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SHEET NO.	REF. NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	SIZE (FEET)	625	630																									
								GROUND ROD	GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	BREAKAWAY STRUCTURAL BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-15.116 DESIGN 1	OVERHEAD SIGN SUPPORT, TYPE TC-9.31 DESIGN 4	SIGN, FLAT SHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	SIGN, OVERLAY	CONCRETE MEDIAN BARRIER SIGN BRACKET	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	SURFACE PREPARATION, NEW SUPPORT SECTION	COATING, EPOXY INTERMEDIATE COAT, SUPPORT SECTION	COATING, URETHANE TOP COAT, SUPPORT SECTION	COATING, ORGANIC ZINC PRIME COAT, SUPPORT SECTION	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	REMOVAL OF POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE
								EACH	FT	FT	EACH	EACH	EACH	SF	SF	SF	SF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
	R-1	SR-8 MAINLINE	ARCHWOOD	RT																								1						
	R-2	SR-8 MAINLINE	LOVERS	RT																								1						
	R-3	SR-8 MAINLINE	4299+50	RT																								1						
	OS-1	SR-8 MAINLINE	ARCHWOOD	RT			20 X 15									300.0																		
	OS-2	SR-8 MAINLINE	LOVERS	RT			20 X 15									300.0																		
							20 X 15									300.0																		
	OS-3	SR-8 MAINLINE	4299+50	RT	OVERLAY		2 X 2										4.0																	
					OVERLAY		2 X 2										4.0																	
	R-4	SR-8 MAINLINE	4330+20	LT																													1	3
	S-1	SR-8 MAINLINE	326+07	CT	(2) D10-5-18	18 X 60								15.0				1																
	S-2	SR-8 MAINLINE	331+35	CT	(2) D10-5-18	18 X 60								15.0				1																
	R-5	SR-8 MAINLINE	333+40	LT																													1	3
					GUIDE SIGN		16 X 10									160.0																		
	OS-14	SB EXIT CD	113+05	RT	E1-H5P		2.5 X 9					1				22.5																		
					GUIDE SIGN		14 X 15									210.0			1	1		3	3	3	3									
					E1-H5P		2.5 X 9									22.5																		
					GUIDE SIGN		40 X 12									480.0																		
	OS-4	SR-8 MAINLINE	333+40	RT	E1-H5P		2.5 X 9	2				1				22.5			1	1		3	3	3	3									
					GUIDE SIGN		15 X 9									135.0																		
	S-3	BEACON ST.	335+50	LT	OM4-2-18	18 X 18			10.0					2.3																			
	S-4	BEACON ST.	335+50	LT	OM4-2-18	18 X 18			10.0					2.3																			
	S-5	BEACON ST.	335+40	LT	W14-2-30	30 X 30			14.0					6.3																			
	S-6	BEACON ST.	335+80	LT	R8-3A-18	18 X 12			14.0					1.5																			
	S-7	BEACON ST.	335+80	LT	R8-3A-18	18 X 12			14.0					1.5																			
	S-8	BEACON ST.	336+00	LT	R8-3A-18	18 X 12			14.0					1.5																			
	S-9	SR-8 MAINLINE	336+63	CT	(2) D10-5-18	18 X 60								15.0				1																
	R-6	SR-8 MAINLINE	338+00	RT																												1	1	1
	S-10	SR-8 MAINLINE	341+91	CT	(2) D10-5-18	18 X 60								15.0				1																
	S-11	FOUNTAIN ST.		LT	W14-2-30	30 X 30			14.0					6.3																			
	S-12	SR-8 MAINLINE	347+19	CT	(2) D10-5-18	18 X 60								15.0				1																
	R-7	SR-8 MAINLINE	350+05	RT																								3						
					GUIDE SIGN		20 X 8									160.0																		
					E1-H5P																									1				
	OS-5	SR-8 MAINLINE	350+05	RT	HOSPITAL																									1				
					GUIDE SIGN		16 X 12									192.0																		
					E1-H5P																									1				
					GUIDE SIGN		14 X 16									224.0																		
	S-13	SR-8 MAINLINE	352+47	CT	(2) D10-5-18	18 X 60								15.0				1																
	R-8	GOODKIRK	354+00	LT																						1	1					1		
	R-9	GOODKIRK	355+60	LT																							1					1		
	R-10	GOODKIRK	355+90	LT																							1					2		
	R-11	SR-8 MAINLINE	357+75	LT																								1			1			
	S-14	SR-8 MAINLINE	357+75	CT	(2) D10-5-18	18 X 60								15.0				1																
	S-15	SB ENTR RAMP	9+15	LT	M2-H3-48	48 X 60				34.5	2				20.0							2												
	OS-6	SR-8 MAINLINE	360+00	LT	W9-H5L-192	192 X 60		1				1		80.0																				
														0.0																				
	S-17	SR-8 MAINLINE	363+03	CT	(2) D10-5-18	18 X 60								15.0				1																
	OS-15	GOODKIRK	514+14.69	RT	GUIDE SIGN		9 X 7					1				63.0				1	1		3	3	3	3				1				
					GUIDE SIGN		9 x 7									63.0														1				
					GUIDE SIGN		14 X 16									224.0																		
					E1-H5P		2.5 X 9									22.5																		
	OS-7	SR-8 MAINLINE	364+00	LT	GUIDE SIGN		16 X 12	2				1				192.0				1	1		3	3	3	3								
					E1-H5P		2.5 X 9									22.5																		
					GUIDE SIGN		25 X 12									300.0																		
	OS-16	GOODKIRK	145+50	RT	GUIDE SIGN		9 X 7					1				63.0			1															
					GUIDE SIGN		9 x 7									63.0			1			3	3	3	3									
	S-18	SR-8 MAINLINE	368+31	CT	(2) D10-5-18	18 X 60								15.0				1																
	S-19	NB ENTR RAMP	371+00	RT	M2-H3-48	48 X 60				34.5	2				20.0							2								1				
					GUIDE SIGN		14 X 15									210.0																		
					E1-H5P		2.5 X 9									22.5																		
	OS-8	SR-8 MAINLINE	372+25	LT	GUIDE SIGN		16 X 10	2				1				160.0				1	1		3	3	3	3								
					E1-H5P		2.5 X 9									22.5																		
					GUIDE SIGN		13 X 9									117.0																		
	S-20	SR-8 MAINLINE	373+59	CT	(2) D10-5-18	18 X 60								15.0				1																
	R-12	SR-8 MAINLINE	373+95	LT																							1					2		
	S-21	SR-8 MAINLINE	373+95	LT	E5-H1c-48	48 X 84				34.5	2				28.0							2												
	OS-9	SR-8 MAINLINE	375+90	LT	W9-H4L-192	192 X 60						1		80.0						1			3	3	3	3								
	S-22	SR-8 MAINLINE	378+87	CT	(2) D10-5-18	18 X 60								15.0				1																
					E1-H5P		2.5 X 9									22.5														2				
	OS-10	SR-8 MAINLINE	379+65	LT	GUIDE SIGN		16 x 11									176.0																		
					E1-H5P		2.5 X 9									22.5														2				
	OS-11	SR-8 MAINLINE	381+10	RT	GUIDE SIGN		17 x 10									170.0																		
	S-23	SR-8 MAINLINE	384+15	CT	(2) D10-5-18	18 X 60								15.0				1																
					GUIDE SIGN		15 X 8									120.0																		
					E1-H5P		2.5 X 9									22.5																		
	OS-12	SR-8 MAINLINE	387+95	LT	GUIDE SIGN		16 X 9	2				1				144.0				1	1		3	3	3	3								
					E1-H5P		2.5 X 9									22.5																		
					E1-H5P		2.5 X 9									22.5																		
					GUIDE SIGN		17 X 10									170.0																		
	R-13	SR-8 MAINLINE	387+95	LT																										1	1			
	S-24	SR-8 MAINLINE	389+43	CT	(2) D10-5-18	18 X 60								15.0				1																
	S-25	SB ENTR RAMP K	389+40	LT	M2-H3-48	48 X 60				34.5	2				20.0							2								1	1			
	S-26	FOUNTAIN ST.	392+00	LT	GUIDE SIGN		17 X 8									136.0														1	1			
					GUIDE SIGN		17 X 8									136.0														1	1			
					GUIDE SIGN		2 X 2										8.0																		
	OS-13	SR-8 MAINLINE	222+87	LT	OVERLAY		2 X 2										4.0																	
					GUIDE SIGN		2 X 2										8.0																		
					GUIDE SIGN		14 X 15									210.0																		
	OS-14	SR-8 MAINLINE	113+00	LT	E1-H5P		2.5 X 9	2				1				22.5				1	1		3	3	3	3								
					GUIDE SIGN		16 X 10									160.0																		
					E1-H5P		2.5 X 9									22.5																		
	S-27	NASH ST.	132+05	LT	R6-1R-36	12 X 36			14.0					3.0														1					
					R1-1-30	30 X 30								6.3																				
	S-28	CARROL ST ON RAMP	3+50	RT	W4-1R-36	36 X 36								18.0				1																
	R-14	SR-8 MAINLINE	5+25	RT																							1					2		
	TOTALS CARRIED TO GENERAL SUMMARY							11	104.0	138.0	8	8	2	403.8	88.0	5653.0	28.0	14	9	9	8	30	30	30	30	1	7	17	4	6	23	2	7	

FINAL TRACINGS
NOT FOR CONSTRUCTION

SIGNING SUBSUMMARY

SUM-077/008-11.65/00.00

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DESIGN AGENCY
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DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.246 | TOTAL 627

STRUCTURE FILE NO. (SFN)	EXPRESSWAY / FREEWAY STRUCTURE ID INFO	INTERSECTING ROADWAY STRUCTURE ID INFO	APPROACH DIRECTION (NB, SB, EB, WB)	SIDE OF ROADWAY (LT, RT)	GENERAL		MAINLINE FREEWAY/EXPRESSWAY				ROADWAY OVER EXPRESSWAY/FREEWAY				
					630	630	630	630	630	630	630	630	630	630	630
					REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	SIGN, FLAT SHEET, 730.20	SIGN, FLAT SHEET	SIGN, FLAT SHEET	GROUND MOUNTED SUPPORT, NO. 2 POST	SIGN, FLAT SHEET, 730.20	SIGN, FLAT SHEET, 730.20	SIGN, FLAT SHEET	SIGN, FLAT SHEET	GROUND MOUNTED SUPPORT, NO. 2 POST
					EACH	EACH	SF	SF	SF	FT	SF	SF	SF	SF	FT
7706030	SUM-76-11.573R		NB	RT			1			7.5					
7706006	SUM-76-11.547L		NB	RT			1			7.5					
7702973	SUM-77.12.033R		NB	RT			1			7.5					
770067	SUM-C702-01.283		NB	RT			1			7.5					
7700091	SUM-8-0.770		NB	RT			1			7.5					
7700156	SUM-8-0.987		NB	RT			1			7.5					
7700180	SUM-8-1.162		NB	RT			1			7.5					
7700210	SUM-C645-00.659		NB	RT			1			7.5					
7708297	SUM-18-10.639		NB	RT			1			7.5					
7700245	SUM-8-01.711		NB	RT			1			7.5					
7700334	SUM-59-03.647		NB	RT			1			7.5					
7706030	SUM-76-11.573R		SB	RT			1			7.5					
7706006	SUM-76-11.547L		SB	RT			1			7.5					
7702973	SUM-77.12.033R		SB	RT			1			7.5					
770067	SUM-C702-01.283		SB	RT			1			7.5					
7700091	SUM-8-0.770		SB	RT			1			7.5					
7700156	SUM-8-0.987		SB	RT			1			7.5					
7700180	SUM-8-1.162		SB	RT			1			7.5					
7700210	SUM-C645-00.659		SB	RT			1			7.5					
7708297	SUM-18-10.639		SB	RT			1			7.5					
7700245	SUM-8-01.711		SB	RT			1			7.5					
7700334	SUM-59-03.647		SB	RT			1			7.5					
7700372	SUM-8-1.040		SB	RT							1				7.5
7700372	SUM-8-1.040		SB	RT							1				7.5
TOTALS CARRIED TO GENERAL SUMMARY							22			165	2				15
							NOTE 1	NOTE 2	NOTE 3		NOTE 1	NOTE 4	NOTE 2	NOTE 3	

NOTE 1	I-h25b, MOUNTED UNDER OM-3R IF SPECIFIED, USE EXPRESSWAY / FREEWAY STRUCTURE INFO
NOTE 2	OM-3L
NOTE 3	OM-3R
NOTE 4	I-h25b, MOUNTED UNDER MAINLINE STRUCTURE ID SIGN, USE INTERSECTING ROADWAY STRUCTURE INFO

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SIGNING SUBSUMMARY

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DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.247 TOTAL 627

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	621 RPM, AS PER PLAN EACH	621 RAISED PAVEMENT MARKER REMOVED EACH	646 CHANNELIZING LINE, 12" FT	646 DOTTED LINE, 6", (WHITE) FT	646 STOP LINE FT	646 LANE ARROW EACH	646 LANE LINE, 6" MILE	646 CENTER LINE MILE	646 CROSSWALK LINE, 24" FT	807 PAVEMENT MARKING, MISC.: WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 8" MILE	807 PAVEMENT MARKING, MISC.: WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 8" MILE	850 GROOVING FOR 8" RECESSED PAVEMENT MARKING, (ASPHALT) EDGE LINE MILE	850 GROOVING FOR 8" RECESSED PAVEMENT MARKING, (ASPHALT) LANE LINE MILE
496-507	ELY-1	SR-8 MAINLINE NB	4297+40	403+97	RT	95	95								2.13		2.13	
496-507	LL-1	SR-8 MAINLINE NB	4297+40	387+00	RT	121	121									1.80		1.80
496	LL-2	SR-8 MAINLINE NB	4297+40	403+97	RT	142	142									2.13		2.13
496-507	ELW-1	SR-8 MAINLINE NB	4297+40	403+97	RT	95	95								2.13		2.13	
497	DLW-1	SR-8 MAINLINE NB	4298+00	4301+25	RT				325									
496-505	CH-1	CENTRAL OFF RAMP NB	4297+40	4301+68	RT	12	12	428										
497-507	CH-2	CENTRAL OFF RAMP NB	4301+25	4305+51	RT	22	22	838										
496-505	CH-3	CENTRAL ON RAMP NB	4329+20	330+12	RT	18	18	670										
497-507	CH-4	CENTRAL ON RAMP NB	4329+21	330+12	RT	18	18	670										
497-507	LL-3	SR-8 MAINLINE NB	330+12	403+97	RT	94	94									1.40		1.40
497	DLW-2	SR-8 MAINLINE NB	330+12	347+95	RT	31	31		1785									
497	CH-5	CARROLL OFF RAMP NB	347+75	354+50	RT	18	18	680										
497-507	DLW-8	CARROLL OFF RAMP NB	348+50	351+65	RT	7	7		315									
497	CH-6	CARROLL OFF RAMP NB	351+65	354+39	RT	8	8	274										
497-507	CH-7	CARROLL OFF RAMP NB	351+65	354+39	RT	8	8	274										
497	CH-8	BUCHTEL ON RAMP NB	373+25	377+60	RT	12	12	435										
497-507	CH-9	BUCHTEL ON RAMP NB	373+25	377+60	RT	12	12	435										
497-507	DLW-3	SR-8 MAINLINE NB	377+60	383+29	RT	11	11		570									
497-498	CH-10	PERKINS OFF RAMP NB	383+25	386+50	RT	12	12	435										
497-507	CH-11	PERKINS OFF RAMP NB	383+25	386+50	RT	12	12	435										
497-498	DLW-4	SR-8 MAINLINE NB	377+31	385+56	RT	15	15		825									
	LA-1	SR-8 MAINLINE NB	378+60		RT						1							
	LA-2	SR-8 MAINLINE NB	386+00		RT						1							
498-499	ELY-2	SR-8 MAINLINE SB	4316+45	403+65	LT	80	80								1.77		1.77	
498-500	LL-4	SR-8 MAINLINE SB	4316+45	403+65	LT	119	119									1.77		1.77
499-500	LL-5	SR-8 MAINLINE SB	4316+45	403+65	LT	119	119									1.77		1.77
499-500	ELW-2	SR-8 MAINLINE SB	4316+45	403+65	LT	80	80								1.77		1.77	
500-501	DLW-5	SR-8 MAINLINE SB	332+75	338+75	LT	11	11		600									
500-509	CH-12	CARROLL ON RAMP SB	338+64	349+95	LT	29	29	1117										
500-509	CH-13	CARROLL ON RAMP SB	338+64	349+95	LT	29	29	1117										
500-509	CH-14	CD OFF RAMP SB	358+75	361+00	LT	7	7	225										
500	CH-15	CD OFF RAMP SB	358+75	361+05	LT	7	7	230										
500-501	CH-16	CD OFF RAMP SB	358+75	365+50	LT	18	18	675										
497-507	DLW-9	CD OFF RAMP SB	361+05	365+50	LT	9	9		445									
500-501	DLW-6	SR-8 MAINLINE SB	365+50	374+41	LT	16	16		891									
499-500	LL-7	SR-8 MAINLINE SB	374+41	385+50	LT	15	15									0.21		0.21
500-501	CH-17	BUCHTEL OFF RAMP SB	374+45	377+75	LT	10	10	330										
501-510	CH-18	BUCHTEL OFF RAMP SB	374+45	377+75	LT	10	10	330										
501-510	DLW-7	SR-8 MAINLINE SB	377+60	383+36	LT				600									
501-510	CH-19	PERKINS ON RAMP SB	383+60	385+50	LT	14	14	510										
501	CH-20	PERKINS ON RAMP SB	383+60	385+50	LT	14	14	510										
502-508																		
502-508	ELY-3	CARROLL ON RAMP SB	0+00	11+95	RT	11	11								0.23		0.23	
502-511	ELW-3	CARROLL ON RAMP SB	0+00	9+00	RT	9	9								0.17		0.17	
502-511	CH-21	CARROLL ON RAMP SB	9+00	10+60	LT	5	5	160										
502	CH-22	CARROLL ON RAMP SB	9+00	11+95	LT	9	9	295										
503	DLW-10	CARROLL ON RAMP SB	10+60	11+95	LT				135									
502-504	ELY-4	CD OFF RAMP SB	4326+00	358+75	LT	33									0.72		0.72	
503	LL-6	CD OFF RAMP SB	4326+00	358+75	LT	33										0.72		0.72
503	ELW-4	CD OFF RAMP SB	4326+00	358+75	LT	33									0.72		0.72	
502	CH-23	CD OFF RAMP SB	100+25	100+75	RT	3		50										
503	CH-24	CD OFF RAMP SB	100+25	101+50	RT	5		125										
504-505	SL-31	GOODKIRK ST								16								
	XW-31	GOODKIRK ST												32				
	DLW-31	GOODKIRK ST							32									
	XW-32	GOODKIRK ST												32				
	DLW-32	GOODKIRK ST							32									
	SL-41	CARROLL ST								24								
	LL-41	CARROLL ST										0.005						
	LL-42	CARROLL ST										0.014						
	CL-41	CARROLL ST											0.014					
	CH-41	CARROLL ST							50									
	SL-42	CARROLL ST								24								
	LA-41	CARROLL ST									1							
	LA-42	CARROLL ST									1							
		PERKINS ON RAMP NB	MOT PAVING AREA		RT	10	10	342										
		PERKINS OFF RAMP SB	MOT PAVING AREA		LT	13	13	465										
		PERKINS OFF RAMP SB	MOT PAVING AREA		LT				106									
TOTALS CARRIED TO SHEET 484						1514	1407	12055	6711	64	4	0.019	0.014	64	9.65	9.81	9.65	9.81

FINAL TRACINGS
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PAVEMENT MARKING SUBSUMMARY

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.248 | TOTAL 627

SUM-077-0808-11.659/00.00

FILENAME: C:\Users\jwilson\Desktop\SUM-077-0808-11.659 00.00 Traffic Control Pavement Marking and Signing.dgn
DESIGN: Dept. STANDARD: 2024 ER | DATE: 5/23/2024 | USER: JWilson | PW: USER: TRaudi
MODEL: Dept. STANDARD: 2024 ER | DATE: 5/23/2024 | USER: JWilson | PW: USER: TRaudi

FINAL TRACINGS
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CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

TRAFFIC CONTROL
PAVEMENT MARKING AND SIGNING

TRAFFIC CONTROL LEGEND

- ELW — EDGE LINE (WHITE) - ITEM 807
- ELY — EDGE LINE (YELLOW) - ITEM 807
- LL — LANE LINE - ITEM 807
- CH — CHANNELIZING LINE - ITEM 646
- DLW — DOTTED LINE, WHITE - ITEM 646
- LA — LANE ARROW - ITEM 646
- SL — STOP LINE - ITEM 646
- DIRECTIONAL ARROW

NOTES:
1. EDGE AND LANE LINES SHALL BE 8" ON SR 8 AND RAMPS
2. INSTALL RAISED PAVEMENT MARKERS ON EDGE LINES OF THE MAINLINE AT THE SAME SPACING AS REQUIRED FOR THE LANE LINES.

TO REMAIN
S 8 0 MILE 0.2
N 8 0 MILE 0.2

BURKHARDT AVE.
LAFOLLETTE ST.
E CROSIER ST.
COVENTRY ST.
DARKOW ST.
RAMP N SB ENT. FROM IR 76 E
RAMP M SB ENT. FROM IR 76 W
RAMP T (IR 76 E/W)
180' PVMT TAPER
BEGIN TAPER STA. 4300+00.00 39.4' RT
END TAPER STA. 4305+00.00 39.4' RT
MATCH EXISTING PAVEMENT MARKINGS STA. 4316+45
MAINLINE STA. 432+00.00
NB EXIT TO IR 76 W
NB EXIT TO IR 76 E
RAMP N TO IR 76 E/W
EXISTING OVERHEAD TRUSS (TO REMAIN) (EX SIGNS REMOVED AND RELOCATED)
LOCATE SIGN AT SE CORNER OF BEACON ST & SPICER ST

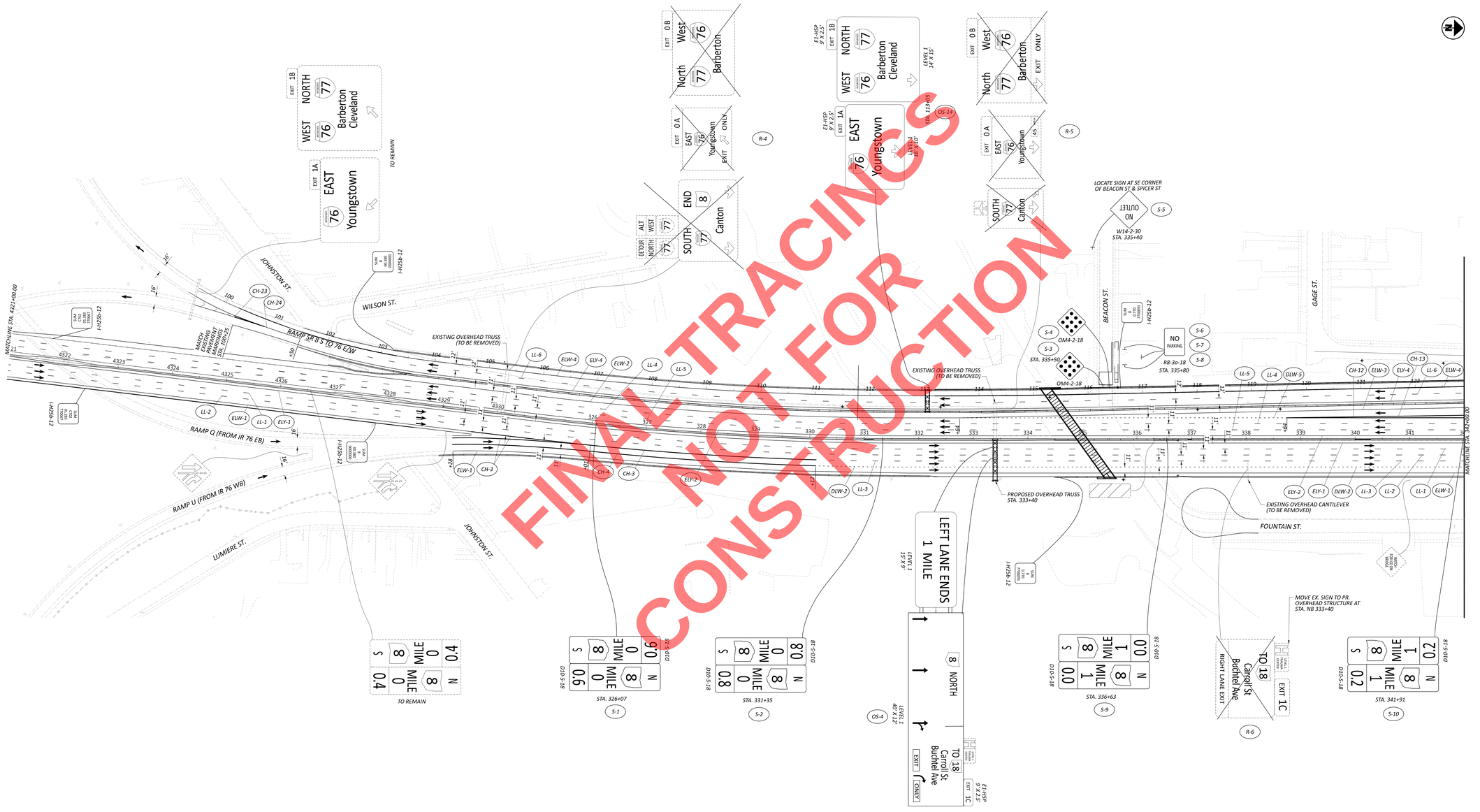
I-H26b-12

EX. OVERHEAD SIGN STRUCTURE AT ARCHWOOD (TO REMAIN) (EX. SIGNS REMOVED AND RELOCATED)

EX. OVERHEAD SIGN STRUCTURE AT STA. 405+75 - NEAR LOVER LANE (TO REMAIN) (EX. SIGNS REMOVED AND RELOCATED)

OS-1 / OS-2 / OS-3 / R-1 / R-2 / R-3

8 NORTH
Cuyahoga Falls
1 MILE
LEVEL 1 - 15" X 20" - 17' MIN. ABOVE PAVEMENT
EXIT LEFT 3 LANES ONLY
LEFT EXIT 125 A
77 North Cleveland
76 West Cleveland
76 East Youngstown EXIT ONLY
EXIT 125 B
EXISTING SIGN TO REMAIN
OVERLAY



FINAL TRACINGS
NOT FOR
CONSTRUCTION

TRAFFIC CONTROL LEGEND

ELW	EDGE LINE (WHITE) - ITEM 807
ELY	EDGE LINE (YELLOW) - ITEM 807
LL	LANE LINE - ITEM 807
CH	CHANNELIZING LINE - ITEM 646
DLW	DOTTED LINE, WHITE - ITEM 646
LA	LANE ARROW - ITEM 646
SL	STOP LINE - ITEM 646
→	DIRECTIONAL ARROW

NOTES:
1. EDGE AND LANE LINES SHALL BE 8" ON SR 8 AND RAMPS
2. INSTALL RAISED PAVEMENT MARKERS ON EDGE LINES OF THE MAINLINE AT THE SAME SPACING AS REQUIRED FOR THE LANE LINES.

HORIZONTAL SCALE IN FEET
0 25 50 100

TRAFFIC CONTROL
PAVEMENT MARKING AND SIGNING

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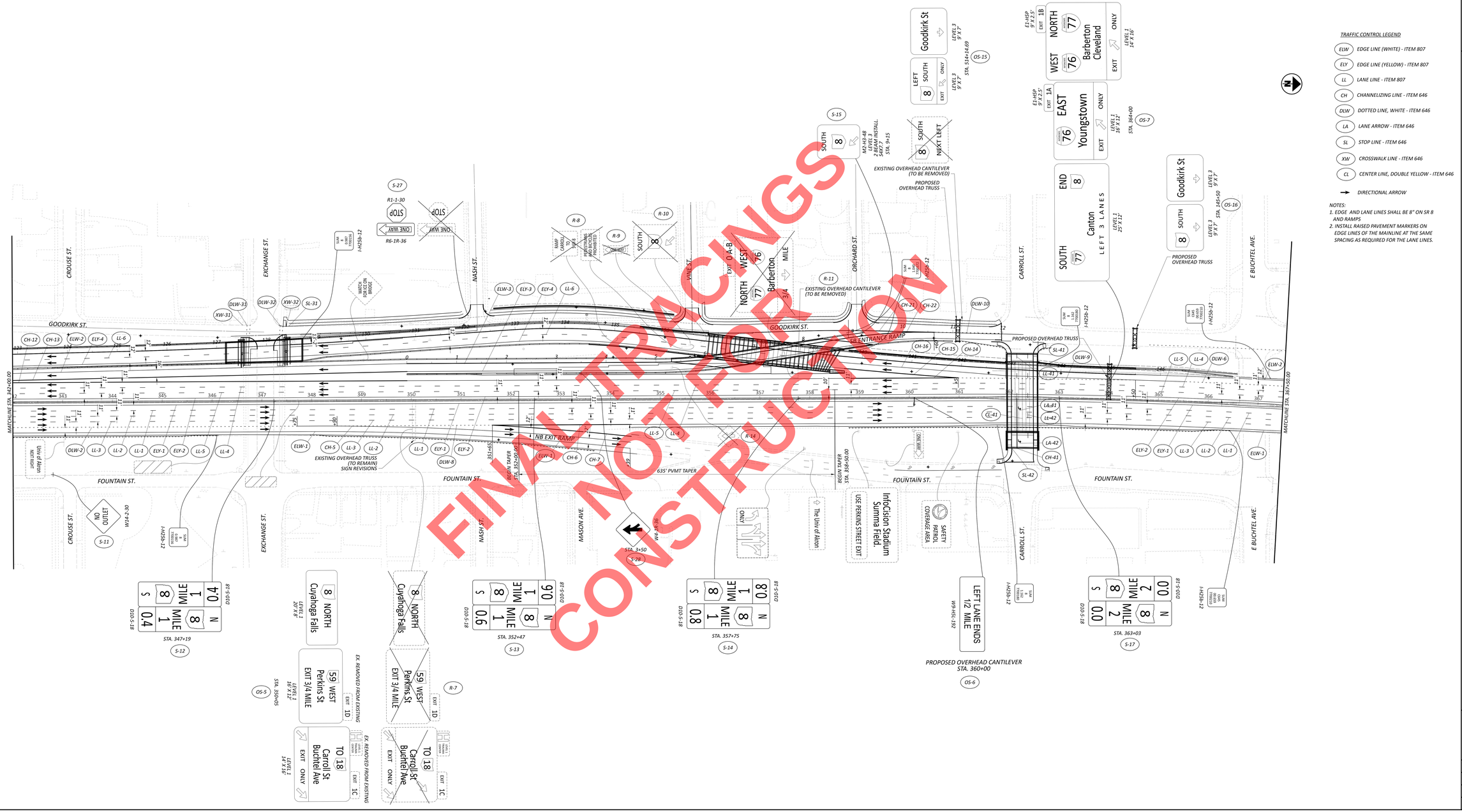
REVIEWER
KDK 5-10-24

PROJECT ID
114865

SHEET P.250 TOTAL 627

SUM-077/008-11.65/00.00



TRAFFIC CONTROL
PAVEMENT MARKING AND SIGNING

DESIGN AGENCY
ARCADIS
DESIGNER JAW
REVIEWER KDK 5-10-24
PROJECT ID 114865
SHEET P.251 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_Surv11 PAPERSIZE: 66x34 (in.) DATE: 9/23/2026 TIME: 12:40:42 PM USER: TBuniak
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FINAL TRACINGS
NOT FOR
CONSTRUCTION

MATCHLINE STA. 367+50.00

TRAFFIC CONTROL LEGEND
EEW EDGE LINE (WHITE) - ITEM 807
EEY EDGE LINE (YELLOW) - ITEM 807
LL LANE LINE - ITEM 807
CH CHANNELIZING LINE - ITEM 646
DLW DOTTED LINE, WHITE - ITEM 646
LA LANE ARROW - ITEM 646
SL STOP LINE - ITEM 646
DIRECTIONAL ARROW

NOTES:
1. EDGE AND LANE LINES SHALL BE 8" ON SR 8 AND RAMPS
2. INSTALL RAISED PAVEMENT MARKERS ON DOTTED LINES AT THE SAME SPACING AS REQUIRED FOR THE LANE LINES.

NB ENTRANCE RAMP Q
SB EXIT RAMP P
PROPOSED OVERHEAD TRUSS
FOUNTAIN ST.
GOODKIRK ST.
E. MARKET ST.
EXISTING OVERHEAD CANTILEVER (TO REMAIN)
PROPOSED OVERHEAD CANTILEVER
BEGIN DOTTED LINE STA. 377+31.00
END DOTTED LINE STA. 385+56.00
NB EXIT RAMP Q
SB ENTRANCE RAMP K
EXISTING OVERHEAD CANTILEVER (TO BE REMOVED)
N. FORGE ST.
PERKINS ST.
M. L. King Jr Blvd & Fwy NEXT RIGHT
LEFT LANE ENDS MERGE RIGHT
SPEED LIMIT 55
STAY IN LANE
WRONG WAY
PEDESTRIANS AND BICYCLES PROHIBITED
NO ENGINE BRAKE TRUCKS OVER 15 TONS USE TALLMADGE AVE
Univ of Akron NEXT RIGHT

D10-5-18
S-18 STA. 368+31
S 8 MILE 2 N 8 0.2
S-19 STA. 371+00
NORTH 8
M2-H3-48 LEVEL 3 2 BEAM INSTALL. S4 X 7.7
S-20 STA. 373+59
S 8 MILE 2 N 8 0.4
S-21 STA. 375+40
S 8 MILE 2 N 8 0.6
S-22 STA. 378+87
S 8 MILE 2 N 8 0.8
S-23 STA. 384+15
S 8 MILE 3 N 8 0.0
S-24 STA. 389+43
S-50 STA. 392+00
NORTH 8 EAST 59 LEVEL 3 17' X 8'
SOUTH 8 WEST 59 LEVEL 3 17' X 8'
EAST 59 NORTH 8
WEST 59 SOUTH 8
I-H25b-12
SUM 18 01.631 7700237
SUM 18 01.639 7700297
SUM 18 10.639 7700297
SUM 18 01.731 7700245
SUM 59 01.647 7700334
SUM 59 01.647 7700334
SUM 59 01.731 7700245
I-H25b-12

E1-H5P 9' X 2.5'
EXIT 1A
77 SOUTH Canton LEFT 3 LANES
LEVEL 1 13' X 9'
76 EAST Youngstown
LEVEL 1 16' X 10'
STA. 372+25
S-50
EXIT 1B
WEST 76 NORTH 77 Barberton Cleveland
EXIT ONLY
LEVEL 1 14' X 15'
EXIT 1A R-12
EXIT 1C
E5-H1c-48 STA. 373+95 2 BEAM INSTALL S4X7.7
S-21
EXIT 1C
Buchtel Ave Carroll St Exchange St
EXIT ONLY
LEVEL 1 16' X 11'
STA. 379+65
S-10
EXIT 1A
Buchtel Ave Carroll St Exchange St
NEXT RIGHT
EXIT 1B
WEST 76 NORTH 77 Barberton 1/2 MILE
LEVEL 1 14' X 15'
STA. 387+95
S-12
EXIT 1C
Buchtel Ave Carroll St Exchange St
NEXT RIGHT
LEVEL 1 13' X 10'
76 EAST Youngstown 1/2 MILE
LEVEL 1 13' X 9'
EXIT 1A
Buchtel Ave Carroll St Exchange St
NEXT RIGHT
R-13
SOUTH 8
SOUTH 8
S-25
M2-H3-48 LEVEL 3 2 BEAM INSTALL. S4 X 7.7 STA. 389+40
EXIT 1D
LEVEL 1 TRAUMA CENTER
WEST 59 TO 18 Perkins St MLK Jr Blvd
EXIT ONLY
TO REMAIN (REPLACE DOWN ARROW W/ UP TO THE RIGHT ARROW)
JUNCTION 76 77 3/4 MILES
TO REMAIN (REPLACE DISTANCE WITH 3/4 OVERLAY)
EXIT 1C
Buchtel Ave Carroll St Exchange St 3/4 MILE
TO REMAIN (REPLACE DISTANCE WITH 3/4 OVERLAY)
EX. OVERHEAD SIGN TRUSS (TO REMAIN) STA. 222+87
S-13
WEST 59 EXIT 1D Perkins St
EXIT ONLY
E1-H5P 9' X 2.5'
LEVEL 1 17' X 10'
S-TA. 381+05
S-11
Perkins St WEST 59
EXIT 1B
E1-H5P 9' X 2.5'
EXIT 18
Perkins St WEST 59
S-9 STA. 379+29
NORTH 8
NORTH 8
M2-H3-48 LEVEL 3 2 BEAM INSTALL. S4 X 7.7 STA. 371+00
S-8 STA. 368+31
S 8 MILE 2 N 8 0.2
D10-5-18
S-7 STA. 373+59
S 8 MILE 2 N 8 0.4
D10-5-18
S-6
LEFT LANE ENDS MERGE RIGHT
W9-H4L-12
PROPOSED OVERHEAD CANTILEVER STA. 375+40
I-H25b-12
S-22 STA. 378+87
S 8 MILE 2 N 8 0.6
D10-5-18
S-23 STA. 384+15
S 8 MILE 2 N 8 0.8
D10-5-18
S-24 STA. 389+43
S 8 MILE 3 N 8 0.0
D10-5-18
S-50 STA. 392+00
NORTH 8 EAST 59 LEVEL 3 17' X 8'
SOUTH 8 WEST 59 LEVEL 3 17' X 8'
EAST 59 NORTH 8
WEST 59 SOUTH 8
I-H25b-12
SUM 59 01.647 7700334
SUM 59 01.731 7700245
I-H25b-12
SUM 18 01.631 7700237
SUM 18 10.639 7700297
SUM 18 10.639 7700297
I-H25b-12

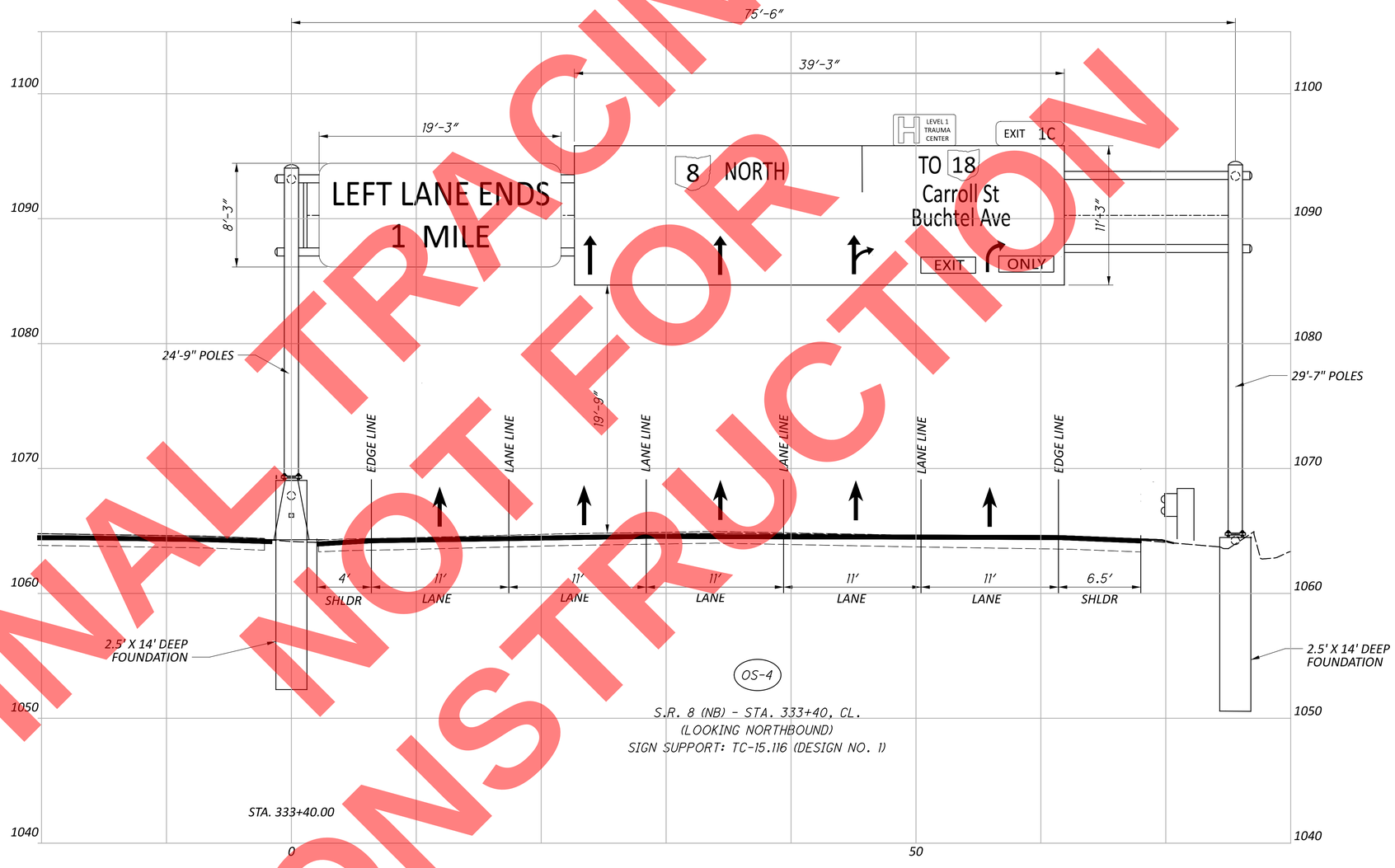
MATCH EXISTING PAVEMENT MARKING STA. 403+97+/- (SB) (MEET EX. APPROACH SLAB)
MATCH EXISTING PAVEMENT MARKING STA. 403+97+/- (SB) (MEET EX. APPROACH SLAB)

TRAFFIC CONTROL
PAVEMENT MARKING AND SIGNING

HORIZONTAL SCALE IN FEET
0 50
25 100

ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
330.434.1400
www.arcadis.com

DESIGNED KRK
DRAWN AMV
CHECKED
PROJECT NO. 114865
DATE 5-10-24
SHEET NO. P-257
TOTAL SHEETS 627



OS-4

S.R. 8 (NB) - STA. 333+40, CL.
(LOOKING NORTHBOUND)
SIGN SUPPORT: TC-15.116 (DESIGN NO. 1)

OVERHEAD SIGN ELEVATION VIEW

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00

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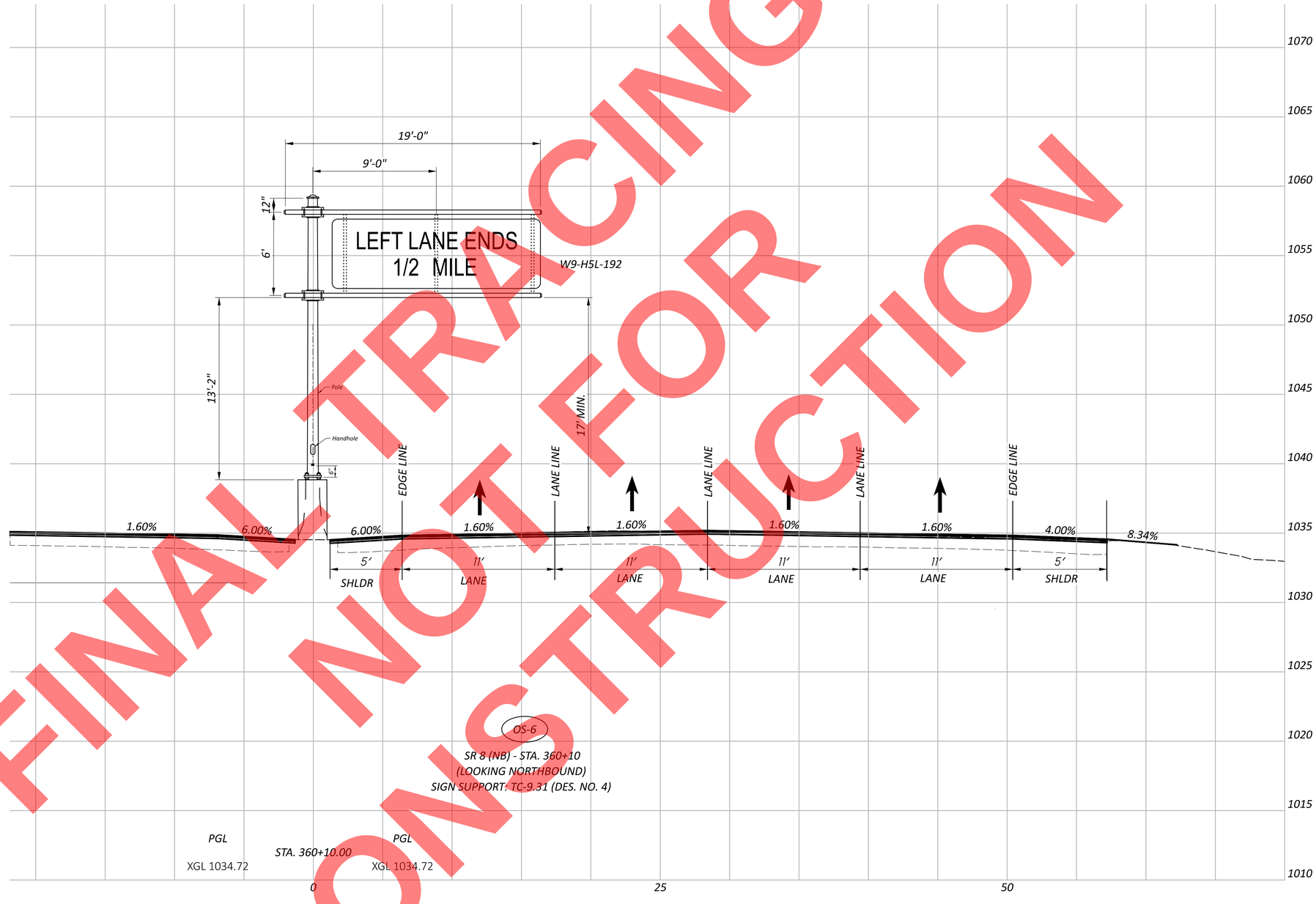
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.253 | TOTAL 627



OS-6

SR 8 (NB) - STA. 360+10
(LOOKING NORTHBOUND)
SIGN SUPPORT: TC-9.31 (DES. NO. 4)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.254 | TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:41:32 PM USER: TBuniak
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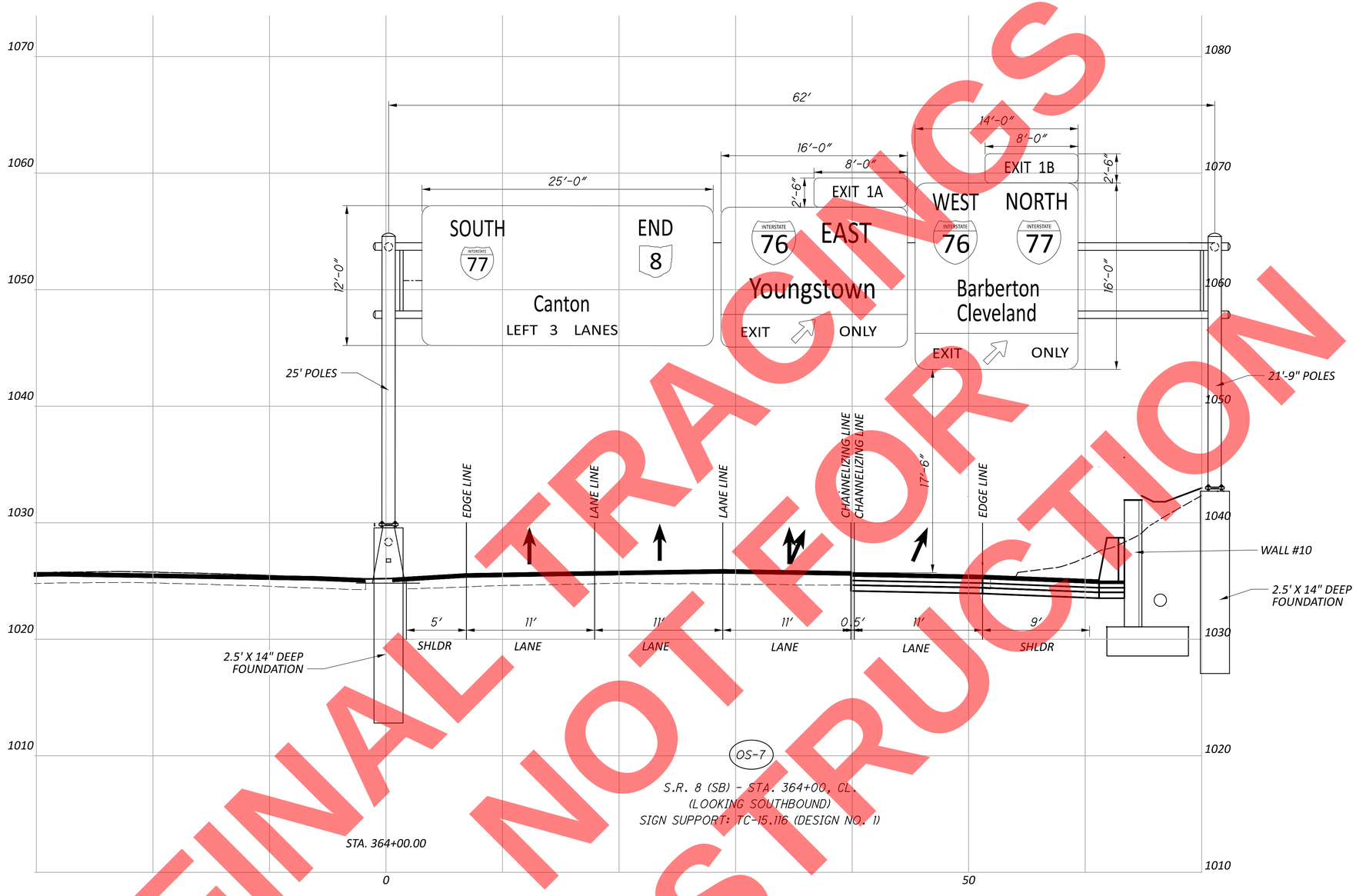

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

SUM-077/008-11.65/00.00

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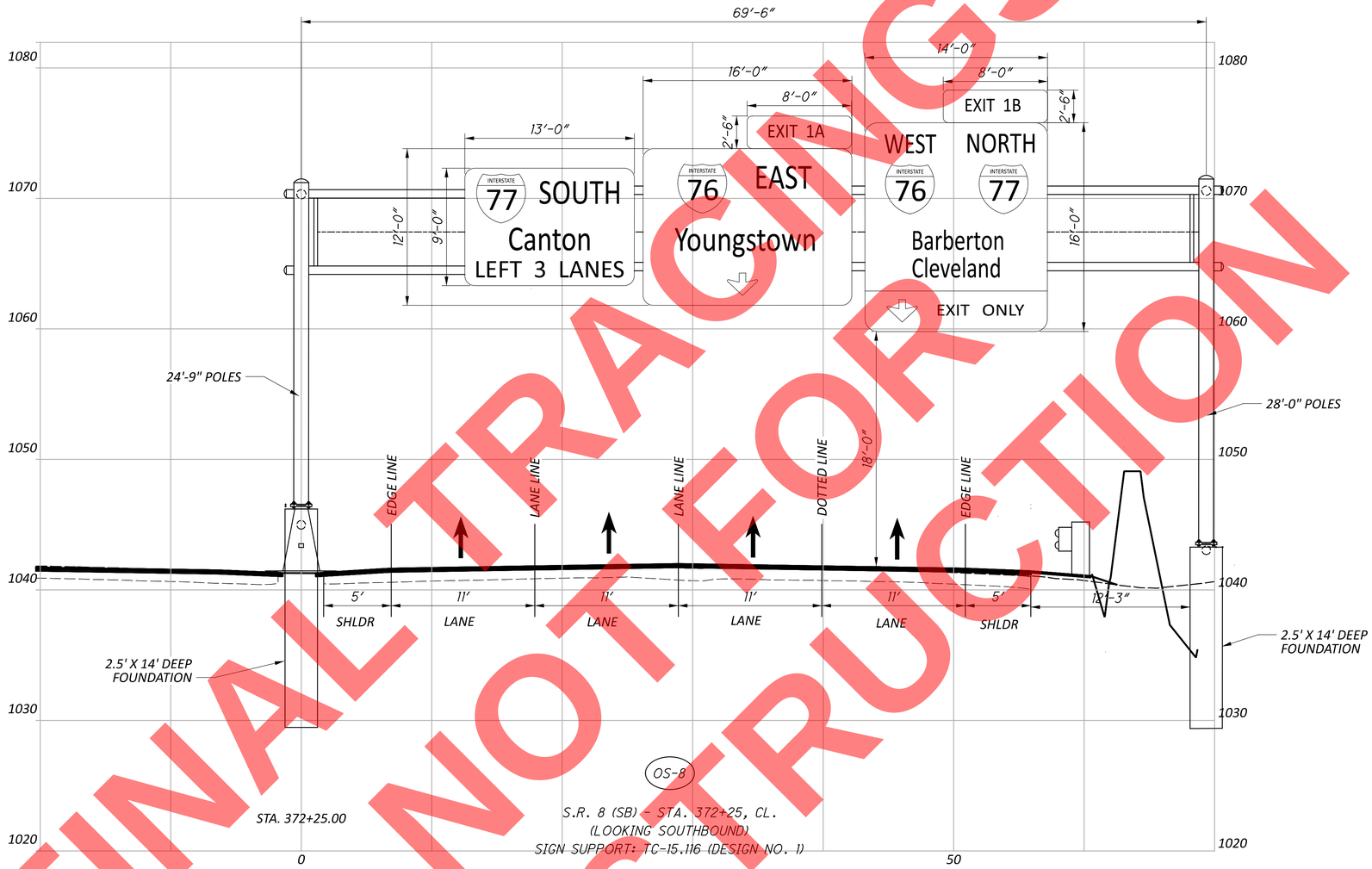
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 5-19-26

PROJECT ID
114865

SHEET P.255 TOTAL 627



FINAL TRACINGS
NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00

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OVERHEAD SIGN ELEVATION DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.256 | TOTAL 627

OS-9

SR 8 (NB) - STA. 375+43
(LOOKING NORTHBOUND)
SIGN SUPPORT: TC-9.31 (DES. NO. 4)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN SUPPORT DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.257 TOTAL 627

SUM-077/008-11.65/00.00

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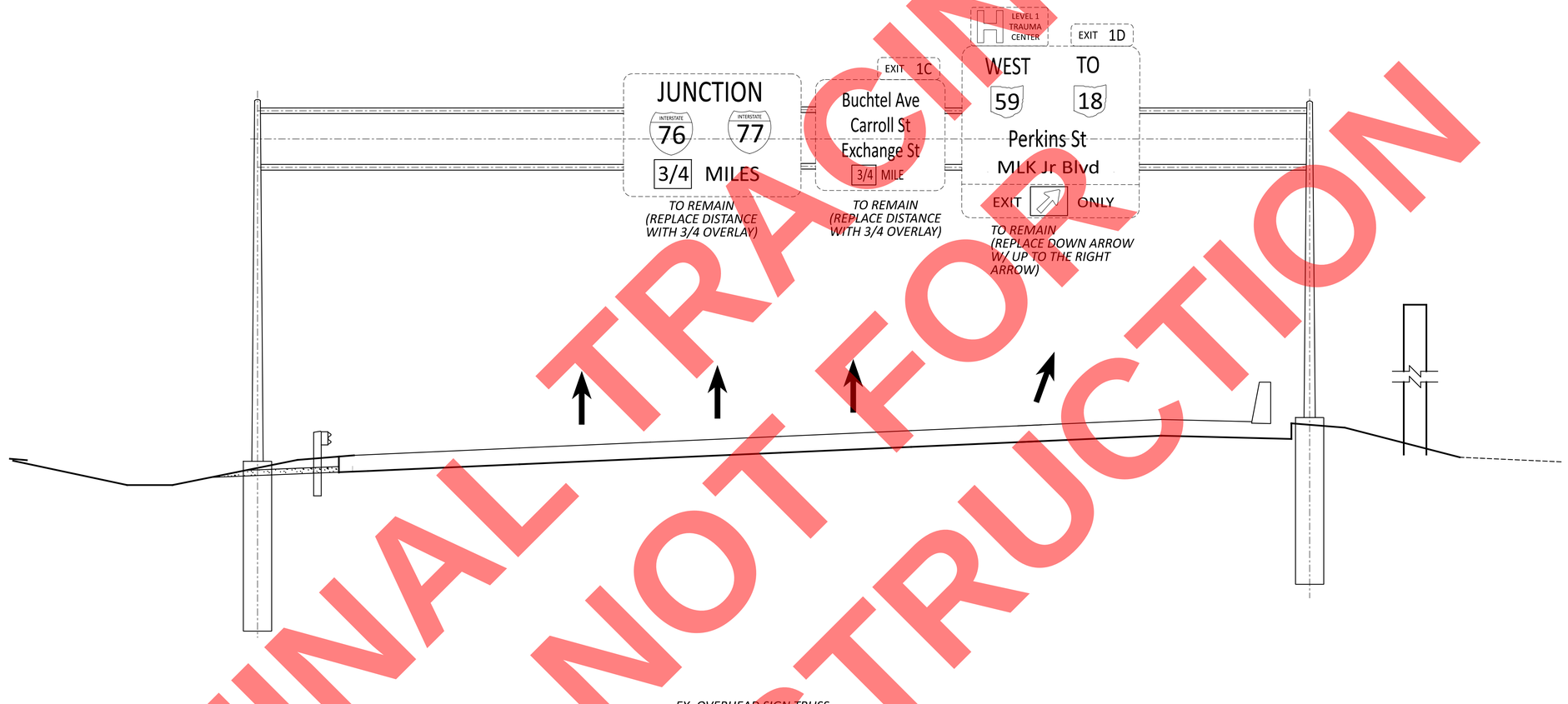

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.258 | TOTAL 627

SUM-077/008-11.65/00.00

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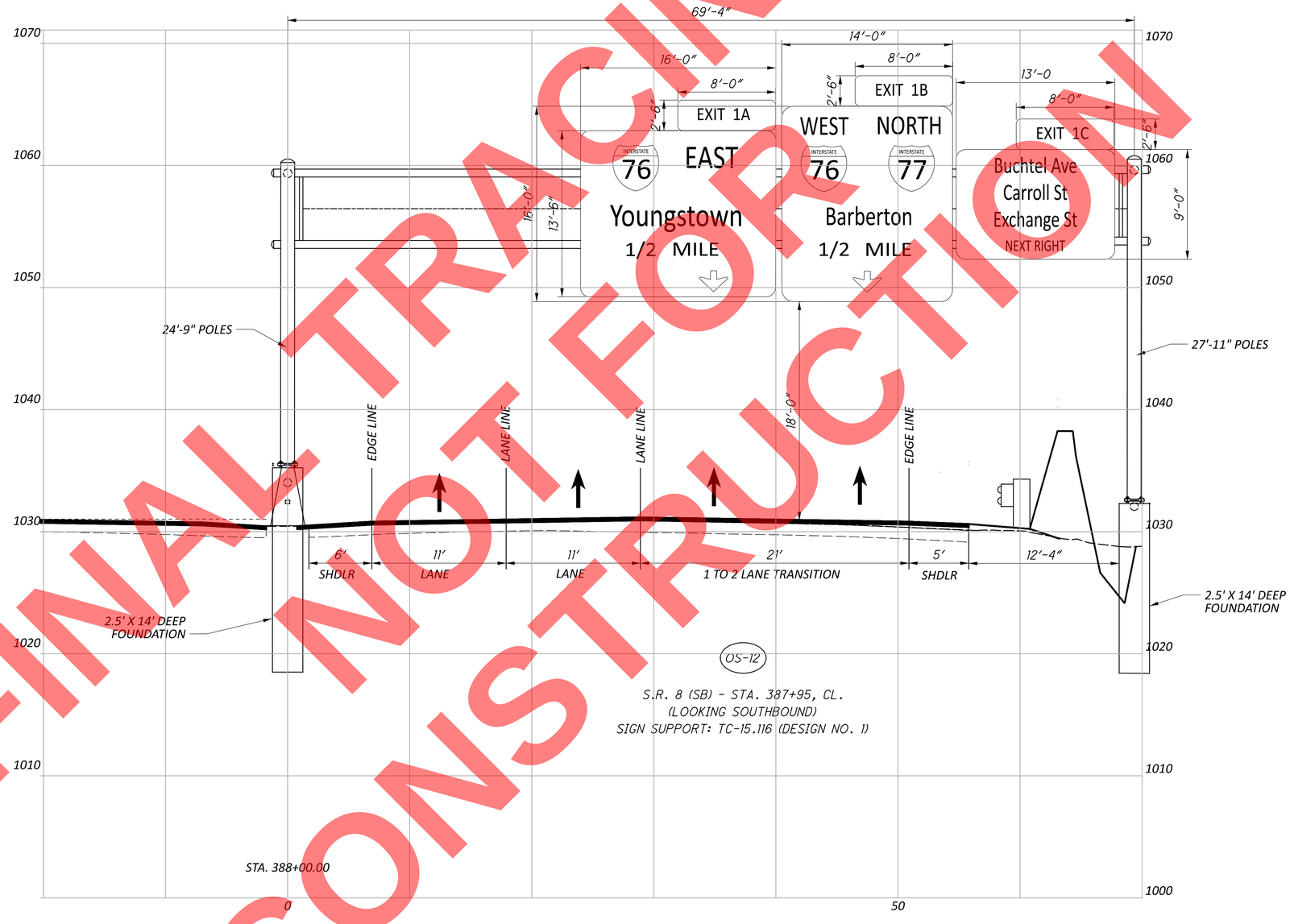

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

SUM-077/008-11.65/00.00

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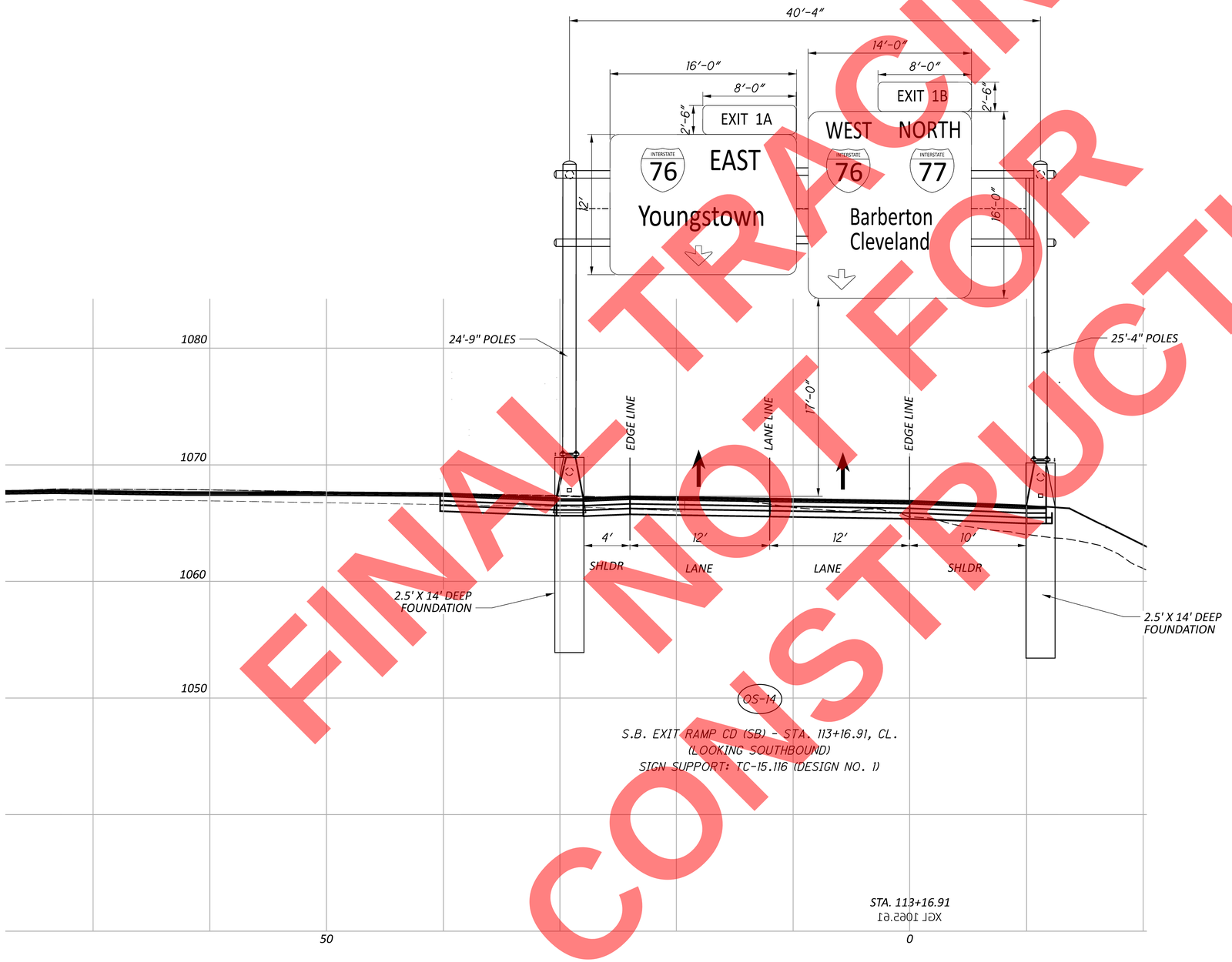
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4965
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.259 | TOTAL 627



FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

SUM-077/008-11.65/00.00

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DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

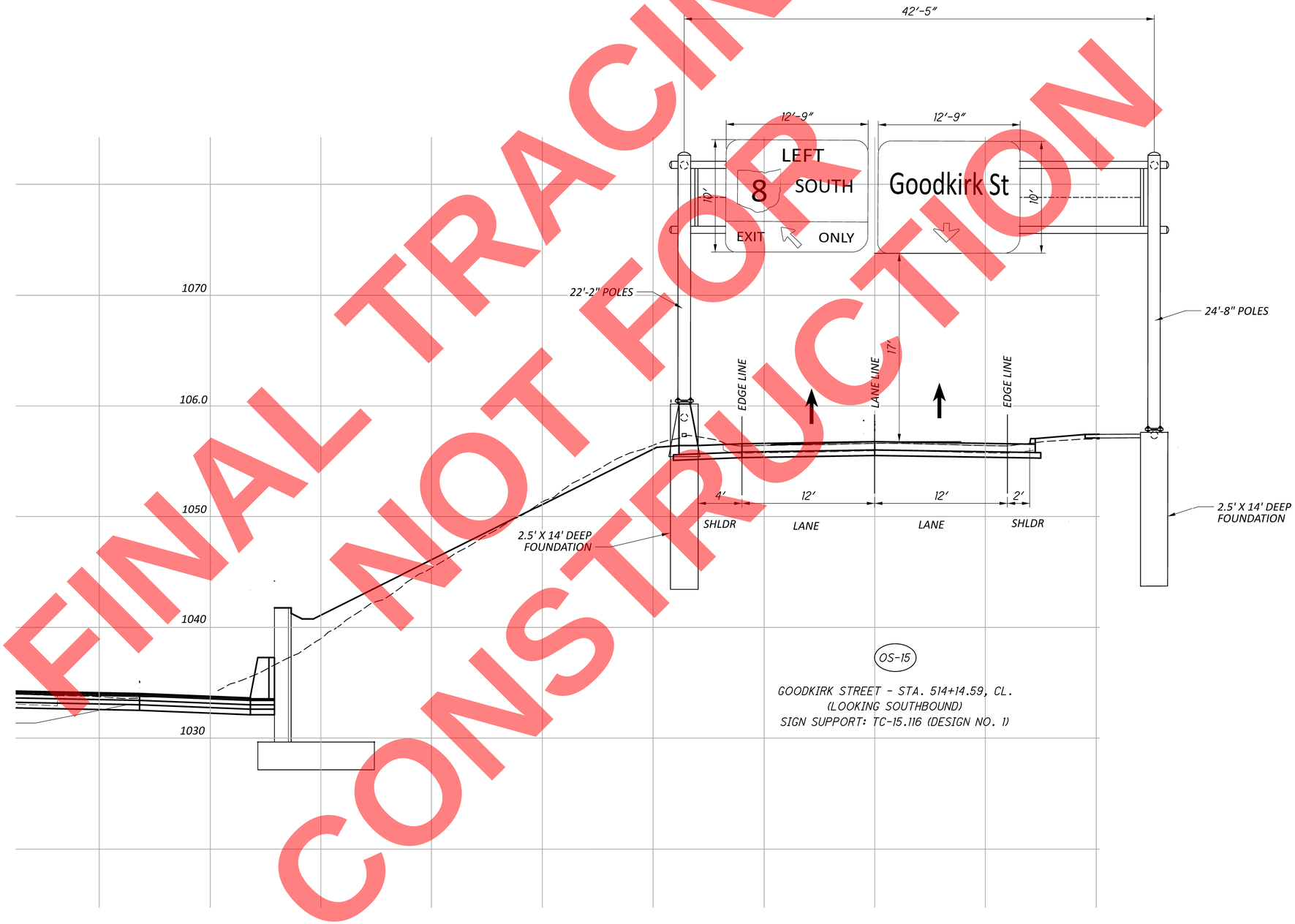
DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.260 | TOTAL 627

FINAL TRACINGS
NOT FOR
CONSTRUCTION



OS-15

GOODKIRK STREET - STA. 514+14.59, CL.
(LOOKING SOUTHBOUND)
SIGN SUPPORT: TC-15.116 (DESIGN NO. 1)

OVERHEAD SIGN ELEVATION DETAILS

SUM-077/008-11.65/00.00

MODEL: Sheet_Surv1 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:39:34 PM USER: burnsk1837
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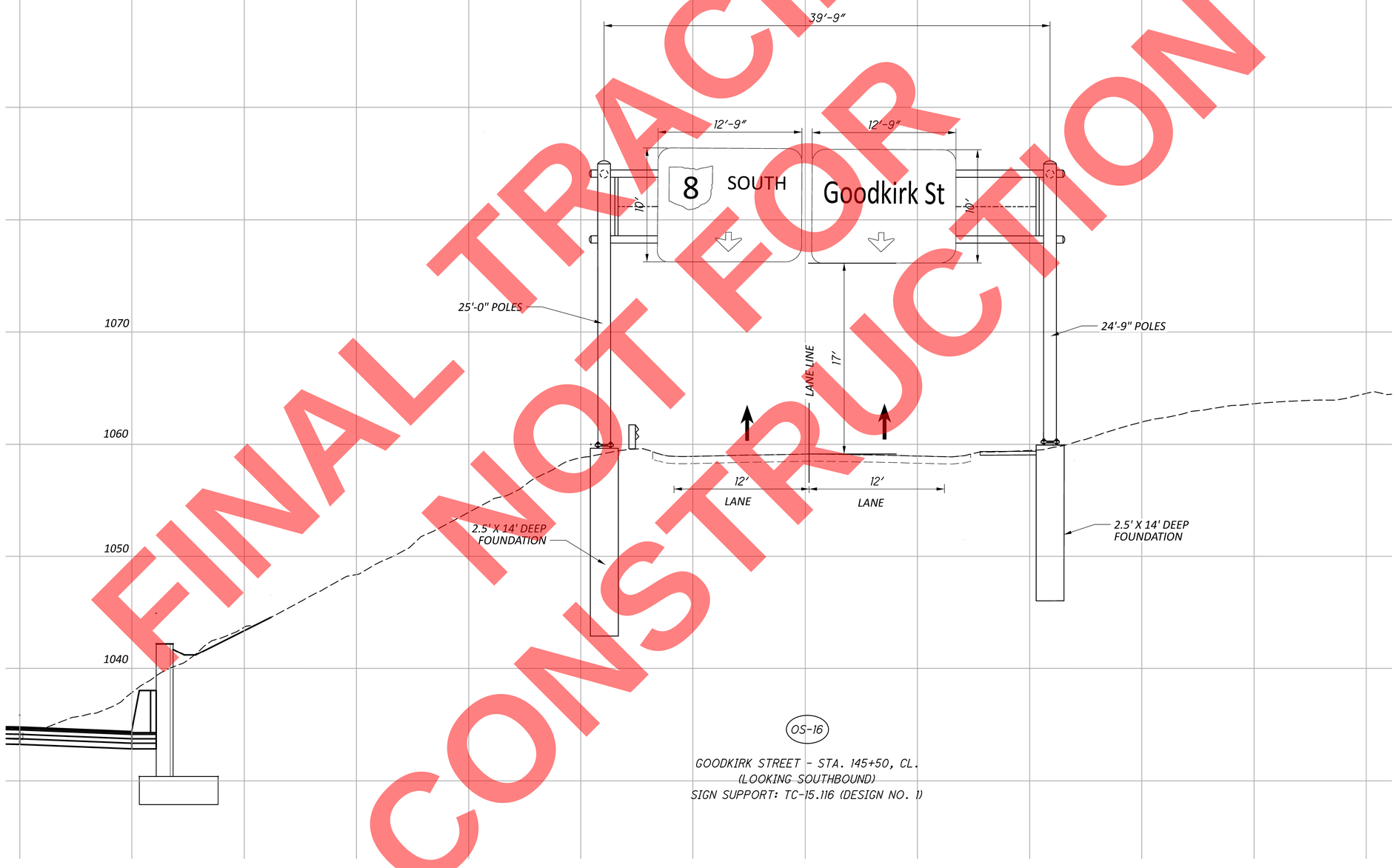
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4850
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.261 | TOTAL 627



OS-16

GOODKIRK STREET - STA. 145+50, CL.
(LOOKING SOUTHBOUND)
SIGN SUPPORT: TC-15.116 (DESIGN NO. 1)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OVERHEAD SIGN ELEVATION DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.262 | TOTAL 627

SUM-077/008-11.65/00.00

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NOTIFICATION

THE CONTRACTOR SHALL GIVE THE CITY OF AKRON, 330-375-2851, 10 WORKING DAYS NOTICE PRIOR TO THE NEW SIGNAL BEING PLACED IN OPERATION.

THE SIGNAL INSTALLATION SHALL BE INSPECTED BY CITY OF AKRON PERSONNEL. ALL DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR AND APPROVED BY THE CITY OF AKRON.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THE TRAFFIC CONTROL SYSTEM 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.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLERS AND ASSOCIATED EQUIPMENT, DETECTOR SYSTEM AND INTERCONNECT ITEMS.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE CITY OF AKRON FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

WORK INSPECTION

THE CONTRACTOR SHALL PROVIDE THE CITY OF AKRON WITH 72-HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITE(S) SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

TRAFFIC SIGNAL MAINTENANCE RESPONSIBILITY

WITHIN 2 WEEKS PRIOR TO THE START OF TRAFFIC SIGNAL WORK AT A GIVEN INTERSECTION ("INTERSECTION"), ALL TRAFFIC FACILITIES SHALL BE LOCATED AND A VISUAL INSPECTION OF THE EXISTING TRAFFIC SIGNAL SHALL BE MADE BY A CITY OF AKRON TRAFFIC ENGINEERING DIVISION REPRESENTATIVE ("CITY") AND THE CONTRACTOR. DURING THIS INSPECTION, THE EXISTING CONDITION OF THE INTERSECTION SHALL BE DOCUMENTED BY THE CITY.

THE COMPLETED REPORT SHALL BE SIGNED BY THE CITY AND THE CONTRACTOR, AT WHICH TIME OWNERSHIP OF THE INTERSECTION SHALL TRANSFER TO THE CONTRACTOR FROM THE BEGIN WORK DATE (DATE ON WHICH THE CONTRACTOR MOBILIZES INTO THE INTERSECTION'S WORK ZONE) UNTIL THE END WORK DATE (DATE ON WHICH THE CITY FORMALLY ACCEPTS THE WORK PERFORMED AT THE INTERSECTION).

UPON TRANSFER OF OWNERSHIP, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF THE INTERSECTION (INCLUDING ABOVE GROUND AND BELOW GROUND FACILITIES), INCLUDING (BUT NOT LIMITED TO) THE MARKING OF ALL UTILITIES AS OFTEN AS REQUIRED THROUGHOUT THE DURATION OF THE WORK.

FOR EACH INTERSECTION, THE CONTRACTOR SHALL BE REQUIRED TO: (A) DOCUMENT THE BEGIN/END WORK DATES AND THE ELECTRIC UTILITY SERVICE DEACTIVATION/ACTIVATION DATES AND (B) SUBMIT A SCANNED COPY OF THE "TRAFFIC SIGNAL MAINTENANCE RESPONSIBILITY" DOCUMENT (INCLUDED IN THE BID BOOK) TO THE CITY DIVISION OF TRAFFIC ENGINEERING VIA EMAIL TO TRAFFIC@AKRONOHIO.GOV WITHIN TEN (10) DAYS OF EACH OF THE FOUR (4) INTERSECTION WORK STAGE DATES (SEE DOCUMENT).

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY OF AKRON.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE CITY TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NONINTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL ENSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDONED, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

SIGNAL ACTIVATION

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNALS TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, ALL ITEMS IN THE PROPOSED SIGNAL PLAN SHALL BE FULLY COMPLETED, (I.E., VEHICLE DETECTION, PEDESTRIAN SIGNAL HEADS, ETC.). IF THERE ARE CONSTRUCTABILITY ISSUES (I.E., ROADWAY WIDENING, ETC.) THAT PREVENT THE SIGNAL FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF AKRON. THE CITY OF AKRON WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE CITY OF AKRON AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED DISTRICT TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE INTERSECTION, THE SIGNAL SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY DISTRICT TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. THE CITY OF AKRON SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

POWER SUPPLY FOR TRAFFIC SIGNALS

ELECTRIC POWER SHALL BE OBTAINED FROM OHIO EDISON AT THE LOCATION INDICATED ON THE PLANS. POWER SUPPLIED SHALL BE 120/240 VOLT 1 PHASE.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE 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 PATH.

   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. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.

   d. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.

   e. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.

   f. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

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.

   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 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.

   ii. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.i ABOVE.

GROUNDING AND BONDING (CONT.)

   iii. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.i ABOVE.

   iv. THE INSTALLATION SHALL BE GREEN 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.

   b. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE 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.

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. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

COND. NO.	COLOR	VEHICLE SIGNAL	PEDESTRIAN SIGNAL
1	BLACK	GREEN BALL	#1 WALK
2	WHITE	AC NEUTRAL	AC NEUTRAL
3	RED	RED BALL	#1 DW/FDW
4	GREEN	EQUIPMENT GROUND	EQUIPMENT GROUND
5	ORANGE	YELLOW BALL	#2 DW/FDW
6	BLUE	GREEN ARROW	#2 WALK
7	WHITE/ BLACK STRIPE	YELLOW ARROW	NOT USED

6. 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.

   i. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.

   ii. 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.

7. PAYMENT – ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

FINAL PLANS NOT FOR CONSTRUCTION

SIGNAL NOTES

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PROJECT ID 114865

SHEET P.263 TOTAL 627

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ITEM 632 - SIGNAL PERFORMANCE TEST AND SYSTEM CHECKS

THE CITY OF AKRON TRAFFIC ENGINEERING DIVISION REQUIRES THAT ALL TRAFFIC CONTROL SIGNAL COMPONENTS AND THE ENTIRE SYSTEM SHALL BE TESTED BY THE CONTRACTOR ACCORDING TO SPECIFICATIONS TO ASSURE PROPER OPERATION BEFORE ACCEPTANCE. GROUND ROD SHALL BE TESTED FOR SATISFACTORY LOW RESISTANCE GROUND. A CHECK SHALL BE PERFORMED ON ALL CONDUCTION TO ASSURE THERE ARE NO SHORTS, CROSSES AND HIGH RESISTANCE OR IMPROPER CONNECTIONS. ALL TRAFFIC CONTROL EQUIPMENT IN THE CONTROLLER CABINET SHALL BE CHECKED FOR CORRECT SETTINGS AND MANIPULATION AND OPERATION.

THE CITY OF AKRON TRAFFIC ENGINEERING DIVISION REQUIRES A TEN DAY PERFORMANCE TEST TO START AFTER ABOVE MENTIONED TESTS ARE CONDUCTED AND PROPERLY LOGGED ON TEST REPORT FORMS AS REQUIRED BY CMS 632.26 (ODOT 632.28). THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE TRAFFIC ENGINEERING DIVISION STATING THAT SIGNAL INSTALLATION IS 100% COMPLETE AND THE TEN DAY TEST IS REQUESTED. THE TRAFFIC SIGNAL ENGINEER OR HIS ASSIGNEE SHALL MONITOR THE TESTS TO ACCEPT THE SIGNAL INSTALLATION ON BEHALF OF THE CITY OF AKRON. ANY DISCREPANCY DETECTED SHALL BE REPAIRED AND THE TEN DAY TEST SHALL BE RESTARTED.

ALL COST OF PERSONNEL, EQUIPMENT, ELECTRICAL ENERGY AND INCIDENTALS REQUIRED TO PERFORM THE TESTS ARE TO HAVE BEEN INCLUDED IN THE CONTRACT UNIT PRICE OF NEW OR UPGRADED SIGNAL ITEMS.

ITEM 632 - SIGNAL SUPPORT FOUNDATION

PRIOR TO ORDERING THE SIGNAL SUPPORTS, THE CONTRACTOR SHALL CONTACT OUPS TO HAVE ALL THE UTILITIES LOCATED IN THE FIELD. THEN, THE CONTRACTOR SHALL MEET THE PROJECT ENGINEER TO LOCATE THE PROPOSED SUPPORT LOCATIONS TO INSURE THERE ARE NO CONFLICTS WITH UTILITIES. IF THERE ARE ISSUES, THE PROJECT ENGINEER SHALL PROVIDE GUIDANCE AS TO THE RELOCATION OF THE SUPPORTS.

DUE TO THE FURTHER POSSIBILITY OF CONFLICT WITH EXISTING OR PROPOSED UNDERGROUND OBSTRUCTIONS (INCLUDING THE POSSIBILITY OF UNRECORDED OBSTRUCTIONS) WHICH COULD AFFECT THE LOCATION OF THE FOUNDATION FOR THIS ITEM, AND CONSEQUENTLY, THE DESIGN OF THE SUPPORT AND/OR ARMS, THE CONTRACTOR SHALL NOT PLACE FINAL ORDERS FOR THE ITEM UNTIL THE FOUNDATIONS HAVE BEEN INSTALLED, AT FINAL GRADE, AND THE CONTRACTOR HAS RECEIVED, FROM ENGINEER, WRITTEN NOTICE TO PROCEED WITH THE ORDERS FOR THE ITEM.

IF ANY FOUNDATION LOCATIONS MUST BE ADJUSTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND MAINTAINING AGENCY, WHO WILL DETERMINE THE REVISED LOCATION AND IF NEEDED, THE SUPPORT DESIGN. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DETERMINING THE REVISED DESIGN. THE ENGINEER WILL INFORM THE CONTRACTOR OF ANY CHANGES NECESSARY AND AUTHORIZE THE CONTRACTOR TO ORDER THE SUPPORT.

THE CONTRACTOR SHALL, WHEN DEVELOPING THE PROGRESS SCHEDULE, AND THOSE OF SUBCONTRACTORS, ENSURE THAT THE FOUNDATIONS ARE INSTALLED AT THE EARLIEST TIME AS IS FEASIBLE AND PRACTICAL, AND SHALL INCLUDE SUFFICIENT TIME IN THE PROGRESS SCHEDULE FOR ORDERING, MANUFACTURING, DELIVERY, AND INSTALLATION OF THE SUPPORT ITEMS AFTER THE FOUNDATIONS ARE IN PLACE.

NO PAYMENTS FOR DELIVERED MATERIALS FOR THE FOUNDATION OR SUPPORT ITEMS SHALL BE MADE UNTIL THE FOUNDATIONS ARE IN PLACE, AND IF CHANGES IN THE DESIGN OF THIS ITEM ARE REQUIRED, NO PAYMENT SHALL BE MADE FOR THE ITEMS MANUFACTURED TO THE ORIGINAL DESIGN.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632 - TEST HOLE PERFORMED

IT IS ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER UNDERGROUND UTILITIES WHILE EXCAVATING FOR SIGNAL SUPPORT FOUNDATIONS OR SIMILAR FOUNDATIONS. AFTER ACCURATELY IDENTIFYING THE PROPOSED LOCATION OF THE FOUNDATION, AS SHOWN IN THE PLANS AND AFTER MODIFYING THAT LOCATION, IF NECESSARY, BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION, THE CONTRACTOR DISCOVERS A UTILITY CONFLICT DURING THE EXCAVATION OPERATION, THE CONTRACTOR WILL BE COMPENSATED FOR EACH PARTIAL FOUNDATION EXCAVATION ACCORDING TO THE BID PRICE.

BEFORE THE CONTRACTOR BEGINS THE EXCAVATION AT THE MODIFIED LOCATION, THE CONTRACTOR SHALL VERIFY THAT THERE WILL BE NO OVERHEAD UTILITY CONFLICTS RESULTING FROM THE NEW SIGNAL SUPPORT LOCATION. NEW SUPPORT LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.

THE WORK WILL INCLUDE BACKFILLING, COMPACTING, AND RESTORATION OF THE EXCAVATION TO THE SITE'S ORIGINAL CONDITION.

EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 TEST HOLE PERFORMED. A QUANTITY OF 2 HAS BEEN ALLOCATED FOR THE PROJECT TO BE USED AT THE DIRECTION OF THE ENGINEER.

ITEM 632 - REMOVAL OF TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR SHALL COORDINATE WITH OHIO EDISON FOR ALL RELATED DISCONNECTS OR REMOVAL OF TRAFFIC SERVICES. COST TO REMOVE OR DISCONNECT WILL BE BILLABLE TO (CONTRACTOR/COA) PER THE OHIO TARIFF.

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, SUPPORT POLES, CABINET, CONTROLLER, ETC. SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. REMOVED ITEMS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY THE CITY OF AKRON OR REUSE BY THE CONTRACTOR ON THIS PROJECT. THE CONTRACTOR SHALL CONTACT THE CITY OF AKRON ENGINEERING DIVISION AT (330) 375-2851 TO MAKE ARRANGEMENTS FOR DELIVERY OF THE MATERIALS TO 1420 TRIPLETT BOULEVARD, AKRON, OHIO.

ALL SIGNAL HEADS AND HANGERS, VEHICULAR AND PEDESTRIAN SIGNALS, SUPPORTS, MAST ARMS AND LUMINAIRE ARMS, CABINETS, CONTROLS, AND PREEMPTION AND VIDEO DETECTION EQUIPMENT (INCLUDING CABLES) SHALL BE REMOVED CAREFULLY AND STORED FOR SALVAGE OR REUSE BY THE CONTRACTOR ON THIS PROJECT. ALL OTHER ITEMS REMOVED ARE TO BE DISPOSED OF BY THE CONTRACTOR.

IN THE EVENT THE ITEMS STORES ON THE PROJECT FOR SALVAGE BY THE CITY OF AKRON ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

ITEMS NOT SPECIFIED FOR STORAGE SHALL BE DISPOSED OF BY THECONTRACTOR.

ITEM 632 - PEDESTRIAN SIGNAL HEAD, AS PER PLAN

A NEW ITEM SHALL BE PROVIDED IN THE EVENT THE EXISTING ITEM CANNOT BE REMOVED AND REUSED.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 PEDESTRIAN SIGNAL HEAD, AS PER PLAN, SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 632 - PEDESTRIAN PUSHBUTTON, AS PER PLAN

A NEW ITEM SHALL BE PROVIDED IN THE EVENT THE EXISTING ITEM CANNOT BE REMOVED AND REUSED.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 PEDESTRIAN PUSHBUTTON, AS PER PLAN, SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 632 - COMBINATION, SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN

ALL SIGNAL SUPPORTS SHALL CONFORM TO C&MS ITEM 632.15 AND 732.11, EXCEPT THAT ALL POLES SHALL BE TAPERED TUBES OF CONTINUOUS TAPER. POLES CONSISISTING OF STRAIGHT SECTIONS WITH A TAPERED EFFECT ACCOMPLISHED BY THE USE OF REDUCERS SHALL NOT BE PERMITTED. OCTAGONAL SHAPED POLES ARE NOT PERMITTED.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632 - SIGNAL PERFORMANCE TEST AND SYSTEM CHECKS

THE CITY OF AKRON TRAFFIC ENGINEERING DIVISION REQUIRES THAT ALL TRAFFIC CONTROL SIGNAL COMPONENTS AND THE ENTIRE SYSTEM SHALL BE TESTED BY THE CONTRACTOR ACCORDING TO SPECIFICATIONS TO ASSURE PROPER OPERATION BEFORE ACCEPTANCE. GROUND ROD SHALL BE TESTED FOR SATISFACTORY LOW RESISTANCE GROUND. A CHECK SHALL BE PERFORMED ON ALL CONDUCTION TO ASSURE THERE ARE NO SHORTS, CROSSES AND HIGH RESISTANCE OR IMPROPER CONNECTIONS. ALL TRAFFIC CONTROL EQUIPMENT IN THE CONTROLLER CABINET SHALL BE CHECKED FOR CORRECT SETTINGS AND MANIPULATION AND OPERATION.

THE CITY OF AKRON TRAFFIC ENGINEERING DIVISION REQUIRES A TEN DAY PERFORMANCE TEST TO START AFTER ABOVE MENTIONED TESTS ARE CONDUCTED AND PROPERLY LOGGED ON TEST REPORT FORMS AS REQUIRED BY CMS 632.26 (ODOT 632.28). THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE TRAFFIC ENGINEERING DIVISION STATING THAT SIGNAL INSTALLATION IS 100% COMPLETE AND THE TEN DAY TEST IS REQUESTED. THE TRAFFIC SIGNAL ENGINEER OR HIS ASSIGNEE SHALL MONITOR THE TESTS TO ACCEPT THE SIGNAL INSTALLATION ON BEHALF OF THE CITY OF AKRON. ANY DISCPREPANCY DETECTED SHALL BE REPAIRED AND THE TEN DAY TEST SHALL BE RESTARTED.

ALL COST OF PERSONNEL, EQUIPMENT, ELECTRICAL ENERGY AND INCIDENTALS REQUIRED TO PERFORM THE TESTS ARE TO HAVE BEEN INCLUDED IN THE CONTRACT UNIT PRICE OF NEW OR UPGRADED SIGNAL ITEMS.

ITEM 632 - REUSE OF TRAFFIC CONTROL ITEM

ALL TRAFFIC CONTROL ITEMS REUSED, INCLUDING BUT NOT LIMITED TO VEHICULAR SIGNAL HEADS, VIDEO DETECTION SYSTEMS, STREET NAME SIGNS, PREEMPTION SYSTEMS, SHALL BE REMOVED AND INSPECTED PRIOR TO REINSTALLING FOR DAMAGE AND TESTED FOR FUNCTIONALITY.

ALL CABLE NEEDED FOR OPERATION SHALL BE INCLUDED, UNLESS ITEMIZED SEPARATELY, IN THE BID ITEM FOR REUSE.

THE CONTRACTOR SHALL THOROUGHLY CHECK THE INSTALLED PREEMPTION SYSTEM, VERIFYING THAT ALL CONNECTIONS ARE PROPERLY MADE TO THE CONTROLLER CABINETS. THE CONTRACTOR SHALL CHECK THAT THE RANGE SETTING IS PROPER FOR EACH APPROACH. THE CONTRACTOR SHALL DETERMINE THAT ALL PHASE SELECTORS ARE SELECTING THE PROPER PHASE AND TIMING ACCURATELY. THE CONTRACTOR SHALL VERIFY THAT ALL EMITTERS ARE BEING PROPERLY DETECTED.

THE REUSED VIDEO DETECTION SYSTEM DETECTOR SHALL BE SETUP FOR VEHICLE STOP LINE DETECTION.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH ITEM REINSTALLED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632 - REUSE OF SIGNAL SUPPORT, AS PER PLAN

THIS ITEM CONSISTS AND REMOVING AND RELOCATING THE EXISTING SIGNAL SUPPORTS AT THE LOCATIONS INDICATED IN THE PLANS. THE CONTRACTOR SHALL MAKE ALL NECESSARY REVISIONS (IF ANY) TO THE SUPPORTS AND MAST ARMS PRIOR TO INSTALLATION TO INSTALL PER PLAN.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH ITEM REINSTALLED, IN PLACE, COMPLETE AND ACCEPTED.

FINAL PLANS NOT FOR CONSTRUCTION

SIGNAL NOTES

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PROJECT ID 114865
SHEET P.264 TOTAL 627

ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AN ACTUATED, SOLID STATE DIGITAL MICROPROCESSOR TYPE TRAFFIC CONTROLLER WITH MENU DRIVEN PROMPTS, INTERNAL TBC, FSK TELEMETRY MODULE FOR CLOSED LOOP COMMUNICATIONS AND ALL OTHER ACCESSORIES THAT ARE REQUIRED TO MAKE THE CONTROLLER COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS.

THE CONTROLLER UNIT SHALL BE AN ECONOLITE COBALT AS MANUFACTURED BY ECONOLITE CONTROL PRODUCTS OF ANAHEIM, CA.

THE PROVISIONS OF ITEMS 633 AND 733 SHALL FURTHER INCLUDE THE FOLLOWING:

THE CONTROLLER ASSEMBLY SHALL INCLUDE A NEMA TS2 TYPE 2 CONTROLLER UNIT AND A NEMA TS2 TYPE 16 MALFUNCTION MANAGEMENT UNIT COMPLETE IN A NEMA TS1 CABINET ASSEMBLY.

THE CONTROLLER UNIT AND CABINET SHALL CONFORM TO ODOT SPECIFICATIONS 633 AND 733 AND SHALL HAVE THE FOLLOWING FEATURES:

1. LOAD SWITCHES AND FLASH TRANSFER RELAYS SHALL BE SUPPLIED IN SUFFICIENT QUANTITY TO PERFORM THE OPERATION AS SHOWN IN THE PLANS. THE LOAD SWITCHES SHALL PROVIDE INDICATORS ON BOTH THE INPUTS AND OUTPUTS OF EACH CIRCUIT.

A. EIGHT (8) PHASE P44 CABINETS SHALL INCLUDE A 12 POSITION NEMA TS1 BACK PANEL WITH A FULL COMPLIMENT OF LOAD SWITCHES (12), FLASHER (1) AND FLASH TRANSFER RELAYS (4).

2. THE CONTROLLER UNIT SHALL BE 16 PHASE FULLY ACTUATED AND SHALL MEET ALL REQUIREMENTS FOR A NEMA TS2 TYPE 2 INCLUDING SDLC (PORT1), RS-232 (PORT 2), AND FSK (PORT 3) PORTS. ADDITIONAL MANUFACTURE SPECIFIC "D" CONNECTORS, 10/100 ETHERNET PORT AND REMOVABLE DATAKEY, SHALL BE INCLUDED. ADDITIONAL FEATURES SHALL BE AS FOLLOWS:

A. THE LCD DISPLAY SHALL BE ALPHANUMERIC AND INCLUDE 16 LINES BY 40 CHARACTERS WITH BACK-LIGHTING AND MULTIPLE LEVELS OF CONTRAST AND A HEATER FOR CONTINUED OPERATION DURING EXTENDED PERIODS BELOW 0° F.

B. ALL DATA SHALL BE STORED EXCLUSIVELY ON AN EASILY REMOVABLE, SOCKET MOUNTED EEPROM SUB-MODULE. WRITE PROTECTION SHALL BE PROVIDED FOR THE PORTION OF THE EEPROM USED TO STORE INTERSECTION CONFIGURATION DATA.

C. THE CONTROLLER SHALL HAVE THE ABILITY TO ASSIGN INPUT OR OUTPUT FUNCTION TO ANY INPUT OR OUTPUT PIN RESPECTIVELY.

D. THE CONTROLLER SHALL BE CAPABLE OF AN ADDITIONAL 12 STANDARD OVERLAPS BY ASSIGNING EACH PHASE OUTPUT TO AN OVERLAP.

E. THE CONTROLLER SHALL INCLUDE "TIME-OF-DAY" AND "COORDINATION" CAPABILITIES.

F. THE CONTROLLER SHALL INCLUDE "PREEMPTION" CAPABILITIES INCLUDING 10 RAILROAD, FIRE AND EMERGENCY VEHICLE HIGH-PRIORITY PREEMPTORS. THE CONTROLLER SHALL ALSO BE CAPABLE OF 4 LOW-PRIORITY "BUS-PREEMPTORS".

G. THE CONTROLLER SHALL BE PROGRAMMABLE TO ALLOW FOR FLASHING "DON'T WALK" THROUGH THE YELLOW SIGNAL PHASE.

ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET (CONT.)

3. THE NEMA TS2 TYPE 16 MALFUNCTION MANAGEMENT UNIT SHALL BE PROVIDED WITH EXTENDED MONITORING IN ACCORDANCE WITH 733.03, PART A. SECTION C. THE CABINET SHALL BE WIRED FOR APPROACH MONITORING. AN SDLC CABLE ASSEMBLY AND TWO RS-485 SDLC CABLES SHALL BE PROVIDED. THE CABLES SHALL CONNECT PORT 1 OF THE CONTROLLER TO PORT 1 OF THE MMU. THIS WILL ENABLE THE ADVANCED ERROR CHECKING, REPORTING AND LOGGING FEATURES AS DEFINED BY NEMA. THE MMU SHALL PASS ALL TESTS AS PERFORMED BY AN AUTOMATIC MONITOR TESTER. TEST RESULTS SHALL BE PRINTED AND SUPPLIED WITH EACH CABINET.

4. THE FOLLOWING SWITCHES SHALL BE ACCESSIBLE VIA THE POLICE PANEL:
A. SIGNAL ON/OFF
B. FLASH CONTROL
C. AUTOMATIC/MANUAL TRANSFER
D. MANUAL PUSH-BUTTON AND 10' COILED HAND CORD

5. THE FOLLOWING SWITCHES SHALL BE MOUNTED ON A TECHNICIANS SWITCH PANEL ON THE INSIDE OF THE MAIN CABINET DOOR:
A. STOP TIME ON/OFF
B. FLASH CONTROL
C. TIMER POWER ON/OFF
D. DETECTOR TEST, MOMENTARY PUSH-BUTTON

6. THE MAINTENANCE PANEL AND POLICE PANEL SHALL BE INSTALLED AS A COMPLETE AND INDEPENDENT ASSEMBLY. A SINGLE MULTI PIN CONNECTOR ASSEMBLY SHALL BE USED TO INTERFACE TO THE MAIN BACK PANEL. DIRECT WIRING FROM THE BACK PANEL TO THE MAINTENANCE/POLICE PANEL WILL NOT BE ALLOWED.

THE MAINTENANCE/POLICE PANEL ASSEMBLY SHALL BE EASILY REPLACED WITHOUT HAVING TO DISTURB ANY OTHER WIRING IN THE CABINET. THE MAINTENANCE PANEL SHALL BE HINGED WITH A STAINLESS STEEL HINGE TO THE POLICE PANEL TO ALLOW EASY ACCESS TO THE WIRING WITHIN THE ASSEMBLY.

7. A FLUORESCENT LAMP WITH DOOR-ACTIVATED PUSH-BUTTON SHALL BE PROVIDED.

8. A FLEXIBLE GOOSENECK LAMP SHALL BE PROVIDED, WIRED TO THE LOAD SIDE OF THE GFI AND MOUNTED TO THE DOOR SUCH THAT THE ENTIRE BACK PANEL AREA CAN BE EASILY ILLUMINATED.

9. THE CABINET SHALL BE ALUMINUM, WITH A NATURAL SATIN FINISH OF THE REQUIRED SIZE TO INCLUDE ALL EQUIPMENT, UNLESS SPECIFIED OTHERWISE, AND SHALL COMPLY WITH THE REQUIREMENTS OF 733.03. PAINTING OF THE CABINET SHALL BE IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION 916.

A. EIGHT (8) PHASE CABINETS SHALL BE A MINIMUM OF 55"Hx44"Wx26"D UNLESS OTHERWISE SPECIFIED
B. EIGHT (8) PHASE CABINETS WITH BATTERY BACK-UP SYSTEMS SHALL BE DOUBLE DOOR CABINETS MEASURING 55"Hx60"Wx26"D, INCLUDE A SEPARATE AND ISOLATED COMPARTMENT FOR THE UPS EQUIPMENT UNLESS OTHERWISE SPECIFIED.

10. THE CONTRACTOR SHALL FURNISH, FOR APPROVAL, TWO CABINET PLANS SHOWING COMPONENT LAYOUT, AND A COPY IN AUTO CAD FORMAT. IN ADDITION AN OPERATION MANUAL SHALL BE INCLUDED THAT PROVIDES INFORMATION REQUIRED FOR INSTALLATION, OPERATION AND MAINTENANCE OF THE CONTROLLER.

11. THE MAIN POWER SURGE PROTECTOR SHALL BE PLUG-IN TYPE, INCLUDE A FAILURE INDICATOR AND A SET OF DRY CONTACTS TO INDICATE THE UNIT HAS FAILED. THE FAIL CONTACTS OF THE SURGE PROTECTOR SHALL BE WIRED TO AN ALARM INPUT FOR REPORTING A FAILED DEVICE TO A CENTRAL COMPUTER.

ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET (CONT.)

12. THE FOLLOWING LIST OF FEATURES SHALL BE INCORPORATED INTO THE CABINET AND TERMINALS FACILITY:

A. THE FIELD TERMINALS FOR SIGNAL HOOKUP SHALL BE MOUNTED TO A PANEL AND ANGLED AT 45° FOR EASE OF INSTALLATION AND MAINTENANCE. THE BACKBOARD SHALL BE MOUNTED AT LEAST 6" ABOVE THE BASE OF THE CABINET. NO WIRES LUGGED OR OTHERWISE, SHALL BE PERMITTED ON THE SIGNAL HOOKUP SIDE OF THE FIELD TERMINAL BLOCKS.

B. WIRE CONNECTIONS TO THE BACK PANEL SHALL BE MADE WITH CRIMP TERMINALS AND THREADED FASTENERS. QUICK-CONNECT TERMINALS ARE NOT ACCEPTABLE. SOLDER CONNECTIONS MAY BE USED ON THE BACKSIDE OF A PANEL THAT UTILIZES FEED THRU STYLE TERMINAL BLOCKS. PRINTED CIRCUIT BOARDS SHALL NOT BE USED AS ANY PART OF THE MAIN BACK PANEL ASSEMBLY.

C. ALL WIRES FASTENED TO THE LOAD SWITCH, FLASHER AND FLASH TRANSFER RELAY SOCKETS SHALL BE SOLDERED IN PLACE. A GOOD MECHANICAL CONNECTION MUST BE MADE PRIOR TO SOLDERING.

D. THE BACK PANEL SHALL BE PROVIDED WITH A UNITIZED SELF-LEVELING/SELF ADJUSTING HINGED MOUNTING MECHANISM TO ALLOW EASY ACCESS TO ALL WIRING ON THE REAR PANEL. THE BACK PANEL SHALL SLIDE ONTO THE HINGE SUPPORT BRACKETS AND BE SECURED IN THE CABINET WITH STAINLESS STEEL MOUNTING HARDWARE SECURELY FASTENED AT NO MORE THAN TWO (2) POINTS. COMPLETE REMOVAL AND REPLACEMENT OF THE MAIN BACK PANEL ASSEMBLY SHALL BE ACCOMPLISHED WITH THE USE OF SIMPLE HAND TOOLS.

E. THE BACK PANEL SHALL BE DESIGNED SUCH THAT IT CAN BE EASILY REMOVED AND REPLACED WITHIN THE CABINET. CONNECTORS SHALL BE USED TO CONNECT ALL SIDE PANELS TO THE BACK PANEL INCLUDING THE DETECTOR PANEL, MAINTENANCE/POLICE PANEL, CABINET FAN PLATE AND ANY AUXILIARY PANEL. THE MAIN BACK PANEL ASSEMBLY SHALL BE EASILY REMOVED AND REPLACED WITHOUT REMOVING OR REWIRING ANY OF THE SIDEWALL MOUNTED PANELS.

F. ALL WIRING OF HARNESSES AND INTER-PANEL WIRING, INCLUDING WIRING TO THE POLICE PANEL SHALL BE PROTECTED WITH A NYLON MESH OR "SNAKE SKIN". ANY EXPOSED WIRES, OR THE USE OF CABLE TIES TO HOLD THE WIRE BUNDLES TOGETHER SHALL NOT BE ALLOWED.

G. ALL BACK PANEL TERMINALS AND COMPONENTS SHALL HAVE SILK-SCREENED TERMINAL/SOCKET FUNCTION IDENTIFICATION LABELS SUCH AS AC COM, PHASE 3 GREEN, ETC. SILK-SCREENED TERMINAL REFERENCE NUMBERS SHALL ALSO BE PROVIDED. LOAD SWITCH FIELD TERMINALS SHALL BE LABELED WITH THE LOAD SWITCH NUMBER, COLOR AND TERMINAL REFERENCE NUMBER.

H. ALL WIRING FOR PEDESTRIAN OUTPUTS AND OVERLAPS SHALL BE BROUGHT TO TERMINALS ON THE FRONT OF THE BACKBOARD FOR EASY MODIFICATION.

I. ALL SWITCHES SHALL BE IDENTIFIED WITH PERMANENT TYPE LABELS. THE USE OF PLASTIC MARKING TAPE OR "CROY" TYPE TAPE IS NOT ACCEPTABLE.

J. ALL MAIN POWER PANEL DEVICES SHALL BE AFFIXED TO THE LOWER RIGHT PORTION OF THE MAIN PANEL, INCLUDING ALL CIRCUIT BREAKERS, LINE FILTERS AND LOAD RELAYS. AS AN ALTERNATE, A SEPARATE POWER PANEL MOUNTED TO THE RIGHT SIDE WALL OF THE CABINET WILL BE PERMITTED.

ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET (CONT.)

K. ALL EQUIPMENT HARNESSES SHALL BE ATTACHED TO THE UNDERSIDE OF THE FIELD TERMINATION FOR LOOPS, AND PEDESTRIAN PUSH BUTTONS SHALL BE ON THE LEFT SIDEWALL. THE TERMINAL BLOCK FOR THESE ITEMS SHALL BE MOUNTED VERTICALLY. TERMINATING OF FIELD WIRES OVER TOP OF OTHER TERMINAL BLOCKS SHALL NOT BE ALLOWED.

L. SHELVES WITH APPROPRIATE CABLE TIE MOUNTING BLOCKS, FOR EASE OF MAINTENANCE, ALL HARNESSES SHALL BE OF SUFFICIENT LENGTH TO PLACE THE EQUIPMENT ON TOP OF THE CABINET AND BE OPERATIONAL.
M. THE CABINET SHALL BE WIRED READY FOR USE IN A "CLOSED LOOP SYSTEM". MEANING A 6 PAIR SYSTEM, RADIO, OR FIBER OPTIC SYSTEM CAN BE INSTALLED WITH A MINIMUM OF FIELD WIRING.

N. A COLOR-CODED WIRING SYSTEM SHALL BE USED THROUGHOUT THE WIRING OF THE CABINET. THE WIRING COLOR-CODE SHALL BE AS FOLLOWS:

a) CONTROLLER UNIT - BLUE 22 GAUGE
b) MMU- VIOLET 22 GAUGE
c) RED LOAD SWITCH OUTPUT - RED 16 GAUGE
d) YELLOW LOAD SWITCH OUTPUT -YELLOW 16 GAUGE
e) GREEN LOAD SWITCH OUTPUT - BROWN 16 GAUGE
*f) AC LINE POWER - BLACK VARIES**
*g) AC NEUTRAL - WHITE VARIES**
*h) EARTH GROUND - GREEN VARIES**
i) LOGIC GROUND-GRAY 22 GAUGE
J) FLASH PROGRAMMING - ORANGE 16 GAUGE
**SIZED APPROPRIATELY TO HANDLE THE VARYING CURRENT REQUIREMENTS*

13. A DETECTOR TERMINATION PANEL SHALL BE INSTALLED AND MOUNTED ON THE LEFT-SIDE WALL OF THE CABINET. A SINGLE MULTI-PIN CONNECTOR SHALL BE USED TO INTERFACE THE DETECTOR PANEL TO THE MAIN BACK PANEL. DIRECT WIRING FROM THE MAIN BACK PANEL TO THE DETECTOR PANEL WILL NOT BE ALLOWED, EXCEPT FOR THE AC SERVICE TO THE PANEL.

A. ALL LOOP DETECTOR HARNESSES SHALL INCLUDE AN APPROPRIATE 10-PIN LOCKING TYPE CONNECTOR TO PLUG INTO THE DETECTOR TERMINATION PANEL. THE LOOP HARNESS SHALL LOCK INTO A MATING CONNECTOR ON THE DETECTOR TERMINATION PANEL.

B. THE PANEL SHALL BE PROVIDED WITH PROVISIONS AND FULLY WIRED FOR A MINIMUM OF EIGHT (8) LOOP DETECTORS INCLUDING CONNECTORS AND LOOP TERMINATION BLOCKS. CONNECTORIZED PLUG-IN STYLE LOOP DETECTOR HARNESSES SHALL BE PROVIDED IN SUFFICIENT QUANTITY TO PERFORM THE REQUIRED SEQUENCE.

C. THE DETECTOR TERMINATION PANEL SHALL BE FULLY PROGRAMMABLE. ALL DETECTOR FUNCTIONS SHALL BE PROGRAMMABLE ON THE DETECTOR PANEL INCLUDING PHASE CALLS, DELAY DEFEAT AND DETECTOR COUNT OUTPUTS.

D. TERMINATION POINTS SHALL BE PROVIDED FOR FOUR (4) PEDESTRIAN PUSHBUTTONS.

E. PROVISIONS FOR INTERFACING SYSTEM DETECTORS AND ADDITIONAL DETECTOR INPUTS SHALL BE INCLUDED ON THE PANEL.

F. THE DETECTOR TERMINATION PANEL SHALL ALLOW FOR EASY EXPANSION. ADDITIONAL DETECTORS TERMINATION PANELS SHALL BE ADDED BY MEANS OF A SINGLE CONNECTING HARNESS ASSEMBLY THAT INCLUDES ALL FUNCTIONS AS REQUIRED TO ACHIEVE THE DESIRED SEQUENCE AND OPERATION INCLUDING PHASE CALLS, PHASE GREENS AND AUXILIARY SYSTEM FUNCTIONS.

G. A MINIMUM OF (8) SURGE PROTECTION DEVICES SHALL BE SUPPLIED AND TERMINATED ON THE DETECTOR TERMINATION PANEL FOR EACH LOOP INPUT.

FINAL NOT FOR CONSTRUCTION

SIGNAL NOTES

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DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.265 TOTAL 627

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ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET (CONT.)

14. PROVIDE AN ETHERNET COMMUNICATIONS MODULE FOR THE CONTROLLER THAT FULLY SUPPORTS AN IEEE 802.3 COMPLIANT GIGABIT ETHERNET AUTO SENSING PORT FOR ADVANCED SYSTEMS COMMUNICATIONS. THE ETHERNET PORT SHALL PROVIDE AN UPSTREAM CONNECTION TO OTHER ETHERNET DEVICES IN THE CABINET. AN INDUSTRY STANDARD RJ-45 TYPE CONNECTOR SHALL BE INCLUDED THAT SUPPORTS A SIMPLE CAT5E PATCH CABLE INTERFACE. THE ETHERNET PORT SHALL BE FACTORY PRE-CONFIGURED WITH A UNIQUE PRIVATE IP ADDRESS AND CLASS B SUBNET MASK.

15. A SYSTEMS INTERFACE PANEL SHALL BE MOUNTED ON THE LEFT SIDEWALL, ABOVE THE DETECTOR TERMINATION PANEL(S). TERMINAL BLOCKS SHALL BE FEED-THRU TYPE AND MOUNTED VERTICALLY. ALL SYSTEMS FUNCTIONS OF THE CONTROLLER SHALL BE TERMINATED ON A SINGLE PANEL. AT A MINIMUM, THE SYSTEMS PANELS SHALL INCLUDE TERMINATION POINTS FOR 16 ADDITIONAL DETECTOR INPUTS, 6 PREEMPT INPUTS, 6 PREEMPT OUTPUTS AND 4 SPECIAL FUNCTION OUTPUTS. THE SYSTEMS INTERFACE PANEL SHALL CONNECT TO THE MAIN BACK PANEL ASSEMBLY AND THE DETECTOR PANEL WITH THE USE OF MULTI-PIN CONNECTORS. DIRECT WIRING FROM THE MAIN BACK PANEL TO THE CLOSED LOOP SYSTEMS INTERFACE PANEL WILL NOT BE ALLOWED.

A. ONE (1) SEICOR MODEL WICO12 WALL MOUNT INTERCONNECT CENTER WITH 12 "SC" COMPATIBLE SINGLE-MODE COUPLERS WITH CERAMIC INSERT SHALL BE INSTALLED ON THE RIGHT SIDE WALL OF THE CABINET. TWO (2) SINGLE-MODE DUPLEX PATCH CORDS WITH "SC" CONNECTORS AND COLOR-CODED BOOTS SHALL BE PROVIDED.

B. CONNECT THE ETHERNET PORT FROM THE CONTROLLER TO THE OPTICAL ETHERNET TRANSCEIVER INSTALLED USING PROPERLY RATED CAT5e CABLES AND RJ45 CONNECTORS.

16. THE CONTROLLERS SHALL HAVE ALL COMMUNICATIONS AND INTERFACE EQUIPMENT IN PLACE IN ORDER TO INTERFACE WITH THE CITY OF AKRON'S CENTRACS TRAFFIC MAINTENANCE SYSTEM.

17. THE CABINET SHALL BE FULLY WIRED TO ACCOMMODATE THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT INCLUDING A FULLY WIRED RACK AND TERMINATION PANEL. THE RACK SHALL BE WIRED TO ACCOMMODATE TWO (2) NEMA LOAD SWITCHES FOR CONFIRMATION LIGHT CONTROL. CONFIRMATION LIGHTS SHALL BE WIRED TO THE PREEMPT TERMINATION PANEL.

18. THE COMPLETE CABINET ASSEMBLY SHALL BE FULLY PROGRAMMED PER THE PLANS AND SPECIFICATIONS, BY A TRAINED FACTORY REPRESENTATIVE AND FACTORY TESTED FOR A MINIMUM OF 24 HOURS, PRIOR TO SHIPMENT. THE SUPPLIER SHALL CERTIFY IN WRITING THAT THE TESTS HAVE BEEN SUCCESSFULLY PERFORMED PRIOR TO FIELD INSTALLATION. A REGISTERED PROFESSIONAL ENGINEER SHALL SUPERVISE ALL TESTING.

PAYMENT FOR ITEM 633 - CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET SHALL BE MADE AT THE CONTRACT PRICE BID. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TESTING, CERTIFICATIONS AND OTHER INCIDENTALS NECESSARY TO FURNISH THE CONTROLLER AND WIRING COMPLETE, TESTED AND ACCEPTED.

ITEM 633 - UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 633 AND 733, A CABINET RISER (8-INCH MINIMUM) AND ANCHOR BOLTS WILL BE PROVIDED FOR BASE-MOUNTED CABINETS.

THE UPS CABINET SHALL INCLUDE A GENERATOR POWER PANEL WITH A HEAVY-DUTY POWER RELAY VERSUS THE LINE VOLTAGE GENERATOR SWITCH. THE GENERATOR INLET SHALL BE A RECESSED PANEL WITH A DOOR THAT IS FLUSH WITH THE EXTERNAL SIDE OF THE UPS CABINET. IT SHALL INCLUDE A RECESSED PLUG, AUTOMATIC TRANSFER SWITCH AND A DOOR THAT SECURELY CLOSES OVER THE POWER CORD.

THE CABINET SHALL HAVE A DOOR STOP MECHANISM AND THERMOSTATICALLY CONTROLLED FAN.

THE CABINET SHALL INCLUDE A BATTERY BALANCING DEVICE THAT REGULATES THE BATTERIES AND OPTIMIZES PERFORMANCE.

IN ADDITION TO SECTION 633.18 AND 733.09 OF THE ODOT C&MS, THE UNINTERRUPTIBLE POWER SERVICE SHALL BE INSTALLED IN THE CONTROLLER CABINET WITH DOUBLE DOORS. THE CABINET SHALL HAVE A NATURAL SATIN FINISH TO MATCH THE SIGNAL CONTROLLER CABINET.

AFTER FOUR (4) HOURS OF BATTERY RUNTIME, THE SYSTEM SHALL BE PROGRAMMED TO SWITCH THE INTERSECTION FROM FULL OPERATION TO CONTROLLER AUTOMATIC FLASH OPERATION THROUGH THE MONITOR. THE CONTROLLER SHALL BE PROGRAMMED SO THAT FLASH OPERATION SHALL BEGIN ONCE THE INTERSECTION RUNS MINOR STREET GREEN (TYP. PH. 4 &8), ALL-RED CLEARANCE, AND THEN FLASH OPERATION.

THE UPS OUTPUT NOTIFICATIONS FOR ON BATTERY, BATTERY 2-HOUR TIMER, AND LOW BATTERY SHALL BE WIRED INTO THE TRAFFIC SIGNAL CABINET BACK PANEL OR THROUGH THE CONTROLLER WITH A C11 TO PROVIDE SPECIAL STATUS ALARMS FOR EACH OUTPUT INTO THE SIGNAL CONTROLLER.

THIS ITEM SHALL INCLUDE A RED LED STATUS INDICATOR LAMP TO ALLOW MAINTENANCE PERSONNEL AND LAW ENFORCEMENT TO QUICKLY ASSESS WHETHER A TRAFFIC SIGNAL CABINET IS BEING POWERED BY A UPS. THE LED HOUSING SHALL BE NEMA 4X, IP65 OR IP66, RATED FOR OUTDOOR USE AND BE TAMPER/ SHATTER RESISTANT. IT SHALL BE A DOMED ENCLOSURE CONTAINING A RED LENS WITH LED THAT IS VISIBLE FROM 100 FOOT MINIMUM. THE ENCLOSURE AND LED MODULE SHOULD BE PLACED ON THE SIDE OF THE UPS CABINET FACING TOWARDS THE MAINLINE ROADWAY AND SEALED FROM WATER INTRUSION. IT SHOULD BE WIRED USING MINIMUM 20GA STRANDED, INSULATED HOOKUP WIRE TO THE STATUS RELAY OUTPUTS OF THE UPS. THE WIRES SHALL BE TERMINATED BY LUGS AT THE DISPLAY END AND PERMANENTLY LABELED "BACKUP POWER STATUS DISPLAY," WITH WIRE POLARITY INDICATED. THE RED LED SHALL ONLY ILLUMINATE TO INDICATE THE CABINET IS OPERATING UNDER UPS BACKUP POWER (THE "BACKUP" OPERATING CONDITION). THIS ITEM INCLUDES PROGRAMMING THE UPS STATUS RELAY OUTPUTS TO PRODUCE THE LAMP STATUS DISPLAYS. THESE STATUS DISPLAYS WILL BE SOLID 100% DUTY CYCLE (NOT FLASHING) DISPLAYS. THE OPERATING VOLTAGE OF THE LED LAMP SHALL BE 120V AC UNLESS OTHERWISE INDICATED.

FINAL PLANS
CONSTRUCTION

SIGNAL NOTES

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DESIGNER
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REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.266 | TOTAL 627

SHEET	LOCATION	SIDE	625									632																					
			CONNECTION, FUSED PULL APART	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	CONDUIT, 2" , 725.051	CONDUIT, 3", 725.051	TRENCH IN PAVED AREA	PULL BOX, 725.08, 18"	PULL BOX, POLYMER CONCRETE, 24"X36"X24"	GROUND ROD	UNDERGROUND WARNING/MARKING TAPE	SIGNALIZATION MISC.: 3" SCHEDULE 40 PVC CONDUIT, ENCASED & NOT ENCASED	VEHICULAR SIGNAL HEAD, INSTALLATION ONLY	PEDESTRIAN SIGNAL HEAD (LED), TYPE 2, COUNTDOWN, AS PER PLAN	PEDESTRIAN PUSHBUTTON, AS PER PLAN	COVERING OF VEHICULAR SIGNAL HEAD	COVERING OF PEDESTRIAN SIGNAL HEAD	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	SIGNAL SUPPORT FOUNDATION	PEDESTAL FOUNDATION	TEST HOLE PERFORMED	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	POWER SERVICE	REUSE OF SIGNAL SUPPORT, AS PER PLAN	PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	REUSE OF TRAFFIC CONTROL ITEM - SIGN STREET NAME	REUSE OF TRAFFIC CONTROL ITEM - PREEMPTION	REUSE OF TRAFFIC CONTROL ITEM - VIDEO DETECTION	SIGNALIZATION MISC.: SIGNAL PERFORMANCE TEST AND SYSTEM CHECKS
			FT	FT	FT	FT	FT	EACH	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	EACH	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
	EXCHANGE & GOODKIRK																																1
	SP-2									1			2	1		2	1		30	85	1		1				1		1	1	1	1	
	SP-2 TO EX. PB-1					29	29				29								58	29													
	EX. PB-1																		20	10													
	EX. PB-1 TO PB-3					62	62				62								124	62													
	PS-1									1				1	1		1		30			1						1					
	PS-1 TO PB-3				28		28				28								56														
	PS-4									1				1	1		1		30			1						1					
	PS-4 TO PB-1				28		28				28								56														
	PB-1							1											10														
	PB-1 TO EX. PB				62		62				62							62	62														
	EX. PB																	130	130														
	SP-3									1			4	1	1	4	1		15	170	1		1				1			2	2	2	
	SP-3 TO EX. PB-4				18		18				18							18	18	36													
	EX. PB-4																	25	25	25													
	POWER TO SP-3				76		76																	76	100	1							
	EX. LTPB-1			50																													
	EX. LTPB-1 TO LTPB-2			168	56		56				56																						
	LTPB-2			15				1																									
	LTPB-2 TO LTPB-3			138	46		46				46																						
	LTPB-3			15				1																									
	LTPB-3 TO SP-3			45	15		15				15																						
	SP-3		2																														
	COMMUNICATIONS																																
	EX. CPB-44																																
	EX. CPB-44 TO CPB-45											57																					
	CPB-48								1																								
	CPB-48 TO EX. CPB-46											220																					
	EX. CPB-45																																
	EX. CPB-45 TO CPB-47											275																					
	EX. CPB-47																																
	BEACON STREET TUNNEL																																
	PB-1 TO PB-2					382	191	2																									
	TOTALS CARRIED TO GENERAL SUMMARY		**2**	**431**	**329**	**473**	**611**	**5**	**1**	**4**	**344**	**552**	**6**	**4**	**3**	**6**	**4**	**235**	**664**	**417**	**2**	**2**	**2**	**76**	**100**	**1**	**2**	**2**	**1**	**3**	**3**	**3**	**1**

FINAL TRACINGS
NOT FOR
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SIGNAL SUBSUMMARY

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PROJECT ID
114865

SHEET P.267 | TOTAL 627

SIGNAL SUBSUMMARY

SHEET	LOCATION	SIDE	625										632																				633				
			CONDUIT, 2", 725.051	CONDUIT, 3", 725.051	CONDUIT, 4", 725.051	TRENCH IN PAVED AREA	STRUCTURE JUNCTION BOX	PULL BOX, 725.08, 18"	PULL BOX, POLYMER CONCRETE, 24"X36"X24"	PULL BOX, POLYMER CONCRETE, 30"X48"X24"	GROUND ROD	UNDERGROUND WARNING/MARKING TAPE	SIGNALIZATION MISC.: 3" SCHEDULE 40 PVC CONDUIT, ENCASED & NOT ENCASED	VEHICULAR SIGNAL HEAD, INSTALLATION ONLY	PEDESTRIAN SIGNAL HEAD (LED), TYPE 2, COUNTDOWN, AS PER PLAN	PEDESTRIAN PUSHBUTTON, AS PER PLAN	COVERING OF VEHICULAR SIGNAL HEAD	COVERING OF PEDESTRIAN SIGNAL HEAD	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	SIGNAL SUPPORT FOUNDATION	TEST HOLE PERFORMED	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	REUSE OF TRAFFIC CONTROL ITEM - SIGN STREET NAME	REUSE OF TRAFFIC CONTROL ITEM - PREEMPTION	REUSE OF TRAFFIC CONTROL ITEM - VIDEO DETECTION	REUSE OF VEHICULAR SIGNAL HEAD	SIGNAL PERFORMANCE TEST AND SYSTEM CHECKS	CABINET FOUNDATION	CONTROLLER ITEM, MISC.: SIGNAL CONTROLLER WITH CABINET	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	CONTROLLER WORK PAD
			FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
	CARROLL & GOODKIRK																																				
	SP-2										1			2	1	1	1	1	175	175	252	1	1			1	1	1	1	1	2						
	SP-2 TO PB-3			5		5						5																									
	PB-3							1																													
	PB-3 TO CPB-68					48						48	48																								
	EX. SP-3																		240	240	197																
	EX SP-3 TO CPB-68			9		9						9																									
	CPB-68 TO PB-5					102						102	102																								
	EX PS-1																		120	120																	
	EX. PB TO PB-5		5			5																															
	EX. SP-1																		110	110	132																
	EX. SP-1 TO PB-5																																				
	PB-5									1																											
	PB-5 TO CONTROLLER				16	8																															
	CONTROLLER		8			8																			100	100								1	1	1	1	1
	COMMUNICATIONS																																				
	EXCHANGE TO CARROLL																																				
	EX. CPB TO CPB-60												157																								
	CPB-60	LT							1																												
	CPB-60 TO CPB-61												190																								
	CPB-61	LT							1																												
	CPB-61 TO CPB-62												85																								
	CPB-62	LT							1																												
	CPB-62 TO CPB-63												171																								
	CPB-63	LT							1																												
	CPB-63 TO CPB-64												149																								
	CPB-64	LT							1																												
	CPB-64 TO CPB-65												118																								
	CPB-65	LT							1																												
	CPB-65 TO CPB-66												249																								
	CPB-66	LT							1																												
	CPB-66 TO CPB-67												119																								
	CPB-67	LT							1																												
	CPB-67 TO CPB-68												191																								
	CPB-68	LT							1																												
	CPB-68 TO PB-5												102																								
	PB-5 TO EX. PB	LT											300																								
	PB-3 TO JB-1		77																																		
	JB-1 TO JB-2		87				1																														
	JB-2 TO EX. PB		79				1																														
	TOTALS CARRIED TO GENERAL SUMMARY		256	14	16	185	2	1	9	1	1	164	1981	2	1	1	1	1	645	645	581	1	1	100	100	1	1	1	1	1	2	1	1	1	1	1

FINAL TRACINGS
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DESIGNER
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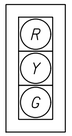
REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.268 | TOTAL 627

EXISTING SIGNAL HEADS



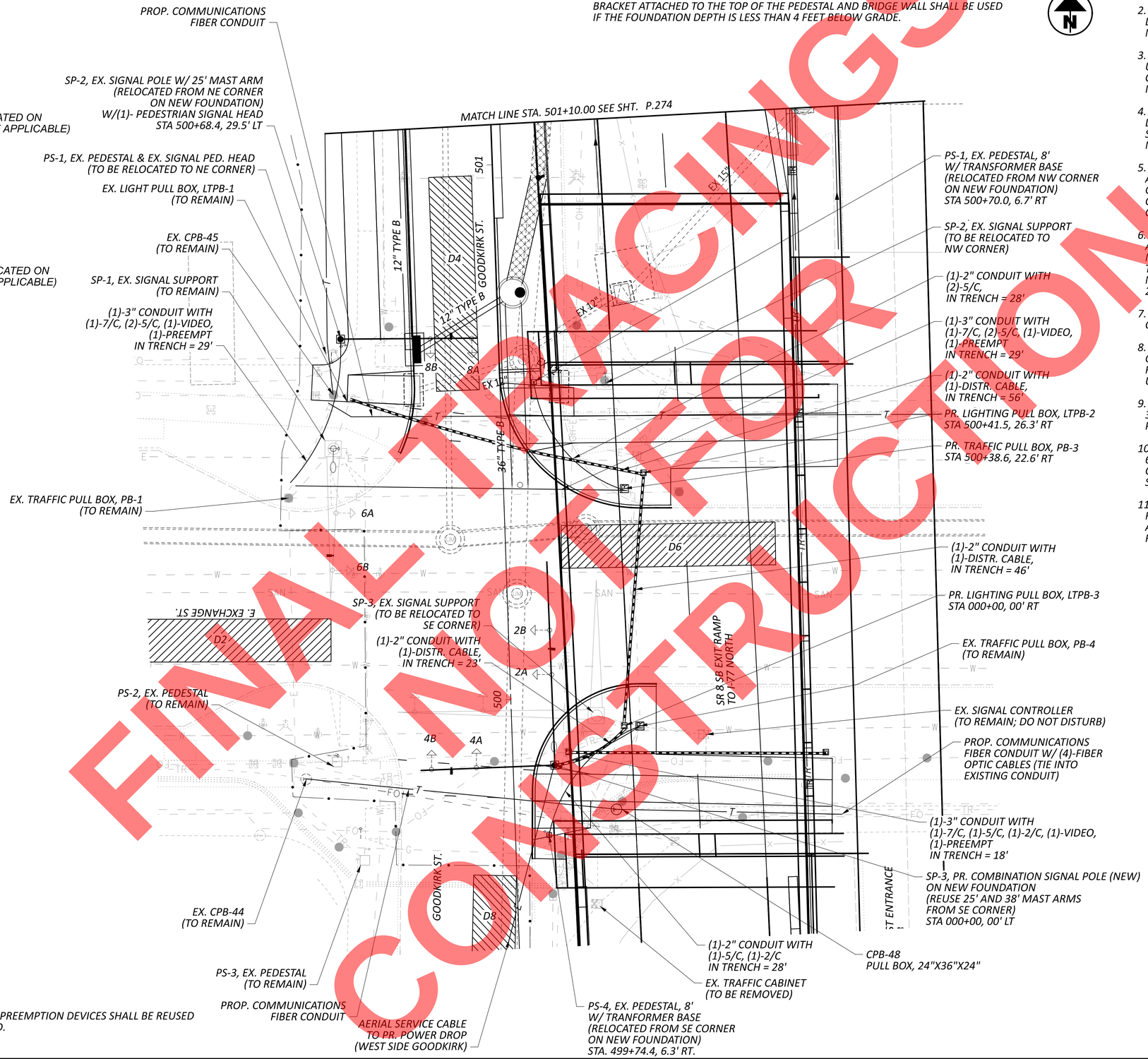
2A,2B,4A,4B,
6A,6B,8A,8B

(TO BE REMOVED AND RELOCATED ON NEW MAST ARM LOCATIONS WHERE APPLICABLE)



PEDESTRIAN HEADS
(LED, COUNTDOWN,
TYPE D2)

(TO BE REMOVED AND RELOCATED ON AT NEW LOCATIONS WHERE APPLICABLE)



NOTES:

12. THE FOUNDATION DEPTH FOR PEDESTAL, PS-1, SHALL BE 4 FEET DEEP OR TO THE DEPTH OF THE PROPOSED BRIDGE FOOTER AND MINIMUM 2.5 FEET BELOW THE GRADE. A BRACKET ATTACHED TO THE TOP OF THE PEDESTAL AND BRIDGE WALL SHALL BE USED IF THE FOUNDATION DEPTH IS LESS THAN 4 FEET BELOW GRADE.

NOTES:

1. ALL CONDUIT SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.

2. STREET CROSSING CONDUITS (TRAFFIC, FIBER, AND LIGHTING) SHALL BE ENCASED - ALL OTHER CONDUIT MAY BE DIRECT BURIAL.

3. NO SIGNAL BASE OR FOUNDATION SHOULD BE POURED UNTIL THE CURBS AND RADII ARE IN PLACE TO ENSURE CORRECT FOUNDATION ELEVATION AND BOLT HEIGHT IS OBTAINED.

4. REFER TO ODOT STANDARD CONSTRUCTION DRAWINGS TC-21.20 AND TC-81.20 AND THE SUMMARY SHEET FOR REQUIRED POLE, BOLT AND FOUNDATION MEASUREMENTS.

5. ALL FOUNDATIONS SHALL INCLUDE: A GROUND ROD, #4 AWG STRANDED GROUND WIRE ATTACHED TO THE GROUND ROD, RUN THROUGH THE GROUND WIRE CONDUIT WITH 18" OF #4 WIRE ABOVE THE TOP OF THE CONDUIT AT THE FOUNDATION TOP.

6. FOUNDATION SHOWN IS FOR TWO BOLT MOUNTING, ALTHOUGH SOME CABINETS MAY REQUIRE FOUR BOLT MOUNTING. CONDUIT SHALL BE ALIGNED AS NECESSARY TO ACCOMMODATE THE INSTALLATION,PER PLAN. MOUNTING BOLTS MAY BE INSTALLED MANUALLY USING 2, 4, OR 6 WEDGE ANCHORS (34").75"X10" AS REQUIRED.

7. CONDUITS ARE NOT SHOWN IN ANY PARTICULAR CONFIGURATION. THEY SHALL BE INSTALLED PER PLAN.

8. POLE FOUNDATIONS SHALL INCLUDE A MINIMUM OF ONE (1) 3" CONDUIT FOR SIGNALS, ONE (1) 2" CONDUIT FOR ELECTRIC AND ONE (1) 1" CONDUIT FOR THE GROUND. UNUSED CONDUITS SHALL BE APPROPRIATELY SEALED.

9. CONTROLLER FOUNDATIONS SHALL INCLUDE: TWO (2) 3" CONDUITS, ONE (1) 2" CONDUIT, ONE (1) 1" CONDUIT, PLUS ADDITIONAL CONDUITS PER PLAN.

10. GROUND RODS SHALL BE INSTALLED PER ODOT SPEC. 625.16. RODS SHALL BE 1" X 10' AND SECURED BY CAD-WELD. ALL METAL TRAFFIC SIGNAL EQUIPMENT SHALL BE GROUNDED.

11. THE CITY OF AKRON MAY PROVIDE A FOUNDATION FORM, BY REQUEST. CONTACT THE SIGNAL LINE FOREMAN AT 330-375-2851 TO MAKE ARRANGEMENTS FOR USE.

LEGEND

	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT HEAD, 12"	●	○
TRAFFIC SIGNAL, 5 UNIT HEAD, 12"	●	○
SIGNAL SUPPORT POLE	◉	◎
PEDESTRIAN HEAD	⌐	⌐
PEDESTRIAN PUSHBUTTON	⊸	⊸
PEDESTAL SUPPORT	⊡	⊡
LUMINAIRE, CONVENTIONAL	●—	
POLE MOUNTED CONTROLLER CABINET	⊠	⊠
TRAFFIC PULL BOX	TR	TR
DETECTION ZONE	▨	▨
VIDEO DETECTION UNIT	▬	
EX. SIGNAL SUPPORT & MAST ARM		◎—
PR. SIGNAL SUPPORT & MAST ARM	◉—	

NOTES:

A. EXISTING VIDEO DETECTION AND PREEMPTION DEVICES SHALL BE REUSED AND/OR RELOCATED AND REUSED.

FINAL NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 5 10 20

SIGNAL PLAN
E. EXCHANGE ST. AND GOODKIRK ST.

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05-10-24
PROJECT ID 114865
SHEET P.269 TOTAL 627

SUM-077/008-11.65/00.00

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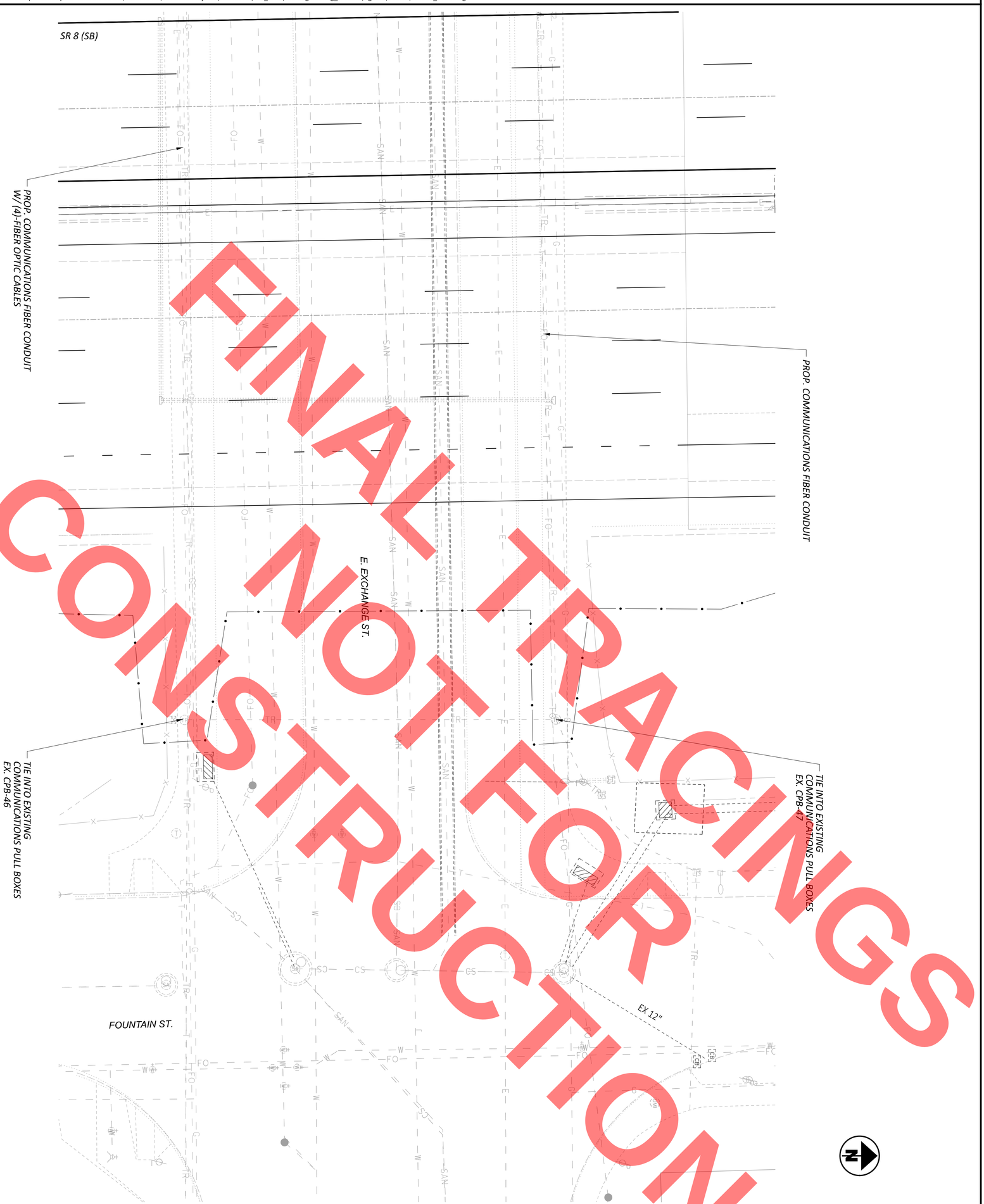


FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	TOTAL	PROJECT ID	REVIEWER	DESIGNER
P.270	627	114865	KDK 05-10-24	JAW

ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com
DESIGN AGENCY

EXCHANGE ST SIGNAL PLAN
GOODKIRK ST TO FOUNTAIN ST

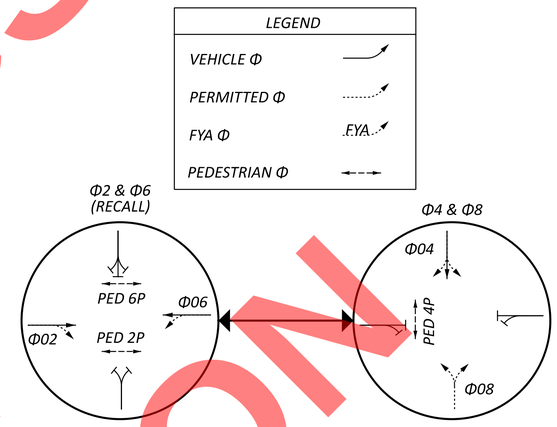
HORIZONTAL SCALE IN FEET
0 10
5 20

SIGNAL TIMING CHART

INTERSECTION:	E. EXCHANGE ST. / GOODKIRK ST.								
MAINTAINING AGENCY:	CITY OF AKRON								
START UP		DUAL ENTRY:	YES	PHASES:		2, 4, 6, 8			
		REST IN RED:		RING 1	-		RING 2	-	
START IN:	ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	2+6	PHASES			-	-	-	-	
COLOR DISPLAYED:	GREEN								
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	EB	-	SB	-	WB	-	NB
MINIMUM GREEN (INITIAL)	(SEC.)	-	20	-	10	-	20	-	10
ADDED INITIAL	*(SEC./ACTUATION)	-	-	-	-	-	-	-	-
MAXIMUM INITIAL	*(SEC.)	-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP)	(SEC.)	-	3.0	-	3.0	-	3.0	-	3.0
TIME BEFORE REDUCTION	*(SEC.)	-	-	-	-	-	-	-	-
MINIMUM GAP	*(SEC.)	-	-	-	-	-	-	-	-
TIME TO REDUCE	*(SEC.)	-	-	-	-	-	-	-	-
MAXIMUM GREEN I	(SEC.)	-	60	-	30	-	60	-	30
MAXIMUM GREEN II	(SEC.)	-	-	-	-	-	-	-	-
YELLOW CHANGE	(SEC.)	-	3.6	-	4.5	-	3.6	-	4.5
ALL RED CLEARANCE	(SEC.)	-	1.0	-	1.0	-	1.0	-	1.0
DELAYED GREEN (LPI) #	(SEC.)	-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY^	(SEC.)	-	-	-	-	-	-	-	-
WALK	(SEC.)	-	8	-	9	-	8	-	-
PEDESTRIAN CLEARANCE	(SEC.)	-	6	-	9	-	6	-	-
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-
*VOLUME DENSITY CONTROLS									

NOTES:
- All movements shall be actuated. The primary through movement shall have min recall active to rest in green.
- Countdown pedestrian signal heads shall go to zero on yellow per OMUTCD Figure 4E-2.
- All detector delays shall be placed on the controller.

PHASING DIAGRAM



VIDEO DETECTION CHART

DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC.)	EXTENSION PROGRAMMED IN CONTROLLER (SEC.)	DETECTOR NO.	PURPOSE	DETECTION ZONE LENGTH (FT)
D2	EB	PRESENCE	2	-		2	STOP-LINE	40
D4	SB	PRESENCE	4	10		4	STOP-LINE	40
D6	WB	PRESENCE	6	-		6	STOP-LINE	40
D8	NB	PRESENCE	8	10		8	STOP-LINE	40

PURPOSE: STOP-LINE OR ADVANCE DETECTION

PREEMPT CHANNELS

CHANNEL 1 = Φ(2) (EASTBOUND ONLY)
CHANNEL 2 = Φ(4) (SOUTHBOUND ONLY)
CHANNEL 3 = Φ(6) (WESTBOUND ONLY)
CHANNEL 4 = Φ(8) (NORTHBOUND ONLY)

PREEMPT NOTES:

1. UPON PREEMPTION, ACTIVE WALK INDICATIONS SHALL IMMEDIATELY BE TERMINATED, FOLLOWED BY THE TIMING OF THE PEDESTRIAN CLEARANCE INTERVAL.
2. IF ANY ACTIVE PHASES OPPOSES THE PREEMPT PHASE, ALL ACTIVE PHASES SHALL TIME THEIR YELLOW AND ALL RED CLEARANCE INTERVALS UPON COMPLETION OF ANY PEDESTRIAN INTERVALS PRIOR TO TRANSITIONING TO THE PREEMPT PHASE IN ORDER TO AVOID THE POTENTIAL FOR YELLOW BALL TRAP.
3. AFTER RELEASE FROM PREEMPT, YELLOW AND ALL RED CLEARANCE INTERVALS SHALL BE DISPLAYED AND RETURN TO NORMAL COORDINATED TIMING PROGRESSION PER CURRENT COORDINATION RECOVERY SETTINGS.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.271 TOTAL 627

SUM-077/008-11.65/00.00

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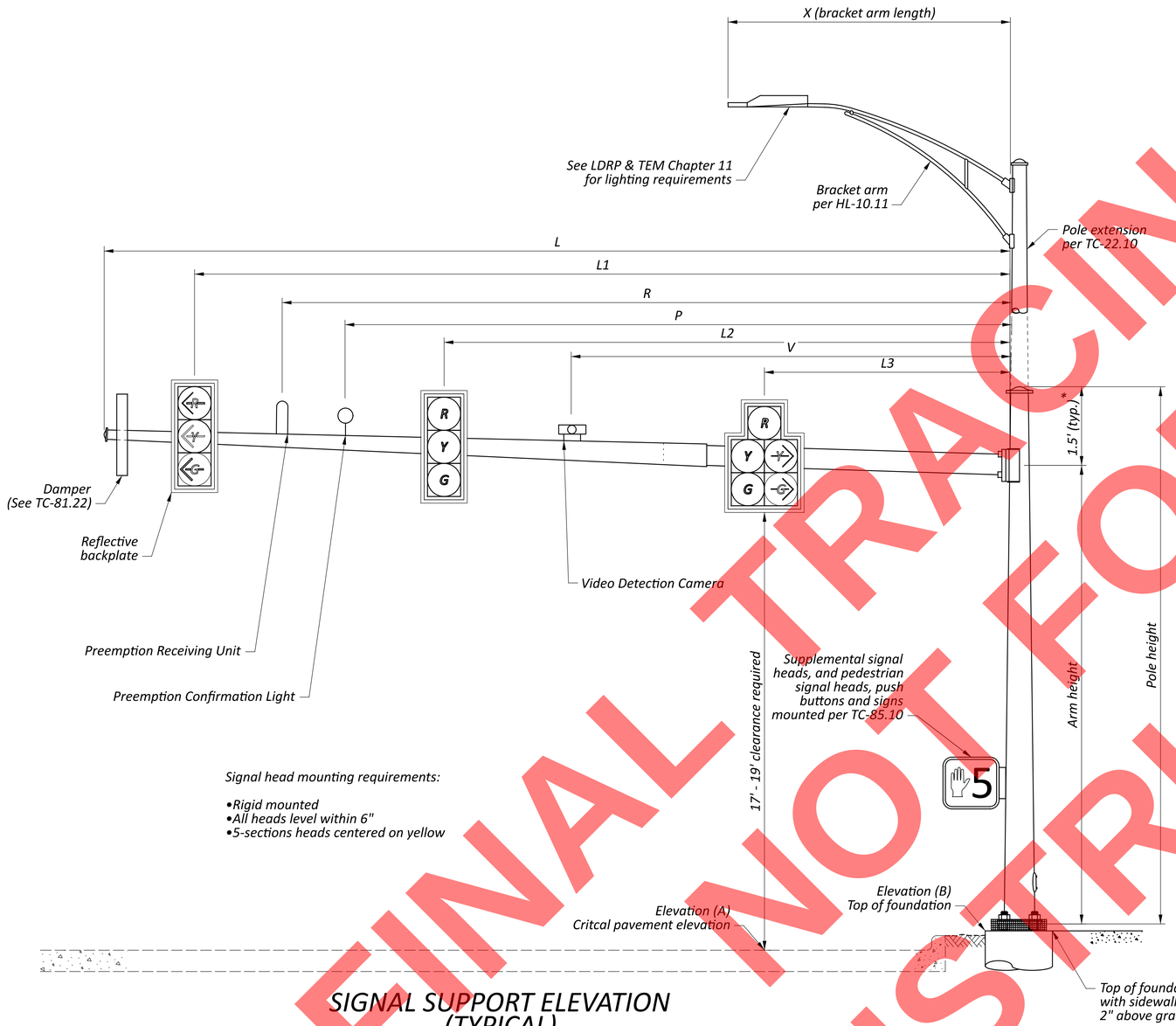
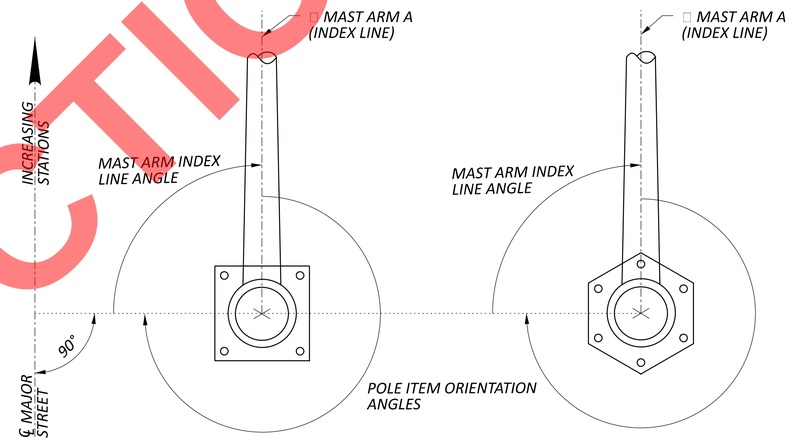


Signal head mounting requirements:

- Rigid mounted
- All heads level within 6"
- 5-sections heads centered on yellow

SIGNAL SUPPORT ELEVATION (TYPICAL)



Note:
1. All angles are measured clockwise.
2. Base plate is oriented square to Mast Arm A, even if the support has two arms.

POLE ORIENTATION

MAST ARM TABLE

SUPPORT NO.	ARM DESIGNATION	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS												MAST ARM A INDEX LINE ANGLE	ANGLES (DEG.) FROM INDEX LINE							
				A (Pavement Elevation)	B (Top of Foundation)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	S1	V	P	R	X		MAST ARM B	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	POWER SERVICE	SIGNAL CABINET	BRACKET ARM	HANDHOLE	CABLE ENTRANCE 12" FROM TOP OF POLE EXTENSION
								FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	-	EXISTING	EXISTING	EXISTING	EXISTING	TC-81.22	2	28	21.5	28	EXISTING	EXISTING	-	-	-	-	-	0	-	-	-	-	-	-	-	-
SP-2	-	-	-	-	-	TC-81.22	2	22	20.5	25	21.5	13.5	-	18	23	24	-	0	-	90	90	-	-	-	-	-
SP-3	A	-	-	-	-	TC-81.22	12	28	21.5	38	33.5	21	-	26	35	37	8	0	-	-	-	-	-	90	-	-
-	B	-	-	-	-	-	-	-	21.5	25	20.5	12.5	-	16	22	24	-	-	90	-	-	-	-	-	-	-

FINAL TRACINGS NOT FOR CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.272 TOTAL 627

SUM-077/008-11.65/00.00

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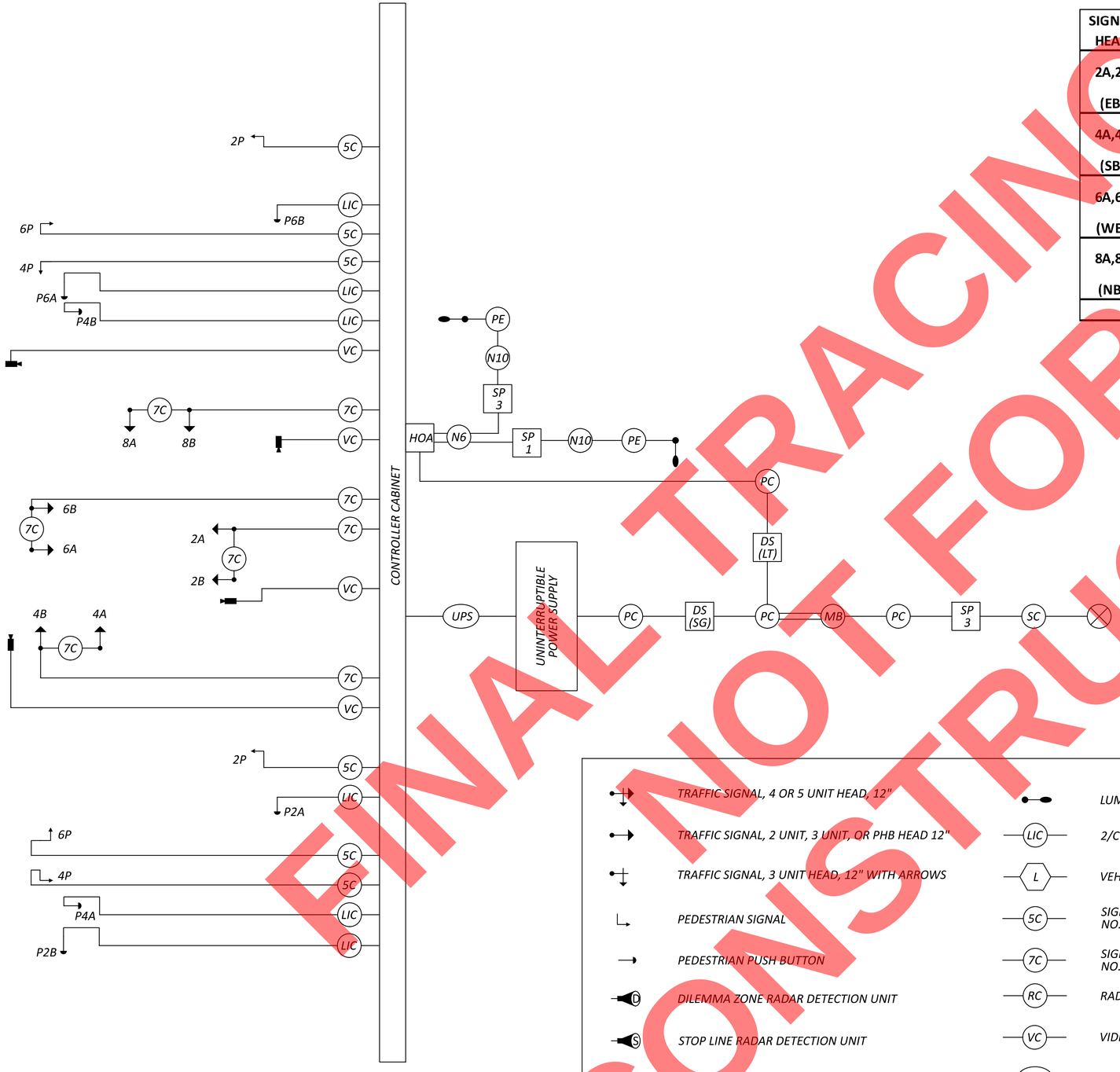
WIRING DIAGRAM (TYPICAL)



FIELD WIRING HOOKUP CHART

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A,2B	R	Φ2 R	R
	Y	Φ2 Y	
(EB)	G	Φ2 G	
4A,4B	R	Φ4 R	R
	Y	Φ4 Y	
(SB)	G	Φ4 G	
6A,6B	R	Φ6 R	R
	Y	Φ6 Y	
(WB)	G	Φ6 G	
8A,8B	R	Φ8 R	R
	Y	Φ8 Y	
(NB)	G	Φ8 G	
LS = LOAD SWITCH			

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
PEDESTRIAN MOVEMENTS			
PED 2P	W	LS 9 G	OUT
SOUTH	DW	LS 9 R	
PED 4P	W	LS 10 G	OUT
WEST	DW	LS 10 R	
PED 6P	W	LS 11 G	OUT
NORTH	DW	LS 11 R	

LEGEND

- TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"
- TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD 12"
- TRAFFIC SIGNAL, 3 UNIT HEAD, 12" WITH ARROWS
- PEDESTRIAN SIGNAL
- PEDESTRIAN PUSH BUTTON
- DILEMMA ZONE RADAR DETECTION UNIT
- STOP LINE RADAR DETECTION UNIT
- VIDEO DETECTION CAMERA
- PTZ CAMERA
- ETHERNET RADIO
- LUMINAIRE, CONVENTIONAL
- LIC — 2/C NO. XX AWG (LEAD-IN CABLE)
- L — VEHICLE LOOP DETECTOR
- 5C — SIGNAL CABLE, 5 CONDUCTOR, NO. XX AWG
- 7C — SIGNAL CABLE, 7 CONDUCTOR, NO. XX AWG
- RC — RADAR DETECTION CABLE
- VC — VIDEO CAMERA CABLE
- INT — INTERCONNECT CABLE
- PE — PHOTOELECTRIC CELL
- POWER SOURCE
- SC — SERVICE CABLE, 3 CONDUCTOR, NO. X AWG
- PC — POWER CABLE, 2 CONDUCTOR, NO. X AWG
- SP 1 — SIGNAL SUPPORT POLE NO. __
- MB — METER BASE
- NX — NO. X AWG DISTRIBUTION CABLE
- NXX — SIGNAL CABLE, 4 CONDUCTOR, NO. XX AWG
- DS — SEPARATE LIGHTING & SIGNAL DISCONNECT SWITCHES
- FC — FLASHER CABINET
- UPS — UNINTERRUPTIBLE POWER SUPPLY CABLE
- HOA — HAND/ OFF/ AUTO SWITCH

FINAL TRACINGS
NOT FOR CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9585
www.arcadis.com

DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SHEET P.273 TOTAL 627

SUM-077/008-11.65/00.00

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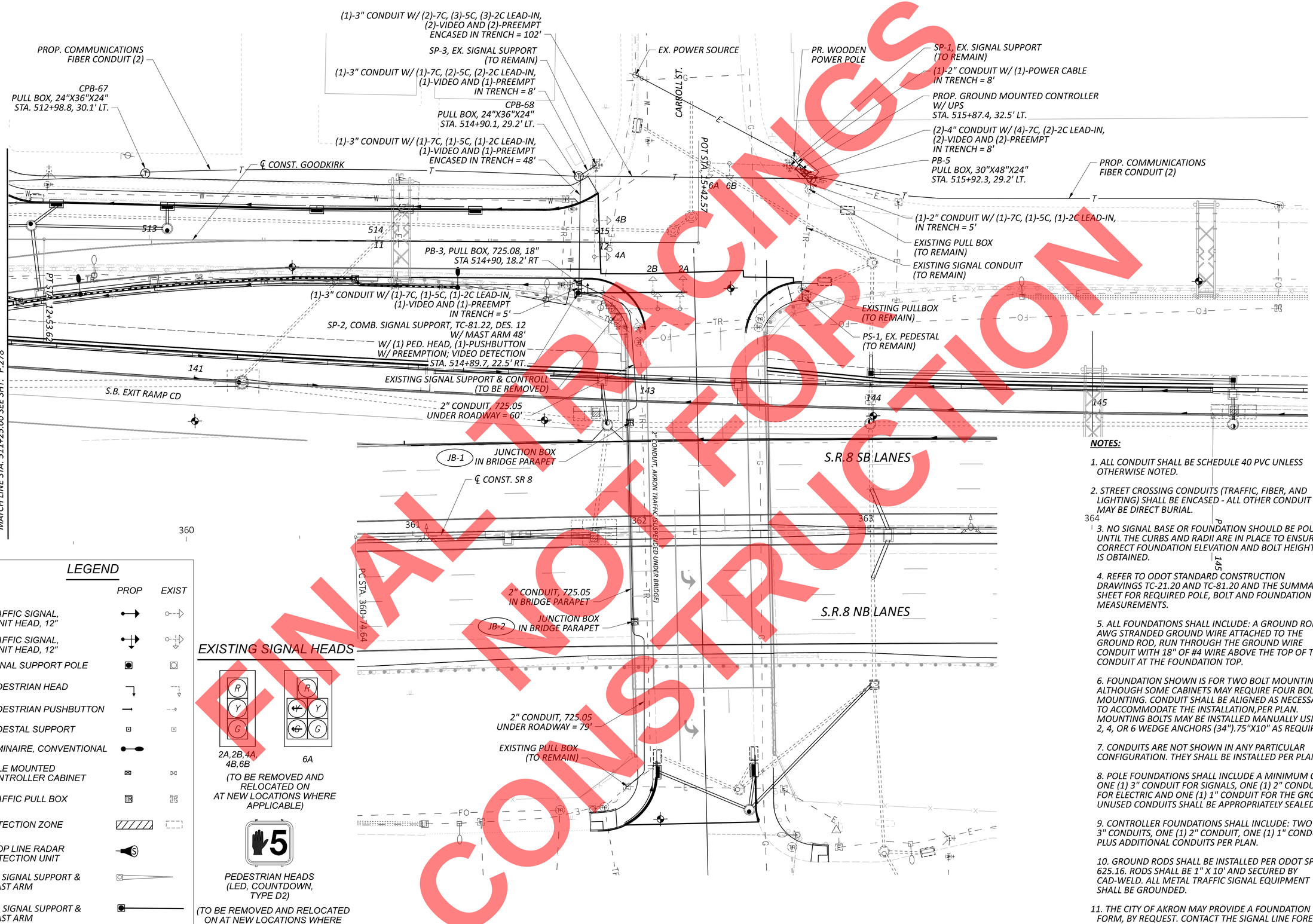

LEGEND

	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT HEAD, 12"		
TRAFFIC SIGNAL, 5 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN HEAD		
PEDESTRIAN PUSHBUTTON		
PEDESTAL SUPPORT		
LUMINAIRE, CONVENTIONAL		
POLE MOUNTED CONTROLLER CABINET		
TRAFFIC PULL BOX		
DETECTION ZONE		
STOP LINE RADAR DETECTION UNIT		
EX. SIGNAL SUPPORT & MAST ARM		
PR. SIGNAL SUPPORT & MAST ARM		

EXISTING SIGNAL HEADS

2A,2B,4A 4B,6B — 6A

(TO BE REMOVED AND RELOCATED ON AT NEW LOCATIONS WHERE APPLICABLE)

PEDESTRIAN HEADS (LED, COUNTDOWN, TYPE D2)

(TO BE REMOVED AND RELOCATED ON AT NEW LOCATIONS WHERE APPLICABLE)

NOTES:

1. ALL CONDUIT SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.
2. STREET CROSSING CONDUITS (TRAFFIC, FIBER, AND LIGHTING) SHALL BE ENCASED - ALL OTHER CONDUIT MAY BE DIRECT BURIAL.
3. NO SIGNAL BASE OR FOUNDATION SHOULD BE POURED UNTIL THE CURBS AND RADII ARE IN PLACE TO ENSURE CORRECT FOUNDATION ELEVATION AND BOLT HEIGHT IS OBTAINED.
4. REFER TO ODOT STANDARD CONSTRUCTION DRAWINGS TC-21.20 AND TC-81.20 AND THE SUMMARY SHEET FOR REQUIRED POLE, BOLT AND FOUNDATION MEASUREMENTS.
5. ALL FOUNDATIONS SHALL INCLUDE: A GROUND ROD, #4 AWG STRANDED GROUND WIRE ATTACHED TO THE GROUND ROD, RUN THROUGH THE GROUND WIRE CONDUIT WITH 18" OF #4 WIRE ABOVE THE TOP OF THE CONDUIT AT THE FOUNDATION TOP.
6. FOUNDATION SHOWN IS FOR TWO BOLT MOUNTING, ALTHOUGH SOME CABINETS MAY REQUIRE FOUR BOLT MOUNTING. CONDUIT SHALL BE ALIGNED AS NECESSARY TO ACCOMMODATE THE INSTALLATION,PER PLAN. MOUNTING BOLTS MAY BE INSTALLED MANUALLY USING 2, 4, OR 6 WEDGE ANCHORS (34").75"X10" AS REQUIRED.
7. CONDUITS ARE NOT SHOWN IN ANY PARTICULAR CONFIGURATION. THEY SHALL BE INSTALLED PER PLAN.
8. POLE FOUNDATIONS SHALL INCLUDE A MINIMUM OF ONE (1) 3" CONDUIT FOR SIGNALS, ONE (1) 2" CONDUIT FOR ELECTRIC AND ONE (1) 1" CONDUIT FOR THE GROUND. UNUSED CONDUITS SHALL BE APPROPRIATELY SEALED.
9. CONTROLLER FOUNDATIONS SHALL INCLUDE: TWO (2) 3" CONDUITS, ONE (1) 2" CONDUIT, ONE (1) 1" CONDUIT, PLUS ADDITIONAL CONDUITS PER PLAN.
10. GROUND RODS SHALL BE INSTALLED PER ODOT SPEC. 625.16. RODS SHALL BE 1" X 10' AND SECURED BY CAD-WELD. ALL METAL TRAFFIC SIGNAL EQUIPMENT SHALL BE GROUNDED.
11. THE CITY OF AKRON MAY PROVIDE A FOUNDATION FORM, BY REQUEST. CONTACT THE SIGNAL LINE FOREMAN AT 330-375-2851 TO MAKE ARRANGEMENTS FOR USE.

HORIZONTAL SCALE IN FEET
0 10 20 40

CARROLL ST SIGNAL PLAN
STA. 358+24.93 R2 TO STA. 368+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.274 TOTAL 627

FINAL PLANS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
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SIGNAL TIMING CHART

INTERSECTION: CARROLL ST. / GOODKIRK ST.									
MAINTAINING AGENCY: CITY OF AKRON									
START UP		DUAL ENTRY: YES		PHASES:			2, 4, 6, 8		
		REST IN RED:		RING 1 -			RING 2 -		
START IN: ALL-RED FLASH		OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6									
FIRST PHASE(S): 2+6		PHASES			-	-	-	-	
COLOR DISPLAYED: GREEN									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		WBLT	EB	-	SB	-	WB	-	-
MINIMUM GREEN (INITIAL)	(SEC.)	7	20	-	10	-	20	-	-
ADDED INITIAL	*(SEC./ACTUATION)	-	-	-	-	-	-	-	-
MAXIMUM INITIAL	*(SEC.)	-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP)	(SEC.)	3	3.0	-	3.0	-	3.0	-	-
TIME BEFORE REDUCTION	*(SEC.)	-	-	-	-	-	-	-	-
MINIMUM GAP	*(SEC.)	-	-	-	-	-	-	-	-
TIME TO REDUCE	*(SEC.)	-	-	-	-	-	-	-	-
MAXIMUM GREEN I	(SEC.)	15	60	-	30	-	60	-	-
MAXIMUM GREEN II	(SEC.)	-	-	-	-	-	-	-	-
YELLOW CHANGE	(SEC.)	3.0	3.6	-	4.5	-	3.6	-	-
ALL RED CLEARANCE	(SEC.)	1.0	1.0	-	1.0	-	1.0	-	-
DELAYED GREEN (LPI) '	(SEC.)	-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY^	(SEC.)	-	-	-	-	-	-	-	-
WALK	(SEC.)	-	8	-	9	-	8	-	-
PEDESTRIAN CLEARANCE	(SEC.)	-	6	-	9	-	6	-	-
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	YES	-	-	-	YES	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY	(ON/OFF)	-	-	-	-	-	-	-	-

*VOLUME DENSITY CONTROLS

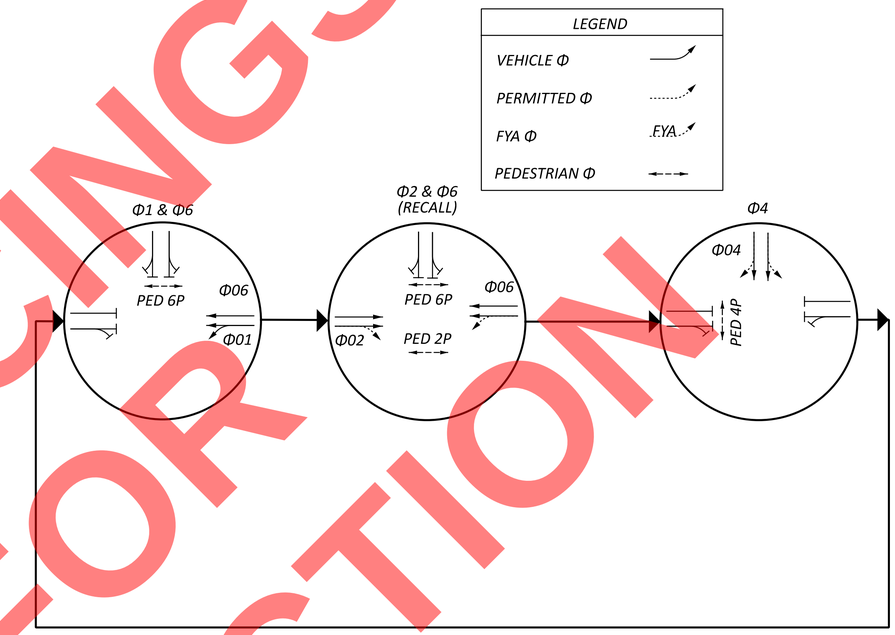
FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.

NOTES:

- All movements shall be actuated. The primary through movement shall have min recall active to rest in green.
- Countdown pedestrian signal heads shall go to zero on yellow per OMUTCD Figure 4E-2.
- All detector delays shall be placed on the controller.

PHASING DIAGRAM



VIDEO DETECTION CHART

DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC.)	EXTENSION PROGRAMMED IN CONTROLLER (SEC.)	DETECTOR NO.	PURPOSE	DETECTION ZONE LENGTH (FT)
D2A	EB	PRESENCE	2	-		2	STOP-LINE	40
D2B	EB	PRESENCE	2	-		2	STOP-LINE	40
D4A	SB	PRESENCE	4	10		4	STOP-LINE	40
D4B	SB	PRESENCE	4	-		4	STOP-LINE	40
D6A	WB	PRESENCE	6	-		6	STOP-LINE	40
D6B	WB	PRESENCE	6	-		6	STOP-LINE	40

PURPOSE: STOP-LINE OR ADVANCE DETECTION

PREEMPT CHANNELS

CHANNEL 1 = Φ(2) (EASTBOUND ONLY)
CHANNEL 2 = Φ(4) (SOUTHBOUND ONLY)
CHANNEL 3 = Φ(6) (WESTBOUND ONLY)
CHANNEL 4 = Φ(8) (NORTHBOUND ONLY)

PREEMPT NOTES:

1. UPON PREEMPTION, ACTIVE WALK INDICATIONS SHALL IMMEDIATELY BE TERMINATED, FOLLOWED BY THE TIMING OF THE PEDESTRIAN CLEARANCE INTERVAL.
2. IF ANY ACTIVE PHASES OPPOSES THE PREEMPT PHASE, ALL ACTIVE PHASES SHALL TIME THEIR YELLOW AND ALL RED CLEARANCE INTERVALS UPON COMPLETION OF ANY PEDESTRIAN INTERVALS PRIOR TO TRANSITIONING TO THE PREEMPT PHASE IN ORDER TO AVOID THE POTENTIAL FOR YELLOW BALL TRAP.
3. AFTER RELEASE FROM PREEMPT, YELLOW AND ALL RED CLEARANCE INTERVALS SHALL BE DISPLAYED AND RETURN TO NORMAL COORDINATED TIMING PROGRESSION PER CURRENT COORDINATION RECOVERY SETTINGS.

FINAL TRACINGS NOT FOR CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.275 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:48:40 PM USER: TBuniak
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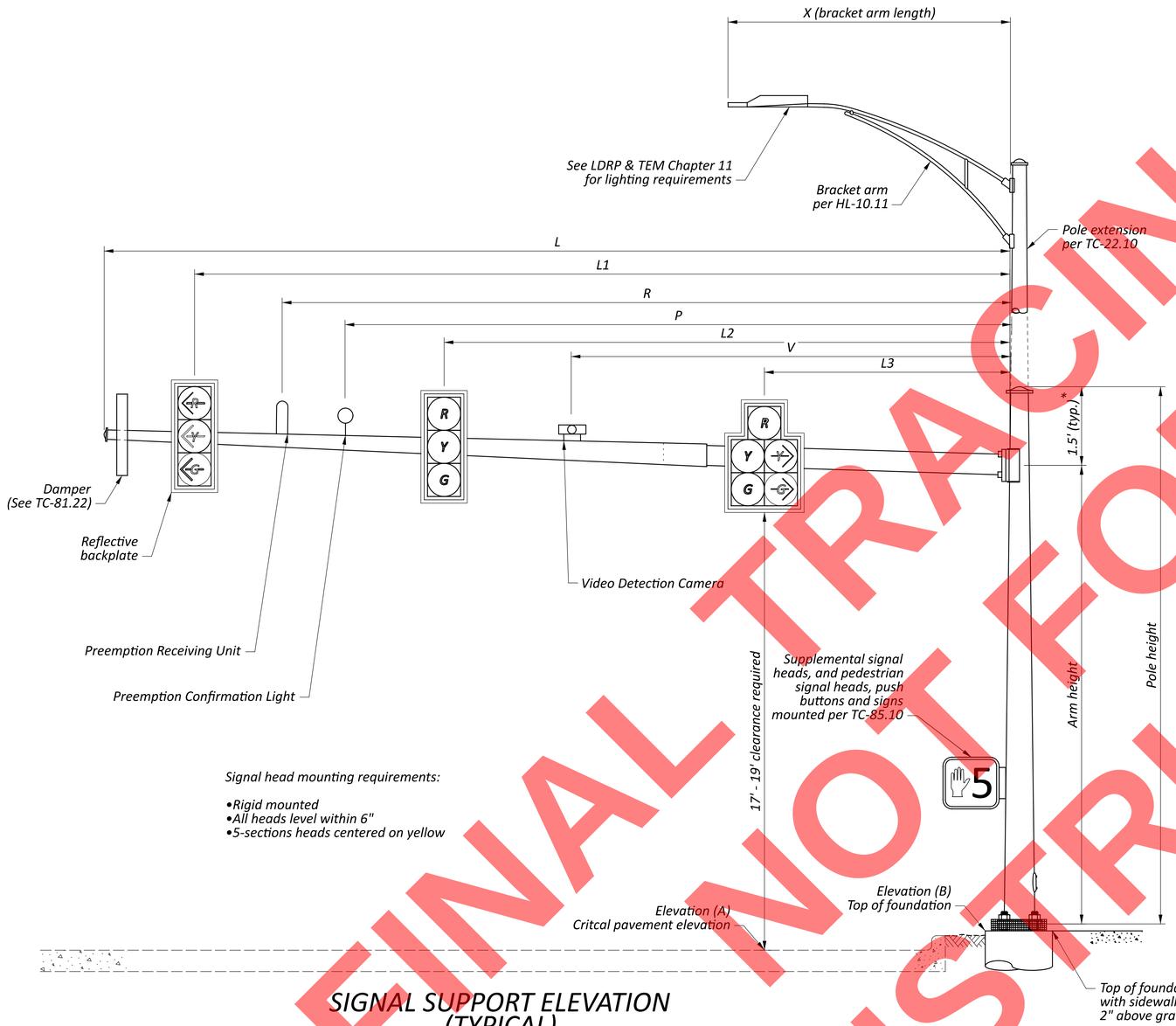
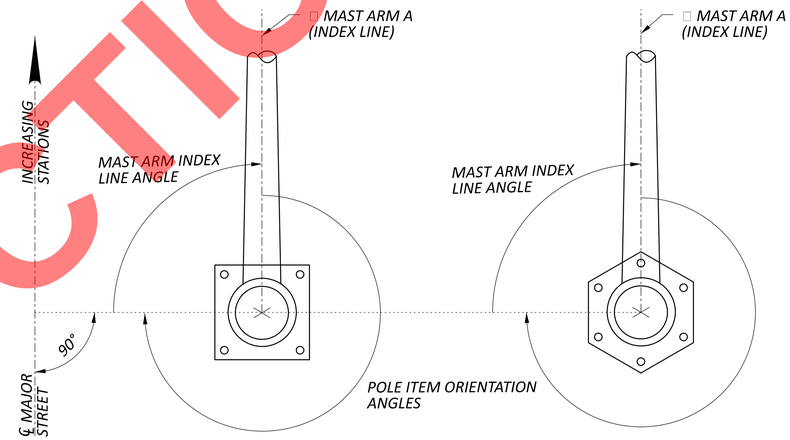


Signal head mounting requirements:

- Rigid mounted
- All heads level within 6"
- 5-sections heads centered on yellow

SIGNAL SUPPORT ELEVATION (TYPICAL)



Note:
1. All angles are measured clockwise.
2. Base plate is oriented square to Mast Arm A, even if the support has two arms.

POLE ORIENTATION

MAST ARM TABLE

SUPPORT NO.	ARM DESIGNATION	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS												MAST ARM A INDEX LINE ANGLE	ANGLES (DEG.) FROM INDEX LINE							
				A (Pavement Elevation)	B (Top of Foundation)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	S1	V	P	R	X		MAST ARM B	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	POWER SERVICE	SIGNAL CABINET	BRACKET ARM	HANDHOLE	CABLE ENTRANCE 12" FROM TOP OF POLE EXTENSION
								FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG
SP-1	-	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	-	EXISTING	EXISTING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP-2	-	-	-	1057.32	1057.46	TC-81.22	12	30	21	48	46	34	-	-	40	39	-	90	-	0	0	-	-	0	-	-
SP-3	-	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	-	EXISTING	EXISTING	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
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DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.276 TOTAL 627

SUM-077/008-11.65/00.00

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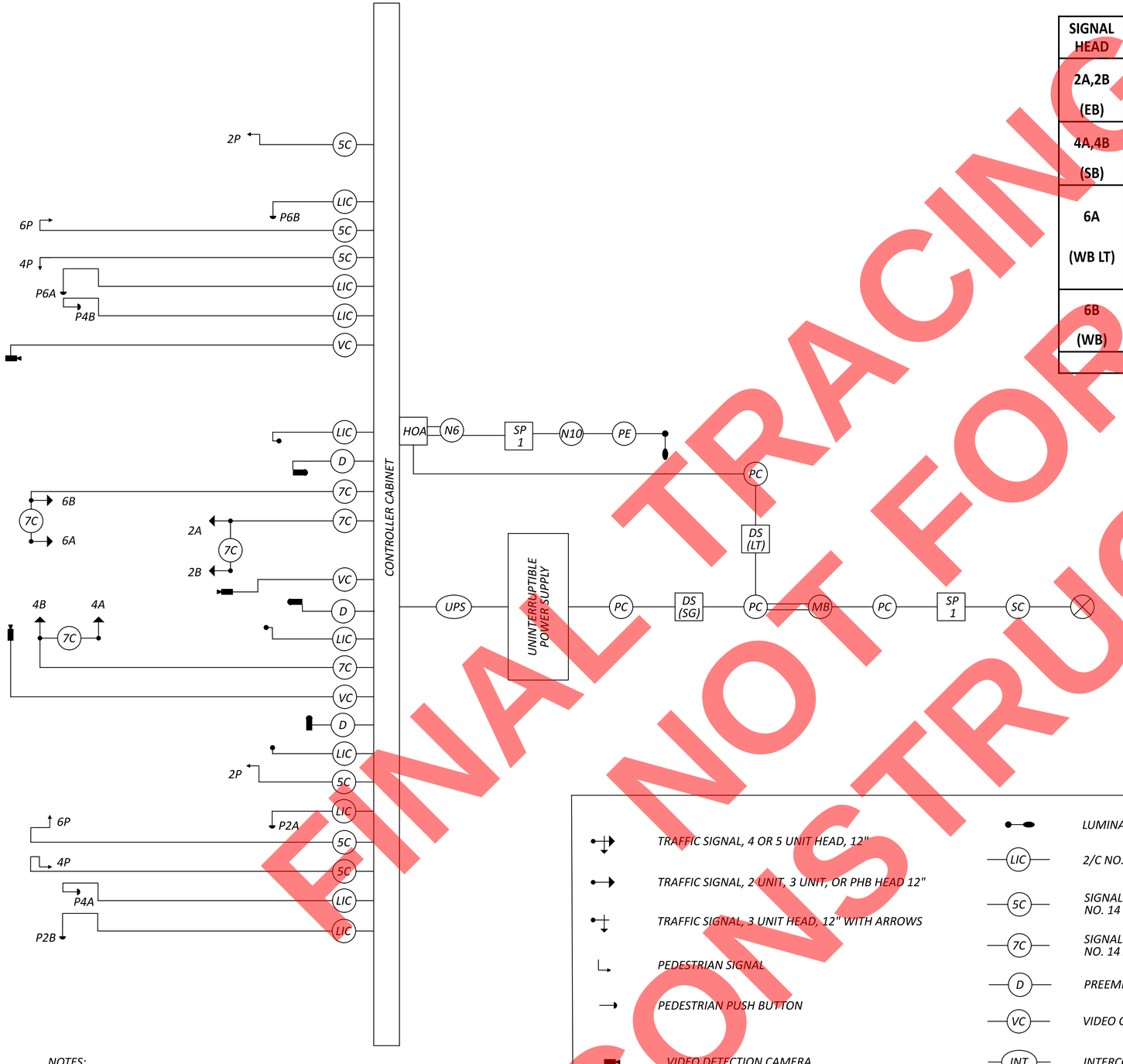
WIRING DIAGRAM (TYPICAL)



NOTES:

- REMOVE AND REERECT PREEMPTION RECEIVING UNIT, CONFIRMATION LIGHT, AND VIDEO DETECTION CAMERA FROM EXISTING SP-3 AND NEW SIGNAL POLE SP-3 WITH NEW CABLE TO PROPOSED CONTROLLER.

FIELD WIRING HOOKUP CHART

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A,2B (EB)	R	Φ2 R	R
	Y	Φ2 Y	
	G	Φ2 G	
4A,4B (SB)	R	Φ4 R	R
	Y	Φ4 Y	
	G	Φ4 G	
6A (WB LT)	R	Ø6R	R
	Y	Ø6Y	
	G	Ø6G	
	<--Y---	Ø1Y	
	<--G---	Ø1G	
6B (WB)	R	Φ6 R	R
	Y	Φ6 Y	
	G	Φ6 G	
LS = LOAD SWITCH			

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
PEDESTRIAN MOVEMENTS			
PED 2P SOUTH	W	LS 9 G	OUT
	DW	LS 9 R	
PED 4P WEST	W	LS 10 G	OUT
	DW	LS 10 R	
PED 8P NORTH	W	LS 11 G	OUT
	DW	LS 11 R	

LEGEND

- TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"
- TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD 12"
- TRAFFIC SIGNAL, 3 UNIT HEAD, 12" WITH ARROWS
- PEDESTRIAN SIGNAL
- PEDESTRIAN PUSH BUTTON
- VIDEO DETECTION CAMERA
- PREEMPTION RECEIVING UNIT
- PREEMPTION CONFIRMATION LIGHT
- LUMINAIRE, CONVENTIONAL
- LIC — 2/C NO. 14 AWG (LEAD-IN CABLE)
- 5C — SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
- 7C — SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
- D — PREEMPTION DETECTOR CABLE
- VC — VIDEO CAMERA CABLE
- INT — INTERCONNECT CABLE
- PE — PHOTOELECTRIC CELL
- POWER SOURCE
- SC — SERVICE CABLE, 3 CONDUCTOR, NO. X AWG
- PC — POWER CABLE, 2 CONDUCTOR, NO. X AWG
- SP 1 — SIGNAL SUPPORT POLE NO. __
- MB — METER BASE
- N6 — NO. 6 AWG DISTRIBUTION CABLE
- N10 — SIGNAL CABLE, 4 CONDUCTOR, NO. XX AWG
- DS — SEPARATE LIGHTING & SIGNAL DISCONNECT SWITCHES
- UPS — UNINTERRUPTIBLE POWER SUPPLY CABLE

FINAL TRACINGS
NOT FOR CONSTRUCTION

SIGNAL DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SHEET P.277 TOTAL 627

SUM-077/008-11.65/00.00

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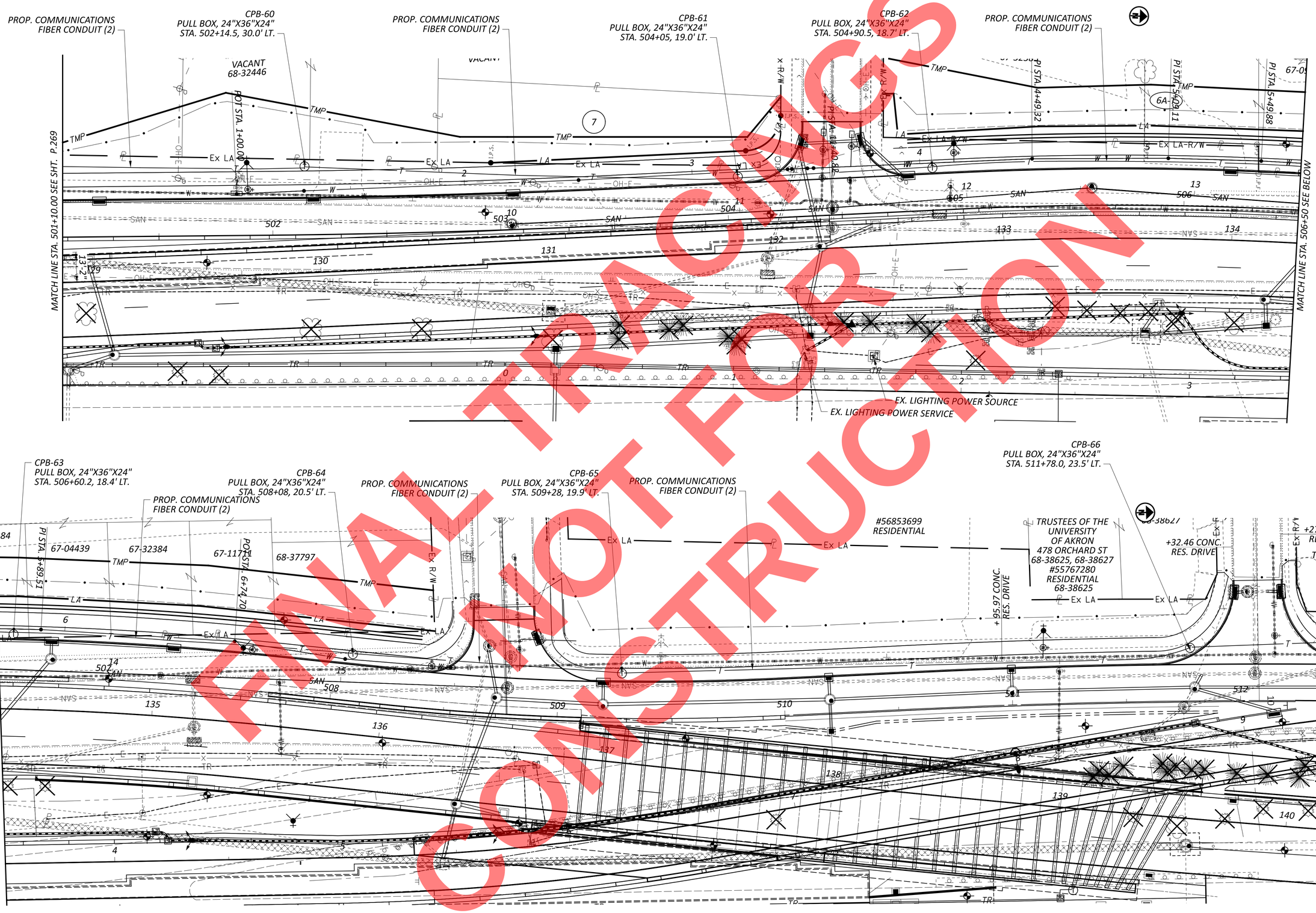

FINAL PLANS
NOT FOR CONSTRUCTION

SIGNAL PLAN - GOODKIRK ST.
STA. 501+10 TO STA. 511+25

SUM-077/008-11.65/00.00

DESIGN AGENCY
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DESIGNER JAW
REVIEWER KDK 07-22-26
PROJECT ID 114865
SHEET P.278 TOTAL 627

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ITEM 625 3" SCHEDULE 40 PVC CONDUIT, ENCASED & NOT ENCASED

ALL CONDUIT IS SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.

NO CONDUIT RADIUS SHALL BE LESS THAN 12 TIMES THE INSIDE CONDUIT DIAMETER.

ALL CONDUIT WHICH WILL NOT HAVE CIRCUIT WIRE OR CABLE PULLED INTO IT DURING CONSTRUCTION SHALL HAVE AN ADEQUATELY SECURED PULL STRING INSTALLED IN IT AS PER ITEM 625.12.

STREET CROSSINGS ARE ENCASED - ALL OTHER CONDUIT CAN BE DIRECT BURIAL.

ALL CONDUIT TRENCHES, BOTH ENCASED AND NOT ENCASED, SHALL HAVE A WARNING TAPE INSTALLED ONE FOOT (1') ABOVE THE CONDUIT.

ITEM 625 PULL BOX, POLYMER CONCRETE, 24"x36"x24"

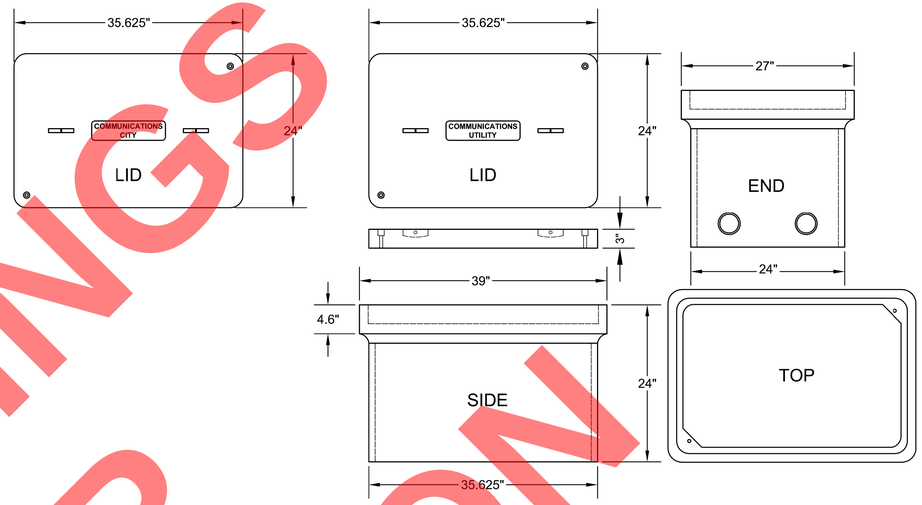
PULL BOXES SHALL HAVE NOMINAL OPENING DIMENSIONS OF 24 INCHES (600MM) x 36 INCHES (900MM) . THE SUPPLIED PULL BOXES SHALL BE ABLE TO SUPPORT A 20,000 LB. MINIMUM VERTICAL LOADING WITHOUT PERMANENT DAMAGE OR DEFLECTION TO THE UNIT. THIS ITEM SHALL INCLUDE BUT IS NOT LIMITED TO THE DISPOSAL OF SURPLUS MATERIAL AND THE RESTORATION OF DISTURBED FACILITIES AND SURFACES.

THE LARGEST BEND RADIUS POSSIBLE SHALL BE MAINTAINED FOR THE FIBER OPTIC CABLE AS SPECIFIED BY THIS SPECIFICATION. ALL COSTS RESULTING FROM THE ABOVE REQUIREMENT SHALL BE INCLUDED IN THE PRICE BID OF ITEM 625 PULL BOX, 24" (600MM) x 36" (900MM) x 24" (600MM)

ITEM 625 PULL BOX, POLYMER CONCRETE, 30"x48"x24"

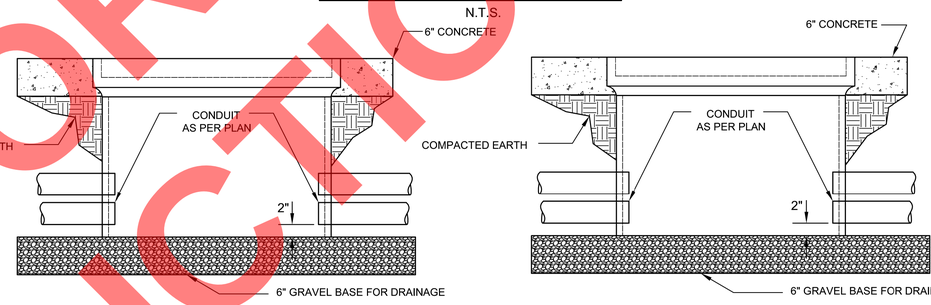
PULL BOXES SHALL HAVE NOMINAL OPENING DIMENSIONS OF 30 INCHES (760MM) x 48 INCHES (1220MM). THE SUPPLIED PULL BOXES SHALL BE ABLE TO SUPPORT A 20,000 LB. MINIMUM VERTICAL LOADING WITHOUT PERMANENT DAMAGE OR DEFLECTION TO THE UNIT. THIS ITEM SHALL INCLUDE BUT IS NOT LIMITED TO THE DISPOSAL OF SURPLUS MATERIAL AND THE RESTORATION OF DISTURBED FACILITIES AND SURFACES.

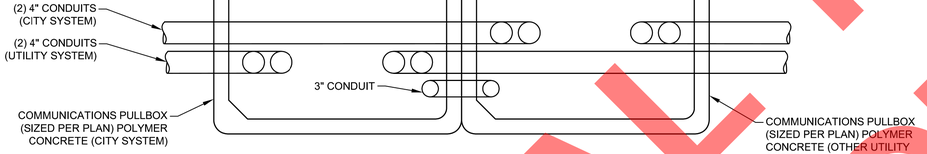
THE LARGEST BEND RADIUS POSSIBLE SHALL BE MAINTAINED FOR THE FIBER OPTIC CABLE AS SPECIFIED BY THIS SPECIFICATION. ALL COSTS RESULTING FROM THE ABOVE REQUIREMENT SHALL BE INCLUDED IN THE PRICE BID OF ITEM 625 PULL BOX, 30" (760MM) x 48" (1220MM) x 24" (600MM)



24"x36"x24" LID & BOX DETAIL

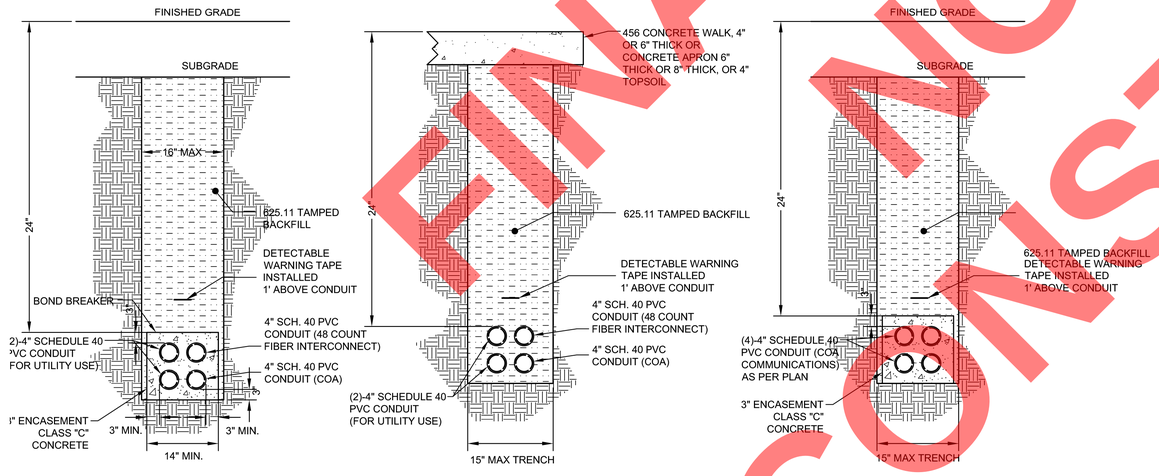
N.T.S.





PULLBOX CONDUIT PLACEMENT DETAIL

N.T.S.



TRENCH IN PAVED AREAS

TRENCH UNDER SIDEWALK OR GRASS AREAS

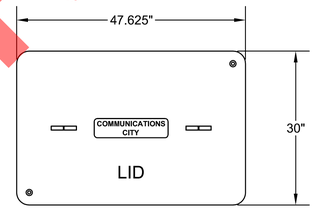
COMMUNICATIONS ONLY CROSSINGS - TRENCH IN PAVED AREAS

UNDERGROUND CONDUIT DETAILS

N.T.S.

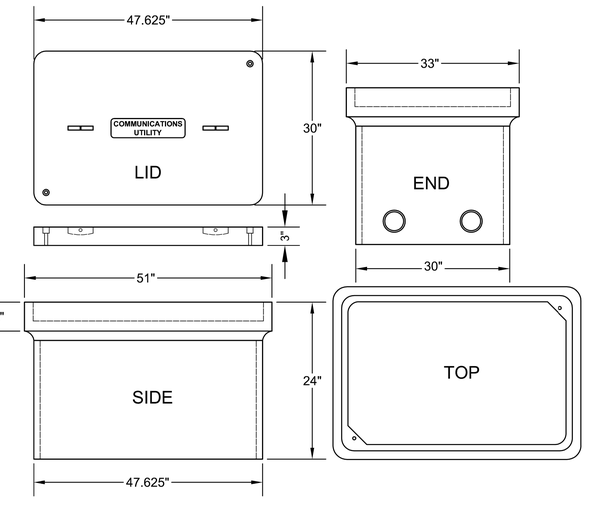
30"x48"x24" PULLBOX DETAIL

N.T.S.



24"x36"x24" PULLBOX DETAIL

N.T.S.



30"x48"x24" LID & BOX DETAIL

N.T.S.

FINAL TRACINGS NOT FOR CONSTRUCTION

COMMUNICATION FIBER CONDUIT DETAILS

SUM-077/008-11.65/00.00

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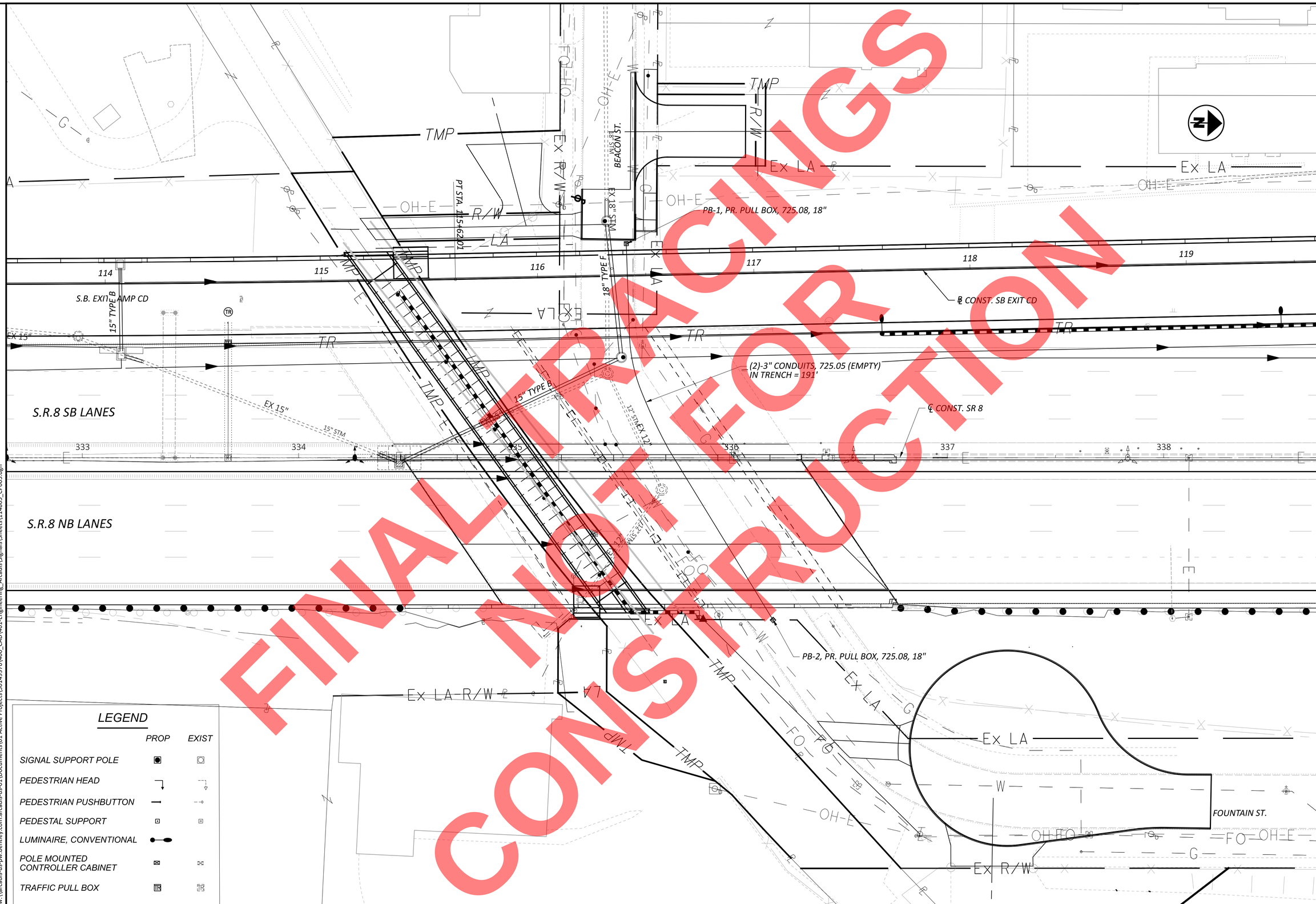
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SHEET P.279 TOTAL 627



FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

SIGNAL PLAN
BEACON STREET TUNNEL

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.280 TOTAL 627

SUM-077/008-11.65/00.00

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ITEM 632 - TEST HOLE PERFORMED

IT IS ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER UNDERGROUND UTILITIES WHILE EXCAVATING FOR SIGNAL SUPPORT FOUNDATIONS OR SIMILAR FOUNDATIONS. AFTER ACCURATELY IDENTIFYING THE PROPOSED LOCATION OF THE FOUNDATION, AS SHOWN IN THE PLANS AND AFTER MODIFYING THAT LOCATION, IF NECESSARY, BASED ON THE FIELD MARKING OF UNDERGROUND UTILITY LOCATION, THE CONTRACTOR DISCOVERS A UTILITY CONFLICT DURING THE EXCAVATION OPERATION, THE CONTRACTOR WILL BE COMPENSATED FOR EACH PARTIAL FOUNDATION EXCAVATION ACCORDING TO THE BID PRICE.

BEFORE THE CONTRACTOR BEGINS THE EXCAVATION AT THE MODIFIED LOCATION, THE CONTRACTOR SHALL VERIFY THAT THERE WILL BE NO OVERHEAD UTILITY CONFLICTS RESULTING FROM THE NEW SIGNAL SUPPORT LOCATION. NEW SUPPORT LOCATIONS ARE TO BE APPROVED BY THE ENGINEER.

THE WORK WILL INCLUDE BACKFILLING, COMPACTING, AND RESTORATION OF THE EXCAVATION TO THE SITE'S ORIGINAL CONDITION.

EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT PRICE BID PER EACH ITEM 632 TEST HOLE PERFORMED. A QUANTITY OF 4 HAS BEEN ALLOCATED FOR THE PROJECT TO BE USED AT THE DIRECTION OF THE ENGINEER.

ITEM 809 - CONDUIT, 2", MULTICELL, HDPE WITH 4-1" INNERDUCTS

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809 - ITS JUNCTION BOX

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809 - CCTV POLE, 70 FEET TALL

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS. THE CONTRACTOR SHALL DETERMINE WHICH TYPE OF POLE TO FURNISH AND INSTALL (CONCRETE OR STEEL) WHEN BIDDING ON THIS ITEM. THE POLE AND FOUNDATION/EMBEDMENT ARE INCIDENTAL TO THIS ITEM REGARDLESS OF MATERIAL TYPE. THE CONTRACTOR SHALL ALSO PROVIDE AND INSTALL ONE COMPLETE LOWERING UNIT TOOL ASSEMBLY PER CAMERA FOR LOWERING CAMERAS PER SUPPLEMENTAL SPECIFICATION 809 (PAID SEPARATELY).

THE CONTRACTOR SHALL FURNISH/INSTALL POLES WITH THE CORRECT LENGTH/EMBEDMENT AND ALL COUPLINGS, HANDHOLES, ETC., IN THE APPROPRIATE LOCATION ABOVE GROUND ACCORDING TO SCD ITS-12.10 OR ITS-12.11.

FOR THIS SITE, LOCATED AT STA. 354+05, 127.5' RT., THE POLE HEIGHT SHALL BE 70 FT ABOVE GROUND. THE EMBEDMENT DEPTH FOR A CONCRETE POLE SHALL BE 10 FT.

THE CONTRACTOR MAY FURNISH/INSTALL LONGER OVERALL LENGTH CONCRETE POLES AT A DEEPER EMBEDMENT DEPTH IF IT IS MORE BENEFICIAL FOR MANUFACTURING, SHIPPING, ETC., AS LONG AS ALL ABOVE GROUND COMPONENTS MAINTAIN APPROPIATE HEIGHT LEVEL.

THE CONTRACTOR SHALL SUBMIT ALL POLE MANUFACTURER FABRICATION DRAWING SUBMITTALS, AS WELL AS INSTALLATION PROCEDURES AND BACKFILL MATERIAL, TO THE ENGINEER FOR ACCEPTANCE BEFORE ORDERING.

PAYMENT FOR EACH POLE COMPLETE, INSTALLED, AND ACCEPTED SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 809, CCTV POLES, 70' TALL.

			Strength I Limit State		Service I Limit State						
CCTV Camera Pole Location	CCTV Camera Pole Height Above Ground (ft)	CCTV Camera Pole Foundation Length (ft)	Maximum Moment in Pole Foundation (in-lbs)	Maximum Shear in Pole Foundation (lbs)	Foundation Head Deflection (in)	Foundation Butt Deflection (in)	Differential Deflection over Foundation Length (in)	Differential Deflection / Foundation Head Deflection	Is It Fixed-Tip (Differential Deflection / Foundation Head Deflection<1.005	Lateral Ration at Foundation Head (radians)	Lateral Deflection at Pole Head (in)
STA. 354+05	70	10	533,108	-13,256	0.00402	0.000005	0.004025	1.001366	Yes	0.0001	0.093

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SIGNAL NOTES

SUM-077/008-11.65/00.00
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DESIGN AGENCY
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DESIGNER
JAW

REVIEWER
KDK 05/19/26

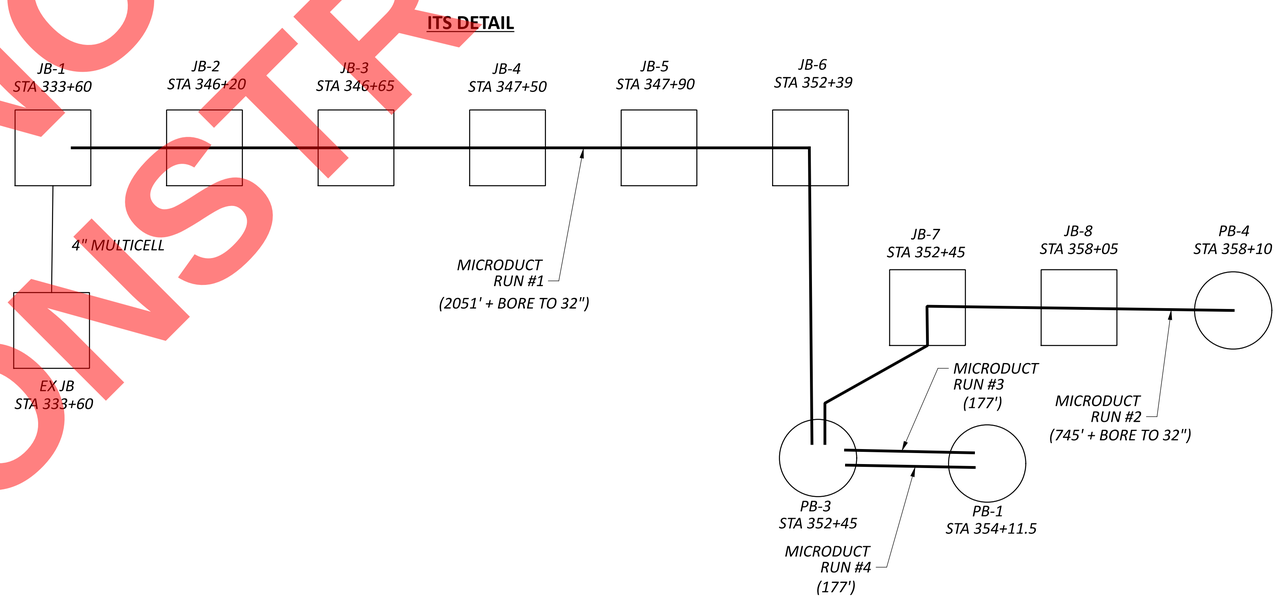
PROJECT ID
114865

SHEET P.281 TOTAL 627

SHEET	LOCATION	SIDE	625			804	809									
			PULL BOX, 725.08, 18"	PULL BOX REMOVED	TRENCH IN PAVED AREA	UNDERGROUND/WARNING TAPE	ITS JUNCTION BOX, 17X30X12 INCHES	32" ITS PULL BOX WITH PAD AND STANDARD LID ASSEMBLY, TYPE 2	CONDUIT, 2", MULTICELL, WITH 4 - 10/8MM INNERDUCTS	CONDUIT, 2", MULTICELL, JACKED OR DRILLED	ITS POWER SERVICE, POLE MOUNTED, 240/480V, 60 AM	CCTV IP-CAMERA SYSTEM, PTZ	CCTV POLE, 70' TALL	CCTV LOWERING UNIT	ITS CABINET - GROUND MOUNTED	ATC CONTROLLER
			EACH	EACH	FT	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
	JB-1, 333+60	LT		1			1		1255							
	JB-2, 346+20	LT					1		52							
	JB-3, 346+65	LT					1		70							
	JB-4, 347+50	LT					1		46							
	JB-5, 347+90	LT					1		448							
	JB-6, 352+39	LT					1		180	180						
	PB-3, 352+45	RT			20	177		1	177							
	PB-1, 354+11.5	RT			20	177		1	177							
	CCTV-1, 354+05	RT				10			10			1	1	1	1	1
	POWER SOURCE	RT		1	40	40					1					
	PB-2, 354+11.5	RT	1			148			148	148						
	JB-7, 352+45	LT							567							
	JB-8, 358+05	LT					1		20							
	PB-4, 358+10	LT						1	10	10						
	TOTALS CARRIED TO GENERAL SUMMARY		**1**	**2**	**80**	**552**	**7**	**3**	**3160**	**338**	**1**	**1**	**1**	**1**	**1**	**1**

SUBSUMMARY

ITS DETAIL



FINAL TRACINGS
NOT FOR
CONSTRUCTION

ITS SUBSUMMARY / ITS DETAIL

DESIGN AGENCY
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DESIGNER
JAW

REVIEWER
KDK 05/19/26

PROJECT ID
114865

SHEET P.282 | TOTAL 627

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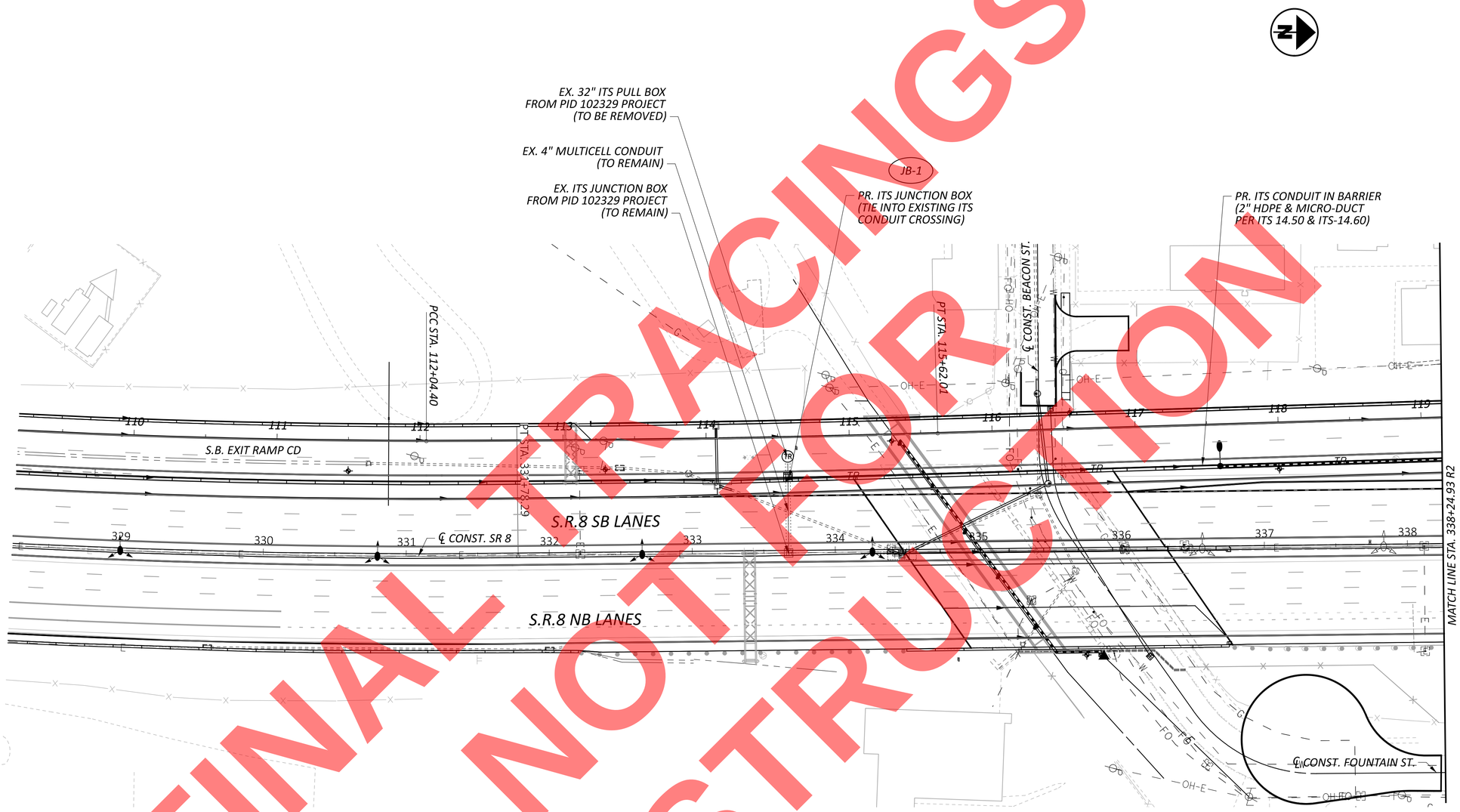

FINAL TRACINGS
NOT FOR
CONSTRUCTION

LEGEND

- PR. CCTV POLE W/ ITS CABINET
- PR. 32" ITS PULL BOX
- PR. ELECTRIC PULL BOX
- PR. POWER POLE
- TR — PR. ITS CONDUIT
- PR. ITS JUNCTION BOX

HORIZONTAL SCALE IN FEET
0 20 40 80

ITS PLAN
STA. 328+24.93 R2 TO STA. 338+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9566
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.283 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_LP011 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:52:18 PM USER: TBuniak
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FINAL TRACINGS
NOT FOR
CONSTRUCTION

LEGEND

- PR. CCTV POLE W/ ITS CABINET
- PR. 32" ITS PULL BOX
- PR. ELECTRIC PULL BOX
- PR. POWER POLE
- TR — PR. ITS CONDUIT
- TR — PR. ITS JUNCTION BOX

HORIZONTAL SCALE IN FEET
0 20 40 80

ITS PLAN
STA. 338+24.93 R2 TO 348+24.93 R2

SUM-077/008-11.65/00.00

MODEL: 114865_LP012 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:52:42 PM USER: TBuniak
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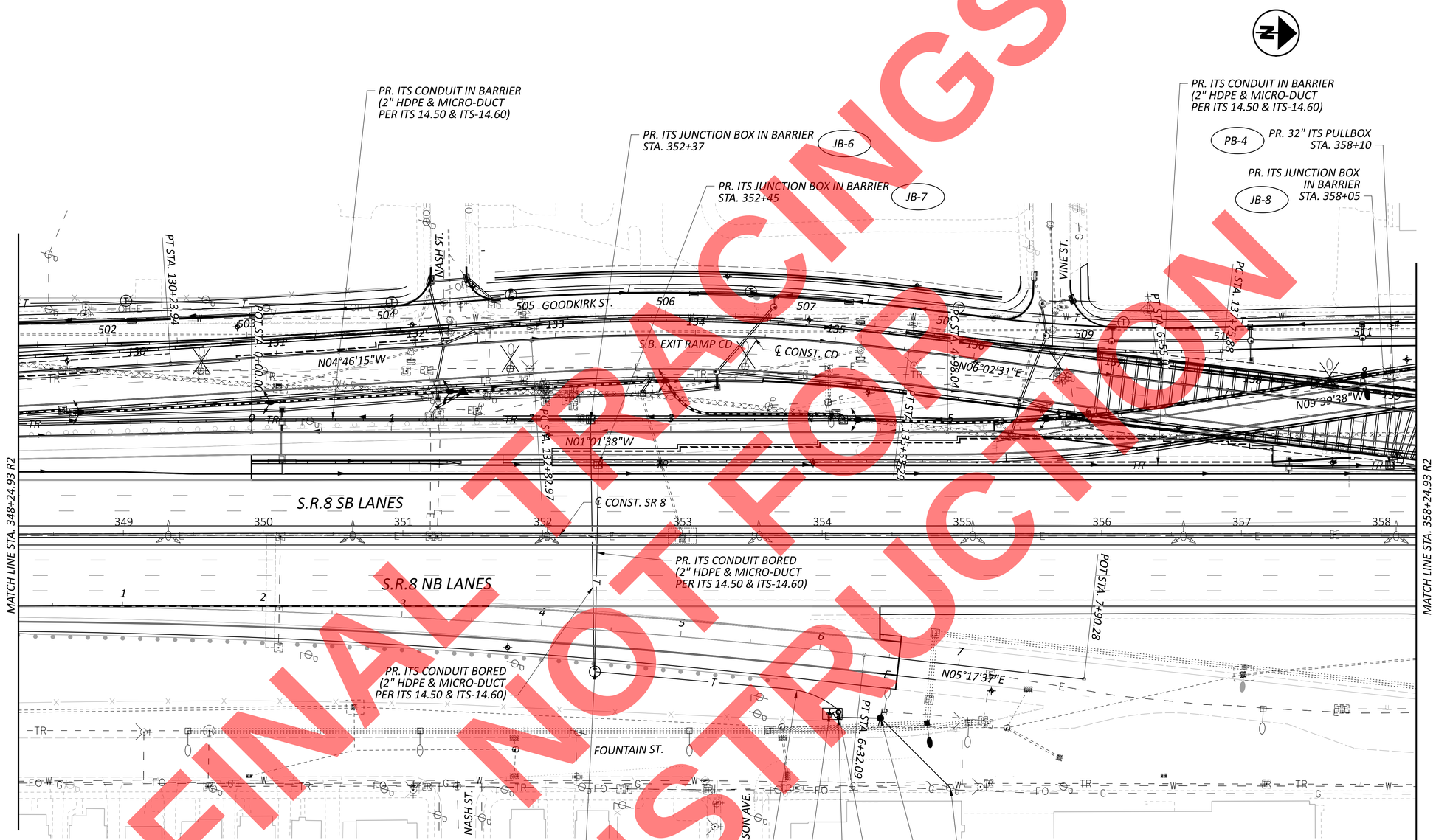
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9500
www.arcadis.com

DESIGNER: JAW
REVIEWER: KDK 05/19/26
PROJECT ID: 114865
SHEET: P.284 TOTAL: 627



LEGEND

- PR. CCTV POLE W/ ITS CABINET
- PR. 32" ITS PULL BOX
- PR. ELECTRIC PULL BOX
- PR. POWER POLE
- TR — PR. ITS CONDUIT
- PR. ITS JUNCTION BOX

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET 0 20 40 80

ITS PLAN
STA. 348+24.93 TO STA. 358+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.285 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_LP013 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:53:07 PM USER: TBuniak
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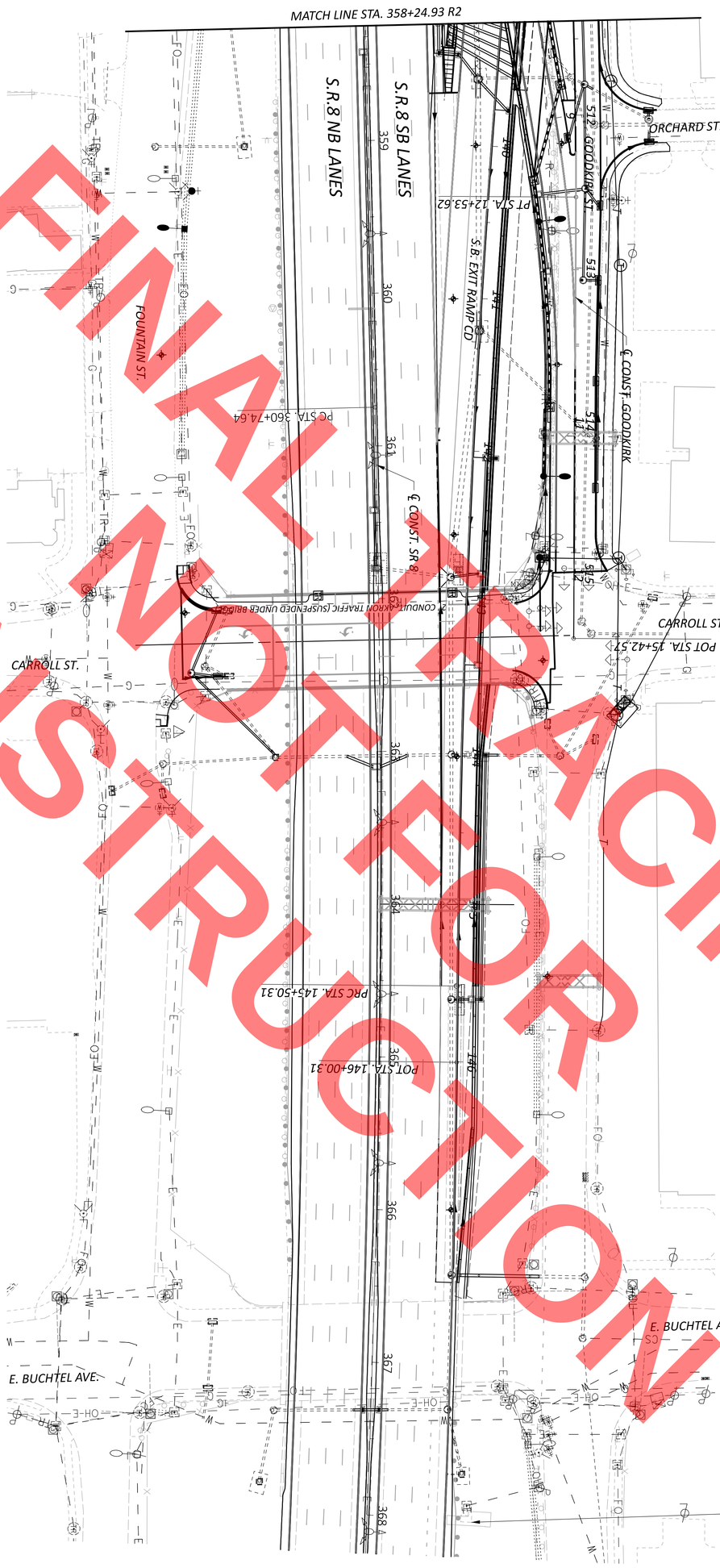

FINAL TRACINGS
NOT FOR CONSTRUCTION

SHEET	TOTAL
P.286	627

PROJECT ID: 114865

REVIEWER: KDK 05/19/26

DESIGNER: JAW

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

ITS PLAN
STA. 358+24.93 R2 TO STA. 368+24.93 R2

HORIZONTAL SCALE IN FEET
0 40
20 80

SUM-077/008-11.65/00.00

MODEL: Sheet_LB010 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:55:13 PM USER: TBuniak
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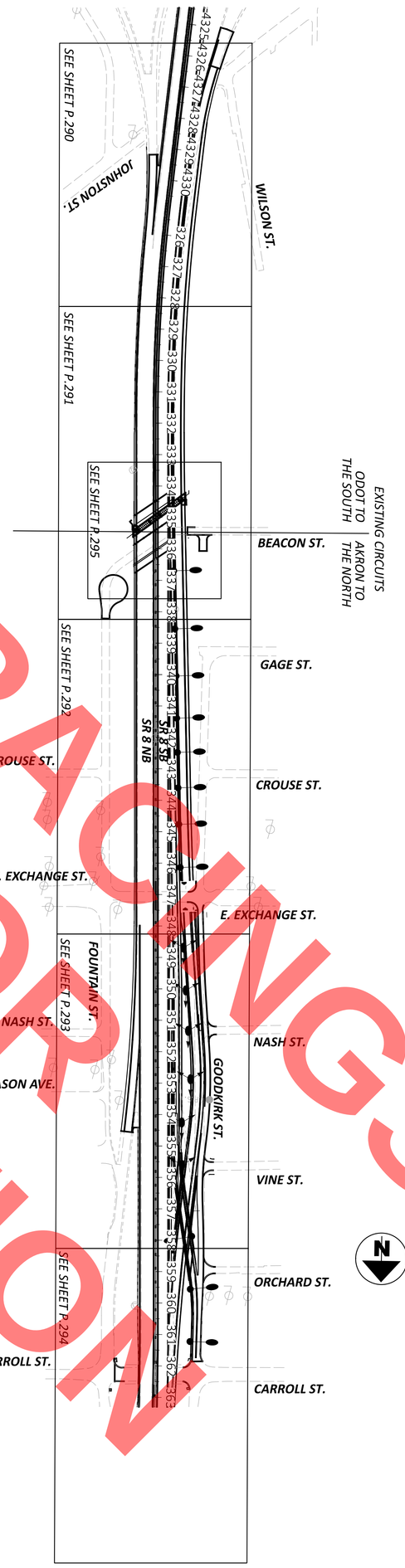
FINAL TRACINGS
NOT FOR
CONSTRUCTION



SHEET	TOTAL
P.287	627

PROJECT ID: 114865

REVIEWER: KDK 05/19/26

DESIGNER: JAW

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-1995
www.arcadis.com

LIGHTING SCHEMATIC

HORIZONTAL SCALE IN FEET
0 200
100 400

ITEM 625, POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

POWER COMPANY OHIO EDISON

ADDRESS 6326 LAKE AVE., ELYRIA, OH 44035

PHONE # 440-653-1931

CONTACT NAME JEFFREY HEURING, PE

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGN-MENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LUMINAIRE, TUNNEL, SOLID STATE (LED), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOTS CONSTRUCTION AND MATERIAL SPECIFICATION AND SUPPLEMENTAL SPECS 813 AND 913, THE TUNNEL LUMINAIRE SHALL BE AS FOLLOWS:

LUMINAIRES SHALL BE LUMEC TUNNEL VIEW LED SMALL, 3000K, TYPE SN, 38W; HOLOPHANE TUNNELPASS LED MEDIUM, PACKAGE 1, 3000K, CLN OPTIC OR APPROVED EQUAL.

LIGHTING FIXTURE SHALL BE VANDAL RESISTANT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "LUMINAIRE, TUNNEL, SOLID STATE (LED), AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOTS CONSTRUCTION AND MATERIAL SPECIFICATION AND SUPPLEMENTAL SPECS 813 AND 913, THE CONVENTIONAL LUMINAIRE SHALL BE AS FOLLOWS:

LUMINAIRES SHALL BE COOPER VERDEON; AEL ATBM; GE ERL2 OR APPROVED EQUAL.

LUMINAIRES SHALL BE 3000K, TYPE III DISTRIBUTION.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOTS CONSTRUCTION AND MATERIAL SPECIFICATION AND SUPPLEMENTAL SPECS 813 AND 913, THE LOW MAST LUMINAIRE SHALL BE AS FOLLOWS:

LUMINAIRES SHALL BE HOLOPHANE HMLED-4; GE EVOLVE HM; COOPER CELESTEON OR APPROVED EQUAL.

LUMINAIRES SHALL BE 3000K, TYPE V DISTRIBUTION.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625, CONDUIT, 1-1/4", 725.04, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 625 AND 725.04 CONDUITS INSTALLED UNDER THIS ITEM SHALL BE ATTACHED TO THE CEILING OF CULVERT SECTIONS. THE CONDUIT SHALL BE SECURED TO THE CEILING BY TWO-HOLE STRAPS SPACED AT 5 FOOT INTERVALS. TWO HOLES SHALL BE DRILLED 1 INCH INTO THE CONCRETE TO ACCOMMODATE 1/4-INCH DIAMETER STAINLESS STEEL AND/OR EPOXY CONCRETE ANCHORS.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "CONDUIT, 1-1/4", 725.04, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER. FOR PAYMENT PURPOSES, BRANCH CONDUIT TO LUMINAIRES SHALL BE CONSIDERED AS CONDUIT BENDS AND SHALL BE INCLUDED IN THIS PAY ITEM. BRANCH CONDUIT SHALL NOT EXCEED 30 INCHES IN LENGTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

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, ARC FLASH CALCULATIONS AND LABEL, LCC-GK

THE CONTRACTOR SHALL SATISFY THE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 825 FOR THE CONTROL CENTERS. THE CONTRACTOR MAY BE ABLE TO OBTAIN LABELS FOR THE ODOT MAINTAINED INSTALLATIONS FROM THE ODOT SIGN SHOP, 1606 WEST BROAD ST., COLUMBUS, OH 43223, FOR NON-ODOT MAINTAINED INSTALLATIONS THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LABEL MADE FROM "ENGINEER GRADE" SIGN SHEETING OR AN EQUIVALENT LABEL MATERIAL.

THE ODOT OFFICE OF ROADWAY ENGINEERING AND THE DISTRICT OFFICE HAVE AN EXCEL SPREADSHEET AVAILABLE UPON REQUEST, TO ASSIST WITH
MAKING AND DOCUMENTING THE REQUIRED CALCULATIONS.

METHOD OF MEASUREMENT SHALL BE AS PER 825.06. THE FOLLOWING THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUMMARY.

ITEM 625 ARC FLASH CALCULATION AND LABEL, POWER SERVICE 1 EACH

ITEM 625, UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN

UNDERGROUND WARNING/MARKING TAPE SHALL BE IN ACCORDANCE WITH CMS 725.22 EXCEPT THE TAPE SHALL NOT BE FURNISHED WITH TRACER WIRE AND THE REQUIRED MINIMUM BREAK STRENGTH SHALL BE WAIVED.

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.)

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.

ITEM 625, NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE, AS PER PLAN
ITEM 625, NO. 10 AWG POLE AND BRACKET CABLE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 625 AND 725, DISTRIBUTION CABLE AND POLE AND BRACKET CABLE SHALL BE ALUMINUM WIRE.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE AND NO. 10 AWG POLE AND BRACKET CABLE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

FINAL NOT FOR CONSTRUCTION
CONTRACT PLANS

LIGHTING NOTES

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
www.arcadis.com

DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SHEET P.288 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:55:34 PM USER: TBunlak
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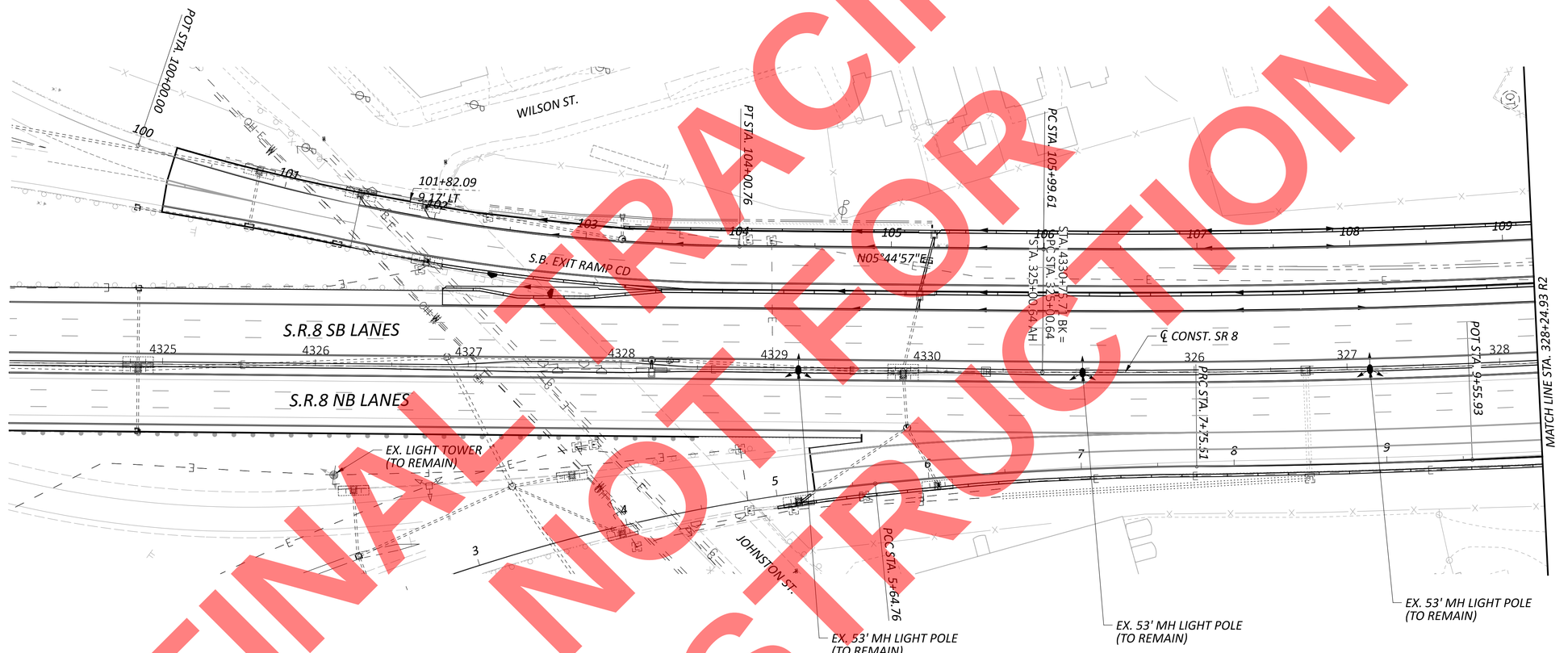
REF. NO.	SHEET NO.	STATION TO STATION	SIDE	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, A12B35 EACH	625 LIGHT POLE, LOW MAST, ALM50 EACH	625 LIGHT POLE, LOW MAST, ALM40 EACH	625 LIGHT POLE ANCHOR L-BOLTS EACH	625 LIGHT POLE FOUNDATION, 24"X8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE, AS PER PLAN (ALUMINUM WIRE) FT	625 NO. 10 AWG POLE AND BRACKET CABLE, AS PER PLAN (ALUMINUM WIRE) FT	625 CONDUIT, 1.25", 725.04 FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V) EACH	625 LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V) EACH	625 LUMINAIRE, TUNNEL, SOLID STATE (LED), AS PER PLAN (TYPE II, 240V) EACH	625 LUMINAIRE, UNDERPASS, SOLID STATE (LED) (TYPE II, 240V) EACH	625 TRENCH IN PAVED AREA FT	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 GROUND ROD EACH	625 POWER SERVICE, AS PER PLAN EACH	625 SERVICE TO UNDERPASS LIGHTING LS	625 UNDERGROUND WARNING/ MARKING TAPE, AS PER PLAN FT	625 POWER SERVICE REMOVED EACH	625 LIGHT POLE REMOVED EACH	625 LIGHT POLE FOUNDATION REMOVED EACH	625 LIGHTING MISC: CONTROL CENTER, REUSE CIRCUIT EACH	625 ARC FLASH CALCULATIONS AND LABEL, LCC-GK EACH
		CIRCUIT A																																	
GKA-11		336+70	LT	2		1					1	555	195		185		1									1									
GKA-10		338+54.4	LT	2		1					1	450	195		150		1									1									
GKA-9		340+04.6	LT	2		1					1	405	195		135		1									1									
GKA-8		341+38.6	LT	2		1					1	330	195		110		1									1									
GKA-7		342+47.6	LT	2		1					1	339	195		113		1									1									
GKA-6		343+60.8	LT	2		1					1	348	195		116		1									1									
GKA-5		344+76.6	LT	2		1					1	414	195		138		1									1									
GKA-4		346+13.9	LT	2		1					1	27	195		9		1					13				1				13					
JB-1		346+23.9	LT									135			45									1											
JB-2		346+67.6	LT									231			77									1											
JB-3		347+43.9	LT									279			93									1											
JB-4		129+45	RT									30			10										1										
PB-1		129+55	RT									15			5							5							5						
GKA-3		129+57.1	RT	2			1		4	1		408	150		136				1			136				1			136						
GKA-2		130+93.2	RT	2			1		4	1		387	150		129				1			129				1			129						
GKA-1		132+22.1	RT	2			1		4	1		30	150		10				1			10				1			10						
LCC-GK		132+31.5	RT									300			50							50				1	1		50	1	10	10	2	1	
		CIRCUIT B																																		
GKB-1		133+78.6	RT	2			1		4	1		435	150		145				1			145				1			145						
PB-2		4+18.1	LT									405			135							135			1				135						
JB-5		4+23.5	LT									30			10									1					0						
GKB-2		4+33.9	LT	2			1		4		1	60	150		20				1			140				1			140						
GKB-3		5+69.15	LT	2				1	4		1	405	150		135				1							1									
JB-6		5+98.3	LT									90			30									1					0						
JB-7		7+64.2	LT									498			166									1					0						
GKB-4		7+99.34	LT	2		1					1	108	195		36				1							1									
JB-8		8+79.3	LT									258			86									1					0						
JB-9		9+39.4	RT									195			65									1					0						
GKB-5		9+66.4	RT	2		1					1	81	195		27	28	1					28		2		1			28						
GKB-6		14+32.4	RT	2		1					1	489	195		163		1									1									
		E. EXCHANGE ST.																																		
UP1														100							1		1												
UP2														100							1		1												
		BEACON ST TUNNEL																																		
BT1					2							135	15	45							1		1												
BT2					2							135	15	45							1		1												
BT3					2							135	15	45							1		1												
BT4					2							135	15	45							1		1												
BT5					2							135	15	45							1		1												
LCC-BT												450		150								50					1	1	50						



LEGEND

- *EX. / PR. UNDERPASS LUMINAIRE*
- *EX. / PR. LOW MAST LIGHT POLE & LUMINAIRE*
- *EX. / PR. CONVENTIONAL LIGHT POLE & LUMINAIRE*
- *PROPOSED TUNNEL LUMINAIRE*
- *PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT*
- *PROPOSED 2" CONDUIT W/ (3)-NO. 4 AWG DISTRIBUTION CABLE*
- *PROPOSED ELECTRIC BOX*
- *PROPOSED CONTROL CENTER*
- *LIGHTING PULL BOX*

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 20 40 80

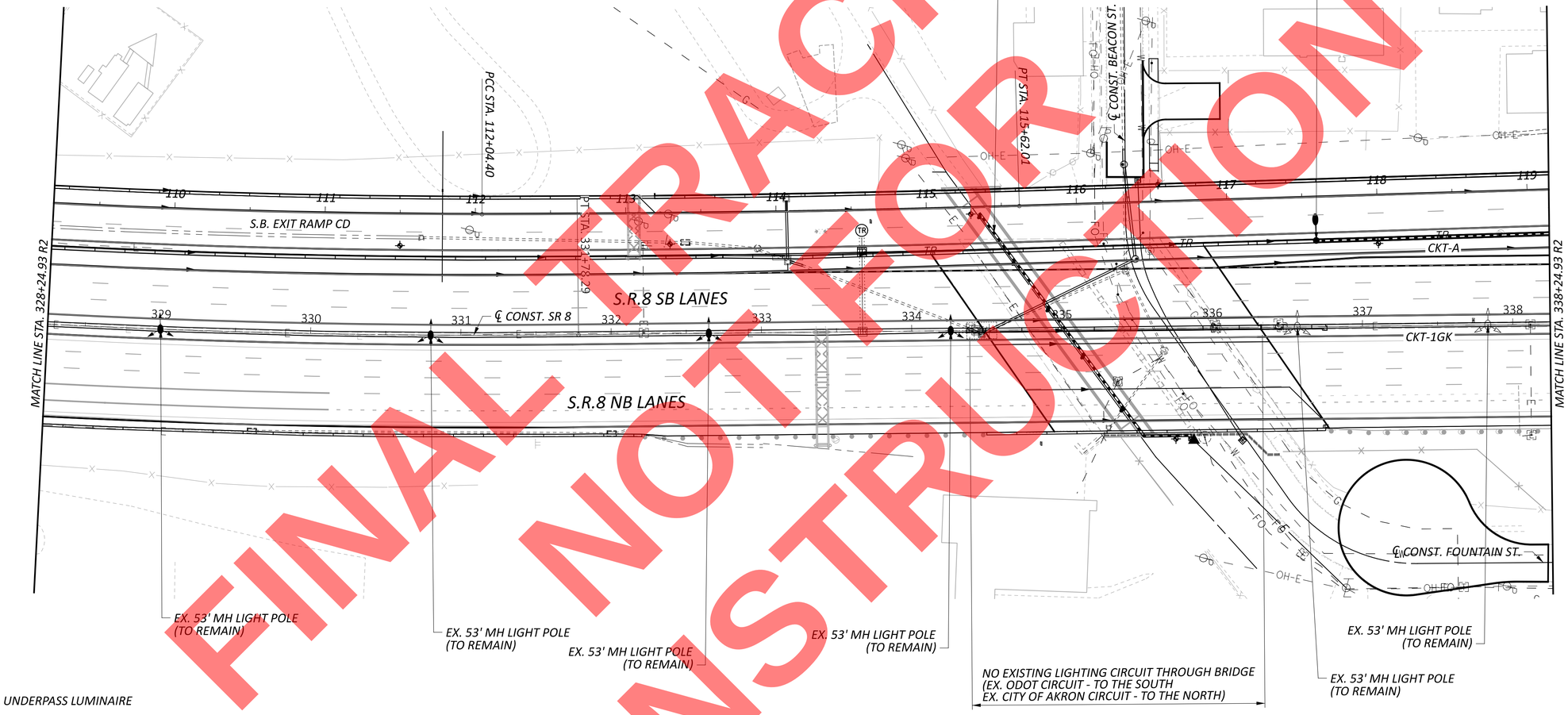
LIGHTING PLAN
STA. 4324+00.00 TO STA. 328+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4566
www.arcadis.com

DESIGNER: JAW
REVIEWER: KDK 05/19/26
PROJECT ID: 114865
SHEET: P.290 TOTAL: 627

SUM-077/008-11.65/00.00
MODEL: 114865_LP010 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:56:20 PM USER: TBuniak
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Lighting\Sheets\114865_LP010.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION



LEGEND

- EX. / PR. UNDERPASS LUMINAIRE
- EX. / PR. LOW MAST LIGHT POLE & LUMINAIRE
- EX. / PR. CONVENTIONAL LIGHT POLE & LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT
- PROPOSED 2" CONDUIT W/ (3)-NO. 4 AWG DISTRIBUTION CABLE
- PROPOSED ELECTRIC BOX
- PROPOSED CONTROL CENTER
- LIGHTING PULL BOX

HORIZONTAL SCALE IN FEET
0 20 40 80

LIGHTING PLAN
STA. 328+24.93 R2 TO STA. 338+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.291 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_LP011 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:56:45 PM USER: TBuniak
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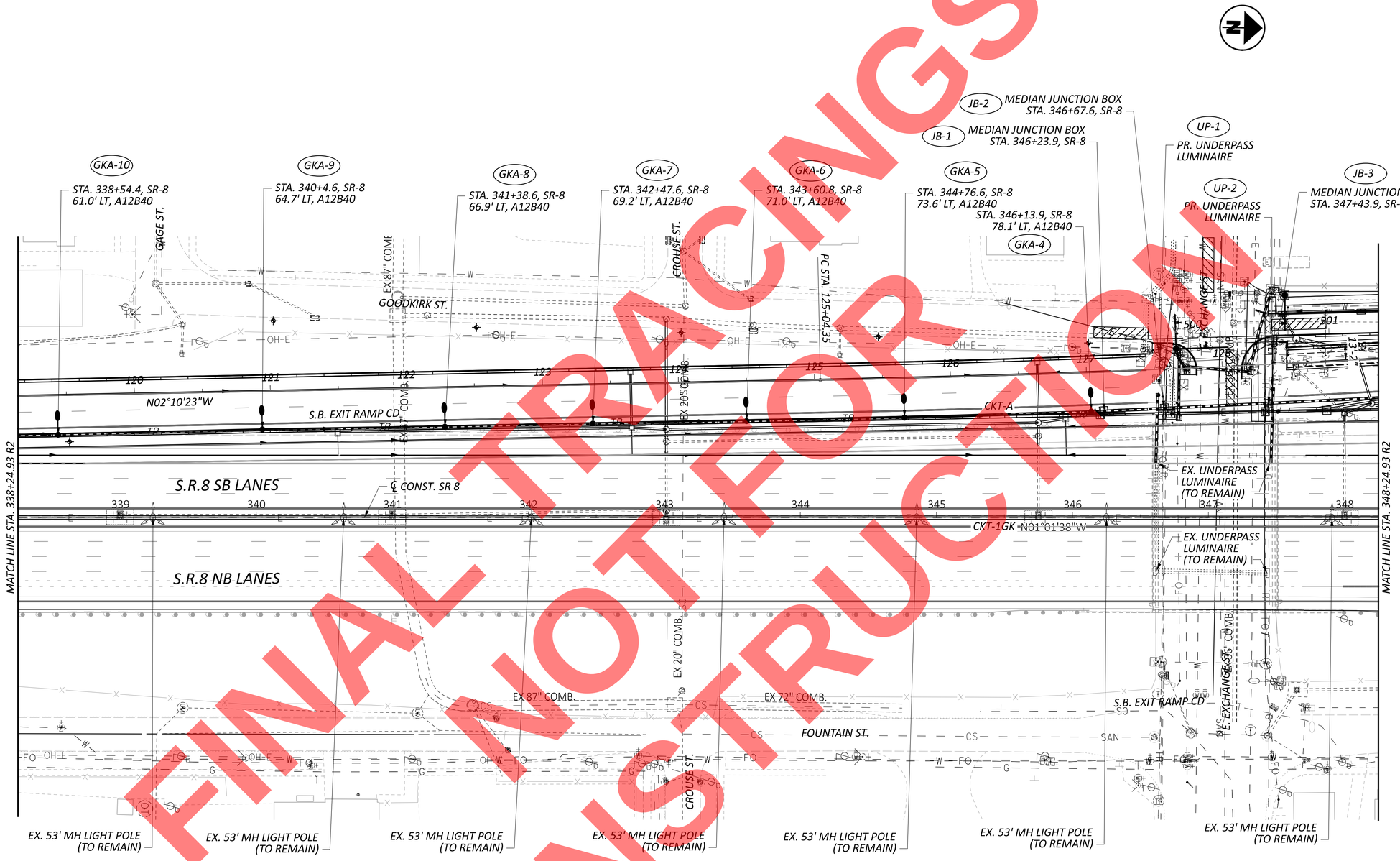

LEGEND

- EX. / PR. UNDERPASS LUMINAIRE
- EX. / PR. LOW MAST LIGHT POLE & LUMINAIRE
- EX. / PR. CONVENTIONAL LIGHT POLE & LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT
- PROPOSED 2" CONDUIT W/ (3)-NO. 4 AWG DISTRIBUTION CABLE
- PROPOSED ELECTRIC BOX
- PROPOSED CONTROL CENTER
- LIGHTING PULL BOX

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 20 40 80

LIGHTING PLAN
STA. 338+24.93 R2 TO 348+24.93 R2

SUM-077/008-11.65/00.00

MODEL: 114865_LP012 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:57:11 PM USER: TBuniak
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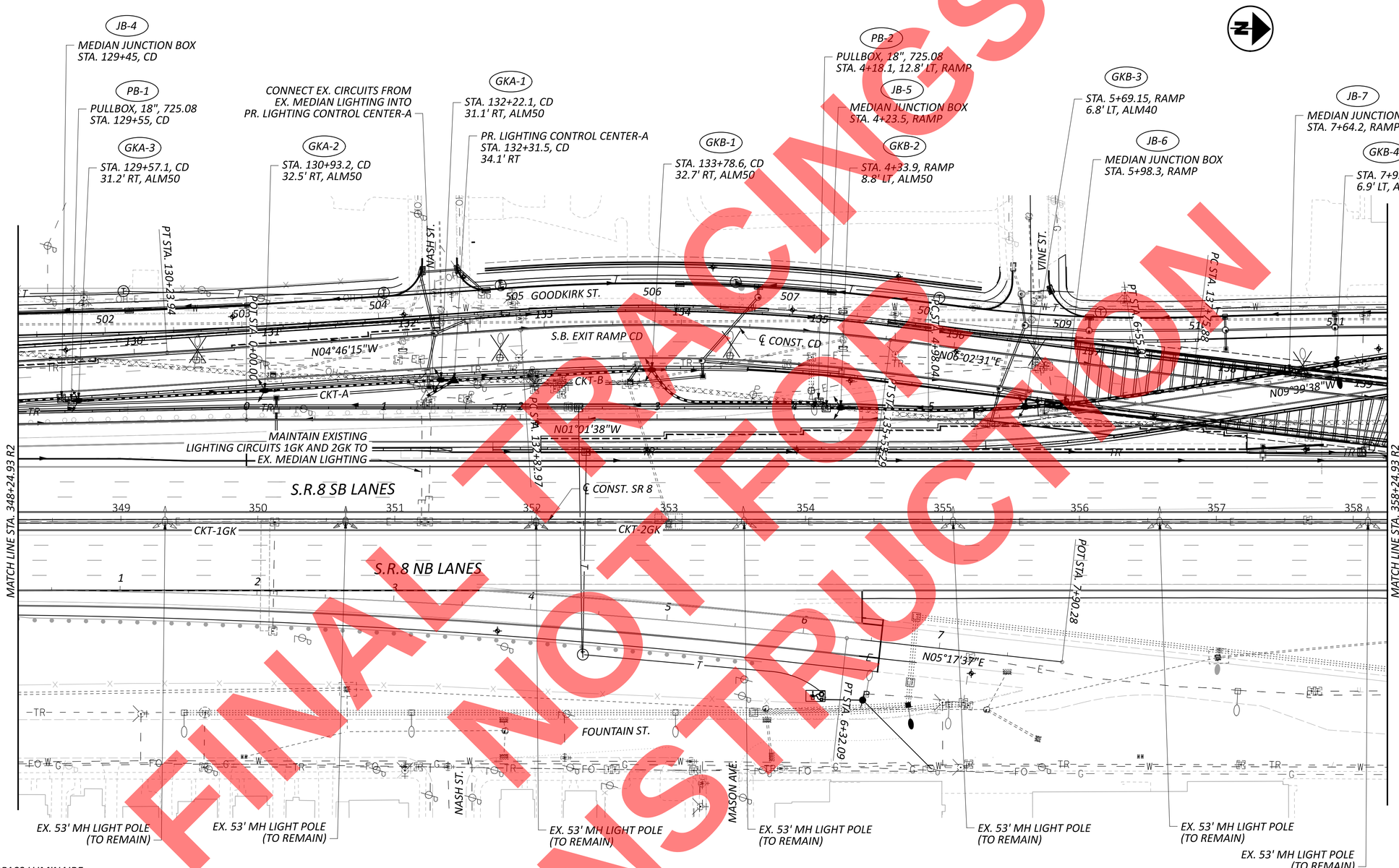
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4696
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.292 TOTAL 627



LEGEND

- EX. / PR. UNDERPASS LUMINAIRE
- EX. / PR. LOW MAST LIGHT POLE & LUMINAIRE
- EX. / PR. CONVENTIONAL LIGHT POLE & LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT
- PROPOSED 2" CONDUIT W/ (3)-NO. 4 AWG DISTRIBUTION CABLE (ALUMINUM WIRE)
- PROPOSED ELECTRIC BOX
- PROPOSED CONTROL CENTER
- LIGHTING PULL BOX

FINAL NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 20 40 80

LIGHTING PLAN
STA. 348+24.93 TO STA. 358+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9500
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.293 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_LP013 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:57:36 PM USER: TBuniak
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LEGEND

- EX. / PR. UNDERPASS LUMINAIRE
- EX. / PR. LOW MAST LIGHT POLE & LUMINAIRE
- EX. / PR. CONVENTIONAL LIGHT POLE & LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT
- PROPOSED 2" CONDUIT W/ (3)-NO. 4 AWG DISTRIBUTION CABLE
- PROPOSED ELECTRIC BOX
- PROPOSED CONTROL CENTER
- LIGHTING PULL BOX

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 20 40 80

LIGHTING PLAN
STA. 358+24.93 R2 TO STA. 368+24.93 R2

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.294 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_LP014 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:58:01 PM USER: TBuniak
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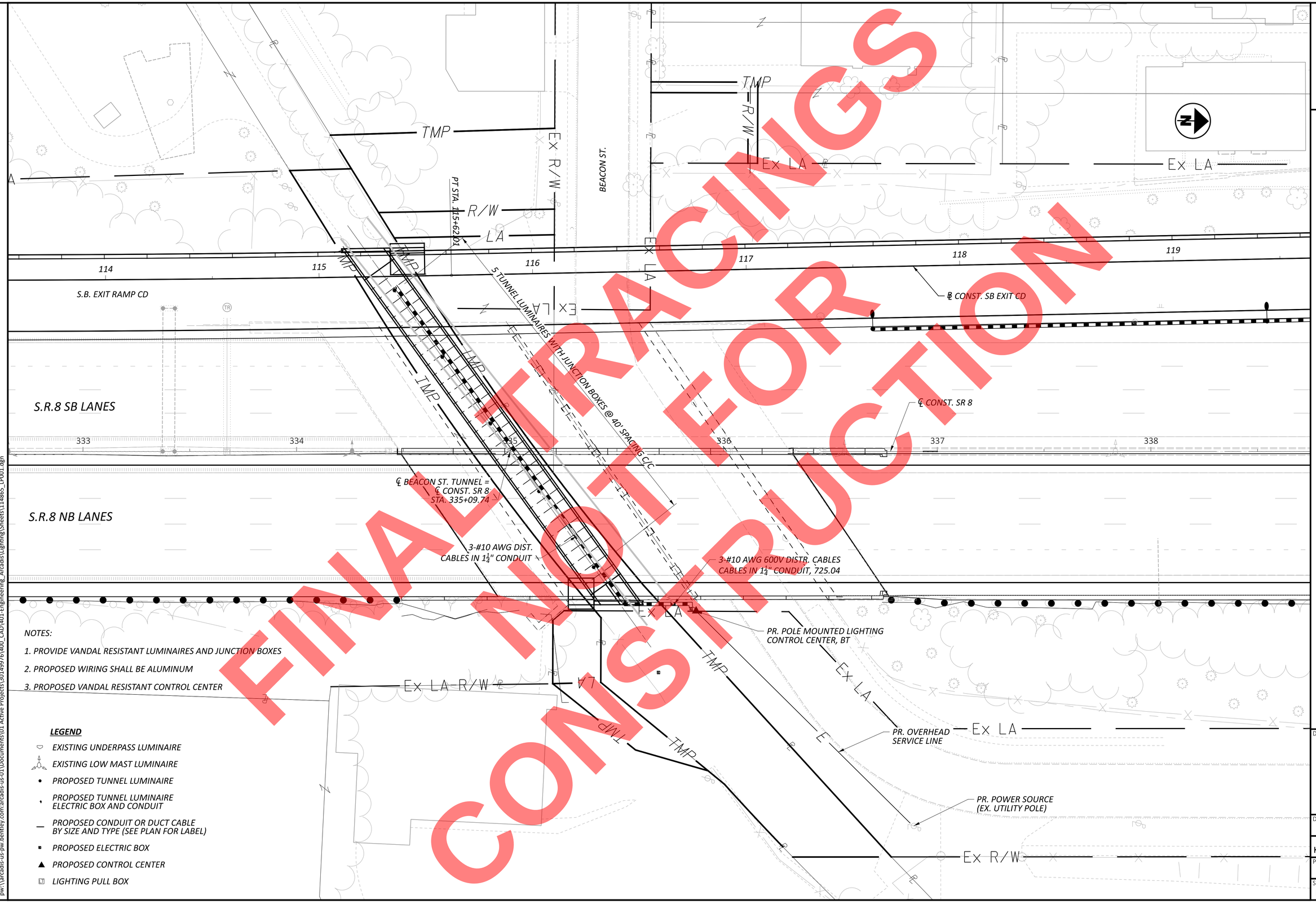

NOTES:

1. PROVIDE VANDAL RESISTANT LUMINAIRES AND JUNCTION BOXES
2. PROPOSED WIRING SHALL BE ALUMINUM
3. PROPOSED VANDAL RESISTANT CONTROL CENTER

LEGEND

- EXISTING UNDERPASS LUMINAIRE
- EXISTING LOW MAST LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE
- PROPOSED TUNNEL LUMINAIRE ELECTRIC BOX AND CONDUIT
- PROPOSED CONDUIT OR DUCT CABLE BY SIZE AND TYPE (SEE PLAN FOR LABEL)
- PROPOSED ELECTRIC BOX
- PROPOSED CONTROL CENTER
- LIGHTING PULL BOX

FINAL TRACINGS NOT FOR CONSTRUCTION

LIGHTING PLAN
BEACON STREET TUNNEL

SUM-077/008-11.65/00.00

MODEL: Sheet_LP001 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:58:31 PM USER: TBuniak
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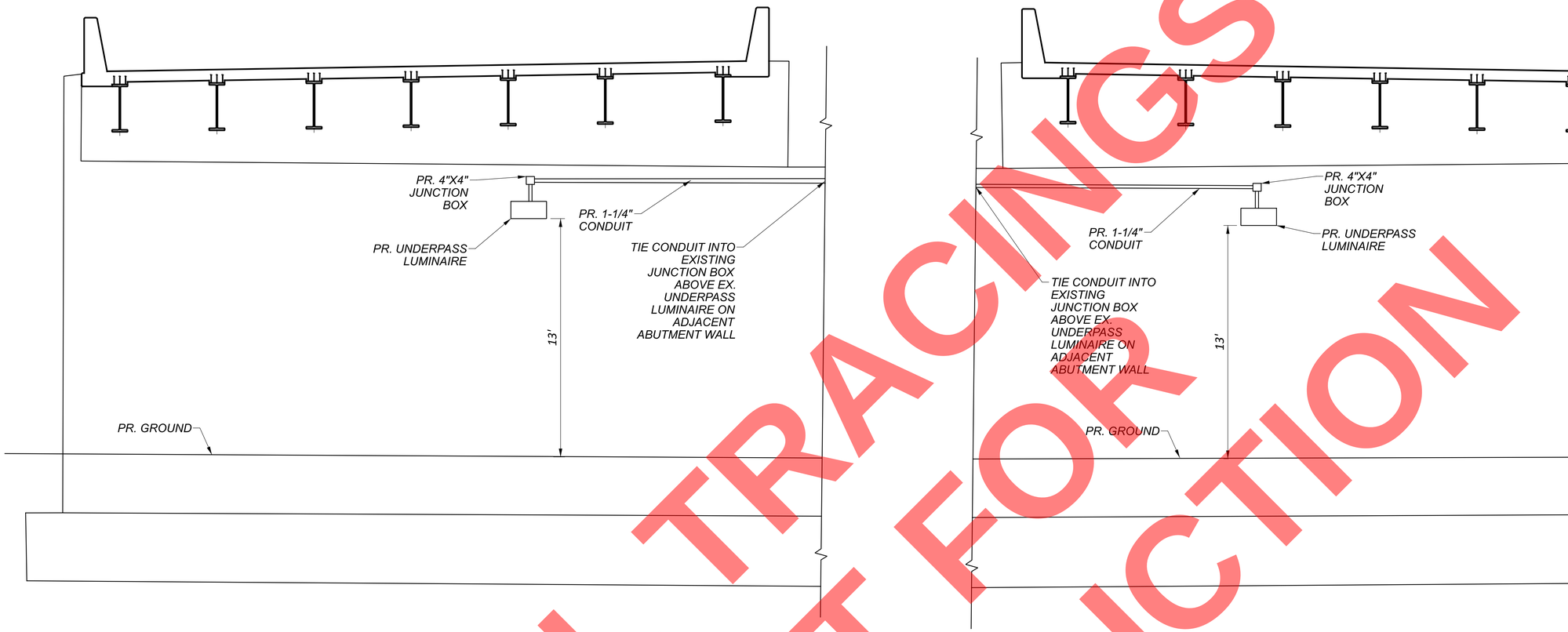
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
www.arcadis.com

DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SHEET P.295 | TOTAL 627

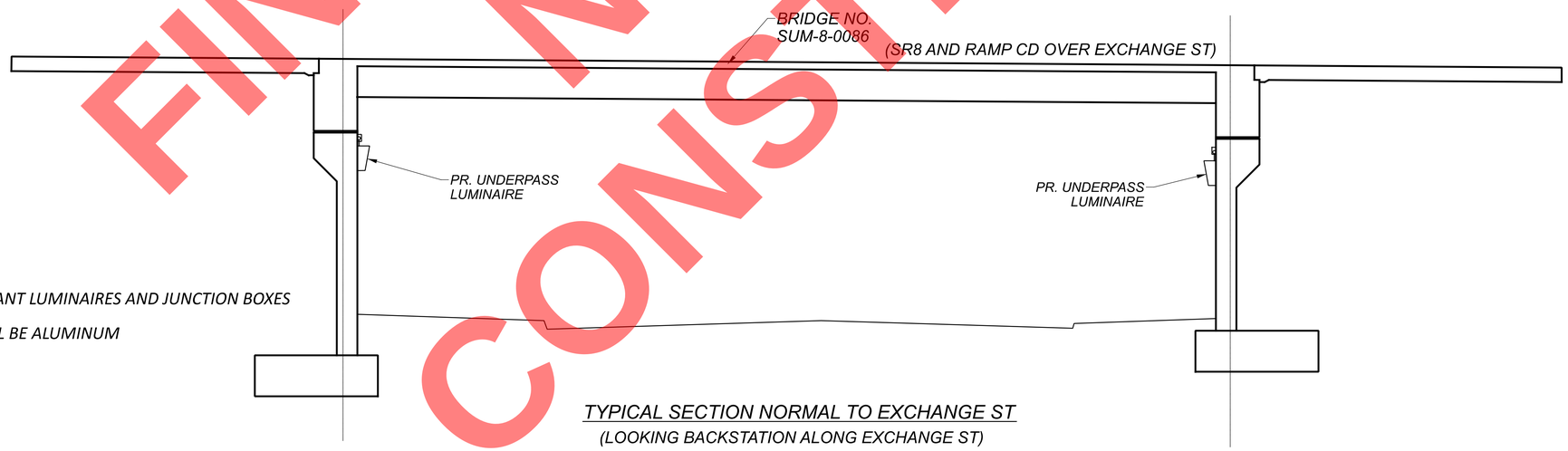


FORWARD ABUTMENT ELEVATION

(BRIDGE NO. SUM-8-0086)
(SR8 AND RAMP CD OVER EXCHANGE ST)

REAR ABUTMENT ELEVATION

(BRIDGE NO. SUM-8-0086)
(SR8 AND RAMP CD OVER EXCHANGE ST)



TYPICAL SECTION NORMAL TO EXCHANGE ST

(LOOKING BACKSTATION ALONG EXCHANGE ST)

NOTES:

1. PROVIDE VANDAL RESISTANT LUMINAIRES AND JUNCTION BOXES
2. PROPOSED WIRING SHALL BE ALUMINUM

FINAL TRACINGS
NOT FOR CONSTRUCTION

LIGHTING DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-5995
www.arcadis.com

DESIGNER JAW

REVIEWER KDK 05/19/26

PROJECT ID 114865

SUBSET 1 | TOTAL 2

SHEET P.296 | TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:58:52 PM USER: TBuniak
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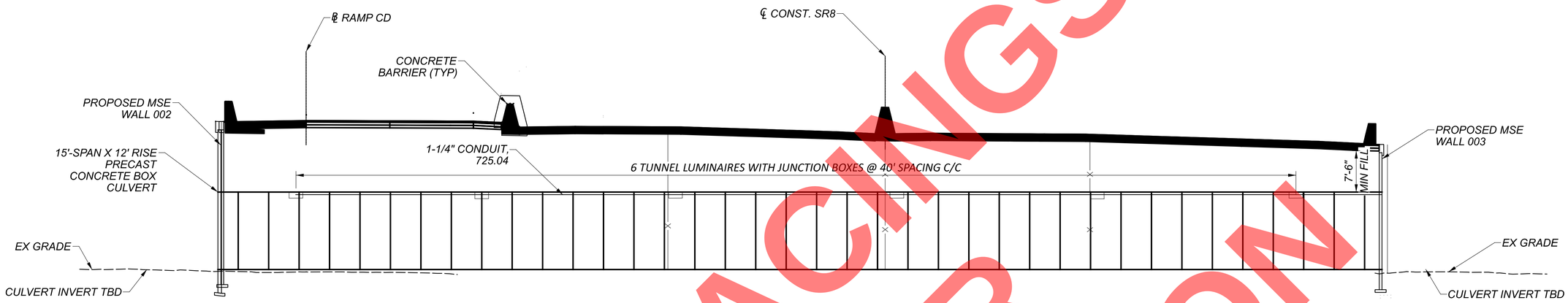
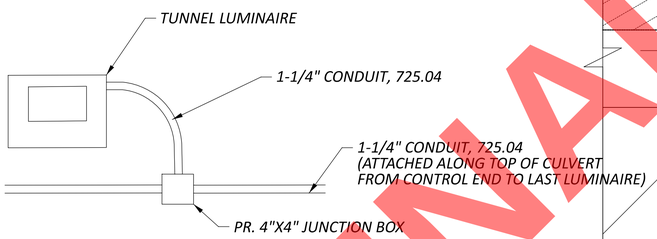


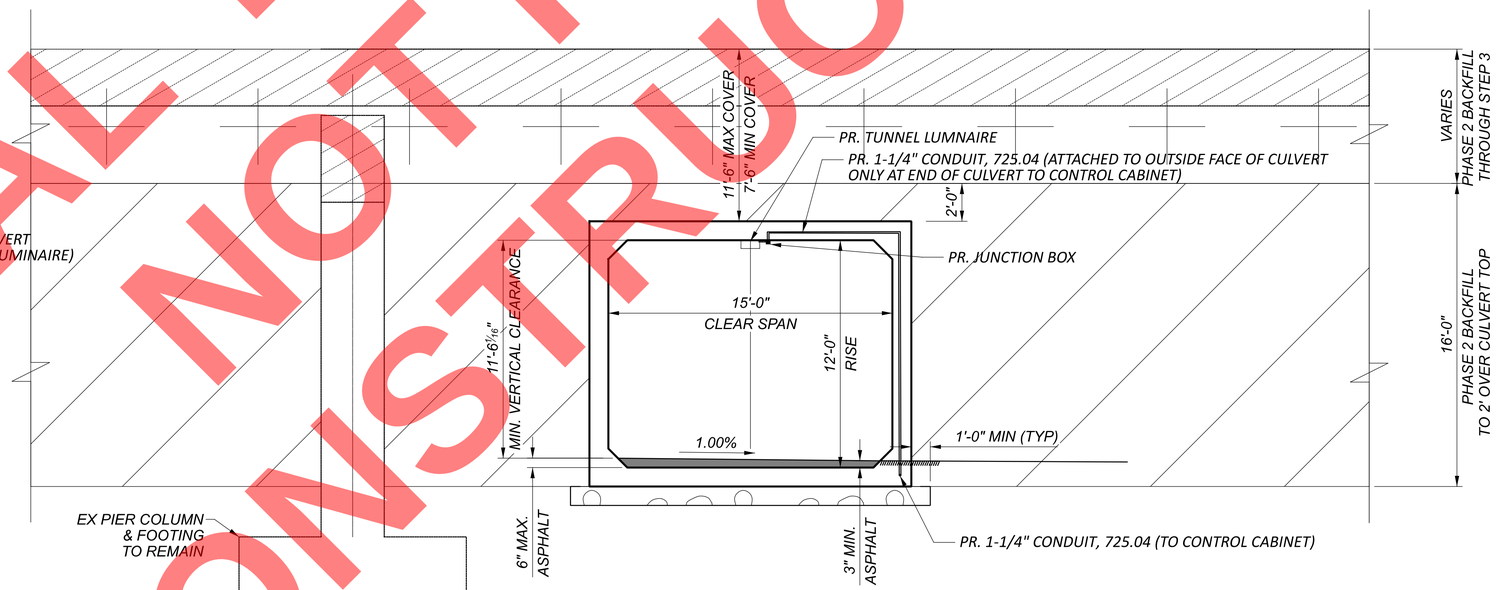
BEACON STREET BOX CULVERT
ELEVATION
(NORMAL TO ℄ CONST SR-8)



TYPICAL LAYOUT ON CEILING
AT LUMINAIRE
(VIEW LOOKING UP)

NOTES:

1. PROVIDE VANDAL RESISTANT LUMINAIRES AND JUNCTION BOXES
2. PROPOSED WIRING SHALL BE ALUMINUM



TYPICAL SECTION NORMAL TO ℄ CONST CULVERT
(LOOKING UPSTATION ALONG ℄ CONST CULVERT)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

LIGHTING DETAILS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SUBSET 2 TOTAL 2
SHEET P.297 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:59:08 PM USER: TBuniak
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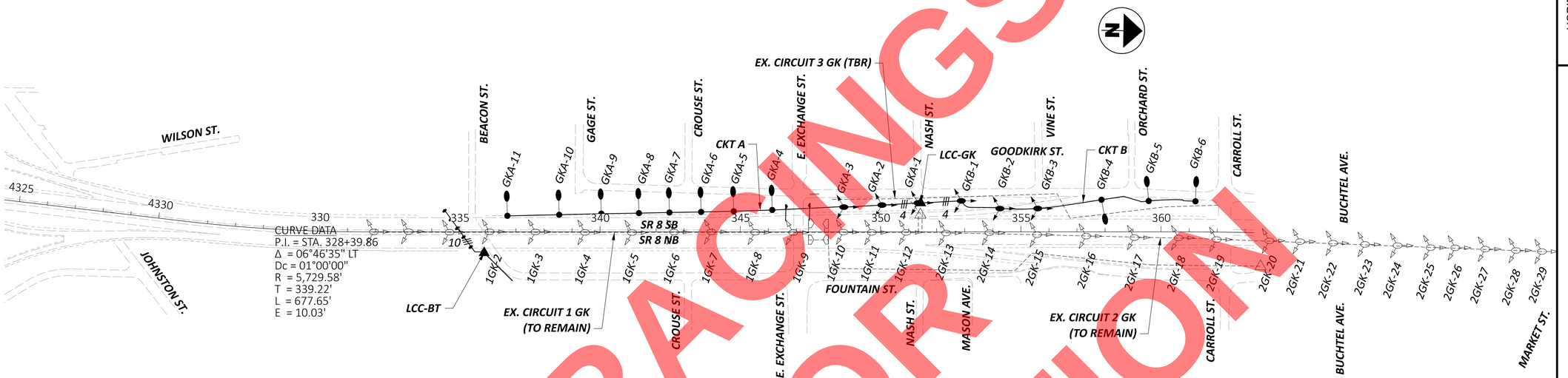

HORIZONTAL SCALE IN FEET
0 100 200 400

CONTROL CENTER DATA

CONTROL CENTER DESIGNATION	LINE VOLTS	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR SIZE - AWG	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD AMPS	CIRCUIT FUSE SIZE AMPS	CIRCUIT CABLE SIZE AWG	MAINTAINING AGENCY
LCC-GK	480	25.7	2	100	A	8.74	20	4	CITY OF AKRON
					B	5.34	10	4	
					1	21.52	30	4	
					2	18.00	30	4	
					-	-	-	-	
					-	-	-	-	

CONTROL CENTER DATA

CONTROL CENTER DESIGNATION	LINE VOLTS	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR SIZE - AWG	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD AMPS	CIRCUIT FUSE SIZE AMPS	CIRCUIT CABLE SIZE AWG	MAINTAINING AGENCY
LCC-BT	240	0.6	2	60	BT	2.50	10	10	CITY OF AKRON
					-	-	-	-	
					-	-	-	-	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

LIGHTING CIRCUIT

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER JAW
REVIEWER KDK 05/19/26
PROJECT ID 114865
SHEET P.298 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet_LB010 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 12:59:24 PM USER: TBuniak
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STANDARD DRAWINGS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

SBR-1-20 REVISED 07/19/24

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

SS 840 DATED 01/16/26

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 AND THE ODOT BRIDGE DESIGN MANUAL, 2020

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THESE STRUCTURES IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN DATA

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (WALLS 6, 8, 9 & 10), (WALLS 2, 3, 4, 5 & 7 COPING) (WALLS 1 & 3 CONCRETE FACING)

CONCRETE CLASS QC5, WITH 1" OR 3/8" NOMINAL MAX. AGGREGATE SIZE - COMPRESSIVE STRENGTH 4.5 KSI (WALLS 1 & 3 DRILLED SHAFTS)

CONCETE CLASS QC MISC. - COMPRESSIVE STRENGTH 4.0 KSI (WALLS 1 & 3 LEVELING PAD)

STEEL H-PILES - ASTM A572 YIELD STRENGTH 50 KSI (WALLS 1 & 3)

EPOXY COATED REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI (WALL 1 & 3 CONCRETE FACING, PRECAST LAGGING PANELS & DRILLED SHAFTS), (WALLS 2, 3, 4, 5 & 7 COPING) (WALLS 6, 8, 9, & 10)

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 STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 509 - EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN: (WALLS 6, 8, 9 & 10)

IN ADDITION TO THE REQUIREMENTS OF ITEM 509, THE REINFORCING STEEL SHALL BE BENT IN THE FIELD TO FOLLOW THE ALIGNMENT OF THE WALL (WALLS 6 & 10) AND FIELD CUT AS NECESSARY AT DRAINAGE STRUCTURES (WALLS 9 & 10). ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 509, EPOXY COATED REINFORCING STEEL, AS PER PLAN.

ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES (WALL 1 & 3)

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

ITEM 524 - DRILLED SHAFTS INTO BEDROCK, AS PER PLAN (WALLS 1 & 3)

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR 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 SUPLLEMENTED BELOW.

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 PILE 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 IS DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC5 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 SOLDIER PILE IS ACCEPTABLE.

CHECK THE POSITION, THE VERTICAL ALIGNMENT AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

PLACE LAGGING SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING. WAIT AT LEAST 12 HOURS AFTER PLACING BEFORE PLACING LAGGING.

PROTECTION OF UNATTENDED OPEN SHAFTS: CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE LAGGING.

ITEM 610 - SPECIAL - RETAINING WALL. MISC.: TIMBER LAGGING (WALLS 1 & 3)

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING UNTREATED HARDWOOD LAGGING TO SERVE AS TEMPORARY LAGGING FOR THE SOLDIER PILE WALL. THE LAGGING SHALL CONSIST OF SOUTHERN PINE NO. 2 OR BETTER, WITH NOMINAL 4"X8" DIMENSIONS. LAGGING SHALL BE PLACED AS EXCAVATION OR EMBANKMENT PLACEMENT PROGRESSES. AT NO TIME SHOULD MORE THAN 3 FEET OF UNSUPPORTED EXCAVATION BE PERMITTED. REDUCE THE UNSUPPORTED HEIGHT AS NECESSARY TO PREVENT CAVING AND SLOUGHING OF THE SOILS BETWEEN THE SOLDIER PILES. PROVIDE ¼" TO ¾" HORIZONTAL JOINT SPACING BETWEEN THE LAGGING BOARDS TO PERMIT DRAINAGE.

THE DEPARTMENT WILL MEASURE THE TEMPORARY SOUTHERN PINE NO. 2 LAGGING BY THE NUMBER OF SQUARE FEET AND WILL DETERMINE THE AREA FROM PLAN DIMENSIONS USING A LENGTH MEASURED ALONG A HORIZONTAL LINE ALONG THE CENTERLINE OF THE SOLDIER PILES AND A HEIGHT FROM THE BOTTOM OF THE LAGGING TO THE TOP. PAYMENT IS FULL COMPENSATION FOR FURNISHING AND PLACING ALL MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID PER SQUARE FOOT FOR ITEM 610 - SPECIAL - RETAINING WALL, MISC.: TIMBER LAGGING

ITEM SPECIAL - RETAINING WALL, MISC.: GEOCOMPOSITE DRAIN (WALLS 1 & 3)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING PREFABRICATED GEOCOMPOSITE DRAIN (PGD) VERTICALLY AND CENTERED IN EACH SOLDIER PILE BAY. THE PGD SHALL BE THE WIDTH AS SHOWN ON THESE PLANS WITHIN EACH SOLDIER PILE BAY. THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING OR AN EQUAL PGD APPROVED BY THE ENGINEER.

AMERIDRAIN 200
AMERICAN WICK DRAIN CORPORATION, INC.
1209 AIRPORT ROAD
MONROE, NC 28110-7389
PHONE: 1-800-242-9425 OR 704-238-9200

TENCATE G100N
TENCATE GEOSYNTHETICS NORTH AMERICA
365 SOUTH HOLLAND DRIVE
PHONE: 1-800-685-9900 OR 706-693-2226

J-DRAIN 200
JDR ENTERPRISES, INC.
292 SOUTH MAIN STREET. SUITE 200
ALPHARETTA, GA 30009
PHONE: 1-800-843-7569 OR 770-442-1467

INSTALL THE DRAIN PER THE MANUFACTURER'S RECOMMENDATIONS. PLACE THE GEOTEXTILE SIDE OF THE DRAIN AGAINST THE RETAINED SLOPE FACE. EXTEND THE DRAIN TO THE FULL HEIGHT OF THE WALL AS SHOWN IN THE PLANS. CARRY THE DRAIN TO THE BOTTOM OF THE WALL AND OUTLET TO THE UNDERDRAIN AS SHOWN ON WALL DETAIL SHEETS. THE DEPARTMENT WILL MEASURE THE DRAIN BY THE NUMBER OF SQUARE YARDS OF SURFACE AREA OF DRAIN PLACED. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL - RETAINING WALL, MISC.: GEOCOMPOSITE DRAIN.

LATERALLY LOADED DRILLED SHAFTS (WALLS 1 & 3)

THE LOADS PRODUCE A MAXIMUM SERVICE LATERAL LOAD AND BENDING MOMENT TO BE SUPPORTED BY EACH DRILLED SHAFT OF 59.79 KIPS, AND 308.28 KIP-FT (WALL 1), AND 60.41 KIPS, AND 478.80 KIP-FT (WALL 3) RESPECTIVELY. THESE LOADS PRODUCE A MAXIMUM FACTORED BENDING MOMENT OF 457.11 KIP-FEET (WALL 1) AND 775.07 KIP-FEET (WALL 3), AND A MAXIMUM FACTORED SHEAR OF 82.07 KIPS (WALL 1) AND 88.14 KIPS (WALL 3), WITHIN THE DRILLED SHAFT.

MINIMUM SOIL REINFORCEMENT LENGTH

THE MINIMUM SOIL REINFORCEMENT LENGTH IS 70% OF THE WALL HEIGHT OR 8 FEET, WHICHEVER IS GREATER (WALLS 2, 4, 5 & 7). THE MINIMUM SOIL REINFORCEMENT LENGTH IS 80% OF THE WALL HEIGHT OR 8 FEET, WHICHEVER IS GREATER (WALL 3).

REINFORCING STEEL (WALLS 2, 3, 4, 5 & 7)

UPON THE WALL MANUFACTURER'S MSE WALL DESIGN, AND AS DESCRIBED IN THE PLANS AND SS 840, FURNISH AND INSTALL EPOXY COATED REINFORCING STEEL ACCORDING TO CMS 509 AND INCIDENTAL TO ITEM 840 - MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN.

FOOTING (WALL 6 (STA. 601+71.27 TO STA. 604+25.51), WALL 8 (SECTION B), WALL 9 & WALL 10)

FOOTING SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER.

FOUNDATION PREPARATION, AS PER PLAN (WALLS 2, 3, 4, 5 & 7)

PRIOR TO CONSTRUCTION OF THE MSE WALL, THE EXISTING IN-SITU SOILS SHALL BE REMOVED AND THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH GRANULAR MATERIAL TYPE C TO THE TOP OF THE FOUNDATION PREPARATION LAYER. IF SOFT OR LOOSE SOILS ARE ENCOUNTERED BELOW THE BOTTOM OF THE FOUNDATION PREPARATION LAYER, THE OVEREXCAVATION MAY NEED TO EXTEND DEEPER. THE LIMITS SHOULD BE VERIFIED AND ADJUSTED AFTER RECEIVING THE FINAL MSE WALL DRAWINGS. THE COST INCLUDED WITH THE UNIT PRICE BID FOR ITEM 840, FOUNDATION PREPERATION, AS PER PLAN FOR PAYMENT.

FOUNDATION BEARING RESISTANCE: (WALLS 2, 3, 4, 5 & 7)

WALL 2:

STA. 0+00 TO STA. 3+00
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.14 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 5.75 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 8.1 KIPS PER SQUARE FOOT.

STA. 3+00 TO STA. 5+50
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 5.72 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 7.87 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 10.4 KIPS PER SQUARE FOOT.

STA. 5+50 TO STA. 8+00
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.14 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 5.20 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 8.0 KIPS PER SQUARE FOOT.

STA. 8+00 TO STA. 11+00
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.70 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 6.47 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 10.1 KIPS PER SQUARE FOOT.

STA. 11+00 TO STA. 14+23.79
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 5.18 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 7.14 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 9.1 KIPS PER SQUARE FOOT.

WALL 3:

STA. 0+00 TO STA. 1+24.09
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.59 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 6.33 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 8.2 KIPS PER SQUARE FOOT.

WALL 4:

STA. 400+00.07 TO STA. 402+25.00
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.1 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 5.7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 14.7 KIPS PER SQUARE FOOT.

STA. 402+25.00 TO STA. 403+75.95
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.9 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 4.1 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 72.3 KIPS PER SQUARE FOOT.

WALL 5:

STA. 499+70 TO STA. 505+50.85
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.4 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 6.0 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 157.4 KIPS PER SQUARE FOOT.

WALL 7:

STA. 700+00.00 TO STA. 702+18.76
THE REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.2 KIPS PER SQUARE FOOT AND A MAXIMUM FACTORED LIMIT STATE BEARING PRESSURE OF 5.7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 124.7 KIPS PER SQUARE FOOT.

ITEM 622 - BARRIER, MISC.: MOMENT SLAB BARRIER (WALLS 2, 3, 4 & 5)

AS SOON AS A CONCRETE SAW CAN BE OPERATED WITHOUT DAMAGING THE FRESHLY PLACED CONCRETE, SAWCUT 1¼" DEEP CONTROL JOINTS INTO THE PERIMETER OF THE CONCRETE PARAPET STARTING AND ENDING AT THE ELEVATION OF THE ROADWAY GRADE. PLACE THE SAWCUTS AT A MINIMUM OF 6 FEET AND A MAXIMUM OF 10 FEET CENTERS. USE AN EDGE GUIDE, FENCE OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF ⅛ INCH. SEAL THE PERIMETER OF THE DEFLECTION CONTROL JOINT TO A MINIMUM DEPTH OF 1 INCH WITH A POLYURETHAN OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM ½ INCH OF THE INSIDE AND OUTSIDE FACE UNSEALED TO ALLOW WATER TO ESCAPE.

FOUNDATION BEARING RESISTANCE: (WALLS 6, 8, 9 & 10)

WALL 6:

STA. 600+13.38 TO STA. 600+31.07
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 0.9 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.3 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 20.6 KIPS PER SQUARE FOOT.

STA. 600+31.07 TO STA. 600+92.27
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.1 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.5 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 20.6 KIPS PER SQUARE FOOT.

STA. 600+92.27 TO STA. 601+71.27
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.2 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.5 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 20.6 KIPS PER SQUARE FOOT.

STA. 601+71.27 TO STA. 602+50.27
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.4 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 4.3 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 110.7 KIPS PER SQUARE FOOT.

STA. 602+50.27 TO STA. 603+90.18
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.4 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 4.3 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 110.7 KIPS PER SQUARE FOOT.

STA. 603+90.18 TO STA. 604+09.10
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.4 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 2.0 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 110.7 KIPS PER SQUARE FOOT.

STA. 604+09.10 TO STA. 604+25.21
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 0.8 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF1.3 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 110.7 KIPS PER SQUARE FOOT.

WALL 8:

STA. 800+75 TO STA. 801+50
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.3 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 1.8 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 82.0 KIPS PER SQUARE FOOT.

STA. 801+50 TO STA. 802+25.36
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.0 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 7.5 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 82.0 KIPS PER SQUARE FOOT.

FINAL
NOT FOR CONSTRUCTION

GENERAL NOTES
RETAINING WALLS

DESIGN AGENCY
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 3
SHEET P.299 TOTAL 627

SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 1:02:41 PM USER: sheikha2048
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\000_CAD\401-Engineering_Arcadis\Structures\Retaining Walls\Sheets\114865_000_WN001

WALL 9:

STA. 997+07.88 TO STA. 997+97.88
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 3.4 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF4.9 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 102.6 KIPS PER SQUARE FOOT.

STA. 997+97.88 TO STA. 999+47.88
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.0 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 5.7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 102.6 KIPS PER SQUARE FOOT.

STA. 999+47.88 TO STA. 997+77.88
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.0 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 5.7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 142.8 KIPS PER SQUARE FOOT.

STA. 999+77.88 TO STA. 1000+33.01
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.2 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 6.0 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 142.8 KIPS PER SQUARE FOOT.

WALL 10:

STA. 1100+02.87 TO STA. 1100+49.96
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.1 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 5.9 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 174.8 KIPS PER SQUARE FOOT.

STA. 1100+49.96 TO STA. 1101+91.74
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.7 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 3.9 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 174.8 KIPS PER SQUARE FOOT.

STA. 1101+91.74 TO STA. 1104+01.99
FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.7 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 3.9 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 97.9 KIPS PER SQUARE FOOT.

AESTHETIC SURFACE TREATMENT:

THE SURFACE OF ALL WALLS SHALL HAVE A PATTERN OF FITZGERALD FORMLINERS SAN DIEGO DRYSTACK-PATTERN 17911, ARCHITECTURAL POLYMERS LARGE STONE OHIO DRYSTACK-PATTERN 911O, OR APPROVED EQUAL. THE STONE FORMLINER SHALL MATCH OTHER PARTS OF THE PROJECT TO ENSURE UNIFORM SURFACE TREATMENTS THROUGHOUT, AS DETERMINED BY THE ENGINEER.

ITEM 530 - SPECIAL - FORMLINER (WALLS 1, 3, 6, 8, 9 & 10)

USE FORM LINERS AS SHOWN ON THE PLANS. THE STONE FORM LINER PATTERN SHALL MATCH OTHER PARTS OF THE PROJECT TO ENSURE UNIFORM SURFACE TREATMENTS THROUGHOUT, AS DETERMINED BY THE ENGINEER.

FORM LINERS SHALL BE CAPABLE OF WITHSTANDING ANTICIPATED CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. FORMLINERS SHALL BE REMOVABLE WITHOUT CAUSING CONCRETE SURFACE DAMAGE. USE A FORM RELEASE PRODUCT AS RECOMMENDED BY THE FORM LINER MANUFACTURER.

USE MANUFACTURER'S APPLICATION RATES AND ALL OTHER MANUFACTURER'S APPLICATION RATES AND ALL OTHER MANUFACTURER'S INSTRUCTIONS. FORM RELEASE PRODUCTS SHALL BE FULLY COMPATIBLE WITH THE FORM LINER MATERIAL AND THE EPOXY-URETHANE SEALER TO BE APPLIED TO THE FINISHED SURFACES.

ALIGN THE FORM LINER PATTERNS ACROSS ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS.

FORM LINERS SHALL EXTEND A MINIMUM OF 1'-0" BELOW THE PROPOSED GROUND LINE AT THE FRONT FACE OF THE WALL. FORM LINERS MAY EXTEND MORE THAN 1'-0" BELOW THE PROPOSED GROUND LINE BUT THE PAY LIMITS SHALL BE 1'-0" BELOW THE GROUND LINE.

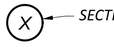
PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 530 - SPECIAL - FORM LINER, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTAL NECESSARY TO COMPLETE THIS ITEM AS SPECIFIED ABOVE AND IN A SATISFACTORY AND WORKMANLIKE MANNER.

STANDARD PLAN DETAILING NOMENCLATURE

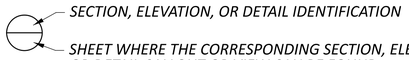
THROUGHOUT THE PLANS, SECTIONS AND DETAILS ARE REFERENCED TO THEIR CORRESPONDING VIEWS THROUGH THE USE OF STANDARD CALLOUTS. THE VIEWS OF SECTIONS, ELEVATIONS, AND DETAILS WILL HAVE UNIQUE NUMBERS ON THE PAGES ON WHICH THEY ARE SHOWN.

LETTERS WILL BE UTILIZED FOR SECTION AND ELEVATION CALLOUTS. NUMBERS WILL BE UTILIZED FOR DETAIL CALLOUTS.

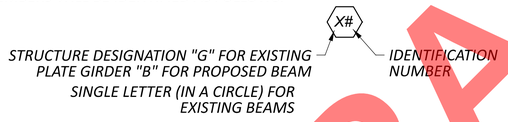
IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON THE SAME SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON A DIFFERENT SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



MEMBERS WILL BE IDENTIFIED AS FOLLOWS:



ITEM 511 - CLASS QC1 CONCRETE, MISC.: CONCRETE FACING (WALLS 1 AND 3)

THE WORK SHALL INCLUDE ALL MATERIALS AND LABOR REQUIRED TO INSTALL A PERMANENT CAST-IN-PLACE CONCRETE FACE ON SOLDIER PILE AND LAGGING WALLS.

THE UNIT BID PRICE SHALL INCLUDE ANY SURFACE PREPARATION REQUIRED, FURNISHING AND INSTALLING REQUIRED REINFORCING PER PLAN SPECIFIC DETAILS AND NOTES, STUD SHEAR CONNECTORS, 1" PEJF, THE INSTALLATION AND SUBSEQUENT REMOVAL OF ALL REQUIRED FORMWORK, AND CONCRETE FURNISHED AND INSTALLED PER THIS NOTE.

SOLDIER PILE AND LAGGING WALL SURFACES SHOULD BE CLEANED OF ALL FOREIGN AND LOOSE MATERIAL AND/OR UNSOUND CONCRETE.

THE SPACING OF BOTH MATS OF THE HORIZONTAL AND VERTICAL REINFORCING STEEL SHALL NOT EXCEED 12" AND SHALL CONTAIN A MINIMUM OF 0.20 SQUARE INCHES OF STEEL PER FOOT IN EACH DIRECTION. REINFORCING STEEL MAY CONSIST OF REINFORCING BARS OR WELDED WIRE FABRIC. PERIMETER BARS SHALL BE #5. REINFORCING STEEL SHALL BE SUPPLIED AND INSTALLED PER ODOT CMS 509.

CONCRETE SHALL BE INSTALLED PER CMS 511. THE MAXIMUM NOMINAL SIZE OF COARSE AGGREGATE SHALL BE LIMITED TO 3/4" ACCORDING TO ACI 301, SECTION 4. THE MIX DESIGN SHALL ADHERE TO CMS 499 (TYPE QC 2, TABLE 499-03-1).

EXPANSION JOINTS SHALL BE PLACED AS NOTED IN PLANS. PLACE 1" PREFORMED EXPANSION JOINT FILLER (PEJF), CMS 705.03, IN ALL EXPANSION JOINTS. CONTRACTION JOINTS SHALL BE USED AT EVERY COLD JOINT AT SPACING NOTED IN PLANS. HORIZONTAL REINFORCING SHALL BE BROKEN AT EXPANSION JOINTS.

PROPOSED CHANGES TO CONTRACTION JOINT SPACING OR EXPANSION JOINT SPACING SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. IF JOINT SPACING CHANGES ARE PROPOSED EXPANSION JOINT SPACING SHALL NOT EXCEED 90 FEET AND CONTRACTION JOINT SPACING SHALL NOT EXCEED 30 FEET.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES (CU. FT.) AT THE CONTRACT BID PRICE FOR EACH STRUCTURE USING NOMINAL DIMENSIONS AS SHOWN IN THE PLANS.

ITEM 840 – MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN

THE MECHANICALLY STABILIZED EARTH WALL WILL NOT UTILIZE A LEVELING PAD ALONG BL WALL RW-2 FROM STA. 1+91.08 TO 2+29.86 AND BL WALL RW-3 FROM STA. 0+00.00 TO STA. 0+34.94. MSE WALL PANELS WILL BE PLACED IN CAST IN PLACE RETAINING WALL AND CULVERT OUTLET KEYWAYS AS SHOWN IN THE PLANS.

STANDARD PLAN ABBREVIATIONS AND SYMBOLS

ABUT =	ABUTMENT	NB =	NORTHBOUND
APP =	APPROACH	NE =	NORTHEAST
AVE =	AVENUE	NF =	NEAR FACE
B# =	BEAM NUMBER	NO/# =	NUMBER
BF =	BOTTOM FLANGE	NW =	NORTHWEST
BM =	BENCHMARK	O/O =	OUT TO OUT
BOT =	BOTTOM	OD =	OUTSIDE DIAMETER
BRG =	BEARING	OH =	OVERHANG
BTWN =	BETWEEN	OVHD =	OVERHEAD
C.B. =	CHORD BEARING	ODOT =	OHIO DEPARTMENT OF TRANSPORTATION
C/C =	CENTER TO CENTER	P.V.I. =	POINT OF VERTICAL INTERSECTION
CB =	CATCH BASIN	PC =	POINT OF CURVE
CCTV =	CLOSED CIRCUIT TELEVISION	PCB =	PORTABLE CONCRETE BARRIER
CIP =	CAST IN PLACE	PEJF =	PREFORMED EXPANSION JOINT FILLER
CJ =	CONSTRUCTION JOINT	PGL =	PROFILE GRADE LINE
CJ-O =	OPTIONAL CONSTRUCTION JOINT	PI =	POINT OF INTERSECTION
CLR =	CLEAR	PMVC =	POINT OF MINIMUM VERTICAL CLEARANCE
CMP =	CORRUGATED METAL PIPE	POT =	POINT ON TANGENT
CMS =	CONSTRUCTION MATERIAL SPECIFICATIONS	PROP =	PROPOSED
CONST =	CONSTRUCTION	PT =	POINT OF TANGENT
CP =	COVER PLATE	PVMT =	PAVEMENT
CSP/N =	CORRUGATED STEEL PIPE (NON-PERFORATED)	RA =	REAR ABUTMENT
CSP/P =	PERFORATED CORRUGATED STEEL PIPE	RCP =	REINFORCED CONCRETE PIPE
DIA =	DIAMETER	RD =	ROAD
DND =	DO NOT DISTURB	REF =	REFERENCE
DPRM =	DIAPHRAGM	REINF. =	REINFORCING OR REBAR
E/P =	EDGE OF PAVEMENT	REQ'D =	REQUIRED
E/S =	EDGE OF SHOULDER	RT =	RIGHT
EB =	EASTBOUND	R/W =	RIGHT OF WAY
EF =	EACH FACE	S/O =	SERIES OF
ELEC =	ELECTRIC	SR =	STATE ROUTE
ELEV or EL =	ELEVATION	SB =	SOUTHBOUND
EX =	EXISTING	SCD =	STANDARD CONSTRUCTION DRAWING
EXP =	EXPANSION	SE =	SOUTHEAST
F/F =	FACE TO FACE	SER =	SERIES
FA =	FORWARD ABUTMENT	SF =	SQUARE FEET
FF =	FAR FACE/FILL FACE	SHLDR =	SHOULDER
FO =	FIBER OPTIC	SPA =	SPACES
FTG =	FOOTING	ST =	STREET OR SPAN TOTAL
G# =	GIRDER NUMBER	STA =	STATION
GR =	GUARDRAIL	STD =	STANDARD
H.C. =	HORIZONTAL CURVE	STG =	STAGE
HORZ =	HORIZONTAL	STM =	STORM
I/I =	INSIDE TO INSIDE	SW =	SOUTHWEST
IR =	INTERSTATE ROUTE	T/ =	TOP OF
JT =	JOINT	T/B =	TOP AND BOTTOM
LT =	LEFT	T/T =	TOE TO TOE
MAX =	MAXIMUM	TBR =	TO BE REMOVED
MH =	MANHOLE	TEMP =	TEMPORARY
MHC =	MINIMUM HORIZONTAL CLEARANCE	TYP =	TYPICAL
MIN =	MINIMUM	U.N.O. =	UNLESS NOTED OTHERWISE
MISC =	MISCELLANEOUS	VC =	VERTICAL CURVE
MVC =	MINIMUM VERTICAL CLEARANCE	VERT =	VERTICAL
		WB =	WEST BOUND
		WW =	WINGWALL

FINAL NOT FOR CONSTRUCTION

GENERAL NOTES
RETAINING WALLS

DESIGN AGENCY
ARCADIS
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 2 TOTAL 3
SHEET P.300 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 1:02:58 PM USER: sheikha2048
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ITEM SPECIAL - SETTLEMENT PLATFORMS

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS ACCEPTED BY THE ENGINEER. TAKE SETTLEMENT READINGS WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. PLOT THE READINGS ON A GRAPH WITH 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 ON THE ODOT OFFICE OF GEOTECHNICAL ENGINEERING WEBSITE: https://www.dot.state.oh.us/geotechnical/Pages/settlement.aspx. PREPARE A SEPARATE GRAPH FOR EACH SETTLEMENT PLATFORM. SEND A COPY OF EACH CUMULATIVE PLOT TO THE ENGINEER AFTER EACH SETTLEMENT READING IS RECORDED.

THE DEPARTMENT WILL CONSIDER VIBRATING WIRE SETTLEMENT CELL SYSTEMS IN LIEU OF SETTLEMENT PLATFORMS. PROVIDE DETAILS AND DESIGN DRAWINGS OF THE PROPOSED SETTLEMENT CELL SYSTEM INCLUDING MANUFACTURER, INSTALLATION PROCEDURES, PROPOSED CABLE LAYOUT WITH ALL EXISTING AND PROPOSED SITE FEATURES AND UTILITIES TO SHOW NO CONFLICT, RESERVOIR/TERMINAL BOX LOCATION, AND RESERVOIR PROTECTIVE MEASURES TO THE ENGINEER AT LEAST 30 DAYS PRIOR TO CONSTRUCTION. THE ENGINEER WILL REQUIRE 10 WORKING DAYS FOR REVIEW AND APPROVAL. NO ADDITIONAL PAYMENT WILL BE MADE IF THE CONTRACTOR ELECTS TO USE VIBRATING WIRE SETTLEMENT CELL SYSTEMS.

MATERIALS: USE SOUND 36"X 36"X ¾"EXTERIOR GRADE PLYWOOD FOR THE BASE. USE STANDARD 2-1/2" BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 36" X 36" X 1/8" MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS: CONFORM THE PLATFORM TO THE DETAILS SHOWN ON THE PLANS. SET THE PLATFORM ON A LEVEL SURFACE. SECURE THE SETTLEMENT PLATFORM TO THE GROUND BY DRIVING A NO. 4 REBAR THROUGH EACH CORNER AND BENDING AT 90 DEGREES. FIRMLY SECURE THE PIPE TO THE PLATFORM AND MAINTAIN THE PIPE IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. MARK THE PIPE AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. ADD NEW SECTIONS TO THE TOP OF THE PIPE AS THE EMBANKMENT HEIGHT RISES. DETERMINE AND RECORD THE LENGTH OF PIPE ADDED AND THE DATE IT WAS ADDED ON THE SETTLEMENT GRAPH.

PROTECT THE SETTLEMENT PLATFORMS FROM CONSTRUCTION EQUIPMENT WITH GUARD STAKES AND HIGH VISIBILITY MARKINGS. SETTLEMENT PLATFORMS MUST BE PLACED INSIDE THE BREAK OF THE SLOPE BUT MAY BE PLACED BEYOND THE EDGE OF PAVEMENT TO BE OUT OF THE WAY AS MUCH AS POSSIBLE. IMMEDIATELY STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED AND NOTIFY THE ENGINEER. RESTORE PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

PRIOR TO PAVING, CUT THE TOP OF THE SETTLEMENT PLATFORM PIPE OFF TWO FEET BELOW THE FINISHED SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

WAITING PERIOD: A WAITING PERIOD OF 46 CALENDAR DAYS IS ANTICIPATED FOR SETTLEMENT MITIGATION. THE WAITING PERIOD WILL COMMENCE ONCE THE FILL HAS REACHED 15 FEET. THE WAITING PERIOD MAY BE REDUCED OR EXTENDED DEPENDING ON THE PLATFORM READINGS. THE ENGINEER MAY CONSIDER THE WAITING PERIOD COMPLETE WHEN CONSECUTIVE SETTLEMENT READINGS, RECORDED AFTER EMBANKMENT CONSTRUCTION IS COMPLETE AND AT LEAST ONE WEEK (168 HOURS) APART, RESULT IN ELEVATION DIFFERENCES EQUAL TO OR LESS THAN 1/8 INCH.

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.

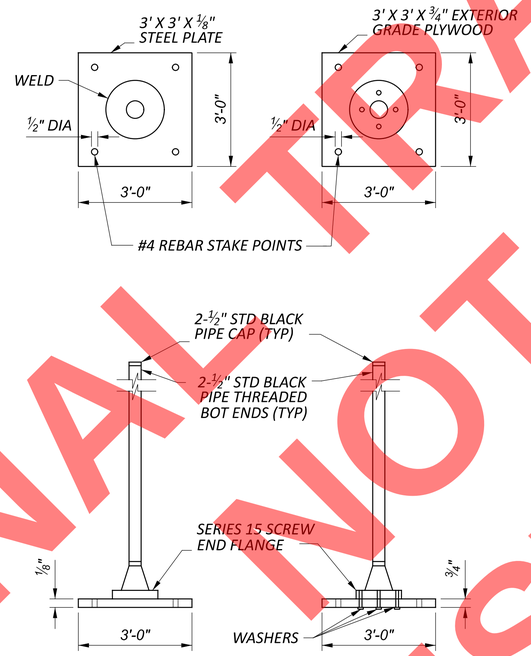
BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR "ITEM 203, SPECIAL SETTLEMENT PLATFORM"WHICH IS COMPENSATION FOR CONSTRUCTING MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.

ITEM SPECIAL - SETTLEMENT PLATFORMS (CONT.)

PLACE SETTLEMENT PLATFORMS AT THE FOLLOWING LOCATIONS:

SETTLEMENT PLATFORM DESIGNATION	ALIGNMENT	STATION	OFFSET	ESTIMATED SETTLEMENT (IN.)
SP-1	℄ WALL RW-2	1+00.0	10' RT	5.52
SP-2	℄ WALL RW-2	1+85.0	5' RT	5.52
SP-3	℄ WALL RW-2	3+00.0	20' RT	5.52
SP-4	℄ WALL RW-2	4+00.0	5' RT	5.52
SP-5	℄ WALL RW-2	5+00.0	10' RT	3.24
SP-6	℄ WALL RW-2	6+00.0	10' RT	3.24
SP-7	℄ WALL RW-2	7+00.0	5' RT	3.24
SP-8	℄ WALL RW-2	8+00.0	15' RT	3.24
SP-9	℄ WALL RW-2	9+00.0	5' RT	3.24
SP-10	℄ WALL RW-2	10+00.0	15' RT	3.24
SP-11	℄ WALL RW-2	11+00.0	5' RT	3.24
SP-12	℄ WALL RW-2	12+15.0	15' RT	3.24
SP-13	℄ WALL RW-2	13+00.0	5' RT	3.24

SETTLEMENT PLATFORM DETAIL
(NOT TO SCALE)



FINAL PLANS
NOT FOR
CONSTRUCTION

GENERAL NOTES
RETAINING WALLS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3456
www.arcadis.com

DESIGNER
AIS

REVIEWER
RBB 8-14-26

PROJECT ID
114865

SUBSET 3 | TOTAL 3

SHEET P.301 | TOTAL 627

SUM-077/008-11.65/00.00
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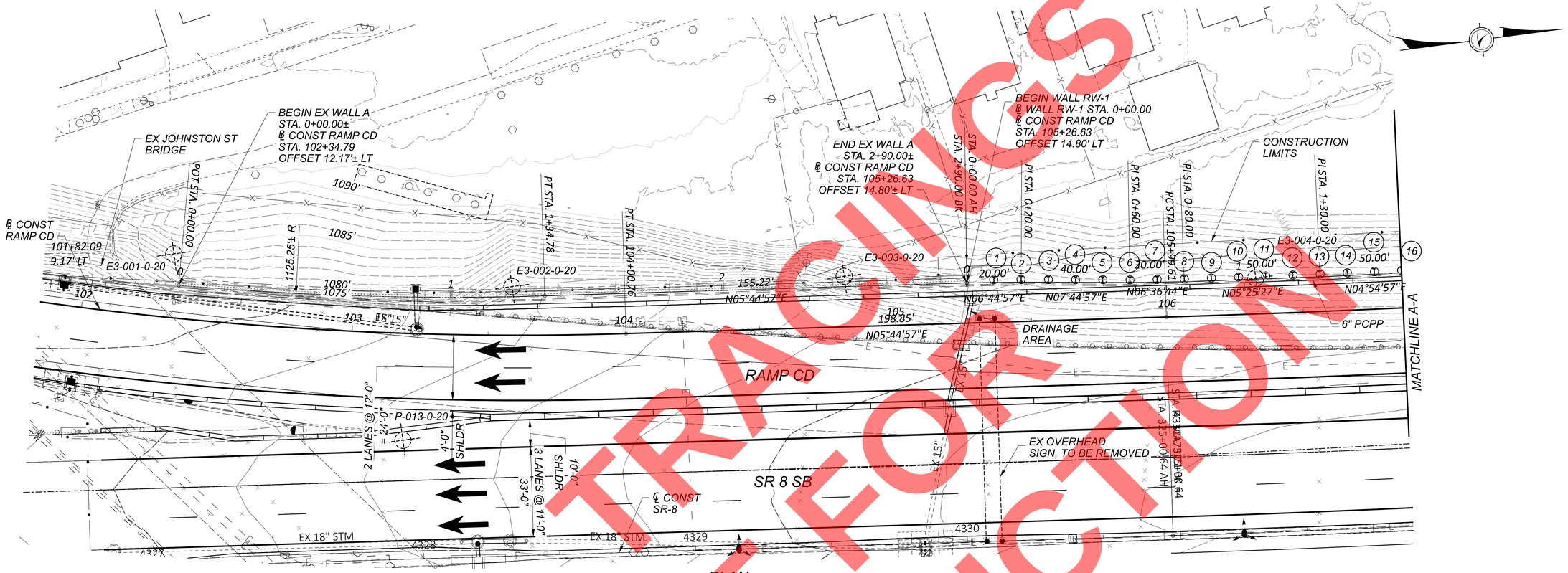

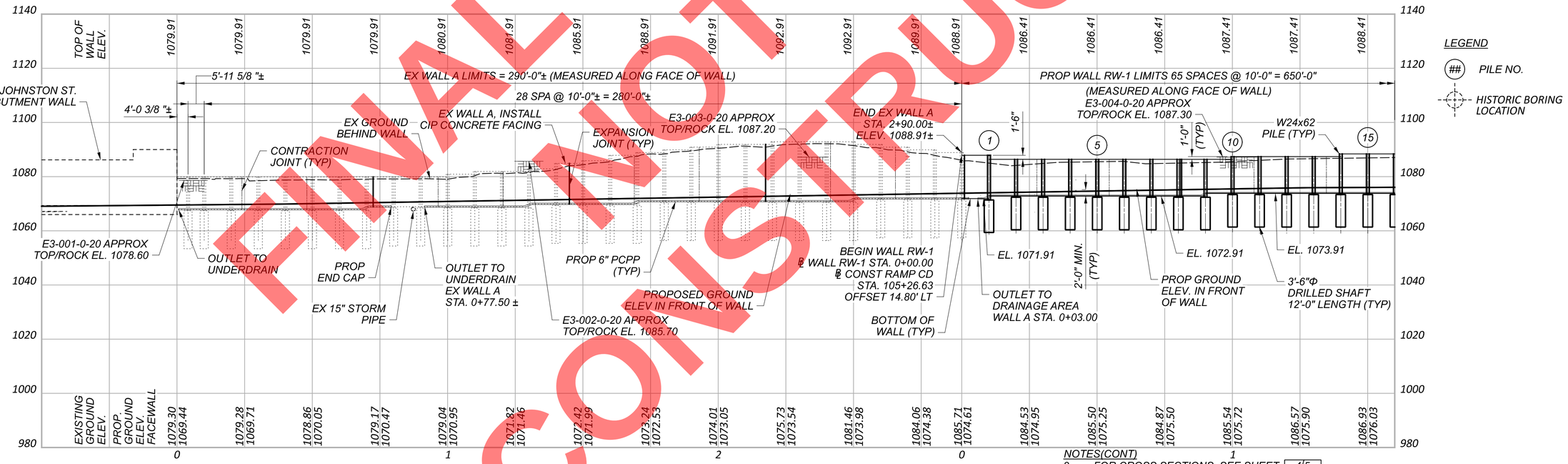

ELEVATION ALONG FRONT FACE OF EX WALL A AND WALL RW-1

NOTES

1. FOR ADDITIONAL EXISTING WALL A DETAILS, SEE EXISTING PLANS PID NO. 102329, DATED 09/28/21.
2. WALL ELEVATIONS, DIMENSIONS AND STATIONING ARE MEASURED ALONG THE FRONT OF THE SOLDIER PILE FLANGES.

NOTES(CONT)

3. FOR CROSS SECTIONS, SEE SHEET 4/5.
4. FOR LOCATIONS OF CONCRETE FACING CONTRACTION AND EXPANSION JOINTS, SEE TABLES ON SHEET 3/5.
5. FOR GENERAL NOTES, SEE SHEETS P.299/627 THRU P.301/627.

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 1 - PLAN AND PROFILE (1 OF 2)
STA. 0+00.00 TO STA. 6+50.00

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
1	5

SHEET	TOTAL
P.302	627

FINAL TRACINGS
NOT FOR CONSTRUCTION

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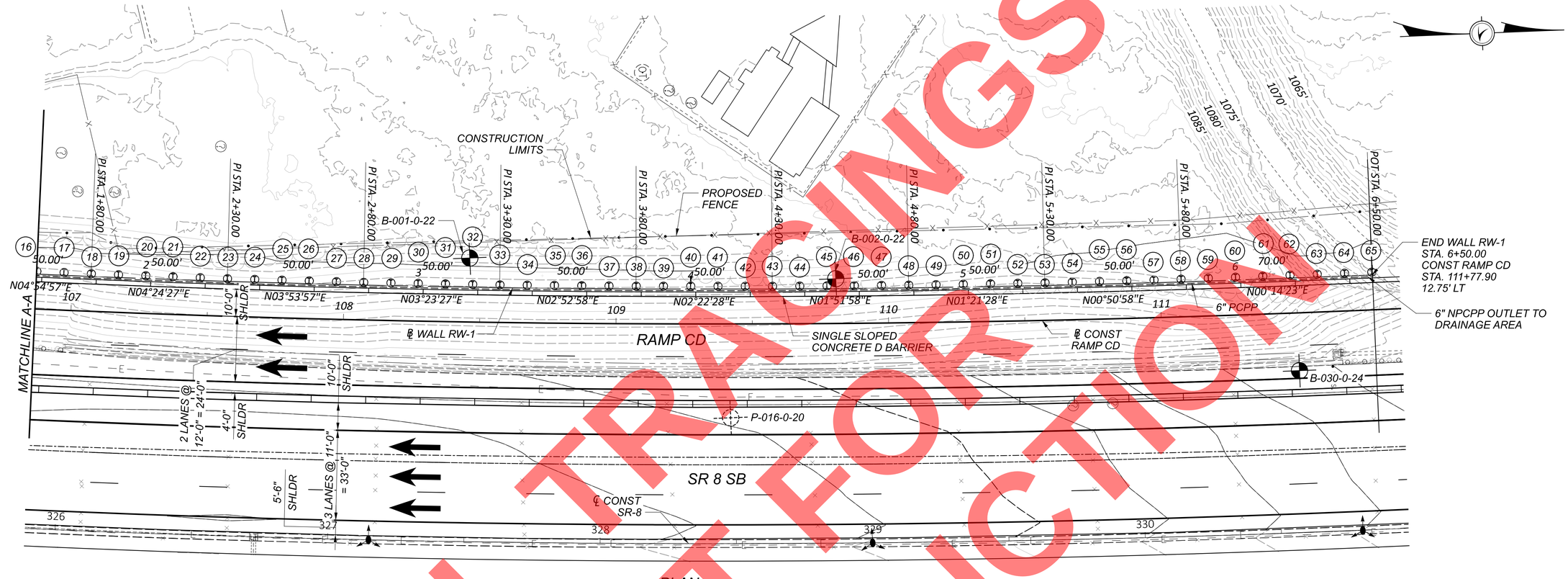
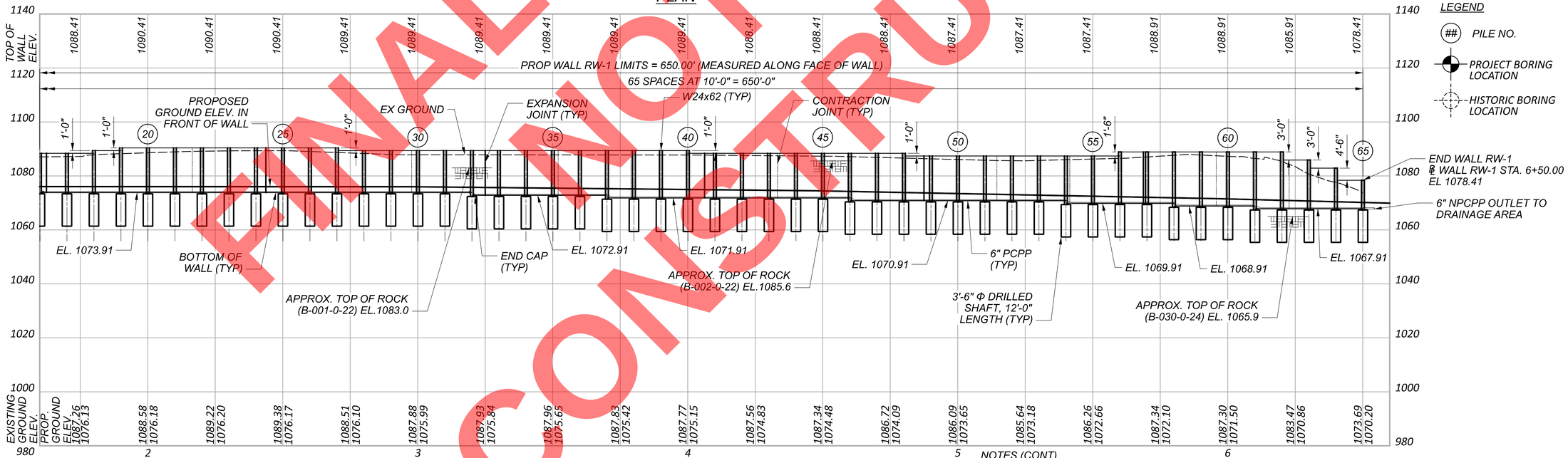
SUM-077/008-11.65/00.00 SUBMITTAL: SUB_STG PENTABLE SUBSET: 1





NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. WALL ELEVATIONS, DIMENSIONS AND STATIONING ARE MEASURED ALONG THE FRONT OF THE SOLDIER PILE FLANGES.

NOTES (CONT)

3. FOR CROSS SECTIONS, SEE SHEET 4/5.
4. FOR LOCATIONS OF CONCRETE FACING CONTRACTION AND EXPANSION JOINTS, SEE TABLES ON SHEET 3/5.

RETAINING WALL 1 - PLAN AND PROFILE (2 OF 2)
STA. 0+00.00 TO STA. 6+50.00

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
2	5

SHEET	TOTAL
P.303	627

PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26	CHECKED: HLD 04/12/26	VERIFY: SAT 04/29/26
01/IMS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	WALL 001	GENERAL	SHEET REF.
1,589	503	21100	1,589	CY	UNCLASSIFIED EXCAVATION	1,589		
1,863	507	00400	1,863	FT	STEEL PILES, MISC.: SOLDIER PILES	1,863		
553	511	53010	553	CY	CLASS QC1 CONCRETE, MISC.: CONCRETE FACING	553		P.300
1,474	512	10050	1,474	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	1,474		
1,488	518	20000	1,488	SY	PREFABRICATED GEOCOMPOSITE DRAIN	1,488		
35	518	21200	35	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	35		
780	524	94805	780	FT	DRILLED SHAFTS, 42" DIAMETER, INTO BEDROCK, AS PER PLAN	780		P.299
10,390	530	51020	10,390	SF	SPECIAL - RETAINING WALL, TIMBER LAGGING	10,390		
940	601	37500	940	FT	PAVED GUTTER, TYPE 1-2	940		
1,155	840	23000	1,155	CY	SELECT GRANULAR BACKFILL	1,155		
940	840	25010	940	FT	6" DRAINAGE PIPE, PERFORATED	940		
20	840	25020	20	FT	6" DRAINAGE PIPE, NON-PERFORATED	20		

EX. WALL A EXPANSION/CONTRACTION JOINT LOCATION	
STATION	TYPE
0+24.00	CONTRACTION
0+48.00	CONTRACTION
0+72.50	EXPANSION
0+96.50	CONTRACTION
1+20.50	CONTRACTION
1+45.00	EXPANSION
1+69.00	CONTRACTION
1+93.00	CONTRACTION
2+17.50	EXPANSION
2+41.50	CONTRACTION
2+65.50	CONTRACTION

WALL RW-1 EXPANSION/CONTRACTION JOINT LOCATION	
STATION	TYPE
0+01.00	EXPANSION
0+27.75	CONTRACTION
0+54.50	CONTRACTION
0+81.25	EXPANSION
1+08.00	CONTRACTION
1+34.75	CONTRACTION
1+62.50	EXPANSION
1+89.50	CONTRACTION
2+16.50	CONTRACTION
2+43.75	EXPANSION
2+70.75	CONTRACTION
2+97.75	CONTRACTION
3+25.00	EXPANSION
3+52.00	CONTRACTION
3+79.00	CONTRACTION
4+06.25	EXPANSION
4+33.25	CONTRACTION
4+59.25	CONTRACTION
4+87.50	EXPANSION
5+14.50	CONTRACTION
5+41.50	CONTRACTION
5+68.75	EXPANSION
5+95.75	CONTRACTION
6+22.75	CONTRACTION

NOTES

1. FOR DIMENSIONS "H", "E", AND "L", SEE TYPICAL PROPOSED WALL RW-1 SECTION ON SHEET 4/5.

2. THE PROPOSED GROUND SURFACE SHOWN IN THE PILE INFORMATION TABLE REFERS TO THE FINISHED GROUND ELEVATION AT THE FACE OF THE SOLDIER PILE WALL.

PILE INFORMATION

PILE NO.	PILE STATION	TOP OF PILE ELEV	PROPOSED GROUND SURFACE	TOP OF SHAFT	BOTTOM OF SHAFT	DIM. " H" (FT.)	DIM. " E" (FT.)	DIM. " L" (FT.)
1	0+10.00	1087.91	1074.75	1071.41	1059.41	16.5	12	28.5
2	0+20.00	1086.41	1074.88	1072.41	1060.41	14	12	26
3	0+30.00	1086.41	1075.01	1072.41	1060.41	14	12	26
4	0+40.00	1086.41	1075.13	1072.41	1060.41	14	12	26
5	0+50.00	1086.41	1075.25	1072.41	1060.41	14	12	26
6	0+60.00	1086.41	1075.36	1072.41	1060.41	14	12	26
7	0+70.00	1086.41	1075.46	1072.41	1060.41	14	12	26
8	0+80.00	1086.41	1075.55	1072.41	1060.41	14	12	26
9	0+90.00	1086.41	1075.64	1072.41	1060.41	14	12	26
10	1+00.00	1087.41	1075.72	1073.41	1061.41	14	12	26
11	1+10.00	1087.41	1075.80	1073.41	1061.41	14	12	26
12	1+20.00	1087.41	1075.87	1073.41	1061.41	14	12	26
13	1+30.00	1087.41	1075.93	1073.41	1061.41	14	12	26
14	1+40.00	1088.41	1075.98	1073.41	1061.41	15	12	27
15	1+50.00	1088.41	1076.03	1073.41	1061.41	15	12	27
16	1+60.00	1088.41	1076.07	1073.41	1061.41	15	12	27
17	1+70.00	1088.41	1076.11	1073.41	1061.41	15	12	27
18	1+80.00	1089.41	1076.14	1073.41	1061.41	16	12	28
19	1+90.00	1090.41	1076.17	1073.41	1061.41	17	12	29
20	2+00.00	1090.41	1076.18	1073.41	1061.41	17	12	29
21	2+10.00	1090.41	1076.19	1073.41	1061.41	17	12	29
22	2+20.00	1090.41	1076.20	1073.41	1061.41	17	12	29
23	2+30.00	1090.41	1076.19	1073.41	1061.41	17	12	29
24	2+40.00	1090.41	1076.19	1073.41	1061.41	17	12	29
25	2+50.00	1090.41	1076.17	1073.41	1061.41	17	12	29
26	2+60.00	1090.41	1076.14	1073.41	1061.41	17	12	29
27	2+70.00	1090.41	1076.12	1073.41	1061.41	17	12	29
28	2+80.00	1089.41	1076.08	1073.41	1061.41	16	12	28
29	2+90.00	1089.41	1076.04	1073.41	1061.41	16	12	28
30	3+00.00	1089.41	1075.99	1073.41	1061.41	16	12	28
31	3+10.00	1089.41	1075.93	1073.41	1061.41	16	12	28
32	3+20.00	1089.41	1075.87	1072.41	1060.41	17	12	29
33	3+30.00	1089.41	1075.80	1072.41	1060.41	17	12	29
34	3+40.00	1089.41	1075.73	1072.41	1060.41	17	12	29
35	3+50.00	1089.41	1075.65	1072.41	1060.41	17	12	29
36	3+60.00	1089.41	1075.56	1072.41	1060.41	17	12	29
37	3+70.00	1089.41	1075.47	1071.41	1059.41	18	12	30
38	3+80.00	1089.41	1075.37	1071.41	1059.41	18	12	30
39	3+90.00	1089.41	1075.26	1071.41	1059.41	18	12	30
40	4+00.00	1089.41	1075.15	1071.41	1059.41	18	12	30
41	4+10.00	1088.41	1075.03	1071.41	1059.41	17	12	29
42	4+20.00	1088.41	1074.90	1071.41	1059.41	17	12	29
43	4+30.00	1088.41	1074.76	1071.41	1059.41	17	12	29
44	4+40.00	1088.41	1074.62	1071.41	1059.41	17	12	29
45	4+50.00	1088.41	1074.48	1071.41	1059.41	17	12	29
46	4+60.00	1088.41	1074.33	1070.41	1058.41	18	12	30
47	4+70.00	1088.41	1074.17	1070.41	1058.41	18	12	30
48	4+80.00	1088.41	1074.00	1070.41	1058.41	18	12	30
49	4+90.00	1087.41	1073.83	1070.41	1058.41	17	12	29
50	5+00.00	1087.41	1073.65	1070.41	1058.41	17	12	29
51	5+10.00	1087.41	1073.47	1070.41	1058.41	17	12	29
52	5+20.00	1087.41	1073.27	1070.41	1058.41	17	12	29
53	5+30.00	1087.41	1073.07	1070.41	1058.41	17	12	29
54	5+40.00	1087.41	1072.87	1069.41	1057.41	18	12	30
55	5+50.00	1087.41	1072.66	1069.41	1057.41	18	12	30
56	5+60.00	1088.91	1072.44	1069.41	1057.41	19.5	12	31.5
57	5+70.00	1088.91	1072.22	1069.41	1057.41	19.5	12	31.5
58	5+80.00	1088.91	1071.98	1068.41	1056.41	20.5	12	32.5
59	5+90.00	1088.91	1071.74	1068.41	1056.41	20.5	12	32.5
60	6+00.00	1088.91	1071.50	1068.41	1056.41	20.5	12	32.5
61	6+10.00	1088.91	1071.25	1067.41	1055.41	21.5	12	33.5
62	6+20.00	1088.91	1070.99	1067.41	1055.41	21.5	12	33.5
63	6+30.00	1085.91	1070.73	1067.41	1055.41	18.5	12	30.5
64	6+40.00	1082.91	1070.47	1067.41	1055.41	15.5	12	27.5
65	6+50.00	1078.41	1070.20	1067.41	1055.41	11	12	23

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 1 - ESTIMATED QUANTITIES
STA. 0+00.00 TO STA. 6+50.00

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
3	5

SHEET	TOTAL
P.304	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PENTABLE: $PENTBLS$ PLOT DRIVER: $PLTDRVS$
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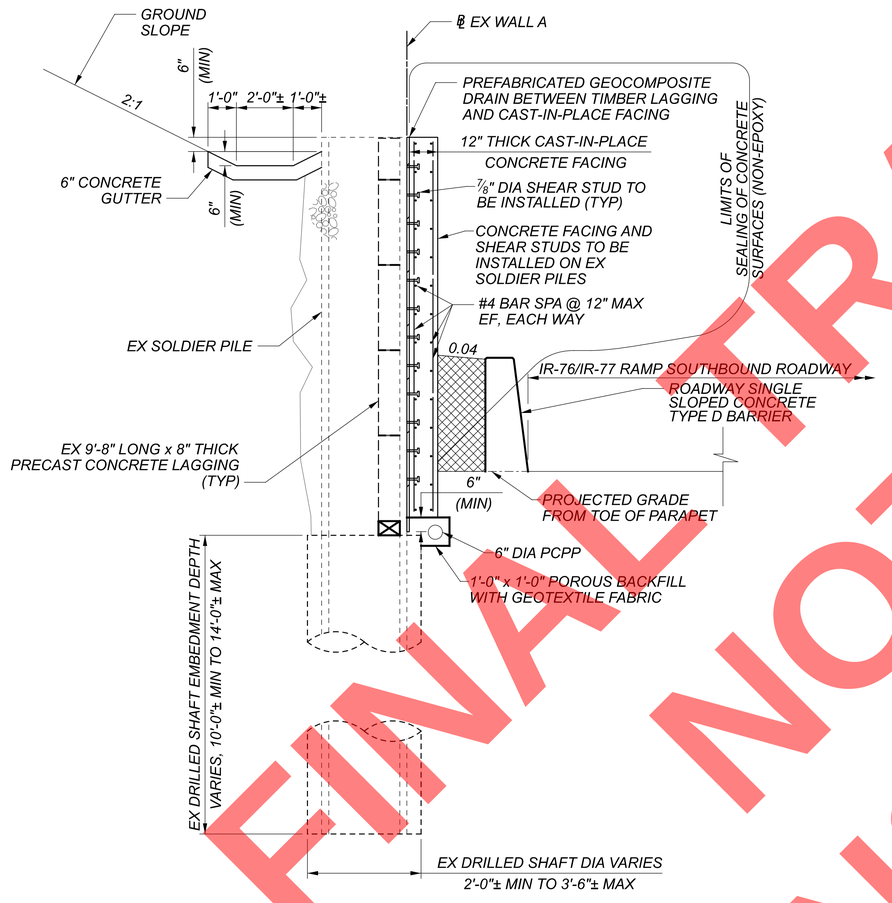
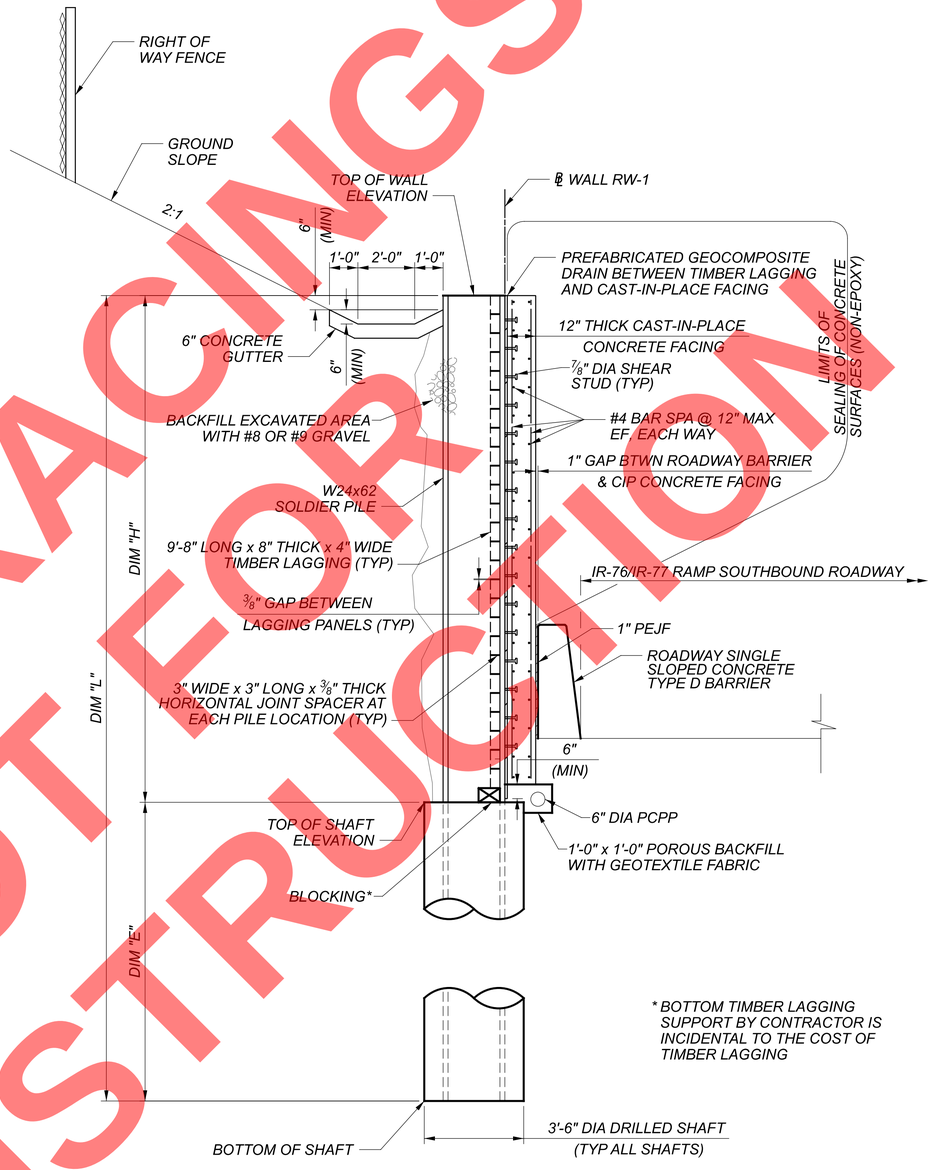
FINAL NOT FOR CONSTRUCTION



TYPICAL EXISTING WALL A SECTION



TYPICAL PROPOSED WALL RW-1 SECTION

* BOTTOM TIMBER LAGGING SUPPORT BY CONTRACTOR IS INCIDENTAL TO THE COST OF TIMBER LAGGING

LEGEND

LIMITS OF LOW STRENGTH MORTAR, TO BE QUANTIFIED WITH ROADWAY QUANTITIES

NOTES

1. PLACE PERFORATED, CORRUGATE, POLYETHLYENE PIPE INSIDE POROUS BACKFILL AND SHALL SLOPE A MINIMUM OF 1.00% TOWARDS THE OUTLET OF THE UNDERDRAIN.
2. PLACE TIMBER BLOCKING AS NECESSARY TO ACHIEVE BOTTOM OF PANEL ELEVATIONS. GRANULAR MATERIAL MAY BE USED IN LIEU OF TIMBER BLOCK TO LEVEL SURFACE.
3. BACKFILL EXCAVATED AREA BETWEEN IN-SITU BEDROCK AND PRECAST PANEL LAGGING WITH #8 OR #9 GRAVEL.
4. FOR ADDITIONAL EXISTING WALL A DETAILS, SEE EXISTING PLANS PID NO. 102329, DATED 9/28/2021.

RETAINING WALL 1 - CROSS SECTIONS
STA. 0+00.00 TO STA. 6+50.00

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

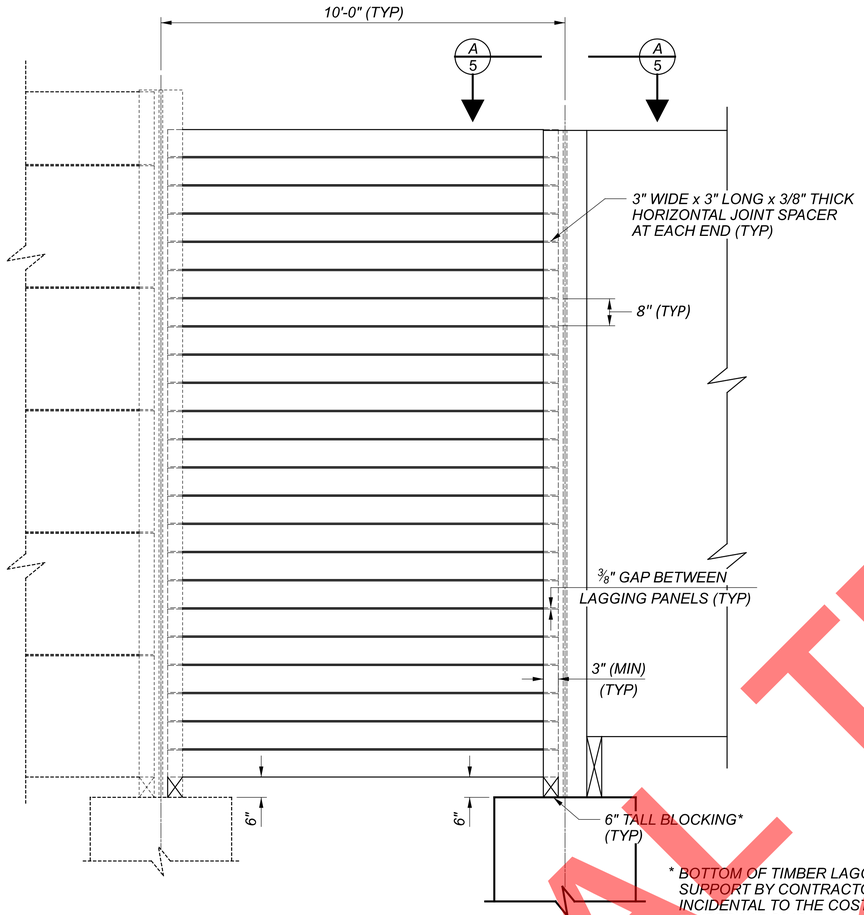
PROJECT ID
114865

SUBSET	TOTAL
4	5

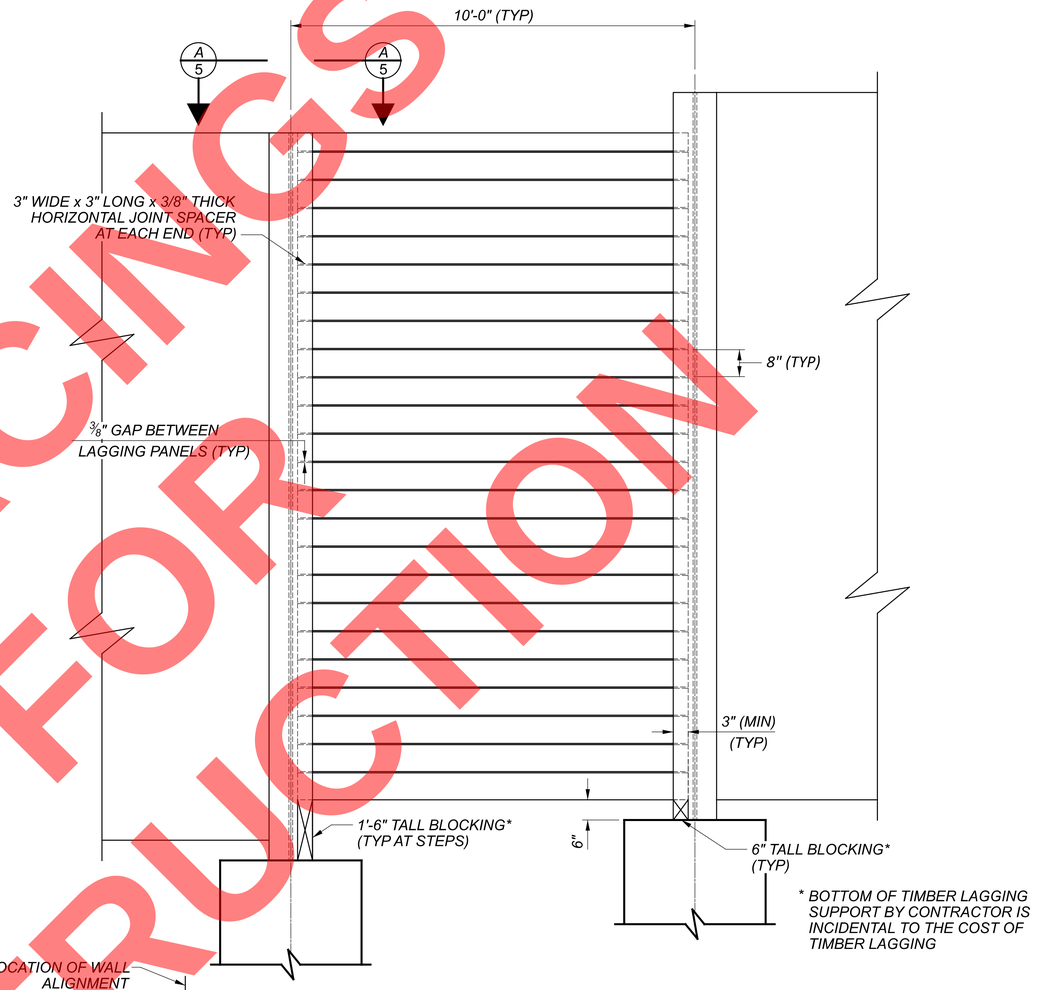
SHEET	TOTAL
P.305	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$
MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:08:02 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 1\Sheets\114865_WALL001_WX001

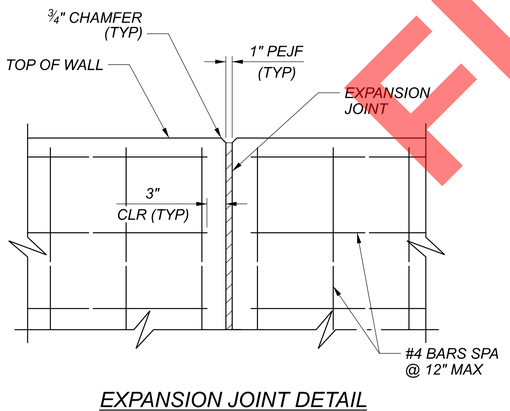
FINAL - NOT FOR CONSTRUCTION



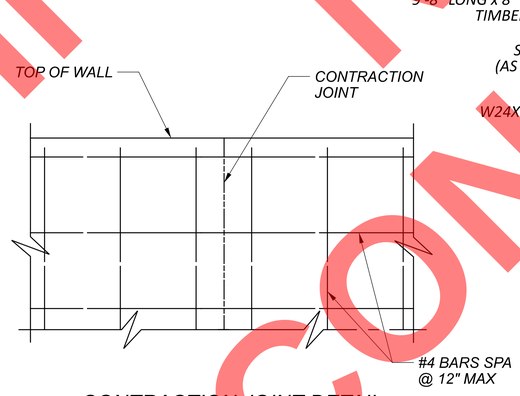
WALL CONNECTION ELEVATION
EXISTING TO PROPOSED



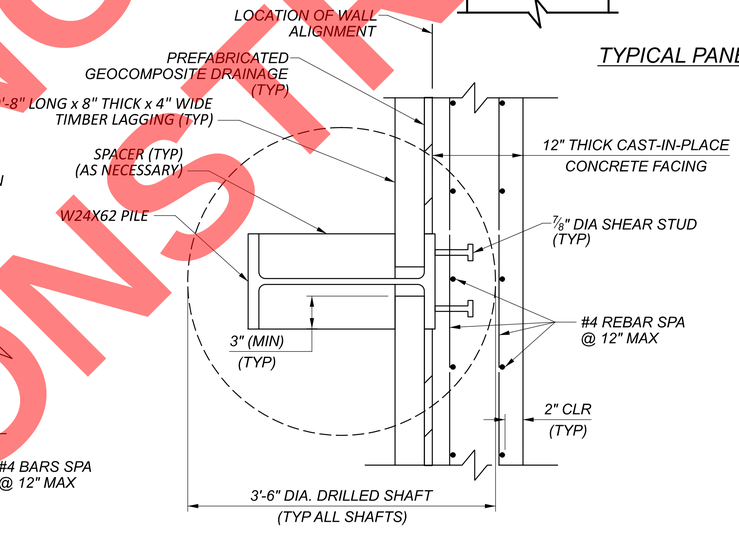
TYPICAL PANEL ELEVATION



EXPANSION JOINT DETAIL



CONTRACTION JOINT DETAIL



A 5 SECTION THRU WALL

NOTES:

1. PREFORATED CORRUGATED PLASTIC PIPE TO BE INSTALLED INSIDE POROUS BACKFILL AND SHALL SLOPE A MINIMUM OF 1.00% TOWARDS THE OUTLET TO THE UNDERDRAIN.
2. FOR SOLDIER PILE CROSS SECTION DETAILS, SEE SHEET 4/5 .
3. PLACE TIMBER BLOCKING AS NECESSARY TO ACHIVE BOTTOM OF PANEL ELEVATIONS. GRANULAR MATERIAL MAY BE USED IN LIEU OF TIMBER BLOCK TO LEVEL SURFACE.
4. BACKFILL EXCAVATED AREA BETWEEN IN-SITU BEDROCK AND TIMBER LAGGING WITH #8 OR #9 GRAVEL.
5. FOR LOCATIONS OF CONTRACTION AND EXPANSION JOINTS, SEE PLAN AND PROFILE SHEETS AND TABLES ON SHEET 3/5 .

RETAINING WALL 1 - SOLDIER PILE DETAILS
STA. 0+00.00 TO STA. 6+50.00

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

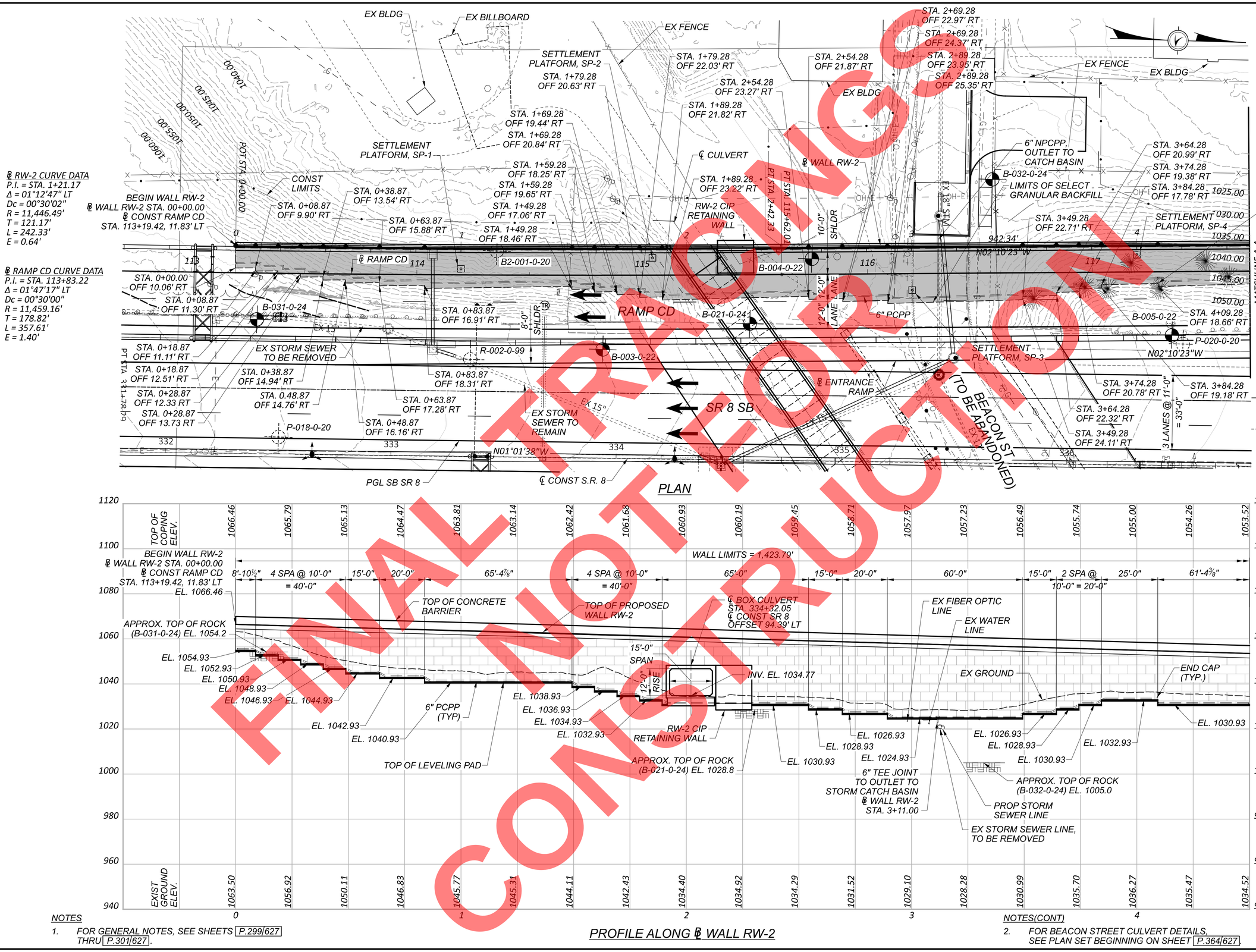
PROJECT ID
114865

SUBSET	TOTAL
5	5

SHEET	TOTAL
P.306	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRVS$
PENTABLE: $PENTBLS$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:08:11 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 1\Sheets\114865_WALL001_WD001

PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
MODEL: Scratch1 - Wall 2 PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:09:10 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 2\Sheets\114865_WALL002_WP001



PROFILE ALONG ℄ WALL RW-2

NOTES

1. FOR GENERAL NOTES, SEE SHEETS P.299/627 THRU P.301/627.

NOTES(CONT)

2. FOR BEACON STREET CULVERT DETAILS, SEE PLAN SET BEGINNING ON SHEET P.364/627.

FINAL NOT FOR CONSTRUCTION

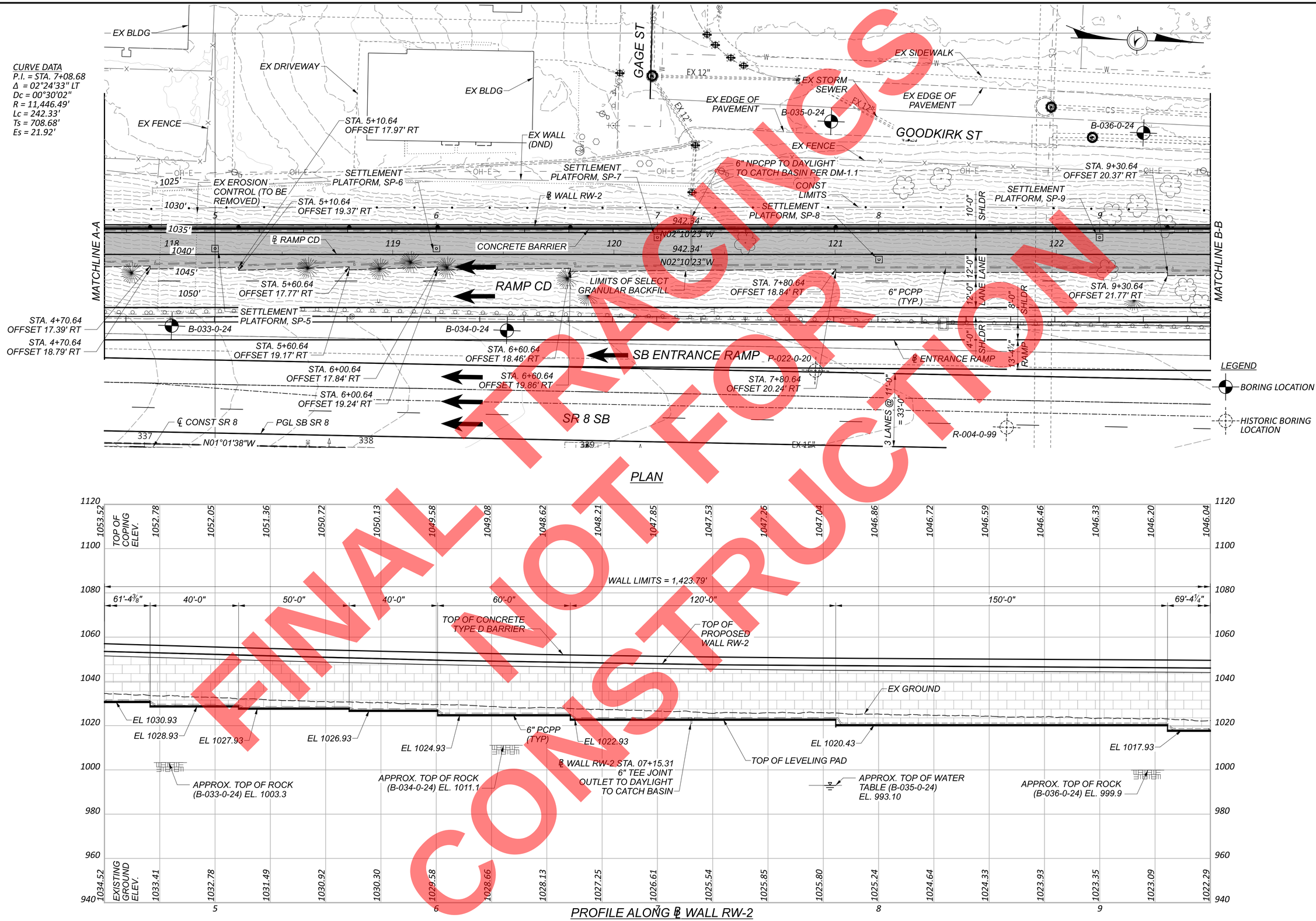
RETAINING WALL 2 - PLAN AND PROFILE (1 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026
PROJECT ID: 114865
SUBSET: 1 | TOTAL: 9
SHEET: P.307 | TOTAL: 627

FINAL NOT FOR CONSTRUCTION



RETAINING WALL 2 - PLAN AND PROFILE (2 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
2	9

SHEET	TOTAL
P.308	627

SUM-077/008-11.65/00.00

SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$

MODEL: Scratch1 - Wall 3 PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:09:40 AM USER: stony
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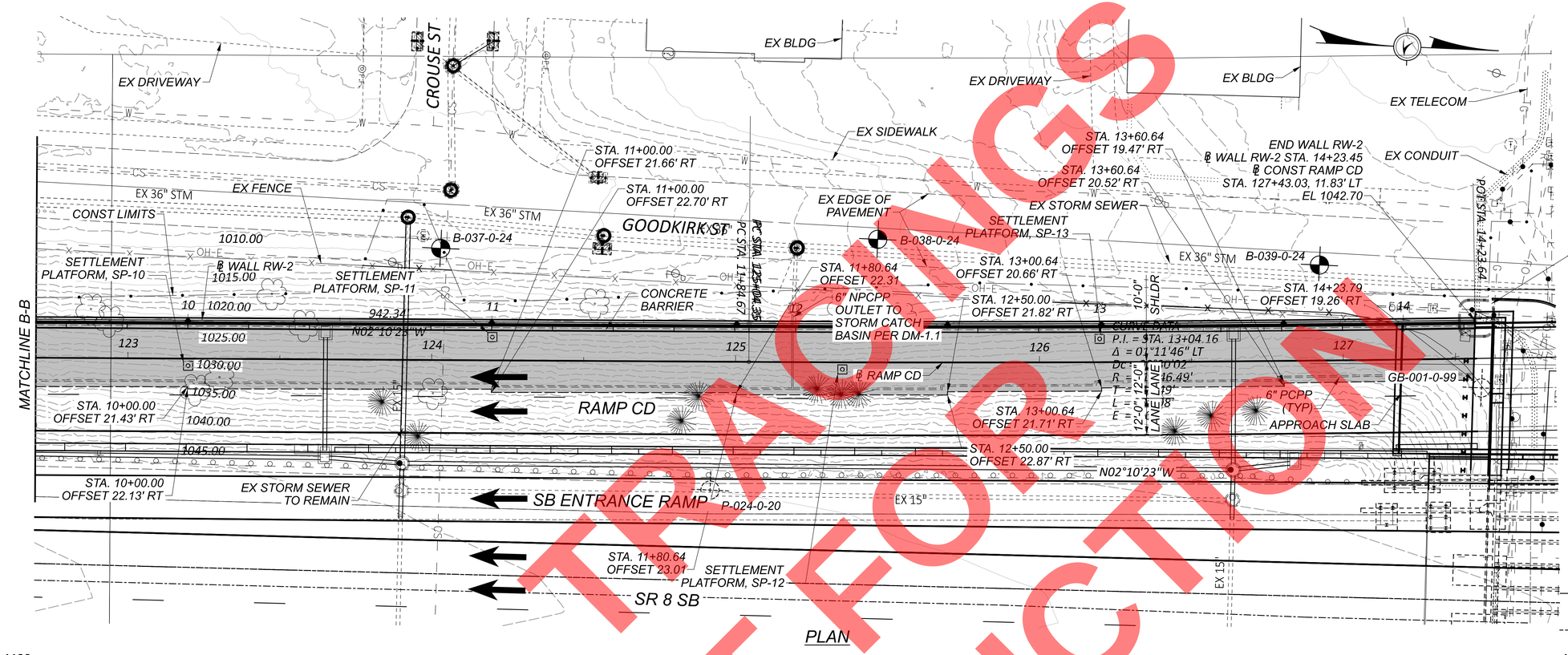

PROFILE ALONG ℄ WALL RW-2

FINAL NOT FOR CONSTRUCTION

RETAINING WALL 2 - PLAN AND PROFILE (3 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
3	9

SHEET	TOTAL
P.309	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
MODEL: Scratch1 - Wall 4 PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:09:58 AM USER: stony
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PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26	CHECKED: HLD 04/14/26	VERIFIED: SAT 04/29/26
01/IMS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	WALL RW-2	GENERAL	SHEET REF.
13	203	65000	13	EACH	SPECIAL - SETTLEMENT PLATFORM	13		P.301
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING		1	
6,396	509	10000	6,396	LB	EPOXY COATED STEEL REINFORCEMENT	6,396		
26	511	46010	26	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	26		
26	511	46510	26	CY	CLASS QC1 CONCRETE, FOOTING	26		
3,822	512	10100	3,822	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	3,822		
6	512	33000	6	SY	TYPE 2 WATERPROOFING	6		
31	516	13600	31	SF	1" PREFORMED EXPANSION JOINT FILLER	31		
1,674	516	13900	1,674	SF	2" PREFORMED EXPANSION JOINT FILLER	1,674		
21	518	21200	21	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	21		
36,115	840	20000	36,115	SF	MECHANICALLY STABILIZED EARTH WALL	36,115		
484	840	20001	484	SF	MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	484		P.300
9,869	840	21000	9,869	CY	WALL EXCAVATION	9,869		
3,497	840	22000	3,497	SY	FOUNDATION PREPARATION	3,497		
28,261	840	23000	28,261	CY	SELECT GRANULAR BACKFILL	28,261		
108	840	23050	108	CY	NATURAL SOIL	108		
2,898	840	25010	2,898	FT	6" DRAINAGE PIPE, PERFORATED	2,898		
85	840	25020	85	FT	6" DRAINAGE PIPE, NON-PERFORATED	85		
1,424	840	26000	1,424	FT	CONCRETE COPING	1,424		
35,069	840	26050	35,069	SF	AESTHETIC SURFACE TREATMENT	35,069		
5	840	27000	5	DAY	ON-SITE ASSISTANCE	5		
1	840	28000	1	LS	SGB INSPECTION AND COMPACTION TESTING		1	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 2 - ESTIMATED QUANTITIES
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
4	9

SHEET	TOTAL
P.310	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
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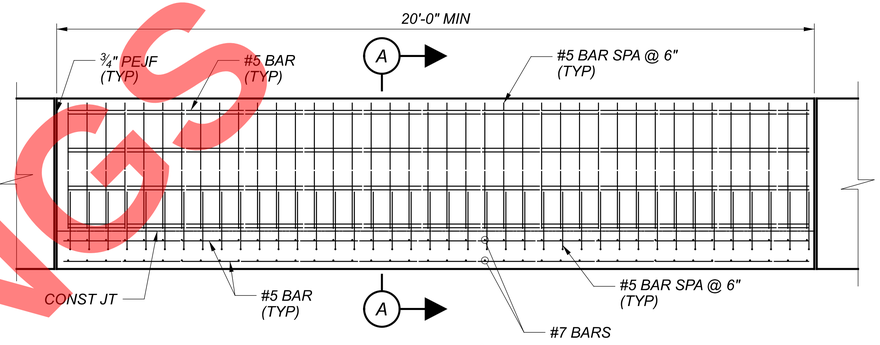
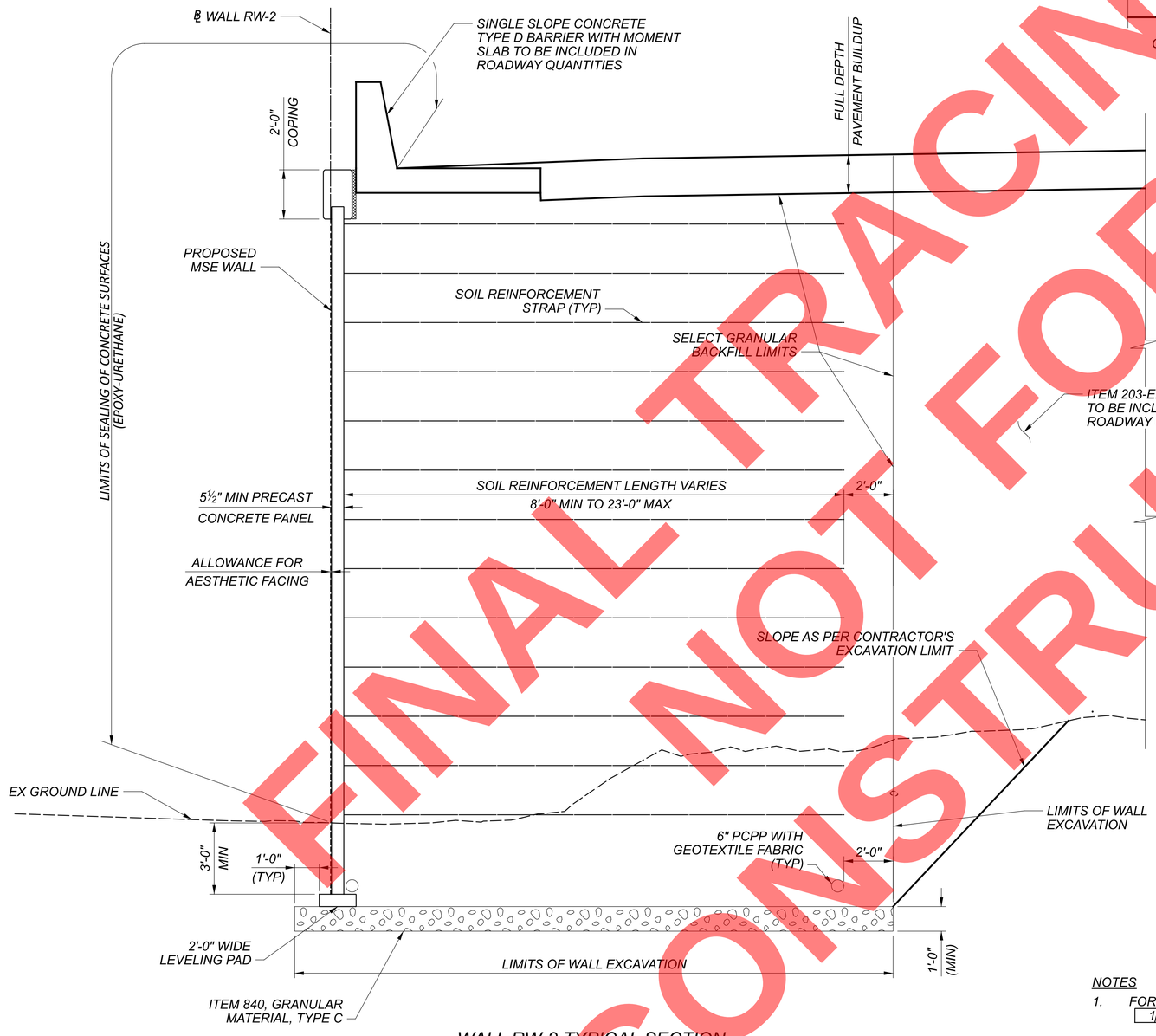
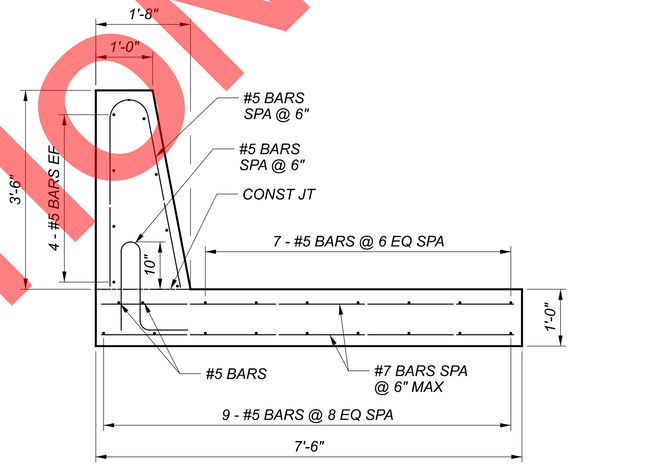
FINAL TRACINGS
NOT FOR
CONSTRUCTION



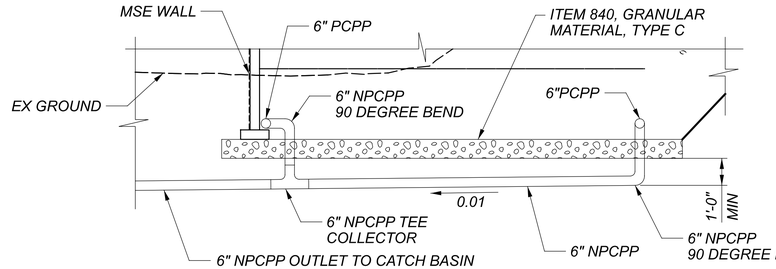
42" SINGLE SLOPE BARRIER WITH MOMENT SLAB FOUNDATION



WALL RW-2 TYPICAL SECTION



A SECTION MOMENT SLAB



PIPE OUTLET DETAIL

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 THRU 3/9 .
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. FOR ADDITIONAL MOMENT SLAB DETAILS AND NOTES, SEE ODOT STD DWG RM-4.9.

RETAINING WALL 2 - CROSS SECTIONS (1 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
5	9

SHEET	TOTAL
P.311	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$

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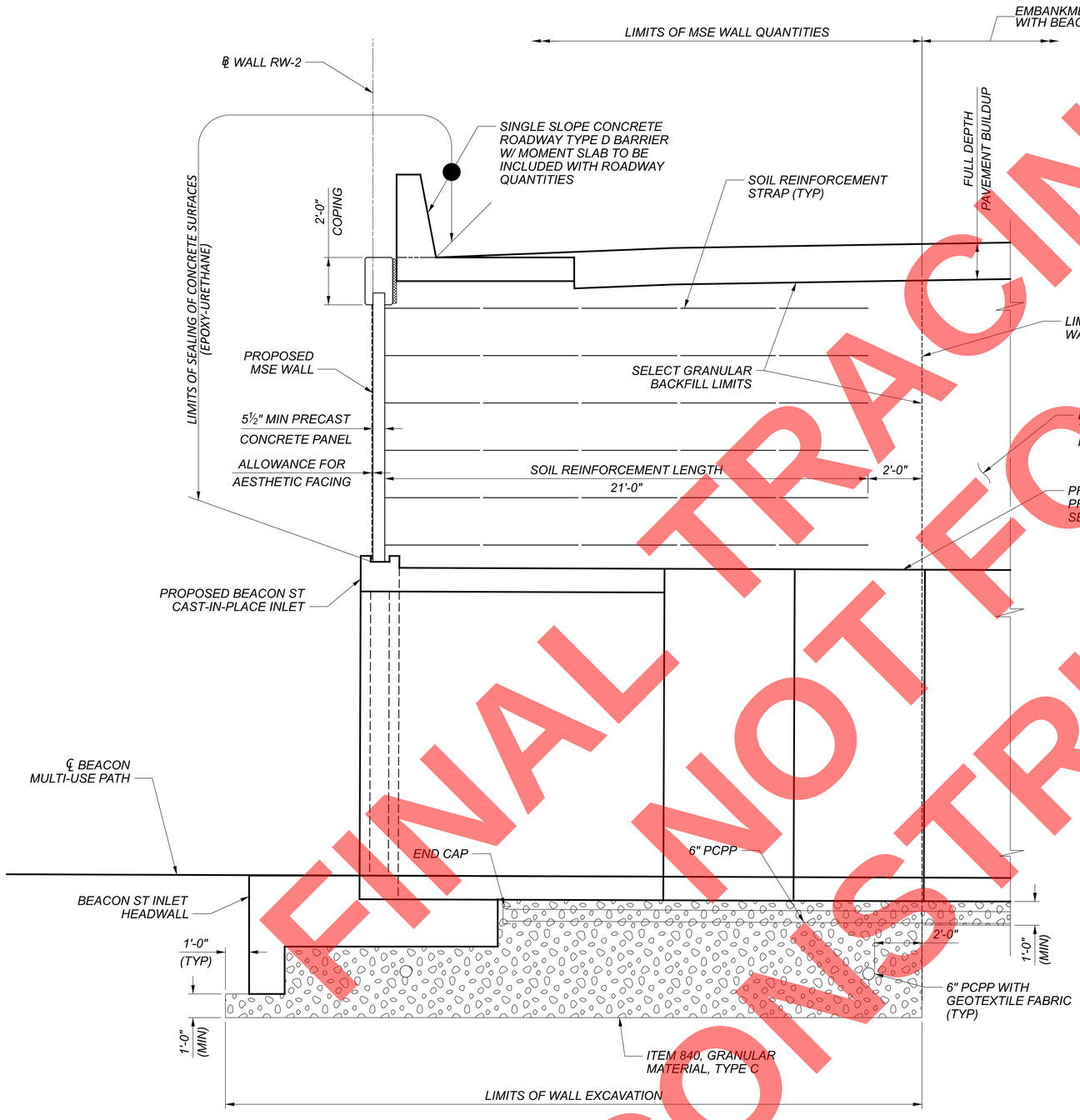

WALL RW-2 SECTION AT BEACON CULVERT

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 THRU 3/9 .
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. FOR ADDITIONAL BEACON STREET CULVERT DETAILS, SEE PLAN SET STARTING ON SHEET P.364/627.

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 2 - CROSS SECTIONS (2 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
6	9

SHEET	TOTAL
P.312	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRVS$
PENTABLE: $PENTBLS$
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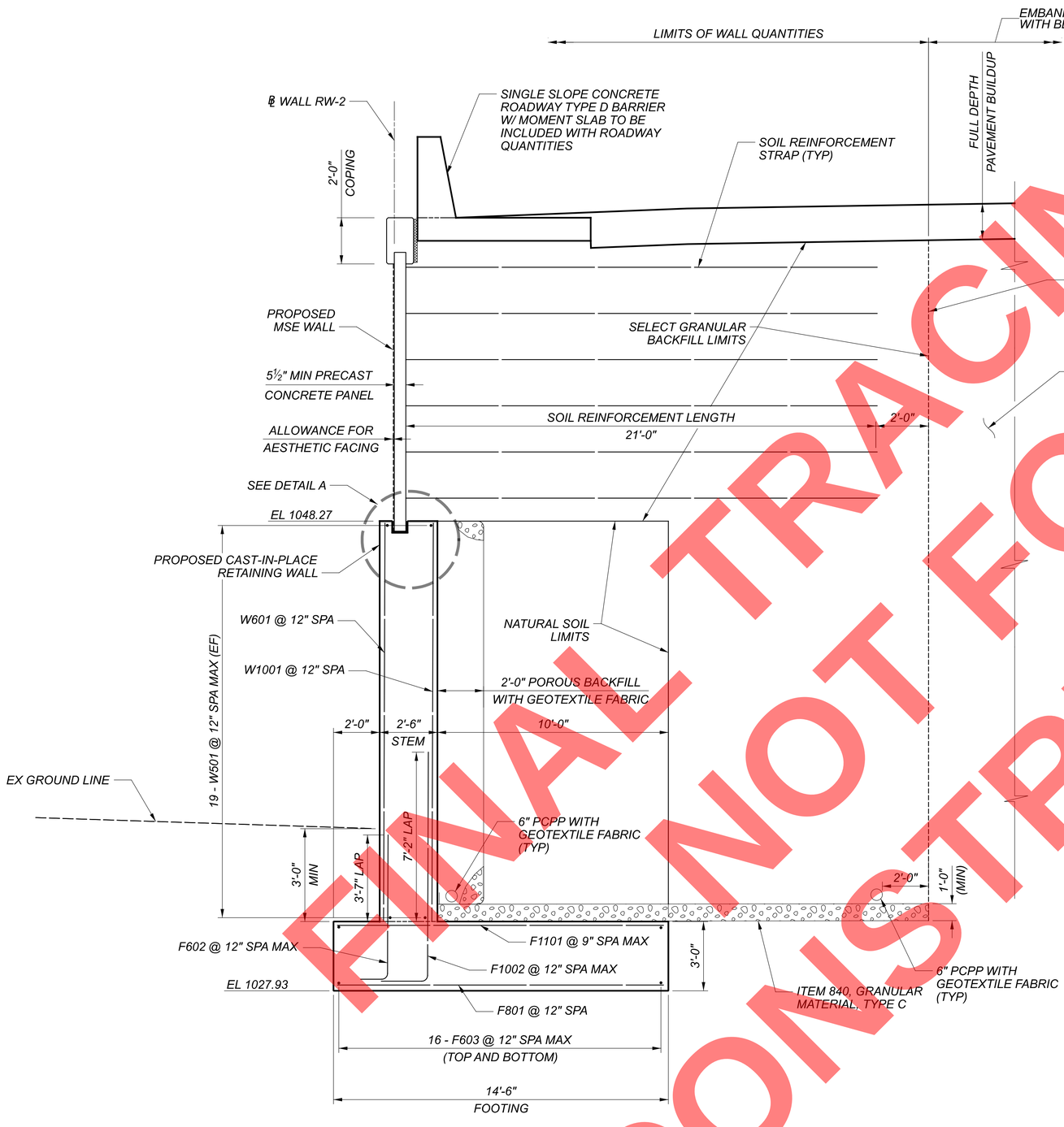
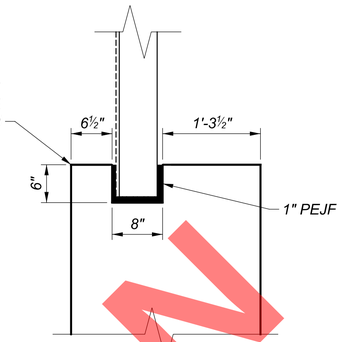
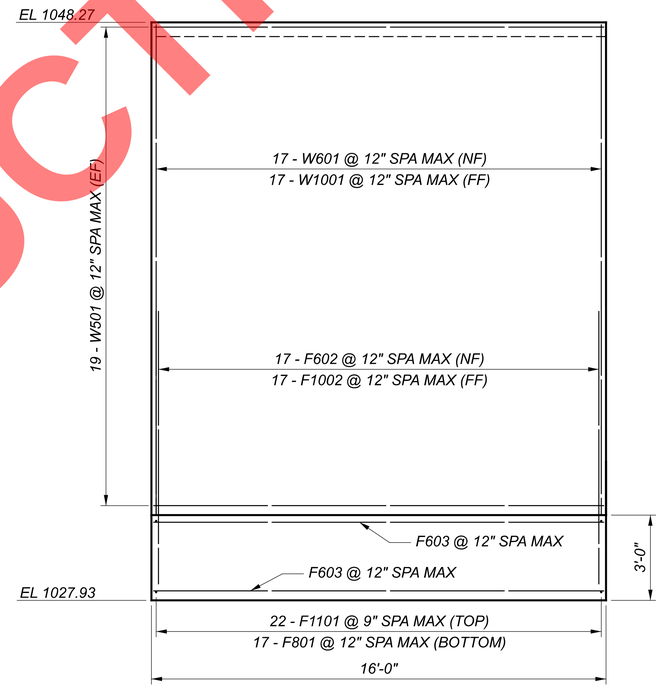
FINAL PLANS NOT FOR CONSTRUCTION



WALL RW-2 SECTION AT CAST-IN-PLACE RETAINING WALL



DETAIL A



WALL RW-2 CAST-IN-PLACE RETAINING WALL ELEVATION

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 THRU 3/9.
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. FOR ADDITIONAL BEACON STREET CULVERT DETAILS, SEE PLAN SET STARTING ON SHEET P.364/627.

RETAINING WALL 2 - CROSS SECTIONS (3 OF 3)
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
7	9

SHEET	TOTAL
P.313	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 PENTABLE: $PENTBLS$

SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:11:59 AM USER: stony
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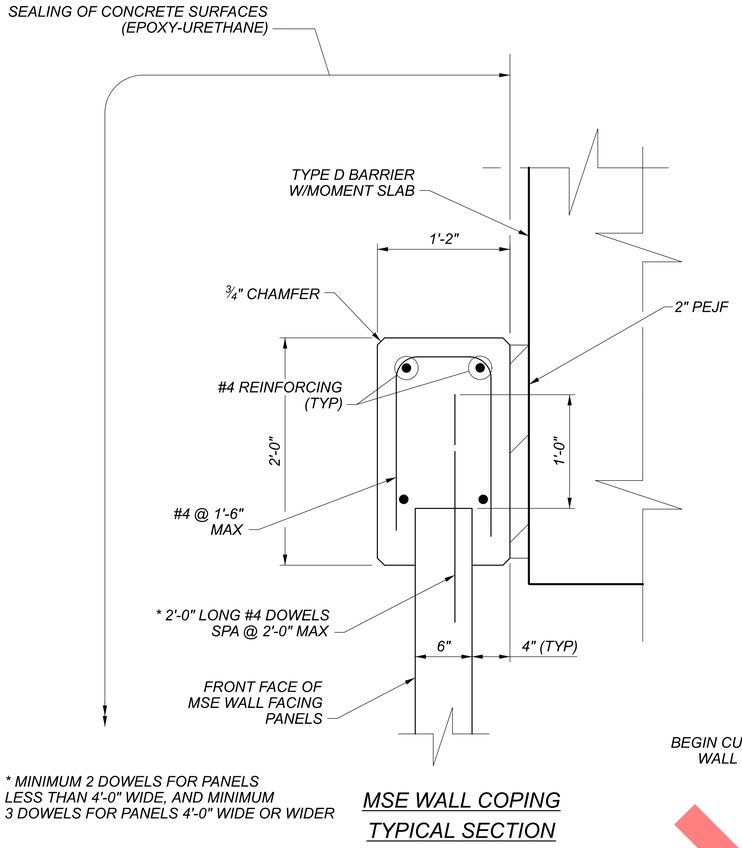
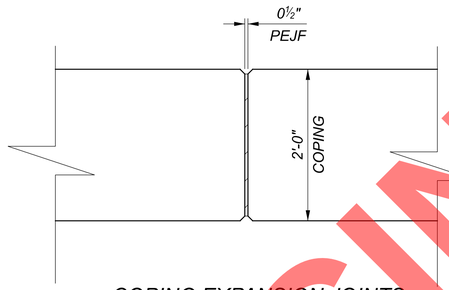
FINAL TRACINGS
NOT FOR
CONSTRUCTION

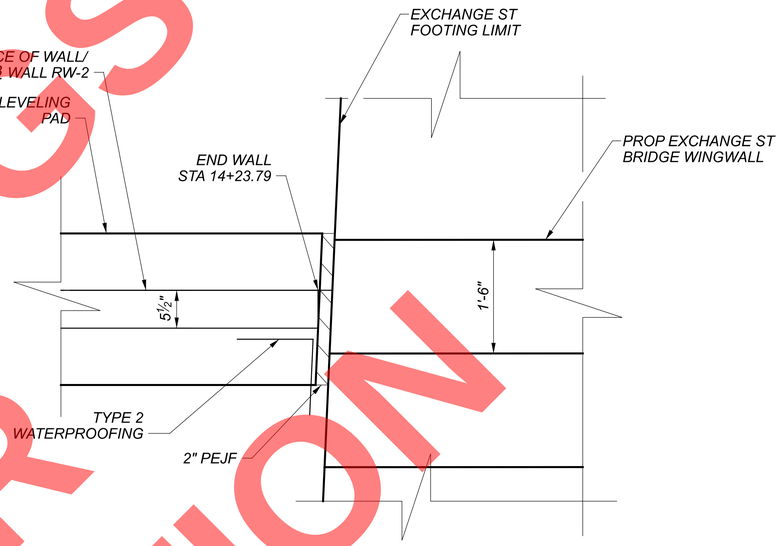


* MINIMUM 2 DOWELS FOR PANELS
LESS THAN 4'-0" WIDE, AND MINIMUM
3 DOWELS FOR PANELS 4'-0" WIDE OR WIDER

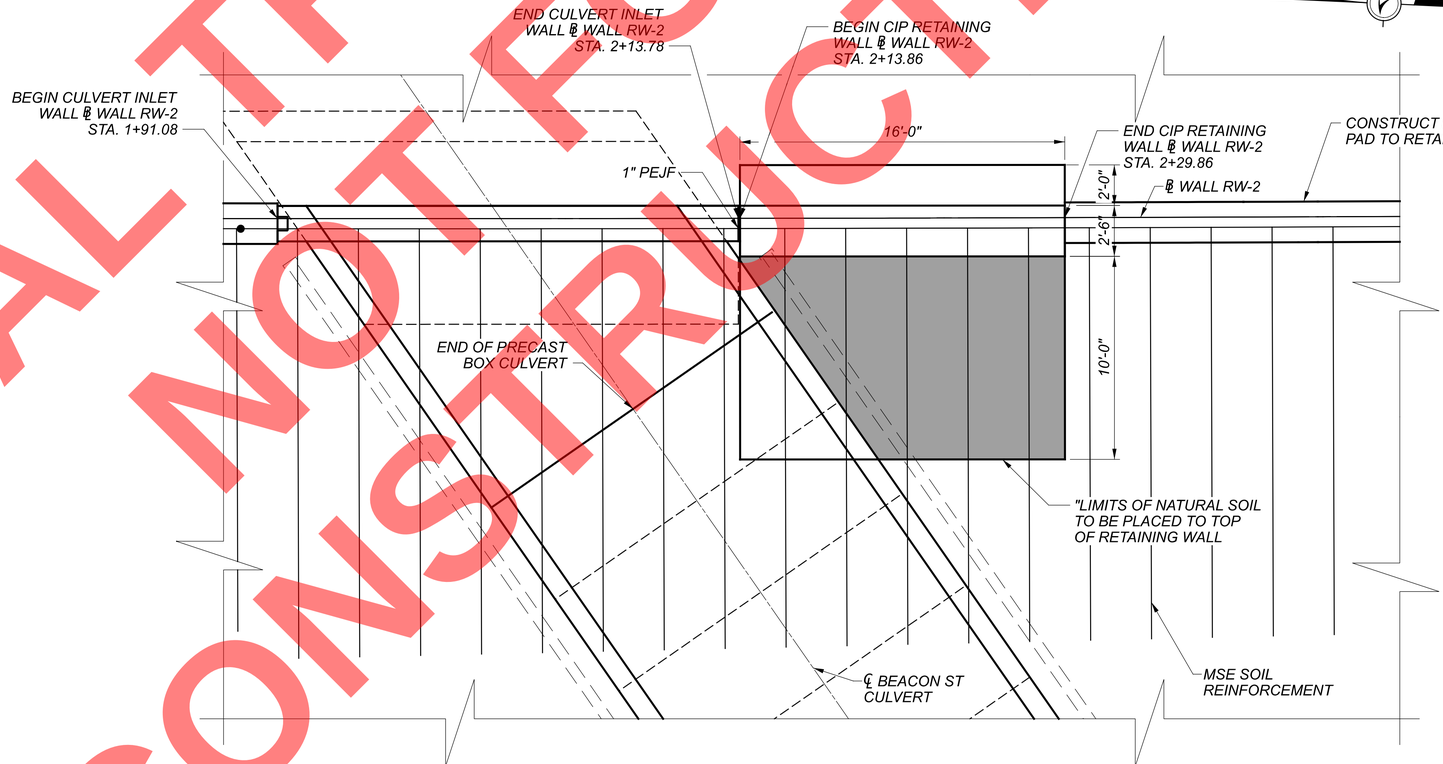
MSE WALL COPING
TYPICAL SECTION



COPING EXPANSION JOINTS



A/3 DETAIL
END WALL JOINT



WALL RW-2 AND PROPOSE CULVERT
BRIDGE NO. SUM-8-0064

SEQUENCE OF CONSTRUCTION

1. CONSTRUCT CAST-IN-PLACE RETAINING WALL ALONG ℄ WALL RW-2 AS SHOWN PRIOR TO THE PLACEMENT OF THE PRECAST BOX CULVERT AND CONSTRUCTION OF THE CAST-IN-PLACE CULVERT OUTLET ALONG ℄ BEACON STREET CULVERT.

NOTE

1. FOR ADDITIONAL DETAILS OF CAST-IN-PLACE RETAINING WALL, SEE SHEET 7/9 .

RETAINING WALL 2 - MSE WALL DETAILS
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

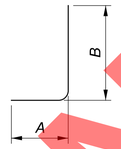
SUBSET	TOTAL
8	9

SHEET	TOTAL
P.314	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:12:25 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 2\Sheets\114865_WALL002_WD001

Mark	NUMBER TYPICAL Col #1	LENGTH	WEIGHT TYP	TYPE	DIMENSIONS A	B	C	D	E	R	INC
RETAINING WALL											
F602	17	7'-4"	188	1	1'-2"	6'-3"					
F603	32	15'-8"	754	STR.							
F801	17	14'-2"	644	STR.							
F1002	17	11'-8"	854	1	2'-0"	9'-11"					
F1101	22	14'-2"	1,656	STR.							
W501	38	15'-8"	621	STR.							
W601	17	17'-0"	435	STR.							
W1001	17	17'-0"	1,244	STR.							
		SUB-TOTAL	6,396								



TYPE-1

REINFORCING BENDING DIAGRAM

REINFORCING CALLOUT NOMENCLATURE
BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.

EXAMPLES: ABUTMENT A501 # 5 BAR — ID

LOCATION MARKS USED: W = RETAINING WALL F = FOOTING

REINFORCING NOTES

1. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING, INCLUDING MECHANICAL CONNECTORS, SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

CONNECTORS AND DOWEL BARS USED WITH EPOXY COATED BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS THAT HAVE BEEN DAMAGED OR THAT OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY, MAY BE REPAIRED AS DIRECTED BY THE ENGINEER, OR THEY SHALL BE REPLACED WITH MATERIAL WITH MEETS THE SPECIFICATIONS.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 2 - REINFORCING LIST
STA. 00+00.00 TO STA. 14+23.79

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
9	9

SHEET	TOTAL
P.315	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRVS$
PENTABLE: $PENTBLS$
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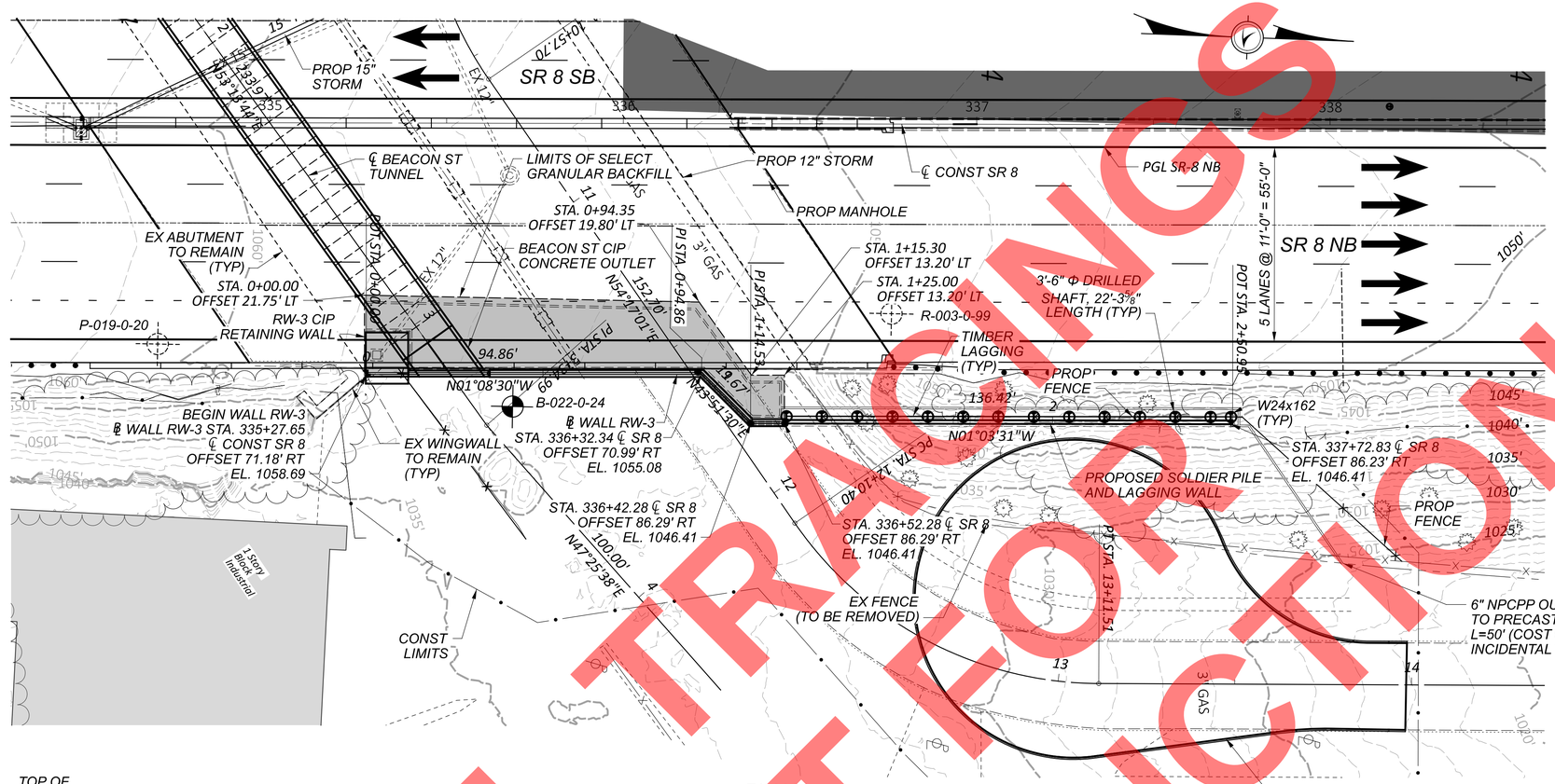
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 2\Sheets\114865_WALL002_WL001

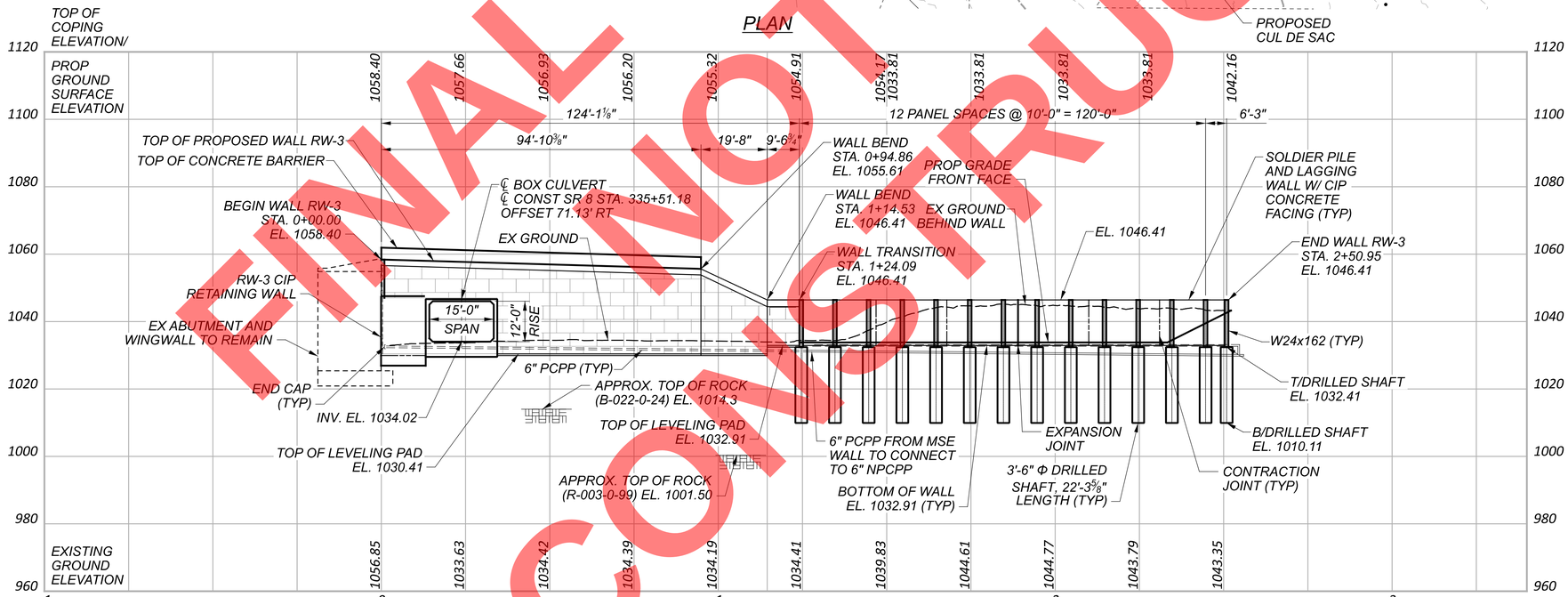
FINAL TRACINGS
NOT FOR
CONSTRUCTION



LEGEND

- ## PILE NO.
- BORING LOCATION
- HISTORIC BORING LOCATION

PLAN



PROFILE ALONG ℄ WALL RW-3

NOTE

1. FOR GENERAL NOTES, SEE SHEETS P.299/627 THRU P.301/627.

RETAINING WALL 3 - PLAN AND PROFILE
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
1	9

SHEET	TOTAL
P.316	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$

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PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26	CHECKED: HLD 04/22/26	VERIFIED: SAT 04/30/26
05/IMS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	WALL RW-3	GENERAL	SHEET REF.
1	503	21300	1	LS	UNCLASSIFIED EXCAVATION		1	
511	507	00400	511	FT	STEEL PILES, MISC.: SOLDIER PILES	511		P.299
5041	509	10000	5,041	LB	EPOXY COATED STEEL REINFORCEMENT	5,041		
40	510	10001	40	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	40		7
20	511	46010	20	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	20		
20	511	46510	20	CY	CLASS QC1 CONCRETE, FOOTING	20		
64	511	53010	64	CY	CLASS QC1 CONCRETE, MISC.: CONCRETE FACING	64		P.300
204	512	10050	204	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	204		
312	512	10100	312	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	312		
41	516	13600	41	SF	1" PREFORMED EXPANSION JOINT FILLER	41		
198	516	13900	198	SF	2" PREFORMED EXPANSION JOINT FILLER	198		
20	518	21200	20	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	20		
313	524	94805	313	FT	DRILLED SHAFTS, 42" DIAMETER, INTO BEDROCK, AS PER PLAN	313		P.299
1705	530	50010	1,705	SF	SPECIAL - RETAINING WALL , GEOCOMPOSITE DRAIN	1,705		P.299
1707	530	51020	1,707	SF	SPECIAL - RETAINING WALL, TIMBER LAGGING	1,707		P.299
127	601	37500	127	FT	PAVED GUTTER, TYPE 1-2	127		
1684	840	20000	1,684	SF	MECHANICALLY STABILIZED EARTH WALL	1,684		
364	840	20001	364	SF	MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	364		3
485	840	21000	485	CY	WALL EXCAVATION	485		
286	840	22000	286	SY	FOUNDATION PREPARATION	286		
3005	840	23000	3,005	CY	SELECT GRANULAR BACKFILL	3,005		
90	840	23050	90	CY	NATURAL SOIL	90		
377	840	25010	377	FT	6" DRAINAGE PIPE, PERFORATED	377		
177	840	25020	177	FT	6" DRAINAGE PIPE, NON-PERFORATED	177		
127	840	26000	127	FT	CONCRETE COPING	127		
2634	840	26050	2,634	SF	AESTHETIC SURFACE TREATMENT	2,634		
5	840	27000	5	DAY	ON-SITE ASSISTANCE	5		
1	840	28000	1	LS	SGB INSPECTION AND COMPACTION TESTING		1	

PILE INFORMATION

PILE NO.	PILE STATION	TOP OF PILE ELEV	FUTURE GROUND	TOP OF SHAFT	BOTTOM OF SHAFT	DIM. " H" (FT.)	DIM. " E" (FT.)	DIM. " L" (FT.)
1	1+24.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
2	1+34.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
3	1+44.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
4	1+53.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
5	1+64.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
6	1+74.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
7	1+84.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
8	1+94.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
9	2+04.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
10	2+14.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
11	2+24.63	1046.41	1033.81	1032.41	1010.11	14.0	22.3	36.3
12	2+34.63	1046.41	1035.08	1032.41	1010.11	14.0	22.3	36.3
13	2+44.63	1046.41	1040.08	1032.41	1010.11	14.0	22.3	36.3
14	2+50.41	1046.41	1042.71	1032.41	1010.11	14.0	22.3	36.3

WALL RW-3
EXPANSION/CONTRACTION JOINT LOCATION

STATION	TYPE
1+46.84	CONTRACTION
1+67.84	CONTRACTION
1+88.97	EXPANSION
2+09.97	CONTRACTION
2+30.97	CONTRACTION

NOTES

1. DIMENSIONS H, E, AND L CORRESPOND TO THE DIMENSION CALLOUTS SHOWN ON SHEET 8/9 .
2. THE PROPOSED GROUND SURFACE SHOWN IN THE PILE INFORMATION TABLE REFERS TO THE FINISHED GROUND ELEVATION IMMEDIATELY IN FRONT OF THE SOLDIER PILE WALL.

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 3 - ESTIMATED QUANTITIES
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
2	9

SHEET	TOTAL
P.317	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRVS$
PENTABLE: $PENTBLS$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 10:09:33 AM USER: stony
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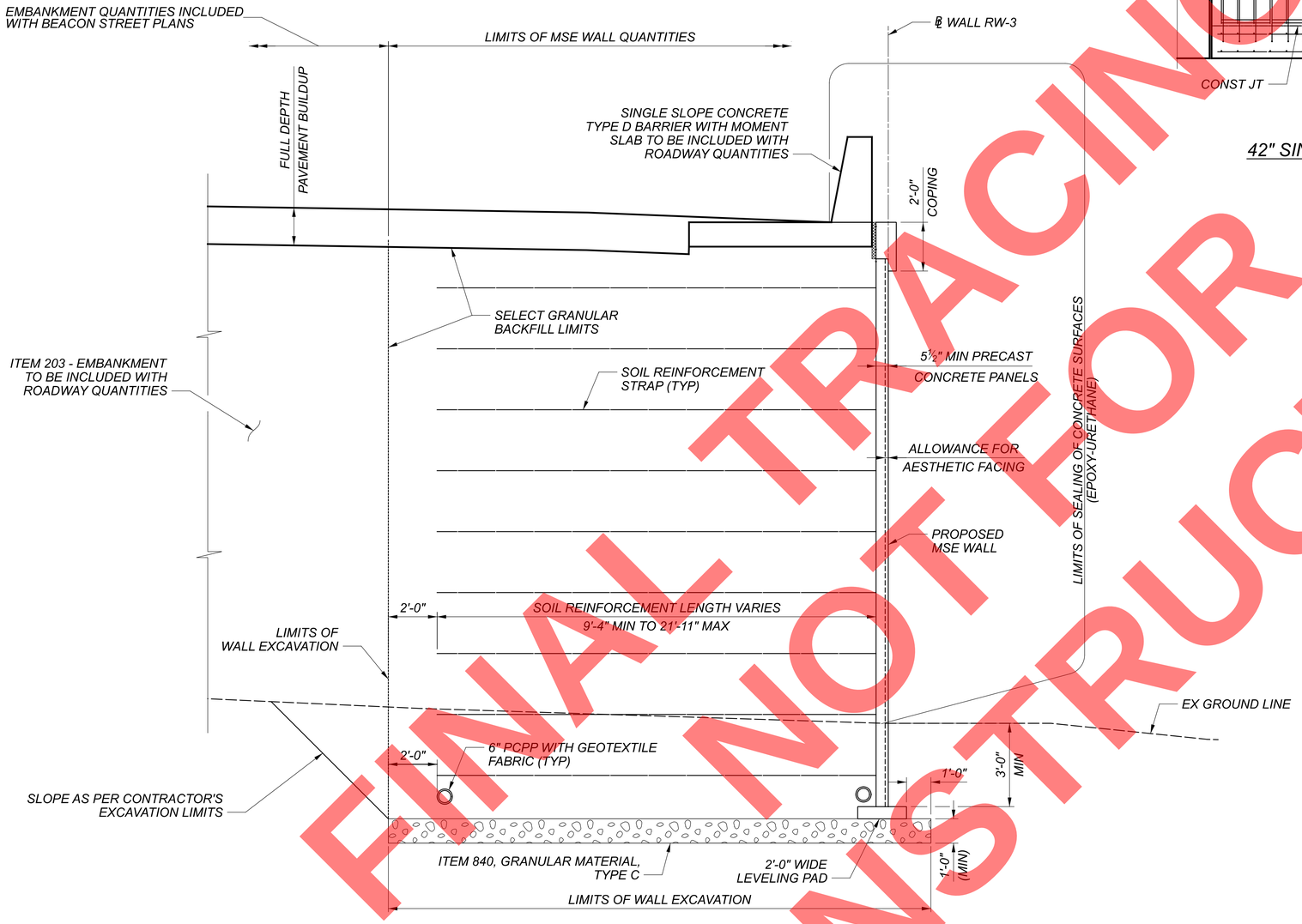
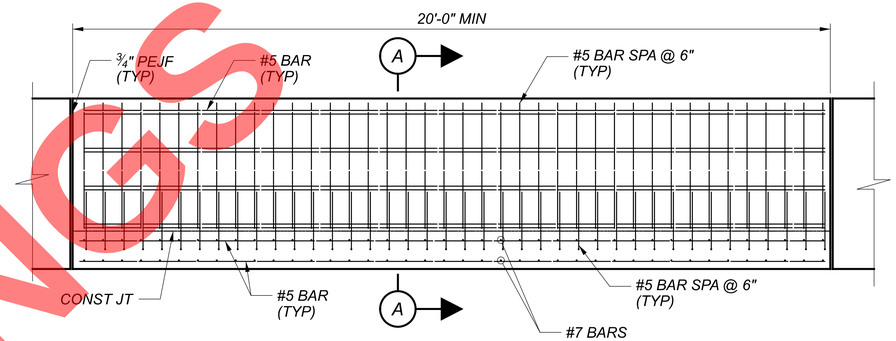
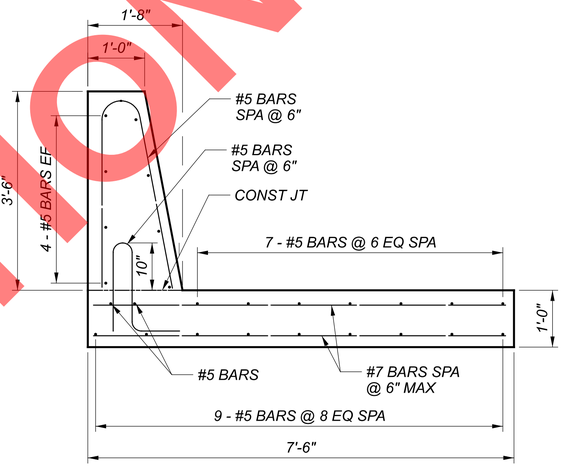
FINAL NOT FOR CONSTRUCTION



WALL RW-3 TYPICAL SECTION



42" SINGLE SLOPE BARRIER WITH MOMENT SLAB FOUNDATION



A SECTION MOMENT SLAB

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 .
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. FOR ADDITIONAL MOMENT SLAB DETAILS AND NOTES, SEE ODOT STD DWG RM-4.9.

RETAINING WALL 3 - CROSS SECTION (1 OF 3)
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026
PROJECT ID: 114865
SUBSET: 3 TOTAL: 9
SHEET: P.318 TOTAL: 627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRV$ SUBMITTAL: SUB_STG
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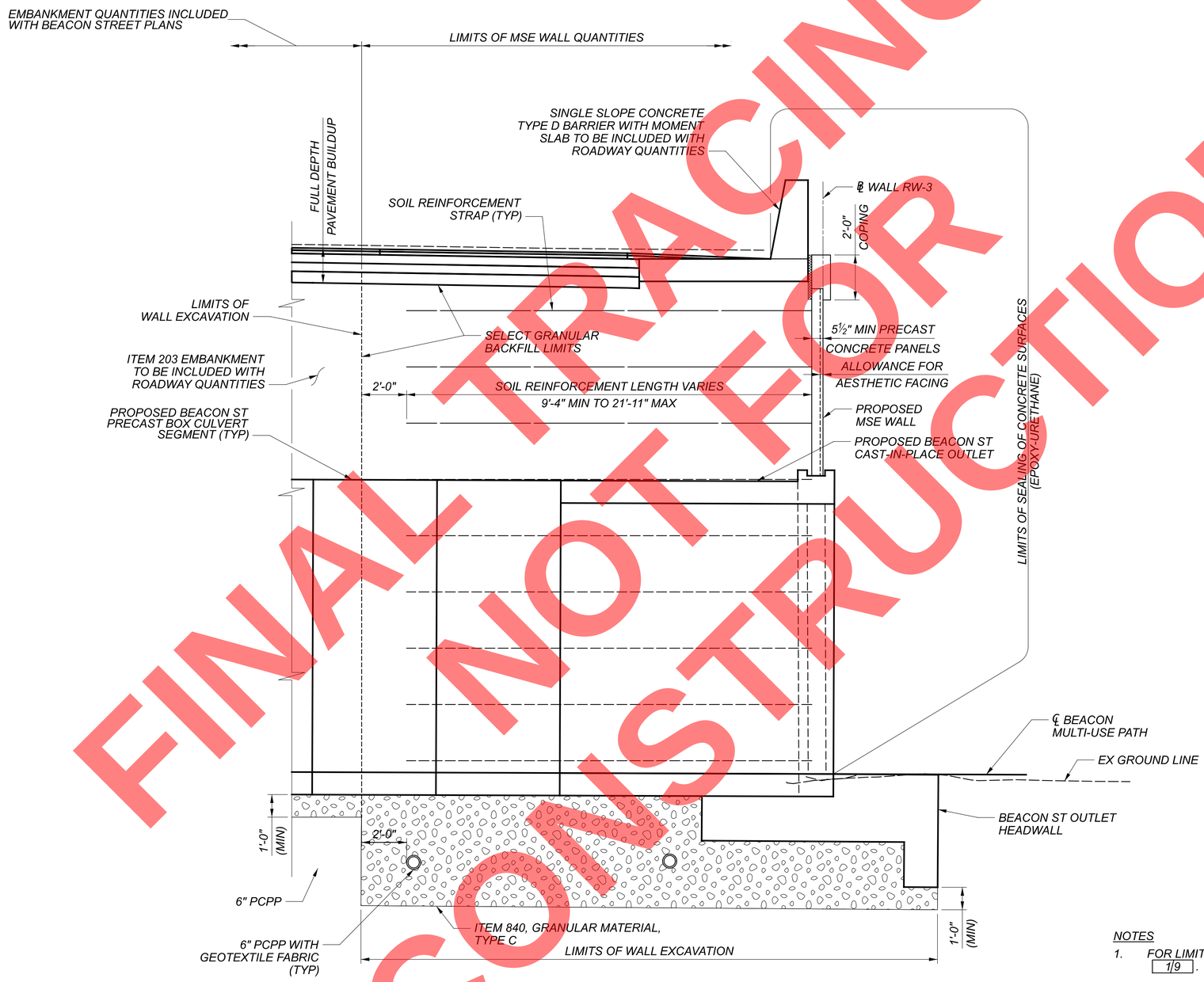

WALL RW-3 SECTION AT BEACON CULVERT

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 .
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. FOR ADDITIONAL BEACON STREET CULVERT DETAILS, SEE PLAN SET STARTING ON SHEET P.364/627.

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 3 - CROSS SECTION (2 OF 3)
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
4	9

SHEET	TOTAL
P.319	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
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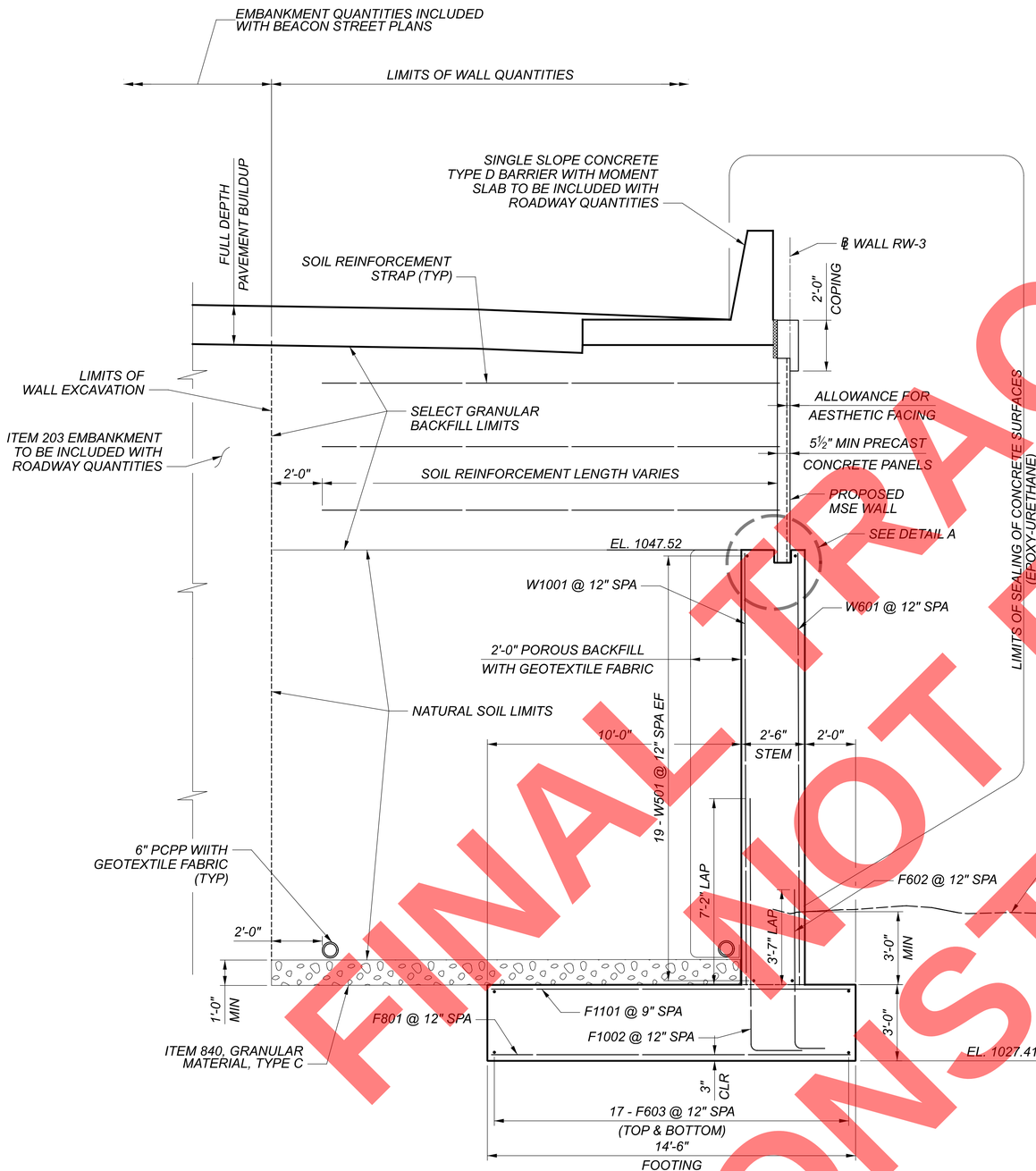
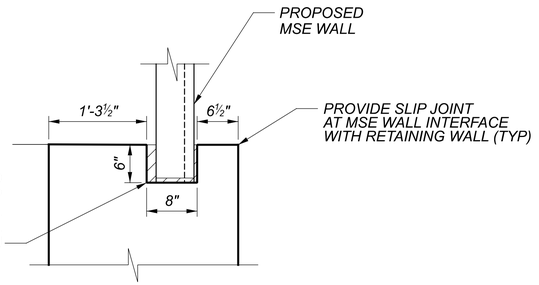
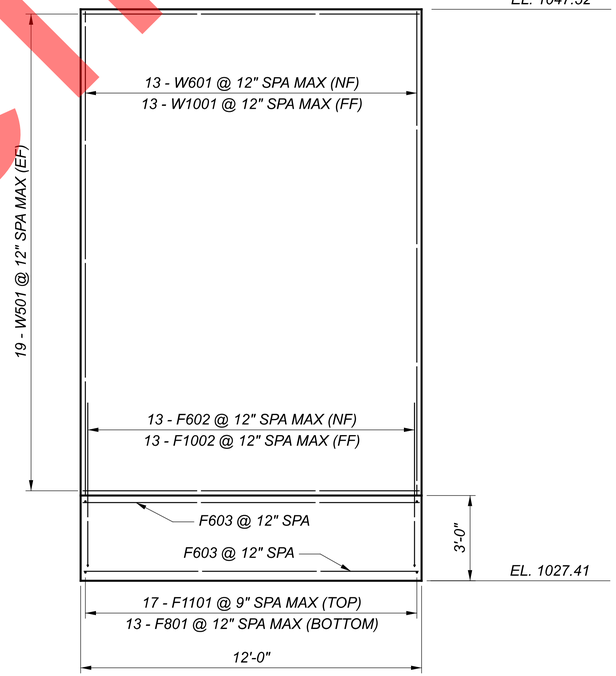
FINAL TRACINGS
NOT FOR
CONSTRUCTION



WALL RW-3 SECTION AT RETAINING WALL



DETAIL A



WALL RW-3 ELEVATION AT BEACON CULVERT

NOTES

1. FOR LIMITS OF GRANULAR BACKFILL, SEE PLAN & PROFILE SHEETS 1/9 .
2. MINIMUM SOIL REINFORCEMENT LENGTHS AS SHOWN ARE REQUIRED FOR EXTERNAL STABILITY OF THE WALL.
3. 2" CLEAR COVER UNLESS NOTED OTHERWISE.

RETAINING WALL 3 - CROSS SECTION (3 OF 3)
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
5	9

SHEET	TOTAL
P.320	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:15:32 AM USER: stony
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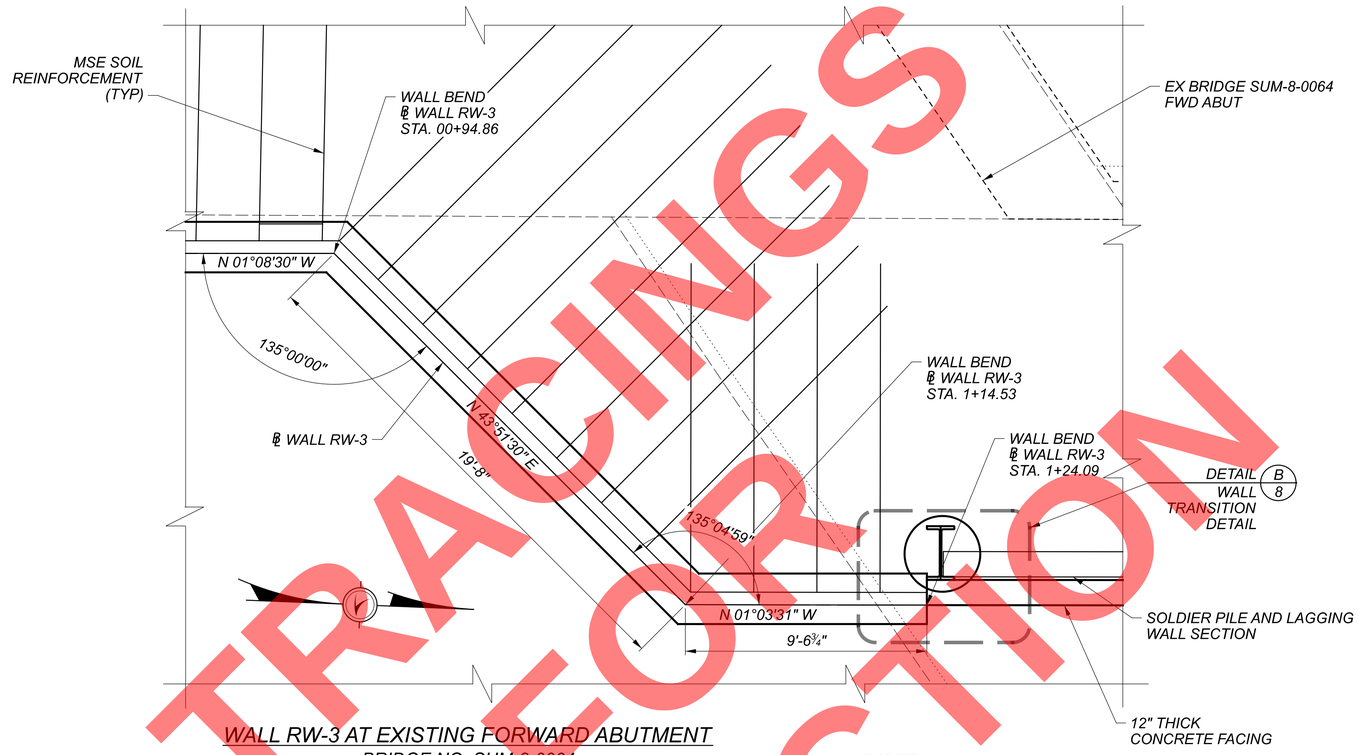
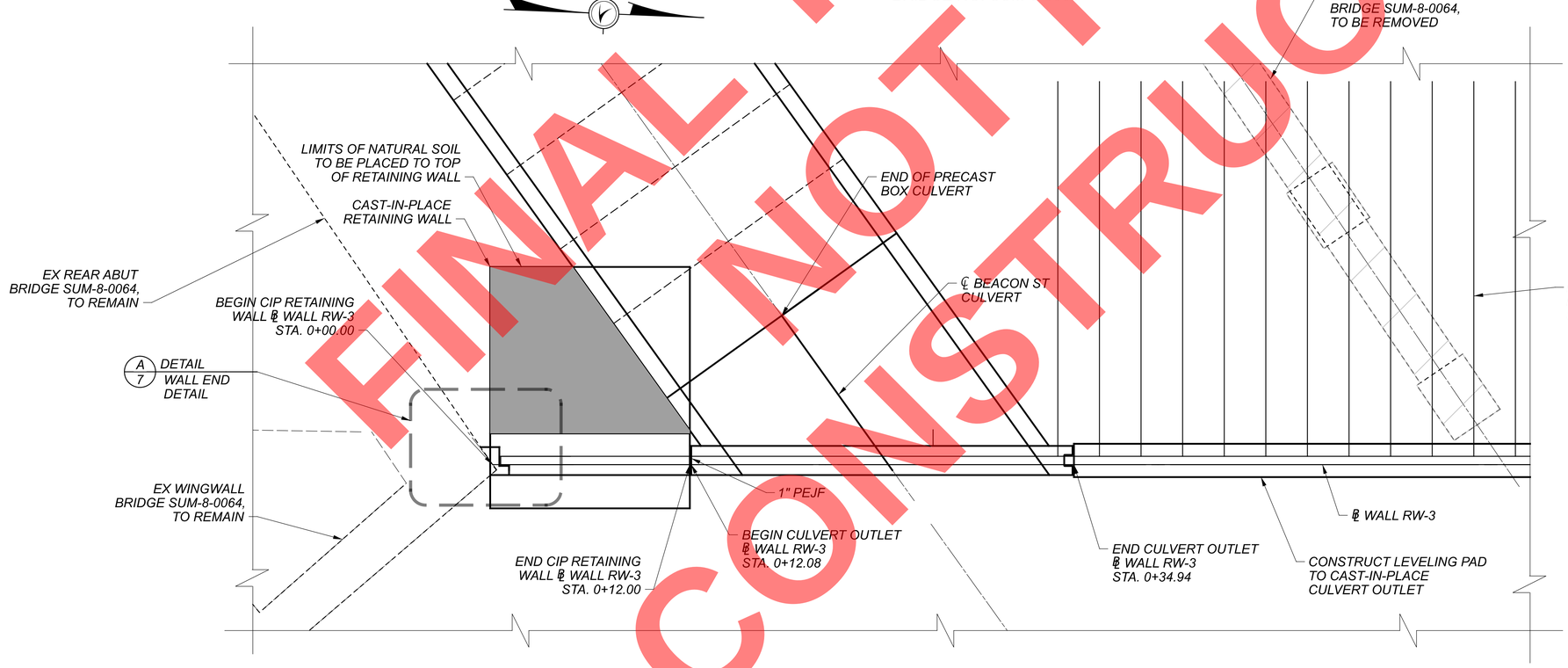
FINAL TRACINGS NOT FOR CONSTRUCTION



WALL RW-3 AT EXISTING FORWARD ABUTMENT
BRIDGE NO. SUM-8-0064



WALL RW-3 AT EXISTING REAR ABUTMENT AND PROPOSED CULVERT
BRIDGE NO. SUM-8-0064

SEQUENCE OF CONSTRUCTION

1. CONSTRUCT CAST-IN-PLACE RETAINING WALL ALONG ℄ WALL RW-3 AS SHOWN PRIOR TO THE PLACEMENT OF THE PRECAST BOX CULVERT AND CONSTRUCTION OF THE CAST-IN-PLACE CULVERT OUTLET ALONG ℄ BEACON STREET CULVERT.

NOTES

1. FOR ADDITIONAL DETAILS OF CAST-IN-PLACE RETAINING WALL, SEE SHEET 5/9 .

RETAINING WALL 3 - WALL DETAILS (1 OF 2)
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
6	9

SHEET	TOTAL
P.321	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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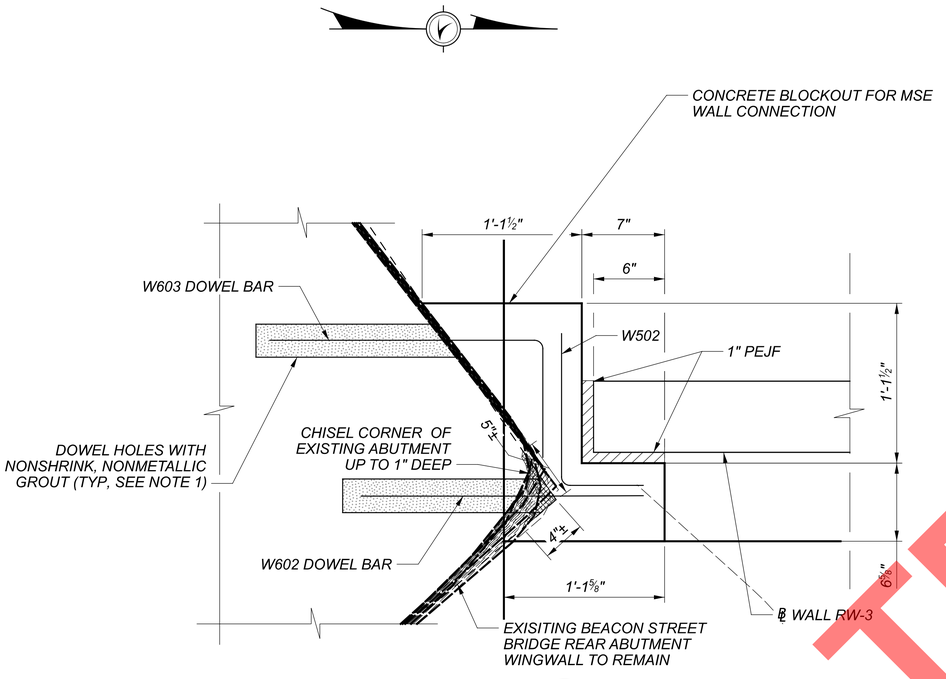
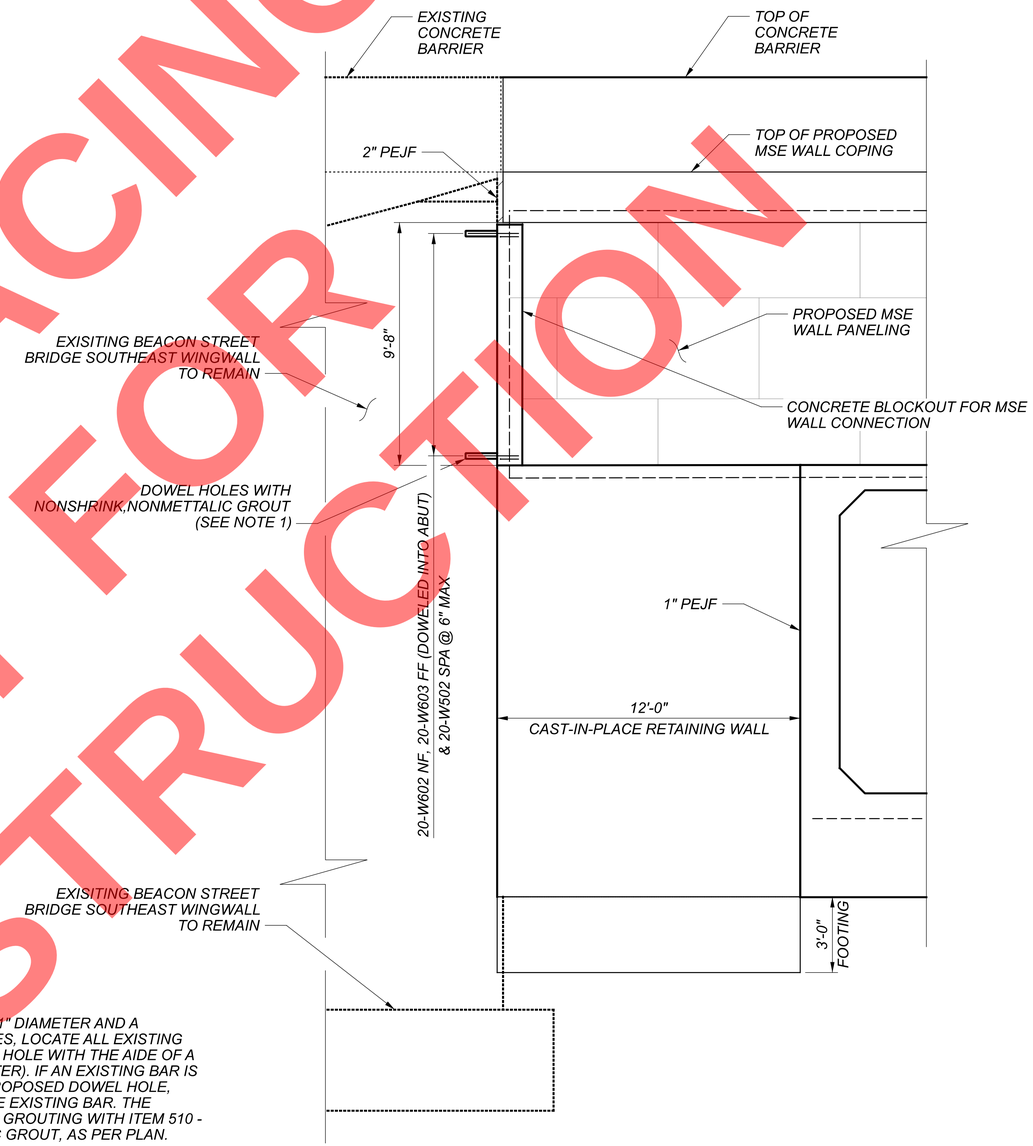
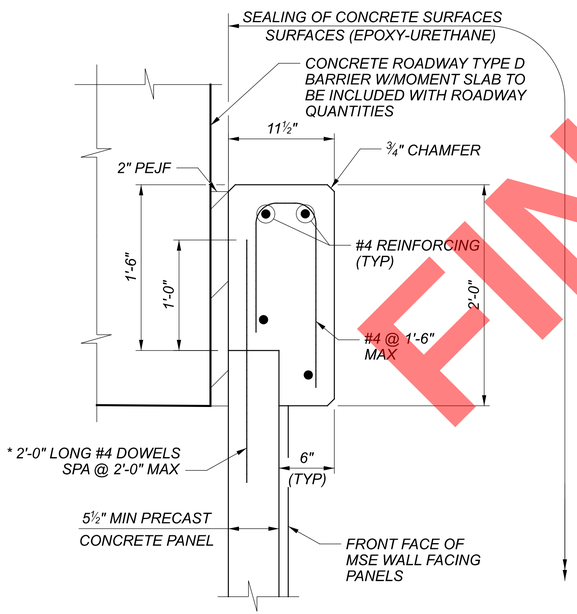
FINAL TRACINGS
NOT FOR
CONSTRUCTION



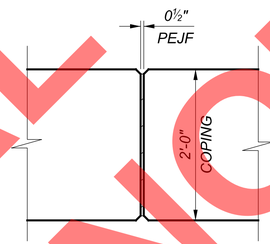
A/6 DETAIL
WALL END DETAIL



ELEVATION
WALL END DETAIL



MSE WALL COPING
TYPICAL SECTION



COPING EXPANSION JOINTS

NOTE

1. DOWEL HOLES FOR #6 REINFORCING SHALL BE 1" DIAMETER AND A MINIMUM OF 15" DEEP. PRIOR TO DRILLING HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AIDE OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. THE DEPARTMENT WILL PAY FOR DOWEL HOLES AND GROUTING WITH ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN.
2. PAYMENT FOR CONCRETE BLOCKOUT IS INCLUDED WITH ITEM 511 - CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING.

RETAINING WALL 3 - WALL DETAILS (2 OF 2)
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

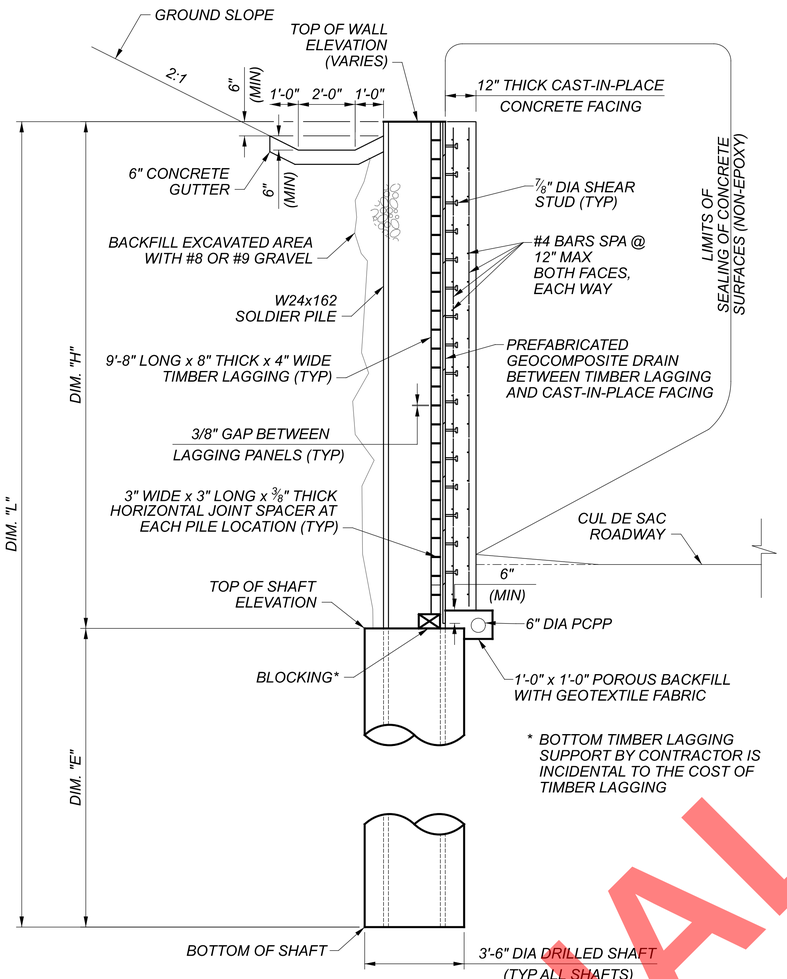
REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
7	9

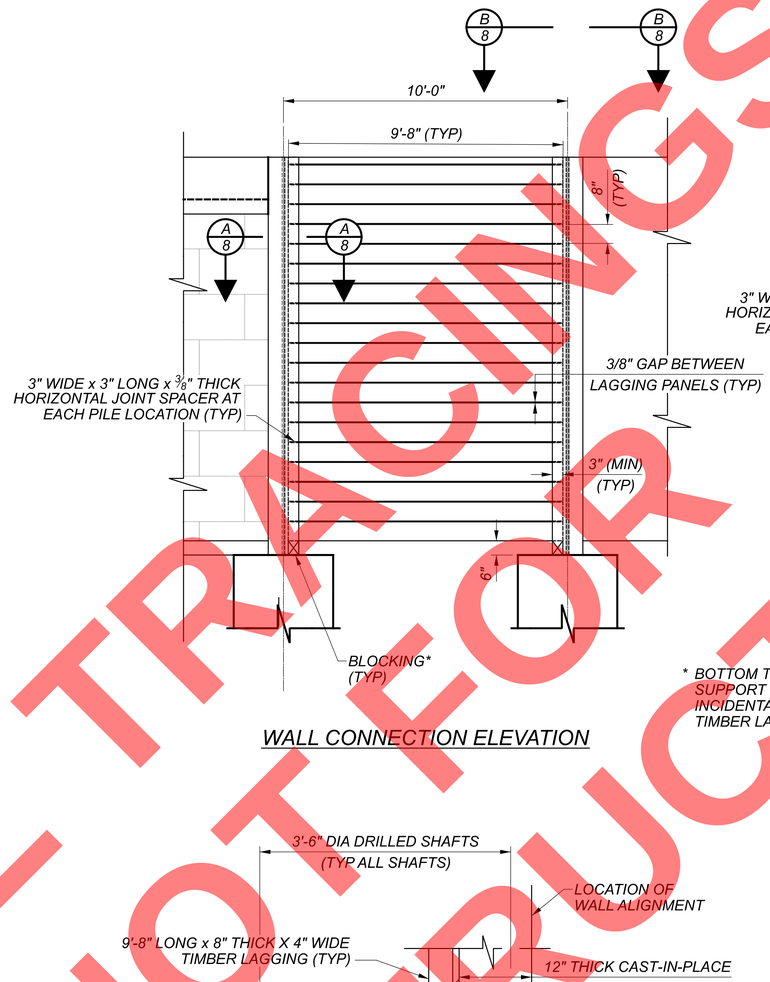
SHEET	TOTAL
P.322	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:15:55 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\Structures\Walls\Wall 3\Sheets\114865_WALL003_WD002



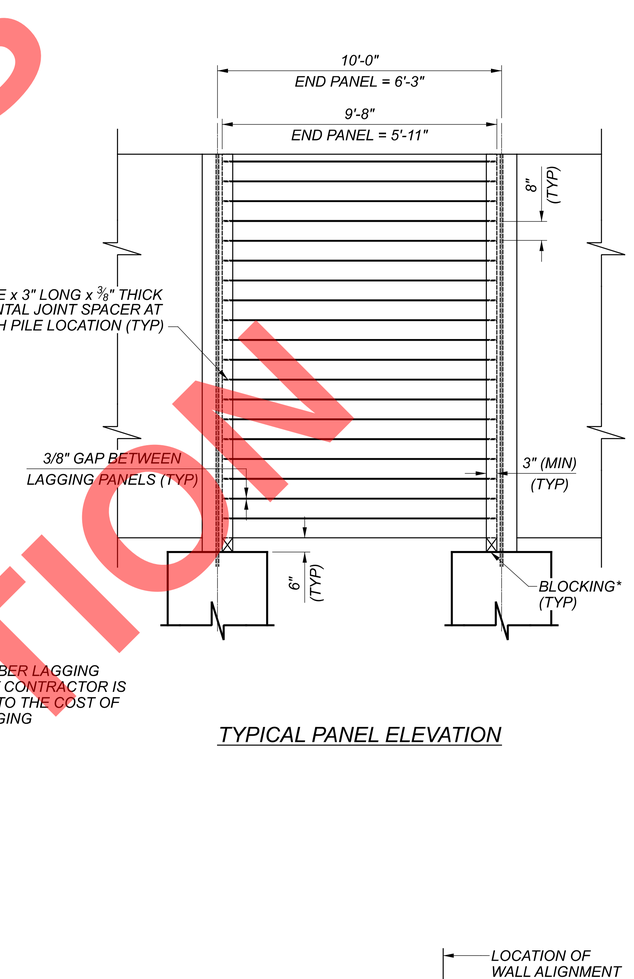
* BOTTOM TIMBER LAGGING SUPPORT BY CONTRACTOR IS INCIDENTAL TO THE COST OF TIMBER LAGGING

TYPICAL PROPOSED WALL RW-3 SECTION

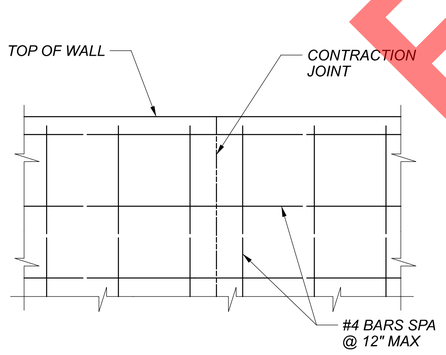


WALL CONNECTION ELEVATION

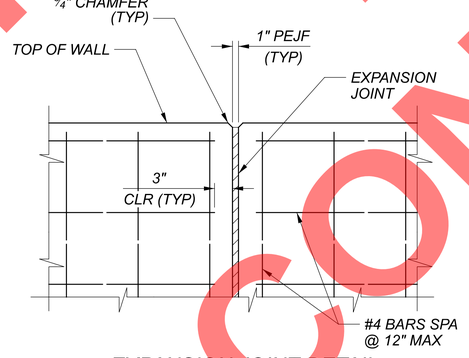
* BOTTOM TIMBER LAGGING SUPPORT BY CONTRACTOR IS INCIDENTAL TO THE COST OF TIMBER LAGGING



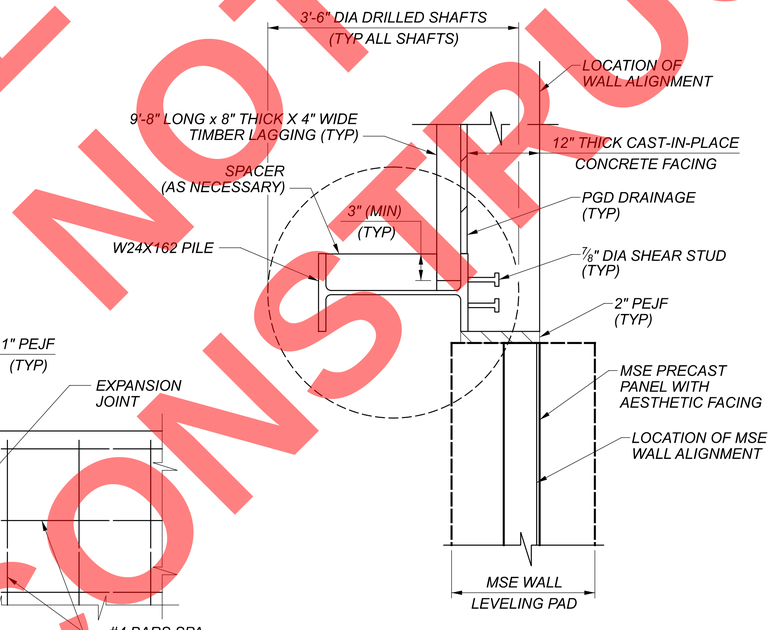
TYPICAL PANEL ELEVATION



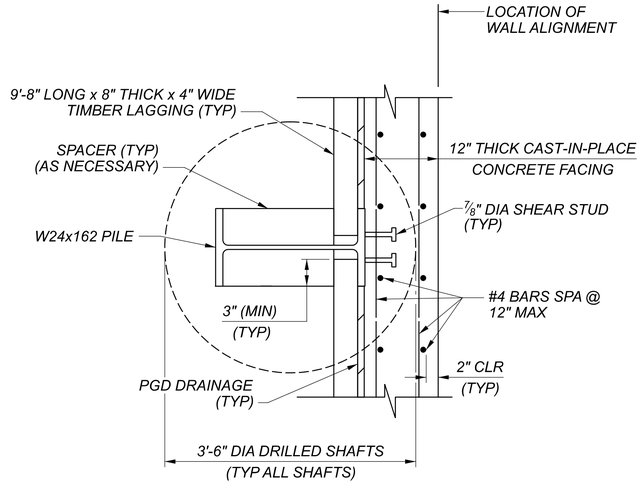
CONTRACTION JOINT DETAIL



EXPANSION JOINT DETAIL



A 8 SECTION THRU WALL



B 8 SECTION THRU WALL

FINAL NOT FOR CONSTRUCTION
TRACINGS

WALL RW-3 SOLDIER PILE CROSS SECTION
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
8	9

SHEET	TOTAL
P.323	627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$
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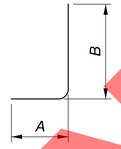
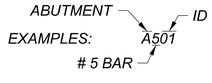
Mark	NUMBER TOTAL	LENGTH	WEIGHT TOTAL	TYPE	DIMENSIONS A	B	C	D	INC
RETAINING WALL									
F602	13	7'-3"	142	1	1'-2"	6'-3"			
F603	32	11'-8"	561	STR.					
F801	13	14'-2"	492	STR.					
F1002	13	11'-7"	648	1	2'-0"	9'-11"			
F1101	17	14'-2"	1,280	STR.					
W501	38	11'-8"	463	STR.					
W502	20	1'-10"	39	1	7"	1'-3"			
W601	13	16'-8"	326	STR.					
W602	20	2'-0"	61	STR.					
W603	20	3'-2"	96	1	1'-3"	2'-1"			
W1001	13	16'-8"	933	STR.					
		SUB-TOTAL	5,041						



TYPE-1

REINFORCING BENDING DIAGRAM

REINFORCING CALLOUT NOMENCLATURE
BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.
LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: W = RETAINING WALL F = FOOTING

REINFORCING NOTES

1. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING, INCLUDING MECHANICAL CONNECTORS, SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

CONNECTORS AND DOWEL BARS USED WITH EPOXY COATED BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS THAT HAVE BEEN DAMAGED OR THAT OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY, MAY BE REPAIRED AS DIRECTED BY THE ENGINEER, OR THEY SHALL BE REPLACED WITH MATERIAL WITH MEETS THE SPECIFICATIONS.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 3 - REINFORCING LIST
STA. 0+00.00 TO STA. 2+50.95

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
9	9

SHEET	TOTAL
P.324	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
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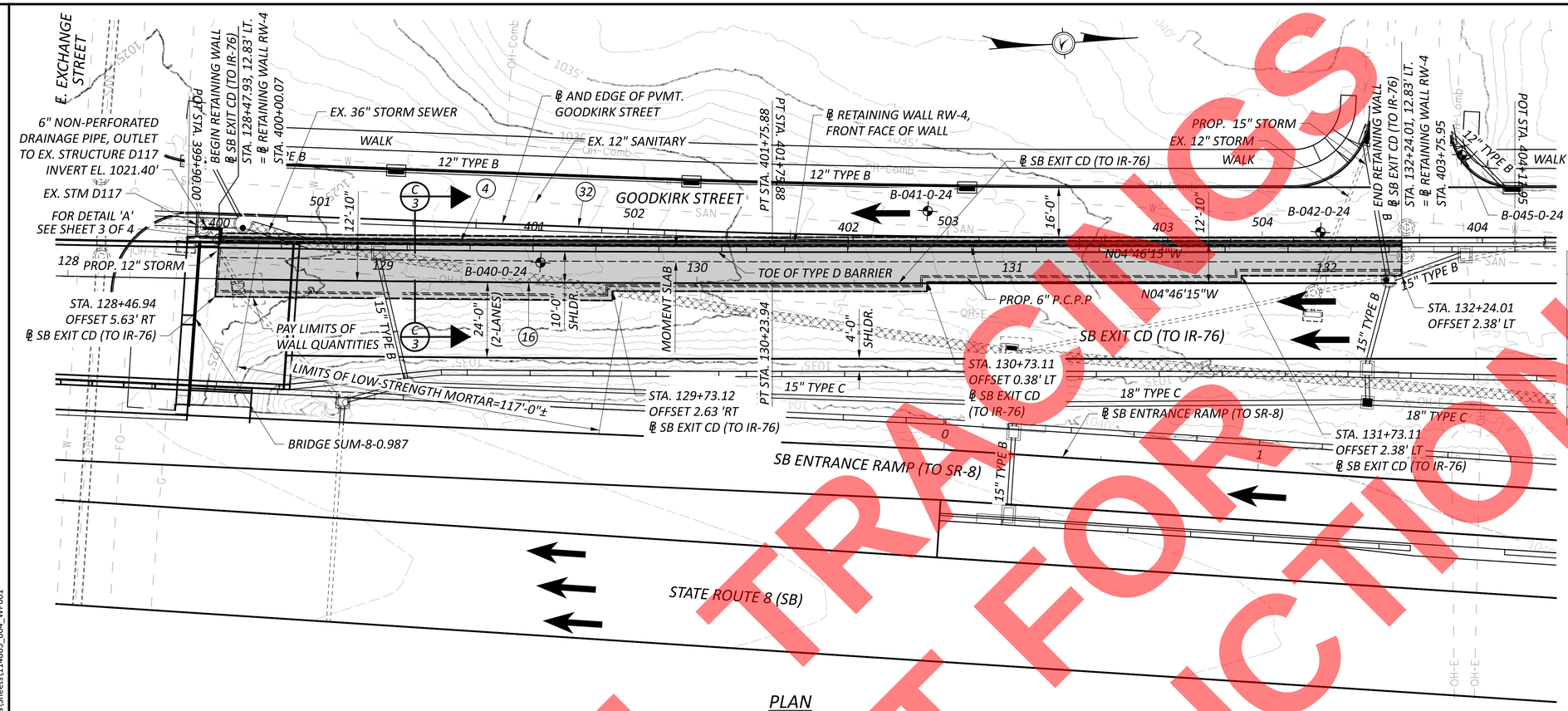


PLAN

NOTES

1. FOR SUM-8-0.987 BRIDGE DETAILS, SEE SHEETS P.377 AND P.414 OF 627 .
2. EARTH WORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
3. FOR GENERAL NOTES, SEE SHEETS P.299 AND P.300 OF 627 .
4. FOR MOMENT SLAB BARRIER DETAILS, SEE SHEET 4 / 4 .

WALL # 4 ELEVATION TABLE

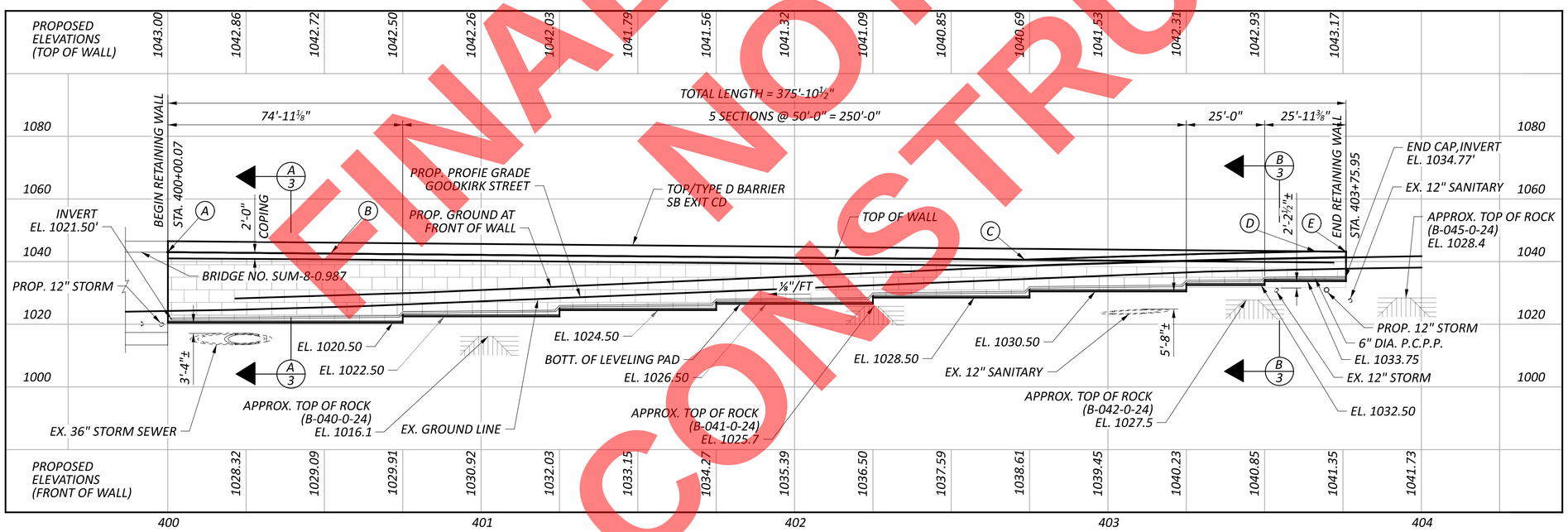
POINT	℄ RETAINING WALL RW4	℄ SB EXIT CD (TO IR-76) STATION	℄ SB EXIT CD (TO IR-76) OFFSET	ELEVATION
A	400+00.07	128+47.93	12.83' LT	1043.00
B	400+52.08	129+00.00	12.83' LT	1042.71
C	402+73.45	131+21.50	12.83' LT	1040.63
D	403+66.37	132+14.42	12.83' LT	1043.26
E	403+75.95	132+24.00	12.83' LT	1043.17

CURVE NO. 16 DATA

P.I. = STA. 127+64.19
Δ = 02°35'52" LT.
Dc = 00°30'00"
R = 11,459.16'
T = 259.84'
L = 519.58'
E = 2.95'

CURVE NO. 32 DATA

P.I. = STA. 502+73.66
Δ = 02°09'19" LT.
Dc = 01°25'57"
R = 4,000.00'
T = 75.25'
L = 150.48'
E = 0.71'



PROFILE ALONG ℄ RETAINING WALL RW-4

℄ RETAINING WALL RW-4 CURVE NO. 4 DATA

P.I. = STA. 400+82.94
Δ = 00°55'50" LT.
Dc = 00°30'02"
R = 11,446.33'
T = 92.94'
L = 185.88'
E = 0.38'

LEGEND

- PROJECT BORING LOCATION
- ROCK
- PAY LIMITS OF WALL QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 4 - PLAN AND PROFILE STA. 400+00.07 TO STA. 403+75.95

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 4
SHEET P.325 TOTAL 627

FINAL NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
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PARTICIPATION	ESTIMATED QUANTITIES				CALC. BY: RBB DATE: 2/18/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SHEET NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
385	512	10100	385	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
764	516	13900	764	SF	2" PREFORMED EXPANSION JOINT FILLER	
5741	840	20000	5,741	SF	MECHANICALLY STABILIZED EARTH WALL	
1100	840	21000	1,100	CY	WALL EXCAVATION	
700	840	22001	700	SY	FOUNDATION PREPARATION, AS PER PLAN	P.299
2533	840	23000	2,533	CY	SELECT GRANULAR BACKFILL	
770	840	25010	770	FT	6" DRAINAGE PIPE, PERFORATED	
8	840	25020	8	FT	6" DRAINAGE PIPE, NON-PERFORATED	
376	840	26000	376	FT	CONCRETE COPING	
1965	840	26050	1,965	SF	AESTHETIC SURFACE TREATMENT	
2	840	27000	2	DAY	ON-SITE ASSISTANCE	
1	840	28000	1	LS	SGB INSPECTION AND COMPACTION TESTING	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00

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RETAINING WALL 4 – ESTIMATED QUANTITIES
STA. 400+00.07 TO STA. 403+75.95

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

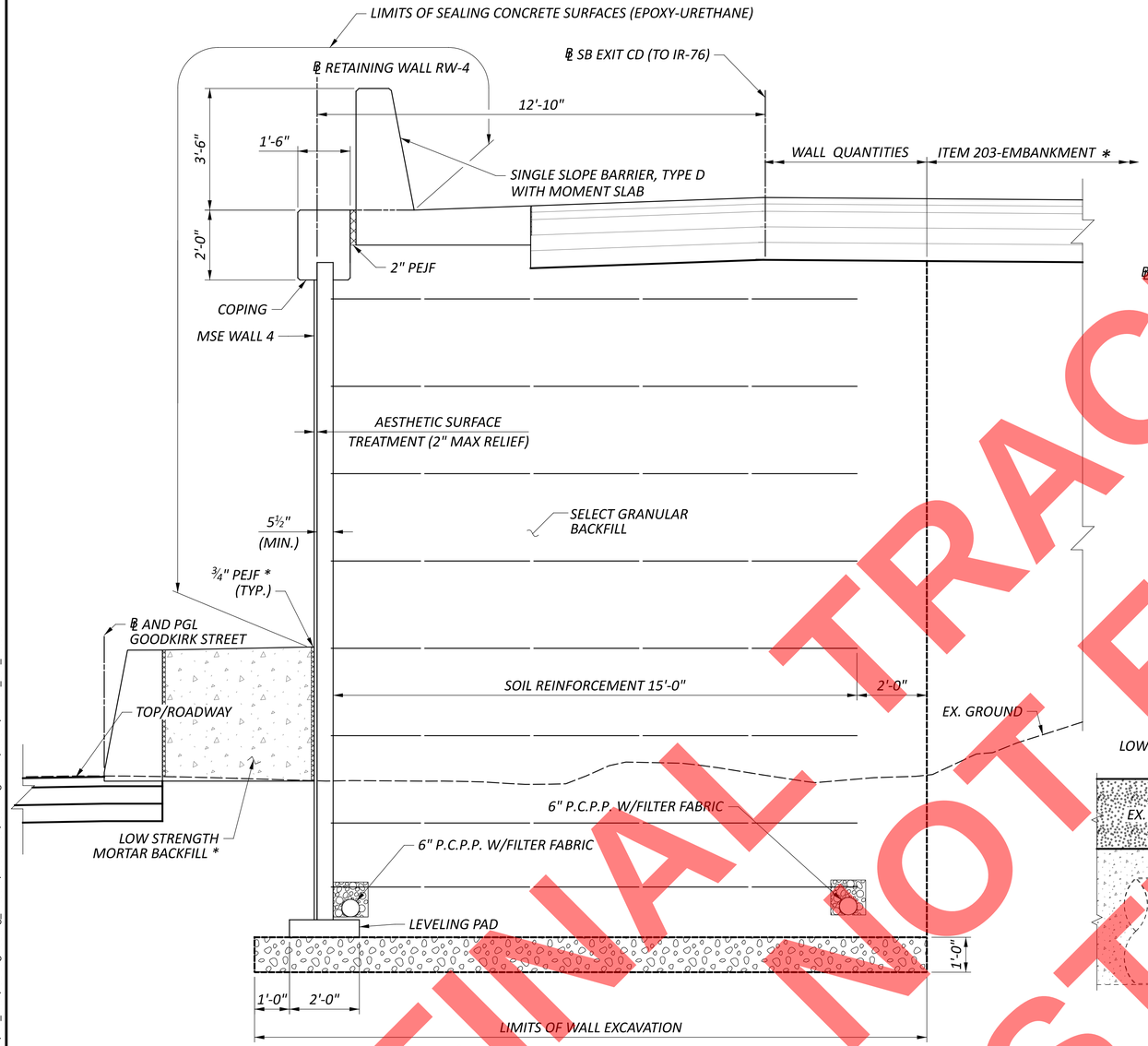
DESIGNER
AIS

REVIEWER
RBB 8-14-26

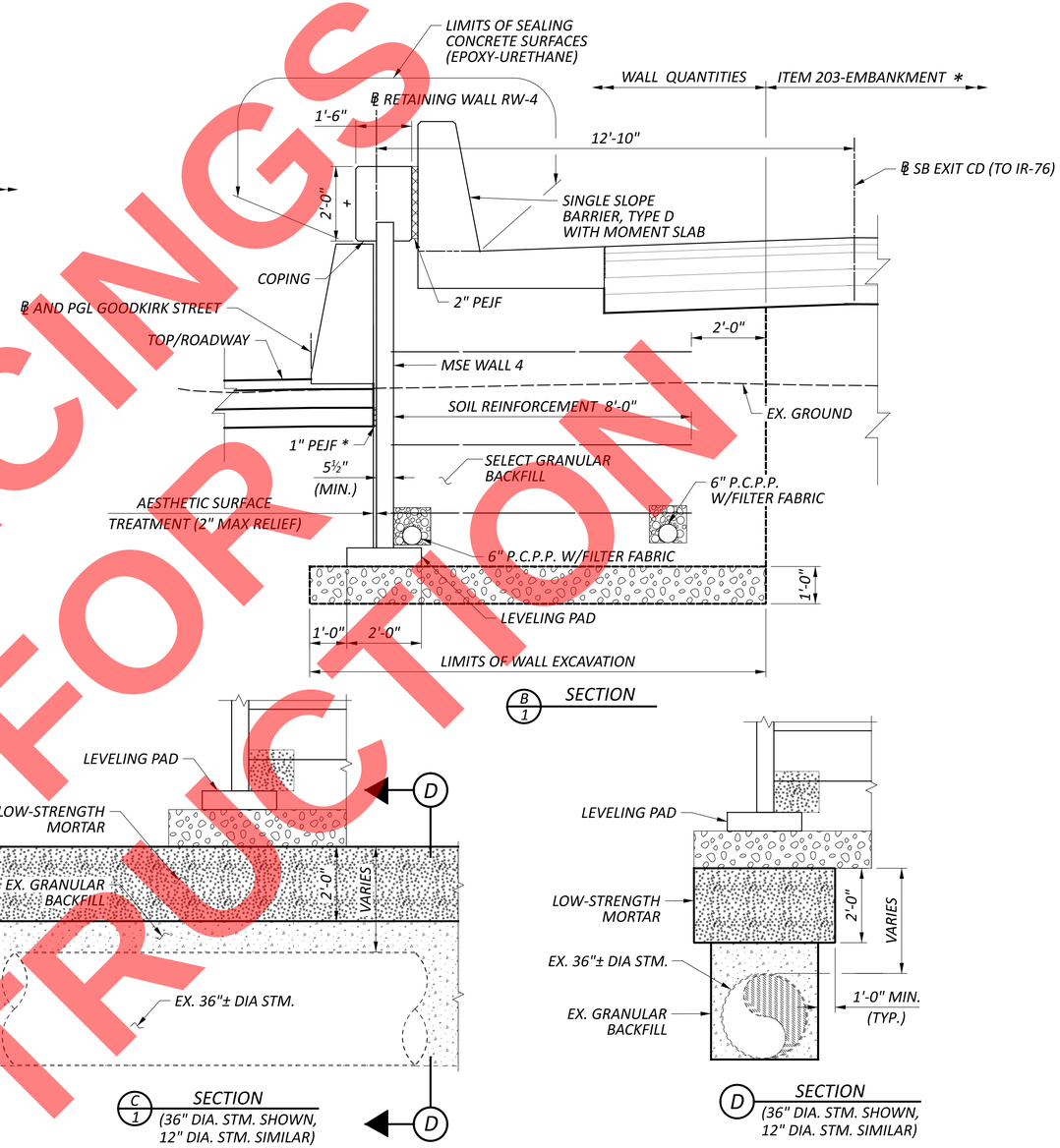
PROJECT ID
114865

SUBSET 2 | TOTAL 4

SHEET P.326 | TOTAL 627



A/1 SECTION



B/1 SECTION

C/1 SECTION
(36" DIA. STM. SHOWN, 12" DIA. STM. SIMILAR)

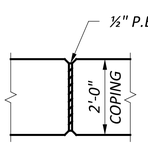
D SECTION
(36" DIA. STM. SHOWN, 12" DIA. STM. SIMILAR)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETSP.299 AND P.300 OF 627 .
2. FOR MOMENT SLAB BARRIER DETAILS, SEE SHEET 4 4 .

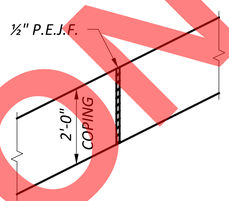
LEGEND:

- ITEM 840, FOUNDATION PREPARATION, AS PER PLAN
- * - INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT.
- \+ = REDUCE COPING HEIGHT TO MATCH THE TOP OF THE EXIT CD TO THE IR-76 BARRIER FROM STA 403+66.37 TO STA 403+75.95



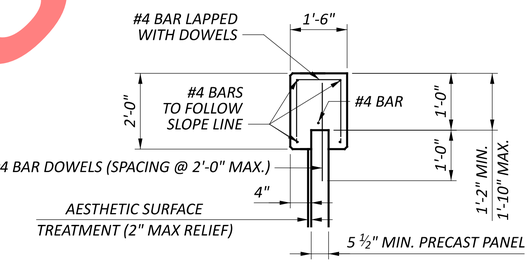
COPING EXPANSION JOINTS

PROVIDE EXPANSION JOINTS PER SS 840.04 A (II). P.E.J.F SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. REINFORCING STEEL SHALL BE DISCONTINUOUS AT EXPANSION JOINTS. COPING EXPANSION JOINTS SHALL BE COORDINATED WITH WALL PANEL JOINTS.



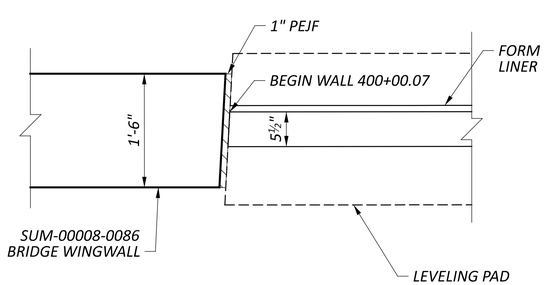
COPING JOINT ELEVATION DETAIL

ORIENT THE COPING EXPANSION JOINTS VERTICALLY



MSE COPING DETAIL

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE COPING REINFORCEMENT DETAILING AND ASSOCIATED BAR LIST BASED ON THE PLAN REQUIREMENTS.



DETAIL 'A'

BEGIN WALL DETAILS

FINAL TRACINGS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00

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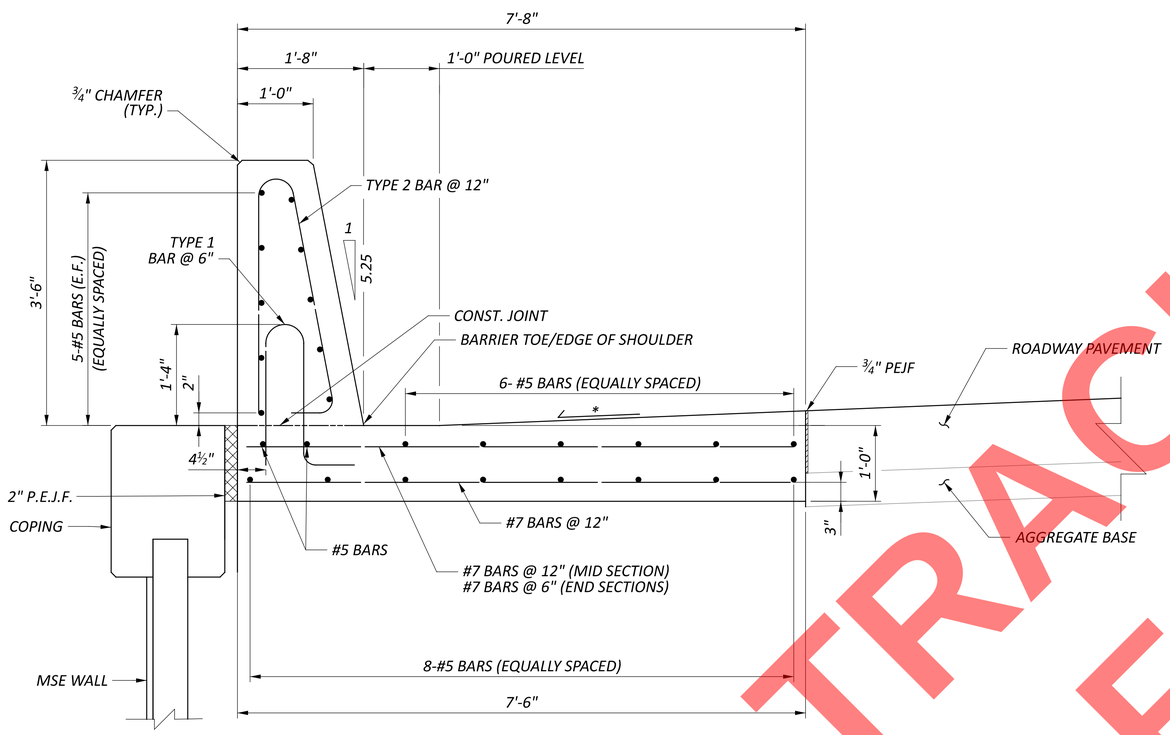
RETAINING WALL 4 – SECTIONS
STA. 400+00.07 TO STA. 403+75.95

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	3
TOTAL	4
SHEET	P.327
TOTAL	627



MOMENT SLAB SECTION

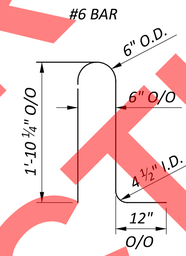
STA. 128+47.93 TO STA. 132+24.01
(℄ SB EXIT CD TO IR-76)

NOTES:

1. ALL ITEMS SHOWN ON THIS SHEET, EXCLUDING PAVEMENT, AGGREGATE BASE AND MSE WALL ARE INCIDENTAL TO ITEM 622-BARRIER, MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB. REFER TO SHEET P.100 OF 627 FOR GENERAL SUMMARY.
2. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. RM-4.9.

LEGEND

* REFER TO ROADWAY PLANS FOR CROSS SLOPE



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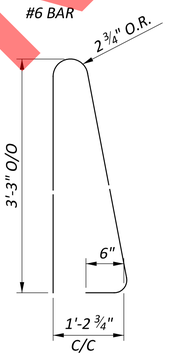

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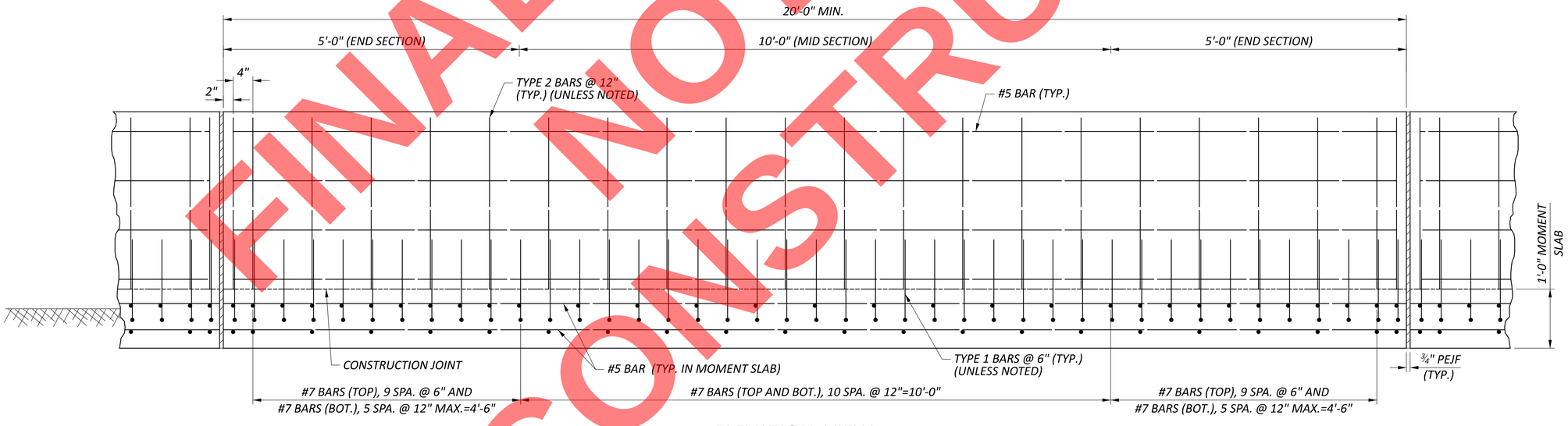

ELEVATION VIEW

42" SINGLE SLOPE BARRIER (TYPE D) WITH MOMENT SLAB FOUNDATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 4 - MOMENT SLAB BARRIER DETAILS
STA. 400+00.07 TO STA. 403+75.95

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	
AIS	
REVIEWER	
RBB	8-14-26
PROJECT ID	
114865	
SUBSET	TOTAL
4	4
SHEET	TOTAL
P.328	627

SUM-077/008-11.65/00.00

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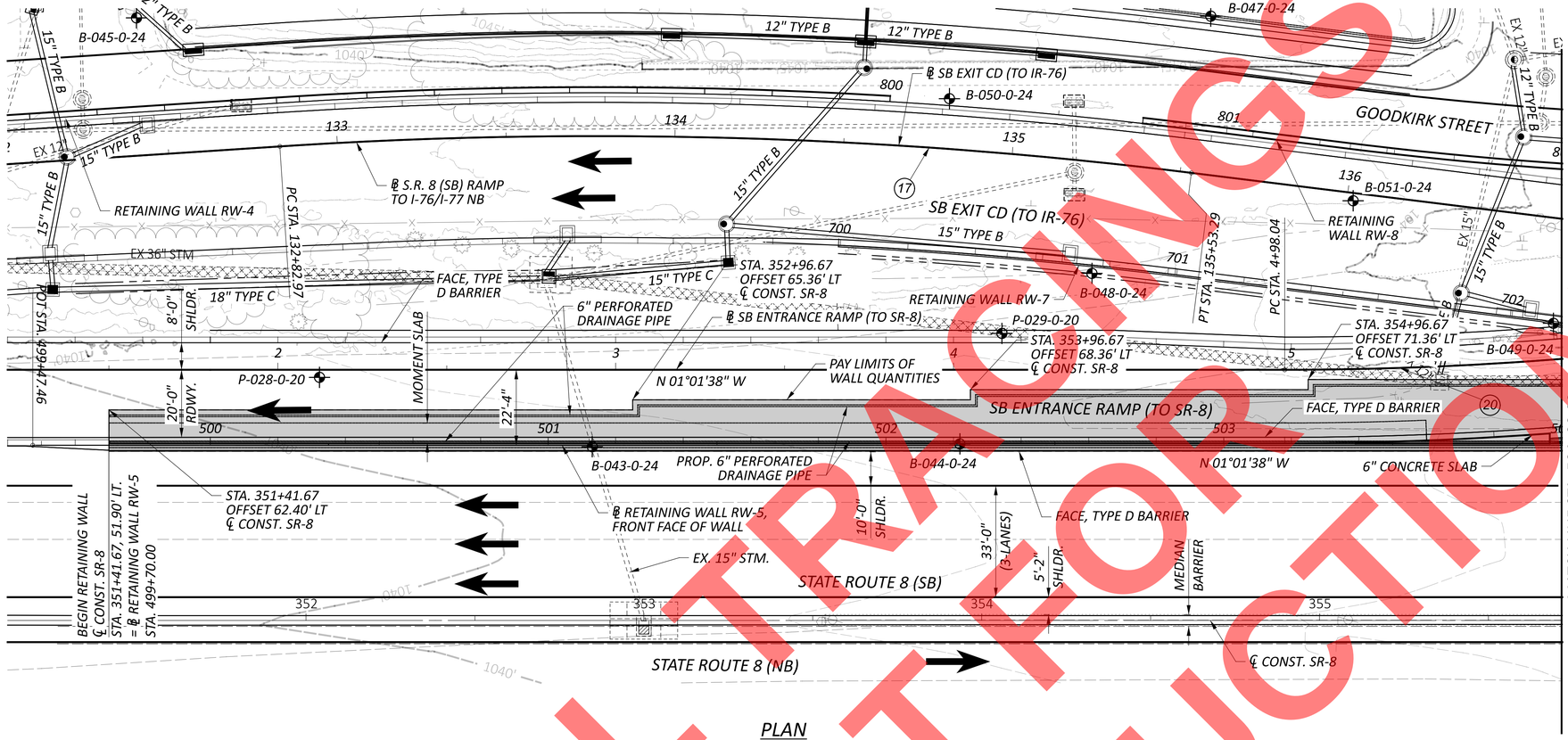
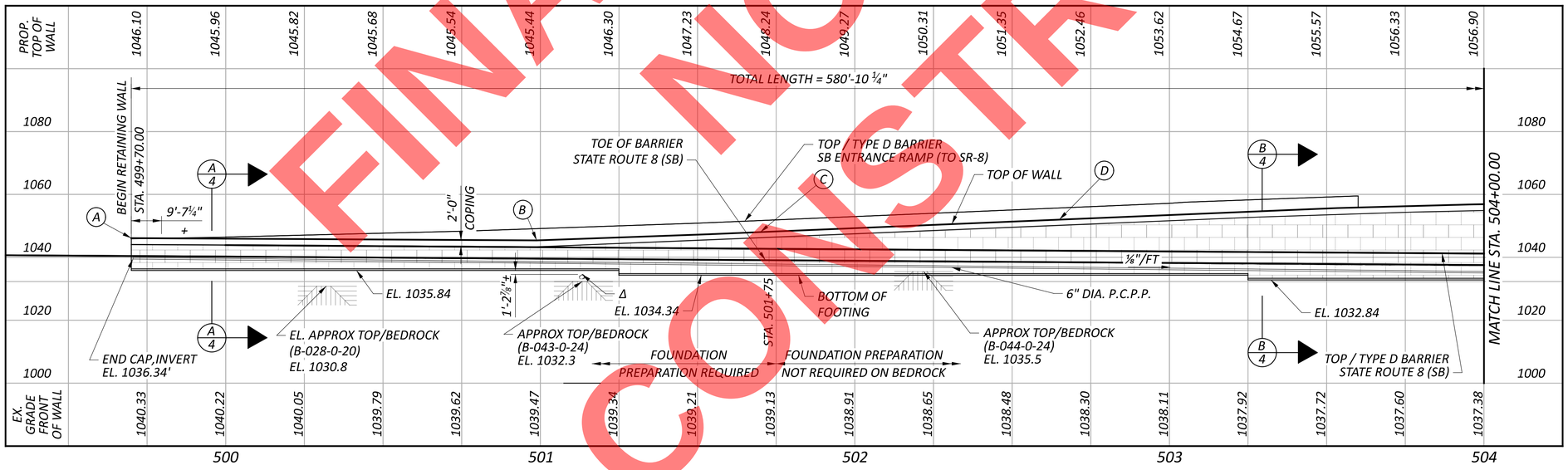


PLAN



PROFILE ALONG WALL RW-5

NOTES

1. FOR RETAINING WALL RW-4 PLAN AND PROFILE, SEE SHEET P.325 OF 627 .
2. FOR RETAINING WALL RW-7 PLAN AND PROFILE, SEE SHEET P.341 OF 627 .
3. FOR RETAINING WALL RW-8 PLAN AND PROFILE, SEE SHEET P.344 OF 627 .
4. WALL RW-5 STATIONS AND OFFSETS ARE GIVEN AT FRONT FACE OF THE WALL.

WALL # 5 ELEVATION TABLE

POINT	WALL STATION	SR 8 STATION	SR 8 OFFSET	ELEVATION
A	499+70.00	351+41.67	51.90' LT	1046.06
B	500+93.35	352+65.02	51.90' LT	1045.40
C(PVI)	501+70.21	353+41.88	51.90' LT	1048.04
D(PVC)	502+65.00	354+36.67	51.90' LT	1052.01

CURVE NO. 17 DATA

P.I. = STA. 134+18.53
Δ = 10°48'46" RT.
Dc = 04°00'00"
R = 1,432.39'
T = 135.56'
L = 270.32'
E = 6.4'

CURVE NO. 20 DATA

P.I. = STA. 5+76.68
Δ = 08°38'00" LT.
Dc = 05°30'00"
R = 1,041.74'
T = 78.63'
L = 156.97'
E = 2.96'

LEGEND

- BORING LOCATION
- ROCK
- PAY LIMITS OF WALL QUANTITIES
- Δ = PROP. 15" STORM SEWER
- + = TAPER THE TOP OF THE COPING TO MATCH THE TOP OF THE TYPE D BARRIER

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 5 - PLAN AND PROFILE (1 OF 2)
STA. 499+70.00 TO STA. 505+50.85

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 5
SHEET P.329 TOTAL 627

FINAL PLANS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00

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WALL # 5 ELEVATION TABLE				
POINT	WALL STATION	SR 8 STATION	SR 8 OFFSET	ELEVATION
E	504+28.32	355+99.99	51.90' LT	1057.32
F	504+65.67	356+37.34	51.90' LT	1055.71
G	505+20.76	356+92.43	51.90' LT	1051.22
H	505+50.83	357+22.52	51.90' LT	1042.37

CURVE NO. 18 DATA

P.I. = STA. 141+63.36
Δ = 05°09'46" LT.
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

CURVE NO. 20 DATA

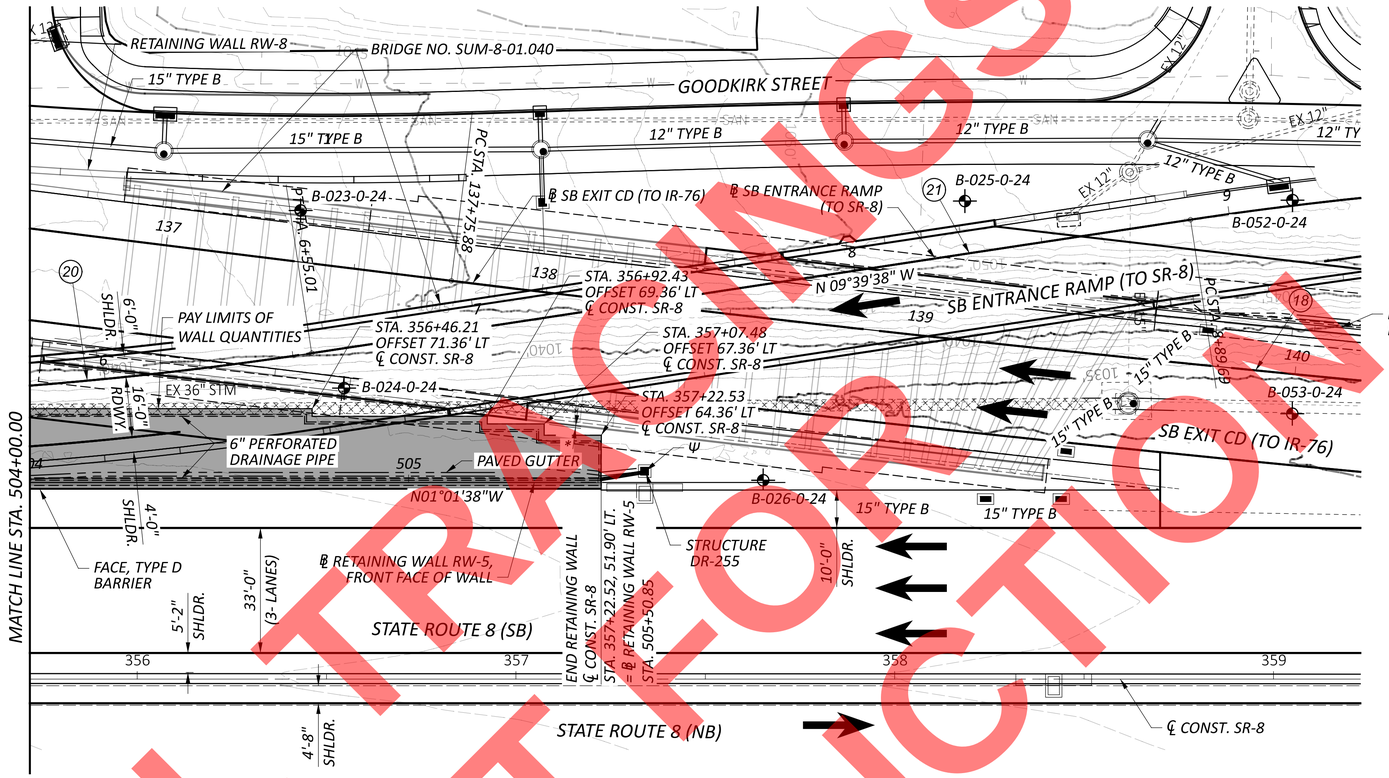
P.I. = STA. 5+76.68
Δ = 08°38'00" LT.
Dc = 05°30'00"
R = 1,041.74'
T = 78.63'
L = 156.97'
E = 2.96'

CURVE NO. 21 DATA

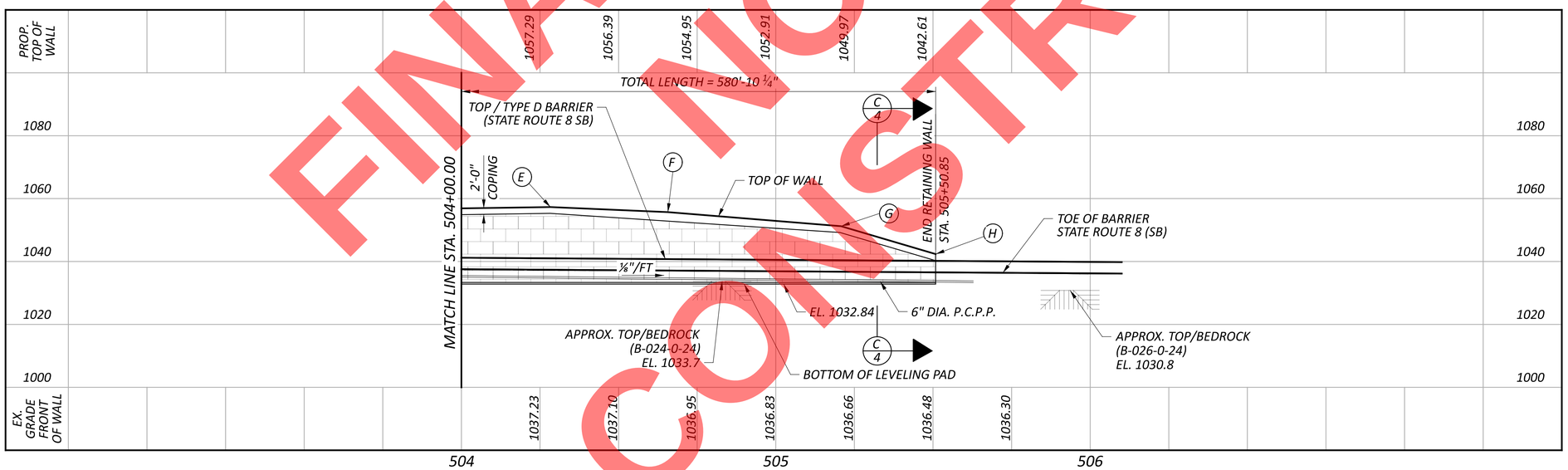
P.I. = STA. 9+76.23
Δ = 10°21'24" RT.
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'

NOTES

1. FOR RETAINING WALL RW-8 PLAN AND PROFILE, SEE SHEET P.344 OF 627 .
2. FOR RETAINING WALL RW-9 PLAN AND PROFILE, SEE SHEET P.350 OF 627 .
3. FOR BRIDGE NO. SUM-8-01.040 DETAILS, SEE SHEETS P.439 THRU P.479 OF 627 .
4. WALL RW-5 STATIONS AND OFFSETS ARE GIVEN AT FRONT FACE OF THE WALL.



PLAN



PROFILE ALONG ℄ RETAINING WALL RW-5

LEGEND

- BORING LOCATION
- ROCK
- PAY LIMITS OF WALL QUANTITIES

Ψ = 6" NON-PERFORATED DRAINAGE PIPE, OUTLET TO PROP. STRUCTURE DR-255 INVERT E3L. 1033.33'

* 1'-6" MINIMUM SELECT STRUCTURAL BACKFILL TO BACK OF ABUTMENT WALL.

FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 5 - PLAN AND PROFILE (2 OF 2)
STA. 499+70.00 TO STA. 505+50.85

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 2 TOTAL 5
SHEET P.330 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:51:58 PM USER: sheikha2048
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PARTICIPATION	ESTIMATED QUANTITIES					CALC. BY: RBB DATE: 3/20/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION		SHEET NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING		
635	512	10100	635	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
390	516	13900	390	SF	2" PREFORMED EXPANSION JOINT FILLER		
9607	840	20000	9,607	SF	MECHANICALLY STABILIZED EARTH WALL		
1628	840	21000	1,628	CY	WALL EXCAVATION		
295	840	22001	295	SY	FOUNDATION PREPARATION, AS PER PLAN		P.299
4907	840	23000	4,907	CY	SELECT GRANULAR BACKFILL		
290	840	23050	290	CY	NATURAL SOIL		
1191	840	25010	1,191	FT	6" DRAINAGE PIPE, PERFORATED		
12	840	25020	12	FT	6" DRAINAGE PIPE, NON-PERFORATED		
581	840	26000	581	FT	CONCRETE COPING		
4200	840	26050	4,200	SF	AESTHETIC SURFACE TREATMENT		
2	840	27000	2	DAY	ON-SITE ASSISTANCE		
1	840	28000	1	LS	SGB INSPECTION AND COMPACTION TESTING		

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 5 – ESTIMATED QUANTITIES
STA. 499+70.00 TO STA. 505+50.85

SUM-077/008-11.65/00.00

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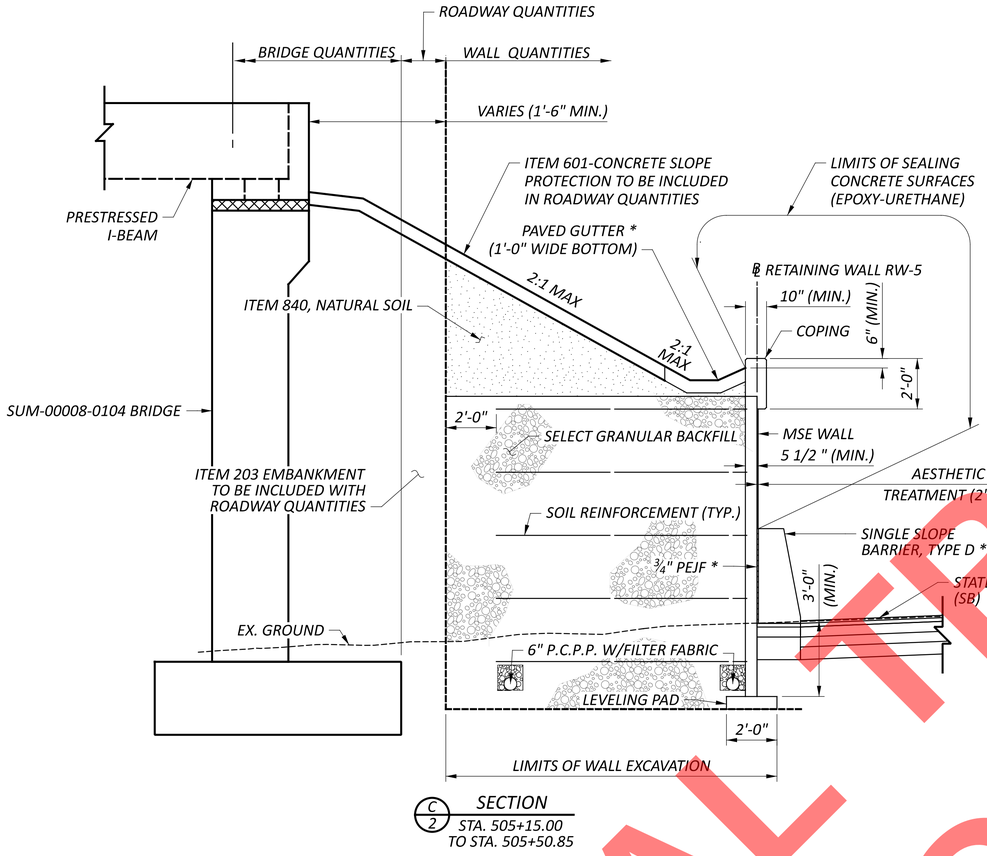
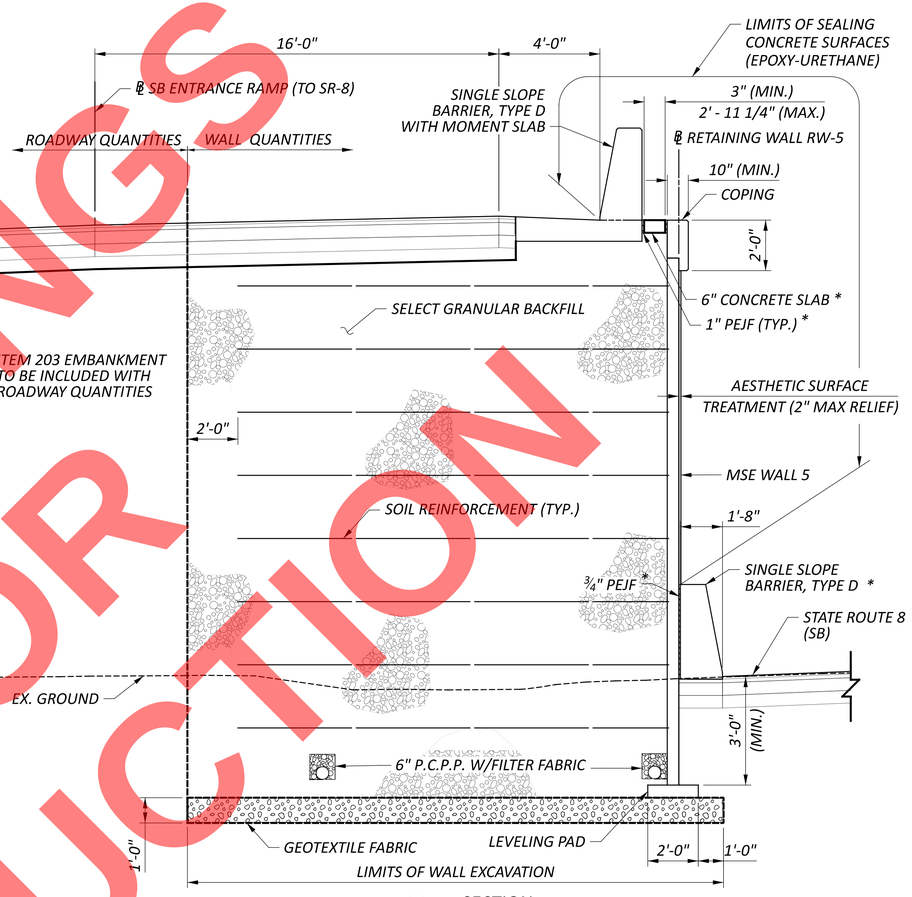
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

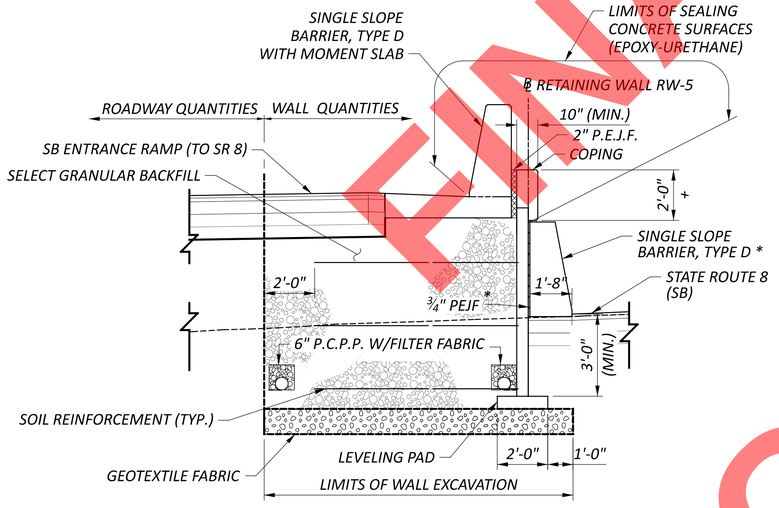
DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 3 TOTAL 5
SHEET P.331 TOTAL 627



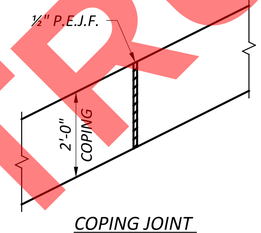
C / 2 SECTION
STA. 505+15.00 TO STA. 505+50.85



B / 1 SECTION
(STA. 500+93.35 TO STA. 505+15.00)

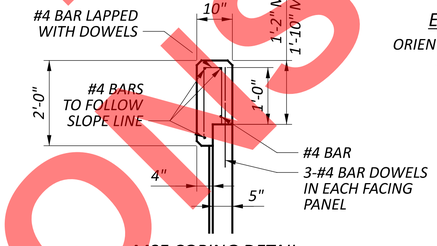


A / 1 SECTION
(STA. 499+70.00 TO STA. 500+93.35)



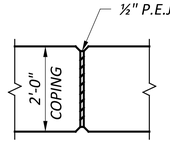
COPING JOINT ELEVATION DETAIL

ORIENT THE COPING EXPANSION JOINTS VERTICALLY



MSE COPING DETAIL

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE COPING REINFORCEMENT DETAILING AND ASSOCIATED BAR LIST BASED ON THE PLAN REQUIREMENTS.



COPING EXPANSION JOINTS

PROVIDE EXPANSION JOINTS PER SS 840.04 A (II). P.E.J.F SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. REINFORCING STEEL SHALL BE DISCONTINUOUS AT EXPANSION JOINTS. COPING EXPANSION JOINTS SHALL BE COORDINATED WITH WALL PANEL JOINTS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS P.299 AND P.300 OF 627 .
2. FOR MOMENT SLAB BARRIER DETAILS, SEE SHEET 5 / 5 .
3. FOUNDATION PREPARATION NOT REQUIRED WHEN FOUNDED ON ROCK.

LEGEND:

- ITEM 840, FOUNDATION PREPARATION, AS PER PLAN
- SELECT GRANULAR BACKFILL
- NATURAL SOIL

* - INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.

\+ = REDUCE COPING HEIGHT TO MATCH THE TOP OF THE ENTRANCE RAMP TO THE SR 8 BARRIER FROM STA 499+70.00 TO STA 499+79.61.

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 5 – SECTIONS
STA. 499+70.00 TO STA. 505+50.85

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4850
www.arcadis.com

DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	4
TOTAL	5
SHEET	P.332
TOTAL	627

SUM-077/008-11.65/00.00
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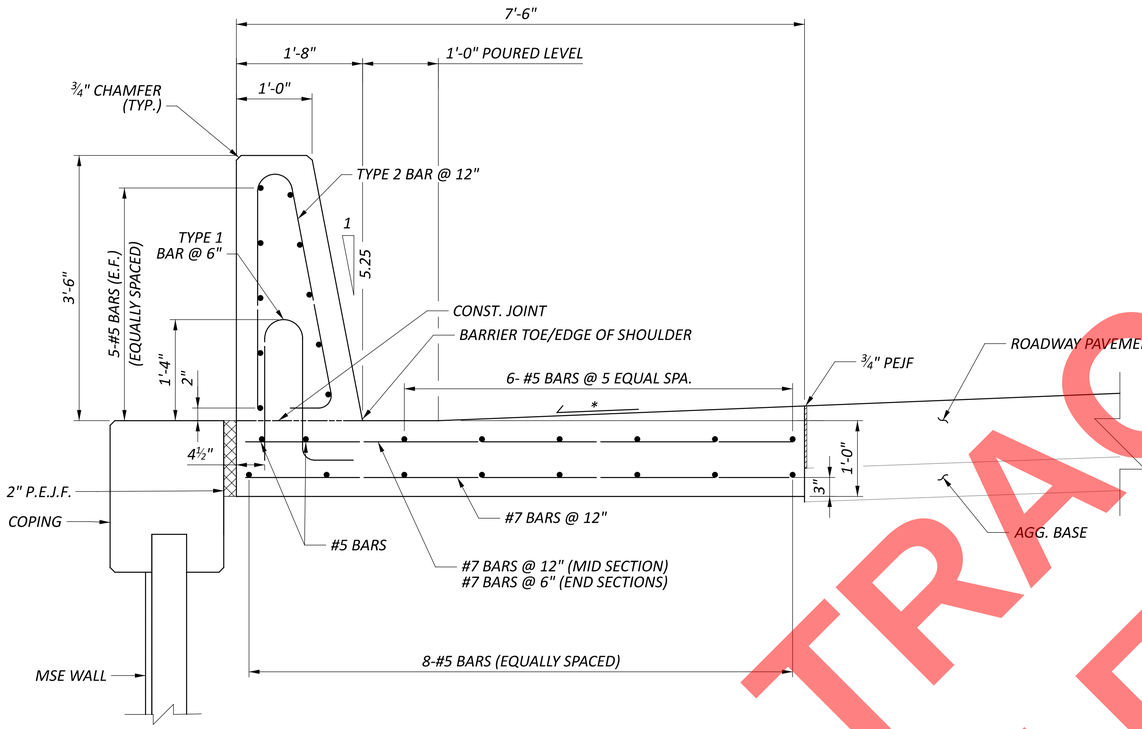
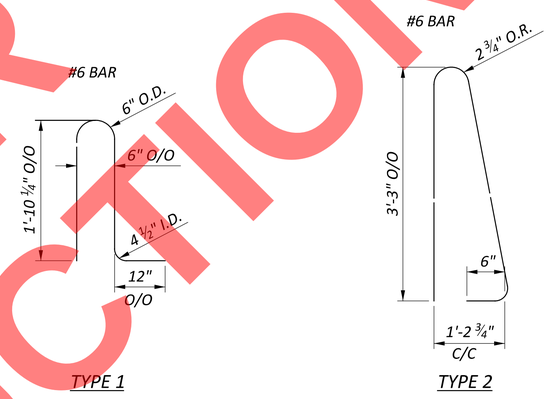


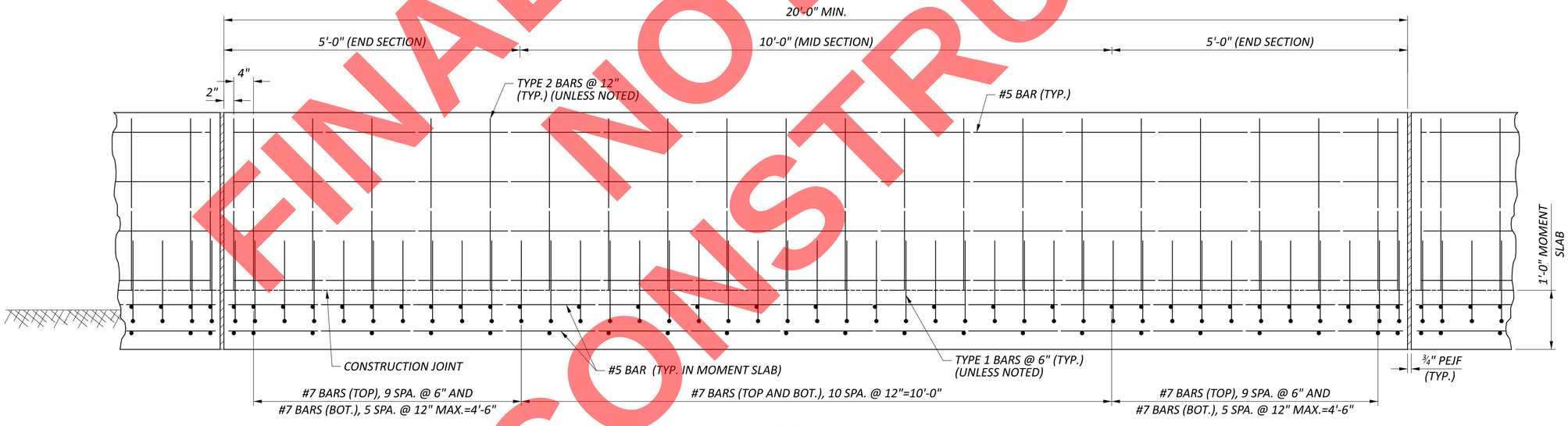
MOMENT SLAB SECTION

STA. 1+50.00 TO STA. 5+74.75
(℄ SB ENTRANCE RAMP TO SR-8)



TYPE 1

TYPE 2



ELEVATION VIEW

42" SINGLE SLOPE BARRIER (TYPE D) WITH MOMENT SLAB FOUNDATION

NOTES:

1. ALL ITEMS SHOWN ON THIS SHEET, EXCLUDING PAVEMENT, AGG. BASE AND MSE WALL ARE INCIDENTAL TO ITEM 622-BARRIER, MISC.: SINGLE SLOPE, TYPE D, MOMENT SLAB. REFER TO SHEET P.100 OF 627 FOR GENERAL SUMMARY.
2. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. RM-4.9.

LEGEND

* REFER TO ROADWAY PLANS FOR CROSS SLOPE

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 5 – MOMENT SLAB BARRIER DETAILS
STA. 499+70.00 TO STA. 505+50.85

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AKRON, OHIO 44308
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 5 TOTAL 5
SHEET P.333 TOTAL 627

SUM-077/008-11.65/00.00

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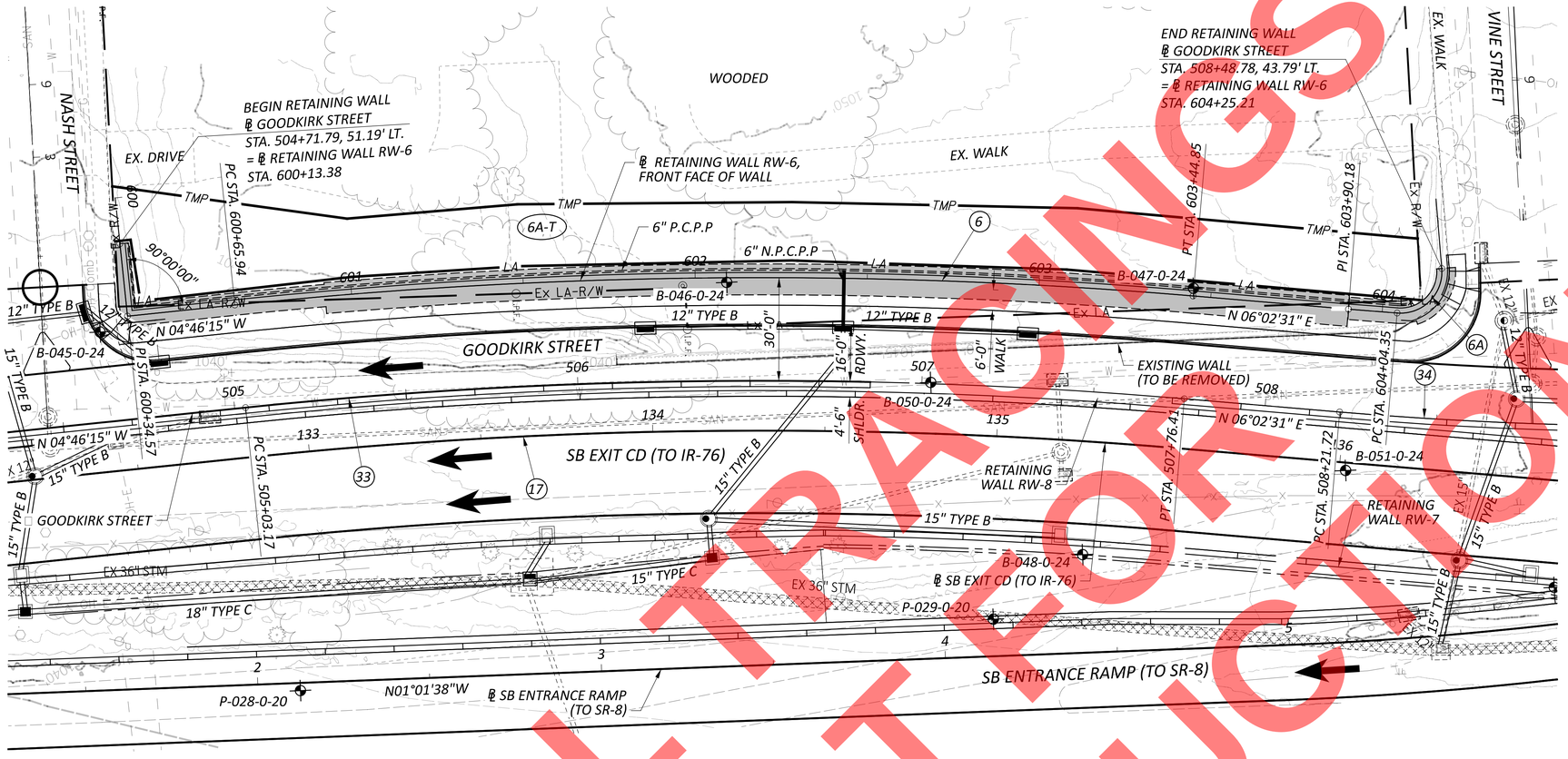
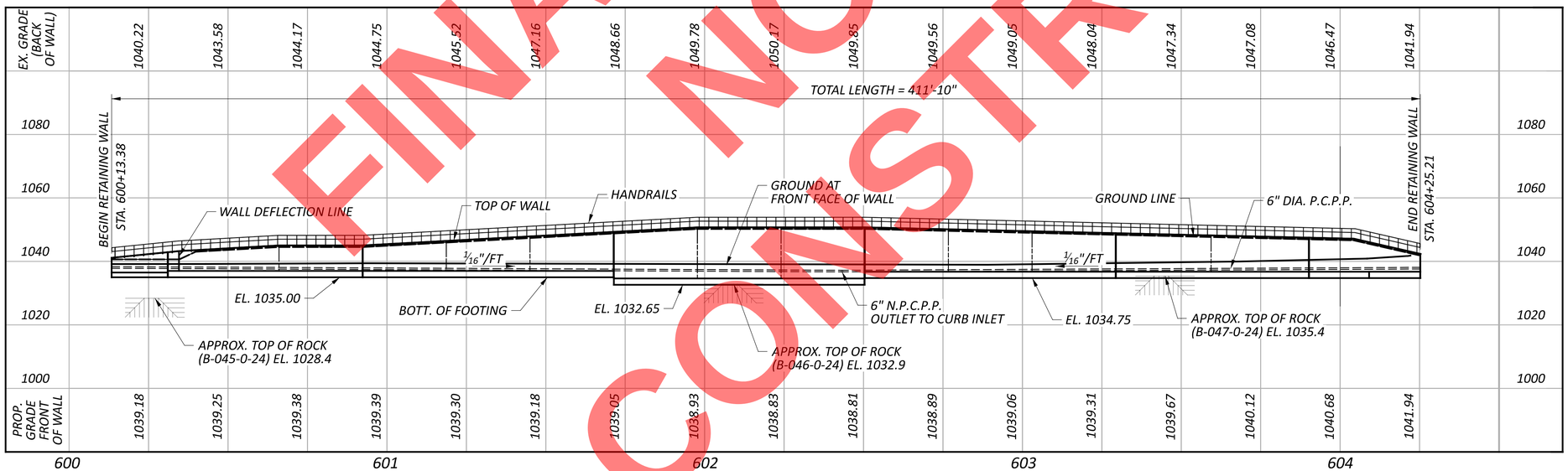


PLAN



PROFILE ALONG ℄ RETAINING WALL RW-6

CURVE NO. 17 DATA

P.I. = STA. 134+18.53
Δ = 10°48'46" RT.
Dc = 04°00'00"
R = 1,432.39'
T = 135.56'
L = 270.32'
E = 6.40'

℄ RETAINING WALL RW-6 CURVE NO. 6 DATA

P.I. = STA. 602+05.81
Δ = 10°48'46" RT.
Dc = 03°52'37"
R = 1,477.89'
T = 139.87'
L = 278.91'
E = 6.60'

℄ RETAINING WALL RW-6 CURVE NO. 6A DATA

P.I. = STA. 604+18.55
Δ = 99°34'51" LT.
Dc = 117°27'53"
R = 12.00'
T = 14.20'
L = 20.86'
E = 6.59'

CURVE NO. 33 DATA

P.I. = STA. 506+40.20
Δ = 10°48'46" RT.
Dc = 03°57'26"
R = 1,447.89'
T = 137.03'
L = 273.24'
E = 6.47'

CURVE NO. 34 DATA

P.I. = STA. 509+10.07
Δ = 08°49'02" LT.
Dc = 05°00'00"
R = 1,145.92'
T = 88.35'
L = 176.35'
E = 3.40'

NOTES

1. FOR RETAINING WALL RW-7 PLAN AND PROFILE, SEE SHEET P.341 OF 627 .
2. FOR RETAINING WALL RW-8 PLAN AND PROFILE, SEE SHEET P.344 OF 627 .

LEGEND

- BORING LOCATION
- ROCK
- RETAINING WALL FOUNDATION

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 6 - PLAN AND PROFILE
STA. 600+13.38 TO STA. 604+25.21

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4500
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 7
SHEET P.334 TOTAL 627

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00
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PARTICIPATION	ESTIMATED QUANTITIES					CALC. BY: RBB DATE: 3/20/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION		STR. SHT. NO.
1	202	11000	1	LS	STRUCTURE REMOVED		
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING		
1990	503	21104	1,990	CY	UNCLASSIFIED EXCAVATION, INCLUDING ROCK		
64726	509	10001	64,726	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN		P.299
259	511	46012	259	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING		
248	511	46512	248	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		
469	512	10100	469	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
19	512	33000	19	SY	TYPE 2 WATERPROOFING		
150	516	13600	150	SF	1" PREFORMED EXPANSION JOINT FILLER		
412	517	73501	412	FT	RAILING, PIPE, AS PER PLAN		5 AND 6
290	518	21200	290	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		
412	518	40000	412	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		
17	518	40010	17	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUM-077/008-11.65/00.00

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RETAINING WALL 6 – ESTIMATED QUANTITIES
STA. 600+13.38 TO STA. 604+25.21

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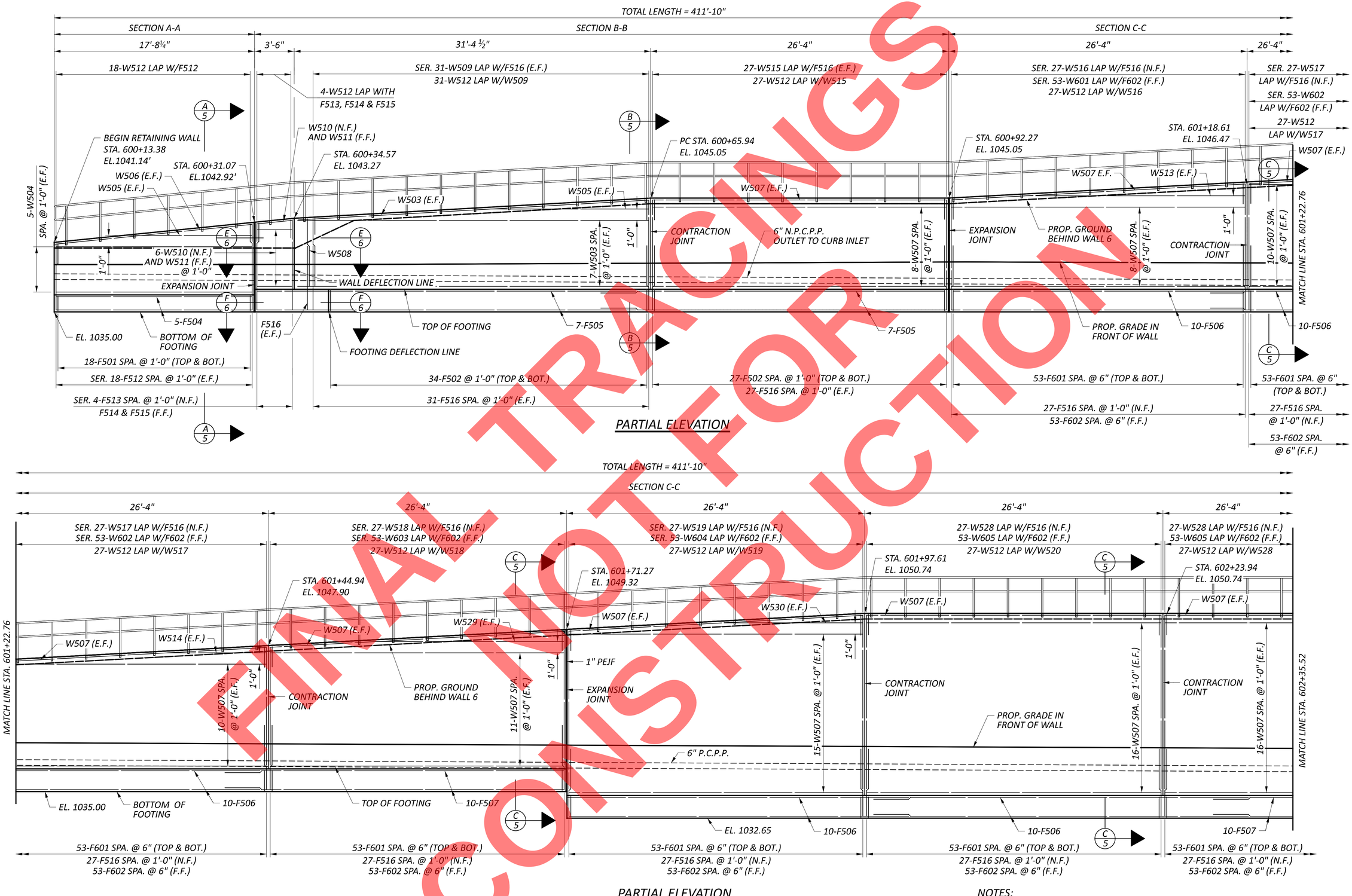
DESIGNER
AIS

REVIEWER
RBB 8-14-26

PROJECT ID
114865

SUBSET 2 | TOTAL 7

SHEET P.335 | TOTAL 627



PARTIAL ELEVATION

PARTIAL ELEVATION

NOTES:

1. WALL LENGTHS MEASURED ALONG FRONT FACE OF RETAINING WALL.
2. SEE SHEETS P.299 THRU P.301 OF 627 FOR GENERAL NOTES.
3. MINIMUM LAP LENGTHS : #5 BARS = 37" AND #6 BARS = 48"

FINAL - NOT FOR CONSTRUCTION

RETAINING WALL 6 – ELEVATIONS (1 OF 2)
STA. 600+13.38 TO STA. 604+25.21

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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 3 TOTAL 7
SHEET P.336 TOTAL 627

SUM-077/008-11.65/00.00

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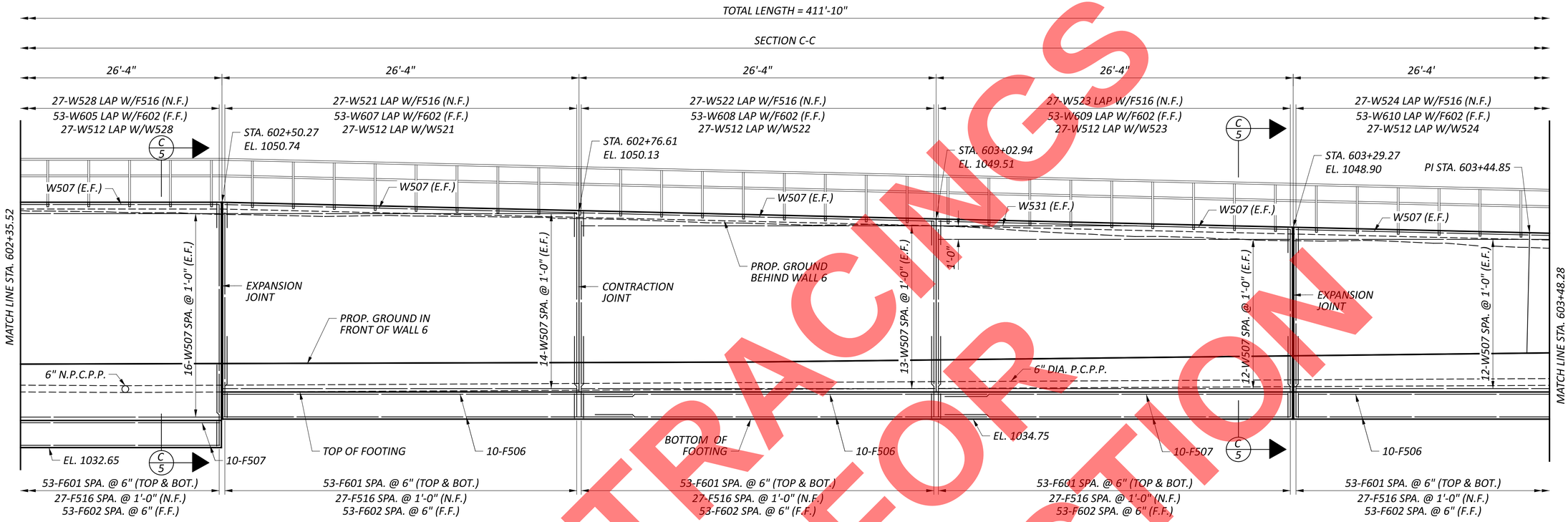
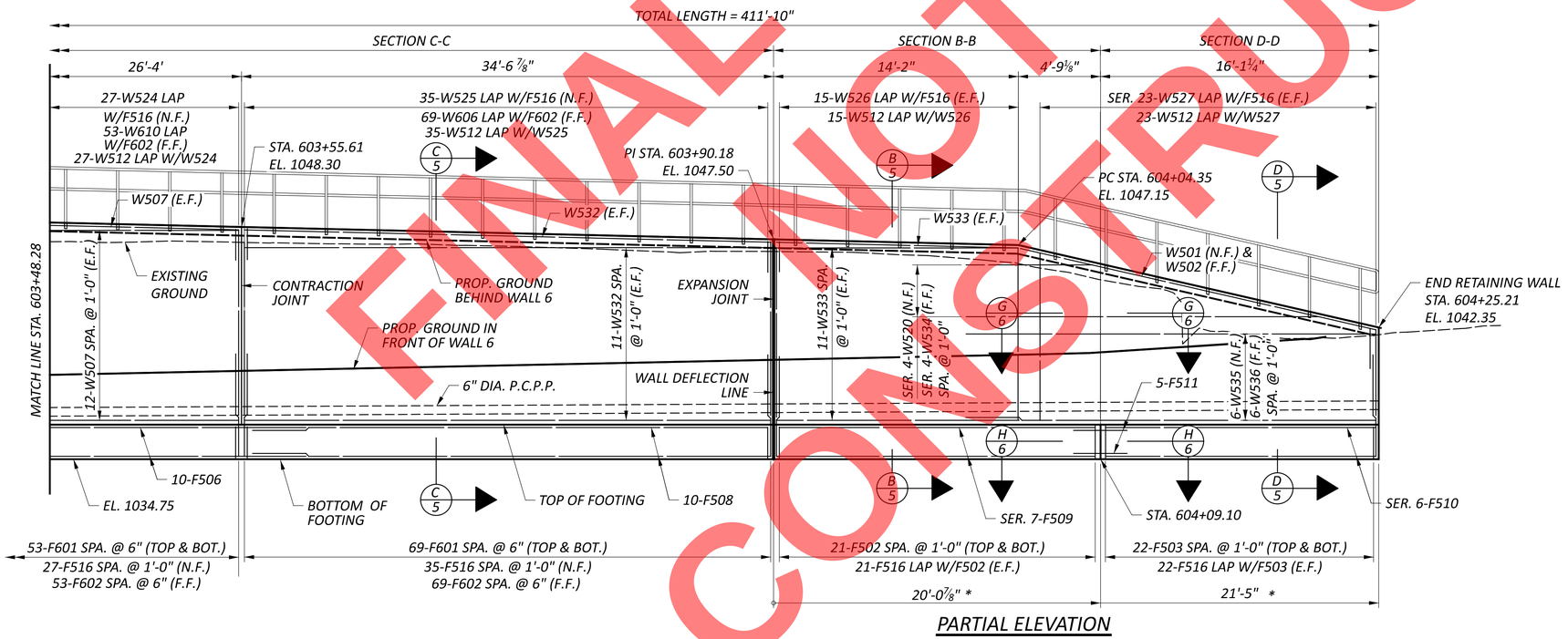


PARTIAL ELEVATION



PARTIAL ELEVATION

LEGEND

* MEASURED ALONG TOE OF FOOTING

NOTES:

1. WALL LENGTHS MEASURED ALONG FRONT FACE OF RETAINING WALL.
2. FOR GENERAL NOTES SEE SHEETS P.299 AND P.300 OF 627 .
3. MINIMUM LAP LENGTHS :
   #5 BARS = 37"
   #6 BARS = 48"

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 6 – ELEVATIONS (2 OF 2)
STA. 600+13.38 TO STA. 604+25.21

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
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DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	4
TOTAL	7
SHEET	P.337
TOTAL	627

SUM-077/008-11.65/00.00
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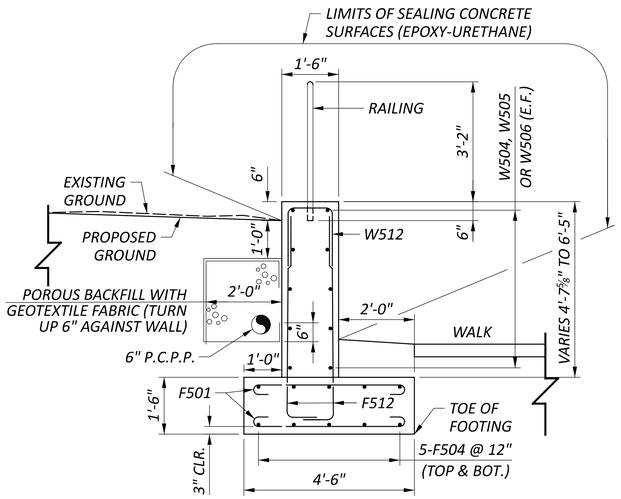
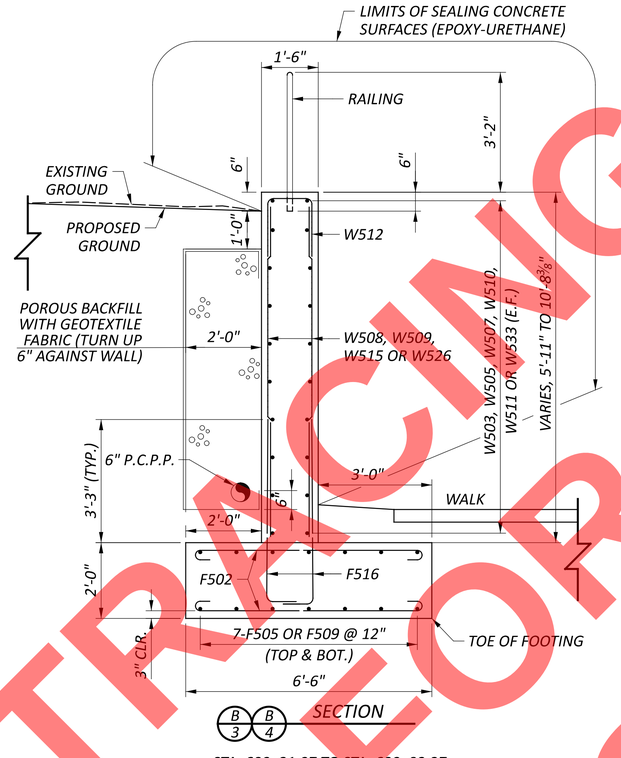


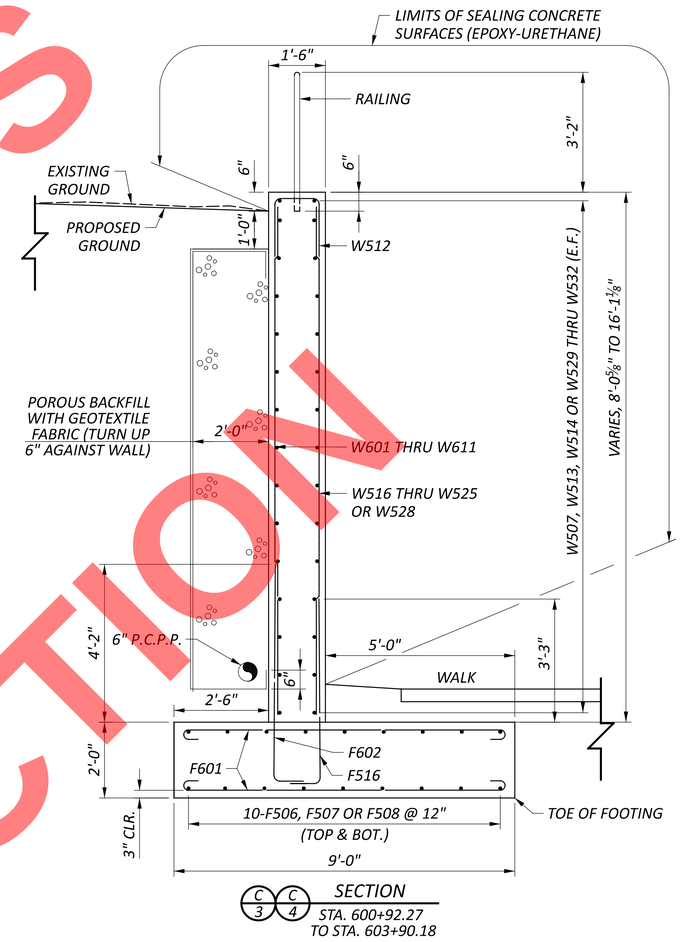
A/3 SECTION

STA. 600+13.38 TO STA. 600+31.07



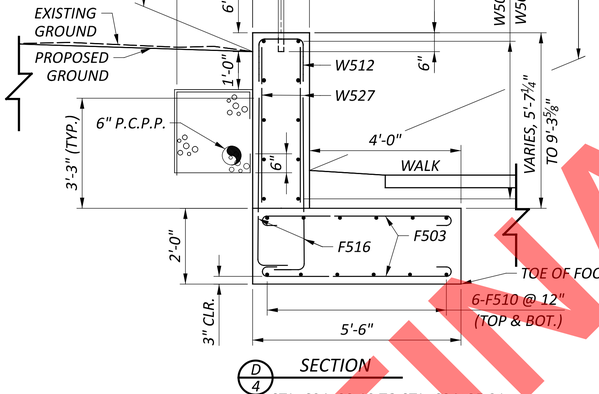
B/3 B/4 SECTION

STA. 600+31.07 TO STA. 600+92.27
STA. 603+90.18 TO STA. 604+09.10



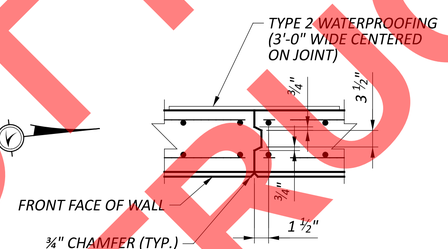
C/3 C/4 SECTION

STA. 600+92.27
TO STA. 603+90.18

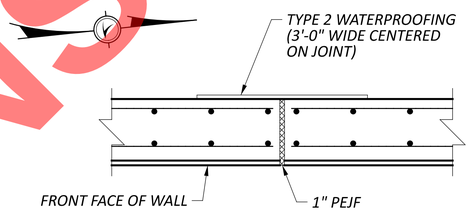


D/4 SECTION

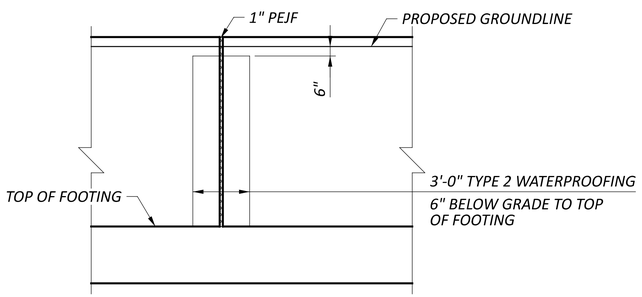
STA. 604+09.10 TO STA. 604+25.21



CONTRACTION JOINT DETAIL



EXPANSION JOINT DETAIL



EXPANSION JOINT ELEVATION

NOTES

1. FABRICATE HAND AND LINE RAILING AND POSTS FROM NOMINAL SIZE 1½" DIAMETER, 0.145" WALL THICKNESS STEEL PIPE MEETING THE REQUIREMENTS OF THE SPECIFICATION FOR WELDED AND SEAMLESS STEEL PIPE ASTM A 53 STANDARD WEIGHT, SCHEDULE NUMBER 40, OR ALUMINUM PIPE MEETING THE REQUIREMENTS OF THE SPECIFICATION FOR ALUMINUM-ALLOY PIPE ASTM B 241, 6063 T6 ASA, SCHEDULE NUMBER 40.
2. GLAVANIZE STEEL HANDRAILS AND POSTS AFTER FABRICATION, AS SPECIFIED IN ASTM A 123. FIELD WELD SPLICES FOR STEEL RAILING. RE-GALVANIZE AREAS ON WHICH THE SPELTER COATING HAS BEEN DAMAGED, AS SPECIFIED IN AASHTO M 36, SECTION 24. METALIZING PROCESS, OR REPAIR UNDER THE DIRECTION OF THE ENGINEER WITH STICK-FORM GALVANIZING REPAIR COMPOUND MEETING FEDERAL SPECIFICATION O-G-93.
3. PROVIDE SPLICES FOR ALUMINUM RAILING WITH INTERNAL SLEEVES AND, AFTER WELDING, BE SMOOTH AND WATER TIGHT.
4. CAST-IN-PLACE OR SET POSTS IN SOCKETS FILLED WITH 1:3 PROPORTIONED CEMENT MORTAR. PROVIDE A HEAVY COATING OF ASPHALT VARNISH OR COAL-TAR PITCH PAINT (BOTH INSIDE AND OUTSIDE) TO THE PROTION OF ALUMINUM POSTS SET INTO CONCRETE OR MORTAR.
5. EMBED THE POSTS A MINIMUM DEPTH OF 6".
6. INSTALL POSTS AND HANDRAILS FREE OF BURRS OR SHARP PROJECTIONS.
7. FOR RAILING DETAIL, SEE SHEET 6 | 7 .
8. MINIMUM LENGTHS: #5 BARS = 37" AND #6 BARS = 48"

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 6 – SECTIONS
STA. 600+13.38 TO STA. 604+25.21

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 5 TOTAL 7
SHEET P.338 TOTAL 627

SUM-077/008-11.65/00.00

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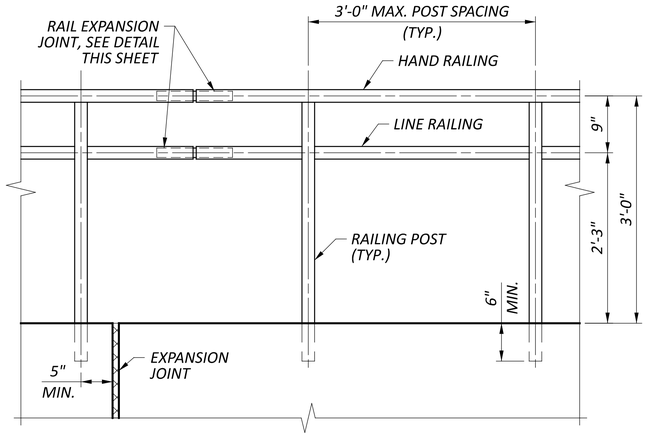
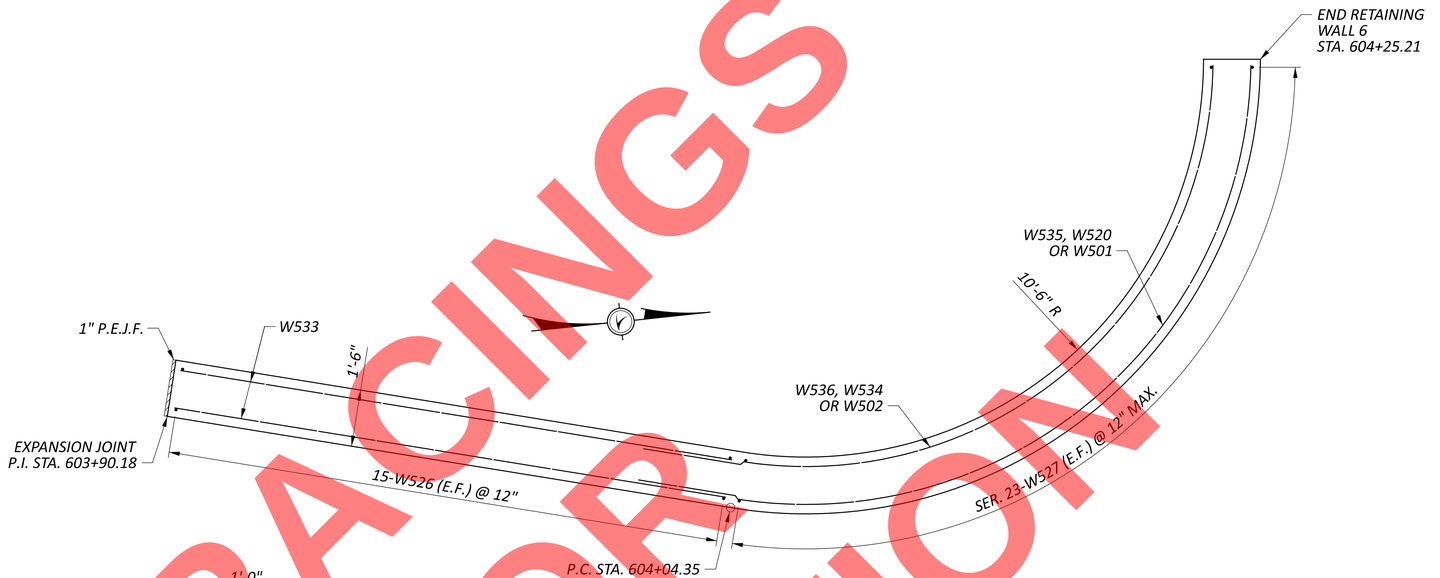
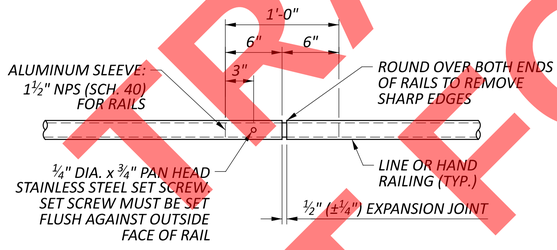


TYPICAL RAILING DETIAL

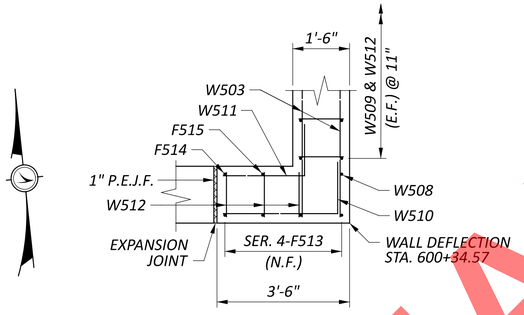
FOR RAILING NOTES, SEE SHEET 5 OF 7



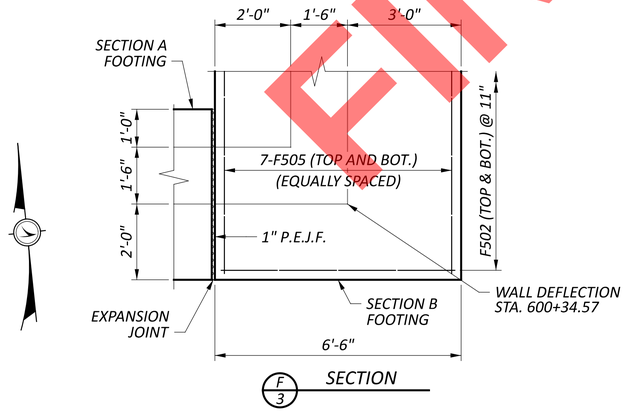
G/4 SECTION



EXPANSION JOINT DETAIL



E/3 SECTION



F/3 SECTION

H/4 SECTION

* MEASURED ALONG TOE OF FOOTING

RETAINING WALL 6 – GENERAL DETAILS
STA. 600+13.38 TO STA. 604+25.21

FINAL TRACINGS
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DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 6 TOTAL 7
SHEET P.339 TOTAL 627

SUM-077/008-11.65/00.00

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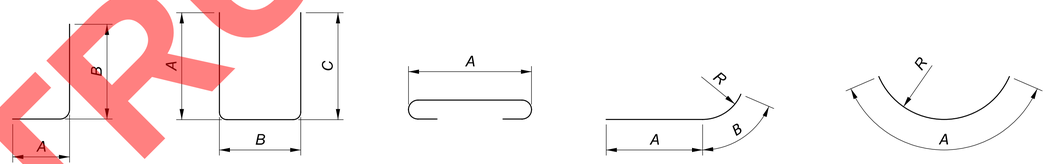
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
F501	36	5' - 4"	200	17	4' - 2"						
F502	164	7' - 4"	1,254	17	6' - 2"						
F503	44	6' - 4"	291	17	5' - 2"						
F504	10	17' - 3"	180	STR.							
F505	28	31' - 4"	915	STR.							
F506	140	30' - 0"	4,381	STR.							
F507	60	24' - 10"	1,554	STR.							
F508	20	33' - 8"	702	STR.							
F509	2 SER. OF 7	17' - 2" TO 19' - 7"	268	38	14' - 1"	3' - 1" TO 5' - 6"				8' - 9" TO 14' - 9"	4 7/8"
F510	2 SER. OF 6	14' - 0" TO 20' - 8"	217	39	14' - 1" TO 20' - 9"					10' - 9" TO 15' - 9"	1' - 4"
F511	10	6' - 11"	72	39	7' - 0"					13' - 3"	
F512	2 SER. OF 18	6' - 9" TO 8' - 6"	285	1	1' - 2"	5' - 8" TO 7' - 5"					1 1/4"
F513	1 SER. OF 4	8' - 6" TO 8' - 9"	36	1	1' - 2"	7' - 6" TO 7' - 9"					1"
F514	1	8' - 6"	9	1	1' - 2"	7' - 6"					
F515	1	8' - 8"	9	1	1' - 2"	7' - 7"					
F516	509	6' - 1"	3,123	1	1' - 2"	5' - 0"					
F601	1198	10' - 0"	16,402	17	8' - 8"						
F602	599	6' - 11"	5,672	1	1' - 2"	5' - 11"					
W501	1	24' - 0"	25	38	3' - 5"	20' - 7"				11' - 9"	
W502	1	22' - 3"	23	38	3' - 5"	18' - 10"				10' - 9"	
W503	16	31' - 0"	517	STR.							
W504	10	17' - 4"	181	STR.							
W505	4	9' - 8"	40	STR.							
W506	2	17' - 5"	36	STR.							
W507	292	26' - 0"	7,918	STR.							
W508	1	6' - 0"	6	STR.							
W509	2 SER. OF 31	6' - 0" TO 7' - 8"	442	STR.							5/8"
W510	7	6' - 3"	46	1	3' - 2"	3' - 2"					
W511	7	5' - 3"	38	1	2' - 2"	3' - 2"					
W512	423	4' - 11"	2,169	2	2' - 0"	1' - 2"	2' - 0"				
W513	2	19' - 4"	40	STR.							
W514	2	8' - 6"	18	STR.							
W515	54	7' - 8"	432	STR.							
W516	1 SER. OF 27	7' - 8" TO 9' - 1"	237	STR.							5/8"
W517	1 SER. OF 27	9' - 1" TO 10' - 6"	277	STR.							5/8"
W518	1 SER. OF 27	10' - 6" TO 11' - 11"	314	STR.							5/8"
W519	1 SER. OF 27	14' - 4" TO 15' - 9"	422	STR.							5/8"
W520	1 SER. OF 4	7' - 6" TO 20' - 4"	58	38	3' - 5"	4' - 2" TO 17' - 0"				11' - 9"	4' - 3 3/8"
W521	27	13' - 0"	366	STR.							
W522	27	12' - 5"	350	STR.							
W523	27	11' - 9"	331	STR.							
W524	27	11' - 1"	312	STR.							
W525	35	10' - 5"	380	STR.							
W526	30	10' - 0"	313	STR.							

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
W527	2 SER. OF 23	5' - 4" TO 9' - 9"	362	STR.							2"
W528	54	15' - 9"	887	STR.							
W529	2	16' - 6"	34	STR.							
W530	2	12' - 3"	26	STR.							
W531	2	14' - 7"	30	STR.							
W532	24	34' - 2"	855	STR.							
W533	24	14' - 8"	367	STR.							
W534	1 SER. OF 4	7' - 3" TO 18' - 11"	55	38	3' - 5"	3' - 10" TO 15' - 6"				10' - 9"	3' - 10 5/8"
W535	6	23' - 8"	148	38	3' - 5"	20' - 3"				11' - 9"	
W536	6	21' - 11"	137	38	3' - 5"	18' - 6"				10' - 9"	
W601	1 SER. OF 53	7' - 8" TO 9' - 1"	670	STR.							3/8"
W602	1 SER. OF 53	9' - 1" TO 10' - 6"	783	STR.							3/8"
W603	1 SER. OF 53	10' - 6" TO 11' - 11"	889	STR.							3/8"
W604	1 SER. OF 53	14' - 4" TO 15' - 9"	1194	STR.							3/8"
W605	106	15' - 9"	2,508	STR.							
W606	69	10' - 5"	1,080	STR.							
W607	53	13' - 0"	1,035	STR.							
W608	53	12' - 5"	988	STR.							
W609	53	11' - 9"	935	STR.							
W610	53	11' - 1"	882	STR.							
SUB-TOTAL	64,726	LBS.									



TYPE-1 TYPE-2 TYPE-17 TYPE-38 TYPE-39

REINFORCING BEND DIAGRAMS

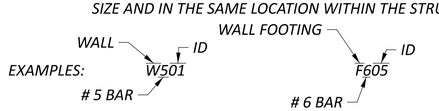
REINFORCING NOTES

1. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, OR ITEM 509 - NO. 4 DEFORMED GFRP REINFORCEMENT.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. "ECRS" DENOTES "EPOXY COATED REINFORCING STEEL".
7. "GRFP" DENOTES "GLASS FIBER EINFORCED POLYMER".

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: F = WALL FOOTING
W = WALL

FINAL NOT FOR CONSTRUCTION

RETAINING WALL 6 – REINFORCING STEEL LIST
STA. 604+13.38 TO STA. 604+25.33

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 7 TOTAL 7
SHEET P.340 TOTAL 627

SUM-077/008-11.65/00.00

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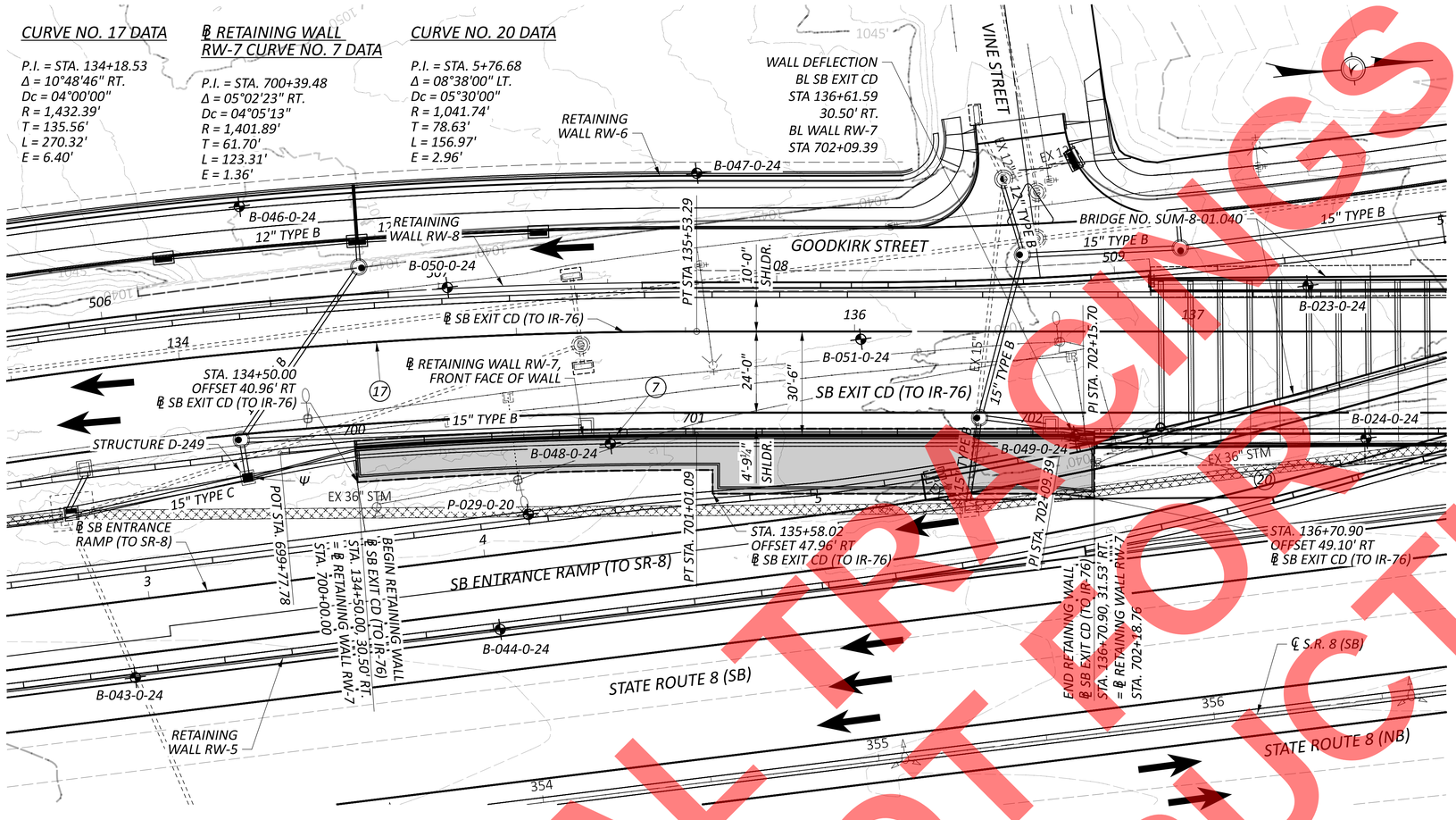
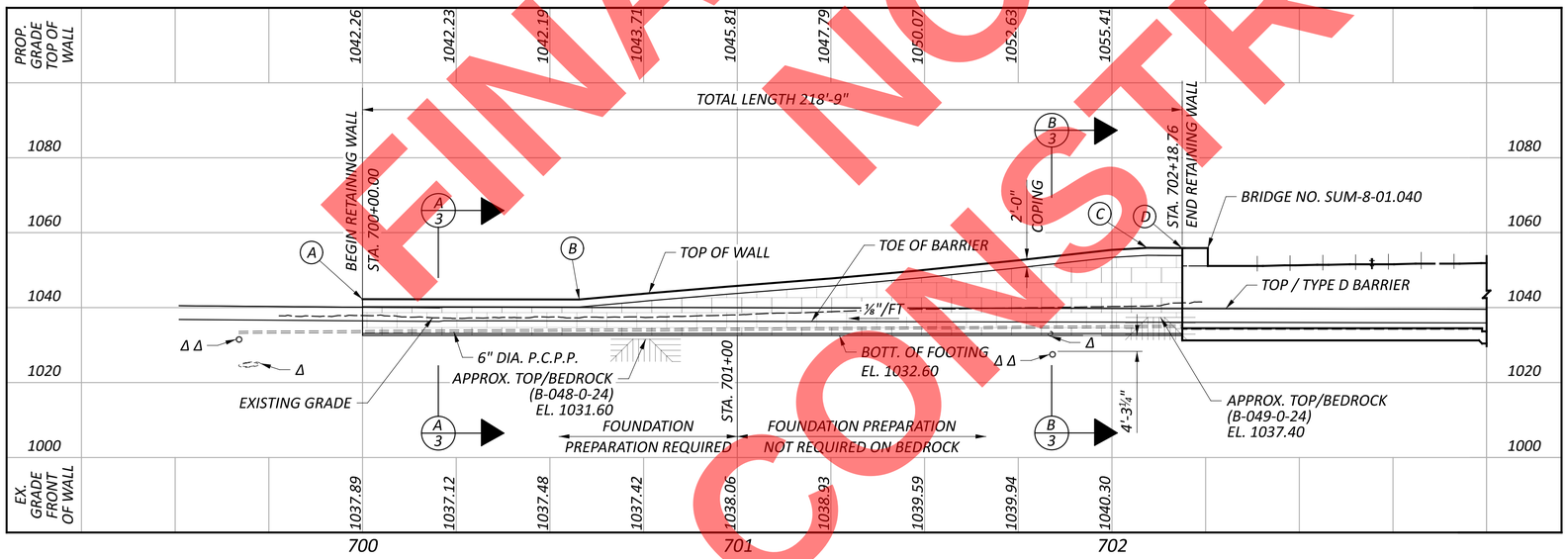


PLAN



PROFILE ALONG ℄ RETAINING WALL RW-7

NOTES

1. FOR RETAINING WALL RW-5 PLAN AND PROFILE, SEE SHEETS P.329 AND P.330 OF 627 .
2. FOR RETAINING WALL RW-6 PLAN AND PROFILE, SEE SHEET P.334 OF 627 .
3. FOR RETAINING WALL RW-8 PLAN AND PROFILE, SEE SHEET P.344 OF 627 .
4. FOR BRIDGE NO. SUM-8-01.140 DETAILS, SEE SHEETS P.439 THRU P.479 OF 627 .

LEGEND

- BORING LOCATION
- ROCK
- PAY LIMITS OF WALL QUANTITIES
- LEVELING PAD

Δ = EXIST. 12" STORM SEWER

Δ Δ = PROP. 15" STORM SEWER

Ψ = 6" NON-PERFORATED DRAINAGE PIPE, OUTLET TO PROP. STRUCTURE D-249 INVERT EL. 1033.15'

POINT	WALL STATION	SB EXIT CD (TO IR-76) RAMP STATION	SB EXIT CD (TO IR-76) RAMP OFFSET TO FRONT OF WALL	ELEVATION
A	700+00.00	134+50.00	30.50' RT.	1042.26
B	700+55.84	135+07.06	30.50' RT.	1042.18
C	702+09.39	136+61.59	30.50' RT.	1055.96
D	702+18.76	136+70.90	31.53' RT.	1055.90

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 7 - PLAN AND PROFILE
STA. 700+00.00 TO STA. 702+18.76

FINAL NOT FOR CONSTRUCTION
TRACINGS

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 3
SHEET P.341 TOTAL 627

SUM-077/008-11.65/00.00

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PARTICIPATION	ESTIMATED QUANTITIES				CALC. BY: RBB DATE: 3/20/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	STR. SHT. NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
213	512	10100	213	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
11	516	13600	11	SF	1" PREFORMED EXPANSION JOINT FILLER	
3138	840	20000	3,138	SF	MECHANICALLY STABILIZED EARTH WALL	
807	840	21000	807	CY	WALL EXCAVATION	
136	840	22001	136	SY	FOUNDATION PREPARATION, AS PER PLAN	P.299
1812	840	23000	1,812	CY	SELECT GRANULAR BACKFILL	
304	840	23050	304	CY	NATURAL SOIL	
462	840	25010	462	FT	6" DRAINAGE PIPE, PERFORATED	
33	840	25020	33	FT	6" DRAINAGE PIPE, NON-PERFORATED	
219	840	26000	219	FT	CONCRETE COPING	
1341	840	26050	1,341	SF	AESTHETIC SURFACE TREATMENT	
2	840	27000	2	DAY	ON-SITE ASSISTANCE	
1	840	28000	1	LS	SGB INSPECTION AND COMPACTION TESTING	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 7 – ESTIMATED QUANTITIES
STA. 700+00.00 TO STA. 702+18.76

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DESIGNER
AIS

REVIEWER
RBB 8-14-26

PROJECT ID
114865

SUBSET 2 | TOTAL 3

SHEET P.342 | TOTAL 627

SUM-077/008-11.65/00.00

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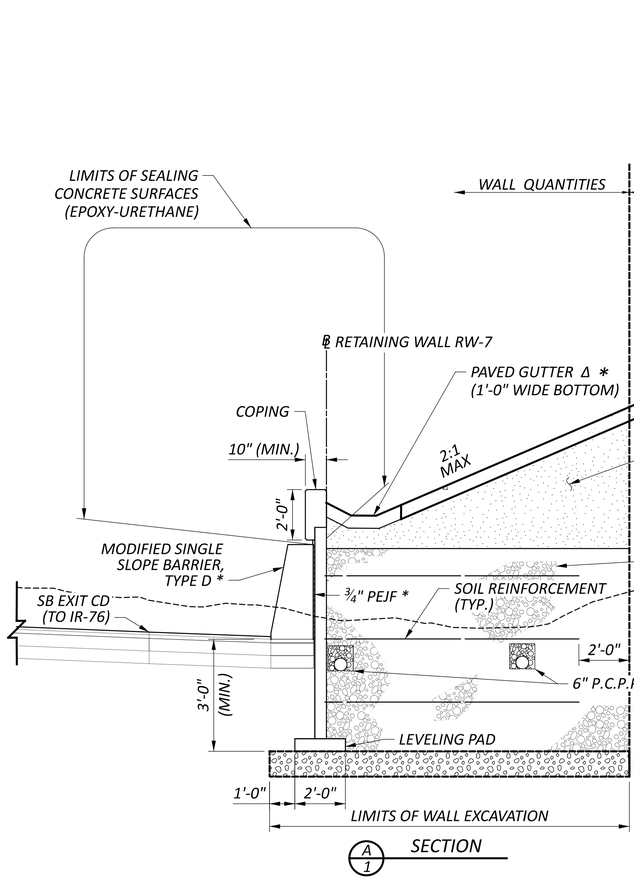
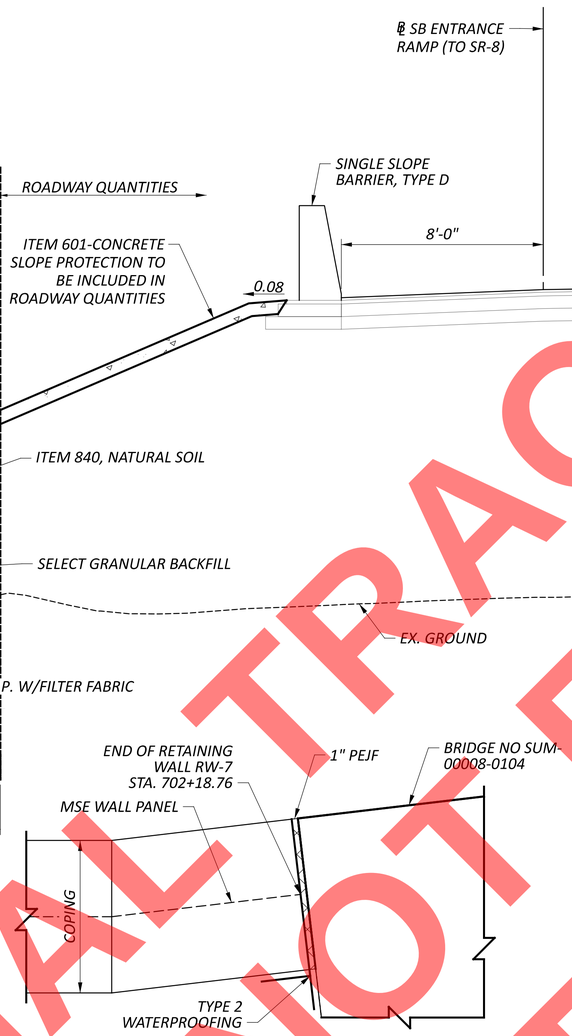
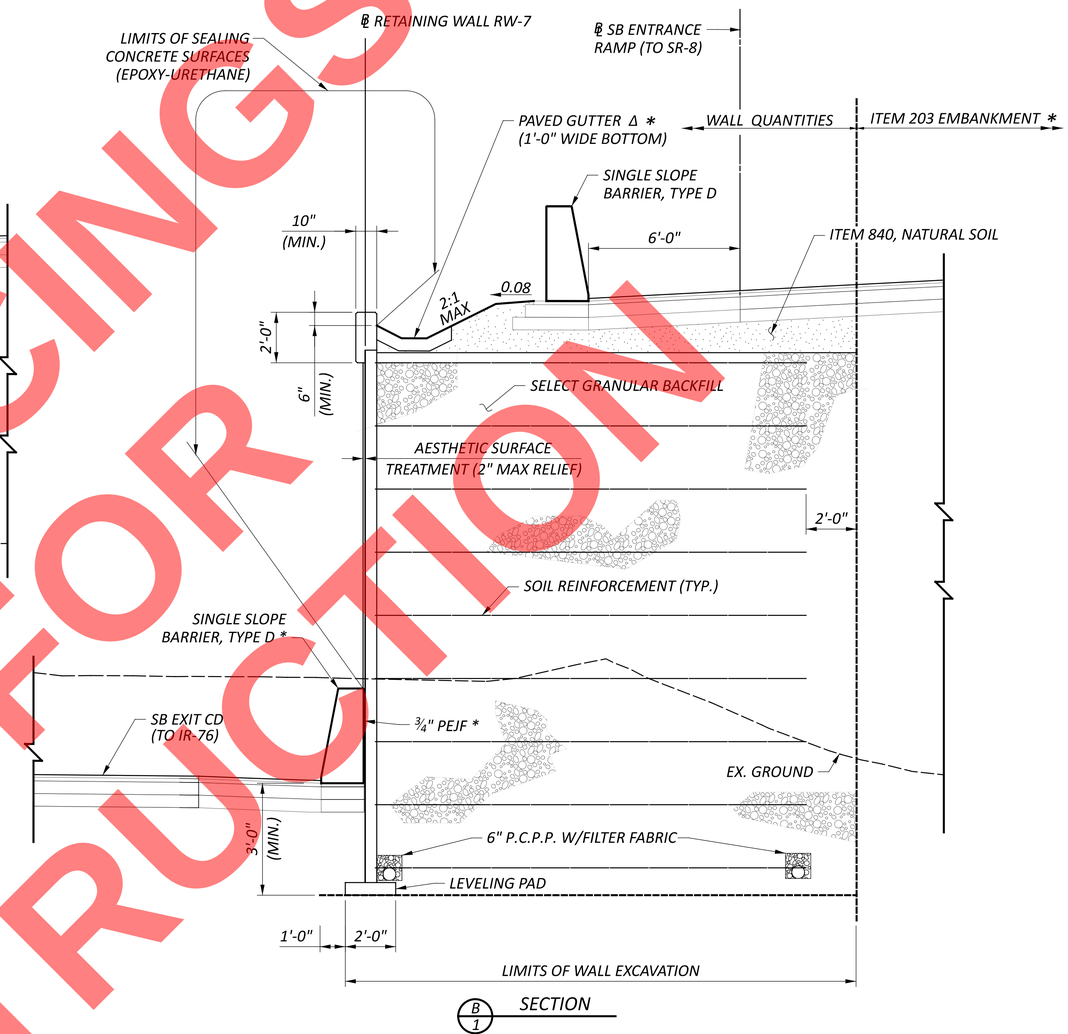
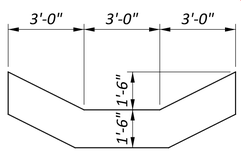
FINAL TRACINGS
NOT FOR
CONSTRUCTION





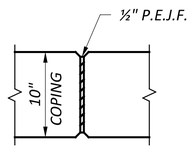
DETAIL 'A'





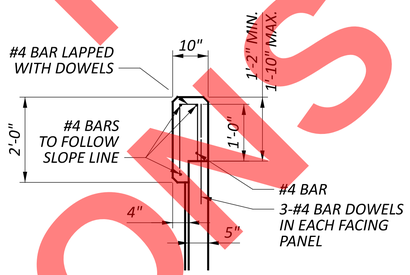
PAVED GUTTER DETAIL

CONCRETE PAD AND GUTTER SHALL BE INCLUDED WITH ITEM 511 - CONCRETE, MISC.: 6" UNREINFORCED PAVED GUTTER FOR PAYMENT.



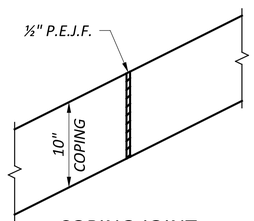
COPING EXPANSION JOINTS

PROVIDE EXPANSION JOINTS PER SS 840.04 A (II). P.E.J.F SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. REINFORCING STEEL SHALL BE DISCONTINUOUS AT EXPANSION JOINTS. COPING EXPANSION JOINTS SHALL BE COORDINATED WITH WALL PANEL JOINTS.



MSE COPING DETAIL

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL BE INCLUDED WITH ITEM 840, CONCRETE COPING FOR PAYMENT. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE COPING REINFORCEMENT DETAILING AND ASSOCIATED BAR LIST BASED ON THE PLAN REQUIREMENTS.



COPING JOINT ELEVATION DETAIL

ORIENT THE COPING EXPANSION JOINTS VERTICALLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS P.299 AND P.300 OF 627 .
2. FOUNDATION PREPARATION NOT REQUIRED WHEN FOUNDED ON ROCK.

LEGEND:

- ITEM 840, FOUNDATION PREPARATION, AS PER PLAN (SEE NOTE 2)
- SELECT GRANULAR BACKFILL
- NATURAL SOIL
- * - INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT.
- Δ -STA. 700+00.00 TO STA. STA. 702+10.00 ALONG ℄ RETAINING WALL RW-7

RETAINING WALL 7 – SECTIONS
STA. 700+00.00 TO STA. 702+18.76

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 3 TOTAL 3
SHEET P.343 TOTAL 627

SUM-077/008-11.65/00.00

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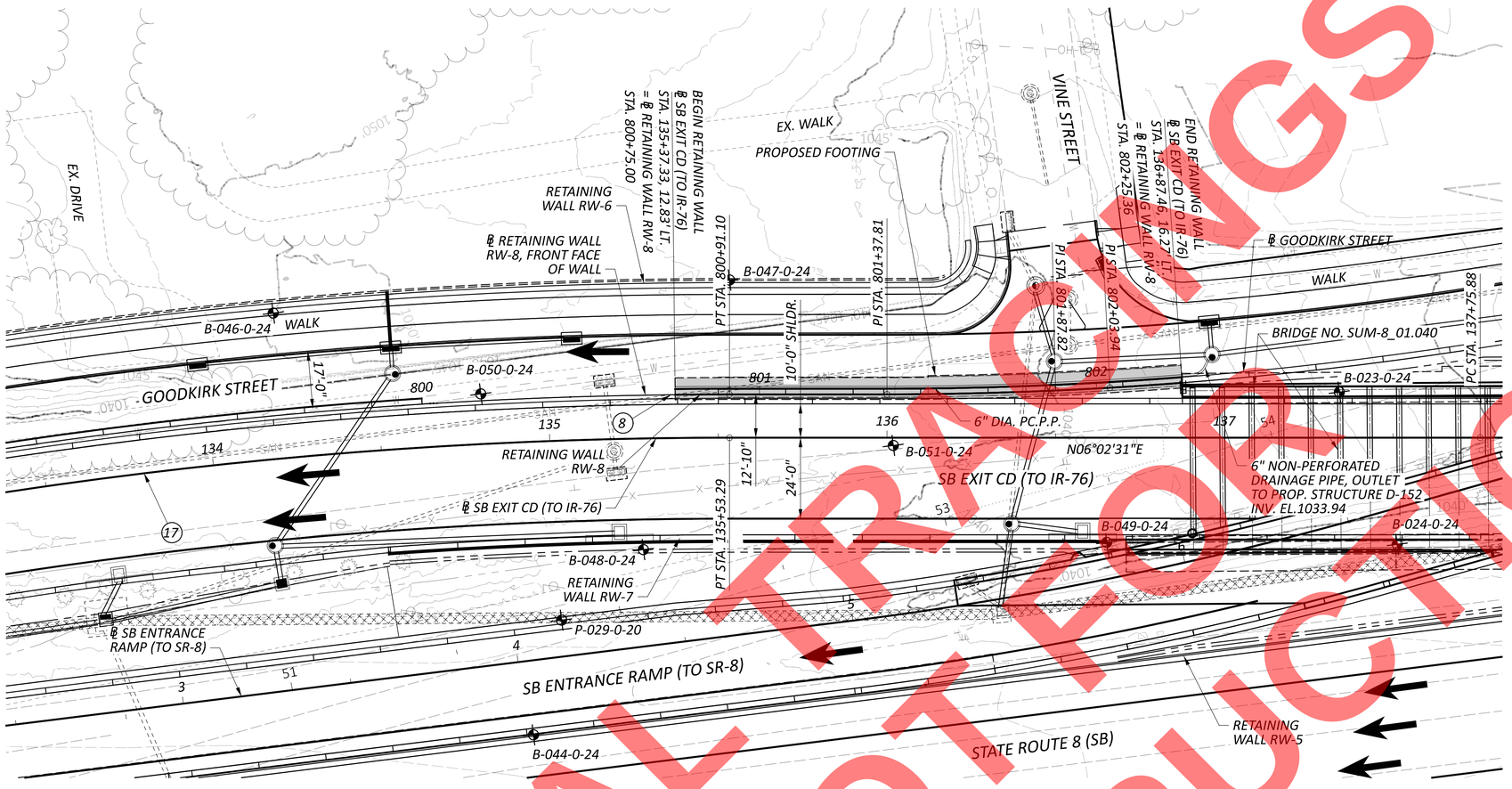
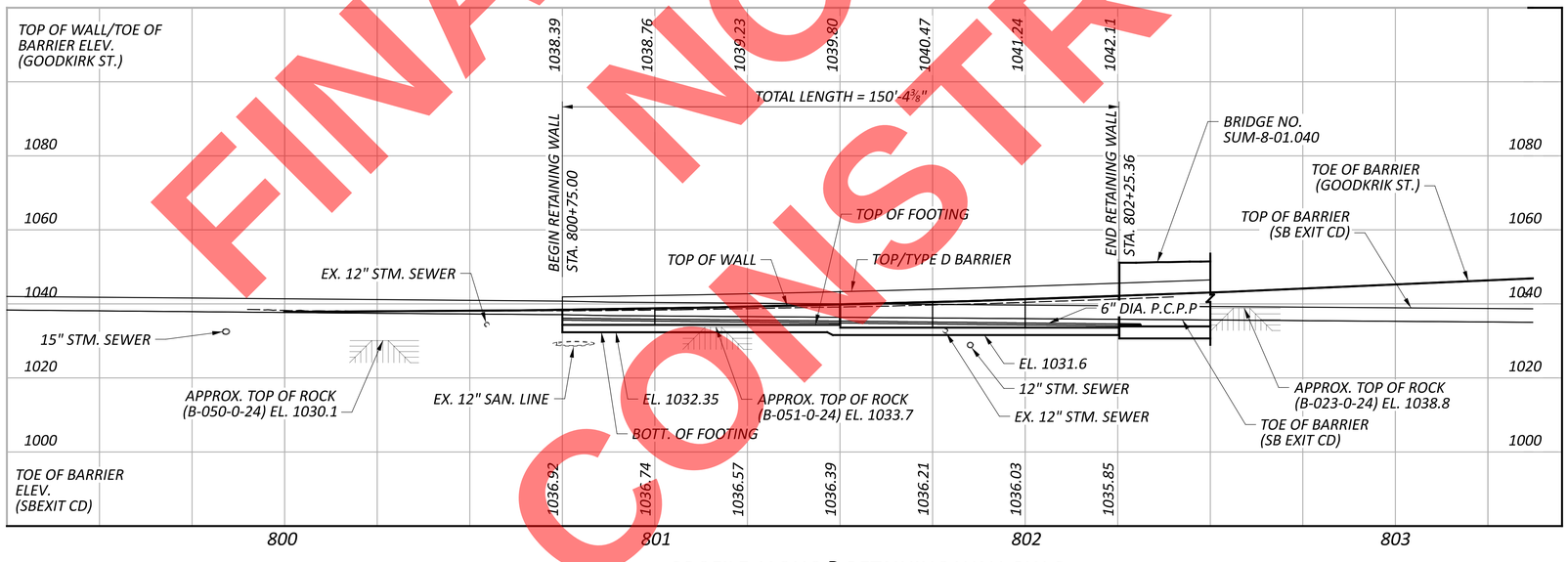


PLAN



PROFILE ALONG ℄ RETAINING WALL RW-8

CURVE NO. 17 DATA

P.I. = STA. 134+18.53
Δ = 10°48'46" RT.
Dc = 04°00'00"
R = 1,432.39'
T = 135.56'
L = 270.32'
E = 6.40'

℄ RETAINING WALL RW-8 CURVE NO. 8 DATA

P.I. = STA. 800+40.57
Δ = 04°00'29" RT.
Dc = 03°57'52"
R = 1,445.22'
T = 50.57'
L = 101.10'
E = 0.88'

NOTES

1. FOR RETAINING WALL RW-5 PLAN AND PROFILE, SEE SHEETS P.329 AND P.330 OF 627 .
2. FOR RETAINING WALL RW-6 PLAN AND PROFILE, SEE SHEET P.334 OF 627 .
3. FOR RETAINING WALL RW-7 PLAN AND PROFILE, SEE SHEET P.341 OF 627 .
4. FOR BRIDGE NO. SUM-8-01.040 DETAILS SEE SHEETS P.439 AND P.479 OF 627 .

LEGEND

- BORING LOCATION
- ROCK
- RETAINING WALL FOOTING

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 8 - PLAN AND PROFILE
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4865
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 6
SHEET P.344 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:56:04 PM USER: sheikha2048
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PARTICIPATION	ESTIMATED QUANTITIES				CALC. BY: RBB DATE: 3/23/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	STR. SHT. NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
362	503	21104	362	CY	UNCLASSIFIED EXCAVATION, INCLUDING ROCK	
20861	509	10001	20,861	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	P.299
612	509	30020	612	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
56	511	46012	56	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
76	511	46512	76	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
133	512	10100	133	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
2	512	33000	2	SY	TYPE 2 WATERPROOFING	
9	516	13600	9	SF	1" PREFORMED EXPANSION JOINT FILLER	
0	518	21200	0	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
150	518	40000	150	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
11	518	40010	11	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
98	530	13000	98	SF	SPECIAL - FORM LINER	

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:56:22 PM USER: sheikha2048
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RETAINING WALL 8 – ESTIMATED QUANTITIES
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
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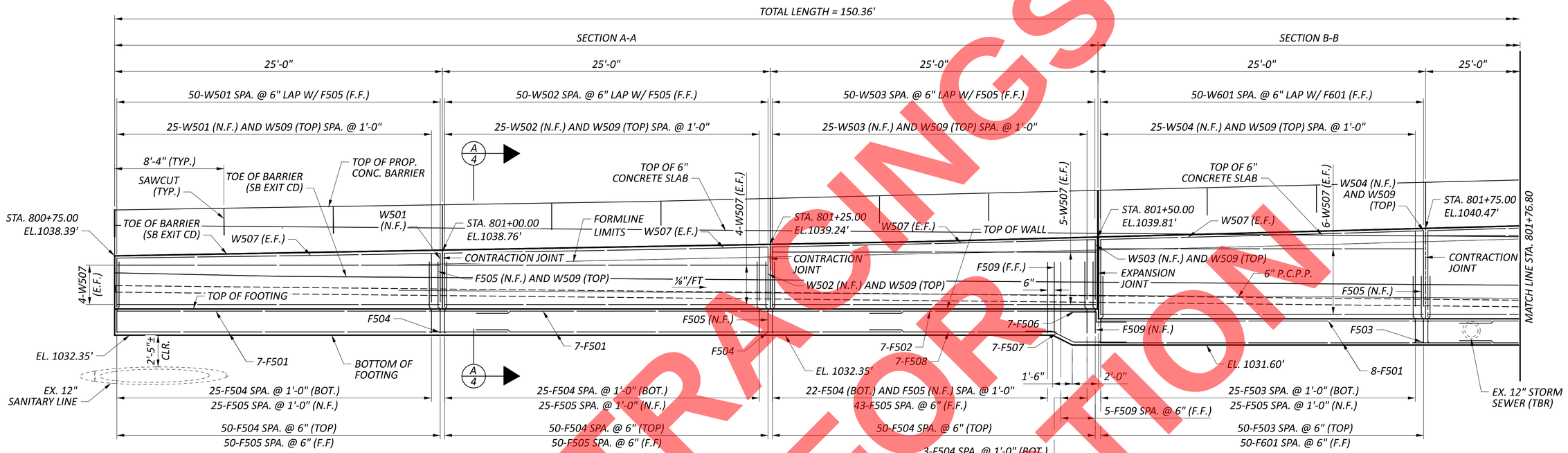
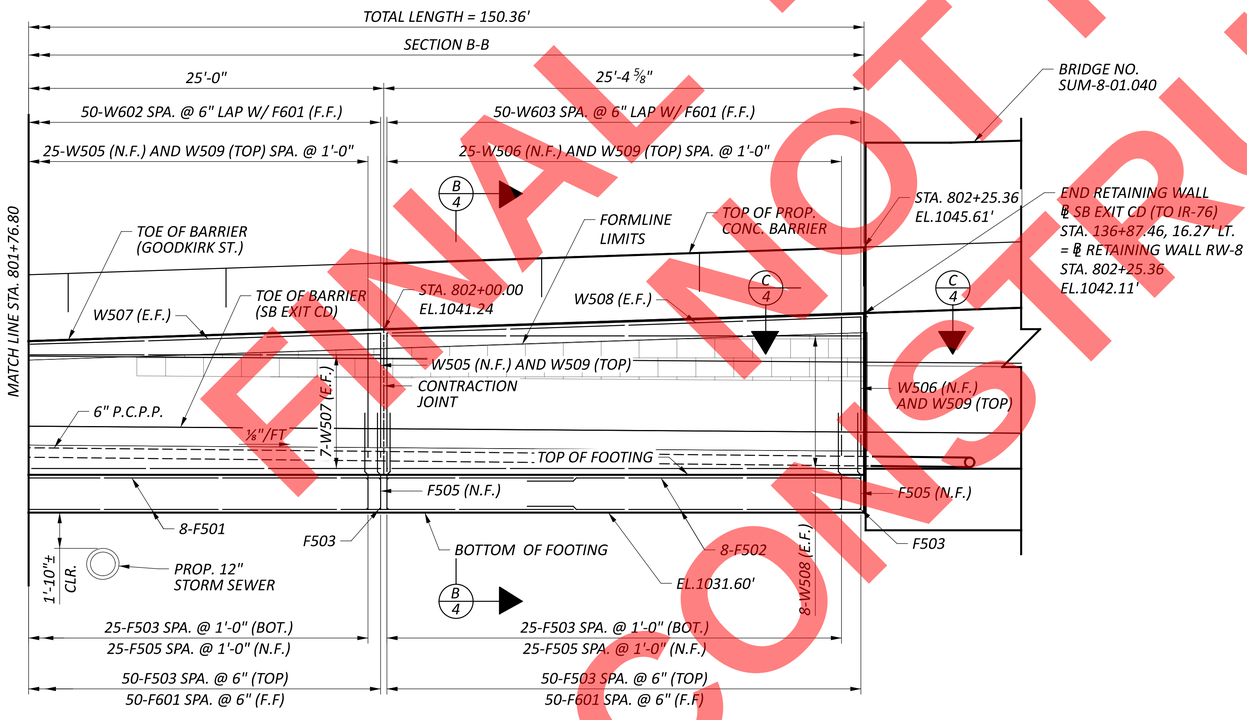
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER: AIS
REVIEWER: RBB 8-14-26
PROJECT ID: 114865
SUBSET: 2 TOTAL: 6
SHEET: P.345 TOTAL: 627



PARTIAL ELEVATION

WALL LENGTH SHOWN ALONG ℄ RETAINING WALL RW-8
(BARRIER REINFORCING BARS NOT SHOWN FOR CLARITY)



PARTIAL ELEVATION

WALL LENGTH SHOWN ALONG ℄ RETAINING WALL RW-8
(BARRIER REINFORCING BARS NOT SHOWN FOR CLARITY)

NOTES:

1. SEE SHEETS P.299 AND P.300 OF 627 FOR GENERAL NOTES.
2. FOR RAILING REINFORCING, SEE SHEET 5 OF 6.
3. MINIMUM LAP LENGTHS:
   #5 BARS = 37"
   #6 BARS = 48"

LEGEND

(TBR) - TO BE REMOVED

FINAL PLANS NOT FOR CONSTRUCTION

RETAINING WALL 8 – ELEVATIONS
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 3 | TOTAL 6
SHEET P.346 | TOTAL 627

SUM-077/008-11.65/00.00
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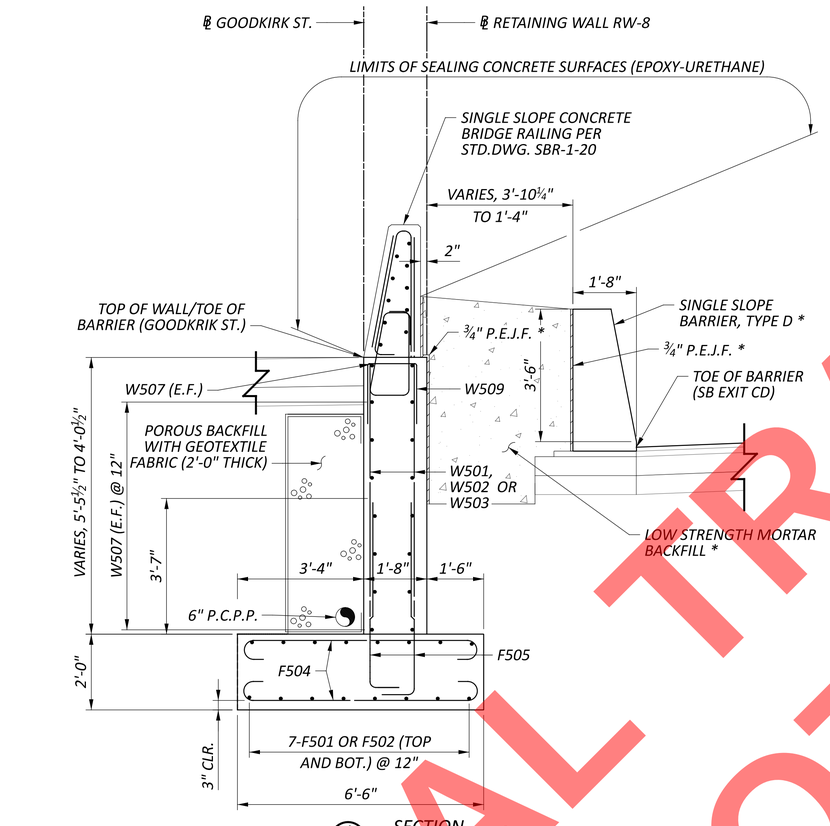
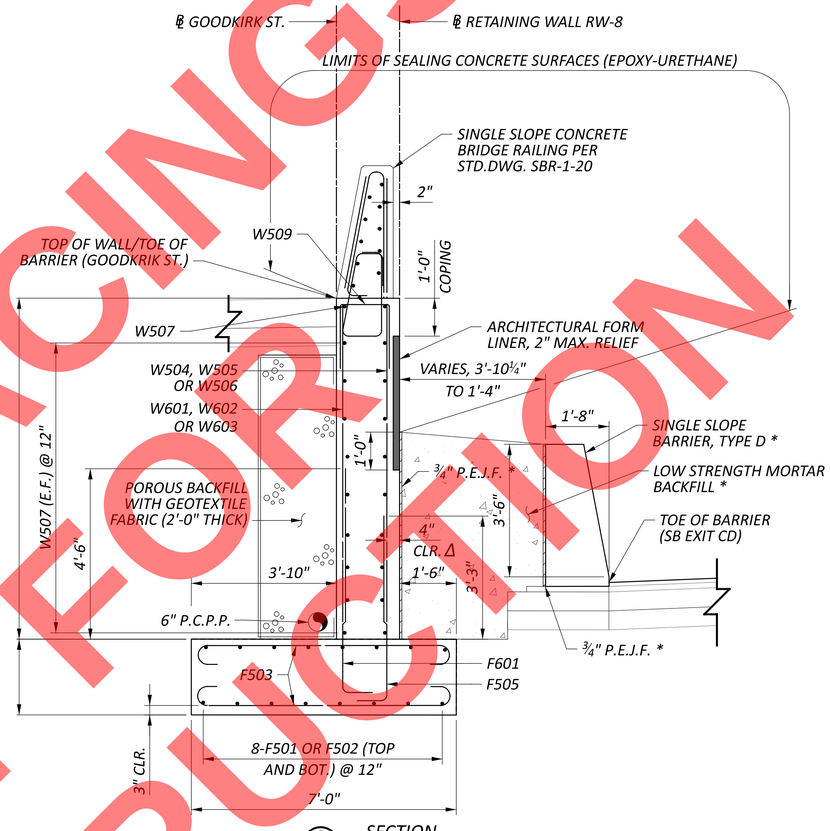


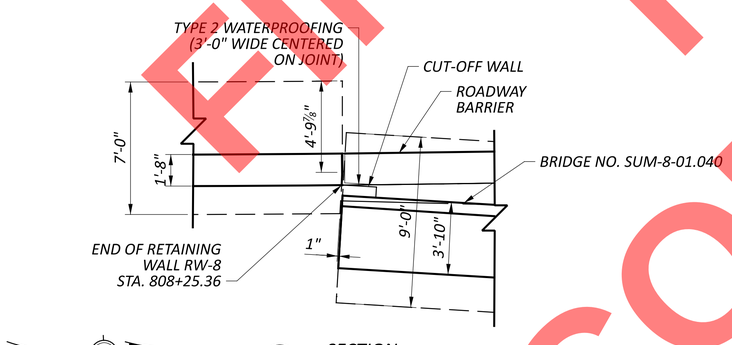
A/3 SECTION

STA. 800+75.00 TO STA. 801+50.00



B/3 SECTION

STA. 801+50.00 TO STA. 802+25.36



C/3 SECTION

LEGEND:

* - INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

Δ - PROVIDE 4" REBAR CLEARANCE TO ALLOW FOR 2" RELIEF IN FORMLINER

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS P.299 AND P.300 THRU 627 .
2. FOR BRIDGE NO. SUM-8-01.040 DETAILS SEE SHEETS P.439 AND P.479 THRU 627 .
3. FOR RAILING DETAILS, SEE SHEET 5 / 6 .
4. MINIMUM LAP LENGTHS:
   #5 BARS = 37"
   #6 BARS = 48"

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 8 – SECTIONS
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 4 TOTAL 6
SHEET P.347 TOTAL 627

SUM-077/008-11.65/00.00
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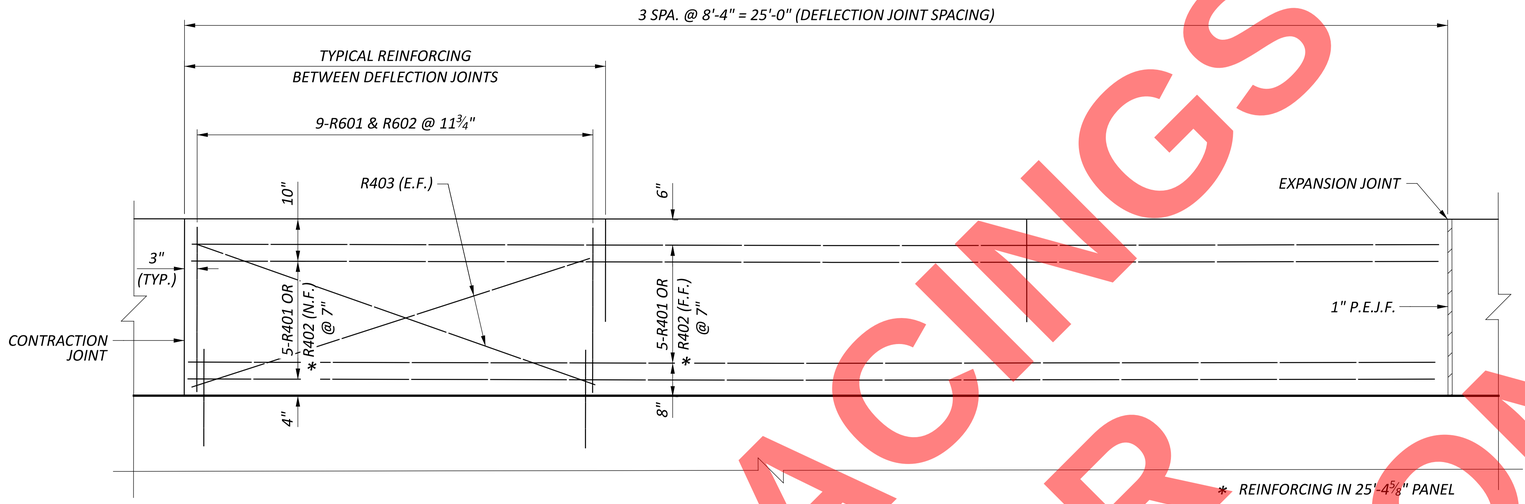
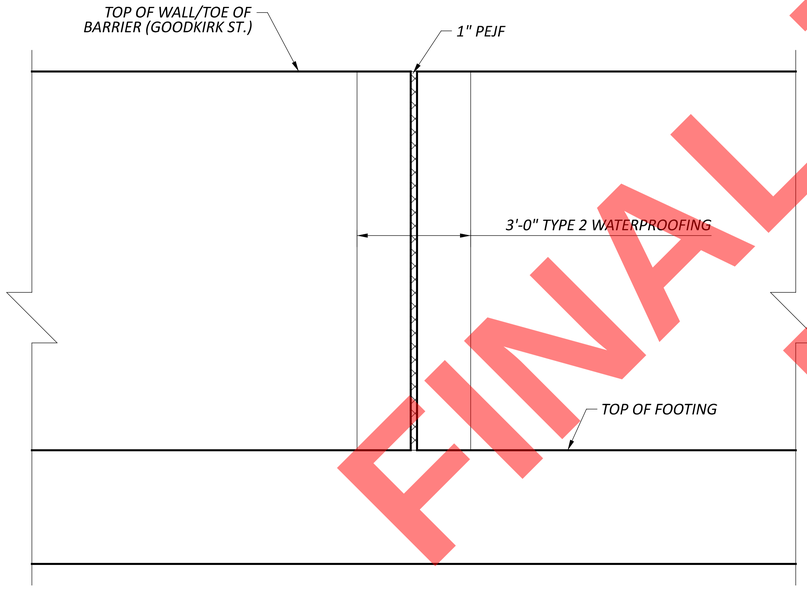
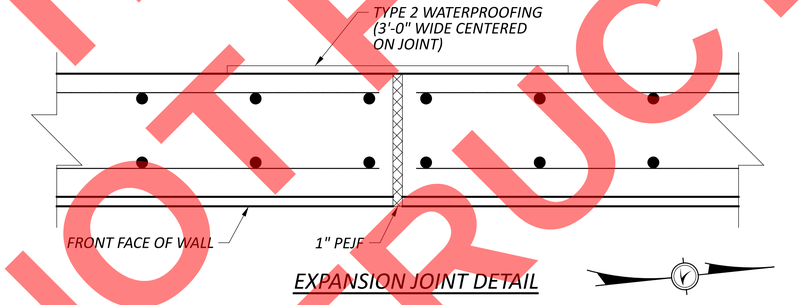


TYPICAL PANELS OF SBR-1-20 CONCRETE PARAPET IN PARTIAL ELEVATION

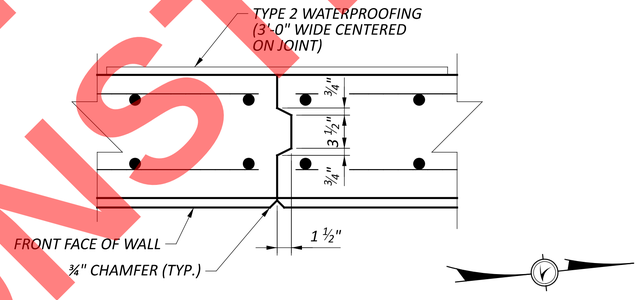
(25'-0" PANEL SHOWN, 25'-4⅝" PANEL SIMILAR)



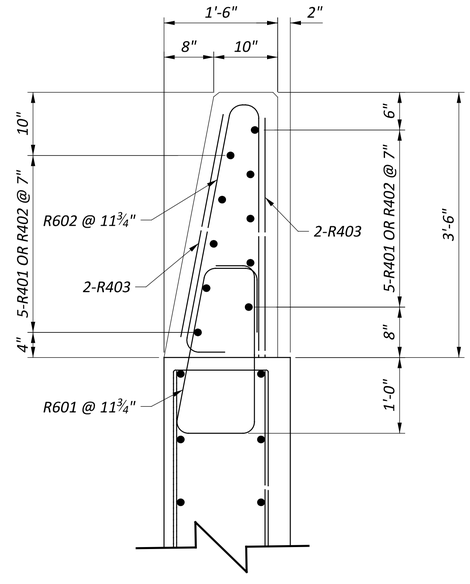
EXPANSION JOINT ELEVATION



EXPANSION JOINT DETAIL



CONTRACTION JOINT DETAIL



RAILING DETAILS

STA. 800+75.00 TO 802+25.36

NOTES:

1. FOR ADDITIONAL RAILING NOTES AND DETAILS, REFER TO STD. DWG. SBR-1-20.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 8 – GENERAL DETAILS
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
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DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET / TOTAL	5 / 6
SHEET / TOTAL	P.348 / 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:57:24 PM USER: shelkha2048
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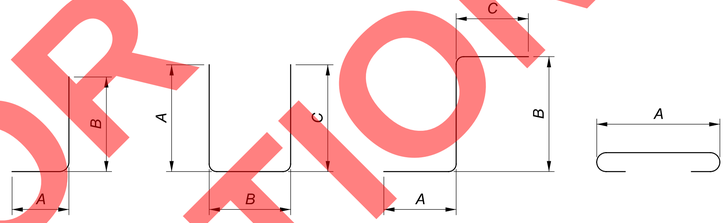
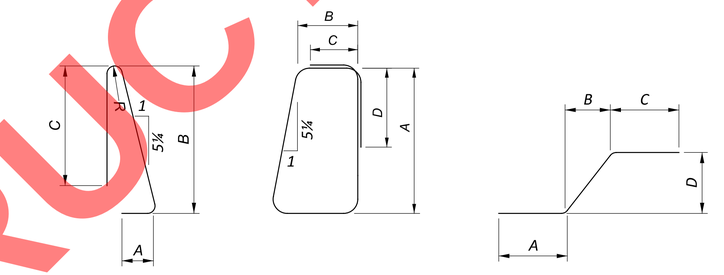
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
WALL AND RAILING (EPOXY COATED REINFORCING STEEL)											
F501	60	30' - 0"	1877	STR.							
F502	30	20' - 10"	652	STR.							
F503	228	7' - 10"	1862	17	6' - 8"						
F504	227	7' - 4"	1731	17	6' - 2"						
F505	295	6' - 8"	2051	1	1' - 6"	5' - 4"					
F506	7	4' - 6"	33	8	2' - 0"	9"	2' - 0"				
F507	7	7' - 8"	56	38	2' - 0"	1' - 6"	4' - 0"	9"			
F508	7	17' - 4"	127	STR.							
F509	10	6' - 11"	72	1	1' - 6"	6' - 1"					
F601	150	7' - 7"	1709	1	1' - 6"	6' - 3"					
W501	76	3' - 9"	297	STR.							
W502	76	4' - 2"	330	STR.							
W503	76	4' - 7"	363	STR.							
W504	26	5' - 11"	160	STR.							
W505	26	6' - 7"	179	STR.							
W506	26	7' - 4"	199	STR.							
W507	62	24' - 8"	1595	STR.							
W508	18	25'-0"	469	STR.							
W509	156	5' - 9"	936	2	2' - 4"	1' - 4"	2' - 4"				
W601	50	5' - 11"	444	STR.							
W602	50	6' - 7"	494	STR.							
W603	50	7' - 4"	551	STR.							
R401	50	24' - 8"	824	STR.							
R402	10	25' - 0"	261	STR.							
R601	162	7' - 8"	1865	37	2' - 5"	0' - 9½"	7"	1' - 0"			
R602	162	7' - 1"	1724	23	6"	3' - 3"	3' - 3"			2"	
		SUB-TOTAL	20,861	LBS.							

MARK	NUMBER TOTAL	BAR LENGTH	TOTAL LENGTH	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
RAILING (GLASS FIBER POLYMER REINFORCEMENT - GFPR)											
R403	72	8' - 6"	612	STR.							
		SUB-TOTAL	612	FT.							





REINFORCING BEND DIAGRAMS

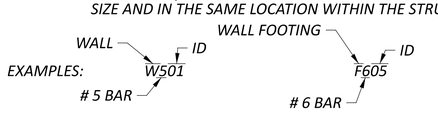
REINFORCING NOTES

1. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, OR ITEM 509 - NO. 4 DEFORMED GFRP REINFORCEMENT.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. "ECRS" DENOTES "EPOXY COATED REINFORCING STEEL".
7. "GRFP" DENOTES "GLASS FIBER EINFORCED POLYMER".

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED:
F = WALL FOOTING
R = RAILING (PARAPET)
W = WALL

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 8 – REINFORCING STEEL LIST
STA. 800+00.00 TO STA. 802+25.36

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 6 TOTAL 6
SHEET P.349 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:57:37 PM USER: sheikha2048
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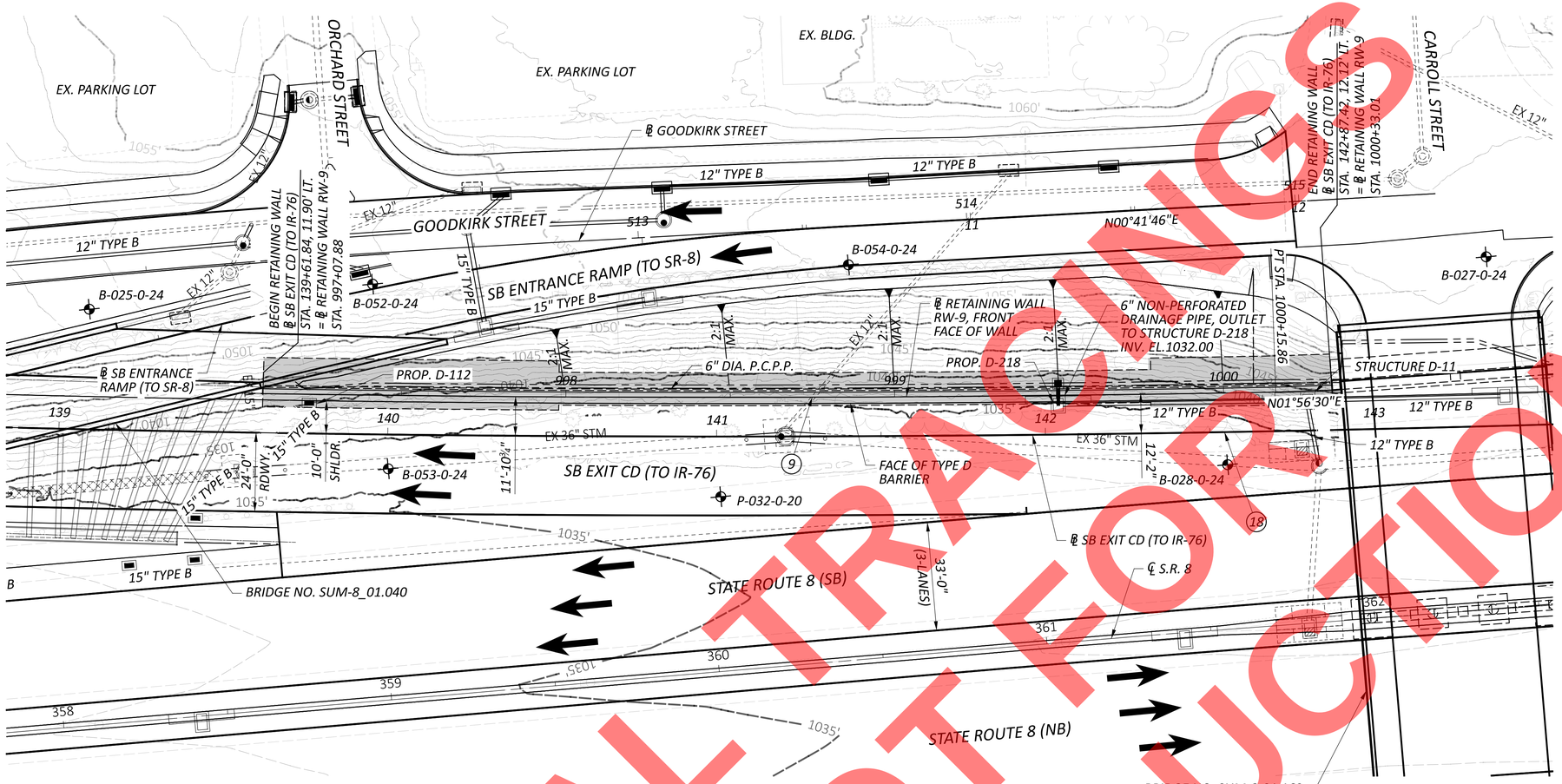
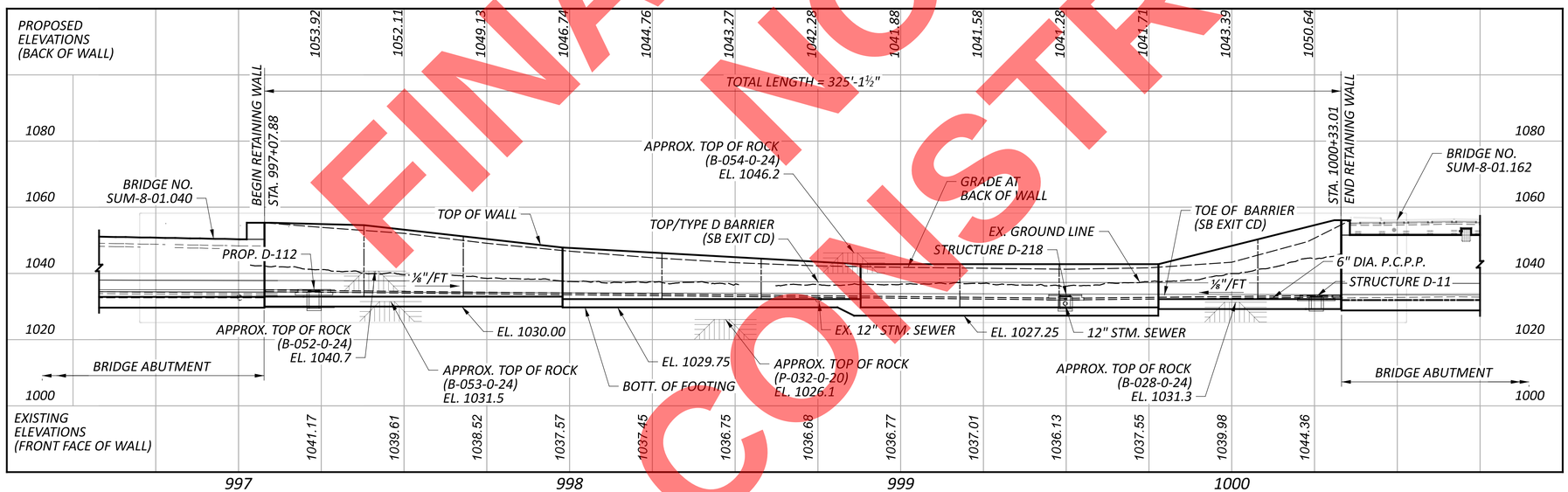


PLAN



PROFILE ALONG ℄ RETAINING WALL RW-9

FINAL
NOT FOR
CONSTRUCTION
TRACINGS

HORIZONTAL SCALE IN FEET
0 10 20 40

℄ RETAINING WALL RW-9 CURVE NO. 9 DATA

P.I. = STA. 998+59.75
Δ = 02°05'04" LT.
Dc = 00°40'03"
R = 8,582.70'
T = 156.14'
L = 312.25'
E = 1.42'

CURVE NO. 18 DATA

P.I. = STA. 141+63.36
Δ = 05°09'46" LT.
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
2. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
3. SEE SHEETS P.299 THRU P.300 OF 627 FOR GENERAL NOTES.
4. SEE SHEET 5 | 7 FOR SECTION VIEWS.
5. FOR BRIDGE NO. SUM-8-01.040 DETAILS SEE SHEETS P.439 THRU P.479 OF 627 .
6. FOR BRIDGE NO. SUM-8-01.162 DETAILS, SEE SHEETS P.480 THRU P.509 OF 627 .

LEGEND

BORING LOCATION
ROCK
RETAINING WALL FOOTING

RETAINING WALL 9 – PLAN PROFILE STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 | TOTAL 7
SHEET P.350 | TOTAL 627

SUM-077/008-11.65/00.00

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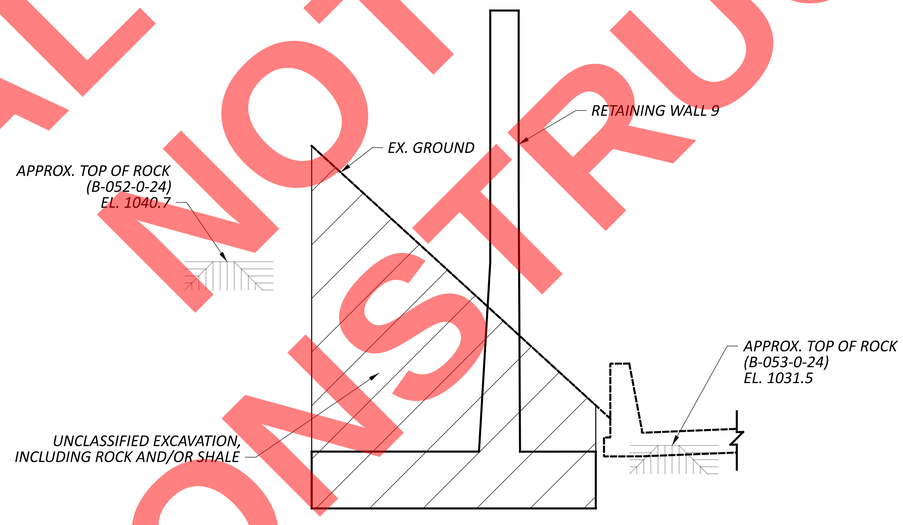
PARTICIPATION	ESTIMATED QUANTITIES				CALC. BY: RBB DATE: 3/17/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	STR. SHT. NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
1955	503	21100	1,955	CY	UNCLASSIFIED EXCAVATION	
199	503	31100	199	CY	ROCK EXCAVATION	
94379	509	10001	94,379	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	P.299
327	511	46012	327	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
408	511	46512	408	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
429	512	10100	429	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
22	512	33000	22	SY	TYPE 2 WATERPROOFING	
269	516	13600	269	SF	1" PREFORMED EXPANSION JOINT FILLER	
323	518	21200	323	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
325	518	40000	325	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
5	518	40010	5	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
3157	530	13000	3,157	SF	SPECIAL - FORM LINER	



FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 9 – ESTIMATED QUANTITIES
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 2 | TOTAL 7
SHEET P.351 | TOTAL 627

SUM-077/008-11.65/00.00

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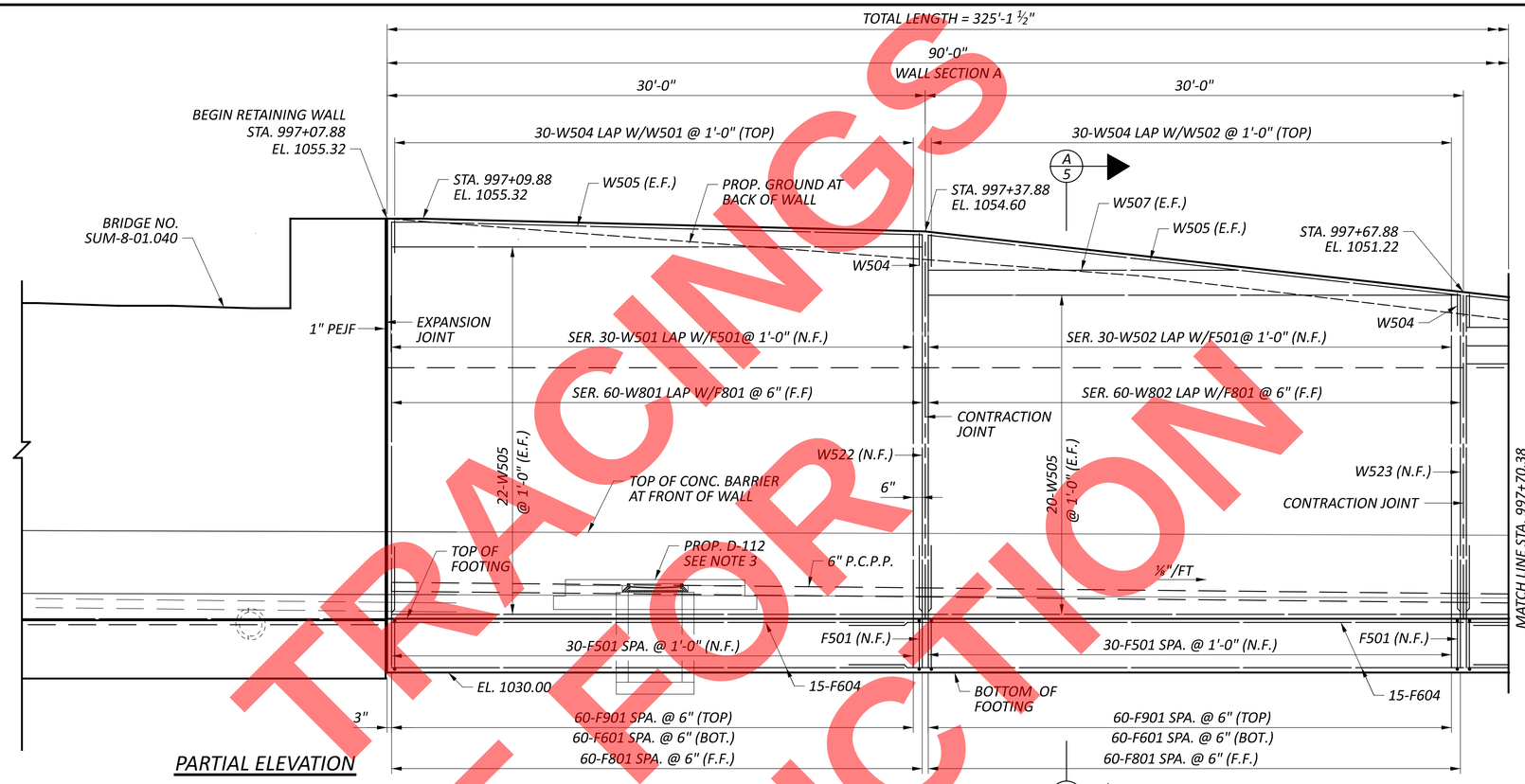
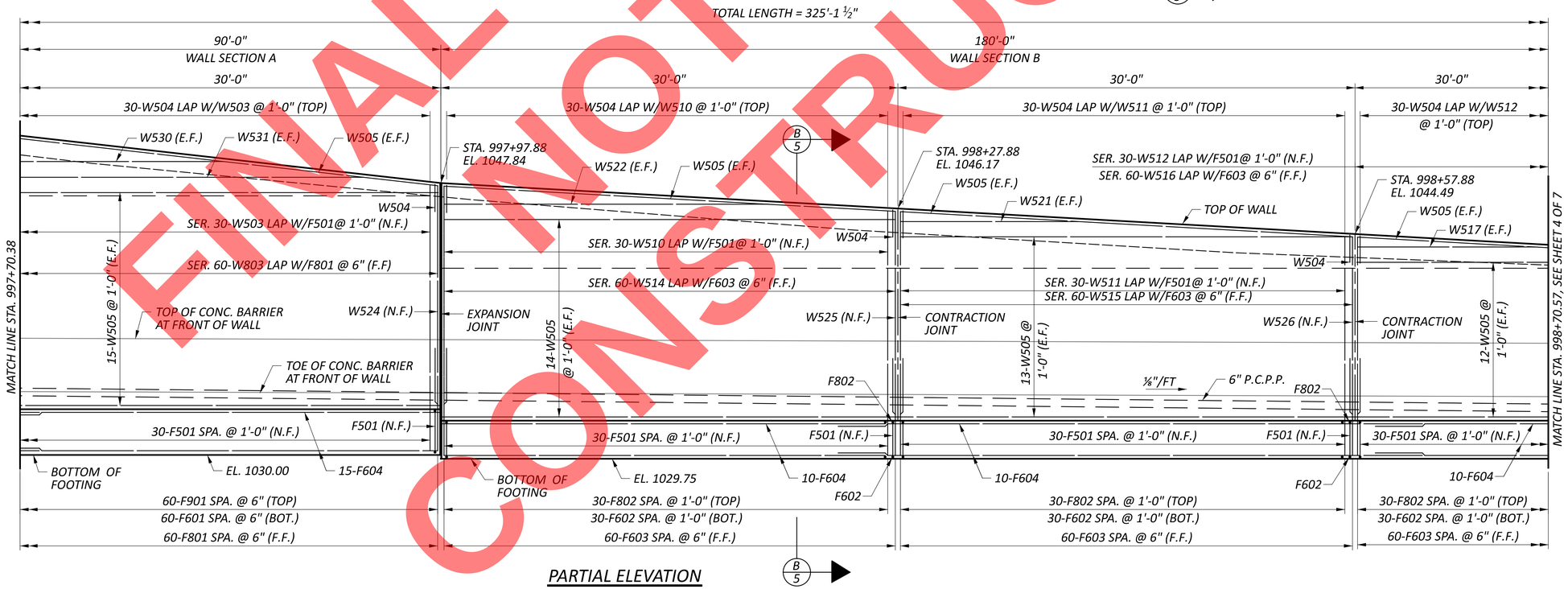
FINAL PLANS
NOT FOR CONSTRUCTION

NOTES:

1. SEE SHEET 5 OF 7 FOR SECTION VIEWS.
2. SEE SHEETS P.299 AND P.300 OF 627 FOR GENERAL NOTES.
3. DRAINAGE STRUCTURES LOCATED WITHIN THE LIMITS OF THE FOOTING SHALL BE CONSTRUCTED PRIOR TO FOOTING CONSTRUCTION. IN LIEU OF THIS A FOOTING BLOCKOUT SHALL BE PROVIDED BY THE CONTRACTOR TO FIT THE PROPOSED DRAINAGE STRUCTURE DIMENSIONS. FOOTING REINFORCEMENT SHALL BE FIELD CUT AS NECESSARY.
4. MINIMUM LAP LENGTHS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"



PARTIAL ELEVATION



PARTIAL ELEVATION

RETAINING WALL 9 – ELEVATIONS (1 OF 2)
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 3 TOTAL 7
SHEET P.352 TOTAL 627

SUM-077/008-11.65/00.00

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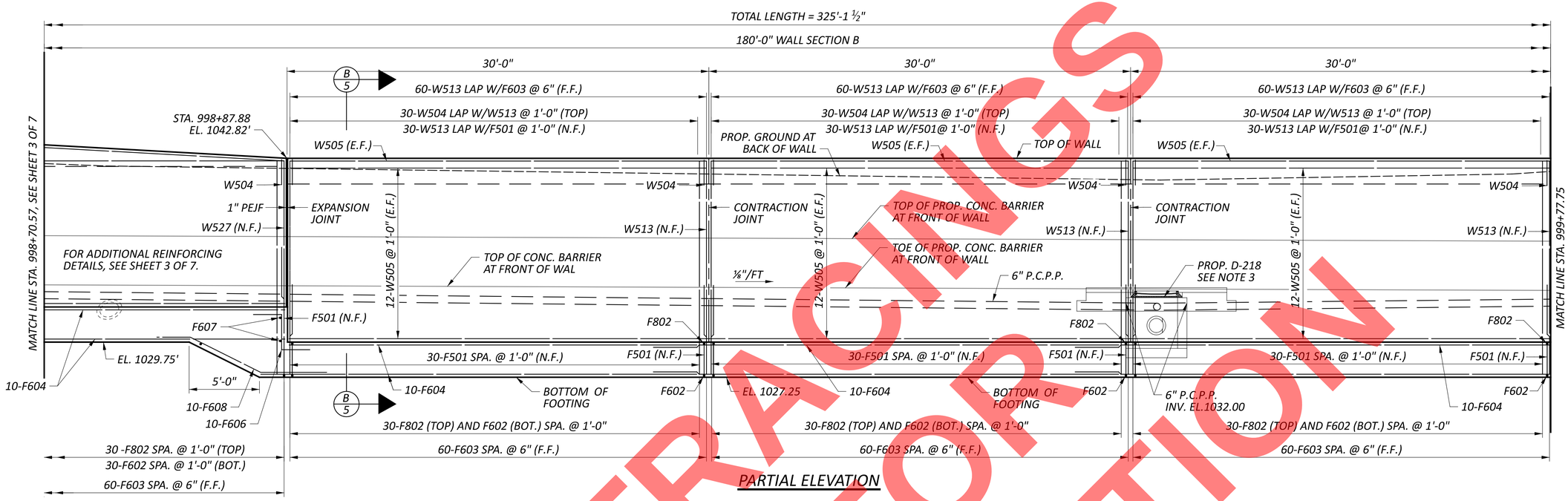
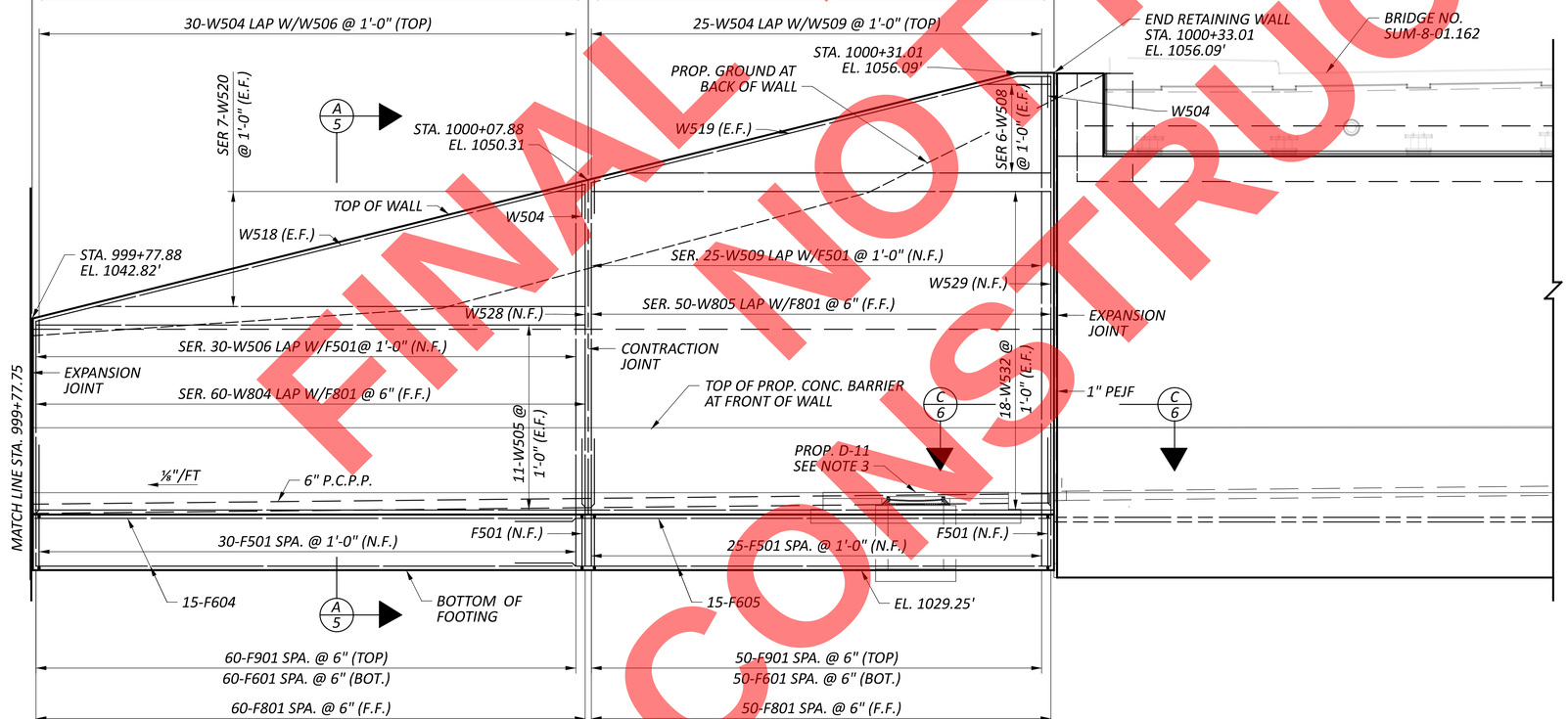


PARTIAL ELEVATION



PARTIAL ELEVATION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES:

1. SEE SHEET 5 OF 7 FOR SECTION VIEWS.
2. SEE SHEETS P.299 AND P.300 OF 627 FOR GENERAL NOTES.
3. DRAINAGE STRUCTURES LOCATED WITHIN THE LIMITS OF THE FOOTING SHALL BE CONSTRUCTED PRIOR TO FOOTING CONSTRUCTION. IN LIEU OF THIS A FOOTING BLOCKOUT SHALL BE PROVIDED BY THE CONTRACTOR TO FIT THE PROPOSED DRAINAGE STRUCTURE DIMENSIONS. FOOTING REINFORCEMENT SHALL BE FIELD CUT ASNECESSARY.
4. MINIMUM LAP LENGTHS
   #5 BARS - 3'-1"
   #6 BARS - 4'-0"

RETAINING WALL 9 – ELEVATIONS (2 OF 2)
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
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DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	4
TOTAL	7
SHEET	P.353
TOTAL	627

SUM-077/008-11.65/00.00
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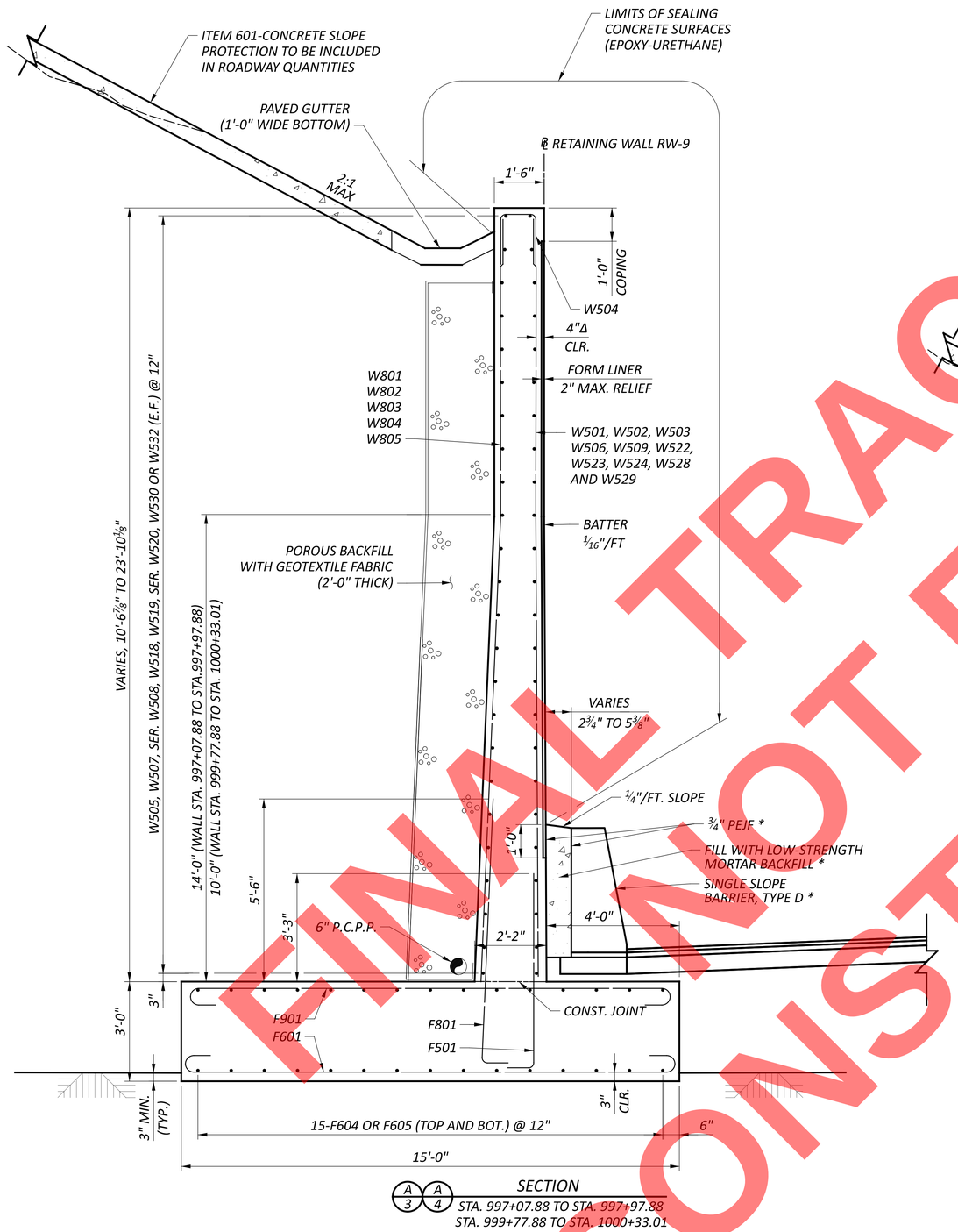

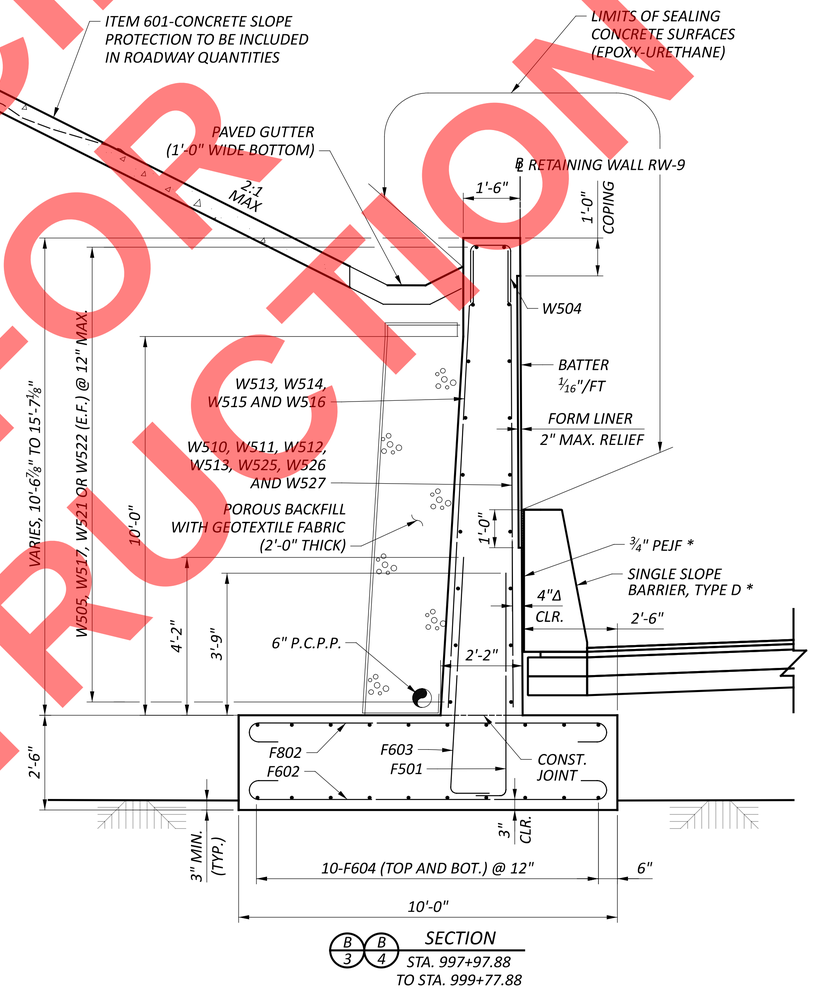

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS P.299AND P.300OF 627 .
2. MINIMUM LAP LENGTHS:
   #5 BARS - 37"
   #6 BARS - 48"
   #8 BARS - 64"

LEGEND:

Δ - PROVIDE 4" REBAR CLEARANCE TO ALLOW FOR 2" RELIEF IN FORMLINER

* PINCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 9 – SECTIONS
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4850
www.arcadis.com

DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	5
TOTAL	7
SHEET	P.354
TOTAL	627

SUM-077/008-11.65/00.00

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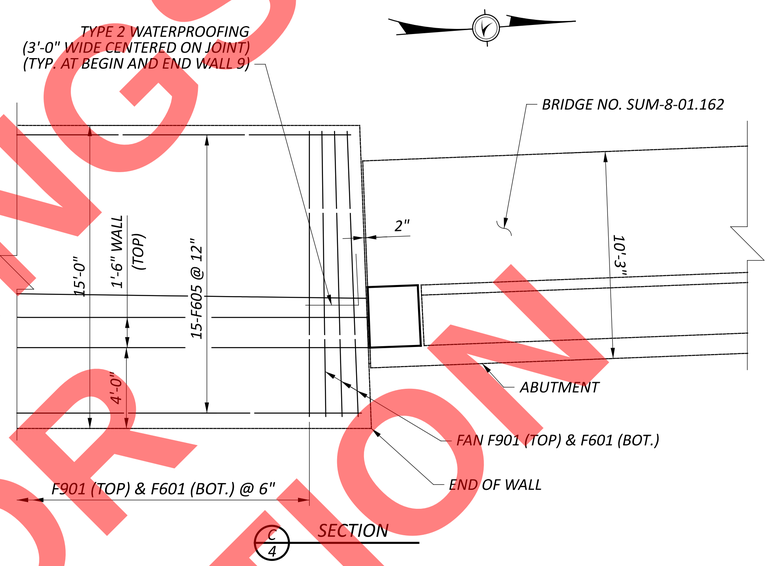
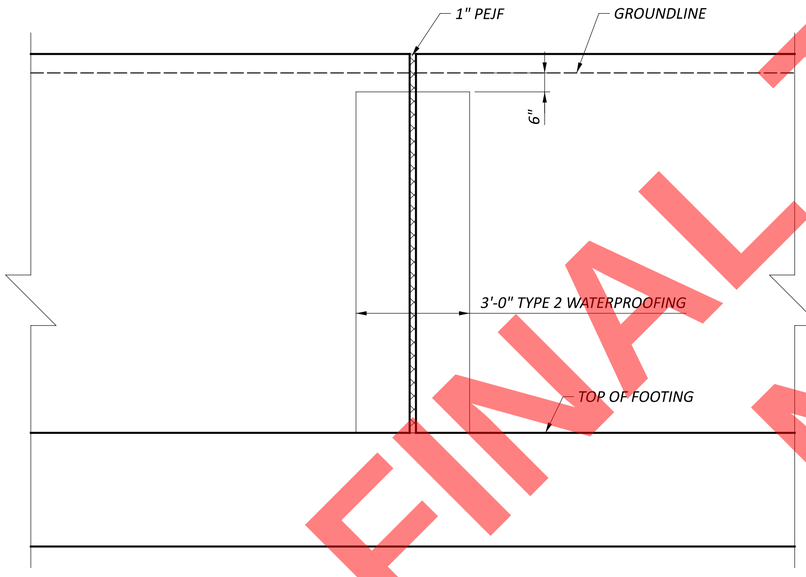
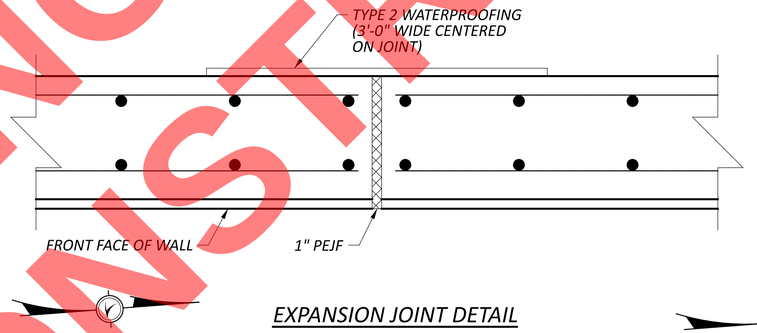
FINAL TRACINGS
NOT FOR
CONSTRUCTION



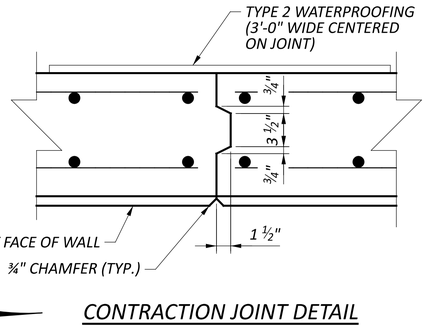
C/4 SECTION



EXPANSION JOINT ELEVATION



EXPANSION JOINT DETAIL



CONTRACTION JOINT DETAIL

RETAINING WALL 9 – GENERAL DETAILS
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	TOTAL 6 | 7
SHEET	TOTAL P.355 | 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 12:59:17 PM USER: sheikha2048
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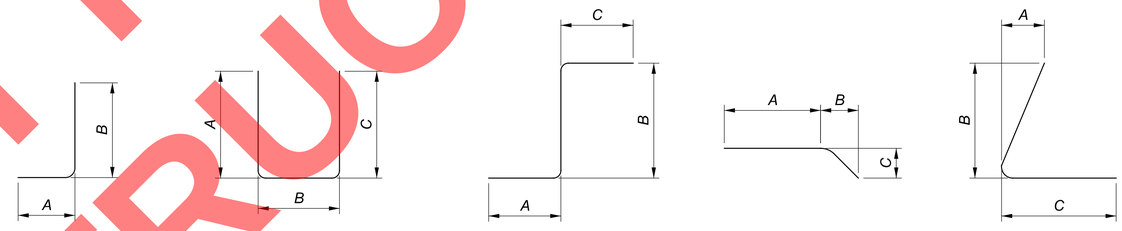
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
F501	336	7' - 5"	2599	1	1' - 6"	6' - 0"					
F601	293	16' - 0"	7041	17	14' - 8"						
F602	186	11' - 0"	3073	17	9' - 8"						
F603	360	7' - 9"	4191	11	5"	6' - 5"	1' - 6"				
F604	240	32' - 6"	11716	STR.							
F605	30	26' - 3"	1183	STR.							
F606	10	6' - 2"	93	8	2' - 0"	2' - 6"	2' - 0"				
F607	2	9' - 8"	29	STR.							
F608	10	11' - 6"	173	38	2' - 0"	5' - 0"	4' - 0"	2' - 6"			
F801	290	9' - 7"	7420	11	6"	8' - 3"	1' - 6"				
F802	185	11' - 6"	5680	17	9' - 8"						
F901	290	17' - 2"	16926	17	14' - 8"						
W501	1 SER. OF 30	21' - 2" TO 21' - 10"	673	STR.							1/4"
W502	1 SER. OF 30	17' - 10" TO 21' - 2"	610	STR.							1 3/8"
W503	1 SER. OF 30	14' - 5" TO 17' - 9"	503	STR.							1 3/8"
W504	336	3' - 11"	1373	2	1' - 6"	1' - 2"	1' - 6"				
W505	304	29' - 8"	9407	STR.							
W506	1 SER. OF 30	10' - 2" TO 17' - 7"	435	STR.							3 1/8"
W507	2	14' - 10"	31	STR.							
W508	2 SER. OF 6	3' - 0" TO 23' - 0"	163	STR.							4' - 0"
W509	1 SER. OF 25	17' - 8" TO 23' - 5"	535	STR.							2 3/8"
W510	1 SER. OF 30	13' - 6" TO 15' - 2"	448	STR.							5/8"
W511	1 SER. OF 30	11' - 10" TO 13' - 6"	396	STR.							5/8"
W512	1 SER. OF 30	10' - 4" TO 11' - 10"	347	STR.							5/8"
W513	273	12' - 8"	3607	STR.							
W514	1 SER. OF 60	13' - 6" TO 15' - 2"	767	19	3' - 8" TO 5' - 4"	9' - 10"	8"				3/8"
W515	1 SER. OF 60	10' - 10" TO 13' - 6"	767	19	1' - 0" TO 3' - 8"	9' - 10"	8"				3/8"
W516	1 SER. OF 60	10' - 4" TO 11' - 10"	767	19	6" TO 2' - 0"	9' - 10"	8"				3/8"
W517	2	11'-10"	25	STR.							
W518	2	30' - 6"	64	STR.							
W519	2	25' - 6"	53	19	23' - 8"	1' - 8"	9"				
W520	2 SER. OF 7	2' - 3" TO 26' - 3"	208	STR.							4' - 0"
W521	2	11' - 2"	23	STR.							
W522	3	21' - 2"	66	STR.							

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
W523	1	17' - 10"	19	STR.							
W524	1	14' - 5"	15	STR.							
W525	1	13' - 6"	14	STR.							
W526	1	11' - 10"	12	STR.							
W527	1	10' - 4"	11	STR.							
W528	1	17' - 7"	18	STR.							
W529	1	23' - 5"	24	STR.							
W530	2	15' - 6"	32	STR.							
W531	2	24' - 8"	51	STR.							
W532	36	24' - 9"	929	STR.							
W801	1 SER. OF 60	21' - 2" TO 21' - 10"	2683	19	7' - 4" TO 8' - 0"	13' - 10"	8"				1/8"
W802	1 SER. OF 60	17' - 10" TO 21' - 2"	2683	19	4' - 0" TO 7' - 4"	13' - 10"	8"				3/4"
W803	1 SER. OF 60	14' - 5" TO 17' - 9"	2683	19	7" TO 3' - 11"	13' - 10"	8"				3/4"
W804	1 SER. OF 60	10' - 2" TO 17' - 7"	2043	19	4" TO 7' - 9"	9' - 10"	8"				1 1/2"
W805	1 SER. OF 52	17' - 8" TO 23' - 5"	1770	19	7' - 10" TO 13' - 7"	9' - 10"	8"				1 3/8"
	SUB-TOTAL		94,379	LBS.							

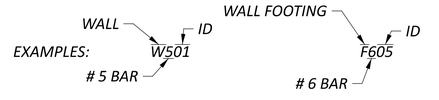


REINFORCING BEND DIAGRAMS

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: F = WALL FOOTING
W = WALL

REINFORCING NOTES

1. ALL STEEL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. "ECRS" DENOTES "EPOXY COATED REINFORCING STEEL".

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 9 – REINFORCING STEEL LIST
STA. 997+07.88 TO STA. 1000+33.01

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4565
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 7 TOTAL 7
SHEET P.356 TOTAL 627

SUM-077/008-11.65/00.00
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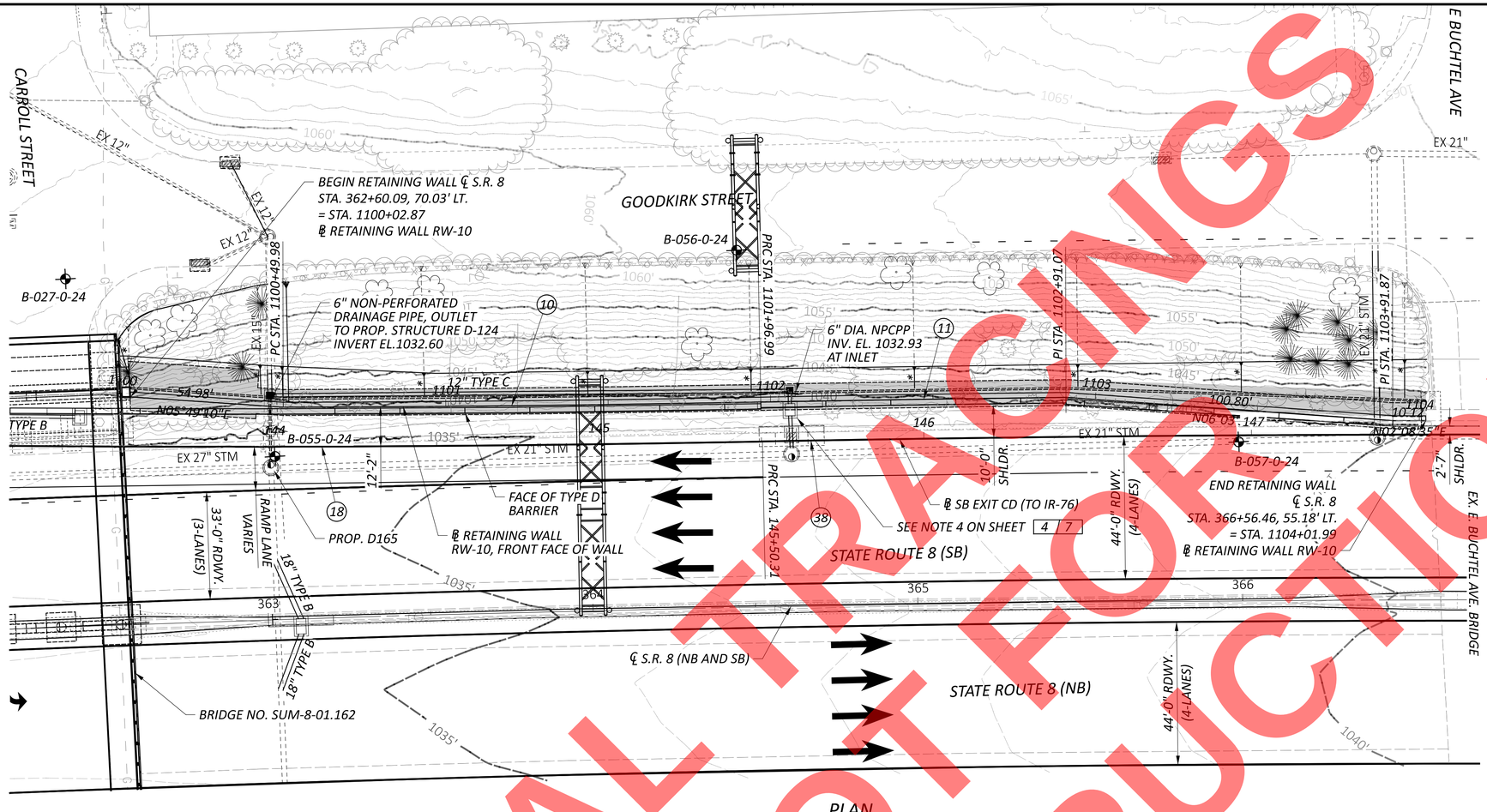
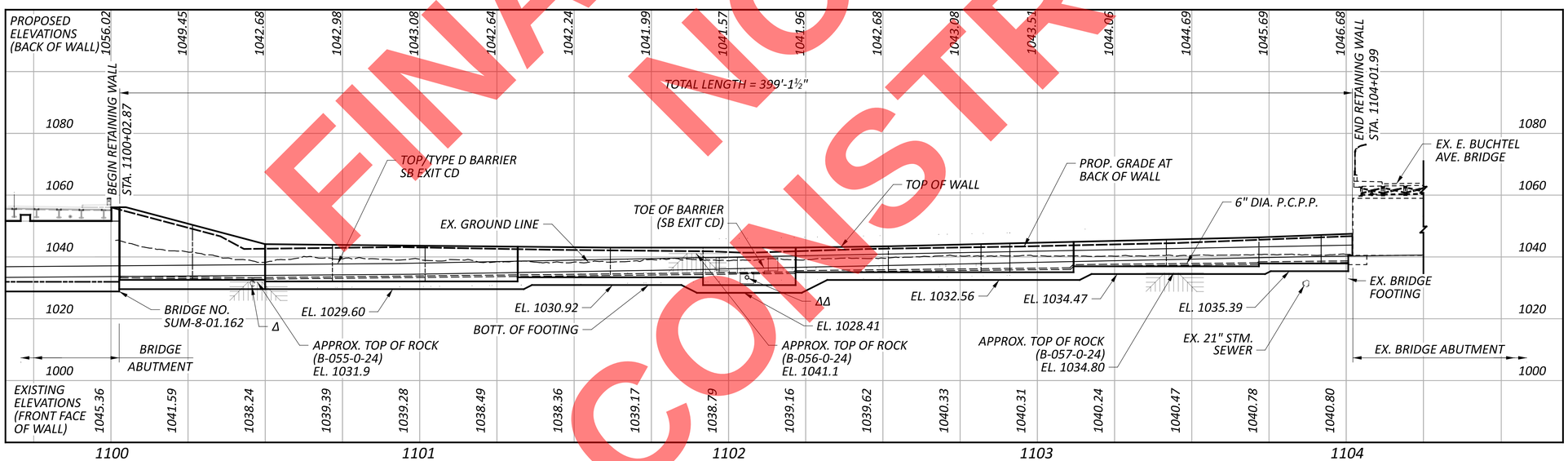
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\401-Engineering_Arcadis\Structures\Retaining Walls\Sheets\114865_009_WL001



PLAN



PROFILE ALONG ℄ RETAINING WALL RW-10

CURVE NO. 18 DATA

P.I. = STA. 141+63.36
Δ = 05°09'46" LT.
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

CURVE NO. 38 DATA

P.I. = STA. 145+75.31
Δ = 00°15'03" RT.
Dc = 00°30'05"
R = 11,426.65'
T = 25.00'
L = 50.00'
E = 0.03'

℄ RETAINING WALL RW-10 CURVE NO. 10 DATA

P.I. = STA. 1101+23.50
Δ = 00°58'54" LT.
Dc = 00°40'03"
R = 8,582.20'
T = 73.52'
L = 147.04'
E = 0.31'

℄ RETAINING WALL RW-10 CURVE NO. 11 DATA

P.I. = STA. 1102+44.05
Δ = 00°28'16" RT.
Dc = 00°30'03"
R = 11,438.82'
T = 47.04'
L = 94.07'
E = 0.10'

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
2. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
3. SEE SHEETS P.299THRU P.300OF 627 FOR GENERAL NOTES.
4. SEE SHEET 5 7 FOR SECTION VIEWS.
5. FOR BRIDGE NO. SUM-8-01.162 DETAILS, SEE SHEETS P.480 THRU P.509 OF 627 .

LEGEND

BORING LOCATION

ROCK

RETAINING WALL FOOTING

Δ = PROP. 15" STORM SEWER

ΔΔ = PROP. 12" STORM SEWER

* = 2:1 MAX.

HORIZONTAL SCALE IN FEET
0 10 20 40

RETAINING WALL 10 - PLAN AND PROFILE
STA. 1100+02.87 TO STA. 1104+01.99

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
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DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 1 TOTAL 7
SHEET P.357 TOTAL 627

SUM-077/008-11.65/00.00

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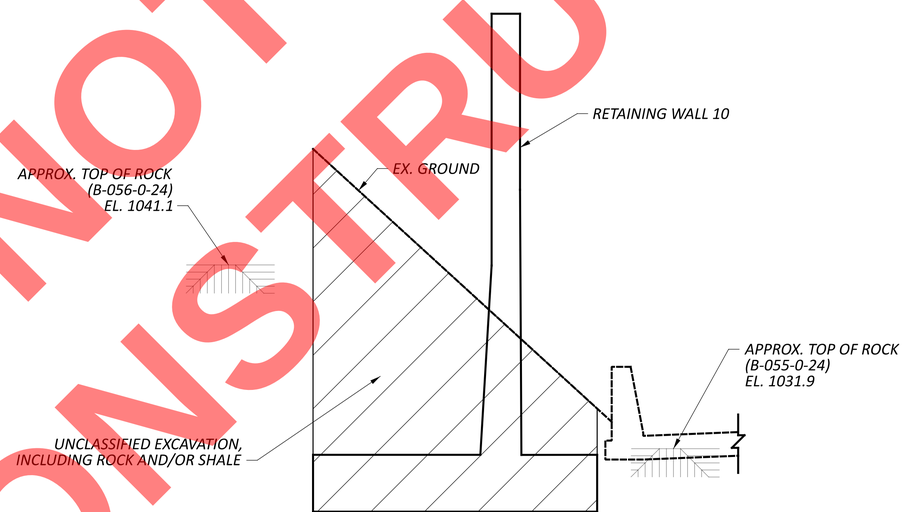
FINAL TRACINGS
NOT FOR CONSTRUCTION

PARTICIPATION	ESTIMATED QUANTITIES				CALC. BY: RBB DATE: 3/18/26 CHK'D BY: AIS DATE: 6/1/26	AS PER PLAN
01/IMS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	STR. SHT. NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
692	503	21100	692	CY	UNCLASSIFIED EXCAVATION	
662	503	31100	662	CY	ROCK EXCAVATION	
82343	509	10001	82,343	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	P.299
277	511	46012	277	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
388	511	46512	388	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
309	512	10100	309	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
18	512	33000	18	SY	TYPE 2 WATERPROOFING	
189	516	13600	189	SF	1" PREFORMED EXPANSION JOINT FILLER	
260	518	21200	260	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
399	518	40000	399	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
20	518	40010	20	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
1980	530	13000	1,980	SF	SPECIAL - FORM LINER	



FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 10 – ESTIMATED QUANTITIES
STA. 1100+02.87 TO STA. 1104+01.99

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 2 TOTAL 7
SHEET P.358 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 1:00:04 PM USER: sheikha2048
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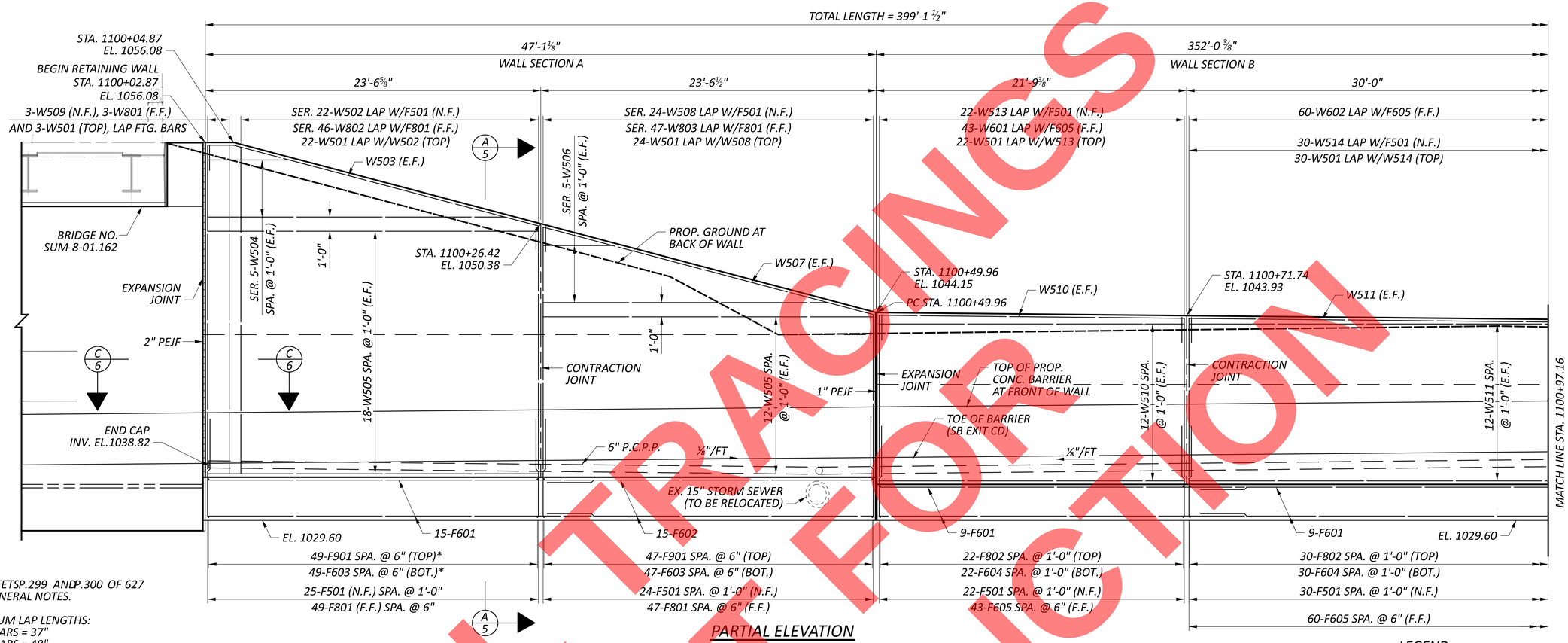


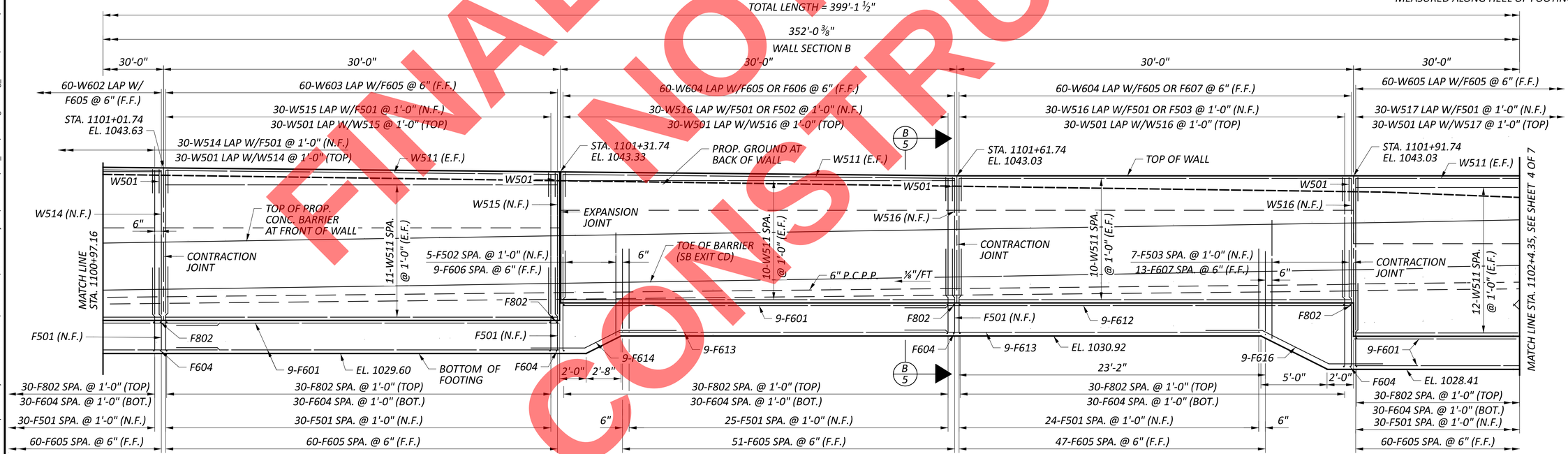
PARTIAL ELEVATION

NOTES:

1. SEE SHEETSP.299 ANDP.300 OF 627 FOR GENERAL NOTES.
2. MINIMUM LAP LENGTHS:
   #5 BARS = 37"
   #6 BARS = 48"
   #8 BARS = 64"

LEGEND:

* - MEASURED ALONG HEEL OF FOOTING



PARTIAL ELEVATION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 10 – ELEVATIONS (1 OF 2)
STA. 1100+02.87 TO STA. 1104+01.99

DESIGN AGENCY	ARCADIS, 222 SOUTH MAIN STREET SUITE 200, AKRON, OHIO 44308, (330) 434-4355, www.arcadis.com
DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	3
TOTAL	7
SHEET	P.359
TOTAL	627

SUM-077/008-11.65/00.00

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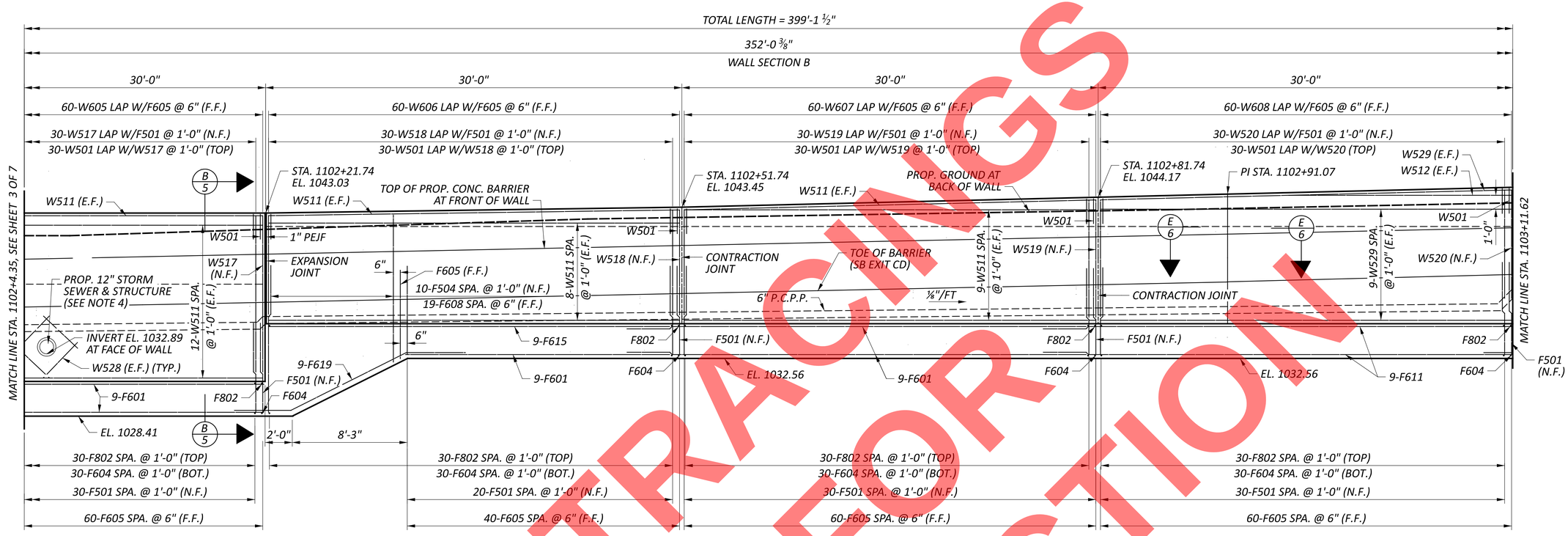
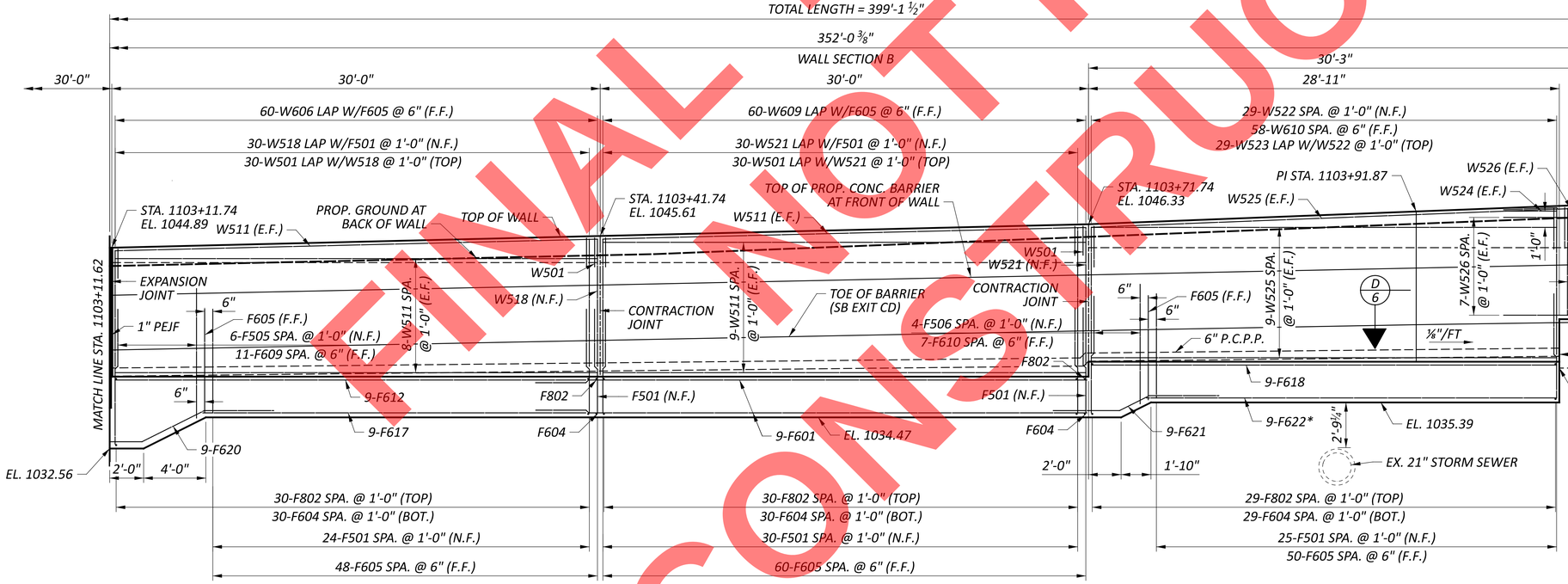


PARTIAL ELEVATION



PARTIAL ELEVATION

NOTES:

1. SEE SHEET 5 OF 7 FOR SECTION VIEWS.
2. SEE SHEETS P.299 ANDP.300 OF 627 FOR GENERAL NOTES.
3. MINIMUM LAP LENGTHS:
   #5 BARS = 37"
   #6 BARS = 48"
   #8 BARS = 64"
4. DRAINAGE STRUCTURES LOCATED WITHIN THE LIMITS OF THE FOOTING SHALL BE CONSTRUCTED PRIOR TO FOOTING CONSTRUCTION. IN LIEU OF THIS A FOOTING BLOCKOUT SHALL BE PROVIDED BY THE CONTRACTOR TO FIT THE PROPOSED DRAINAGE STRUCTURE DIMENSIONS. WALL AND FOOTING REINFORCEMENT SHALL BE FIELD CUT AS NECESSARY.

LEGEND:

* - CUT BARS IF NECESSARY FOR 2" END COVER

FINAL TRACINGS
NOT FOR CONSTRUCTION

RETAINING WALL 10 – ELEVATIONS (2 OF 2)
STA. 1100.02.87 TO STA. 1104+01.99

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 4 TOTAL 7
SHEET P.360 TOTAL 627

SUM-077/008-11.65/00.00
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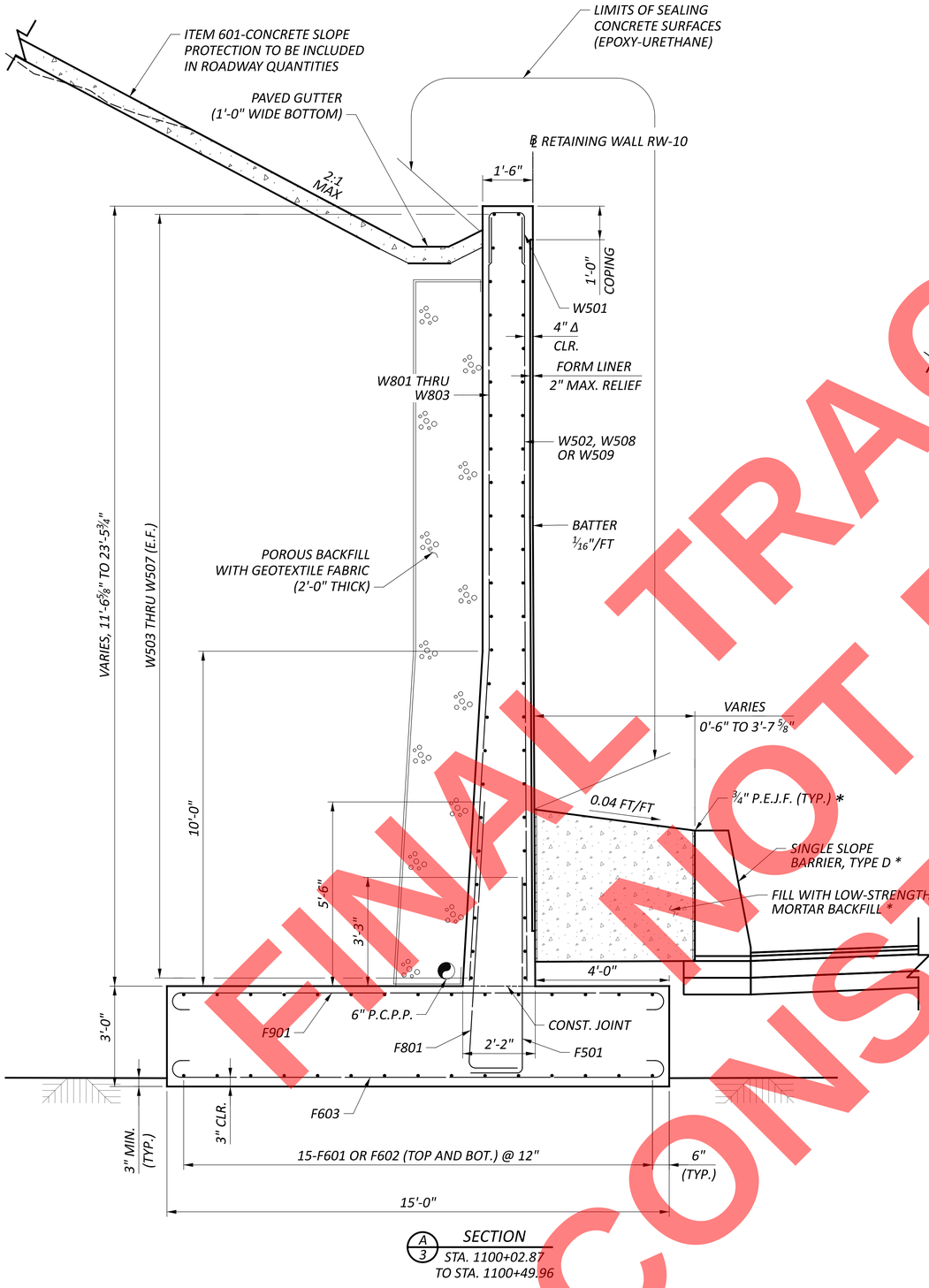

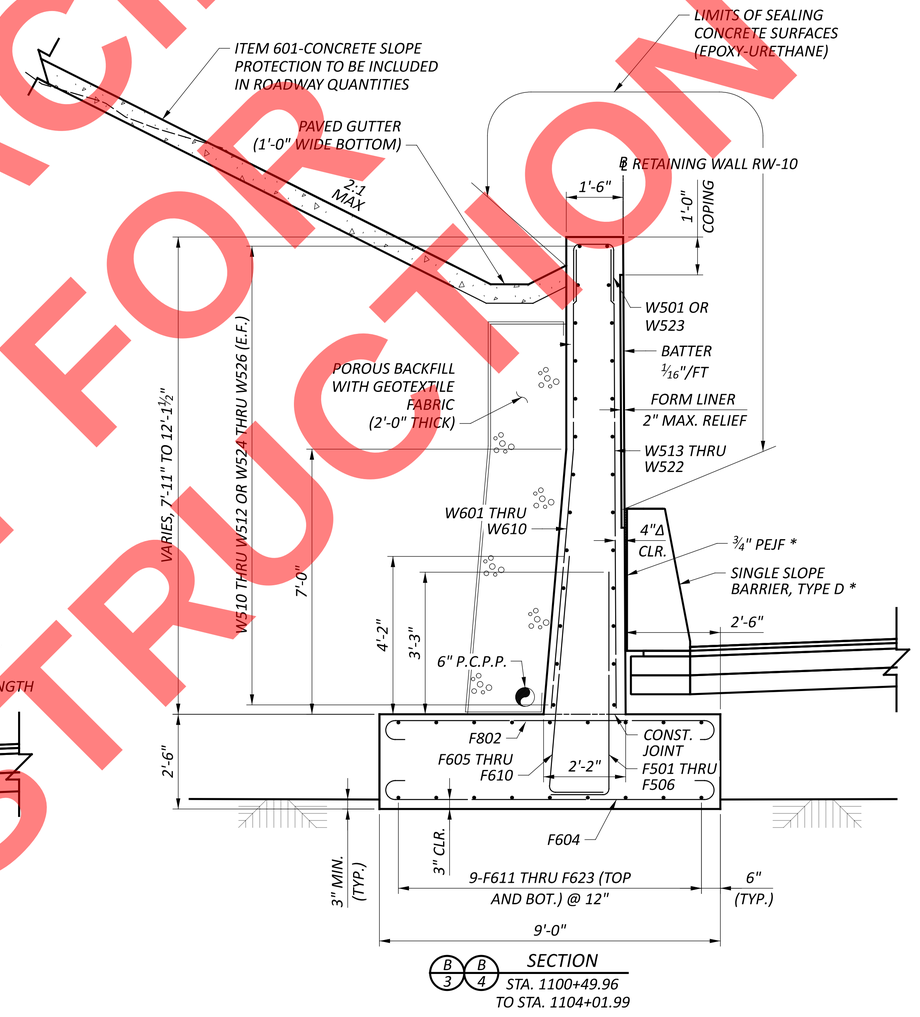

NOTES:

1. SEE SHEETS P.299 AND P.300 OF 627 FOR GENERAL NOTES.
2. MINIMUM LAP LENGTHS:
   #5 BARS = 37"
   #6 BARS = 48"
   #8 BARS = 64"

LEGEND:

Δ - PROVIDE 4" REBAR CLEARANCE TO ALLOW FOR 2" RELIEF IN FORMLINER

* - INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

† - F617 TOP ONLY. F614, F616, F618 THRU F621 BOT. ONLY.

FINAL TRACINGS NOT FOR CONSTRUCTION

RETAINING WALL 10 – SECTIONS
STA. 1100+02.87 TO STA. 1104+01.99

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER	AIS
REVIEWER	RBB 8-14-26
PROJECT ID	114865
SUBSET	5
TOTAL	7
SHEET	P.361
TOTAL	627

SUM-077/008-11.65/00.00
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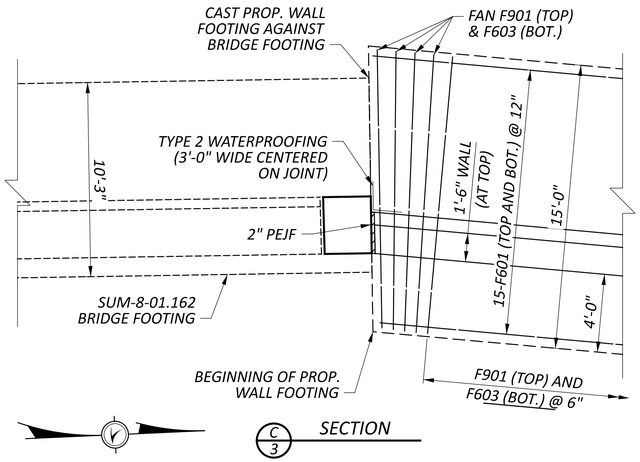
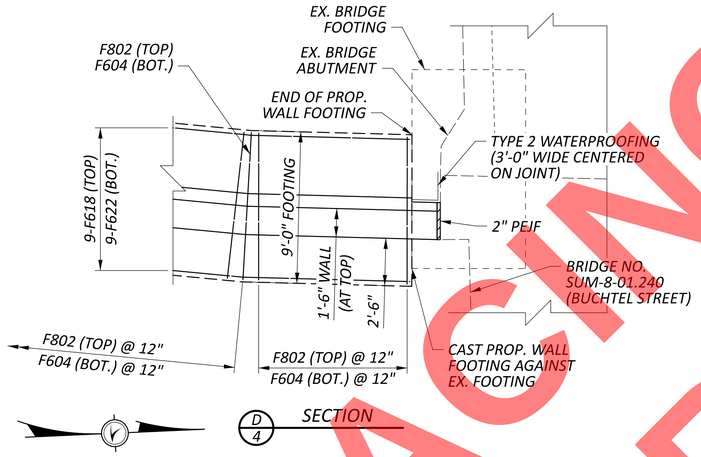


V

C/3 SECTION



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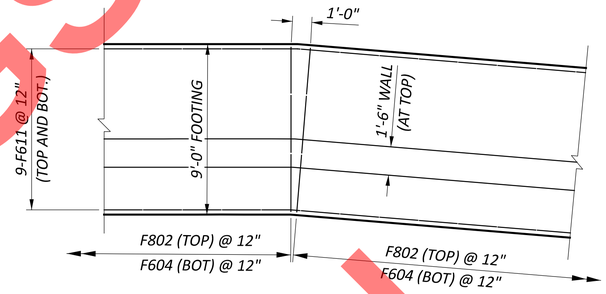
D/4 SECTION



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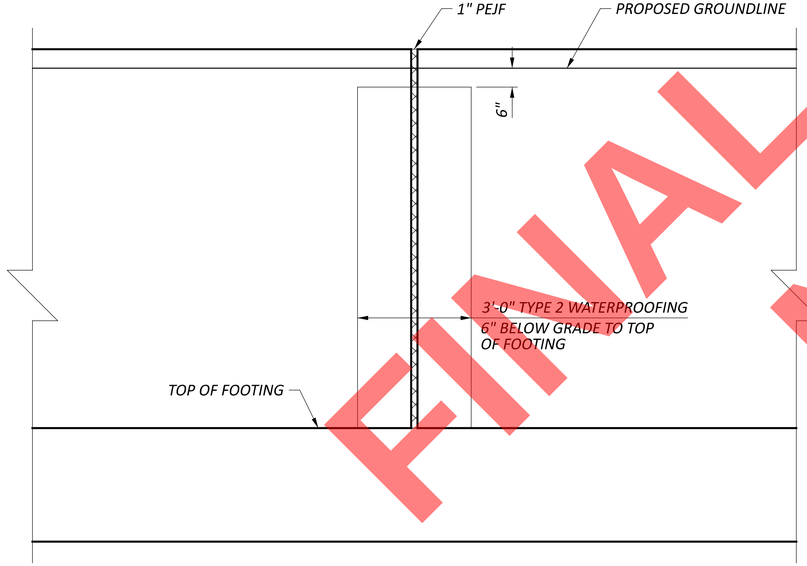
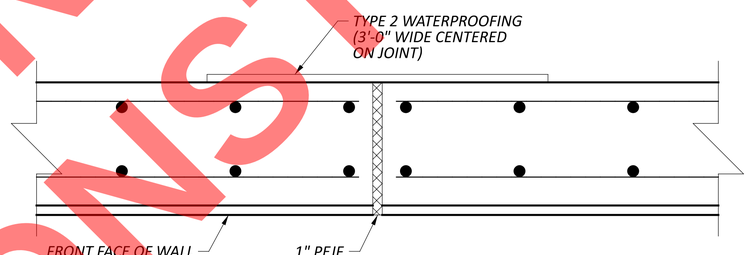
E/4 SECTION

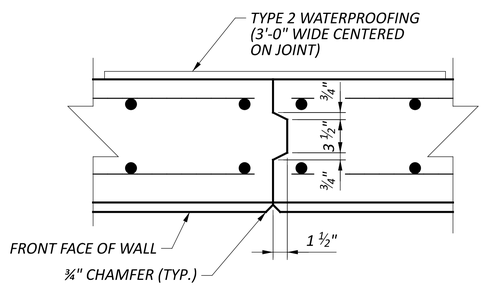


EXPANSION JOINT ELEVATION



V

EXPANSION JOINT DETAIL



V

CONTRACTION JOINT DETAIL

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RETAINING WALL 10 - GENERAL DETAILS
STA. 1100+02.87 TO STA. 1104+01.99

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 6 TOTAL 7
SHEET P.362 TOTAL 627

SUM-077/008-11.65/00.00

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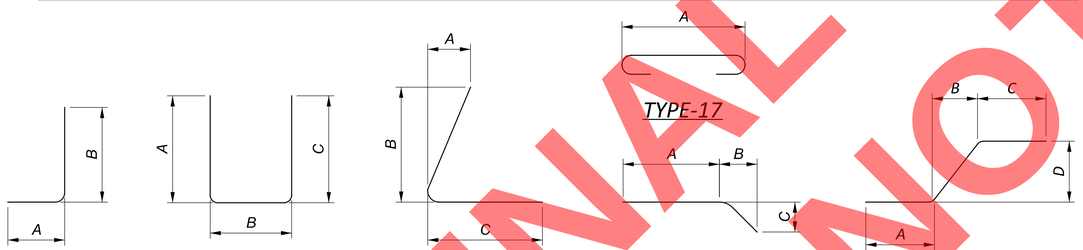
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
F501	378	7' - 11"	3,121	1	2' - 0"	6' - 0"					
F502	5	9' - 2"	48	1	2' - 0"	7' - 4"					
F503	7	10' - 5"	76	1	2' - 0"	8' - 6"					
F504	10	12' - 1"	126	1	2' - 0"	10' - 2"					
F505	6	9' - 10"	62	1	2' - 0"	7' - 11"					
F506	4	8' - 9"	37	1	2' - 0"	6' - 11"					
F601	156	30' - 0"	7,029	STR.							
F602	30	20' - 9"	935	STR.							
F603	96	16' - 0"	2,307	17	14' - 8"						
F604	362	10' - 0"	5,437	17	8' - 8"						
F605	642	8' - 3"	7,955	11	7"	6' - 5"	2' - 0"				
F606	9	9' - 7"	130	11	9"	7' - 9"	2' - 0"				
F607	14	10' - 9"	226	11	10"	8' - 11"	2' - 0"				
F608	19	12' - 6"	357	11	1' - 0"	10' - 7"	2' - 0"				
F609	11	10' - 2"	168	11	10"	8' - 4"	2' - 0"				
F610	7	9' - 2"	96	11	8"	7' - 4"	2' - 0"				
F611	18	30' - 0"	811	19	20' - 8"	9' - 4"	9"				
F612	18	33' - 8"	910	STR.							
F613	18	26' - 3"	710	STR.							
F614	9	6' - 0"	81	38	4' - 2"	2' - 8"	5' - 6"	1' - 4"			
F615	9	37' - 10"	511	STR.							
F616	9	9' - 0"	122	38	4' - 2"	5' - 0"	6' - 2"	2' - 6"			
F617	9	27' - 8"	374	STR.							
F618	9	28' - 6"	385	19	19' - 11"	8' - 7"	7"				
F619	9	11' - 8"	158	38	4' - 2"	8' - 4"	5' - 10"	4' - 2"			
F620	9	7' - 10"	106	38	4' - 2"	3' - 10"	6' - 2"	1' - 11"			
F621	9	5' - 10"	79	38	4' - 2"	1' - 10"	6' - 2"	11"			
F622	9	25' - 1"	339	19	16' - 6"	8' - 7"	7"				
F801	96	10' - 7"	2,713	11	7"	8' - 5"	2' - 4"				
F802	362	10' - 6"	10,149	17	8' - 8"						
F901	96	17' - 2"	5,603	17	14' - 8"						

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INCR.
W501	381	4' - 11"	1,954	2	2' - 0"	1' - 2"	2' - 0"				
W502	1 SER. OF 22	23' - 0" TO 17' - 6"	465	STR.							3 ⅛"
W503	2	23' - 9"	50	19	22' - 1"	1' - 8"	5"				
W504	2 SER. OF 5	5' - 8" TO 20' - 10"	138	STR.							3' - 9 ½"
W505	60	23' - 2"	1,450	STR.							
W506	2 SER. OF 5	4' - 10" TO 19' - 11"	130	STR.							3' - 9 ¼"
W507	2	23' - 11"	50	STR.							
W508	1 SER. OF 24	17' - 4" TO 11' - 3"	357	STR.							3 ⅛"
W509	3	23' - 1"	72	STR.							
W510	26	21' - 5"	581	STR.							
W511	214	29' - 8"	6,622	STR.							
W512	2	16' - 0"	33	STR.							
W513	22	11' - 6"	264	STR.							
W514	31	11' - 2"	361	STR.							
W515	31	10' - 10"	350	STR.							
W516	62	9' - 3"	598	STR.							
W517	31	11' - 9"	380	STR.							
W518	62	7' - 7"	490	STR.							
W519	31	8' - 0"	259	STR.							
W520	31	8' - 9"	283	STR.							
W521	31	8' - 3"	267	STR.							
W522	29	8' - 1"	244	STR.							
W523	31	5' - 11"	191	2	2' - 6"	1' - 2"	2' - 6"				
W524	2	3' - 2"	7	STR.							
W525	20	28' - 2"	588	19	19' - 11"	8' - 3"	7"				
W526	16	4' - 7"	76	STR.							
W527	4	6' - 7"	27	STR.							
W528	8	3' - 6"	29	STR.							
W529	20	29' - 8"	619	19	20'-5"	9'-3"	0'-9"				
W601	43	11' - 6"	743	19	4' - 8"	6' - 10"	8"				
W602	60	11' - 2"	1,006	19	4' - 4"	6' - 10"	8"				
W603	60	10' - 10"	976	19	4' - 0"	6' - 10"	8"				
W604	120	9' - 3"	1,667	19	2' - 5"	6' - 10"	8"				
W605	60	11' - 9"	1,059	19	4' - 11"	6' - 10"	8"				
W606	120	7' - 7"	1,367	19	9"	6' - 10"	8"				
W607	60	8' - 0"	721	19	1' - 2"	6' - 10"	8"				
W608	60	8' - 9"	789	19	1' - 11"	6' - 10"	8"				
W609	62	8' - 3"	744	19	1' - 5"	6' - 10"	8"				
W610	58	8' - 1"	704	19	1' - 3"	6' - 10"	8"				
W801	3	23' - 1"	185	19	13' - 3"	9' - 10"	8"				
W802	1 SER. OF 46	23' - 0" TO 17' - 6"	2487	19	13' - 2" TO 7' - 8"	9' - 10"	8"				1 ½"
W803	1 SER. OF 47	17' - 4" TO 11' - 3"	1799	19	7' - 6" TO 1' - 5"	9' - 10"	8"				1 ⅝"
		SUB-TOTAL	82,343	LBS.							

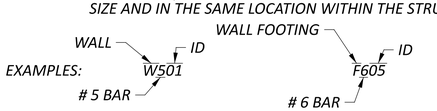


REINFORCING BEND DIAGRAMS

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: F = WALL FOOTING
W = WALL

REINFORCING NOTES

1. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, OR ITEM 509 - NO. 4 DEFORMED GFRP REINFORCEMENT.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. "ECRS" DENOTES "EPOXY COATED REINFORCING STEEL".
7. "GRFP" DENOTES "GLASS FIBER EINFORCED POLYMER".

FINAL PLANS NOT FOR CONSTRUCTION

RETAINING WALL 10 – REINFORCING STEEL LIST
STA. 1100+02.87 TO STA. 1104+01.74

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER AIS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 7 TOTAL 7
SHEET P.363 TOTAL 627

SUM-077/008-11.65/00.00

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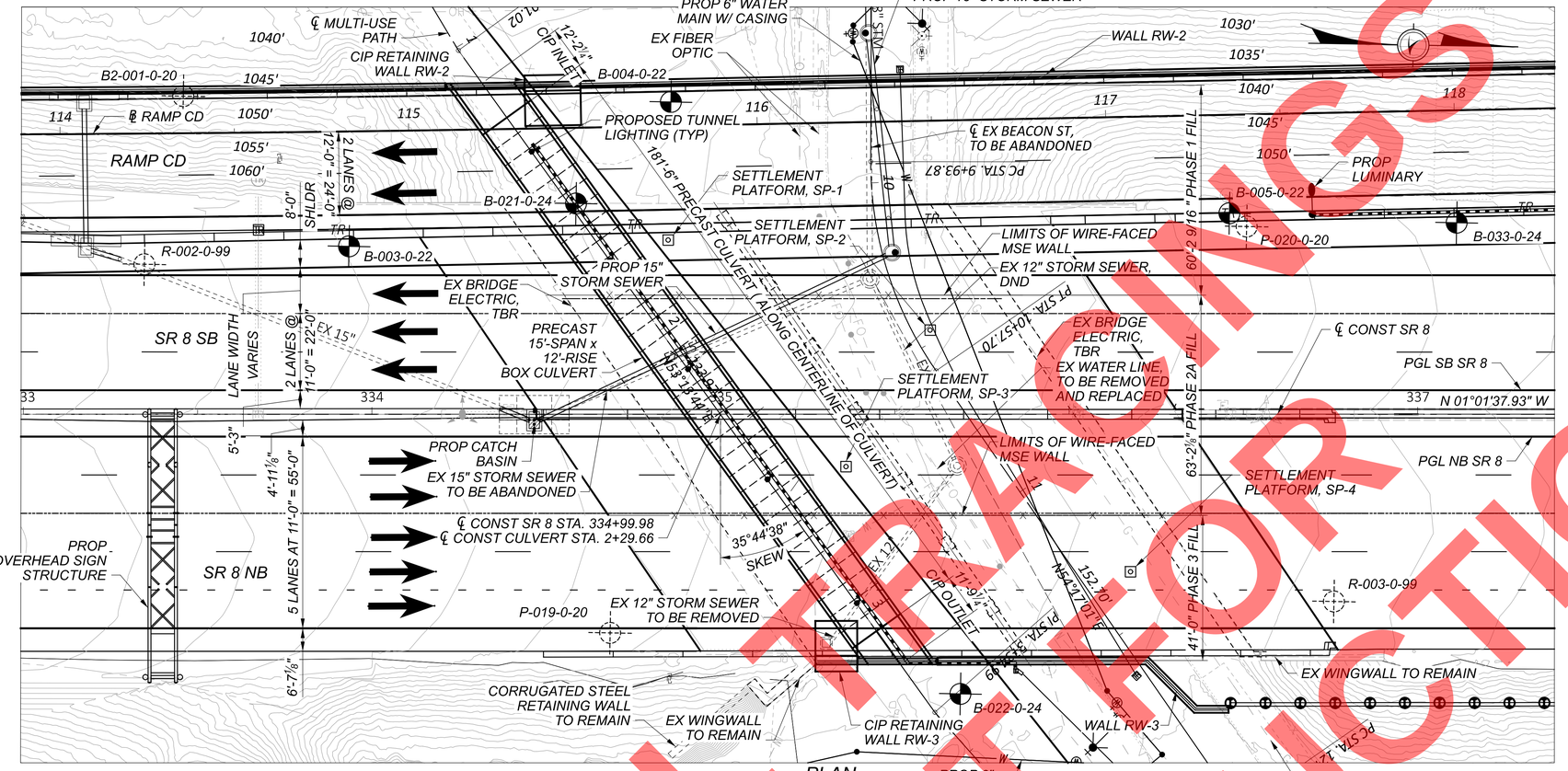
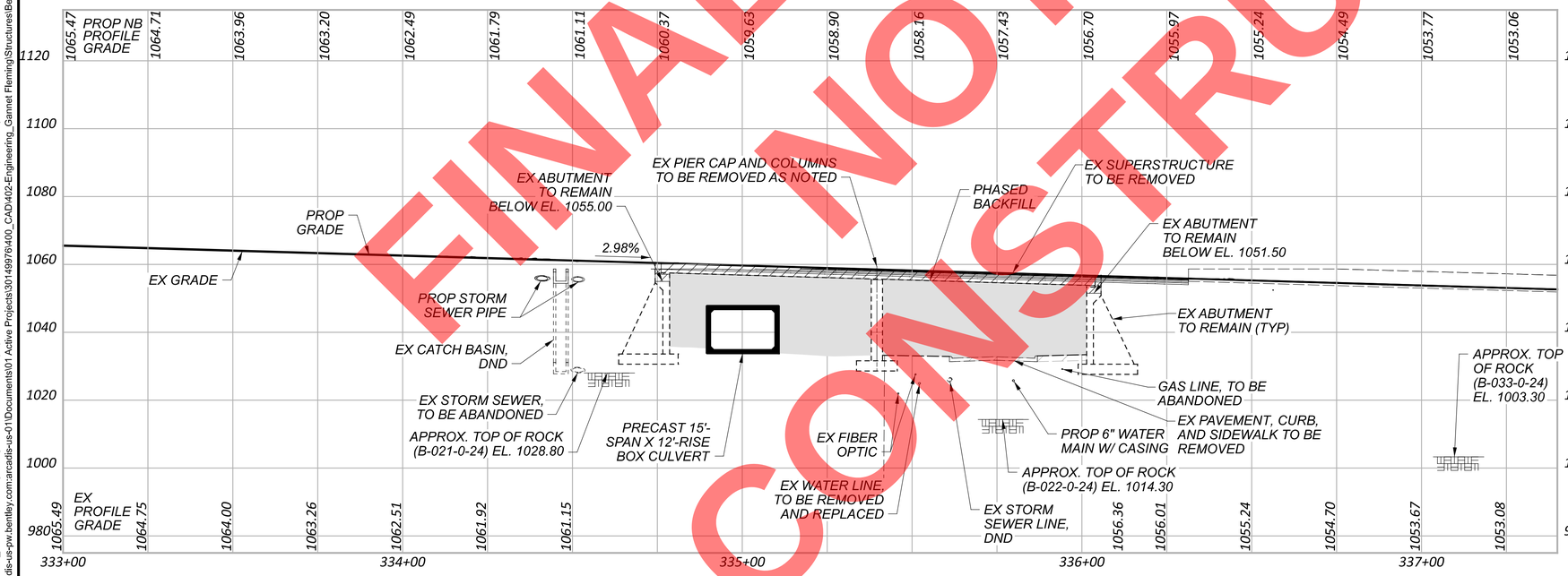


PLAN



PROFILE ALONG NORTHBOUND PGL OF SR-8

FINAL PLANS NOT FOR CONSTRUCTION

BENCHMARK DATA

BM CP16 STA. 333+48.72 ELEV. 1063.68 OFFSET 71.59' RT
ALUMINUM DISC IN CONCRETE STAMPED "16"

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET P.002

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC: SR 8 NB

2032 ADT =	61810	2032 ADTT =	2472
2052 ADT =	63160	2052 ADTT =	2526
DIRECTIONAL DISTRIBUTION =	53%		

DESIGN TRAFFIC: SR 8 SB

2032 ADT =	54930	2032 ADTT =	2747
2052 ADT =	55850	2052 ADTT =	2793
DIRECTIONAL DISTRIBUTION =	47%		

LEGEND

- PROJECT BORING LOCATION
- HISTORIC BORING LOCATION

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON WALL TYPE SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN PIER

SPANS: 63'-6"±, 63'-6"± C/C BEARINGS

ROADWAY: 56'-9"± TOE/TOE PARAPETS (LEFT)
66'-9"± TOE/TOE PARAPETS (RIGHT)

LOADING: HS 20-44 (CASE 1) AND THE ALTERNATE MILITARY LOADING

SKEW: 34° 25' 00"± RIGHT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81, 25' LONG

ALIGNMENT: TANGENT

CROWN: 3/16" FT/FT

STRUCTURE FILE NUMBER: 7700091

DATE BUILT: 1954, REHABILITATED 2002

DISPOSITION: SUPERSTRUCTURE AND PORTIONS OF SUBSTRUCTURE TO BE REMOVED

PROPOSED STRUCTURE

TYPE: PRECAST REINFORCED CONCRETE BOX CULVERT BACKFILLED WITH SOIL TO PROPOSED ROADWAY

SPAN X RISE: 15'-0" X 12'-0"

LOADING: HL93 AND 0.06 KSF FUTURE WEARING SURFACE

SKEW: 35° 44' 38" RIGHT FORWARD

WEARING SURFACE: ASPHALT CONCRETE

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE 41° 04' 04" N
LONGITUDE 81° 30' 15.2" W

SITE PLAN
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN	7700092
DESIGN AGENCY	GFT, 8890 Lyra drive, Suite 110, Columbus, Ohio 43240
DESIGNER	SAT
CHECKER	AM
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	1
TOTAL	13
SHEET	P.364
TOTAL	627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
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REFERENCED STANDARD DRAWINGS

PCB-91 _____ REVISED 07-17-2020
HWDD-1 _____ REVISED 01-16-2026

REFERENCED SUPPLEMENTAL SPECIFICATIONS

800 _____ DATED 01-17-2025
840 _____ DATED 01-17-2025
940 _____ DATED 04-17-2015

DESIGN SPECIFICATIONS

THE NEW SUPERSTRUCTURE, BEARINGS, AND ABUTMENTS CONFORM TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS", ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 (TENTH EDITION), AND THE ODOT BRIDGE DESIGN MANUAL, 2020.
NO SPECIAL DESIGN SPECIFICATIONS WERE USED.

LRFD OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 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, 2020.

DESIGN LOADING

DESIGN LOADING: HL-93 WITH FUTURE WEARING SURFACE (FWS) OF 0.060 KSF.

DESIGN DATA

CONCRETE

CULVERT (NEW), CLASS QC3: F'_C = 5.0 KSI

STEEL

REINFORCING (NEW), MINIMUM F_Y = 60 KSI

FOUNDATION BEARING RESISTANCE

THE BEACON STREET CULVERT, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 2.06 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 2.88 KIPS PER SQUARE FOOT. FACTORED BEARING RESISTANCE IS 5.4 KIPS PERSQUARE FOOT.

CONSTRUCTION CONSTRAINTS (BACKFILL LIMITATION):

THE BACKFILL ABOVE THE CULVERT SHALL NOT BE PLACED HIGHER THAN THE SPECIFIED LIMITS WITHIN THE PLANS.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

PREFORMED EXPANSION JOINT FILLER

PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED BETWEEN THE SIDES OF THE BOX CULVERT AND THE JOINTS WHERE MECHANICALLY STABILIZED EARTH WALL MEET THE CULVERT AND EXTEND FROM BOTTOM OF CULVERT TO THE TOP OF THE CULVERT. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

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 CMS 501.05.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CONT.)

PROTECTION OF STEEL SUPPORT SYSTEMS

BEFORE DECK SLAB CUTTING IS PERMITTED AT THE CUTLINE, DRAW THE OUTLINE OF GIRDER A ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2" OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF THE GIRDER FLANGE EDGES. DECK CUTS OVER OR WITHIN 2" OF THE GIRDER FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2" OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. REMOVAL METHODS AROUND GIRDER A SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING OF THE PRIMARY STRUCTURAL MEMBER.

PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO REMAIN FOR MAINTAINING TRAFFIC. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, TO THE ENGINEER. OBTAIN ENGINEER'S APPROVAL BEFORE PERFORMING THE REPAIRS.

REMOVAL METHODS

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM, STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS

IF THE CONTRACTOR'S DECK DEMOLITION ENGINEERED DRAWINGS SHOW REMOVAL OF THE EXISTING DECK OVER AN EXISTING GIRDER, REMOVE EXISTING WELDED ATTACHMENTS (E.G., CROSSFRAMES AND CONNECTION PLATES; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

SUBSTRUCTURE CONCRETE REMOVAL

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. REMOVE EXISTING ABUTMENTS TO 1' BELOW BOTTOM OF PROPOSED ROADWAY CONSTRUCTION. REMOVE THE EXISTING PIERS AS SHOWN IN THE PLANS.

MEASUREMENT & PAYMENT

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

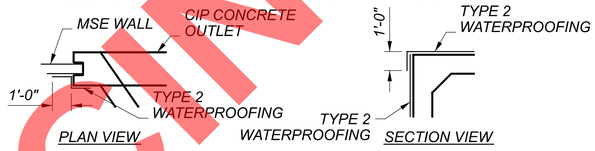
ITEM 407 - TACK COAT, AS PER PLAN

APPLY TACK COAT TO THE LIMITS OF CAST-IN-PLACE AND PRECAST CONCRETE CULVERT FLOOR AS SHOWN IN PLANS. THIS WORK SHALL ADHERE TO THE REQUIREMENTS OF ITEM 407 PER THE CMS. THE MATERIAL SHALL BE SBR ASPHALT EMULSION CONFORMING TO 702.13. PAYMENT FOR MATERIAL AND INSTALLATION AT THE CONTRACT PRICE SQUARE YARD FOR ITEM 407 - TACK COAT, AS PER PLAN.

TYPE 2 WATERPROOFING

TYPE 2 WATERPROOFING, PER CMS 512.08 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH WILL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

TYPE 2 WATERPROOFING, PER CMS 512.08 AND 711.25, SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH WILL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.



WATERPROOFING DETAILS

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO S1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN

PROVIDE A DESIGN FOR AND CONSTRUCT THE TEMPORARY MSE WALL ACCORDING TO SUPPLEMENTAL SPECIFICATION 867. ALL LABOR, MATERIALS, EQUIPMENT, ETC., NECESSARY TO CONSTRUCT THE WALL TO THE APPROXIMATE LIMITS SHOWN IN THESE PLANS SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 867 - RETAINING WALL, MISC.: TEMPORARY WIRE FACED MSE WALL. THE COST OF THE WALL SHALL INCLUDE THE NECESSARY CALCULATIONS AND WORKING DRAWINGS, THE EXCAVATION FOR THE WALL, THE WALL FACING, WALL REINFORCEMENT, GRANULAR EMBANKMENT, THE ITEM 203 EMBANKMENT ALONG THE LIMITS OF THE WALL AND ALL OTHER COSTS REQUIRED TO PROVIDE A COMPLETE MSE WALL SYSTEM.

THE DESIGN ILLUSTRATED IN THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION AND EMBANKMENT IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN DESCRIBED IN THE PLANS OR PREPARE AND ALTERNATE TO SUPPORT THE EXCAVATION AND EMBANKMENT. IF CONSTRUCTING AN ALTERNATE DESIGN FOR THE TEMPORARY SUPPORT SYSTEM, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH CMS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT SYSTEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL - RETAINING WALL, MISC.: TEMPORARY WIRE FACED MSE WALL. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:
1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 – PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

FINAL ACTION
NOT FOR CONSTRUCTION

GENERAL NOTES (1 OF 2)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER SAT | CHECKER AM
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 2 | TOTAL 13
SHEET P.365 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1 PENTABLE: $PENTBL$$
PLOT_DRIVER: $PLTDRV$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:10:51 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Beacon Street Tunnel\Sheets\114865_SFN7700092_SN001

ITEM SPECIAL - SETTLEMENT PLATFORMS

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS ACCEPTED BY THE ENGINEER. TAKE SETTLEMENT READINGS WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. PLOT THE READINGS ON A GRAPH WITH 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 ON THE ODOT OFFICE OF GEOTECHNICAL ENGINEERING WEBSITE: https://www.dot.state.oh.us/geotechnical/Pages/settlement.aspx. PREPARE A SEPARATE GRAPH FOR EACH SETTLEMENT PLATFORM. SEND A COPY OF EACH CUMULATIVE PLOT TO THE ENGINEER AFTER EACH SETTLEMENT READING IS RECORDED.

THE DEPARTMENT WILL CONSIDER VIBRATING WIRE SETTLEMENT CELL SYSTEMS IN LIEU OF SETTLEMENT PLATFORMS. PROVIDE DETAILS AND DESIGN DRAWINGS OF THE PROPOSED SETTLEMENT CELL SYSTEM INCLUDING MANUFACTURER, INSTALLATION PROCEDURES, PROPOSED CABLE LAYOUT WITH ALL EXISTING AND PROPOSED SITE FEATURES AND UTILITIES TO SHOW NO CONFLICT, RESERVOIR/TERMINAL BOX LOCATION, AND RESERVOIR PROTECTIVE MEASURES TO THE ENGINEER AT LEAST 30 DAYS PRIOR TO CONSTRUCTION. THE ENGINEER WILL REQUIRE 10 WORKING DAYS FOR REVIEW AND APPROVAL. NO ADDITIONAL PAYMENT WILL BE MADE IF THE CONTRACTOR ELECTS TO USE VIBRATING WIRE SETTLEMENT CELL SYSTEMS.

MATERIALS: USE SOUND 36"X 36"X ¾"EXTERIOR GRADE PLYWOOD FOR THE BASE. USE STANDARD 2-1/2" BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 36" X 36" X 1/8" MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS: CONFORM THE PLATFORM TO THE DETAILS SHOWN ON THE PLANS. SET THE PLATFORM ON A LEVEL SURFACE. SECURE THE SETTLEMENT PLATFORM TO THE GROUND BY DRIVING A NO. 4 REBAR THROUGH EACH CORNER AND BENDING AT 90 DEGREES. FIRMLY SECURE THE PIPE TO THE PLATFORM AND MAINTAIN THE PIPE IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. MARK THE PIPE AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. ADD NEW SECTIONS TO THE TOP OF THE PIPE AS THE EMBANKMENT HEIGHT RISES. DETERMINE AND RECORD THE LENGTH OF PIPE ADDED AND THE DATE IT WAS ADDED ON THE SETTLEMENT GRAPH.

PROTECT THE SETTLEMENT PLATFORMS FROM CONSTRUCTION EQUIPMENT WITH GUARD STAKES AND HIGH VISIBILITY MARKINGS. SETTLEMENT PLATFORMS MUST BE PLACED INSIDE THE BREAK OF THE SLOPE BUT MAY BE PLACED BEYOND THE EDGE OF PAVEMENT TO BE OUT OF THE WAY AS MUCH AS POSSIBLE. IMMEDIATELY STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED AND NOTIFY THE ENGINEER. RESTORE PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

PRIOR TO PAVING, CUT THE TOP OF THE SETTLEMENT PLATFORM PIPE OFF TWO FEET BELOW THE FINISHED SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

WAITING PERIOD: A WAITING PERIOD OF 14 CALENDAR DAYS IS ANTICIPATED FOR SETTLEMENT MITIGATION. THE WAITING PERIOD WILL COMMENCE ONCE THE FILL HAS REACHED 26 FEET. THE WAITING PERIOD MAY BE REDUCED OR EXTENDED DEPENDING ON THE PLATFORM READINGS. THE ENGINEER MAY CONSIDER THE WAITING PERIOD COMPLETE WHEN CONSECUTIVE SETTLEMENT READINGS, RECORDED AFTER EMBANKMENT CONSTRUCTION IS COMPLETE AND AT LEAST ONE WEEK (168 HOURS) APART, RESULT IN ELEVATION DIFFERENCES EQUAL TO OR LESS THAN 1/8 INCH.

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.

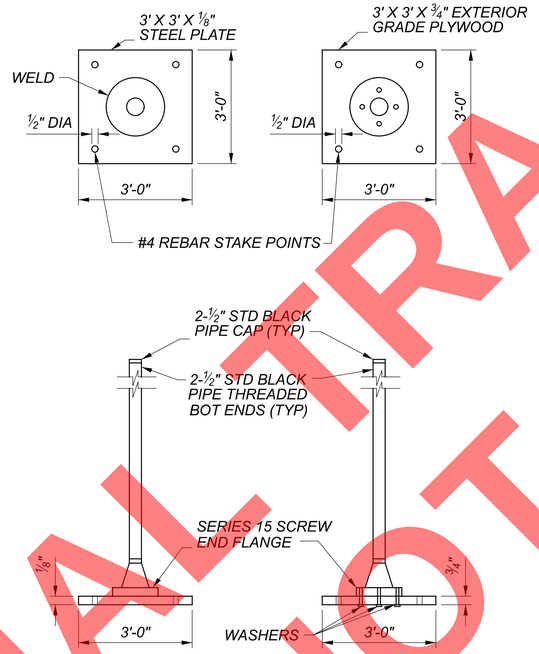
BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR "ITEM 203, SPECIAL SETTLEMENT PLATFORM"WHICH IS COMPENSATION FOR CONSTRUCTING MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.

ITEM SPECIAL - SETTLEMENT PLATFORMS (CONT.)

PLACE SETTLEMENT PLATFORMS AT THE FOLLOWING LOCATIONS:

SETTLEMENT PLATFORM DESIGNATION	ALIGNMENT	STATION	OFFSET	ESTIMATED SETTLEMENT (IN.)
SP-1	℄ SR-8	334+84.2	50' LT	5.28
SP-2	℄ SR-8	335+60.2	24' LT	5.28
SP-3	℄ SR-8	335+36.3	15' RT	5.28
SP-4	℄ SR-8	336+17.6	45' RT	5.28

SETTLEMENT PLATFORM DETAIL
(NOT TO SCALE)



STANDARD PLAN ABBREVIATIONS AND SYMBOLS

ABUT =	ABUTMENT	MAX =	MAXIMUM
ADT =	AVERAGE DAILY TRAFFIC	MH =	MANHOLE
ADTT =	AVERAGE DAILY TRUCK TRAFFIC	MHC =	MINIMUM HORIZONTAL CLEARANCE
APP or APPR =	APPROACH	MIN =	MINIMUM
APPROX. =	APPROXIMATE	MISC =	MISCELLANEOUS
AVE =	AVENUE	MSE =	MINIMUM VERTICAL CLEARANCE
		MVC =	MECHANICALLY STABILIZED EARTH
(G#) =	PROPOSED GIRDER NUMBER	NPCPP =	NON-PERFORATED CORRUGATED PLASTIC PIPE
		NB =	NORTHBOUND
BF =	BOTTOM FLANGE	NE =	NORTHEAST
BM =	BENCHMARK	NF =	NEAR FACE
BOT =	BOTTOM	NO =	NUMBER
BRG =	BEARING	NW =	NORTHWEST
BTWN =	BETWEEN	O/O =	OUT TO OUT
C.B. =	CHORD BEARING	OD =	OUTSIDE DIAMETER
C/C =	CENTER TO CENTER	OH =	OVERHANG
CB =	CATCH BASIN	OVHD =	OVERHEAD
CCTV =	CLOSED CIRCUIT TELEVISION	ODOT =	OHIO DEPARTMENT OF TRANSPORTATION
CIP =	CAST IN PLACE	P.V.I. or VPI =	POINT OF VERTICAL INTERSECTION
CJ =	CONSTRUCTION JOINT	PC =	POINT OF CURVE
CJ-O =	OPTIONAL CONSTRUCTION JOINT	PCB =	PORTABLE CONCRETE BARRIER
CLR =	CLEAR	PCPP =	PERFORATED CORRUGATED PLASTIC PIPE
CMP =	CORRUGATED METAL PIPE	PEJF =	PREFORMED EXPANSION JOINT FILLER
CMS =	CONSTRUCTION MATERIAL SPECIFICATIONS	PGL =	PROFILE GRADE LINE
CONST =	CONSTRUCTION	PI =	POINT OF INTERSECTION
CP =	COVER PLATE	PMVC =	POINT OF MINIMUM VERTICAL CLEARANCE
CSP/N =	CORRUGATED STEEL PIPE (NON-PERFORATED)	POT =	POINT ON TANGENT
CSP/P =	PERFORATED CORRUGATED STEEL PIPE	PROP =	PROPOSED
CVN =	CHARPY V-NOTCH	PSF =	POUNDS PER SQUARE FOOT
DIA =	DIAMETER	PT =	POINT OF TANGENT
DND =	DO NOT DISTURB	PVMT =	PAVEMENT
DPRM =	DIAPHRAGM	R =	RADIUS
DWG =	DRAWING	RA =	REAR ABUTMENT
E/P =	EDGE OF PAVEMENT	RCP =	REINFORCED CONCRETE PIPE
E/S =	EDGE OF SHOULDER	RD =	ROAD
EB =	EASTBOUND	REF =	REFERENCE
EF =	EACH FACE	REINF. =	REINFORCING OR REBAR
ELEC =	ELECTRIC	REQ'D =	REQUIRED
ELEV or EL =	ELEVATION	RT =	RIGHT
EQ =	EQUAL	R/W =	RIGHT OF WAY
EX or EXIST =	EXISTING	S/O =	SERIES OF
EXP =	EXPANSION	SR =	STATE ROUTE
F/F =	FACE TO FACE	SB =	SOUTHBOUND
FA =	FORWARD ABUTMENT	SCD =	STANDARD CONSTRUCTION DRAWING
FF =	FAR FACE/FILL FACE	SE =	SOUTHEAST
FO =	FIBER OPTIC	SER =	SERIES
FT =	FOOT	SF =	SQUARE FEET
FTG =	FORWARD	SHLDR =	SHOULDER
FWD =	FOOTING	SPA =	SPACES
		ST =	STREET OR SPAN TOTAL
(A) =	EXISTING GIRDER LETTER	STA =	STATION
		STD =	STANDARD
GR =	GUARDRAIL	STG =	STAGE
GFRP =	GLASS -FIBER REINFORCED POLYMER	STM =	STORM
H.C. =	HORIZONTAL CURVE	SW =	SOUTHWEST
HORZ =	HORIZONTAL	T/ =	TOP OF
I/I =	INSIDE TO INSIDE	T/B =	TOP AND BOTTOM
IN =	INCH	T/T =	TOE TO TOE
INV =	INTERSTATE ROUTE	TBR =	TO BE REMOVED
IR =	INVERT	TEMP =	TEMPORARY
JT =	KIPS PER SQUARE INCH	TYP =	TYPICAL
KSF =	KIPS PER SQUARE FOOT	U.N.O. =	UNLESS NOTED OTHERWISE
KSI =	JOINT	VC =	VERTICAL CURVE
LT =	LEFT	VERT =	VERTICAL
LAT =	LATERAL	WB =	WEST BOUND
		WW =	WINGWALL

STANDARD PLAN DETAILING NOMENCLATURE

THROUGHOUT THE PLANS, SECTIONS AND DETAILS ARE REFERENCED TO THEIR CORRESPONDING VIEWS THROUGH THE USE OF STANDARD CALLOUTS. THE VIEWS OF SECTIONS, ELEVATIONS, AND DETAILS WILL HAVE UNIQUE NUMBERS ON THE PAGES ON WHICH THEY ARE SHOWN.

LETTERS WILL BE UTILIZED FOR SECTION AND ELEVATION CALLOUTS. NUMBERS WILL BE UTILIZED FOR DETAIL CALLOUTS.

IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON THE SAME SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:

(X) ← SECTION, ELEVATION, OR DETAIL IDENTIFICATION

IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON A DIFFERENT SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:

(A / #) ← SECTION, ELEVATION, OR DETAIL IDENTIFICATION
(A / #) ← SHEET WHERE THE CORRESPONDING SECTION, ELEVATION, OR DETAIL CALLOUT OR VIEW CAN BE FOUND

STANDARD PLAN DETAILING NOMENCLATURE (CONT.)

MEMBERS WILL BE IDENTIFIED AS FOLLOWS:

(X#) ← IDENTIFICATION NUMBER
STRUCTURE DESIGNATION "G" FOR EXISTING PLATE GIRDER "B" FOR PROPOSED BEAM
SINGLE LETTER (IN A CIRCLE) FOR EXISTING BEAMS

FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL NOTES (2 OF 2)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER SAT | CHECKER AM
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 3 | TOTAL 13
SHEET P.366 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1 PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:11:03 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Beacon Street Tunnel\Sheets\114865_SFN7700092_SN002

PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26	CHECKED: HLD 04/03/26	VERIFIED: SAT 05/01/26
05/IMS	ITEM	ITEM EXT.	TOTAL QUANTITY	UNIT	DESCRIPTION	BEACON CULVERT	GENERAL	SHEET REF.
1	202	11203	LUMP	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN		1	2
704	202	22900	704	SY	APPROACH SLAB REMOVED	704		
12,189	203	20000	12,189	CY	EMBANKMENT	12,189		
4	203	65000	4	EACH	SPECIAL - SETTLEMENT PLATFORM	4		3
21	407	10001	21	GAL	TACK COAT, AS PER PLAN	21		2
58	441	70000	58	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	58		
19,815	509	10000	19,815	LB	EPOXY COATED STEEL REINFORCEMENT	19,815		
103	511	53014	103	CY	CLASS QC3 CONCRETE, MISC.: CAST-IN-PLACE REINFORCED CONCRETE OUTLETS	103		
856	512	10001	856	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	856		2
856	512	10100	856	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	856		
1,074	512	33000	1,074	SY	TYPE 2 WATERPROOFING	1,074		
457	518	21200	457	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	457		
411	518	40000	411	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	411		
5	518	40012	5	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	5		
182	611	97400	182	FT	CONDUIT, MISC.: PRECAST REINFORCED CONCRETE SECTIONS (15' SPAN X 12' RISE)	182		
1	867	00101	LUMP	LS	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN		1	2

FINAL TRACINGS
NOT FOR
CONSTRUCTION

ESTIMATED QUANTITIES
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
4	13

SHEET	TOTAL
P.367	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:11:12 AM USER: stony
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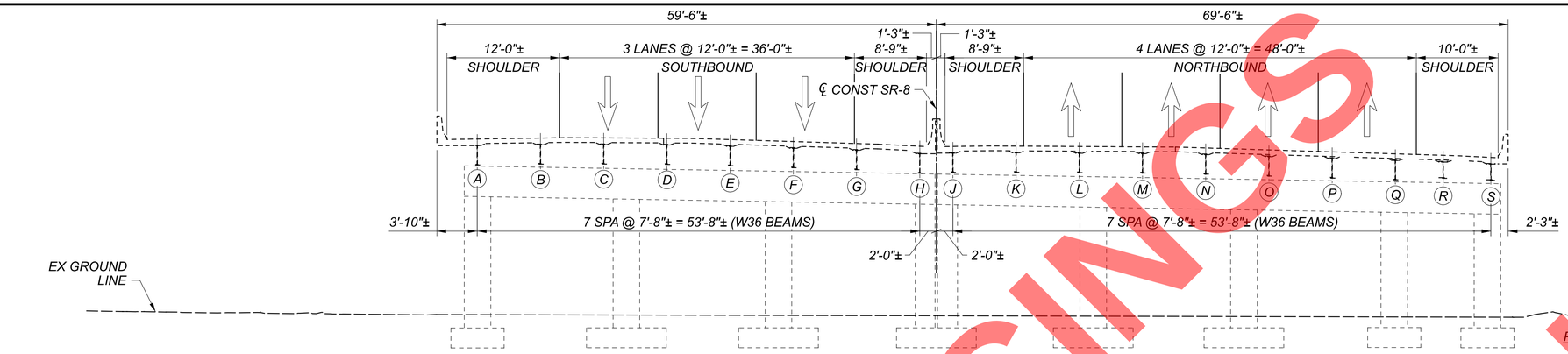
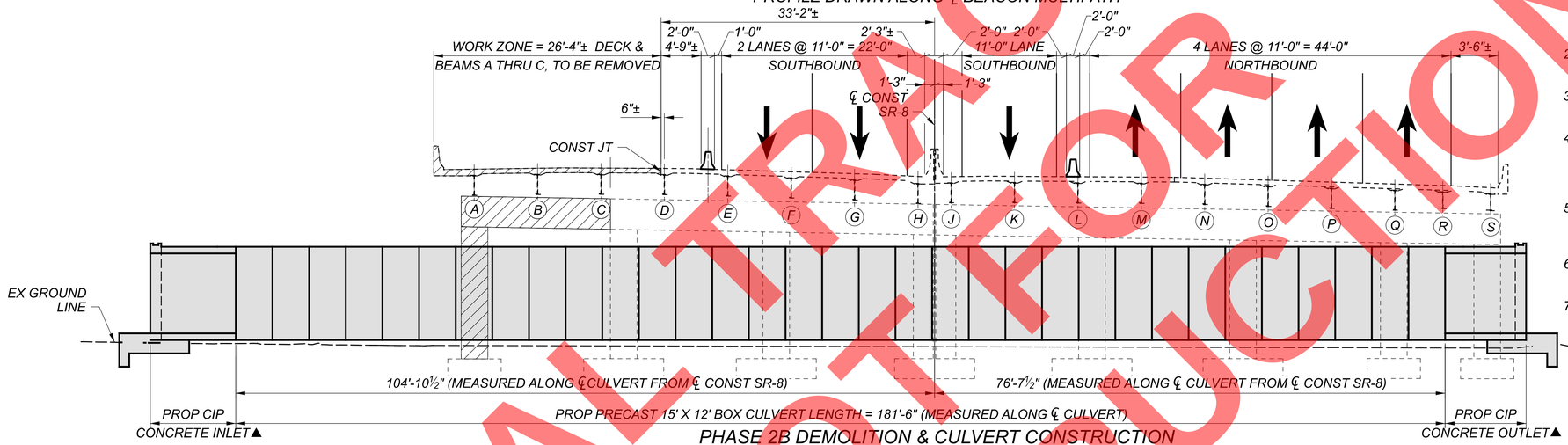
PLOT_DRIVER: $PLTDRV$ PENTABLE: $PENTBL$$



EXISTING BRIDGE AND SITE CONDITIONS

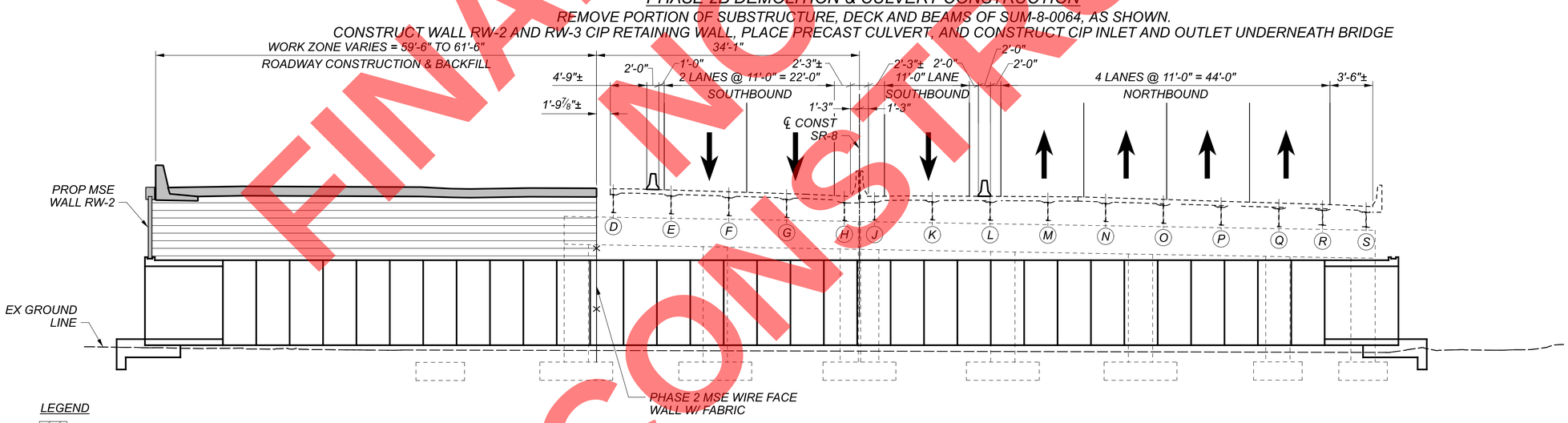
PROFILE DRAWN ALONG ℄ BEACON MULTIPATH



PHASE 2B DEMOLITION & CULVERT CONSTRUCTION

REMOVE PORTION OF SUBSTRUCTURE, DECK AND BEAMS OF SUM-8-0064, AS SHOWN.

CONSTRUCT WALL RW-2 AND RW-3 CIP RETAINING WALL, PLACE PRECAST CULVERT, AND CONSTRUCT CIP INLET AND OUTLET UNDERNEATH BRIDGE



PHASE 2B ROADWAY CONSTRUCTION

CONSTRUCT MSE WALL RW-2, WIRE-FACED MSE WALL AND PORTIONS OF ROADWAY AS SHOWN

LEGEND

- REMOVAL LIMITS
- PROPOSED CONSTRUCTION LIMITS
- ▲ DIMENSION VARIES, SEE SHEET 10/13 AND 11/13 FOR CAST-IN-PLACE DETAILS
- - PHASE 2B FILL ABOVE CULVERT

PHASED CONSTRUCTION NOTES

1. CONSTRUCT CIP RETAINING WALLS ALONG WALL RW-2 AND RW-3 PRIOR TO PLACING PRECAST CULVERT SEGMENTS IN PHASE 2B. FOR CIP RETAINING WALL DETAILS, SEE PLAN SETS STARTING ON SHEET P.307/627 AND SHEET P.316/627.
2. PRECAST CULVERT WILL BE PLACED UNDERNEATH EXISTING BRIDGE IN PHASE 2B DEMOLITION.
3. CONSTRUCT CIP CULVERT INLET AND OUTLET AS SHOWN IN PLANS.
4. PLACE PHASE 2B BACKFILL AS SHOWN WITH TEMPORARY WIRE FACE MSE WITH FABRIC BETWEEN CONSTRUCTION PHASES TO RETAIN BACKFILL.
5. ALL BRIDGE AND ROADWAY DIMENSIONS ARE MEASURED NORMAL TO THE ℄ OF CONSTRUCTION OF SR-8.
6. FOR PIER REMOVAL DETAILS AND DIMENSIONS, SEE SHEET 8/13.
7. NO WORK DONE ON BEACON STREET IN PHASE 1.

PHASED CONSTRUCTION DETAILS (1 OF 4)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
5	13

SHEET	TOTAL
P.368	627

FINAL NOT FOR CONSTRUCTION
TRACINGS

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
PENTABLE SUBSET: 1
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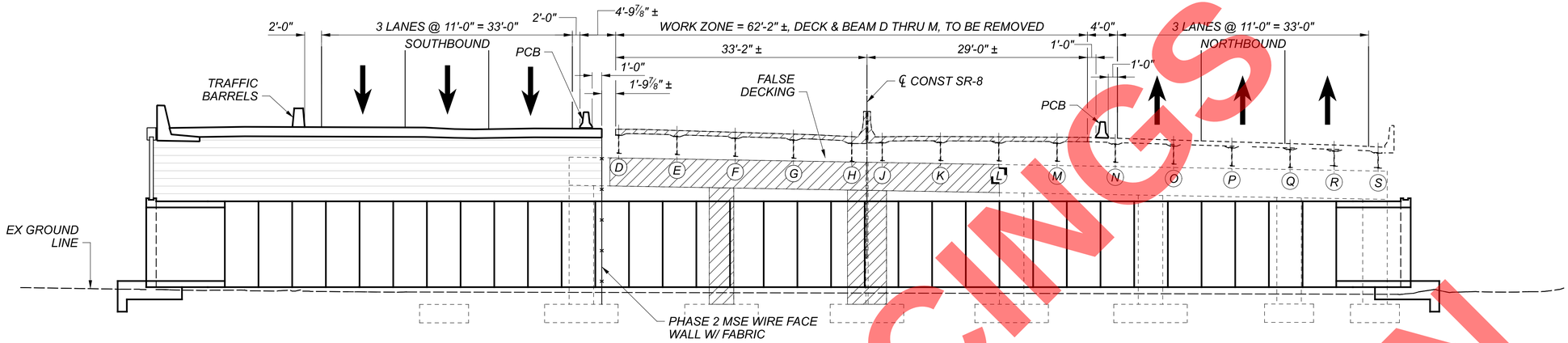
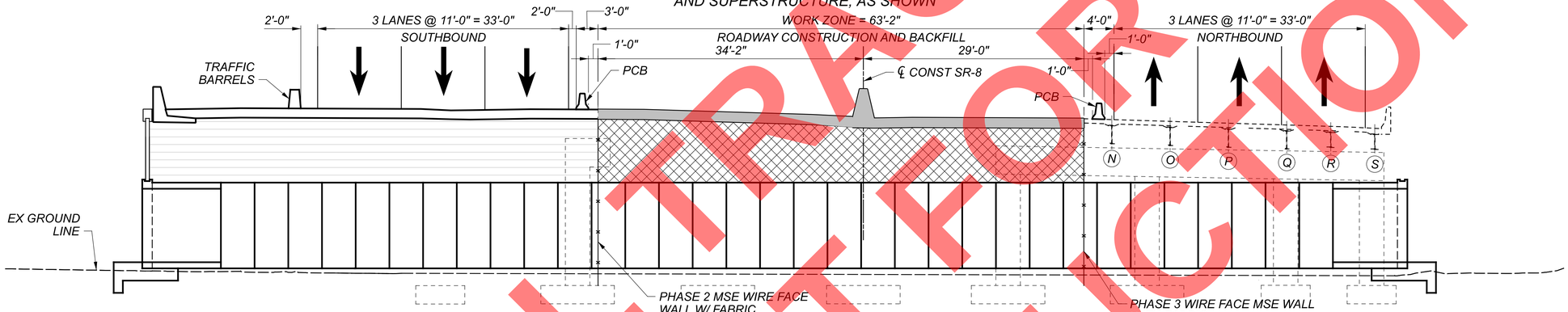


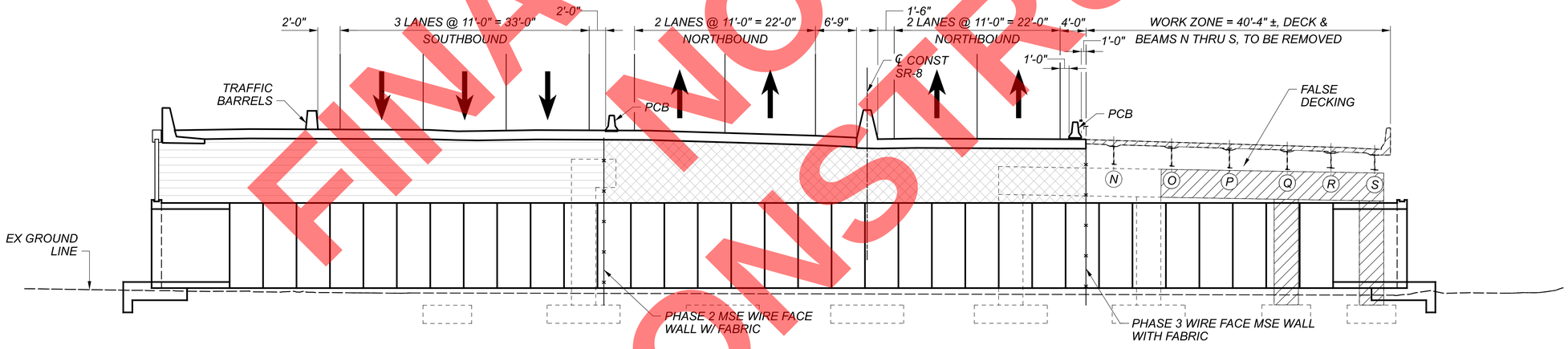
PHASE 3 DEMOLITION

REMOVE PORTIONS OF SUBSTRUCTURE AND SUPERSTRUCTURE, AS SHOWN



PHASE 3 CONSTRUCTION

CONSTRUCT WIRE-FACED MSE WALL, BACKFILL AND PORTIONS OF ROADWAY, AS SHOWN



PHASE 4 DEMOLITION

REMOVE PORTIONS OF SUBSTRUCTURE AND SUPERSTRUCTURE, AS SHOWN

LEGEND

- LIMITS OF DEMOLITION
- LIMITS OF CONSTRUCTION
- PHASE 2B BACKFILL LIMITS
- PHASE 3 BACKFILL LIMITS

PHASED CONSTRUCTION NOTES

1. PLACE PHASE 3 BACKFILL AS NOTED ABOVE WITH TEMPORARY WIRED FACE MSE WITH FABRIC BETWEEN CONSTRUCTION PHASES TO RETAIN BACKFILL.
2. ALL BRIDGE AND ROADWAY DIMENSIONS ARE MEASURED NORMAL TO THE ℄ OF CONSTRUCTION OF SR-8.
3. FOR PIER REMOVAL DETAILS AND DIMENSIONS, SEE SHEET 8/13 .

FINAL PLANS NOT FOR CONSTRUCTION

PHASED CONSTRUCTION DETAILS (2 OF 4)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER SAT | CHECKER AM
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 6 | TOTAL 13
SHEET P.369 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
PENTABLE SUBSET: 1
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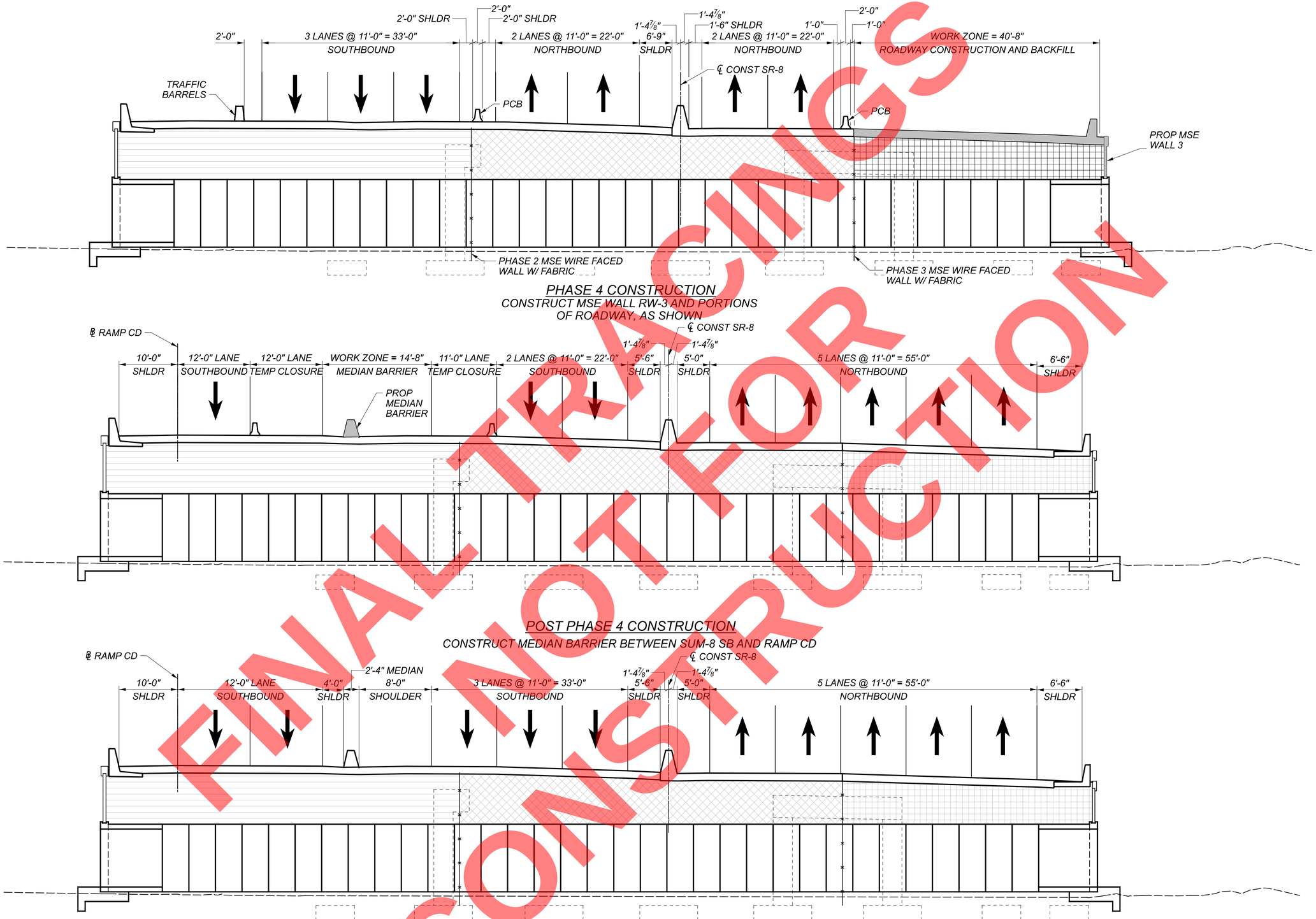

FINAL TRACINGS NOT FOR CONSTRUCTION

LEGEND

- *LIMITS OF CONSTRUCTION*
- *PHASE 2B BACKFILL LIMITS*
- *PHASE 3 BACKFILL LIMITS*
- *PHASE 4 BACKFILL LIMITS*

FINAL LAYOUT

PHASED CONSTRUCTION NOTES

1. *PLACE PHASE 4 BACKFILL AS NOTED ABOVE.*
2. *ALL BRIDGE AND ROADWAY DIMENSIONS ARE MEASURED NORMAL TO THE ℄ OF CONSTRUCTION OF SR-8.*
3. *FOR PIER REMOVAL DETAILS AND DIMENSIONS, SEE SHEET 8/13 .*

PHASED CONSTRUCTION DETAILS (3 OF 4)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
7	13

SHEET	TOTAL
P.370	627

SUM-077/008-11.65/00.00

SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$

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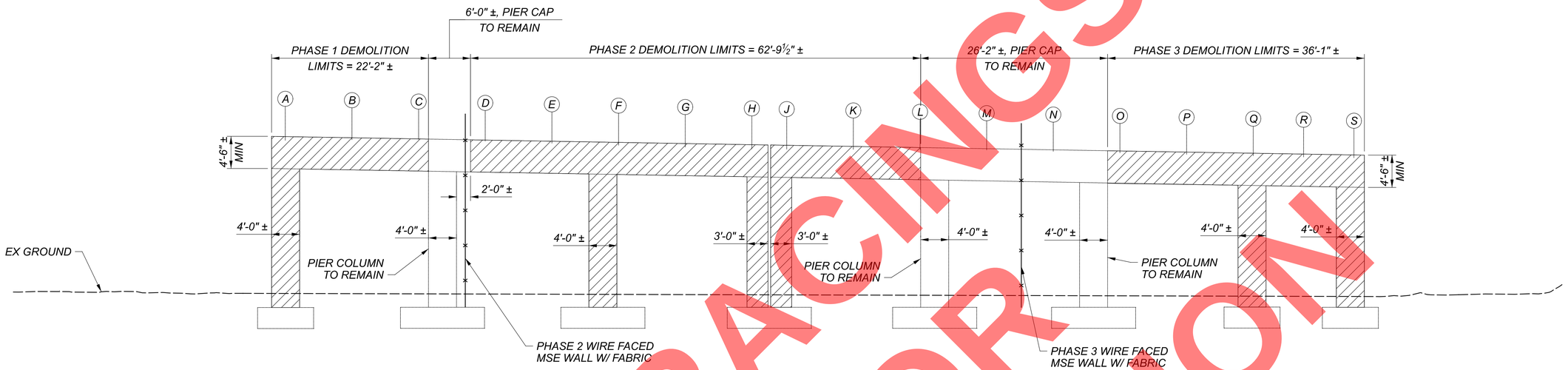

EX SUM-8-0.63 PIER PHASED DEMOLITION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

PHASED CONSTRUCTION DETAILS (4 OF 4)
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
8	13

SHEET	TOTAL
P.371	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1

SUBMITTAL: SUB_STG

PENTABLE: $PENTBL$$

PLOT DRIVER: $PLTDRV$$

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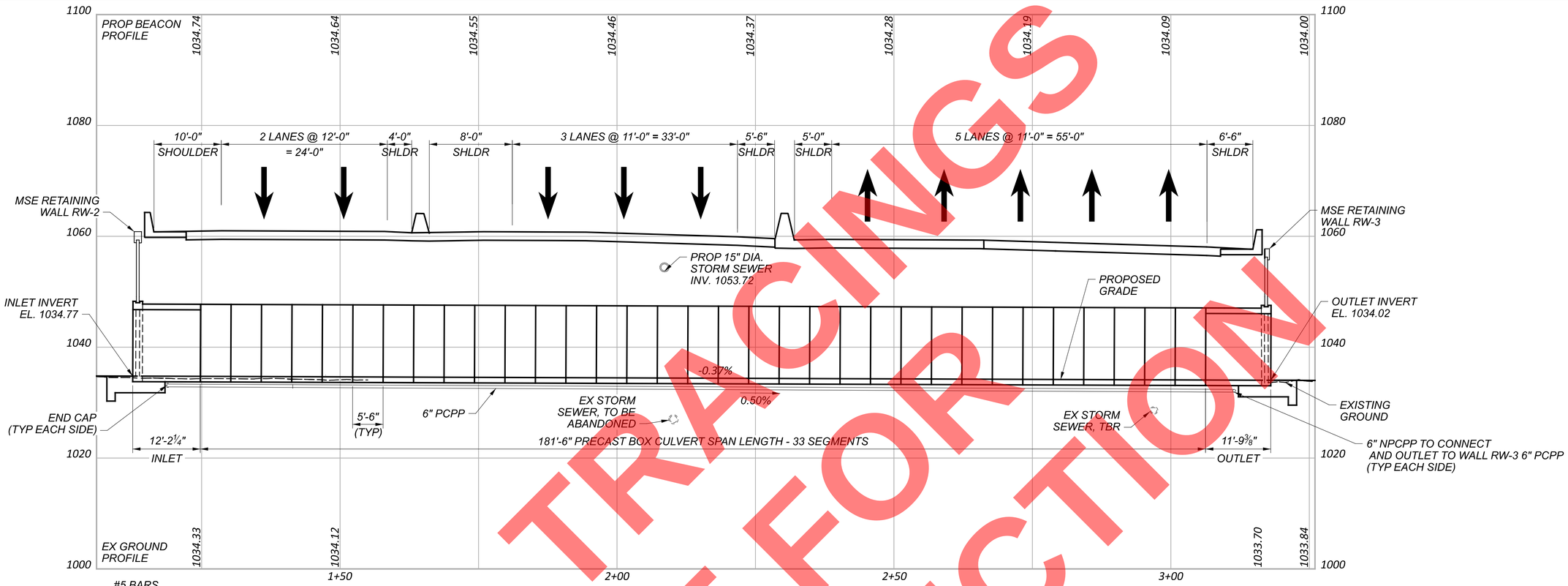
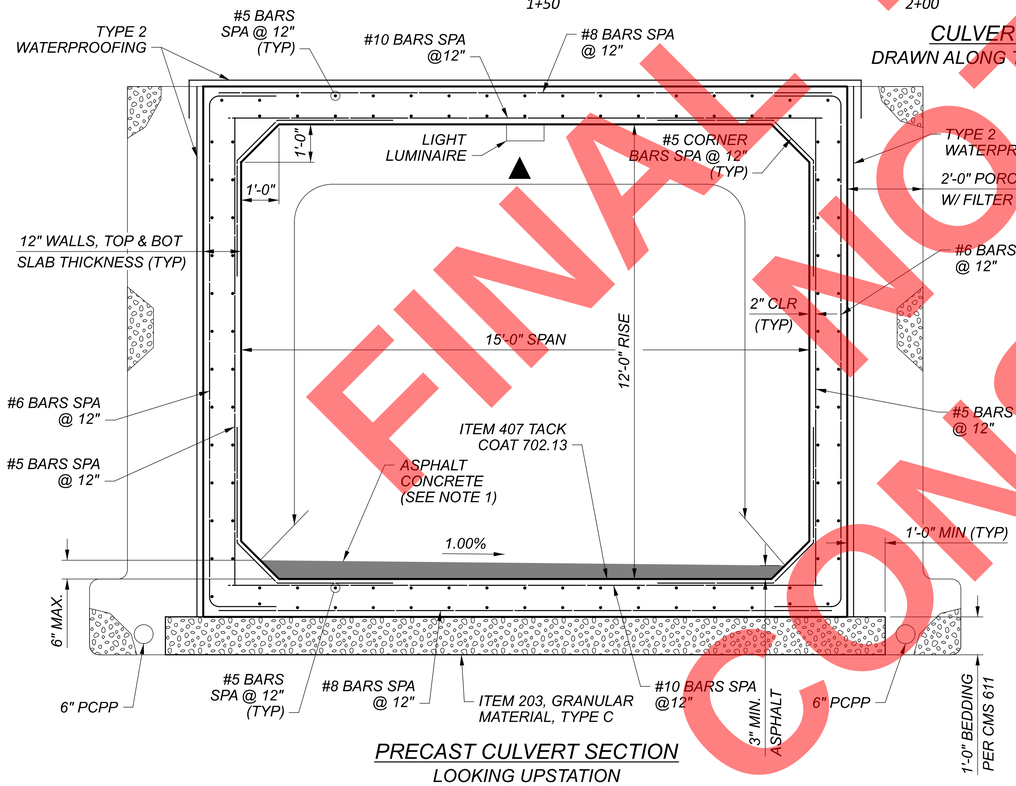


CULVERT PROFILE
DRAWN ALONG THE ℄ OF CULVERT



PRECAST CULVERT SECTION
LOOKING UPSTATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

NOTE

1. ASPHALT CONCRETE SHALL BE PLACED IN 1.5" MAX THICKNESS LIFTS. ASPHALT SHALL BE PAID FOR UNDER ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22.
2. FOR BEACON STREET LIGHTING DETAILS AND LAYOUT, SEE SHEET P.297/627.

LEGEND

▲ LIMITS OF ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION). TO BE APPLIED THE ENTIRE LENGTH OF CULVERT.

CULVERT SECTION & PROFILE
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
SAT	AM

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
9	13

SHEET	TOTAL
P.372	627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
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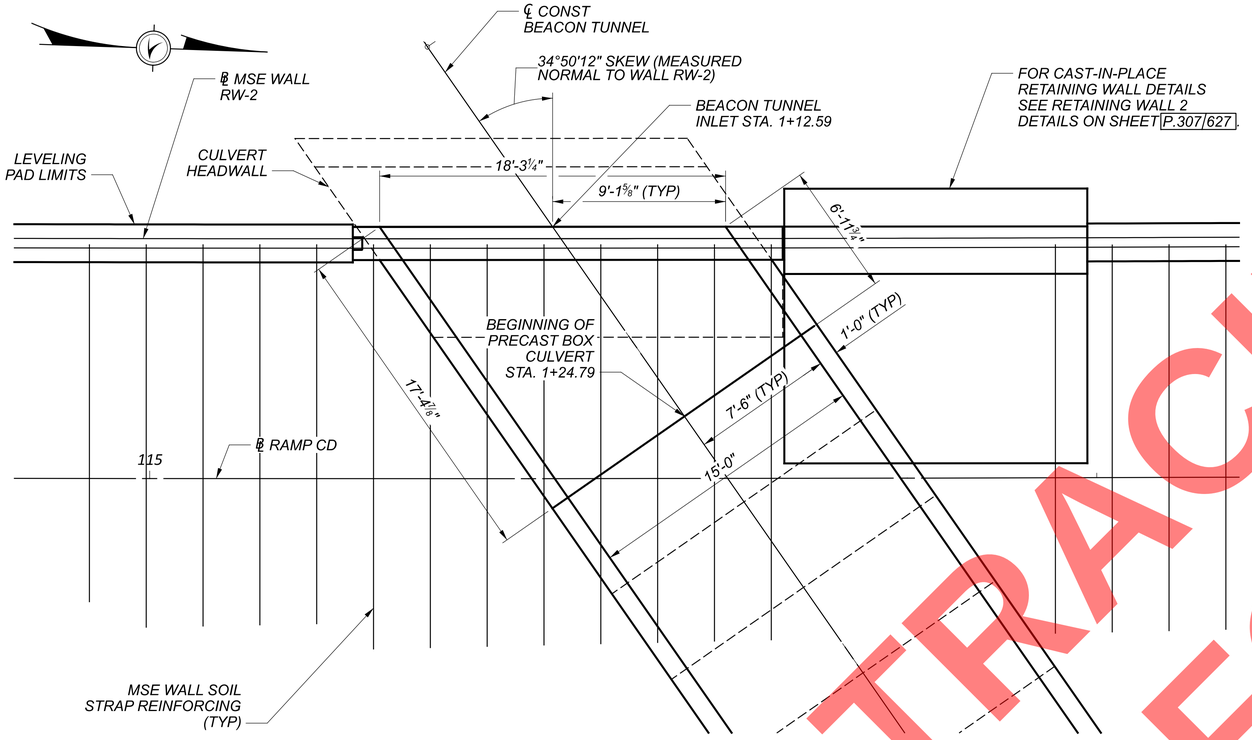
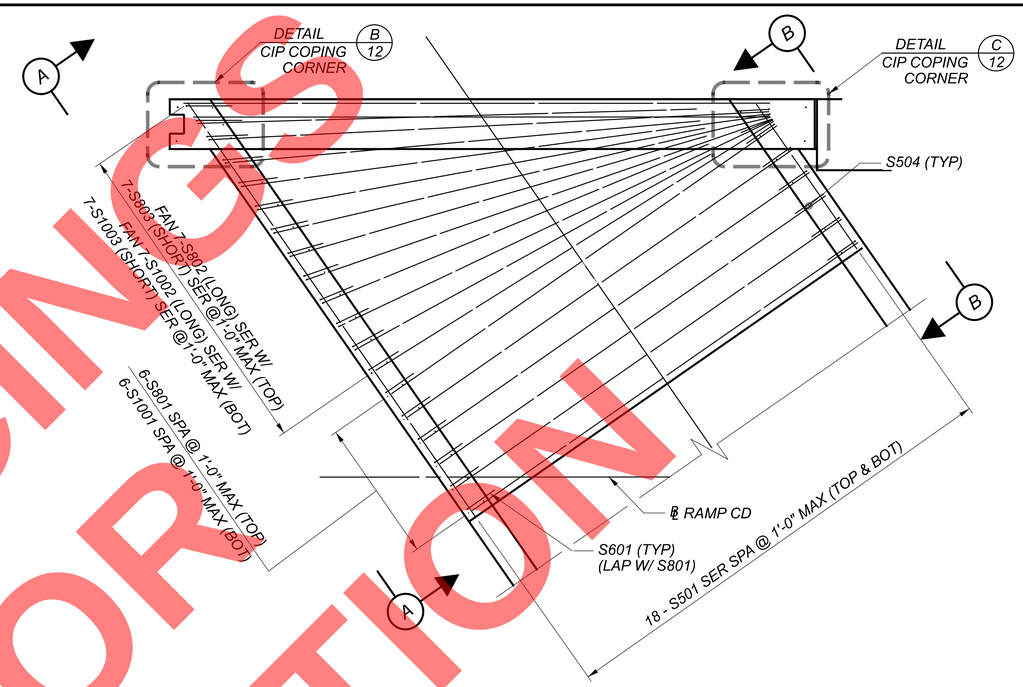
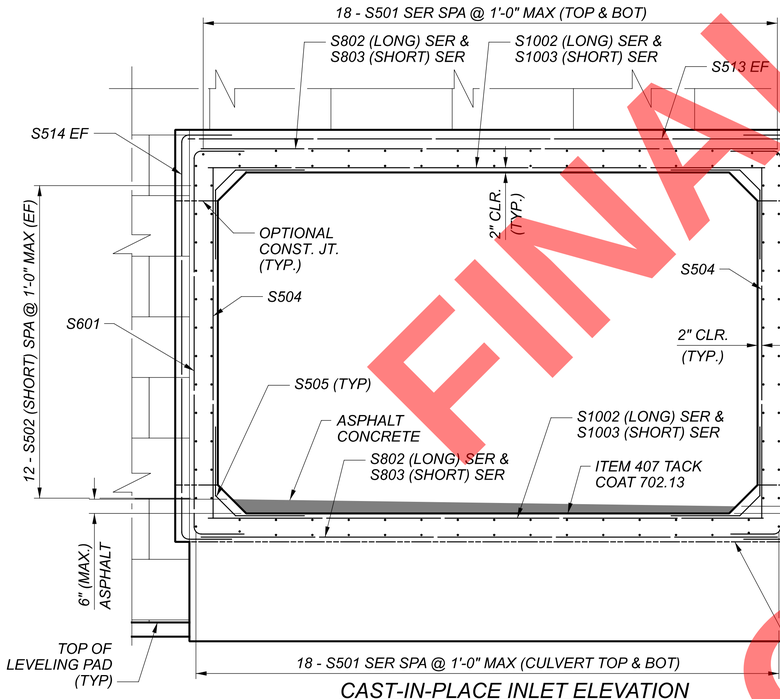


CAST-IN-PLACE INLET PLAN



REINFORCING PLAN DETAIL

TOP SLAB SHOWN, BOTTOM SLAB IDENTICAL
RETAINING WALL NOT SHOWN FOR CLARITY

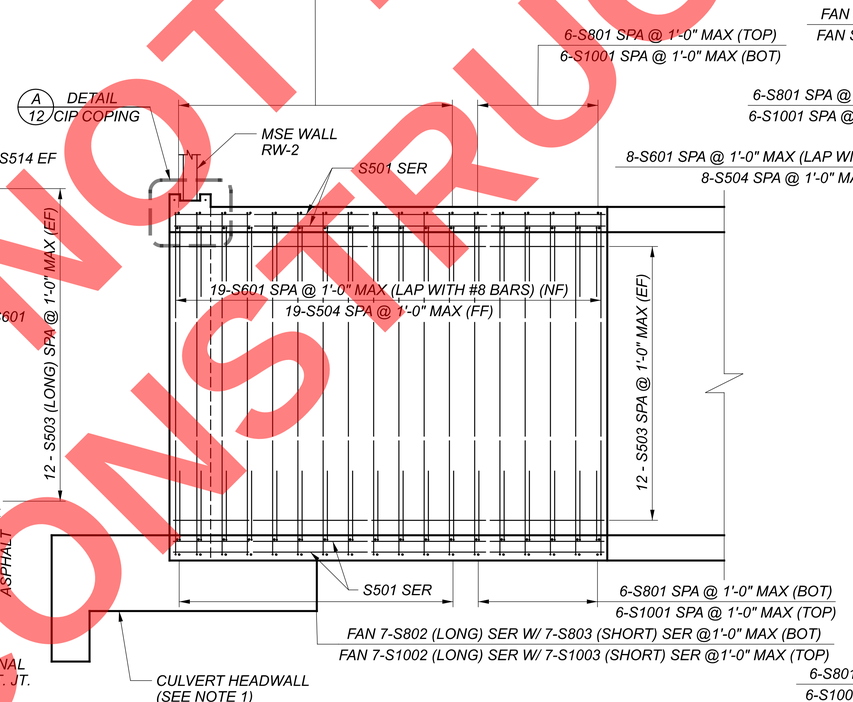


CAST-IN-PLACE INLET ELEVATION

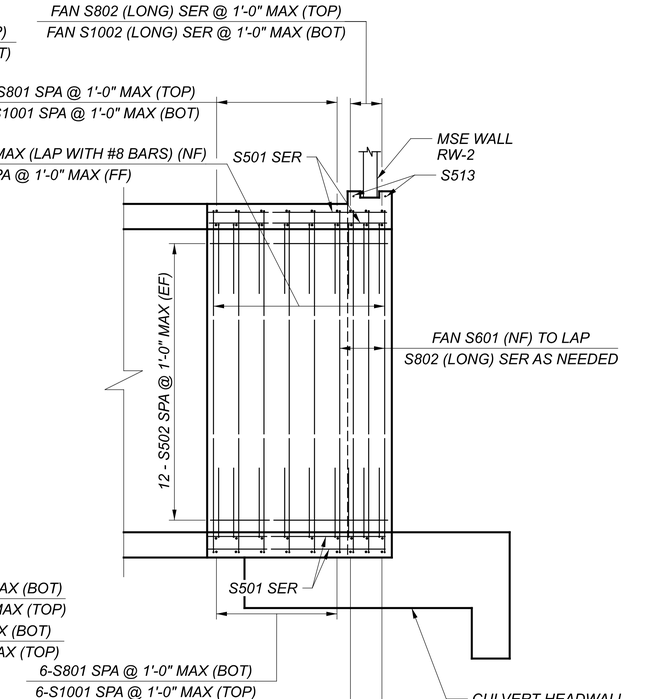
LOOKING UPSTATION

NOTE

1. FOR MSE WALL COPING AND HEADWALL DETAILS, SEE SHEET 12/13 .



VIEW A-A



VIEW B-B

FINAL TRACINGS NOT FOR CONSTRUCTION

INLET CULVERT DETAILS
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN	7700092
DESIGN AGENCY	GFT, 8890 lyra drive, Suite 110, Columbus, Ohio 43240
DESIGNER	SAT
CHECKER	AM
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	10
TOTAL	13
SHEET	P.373
TOTAL	627

SUM-077/008-11.65/00.00

SUBMITTAL: SUB_STG PENTABLE SUBSET: 1 PENTABLE: $PENTBL$$

PLOT DRIVER: $PLTDRV$$

MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:14:15 AM USER: stony
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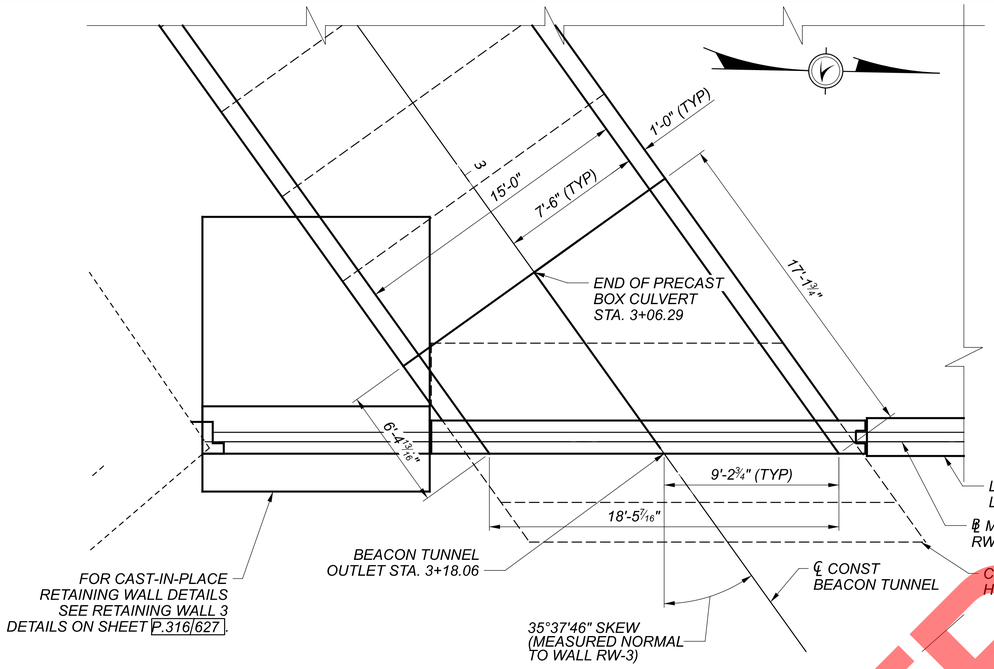
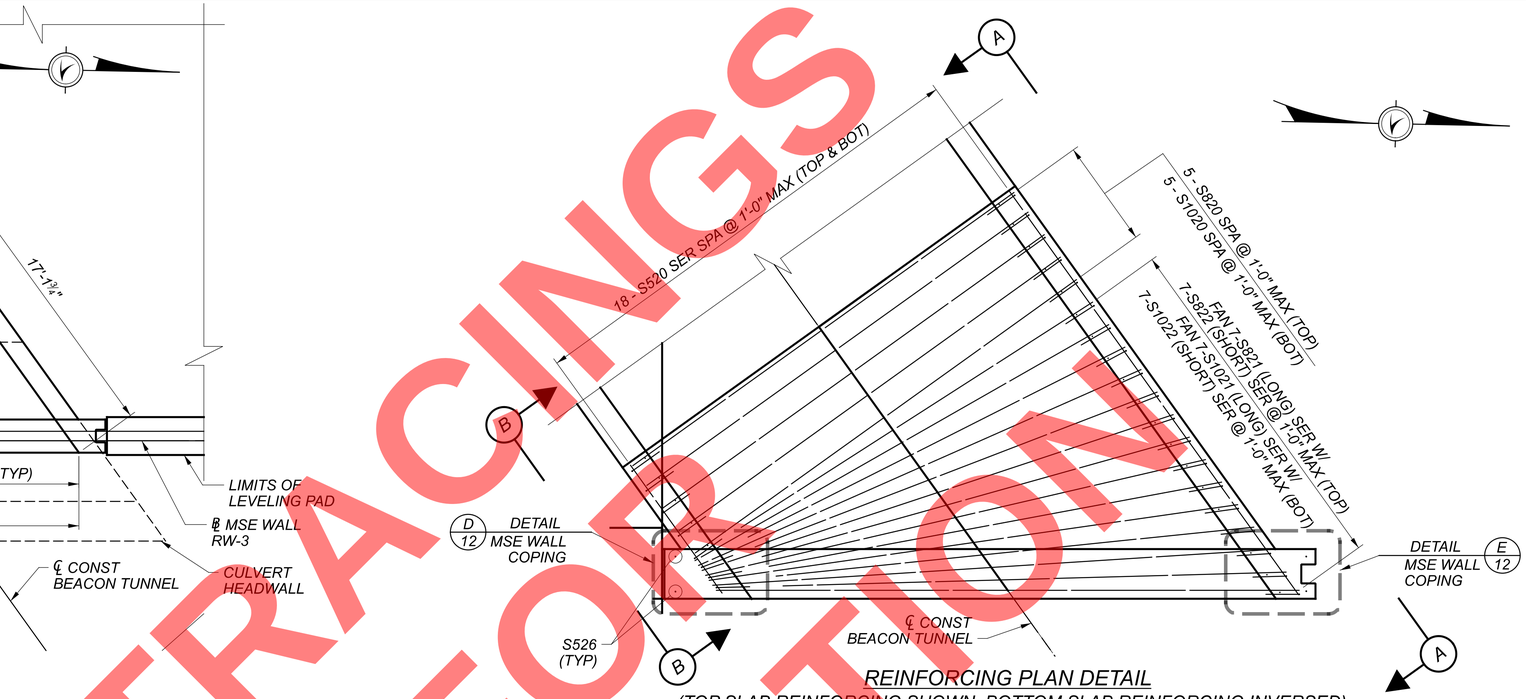
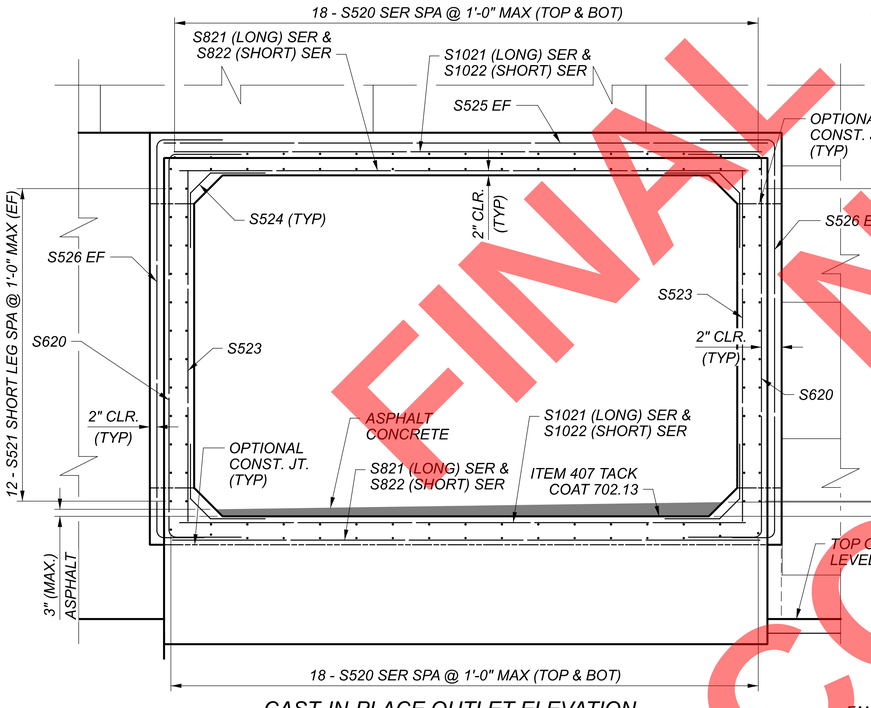


CAST-IN-PLACE OUTLET PLAN



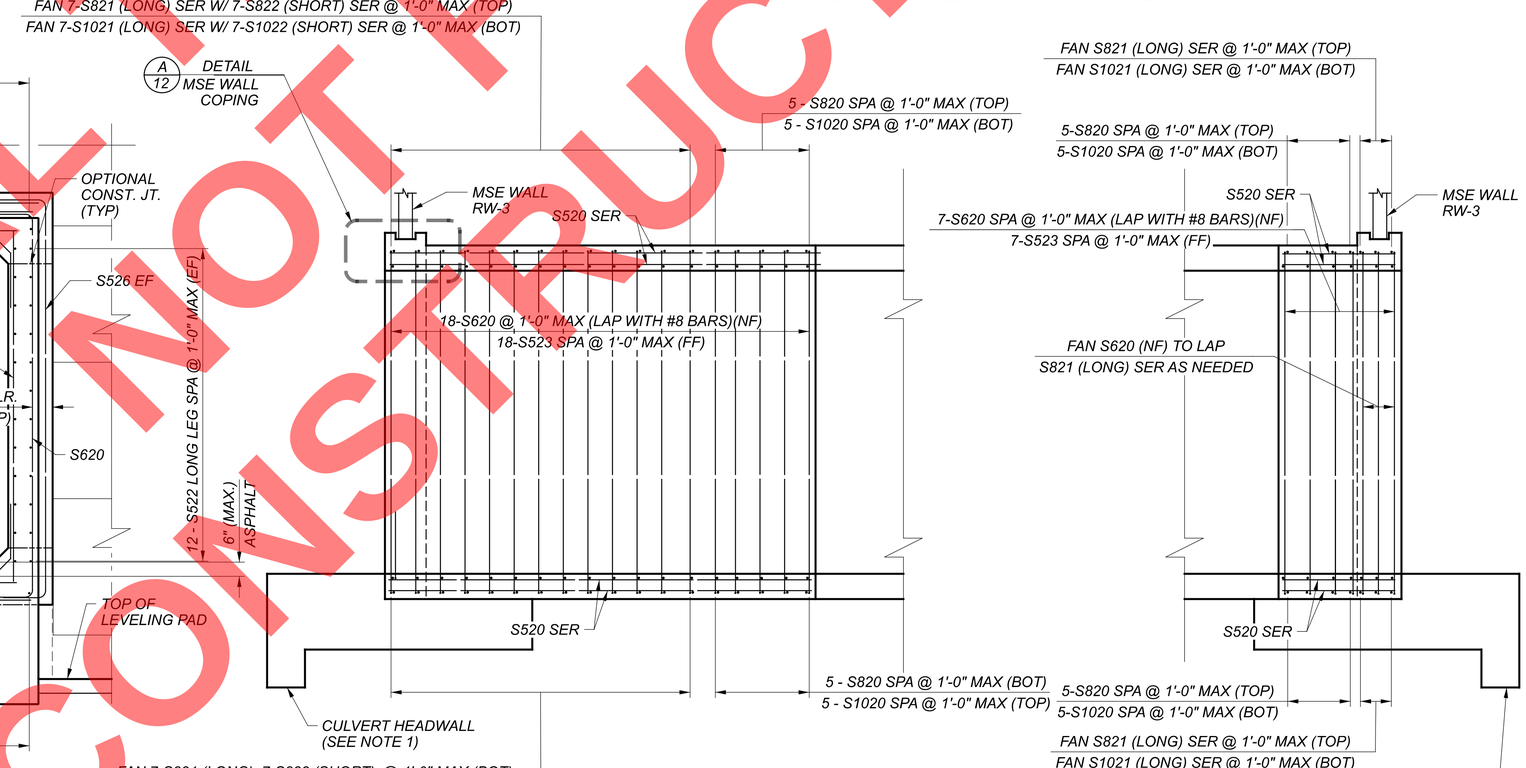
REINFORCING PLAN DETAIL

(TOP SLAB REINFORCING SHOWN, BOTTOM SLAB REINFORCING INVERSED)
RETAINING WALL NOT SHOWN FOR CLARITY



CAST-IN-PLACE OUTLET ELEVATION

LOOKING DOWNSTATION



VIEW A-A

VIEW B-B

NOTE

1. FOR MSE WALL COPING AND HEADWALL DETAILS, SEE SHEET 12|13 .

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OUTLET CULVERT DETAILS
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN	7700092
DESIGN AGENCY	GFT, 8800 Lyra drive, Suite 110, Columbus, Ohio 43240
DESIGNER	SAT
CHECKER	AM
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	11
TOTAL	13
SHEET	P.374
TOTAL	627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$
PLOT DRIVER: $PLTDRV$
MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:14:34 AM USER: stony
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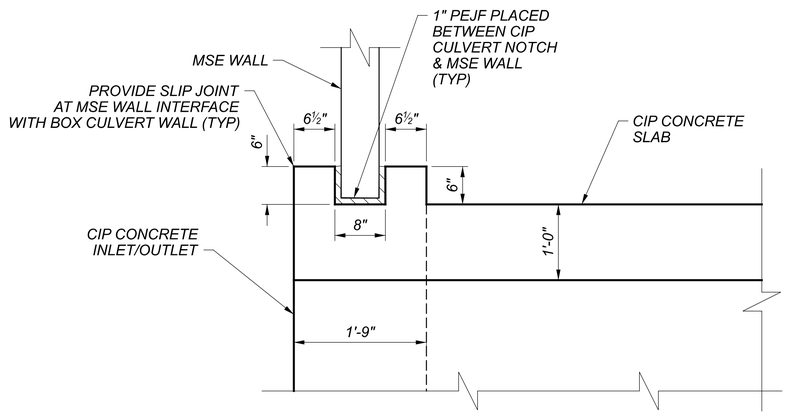
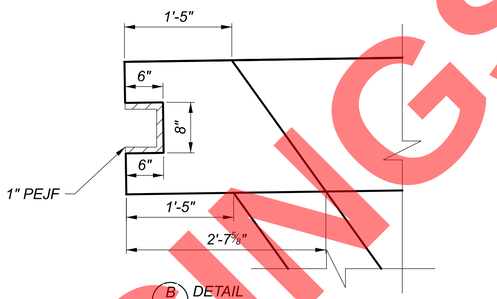
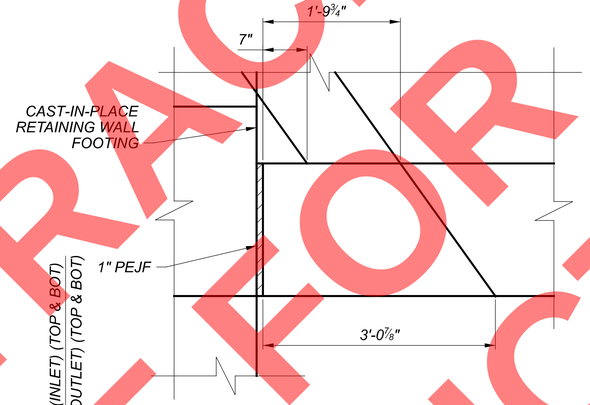


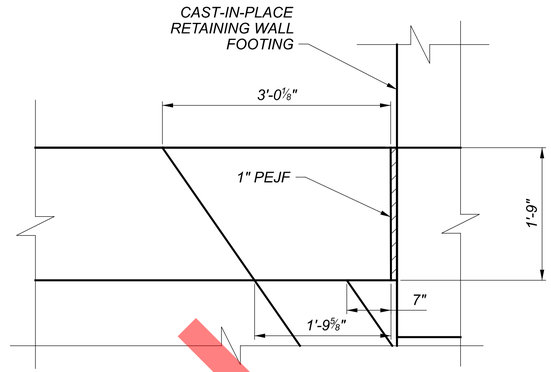
A 10 11 DETAIL MSE WALL COPING



B 10 DETAIL CIP COPING CORNER



D 11 DETAIL CIP COPING CORNER



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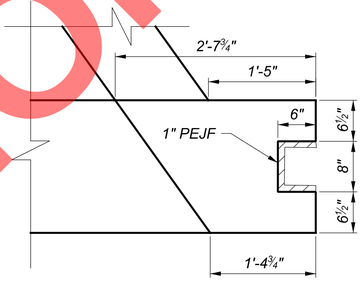
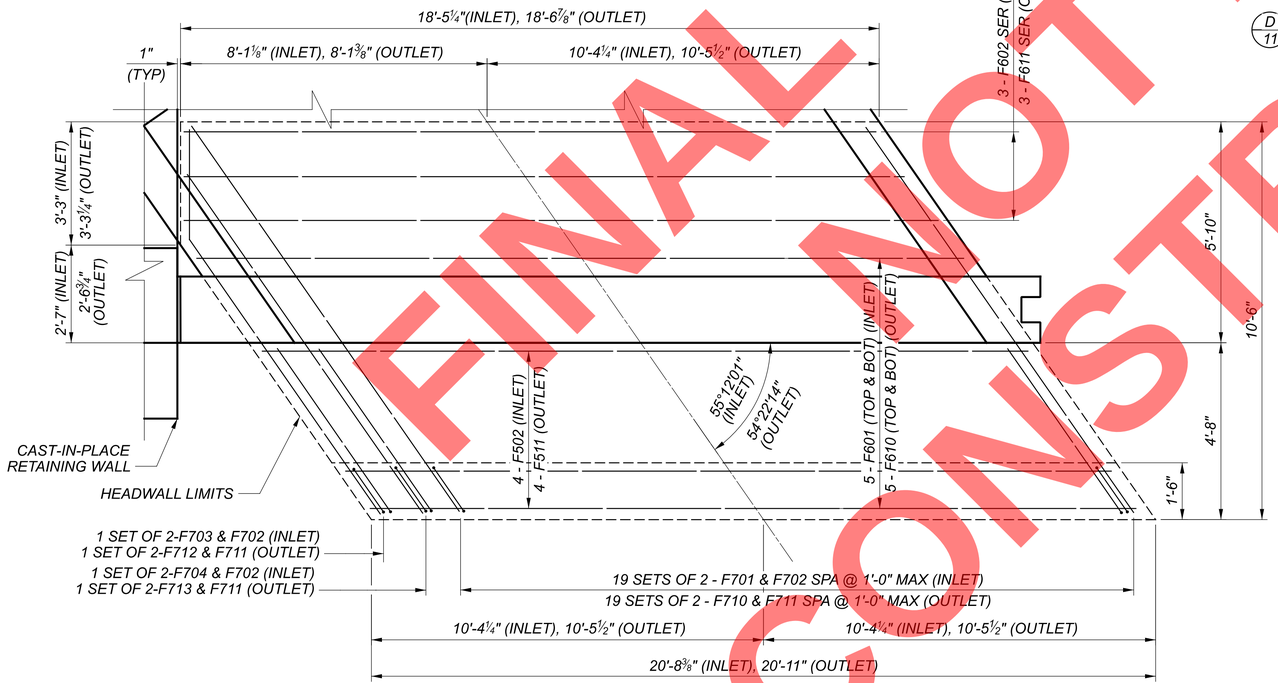
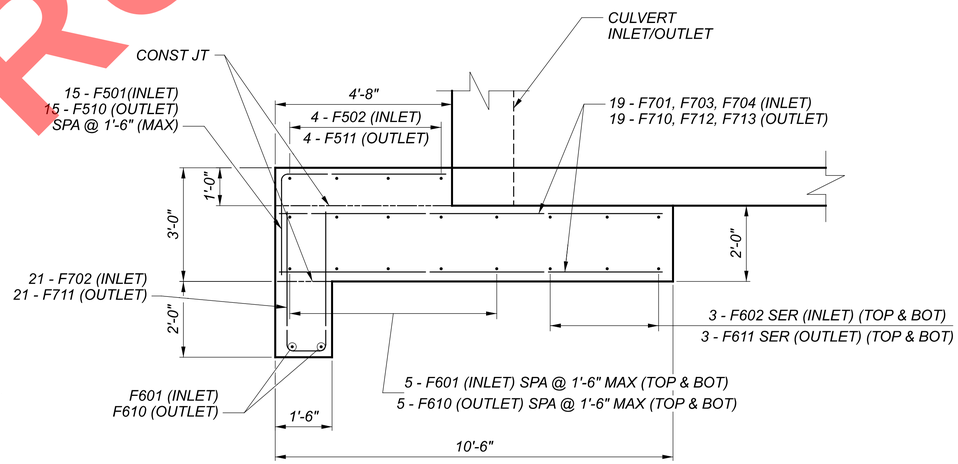


E 11 DETAIL CIP COPING CORNER



CULVERT HEADWALL PLAN
(INLET SHOWN, OUTLET SIMILAR)



CULVERT HEADWALL SECTION
(INLET SHOWN, OUTLET SIMILAR)

NOTE

1. HEADWALL CONCRETE TO BE QUANTIFIED AND PAID FOR WITH ITEM 511 - CLASS QC3 CONCRETE, MISC.: CAST-IN-PLACE REINFORCED CONCRETE OUTLETS.

INLET

OUTLET

FINAL TRACINGS
NOT FOR CONSTRUCTION

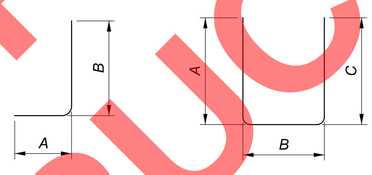
ADDITIONAL CULVERT DETAILS
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER SAT | CHECKER AM
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 12 | TOTAL 13
SHEET P.375 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:14:47 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Beacon Street Tunnel\Sheets\114865_SFN7700092_SS005.dgn

Mark	NUMBER			LENGTH	WEIGHT			TYPE	DIMENSIONS				
	INLET	OUTLET	TOTAL		INLET	OUTLET	TOTAL		A	B	C	D	INC
CULVERT													
	4		4	5'-11"									
S501	SER OF		SER OF	to	889		889	STR.					8 ¼"
	18		18	17'-9"									
S502	24		24	5'-11"	149		149	STR.					
S503	24		24	17'-9"	445		445	STR.					
S504	27		27	13'-8"	385		385	STR.					
S505	54		54	7'-10"	442		442	13	3'-0"	1'-4"	1'-4"	3'-0"	
S513	2		2	22'-3"	47		47	STR.					
S514	4		4	18'-9"	79		79	2	2'-5"	14'-2"	2'-5"		
		4	4	5'-6"									
S520		SER OF	SER OF	to		858	858	STR.					8 ¼"
		18	18	17'-4"									
S521		24	24	5'-7"		140	140	STR.					
S522		24	24	17'-4"		434	434	STR.					
S523		26	26	13'-8"		371	371	STR.					
S524		52	52	7'-10"		425	425	13	3'-0"	1'-4"	1'-4"	3'-0"	
S525		2	2	22'-6"		47	47	STR.					
S526		4	4	18'-9"		79	79	2	2'-5"	14'-2"	2'-5"		
S601	27		27	20'-4"	825		825	2	3'-6"	13'-8"	3'-6"		
S620		26	26	20'-4"		795	795	2	3'-6"	13'-8"	3'-6"		
S801	12		12	16'-8"	534		534	STR.					
	2		2	16'-8"									
S802	SER OF		SER OF	to	695		695	STR.					7 ½"
	7		7	20'-6"									
	2		2	13'-8"									
S803	SER OF		SER OF	to	583		583	STR.					7 ½"
	7		7	17'-6"									
S820		10	10	16'-8"		445	445	STR.					
		2	2	16'-8"									
S821		SER OF	SER OF	to		697	697	STR.					7 ⅜"
		7	7	20'-7"									
		2	2	13'-8"									
S822		SER OF	SER OF	to		585	585	STR.					7 ⅜"
		7	7	17'-7"									
S1001	12		12	16'-8"	861		861	STR.					
	2		2	16'-8"									
S1002	SER OF		SER OF	to	1,120		1,120	STR.					7 ⅛"
	7		7	20'-6"									
	2		2	13'-8"									
S1003	SER OF		SER OF	to	939		939	STR.					7 ½"
	7		7	17'-6"									
S1020		10	10	16'-8"		718	718	STR.					
		2	2	16'-8"									
S1021		SER OF	SER OF	to		1,123	1,123	STR.					7 ¾"
		7	7	20'-7"									
		2	2	13'-8"									
S1022		SER OF	SER OF	to		942	942	STR.					7 ¾"
		7	7	17'-7"									
				SUB-TOTAL	7,993	7,659	15,652						

Mark	NUMBER			LENGTH	WEIGHT			TYPE	DIMENSIONS			
	INLET	OUTLET	TOTAL		INLET	OUTLET	TOTAL		A	B	C	INC
HEADWALL												
F501	15		15	7'-11"	124		124	1	5'-3"	2'-8"		
F502	4		4	20'-4"	85		85	STR.				
F510		15	15	7'-11"		124	124	1	5'-3"	2'-8"		
F511		4	4	20'-7"		86	86	STR.				
F601	12		12	20'-4"	367		367	STR.				
	2		2	18'-0"								
F602	SER OF		SER OF	to	171		171	STR.				11 ½"
	3		3	19'-11"								
F610		12	12	20'-7"		371	371	STR.				
		2	2	18'-2"								
F611		SER OF	SER OF	to		173	173	STR.				1'-0"
		3	3	20'-2"								
F701	38		38	12'-3"	952		952	STR.				
F702	21		21	6'-6"	280		280	2	2'-7"	1'-6"	2'-7"	
F703	2		2	11'-5"	47		47	19	8'-6"	2'-4"	1'-8"	
F704	2		2	11'-2"	46		46	STR.				
F710		38	38	12'-5"		965	965	STR.				
F711		21	21	6'-6"		280	280	2	2'-7"	1'-6"	2'-7"	
F712		2	2	11'-5"		47	47	19	8'-6"	2'-5"	1'-8"	
F713		2	2	11'-0"		45	45	STR.				
				SUB-TOTAL	2,072	2,091	4,163					



REINFORCING BEND DIAGRAMS

MINIMUM LAP LENGTH
#5 BARS = 2'-6"

REINFORCING CALLOUT NOMENCLATURE
BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.
LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.

EXAMPLES: CULVERT C501 — ID; # 5 BAR

LOCATION MARKS USED: C = CULVERT

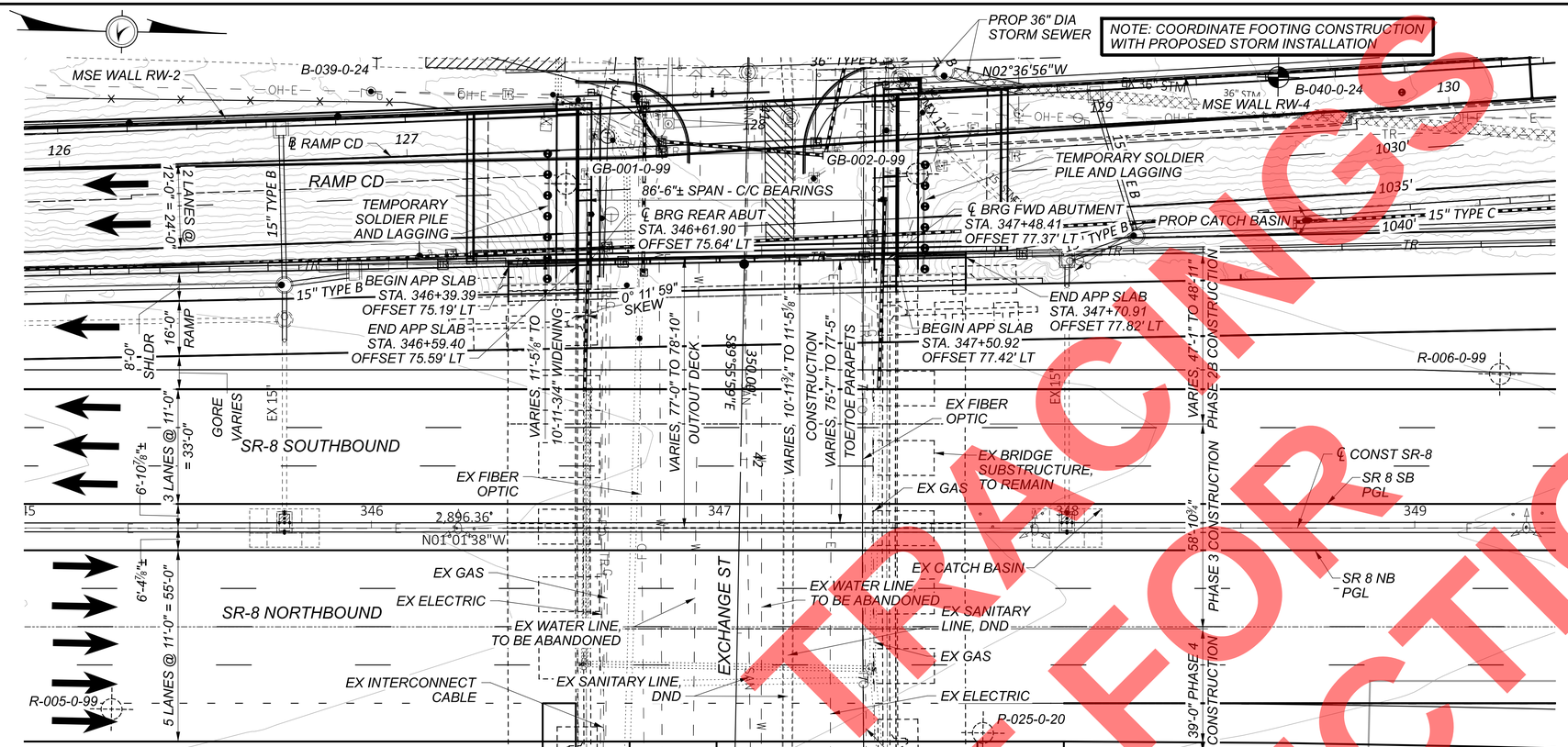
REINFORCING NOTES
1. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING, INCLUDING MECHANICAL CONNECTORS, SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

FINAL TRACINGS
NOT FOR CONSTRUCTION

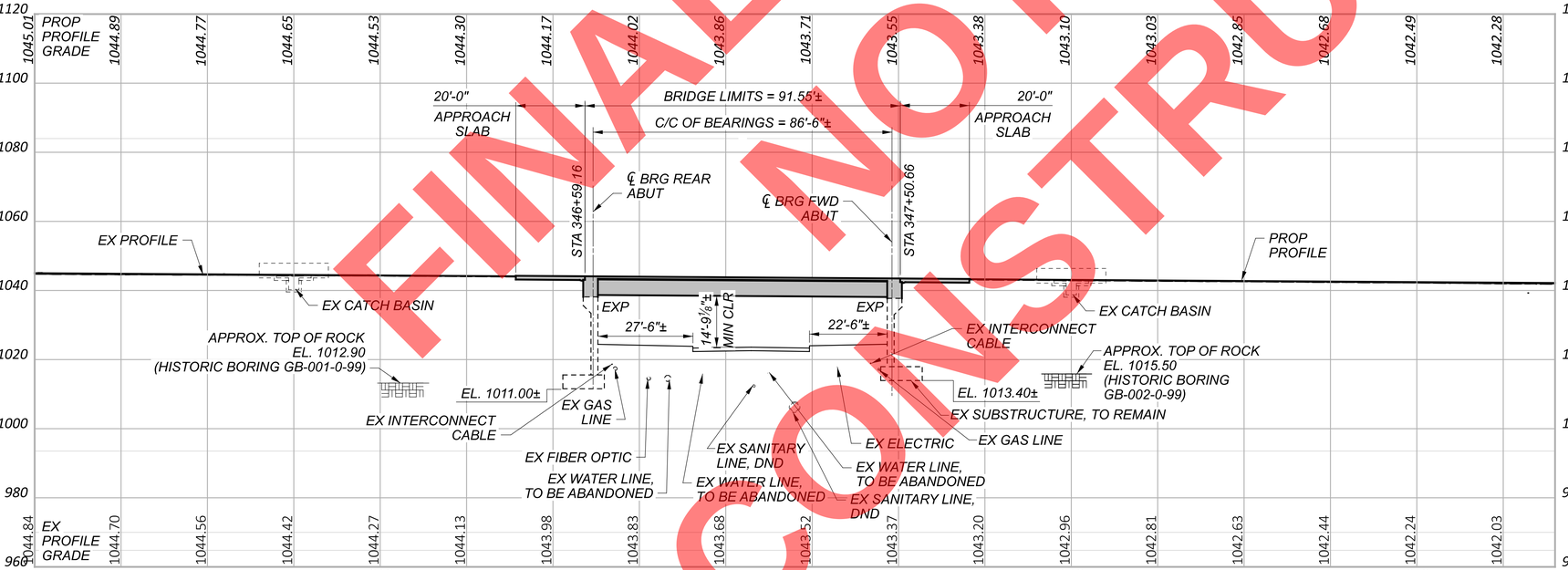
REINFORCING STEEL LIST
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700092
DESIGN AGENCY GFT 8800 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER SAT | CHECKER AM
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 13 | TOTAL 13
SHEET P.376 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/18/2026 TIME: 9:14:59 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Beacon Street Tunnel\Sheets\114865_SFN7700092_SL001.dgn



PLAN



PROFILE ALONG SR-8 SB PROFILE GRADE LINE

NOTE:

1. PROFILE DRAWN ALONG SB PGL, BUT PROPOSED WIDENING CONSTRUCTION SHOWN FOR CLARITY.

BENCHMARK DATA

BM CP15 STA. 337+92.58 ELEV. 1050.87 OFFSET 60.83' LT
ALUMINUM DISC IN CONCRETE STAMPED "15"

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET P.002

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:

2032 ADT = 54930 2032 ADTT = 2747
2052 ADT = 55850 2052 ADTT = 2793
DIRECTIONAL DISTRIBUTION = 47%

LEGEND

- PROJECT BORING LOCATION
- HISTORIC BORING LOCATION
- ● 14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
  14'-9⅛" ACTUAL MINIMUM VERTICAL CLEARANCE

EXISTING STRUCTURE

TYPE: SINGLE SPAN NON-COMPOSITE STEEL GIRDERS WITH REINFORCED CONCRETE DECK, SEMI-INTEGRAL DIAPHRAGMS ON FULL-HEIGHT ABUTMENTS

SPAN: 86'-6"±, C/C BEARINGS
ROADWAY: VARIES, 65'-9¼"± TO 67'-11⅛"± TOE/TOE BARRIER
LOADING: HS20-44 (CASE I) AND THE ALTERNATE MILITARY LOADING
SKEW: 0° 11' 59"± LEFT FORWARD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81, 20'-0"± LONG
ALIGNMENT: TANGENT
CROWN: 3/16"/FT
STRUCTURE FILE NUMBER: 7700156
DATE BUILT: 1954, REHAB: 1982 & 2004
DISPOSITION: TO BE WIDENED AND RESURFACED

PROPOSED STRUCTURE

TYPE: WIDENED SINGLE SPAN STEEL GIRDER WITH COMPOSITE REINFORCED CONCRETE DECK ON WIDENED SEMI-INTEGRAL ABUTMENTS

SPANS: EXISTING
ROADWAY: VARIES, 75'-7" TO 77'-5" TOE/TOE PARAPETS
LOADING: HL93 AND .060 KSF FUTURE WEARING SURFACE
SKEW: EXISTING
WEARING SURFACE: VARIABLE SUPERPLASTICIZED CONCRETE OVERLAY
APPROACH SLABS: 20'-0"± LONG, MATCH EXISTING
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
DECK AREA: 7134 SF

COORDINATES: LATITUDE 41° 04' 16.2" N
LONGITUDE 81° 30' 13.0" W

SITE PLAN - SOUTHBOUND
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 1 | TOTAL 38
SHEET P.377 | TOTAL 627

FINAL NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: BLP_SB SR8 - Plan 3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:31:37 AM USER: stony
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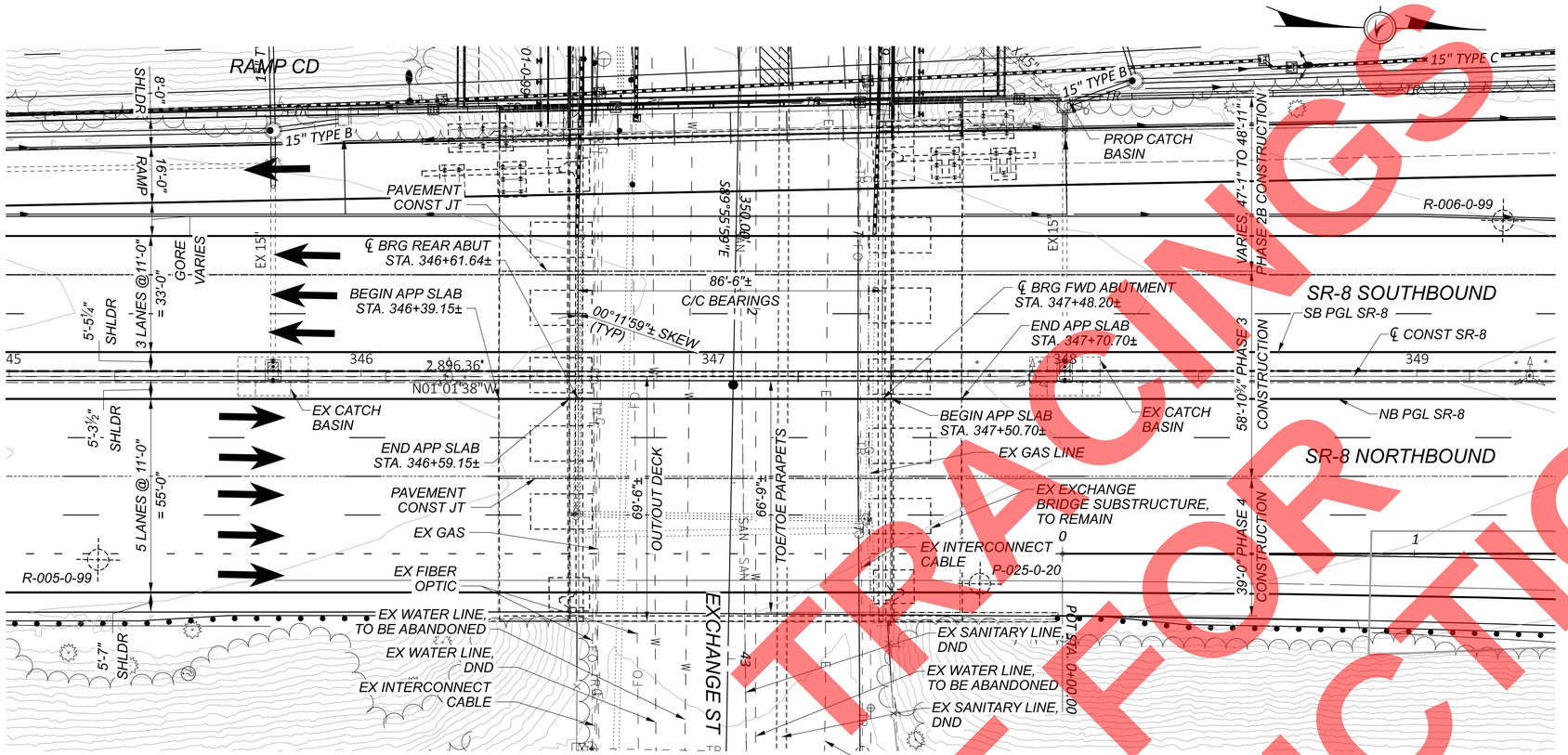
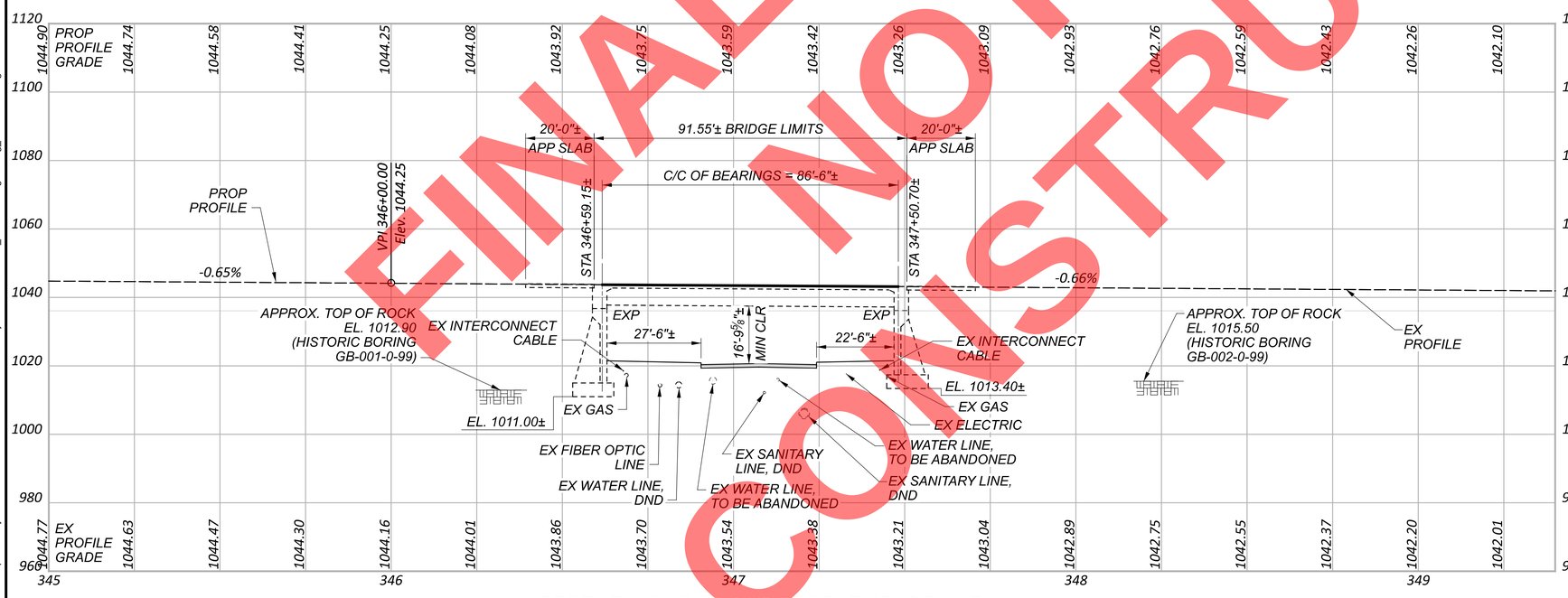


PLAN



PROFILE ALONG SR-8 NB PROFILE GRADE LINE

FINAL NOT FOR CONSTRUCTION
TRACINGS

BENCHMARK DATA

BM CP15 STA. 337+92.58 ELEV. 1050.87 OFFSET 60.83' LT
ALUMINUM DISC IN CONCRETE STAMPED "15"

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET P.002

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:

2032 ADT =	*60720*	*2032 ADTT =*	*2429*
2052 ADT =	*63160*	*2052 ADTT =*	*2526*
DIRECTIONAL DISTRIBUTION =	*53%*		

LEGEND

HISTORIC BORING LOCATION

● *14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
16'-9⅝" ACTUAL MINIMUM VERTICAL CLEARANCE

EXISTING STRUCTURE

TYPE: SINGLE SPAN NON-COMPOSITE STEEL GIRDERS WITH REINFORCED CONCRETE DECK, SEMI-INTEGRAL DIAPHRAGMS ON FULL-HEIGHT ABUTMENTS

SPAN: 86'-6"±, C/C BEARINGS
ROADWAY: 66'-9"± TOE/TOE BARRIER
LOADING: HS20-44 (CASE I) AND THE ALTERNATE MILITARY LOADING
SKEW: 0° 11' 59"± LEFT FORWARD
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81, 20'-0"± LONG
ALIGNMENT: TANGENT
CROWN: 3/16"/FT
STRUCTURE FILE NUMBER: 7700156
DATE BUILT: 1954, REHAB: 1982 & 2004
DISPOSITION: TO BE RESURFACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN STEEL GIRDER WITH RESURFACED COMPOSITE REINFORCED CONCRETE DECK ON SEMI-INTEGRAL ABUTMENTS

SPAN: EXISTING
ROADWAY: EXISTING
LOADING: HL93 AND 0.06 KSF FUTURE WEARING SURFACE
SKEW: EXISTING
WEARING SURFACE: VARIABLE SUPERPLASTICIZED CONCRETE OVERLAY
APPROACH SLABS: 20'-0"± LONG, MATCH EXISTING (AS-1-81)
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
DECK AREA: 6378 SF

COORDINATES: LATITUDE 41° 06' 16.2" N
LONGITUDE 81° 30' 13.0" W

SITE PLAN - NORTHBOUND
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
2	38

SHEET	TOTAL
P.378	627

SUM-077/008-11.65/00.00

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: BLP_NB SR8 - Plan 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:32:11 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SP002

REFERENCED STANDARD DRAWINGS

AS-1-81	______	REVISED 04-20-2001
GSD-1-19	______	REVISED 07-19-2024
SBR-1-20	______	REVISED 07-19-2024
SICD-1-21	______	REVISED 01-19-2024
SICD-2-14	______	REVISED 01-15-2021
PCB-91	______	REVISED 07-17-2020
RM-4.2	______	REVISED 07-18-2025
HL-30.32	______	REVISED 04-17-2020
HL-50.21	______	REVISED 07-15-2022

REFERENCED SUPPLEMENTAL SPECIFICATIONS

800	______	DATED 01-16-2026
848	______	DATED 07-19-2024

DESIGN SPECIFICATIONS

THE NEW SUPERSTRUCTURE, BEARINGS, AND ABUTMENTS CONFORM TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS", ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 (TENTH EDITION), AND THE ODOT BRIDGE DESIGN MANUAL, 2020.
NO SPECIAL DESIGN SPECIFICATIONS WERE USED.

LRFD OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 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, 2020.

DESIGN LOADING

EXISTING SUBSTRUCTURE (1953)
VEHICULAR LIVE LOAD: CF 1000 (57)
NO FUTURE WEARING SURFACE (FWS)

EXISTING SUPERSTRUCTURE AND EXISTING SUBSTRUCTURE (2001)
VEHICULAR LIVE LOAD SUPERSTRUCTURE: HS20-44 CASE I AND ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

PROPOSED SUPERSTRUCTURE AND PROPOSED SUBSTRUCTURES
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

PRIMARY PROPOSED WORK

1. ALL WORK SHALL BE PERFORMED WITHIN RESPECTIVE PHASES OF CONSTRUCTION AS SHOWN IN THE PLANS.
2. REMOVE PORTIONS OF EXISTING SUBSTRUCTURE AND SUPERSTRUCTURE TO THE LIMITS SHOWN IN PLANS, AND REBUILD AND WIDEN THE SUBSTRUCTURE TO ACCOMMODATE THE NEW, WIDER SUPERSTRUCTURES.
3. ADD 1 NEW GIRDER LINE AND INSTALL NEW ELASTOMERIC BEARINGS AT ALL SUBSTRUCTURES FOR THE NEW STEEL GIRDERS AND PAINT.
4. REMOVE PORTIONS OF EXISTING APPROACH SLABS AS SHOWN IN PLANS AND INSTALL NEW WIDENED APPROACH SLABS (20' LONG).
5. REMOVE AND RESURFACE DECK LIMITS AS SHOWN IN PLANS.

DESIGN DATA

CONCRETE
SUBSTRUCTURE (NEW), CLASS QC1: F'c = 4.0 KSI
SUPERSTRUCTURE (NEW), CLASS QC2: F'c = 4.5 KSI
SUBSTRUCTURE (EX), CLASS C (1953), CLASS HP (2001): F'c = 4.0 KSI
SUPERSTRUCTURE (EX), CLASS HP (2001): F'c = 4.5 KSI

STEEL
STRUCTURAL STEEL (NEW), ASTM A709 (GRADE 50): F_Y = 50 KSI
REINFORCING (NEW), MINIMUM F_Y = 60 KSI
STRUCTURAL STEEL (EX), F_Y = 33 KSI (1953), A572/A709 (GRADE 50): F_Y = 50 KSI
REINFORCING (EX), ASTM A615 OR A996 (GRADE 60) (2011): F_Y = 60 KSI

DECK PROTECTION METHODS

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
CLASS QC2 CONCRETE
SEALING OF CONCRETE SURFACES
SUPERPLASTICIZED DENSE CONCRETE OVERLAY

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

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 CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS

BEFORE DECK SLAB CUTTING IS PERMITTED AT THE CUTLINE, DRAW THE OUTLINE OF GIRDER A ON THE SURFACE OF THE DECK. DRILL SMALL DIAMETER PILOT HOLES 2" OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF THE GIRDER FLANGE EDGES. DECK CUTS OVER OR WITHIN 2" OF THE GIRDER FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2" OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. REMOVAL METHODS AROUND GIRDER A SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING OF THE PRIMARY STRUCTURAL MEMBER.

PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE FOR MAINTAINING TRAFFIC. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, TO THE ENGINEER. OBTAIN ENGINEER'S APPROVAL BEFORE PERFORMING THE REPAIRS.

REMOVAL METHODS

THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM, STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS

IF THE CONTRACTOR'S DECK DEMOLITION ENGINEERED DRAWINGS SHOW REMOVAL OF THE EXISTING DECK OVER AN EXISTING GIRDER, REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

SUBSTRUCTURE CONCRETE REMOVAL

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

CUT LINE CONSTRUCTION JOINT PREPARATION

SAWCUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIALS BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

MEASUREMENT & PAYMENT

THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

FOUNDATION BEARING RESISTANCE

ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 10.0 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 15.1 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 56.7 KIPS PER SQUARE FOOT.

DECK PLACEMENT DESIGN 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 WITH A MAXIMUM WHEEL LOAD OF 2.2 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

FOOTINGS

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER.

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

ASBESTOS NOTIFICATION (CONT.)

THE FORM SHALL INCLUDE:
1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 – PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN 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.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

A QUANTITY OF 300 POUNDS HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO CMS 709.00.

ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT CONCRETE REINFORCEMENT BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING STEEL REINFORCEMENT BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW CONCRETE REINFORCEMENT OF THE SAME SIZE, COATING, AND MATERIAL AT NO COST TO THE DEPARTMENT.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

DOWEL HOLES FOR #5 REINFORCING SHALL BE 7/8" DIAMETER AND A MINIMUM OF 12" DEEP. DOWEL HOLES FOR #6 REINFORCING SHALL BE 1" DIAMETER AND A MINIMUM OF 15" DEEP. DOWEL HOLES FOR #8 REINFORCING SHALL BE 1.25" DIAMETER AND A MINIMUM OF 18" DEEP. DOWEL HOLES FOR #9 REINFORCING SHALL BE 1.5" DIAMETER AND A MINIMUM OF 22" DEEP. DOWEL HOLES FOR #10 REINFORCING SHALL BE 1.75" DIAMETER AND A MINIMUM OF 25" DEEP. PRIOR TO DRILLING HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AIDE OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. THE DEPARTMENT WILL PAY FOR DOWEL HOLES AND GROUTING WITH ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN.

FINAL NOT FOR CONSTRUCTION

GENERAL NOTES (1 OF 4)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
3	38

SHEET	TOTAL
P.379	627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:32:31 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SN001

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG
SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:32:42 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SN002

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN

IN ADDITION TO THE BRIDGE DECK PARAPETS, THE DEPARTMENT WILL PAY FOR CONCRETE PARAPETS ON THE APPROACH SLABS WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN.

AS PART OF CONSTRUCTING THE BRIDGE AND APPROACH SLAB PARAPETS, FURNISH AND INSTALL 4" DIAMETER CONDUITS, COUPLINGS, AND FITTINGS, FROM PULL BOX TO PULL BOX AS SHOWN IN THE PLANS. FURNISH AND INSTALL THE CONDUIT, COUPLINGS, AND FITTINGS AS PER CMS 625.

THE DEPARTMENT WILL PAY FOR FURNISHING AND INSTALLING THE 4" DIAMETER CONDUITS, COUPLINGS, AND FITTINGS WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN.

THE DEPARTMENT WILL PAY FOR FURNISHING AND INSTALLING THE PULL BOXES WITH ITEM 625 - PULL BOX IN THE ROADWAY QUANTITIES.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN

PERFORM THE WORK PER C&MS 513, EXCEPT AS NOTED BELOW. SELECT ONE OF THE TWO OPTIONS DESCRIBED BELOW:

1. GALVANIZE AND SHOP PAINT EXTERIOR FASCIA GIRDER
2. METALIZE AND SHOP PAINT EXTERIOR FASCIA GIRDER

1.0 OPTION 1: SHOP GALVANIZING AND SHOP PAINTING OF FASCIA GIRDER

SHOP GALVANIZE ALL STRUCTURAL STEEL SURFACES AS DETAILED IN THESE PLANS, INCLUDING BUT NOT LIMITED TO GIRDER, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, AND BEARING LOAD PLATES.

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZE ALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HEREIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CONSTRUCTION AND MATERIAL SPECIFICATION 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATINGS SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS OF THIS SPECIFICATION. SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

SHEAR STUDS SHALL BE INSTALLED AS PER SECTION 513.22.

1.1 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL SPECIALIST, (QCS), AND GALVANIZER'S QCS COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THIS SPECIFICATION.

1.2 QUALITY CONTROL

1.2.1 QUALITY CONTROL SPECIALIST

THE GALVANIZER'S QCS (QUALITY CONTROL SPECIALIST) REQUIRED UNDER 514, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE QCS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN 514.05.

1.2.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCS AND THE DEPARTMENT'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE DEPARTMENT'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK. DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE DEPARTMENT TO FINAL ACCEPTANCE.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

QUALITY CONTROL POINTS	
QUALITY CONTROL POINTS (QCP)	PURPOSE
A. SOLVENT CLEANING	REMOVE ASPHALTIC CEMENT, OIL, GREASE, SALT, DIRT, ETC.
B. GRINDING EDGES	REMOVE SHARP CORNERS PER AWS.
C. ABRASIVE BLASTING	BLAST SURFACES, INCLUDING REPAIR FINS, TEARS, SLIVERS OR SHARP EDGES.
D. GALVANIZING	CHECK COATING THICKNESS.
E. PAINTING SURFACE CLEANING	CHECK PAINT SURFACE ROUGHNESS. CHECK FOR HOLE CLEARANCE. CHECK FOR OTHER FIELD CONNECTIONS UNIFORM COATING THICKNESS.
F. SECOND /AX (QCP)	CHECK SWEEP AND CAMBER TOLERANCES OF EACH STRUCTURAL MEMBER.
G. FIELD REPAIR OF DAMAGED AREAS	CHECK FOR DAMAGE AREAS AFTER ERECTION OF STRUCTURE. PERFORM DAMAGE REPAIRS.
H. FINAL REVIEW	CLEAN STRUCTURE AS PER QCP #1. VISUALLY INSPECT SYSTEM FOR ACCEPTANCE.

1.2.2.A. SOLVENT CLEANING (QCP #1)

THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSC-SP 1 SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLAST CLEANING BEGINS. THE GALVANIZER'S QCS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SP 1 AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.B. GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN 1 1/2 INCH MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT AFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.C. ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE GALVANIZER'S QCS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

ALL FINS, TEARS, SLIVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE 513 FABRICATOR.

THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP 6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.2.2.D. GALVANIZING (QCP #4)

GALVANIZED PER 711.02 AND THIS SPECIFICATION. COATING THICKNESS MUST BE A MINIMUM OF 4 MILS MEASURED AS SPECIFIED.

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE FABRICATOR, GALVANIZER AND ERECTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. PRIOR TO GALVANIZING, SURFACE IMPERFECTIONS MAY BE REPAIRED BY THE FABRICATOR IN CONFORMANCE WITH ASTM A6. IMPERFECTIONS GREATER THAN THE LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE DEPARTMENT.
ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.
DOCUMENTATION OF COATING THICKNESS MUST BE PERFORMED BY THE GALVANIZER'S QCS. THE GALVANIZER'S QCS MUST RECORD THE GAGE READINGS AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.E. FAYING SURFACE CLEANING (QCP #5)

AREAS OF FIELD CONNECTIONS MUST HAVE A UNIFORM GALVANIZED COATING THICKNESS FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT SPLICE PLATES, BEARINGS OR OTHER FIELD CONNECTIONS FROM MAKING INTIMATE CONTACT.

FAYING SURFACES OF THE BOLTED SPLICES MUST BE ROUGHENED IN THE SHOP AFTER GALVANIZING BY HAND WIRE BRUSHING. POWER WIRE BRUSHING IS NOT PERMITTED. ALL FIELD SPLICE BOLT HOLES MUST BE FREE OF ZINC BUILD UP. AFTER GALVANIZING, CLEAN EACH HOLE AS NECESSARY SO THAT A DRIFT PIN 1/16" LESS THAN THE DIAMETER OF THAT HOLE CAN BE FULLY INSERTED. CONSIDERATION WILL BE GIVEN TO OTHER METHODS OF TREATING THE FAYING SURFACES AND BOLT HOLES IF A WRITTEN REQUEST IS SUBMITTED TO THE OFFICE OF MATERIAL MANAGEMENT (OMM) IN ACCORDANCE WITH C&MS 108.05.

INSPECTION OF THE ROUGHENING OF THE FAYING SURFACES AND CHECKING OF HOLES WITH DRIFT PINS MUST BE PERFORMED BY THE GALVANIZER'S QCS. ACCEPTANCE OF THE FAYING SURFACES AND HOLES SHALL BE DOCUMENTED BY THE GALVANIZER'S QCS.

1.2.2.F. SECOND LAY DOWN (QCP #6)

AFTER GALVANIZING, MATERIALS MUST BE PLACED IN A SECOND SHOP ASSEMBLY PER C&MS SECTION 513.24 TO CHECK ALIGNMENT OF HOLES, SWEEP AND CAMBER AGAINST THE FABRICATORS ORIGINAL RECORDED LAY DOWN DIMENSIONS. THIS SHOP ASSEMBLY MAY BE PERFORMED AT THE GALVANIZER'S FACILITY, BY THE FABRICATORS PERSONNEL, IF APPROVED BY THE OFFICE OF MATERIAL MANAGEMENT (OMM). THE SECOND LAY DOWN MAY BE WAIVED BY THE OMM IF THE FABRICATOR RECORDS INDIVIDUAL GIRDER CAMBERS AND SWEEPS DURING THE FIRST LAY DOWN, AND THE NEW INDIVIDUAL GIRDER CAMBERS AND SWEEPS, AFTER GALVANIZING, COMPARED TO THE FIRST LAY DOWN ARE WITHIN THE FOLLOWING TOLERANCES:

BEARING POINTS AFTER GALVANIZING MUST BE WITHIN ⅛ INCH OF THE APPROVED SHOP DRAWING LAY DOWN.

CAMBER POINTS AFTER GALVANIZING MUST BE + ¼" OR - 0 INCH FROM THE FIRST LAY DOWN.

SWEEP POINTS AFTER GALVANIZING MUST BE ⅜" FROM THE FIRST LAY DOWN.

INDIVIDUAL GIRDERS THAT EXCEED THE LISTED TOLERANCES MUST BE PLACED WITH AT LEAST TWO ADJACENT GIRDERS IN LAY DOWN FOR CHECKING AGAINST THE RECORDED SHOP ASSEMBLY RECORDS PER 513.24. DOCUMENTATION OF THE SECOND LAY DOWN OR INDIVIDUAL MEMBER CAMBERS MUST BE RECORDED BY THE FABRICATOR'S QCS OR GALVANIZER'S QCS PER 513.24.

1.2.2.G. FIELD REPAIR OF DAMAGED AREAS (QCP #7)

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE CONTRACTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. IMPERFECTIONS MAY BE REPAIRED BY GRINDING AS ALLOWED BY ASTM A6 BY THE CONTRACTOR. IMPERFECTIONS THAT ARE GREATER THAN THE GRINDING LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE OMM.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DAMAGED GALVANIZING WHICH WILL BE INACCESSIBLE FOR REPAIR AFTER ERECTION MUST BE REPAIRED PRIOR TO ERECTION.

IN ORDER TO MINIMIZE DAMAGE TO THE GALVANIZED STEEL, CONCRETE SPLATTER AND FORM LEAKAGE MUST BE WASHED FROM THE SURFACE OF THE STEEL SHORTLY AFTER THE CONCRETE IS PLACED AND BEFORE IT IS DRY. IF THE CONCRETE DRIES, IT MUST BE REMOVED.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.2.2.G. FIELD REPAIR OF DAMAGED AREAS (QCP #7) (CONT.)

TEMPORARY ATTACHMENTS, SUPPORTS FOR SCAFFOLDING AND FINISHING MACHINE OR FORMS MUST NOT DAMAGE THE COATING SYSTEM. IN PARTICULAR, SUFFICIENT SIZE SUPPORT PADS MUST BE USED ON THE FASCIAS WHERE BRACING IS USED.

DOCUMENTATION OF GALVANIZING REPAIRS MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.H. FINAL REVIEW (QCP #8)

AFTER THE ERECTION WORK HAS BEEN COMPLETED, INCLUDING ALL CONNECTIONS AND THE APPROVED REPAIR OF ANY DAMAGED GIRDER, GIRDERS OR OTHER STEEL MEMBERS, AND THE DECK HAS BEEN PLACED, THE CONTRACTOR AND ENGINEER MUST INSPECT THE STRUCTURE FOR DAMAGED COATING. (QCP #8). DAMAGED AREAS MUST BE REPAIRED BY QCP #7. AT THE COMPLETION OF CONSTRUCTION, THE GALVANIZING MUST BE UNDAMAGED AND THE SURFACES FREE FROM GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPLATTER OR OTHER SILAGE. SUCH SILAGE WILL BE REMOVED BY SOLVENT CLEANING PER SSPC-SP1 (QCP #1).

DOCUMENTATION OF FINAL REVIEW MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.3 TESTING EQUIPMENT

THE FABRICATOR MUST PROVIDE THE GALVANIZER'S QCS INSPECTOR THE FOLLOWING TESTING EQUIPMENT IN GOOD WORKING ORDER FOR THE DURATION OF THE PROJECT.
ONE (POSITECTOR 2000 OR 6000, QUANIX 2200, OR ELCOMETER A345FBI1) AND THE CALIBRATION PLATES, 38-200 MM AND 250-625 MM [1.5-8 MILS AND 10-25 MILS] AS PER THE NBS CALIBRATION STANDARDS IN ACCORDANCE WITH ASTM D-1186.

1.4 COATING THICKNESS

GALVANIZED THICKNESS MUST BE DETERMINED BY USE OF TYPE 2 MAGNETIC GAGE IN ACCORDANCE WITH THE FOLLOWING:

FIVE SEPARATE SPOT MEASUREMENTS MUST BE MADE, SPACED EVENLY OVER ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF SURFACE AREA ON EACH STRUCTURAL MEMBER. THREE GAGE READINGS MUST BE MADE FOR EACH SPOT MEASUREMENT. THE PROBE MUST BE MOVED A DISTANCE OF 1 TO 3 INCHES FOR EACH NEW GAGE READING. ANY UNUSUALLY HIGH OR LOW GAGE READING THAT CANNOT BE REPEATED CONSISTENTLY MUST BE DISCARDED. THE AVERAGE (MEAN) OF THE 3 GAGE READINGS MUST BE USED AS THE SPOT MEASUREMENT. THE AVERAGE OF FIVE SPOT MEASUREMENTS FOR EACH SUCH 100 SQUARE FOOT AREA MUST NOT BE LESS THAN THE SPECIFIED THICKNESS. NO SINGLE SPOT MEASUREMENT IN ANY 100 SQUARE FOOT AREA MUST BE LESS THAN 80% OF THE SPECIFIED MINIMUM THICKNESS. ANY ONE OF 3 READINGS WHICH ARE AVERAGED TO PRODUCE EACH SPOT MEASUREMENT, MAY UNDER-RUN OR OVER-RUN BY A GREATER AMOUNT. THE 5 SPOT MEASUREMENTS MUST BE MADE FOR ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF AREA ON EACH STRUCTURAL MEMBER. ALL SPLICE MATERIAL AND SECONDARY MEMBERS MUST HAVE AT LEAST ONE SPOT MEASURED ON EACH PIECE. THE PROBE MUST BE MOVED SO THAT ONE READING IS TAKEN AT EACH END AND MIDDLE OF THE PIECE FOR A TOTAL OF THREE READINGS.

THE GALVANIZER'S QCS MUST INSPECT AND PROVIDE DOCUMENTATION OF ACTUAL DATA, THE GALVANIZED THICKNESS CHECKS WERE PERFORMED PER SPECIFICATION, AND THE COATING THICKNESS MEETS SPECIFICATION REQUIREMENTS.

1.5 SHOP PAINTING OF EXTERIOR FASCIA GIRDER
AFTER GALVANIZATION, REMOVE ZINC HIGH SPOTS SUCH AS META DRIP LINE AND OTHERS THAT WOULD DETRACT FROM THE PAINT APPEARANCE BY SSPC SP2 OR SP3. TAKE CARE THAT THE BASE GALVANIZED COATING IS NOT REMOVED. CHECK REPAIRED AREAS FOR REQUIRED COATING THICKNESS.

AFTER REMOVING HIGH SPOTS, CLEAN THE GALVANIZED COATING ACCORDING TO SSPC SP-1. THE CLEANING SOLUTION SHALL BE AN ALKALINE SOLUTION WITH A PH RANGING FROM A MINIMUM OF 11 TO A MAXIMUM OF 12. THIS SOLUTION CAN BE APPLIED BY IMMERSION, SPRAY OR SOFT NYLON BRUSH. FOLLOW CLEANING WITH A HOT WATER OR HOT PRESSURE WASHER RINSE. SEPARATE INDIVIDUAL PIECES AND POSITION TO FACILITATE DRAINAGE AND DRYING. THE PIECES SHALL BE COMPLETELY DRY BEFORE PROCEEDING.

FINAL NOT FOR CONSTRUCTION

GENERAL NOTES (2 OF 4)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
4	38

SHEET	TOTAL
P.380	627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:32:51 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SN003.dgn

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.5 SHOP PAINTING OF EXTERIOR FASCIA GIRDER (CONT.)

AFTER CLEANING, ABRASIVE BLAST THE PIECES ACCORDING TO SSPC-SP7 BRUSH-OFF BLAST CLEANING. THE BLASTING OPERATION SHALL ROUGHEN THE GALVANIZED SURFACE TO AN ANGULAR SURFACE PROFILE OF 0.75 TO 1.00 MILS. SELECT THE BLASTING EQUIPMENT TECHNIQUE AND ABRASIVE MATERIAL TO PROVIDE FOR THE SPECIFIED SURFACE PROFILE WITHOUT REMOVAL OF EXCESSIVE ZINC LAYERS. THE AMOUNT OF REMOVAL OF ZINC MILLAGE SHALL NOT EXCEED 1.0 MIL. REMOVE ALL ABRASIVE RESIDUE WITH CLEAN COMPRESSED AIR OR OTHER METHODS ACCEPTABLE TO THE DEPARTMENT BRUSH-OFF BLAST CLEANING SHALL BE PERFORMED IN THE FIELD AFTER OBTAINING SURFACE PROFILE, FIELD APPLY A TWO COAT PAINT SYSTEM CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT. MEETING THE REQUIREMENTS OF C&MS 708.02 TO THE LIMITS SHOWN BELOW. APPLY THE EPOXY COATING WITHIN 24 HOURS OF THE BRUSH-OFF BLASTING.

FOR THE URETHANE FINISH COAT, USE SEAL BROWN, NASA SAFETY BROWN AMS STANDARD 595A 10080.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH EXTERIOR FASCIA GIRDER AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA GIRDER).

1.6 HANDLING AND SHIPPING

REASONABLE CARE MUST BE EXERCISED IN HANDLING THE GALVANIZED STEEL DURING SHIPPING, ERECTION, AND SUBSEQUENT CONSTRUCTION OF THE BRIDGE. THE STEEL MUST BE INSULATED FROM THE BINDING CHAINS BY SOFTENERS. HOOKS AND SLINGS USED TO HOIST STEEL MUST BE PADDED. DIAPHRAGMS AND SIMILAR PIECES MUST BE SPACED IN SUCH A WAY THAT NO RUBBING WILL OCCUR DURING SHIPMENT THAT MAY DAMAGE THE GALVANIZING. THE STEEL MUST BE STORED ON PALLETS AT THE JOB SITE, OR BY OTHER MEANS, SO THAT IT DOES NOT REST ON THE GROUND OR SO THAT COMPONENTS DO NOT FALL OR REST ON EACH OTHER.

1.7 SAFETY REQUIREMENT AND PRECAUTIONS

THE CONTRACTOR MUST MEET THE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), IN ADDITION TO THE SCAFFOLDING REQUIREMENTS BELOW.

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION IN ADDITION TO THE SCAFFOLDING REQUIREMENTS SPECIFIED BELOW.

1.8 SCAFFOLDING

RUBBER ROLLERS, OR OTHER PROTECTIVE DEVICES MEETING THE APPROVAL OF THE ENGINEER, MUST BE USED ON SCAFFOLD FASTENINGS. METAL ROLLERS OR CLAMPS AND OTHER TYPES OF FASTENINGS WHICH WILL MAR OR DAMAGE COATED SURFACES MUST NOT BE USED.

1.9 INSPECTION ACCESS FOR FIELD REPAIR

IN ADDITION TO THE REQUIREMENT OF 105.10, THE CONTRACTOR MUST FURNISH, ERECT, AND MOVE SCAFFOLDING AND OTHER APPROPRIATE EQUIPMENT, TO PERMIT THE INSPECTOR THE OPPORTUNITY TO INSPECT CLOSELY OBSERVE, ALL AFFECTED SURFACES. THIS OPPORTUNITY MUST BE PROVIDED TO THE INSPECTOR DURING ALL PHASES OF THE WORK AND CONTINUE FOR A PERIOD OF AT LEAST TEN (10) WORKING DAYS AFTER THE TOUCH-UP WORK HAS BEEN COMPLETED. WHEN SCAFFOLDING IS USED, IT MUST BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS. WHEN SCAFFOLDING, OR THE HANGERS ATTACHED TO THE SCAFFOLDING ARE SUPPORTED BY HORIZONTAL WIRE ROPES, OR WHEN SCAFFOLDING IS PLACED DIRECTLY UNDER THE SURFACE TO BE PAINTED, THE FOLLOWING REQUIREMENTS MUST BE COMPLIED WITH:

WHEN SCAFFOLDING IS SUSPENDED 43" OR MORE BELOW THE COATED SURFACE TO BE REPAIRED, TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING. ONE ROW OF GUARDRAIL MUST BE PLACED AT 42" ABOVE THE SCAFFOLDING AND THE OTHER ROW AT 20" ABOVE THE SCAFFOLDING.

WHEN THE SCAFFOLDING IS SUSPENDED AT LEAST 21", BUT LESS THAN 43" BELOW THE COATED SURFACE TO BE REPAIRED, A ROW OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING AT 20" ABOVE THE SCAFFOLDING.

TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF SCAFFOLDING NOT PREVIOUSLY MENTIONED. THE ROWS OF GUARDRAIL MUST BE PLACED AT 42" AND 20" ABOVE SCAFFOLDING, AS PREVIOUSLY MENTIONED.

ALL SCAFFOLDING MUST BE AT LEAST 24" WIDE WHEN GUARDRAIL IS USED AND 28" WIDE WHEN THE SCAFFOLDING IS SUSPENDED LESS THAN 21" BELOW THE COATED SURFACE TO BE REPAIRED AND GUARDRAIL IS NOT USED. IF TWO OR MORE SCAFFOLDING ARE LAID PARALLEL TO ACHIEVE THE PROPER WIDTH, THEY MUST BE RIGIDLY ATTACHED TO EACH OTHER TO PRECLUDE ANY DIFFERENTIAL MOVEMENT.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.9 INSPECTION ACCESS FOR FIELD REPAIR (CONT.)

ALL GUARDRAILS MUST BE CONSTRUCTED AS A SUBSTANTIAL BARRIER WHICH IS SECURELY FASTENED IN PLACE AND IS FREE FROM PROTRUDING OBJECTS SUCH AS NAILS, SCREWS AND BOLTS. THERE MUST BE AN OPENING IN THE GUARDRAIL, PROPERLY LOCATED, TO ALLOW THE INSPECTOR ACCESS ONTO THE SCAFFOLDING.

THE RAILS AND UPRIGHTS MUST BE EITHER METAL OR WOOD. IF PIPE RAILING IS USED, THE RAILING MUST HAVE A NOMINAL DIAMETER OF NO LESS THAN ONE AND ONE HALF INCHES. IF STRUCTURAL STEEL RAILING IS USE, THE RAILS MUST BE 2 X 2 X 3/8 INCH STEEL ANGLES OR OTHER METAL SHAPES OF EQUAL OR GREATER STRENGTH. IF WOOD RAILING IS USED, THE RAILING MUST BE 2 X 4 INCH (NOMINAL) STOCK. ALL UPRIGHTS MUST BE SPACED AT NO MORE THAN 8 FEET ON CENTER. IF WOOD UPRIGHTS ARE USED, THE UPRIGHTS MUST BE 2 X 4 INCHES (NOMINAL) STOCK.

WHEN THE SURFACE TO BE INSPECTED IS MORE THAN 15 FEET ABOVE THE GROUND OR WATER, AND THE SCAFFOLDING IS SUPPORTED FROM THE STRUCTURE BEING PAINTED, THE CONTRACTOR MUST PROVIDE THE INSPECTOR WITH A SAFETY BELT AND LIFELINE. THE LIFELINE MUST NOT ALLOW A FALL GREATER THAN 6 FEET. THE CONTRACTOR MUST PROVIDE A METHOD OF ATTACHING THE LIFELINE TO THE STRUCTURE INDEPENDENT OF THE SCAFFOLDING, CABLES, OR BRACKETS SUPPORTING THE SCAFFOLDING.

WHEN SCAFFOLDING IS MORE THAN TWO AND ONE HALF FEET ABOVE THE GROUND, THE CONTRACTOR MUST PROVIDE A LADDER FOR ACCESS ONTO THE SCAFFOLDING. THE LADDER AND ANY EQUIPMENT USED TO ATTACH THE LADDER TO THE STRUCTURE MUST BE CAPABLE OF SUPPORTING 250 POUNDS WITH A SAFETY FACTOR OF AT LEAST FOUR (4). ALL RUNGS, STEPS, CLEATS, OR TREADS MUST HAVE UNIFORM SPACING AND MUST NOT EXCEED 12" ON CENTER. AT LEAST ONE SIDE RAIL MUST EXTEND AT LEAST 36" ABOVE THE LANDING NEAR THE TOP OF THE LADDER.

AN ADDITIONAL LANDING MUST BE REQUIRED WHEN THE DISTANCE FROM THE LADDER TO THE POINT WHERE THE SCAFFOLDING MAY BE ACCESSED, EXCEEDS 12". THE LANDING MUST BE A MINIMUM OF AT LEAST 24" WIDE AND 24" LONG. IT MUST ALSO BE OF ADEQUATE SIZE AND SHAPE SO THAT THE DISTANCE FROM THE LANDING TO THE POINT WHERE THE SCAFFOLDING IS ACCESSD DOES NOT EXCEED 12". THE LANDING MUST BE RIGID AND FIRMLY ATTACHED TO THE LADDER; HOWEVER, IT MUST NOT BE SUPPORTED BY THE LADDER. THE SCAFFOLDING MUST BE CAPABLE OF SUPPORTING A MINIMUM OF 1000 LBS.

IN ADDITION TO THE AFOREMENTIONED REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE TO OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES.

THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC CONTROL TO PERMIT INSPECTION DURING AND AFTER ALL PHASES OF THE PROJECT.

1.10 PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR MUST INSTALL AND MAINTAIN SUITABLE SHIELDS OR ENCLOSURES TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS, TRUCKS, BOATS, OR VEHICLES TRAVELLING ON, OVER, OR UNDER STRUCTURES HAVING GALVANIZED REPAIRS. THEY MUST BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATIONS IN THE OPEN LANES. PAYMENT FOR THE SHIELDS MUST BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING OPERATION. WORK MUST BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, MOTOR VEHICLES, BOATS, OR OTHER PROPERTY IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR MUST RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY, TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE.

1.11 POLLUTION CONTROL

THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL AGENCIES.

2.0 OPTION 2: SHOP METALIZING AND SHOP PAINTING OF EXTERIOR FASCIA GIRDERS

DELETE THE REQUIREMENTS OF 513.27. SHOP METALIZE ALL STRUCTURAL STEEL SURFACES PER SUPPLEMENTAL SPECIFICATION (SS) 845, INCLUDING BUT NOT LIMITED TO GIRDERS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, AND BEARING LOAD PLATES, EXCEPT DO NOT METALIZE THE TOP SURFACE OF GIRDER TOP FLANGES. APPLY A PRIME COAT, 708.01, IN THE SHOP TO THE TOP SURFACE OF GIRDER TOP FLANGES. THE PRIME COAT SHALL BE A MIST COATING FROM 0.5 TO 1.5 MILS.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO EXTERIOR FASCIA GIRDER, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA GIRDER).

FOR THE URETHANE FINISH COAT, USE SEAL BROWN, NASA SAFETY BROWN AMS STANDARD 595A 10080.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

2.0 OPTION 2: SHOP METALIZING AND SHOP PAINTING OF EXTERIOR FASCIA GIRDER (CONT.)

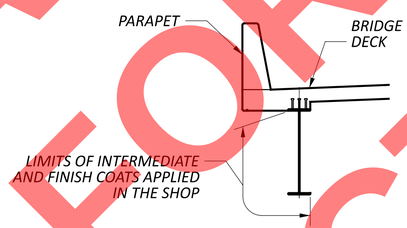
REPAIR DAMAGE TO THE METALIZING CAUSED DURING STORAGE, TRANSPORTATION, ERECTION, BOLTING, WELDING, FORMING, CONCRETE PLACEMENT, AND FORM REMOVAL OPERATION, ACCORDING TO C&MS 711.02. REPAIR DAMAGE TO THE GALVANIZED COATING ON THE NUTS, BOLTS, AND WASHERS, IN THE FIELD DUE TO THE BOLT TIGHTENING OPERATIONS, ACCORDING TO C&MS 711.02. EXERCISE EXTREME CARE WHILE HANDLING THE STEEL DURING ERECTION, AND DURING SUBSEQUENT CONSTRUCTION OF THE BRIDGE. INSULATE THE STEEL FROM THE BINDING CHAINS BY SOFTENERS AND PAD ALL HOOKS AND SLINGS THAT ARE USED TO HOIST/ERECT THE STEEL MEMBERS.

3.0 METHOD OF MEASUREMENT

THE COST OF ALL LABOR, MATERIALS, EQUIPMENT NECESSARY TO GALVANIZE OR METALIZE, FABRICATE THE STRUCTURAL STEEL IN ACCORDANCE WITH 513, APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE LIMITS OF FASCIA GIRDER PAINTING DETAIL, AND PERFORM ANY NECESSARY FIELD REPAIR SHALL BE INCLUDED IN THIS 513, AS PER PLAN ITEM.

4.0 BASIS OF PAYMENT

PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN.



LIMITS OF EXTERIOR FASCIA GIRDER PAINTING

ITEM 514 - FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN

STRUCTURAL STEEL ON THE EXISTING FASCIA GIRDER THAT WILL INCUR DAMAGE DUE TO WELDING OF PROPOSED CONNECTION PLATES SHALL BE REPAIRED AND PAINTED IN ACCORDANCE WITH CMS 514.22.

THE FINISH COAT COLOR ON THE EXISTING FASCIA GIRDER FOR AFFECTED STRUCTURAL STEEL SHALL BE SEAL BROWN, NASA SAFETY BROWN AMS-595A-10080.

PAYMENT WILL BE MADE AT THE CONTRACT LUMP SUM PRICE FOR THE ITEM 514, FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN.

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN, (VARIABLE THICKNESS)

SUPERPLASTICIZED DENSE CONCRETE OVERLAY SHALL BE PLACED TO THE ELEVATIONS SHOWN IN THE PLANS.

SUGGESTED SEQUENCE OF CONSTRUCTION

(SEE PHASED CONSTRUCTION DETAILS SHEETS 8/38 THRU 9/38)

PHASE 1

1. INSTALL PORTABLE CONCRETE BARRIERS AS SHOWN ON FOR PHASE 1 AND SHIFT TRAFFIC AS SHOWN.

NO WORK WILL BE PERFORMED ON BRIDGE IN PHASE 2A.

PHASE 2B

1. REMOVE PORTIONS OF EXISTING DECK TO THE LIMITS SHOWN.
2. HYDRODEMOLITION EXISTING 1" OF DECK TO THE LIMITS SHOWN.
2. INSTALL TEMPORARY SHORING AS SHOWN IN TEMPORARY SHORING DETAILS.
3. REMOVE PORTIONS OF REAR AND FORWARD APPROACH SLAB, ABUTMENT WINGWALL, AND DIAPHRAGM AS SHOWN IN ABUTMENT REMOVAL SHEETS.
4. CONSTRUCT WIDENED ABUTMENTS AS SHOWN ON ABUTMENT WIDENING PLAN AND ELEVATION SHEETS.
5. ERECT NEW BEAMS, BEARINGS, AND CROSSFRAMES AS SHOWN IN PHASE 2B CONSTRUCTION.
6. CONSTRUCT NEW WIDENED DECK, PARAPETS, AND APPROACH SLABS.
7. RESURFACE DECK TO LIMITS SHOWN.

PHASE 3

8. SHIFT PORTABLE CONCRETE BARRIER AS SHOWN.
9. REMOVE 1" OF DECK AND RESURFACE TO THE LIMITS SHOWN.

PHASE 4

10. SHIFT PORTABLE CONCRETE BARRIER AS SHOWN.
11. REMOVE 1" OF DECK AND RESURFACE TO THE LIMITS SHOWN.

FINAL PLANS NOT FOR CONSTRUCTION

GENERAL NOTES (3 OF 4)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
5	38

SHEET	TOTAL
P.381	627

STANDARD PLAN ABBREVIATIONS AND SYMBOLS

ABUT = ABUTMENT
ADT = AVERAGE DAILY TRAFFIC
ADTT = AVERAGE DAILY TRUCK TRAFFIC
APP or APPR = APPROACH
APPROX. = APPROXIMATE
AVE = AVENUE

(G#) = PROPOSED GIRDER NUMBER

BF = BOTTOM FLANGE
BM = BENCHMARK
BOT = BOTTOM
BRG = BEARING
BTWN = BETWEEN
C.B. = CHORD BEARING
C/C = CENTER TO CENTER
CB = CATCH BASIN
CCTV = CLOSED CIRCUIT TELEVISION
CIP = CAST IN PLACE
CJ = CONSTRUCTION JOINT
CJ-O = OPTIONAL CONSTRUCTION JOINT
CLR = CLEAR
CMP = CORRUGATED METAL PIPE
CMS = CONSTRUCTION MATERIAL SPECIFICATIONS
CONST = CONSTRUCTION
CP = COVER PLATE
CSP/N = CORRUGATED STEEL PIPE (NON-PERFORATED)
CSP/P = PERFORATED CORRUGATED STEEL PIPE
CVN = CHARPY V-NOTCH
DIA = DIAMETER
DND = DO NOT DISTURB
DPRM = DIAPHRAGM
DWG = DRAWING
E/P = EDGE OF PAVEMENT
E/S = EDGE OF SHOULDER
EB = EASTBOUND
EF = EACH FACE
ELEC = ELECTRIC
ELEV or EL = ELEVATION
EQ = EQUAL
EX or EXIST = EXISTING
EXP = EXPANSION
F/F = FACE TO FACE
FA = FORWARD ABUTMENT
FF = FAR FACE/FILL FACE
FO = FIBER OPTIC
FT = FOOT
FTG = FORWARD
FWD = FOOTING

<A> = EXISTING GIRDER LETTER

GR = GUARDRAIL
GFRP = GLASS -FIBER REINFORCED POLYMER
H.C. = HORIZONTAL CURVE
HORZ = HORIZONTAL
I/I = INSIDE TO INSIDE
IN = INCH
INV = INTERSTATE ROUTE
IR = INVERT
JT = KIPS PER SQUARE INCH
KSF = KIPS PER SQUARE FOOT
KSI = JOINT
LT = LEFT
MAX = MAXIMUM
MH = MANHOLE
MHC = MINIMUM HORIZONTAL CLEARANCE
MIN = MINIMUM
MISC = MISCELLANEOUS
MSE = MINIMUM VERTICAL CLEARANCE
MVC = MECHANICALLY STABILIZED EARTH
NPCPP = NON-PREFORATED CORRUGATED PLASTIC PIPE
NB = NORTHBOUND
NE = NORTHEAST
NF = NEAR FACE
NO = NUMBER
NW = NORTHWEST
O/O = OUT TO OUT
OD = OUTSIDE DIAMETER
OH = OVERHANG
OVHD = OVERHEAD
ODOT = OHIO DEPARTMENT OF TRANSPORTATION
P.V.I. or VPI = POINT OF VERTICAL INTERSECTION
PC = POINT OF CURVE
PCB = PORTABLE CONCRETE BARRIER
PCPP = PERFORATED CORRUGATED PLASTIC PIPE
PEJF = PREFORMED EXPANSION JOINT FILLER
PGL = PROFILE GRADE LINE
PI = POINT OF INTERSECTION
PMVC = POINT OF MINIMUM VERTICAL CLEARANCE
POT = POINT ON TANGENT
PROP = PROPOSED
PSF = POUNDS PER SQUARE FOOT
PT = POINT OF TANGENT
PVMT = PAVEMENT
RA = REAR ABUTMENT
RCP = REINFORCED CONCRETE PIPE
RD = ROAD
REF = REFERENCE
REINF. = REINFORCING OR REBAR
REQ'D = REQUIRED
RT = RIGHT
R/W = RIGHT OF WAY
S/O = SERIES OF
SR = STATE ROUTE
SB = SOUTHBOUND
SCD = STANDARD CONSTRUCTION DRAWING
SE = SOUTHEAST
SER = SERIES
SF = SQUARE FEET
SHLDR = SHOULDER
SPA = SPACES
ST = STREET OR SPAN TOTAL
STA = STATION
STD = STANDARD
STG = STAGE
STM = STORM
SW = SOUTHWEST
T/ = TOP OF
T/B = TOP AND BOTTOM
T/T = TOE TO TOE
TBR = TO BE REMOVED
TEMP = TEMPORARY
TYP = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE
VC = VERTICAL CURVE
VERT = VERTICAL
WB = WEST BOUND
WW = WINGWALL

STANDARD PLAN DETAILING NOMENCLATURE

THROUGHOUT THE PLANS, SECTIONS AND DETAILS ARE REFERENCED TO THEIR CORRESPONDING VIEWS THROUGH THE USE OF STANDARD CALLOUTS. THE VIEWS OF SECTIONS, ELEVATIONS, AND DETAILS WILL HAVE UNIQUE NUMBERS ON THE PAGES ON WHICH THEY ARE SHOWN.

LETTERS WILL BE UTILIZED FOR SECTION AND ELEVATION CALLOUTS. NUMBERS WILL BE UTILIZED FOR DETAIL CALLOUTS.

IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON THE SAME SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



SECTION, ELEVATION, OR DETAIL IDENTIFICATION

IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON A DIFFERENT SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



SECTION, ELEVATION, OR DETAIL IDENTIFICATION

SHEET WHERE THE CORRESPONDING SECTION, ELEVATION, OR DETAIL CALLOUT OR VIEW CAN BE FOUND

MEMBERS WILL BE IDENTIFIED AS FOLLOWS:



FINAL TRACINGS
NOT FOR CONSTRUCTION

GENERAL NOTES (4 OF 4)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY GFT 8800 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 6 | TOTAL 38
SHEET P.382 | TOTAL 627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:33:01 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SN004.dgn

PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26	CHECKED: HLD 04/21/26		VERIFIED: SAT 05/01/26	
						BRIDGE				
07/NHS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	ABUT	PIER	SUPER	GENERAL	SHEET REF.
1	202	11203	LUMP	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	3
13	202	22900	13	SY	APPROACH SLAB REMOVED			13		
1	503	11100	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING				1	
568	503	21100	568	CY	UNCLASSIFIED EXCAVATION	568				
99	503	31100	99	CY	ROCK EXCAVATION	99				
88,210	509	10001	88,210	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	75,036		13,174		3
300	509	20001	300	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN			300		3
1,828	509	30020	1,828	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			1,828		
146	510	10001	146	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	146				3
2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
50	511	34444	50	CY	CLASS QC2 CONCRETE, BRIDGE DECK			50		
20	511	34449	20	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN			20		4
306	511	44112	306	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	306				
197	511	46512	197	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	197				
375	512	10100	375	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	229		146		
18	512	33000	18	SY	TYPE 2 WATERPROOFING	18				
20,296	513	10261	20,296	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN			20,296		4
372	513	20000	372	EACH	WELDED STUD SHEAR CONNECTORS			372		
1	514	00504	1	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			1		
1	514	10000	1	EACH	FINAL INSPECTION REPAIR			1		
1	514	21001	LUMP	LS	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN				1	5
9	516	13600	9	SF	1" PREFORMED EXPANSION JOINT FILLER			9		
85	516	13900	85	SF	2" PREFORMED EXPANSION JOINT FILLER			85		
37	516	14020	37	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			37		
2	516	44100	2	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"x12"x2.62" BEARING WITH 16"x13" LOAD PLATE AND BEVELED HP12x53 PEDESTAL)	2				
210	518	21200	210	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	210				
109	518	40000	109	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	109				
10	518	40012	10	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	10				
50	526	15000	50	SY	REINFORCED CONCRETE APPROACH SLABS (T=13")			50		
1	625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM			1		
1,953	848	10201	1,953	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN , (VARIABLE THICKNESS)			1,953		5
1,953	848	20000	1,953	SY	SURFACE PREPARATION USING HYDRODEMOLITION			1,953		
1	848	50100	LUMP	LS	TEST SLAB				1	

FINAL TRACINGS
NOT FOR CONSTRUCTION

ESTIMATED QUANTITIES
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
7	38

SHEET	TOTAL
P.383	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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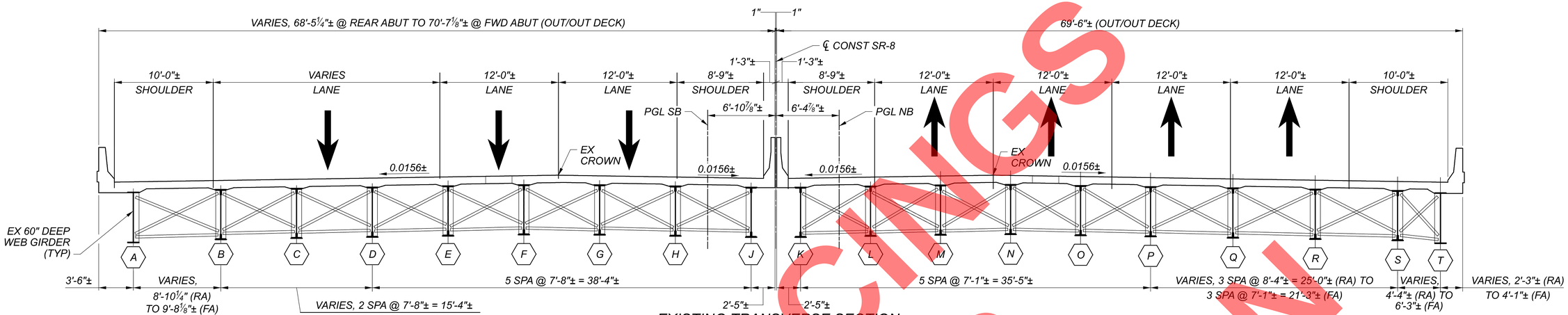
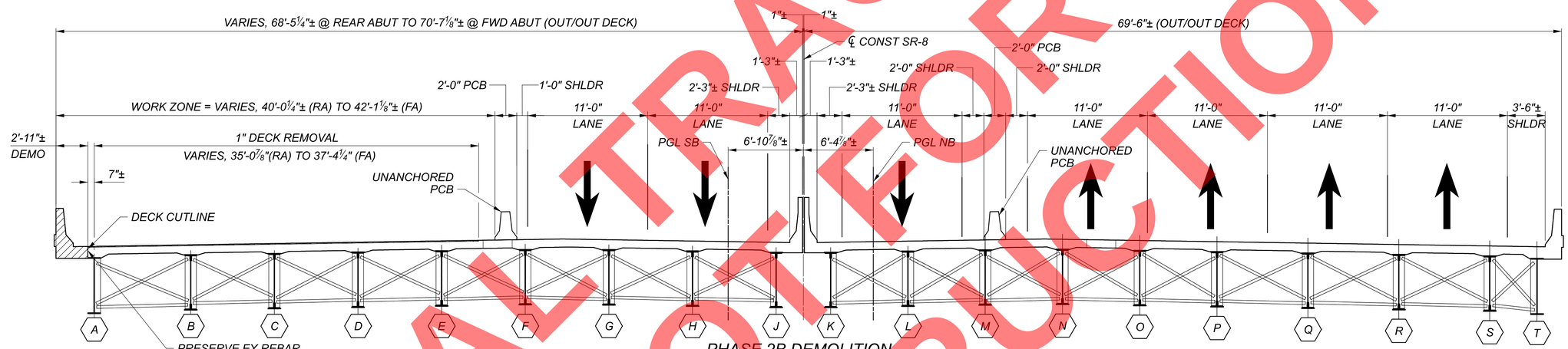
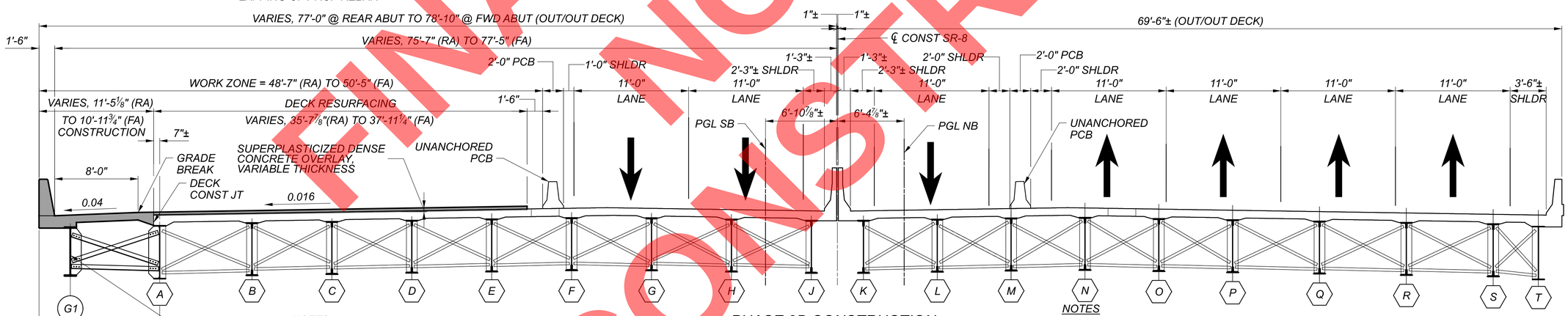


EXISTING TRANSVERSE SECTION
PRIOR TO CONSTRUCTION



PHASE 2B DEMOLITION
REMOVE PORTIONS OF SOUTHBOUND SUPERSTRUCTURE AS SHOWN



PHASE 2B CONSTRUCTION
CONSTRUCT WIDENED SUPERSTRUCTURE ALONG WITH WIDENED ABUTMENT SUBSTRUCTURE (NOT SHOWN), REMOVE 1" OF DECK VIA HYDRODEMOLITION, AND RESURFACE BRIDGE DECK AS SHOWN

NOTES

1. PORTABLE CONCRETE BARRIERS ARE INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.
2. SEE STD DWG RM-4.2 FOR PORTABLE CONCRETE BARRIER DETAILS.

LEGEND

- SUPERSTRUCTURE REMOVAL LIMITS
- PROPOSED CONSTRUCTION LIMITS

NOTES

3. FOR SUBSTRUCTURE DETAILS, SEE SHEET 12/38 THRU 20/38 .
4. NO WORK WILL BE PERFORMED ON BRIDGE IN PHASE 1 & PHASE 2A, FOR MAINTENANCE OF TRAFFIC TYPICAL DETAILS, SEE SHEET P.049/627 .
5. FOR DECK REMOVAL AND RESURFACING DETAILS, SEE SHEET 27/38 .
6. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 5/38 .

FINAL TRACINGS NOT FOR CONSTRUCTION

PHASED CONSTRUCTION DETAILS (1 OF 2)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 8 | TOTAL 38
SHEET P.384 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
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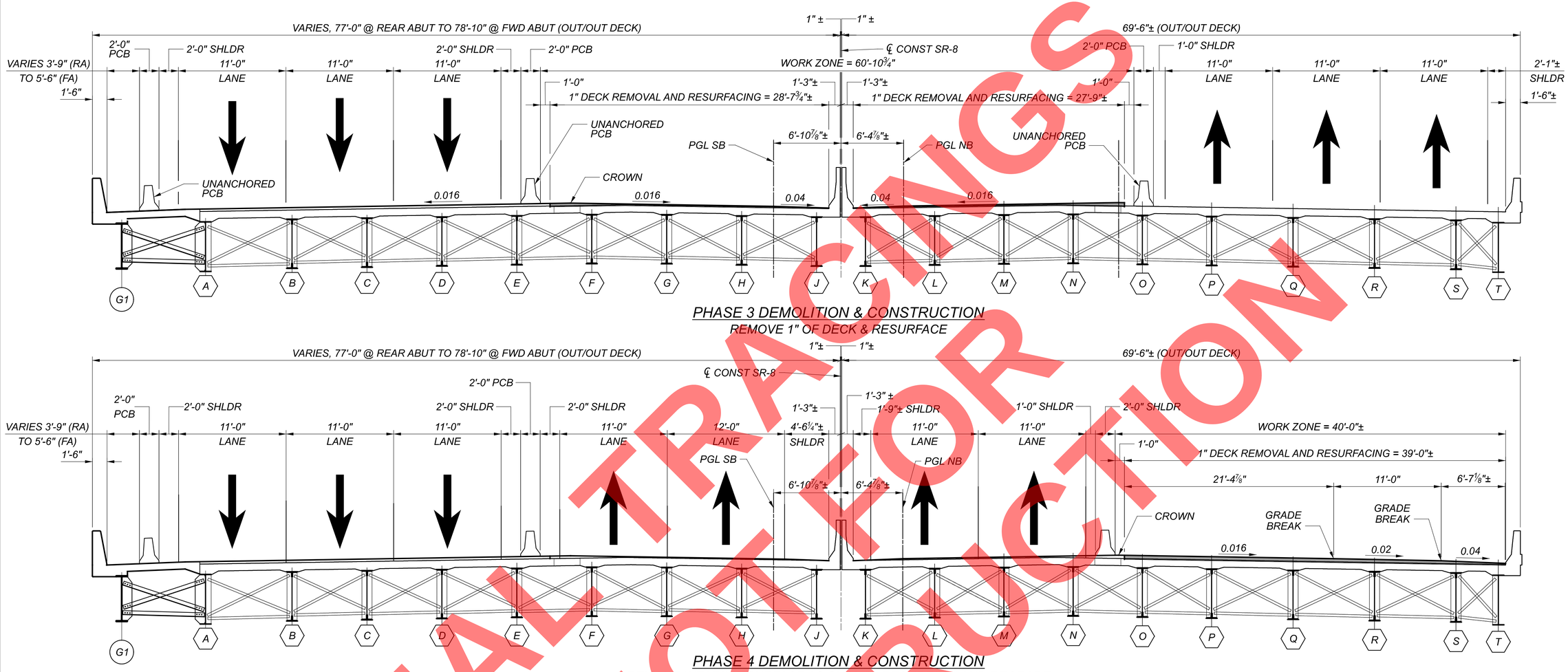
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange Street Bridge.dgn

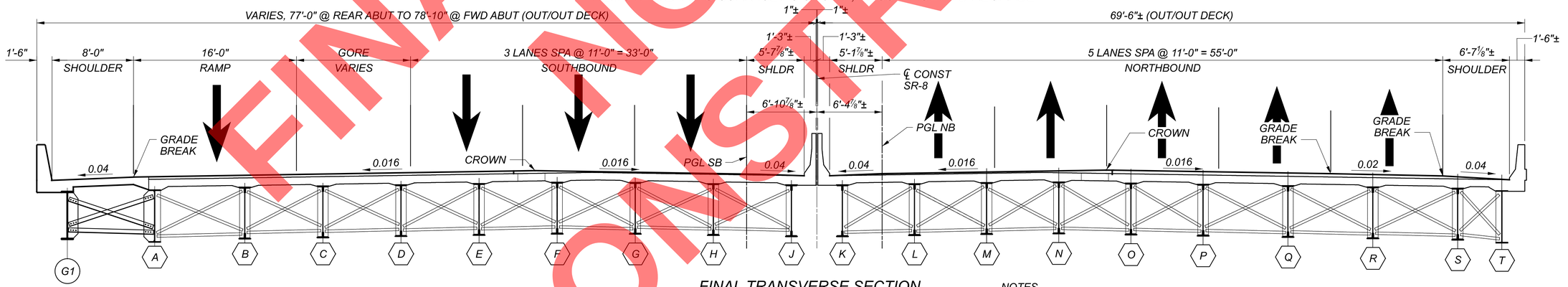


PHASE 3 DEMOLITION & CONSTRUCTION

REMOVE 1" OF DECK & RESURFACE

PHASE 4 DEMOLITION & CONSTRUCTION

REMOVE WEARING SURFACE AS SHOWN, RESURFACE AND REGRADE



FINAL TRANSVERSE SECTION

LEGEND

PROPOSED CONSTRUCTION LIMITS

NOTES

1. PORTABLE CONCRETE BARRIERS ARE INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.
2. SEE STD DWG RM-4.2 FOR PORTABLE CONCRETE BARRIER DETAILS.
3. FOR DECK REMOVAL AND RESURFACING DETAILS, SEE SHEET 27/38 .
4. FOR SEQUENCE OF CONSTRUCTION NOTES, SEE SHEET 5/38 .

FINAL TRACINGS NOT FOR CONSTRUCTION

PHASED CONSTRUCTION DETIALS (2 OF 2)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
9	38

SHEET	TOTAL
P.385	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$

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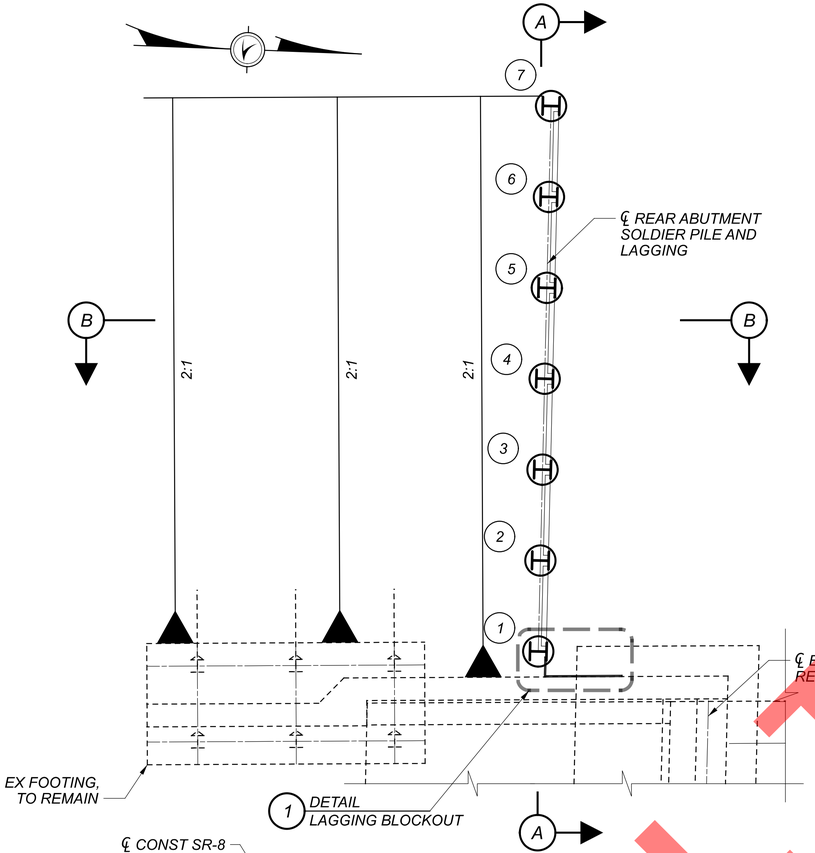
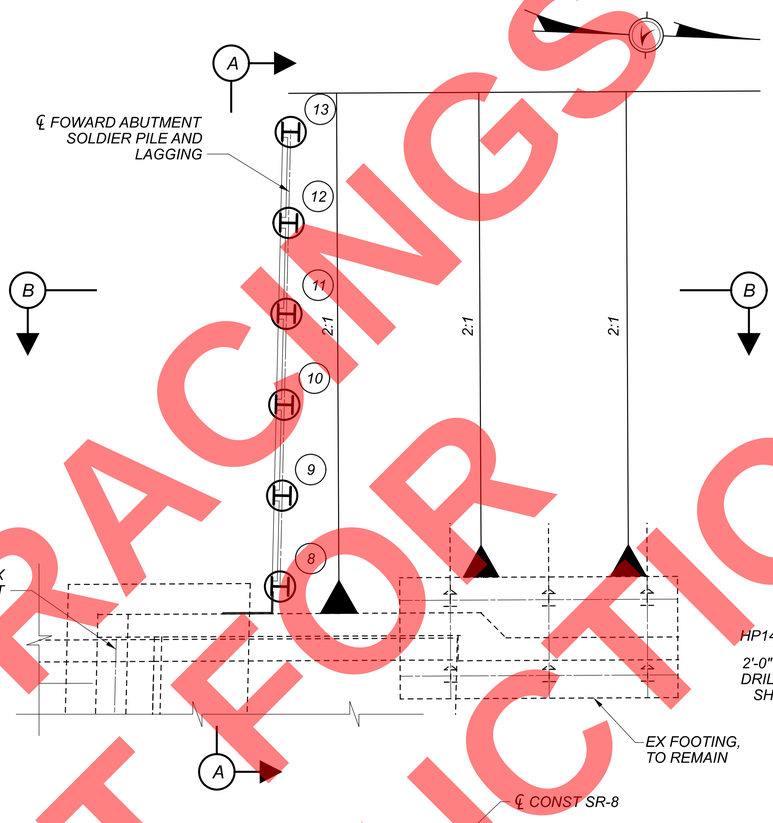
FINAL TRACINGS
NOT FOR
CONSTRUCTION

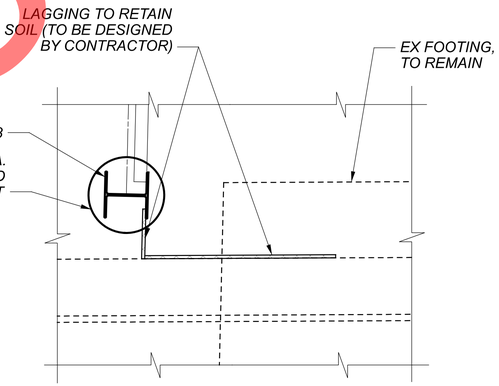


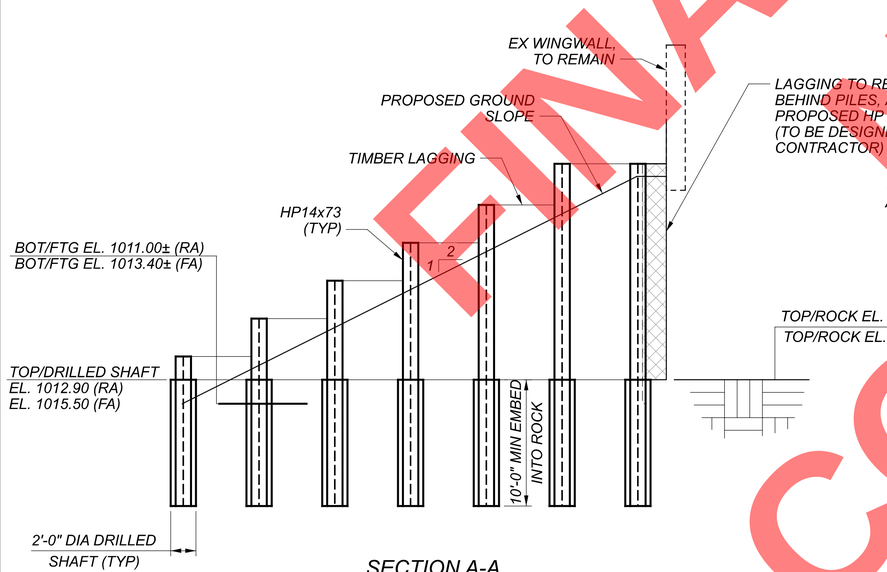
PARTIAL REAR ABUTMENT PLAN



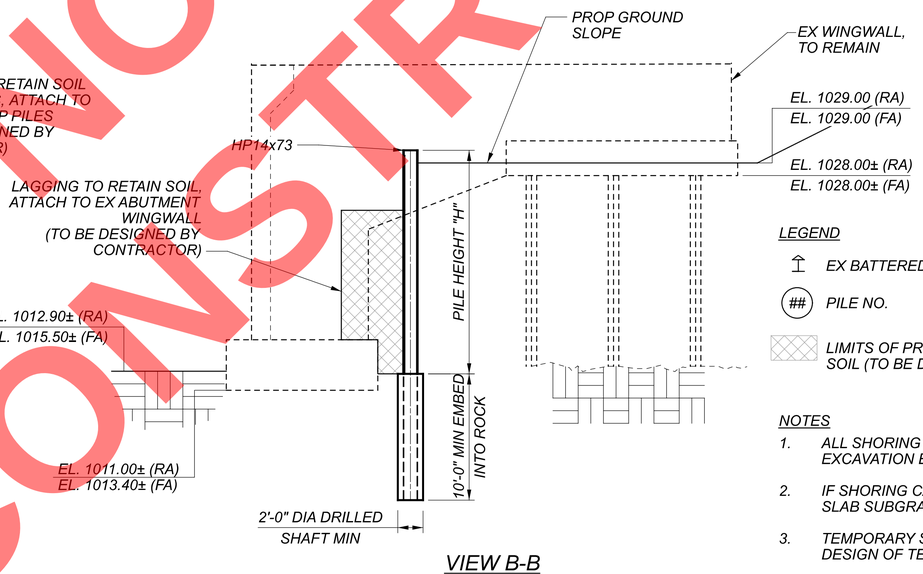
PARTIAL FORWARD ABUTMENT PLAN

DRILLED SHAFT TABLE			
PILE NO.	STATION	OFFSET	PILE HEIGHT "H"
1	345+50.58	71.66' LT	17.10'
2	345+50.60	77.66' LT	17.10'
3	345+50.62	83.66' LT	13.85'
4	345+50.64	89.66' LT	10.85'
5	345+50.66	95.66' LT	7.85'
6	345+50.68	101.66' LT	4.85'
7	345+50.70	107.66' LT	1.85'
8	347+59.12	74.47' LT	14.50'
9	347+59.14	80.47' LT	14.50'
10	347+59.16	86.47' LT	10.25'
11	347+59.18	92.47' LT	7.25'
12	347+59.20	98.47' LT	4.25'
13	347+59.22	104.47' LT	1.25'





SECTION A-A
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



VIEW B-B
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

LEGEND

- EX BATTERED HP10x42 PILE
- (##) PILE NO.
- LIMITS OF PROPOSED LAGGING TO RETAIN SOIL (TO BE DESIGNED BY CONTRACTOR)

NOTES

1. ALL SHORING SHALL BE PAID FOR UNDER ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.
2. IF SHORING CAN NOT BE REMOVED, CUT MINIMUM 1'-0" BELOW APPROACH SLAB SUBGRADE.
3. TEMPORARY SHORING DETAILS ARE SHOWN FOR INFORMATION PURPOSES ONLY, DESIGN OF TEMPORARY SHORING IS TO BE PREPARED BY THE CONTRACTOR.
4. SHEETING SHOWN FOR REPRESENTATION OF LOCATION, BRACED OR PILE AND LAGGING EXCAVATION IS LIKELY, AT THE CONTRACTORS OPTION.

TEMPORARY SHORING DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
10	38

SHEET	TOTAL
P.386	627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRV$$
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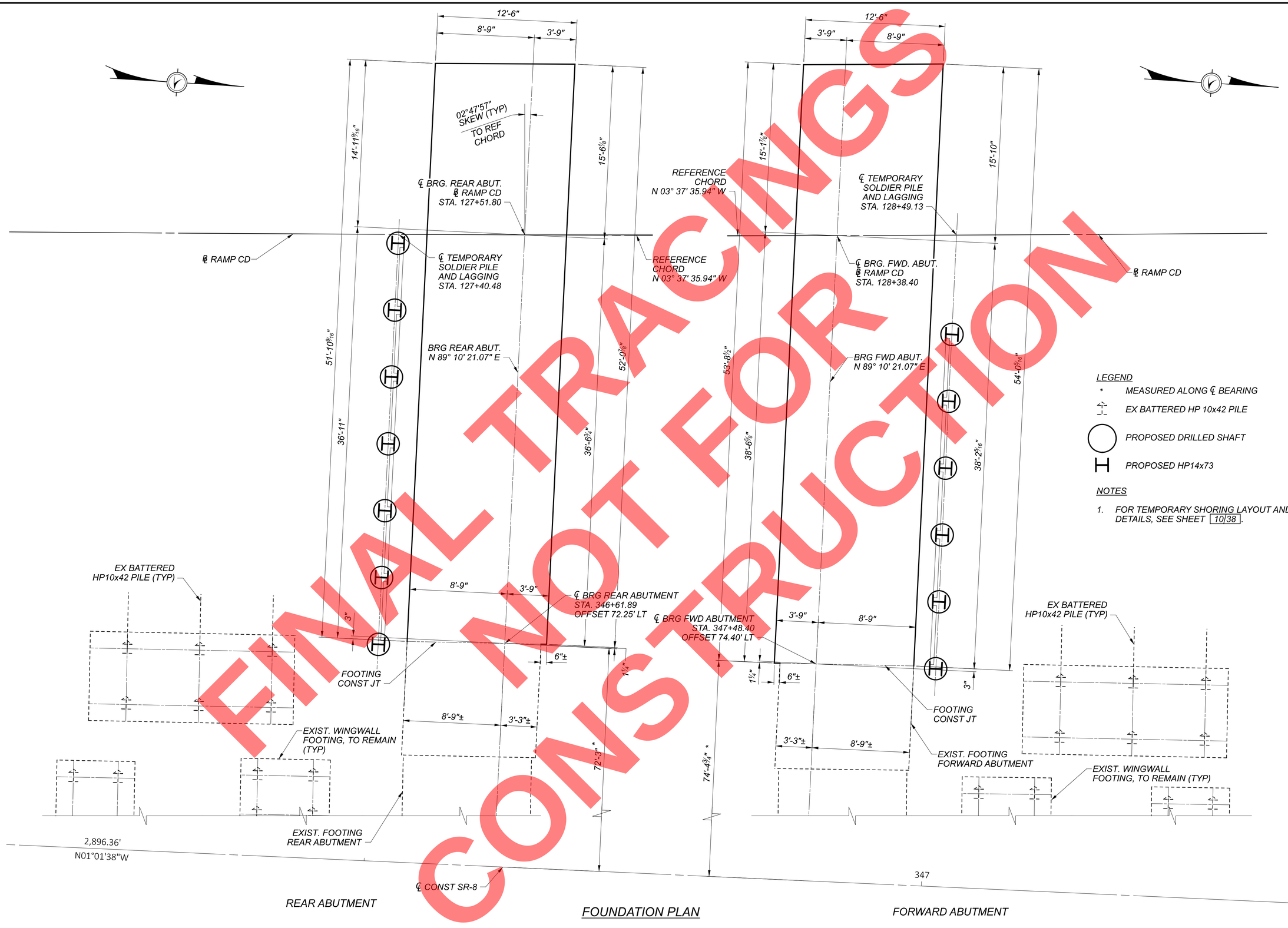

LEGEND

* MEASURED ALONG ℄ BEARING

EX BATTERED HP 10x42 PILE

PROPOSED DRILLED SHAFT

PROPOSED HP14x73

NOTES

1. FOR TEMPORARY SHORING LAYOUT AND DETAILS, SEE SHEET 10/38.

FINAL NOT FOR CONSTRUCTION

FOUNDATION PLAN
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
11	38

SHEET	TOTAL
P.387	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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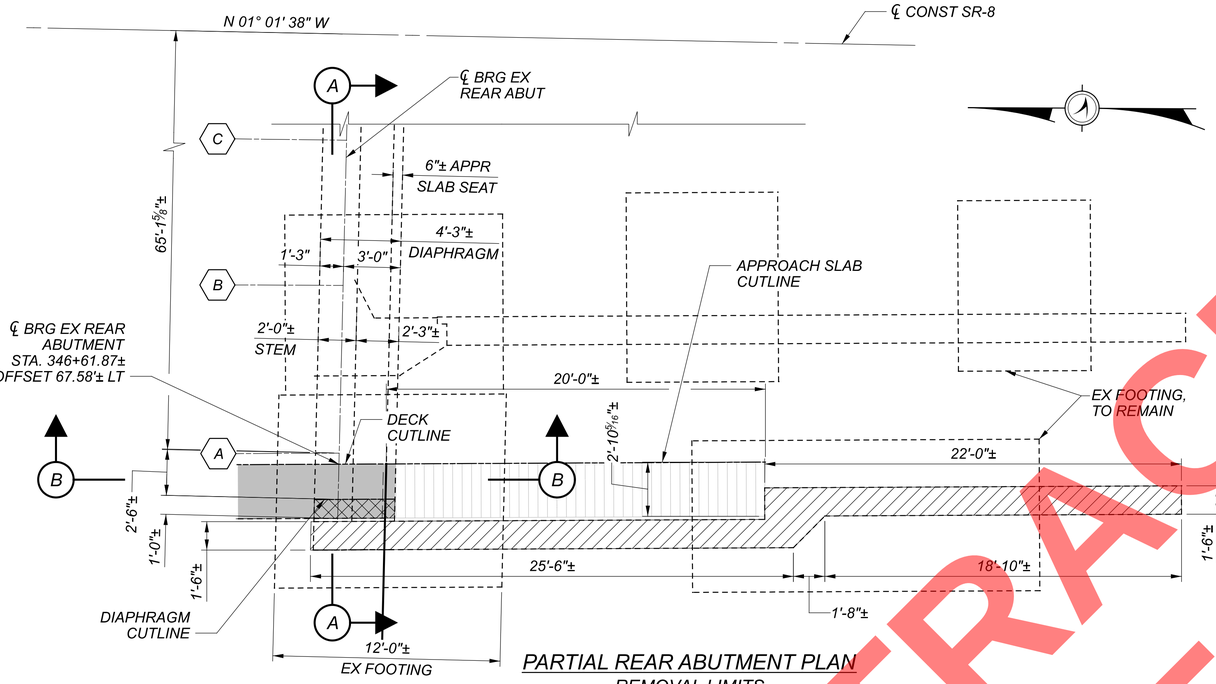
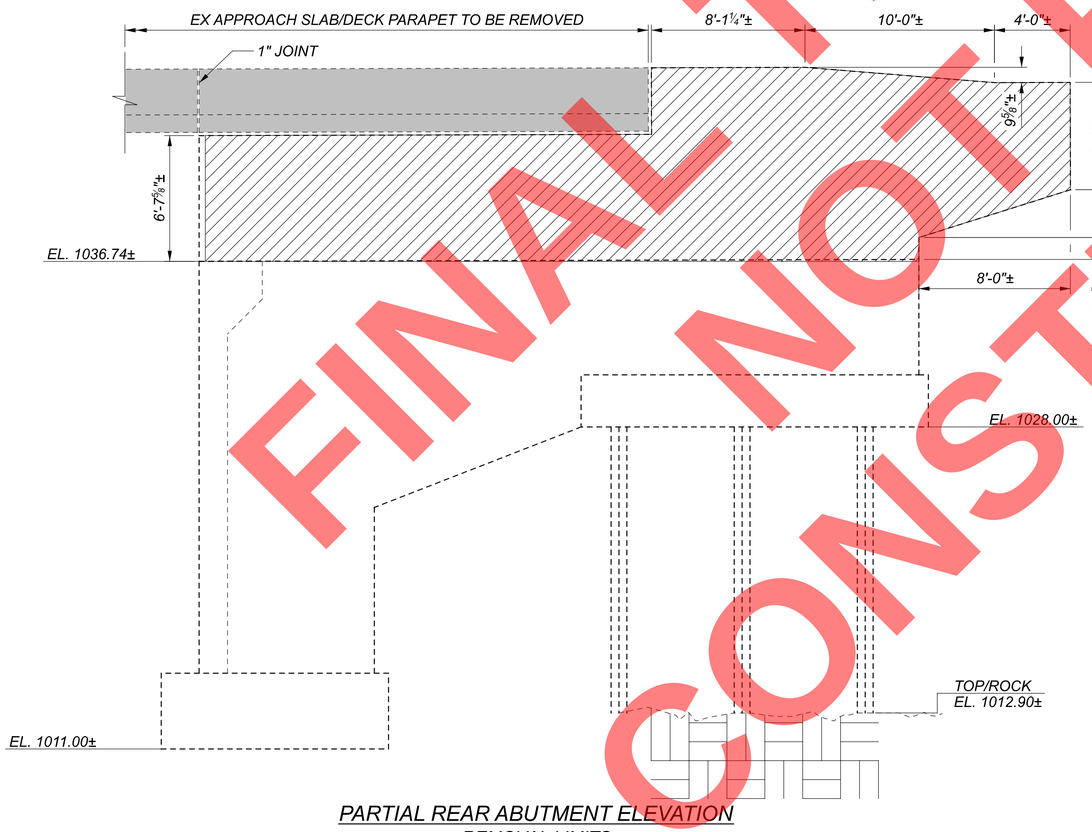
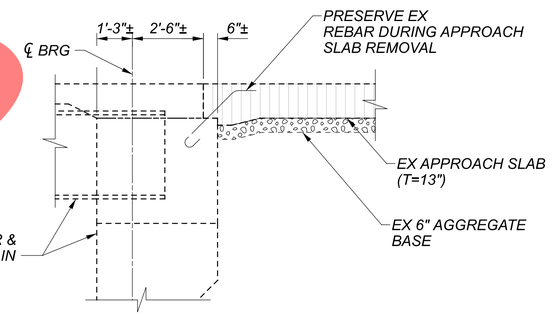


PARTIAL REAR ABUTMENT PLAN
REMOVAL LIMITS



PARTIAL REAR ABUTMENT ELEVATION
REMOVAL LIMITS



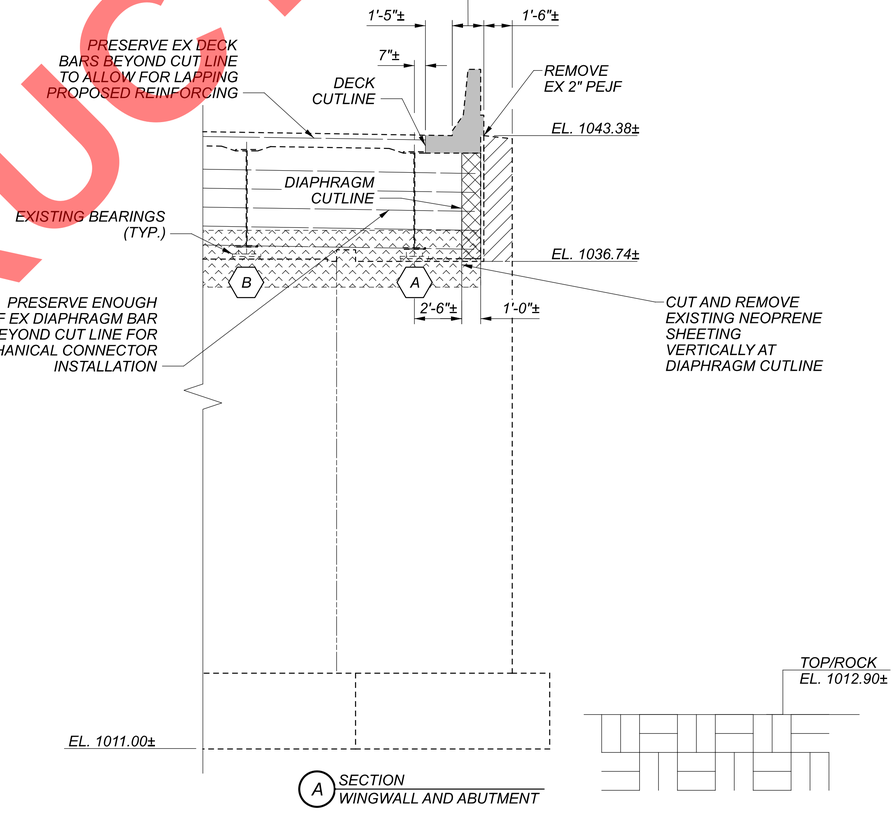
B SECTION
EX APPROACH SLAB

NOTES

1. PRESERVE THE VERTICAL REINFORCING ABOVE THE CUTLINE UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL SUBMIT MECHANICAL SPLICE CUT SHEET BEFORE ABUTMENT REMOVAL BEGINS SO THE LENGTH OF THE EXISTING REBAR PRESERVATION IS KNOWN.

LEGEND

- LIMITS OF EX SUPERSTRUCTURE REMOVED
- LIMITS OF EX WINGWALL REMOVED
- LIMITS OF EX DIAPHRAGM REMOVED
- LIMITS OF EX APPROACH SLAB REMOVED



A SECTION
WINGWALL AND ABUTMENT

REAR ABUTMENT REMOVAL
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN	7700156
DESIGN AGENCY	GFT, 8800 Lyra drive, Suite 110, Columbus, Ohio 43240
DESIGNER	AM
CHECKER	SAT
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	12
TOTAL	38
SHEET	P.388
TOTAL	627

FINAL TRACINGS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
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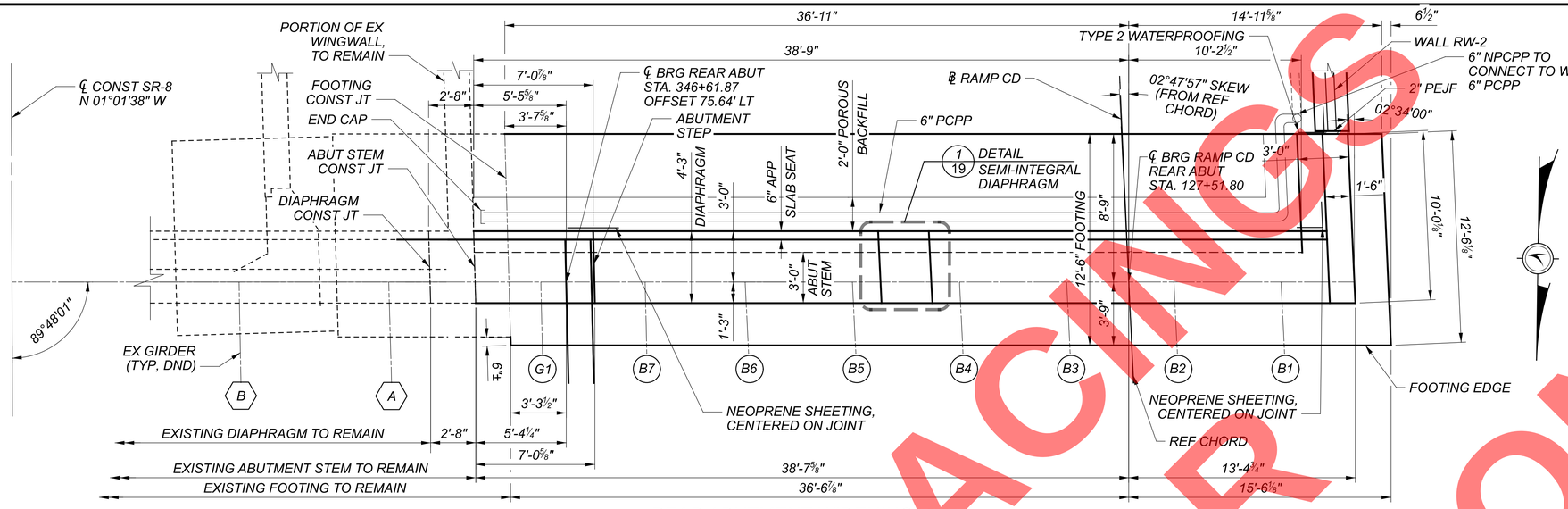
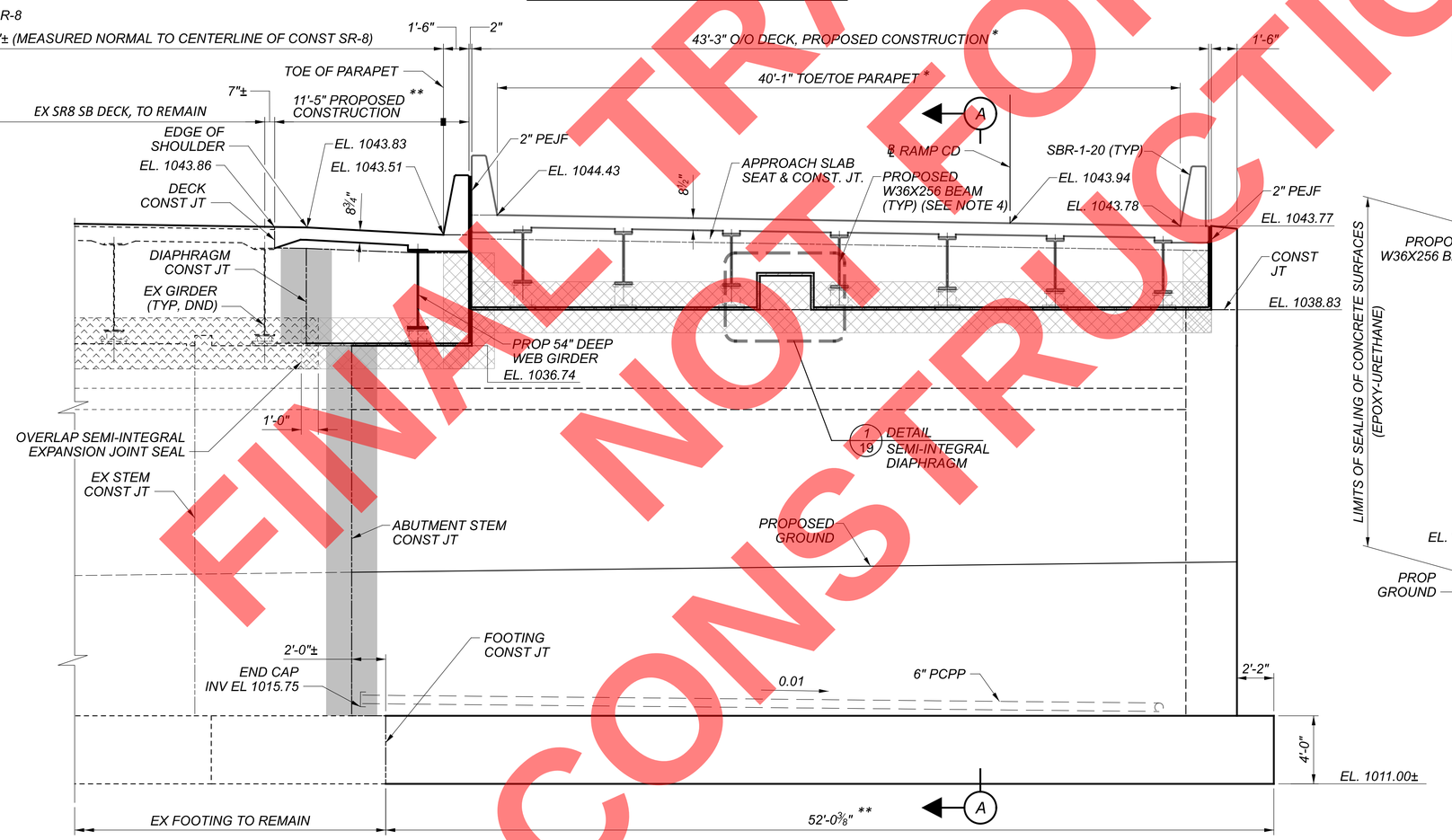
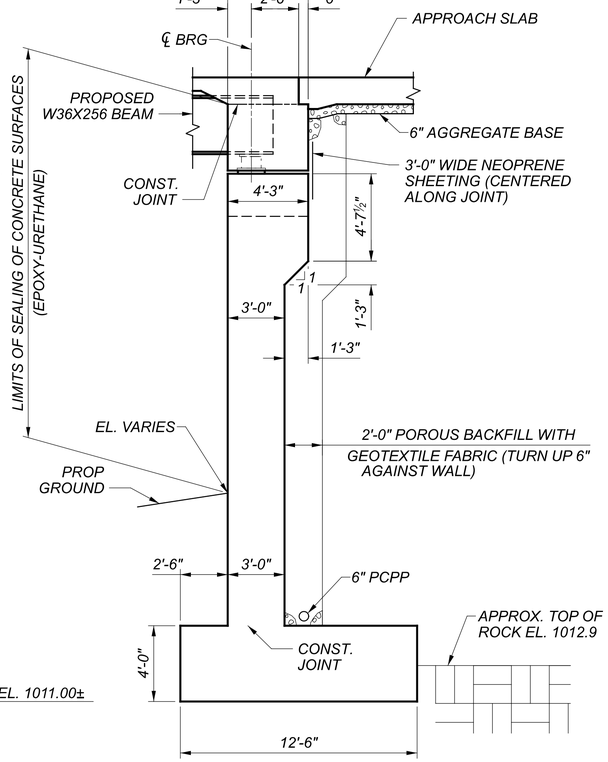
FINAL TRACINGS
NOT FOR
CONSTRUCTION



REAR ABUTMENT WIDENING PLAN



REAR ABUTMENT WIDENING ELEVATION AT ℄ BEARING



SECTION A-A

NOTES

1. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS AFTER THE DECK PLACEMENT IS COMPLETE. PROCEDURES THAT PLACE THE ABUTMENT DIAPHRAGM WITH THE DECK CONCRETE MAY BE APPROVED BY THE ENGINEER IF THE PLACEMENT SUBMITTAL CAN ASSURE THAT THE DECK CONCRETE WILL BE PLACED BEFORE CONCRETE IN THE DIAPHRAGM HAS REACHED ITS INITIAL SET.
2. SEE SHEET 11/38 FOR FOUNDATION PLAN.
3. SEE SHEET 34/38 FOR APPROACH SLAB DETAILS.
4. FOR RAMP CD BRIDGE DETAILS, SEE PLAN SET STARTING ON SHEET P.415/627.

LEGEND

* DIMENSION MEASURED NORMAL TO ℄ RAMP CD.

** DIMENSION MEASURED ALONG ABUT ℄ OF BEARING

PROPOSED SEMI-INTEGRAL EXPANSION JOINT SEAL

EXISTING SEMI-INTEGRAL EXPANSION JOINT SEAL

TYPE 2 WATERPROOFING 3' WIDE, CENTERED ALONG JOINT

REAR ABUTMENT WIDENING PLAN AND ELEVATION
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
13	38

SHEET	TOTAL
P.389	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:34:18 AM USER: stony
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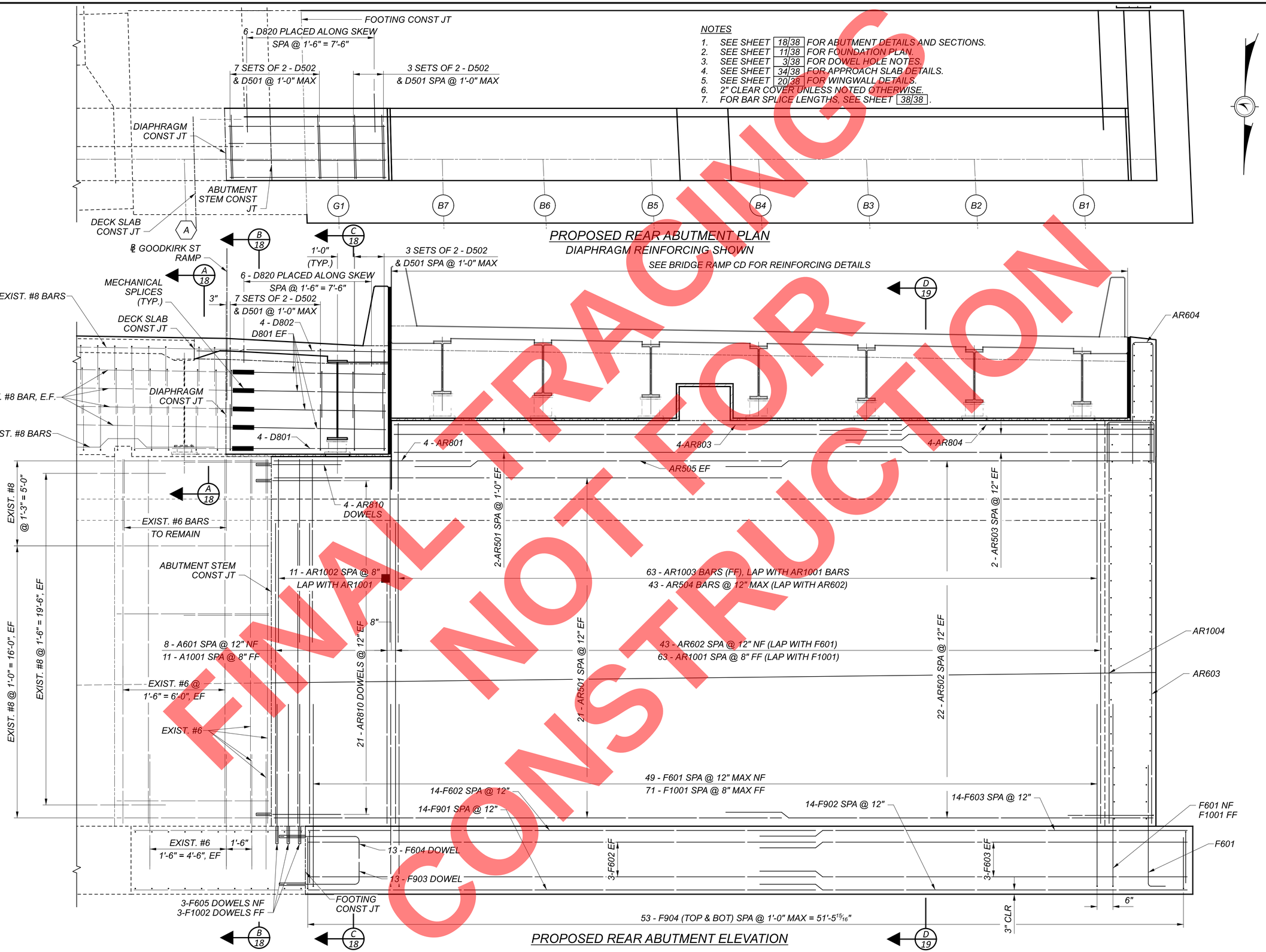
FINAL NOT FOR CONSTRUCTION
TRACINGS

NOTES
1. SEE SHEET 18/38 FOR ABUTMENT DETAILS AND SECTIONS.
2. SEE SHEET 11/38 FOR FOUNDATION PLAN.
3. SEE SHEET 3/38 FOR DOWEL HOLE NOTES.
4. SEE SHEET 34/38 FOR APPROACH SLAB DETAILS.
5. SEE SHEET 20/38 FOR WINGWALL DETAILS.
6. 2" CLEAR COVER UNLESS NOTED OTHERWISE.
7. FOR BAR SPLICE LENGTHS, SEE SHEET 38/38 .



PROPOSED REAR ABUTMENT PLAN
DIAPHRAGM REINFORCING SHOWN
SEE BRIDGE RAMP CD FOR REINFORCING DETAILS

PROPOSED REAR ABUTMENT ELEVATION

REAR ABUTMENT REINFORCING
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY
GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 14 | TOTAL 38
SHEET P.390 | TOTAL 627

SUM-077/008-11.65/00.00

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SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRVS$
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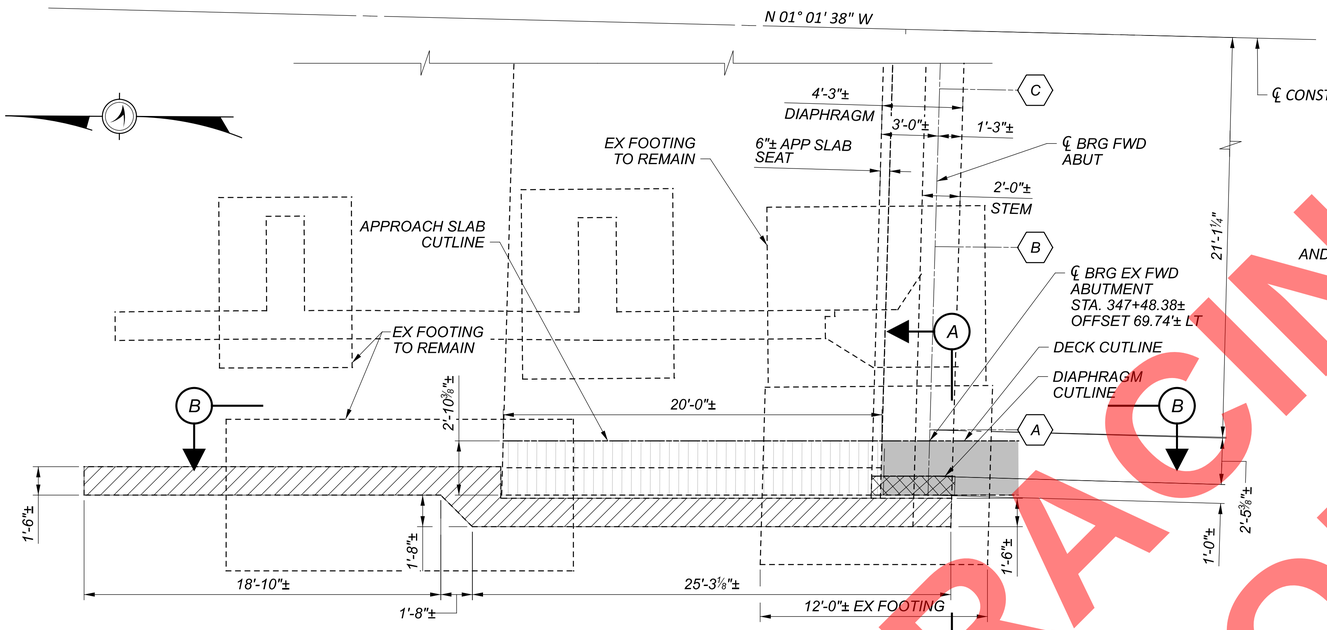
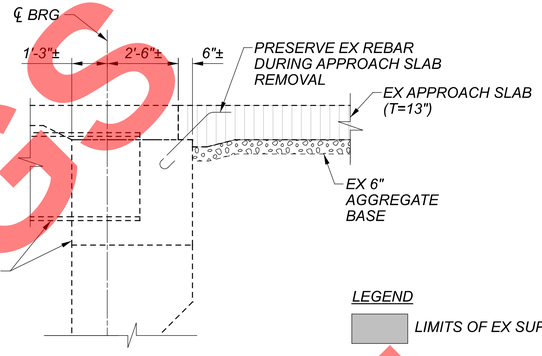


PARTIAL FORWARD ABUTMENT PLAN
REMOVAL LIMITS



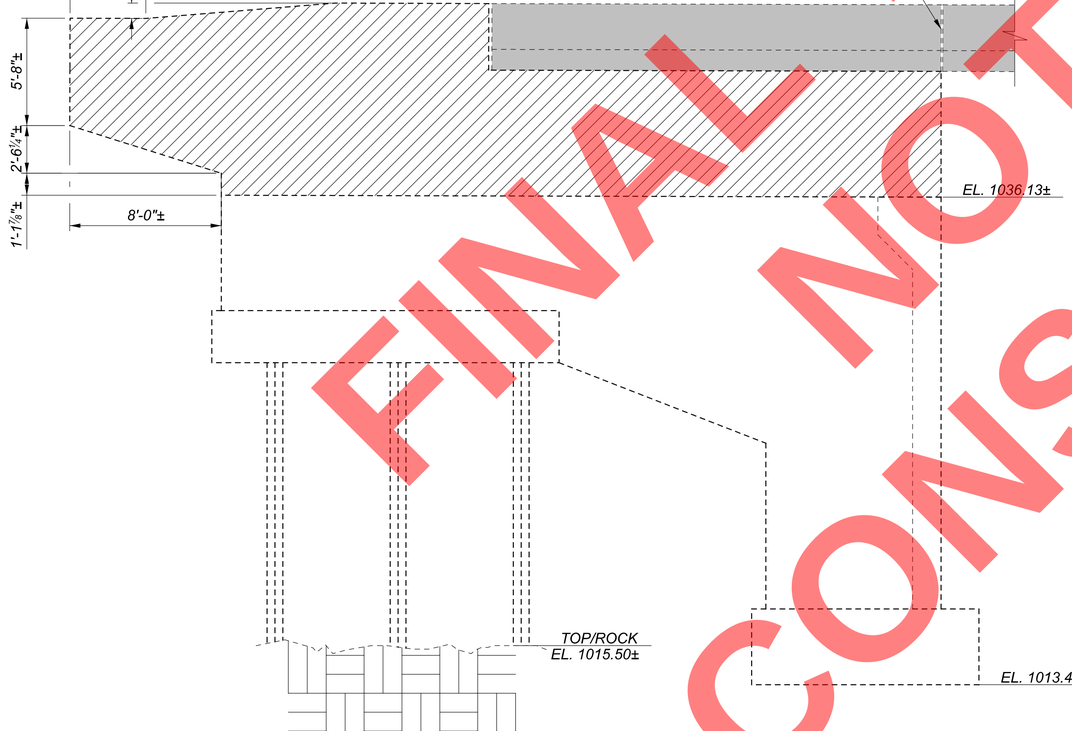
B SECTION
EX APPROACH SLAB

LEGEND

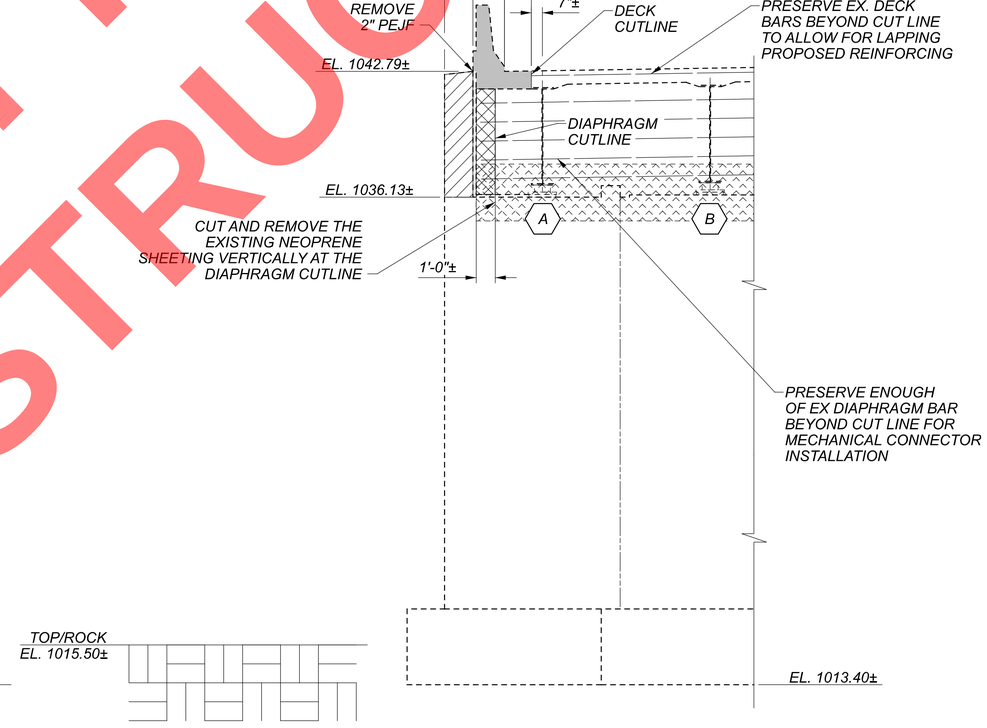
- LIMITS OF EX SUPERSTRUCTURE TO BE REMOVED
- LIMITS OF EX WINGWALL TO BE REMOVED
- LIMITS OF EX DIAPHRAGM TO BE REMOVED
- LIMITS OF EX APPROACH SLAB TO BE REMOVED
- EXISTING SEMI-INTEGRAL EXPANSION JOINT SEAL

NOTES

1. PRESERVE THE VERTICAL REINFORCING ABOVE THE CUTLINE UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL SUBMIT MECHANICAL SPLICE CUT SHEET BEFORE ABUTMENT REMOVAL BEGINS SO THE LENGTH OF THE EXISTING REBAR PRESERVATION IS KNOWN.



PARTIAL FORWARD ABUTMENT ELEVATION
REMOVAL LIMITS



A SECTION
WINGWALL AND ABUTMENT

FINAL PLANS
NOT FOR CONSTRUCTION

FORWARD ABUTMENT REMOVAL
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
15	38

SHEET	TOTAL
P.391	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
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PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
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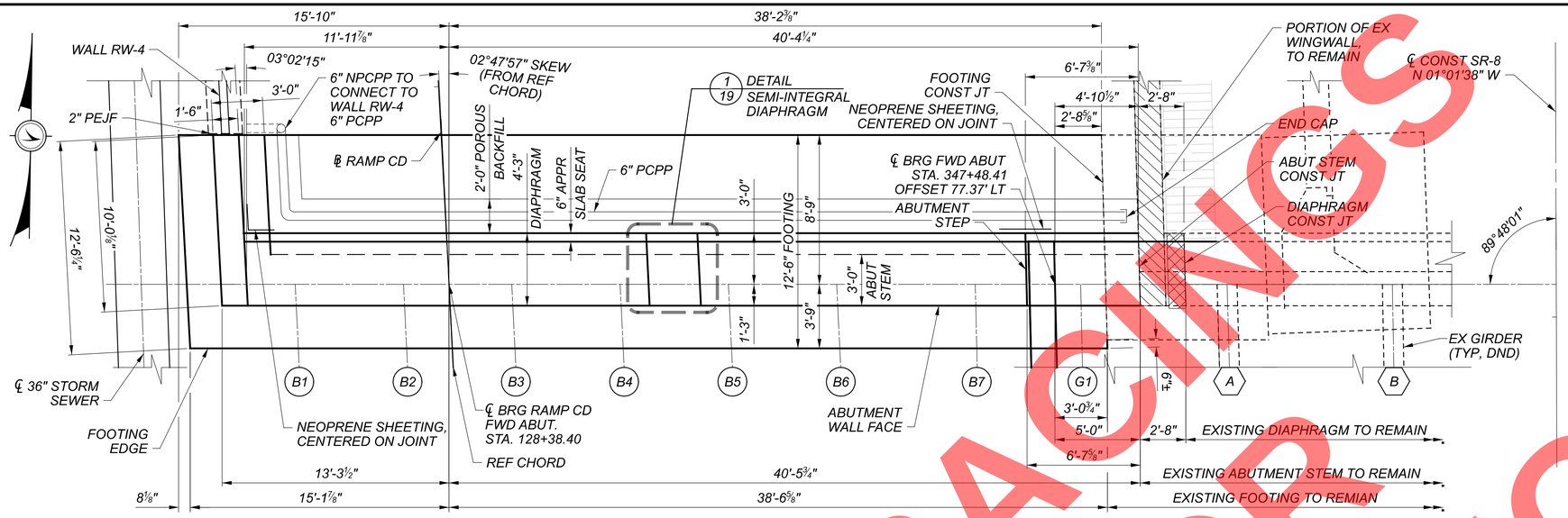
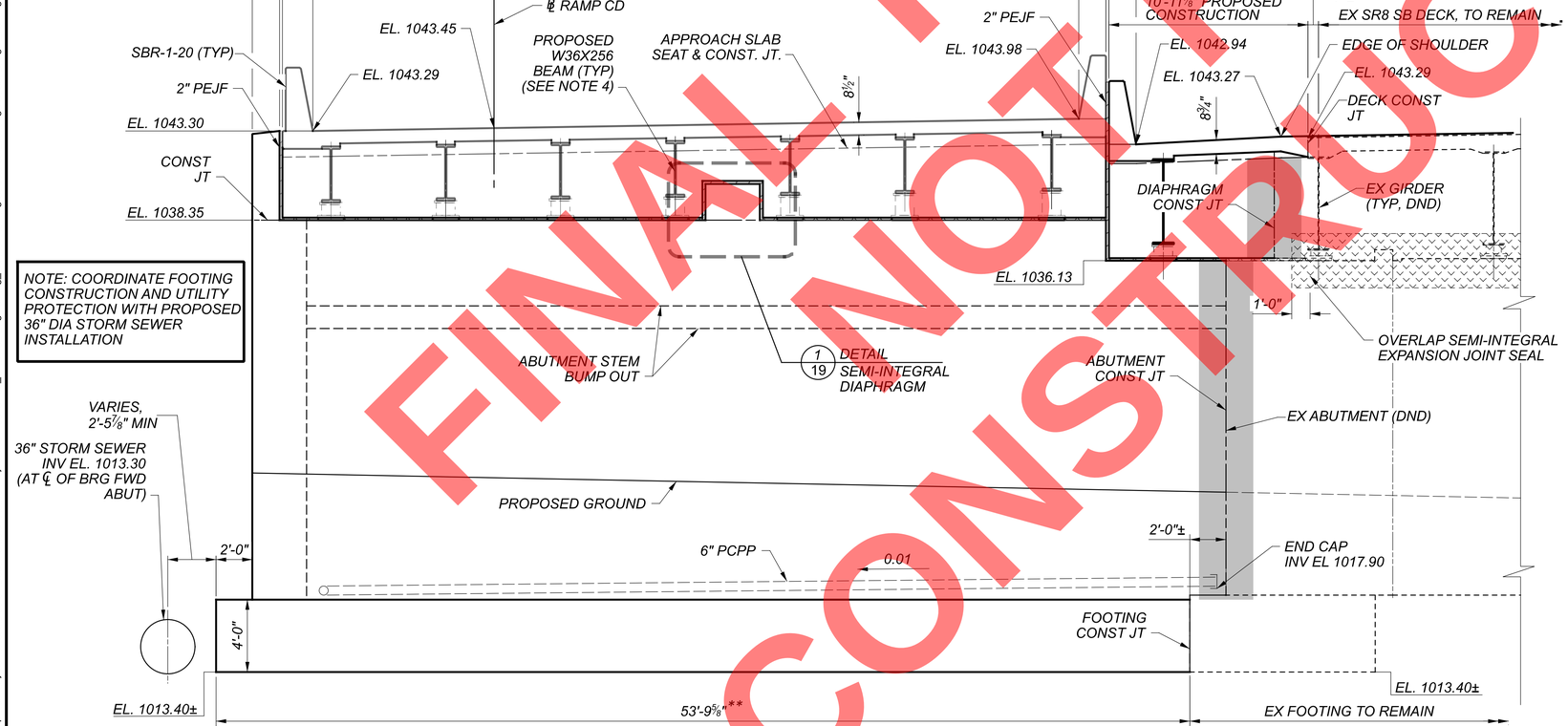
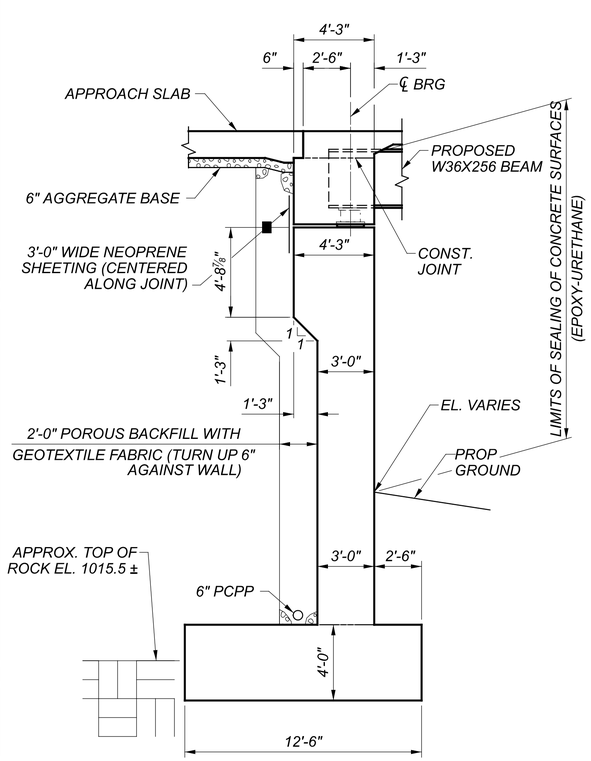


FORWARD ABUTMENT WIDENING PLAN



FORWARD ABUTMENT WIDENING ELEVATION AT ℄ BEARING



SECTION A-A
(WIDENED SECTION SIMILAR)

NOTES

1. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS AFTER THE DECK PLACEMENT IS COMPLETE. PROCEDURES THAT PLACE THE ABUTMENT DIAPHRAGM WITH THE DECK CONCRETE MAY BE APPROVED BY THE ENGINEER IF THE PLACEMENT SUBMITTAL CAN ASSURE THAT THE DECK CONCRETE WILL BE PLACED BEFORE CONCRETE IN THE DIAPHRAGM HAS REACHED ITS INITIAL SET.
2. SEE SHEET 11/38 FOR FOUNDATION PLAN.
3. SEE SHEET 35/38 FOR APPROACH SLAB DETAILS.
4. FOR RAMP CD BRIDGE DETAILS, SEE PLAN SET STARTING ON SHEET P.415/627.
5. COORDINATE FOOTING CONSTRUCTION WITH PROPOSED 36" DIA STORM SEWER INSTALLATION.
6. PROTECT THE NEW 36" STORM SEWER FROM DAMAGE OR DISPLACEMENT DURING CONSTRUCTION. PROVIDE TEMPORARY SUPPORT AS NECESSARY. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

LEGEND

* DIMENSION MEASURED NORMAL TO ℄ RAMP CD.

** DIMENSION MEASURED ALONG ABUT ℄ OF BEARING

PROPOSED SEMI-INTEGRAL EXPANSION JOINT SEAL

EXISTING SEMI-INTEGRAL EXPANSION JOINT SEAL

TYPE 2 WATERPROOFING 3' WIDE, CENTERED ALONG JOINT

FORWARD ABUTMENT PLAN AND ELEVATION
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET
BRIDGE NO. SUM-8-0.987

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

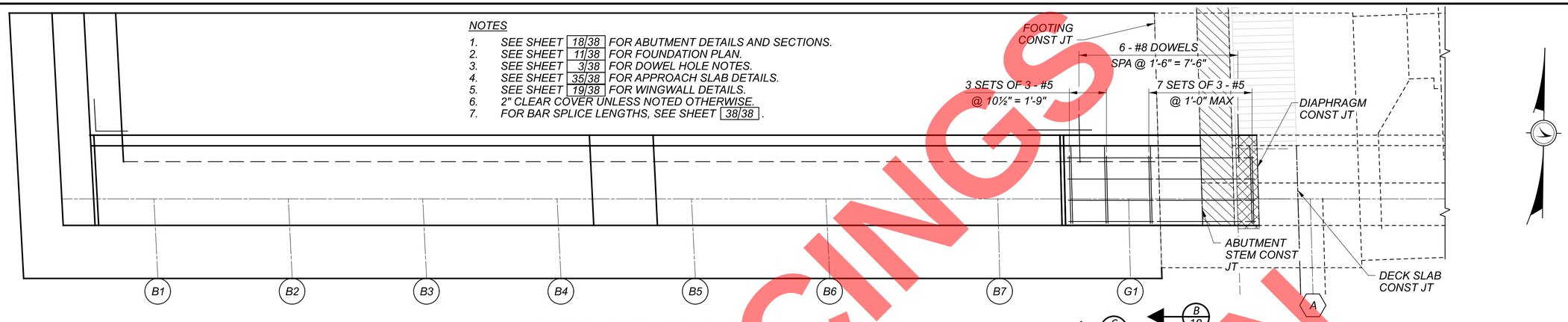
SUBSET	TOTAL
16	38

SHEET	TOTAL
P.392	627

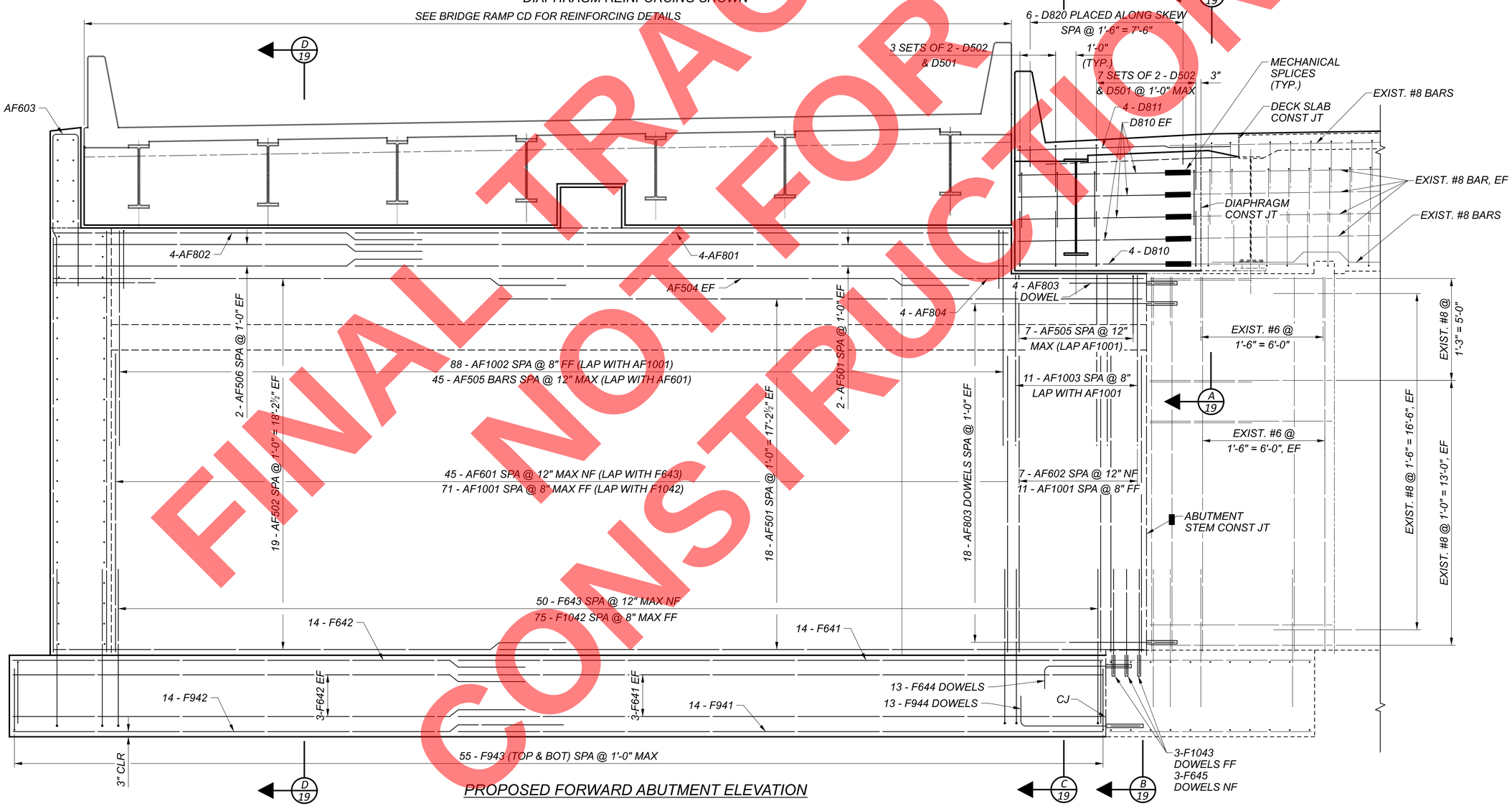
FINAL TRACINGS NOT FOR CONSTRUCTION

NOTES

1. SEE SHEET 18/38 FOR ABUTMENT DETAILS AND SECTIONS.
2. SEE SHEET 11/38 FOR FOUNDATION PLAN.
3. SEE SHEET 3/38 FOR DOWEL HOLE NOTES.
4. SEE SHEET 35/38 FOR APPROACH SLAB DETAILS.
5. SEE SHEET 19/38 FOR WINGWALL DETAILS.
6. 2" CLEAR COVER UNLESS NOTED OTHERWISE.
7. FOR BAR SPLICE LENGTHS, SEE SHEET 38/38.



PROPOSED FORWARD ABUTMENT PLAN
DIAPHRAGM REINFORCING SHOWN



PROPOSED FORWARD ABUTMENT ELEVATION

FINAL TRACINGS NOT FOR CONSTRUCTION

FORWARD ABUTMENT REINFORCING
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026
PROJECT ID 114865

SUBSET	TOTAL
17	38

SHEET	TOTAL
P.393	627

SUM-077/008-11.65/00.00

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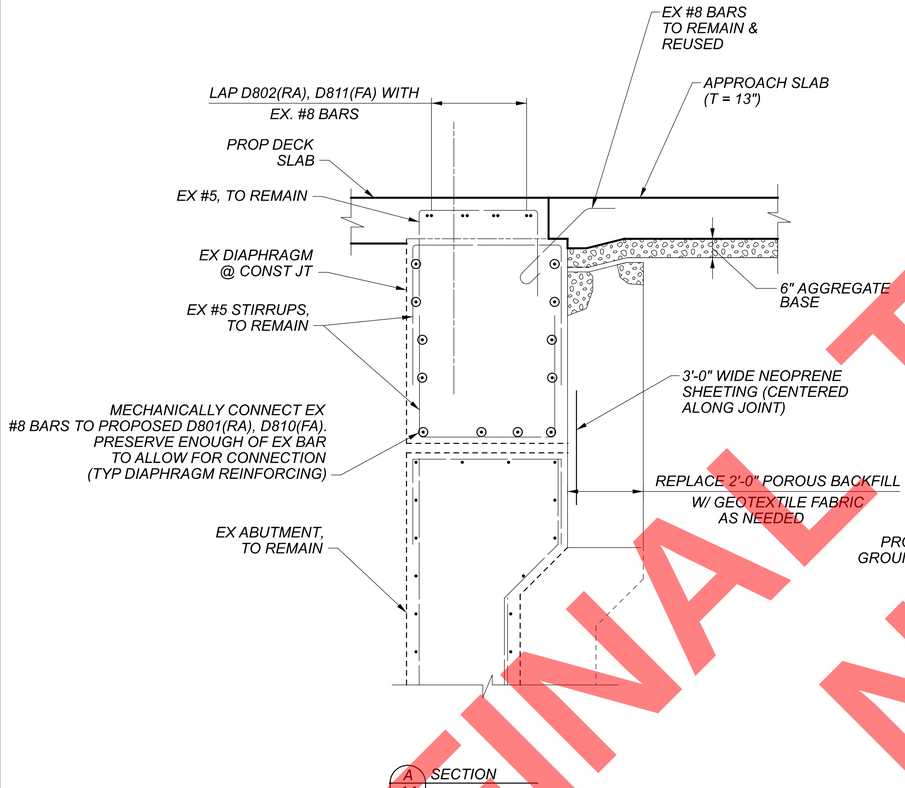
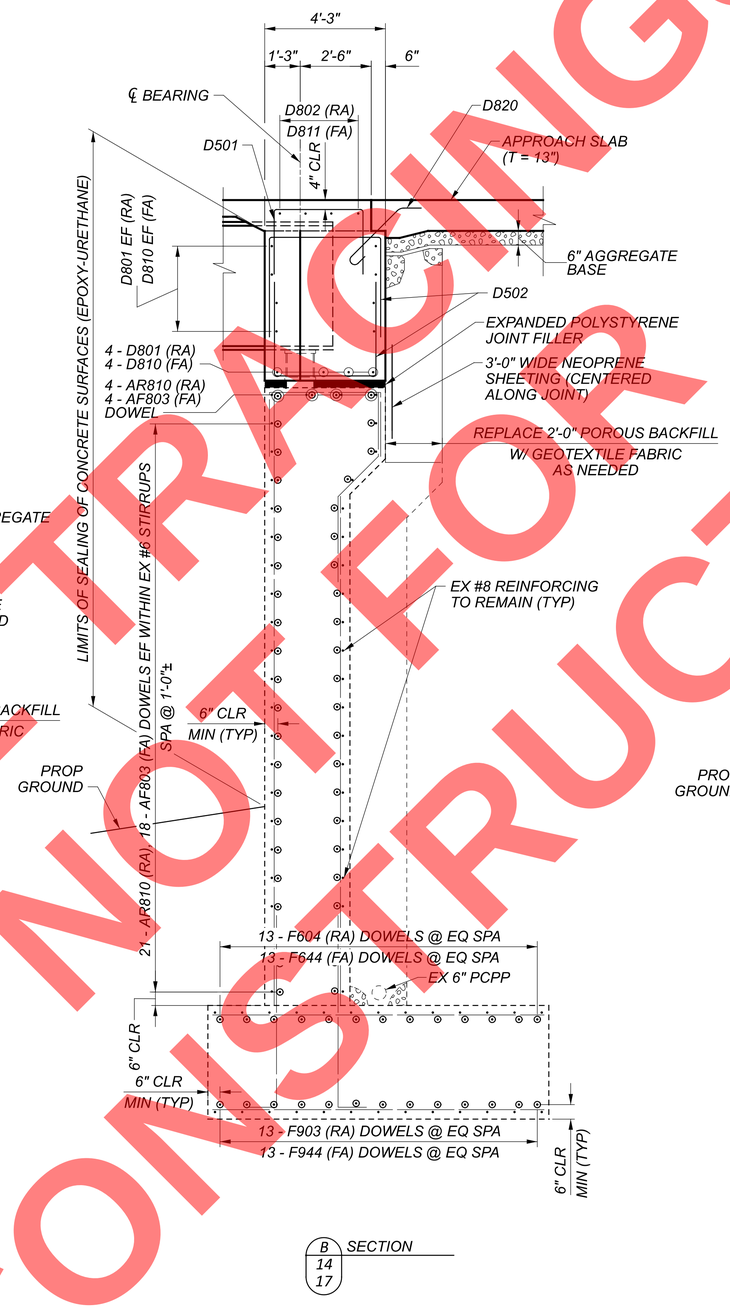


A SECTION
14
16



B SECTION
14
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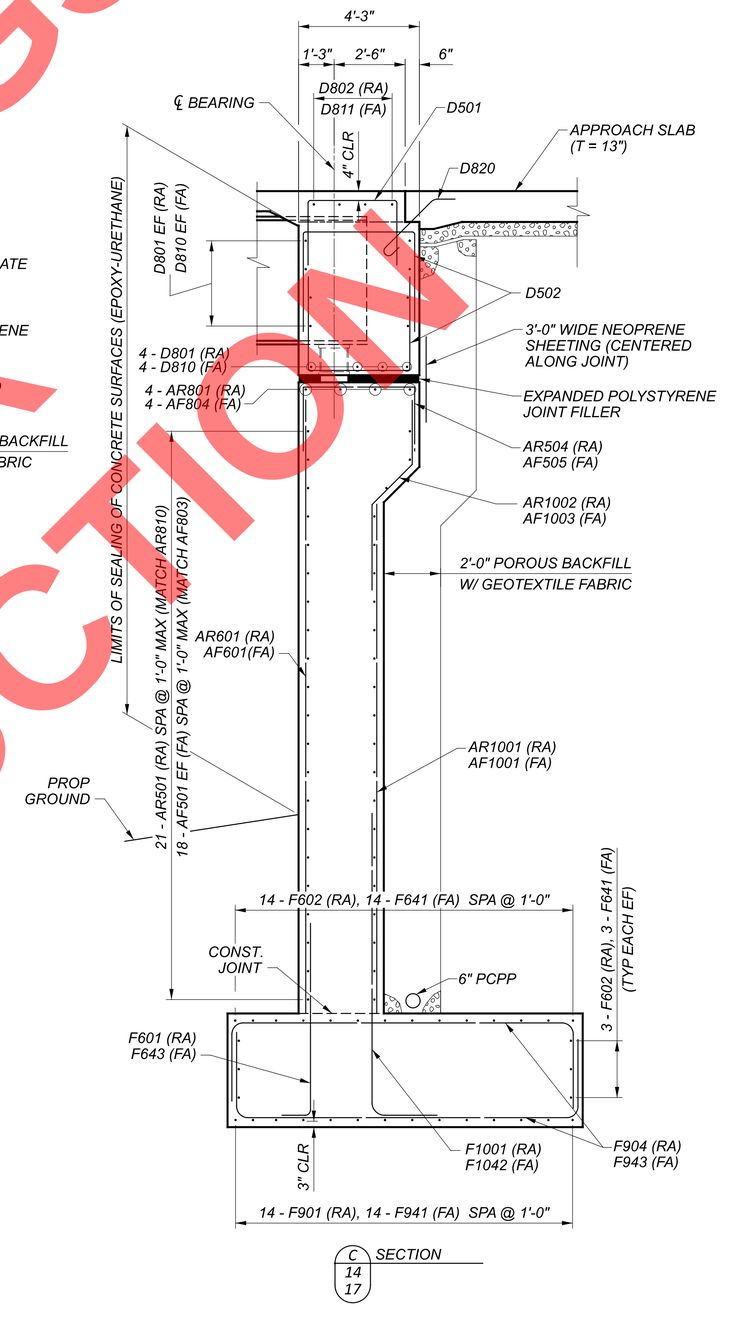


C SECTION
14
17

NOTES

1. 2" CLEAR COVER UNLESS NOTED OTHERWISE.
2. FOR BAR LAP LENGTHS, SEE SHEET 38/38.

FINAL NOT FOR CONSTRUCTION

TYPICAL ABUTMENT DETAILS (1 OF 2)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

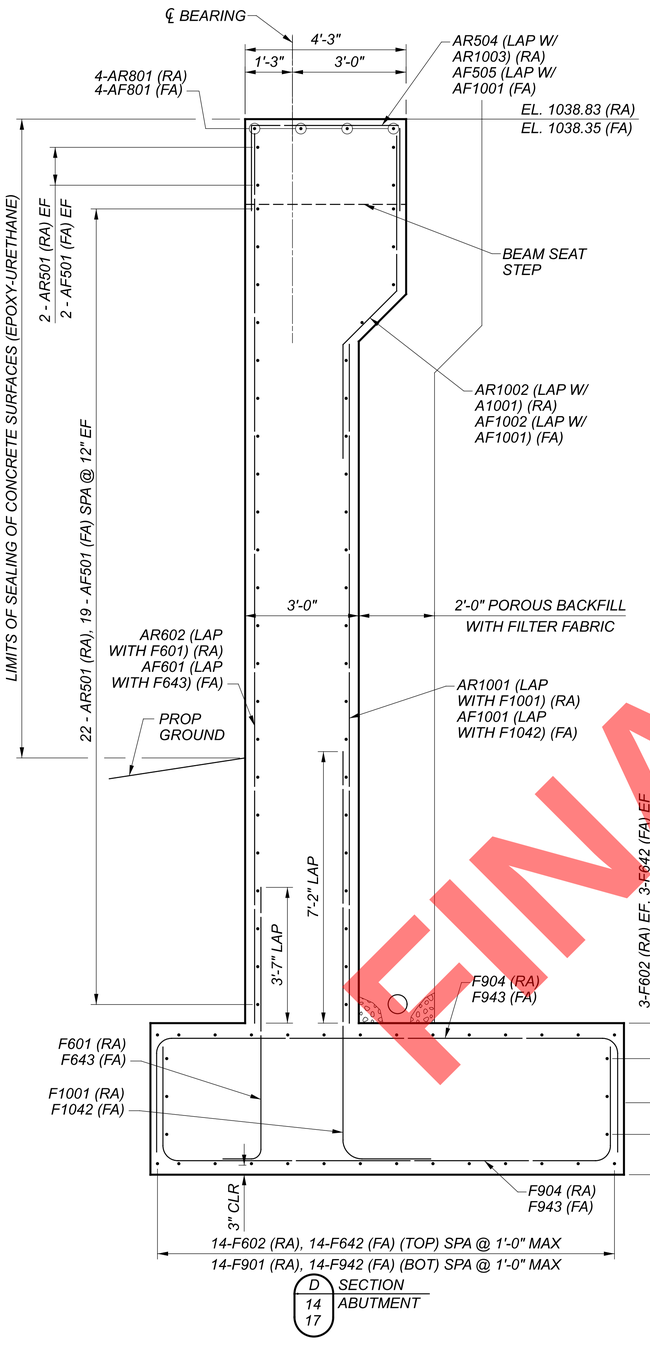
DESIGNER	CHECKER
AM	SAT

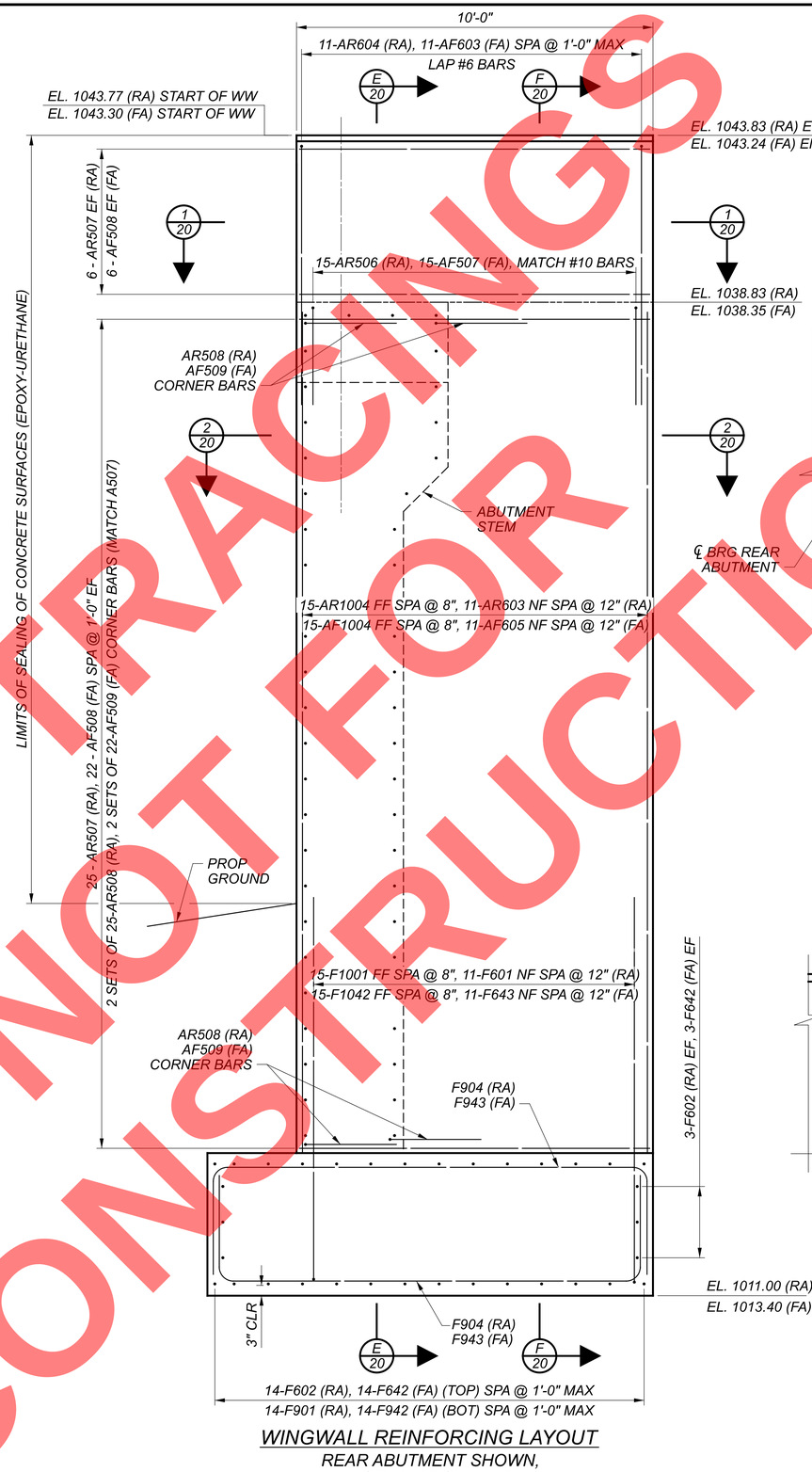
REVIEWER
EFD 08/2026

PROJECT ID
114865

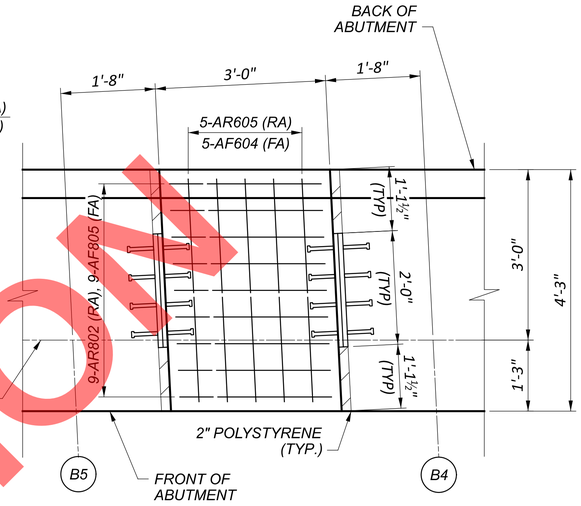
SUBSET	TOTAL
18	38

SHEET	TOTAL
P.394	627

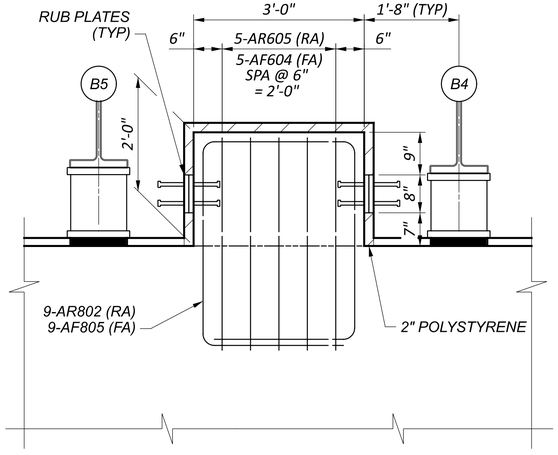




WINGWALL REINFORCING LAYOUT
REAR ABUTMENT SHOWN, FORWARD SIMILAR



SEMI-INTEGRAL DIAPHRAGM PLAN
(REAR ABUTMENT SHOWN, FORWARD SIMILAR)



SEMI-INTEGRAL DIAPHRAGM ELEVATION
(REAR ABUTMENT SHOWN, FORWARD SIMILAR)

NOTES

1. FOR WINGWALL DETAILS, SEE SHEET 20/38 .
2. FOR ADDITIONAL SEMI-INTEGRAL DIAPHRAGM DETAILS, SEE ODOT STD. DWG. SICD-2-14.
3. 2" CLEAR COVER UNLESS NOTED OTHERWISE.
4. FOR BAR LAP LENGTHS, SEE SHEET 38/38 .

FINAL TRACINGS NOT FOR CONSTRUCTION

TYPICAL PROPOSED ABUTMENT DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
19	38

SHEET	TOTAL
P.395	627

SUM-077/008-11.65/00.00
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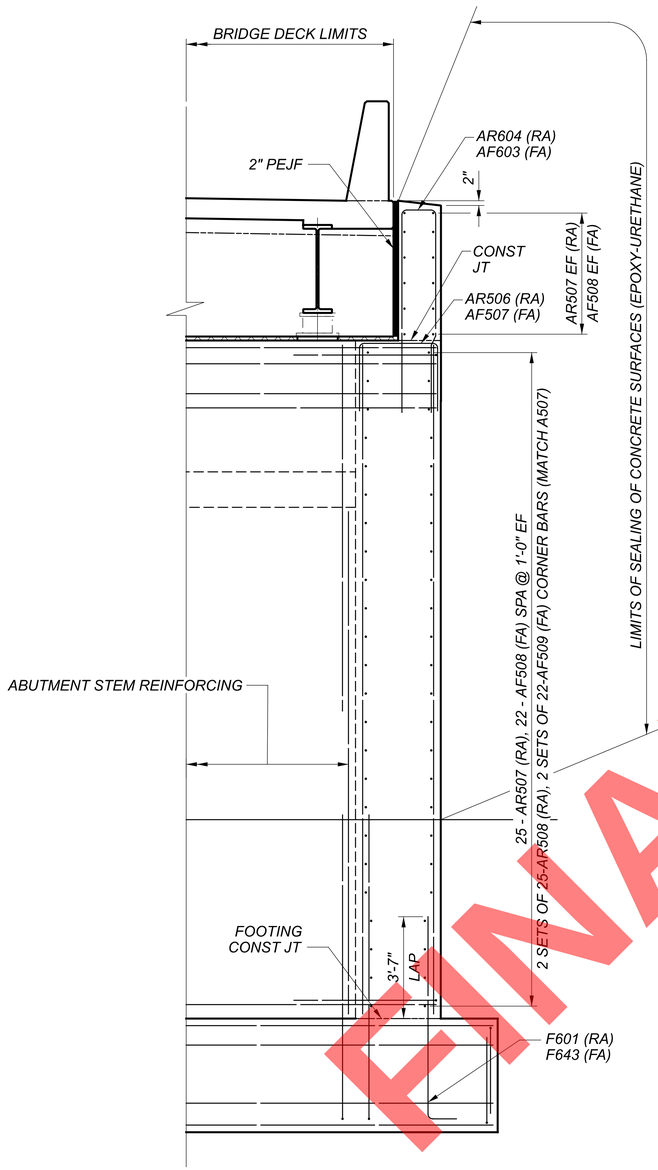
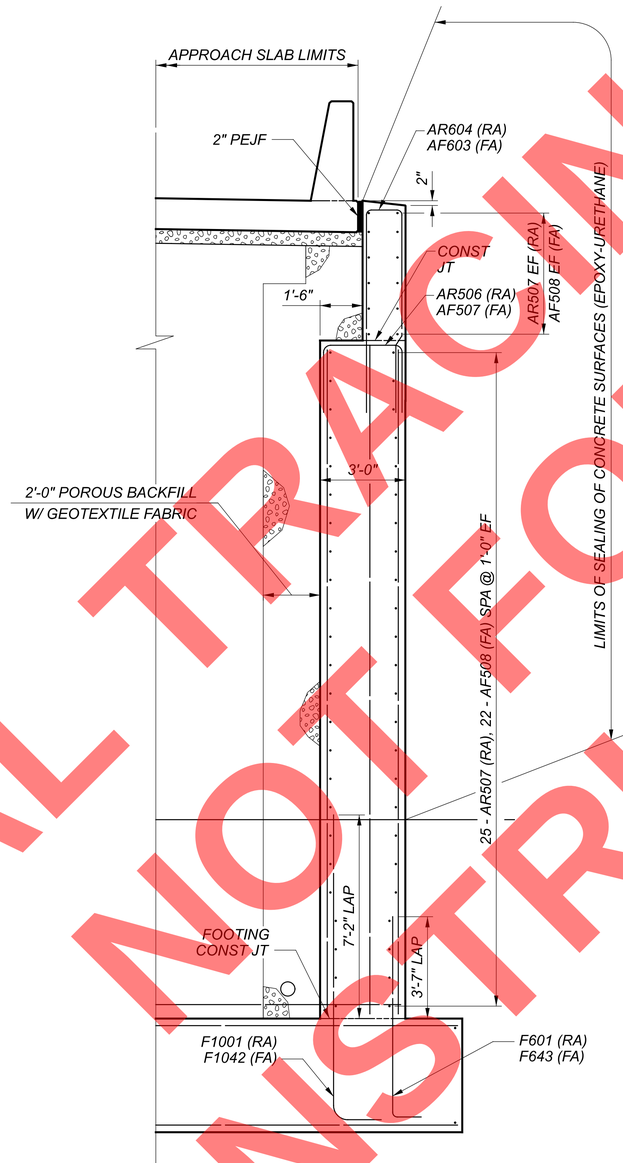
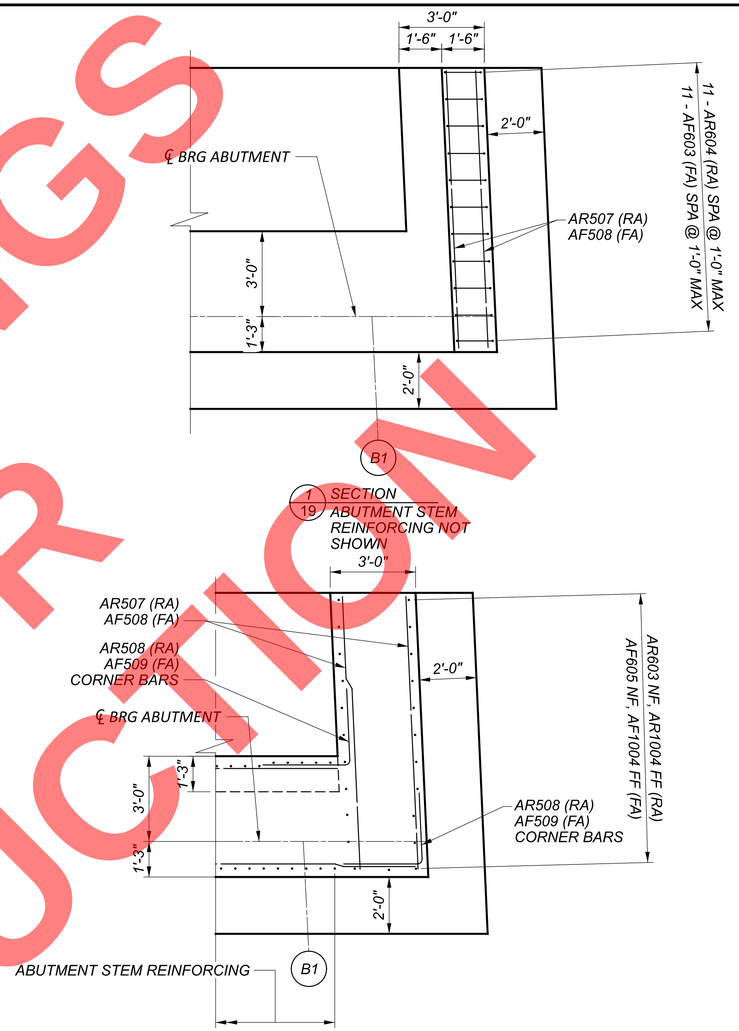


E 19 SECTION
REAR ABUTMENT SHOWN, FORWARD SIMILAR



F 19 SECTION
REAR ABUTMENT SHOWN, FORWARD SIMILAR



2 19 SECTION
REAR ABUTMENT SHOWN, FORWARD SIMILAR

NOTES

1. 2" CLEAR COVER UNLESS NOTED OTHERWISE.
2. FOR BAR LAP LENGTHS, SEE SHEET 38/38 .
3. FOR ABUTMENT STEM REINFORCING DETAILS, SEE SHEETS 14/38 AND 17/38 .

FINAL NOT FOR CONSTRUCTION

ABUTMENT WINGWALL DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
20	38

SHEET	TOTAL
P.396	627

SUM-077/008-11.65/00.00
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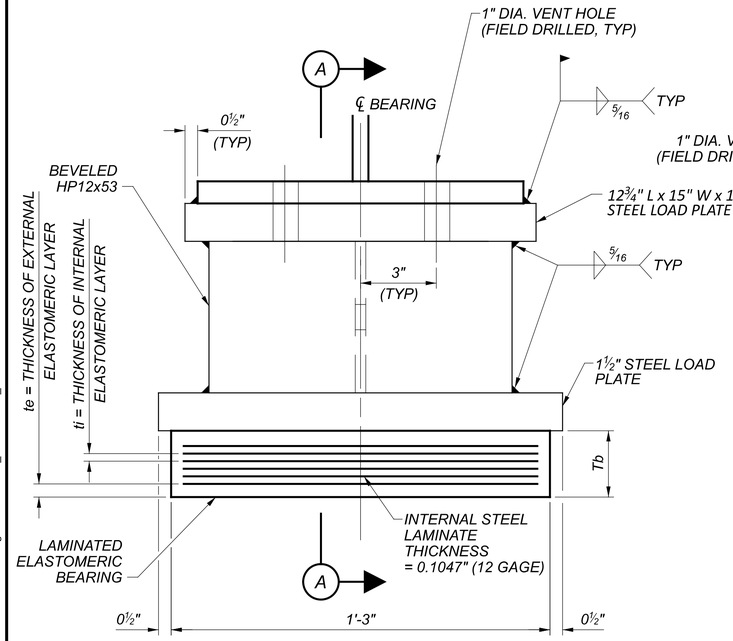
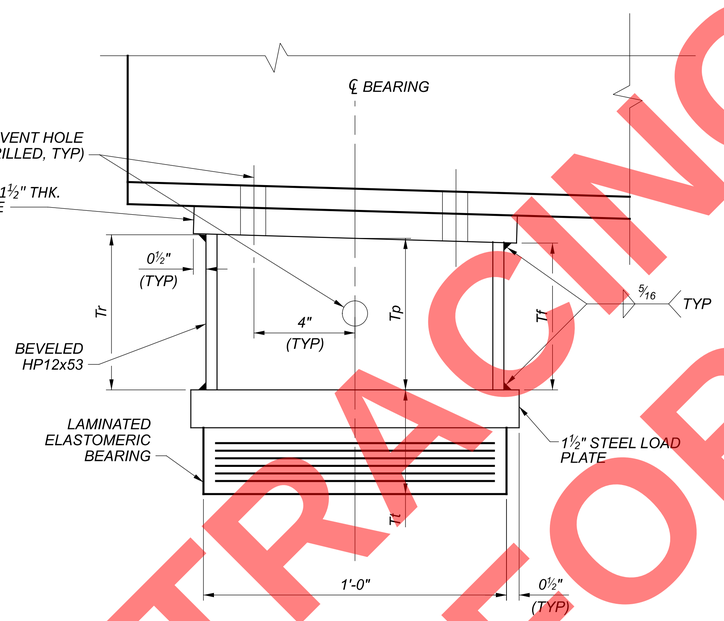
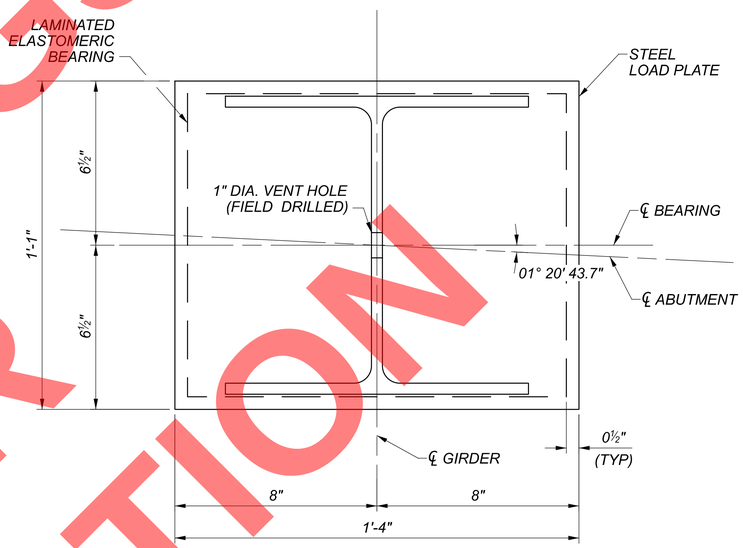


LAMINATED ELASTOMERIC EXPANSION BEARING
TYPICAL, REAR AND FORWARD



A SECTION
UPSTATION



BEARING ORIENTATION PLAN
REAR SHOWN
FORWARD SIMILAR

ABUTMENT BEARING SCHEDULE

SUPPORT	BEARING TYPE	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	TOTAL LOAD (KIPS)	ti	NO. OF ti's	te	NO. OF te's	NO. OF INTERNAL LAMINATES	Tb	Tt @ BRG	Tr	Tp	Tf
REAR ABUT	EXPANSION	99.98	82.95	182.93	0.300	6.00	0.195	1.00	6.00	2.623	4.12	8.29	8.25	8.21
FORWARD ABUT	EXPANSION	99.79	80.32	180.11	0.300	6.00	0.195	1.00	6.00	2.623	4.12	8.79	8.75	8.71

NOTES

1. *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. *THE STEEL LOAD PLATE SHALL BE ASTM A709, GRADE 50 STEEL. BOND THE LOAD PLATE BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.*
3. *THE DEAD, LIVE, AND TOTAL LOADS TABULATED IN THE BEARING SCHEDULE ARE UNFACTORED LOADS.*
4. *REFER TO STD DWG SICD-1-21 FOR ADDITIONAL ABUTMENT BEARING NOTES AND DETAILS.*
5. *ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.*
6. *PAYMENT FOR ELASTOMERIC BEARINGS, LOAD PLATES, AND PEDESTALS AND INSTALLATION TO BE INCLUDED WITH ITEM 516, ELASTOMERC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

BEARING DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
21	38

SHEET	TOTAL
P.397	627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:36:26 AM USER: stony
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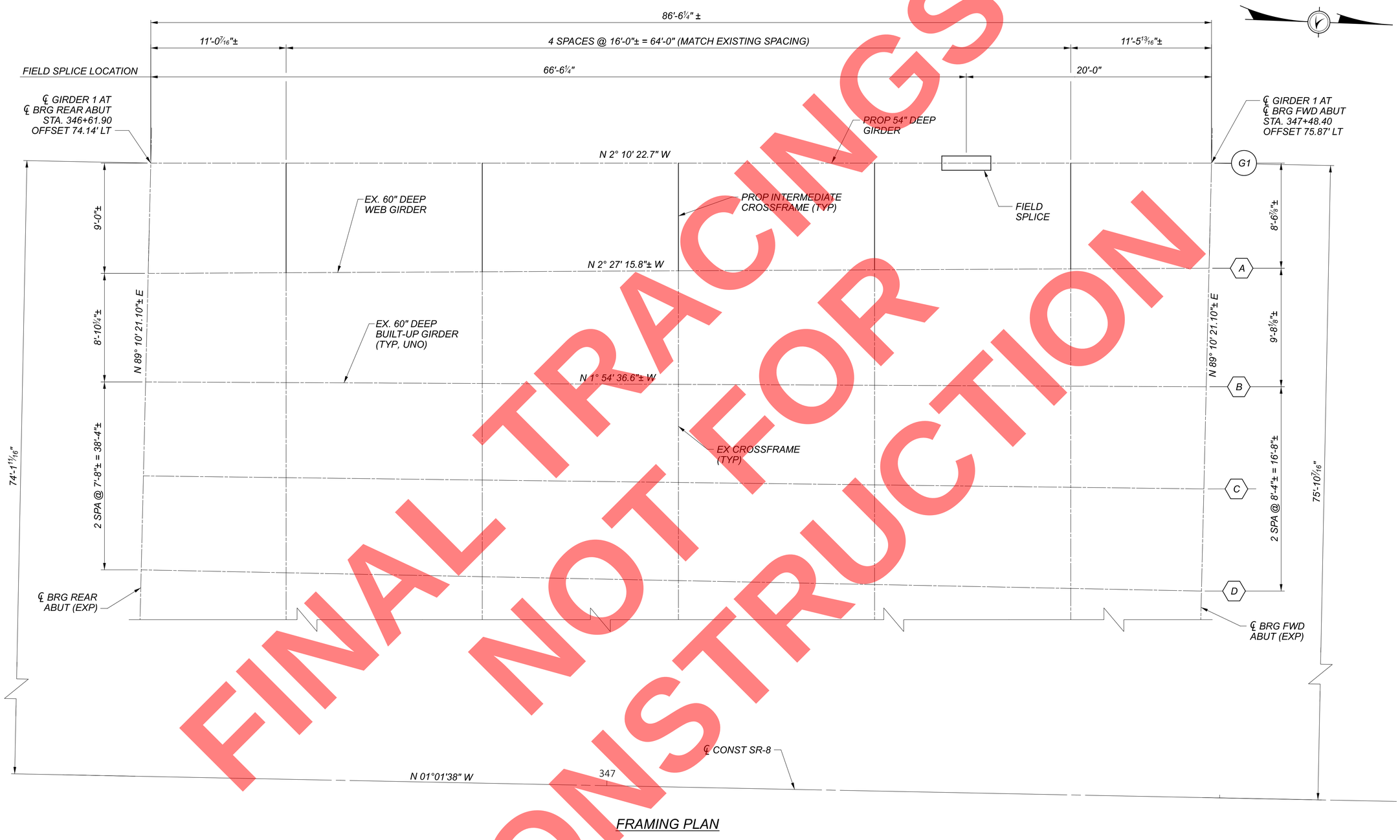

FRAMING PLAN

NOTES

1. FOR BEAM ELEVATION DETAILS, SEE SHEET 23/38 .
2. FOR CROSSFRAME DETAILS, SEE SHEET 24/38 .

FINAL TRACINGS
NOT FOR
CONSTRUCTION

FRAMING PLAN
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
22	38

SHEET	TOTAL
P.398	627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ ENTABLE: $PENTBL$$
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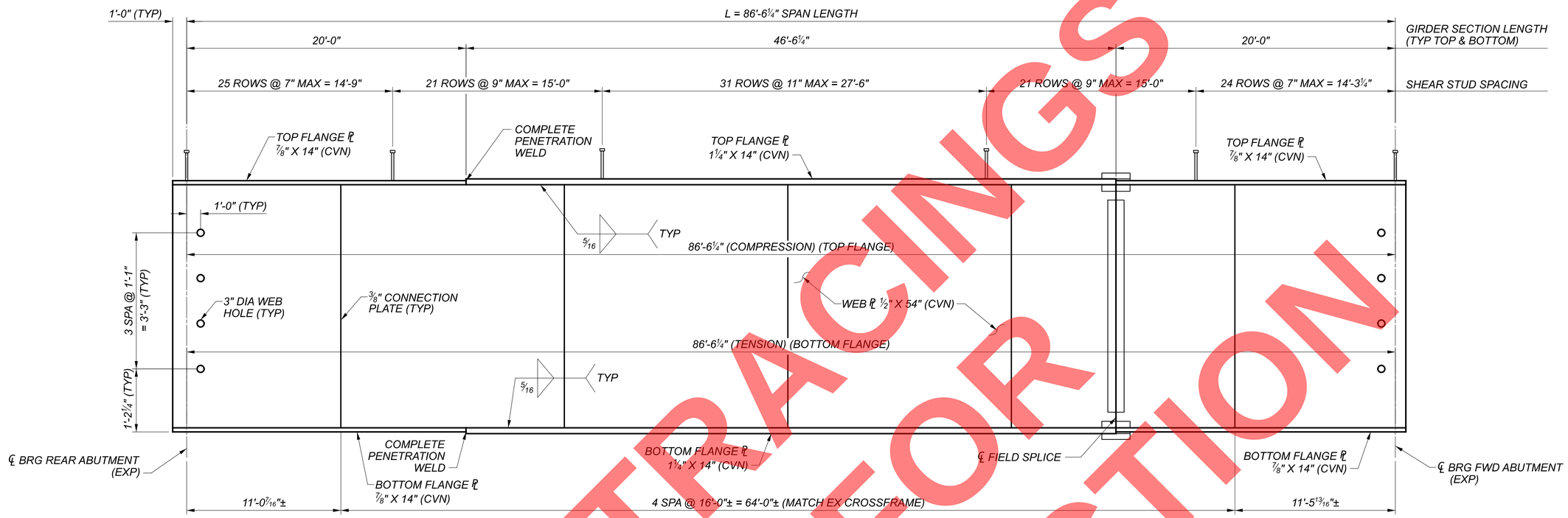
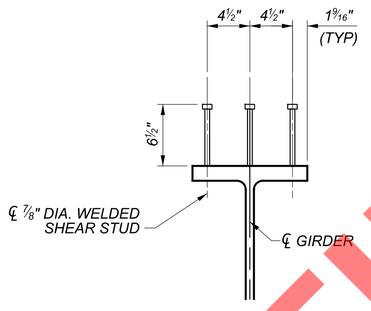


GIRDER 1 ELEVATION

DIMENSIONS ALONG GIRDER, EXAGGERATED IN Y SCALE



SHEAR STUD DETAIL

NOTES

1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.
2. FOR FRAMING PLAN, SEE SHEET 22/38 .
3. FOR CROSSFRAME DETAILS, SEE SHEET 24/38 .
3. FOR ADDITIONAL DETAILS FOR STIFFENERS, SEE STD DWG GSD-1-19.
4. ALL STEEL SHALL BE ASTM A709 GRADE 50, AND SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH CMS 711.02.
5. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION" OR "C". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION" OR "T". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND AT LEAST 5/16" THICK.

FINAL TRACINGS
NOT FOR CONSTRUCTION

BEAM ELEVATION
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
23	38

SHEET	TOTAL
P.399	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:36:44 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SS002

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:36:53 AM USER: stony
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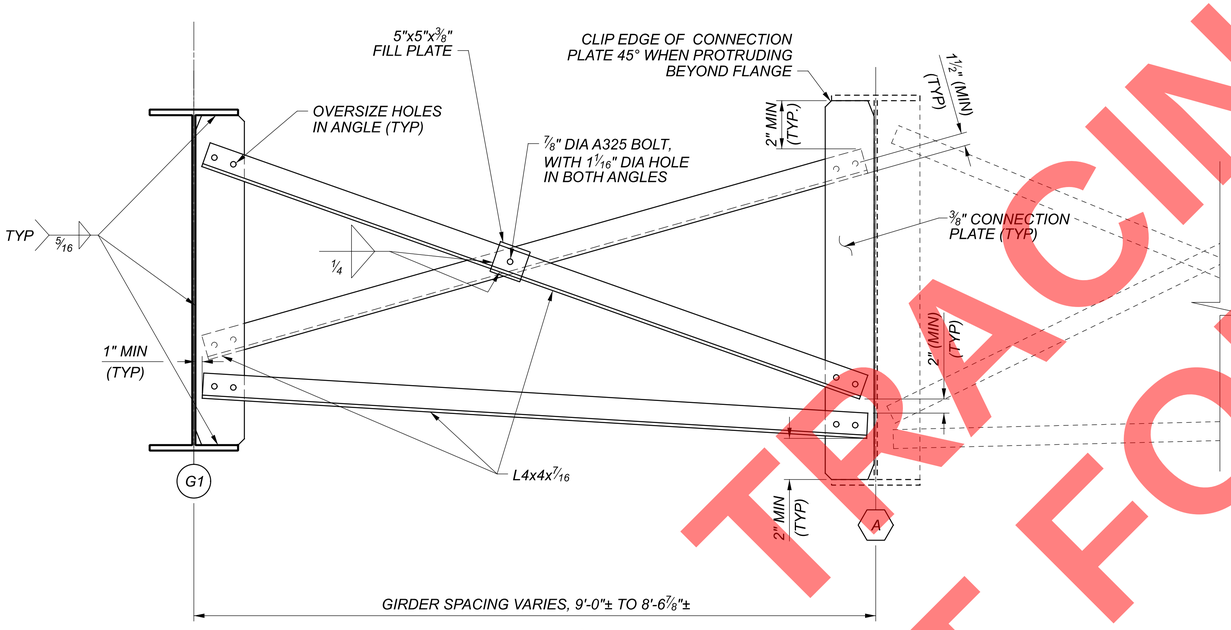
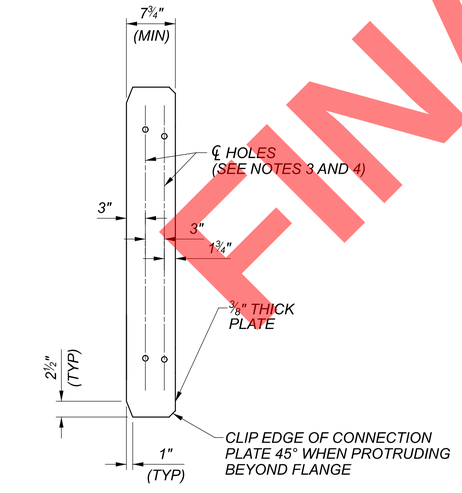
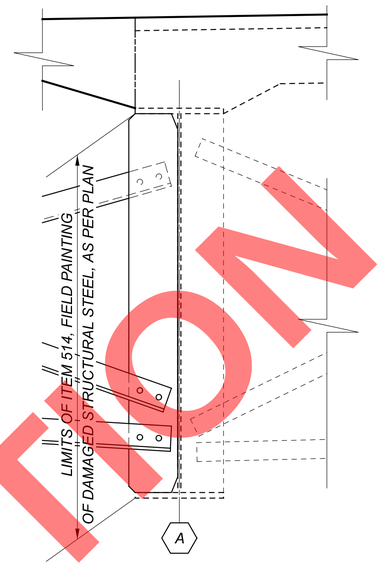
SUM-077/008-11.65/00.00



CROSSFRAME DETAILS



TYPICAL CONNECTION PLATE DETAIL



EX BEAM A PREPARATION DETAIL

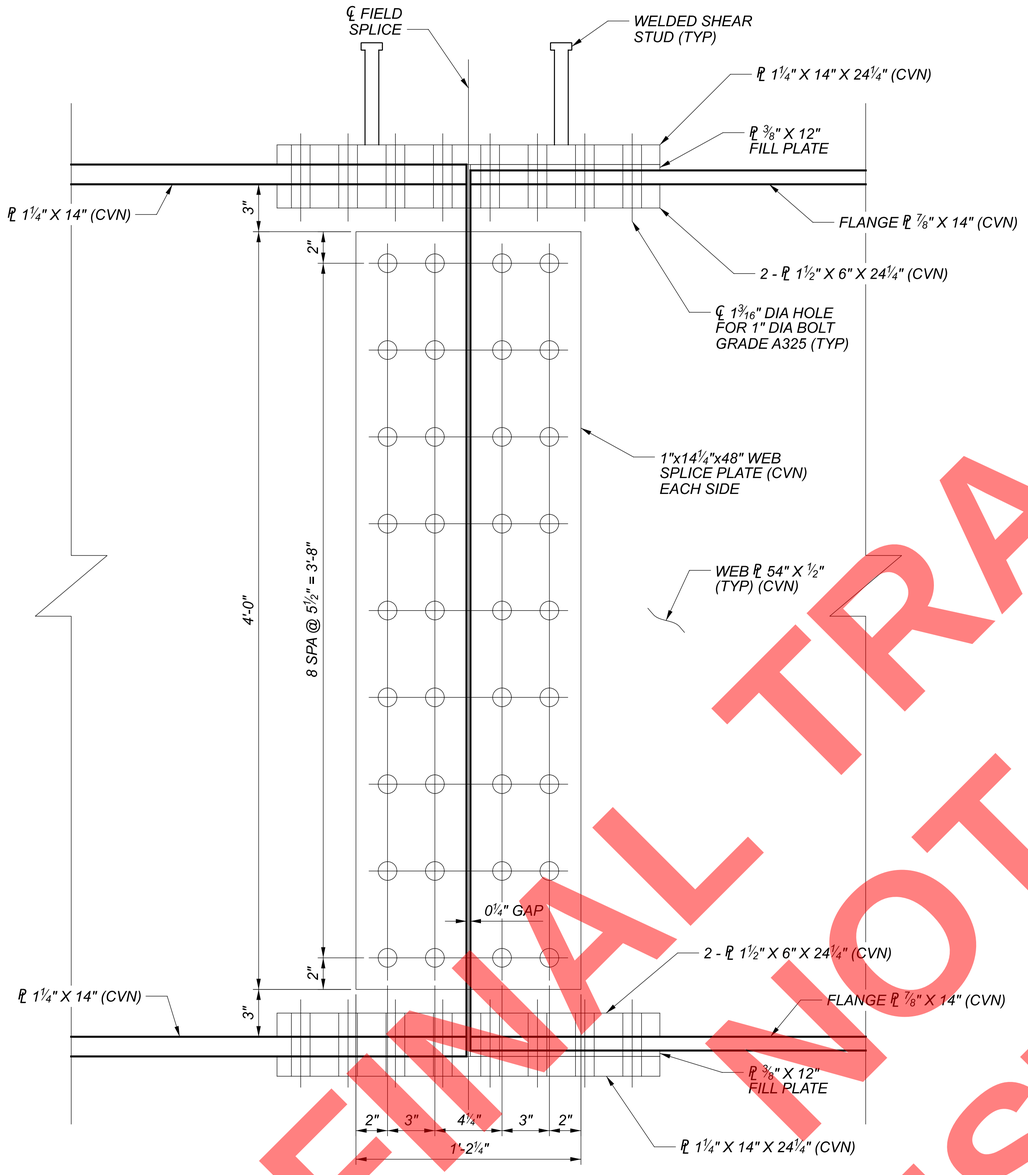
NOTES

1. SEE SHEET 22/38 FOR FRAMING PLAN DETAILS.
2. FOR ADDITIONAL DIAPHRAGM AND CONNECTION PLATE DETAILS, REFER TO ODOT STD DWG GSD-1-19.
3. TERMINATE WELDS ¼" FROM THE END OF PLATE TO BEAM INTERFACE.
4. ALL BOLT HOLES TO BE 15/16" DIA IN CONNECTION PLATES AND 1 1/16" DIA IN CROSSFRAME ANGLES FOR CROSSFRAMES.
5. HIGH STRENGTH BOLTS SHALL BE ⅞" DIAMETER A325 UNLESS NOTED OTHERWISE.
6. THE PAINTING OF THE EXISTING GIRDER WILL BE INCLUDED UNDER ITEM 514, FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN.

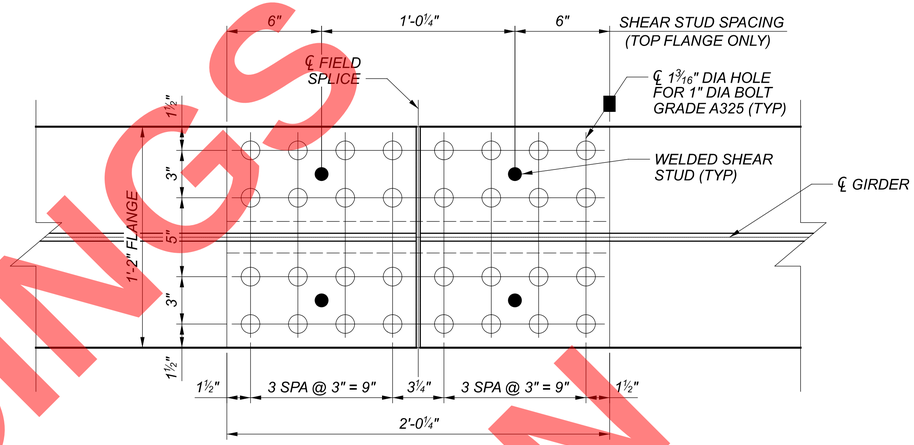
FINAL TRACINGS
NOT FOR CONSTRUCTION

GIRDER AND CROSSFRAME DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN	7700156
DESIGN AGENCY	GFT, 8800 Lyra drive, Suite 110, Columbus, Ohio 43240
DESIGNER	AM
CHECKER	SAT
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	24
TOTAL	38
SHEET	P.400
TOTAL	627

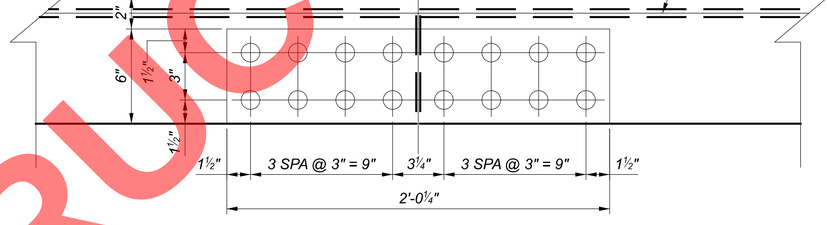


FIELD SPLICE ELEVATION



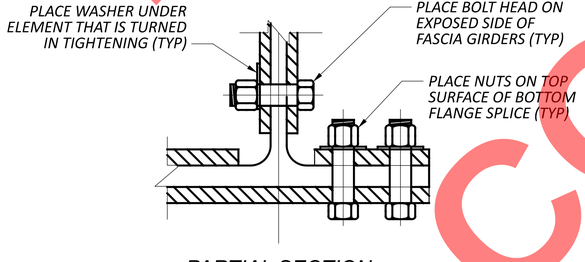
PLAN - OUTER PLATE

(TOP FLANGE SHOWN, BOTTOM FLANGE SIMILAR)
(SYMMETRICAL ABOUT ℄ SPLICE AND ℄ BEAM)



PLAN - INNER PLATE

(TOP AND BOTTOM FLANGE)
(SYMMETRICAL ABOUT ℄ SPLICE AND ℄ BEAM)



PARTIAL SECTION

NOTES

1. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER F3125, GRADE A325, TYPE 1 UNLESS NOTED OTHERWISE.
2. CHARPY V-NOTCH TOUGHNESS REQUIREMENT: WHERE SHAPE OR PLATE IS DESIGNATED "(CVN)", FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.
3. SEE FRAMING PLAN ON SHEET 22/38 FOR FIELD SPLICE LOCATIONS.

FINAL TRACINGS NOT FOR CONSTRUCTION

SPLICE DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
25	38

SHEET	TOTAL
P.401	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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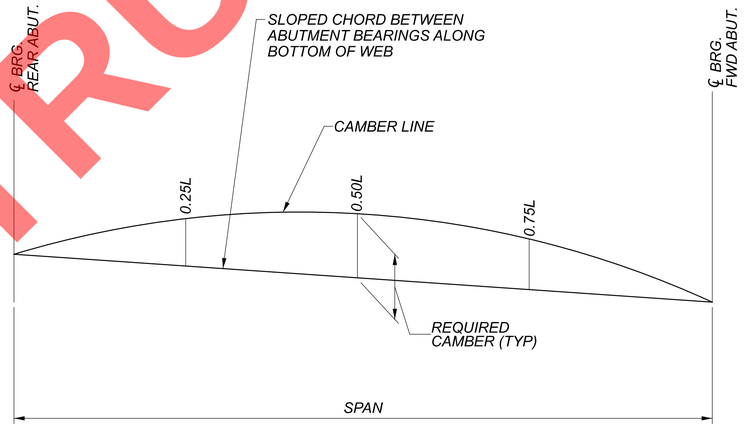
FINAL TRACINGS
NOT FOR
CONSTRUCTION

GIRDER CAMBER AND DEFLECTIONS						
POINT		GIRDER 1				
		DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	TOTAL CAMBER
RA		0.00"	0.00"	0.00"	0.00"	**0.00"**
SPAN 1	0.25	0.20"	0.97"	0.03"	0.03"	**1.23"**
	0.50	0.28"	1.36"	0.05"	0.06"	**1.74"**
	0.75	0.20"	0.97"	0.03"	0.09"	**1.29"**
FA		0.00"	0.00"	0.00"	0.00"	**0.00"**



CAMBER AND BLOCKING DIAGRAM
ALONG CENTERLINE BEAM

NOTES
1. CAMBER IS MEASURED ALONG BOTTOM OF THE BEAM WEB.

BEAM CAMBER AND BLOCKING
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
26	38

SHEET	TOTAL
P.402	627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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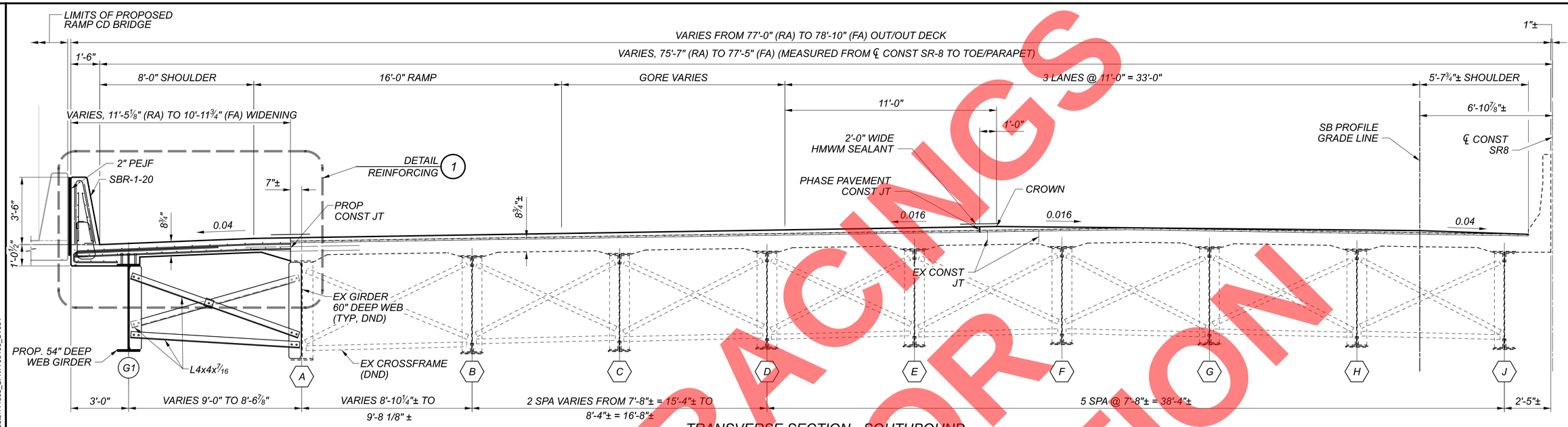
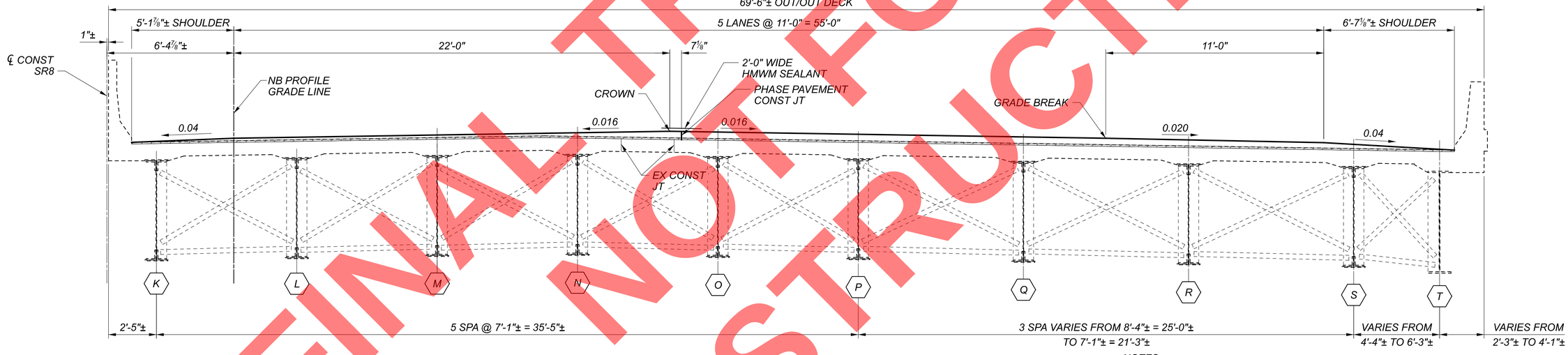
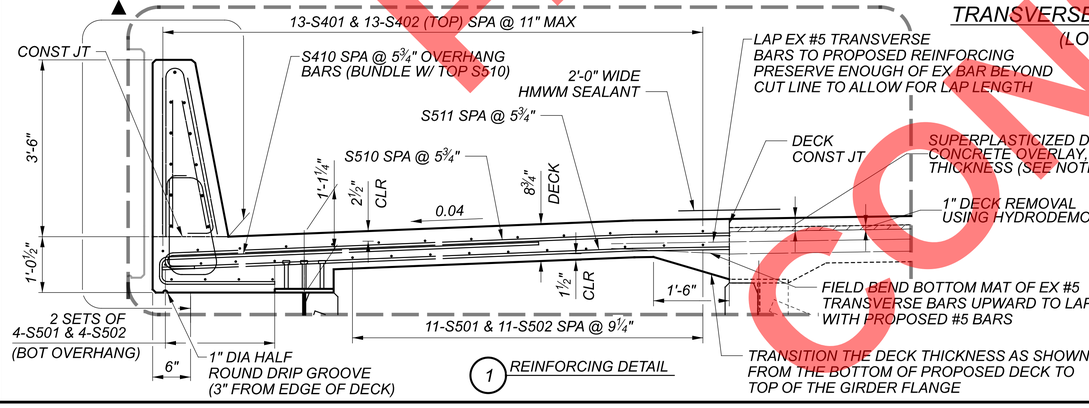


TRANSVERSE SECTION - SOUTHBOUND
(LOOKING UPSTATION)



TRANSVERSE SECTION - NORTHBOUND
(LOOKING UPSTATION)



1 REINFORCING DETAIL

LEGEND

▲ LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

LIMITS OF 1" DECK REMOVAL PER ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION

NOTES

1. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITIY OF CONCRETE THAT FORMS EACH BEAM HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4.50" 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, 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 511.23.
2. FOR PARAPET REINFORCING DETAILS, SEE SHEET 33/38 .
3. IN BAY G1/A, DO NOT FULLY TORQUE BOLTS TO CONNECTION PLATE UNTIL DECK POUR IS COMPLETE. THE STRUCTURAL STEEL AND METALIZING/GALVINIZING WILL BE INCLUDED FOR PAYMENT UNDER ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN.
4. FOR CROSSFRAME DETAILS, SEE SHEET 24/38 .
5. SUPERPLASTICIZED DENSE CONCRETE OVERLAY THICKNESS VARIES ACROSS DECK AND APPROACH SLAB, SEE FINAL SURFACE ELEVATION PLANS ON SHEET 31/38 AND 32/38 FOR FURTHER DETAILS.

FINAL TRACINGS
NOT FOR CONSTRUCTION

TRANSVERSE SECTION
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
27	38

SHEET	TOTAL
P.403	627

SUM-077/008-11.65/00.00
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SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
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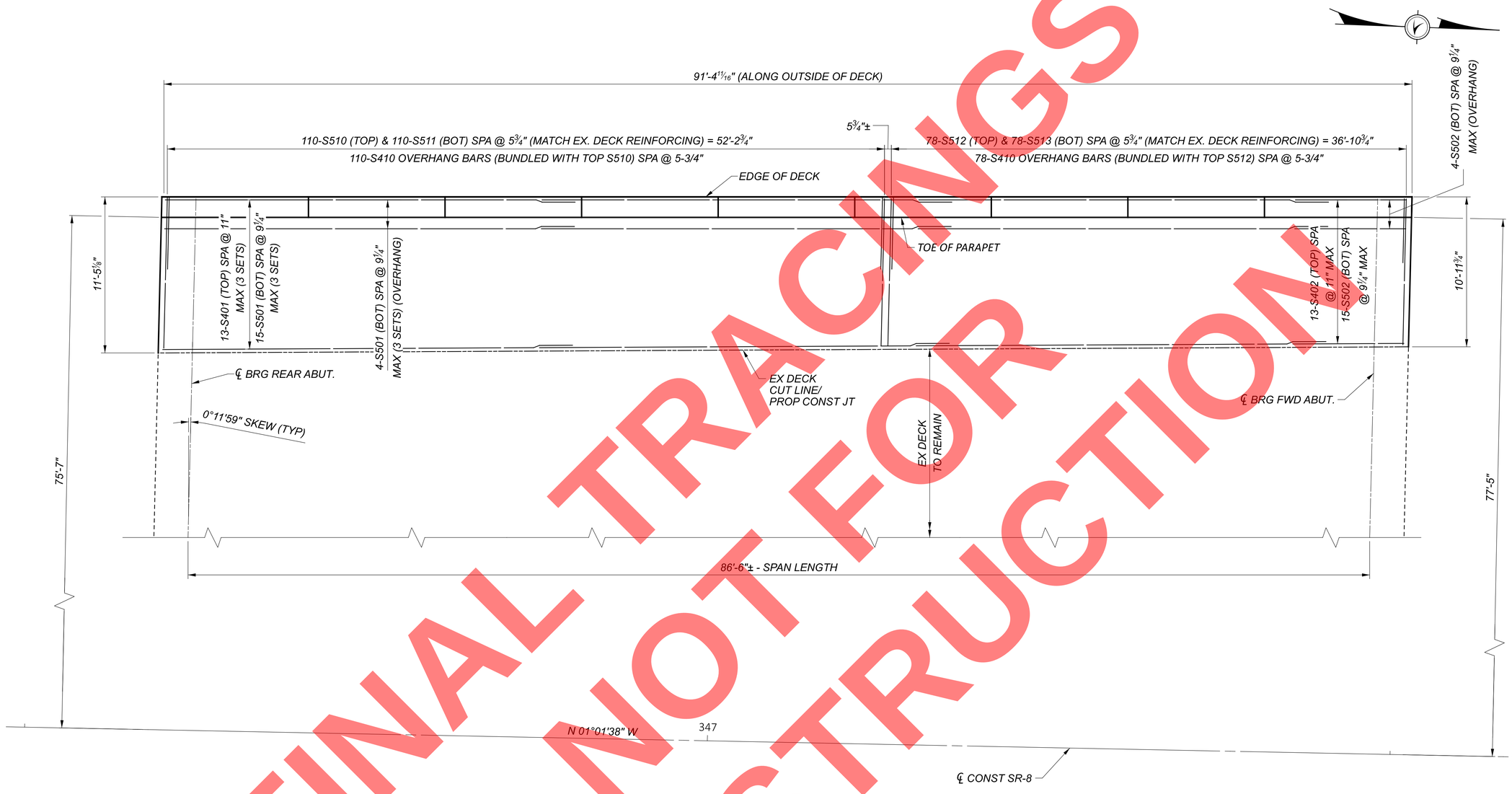
FINAL TRACINGS
NOT FOR
CONSTRUCTION



DECK REINFORCING PLAN

NOTES

1. FOR BAR SPLICE LENGTHS, SEE SHEET 38/38 .

DECK PLAN
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN	7700156
DESIGN AGENCY	GFT 8800 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER	AM
CHECKER	SAT
REVIEWER	EFD 08/2026
PROJECT ID	114865
SUBSET	28
TOTAL	38
SHEET	P.404
TOTAL	627

SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$

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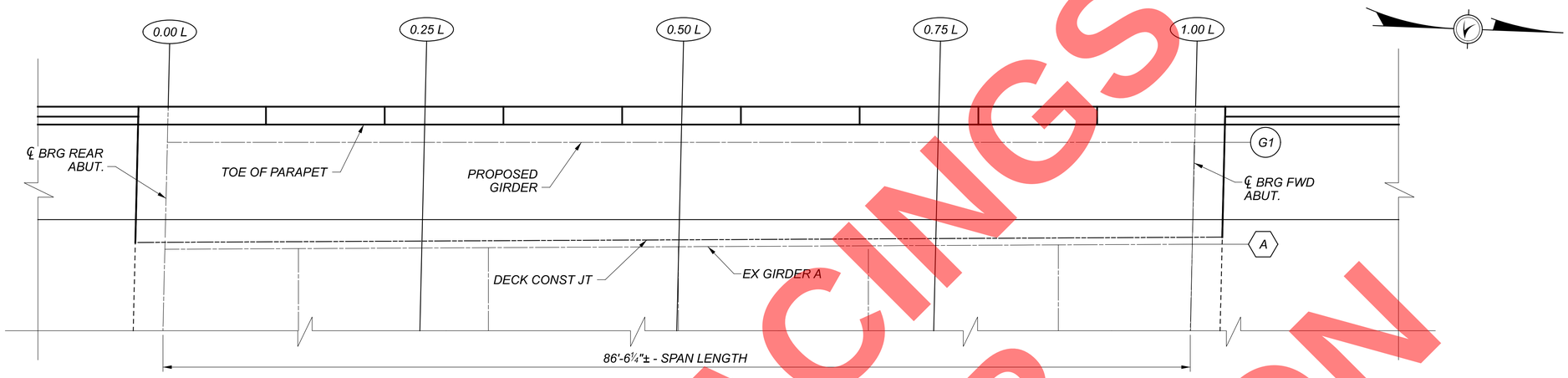
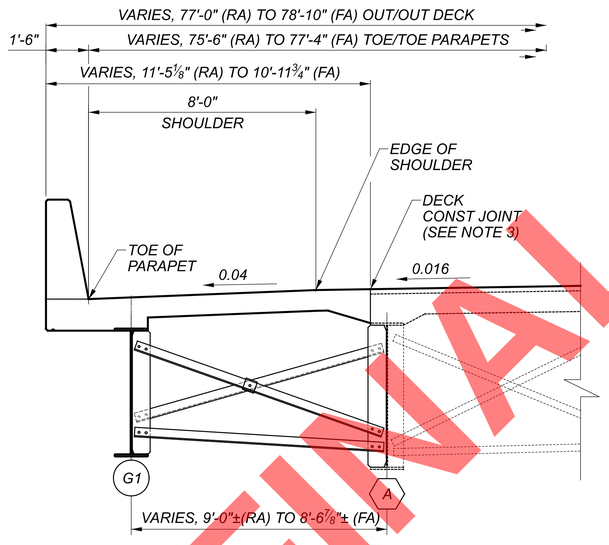
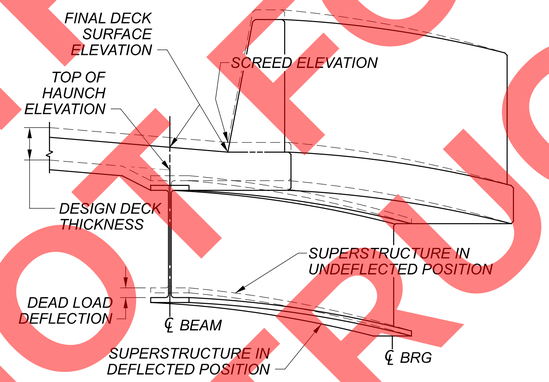


TOP OF HAUNCH, SCREED AND FINAL DECK ELEVATION LINE LOCATION



TOP OF HAUNCH LINE LOCATIONS



TOP OF HAUNCH, SCREED AND FINAL DECK ELEVATION SCHEMATIC

FOR ALL OTHER ELEVATIONS, SEE SHEET 30/38 FOR DETAILS.

TOP OF HAUNCH ELEVATIONS

SPAN NO.	LOCATION	GIRDER #1 STA.	GIRDER #1 T/HAUNCH ELEV.
REAR ABUT		346+61.90	1042.84
SPAN 1	0.25 L	346+83.52	1042.78
	0.50 L	347+05.15	1042.68
	0.75 L	347+26.78	1042.50
FORWARD ABUT		347+48.40	1042.27

NOTES

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF DECK ABOVE THE BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. DIMENSIONS IN THE TRANSVERSE SECTION ARE SHOWN NORMAL TO THE CENTERLINE OF CONSTRUCTION OF SR-8.
3. THE DECK ELEVATIONS (FINISHED, SCREED, TOP OF HAUNCH) ARE CALCULATED FROM THE PROPOSED CONSTRUCTION JOINT FROM THE EXISTING SURVEY DATA. THE CALCULATED ELEVATION AND EXISTING TOP OF DECK MAY DIFFER SLIGHTLY. THE CONSTRUCTION JOINT TOP OF FINISHED DECK ELEVATIONS ARE TO MATCH THAT OF THE EXISITNG DECK ELEVATION. THE PROPOSED DECK ELEVATIONS ARE CALCULATED PRIOR TO SURFACE PREPARATION USING HYDRODEMOLITION AND SUPERPLASTICIZED DENSE CONCRETE OVERLAY.

FINAL TRACINGS NOT FOR CONSTRUCTION

TOP OF HAUNCH ELEVATIONS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
29	38

SHEET	TOTAL
P.405	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRV$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:37:44 AM USER: stony
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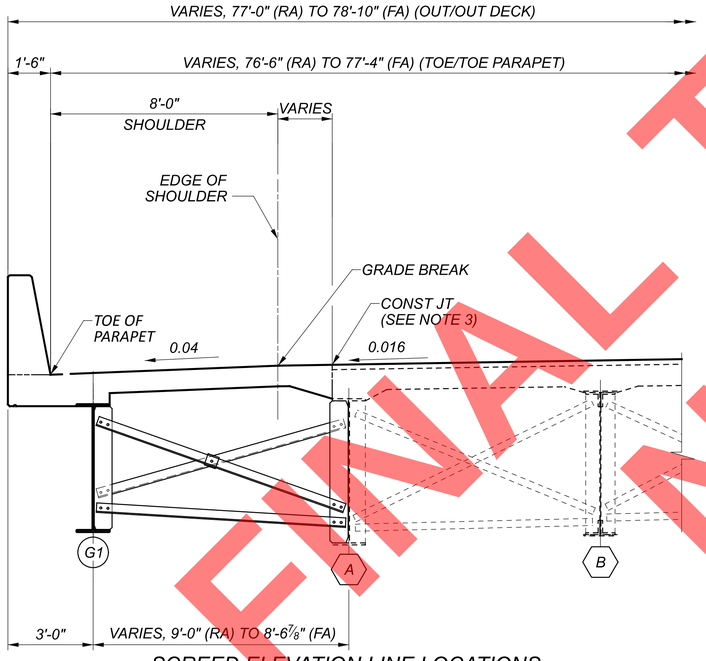
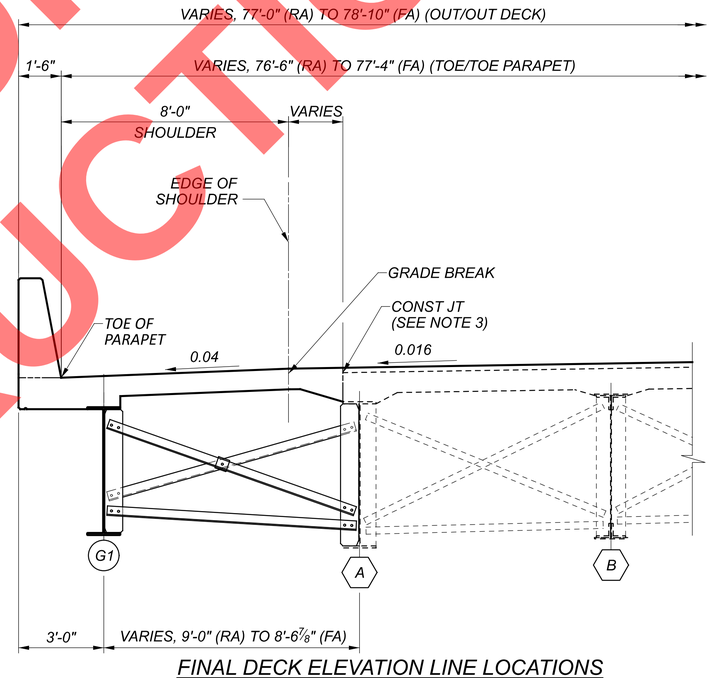
SCREED ELEVATIONS							
SPAN NO.	LOCATION	TOE OF PARAPET		EDGE OF SHOULDER		CONSTRUCTION JOINT	
		STA.	SCREED ELEV.	STA.	SCREED ELEV.	STA.	SCREED ELEV.
REAR ABUT		346+61.90	1043.51	346+61.87	1043.83	346+61.87	1043.86
SPAN 1	0.25 L	346+83.53	1043.45	346+83.50	1043.77	346+83.50	1043.80
	0.50 L	347+05.16	1043.35	347+05.13	1043.67	347+05.12	1043.69
	0.75 L	347+26.78	1043.17	347+26.75	1043.49	347+26.75	1043.51
FORWARD ABUT		347+48.41	1042.94	347+48.38	1043.27	347+48.38	1043.29

FINAL DECK SURFACE ELEVATIONS									
SPAN NO.	LOCATION	TOE OF PARAPET		GIRDER #1		EDGE OF SHOULDER		CONSTRUCTION JOINT	
		STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.
REAR ABUT		346+61.90	1043.51	346+61.90	1043.57	346+61.87	1043.83	346+61.87	1043.86
SPAN 1	0.25 L	346+83.53	1043.37	346+83.52	1043.43	346+83.50	1043.69	346+83.50	1043.72
	0.50 L	347+05.16	1043.23	347+05.15	1043.29	347+05.13	1043.55	347+05.12	1043.57
	0.75 L	347+26.78	1043.09	347+26.78	1043.15	347+26.75	1043.41	347+26.75	1043.43
FORWARD ABUT		347+48.41	1042.94	347+48.40	1043.00	347+48.38	1043.27	347+48.38	1043.29



SCREED ELEVATION LINE LOCATIONS



FINAL DECK ELEVATION LINE LOCATIONS

NOTES

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.
3. THE DECK ELEVATIONS (FINISHED, SCREED, TOP OF HAUNCH) ARE CALCULATED AT THE PROPOSED CONSTRUCTION JOINT FROM THE PROPOSED SURVEY DATA.

FINAL TRACINGS
NOT FOR CONSTRUCTION

SCREED & FINAL DECK ELEVATIONS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 30 | TOTAL 38
SHEET P.406 | TOTAL 627

SUM-077/008-11.65/00.00

PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:37:55 AM USER: stony
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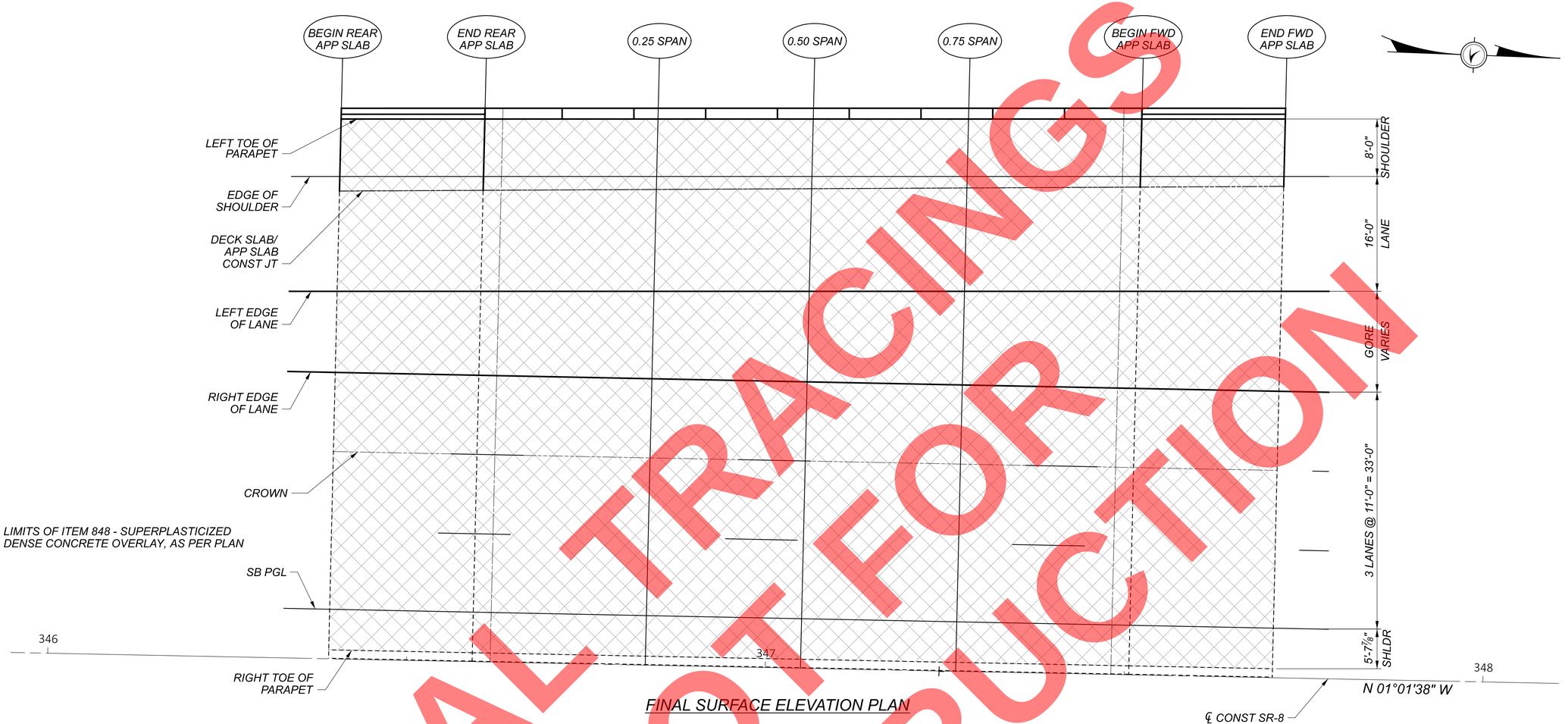

LEGEND

LIMITS OF ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN

FINAL SURFACE ELEVATION PLAN

FINAL BRIDGE SURFACE ELEVATIONS - SOUTHBOUND SR-8

LOCATION	LEFT TOE OF PARAPET			EDGE OF SHOULDER			DECK SLAB/APP SLAB CONSTRUCTION JOINT			LEFT EDGE OF LANE				RIGHT EDGE OF LANE			
	STA.	OFFSET	PROPOSED DECK ELEVATION	STA.	OFFSET	PROPOSED DECK ELEVATION	STA.	OFFSET	PROPOSED DECK ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION
BEGIN REAR APP SLAB	346+39.39	75.19' LT	1043.65	346+39.36	67.19' LT	1043.97	346+39.36	65.16' LT	1044.00	346+39.31	51.18' LT	1043.84	1044.23	346+39.27	39.90' LT	1044.05	1044.41
END REAR APP SLAB	346+59.40	75.59' LT	1043.52	346+59.37	67.59' LT	1043.84	346+59.37	65.66' LT	1043.87	346+59.32	51.58' LT	1043.71	1044.10	346+59.28	39.90' LT	1043.92	1044.29
0.25L SPAN	346+83.53	76.07' LT	1043.37	346+83.50	68.07' LT	1043.69	346+83.50	66.26' LT	1043.72	346+83.45	52.07' LT	1043.55	1043.95	346+83.40	39.90' LT	1043.78	1044.14
0.50L SPAN	347+05.16	76.50' LT	1043.23	347+05.13	68.50' LT	1043.55	347+05.12	66.80' LT	1043.57	347+05.07	52.50' LT	1043.41	1043.81	347+05.03	39.90' LT	1043.65	1044.01
0.75L SPAN	347+26.78	76.94' LT	1043.09	347+26.75	68.94' LT	1043.41	347+26.75	67.34' LT	1043.43	347+26.70	52.93' LT	1043.27	1043.67	347+26.65	39.90' LT	1043.51	1043.87
BEGIN FWD APP SLAB	347+50.92	77.42' LT	1042.93	347+50.89	69.42' LT	1043.25	347+50.89	67.94' LT	1043.27	347+50.84	53.41' LT	1043.10	1043.51	347+50.78	39.90' LT	1043.37	1043.73
END FWD APP SLAB	347+70.91	77.82' LT	1042.78	347+70.88	69.82' LT	1043.11	347+70.88	68.44' LT	1043.13	347+70.91	53.81' LT	1042.97	1043.36	347+70.78	39.90' LT	1043.24	1043.59

FINAL BRIDGE SURFACE ELEVATIONS - SOUTHBOUND SR-8

LOCATION	CROWN OF ROADWAY				SOUTHBOUND PGL				RIGHT TOE OF PARAPET			
	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION
BEGIN REAR APP SLAB	346+39.23	28.87' LT	1044.26	1044.58	346+39.15	6.91' LT	1044.05	1044.24	346+39.13	1.25' LT	1044.01	1044.02
END REAR APP SLAB	346+59.24	28.87' LT	1044.14	1044.46	346+59.16	6.91' LT	1043.93	1044.11	346+59.14	1.25' LT	1043.88	1043.89
0.25L SPAN	346+83.36	28.87' LT	1043.99	1044.32	346+83.29	6.91' LT	1043.78	1043.96	346+83.27	1.25' LT	1043.74	1043.74
0.50L SPAN	347+04.99	28.87' LT	1043.85	1044.18	347+04.91	6.91' LT	1043.65	1043.83	347+04.89	1.25' LT	1043.60	1043.61
0.75L SPAN	347+26.61	28.87' LT	1043.71	1044.05	347+26.54	6.91' LT	1043.51	1043.70	347+26.52	1.25' LT	1043.47	1043.47
BEGIN FWD APP SLAB	347+50.75	28.87' LT	1043.56	1043.90	347+50.66	6.91' LT	1043.36	1043.55	347+50.65	1.25' LT	1043.32	1043.32
END FWD APP SLAB	347+70.74	28.87' LT	1043.43	1043.76	347+70.66	6.91' LT	1043.24	1043.41	347+70.64	1.25' LT	1043.20	1043.18

NOTES

1. THE EXISTING DECK ELEVATIONS HAVE BEEN CALCULATED FROM THE EXISTING SURVEY DATA. THE CALCULATED ELEVATION AND EXISTING TOP OF DECK ELEVATION MAY DIFFER SLIGHTLY. THE EXISTING DECK ELEVATIONS ARE CALCULATED PRIOR TO SURFACE PREPARATION USING HYDRODEMOLITION.
2. THE PROPOSED DECK ELEVATIONS ARE CALCULATED AT THE PROPOSED DECK SLAB CONSTRUCTION JOINT FROM THE PROPOSED SURVEY DATA.
3. THE FINAL SURFACE ELEVATIONS ARE CALCULATED AFTER SURFACE PREPARATION USING HYDRODEMOLITION AND SUPERPLASTICIZED DENSE CONCRETE OVERLAY.
4. FOR TYPICAL DECK CROSS SECTION OVERLAY DETAILS, SEE SHEET 32/38.

FINAL NOT FOR CONSTRUCTION

SOUTHBOUND FINAL SURFACE ELEVATION PLAN
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 31 | TOTAL 38
SHEET P.407 | TOTAL 627

SUM-077/008-11.65/00.00
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PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
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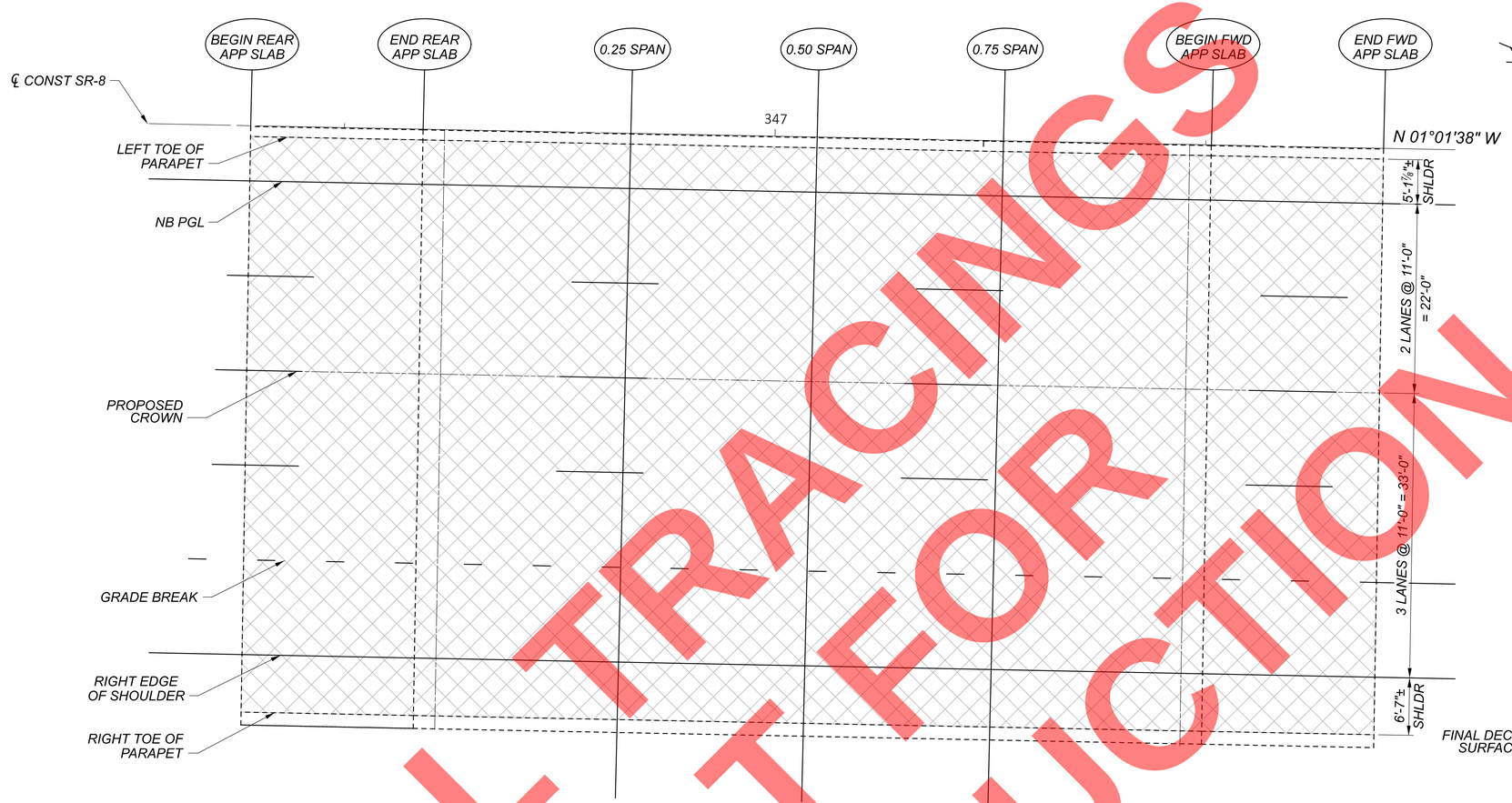

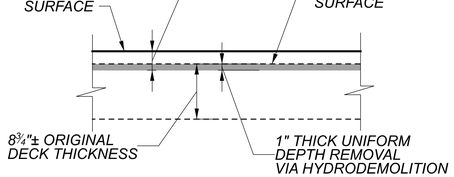

EXISTING DECK OVERLAY TYPICAL SECTION

LEGEND

LIMITS OF ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYRDRODEMOLITION, AS PER PLAN

FINAL SURFACE ELEVATION PLAN

FINAL BRIDGE SURFACE ELEVATIONS - NORTHBOUND SR-8

LOCATION	LEFT TOE OF PARAPET				NORTHBOUND PGL				CROWN OF ROADWAY				GRADE BREAK @ LANE LINE			
	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION
BEGIN REAR APP SLAB	346+39.13	1.25' RT	1043.86	1043.89	346+39.15	6.41' RT	1043.92	1044.18	346+39.23	28.40' RT	1044.08	1044.53	346+39.31	50.41' RT	1043.76	1044.17
END REAR APP SLAB	346+59.14	1.25' RT	1043.73	1043.74	346+59.16	6.41' RT	1043.80	1044.05	346+59.24	28.40' RT	1043.89	1044.40	346+59.31	50.41' RT	1043.61	1044.05
0.25L SPAN	346+83.26	1.25' RT	1043.58	1043.59	346+83.24	6.41' RT	1043.64	1043.90	346+83.16	28.40' RT	1043.74	1044.25	346+83.09	50.41' RT	1043.45	1043.90
0.50L SPAN	347+04.88	1.25' RT	1043.45	1043.45	347+04.87	6.41' RT	1043.51	1043.76	347+04.79	28.40' RT	1043.60	1044.12	347+04.71	50.41' RT	1043.30	1043.76
0.75L SPAN	347+26.51	1.25' RT	1043.31	1043.32	347+26.49	6.41' RT	1043.36	1043.63	347+26.41	28.40' RT	1043.44	1043.98	347+26.34	50.41' RT	1043.14	1043.63
BEGIN FWD APP SLAB	347+50.64	1.25' RT	1043.16	1043.17	347+50.66	6.41' RT	1043.20	1043.48	347+50.74	28.40' RT	1043.26	1043.83	347+50.47	50.41' RT	1042.97	1043.48
END FWD APP SLAB	347+70.64	1.25' RT	1043.04	1043.04	347+70.66	6.41' RT	1043.07	1043.35	347+70.74	28.40' RT	1043.12	1043.70	347+70.46	50.41' RT	1042.83	1043.35

FINAL BRIDGE SURFACE ELEVATIONS - NORTHBOUND SR-8

LOCATION	RIGHT EDGE OF SHOULDER				RIGHT TOE OF PARAPET			
	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION	STA.	OFFSET	EXISTING DECK ELEVATION	FINAL SURFACE ELEVATION
BEGIN REAR APP SLAB	346+39.34	61.41' RT	1043.61	1043.95	346+39.37	68.00' RT	1043.52	1043.69
END REAR APP SLAB	346+59.35	61.41' RT	1043.46	1043.83	346+59.38	68.00' RT	1043.35	1043.57
0.25L SPAN	346+83.05	61.41' RT	1043.30	1043.68	346+83.03	68.00' RT	1043.19	1043.42
0.50L SPAN	347+04.67	61.41' RT	1043.14	1043.54	347+04.65	68.00' RT	1043.04	1043.28
0.75L SPAN	347+26.30	61.41' RT	1042.99	1043.41	347+26.28	68.00' RT	1042.89	1043.15
BEGIN FWD APP SLAB	347+50.85	61.41' RT	1042.82	1043.26	347+50.87	68.00' RT	1042.73	1043.00
END FWD APP SLAB	347+70.85	61.41' RT	1042.70	1043.13	347+70.87	68.00' RT	1042.65	1042.87

NOTES

1. THE EXISTING DECK ELEVATIONS HAVE BEEN CALCULATED FROM THE EXISTING SURVEY DATA. THE CALCULATED ELEVATION AND EXISTING TOP OF DECK ELEVATION MAY DIFFER SLIGHTLY. THE EXISTING DECK ELEVATIONS ARE CALCULATED PRIOR TO SURFACE PREPARATION USING HYDRODEMOLITION.
2. THE PROPOSED DECK ELEVATIONS ARE CALCULATED AT THE DECK SLAB CONSTRUCTION JOINT FROM THE PROPOSED SURVEY DATA.
3. THE FINAL SURFACE ELEVATIONS ARE CALCULATED AFTER SURFACE PREPARATION USING HYDRODEMOLITION AND SUPERPLASTICIZED DENSE CONCRETE OVERLAY.

FINAL TRACINGS NOT FOR CONSTRUCTION

NORTHBOUND FINAL SURFACE ELEVATION PLAN
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 32 | TOTAL 38
SHEET P.408 | TOTAL 627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
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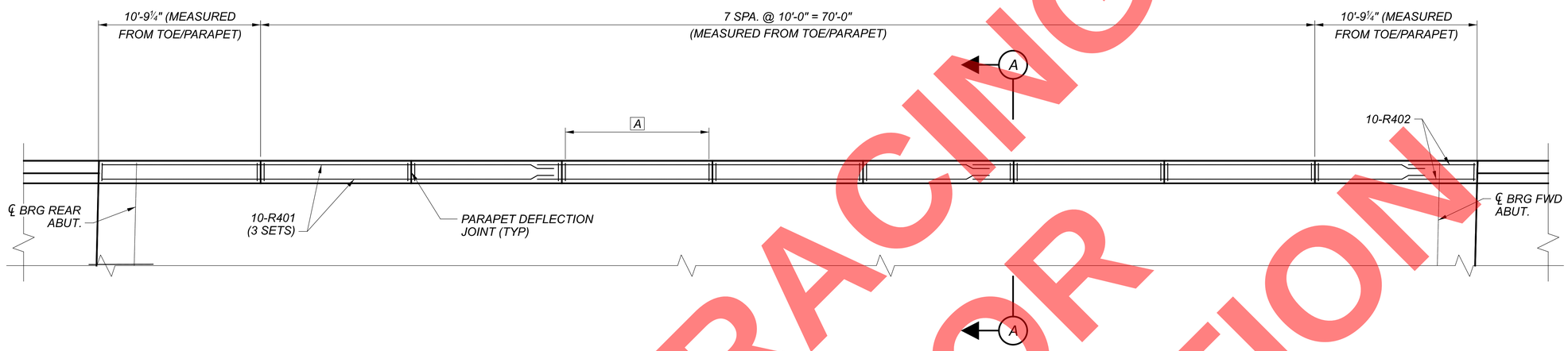
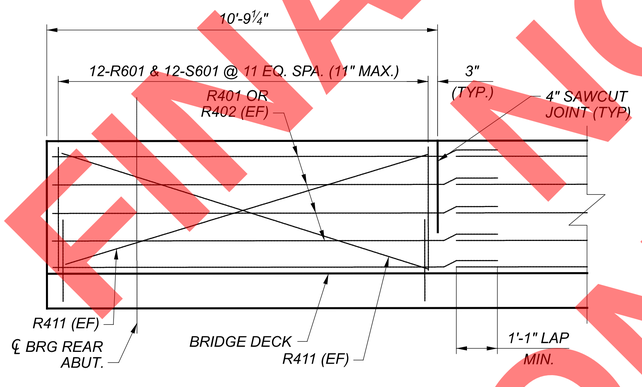
FINAL TRACINGS
NOT FOR
CONSTRUCTION



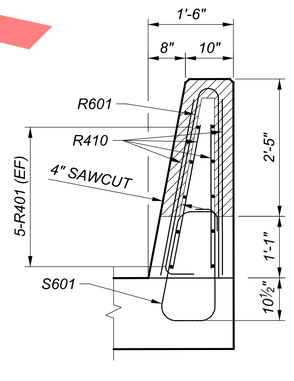
PARAPET PLAN

LEGEND

A 11-R601, 11-S601 @ 10 EQ. SPA. (1'-0" MAX.), 4-GR410 (TYP. FOR 10'-0" PANELS)



END PARAPET ELEVATION
REAR END PANEL SHOWN, FORWARD PANEL SIMILAR



A SECTION
PARAPET REINFORCING

NOTES

1. FOR ADDITIONAL PARAPET DETAILS, REFER TO STANDARD BRIDGE DRAWING SBR-1-20.

PARAPET PLANS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
33	38

SHEET	TOTAL
P.409	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:38:32 AM USER: stony
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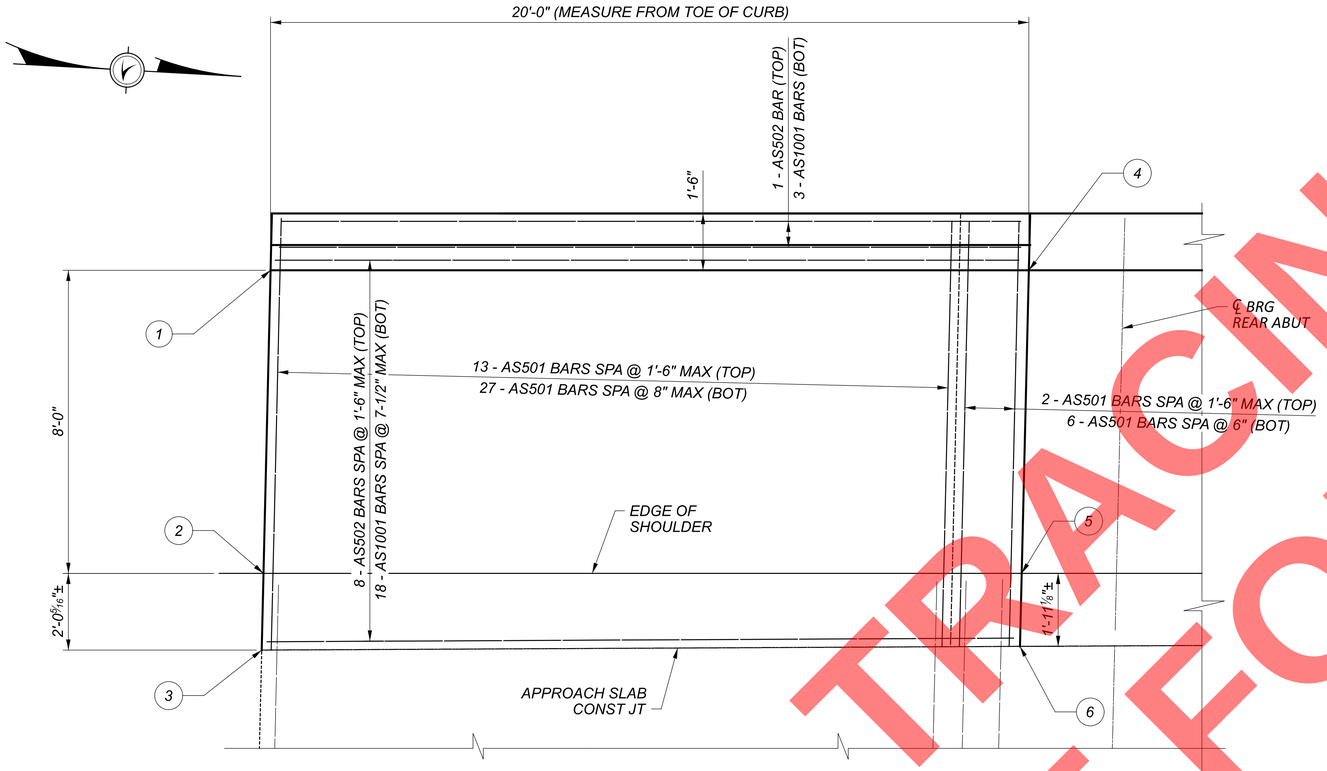
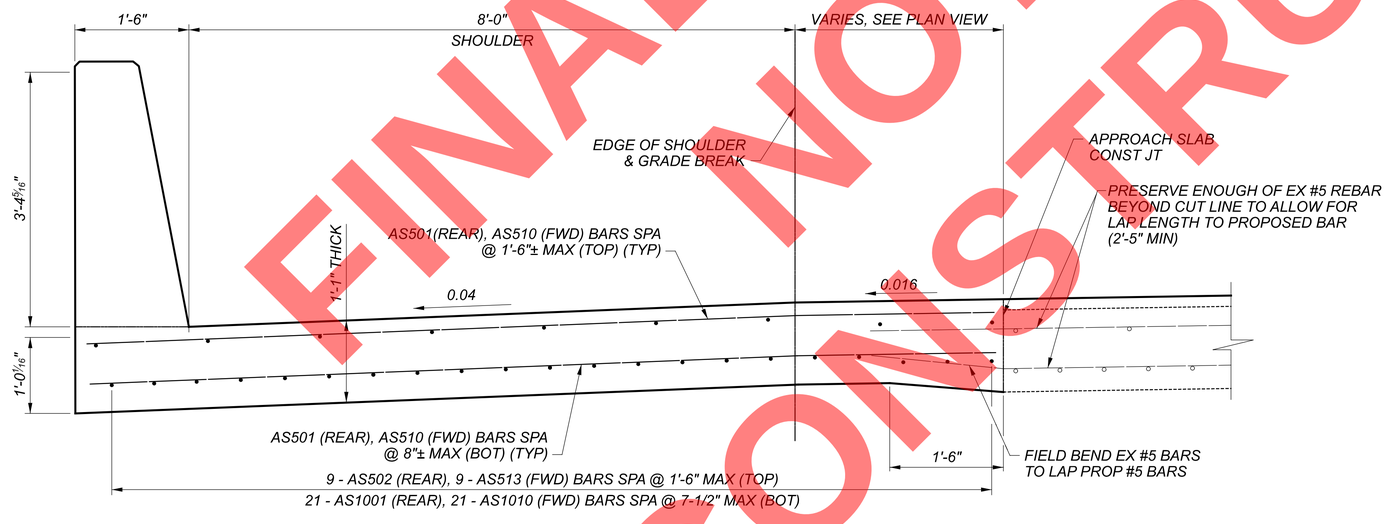


REAR APPROACH SLAB PLAN

REAR APPROACH SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	APPR. SLAB ELEVATION
1	346+39.39	75.19 LT	1043.65
2	346+39.36	67.19 LT	1043.97
3	346+39.36	65.16 LT	1044.00
4	346+59.40	75.59 LT	1043.52
5	346+59.37	67.59 LT	1043.84
6	346+59.37	65.66 LT	1043.87



APPROACH SLAB TYPICAL SECTION
LOOKING UPSTATION

NOTES

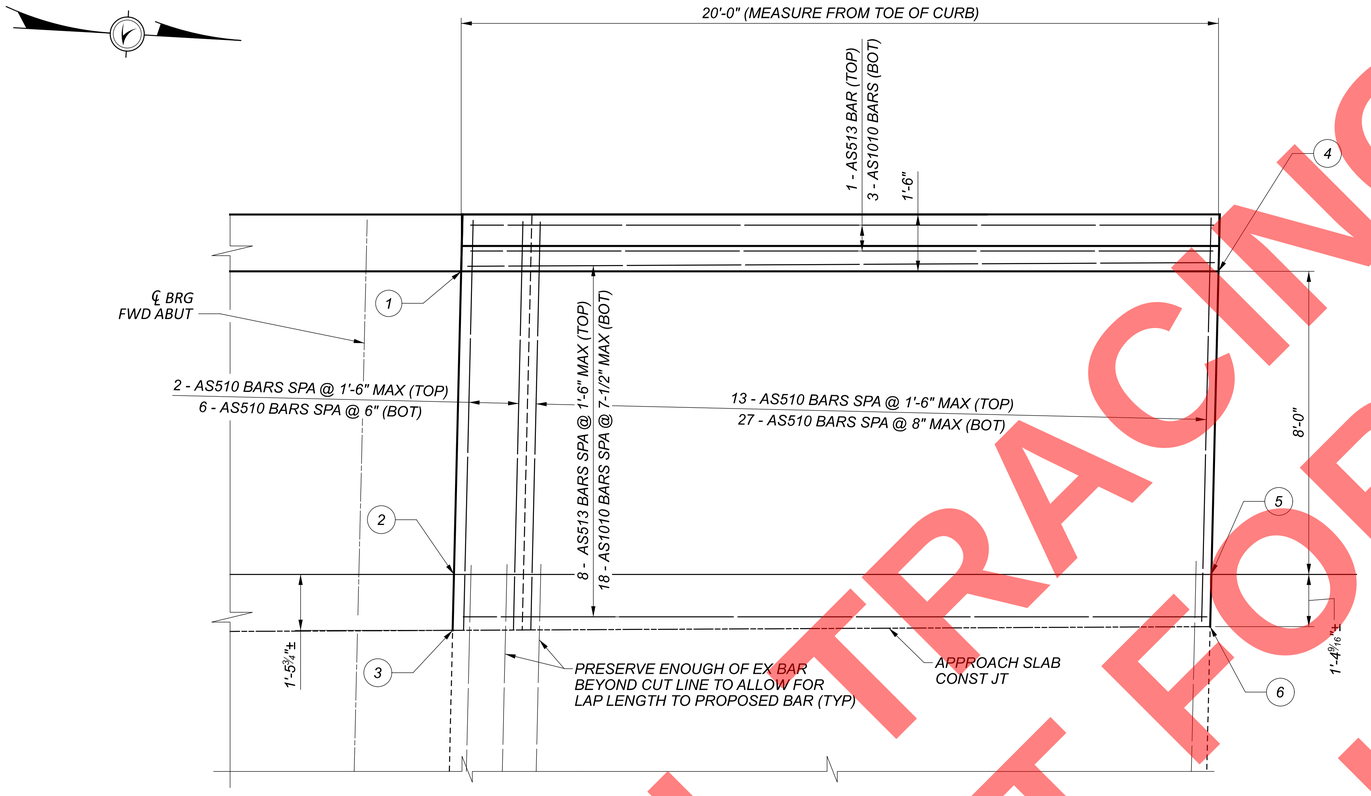
1. FOR ADDITIONAL PARAPET DETAILS & REINFORCING SEE SHEET 36/38 .
2. FOR ADDITIONAL PARAPET DETAILS REFER TO STD DWG SBR-1-20.
3. FOR EXISTING APPROACH SLAB REMOVAL DETAILS, SEE SHEET 12/38 .
4. THE APPROACH SLAB ELEVATIONS ARE CALCULATED AT THE PROPOSED APPROACH SLAB CONSTRUCTION JOINT FROM THE PROPOSED SURVEY DATA.
5. PROPOSED APPROACH SLAB HAS BEEN DESIGNED TO MATCH THE EXISTING APPROACH SLAB, FOR FURTHER APPROACH SLAB DETAILS, SEE STD DWG AS-1-81, DATED 4-20-2001.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

REAR APPROACH SLAB
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156
DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 34 | TOTAL 38
SHEET P.410 | TOTAL 627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:38:41 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SM101



FORWARD APPROACH SLAB PLAN

FORWARD APPROACH SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	APPR SLAB ELEVATION
1	347+50.92	77.42 LT	1042.93
2	347+50.89	69.42 LT	1043.25
3	347+50.89	67.94 LT	1043.27
4	347+70.91	77.82 LT	1042.78
5	347+70.88	69.82 LT	1043.11
6	347+70.88	68.44 LT	1043.13

NOTES

1. *FOR ADDITIONAL PARAPET DETAILS & REINFORCING SEE SHEET 36/38.*
2. *FOR ADDITIONAL PARAPET DETAILS REFER TO STD DWG SBR-1-20.*
3. *FOR EXISTING APPROACH SLAB REMOVAL DETAILS, SEE SHEET 15/38.*
4. *FOR APPROACH SLAB TYPICAL SECTION, SEE SHEET 34/38.*
5. *THE APPROACH SLAB ELEVATIONS ARE CALCULATED AT THE PROPOSED CONSTRUCTION JOINT FROM THE PROPOSED SURVEY DATA.*
6. *PROPOSED APPROACH SLAB HAS BEEN DESIGNED TO MATCH THE EXISTING APPROACH SLAB, FOR FURTHER APPROACH SLAB DETAILS, SEE STD DWG AS-1-81, DATED 4-20-2001.*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

FORWARD APPROACH SLAB
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
35	38

SHEET	TOTAL
P.411	627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:38:50 AM USER: stony
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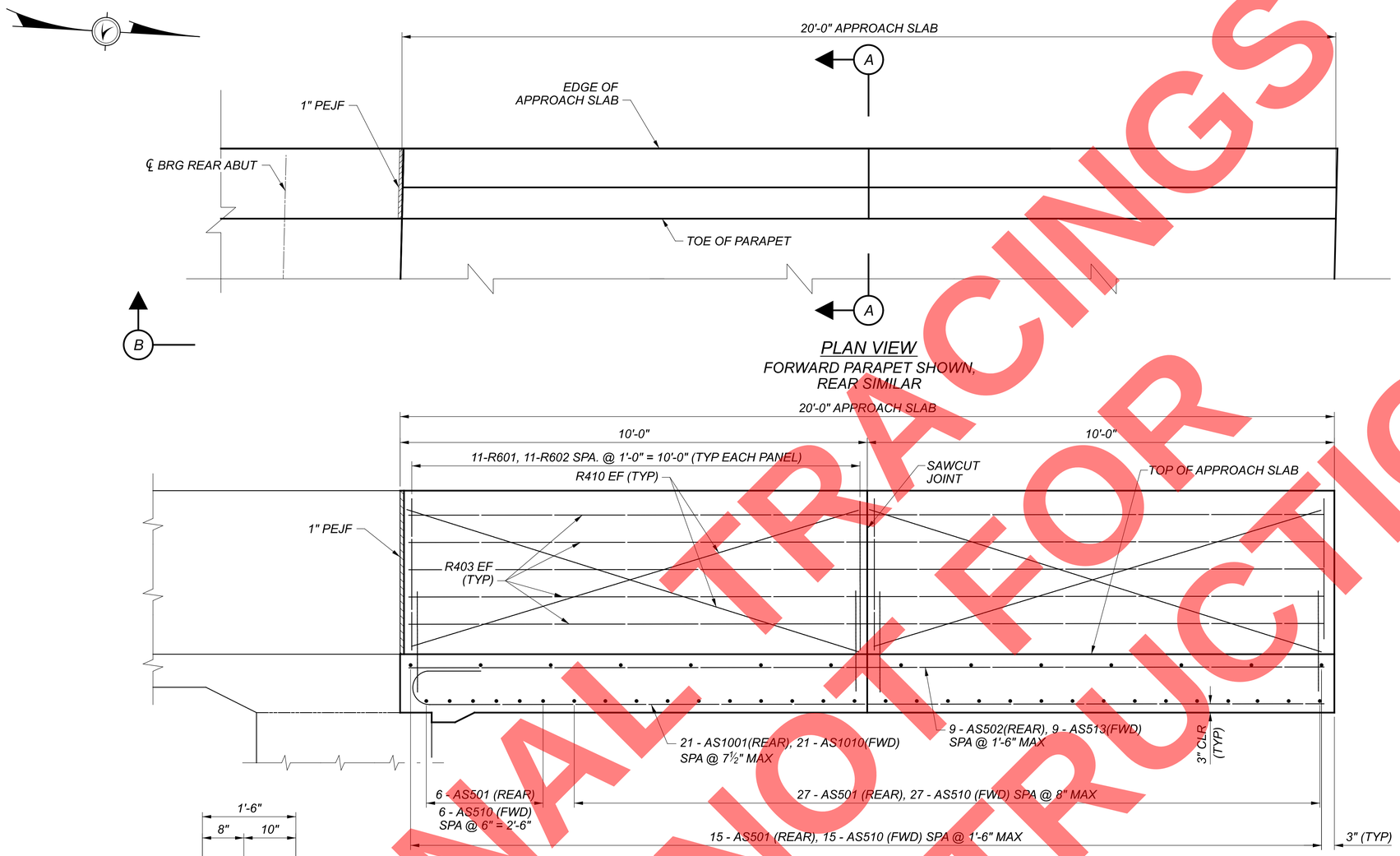
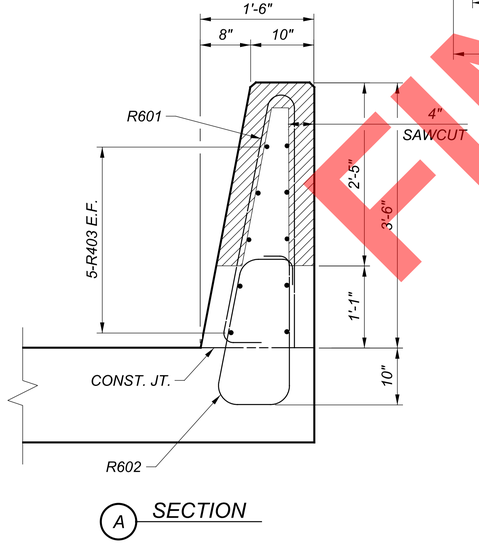


PLAN VIEW
FORWARD PARAPET SHOWN, REAR SIMILAR

B ELEVATION VIEW



A SECTION

NOTES

1. FOR ADDITIONAL PARAPET DETAILS, SEE ODOT STD. DWG. SBR-1-20.
2. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ARCHIVED STD DWG AS-1-81, DATED 4-20-2001.

FINAL TRACINGS
NOT FOR CONSTRUCTION

APPROACH SLAB DETAILS
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8800 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
36	38

SHEET	TOTAL
P.412	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:38:58 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Exchange St. Mainline Widening\Sheets\114865_SFN7700156_SM003

Mark	NUMBER TOTAL	LENGTH	WEIGHT TOTAL	TYPE	DIMENSIONS A	B	C	D
REAR ABUTMENT								
AR501	46	30'-0"	1,440	STR.				
AR502	44	24'-9"	1,136	STR.				
AR503	4	17'-9"	75	STR.				
AR504	51	8'-2"	435	2	2'-3"	3'-11"	2'-3"	
AR505	2	21'-6"	45	STR.				
AR506	15	7'-5"	117	2	2'-6"	2'-7"	2'-6"	
AR507	56	9'-8"	565	STR.				
AR508	50	4'-11"	257	1	2'-6"	2'-6"		
AR601	8	21'-4"	257	STR.				
AR602	43	23'-6"	1,518	STR.				
AR603	11	23'-6"	389	STR.				
AR604	11	15'-5"	255	2	7'-3"	1'-2"	7'-3"	
AR605	5	15'-11"	120	3	3'-11"	3'-9"		
AR801	4	12'-0"	129	STR.				
AR802	9	13'-8"	329	5	2'-7"	3'-7"	2'-3"	
AR803	4	30'-0"	321	STR.				
AR804	4	19'-6"	209	STR.				
AR810	46	6'-0"	737	STR.				
AR1001	74	18'-0"	5,732	STR.				
AR1002	11	11'-2"	529	74	7'-2"	1'-3"	2'-4"	1'-3"
AR1003	63	13'-3"	3,592	74	7'-2"	1'-3"	4'-5"	1'-3"
AR1004	15	23'-6"	1,517	STR.				
F601	60	8'-6"	767	1	1'-2"	7'-6"		
F602	20	30'-0"	902	STR.				
F603	20	25'-9"	774	STR.				
F604	13	5'-5"	106	1	1'-2"	4'-4"		
F605	3	5'-0"	23	STR.				
F606	53	12'-2"	969	STR.				
F901	14	30'-0"	1,428	STR.				
F902	14	27'-8"	1,317	STR.				
F903	13	7'-6"	332	1	1'-9"	6'-0"		
F904	106	17'-8"	6,368	2	3'-0"	12'-2"	3'-0"	
F1001	86	12'-11"	4,780	1	2'-0"	11'-3"		
F1002	3	8'-6"	110	STR.				
		SUB-TOTAL	37,580					

Mark	NUMBER TOTAL	LENGTH	WEIGHT TOTAL	TYPE	DIMENSIONS A	B	C	D
FWD ABUTMENT								
AF501	42	30'-0"	1,315	STR.				
AF502	38	26'-6"	1,051	STR.				
AF503	4	19'-4"	81	STR.				
AF504	2	23'-0"	48	STR.				
AF505	52	8'-3"	448	2	2'-3"	3'-11"	2'-3"	
AF506	4	20'-0"	84	STR.				
AF507	15	7'-6"	118	2	2'-6"	2'-8"	2'-6"	
AF508	56	9'-8"	565	STR.				
AF509	44	4'-11"	226	1	2'-6"	2'-6"		
AF601	45	20'-7"	1,392	STR.				
AF602	7	18'-5"	194	STR.				
AF603	11	15'-4"	254	2	7'-3"	1'-2"	7'-3"	
AF604	5	15'-11"	120	3	3'-11"	3'-9"		
AF605	11	21'-0"	347	STR.				
AF801	4	30'-0"	321	STR.				
AF802	4	21'-10"	234	STR.				
AF803	22	6'-0"	353	STR.				
AF804	4	12'-0"	129	STR.				
AF805	9	13'-8"	329	5	2'-7"	3'-7"	2'-3"	
AF1001	82	15'-0"	5,293	STR.				
AF1002	89	13'-3"	5,075	74	7'-2"	1'-3"	4'-5"	1'-3"
AF1003	13	11'-1"	620	74	7'-2"	1'-3"	2'-3"	1'-3"
AF1004	15	21'-0"	1,356	STR.				
F641	20	30'-0"	902	STR.				
F642	20	27'-0"	812	STR.				
F643	61	8'-6"	779	1	1'-2"	7'-6"		
F644	14	5'-4"	113	1	1'-2"	4'-3"		
F645	3	5'-0"	23	STR.				
F941	14	30'-0"	1,428	STR.				
F942	14	29'-3"	1,393	STR.				
F943	110	17'-8"	6,608	2	3'-0"	12'-2"	3'-0"	
F944	13	7'-6"	332	1	1'-9"	6'-0"		
F1042	90	12'-11"	5,003	1	2'-0"	11'-3"		
F1043	3	8'-6"	110	STR.				
		SUB-TOTAL	37,456					

FINAL TRACINGS
NOT FOR CONSTRUCTION

NOTE

1. FOR REINFORCING GENERAL NOTES AND BEND DIAGRAM, SEE SHEET 38/38.

REINFORCING LIST (1 OF 2)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
37	38

SHEET	TOTAL
P.413	627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
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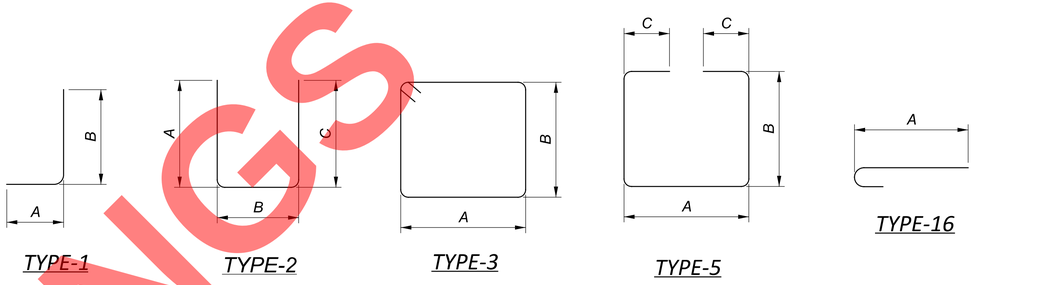
Mark	NUMBER TOTAL	LENGTH	WEIGHT TYP			WEIGHT TOTAL	TYPE	DIMENSIONS A	B	C	D	E	F	R
DECK														
S401	39	30'-0"	782			782	STR.							
S402	13	7'-1"	62			62	STR.							
S410	188	10'-1"	1,267			1,267	2	7'-4"	7"	2'-3"				
S501	57	30'-0"	1,784			1,784	STR.							
S502	19	8'-7"	171			171	STR.							
S510	110	11'-5"	1,310			1,310	16	10'-10"						
S511	110	10'-10"	1,243			1,243	STR.							
S512	78	11'-3"	916			916	16	10'-8"						
S513	78	10'-8"	868			868	STR.							
S601	101	7'-4"	1,113			1,113	62	9 ½"	1'-3"	2'-4"	2'-4"	7"	12"	
		SUB-TOTAL	9,516			9,516								
DIAPHRAGM														
D501	20	9'-2"	192			192	2	3'-0"	3'-5"	3'-0"				
D502	40	11'-8"	487			487	2	4'-0"	3'-11"	4'-0"				
# D801	12	8'-10"	284			284	STR.							
D802	4	11'-1"	119			119	STR.							
# D810	12	8'-6"	273			273	STR.							
D811	4	10'-7"	114			114	STR.							
D820	12	5'-0"	161			161	18	2'-8"	1'-0"	1'-0"				
		SUB-TOTAL	1,630			1,630								
PARAPET														
R601	145	7'-1"	1,543			1,543	23	6"	3'-3"	3'-3"				2"
R602	44	7'-4"	485			485	62	9 ½"	1'-3"	2'-4"	2'-4"	7"	12"	
		SUB-TOTAL	2,028			2,028								

= ALL OR A PORTION OF BARS PROVIDED WITH MECHANICAL CONNECTORS

PARAPET					
MARK	TOTAL	LENGTH	MATERIAL	LENGTH TOTAL	TYPE
R401	33	30.00'	GFRP	990.00'	STR.
R402	11	7.17'	GFRP	78.87'	STR.
R403	20	19.67'	GFRP	393.40'	STR.
R410	28	10.00'	GFRP	280.00'	STR.
R411	8	10.75'	GFRP	86.00'	STR.
		SUB-TOTAL		1,828	FEET

Mark	NUMBER TOTAL	LENGTH	WEIGHT TOTAL	TYPE	DIMENSIONS A
REAR APPROACH SLAB					
AS501	48	11'-2"	560	STR.	
AS502	10	19'-8"	206	STR.	
AS1001	21	21'-1"	1,906	16	19'-7"
		SUB-TOTAL	2,672		
FWD APPROACH SLAB					
AS510	48	10'-8"	535	STR.	
AS513	9	19'-8"	185	STR.	
AS1010	21	21'-1"	1,906	16	19'-7"
		SUB-TOTAL	2,626		



REINFORCING BEND DIAGRAMS

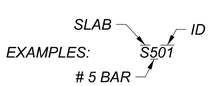
MINIMUM LAP LENGTHS

#4 BAR (STEEL) = 2'-0"
#4 BAR (GFRP) = 1'-1"
#5 BAR (ALL) = 2'-6"
#6 BAR (HORZ.) = 3'-1"
#6 BAR (VERT.) = 3'-7"
#8 BAR (ALL) = 4'-9"
#9 BAR (ALL) = 5'-10"
#10 BAR (ALL) = 7'-2"

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: D = ABUTMENT DIAPHRAGM AS = APPROACH SLAB S = SLAB (DECK) R = RAIL (PARAPET)

REINFORCING NOTES

1. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING, INCLUDING MECHANICAL CONNECTORS, SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

FINAL TRACINGS NOT FOR CONSTRUCTION

REINFORCING LIST (2 OF 2)
BRIDGE NO. SUM-8-0.987
SR 8 MAINLINE WIDENING OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER: EFD 08/2026

PROJECT ID: 114865

SUBSET	TOTAL
38	38

SHEET	TOTAL
P.414	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBL$$
PLOT DRIVER: $PLTDRV$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:39:16 AM USER: stony
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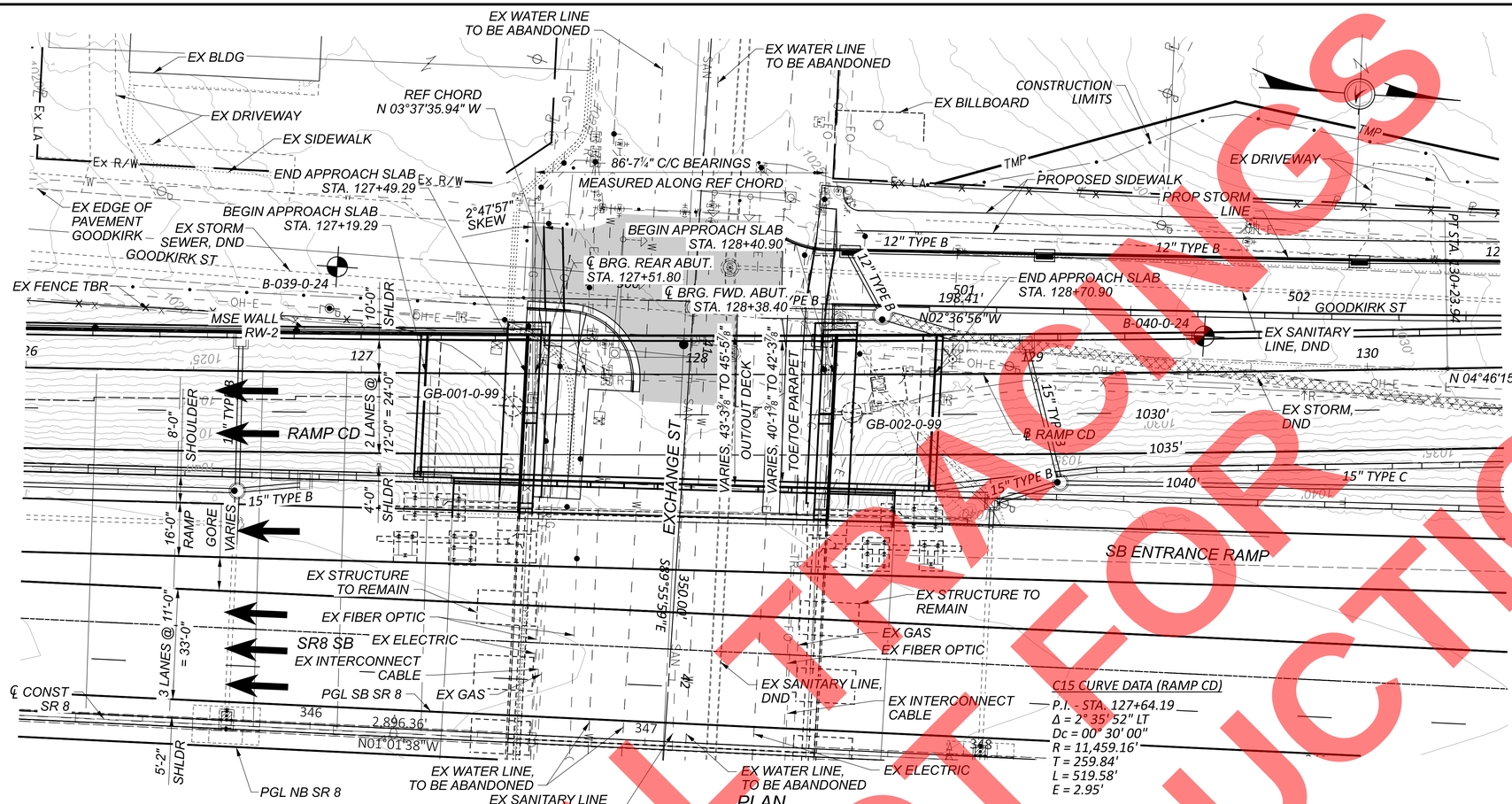

BENCHMARK DATA

BM CP15 STA. 337+92.58 ELEV. 1050.87 OFFSET 60.83' LT
ALUMINUM DISC IN CONCRETE STAMPED "15"

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET P.002

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND

- PROJECT BORING LOCATIONS
- HISTORIC BORING LOCATIONS
- 14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
  15'-9¾" ACTUAL MINIMUM VERTICAL CLEARANCE

PROPOSED STRUCTURE

TYPE: PROPOSED RAMP BRIDGE SINGLE SPAN STEEL BEAM WITH COMPOSITE REINFORCED CONCRETE DECK ON WALL TYPE SEMI-INTEGRAL ABUTMENTS

SPANS: 86'-7¼" C/C BEARINGS ALONG REF CHORD

ROADWAY: 38'-0" TOE/TOE PARAPET

LOADING: HL93 AND 0.06 KSF FUTURE WEARING SURFACE

SKEW: 2° 47' 57" LEFT FORWARD TO REF CHORD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-15, AS-2-15 (TYPE C) (30'-0" LONG)

ALIGNMENT: 0° 30' 00" CURVE LEFT

CROWN: 0.016 FT/FT

DECK AREA: 3,769 SF

COORDINATES: LATITUDE 41° 04' 16.2 N
LONGITUDE 81° 30' 13.5" W

SITE PLAN
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
1	24

SHEET	TOTAL
P.415	627

FINAL PLANS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$
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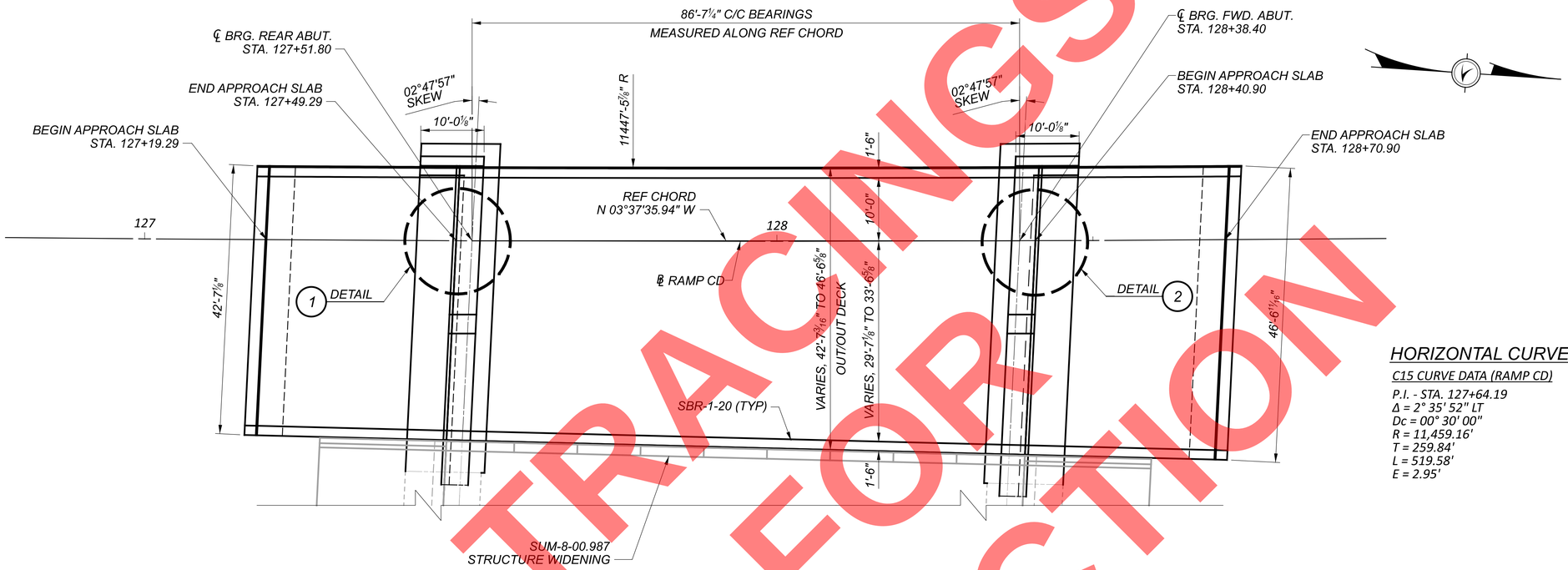
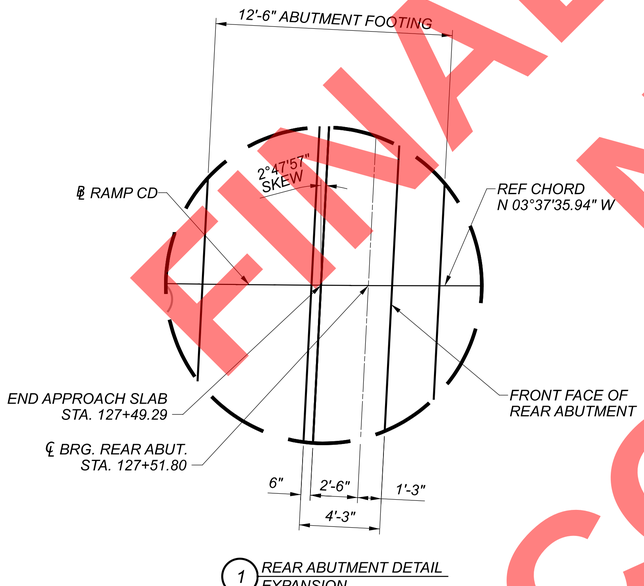


GENERAL PLAN

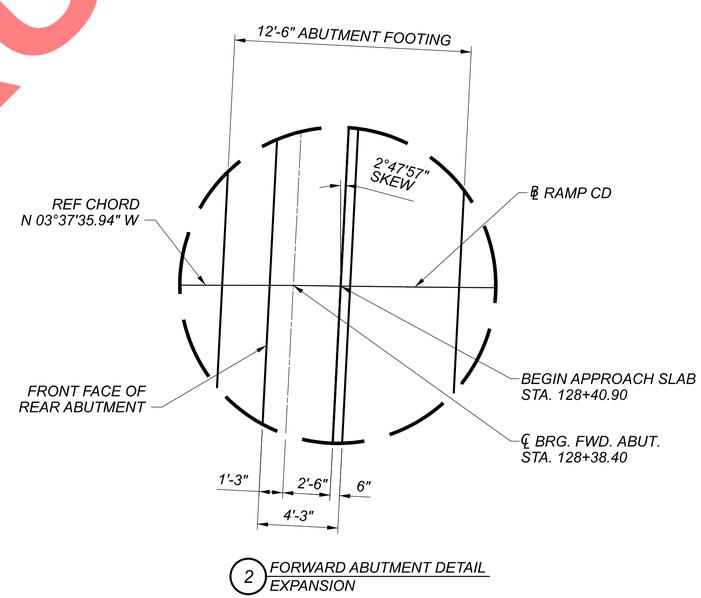
HORIZONTAL CURVE DATA

C15 CURVE DATA (RAMP CD)

P.I. - STA. 127+64.19
Δ = 2° 35' 52" LT
Dc = 00° 30' 00"
R = 11,459.16'
T = 259.84'
L = 519.58'
E = 2.95'



1 REAR ABUTMENT DETAIL EXPANSION



2 FORWARD ABUTMENT DETAIL EXPANSION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GENERAL PLAN
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
2	24

SHEET	TOTAL
P.416	627

SUM-077/008-11.65/00.00

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$

PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG

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PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$

REFERENCED ODOT STANDARD DRAWINGS

AS-1-15	_____	REVISED 01-20-2023
AS-2-15	_____	REVISED 07-21-2023
GSD-1-19	_____	REVISED 07-19-2024
SBR-1-20	_____	REVISED 07-19-2024
SICD-1-21	_____	REVISED 01-19-2024
HL-30.31	_____	REVISED 07-18-2025

REFERENCED ODOT SUPPLEMENTAL SPECIFICATIONS

800 _____ DATED 01-16-2026

DESIGN SPECIFICATIONS

THE NEW SUPERSTRUCTURE AND BEARINGS CONFORM TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS", ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 (TENTH EDITION), AND THE ODOT BRIDGE DESIGN MANUAL, 2020.
NO SPECIAL DESIGN SPECIFICATIONS WERE USED.

LRFD OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THE NEW SUPERSTRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

PROPOSED SUPERSTRUCTURE

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN DATA

CONCRETE

SUPERSTRUCTURE (NEW), CLASS QC2: F'c = 4.5 KSI

STEEL

STRUCTURAL STEEL (NEW), ASTM A709 (GRADE 50): Fy = 50 KSI
STEEL REINFORCEMENT (NEW): MINIMUM Fy = 60 KSI
GFRP REINFORCEMENT (PARAPET)

DECK PROTECTION METHODS

EPOXY COATED STEEL REINFORCEMENT DECK & DIAPHRAGM
2½" CONCRETE COVER
CLASS QC2 CONCRETE WITH QC/QA

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

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.
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.
NOTE THAT THE EXISTING BEARING SEATS MUST BE SURVEYED AND DATA PROVIDED TO THE ENGINEER PRIOR TO BEARING FABRICATION.

DECK PLACEMENT DESIGN 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 WITH A MAXIMUM WHEEL LOAD OF 2.31 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN

IN ADDITION TO THE BRIDGE DECK PARAPETS, THE DEPARTMENT WILL PAY FOR CONCRETE PARAPETS ON THE APPROACH SLABS WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN.

AS PART OF CONSTRUCTING THE BRIDGE AND APPROACH SLAB PARAPETS, FURNISH AND INSTALL 4" DIAMETER CONDUITS, COUPLINGS, AND FITTINGS, FROM PULL BOX TO PULL BOX AS SHOWN IN THE PLANS. FURNISH AND INSTALL THE CONDUIT, COUPLINGS, AND FITTINGS AS PER CMS 625.

THE DEPARTMENT WILL PAY FOR FURNISHING AND INSTALLING THE 4" DIAMETER CONDUITS, COUPLINGS, AND FITTINGS WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN.

THE DEPARTMENT WILL PAY FOR FURNISHING AND INSTALLING THE PULL BOXES WITH ITEM 625 - PULL BOX IN THE ROADWAY QUANTITIES.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN

PERFORM THE WORK PER C&MS 513, EXCEPT AS NOTED BELOW. SELECT ONE OF THE TWO OPTIONS DESCRIBED BELOW:

1. GALVANIZE AND SHOP PAINT EXTERIOR FASCIA BEAMS
2. METALIZE AND SHOP PAINT EXTERIOR FASCIA BEAMS

1.0 OPTION 1: SHOP GALVANIZING AND SHOP PAINTING OF FASCIA BEAMS

SHOP GALVANIZE ALL STRUCTURAL STEEL SURFACES AS DETAILED IN THESE PLANS, INCLUDING BUT NOT LIMITED TO BEAMS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, AND BEARING LOAD PLATES.

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZE ALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HEREIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CONSTRUCTION AND MATERIAL SPECIFICATION 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATINGS SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS OF THIS SPECIFICATION. SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

SHEAR STUDS SHALL BE INSTALLED AS PER SECTION 513.22.

1.1 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL SPECIALIST, (QCS), AND GALVANIZER'S QCS COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THIS SPECIFICATION.

1.2 QUALITY CONTROL

1.2.1 QUALITY CONTROL SPECIALIST

THE GALVANIZER'S QCS (QUALITY CONTROL SPECIALIST) REQUIRED UNDER 514, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE QCS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN 514.05.

1.2.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCS AND THE DEPARTMENT'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE DEPARTMENT'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK. DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE DEPARTMENT TO FINAL ACCEPTANCE.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

QUALITY CONTROL POINTS	
QUALITY CONTROL POINTS (QCP)	PURPOSE
A. SOLVENT CLEANING	REMOVE ASPHALTIC CEMENT, OIL, GREASE, SALT, DIRT, ETC.
B. GRINDING EDGES	REMOVE SHARP CORNERS PER AWS.
C. ABRASIVE BLASTING	BLAST SURFACES, INCLUDING REPAIR FINS, TEARS, SLIVERS OR SHARP EDGES.
D. GALVANIZING	CHECK COATING THICKNESS.
E. PAINTING SURFACE CLEANING	CHECK PAINT SURFACE ROUGHNESS. CHECK FOR HOLE CLEARANCE. CHECK FOR OTHER FIELD CONNECTIONS UNIFORM COATING THICKNESS.
F. SECOND /AX (QCP)	CHECK SWEEP AND CAMBER TOLERANCES OF EACH STRUCTURAL MEMBER.
G. FIELD REPAIR OF DAMAGED AREAS	CHECK FOR DAMAGE AREAS AFTER ERECTION OF STRUCTURE. PERFORM DAMAGE REPAIRS.
H. FINAL REVIEW	CLEAN STRUCTURE AS PER QCP #1. VISUALLY INSPECT SYSTEM FOR ACCEPTANCE.

1.2.2.A. SOLVENT CLEANING (QCP #1)

THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSC-SP 1 SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLAST CLEANING BEGINS. THE GALVANIZER'S QCS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SP 1 AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.B. GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN 1 1/2 INCH MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT AFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.C. ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE GALVANIZER'S QCS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

ALL FINS, TEARS, SILVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE 513 FABRICATOR.

THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP 6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.2.2.D. GALVANIZING (QCP #4)

GALVANIZED PER 711.02 AND THIS SPECIFICATION. COATING THICKNESS MUST BE A MINIMUM OF 4 MILS MEASURED AS SPECIFIED.

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE FABRICATOR, GALVANIZER AND ERECTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. PRIOR TO GALVANIZING, SURFACE IMPERFECTIONS MAY BE REPAIRED BY THE FABRICATOR IN CONFORMANCE WITH ASTM A6. IMPERFECTIONS GREATER THAN THE LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE DEPARTMENT.
ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.
DOCUMENTATION OF COATING THICKNESS MUST BE PERFORMED BY THE GALVANIZER'S QCS. THE GALVANIZER'S QCS MUST RECORD THE GAGE READINGS AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.E. FAYING SURFACE CLEANING (QCP #5)

AREAS OF FIELD CONNECTIONS MUST HAVE A UNIFORM GALVANIZED COATING THICKNESS FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT SPLICE PLATES, BEARINGS OR OTHER FIELD CONNECTIONS FROM MAKING INTIMATE CONTACT.

FAYING SURFACES OF THE BOLTED SPLICES MUST BE ROUGHENED IN THE SHOP AFTER GALVANIZING BY HAND WIRE BRUSHING. POWER WIRE BRUSHING IS NOT PERMITTED. ALL FIELD SPLICE BOLT HOLES MUST BE FREE OF ZINC BUILD UP. AFTER GALVANIZING, CLEAN EACH HOLE AS NECESSARY SO THAT A DRIFT PIN 1/16" LESS THAN THE DIAMETER OF THAT HOLE CAN BE FULLY INSERTED. CONSIDERATION WILL BE GIVEN TO OTHER METHODS OF TREATING THE FAYING SURFACES AND BOLT HOLES IF A WRITTEN REQUEST IS SUBMITTED TO THE OFFICE OF MATERIAL MANAGEMENT (OMM) IN ACCORDANCE WITH C&MS 108.05.

INSPECTION OF THE ROUGHENING OF THE FAYING SURFACES AND CHECKING OF HOLES WITH DRIFT PINS MUST BE PERFORMED BY THE GALVANIZER'S QCS. ACCEPTANCE OF THE FAYING SURFACES AND HOLES SHALL BE DOCUMENTED BY THE GALVANIZER'S QCS.

1.2.2.F. SECOND LAY DOWN (QCP #6)

AFTER GALVANIZING, MATERIALS MUST BE PLACED IN A SECOND SHOP ASSEMBLY PER C&MS SECTION 513.24 TO CHECK ALIGNMENT OF HOLES, SWEEP AND CAMBER AGAINST THE FABRICATORS ORIGINAL RECORDED LAY DOWN DIMENSIONS. THIS SHOP ASSEMBLY MAY BE PERFORMED AT THE GALVANIZER'S FACILITY, BY THE FABRICATORS PERSONNEL, IF APPROVED BY THE OFFICE OF MATERIAL MANAGEMENT (OMM). THE SECOND LAY DOWN MAY BE WAIVED BY THE OMM IF THE FABRICATOR RECORDS INDIVIDUAL BEAM CAMBERS AND SWEEPS DURING THE FIRST LAY DOWN, AND THE NEW INDIVIDUAL BEAM CAMBERS AND SWEEPS, AFTER GALVANIZING, COMPARED TO THE FIRST LAY DOWN ARE WITHIN THE FOLLOWING TOLERANCES:

BEARING POINTS AFTER GALVANIZING MUST BE WITHIN ⅛ INCH OF THE APPROVED SHOP DRAWING LAY DOWN.

CAMBER POINTS AFTER GALVANIZING MUST BE + ¼" OR - 0 INCH FROM THE FIRST LAY DOWN.

SWEEP POINTS AFTER GALVANIZING MUST BE ⅜" FROM THE FIRST LAY DOWN.

INDIVIDUAL BEAMS THAT EXCEED THE LISTED TOLERANCES MUST BE PLACED WITH AT LEAST TWO ADJACENT BEAMS IN LAY DOWN FOR CHECKING AGAINST THE RECORDED SHOP ASSEMBLY RECORDS PER 513.24. DOCUMENTATION OF THE SECOND LAY DOWN OR INDIVIDUAL MEMBER CAMBERS MUST BE RECORDED BY THE FABRICATOR'S QCS OR GALVANIZER'S QCS PER 513.24.

1.2.2.G. FIELD REPAIR OF DAMAGED AREAS (QCP #7)

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE CONTRACTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. IMPERFECTIONS MAY BE REPAIRED BY GRINDING AS ALLOWED BY ASTM A6 BY THE CONTRACTOR. IMPERFECTIONS THAT ARE GREATER THAN THE GRINDING LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE OMM.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DAMAGED GALVANIZING WHICH WILL BE INACCESSIBLE FOR REPAIR AFTER ERECTION MUST BE REPAIRED PRIOR TO ERECTION.

IN ORDER TO MINIMIZE DAMAGE TO THE GALVANIZED STEEL, CONCRETE SPLATTER AND FORM LEAKAGE MUST BE WASHED FROM THE SURFACE OF THE STEEL SHORTLY AFTER THE CONCRETE IS PLACED AND BEFORE IT IS DRY. IF THE CONCRETE DRIES, IT MUST BE REMOVED.

FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL NOTES (1 OF 3)
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
3	24

SHEET	TOTAL
P.417	627

PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
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ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.2.2.G. FIELD REPAIR OF DAMAGED AREAS (QCP #7) (CONT.)

TEMPORARY ATTACHMENTS, SUPPORTS FOR SCAFFOLDING AND FINISHING MACHINE OR FORMS MUST NOT DAMAGE THE COATING SYSTEM. IN PARTICULAR, SUFFICIENT SIZE SUPPORT PADS MUST BE USED ON THE FASCIAS WHERE BRACING IS USED.

DOCUMENTATION OF GALVANIZING REPAIRS MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.2.2.H. FINAL REVIEW (QCP #8)

AFTER THE ERECTION WORK HAS BEEN COMPLETED, INCLUDING ALL CONNECTIONS AND THE APPROVED REPAIR OF ANY DAMAGED BEAMS, GIRDERS OR OTHER STEEL MEMBERS, AND THE DECK HAS BEEN PLACED, THE CONTRACTOR AND ENGINEER MUST INSPECT THE STRUCTURE FOR DAMAGED COATING. (QCP #8). DAMAGED AREAS MUST BE REPAIRED BY QCP #7. AT THE COMPLETION OF CONSTRUCTION, THE GALVANIZING MUST BE UNDAMAGED AND THE SURFACES FREE FROM GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPLATTER OR OTHER SILAGE. SUCH SILAGE WILL BE REMOVED BY SOLVENT CLEANING PER SSPC-SP1 (QCP #1).

DOCUMENTATION OF FINAL REVIEW MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.3 TESTING EQUIPMENT

THE FABRICATOR MUST PROVIDE THE GALVANIZER'S QCS INSPECTOR THE FOLLOWING TESTING EQUIPMENT IN GOOD WORKING ORDER FOR THE DURATION OF THE PROJECT.
ONE (POSITECTOR 2000 OR 6000, QUANIX 2200, OR ELCOMETER A345FBI1) AND THE CALIBRATION PLATES, 38-200 MM AND 250-625 MM [1.5-8 MILS AND 10-25 MILS] AS PER THE NBS CALIBRATION STANDARDS IN ACCORDANCE WITH ASTM D-1186.

1.4 COATING THICKNESS

GALVANIZED THICKNESS MUST BE DETERMINED BY USE OF TYPE 2 MAGNETIC GAGE IN ACCORDANCE WITH THE FOLLOWING:

FIVE SEPARATE SPOT MEASUREMENTS MUST BE MADE, SPACED EVENLY OVER ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF SURFACE AREA ON EACH STRUCTURAL MEMBER. THREE GAGE READINGS MUST BE MADE FOR EACH SPOT MEASUREMENT. THE PROBE MUST BE MOVED A DISTANCE OF 1 TO 3 INCHES FOR EACH NEW GAGE READING. ANY UNUSUALLY HIGH OR LOW GAGE READING THAT CANNOT BE REPEATED CONSISTENTLY MUST BE DISCARDED. THE AVERAGE (MEAN) OF THE 3 GAGE READINGS MUST BE USED AS THE SPOT MEASUREMENT. THE AVERAGE OF FIVE SPOT MEASUREMENTS FOR EACH SUCH 100 SQUARE FOOT AREA MUST NOT BE LESS THAN THE SPECIFIED THICKNESS. NO SINGLE SPOT MEASUREMENT IN ANY 100 SQUARE FOOT AREA MUST BE LESS THAN 80% OF THE SPECIFIED MINIMUM THICKNESS. ANY ONE OF 3 READINGS WHICH ARE AVERAGED TO PRODUCE EACH SPOT MEASUREMENT, MAY UNDER-RUN OR OVER-RUN BY A GREATER AMOUNT. THE 5 SPOT MEASUREMENTS MUST BE MADE FOR ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF AREA ON EACH STRUCTURAL MEMBER. ALL SPLICE MATERIAL AND SECONDARY MEMBERS MUST HAVE AT LEAST ONE SPOT MEASURED ON EACH PIECE. THE PROBE MUST BE MOVED SO THAT ONE READING IS TAKEN AT EACH END AND MIDDLE OF THE PIECE FOR A TOTAL OF THREE READINGS.

THE GALVANIZER'S QCS MUST INSPECT AND PROVIDE DOCUMENTATION OF ACTUAL DATA, THE GALVANIZED THICKNESS CHECKS WERE PERFORMED PER SPECIFICATION, AND THE COATING THICKNESS MEETS SPECIFICATION REQUIREMENTS.

1.5 SHOP PAINTING OF EXTERIOR FASCIA BEAMS

AFTER GALVANIZATION, REMOVE ZINC HIGH SPOTS SUCH AS METAL DRIP LINE AND OTHERS THAT WOULD DETRACT FROM THE PAINT APPEARANCE BY SSPC SP2 OR SP3. TAKE CARE THAT THE BASE GALVANIZED COATING IS NOT REMOVED. CHECK REPAIRED AREAS FOR REQUIRED COATING THICKNESS.

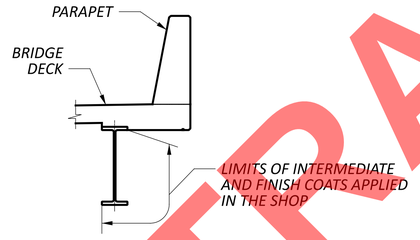
AFTER REMOVING HIGH SPOTS, CLEAN THE GALVANIZED COATING ACCORDING TO SSPC SP-1. THE CLEANING SOLUTION SHALL BE AN ALKALINE SOLUTION WITH A PH RANGING FROM A MINIMUM OF 11 TO A MAXIMUM OF 12. THIS SOLUTION CAN BE APPLIED BY IMMERSION, SPRAY OR SOFT NYLON BRUSH. FOLLOW CLEANING WITH A HOT WATER OR HOT PRESSURE WASHER RINSE. SEPARATE INDIVIDUAL PIECES AND POSITION TO FACILITATE DRAINAGE AND DRYING. THE PIECES SHALL BE COMPLETELY DRY BEFORE PROCEEDING.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

AFTER CLEANING, ABRASIVE BLAST THE PIECES ACCORDING TO SSPC-SP7 BRUSH-OFF BLAST CLEANING. THE BLASTING OPERATION SHALL ROUGHEN THE GALVANIZED SURFACE TO AN ANGULAR SURFACE PROFILE OF 0.75 TO 1.00 MILS. SELECT THE BLASTING EQUIPMENT TECHNIQUE AND ABRASIVE MATERIAL TO PROVIDE FOR THE SPECIFIED SURFACE PROFILE WITHOUT REMOVAL OF EXCESSIVE ZINC LAYERS THE AMOUNT OF REMOVAL OF ZINC MILLAGE SHALL NOT EXCEED 1.0 MIL. REMOVE ALL ABRASIVE RESIDUE WITH CLEAN COMPRESSED AIR OR OTHER METHODS ACCEPTABLE TO THE DEPARTMENT BRUSH-OFF BLAST CLEANING SHALL BE PERFORMED IN THE FIELD AFTER OBTAINING SURFACE PROFILE, FIELD APPLY A TWO COAT PAINT SYSTEM CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT. MEETING THE REQUIREMENTS OF C&MS 708.02 TO THE LIMITS SHOWN BELOW. APPLY THE EPOXY COATING WITHIN 24 HOURS OF THE BRUSH-OFF BLASTING.

FOR THE URETHANE FINISH COAT, USE SEAL BROWN, NASA SAFETY BROWN AMS STANDARD 595A 10080.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH EXTERIOR FASCIA BEAMS, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA BEAMS).



LIMITS OF EXTERIOR FASCIA BEAM PAINTING

1.6 HANDLING AND SHIPPING

REASONABLE CARE MUST BE EXERCISED IN HANDLING THE GALVANIZED STEEL DURING SHIPPING, ERECTION, AND SUBSEQUENT CONSTRUCTION OF THE BRIDGE. THE STEEL MUST BE INSULATED FROM THE BINDING CHAINS BY SOFTENERS. HOOKS AND SLINGS USED TO HOIST STEEL MUST BE PADDED. DIAPHRAGMS AND SIMILAR PIECES MUST BE SPACED IN SUCH A WAY THAT NO RUBBING WILL OCCUR DURING SHIPMENT THAT MAY DAMAGE THE GALVANIZING. THE STEEL MUST BE STORED ON PALLETS AT THE JOB SITE, OR BY OTHER MEANS, SO THAT IT DOES NOT REST ON THE GROUND OR SO THAT COMPONENTS DO NOT FALL OR REST ON EACH OTHER.

1.7 SAFETY REQUIREMENT AND PRECAUTIONS

THE CONTRACTOR MUST MEET THE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), IN ADDITION TO THE SCAFFOLDING REQUIREMENTS BELOW.

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION IN ADDITION TO THE SCAFFOLDING REQUIREMENTS SPECIFIED BELOW.

1.8 SCAFFOLDING

RUBBER ROLLERS, OR OTHER PROTECTIVE DEVICES MEETING THE APPROVAL OF THE ENGINEER, MUST BE USED ON SCAFFOLD FASTENINGS. METAL ROLLERS OR CLAMPS AND OTHER TYPES OF FASTENINGS WHICH WILL MAR OR DAMAGE COATED SURFACES MUST NOT BE USED.

1.9 INSPECTION ACCESS FOR FIELD REPAIR

IN ADDITION TO THE REQUIREMENT OF 105.10, THE CONTRACTOR MUST FURNISH, ERECT, AND MOVE SCAFFOLDING AND OTHER APPROPRIATE EQUIPMENT, TO PERMIT THE INSPECTOR THE OPPORTUNITY TO INSPECT CLOSELY OBSERVE, ALL AFFECTED SURFACES. THIS OPPORTUNITY MUST BE PROVIDED TO THE INSPECTOR DURING ALL PHASES OF THE WORK AND CONTINUE FOR A PERIOD OF AT LEAST TEN (10) WORKING DAYS AFTER THE TOUCH-UP WORK HAS BEEN COMPLETED. WHEN SCAFFOLDING IS USED, IT MUST BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS. WHEN SCAFFOLDING, OR THE HANGERS ATTACHED TO THE SCAFFOLDING ARE SUPPORTED BY HORIZONTAL WIRE ROPES, OR WHEN SCAFFOLDING IS PLACED DIRECTLY UNDER THE SURFACE TO BE PAINTED, THE FOLLOWING REQUIREMENTS MUST BE COMPLIED WITH:

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.9 INSPECTION ACCESS FOR FIELD REPAIR (CONT.)

WHEN SCAFFOLDING IS SUSPENDED 43" OR MORE BELOW THE COATED SURFACE TO BE REPAIRED, TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING. ONE ROW OF GUARDRAIL MUST BE PLACED AT 42" ABOVE THE SCAFFOLDING AND THE OTHER ROW AT 20" ABOVE THE SCAFFOLDING.

WHEN THE SCAFFOLDING IS SUSPENDED AT LEAST 21", BUT LESS THAN 43" BELOW THE COATED SURFACE TO BE REPAIRED, A ROW OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING AT 20" ABOVE THE SCAFFOLDING.

TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF SCAFFOLDING NOT PREVIOUSLY MENTIONED. THE ROWS OF GUARDRAIL MUST BE PLACED AT 42" AND 20" ABOVE SCAFFOLDING, AS PREVIOUSLY MENTIONED.

ALL SCAFFOLDING MUST BE AT LEAST 24" WIDE WHEN GUARDRAIL IS USED AND 28" WIDE WHEN THE SCAFFOLDING IS SUSPENDED LESS THAN 21" BELOW THE COATED SURFACE TO BE REPAIRED AND GUARDRAIL IS NOT USED. IF TWO OR MORE SCAFFOLDING ARE LAID PARALLEL TO ACHIEVE THE PROPER WIDTH, THEY MUST BE RIGIDLY ATTACHED TO EACH OTHER TO PRECLUDE ANY DIFFERENTIAL MOVEMENT.

ALL GUARDRAILS MUST BE CONSTRUCTED AS A SUBSTANTIAL BARRIER WHICH IS SECURELY FASTENED IN PLACE AND IS FREE FROM PROTRUDING OBJECTS SUCH AS NAILS, SCREWS AND BOLTS. THERE MUST BE AN OPENING IN THE GUARDRAIL, PROPERLY LOCATED, TO ALLOW THE INSPECTOR ACCESS ONTO THE SCAFFOLDING.

THE RAILS AND UPRIGHTS MUST BE EITHER METAL OR WOOD. IF PIPE RAILING IS USED, THE RAILING MUST HAVE A NOMINAL DIAMETER OF NO LESS THAN ONE AND ONE HALF INCHES. IF STRUCTURAL STEEL RAILING IS USE, THE RAILS MUST BE 2 X 2 X 3/8 INCH STEEL ANGLES OR OTHER METAL SHAPES OF EQUAL OR GREATER STRENGTH. IF WOOD RAILING IS USED, THE RAILING MUST BE 2 X 4 INCH (NOMINAL) STOCK. ALL UPRIGHTS MUST BE SPACED AT NO MORE THAN 8 FEET ON CENTER. IF WOOD UPRIGHTS ARE USED, THE UPRIGHTS MUST BE 2 X 4 INCHES (NOMINAL) STOCK.

WHEN THE SURFACE TO BE INSPECTED IS MORE THAN 15 FEET ABOVE THE GROUND OR WATER, AND THE SCAFFOLDING IS SUPPORTED FROM THE STRUCTURE BEING PAINTED, THE CONTRACTOR MUST PROVIDE THE INSPECTOR WITH A SAFETY BELT AND LIFELINE. THE LIFELINE MUST NOT ALLOW A FALL GREATER THAN 6 FEET. THE CONTRACTOR MUST PROVIDE A METHOD OF ATTACHING THE LIFELINE TO THE STRUCTURE INDEPENDENT OF THE SCAFFOLDING, CABLES, OR BRACKETS SUPPORTING THE SCAFFOLDING.

WHEN SCAFFOLDING IS MORE THAN TWO AND ONE HALF FEET ABOVE THE GROUND, THE CONTRACTOR MUST PROVIDE A LADDER FOR ACCESS ONTO THE SCAFFOLDING. THE LADDER AND ANY EQUIPMENT USED TO ATTACH THE LADDER TO THE STRUCTURE MUST BE CAPABLE OF SUPPORTING 250 POUNDS WITH A SAFETY FACTOR OF AT LEAST FOUR (4). ALL RUNGS, STEPS, CLEATS, OR TREADS MUST HAVE UNIFORM SPACING AND MUST NOT EXCEED 12" ON CENTER. AT LEAST ONE SIDE RAIL MUST EXTEND AT LEAST 36" ABOVE THE LANDING NEAR THE TOP OF THE LADDER.

AN ADDITIONAL LANDING MUST BE REQUIRED WHEN THE DISTANCE FROM THE LADDER TO THE POINT WHERE THE SCAFFOLDING MAY BE ACCESSED, EXCEEDS 12". THE LANDING MUST BE A MINIMUM OF AT LEAST 24" WIDE AND 24" LONG. IT MUST ALSO BE OF ADEQUATE SIZE AND SHAPE SO THAT THE DISTANCE FROM THE LANDING TO THE POINT WHERE THE SCAFFOLDING IS ACCESSED DOES NOT EXCEED 12". THE LANDING MUST BE RIGID AND FIRMLY ATTACHED TO THE LADDER; HOWEVER, IT MUST NOT BE SUPPORTED BY THE LADDER. THE SCAFFOLDING MUST BE CAPABLE OF SUPPORTING A MINIMUM OF 1000 LBS.

IN ADDITION TO THE AFOREMENTIONED REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE TO OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES.

THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC CONTROL TO PERMIT INSPECTION DURING AND AFTER ALL PHASES OF THE PROJECT.

1.10 PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR MUST INSTALL AND MAINTAIN SUITABLE SHIELDS OR ENCLOSURES TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS, TRUCKS, BOATS, OR VEHICLES TRAVELLING ON, OVER, OR UNDER STRUCTURES HAVING GALVANIZED REPAIRS. THEY MUST BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATIONS IN THE OPEN LANES. PAYMENT FOR THE SHIELDS MUST BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING OPERATION. WORK MUST BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, MOTOR VEHICLES, BOATS, OR OTHER PROPERTY IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR MUST RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY, TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (CONT.)

1.11 POLLUTION CONTROL

THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL AGENCIES.

2.0 OPTION 2: SHOP METALIZING AND SHOP PAINTING OF EXTERIOR FASCIA BEAMS

DELETE THE REQUIREMENTS OF 513.27. SHOP METALIZE ALL STRUCTURAL STEEL SURFACES PER SUPPLEMENTAL SPECIFICATION (SS) 845, INCLUDING BUT NOT LIMITED TO BEAMS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, AND BEARING LOAD PLATES, EXCEPT DO NOT METALIZE THE TOP SURFACE OF BEAM TOP FLANGES. APPLY A PRIME COAT, 708.01, IN THE SHOP TO THE TOP SURFACE OF BEAM TOP FLANGES. THE PRIME COAT SHALL BE A MIST COATING FROM 0.5 TO 1.5 MILS.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH EXTERIOR FASCIA BEAMS, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA BEAMS).

FOR THE URETHANE FINISH COAT, USE SEAL BROWN, NASA SAFETY BROWN AMS STANDARD 595A 10080.

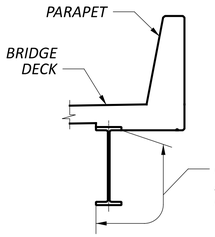
REPAIR DAMAGE TO THE METALIZING CAUSED DURING STORAGE, TRANSPORTATION, ERECTION, BOLTING, WELDING, FORMING, CONCRETE PLACEMENT, AND FORM REMOVAL OPERATION, ACCORDING TO C&MS 711.02. REPAIR DAMAGE TO THE GALVANIZED COATING ON THE NUTS, BOLTS, AND WASHERS, IN THE FIELD DUE TO THE BOLT TIGHTENING OPERATIONS, ACCORDING TO C&MS 711.02. EXERCISE EXTREME CARE WHILE HANDLING THE STEEL DURING ERECTION, AND DURING SUBSEQUENT CONSTRUCTION OF THE BRIDGE. INSULATE THE STEEL FROM THE BINDING CHAINS BY SOFTENERS AND PAD ALL HOOKS AND SLINGS THAT ARE USED TO HOIST/ERECT THE STEEL MEMBERS.

3.0 METHOD OF MEASUREMENT

THE COST OF ALL LABOR, MATERIALS, EQUIPMENT NECESSARY TO GALVANIZE OR METALIZE, FABRICATE THE STRUCTURAL STEEL IN ACCORDANCE WITH 513, APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE LIMITS OF FASCIA BEAM PAINTING DETAIL, AND PERFORM ANY NECESSARY FIELD REPAIR SHALL BE INCLUDED IN THIS 513, AS PER PLAN ITEM.

4.0 BASIS OF PAYMENT

PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN.



LIMITS OF EXTERIOR FASCIA BEAM PAINTING

FINAL PLANS NOT FOR CONSTRUCTION

GENERAL NOTES (2 OF 3)
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 4 | TOTAL 24
SHEET P.418 | TOTAL 627

STANDARD PLAN ABBREVIATIONS AND SYMBOLS

ABUT = ABUTMENT
ADT = AVERAGE DAILY TRAFFIC
ADTT = AVERAGE DAILY TRUCK TRAFFIC
APP or APPR = APPROACH
APPROX. = APPROXIMATE
AVE = AVENUE

⟨B#⟩ = PROPOSED BEAM NUMBER

BF = BOTTOM FLANGE
BM = BENCHMARK
BOT = BOTTOM
BRG = BEARING
BTWN = BETWEEN
C.B. = CHORD BEARING
C/C = CENTER TO CENTER
CB = CATCH BASIN
CCTV = CLOSED CIRCUIT TELEVISION
CIP = CAST IN PLACE
CJ = CONSTRUCTION JOINT
CJ-O = OPTIONAL CONSTRUCTION JOINT
CLR = CLEAR
CMP = CORRUGATED METAL PIPE
CMS = CONSTRUCTION MATERIAL SPECIFICATIONS
CONST = CONSTRUCTION
CP = COVER PLATE
CSP/N = CORRUGATED STEEL PIPE (NON-PERFORATED)
CSP/P = PERFORATED CORRUGATED STEEL PIPE
CVN = CHARPY V-NOTCH
DIA = DIAMETER
DND = DO NOT DISTURB
DPRM = DIAPHRAGM
DWG = DRAWING
E/P = EDGE OF PAVEMENT
E/S = EDGE OF SHOULDER
EB = EASTBOUND
EF = EACH FACE
ELEC = ELECTRIC
ELEV or EL = ELEVATION
EQ = EQUAL
EX or EXIST = EXISTING
EXP = EXPANSION
F/F = FACE TO FACE
FA = FORWARD ABUTMENT
FF = FAR FACE/FILL FACE
FO = FIBER OPTIC
FT = FOOT
FTG = FORWARD
FWD = FOOTING

⟨A⟩ = EXISTING GIRDER LETTER

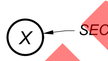
GR = GUARDRAIL
GFRP = GLASS -FIBER REINFORCED POLYMER
H.C. = HORIZONTAL CURVE
HORZ = HORIZONTAL
I/I = INSIDE TO INSIDE
IN = INCH
INV = INTERSTATE ROUTE
IR = INVERT
JT = KIPS PER SQUARE INCH
KSF = KIPS PER SQUARE FOOT
KSI = JOINT
LT = LEFT
LAT = LATERAL
MAX = MAXIMUM
MH = MANHOLE
MHC = MINIMUM HORIZONTAL CLEARANCE
MIN = MINIMUM
MISC = MISCELLANEOUS
MSE = MINIMUM VERTICAL CLEARANCE
MVC = MECHANICALLY STABILIZED EARTH
NPCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE
NB = NORTHBOUND
NE = NORTHEAST
NF = NEAR FACE
NO = NUMBER
NW = NORTHWEST
O/O = OUT TO OUT
OD = OUTSIDE DIAMETER
OH = OVERHANG
OVHD = OVERHEAD
ODOT = OHIO DEPARTMENT OF TRANSPORTATION
P.V.I. or VPI = POINT OF VERTICAL INTERSECTION
PC = POINT OF CURVE
PCB = PORTABLE CONCRETE BARRIER
PCPP = PERFORATED CORRUGATED PLASTIC PIPE
PEJF = PREFORMED EXPANSION JOINT FILLER
PGL = PROFILE GRADE LINE
PI = POINT OF INTERSECTION
PMVC = POINT OF MINIMUM VERTICAL CLEARANCE
POT = POINT ON TANGENT
PROP = PROPOSED
PSF = POUNDS PER SQUARE FOOT
PT = POINT OF TANGENT
PVMT = PAVEMENT
R = RADIUS
RA = REAR ABUTMENT
RCP = REINFORCED CONCRETE PIPE
RD = ROAD
REF = REFERENCE
REINF. = REINFORCING OR REBAR
REQ'D = REQUIRED
RT = RIGHT
R/W = RIGHT OF WAY
S/O = SERIES OF
SR = STATE ROUTE
SB = SOUTHBOUND
SCD = STANDARD CONSTRUCTION DRAWING
SE = SOUTHEAST
SER = SERIES
SF = SQUARE FEET
SHLDR = SHOULDER
SPA = SPACES
ST = STREET OR SPAN TOTAL
STA = STATION
STD = STANDARD
STG = STAGE
STM = STORM
SW = SOUTHWEST
T/ = TOP OF
T/B = TOP AND BOTTOM
T/T = TOE TO TOE
TBR = TO BE REMOVED
TEMP = TEMPORARY
TYP = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE
VC = VERTICAL CURVE
VERT = VERTICAL
WB = WEST BOUND
WW = WINGWALL

STANDARD PLAN DETAILING NOMENCLATURE

THROUGHOUT THE PLANS, SECTIONS AND DETAILS ARE REFERENCED TO THEIR CORRESPONDING VIEWS THROUGH THE USE OF STANDARD CALLOUTS. THE VIEWS OF SECTIONS, ELEVATIONS, AND DETAILS WILL HAVE UNIQUE NUMBERS ON THE PAGES ON WHICH THEY ARE SHOWN.

LETTERS WILL BE UTILIZED FOR SECTION AND ELEVATION CALLOUTS. NUMBERS WILL BE UTILIZED FOR DETAIL CALLOUTS.

IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON THE SAME SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



IF A SECTION, ELEVATION, OR DETAIL VIEW IS ON A DIFFERENT SHEET FROM WHICH IT IS CUT, THE CALLOUT WILL APPEAR AS FOLLOWS:



MEMBERS WILL BE IDENTIFIED AS FOLLOWS:



FINAL TRACINGS
NOT FOR CONSTRUCTION

GENERAL NOTES (3 OF 3)
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 5 | TOTAL 24
SHEET P.419 | TOTAL 627

SUM-077/008-11.65/00.00

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:44:43 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SN003.dgn

PARTICIPATION	ESTIMATED QUANTITIES					CALCULATED: RLP 01/20/26		CHECKED: HLD 04/22/26	VERIFIED: SAT 05/01/26	
						BRIDGE				
05/IMS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	ABUT	PIER	SUPER	GENERAL	SHEET REF.
46,769	509	10000	46,769	LB	EPOXY COATED STEEL REINFORCEMENT			46,769		
4,542	509	30020	4,542	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			4,542		
169	511	34446	169	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			169		
46	511	34449	46	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN			46		3
334	512	10100	334	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)			334		
175,142	513	10261	175,142	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN			175,142		3
2,730	513	20000	2,730	EACH	WELDED STUD SHEAR CONNECTORS			2,730		
332	516	13900	332	SF	2" PREFORMED EXPANSION JOINT FILLER			332		
89	516	14020	89	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			89		
14	516	44100	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15"x12"x2.62" BEARING WITH 16"x13" LOAD PLATE AND BEVELED HP12x53 PEDESTAL)	14				
297	526	30010	297	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")			297		
90	526	90030	90	FT	TYPE C INSTALLATION			90		
152	625	25602	152	FT	CONDUIT, 4", 725.05			152		
1	625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM			1		

FINAL TRACINGS
NOT FOR CONSTRUCTION

ESTIMATED QUANTITIES
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
6	24

SHEET	TOTAL
P.420	627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
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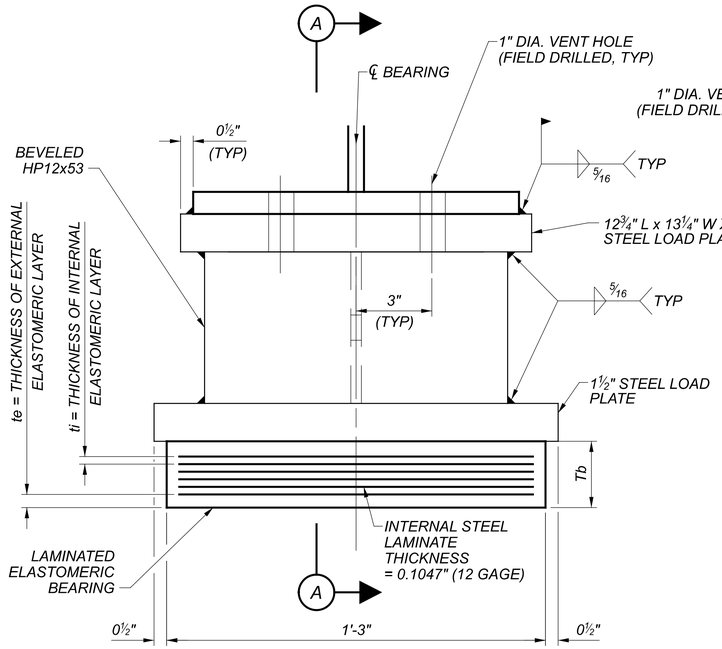
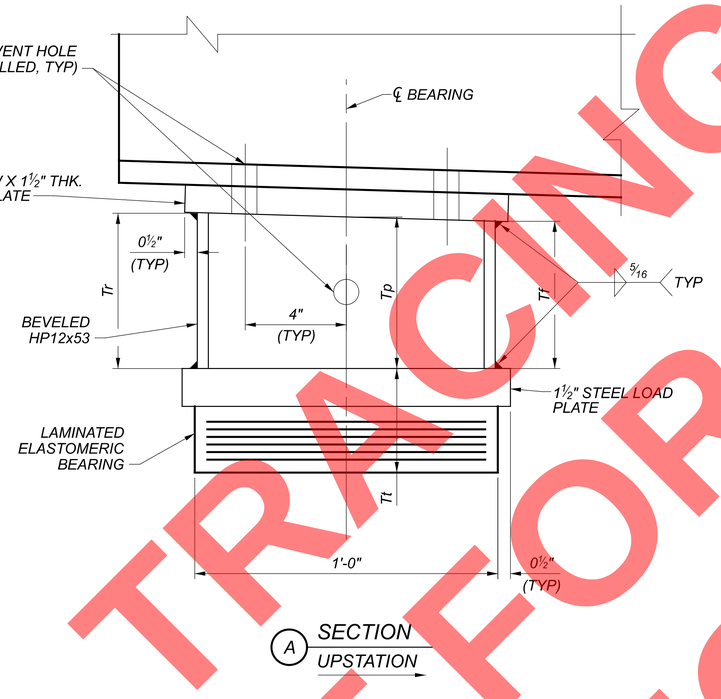
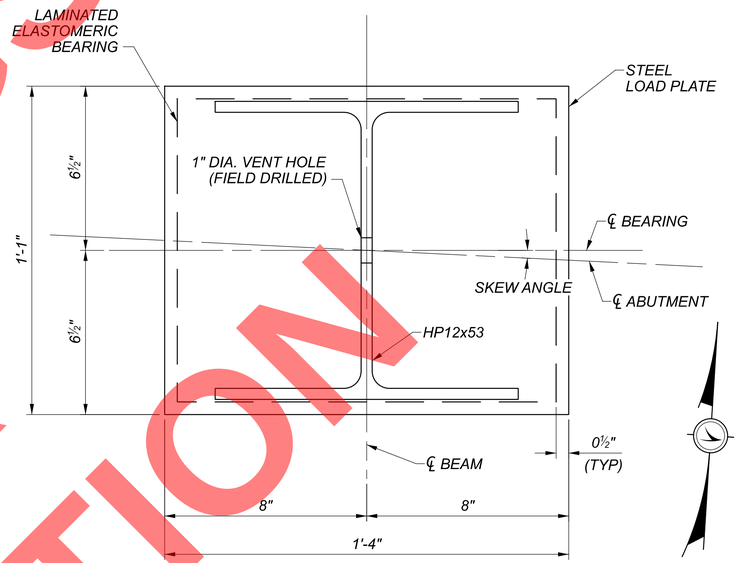


LAMINATED ELASTOMERIC EXPANSION BEARING
TYPICAL, REAR AND FORWARD



A SECTION
UPSTATION



BEARING ORIENTATION PLAN
REAR SHOWN
FORWARD SIMILAR

SKEW TABLE		
BEAMS	REAR ABUT	FORWARD ABUT
BEAMS 1-6	2° 47' 57"	2° 47' 57"
BEAM 7	1° 20' 43.7"	1° 20' 43.7"

ABUTMENT BEARING SCHEDULE											
SUPPORT	BEARING TYPE	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	TOTAL LOAD (KIPS)	ti	NO. OF ti's	te	NO. OF te's	NO. OF INTERNAL LAMINATES	Tb	Tt @ BRG
REAR ABUT	EXPANSION	95.18	84.20	179.38	0.300	6.00	0.195	1.00	6.00	2.623	4.12
FORWARD ABUT	EXPANSION	99.25	82.60	181.85	0.300	6.00	0.195	1.00	6.00	2.623	4.12

HP PEDESTAL TABLE				
ABUTMENT	BEAMS	Tr	Tp	Tf
REAR ABUTMENT	BEAM 1	6.030	6.000	5.970
	BEAM 2	7.287	7.257	7.227
	BEAM 3	8.487	8.457	8.427
	BEAM 4	9.807	9.777	9.747
	BEAM 5	11.007	10.977	10.947
	BEAM 6	12.207	12.177	12.147
	BEAM 7	13.407	13.377	13.347
FWD ABUTMENT	BEAM 1	6.030	6.000	5.970
	BEAM 2	7.270	7.240	7.210
	BEAM 3	8.510	8.480	8.450
	BEAM 4	9.750	9.720	9.690
	BEAM 5	10.980	10.950	10.920
	BEAM 6	12.220	12.190	12.160
	BEAM 7	13.810	13.780	13.750

NOTES

1. 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. THE STEEL LOAD PLATE SHALL BE ASTM A709, GRADE 50 STEEL. BOND THE LOAD PLATE BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
3. THE DEAD, LIVE, AND TOTAL LOADS TABULATED IN THE BEARING SCHEDULE ARE UNFACTORED LOADS.
4. REFER TO STD DWG SICD-1-21 FOR ADDITIONAL ABUTMENT BEARING NOTES AND DETAILS.
5. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
6. PAYMENT FOR ELASTOMERIC BEARINGS, LOAD PLATES, AND PEDESTALS AND INSTALLATION TO BE INCLUDED WITH ITEM 516, ELASTOMERC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).

FINAL TRACINGS NOT FOR CONSTRUCTION

BEARING DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 7 | TOTAL 24
SHEET P.421 | TOTAL 627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:01 AM USER: stony
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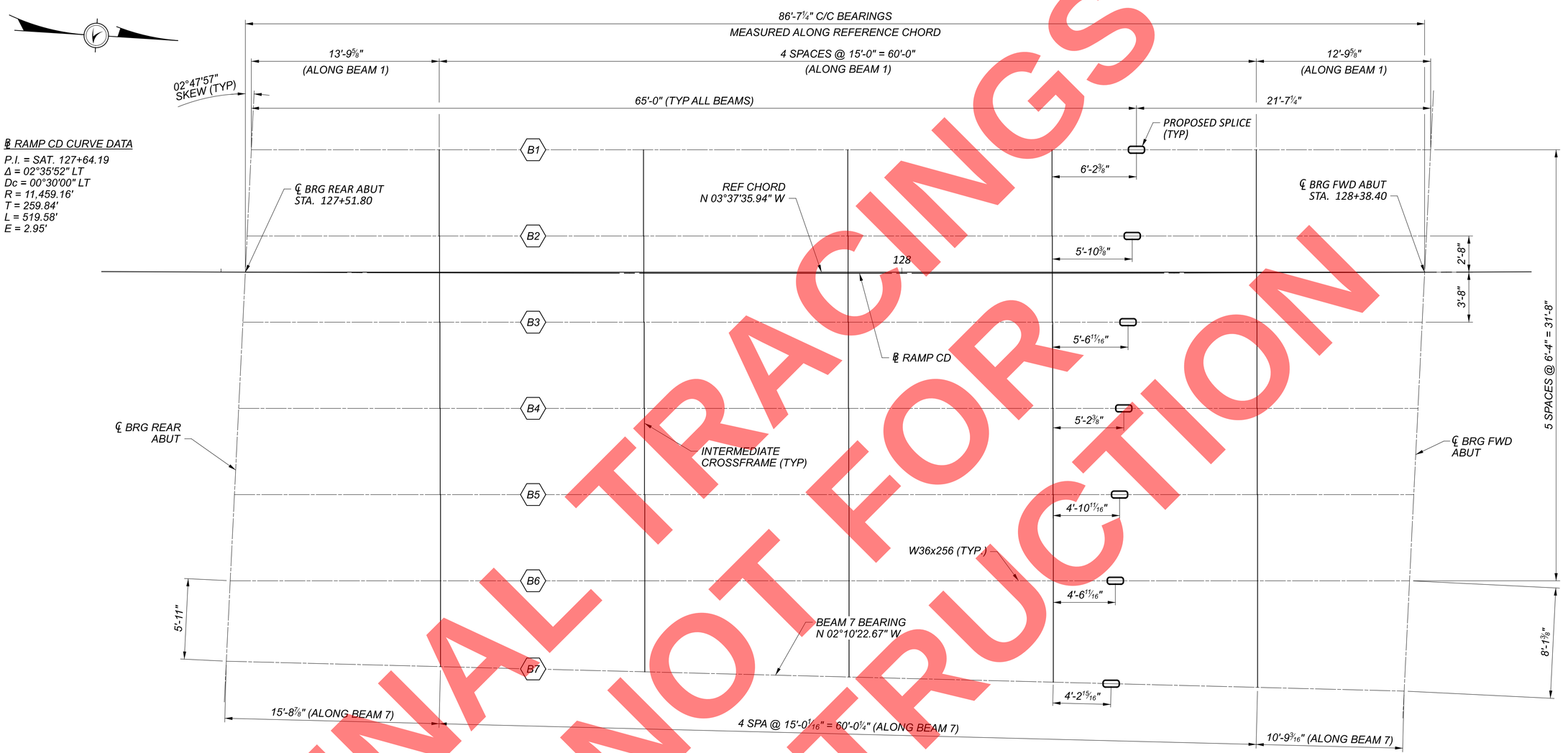

FRAMING PLAN

ALL BEAMS ARE PARALLEL
TO REFERENCE CHORD
UNLESS NOTED OTHERWISE

NOTES

1. FOR CROSSFRAME DETAILS, SEE SHEET 10|24.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

FRAMING PLAN
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

SUBSET	TOTAL
8	24

SHEET	TOTAL
P.422	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$
MODEL: Untitled Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:10 AM USER: stony
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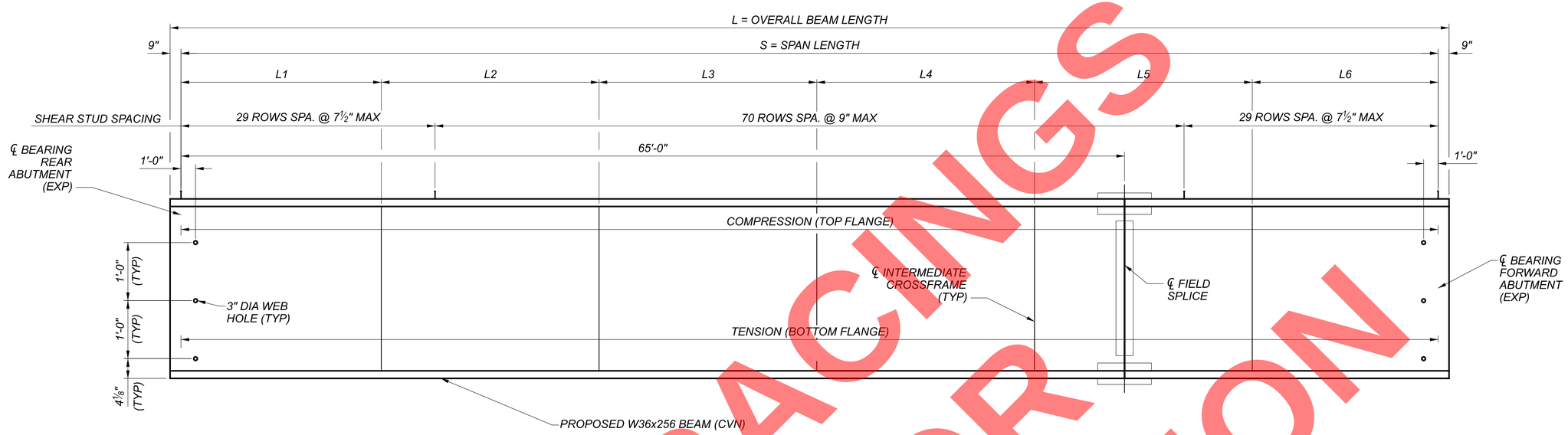
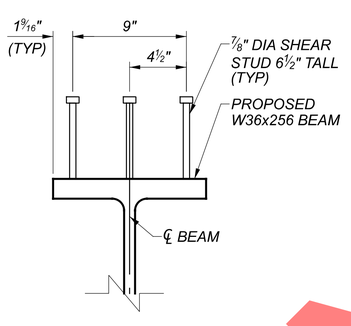


BEAM ELEVATION SCHEMATIC

DIMENSIONS ALONG ℄ BEAM, EXAGGERATED IN Y SCALE



SHEAR STUD DETAIL

BEAM DIMENSION DATA TABLE (DIMENSION TAKEN ALONG ℄ OF BEAM)								
BEAM NUMBER	BEAM LENGTH	SPAN LENGTH	CROSSFRAME SPACING					
	L	S	L1	L2	L3	L4	L5	L6
B1	88'-1¼"	86'-7¼"	13'-9⅞"	15'-0"	15'-0"	15'-0"	15'-0"	12'-9⅝"
B2	88'-1¼"	86'-7¼"	14'-1⁵⁄₁₆"	15'-0"	15'-0"	15'-0"	15'-0"	12'-5¹⁵⁄₁₆"
B3	88'-1¼"	86'-7¼"	14'-5⁵⁄₁₆"	15'-0"	15'-0"	15'-0"	15'-0"	12'-1⅝"
B4	88'-1¼"	86'-7¼"	14'-9⁵⁄₁₆"	15'-0"	15'-0"	15'-0"	15'-0"	11'-9⅝"
B5	88'-1¼"	86'-7¼"	15'-1⅝"	15'-0"	15'-0"	15'-0"	15'-0"	11'-5⅝"
B6	88'-1¼"	86'-7¼"	15'-5⁵⁄₁₆"	15'-0"	15'-0"	15'-0"	15'-0"	11'-1⅛"
B7	88'-0¼"	86'-6¼"	15'-8⅞"	15'-0 1⁄₁₆"	15'-0 1⁄₁₆"	15'-0 1⁄₁₆"	15'-0 1⁄₁₆"	10'-9³⁄₁₆"

NOTES

1. FOR FRAMING PLAN, SEE SHEET 8/24.
2. FOR CROSSFRAME AND CONNECTION PLATE DETAILS, SEE SHEET 10/24.
3. FOR ADDITIONAL STIFFENER DETAILS, SEE STD DWG GSD-1-19.
4. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION" OR "C". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION" OR "T". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND AT LEAST ⁵⁄₁₆" THICK.
5. TERMINATE STIFFENER WELDS ¼" (± ⅛") FROM THE END OF THE STIFFNER TO BEAM INTERFACE.
6. ALL STEEL SHALL BE ASTM A709 GRADE 50, AND SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH CMS 711.02.
7. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.

FINAL TRACINGS NOT FOR CONSTRUCTION

BEAM ELEVATION
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 9 | TOTAL 24
SHEET P.423 | TOTAL 627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:18 AM USER: stony
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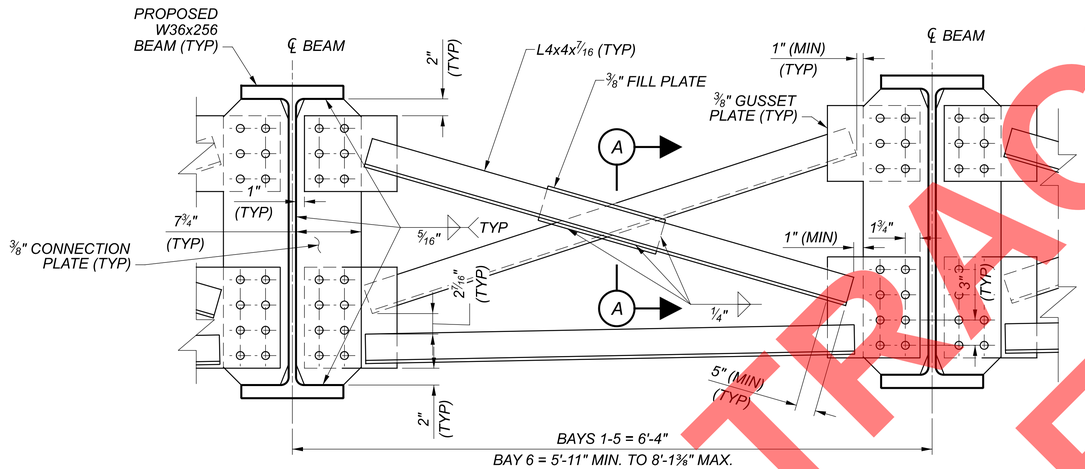
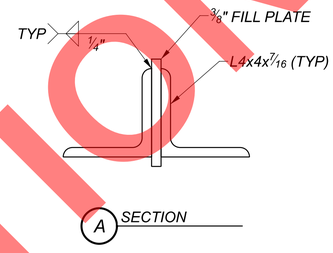
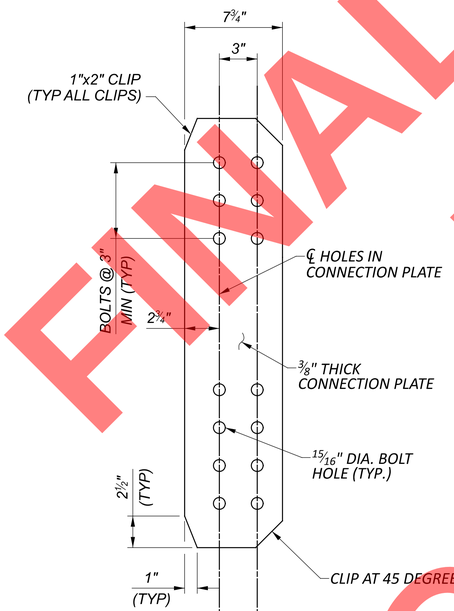
PLOT DRIVER: $PLTDRVS$ PENTABLE: $PENTBLS$
SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:27 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS003



TYPICAL INTERMEDIATE CROSSFRAME





CONNECTION PLATE DETAIL

NOTES

1. SEE SHEET 8/24 FOR FRAMING PLAN DETAILS.
2. FOR ADDITIONAL CROSSFRAME AND CONNECTION PLATE DETAILS, REFER TO ODOT STD DWG GSD-1-19.
3. TERMINATE WELDS ¼" FROM THE END OF PLATE TO BEAM INTERFACE.
4. ALL BOLT HOLES TO BE 15/16" DIA IN CONNECTIONS PLATES AND 1 1/16" DIA IN CROSSFRAMES.
5. HIGH STRENGTH BOLTS SHALL BE ⅞" DIAMETER A325 UNLESS NOTED OTHERWISE.

FINAL TRACINGS
NOT FOR CONSTRUCTION

BEAM CROSSFRAME DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 lyra drive, Suite 110
Columbus, Ohio 43240

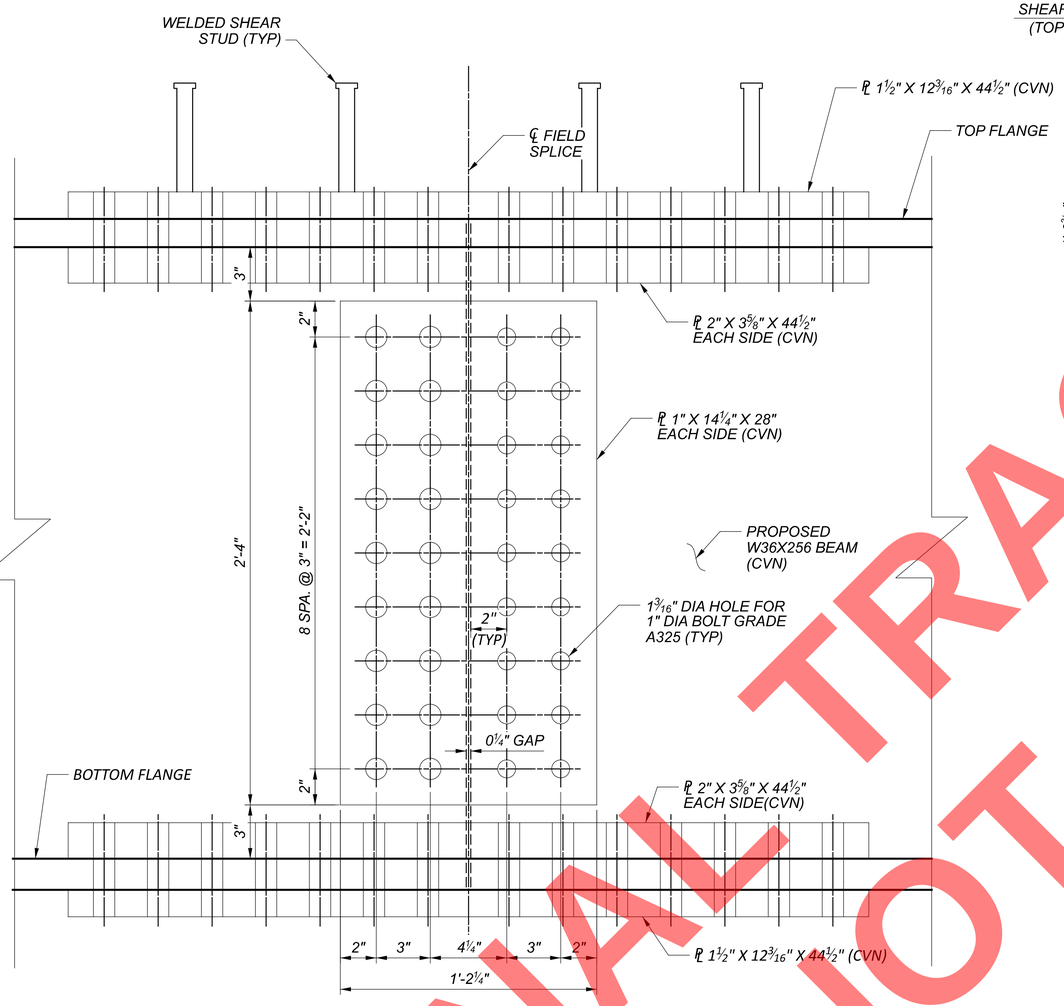
DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

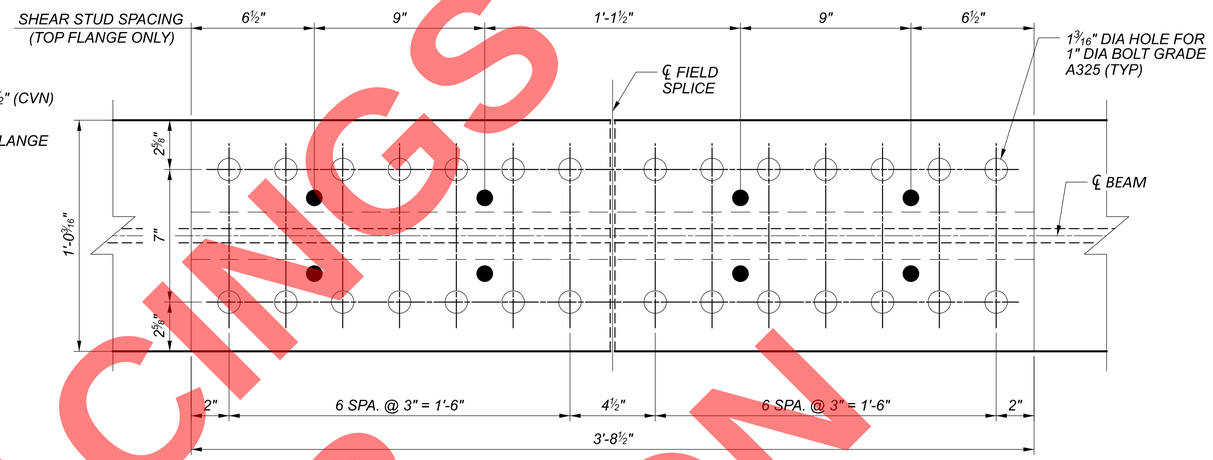
SUBSET	TOTAL
10	24

SHEET	TOTAL
P.424	627



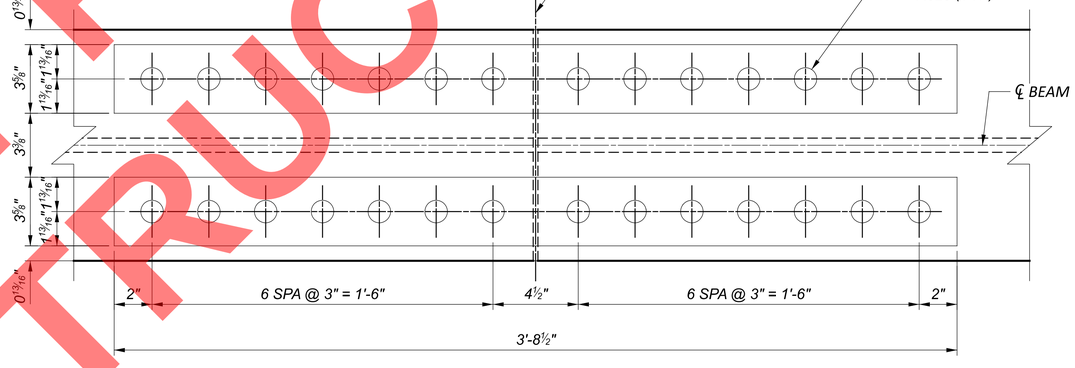
FIELD SPLICE ELEVATION

PARTIAL SECTION



PLAN - OUTER PLATE

(TOP FLANGE SHOWN, BOTTOM FLANGE SIMILAR)
(SYMMETRICAL ABOUT ℄ SPLICE AND ℄ BEAM)



PLAN - INNER PLATE

(TOP AND BOTTOM FLANGE)
(SYMMETRICAL ABOUT ℄ SPLICE AND ℄ BEAM)

NOTES (IN MOST SHEETS, NOT GEN NOTES)

1. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER F3125, GRADE A325, TYPE 1 UNLESS NOTED OTHERWISE.
2. CHARPY V-NOTCH TOUGHNESS REQUIREMENT: WHERE SHAPE OR PLATE IS DESIGNATED "(CVN)", FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.
3. SEE FRAMING PLAN ON SHEET 8/24 FOR FIELD SPLICE LOCATIONS.

FINAL TRACINGS NOT FOR CONSTRUCTION

SPLICE DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8800 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 11 | TOTAL 24
SHEET P.425 | TOTAL 627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUM-077/008-11.65/00.00 PENTABLE SUBSET: 1 SUBMITTAL: SUB_STG
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:36 AM USER: stony
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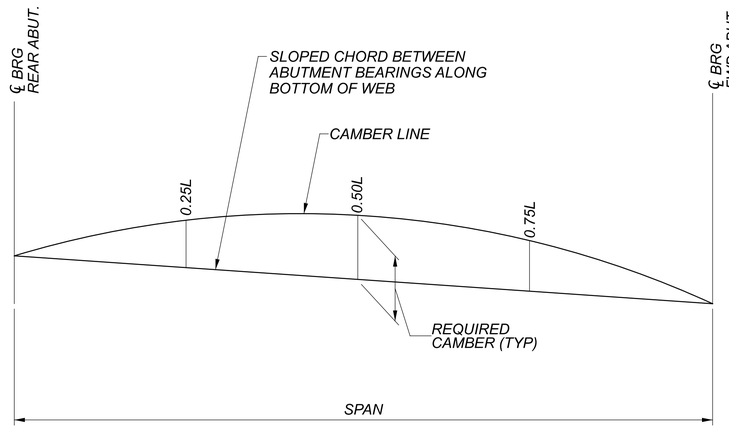


CAMBER AND BLOCKING DIAGRAM
ALONG CENTERLINE BEAM

BEAM CAMBER AND DEFLECTIONS

POINT		BEAM 1					BEAM 2					BEAM 3					BEAM 4					BEAM 5					BEAM 6					BEAM 7				
		DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**	DEFLECTION DUE TO WEIGHT OF STEEL	DEFLECTION DUE TO NON-COMPOSITE DEAD LOAD	DEFLECTION DUE TO COMPOSITE DEAD LOAD	ADJUSTMENT REQUIRED FOR ROADWAY PROFILE & SUPER ELEVATION	**TOTAL CAMBER**
RA		0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**
SPAN 1	0.25	0.50"	1.27"	0.21"	-0.01"	**1.96"**	0.50"	1.30"	0.21"	-0.01"	**2.00"**	0.51"	1.33"	0.21"	-0.01"	**2.03"**	0.51"	1.35"	0.20"	-0.01"	**2.05"**	0.51"	1.36"	0.20"	-0.01"	**2.06"**	0.50"	1.38"	0.20"	-0.01"	**2.07"**	0.50"	1.39"	0.20"	-0.01"	**2.08"**
	0.50	0.71"	1.80"	0.30"	-0.02"	**2.79"**	0.72"	1.85"	0.29"	-0.02"	**2.85"**	0.72"	1.89"	0.29"	-0.02"	**2.89"**	0.72"	1.92"	0.29"	-0.02"	**2.92"**	0.72"	1.94"	0.29"	-0.02"	**2.94"**	0.72"	1.96"	0.29"	-0.02"	**2.95"**	0.71"	1.98"	0.29"	-0.02"	**2.97"**
	0.75	0.50"	1.27"	0.21"	-0.01"	**1.96"**	0.50"	1.30"	0.21"	-0.01"	**2.00"**	0.51"	1.33"	0.21"	-0.01"	**2.03"**	0.51"	1.35"	0.20"	-0.01"	**2.05"**	0.51"	1.37"	0.20"	-0.01"	**2.07"**	0.50"	1.38"	0.20"	-0.01"	**2.08"**	0.50"	1.40"	0.20"	-0.01"	**2.09"**
FA		0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**	0.00"	0.00"	0.00"	0.00"	**0.00"**

NOTES

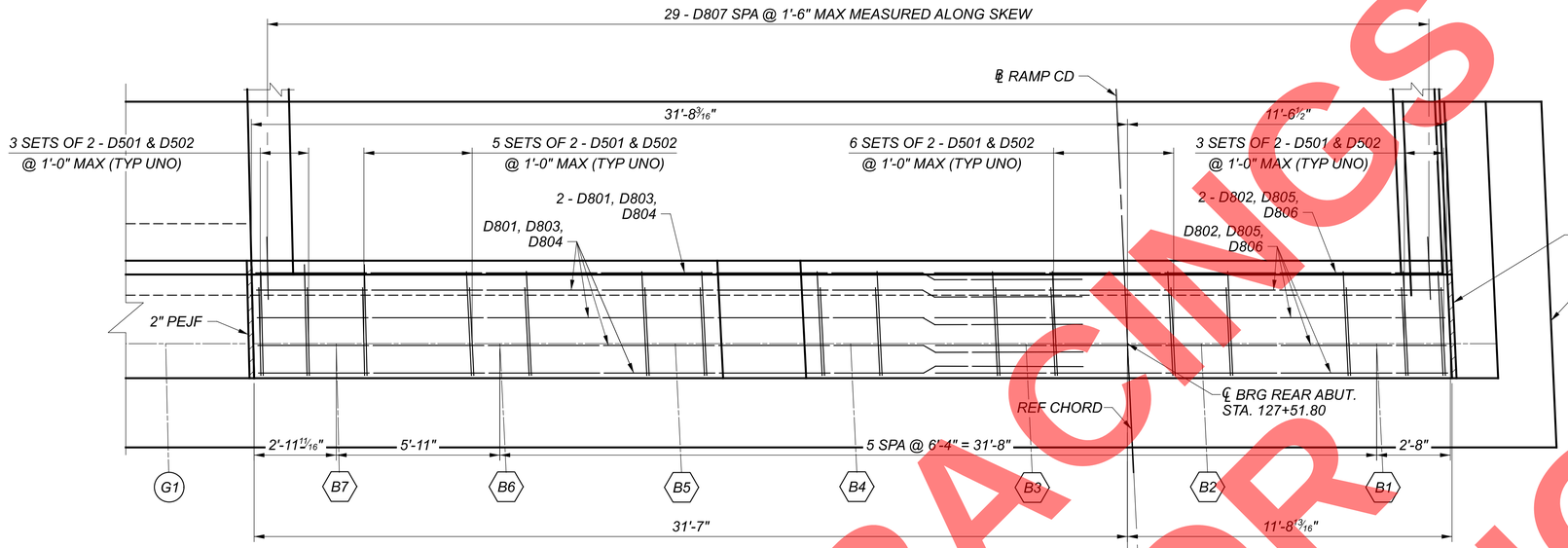
1. *CAMBER IS MEASURED ALONG BOTTOM OF THE BEAM WEB.*

FINAL TRACINGS
NOT FOR
CONSTRUCTION

BEAM CAMBER
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

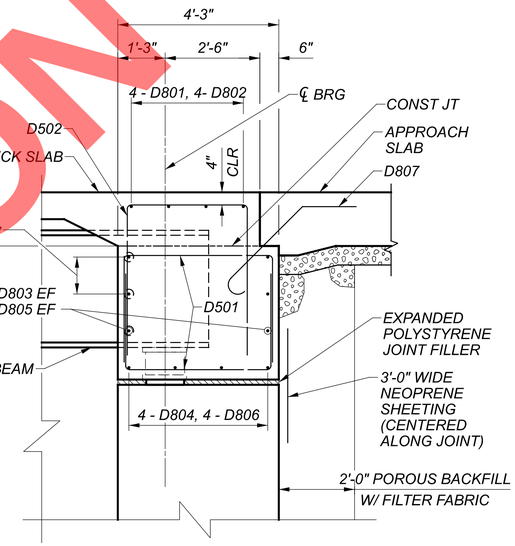
SFN 7700158
DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 12 | TOTAL 24
SHEET P.426 | TOTAL 627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: [1]
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:47 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS004

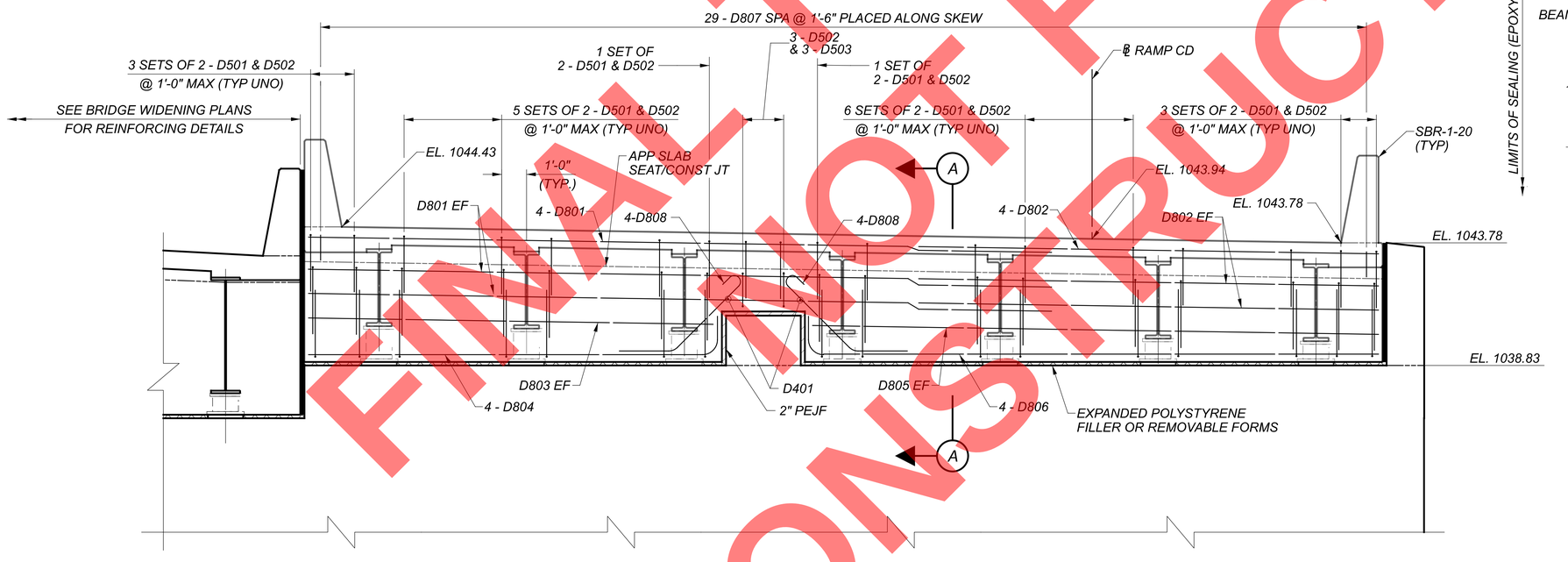


PLAN

02°47'57" SKEW (FROM REF CHORD)



A SECTION



ELEVATION

NOTES

1. FOR ABUTMENT DETAILS, SEE PLAN SET SHEETS P.387 / 627 THRU P.396 / 627.
2. SEE SHEET 15/24 FOR TRANSVERSE SECTION.
3. SEE SHEET 21/24 FOR APPROACH SLAB DETAILS.
4. 2" CLEAR COVER UNLESS NOTED OTHERWISE.

REAR SEMI-INTEGRAL DIAPHRAGM DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

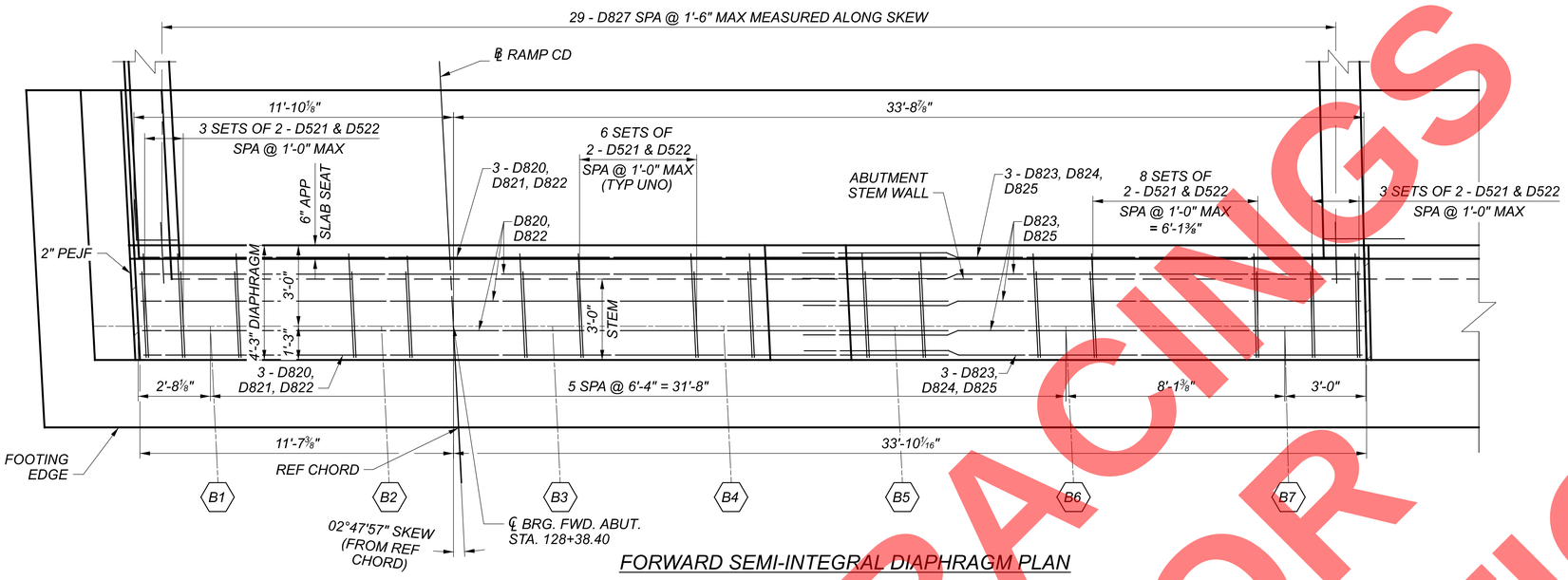
PROJECT ID 114865

SUBSET	TOTAL
13	24

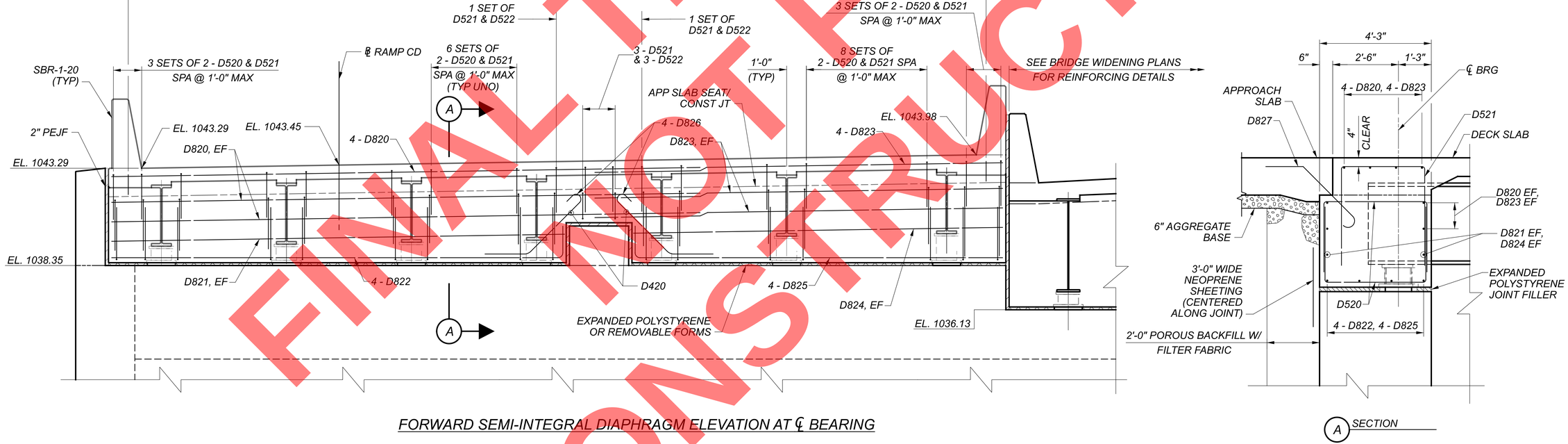
SHEET	TOTAL
P.427	627

FINAL TRACINGS NOT FOR CONSTRUCTION

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:45:57 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o11\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannel Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS005



FORWARD SEMI-INTEGRAL DIAPHRAGM PLAN



FORWARD SEMI-INTEGRAL DIAPHRAGM ELEVATION AT ℄ BEARING

SECTION

NOTES

1. FOR ABUTMENT DETAILS, SEE PLAN SET SHEETS P.387/627 THRU P.396/627.
2. SEE SHEET 15/24 FOR TRANSVERSE SECTION.
3. SEE SHEET 22/24 FOR APPROACH SLAB DETAILS.
4. 2" CLEAR COVER UNLESS NOTED OTHERWISE.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

FORWARD SEMI-INTEGRAL DIAPHRAGM DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

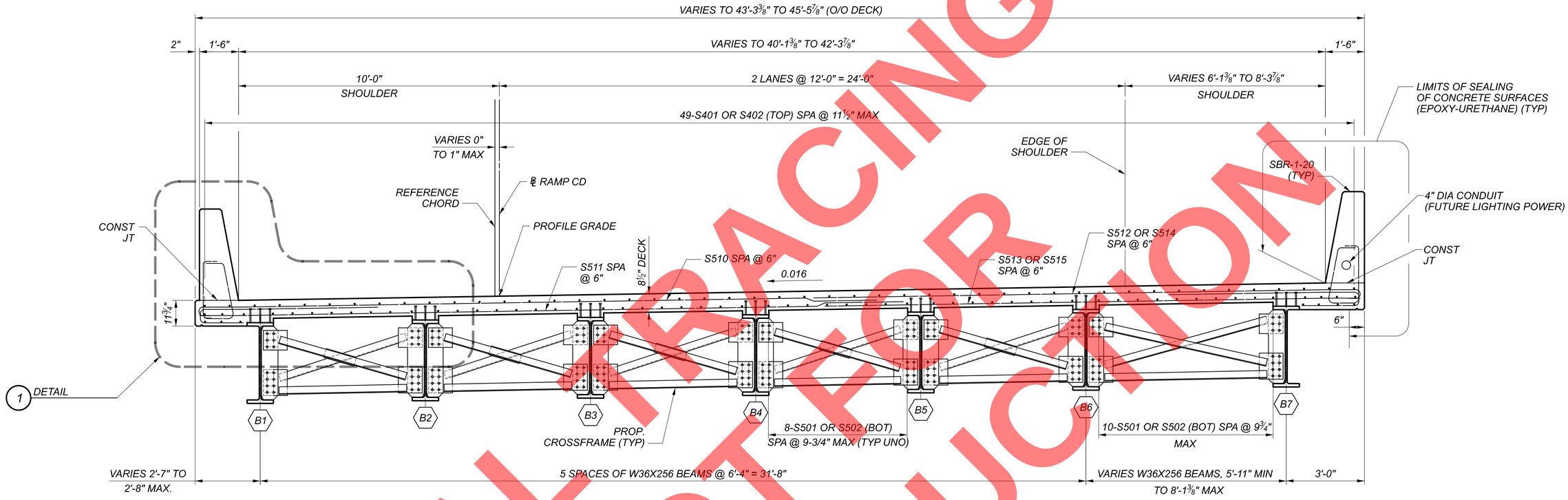
PROJECT ID
114865

SUBSET	TOTAL
14	24

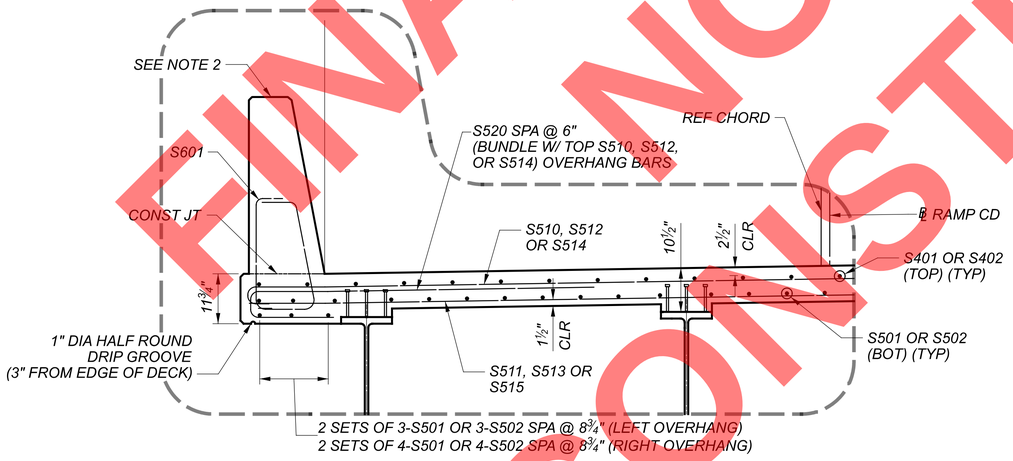
SHEET	TOTAL
P.428	627

SUM-077/008-11.65/00.00

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:07 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS006



TRANSVERSE SECTION



1 DETAIL
TYPICAL REINFORCING PATTERN AT OVERHANGS

NOTES

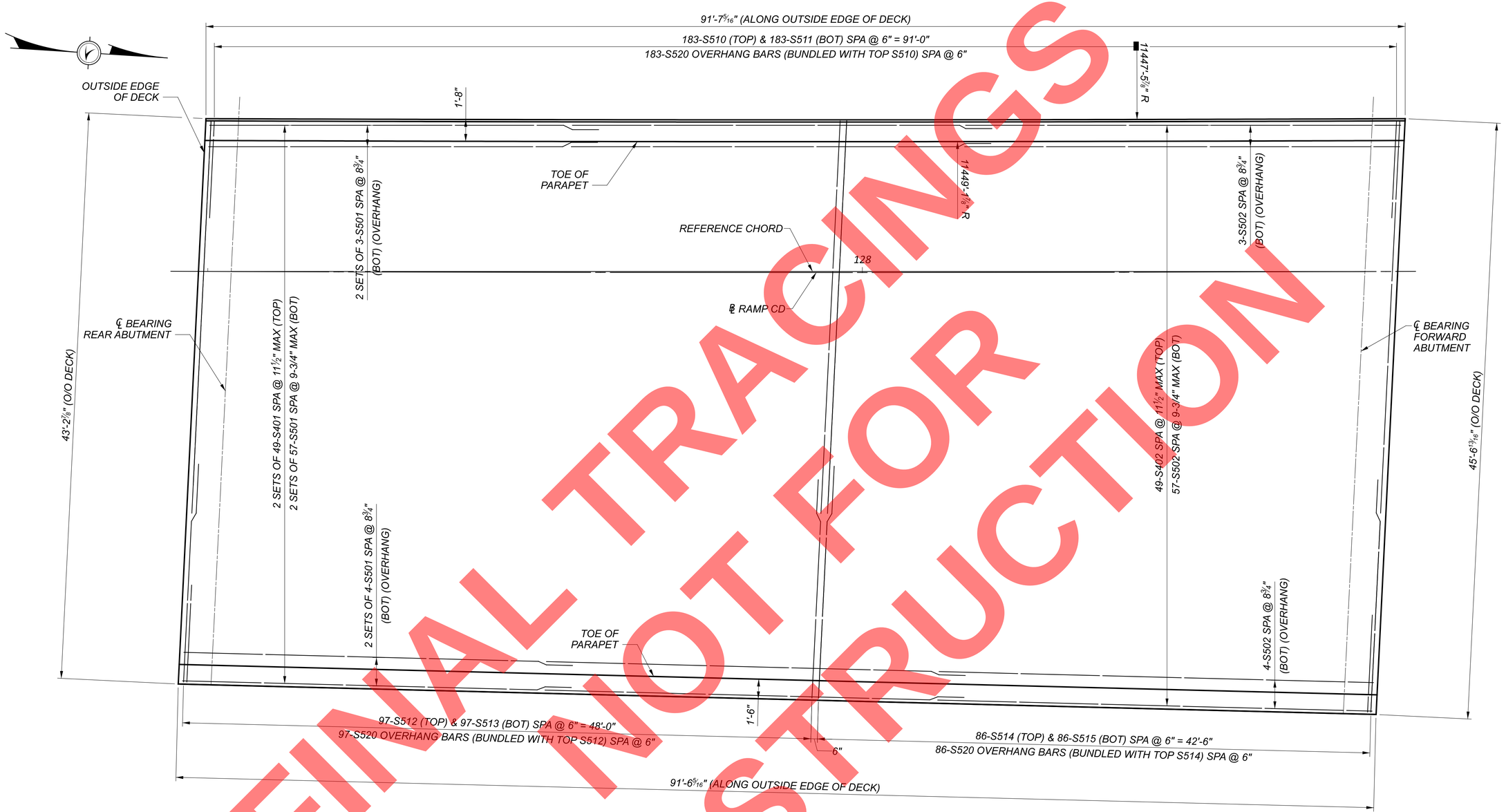
1. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 3.57" AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM, 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 511.23.
2. FOR PARAPET REINFORCING DETAILS, SEE SHEET 20/24.
3. FOR CROSSFRAME DETAILS, SEE SHEET 10/24 .

FINAL PLANS NOT FOR CONSTRUCTION

TRANSVERSE SECTION
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY
GFT 8890 lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 15 | TOTAL 24
SHEET P.429 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRV$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:16 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_ST001



DECK REINFORCING PLAN

FINAL TRACINGS
NOT FOR CONSTRUCTION

NOTES

1. SEE SHEET 24/24 FOR LAP LENGTHS.
2. PLACE TRANSVERSE REINFORCING PARALLEL TO ℄ OF BEARING.
3. SEE SHEET 20/24 FOR PARAPET REINFORCING DETAILS.

DECK PLAN
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER EFD 08/2026

PROJECT ID 114865

SUBSET	TOTAL
16	24

SHEET	TOTAL
P.430	627

PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:26 AM USER: stony
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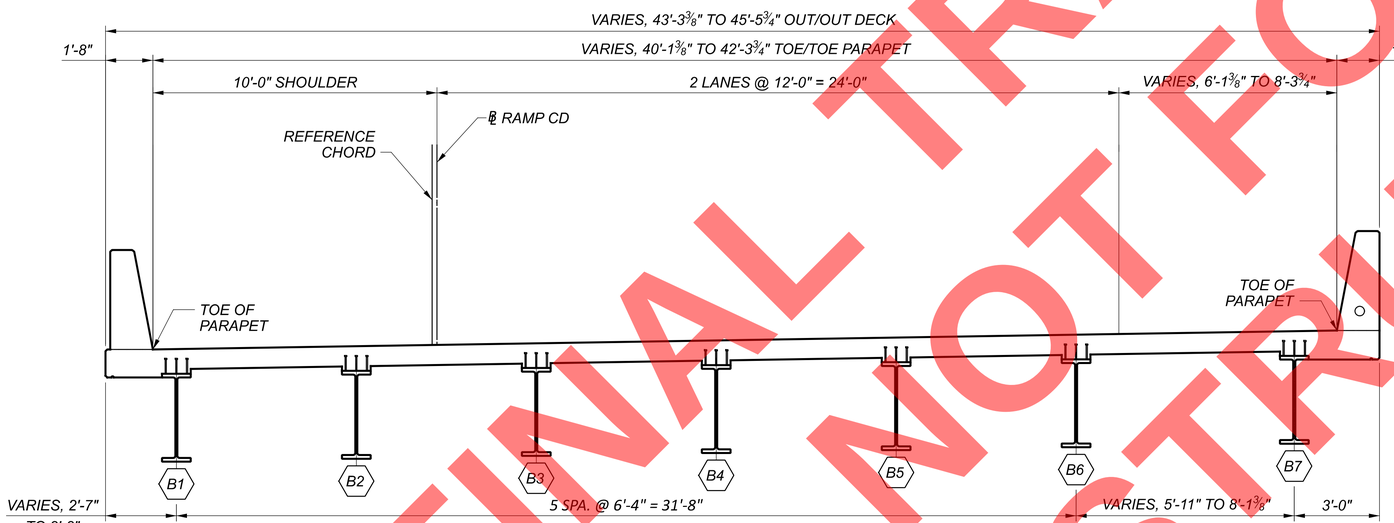
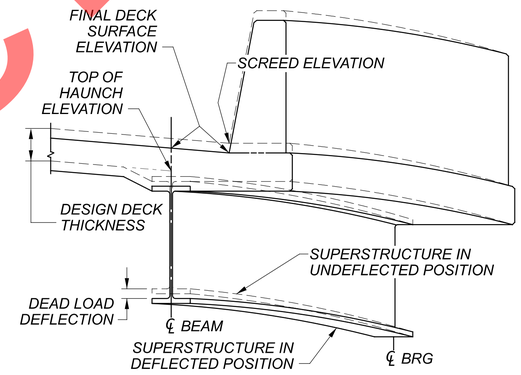
TOP OF HAUNCH ELEVATIONS															
SPAN NO.	LOCATION	BEAM #1		BEAM #2		BEAM #3		BEAM #4		BEAM #5		BEAM #6		BEAM #7	
		STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.	STA.	T/HAUNCH ELEV.
REAR ABUT		127+52.20	1043.09	127+51.91	1043.19	127+51.63	1043.29	127+51.34	1043.39	127+51.06	1043.50	127+50.77	1043.60	127+50.51	1043.70
SPAN 1	0.25 L	127+73.87	1043.09	127+73.57	1043.19	127+73.27	1043.30	127+72.97	1043.40	127+72.68	1043.51	127+72.38	1043.61	127+72.08	1043.72
	0.50 L	127+95.53	1043.02	127+95.22	1043.12	127+94.91	1043.23	127+94.60	1043.33	127+94.30	1043.44	127+93.99	1043.54	127+93.65	1043.66
	0.75 L	128+17.20	1042.84	128+16.88	1042.95	128+16.56	1043.05	128+16.24	1043.16	128+15.92	1043.26	128+15.59	1043.37	128+15.21	1043.49
FORWARD ABUT		128+38.87	1042.60	128+38.53	1042.70	128+38.20	1042.81	128+37.87	1042.91	128+37.53	1043.01	128+37.20	1043.12	128+36.78	1043.25



TOP OF HAUNCH, SCREED, AND FINAL DECK ELEVATION LINE LOCATIONS



TOP OF HAUNCH, SCREED, AND FINAL DECK ELEVATION

FOR ALL OTHER ELEVATIONS, SEE SHEETS 18/24 AND 19/24 FOR DETAILS.

NOTES

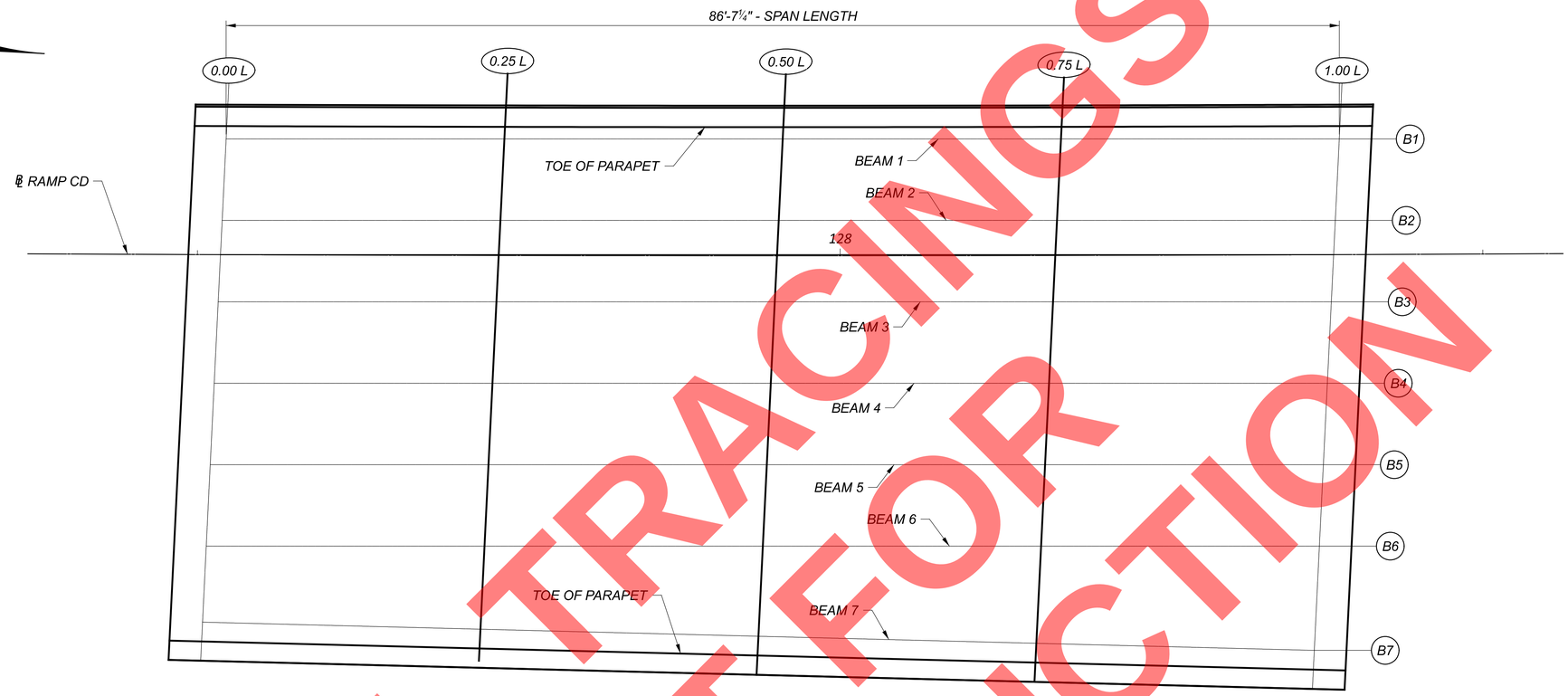
1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF DECK ABOVE THE BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. DIMENSION IN THE TRANSVERSE SECTION ARE SHOWN NORMAL TO THE ℄ OF RAMP CD.

FINAL TRACINGS NOT FOR CONSTRUCTION

TOP OF HAUNCH ELEVATIONS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY
GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 17 | TOTAL 24
SHEET P.431 | TOTAL 627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:35 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o11\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS007



FINAL TRACINGS NOT FOR CONSTRUCTION

TOP OF HAUNCH, SCREED AND FINAL DECK ELEVATION LINE LOCATION

SCREED ELEVATIONS

SPAN NO.	LOCATION	LEFT PARAPET TOE STA.	LEFT PARAPET TOE SCREED ELEV.	BL RAMP CD STA.	BL RAMP CD SCREED ELEV.	RIGHT PARAPET TOE STA.	RIGHT PARAPET TOE SCREED ELEV.
REAR ABUT		127+52.24	1043.78	127+51.79	1043.94	127+50.44	1044.43
SPAN 1	0.25 L	127+73.91	1043.78	127+73.44	1043.94	127+72.01	1044.45
	0.50 L	127+95.58	1043.71	127+95.09	1043.88	127+93.57	1044.39
	0.75 L	128+17.25	1043.54	128+16.74	1043.70	128+15.14	1044.23
FORWARD ABUT		128+38.92	1043.29	128+38.39	1043.45	128+36.70	1043.98

NOTE

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

SCREED ELEVATION
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

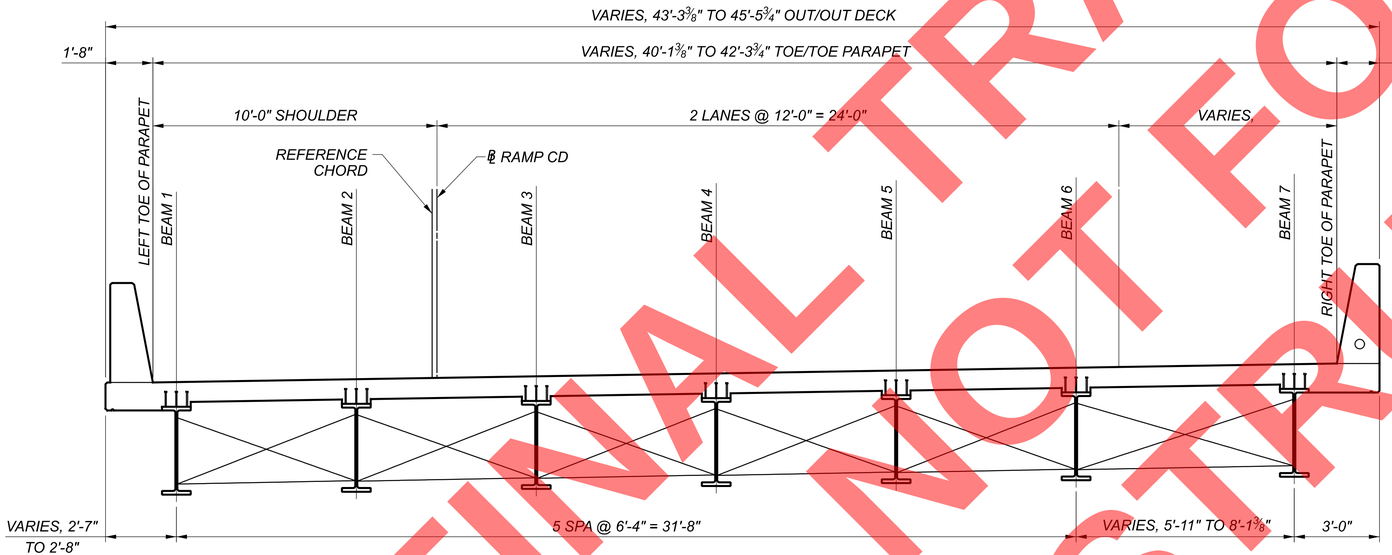
PROJECT ID
114865

SUBSET	TOTAL
18	24

SHEET	TOTAL
P.432	627

SUM-077/008-11.65/00.00
PENTABLE SUBSET: [1] SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$ PENTABLE: $PENTBL$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:44 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-d1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS008

FINAL DECK SURFACE ELEVATIONS																					
SPAN NO.	LOCATION	LEFT PARAPET TOE		BEAM #1		BEAM #2		BL RAMP CD		BEAM #3		BEAM #4		BEAM #5		BEAM #6		BEAM #7		RIGHT PARAPET TOE	
		STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.	STA.	DECK ELEV.
REAR ABUT		127+52.24	1043.78	127+52.20	1043.79	127+51.91	1043.90	127+51.79	1043.94	127+51.63	1044.00	127+51.34	1044.10	127+51.06	1044.21	127+50.77	1044.31	127+50.51	1044.40	127+50.44	1044.43
SPAN 1	0.25 L	127+73.91	1043.66	127+73.87	1043.67	127+73.57	1043.77	127+73.44	1043.82	127+73.27	1043.88	127+72.97	1043.98	127+72.68	1044.08	127+72.38	1044.19	127+72.08	1044.29	127+72.01	1044.32
	0.50 L	127+95.58	1043.53	127+95.53	1043.55	127+95.22	1043.65	127+95.09	1043.70	127+94.91	1043.76	127+94.60	1043.86	127+94.30	1043.96	127+93.99	1044.07	127+93.65	1044.18	127+93.57	1044.20
	0.75 L	128+17.25	1043.41	128+17.20	1043.43	128+16.88	1043.53	128+16.74	1043.58	128+16.56	1043.63	128+16.24	1043.74	128+15.92	1043.84	128+15.59	1043.94	128+15.21	1044.07	128+15.14	1044.09
FORWARD ABUT		128+38.92	1043.29	128+38.87	1043.31	128+38.53	1043.41	128+38.39	1043.45	128+38.20	1043.51	128+37.87	1043.62	128+37.53	1043.72	128+37.20	1043.82	128+36.78	1043.96	128+36.70	1043.98



FINAL DECK ELEVATION LINE LOCATIONS

NOTE

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

FINAL CONTRACT DRAWINGS NOT FOR CONSTRUCTION

FINAL DECK ELEVATIONS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

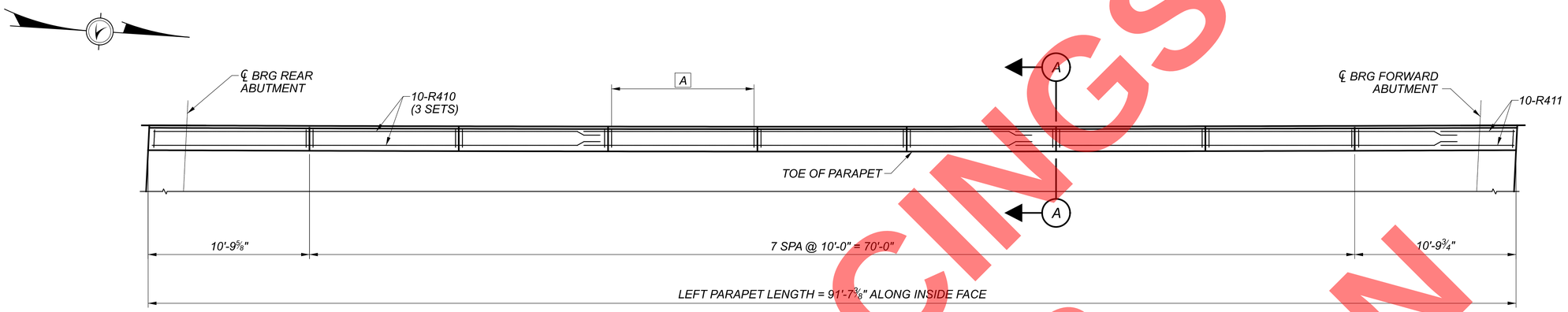
REVIEWER EFD 08/2026

PROJECT ID 114865

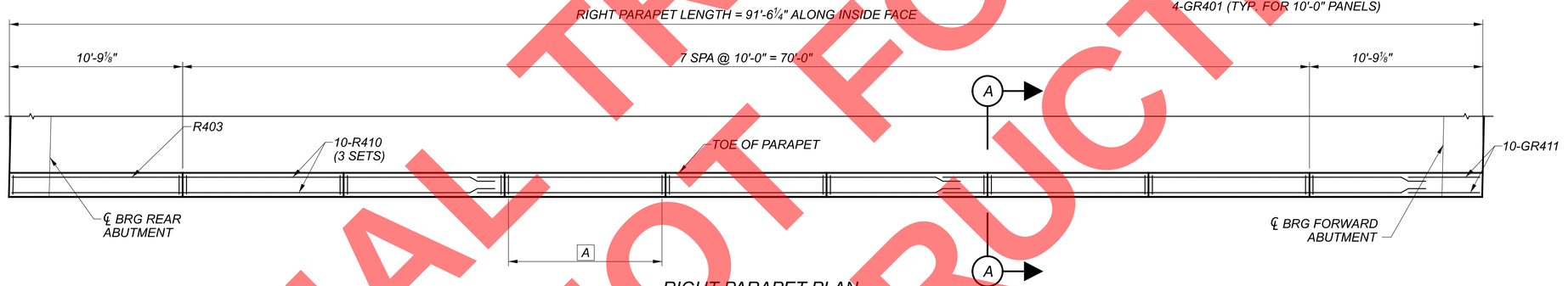
SUBSET	TOTAL
19	24

SHEET	TOTAL
P.433	627

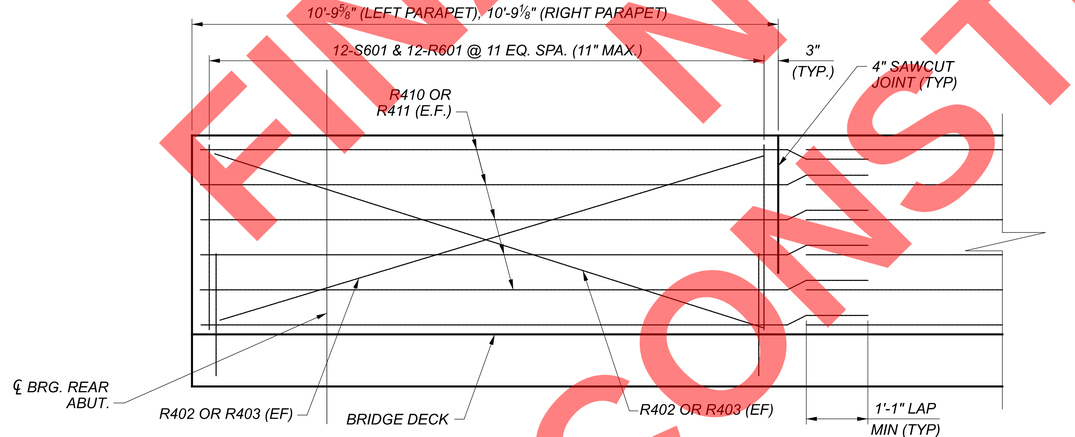
SUM-077/008-11.65/00.00
PENTABLE SUBSET: 1
SUBMITTAL: SUB_STG
PLOT DRIVER: $PLTDRV$$
PENTABLE: $PENTBL$$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:46:52 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o11\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SS009



LEFT PARAPET PLAN



RIGHT PARAPET PLAN

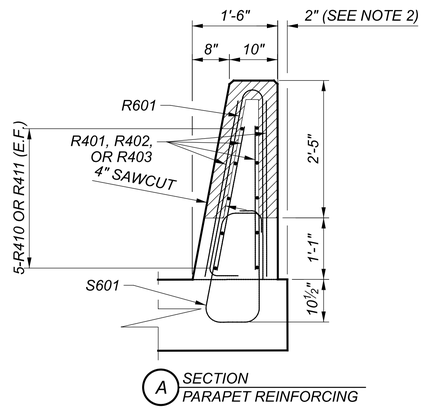


END PARAPET ELEVATION

REAR END PANEL SHOWN, FORWARD PANEL SIMILAR

LEGEND

A — 11-S601, 11-R601 @ 10 EQ. SPA. (1'-0" MAX.), 4-GR401 (TYP. FOR 10'-0" PANELS)



A SECTION PARAPET REINFORCING

NOTES

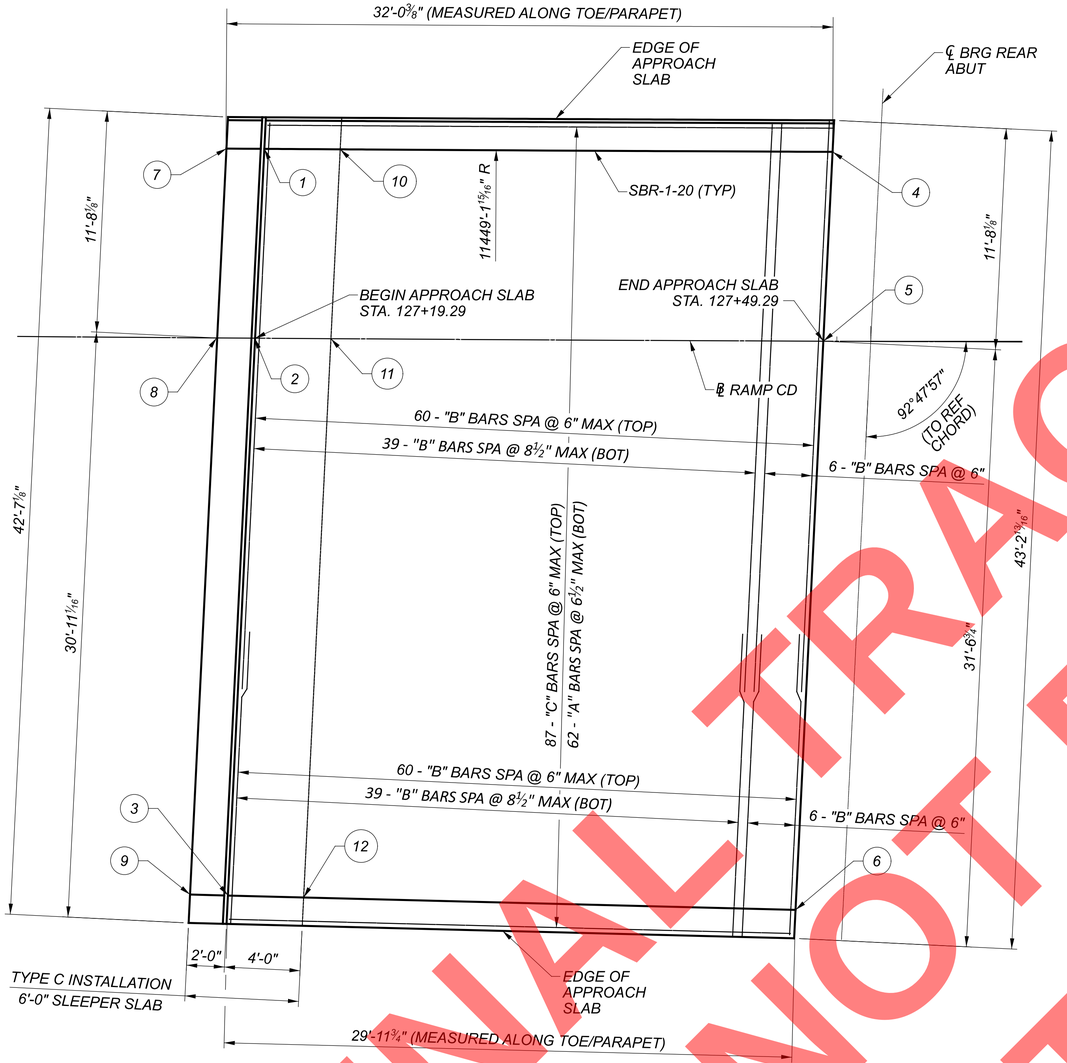
1. FOR ADDITIONAL PARAPET DETAILS, REFER TO STANDARD BRIDGE DRAWING SBR-1-20.
2. OMIT 2" BUMPOUT FOR RIGHT OVERHANG PARAPETS ADJACENT TO SR 8 SOUTHBOUND BRIDGE.
3. SEE SHEET 24 / 24 FOR LAP LENGTHS.

FINAL TRACINGS NOT FOR CONSTRUCTION

PARAPET PLANS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 20 | TOTAL 24
SHEET P.434 | TOTAL 627

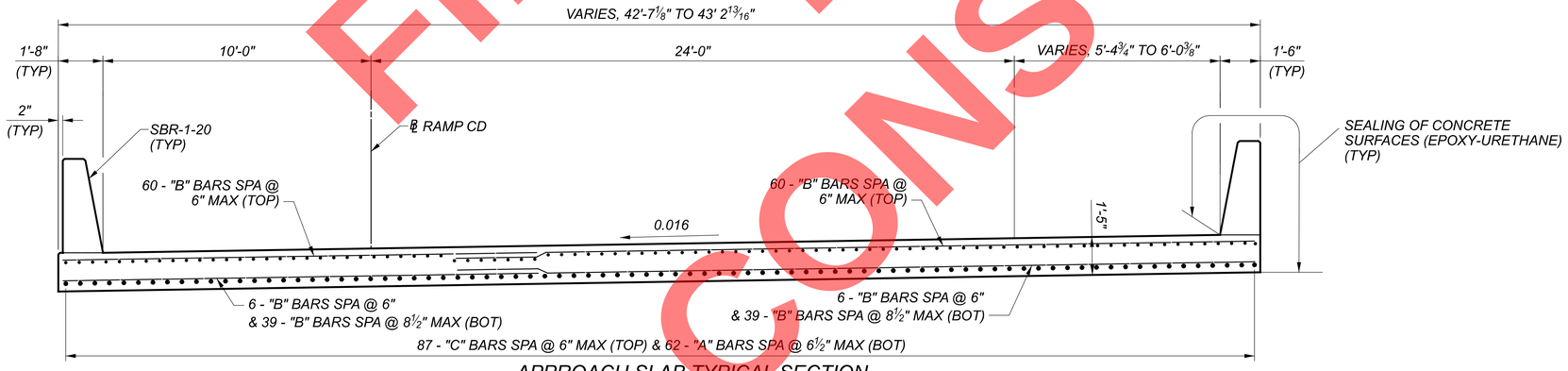
SUM-077/008-11.65/00.00 SUBMITTAL: SUB_STG PENTABLE SUBSET: 1 PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRVS$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:47:01 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o11\Documents\01 Active Projects\30149976400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SA001



REAR APPROACH SLAB

REAR APPROACH SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	APPR. SLAB ELEVATION
1	127+19.71	10.00 LT	1043.96
2	127+19.29	0.00 LT	1044.12
3	127+18.05	29.43 RT	1044.60
4	127+49.74	10.00 LT	1043.79
5	127+49.29	0.00 LT	1043.95
6	127+47.94	30.03 RT	1044.44

REAR SLEEPER SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	TOP OF SLEEPER SLAB
7	127+17.71	10.00 LT	1042.55
8	127+17.29	0.00 LT	1042.72
9	127+16.05	29.39 RT	1043.19
10	127+23.72	10.00 LT	1042.52
11	127+23.29	0.00 LT	1042.68
12	127+22.04	29.51 RT	1043.16



APPROACH SLAB TYPICAL SECTION
LOOKING UPSTATION

NOTES

1. FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN, SEE STD DWG AS-1-15.
2. FOR ADDITIONAL PARAPET DETAILS & REINFORCING SEE SHEET 23/24 .
3. FOR SLEEPER SLAB DETAILS, REFER TO STD DWG AS-2-15.

FINAL TRACINGS NOT FOR CONSTRUCTION

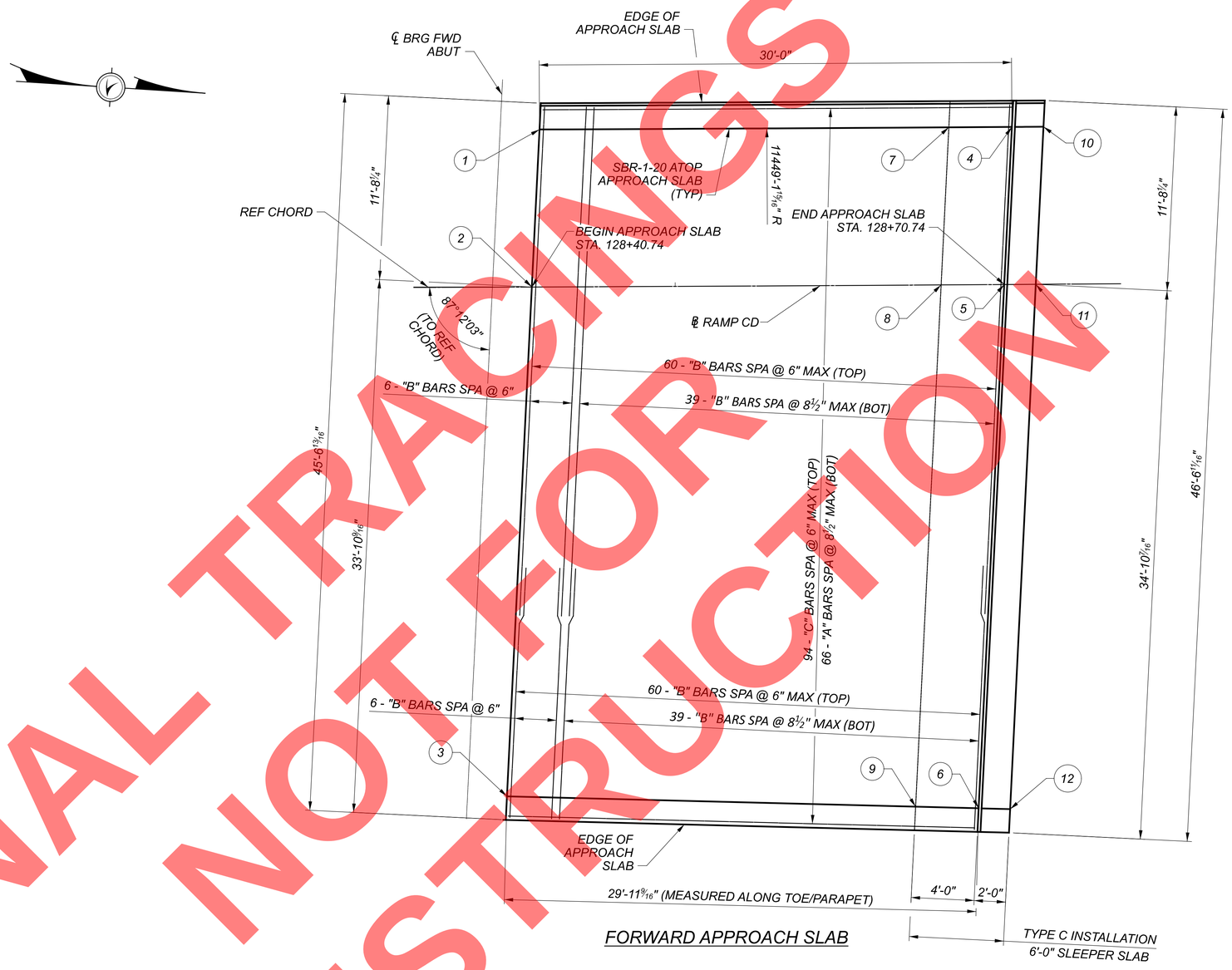
REAR APPROACH SLAB DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158
DESIGN AGENCY GFT 8890 lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 21 | TOTAL 24
SHEET P.435 | TOTAL 627

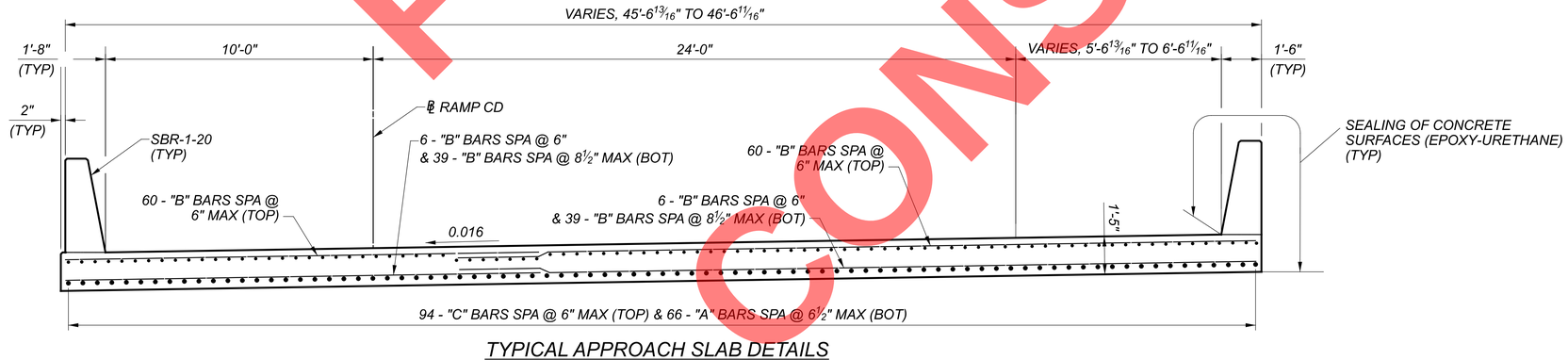
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:47:10 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SM001

FORWARD APPROACH SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	APPR SLAB ELEVATION
1	127+41.43	10.00 LT	1043.84
2	127+40.90	0.00 LT	1044.00
3	127+39.19	32.34 RT	1044.53
4	127+71.45	10.00 LT	1043.67
5	127+70.90	0.00 LT	1043.83
6	127+69.06	33.25 RT	1044.38

FORWARD SLEEPER SLAB SURFACE ELEVATIONS			
POINT	STATION	OFFSET	TOP OF SLEEPER SLAB
7	127+67.44	10.00 LT	1042.28
8	127+66.89	0.00 LT	1042.44
9	127+65.07	33.13 RT	1042.98
10	127+73.46	10.00 LT	1042.24
11	127+72.90	0.00 LT	1042.41
12	127+71.05	33.32 RT	1042.95



FORWARD APPROACH SLAB



TYPICAL APPROACH SLAB DETAILS

NOTES

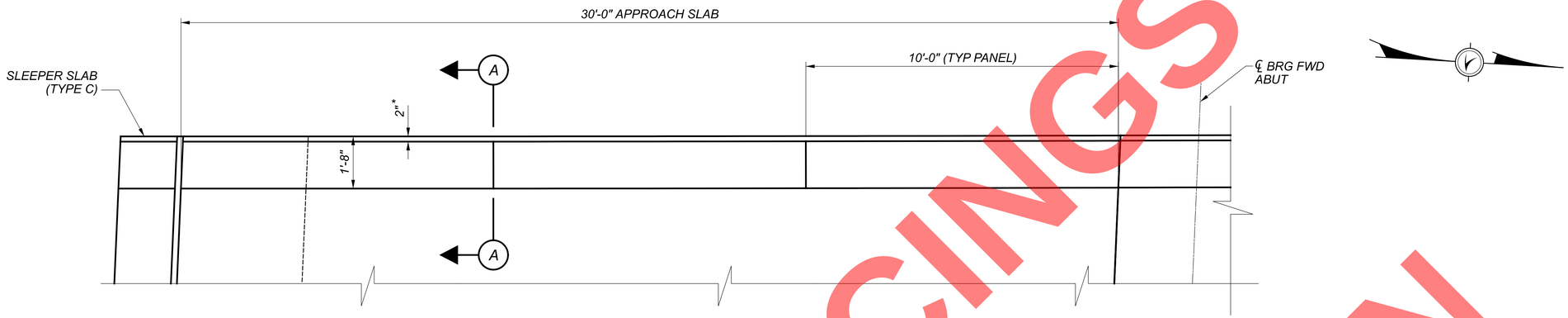
1. FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN, SEE STD DWG AS-1-15.
2. FOR ADDITIONAL PARAPET DETAILS & REINFORCING SEE SHEET 23/24 .
3. FOR SLEEPER SLAB DETAILS, REFER TO STD DWG AS-2-15.

FINAL TRACINGS
NOT FOR CONSTRUCTION

FORWARD APPROACH SLAB DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

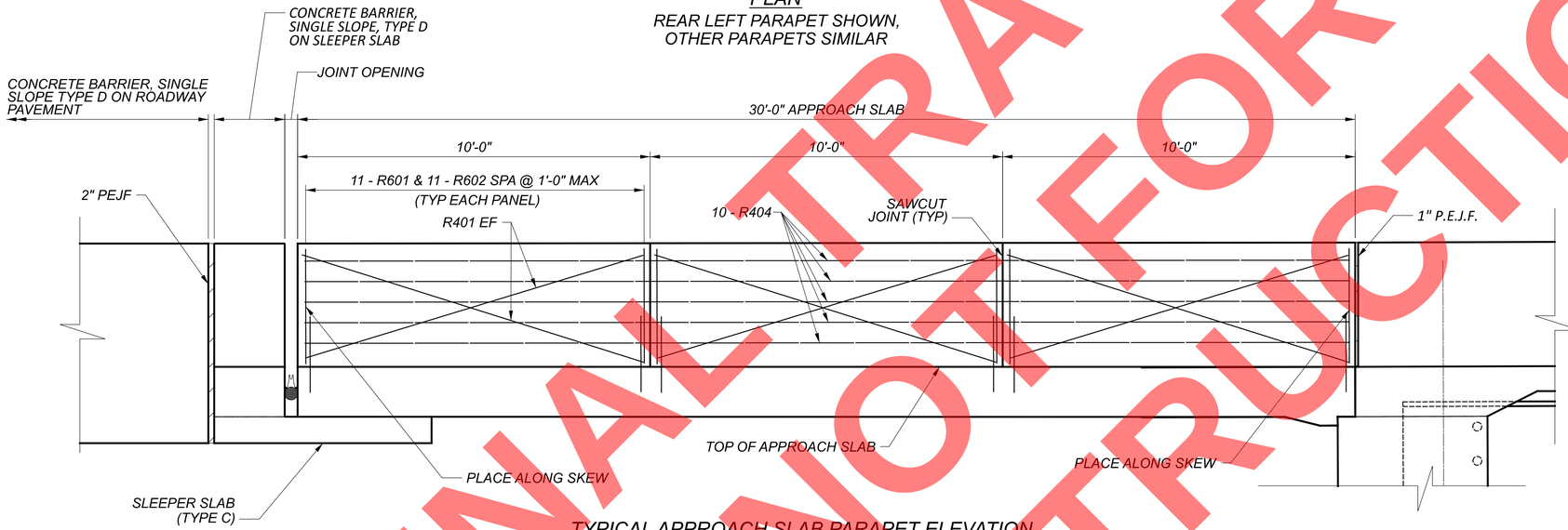
SFN 7700158
DESIGN AGENCY GFT 8890 Lyra drive, Suite 110 Columbus, Ohio 43240
DESIGNER AM | CHECKER SAT
REVIEWER EFD 08/2026
PROJECT ID 114865
SUBSET 22 | TOTAL 24
SHEET P.436 | TOTAL 627

SUM-077/008-11.65/00.00
SUBMITTAL: SUB_STG
PENTABLE SUBSET: 1
PENTABLE: $PENTBLS$
PLOT DRIVER: $PLTDRV$
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:47:19 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o1\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SM002

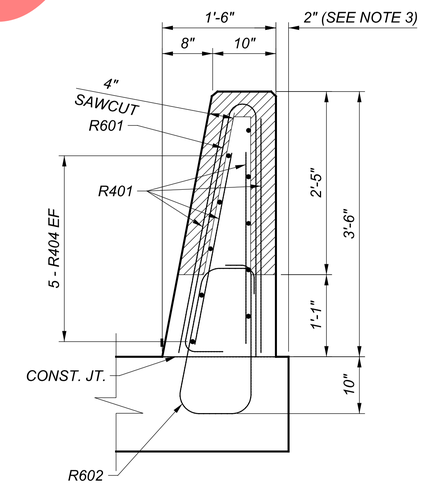


PLAN

REAR LEFT PARAPET SHOWN, OTHER PARAPETS SIMILAR



TYPICAL APPROACH SLAB PARAPET ELEVATION



A SECTION
APPROACH SLAB PARAPET

NOTES:

1. FOR ADDITIONAL PARAPET DETAILS, SEE ODOT STD. DWG. SBR-1-20.
2. FOR ADDITIONAL APPROACH SLAB AND SLEEPER SLAB DETAILS, SEE ODOT STD DWG AS-1-15 AND AS-2-15.
*3. OMIT 2" OVERHAND FOR PARAPETS ALONG THE RIGHT SIDE PARAPETS THAT ARE ADJACENT SR 8 MAINLINE WIDENED BRIDGE.

FINAL TRACINGS NOT FOR CONSTRUCTION

APPROACH SLAB DETAILS
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

REVIEWER
EFD 08/2026

PROJECT ID
114865

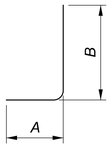
SUBSET	TOTAL
23	24

SHEET	TOTAL
P.437	627

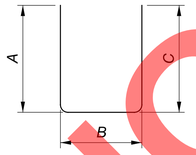
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBL$$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
SUM-077/008-11.65/00.00
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:47:29 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\402-Engineering_Gannet Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SM003

Mark	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
					A	B	C	D	E	F	R
DECK											
S401	98	30'-0"	1,964	STR.							
S402	49	35'-4"	1,157	STR.							
S501	128	30'-0"	4,006	STR.							
S502	64	36'-4"	2,426	STR.							
S510	183	30'-7"	5,838	16	30'-0"						
S511	183	35'-4"	6,745	STR.							
S512	97	17'-3"	1,746	16	16'-8"						
S513	97	16'-8"	1,687	STR.							
S514	86	18'-4"	1,645	16	17'-9"						
S515	86	17'-9"	1,593	STR.							
S520	366	10'-0"	3,818	2	7'-4"	7"	2'-3"				
S601	202	7'-4"	2,225	62	9 ½"	1'-3"	2'-4"	2'-4"	7"	12"	
		SUB-TOTAL	34,850								
PARAPET											
R601	334	7'-1"	3,554	23	6"	3'-3"	3'-3"				2"
R602	132	7'-4"	1,454	62	9 ½"	1'-3"	2'-4"	2'-4"	7"	12"	
		SUB-TOTAL	5,008								
REAR DIAPHRAGM											
D401	2	4'-0"	6	STR.							
D501	68	10'-3"	727	2	3'-3"	3'-11"	3'-3"				
D502	37	8'-5"	325	2	2'-7"	3'-5"	2'-7"				
D503	3	11'-9"	37	3	3'-11"	1'-8"					
D801	8	30'-0"	641	STR.							
D802	8	18'-4"	392	STR.							
D803	2	16'-7"	89	STR.							
D804	4	17'-11"	192	1	16'-6"	1'-7"					
D805	2	21'-4"	114	STR.							
D806	4	22'-9"	243	1	21'-3"	1'-7"					
D807	29	5'-2"	401	18	2'-10"	1'-0"	1'-0"				
D808	8	7'-9"	166	18	4'-0"	2'-0"	2'-0"				
		SUB-TOTAL	3,333								
FWD DIAPHRAGM											
D420	2	4'-0"	6	STR.							
D520	80	9'-9"	814	2	3'-0"	3'-11"	3'-0"				
D521	43	8'-5"	378	2	2'-7"	3'-5"	2'-7"				
D522	3	11'-1"	35	3	3'-11"	1'-4"					
D820	8	30'-0"	641	STR.							
D821	2	22'-10"	122	STR.							
D822	4	24'-3"	259	1	22'-10"	1'-7"					
D823	8	20'-8"	442	STR.							
D824	2	18'-7"	100	STR.							
D825	4	20'-0"	214	1	18'-6"	1'-7"					
D826	8	7'-9"	166	18	4'-0"	2'-0"	2'-0"				
D827	29	5'-2"	401	18	2'-10"	1'-0"	1'-0"				
		SUB-TOTAL	3,578								

GFRP PARAPET					
MARK	TOTAL	LENGTH	MATERIAL	LENGTH TOTAL	TYPE
R401	104	10.00'	GFRP	1040.00'	STR.
R402	4	10.33'	GFRP	41.32'	STR.
R403	12	10.75'	GFRP	129.00'	STR.
R404	40	29.67'	GFRP	1186.80'	STR.
R410	66	30.00'	GFRP	1980.00'	STR.
R411	22	7.50'	GFRP	165.00'	STR.
SUB-TOTAL				4,542	FEET



TYPE-1



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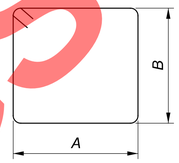
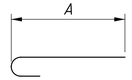
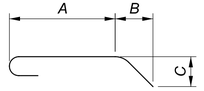


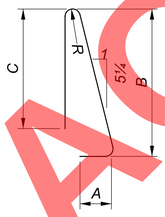
TYPE-3



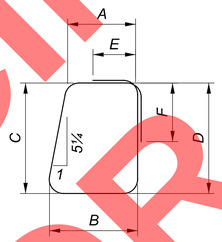
TYPE-16



TYPE-18



TYPE-23



TYPE-62

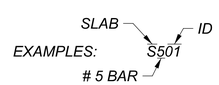
REINFORCING BEND DIAGRAMS

MINIMUM LAP LENGTHS

#4 BAR (STEEL) = 2'-0"
#4 BAR (GFRP) = 1'-1"
#5 BAR (ALL) = 2'-6"
#6 BAR (ALL) = 3'-1"
#8 BAR (ALL) = 4'-9"

REINFORCING CALLOUT NOMENCLATURE
BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.



LOCATION MARKS USED: *D = ABUTMENT DIAPHRAGM* *S = SLAB (DECK)* *R = RAIL (PARAPET)*

REINFORCING NOTES

1. *ALL REINFORCEMENT BARS SHALL BE EPOXY COATED UNLESS SPECIFIED IN TABLES. PAYMENT FOR REINFORCING, INCLUDING MECHANICAL CONNECTORS, SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL*
2. *"STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.*
3. *"SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.*
4. *REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.*

FINAL TRACINGS NOT FOR CONSTRUCTION

REINFORCING LIST
BRIDGE NO. SUM-8-0.987 CD
RAMP CD OVER EXCHANGE STREET

SFN 7700158

DESIGN AGENCY
GFT
8890 Lyra drive, Suite 110
Columbus, Ohio 43240

DESIGNER	CHECKER
AM	SAT

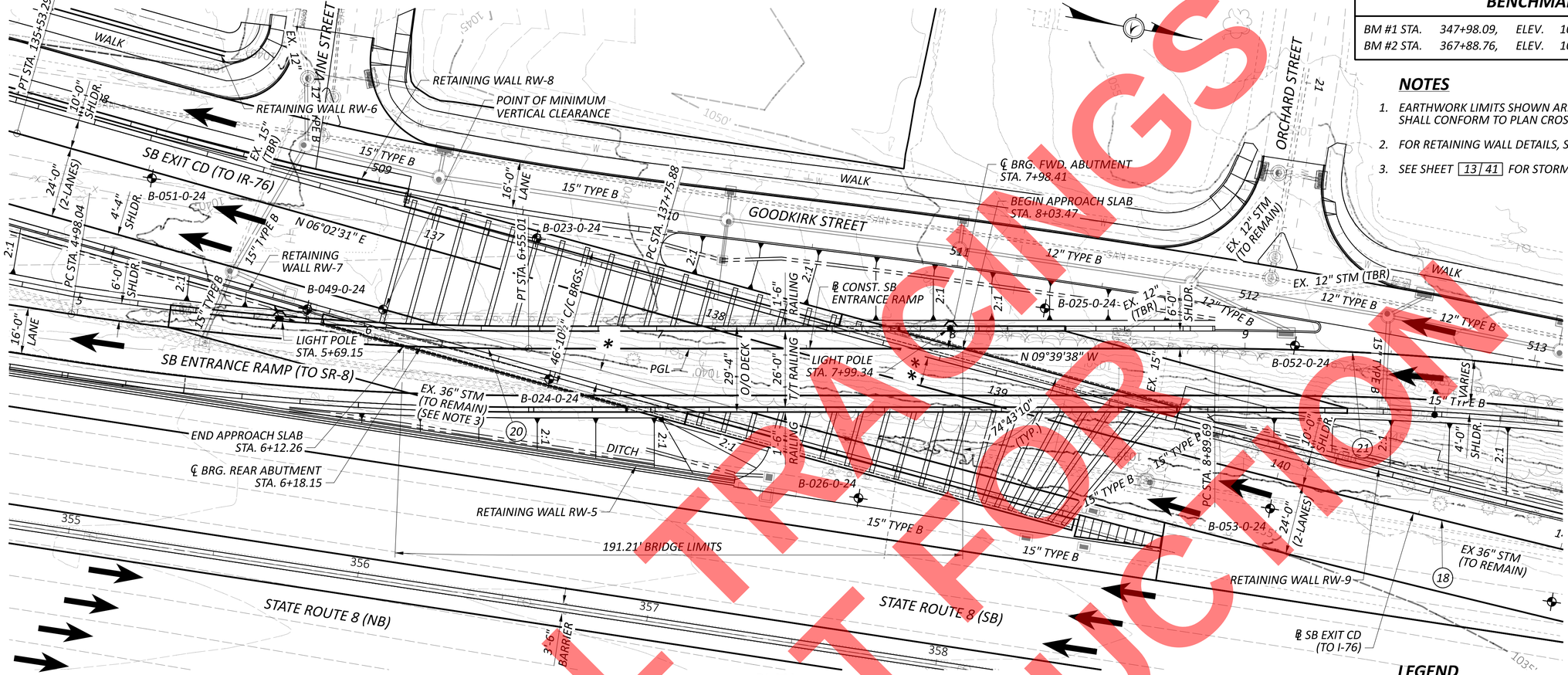
REVIEWER EFD 08/2026

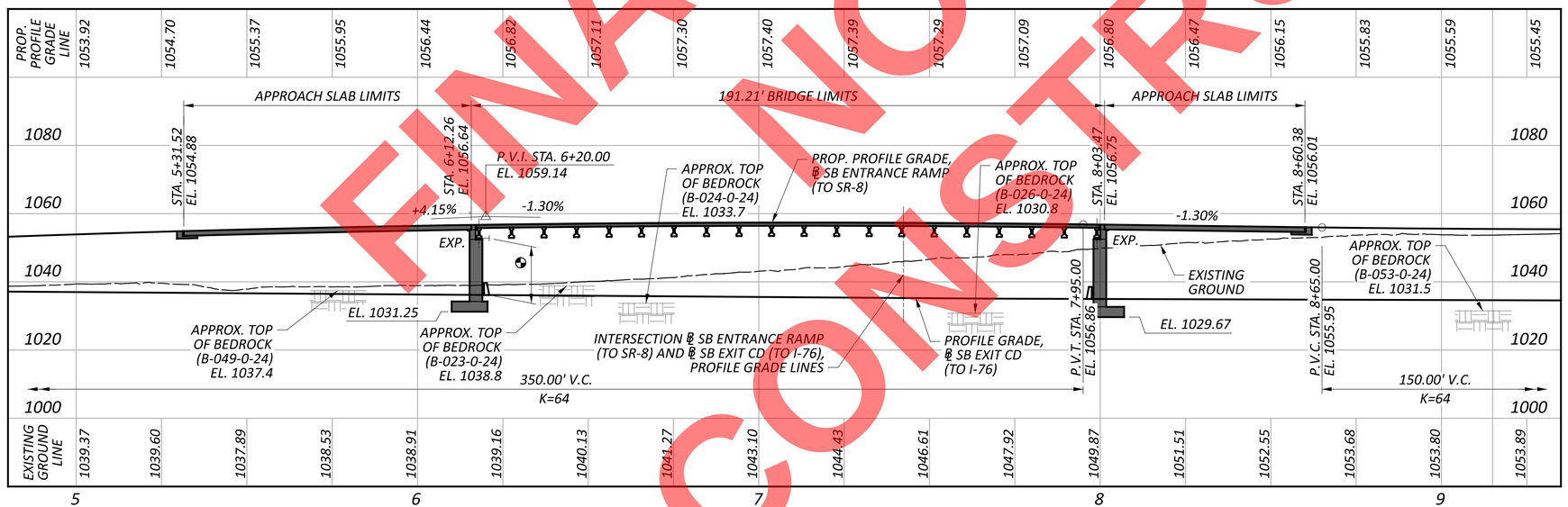
PROJECT ID 114865

SUBSET	TOTAL
24	24

SHEET	TOTAL
P.438	627

SUM-077/008-11.65/00.00
PLOT DRIVER: $PLTDRV$$ PENTABLE: $PENTBLS$
SUBMITTAL: SUB_STG PENTABLE SUBSET: 1
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/15/2026 TIME: 8:47:38 AM USER: stony
pw:\\arcadis-us-pw.bentley.com:arcadis-us-o11\Documents\01 Active Projects\301499764\00_CAD\402-Engineering_Gannel Fleming\Structures\Exchange Street Bridge\Ramp CD Bridge\Sheets\114865_SFN7700158_SL001





PROFILE ALONG SB ENTRANCE RAMP (TO S.R. 8) PROFILE GRADE LINE

BENCHMARK DATA

BM #1 STA.	347+98.09,	ELEV.	1044.97,	OFFSET	69.34'	RIGHT
BM #2 STA.	367+88.76,	ELEV.	1044.06,	OFFSET	57.23'	RIGHT

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR RETAINING WALL DETAILS, SEE SHEETS P.325 THRU P.363 .
3. SEE SHEET 13 | 41 FOR STORM SEWER PROTECTION DETAILS.

HORIZONTAL SCALE IN FEET
0 10 20 40

(18) ℄ CURVE DATA
P.I. = STA. 141+63.36
Δ = 05°09'46" LT.
Dc = 00°40'00"
R = 8,594.37'
T = 387.48'
L = 774.43'
E = 8.73'

(20) ℄ CURVE DATA
P.I. = STA. 5+76.68
Δ = 08°38'00" LT.
Dc = 05°30'00"
R = 1,041.74'
T = 78.63'
L = 156.97'
E = 2.96'

(21) ℄ CURVE DATA
P.I. = STA. 9+76.23
Δ = 10°21'24" LT.
Dc = 06°00'00"
R = 954.93'
T = 86.54'
L = 172.61'
E = 3.91'

LEGEND

- BORING LOCATION
- * - 4'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE 4'-4" ACTUAL MINIMUM HORIZONTAL CLEARANCE
- ** - 10'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE 10'-0" ACTUAL MINIMUM HORIZONTAL CLEARANCE
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE 16'-0½" ACTUAL MINIMUM VERTICAL CLEARANCE

(TBR) TO BE REMOVED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN PRESTRESSED CONCRETE I-BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK SLAB ON SEMI-INTEGRAL REINFORCED CONCRETE FULL-HEIGHT WALL ABUTMENTS ON SPREAD FOOTINGS

SPAN: 46'-10½" C/C BRGS. (NORMAL TO ℄ SB EXIT CD (TO IR-76))

ROADWAY: 26'-0" T/T RAILING

LOADING: HL93 AND 0.060 KSF FUTURE WEARING SURFACE

SKEW: 74°43'10" RIGHT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 15'-0" LONG, 17" THICK (MODIFIED AS-1-15) MEASURED PERPENDICULAR TO END OF BRIDGE TYPE C INSTALLATION

ALIGNMENT: 5°30'00" CURVE LEFT/TANGENT

SUPERELEVATION: VARIES

DECK AREA: 4,971.2 SF

COORDINATES: LATITUDE N 41°04'26.91"
LONGITUDE W 81°30'16.42"

SITE PLAN
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER	CHECKER
NES	CMD

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
1	41

SHEET	TOTAL
P.439	627

FINAL PLANS NOT FOR CONSTRUCTION

SUM-077/008-11.65/00.00
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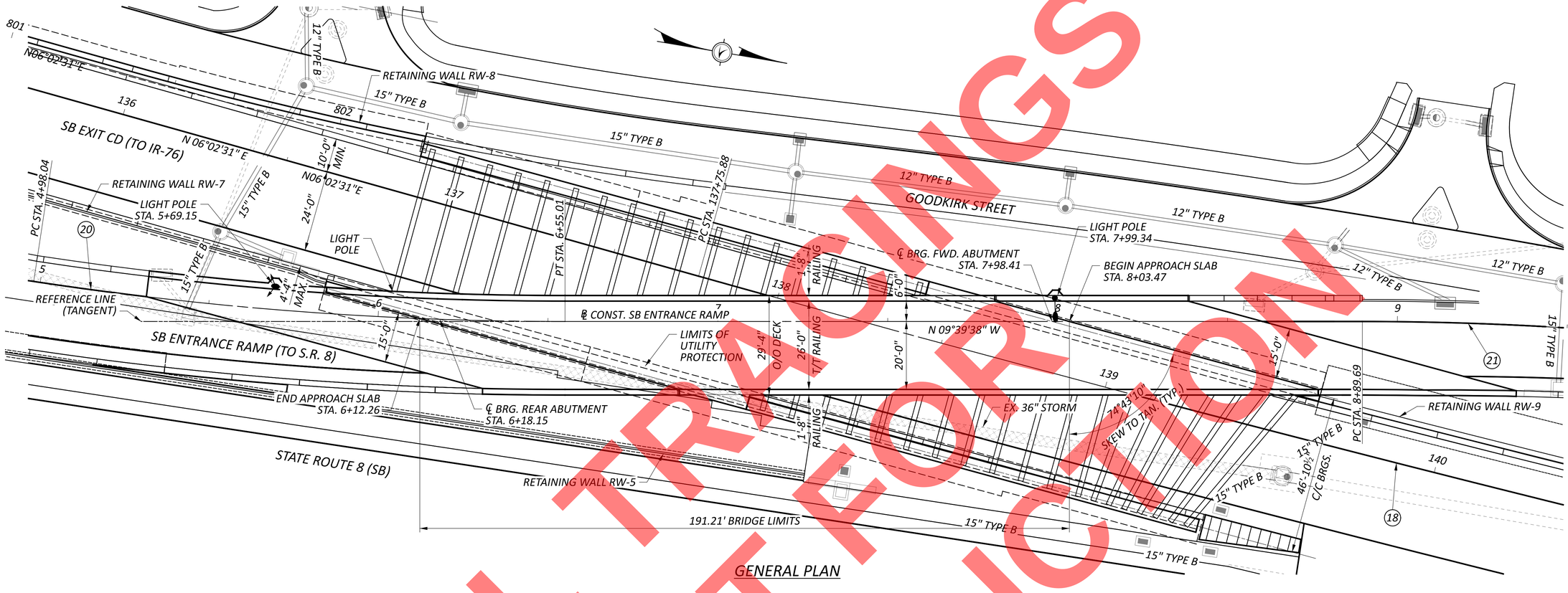
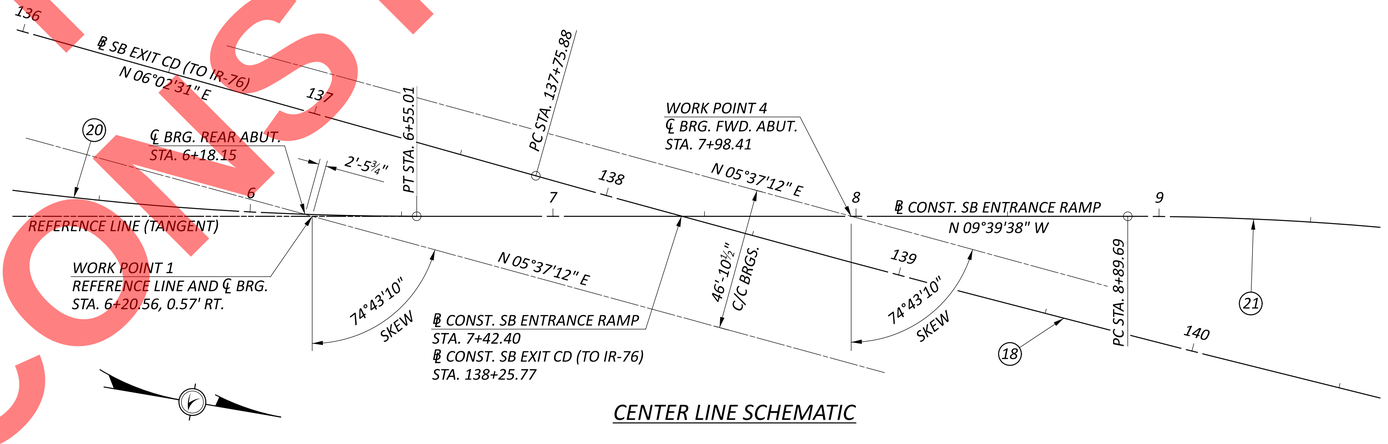


GENERAL PLAN



CENTER LINE SCHEMATIC

20 ℄ CURVE DATA
P.I. = STA. 5+76.68
Δ = 08°38'00" LT.
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R = 1,041.74'
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L = 774.43'
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FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL PLAN
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 9:05:20 AM USER: cferrell
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SFN 7700372
DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

DESIGNER	CHECKER
NES	SS

REVIEWER: RBB 8-14-26
PROJECT ID: 114685
SUBSET: 2 TOTAL: 41
SHEET: P.440 TOTAL: 627

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	DATED (REVISED)	1/20/2023
AS-2-15	DATED (REVISED)	7/21/2023
PSID-2-15	DATED (REVISED)	7/18/2025
SBR-1-20	DATED (REVISED)	7/19/2024
SICD-1-21	DATED (REVISED)	1/19/2024

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

SS800	DATED	7/17/2026

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

SPECIAL DESIGN SPECIFICATIONS

THE BRIDGE REQUIRED THE USE OF A THREE DIMENSIONAL MODEL USING THE FINITE ELEMENT DESIGN METHOD TO ANALYZE THE STRUCTURE. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS MIDAS CIVIL 2025, VERSION 2.2 (WITH FINITE ELEMENT MESHING ANALYSIS SELECTED). THIS PROGRAM WAS USED TO DESIGN THE PRESTRESSED I-BEAM MEMBERS, THE COMPOSITE CONCRETE DECK AND TO CALCULATE REACTIONS FOR THE DESIGN OF THE BEARINGS AND SUBSTRUCTURES.

DECK DESIGN: SHELL ELEMENTS WERE USED TO MODEL THE BRIDGE DECK CONCRETE. FRAME ELEMENTS WERE USED TO MODEL PRESTRESSED I-BEAM MEMBERS, INTERMEDIATE DIAPHRAGMS, AND END DIAPHRAGMS. LINKS WERE USED TO MODEL CONNECTION BETWEEN PRESTRESSED I-BEAM MEMBERS AND BRIDGE DECK CONCRETE.

DECK DESIGN: FRAME ELEMENTS WERE USED TO MODEL THE COMPOSITE PRESTRESSED I-BEAM MEMBERS, INTERMEDIATE DIAPHRAGMS AND END DIAPHRAGMS. GRILLAGE FRAME ELEEMENTS WERE USED TO MODEL THE STIFFNESS OF THE DECK.

DEAD LOAD DISTRIBUTION: THE NON-COMPOSITE DEAD LOAD AND COMPOSITE DEAD LOAD WERE DISTRIBUTED BASED ON THE MODEL STIFFNESS AND APPLIED DIRECTLY TO THE FINITE ELEMENT MODEL.

LIVE LOAD DISTRIBUTION: THE DESIGN ANALYSIS WAS CARRIED OUT BY APPLYING TRUCK AND LANE LOADS DIRECTLY TO THE FINITE ELEMENT MODEL, RATHER THAN BY USING CALCULATED DISTRIBUTION FACTORS.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 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

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER

DECK PLACEMENT DESIGN ASSUMPTIONS

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM. THREADED INSERTS INTO THE BEAMS ARE NOT PERMITTED FOR DECK PLACEMENT. INTERMEDIATE DIAPHRAGMS SHALL NOT BE USED FOR SUPPORT OF FALSEWORK. FALSEWORK SUPPORT SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

CONCRETE SHALL BE FINISHED PERPENDICULAR TO THE BASELINE CONSTRUCTION SOUTHBOUND ENTRANCE RAMP.

DESIGN DATA

CONCRETE CLASS (QC2):
COMPRESSIVE STRENGTH 4.5 KSI (BRIDGE DECK, PARAPETS, ABUTMENT DIAPHRAGMS, INTERMEDIATE DIAPHRAGMS)

CONCRETE CLASS (QC1):
COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT:

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI

GFRP REINFORCEMENT (PARAPETS)

CONCRETE FOR PRESTRESSED BEAMS:

COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI
COMPRESSIVE STRENGTH (RELEASE) - 5.0 KSI

WELDED WIRE FABRIC: YIELD STRENGTH - 70 KSI

PRESTRESSING STRAND:

AREA = 0.217 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 203, EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STA. 5+25 TO STA. 6+75 AND STA. 7+75 TO STA. 9+25. ITEM 203 SHALL BE INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.

FOUNDATION BEARING RESISTANCE

ABUTMENT WALL A AND B FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 10.56 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 14.32 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 103.6 KIPS PER SQUARE FOOT.

ABUTMENT WALL C FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 5.15 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 6.69 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 103.6 KIPS PER SQUARE FOOT.

ABUTMENT WALL D FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 5.15 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 6.69 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 104.6 KIPS PER SQUARE FOOT.

ABUTMENT WALL E AND F FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 10.56 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 14.32 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 104.6 KIPS PER SQUARE FOOT.

FOOTINGS

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES* INTO BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER.

ITEM 516, PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS

THE TOP OF PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS OUTSIDE THE LIMITS OF THE CONCRETE DECK SHALL BE SLOPED TO DRAIN. THE TOP OF THE PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS INSIDE THE LIMITS OF THE CONCRETE DECK SHALL BE INTENTIONALLY ROUGHENED. INCLUDE WITH ITEM 516, DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2.

ITEM 530, SPECIAL - FORMLINER

USE FORM LINERS AT THE REAR AND FORWARD ABUTMENTS AS SHOWN ON THE PLANS. FORM LINERS SHALL HAVE A PATTERN OF FITZGERALD FORMLINERS SAN DIEGO DRYSTACK - PATTERN 17911, ARCHITECTURAL POLMERS LARGE STONE OHIO DRYSTACK - PATTERN 9110, OR APPROVED EQUAL. THE STONE FORM LINER PATTERN SHALL MATCH OTHER PARTS OF THE PROJECT (RETAINING WALLS AND ROADWAY SIDE OF NOISE WALLS) TO ENSURE UNIFORM SURFACE TREATMENTS THROUGHOUT, AS DETERMINED BY THE ENGINEER.

FORM LINERS SHALL BE CAPABLE OF WITHSTANDING ANTICIPATED CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. FORM LINERS SHALL BE REMOVABLE WITHOUT CAUSING CONCRETE SURFACE DAMAGE. USE A FORM RELEASE PRODUCT AS RECOMMENDED BY THE FORM LINER MANUFACTURER. USE MANUFACTURER'S INSTRUCTIONS. FORM RELEASE PRODUCTS SHALL BE FULLY COMPATIBLE WITH THE FORM LINER MATERIAL AND THE EPOXY-URETHANE SEALER TO BE APPLIED TO THE FINISHED SURFACES.

ALIGN THE FORM LINER PATTERNS ACROSS ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS.

FORM LINERS SHALL EXTEND A MINIMUM OF 1'-0" BELOW THE TOP OF BARRIER AT THE FRONT FACE OF THE WALL. FORM LINERS MAY EXTEND MORE THAN 1'-0" BELOW THE PROPOSED GROUND LINE BUT THE PAY LIMITS SHALL BE 1'-0" BELOW THE GROUND LINE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 530 - SPECIAL - FORMLINER, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTAL NECESSARY TO COMPLETE THIS ITEM AS SPECIFIED ABOVE AND IN A SATISFACTORY AND WORKMANLIKE MANNER.

UTILITY PROTECTION

THE EXISTING 36" STORM SEWER BELOW THE REAR ABUTMENT SHALL BE PROTECTED AS SHOWN ON SHEET 12 / 41. EXISTING GRANULAR MATERIAL SHALL BE REMOVED TO THE SPRINGLINE. IF EXISTING LOW STRENGTH MORTAR IS ENCOUNTERED, IT SHALL REMAIN.

A QUANTITY OF 309 CUBIC YARDS HAS BEEN ESTIMATED FOR THIS WORK. LIMITS OF LOW STRENGTH MORTAR PLACEMENT SHALL BE AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 613 - LOW STRENGTH MORTAR BACKFILL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS INCLUDING GRANULAR MATERIAL REMOVAL AND DISPOSAL.

ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN

THE BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS, TESTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL STEEL DIAPHRAGM GUIDES AS SHOWN ON SHEET 12 / 41 . PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 511 - SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN.

ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN

THE CONTRACTOR SHALL USE A MECHANIZED FINISHING MACHINE FOR PLACEMENT OF THE APPROACH SLAB CONCRETE. CONCRETE SHALL BE FINISHED PERPENDICULAR TO THE BASELINE CONSTRUCTION SOUTHBOUND ENTRANCE RAMP.

STANDARD ABBREVIATIONS

ABUT.	-	ABUTMENT
APP.	-	AS PER PLAN
APPR.	-	APPROACH
℄	-	BASE LINE
BRG.	-	BEARING
℄	-	CENTERLINE
C/C	-	CENTER TO CENTER
CLR.	-	CLEAR
DIA.	-	DIAMETER
DIM	-	DIMENSION
E.F.	-	EACH FACE
E.S.	-	EACH SIDE
EL.	-	ELEVATION
EOP	-	EDGE OF PAVEMENT
EQUAL.	-	EQUALLY
EX.	-	EXISTING
EXP.	-	EXPANSION
F.A.	-	FORWARD ABUTMENT
F.F.	-	FAR FACE
F.S.	-	FIELD SPLICE
F/F	-	FACE TO FACE
MAX.	-	MAXIMUM
MID.	-	MIDDLE
MIN.	-	MINIMUM
N.F.	-	NEAR FACE
O/O	-	OUT TO OUT
P.E.J.F.	-	PREFORMED EXPANSION JOINT FILLER
PGL	-	PROFILE GRADE LINE
PL	-	PLATE
PROP.	-	PROPOSED
R.A.	-	REAR ABUTMENT
SPA.	-	SPACE
STA.	-	STATION
T/T	-	TOE TO TOE
TYP.	-	TYPICAL
VAR.	-	VARIES
W/	-	WITH
W/O	-	WITHOUT
U.N.O.	-	UNLESS NOTED OTHERWISE
SB	-	SOUTHBOUND
CD	-	COLLECTOR/DISTRIBUTOR

FINAL PACKAGING
NOT FOR CONSTRUCTION

GENERAL NOTES
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
NES	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
3	41

SHEET	TOTAL
P.441	627

SUM-077/008-11.65/00.00
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PARTICIPATION	ESTIMATED QUANTITIES					CALC. BY: NES DATE: 6/1/26 CHK'D BY: CMD DATE: 6/1/26			AS PER PLAN
06/NHS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	GENERAL	STR. SHT. NO.
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING			1	
1716	503	21100	1,716	CY	UNCLASSIFIED EXCAVATION			1716	
883	503	31100	883	CY	ROCK EXCAVATION			883	
210700	509	10000	210,700	LB	EPOXY COATED STEEL REINFORCEMENT	97528	107393	5779	
8941	509	30020	8,941	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	5509		3432	
349	511	33418	349	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	349			
8	511	33501	8	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN		8		3
205	511	34446	205	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	205			
96	511	34450	96	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	59		37	33, 34
1110	511	44112	1,110	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING		1110		
625	511	46512	625	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		625		
3862	512	10100	3,862	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1950	1677	235	
51	512	10300	51	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	51			
19	512	33000	19	SY	TYPE 2 WATERPROOFING		19		
25	515	15000	25	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 48'-6½")	25			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 48'-8½")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 49'-2½")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 49'-9")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 50'-5¼")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 51'-3½")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 52'-3")	1			3
1	515	15000	1	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 2, (LENGTH = 53'-4")	1			3
31	515	E2000	31	EACH	INTERMEDIATE DIAPHRAGMS	31			
212	516	10010	212	FT	ARMORLESS PREFORMED JOINT SEAL			212	
300	516	13600	300	SF	1" PREFORMED EXPANSION JOINT FILLER		283	17	
64	516	13900	64	SF	2" PREFORMED EXPANSION JOINT FILLER		64		
249	516	14020	249	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	249			
64	516	44401	64	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN (1'-3 ½" X 1'-3 ½" X 5.045" BEARING WITH HP10X42 PEDESTAL)	64			14
3	516	44401	3	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN (1'-3 ½" X 1'-3 ½" X 5.045" BEARING)	3			15
584	518	21200	584	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		584		
541	518	40000	541	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		541		
17	518	40010	17	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		17		
406	526	30001	406	SY	REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN			406	3
234	526	90030	234	FT	TYPE C INSTALLATION			234	
7450	530	13000	7,450	SF	SPECIAL - FORM LINER		7450		
309	613	41200	309	CY	LOW STRENGTH MORTAR BACKFILL			309	

FINAL TRACINGS
NOT FOR
CONSTRUCTION

ESTIMATED QUANTITIES
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

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DESIGNER	CHECKER
NES	CMD

REVIEWER
RBB 8-14-26

PROJECT ID
114685

SUBSET	TOTAL
4	41

SHEET	TOTAL
P.442	627

SUM-077/008-11.65/00.00

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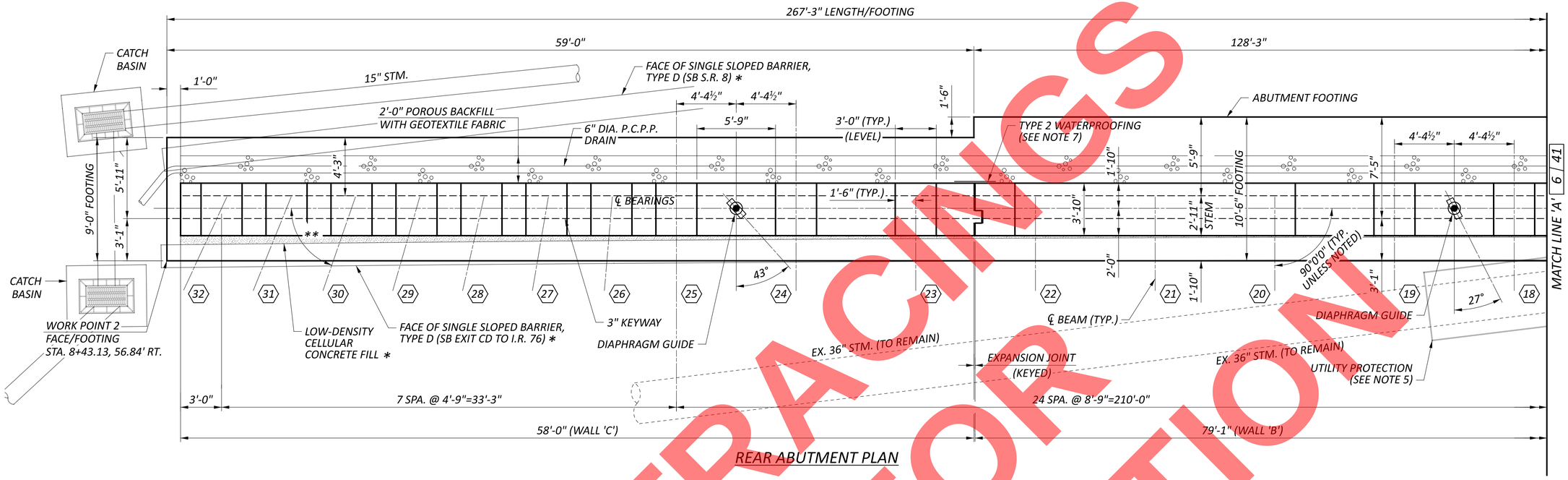


REAR ABUTMENT PLAN

BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
H	1051.88
J	1051.82
K	1051.69
L	1051.55
M	1051.39
N	1051.24
P	1051.14
R	1051.01
S	1050.87
T	1050.74
U	1050.60
V	1050.45
W	1050.31

LEGEND

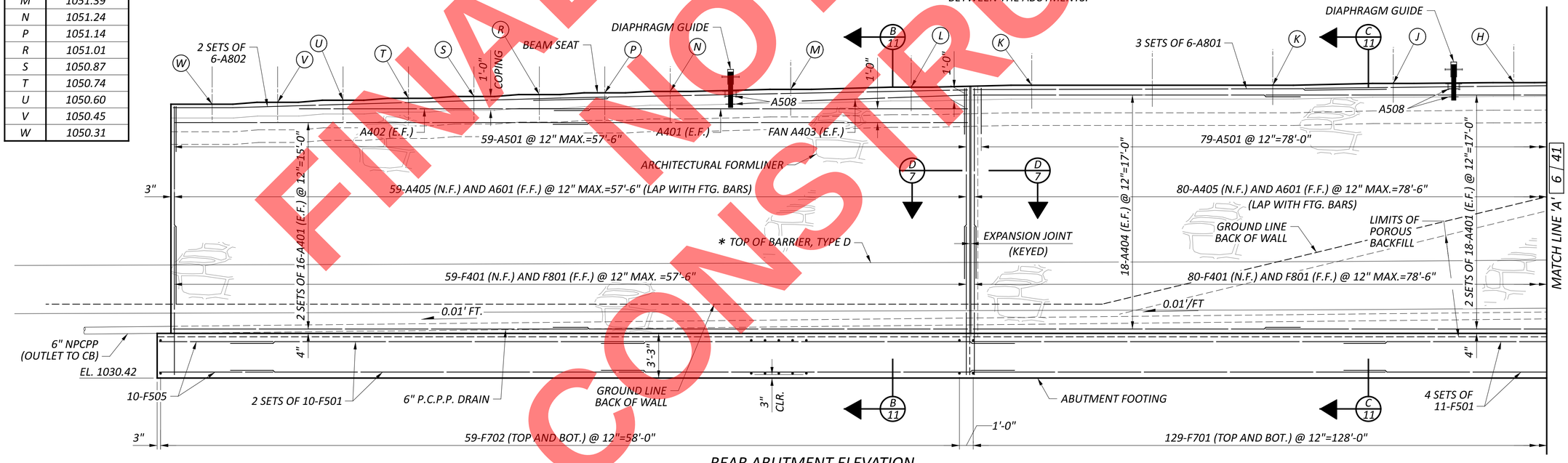
(#) BEAM NUMBER DESIGNATION

* INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

** FOR BEAM 26 THRU 32 ANGLES, REFER TO FRAMING PLAN SHEET 17 / 41 .

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS: #4 BARS = 30" #5 BARS = 37" #8 BARS = 64"
2. FOR REAR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 22 / 41 THRU 24 / 41 AND 28 / 41 .
3. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.
4. FOR ADDITIONAL REAR ABUTMENT DETAILS, SEE SHEETS 6 / 41 THRU 7 / 41 AND 11 / 41 .
5. FOR UTILITY PROTECTION DETAILS, SEE SHEET 13 / 41 .
6. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
7. SEAL VERTICAL EXPANSION JOINT FROM TOP OF FOOTING TO 1 FOOT BELOW EMBANKMENT WITH TYPE 2 WATERPROOFING MATERIAL, 3'-0" WIDE CENTERED ON THE JOINT.



REAR ABUTMENT ELEVATION

FINAL TRACINGS NOT FOR CONSTRUCTION

REAR ABUTMENT PLAN AND ELEVATION (1 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-3555
www.arcadis.com

DESIGNER	CHECKER
DRH	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
5	41

SHEET	TOTAL
P.443	627

SUM-077/008-11.65/00.00

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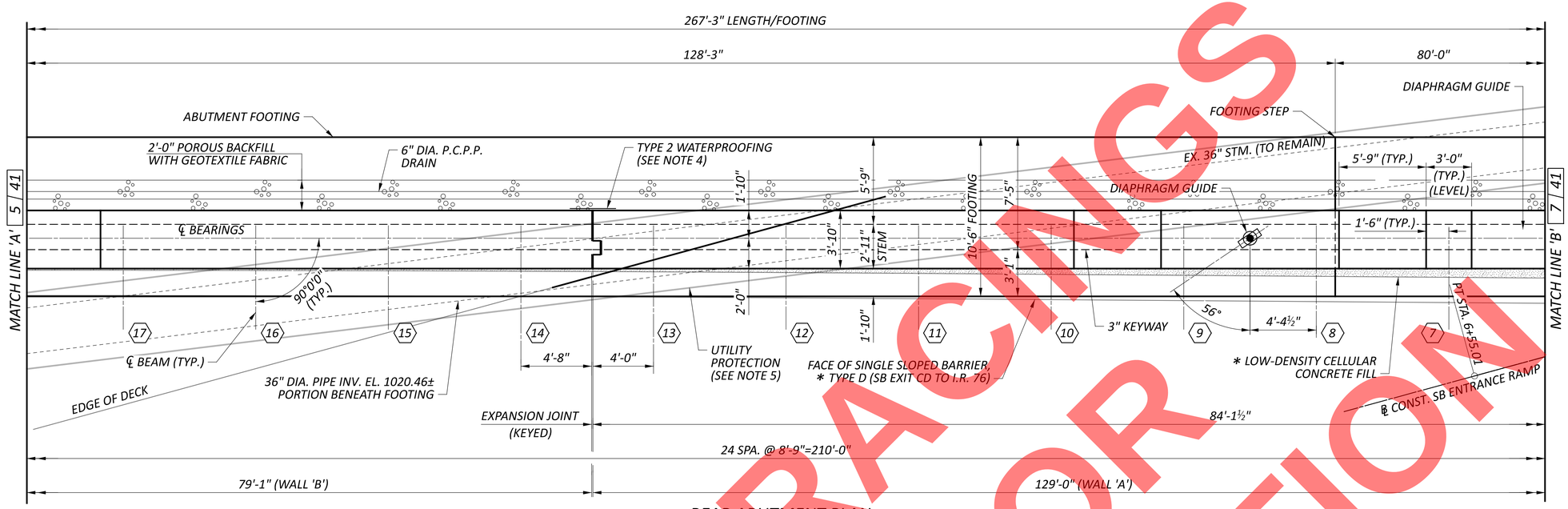


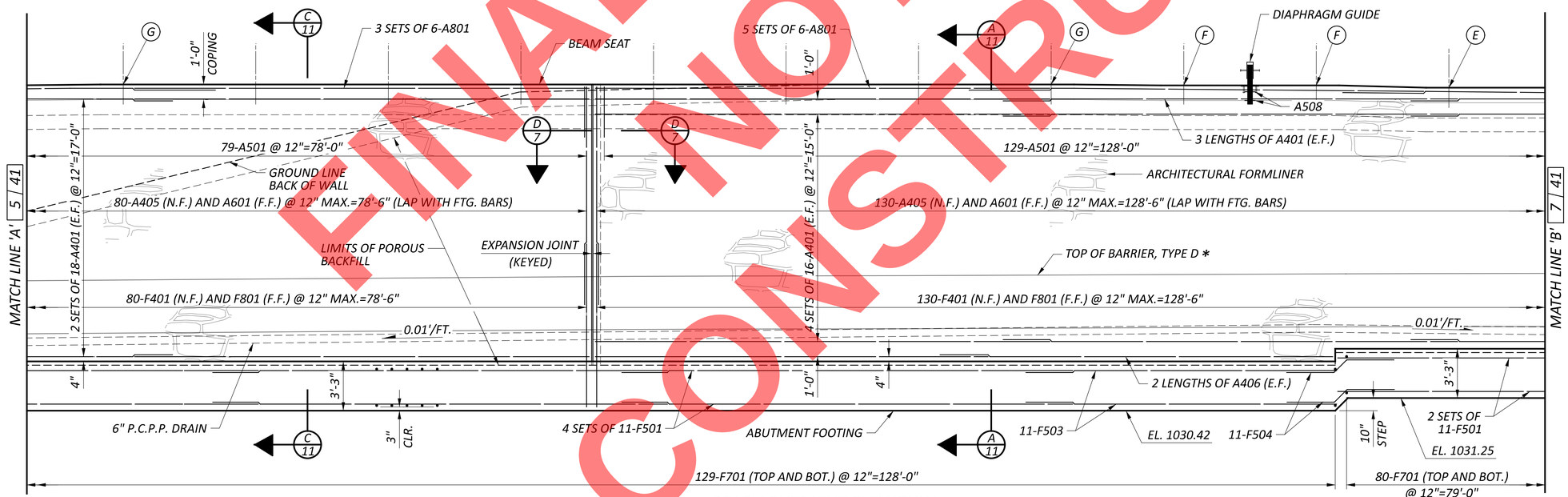
REAR ABUTMENT PLAN

LEGEND

- (#) BEAM NUMBER DESIGNATION
- * INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #4 BARS = 30" #5 BARS = 37" #8 BARS = 64"
2. FOR REAR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 22 / 41 THRU 24 / 41 AND 28 / 41 .
3. FOR ADDITIONAL REAR ABUTMENT DETAILS, SEE SHEETS 5 / 41 , 7 / 41 AND 11 / 41 .
4. SEAL VERTICAL EXPANSION JOINT FROM TOP OF FOOTING TO 1 FOOT BELOW EMBANKMENT WITH TYPE 2 WATERPROFFING MATERIAL 3'-0" WIDE CENTERED ON THE JOINT.
5. FOR UTILITY PROTECTION DETAILS, SEE SHEET 13 / 41 .
6. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
7. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.



REAR ABUTMENT ELEVATION

BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
E	1051.73
F	1051.88
G	1051.94

FINAL TRACINGS
NOT FOR CONSTRUCTION

REAR ABUTMENT PLAN AND ELEVATION (2 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
DRH	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
6	41

SHEET	TOTAL
P.444	627

SUM-077/008-11.65/00.00

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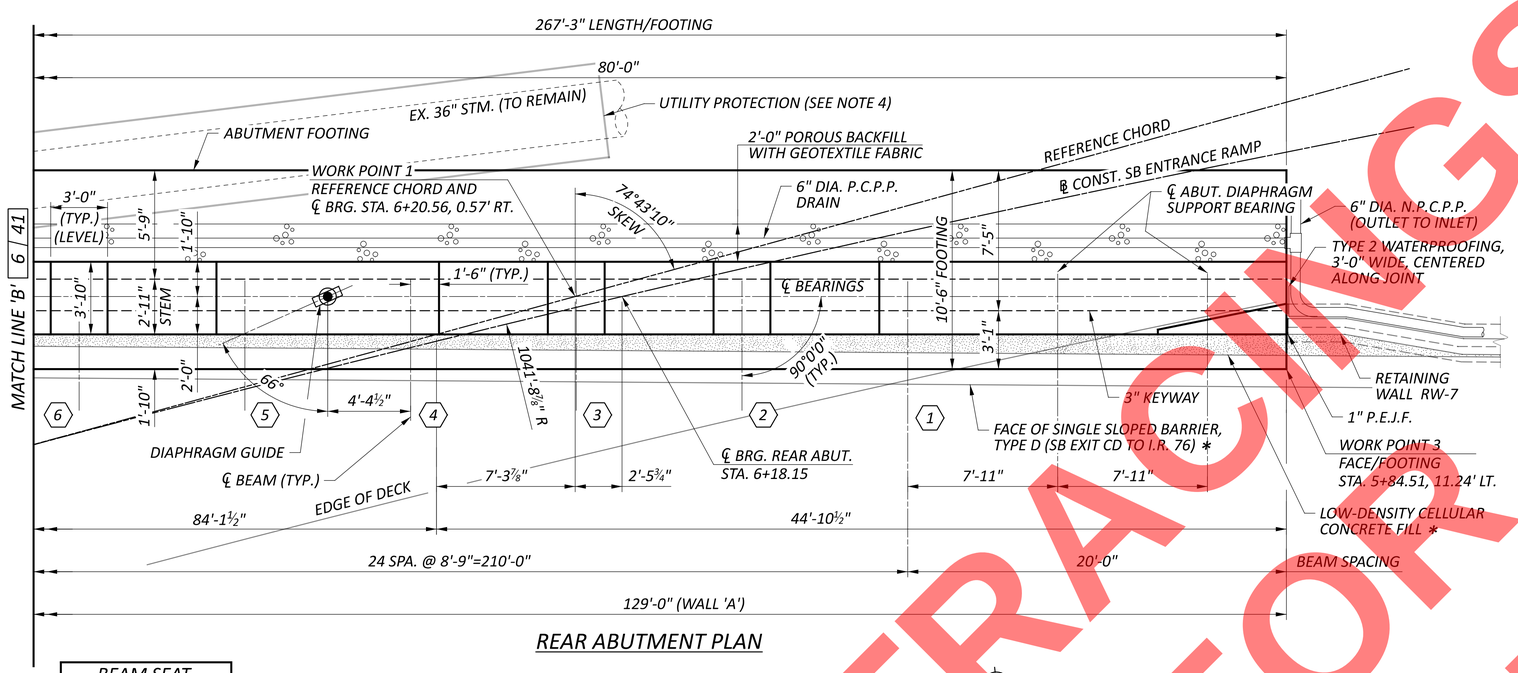
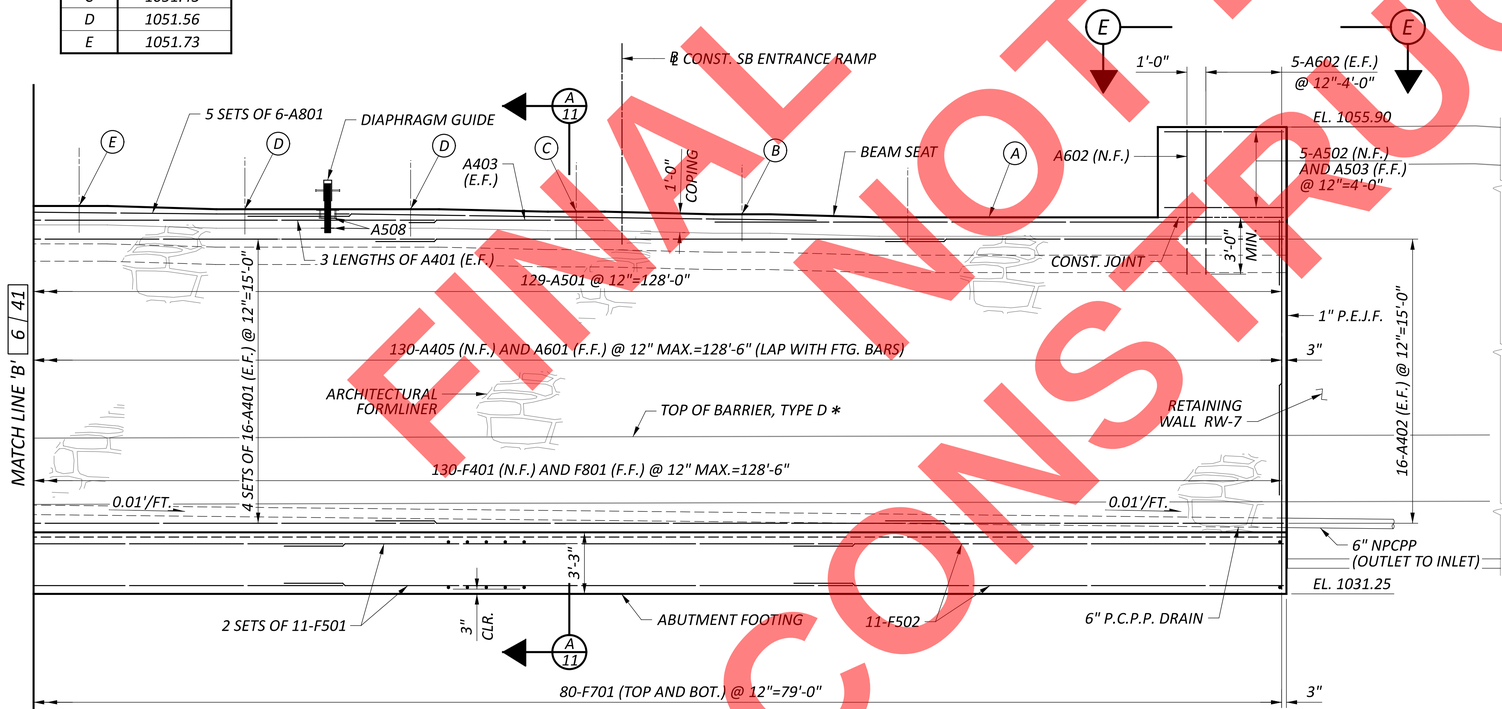
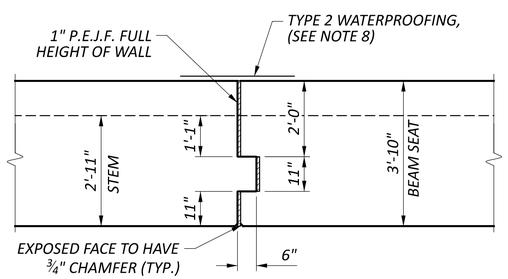


REAR ABUTMENT PLAN

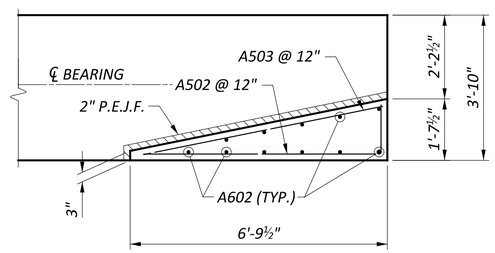
BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
A	1051.13
B	1051.29
C	1051.43
D	1051.56
E	1051.73



REAR ABUTMENT ELEVATION



D 5 | D 6 | D 8 | D 9 — SECTION EXPANSION JOINT



E — VIEW END WALL PLAN

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #4 BARS = 30"
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR REAR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 22 / 41 THRU 24 / 41 AND 28 / 41 .
3. FOR ADDITIONAL REAR ABUTMENT DETAILS, SEE SHEETS 5 / 41 THRU 6 / 41 AND 11 / 41 .
4. FOR UTILITY PROTECTION DETAILS, SEE SHEET 13 / 41 .
5. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
6. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.
7. FOR RETAINING WALL RW-7, SEE SHEETS P.341 THRU P.343 OF 627 .
8. SEAL VERTICAL EXPANSION JOINT FROM TOP OF FOOTING TO 1 FOOT BELOW EMBANKMENT WITH TYPE 2 WATERPROFFING MATERIAL 3'-0" WIDE CENTERED ON THE JOINT.

LEGEND

(#) BEAM NUMBER DESIGNATION

* INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

FINAL PLANS NOT FOR CONSTRUCTION

REAR ABUTMENT PLAN AND ELEVATION (3 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4395
www.arcadis.com

DESIGNER	CHECKER
DRH	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
7	41

SHEET	TOTAL
P.445	627

SUM-077/008-11.65/00.00

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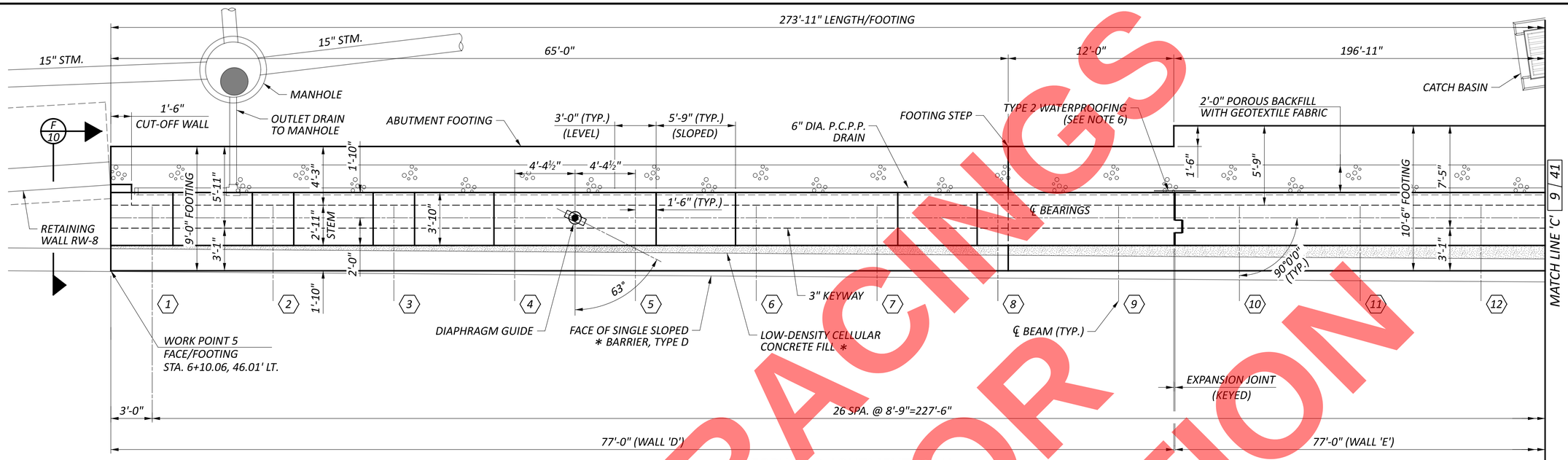


FORWARD ABUTMENT PLAN

BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
A	1051.13
B	1051.29
C	1051.43
D	1051.56
E	1051.73
F	1051.88
G	1051.94

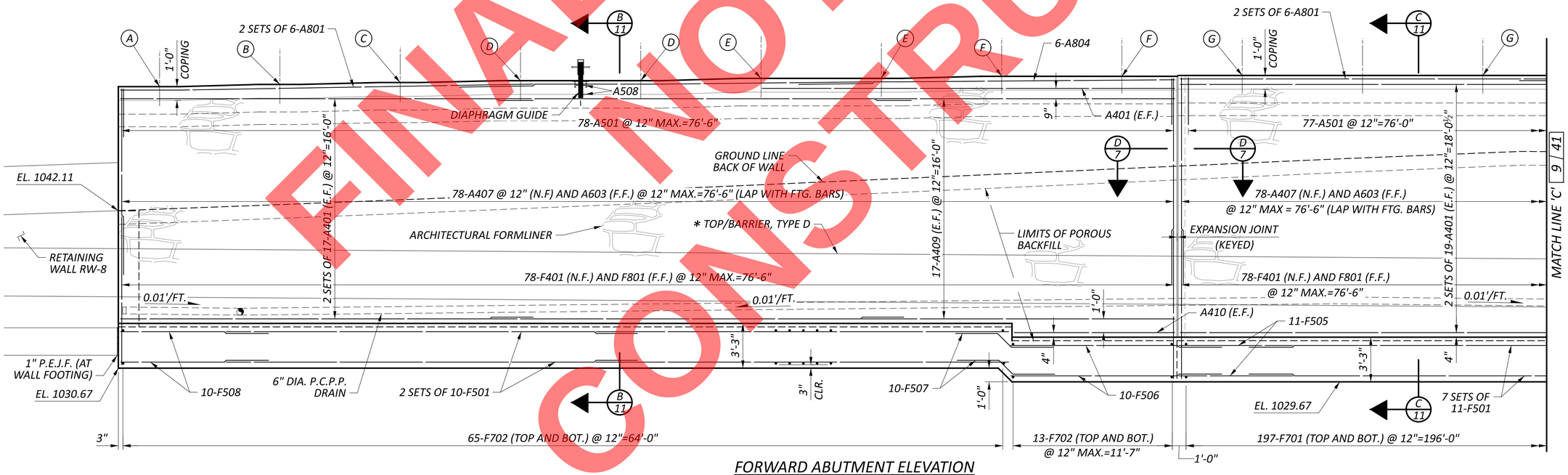
LEGEND

(#) BEAM NUMBER DESIGNATION

* INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS: #4 BARS = 30" #5 BARS = 37" #8 BARS = 64"
2. FOR FORWARD ABUTMENT DIAPHRAGM DETAILS, SEE SHEET 25 / 41 THRU 28 / 41 .
3. FOR ADDITIONAL FORWARD ABUTMENT DETAILS, SEE SHEETS 9 / 41 THRU 11 / 41 .
4. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
5. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.
6. SEAL VERTICAL EXPANSION JOINT FROM TOP OF FOOTING TO 1 FOOT BELOW EMBANKMENT WITH TYPE 2 WATERPROOFING MATERIAL, 3'-0" WIDE CENTERED ON THE JOINT.
7. FOR RETAINING WALL RW-8, SEE SHEET P.344 THRUP.349OF 627 .



FORWARD ABUTMENT ELEVATION

FINAL TRACINGS NOT FOR CONSTRUCTION

FORWARD ABUTMENT PLAN AND ELEVATION (1 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
DRH	CMD

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
8	41

SHEET	TOTAL
P.446	627

SUM-077/008-11.65/00.00

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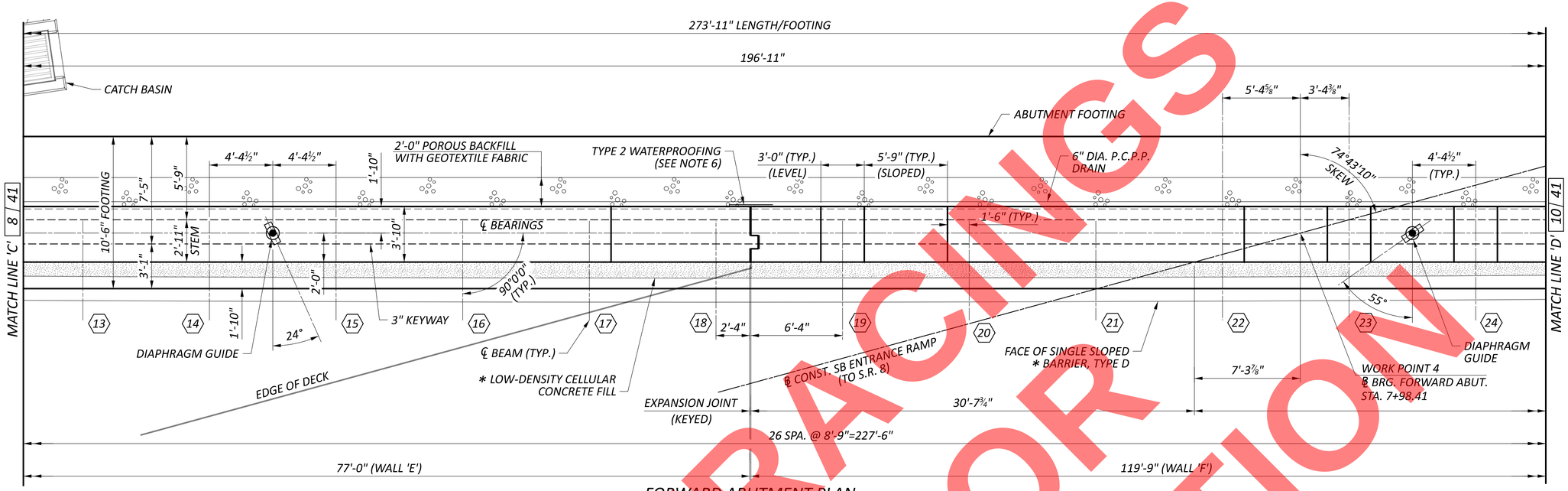


FORWARD ABUTMENT PLAN

BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
G	1051.94
H	1051.88
J	1051.82
K	1051.69
L	1051.55
M	1051.39

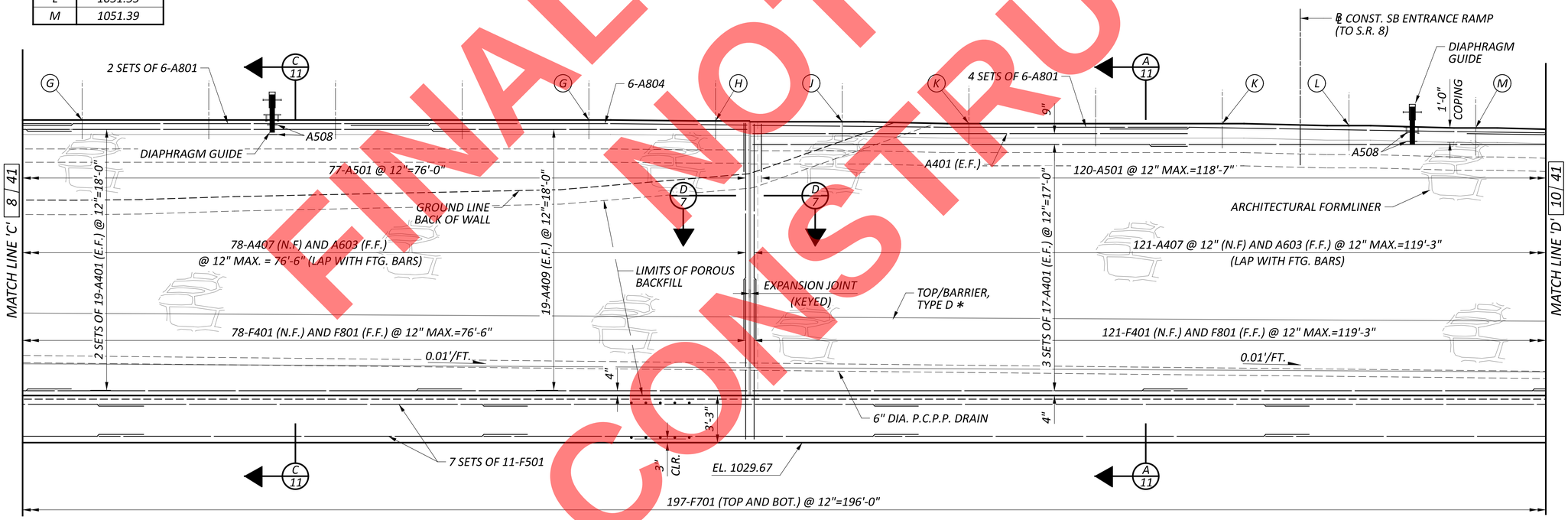
LEGEND

(#) BEAM NUMBER DESIGNATION

* INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS: #4 BARS = 30" #5 BARS = 37" #8 BARS = 64"
2. FOR FORWARD ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 25 / 41 THRU 28 / 41 .
3. FOR ADDITIONAL FORWARD ABUTMENT DETAILS, SEE SHEETS 8 / 41 , 10 / 41 AND 11 / 41 .
4. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
5. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.
6. SEAL VERTICAL EXPANSION JOINT FROM TOP OF FOOTING TO 1 FOOT BELOW EMBANKMENT WITH TYPE 2 WATERPROOFING MATERIAL, 3'-0" WIDE CENTERED ON THE JOINT.



FORWARD ABUTMENT ELEVATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

FORWARD ABUTMENT PLAN AND ELEVATION (2 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
DRH	CMD

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
9	41

SHEET	TOTAL
P.447	627

SUM-077/008-11.65/00.00

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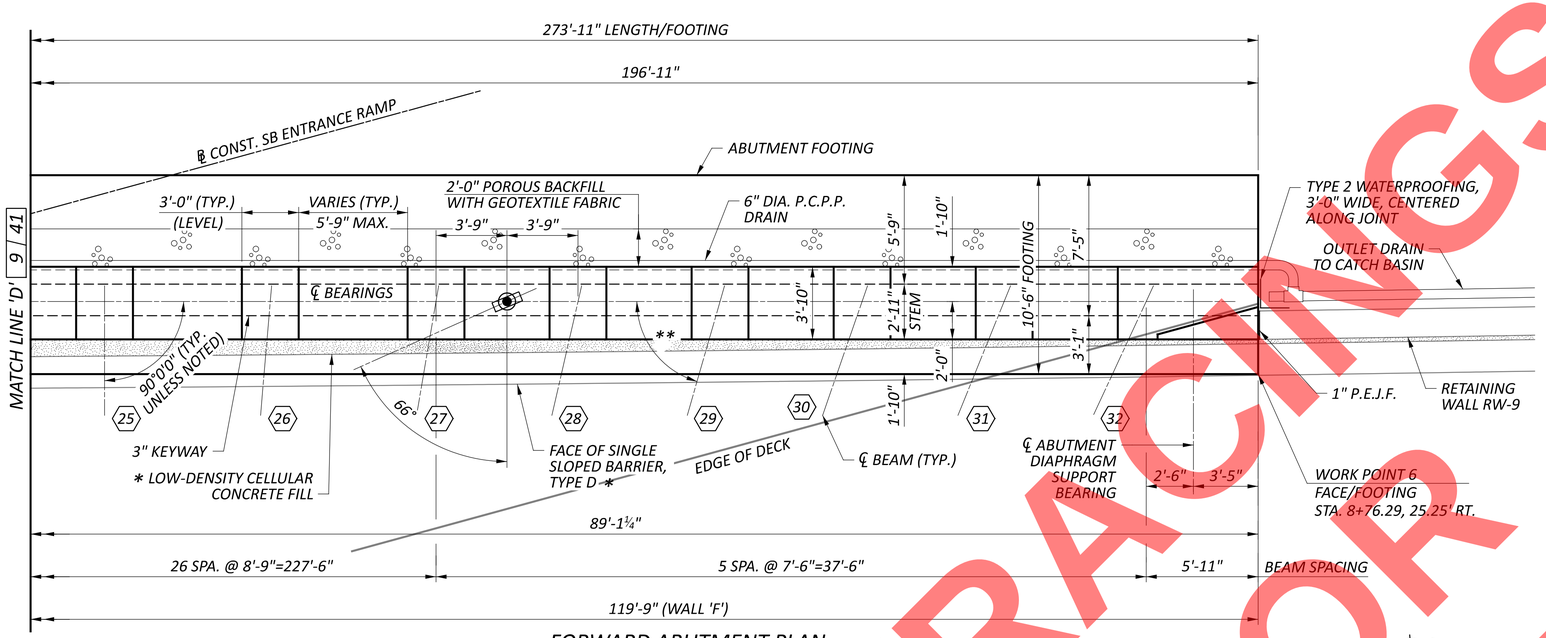
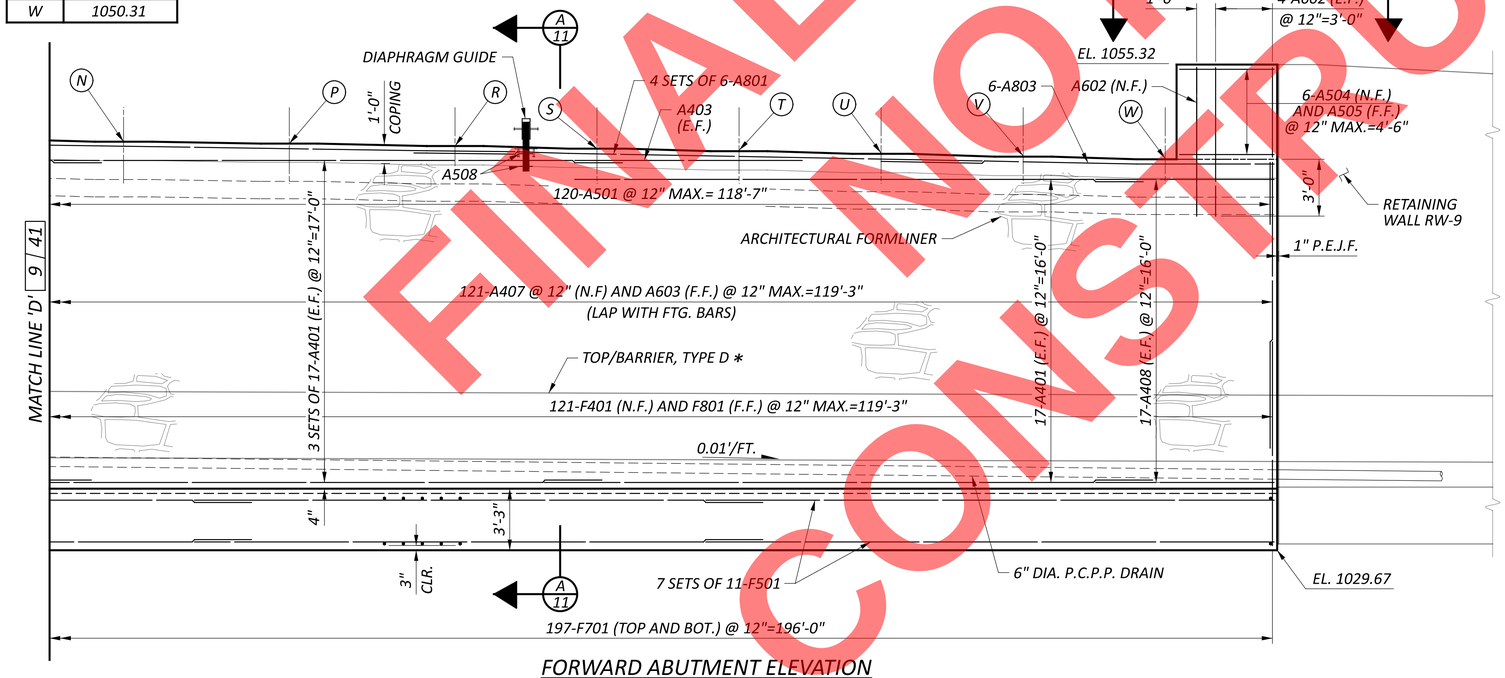


FORWARD ABUTMENT PLAN

BEAM SEAT ELEVATION TABLE	
POINT	ELEVATION
N	1051.24
P	1051.14
R	1051.01
S	1050.87
T	1050.74
U	1050.60
V	1050.45
W	1050.31

NOTES:

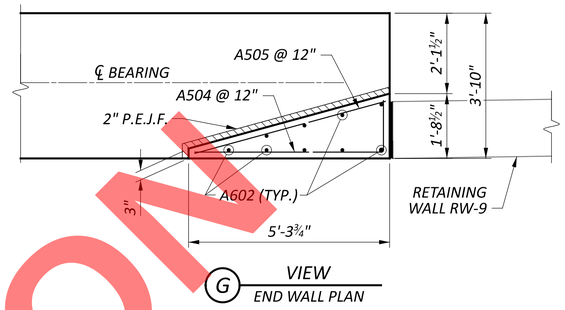
1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #4 BARS = 30" #5 BARS = 37" #8 BARS = 64"
2. FOR FORWARD ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 25 / 41 THRU 28 / 41 .
3. FOR ADDITIONAL FORWARD ABUTMENT DETAILS, SEE SHEETS 8 / 41 THRU 9 / 41 AND 11 / 41 .
4. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .
5. SEAT ELEVATIONS: THE BEAM SEAT ELEVATIONS WERE CALCULATED USING THE ASSUMED CAMBER D30 WITH A MINIMUM SACRIFICIAL HAUNCH THICKNESS OF 2 INCHES. REFER TO SHEET 20 / 41 FOR CAMBER INFORMATION. THE CONTRACTOR SHALL ADJUST SEAT ELEVATIONS BASED UPON THE ACTUAL BEAM CAMBER AT THE TIME OF FABRICATION IF AVAILABLE. BEAMS SHALL BE INSTALLED LEVEL BETWEEN THE ABUTMENTS.
6. FOR RETAINING WALL RW-9, SEE SHEET P.350 THRU P.356 OF 627 .



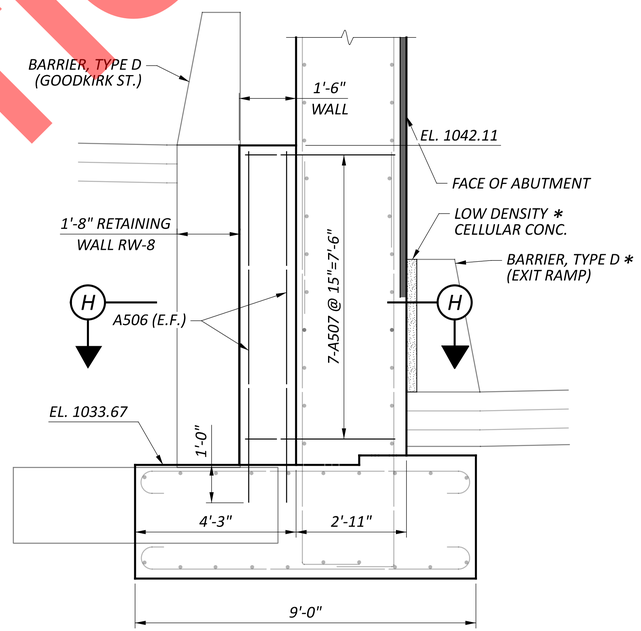
FORWARD ABUTMENT ELEVATION

LEGEND

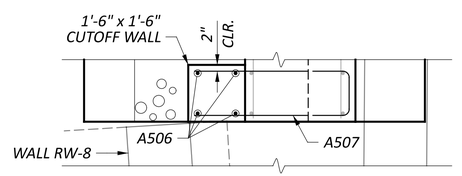
- (#) BEAM NUMBER DESIGNATION
- * INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT
- ** FOR BEAM 26 THRU 32 ANGLES, REFER TO FRAMING PLAN SHEET 17 / 41 .



G VIEW
END WALL PLAN



F 8 VIEW
CUT-OFF WALL



H SECTION
CUT-OFF WALL

FORWARD ABUTMENT PLAN AND ELEVATION (3 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER	CHECKER
DRH	RBB

REVIEWER RBB 8-14-26

PROJECT ID 114865

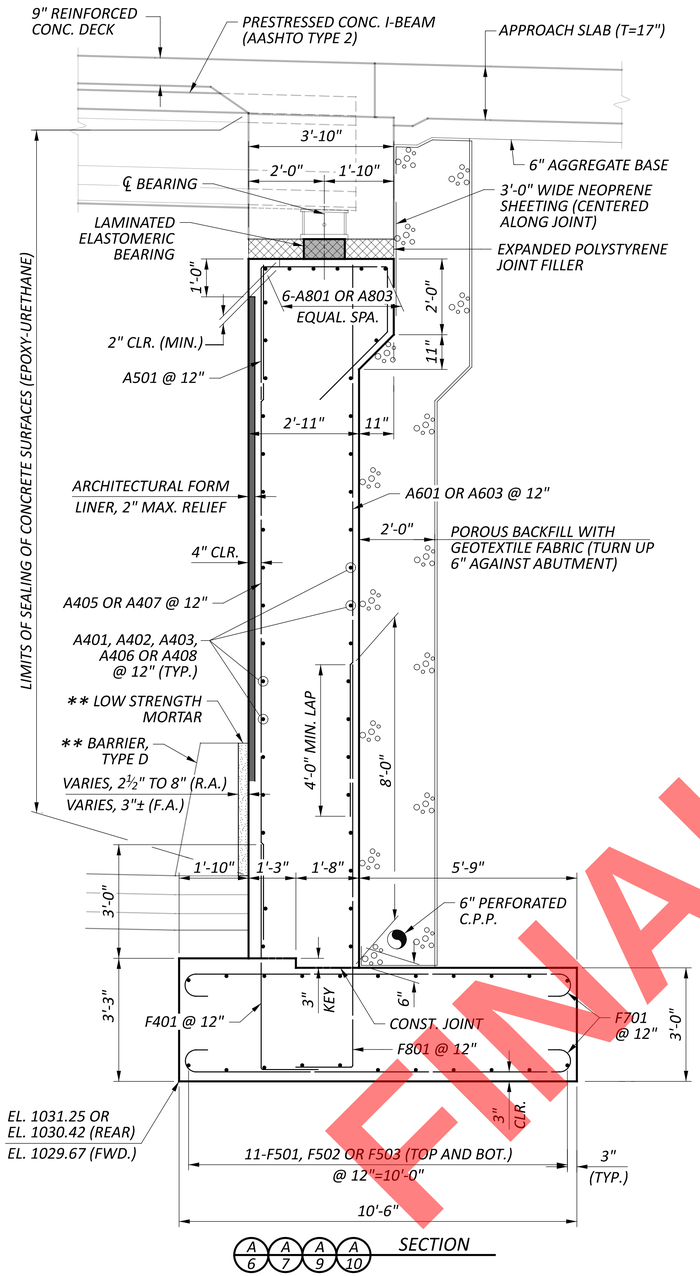
SUBSET	TOTAL
10	41

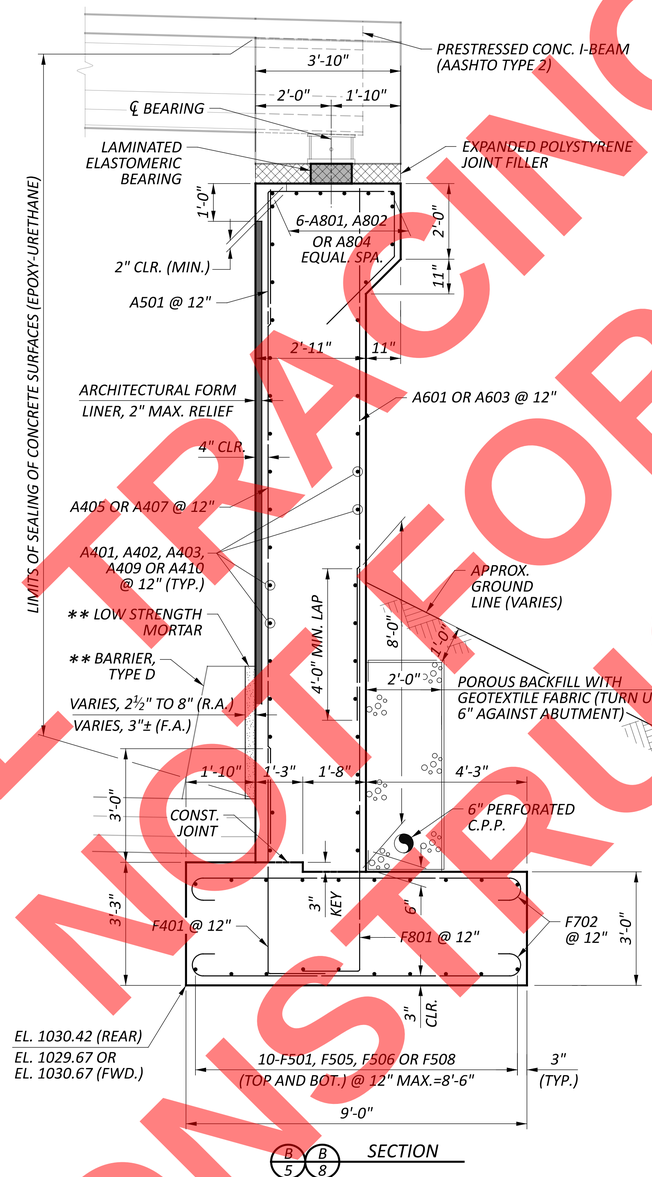
SHEET	TOTAL
P.448	627

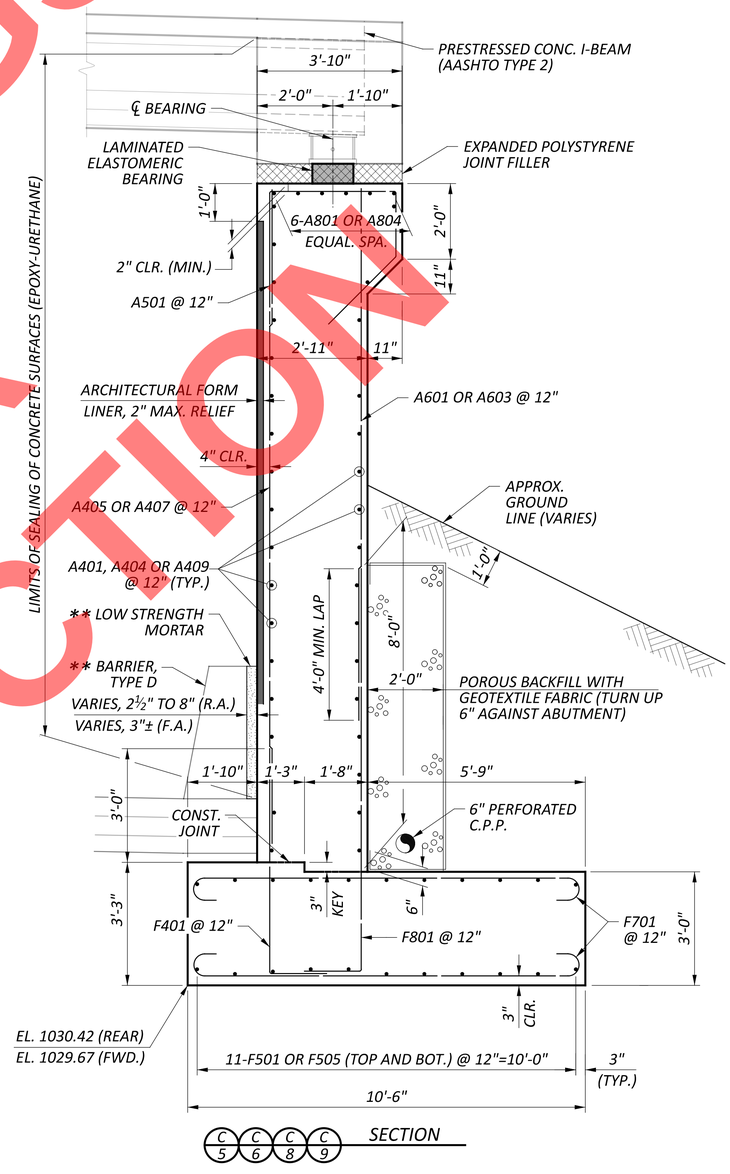
SUM-077/008-11.65/00.00

FINAL CONSTRUCTION DRAWINGS NOT FOR CONSTRUCTION

SUBMITTAL DATE: S_DATE







FINAL PLANS
NOT FOR CONSTRUCTION

LEGEND

** INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT

NOTES:

1. ALL REINFORCING STEEL CLEARANCES ARE 2", UNLESS OTHERWISE NOTED.
2. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #4 BAR = 30"
   #6 BAR = 48"

ABUTMENT DETAILS
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4696
www.arcadis.com

DESIGNER	CHECKER
DRH	CMD

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
11	41

SHEET	TOTAL
P.449	627

SUM-077/008-11.65/00.00
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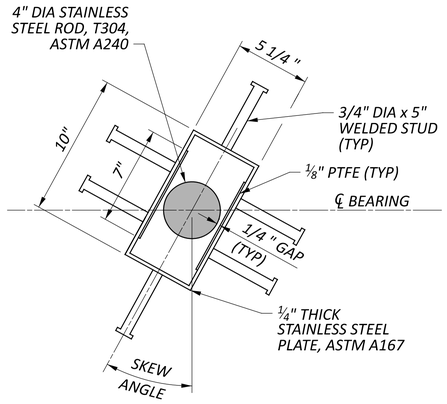
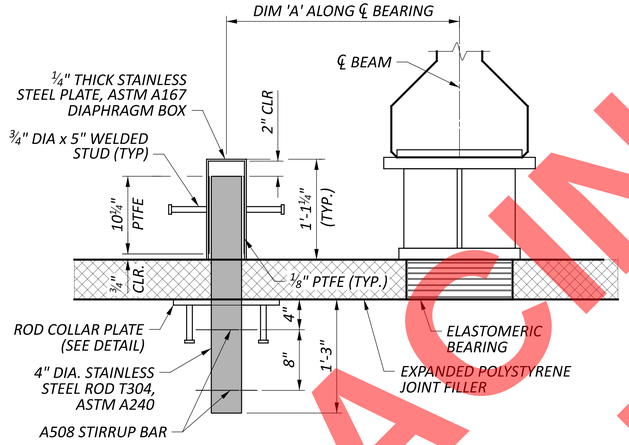
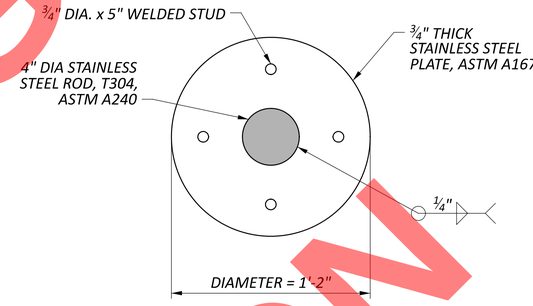


DIAPHRAGM GUIDE PLAN



DIAPHRAGM GUIDE ELEVATION

PLACE TO AVOID INTERFERENCE WITH REINFORCEMENT



ROD COLLAR PLATE DETAIL

DIAPHRAGM GUIDE TABLE			
ABUTMENT	BTWN BEAMS	SKEW ANGLE*	DIM 'A'
REAR	4 - 5	69°	4'-4 ½"
REAR	8 - 9	62°	4'-4 ½"
REAR	18 - 19	-31°	4'-4 ½"
REAR	24 - 25	-62°	4'-4 ½"
FORWARD	4 - 5	-69°	4'-4 ½"
FORWARD	14 - 15	-27°	4'-4 ½"
FORWARD	23 - 24	60°	4'-4 ½"
FORWARD	27 - 28	68°	3'-9"

LEGEND

* FOR ORIENTATION OF ANGLE, REFER TO ABUTMENT PLAN SHEETS

NOTES:

1. STAINLESS STEEL: 13 GAGE STAINLESS STEEL, TYPE 304, ASTM A240 STEEL FOR ROD AND ASTM A167 FOR STEEL PLATE WITH A SURFACE FINISH OF 8.0μ - IN OR BETTER. MINIMUM FY = 30 KSI AND MINIMUM FU = 75 KSI.
2. PTFE: PROVIDE PTFE SHEET OR FABRIC PER SUPPLEMENTAL SPECIFICATION 869.10 AND ATTACH PER 869.11.
3. STEEL PLATE (BOX AND COLLAR): PROVIDE ASTM A167 GRADE 50 STEEL ACCORDING TO CMS 711.01.
4. WELDED STUDS: PROVIDE WELDED STUDS IN ACCORDANCE WITH CMS 513.22. (TOTAL OF 6 STUDS REQUIRED FOR EACH STEEL BOX AND 4 STUDS REQUIRED FOR EACH COLLAR PLATE.)
5. BASIS FOR PAYMENT: THE PAYMENT OF ALL DIAPHRAGM GUIDE PARTS SHALL BE INCLUDED IN THE ITEM 511 - SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN.
6. AFTER CASTING THE DECK, RE-CENTER THE DIAPHRGAM GUIDE ON THE STEEL ROD AND CHECK THE PLUMBNESS OF THE GUIDE. SECURELY FASTEN THE GUIDE TO THE REINFORCING PRIOR TO CASTING THE END DIAPHRAGM. TAKE CARE TO NOT DISTURB THE GUIDE WHEN PLACING AND VIBRATING CONCRETE AROUND IT.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUBSTRUCTURE DETAILS (1 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9850
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DESIGNER	CHECKER
NES	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
12	41

SHEET	TOTAL
P.450	627

SUM-077/008-11.65/00.00
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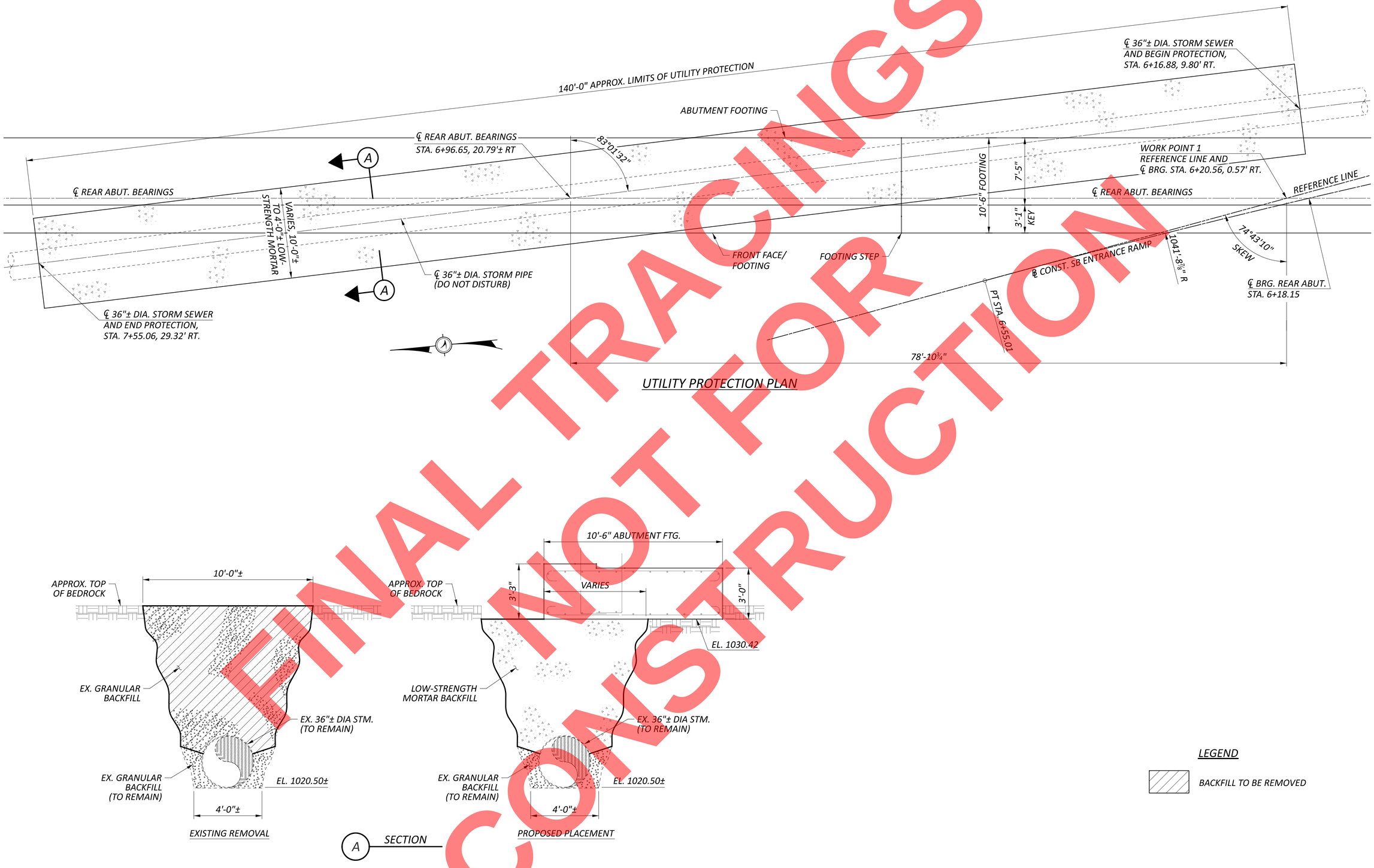

FINAL TRACINGS NOT FOR CONSTRUCTION

SUBSTRUCTURE DETAILS (2 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER	CHECKER
NES	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
13	41

SHEET	TOTAL
P.451	627

SUM-077/008-11.65/00.00

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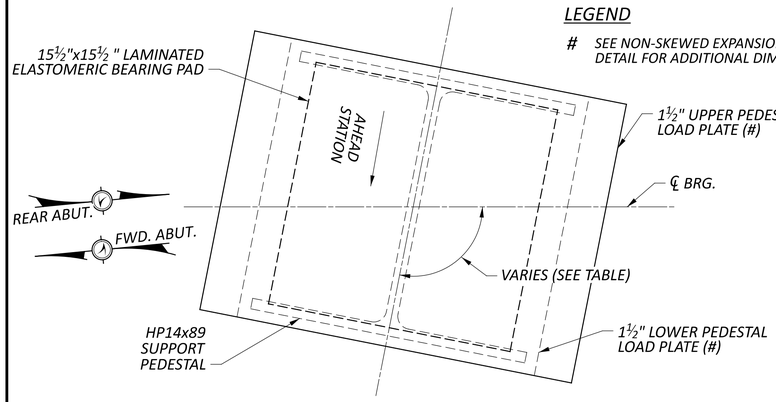
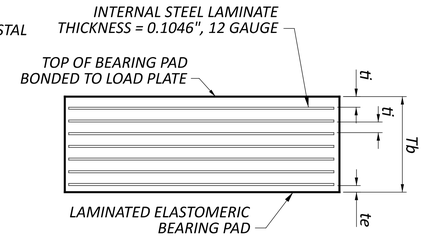
FINAL TRACINGS
NOT FOR CONSTRUCTION

LEGEND

\# SEE NON-SKEWED EXPANSION BEARING DETAIL FOR ADDITIONAL DIMENSIONS





BEARING PAD DETAIL

BEARING SCHEDULE

SUPPORT	BEARING TYPE	QUANTITY	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	TOTAL LOAD (KIPS)	ti	NUMBER OF ti's	te_{top}	te_{bot}	NUMBER OF STEEL LAMINATES	Tb
REAR ABUT.	EXPANSION	32	76.90	116.10	193.00	0.5625"	7	0.375"	0.5625"	7	5.045"
FORWARD ABUT.	EXPANSION	32	76.90	116.10	193.00	0.5625"	7	0.375"	0.5625"	7	5.045"

BEARING HEIGHTS (GIRDERS #1 - #16)

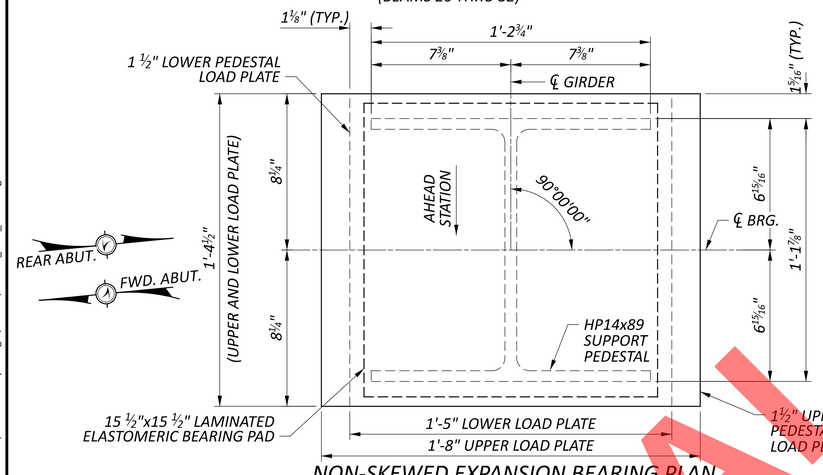
		GIRDER															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
REAR	HP	6"	6"	6"	6"	7"	6"	7"	6"	6.5"	6.5"	6.75"	7"	7"	7"	6.75"	6.5"
	HB	14.045"	14.045"	14.045"	14.045"	15.045"	14.045"	15.045"	14.045"	14.545"	14.545"	14.795"	15.045"	15.045"	15.045"	14.795"	14.545"
FORWARD	HP	6"	6"	6"	6"	7"	6"	7"	6"	6.5"	6.5"	6.75"	7"	7"	7"	6.75"	6.5"
	HB	14.045"	14.045"	14.045"	14.045"	15.045"	14.045"	15.045"	14.045"	14.545"	14.545"	14.795"	15.045"	15.045"	15.045"	14.795"	14.545"

BEARING HEIGHTS (GIRDERS #17 - #32)

		GIRDER															
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
REAR	HP	6"	6"	6"	6.75"	6.75"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
	HB	15.045"	14.045"	14.045"	14.795"	14.795"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"
FORWARD	HP	6"	6"	6"	6.75"	6.75"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
	HB	15.045"	14.045"	14.045"	14.795"	14.795"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"	14.045"

SKEWED EXPANSION BEARING PLAN

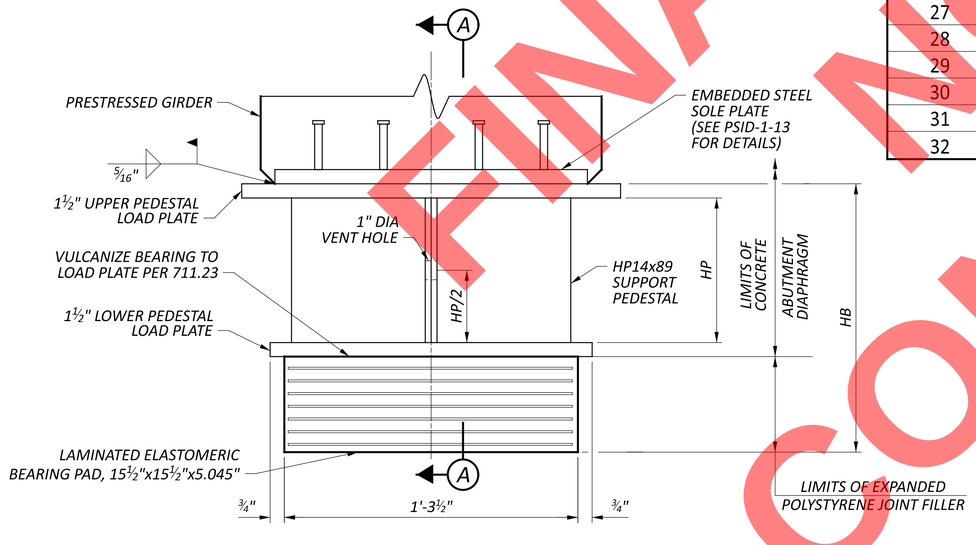
(BEAMS 26 THRU 32)



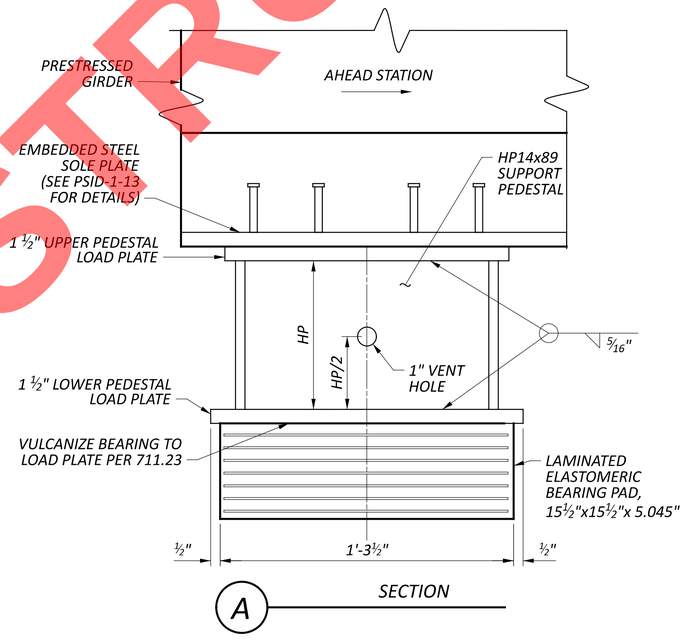
NON-SKEWED EXPANSION BEARING PLAN

(BEAMS 1 THRU 25)

BEARING ORIENTATION TABLE	
BEAM	ANGLE
1 THRU 25	90°00'00"
26	94°52'39"
27	99°41'07"
28	102°54'59"
29	106°03'59"
30	109°07'11"
31	112°03'52"
32	114°53'29"



EXPANSION BEARING ELEVATION



SECTION

NOTES

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER.
2. 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.
3. THE ELASTOMERIC BEARING PADS SHALL CONFORM TO ODOT CMS 516.07 AND 711.23.
4. THE UPPER AND LOWER PEDESTAL LOAD PLATES AND THE HP14x89 SUPPORT PEDESTALS SHALL BE ASTM A709, GRADE 50 STEEL AND SHALL BE GALVANIZED IN ACCORDANCE WITH CMS 516.03 AND 711.02. AFTER THE BEAMS ARE SET AND THE BEARING ASSEMBLIES ARE WELDED TO THE EMBEDDED STEEL SOLE PLATES, THE GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH CMS 711.02.
5. THE DEAD, LIVE AND TOTAL LOADS TABULATED IN THE BEARING SCHEDULE ARE UNFACTORED LOADS.
6. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
7. ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO FABRICATE, SHIP/DELIVER, AND INSTALL THE BEARING ASSEMBLIES (ELASTOMERIC BEARING, SHIMS, UPPER LOAD PLATE, LOWER LOAD PLATE, HP SUPPORT PEDESTAL) SHALL BE INCLUDED WITH ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (1'-3½" x 1'-3 ½" x 5.045" BEARING WITH HP14x89 PEDESTAL) FOR PAYMENT.

BEARING DETAILS (1 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-2046
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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
14	41

SHEET	TOTAL
P.452	627

SUM-077/008-11.65/00.00

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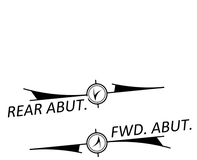
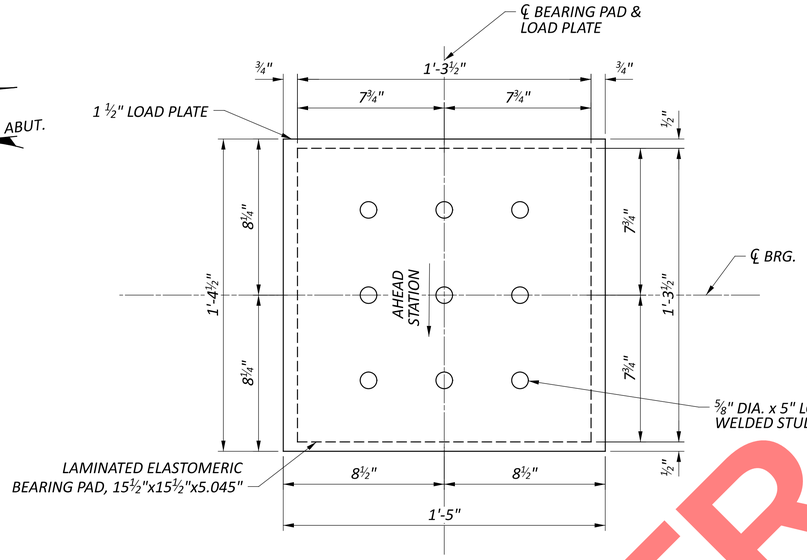
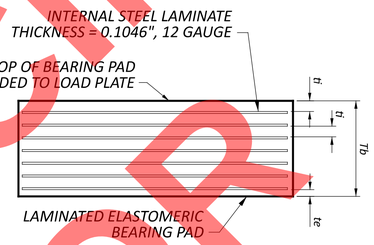




ABUTMENT DIAPHRAGM SUPPORT BEARING PLAN

BEARING SUPPORT SCHEDULE

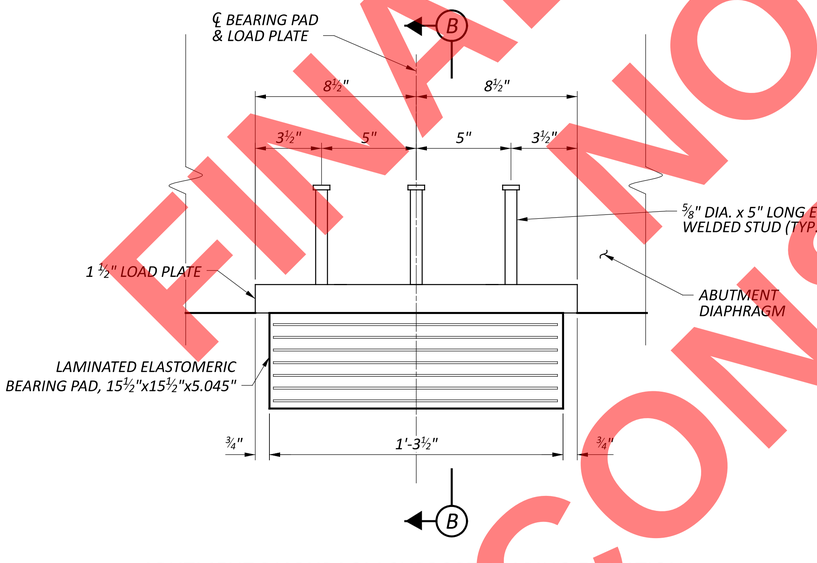
SUPPORT	BEARING TYPE	QUANTITY	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	TOTAL LOAD (KIPS)	ti	NUMBER OF ti's	te_{top}	te_{bot}	NUMBER OF STEEL LAMINATES	Tb
REAR ABUT.	EXPANSION	2	25.30	16.00	41.30	0.5625"	7	0.375"	0.5625"	7	5.045"
FORWARD ABUT.	EXPANSION	1	25.30	16.00	41.30	0.5625"	7	0.375"	0.5625"	7	5.045"



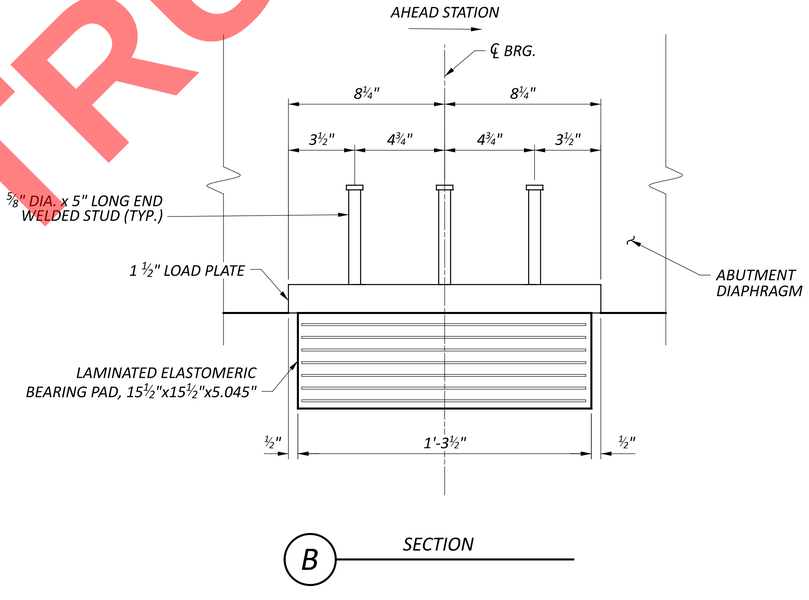
SUPPORT BEARING PAD DETAIL

NOTES:

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER.
2. 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.
3. THE ELASTOMERIC BEARING PADS SHALL CONFORM TO ODOT CMS 516.07 AND 711.23.
4. THE LOAD PLATES SHALL BE ASTM A709, GRADE 50 STEEL AND SHALL BE GALVANIZED IN ACCORDANCE WITH CMS 516.03 AND 711.02. THE LOAD PLATE SHALL BE VULCANIZED TO ELASTOMERIC BEARING PAD PER 711.23.
5. THE DEAD, LIVE AND TOTAL LOADS TABULATED IN THE BEARING SCHEDULE ARE UNFACTORED.
6. ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO FABRICATE, SHIP/DELIVER, AND INSTALL THE BEARING ASSEMBLIES (ELASTOMERIC BEARING, LOAD PLATE) SHALL BE INCLUDED WITH ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (1'-3½"x1'-3½" x5.045" BEARING) FOR PAYMENT.
7. FOR ABUTMENT DIAPHRAGM BEARING LOCATIONS, SEE ABUTMENT DIAPHRAGM PLAN ON SHEETS 24 41 AND 27 41 .



ABUTMENT DIAPHRAGM SUPPORT BEARING ELEVATION



SECTION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

BEARING DETAILS (2 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
15	41

SHEET	TOTAL
P.453	627

SUM-077/008-11.65/00.00

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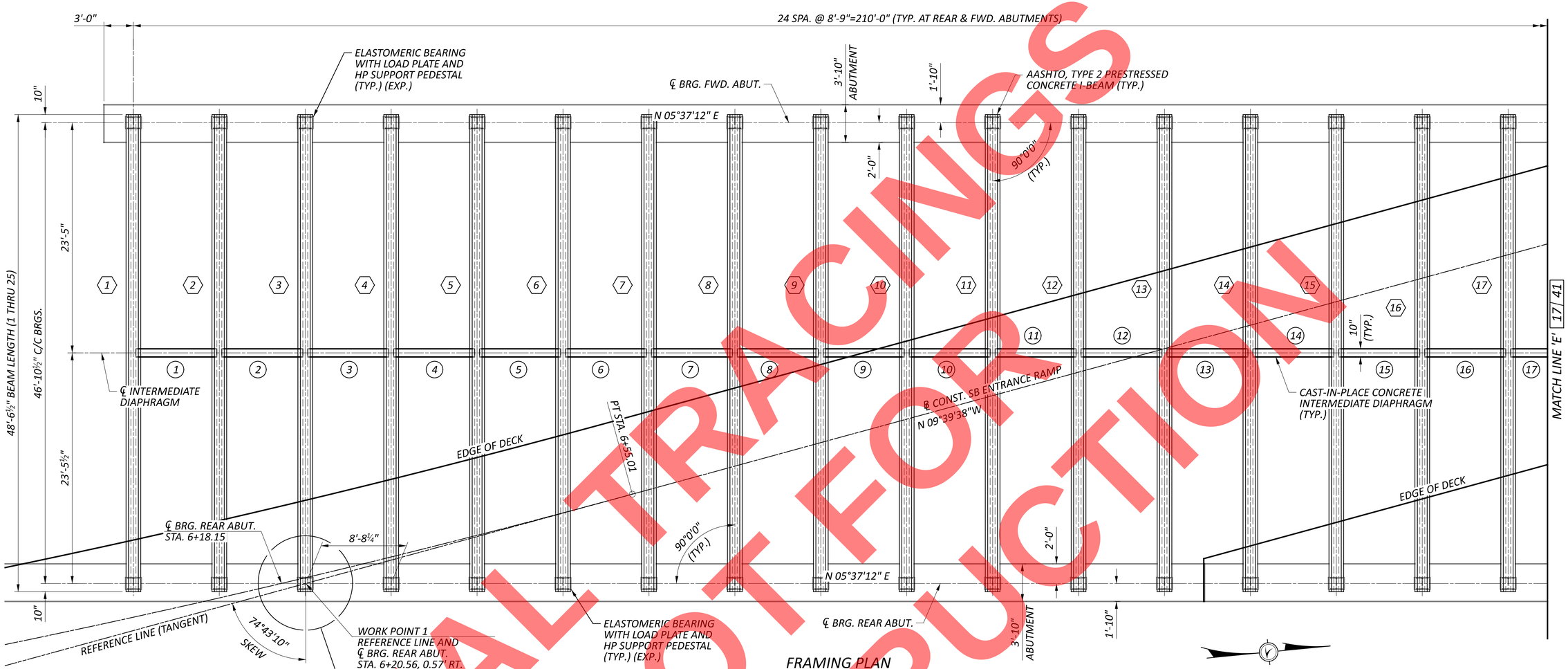

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES

1. THE CONTRACTOR SHALL USE CAST-IN-PLACE REINFORCED CONCRETE INTERMEDIATE DIAPHRAGMS.
2. FOR TRANSVERSE SECTION, SEE SHEET 33/41 .
3. FOR SLAB PLAN, SEE SHEET 31/41 .
4. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM DETAILS SEE SHEETS 22/41 THRU 28/41 .
5. FOR BEARING DETAILS, SEE SHEET 14/41 THRU 15/41 .
6. FOR BEAM DETAILS AND INTERMEDIATE DIAPHRAGM DETAILS, SEE SHEETS 18/41 THRU 21/41 .

LEGEND

- (#) BEAM NUMBER DESIGNATION
- (#) DIAPHRAGM NUMBER DESIGNATION

FRAMING PLAN (1 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
16	41

SHEET	TOTAL
P.454	627

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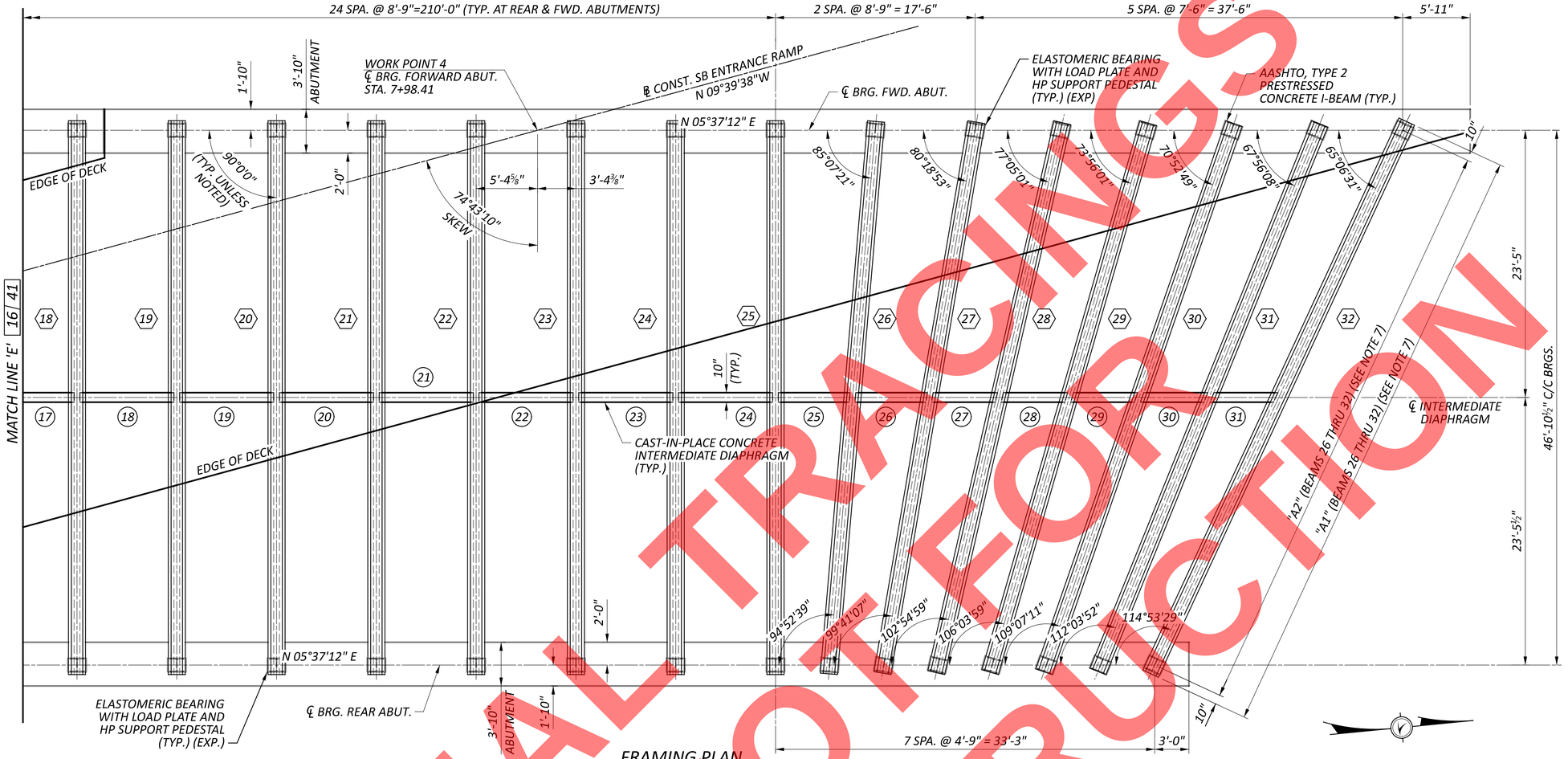

FRAMING PLAN

FINAL NOT FOR CONSTRUCTION
TRACINGS

NOTES

1. THE CONTRACTOR SHALL USE CAST-IN-PLACE REINFORCED CONCRETE DIAPHRAGMS. REFER TO ODOT STANDARD DRAWING PSID-1-13.
2. FOR TRANSVERSE SECTION SEE SHEET 33 / 41 .
3. FOR SLAB PLAN SEE SHEET 31 / 41 .
4. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM DETAILS SEE SHEETS 22 / 41 THRU 28 / 41 .
5. FOR BEARING DETAILS, SEE SHEET 14 / 41 THRU 15 / 41 .
6. FOR BEAM DETAILS AND INTERMEDIATE DIAPHRAGM DETAILS, SEE SHEETS 18 / 41 THRU 21 / 41 .
7. FOR DIMENSIONS "A1" AND "A2", SEE BEAM GEOMETRY TABLE ON SHEET 20 / 41 .

LEGEND

(#) BEAM NUMBER DESIGNATION

(#) DIAPHRAGM NUMBER DESIGNATION

FRAMING PLAN (2 OF 2)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
17	41

SHEET	TOTAL
P.455	627

SUM-077/008-11.65/00.00

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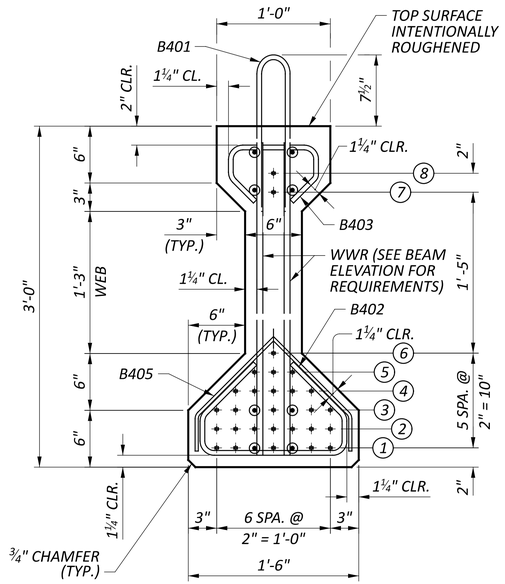
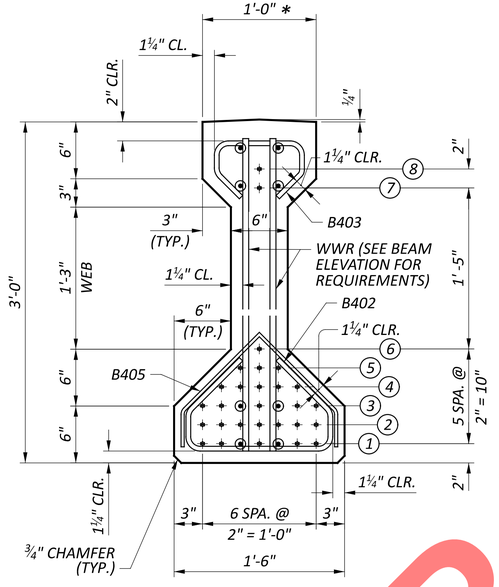


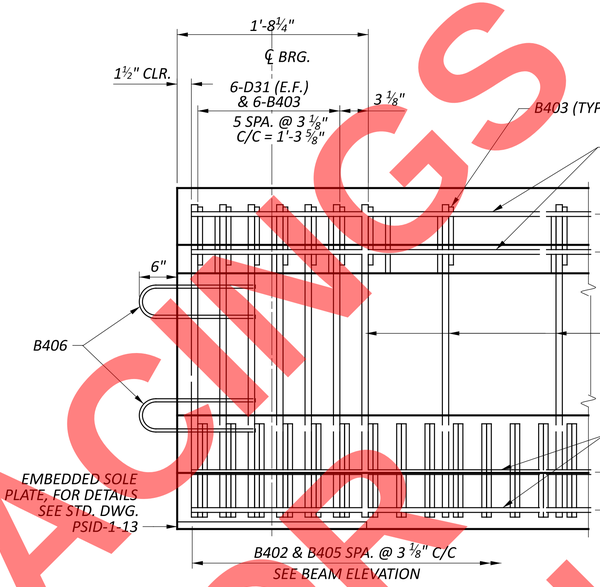
COMPOSITE BEAM SECTION

(AASHTO TYPE 2)



NON-COMPOSITE BEAM SECTION

(AASHTO TYPE 2)

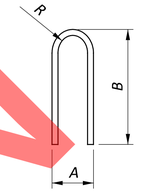


ANCHORAGE ZONE REINFORCING DETAIL

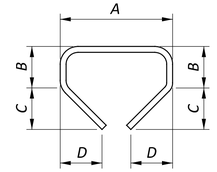
(STRANDS NOT SHOWN FOR CLARITY)

LEGEND

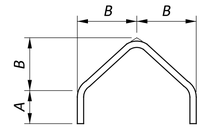
- ✱ TOP SURFACE TO BE TROWEL FINISHED SMOOTH WITH CROWN AT ℄ BEAM AS SHOWN
- ⊙ #4 BAR (FULL LENGTH)
- (e) SHALL BE EPOXY COATED
- ◊ SEE ANCHORAGE ZONE REINFORCING DETAIL
- ⌂ VERTICAL WWR REQUIRED AREA (E.F.)



TYPE 1

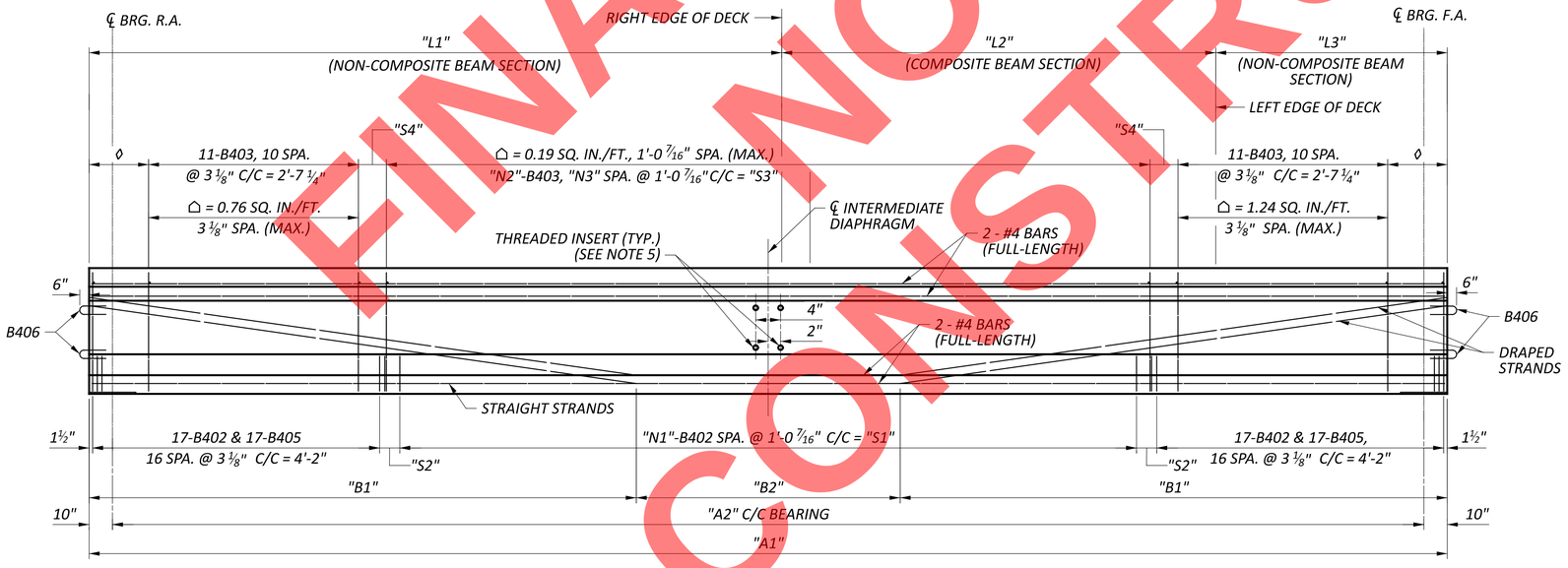


TYPE 2



TYPE 3

BEAMS	NUMBER OF STRANDS PER ROW																TOTAL STRANDS	CONCRETE STRENGTHS (PSI)	
	END SECTION - ROW NUMBER								MID SECTION - ROW NUMBER										
	①	②	③	④	⑤	⑥	⑦	⑧	①	②	③	④	⑤	⑥	⑦	⑧		f'ci	f'c
BEAMS 1 - 4	2	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	4	5,000	7,000
BEAMS 5 - 10	4	4	0	0	0	0	1	1	5	5	0	0	0	0	0	0	10		
BEAMS 11 - 21	4	4	2	0	0	0	1	1	5	5	2	0	0	0	0	0	12		
BEAMS 22 - 27	4	4	0	0	0	0	1	1	5	5	0	0	0	0	0	0	10		
BEAMS 28 - 32	2	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	4		



BEAM ELEVATION

MARK	TYPE	DIMENSIONS				
		A	B	C	D	R
AASHTO TYPE 2						
B401 (e)	1	3½"	1'-10"			1¼"
B402	2	1'-3½"	4¼"	5½"	5½"	
B403	2	9½"	3½"	2½"	2½"	
B405	4	4¼"	7¾"			
B406 (e)	1	4½"	1'-8"			1¾"

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES THE BAR LOCATION, THE NEXT DIGIT INDICATES THE BAR SIZE AND THE REMAINING DIGITS ITS SEQUENCE NUMBER. ALL STEEL SHALL BE BLACK UNLESS OTHERWISE SHOWN.

NOTES

1. LENGTH OF "L1" AND "L3" OF THE BEAM IS NON-COMPOSITE. LENGTH "L2" OF THE BEAM IS COMPOSITE.
2. PLACE B401 BARS AS SHOWN ON SHEET 19 / 41 . SEE TABLE FOR TOTAL NUMBER OF B401 BARS REQUIRED FOR EACH BEAM ON SHEET 20 / 41 .
3. FOR TABLE OF DIMENSIONS, SEE BEAM GEOMETRY TABLE ON SHEET 20 / 41 .
4. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING PSID-1-13.
5. FOR THREADED INSERT LOCATIONS, SEE THREADED INSERT LOCATIONS TABLE ON SHEET 20 / 41 .
6. PAYMENT FOR PRESTRESSED CONCRETE BEAMS INCLUDES ALL INSERTS, SLEEVES, FITTINGS, REINFORCING STEEL (FULLY OR PARTIALLY ENCASED) IN THE MEMBERS, THREADED RODS, EMBEDDED INSERTS, EMBEDDED BEARING SOLE PLATES, AND TEMPORARY BRACING NECESSARY TO COMPLETE THIS WORK.
7. ALL EXPOSED SURFACES OF THE PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. SEALER SHALL BE EXCLUDED FROM THE TOP SURFACE OF THE UPPER BEAM FLANGES THAT ARE WITHIN THE LIMITS OF THE CONCRETE DECK. THE DEPARTMENT WILL PAY FOR SEALING OF THE PRESTRESSED CONCRETE I-BEAMS UNDER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).
8. FOR BEAM HAUNCH REINFORCING, SEE SHEET 32 / 41 .
9. B401 AND B406 BARS SHALL BE EPOXY COATED.

FINAL TRACINGS NOT FOR CONSTRUCTION

BEAM DETAILS (1 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER	CHECKER
NES	JRM

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
18	41

SHEET	TOTAL
P.456	627

SUM-077/008-11.65/00.00
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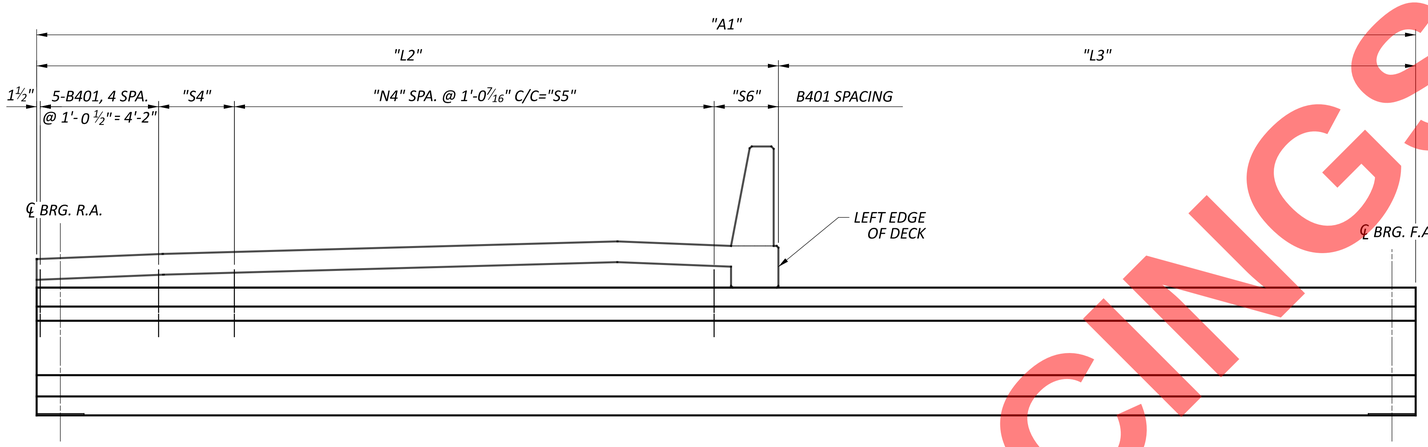
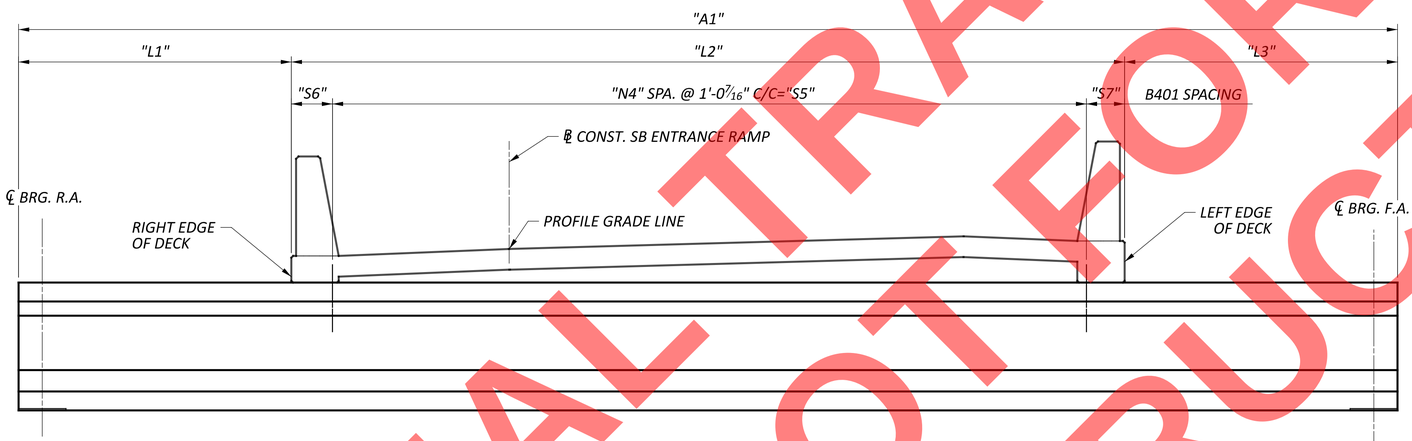


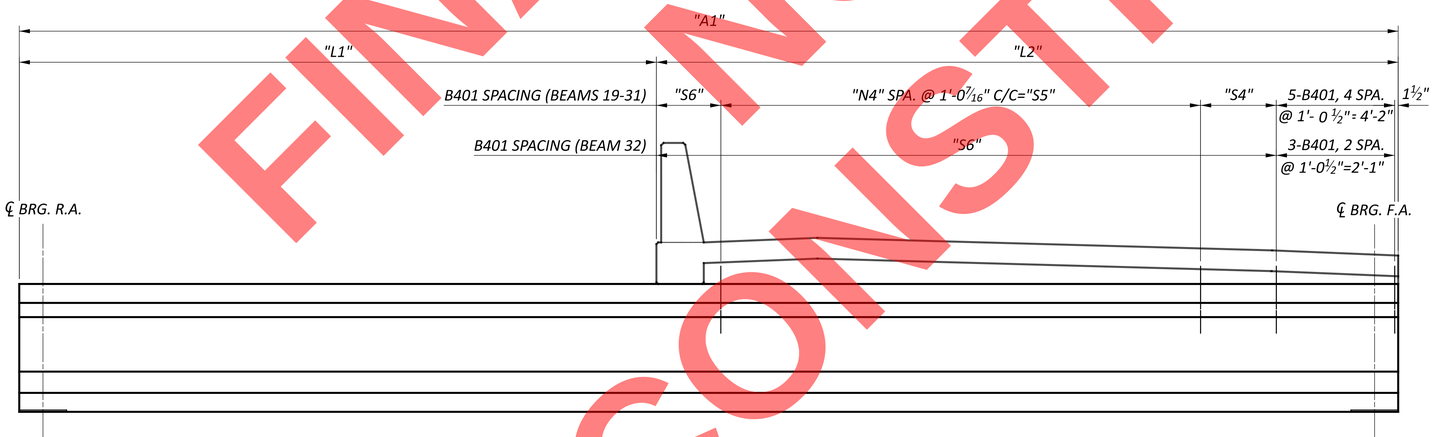
HAUNCH BAR BEAM ELEVATION

(BEAMS 1 THRU 13)



HAUNCH BAR BEAM ELEVATION

(BEAMS 14 THRU 18)



HAUNCH BAR BEAM ELEVATION

(BEAMS 19 THRU 32)

NOTES

1. LENGTH OF "L1" AND "L3" OF THE BEAM IS NON-COMPOSITE. LENGTH "L2" OF THE BEAM IS COMPOSITE.
2. FOR TABLE OF DIMENSIONS, SEE BEAM GEOMETRY TABLE ON SHEET 20 | 41 .
3. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING PSID-1-13.
4. PAYMENT FOR PRESTRESSED CONCRETE BEAMS INCLUDES ALL INSERTS, SLEEVES, FITTINGS, REINFORCING STEEL (FULLY OR PARTIALLY ENCASED) IN THE MEMBERS, THREADED RODS, EMBEDDED INSERTS, EMBEDDED BEARING SOLE PLATES, AND TEMPORARY BRACING NECESSARY TO COMPLETE THIS WORK.
5. ALL EXPOSED SURFACES OF THE PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. SEALER SHALL BE EXCLUDED FROM THE TOP SURFACE OF THE UPPER BEAM FLANGES THAT ARE WITHIN THE LIMITS OF THE CONCRETE DECK. THE DEPARTMENT WILL PAY FOR SEALING OF THE PRESTRESSED CONCRETE I-BEAMS UNDER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).
6. FOR BEAM HAUNCH REINFORCING, SEE SHEET 32 | 41 .
7. B401 AND B406 BARS SHALL BE EPOXY COATED.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

BEAM DETAILS (2 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-5955
www.arcadis.com

DESIGNER	CHECKER
NES	JRM

REVIEWER
RBB 8-14-26

PROJECT ID
114685

SUBSET	TOTAL
19	41

SHEET	TOTAL
P.457	627

SUM-077/008-11.65/00.00

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BEAM GEOMETRY															NUMBER OF BARS REQUIRED					
BEAM	A1	A2	B1	B2	L1	L2	L3	S1	S2	S3	S4	S5	S6	S7	N1	N2	N3	N4	B401	B402	B403	B405
1	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	5' - 3"	43' - 3 1/2"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	0' - 0"	0' - 1 7/8"	N/A	38	38	37	0	6	72	72	34
2	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	7' - 2 3/4"	41' - 3 3/4"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	1' - 0 7/16"	1' - 1 3/16"	N/A	38	38	37	1	7	72	72	34
3	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	9' - 3 1/2"	39' - 3"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	3' - 1 5/16"	1' - 1 1/16"	N/A	38	38	37	3	9	72	72	34
4	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	11' - 5 3/8"	37' - 1 3/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	5' - 2 3/16"	1' - 1 13/16"	N/A	38	38	37	5	11	72	72	34
5	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	13' - 7 3/4"	34' - 10 3/4"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	8' - 3 1/2"	0' - 3 1/8"	N/A	38	38	37	8	14	72	72	34
6	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	15' - 11 3/8"	32' - 7 1/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	10' - 4 3/8"	0' - 5 7/8"	N/A	38	38	37	10	16	72	72	34
7	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	18' - 3 7/8"	30' - 2 5/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	12' - 5 1/4"	0' - 9 1/2"	N/A	38	38	37	12	18	72	72	34
8	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	20' - 8 5/8"	27' - 9 7/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	14' - 6 1/8"	1' - 1 3/8"	N/A	38	38	37	14	20	72	72	34
9	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	23' - 1 1/4"	25' - 5 1/4"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	17' - 7 7/16"	0' - 4 11/16"	N/A	38	38	37	17	23	72	72	34
10	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	25' - 6"	23' - 0 1/2"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	19' - 8 5/16"	0' - 8 9/16"	N/A	38	38	37	19	25	72	72	34
11	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	27' - 10 5/8"	20' - 7 7/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	21' - 9 3/16"	1' - 0 5/16"	N/A	38	38	37	21	27	72	72	34
12	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	30' - 3 3/8"	18' - 3 1/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	24' - 10 1/2"	0' - 3 3/4"	N/A	38	38	37	24	30	72	72	34
13	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	0' - 0"	32' - 8"	15' - 10 1/2"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	26' - 11 3/8"	0' - 7 1/16"	N/A	38	38	37	26	32	72	72	34
14	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	4' - 7 7/8"	30' - 5"	13' - 5 5/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	29' - 0 1/4"	0' - 5 1/4"	0' - 11 1/2"	38	38	37	28	29	72	72	34
15	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	7' - 0 1/2"	30' - 5"	11' - 1"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	30' - 0 11/16"	0' - 1 1/2"	0' - 2 13/16"	38	38	37	29	30	72	72	34
16	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	9' - 5 1/4"	30' - 5"	8' - 8 1/4"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	29' - 0 1/4"	0' - 10 1/8"	0' - 6 5/8"	38	38	37	28	29	72	72	34
17	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	11' - 9 7/8"	30' - 5"	6' - 3 5/8"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	29' - 0 1/4"	0' - 6 3/8"	0' - 10 3/8"	38	38	37	28	29	72	72	34
18	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	14' - 2 1/2"	30' - 5"	3' - 11"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	29' - 0 1/4"	0' - 2 1/2"	1' - 2 1/4"	38	38	37	28	29	72	72	34
19	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	16' - 7 1/4"	31' - 11 1/4"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	25' - 10 15/16"	0' - 11 3/16"	N/A	38	38	37	25	31	72	72	34
20	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	19' - 0"	29' - 6 1/2"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	23' - 10 7/16"	0' - 7 7/16"	N/A	38	38	37	23	29	72	72	34
21	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	21' - 4 5/8"	27' - 1 7/8"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	21' - 9 3/16"	0' - 3 3/16"	N/A	38	38	37	21	27	72	72	34
22	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	23' - 9 1/4"	24' - 9 1/4"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	18' - 7 7/8"	1' - 0 1/4"	N/A	38	38	37	18	24	72	72	34
23	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	26' - 2"	22' - 4 1/2"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	16' - 7"	0' - 8 3/8"	N/A	38	38	37	16	22	72	72	34
24	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	28' - 6 3/4"	19' - 11 3/4"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	14' - 6 1/8"	0' - 4 1/2"	N/A	38	38	37	14	20	72	72	34
25	48' - 6 1/2"	46' - 10 1/2"	19' - 5"	9' - 8 1/2"	30' - 11 3/8"	17' - 7 1/8"	0' - 0"	38' - 4 1/4"	0' - 9 5/8"	38' - 4 1/4"	0' - 9 5/8"	11' - 4 13/16"	1' - 1 3/16"	N/A	38	38	37	11	17	72	72	34
26	48' - 8 1/2"	47' - 0 1/2"	19' - 5 3/4"	9' - 9"	33' - 1 3/8"	15' - 7 1/8"	0' - 0"	38' - 4 1/4"	0' - 10 5/8"	38' - 4 1/4"	0' - 10 5/8"	9' - 3 15/16"	1' - 1 1/16"	N/A	38	38	37	9	15	72	72	34
27	49' - 2 1/2"	47' - 6 1/2"	19' - 8 1/4"	9' - 10"	35' - 7 5/8"	13' - 6 5/8"	0' - 0"	39' - 4 5/8"	0' - 7 7/16"	39' - 4 5/8"	0' - 7 7/16"	8' - 3 1/2"	0' - 4 7/16"	N/A	39	39	38	8	14	73	73	34
28	49' - 9"	48' - 1"	19' - 10 3/4"	9' - 11 1/2"	38' -0 5/8"	11' - 8 3/8"	0' - 0"	39' - 4 5/8"	0' - 10 11/16"	39' - 4 5/8"	0' - 10 11/16"	6' - 2 5/8"	0' - 3 9/16"	N/A	39	39	38	6	12	73	73	34
29	50' - 5 1/4"	48' - 9 1/2"	20' - 2 1/8"	10' - 1"	40' - 8 1/2"	9' - 8 3/4"	0' - 0"	40' - 5 1/8"	0' - 8 9/16"	40' - 5 1/2"	0' - 8 9/16"	4' - 1 3/4"	0' - 6 15/16"	N/A	40	40	39	4	10	74	74	34
30	51' - 3 1/2"	49' - 7 1/2"	20' - 6 1/4"	10' - 3"	43' - 7 1/2"	7' - 8"	0' - 0"	41' - 5 1/2"	0' - 7 1/2"	41' - 5 1/2"	0' - 7 1/2"	2' - 0 7/8"	0' - 8 1/8"	N/A	41	41	40	2	8	75	75	34
31	52' - 3"	50' - 7"	20' - 10 3/4"	10' - 5 1/2"	46' - 9 7/8"	5' - 5 1/8"	0' - 0"	42' - 6"	0' - 7"	42' - 6"	0' - 7"	0' - 0"	0' - 6 5/8"	N/A	42	42	41	0	6	76	76	34
32	53' - 4"	51' - 8"	21' -4"	10' - 8"	50' - 3 7/8"	3' - 0 1/8"	0' - 0"	43' - 6 3/8"	0' - 7 5/16"	43' - 6 3/8"	N/A	N/A	0' - 9 3/8"	N/A	43	43	42	N/A	3	77	77	34

THREADED INSERT LOCATIONS

BEAM	DISTANCE *
1	24' - 3 1/2"
2	24' - 3 1/2"
3	24' - 3 1/2"
4	24' - 3 1/2"
5	24' - 3 1/2"
6	24' - 3 1/2"
7	24' - 3 1/2"
8	24' - 3 1/2"
9	24' - 3 1/2"
10	24' - 3 1/2"
11	24' - 3 1/2"
12	24' - 3 1/2"
13	24' - 3 1/2"
14	24' - 3 1/2"
15	24' - 3 1/2"
16	24' - 3 1/2"
17	24' - 3 1/2"
18	24' - 3 1/2"
19	24' - 3 1/2"
20	24' - 3 1/2"
21	24' - 3 1/2"
22	24' - 3 1/2"
23	24' - 3 1/2"
24	24' - 3 1/2"
25	24' - 3 1/2"
26	24' - 4 1/2"
27	24' - 7 1/2"
28	24' - 10 3/4"
29	25' - 3"
30	25' - 8"
31	26' - 1 3/4"
32	26' - 8 1/4"

* DISTANCE SHOWN FROM REAR END OF BEAM TO ℄ INTERMEDIATE DIAPHRGAM

BEAM CAMBER AT MIDSPAN

BEAM	AT DAY 0 (D_1) (IN)	AT DAY 30 (D_2) (IN)	DEFL. DUE TO REMAINING DL (IN)
BEAM 1	1/32	1/16	-1/32
BEAM 2	1/32	1/16	-1/16
BEAM 3	1/32	1/16	-1/16
BEAM 4	1/32	1/16	-3/32
BEAM 5	7/16	13/16	-1/8
BEAM 6	7/16	13/16	-5/32
BEAM 7	7/16	13/16	-3/16
BEAM 8	7/16	13/16	-7/32
BEAM 9	7/16	13/16	-1/4
BEAM 10	7/16	13/16	-9/32
BEAM 11	9/16	1	-5/16
BEAM 12	9/16	1	-11/32
BEAM 13	9/16	1	-3/8
BEAM 14	9/16	1	-13/32
BEAM 15	9/16	1	-13/32
BEAM 16	9/16	1	-13/32
BEAM 17	9/16	1	-13/32
BEAM 18	9/16	1	-13/32
BEAM 19	9/16	1	-3/8
BEAM 20	9/16	1	-3/8
BEAM 21	9/16	1	-11/32
BEAM 22	7/16	13/16	-5/16
BEAM 23	7/16	13/16	-9/32
BEAM 24	7/16	13/16	-1/4
BEAM 25	7/16	13/16	-3/16
BEAM 26	7/16	13/16	-5/32
BEAM 27	7/16	13/16	-1/8
BEAM 28	1/32	1/16	-1/8
BEAM 29	1/32	1/16	-3/32
BEAM 30	1/32	1/16	-1/16
BEAM 31	1/32	1/16	-1/16
BEAM 32	1/32	1/16	-1/32

FINAL PLANS
NOT FOR CONSTRUCTION

BEAM DETAILS (3 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER	CHECKER
NES	JRM

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
20	41

SHEET	TOTAL
P.458	627

SUM-077/008-11.65/00.00

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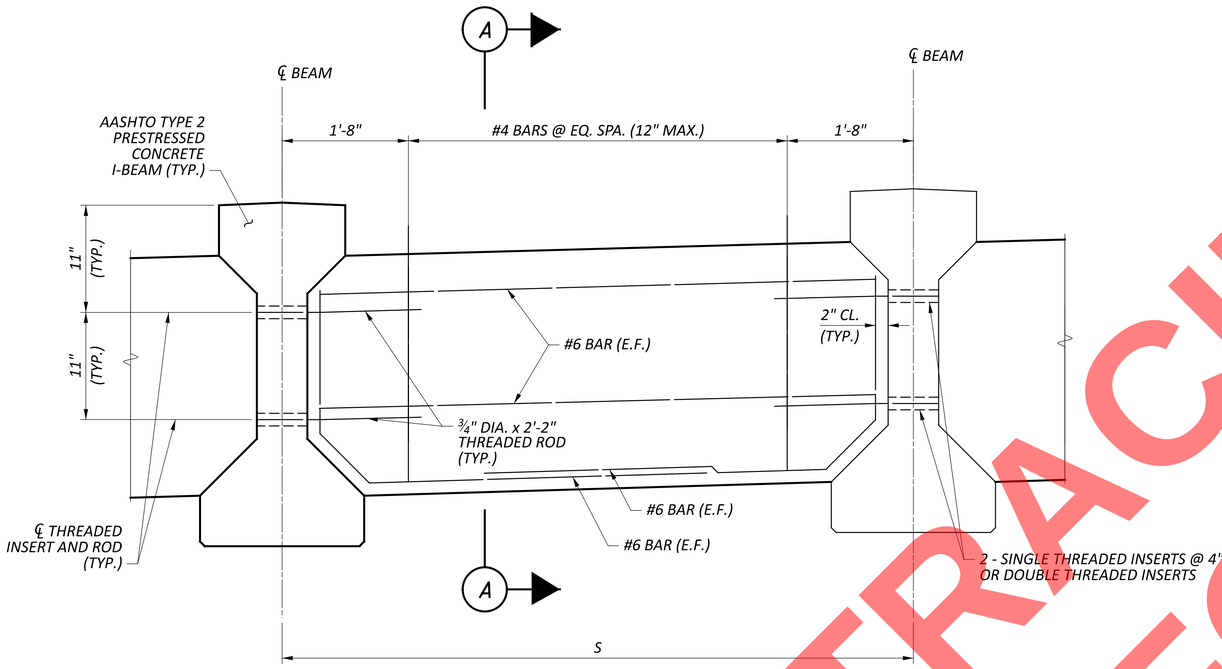
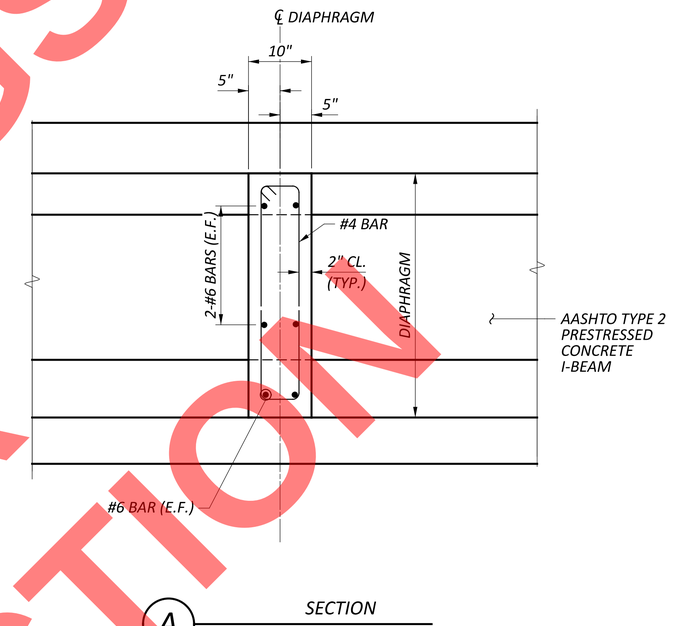


TYPICAL INTERMEDIATE DIAPHRAGM ELEVATION

(INTERIOR DIAPHRAGM BAY SHOWN, EXTERIOR DIAPHRAGM BAY SIMILAR)
(DECK NOT SHOWN)



SECTION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES

1. *FOR THREADED INSERTS AND ADDITIONAL DETAILS NOT SHOWN, SEE STANDARD DRAWING PSID-1-13.*
2. *THREADED RODS SHALL CONFORM TO 709.01, 709.03, OR 709.05 WITH THREADS FORMED PRIOR TO GALVANIZING.*
3. *PAYMENT FOR THE THREADED INSERTS AND THREADED RODS SHALL BE INCIDENTAL TO THE PRESTRESSED CONCRETE BRIDGE I-BEAMS MEMBERS.*
4. *PAYMENT FOR THE CONCRETE AND REINFORCING STEEL REQUIRED TO CONSTRUCT EACH CAST-IN-PLACE CONCRETE INTERMEDIATE DIAPHRAGM SHALL BE INCIDENTAL TO ITEM 515 - INTERMEDIATE DIAPHRAGMS.*
5. *ALL EXPOSED SURFACES OF THE REINFORCED CONCRETE INTERMEDIATE DIAPHRAGMS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. THE DEPARTMENT WILL PAY FOR SEALING OF THE DIAPHRAGMS UNDER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).*
6. *CONCRETE FOR INTERMEDIATE DIAPHRAGMS SHALL CONFORM TO ITEM 511.*
7. *CAST-IN-PLACE INTERMEDIATE DIAPHRAGMS TO BE PLACED AND CURED AT LEAST 48 HOURS BEFORE DECK PLACEMENT.*

BEAM DETAILS (4 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
NES	JRM

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
21	41

SHEET	TOTAL
P.459	627

SUM-077/008-11.65/00.00

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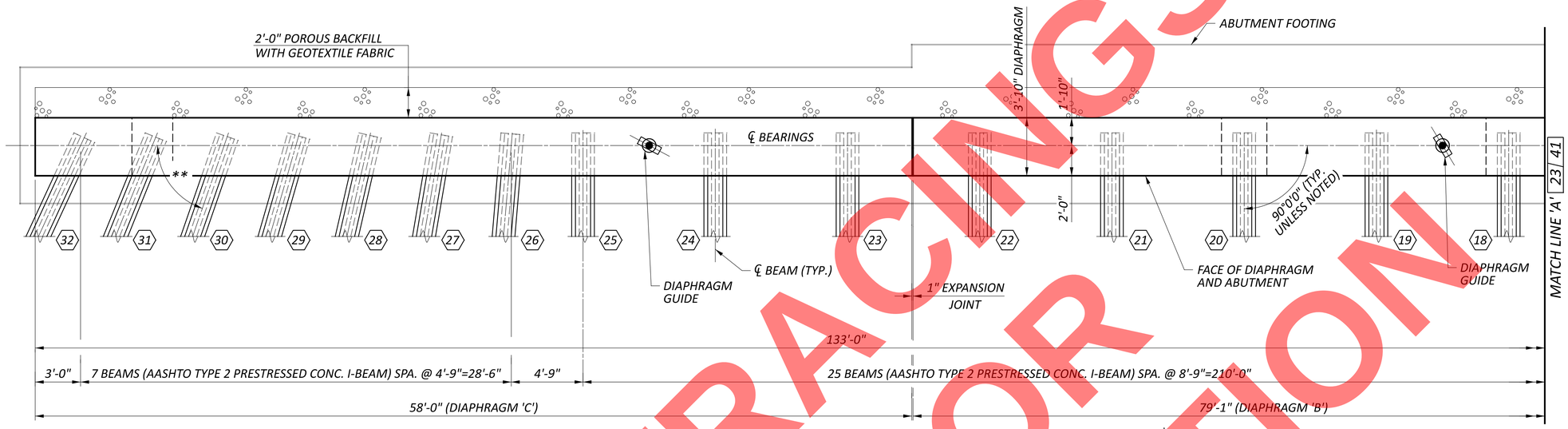


REAR ABUTMENT DIAPHRAGM PLAN

LEGEND

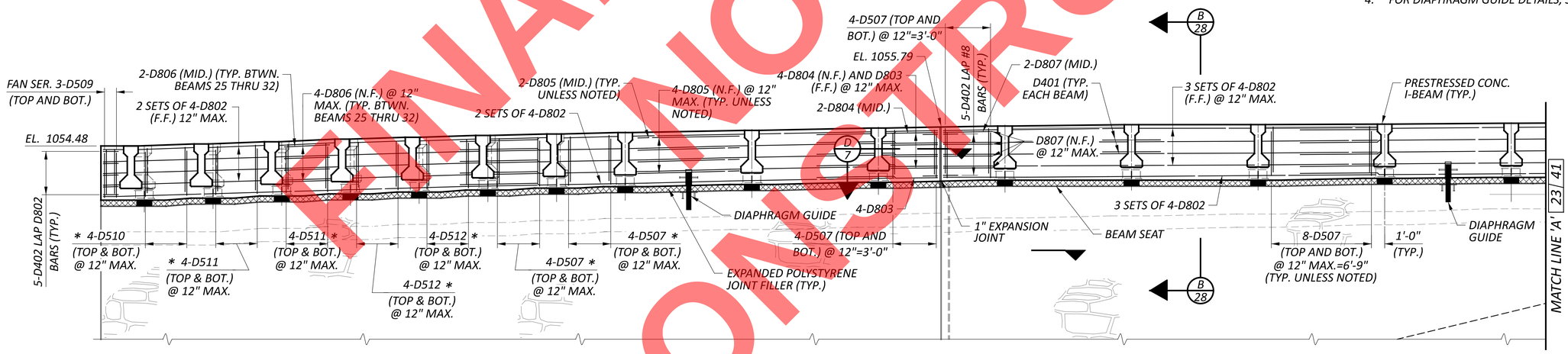
(#) BEAM DESIGNATION

** FOR BEAM 26 THRU 32 ANGLES REFER TO FRAMING PLAN SHEET 17 / 41 .

* BARS EQUALLY SPACED AND PLACED PARALLEL TO BEAM.

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR REAR ABUTMENT DETAILS, SEE SHEETS 5 / 41 THRU 7 / 41 AND 11 / 41 .
3. DIAPHRAGM REINFORCING BARS TO BE SPACED ALONG THE BACK FACE OF THE DIAPHRAGM, AND PLACED PARALLEL WITH THE BEAMS.
4. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 / 41 .



REAR ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUPERSTRUCTURE DETAILS (1 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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www.arcadis.com

DESIGNER	CHECKER
NES	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
22	41

SHEET	TOTAL
P.460	627

SUM-077/008-11.65/00.00

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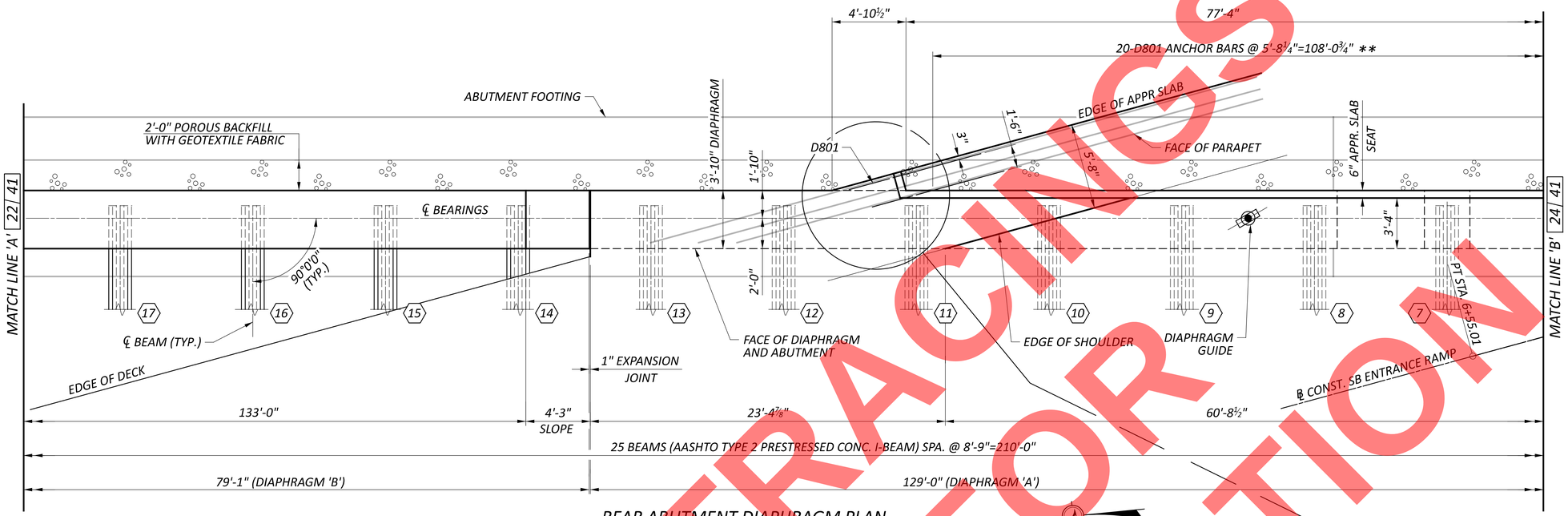
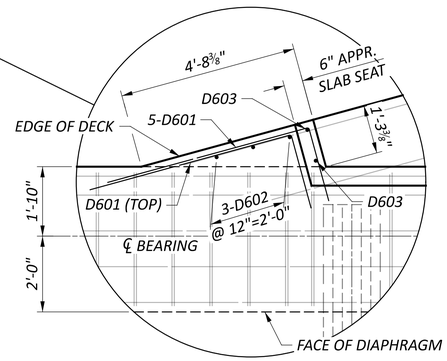


REAR ABUTMENT DIAPHRAGM PLAN



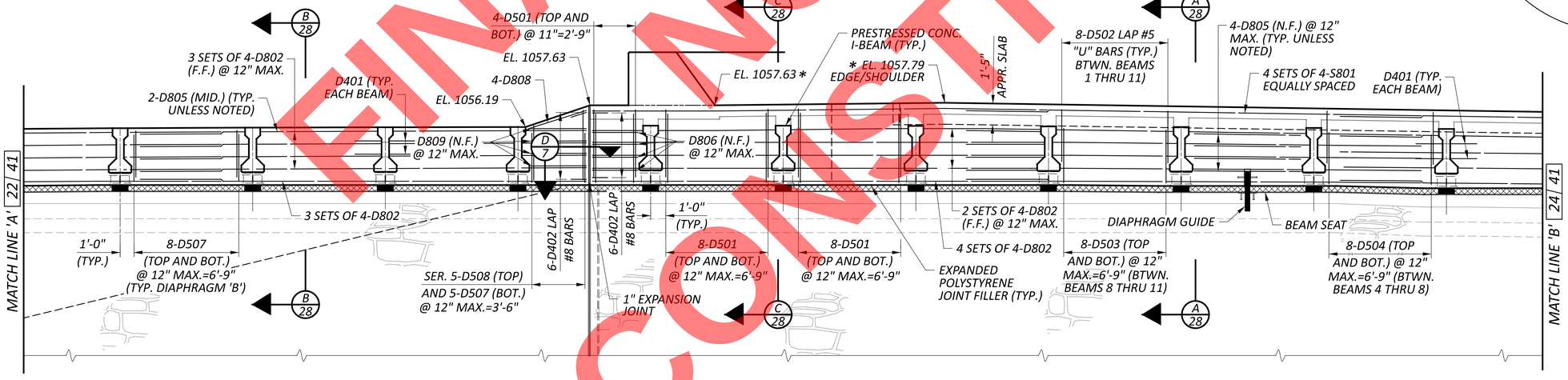
NOTE: LAP HORIZONTAL REINFORCING WITH S801 OR D802 BARS.

LEGEND

- (#) BEAM NUMBER DESIGNATION
- * ELEVATIONS TAKEN AT ℄ BEARING
- ** REINFORCING BARS TO BE SPACED ALONG THE BACK FACE OF THE DIAPHRAGM, AND PLACED PARALLEL WITH THE REFERENCE CHORD.

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR REAR ABUTMENT DETAILS, SEE SHEETS 5/41 THRU 7/41 AND 11/41.
3. FOR DIAPHRAGM DETAILS, SEE SHEET 12/41 .



REAR ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (2 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER	CHECKER
NES	SS

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
23	41

SHEET	TOTAL
P.461	627

SUM-077/008-11.65/00.00

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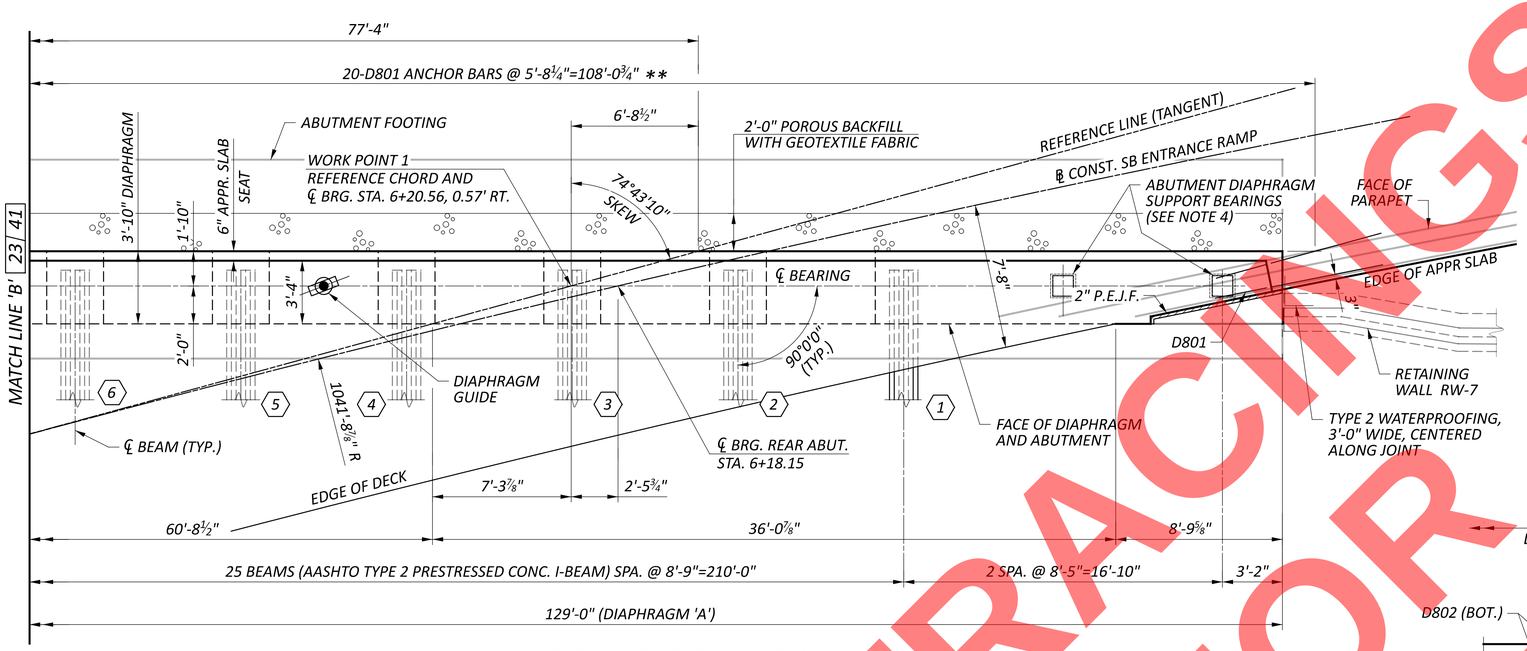
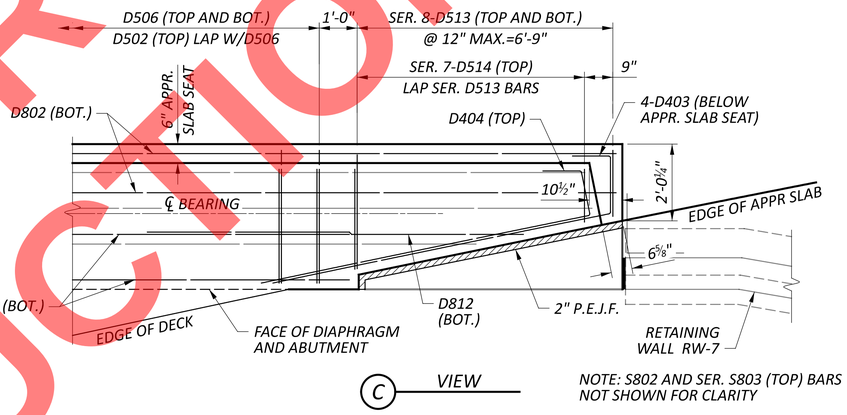


REAR ABUTMENT DIAPHRAGM PLAN

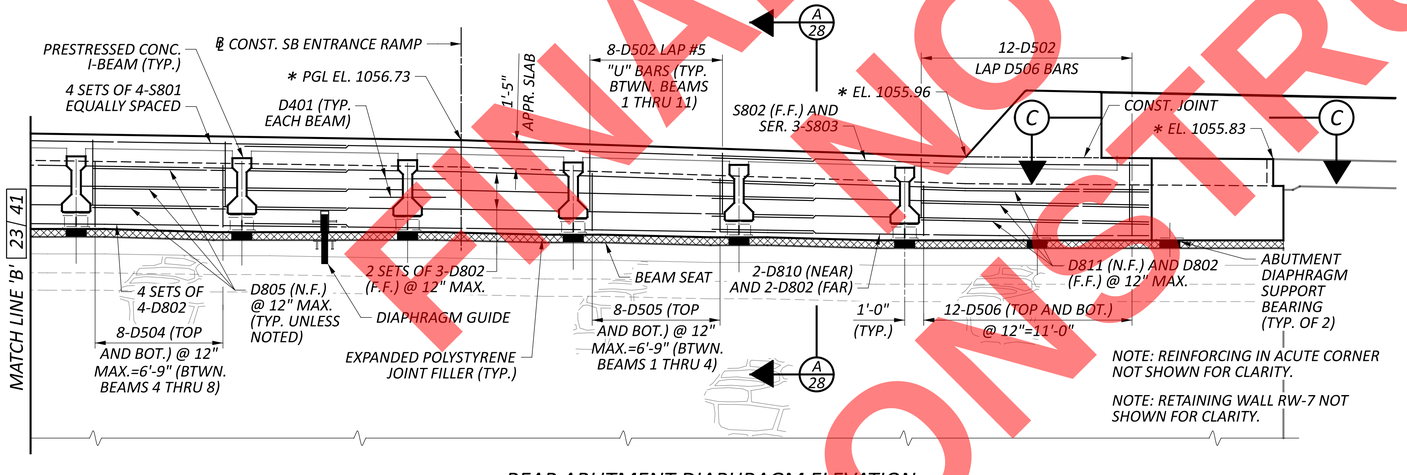
NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR REAR ABUTMENT DETAILS, SEE SHEETS 5 | 41 THRU 7 | 41 AND 7 | 41 .
3. FOR BEARING DETAILS, SEE SHEETS 14 | 41 AND 15 | 41 .
4. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 12 | 41 .



C VIEW

NOTE: S802 AND SER. S803 (TOP) BARS NOT SHOWN FOR CLARITY



NOTE: REINFORCING IN ACUTE CORNER NOT SHOWN FOR CLARITY.

NOTE: RETAINING WALL RW-7 NOT SHOWN FOR CLARITY.

REAR ABUTMENT DIAPHRAGM ELEVATION

LEGEND

(#) BEAM NUMBER DESIGNATION

* ELEVATIONS TAKEN AT ℄ BEARING

** REINFORCING BARS TO BE SPACED ALONG THE BACK FACE OF THE DIAPHRAGM, AND PLACED PARALLEL WITH THE REFERENCE CHORD.

FINAL PLANS
NOT FOR
CONSTRUCTION

SUPERSTRUCTURE DETAILS (3 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9500
www.arcadis.com

DESIGNER	CHECKER
NES	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
24	41

SHEET	TOTAL
P.462	627

SUM-077/008-11.65/00.00

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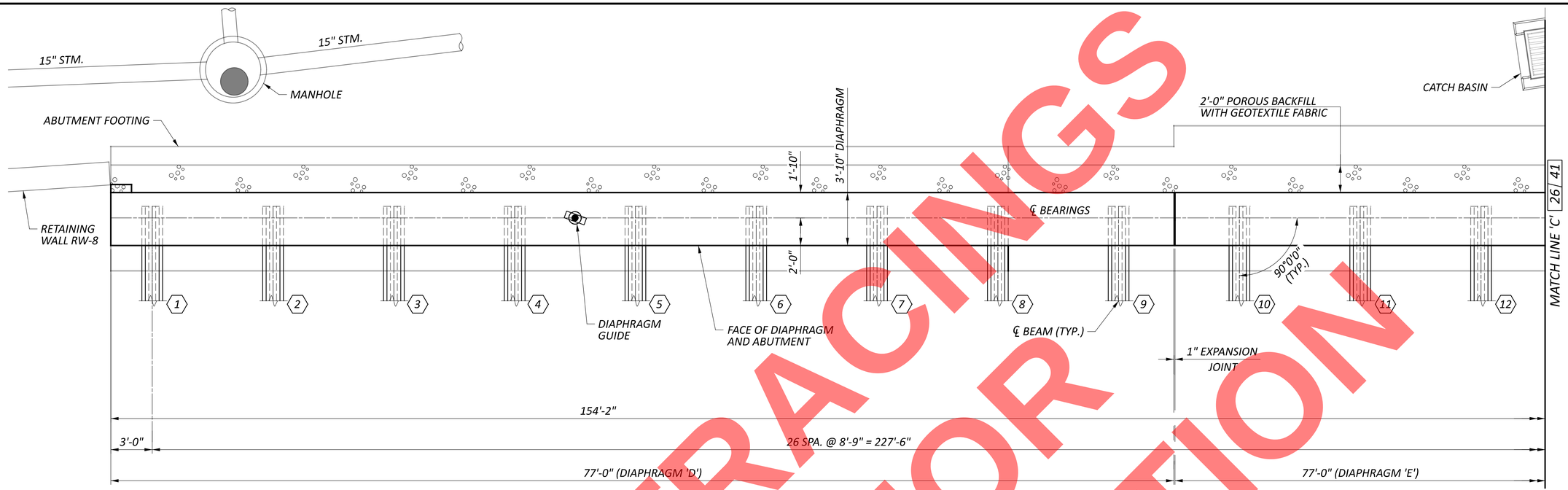


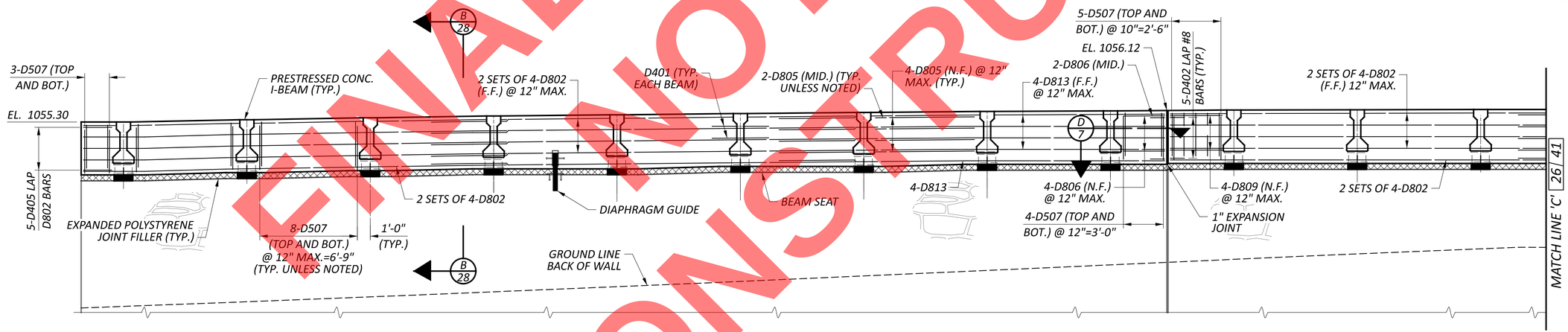
FORWARD ABUTMENT DIAPHRAGM PLAN

LEGEND

(#) BEAM NUMBER DESIGNATION

NOTES

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 8 / 41 THRU 11 / 41 .
3. FOR EXPANSION JOINT (KEYED) DETAILS SEE SECTION C-C ON SHEET 7 / 41 .
4. FOR DIAPHRAGM GUIDE DETAILS SEE SHEET 12 / 41.



FORWARD ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (4 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4355
www.arcadis.com

DESIGNER	CHECKER
NES	CMD

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
25	41

SHEET	TOTAL
P.463	627

SUM-077/008-11.65/00.00

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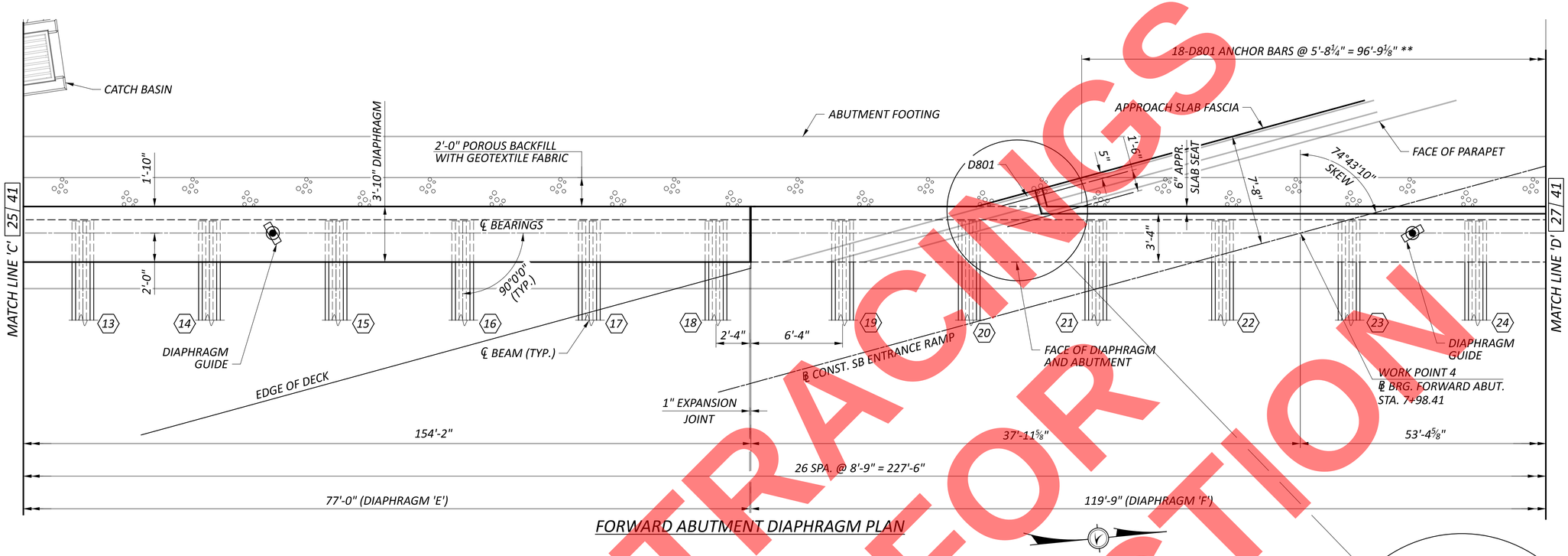
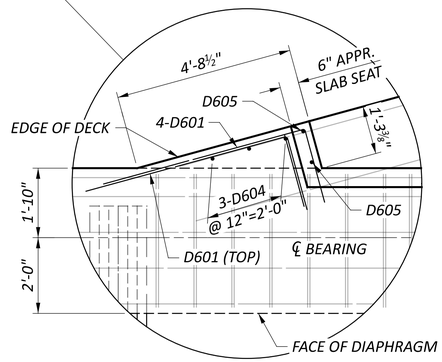


FORWARD ABUTMENT DIAPHRAGM PLAN



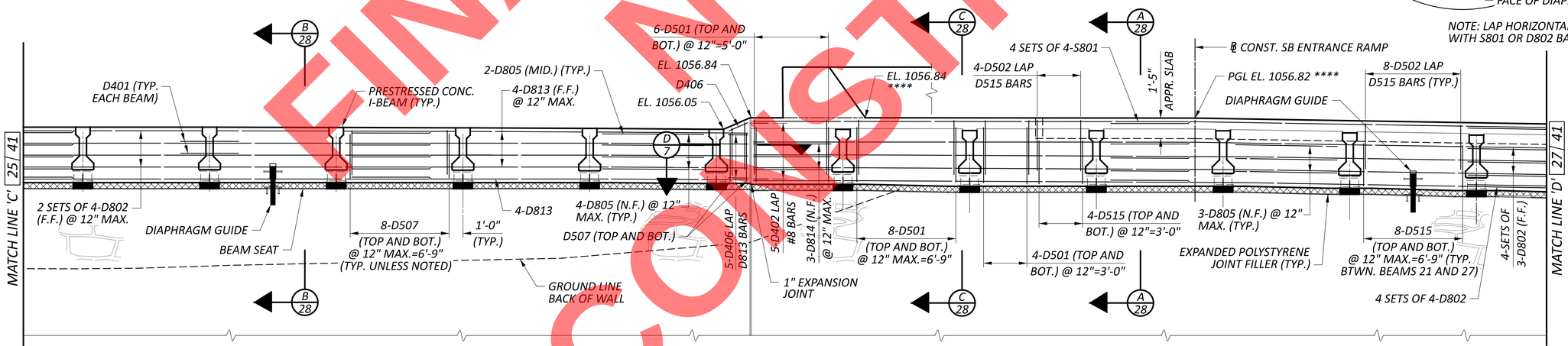
NOTE: LAP HORIZONTAL REINFORCING WITH S801 OR D802 BARS.

LEGEND

- (#) BEAM NUMBER DESIGNATION
- **** ELEVATIONS TAKEN AT ℄ BEARING
- ** REINFORCING BARS TO BE SPACED ALONG THE BACK FACE OF THE DIAPHRAGM, AND PLACED PARALLEL WITH THE REFERENCE CHORD.

NOTES

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 8 | 41 THRU 11 | 41 .
3. FOR EXPANSION JOINT (KEYED) DETAILS SEE SECTION C-C ON SHEET 7 | 41 .
4. FOR DIAPHRAGM GUIDE DETAILS SEE SHEET 12 | 41.



FORWARD ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (5 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 9:12:55 AM USER: cferrell
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SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4955
www.arcadis.com

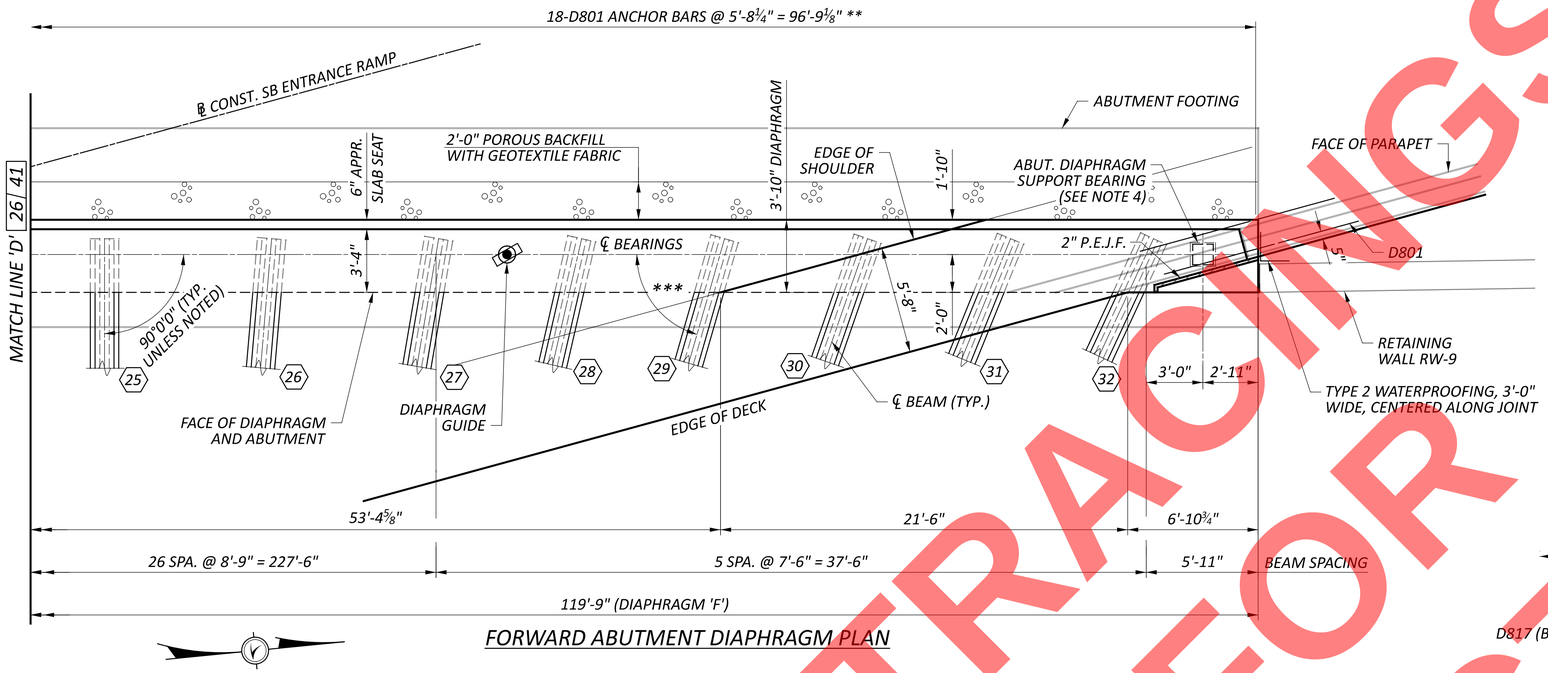
DESIGNER	CHECKER
NES	CMD

REVIEWER: RBB 8-14-26

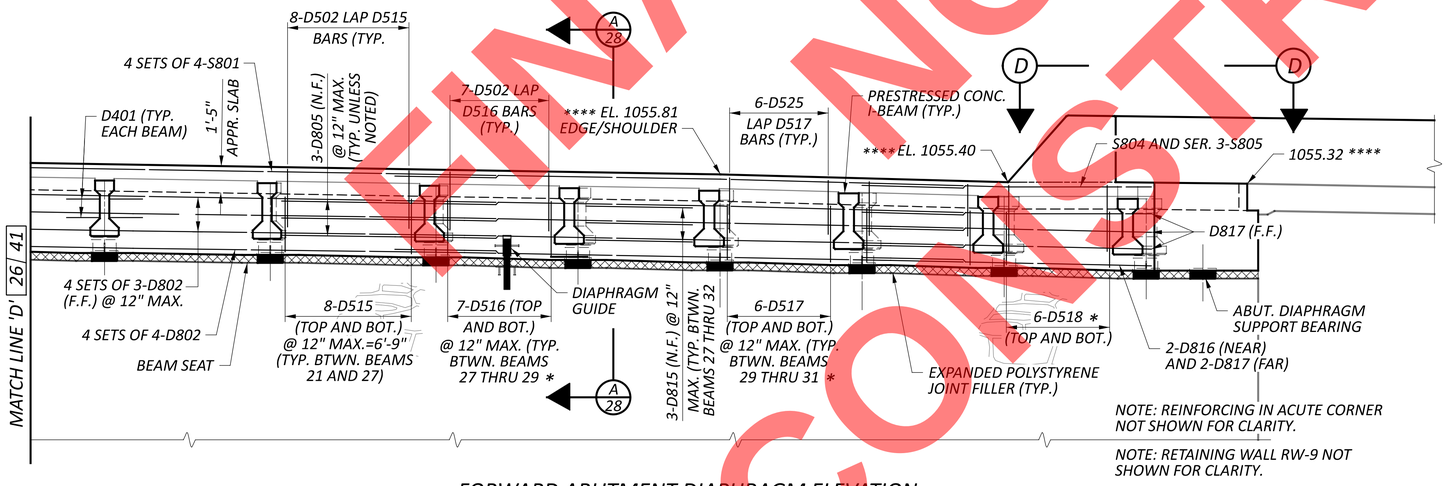
PROJECT ID: 114685

SUBSET	TOTAL
26	41

SHEET	TOTAL
P.464	627



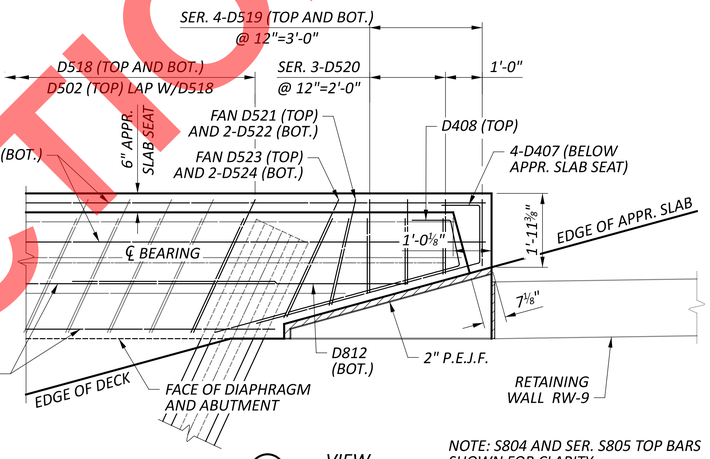
FORWARD ABUTMENT DIAPHRAGM PLAN



NOTE: REINFORCING IN ACUTE CORNER NOT SHOWN FOR CLARITY.

NOTE: RETAINING WALL RW-9 NOT SHOWN FOR CLARITY.

FORWARD ABUTMENT DIAPHRAGM ELEVATION



D VIEW

NOTE: S804 AND SER. S805 TOP BARS SHOWN FOR CLARITY

NOTES

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
2. FOR FORWARD ABUTMENT DETAILS, SEE SHEETS 8 | 41 THRU 11 | 41 .
3. FOR DIAPHRAGM GUIDE DETAILS SEE SHEET 12 | 41.
4. FOR BEARING DETAILS, SEE SHEETS 14 | 41 AND 15 | 41 .

LEGEND

(#)	BEAM NUMBER DESIGNATION
*	BARS EQUALLY SPACED AND PLACED PARALLEL TO BEAM.
**	REINFORCING BARS TO BE SPACED ALONG THE BACK FACE OF THE DIAPHRAGM, AND PLACED PARALLEL WITH THE REFERENCE CHORD.
***	FOR BEAM 26 THRU 32 ANGLES REFER TO FRAMING PLAN SHEET 17	41 .
****	ELEVATIONS TAKEN AT ℄ BEARING

FINAL TRACINGS NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (6 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
NES	CMD

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
27	41

SHEET	TOTAL
P.465	627

SUM-077/008-11.65/00.00

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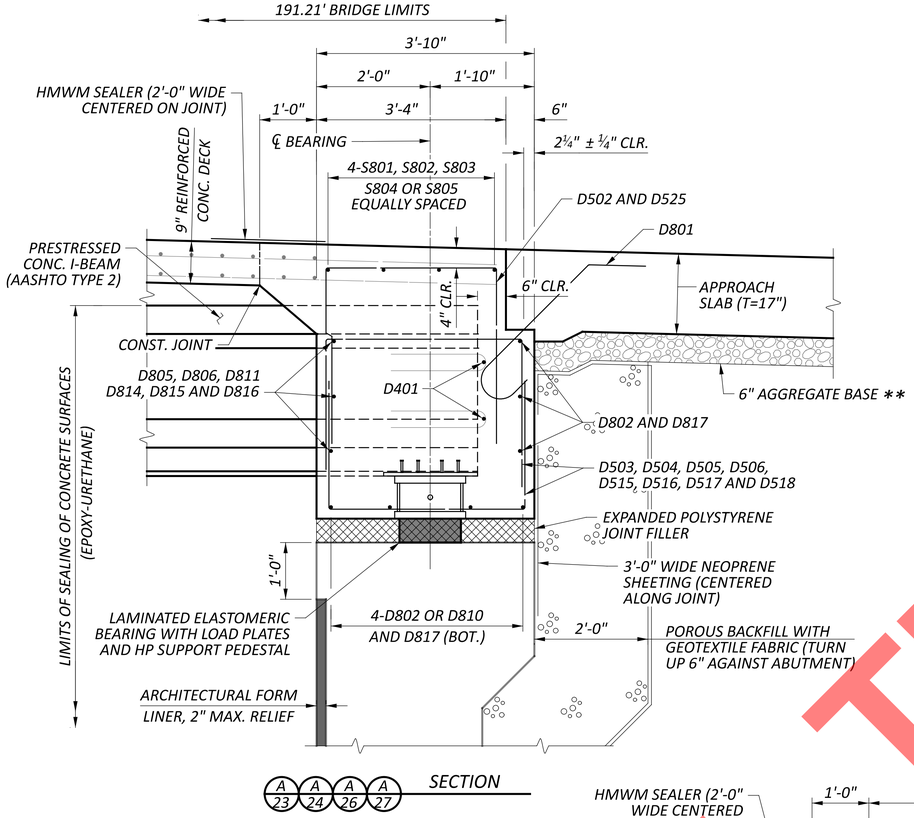

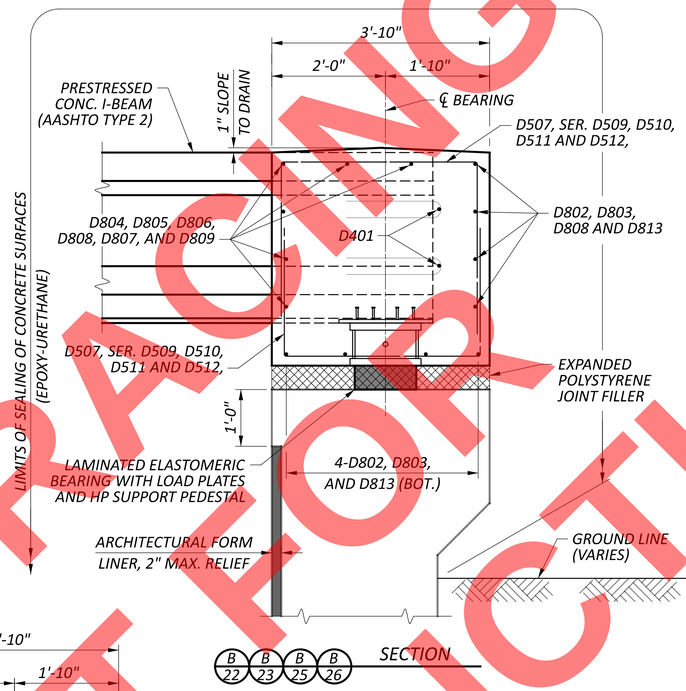

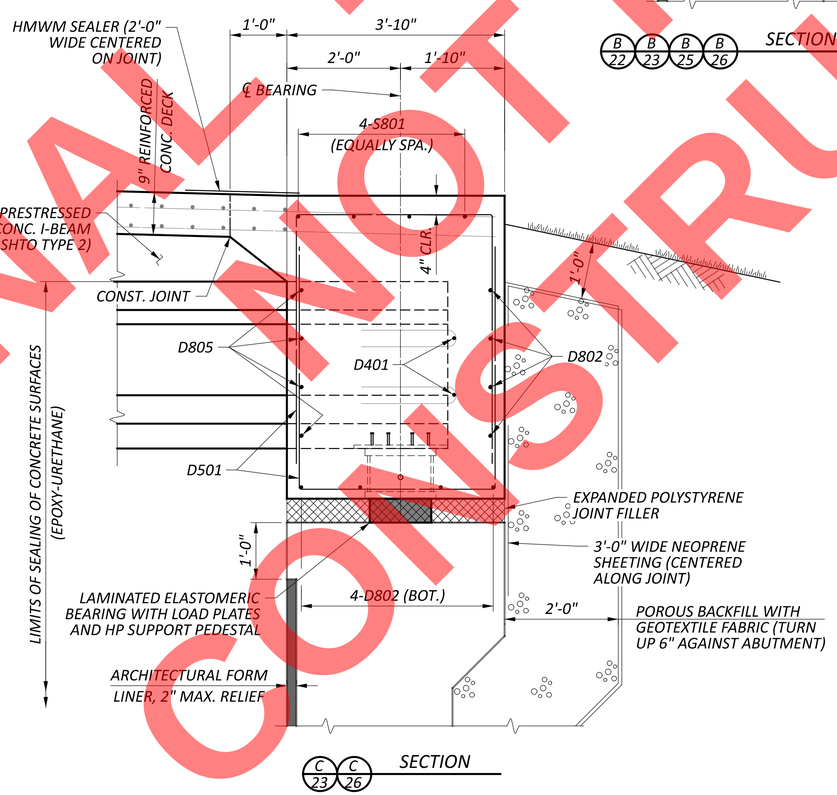

NOTES

1. ALL CONCRETE SHALL BE CLASS QC2.
2. PROVIDE A 1" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
3. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS AFTER THE DECK CONCRETE HAS REACHED ITS INITIAL SET.
4. EXPANDED POLYSTYRENE FILLER SHALL BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN FOR PAYMENT.
5. FOR ADDITIONAL SEMI-INTEGRAL ABUTMENT DETAILS AND NOTES, SEE ODOT STANDARD DRAWING SICD-1-21.
6. FOR DECK PLAN, TRANSVERSE SECTION AND ADDITIONAL DETAILS AND NOTES, SEE SHEETS 31 / 41 AND 33 / 41 .
7. FOR APPROACH SLAB DETAILS, SEE SHEETS 35 / 41 THRU 38 / 41 .
8. GEOTEXTILE FABRIC SHALL CONFORM WITH 712.09, TYPE A, AND BE INCLUDED WITH ITEM 518, POROUS BACKFILL FOR PAYMENT.
9. FOR BEARING DETAILS, SEE SHEETS 14 / 41 AND 15 / 41 .

LEGEND

** INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.

FINAL PLANS NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (7 OF 7)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4395
www.arcadis.com

DESIGNER	CHECKER
NES	CMD

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
28	41

SHEET	TOTAL
P.466	627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 9:15:33 AM USER: dferrell
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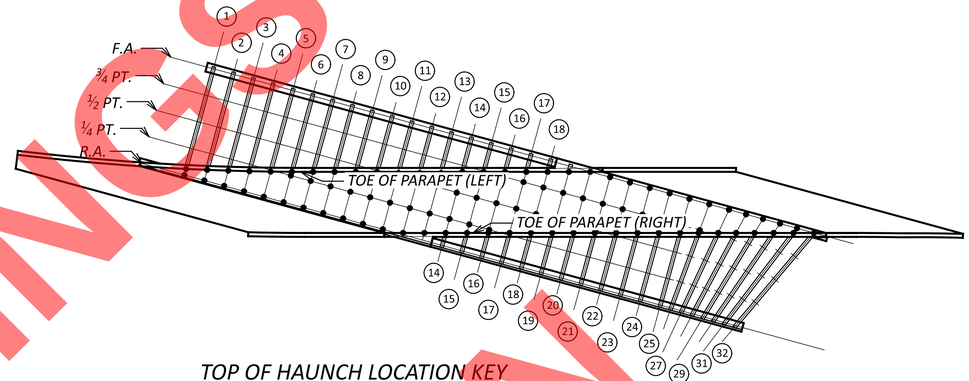
TOP OF HAUNCH ELEVATION TABLE

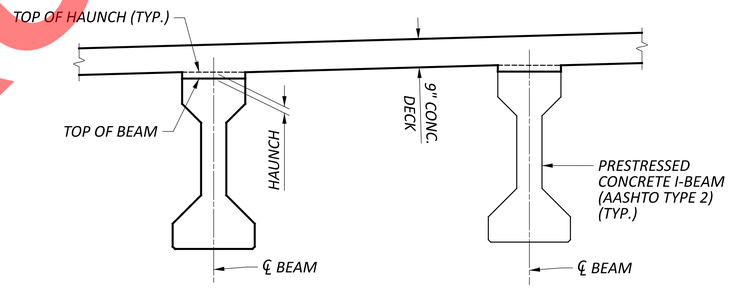
LOCATION		LEFT RAILING @ TOE	R.A.	1/4	1/2	3/4	F.A.	RIGHT RAILING @ TOE
BEAM 1	DISTANCE FROM ℄ REAR ABUT. (FT)	2.71	0.00	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1055.46	1055.58					
BEAM 2	DISTANCE FROM ℄ REAR ABUT. (FT)	4.69	0.00	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1055.62	1055.82					
BEAM 3	DISTANCE FROM ℄ REAR ABUT. (FT)	6.74	0.00	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1055.77	1056.03					
BEAM 4	DISTANCE FROM ℄ REAR ABUT. (FT)	8.88	0.00	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1055.90	1056.24					
BEAM 5	DISTANCE FROM ℄ REAR ABUT. (FT)	11.09	0.00	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.06	1056.42					
BEAM 6	DISTANCE FROM ℄ REAR ABUT. (FT)	13.39	0.00	11.72	N/A	N/A	N/A	N/A
	ELEVATION	1056.16	1056.58	1056.22				
BEAM 7	DISTANCE FROM ℄ REAR ABUT. (FT)	15.77	0.00	11.72	N/A	N/A	N/A	N/A
	ELEVATION	1056.25	1056.73	1056.39				
BEAM 8	DISTANCE FROM ℄ REAR ABUT. (FT)	18.16	0.00	11.72	N/A	N/A	N/A	N/A
	ELEVATION	1056.32	1056.86	1056.55				
BEAM 9	DISTANCE FROM ℄ REAR ABUT. (FT)	20.55	0.00	11.72	N/A	N/A	N/A	N/A
	ELEVATION	1056.38	1056.96	1056.67				
BEAM 10	DISTANCE FROM ℄ REAR ABUT. (FT)	22.94	0.00	11.72	23.44	N/A	N/A	N/A
	ELEVATION	1056.43	1057.04	1056.78	1056.43			
BEAM 11	DISTANCE FROM ℄ REAR ABUT. (FT)	25.33	0.00	11.72	23.44	N/A	N/A	N/A
	ELEVATION	1056.47	1057.00	1056.87	1056.55			
BEAM 12	DISTANCE FROM ℄ REAR ABUT. (FT)	27.72	0.00	11.72	23.44	N/A	N/A	0.77
	ELEVATION	1056.48	1056.78	1056.93	1056.65			1056.88
BEAM 13	DISTANCE FROM ℄ REAR ABUT. (FT)	30.11	N/A	11.72	23.44	N/A	N/A	3.16
	ELEVATION	1056.48		1056.97	1056.74			1056.87
BEAM 14	DISTANCE FROM ℄ REAR ABUT. (FT)	32.50	N/A	11.72	23.44	N/A	N/A	5.55
	ELEVATION	1056.47		1056.93	1056.78			1056.85
BEAM 15	DISTANCE FROM ℄ REAR ABUT. (FT)	34.89	N/A	11.72	23.44	N/A	N/A	7.94
	ELEVATION	1056.45		1056.97	1056.80			1056.81
BEAM 16	DISTANCE FROM ℄ REAR ABUT. (FT)	37.28	N/A	11.72	23.44	35.16	N/A	10.33
	ELEVATION	1056.40		1056.82	1056.80	1057.25		1056.76
BEAM 17	DISTANCE FROM ℄ REAR ABUT. (FT)	39.67	N/A	11.72	23.44	35.16	N/A	12.72
	ELEVATION	1056.34		1056.70	1056.77	1056.55		1056.70
BEAM 18	DISTANCE FROM ℄ REAR ABUT. (FT)	42.06	N/A	N/A	23.44	35.16	N/A	15.11
	ELEVATION	1056.27			1056.73	1056.57		1056.62
BEAM 19	DISTANCE FROM ℄ REAR ABUT. (FT)	44.45	N/A	N/A	23.44	35.16	N/A	17.50
	ELEVATION	1056.19			1056.66	1056.50		1056.52
BEAM 20	DISTANCE FROM ℄ REAR ABUT. (FT)	46.84	N/A	N/A	23.44	35.16	46.88	19.89
	ELEVATION	1056.09			1056.55	1056.45	1056.09	1056.42
BEAM 21	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	23.44	35.16	46.88	22.28
	ELEVATION				1056.34	1056.36	1056.09	1056.29
BEAM 22	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	23.44	35.16	46.88	24.67
	ELEVATION				1056.15	1056.23	1056.08	1056.14
BEAM 23	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	35.16	46.88	27.06
	ELEVATION					1056.10	1056.02	1055.99
BEAM 24	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	35.16	46.88	29.45
	ELEVATION					1055.96	1055.91	1055.83
BEAM 25	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	35.16	46.88	31.84
	ELEVATION					1055.78	1055.77	1055.67
BEAM 26	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	35.28	47.05	34.06
	ELEVATION					1055.57	1055.63	1055.53
BEAM 27	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	35.66	47.55	36.65
	ELEVATION					1055.40	1055.48	1055.39
BEAM 28	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	N/A	48.09	39.12
	ELEVATION						1055.35	1055.21
BEAM 29	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	N/A	48.78	41.83
	ELEVATION						1055.20	1055.08
BEAM 30	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	N/A	49.61	44.81
	ELEVATION						1055.05	1054.94
BEAM 31	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	N/A	50.58	48.09
	ELEVATION						1054.85	1054.80
BEAM 32	DISTANCE FROM ℄ REAR ABUT. (FT)	N/A	N/A	N/A	N/A	N/A	51.68	51.68
	ELEVATION						1054.65	1054.65



TOP OF HAUNCH LOCATION KEY

LEGEND

● TOP OF HAUNCH ELEVATION LOCATION AT ℄ OF BEAM



TOP OF HAUNCH ELEVATION KEY

NOTE

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM/GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

FINAL TRACINGS NOT FOR CONSTRUCTION

TOP OF HAUNCH ELEVATION TABLE
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
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www.arcadis.com

DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
29	41

SHEET	TOTAL
P.467	627

SUM-077/008-11.65/00.00
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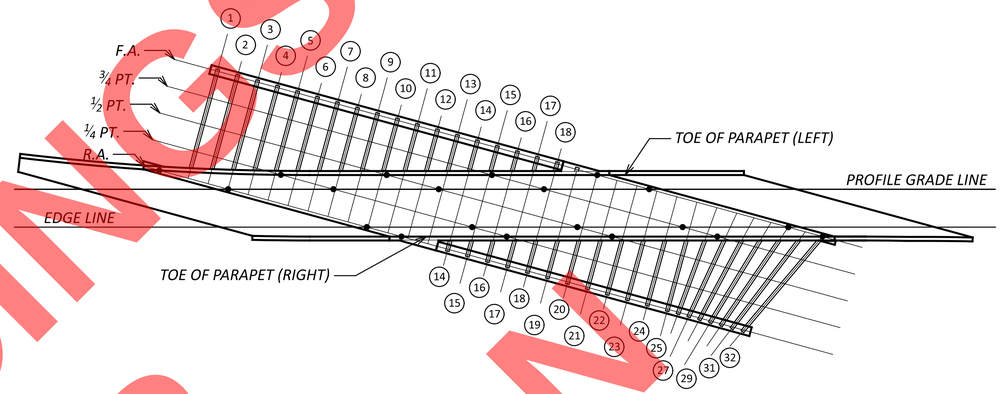
FINAL DECK ELEVATION TABLE

LOCATION		LEFT RAILING @ TOE	PROFILE GRADE LINE	R.A.	1/4	1/2	3/4	F.A.	EDGE OF RIGHT LANE	RIGHT RAILING @ TOE
BEAM 1	STATION	06+04.01	N/A	06+03.42	N/A	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.21		1056.33						
BEAM 2	STATION	06+13.03	N/A	06+11.98	N/A	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.37		1056.57						
BEAM 3	STATION	06+22.07	06+20.63	06+20.50	N/A	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.52	1056.76	1056.78						
BEAM 4	STATION	06+31.13	06+29.64	06+28.99	N/A	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.65	1056.88	1056.99						
BEAM 5	STATION	06+40.21	06+38.66	06+37.45	N/A	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.77	1056.99	1057.17						
BEAM 6	STATION	06+49.31	06+47.70	06+45.87	06+48.87	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.86	1057.09	1057.33	1056.93					
BEAM 7	STATION	06+58.41	06+56.77	06+54.26	06+57.34	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1056.95	1057.17	1057.48	1057.09					
BEAM 8	STATION	06+67.48	06+65.84	06+62.69	06+65.78	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1057.01	1057.24	1057.61	1057.25					
BEAM 9	STATION	06+76.55	06+74.91	06+71.13	06+74.22	N/A	N/A	N/A	N/A	N/A
	ELEVATION	1057.07	1057.30	1057.71	1057.37					
BEAM 10	STATION	06+85.62	06+83.98	06+79.57	06+82.66	06+85.75	N/A	N/A	06+79.61	N/A
	ELEVATION	1057.11	1057.35	1057.79	1057.48	1057.11			1057.79	
BEAM 11	STATION	06+94.69	06+93.05	06+88.01	06+91.10	06+94.19	N/A	N/A	06+88.68	N/A
	ELEVATION	1057.14	1057.38	1057.75	1057.56	1057.22			1057.79	
BEAM 12	STATION	07+03.76	07+02.12	06+96.45	06+99.54	07+02.63	N/A	N/A	06+97.75	06+96.66
	ELEVATION	1057.16	1057.40	1057.53	1057.62	1057.32			1057.78	1057.63
BEAM 13	STATION	07+12.83	07+11.19	N/A	07+07.98	07+11.07	N/A	N/A	07+06.82	07+05.73
	ELEVATION	1057.17	1057.41		1057.66	1057.41			1057.76	1057.61
BEAM 14	STATION	07+21.94	07+20.26	N/A	07+16.42	07+19.51	N/A	N/A	07+15.89	07+14.80
	ELEVATION	1057.16	1057.40		1057.62	1057.45			1057.72	1057.57
BEAM 15	STATION	07+30.97	07+29.33	N/A	07+24.86	07+27.95	07+31.04	N/A	07+24.96	07+23.87
	ELEVATION	1057.14	1057.38		1057.66	1057.47	1057.14		1057.67	1057.52
BEAM 16	STATION	07+40.04	07+38.40	N/A	07+33.31	07+36.39	07+39.48	N/A	07+34.03	07+32.94
	ELEVATION	1057.10	1057.35		1057.51	1057.47	1057.19		1057.61	1057.46
BEAM 17	STATION	07+49.11	07+47.47	N/A	07+41.75	07+44.83	07+47.92	N/A	07+43.10	07+42.02
	ELEVATION	1057.06	1057.31		1057.39	1057.44	1057.24		1057.54	1057.39
BEAM 18	STATION	07+58.18	07+56.54	N/A	N/A	07+53.28	07+56.36	N/A	07+52.17	07+51.08
	ELEVATION	1056.99	1057.25			1057.40	1057.26		1057.43	1057.30
BEAM 19	STATION	07+67.25	07+65.62	N/A	N/A	07+61.72	07+64.80	N/A	07+61.24	07+60.15
	ELEVATION	1056.92	1057.18			1057.33	1057.19		1057.35	1057.20
BEAM 20	STATION	07+76.32	07+74.67	N/A	N/A	07+70.16	07+73.24	07+76.33	07+70.31	07+69.22
	ELEVATION	1056.84	1057.10			1057.22	1057.14	1056.84	1057.23	1057.09
BEAM 21	STATION	N/A	07+83.76	N/A	N/A	07+78.60	07+81.69	07+84.77	07+79.39	07+78.29
	ELEVATION		1057.00			1057.01	1057.05	1056.84	1057.11	1056.96
BEAM 22	STATION	N/A	07+92.83	N/A	N/A	07+87.04	07+90.13	07+93.21	07+88.45	07+87.36
	ELEVATION		1056.89			1056.83	1056.94	1056.83	1056.97	1056.82
BEAM 23	STATION	N/A	N/A	N/A	N/A	N/A	07+98.57	08+01.66	07+97.53	07+96.43
	ELEVATION						1056.81	1056.77	1056.82	1056.68
BEAM 24	STATION	N/A	N/A	N/A	N/A	N/A	08+07.01	08+10.10	08+06.60	08+05.50
	ELEVATION						1056.66	1056.66	1056.67	1056.52
BEAM 25	STATION	N/A	N/A	N/A	N/A	N/A	08+15.45	08+18.54	08+15.67	08+14.57
	ELEVATION						1056.48	1056.52	1056.51	1056.37
BEAM 26	STATION	N/A	N/A	N/A	N/A	N/A	08+22.92	08+26.98	08+23.97	08+22.50
	ELEVATION						1056.27	1056.38	1056.37	1056.23
BEAM 27	STATION	N/A	N/A	N/A	N/A	N/A	08+30.40	08+35.42	08+32.68	08+30.81
	ELEVATION						1056.10	1056.23	1056.22	1056.09
BEAM 28	STATION	N/A	N/A	N/A	N/A	N/A	N/A	08+42.65	08+40.56	08+38.41
	ELEVATION							1056.10	1056.09	1055.96
BEAM 29	STATION	N/A	N/A	N/A	N/A	N/A	N/A	08+49.89	08+48.71	08+46.27
	ELEVATION							1055.95	1055.95	1055.83
BEAM 30	STATION	N/A	N/A	N/A	N/A	N/A	N/A	08+57.12	N/A	08+54.41
	ELEVATION							1055.80		1055.69
BEAM 31	STATION	N/A	N/A	N/A	N/A	N/A	N/A	08+64.36	N/A	08+62.85
	ELEVATION							1055.60		1055.55
BEAM 32	STATION	N/A	N/A	N/A	N/A	N/A	N/A	08+71.59	N/A	08+71.59
	ELEVATION							1055.40		1055.40



SCREED LOCATION KEY

LEGEND

- SCREED ELEVATION LOCATION

SCREED ELEVATION TABLE

LOCATION		STATION	OFFSET	ELEVATION
CL BEARING REAR ABUTMENT	LEFT RAILING @ TOE	05+91.02	6.00' LT	1055.96
	PROFILE GRADE LINE	06+18.15	0.00	1056.73
	RIGHT EDGE OF PAVEMENT	06+79.11	16.00' RT	1057.79
	RIGHT RAILING @ TOE	06+93.75	20.00' RT	1057.63
BEAM 1/4 POINT	LEFT RAILING @ TOE	06+42.71	6.00' LT	1056.99
	PROFILE GRADE LINE	06+65.01	0.00	1057.25
	RIGHT EDGE OF PAVEMENT	07+23.57	16.00' RT	1057.70
	RIGHT RAILING @ TOE	07+38.21	20.00' RT	1057.44
BEAM 1/2 POINT	LEFT RAILING @ TOE	06+87.51	6.00' LT	1057.14
	PROFILE GRADE LINE	07+09.48	0.00	1057.43
	RIGHT EDGE OF PAVEMENT	07+68.04	16.00' RT	1057.30
	RIGHT RAILING @ TOE	07+82.68	20.00' RT	1056.92
BEAM 3/4 POINT	LEFT RAILING @ TOE	07+31.98	6.00' LT	1057.15
	PROFILE GRADE LINE	07+53.94	0.00	1057.29
	RIGHT EDGE OF PAVEMENT	08+12.50	16.00' RT	1056.58
	RIGHT RAILING @ TOE	08+27.15	20.00' RT	1056.16
CL BEARING FORWARD ABUTMENT	LEFT RAILING @ TOE	07+76.44	6.00' LT	1056.84
	PROFILE GRADE LINE	07+98.41	0.00	1056.82
	RIGHT EDGE OF PAVEMENT	08+56.97	16.00' RT	1055.81
	RIGHT RAILING @ TOE	08+71.61	20.00' RT	1055.40

NOTES

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

FINAL TRACINGS
NOT FOR CONSTRUCTION

SCREED AND FINAL DECK SURFACE ELEVATIONS
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

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30	41

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P.468	627

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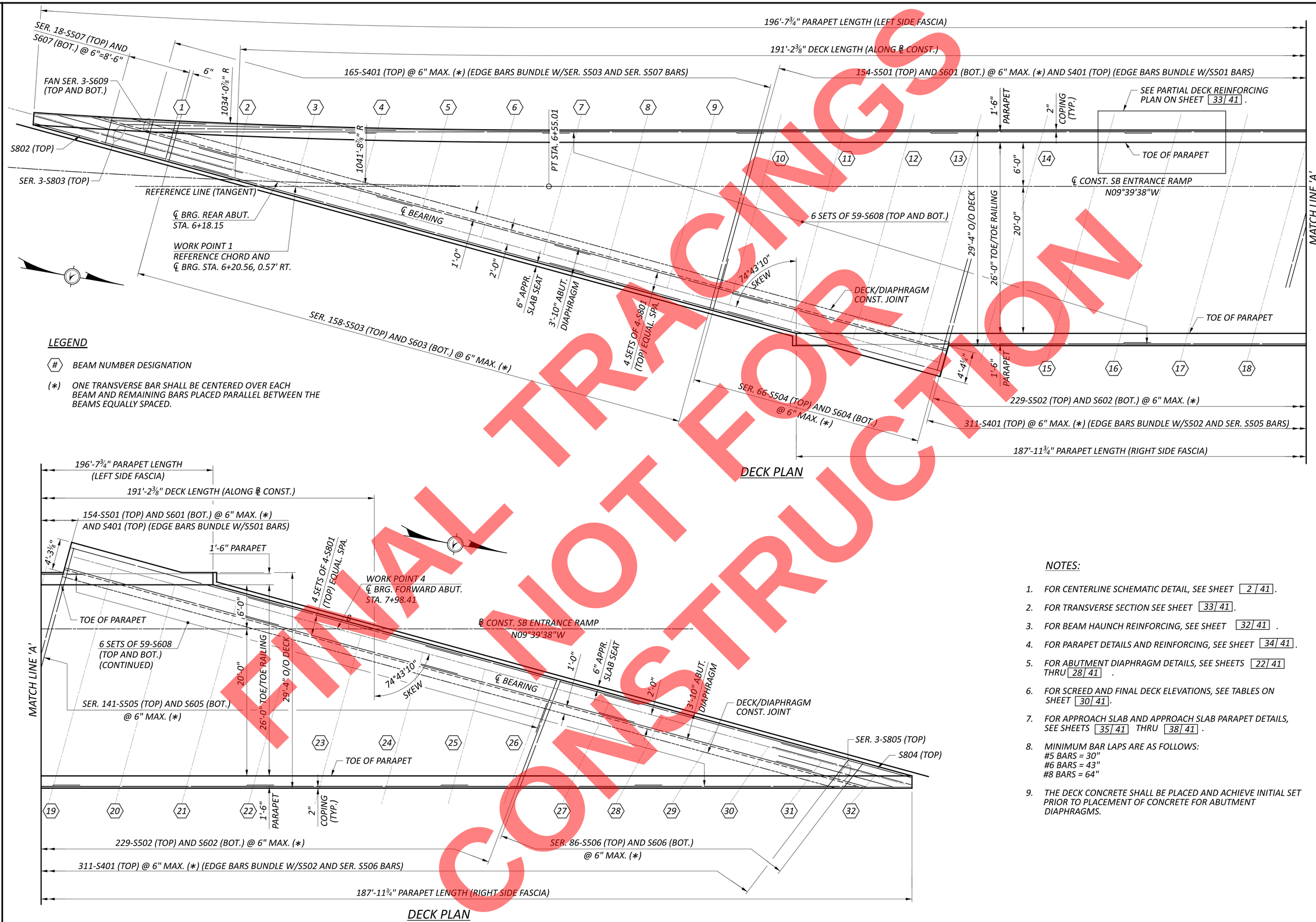

LEGEND

(#) BEAM NUMBER DESIGNATION

(*) ONE TRANSVERSE BAR SHALL BE CENTERED OVER EACH BEAM AND REMAINING BARS PLACED PARALLEL BETWEEN THE BEAMS EQUALLY SPACED.

DECK PLAN

DECK PLAN

NOTES:

1. FOR CENTERLINE SCHEMATIC DETAIL, SEE SHEET 2/41 .
2. FOR TRANSVERSE SECTION SEE SHEET 33/41 .
3. FOR BEAM HAUNCH REINFORCING, SEE SHEET 32/41 .
4. FOR PARAPET DETAILS AND REINFORCING, SEE SHEET 34/41 .
5. FOR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 22/41 THRU 28/41 .
6. FOR SCREED AND FINAL DECK ELEVATIONS, SEE TABLES ON SHEET 30/41 .
7. FOR APPROACH SLAB AND APPROACH SLAB PARAPET DETAILS, SEE SHEETS 35/41 THRU 38/41 .
8. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 30"
   #6 BARS = 43"
   #8 BARS = 64"
9. THE DECK CONCRETE SHALL BE PLACED AND ACHIEVE INITIAL SET PRIOR TO PLACEMENT OF CONCRETE FOR ABUTMENT DIAPHRAGMS.

FINAL TRACINGS NOT FOR CONSTRUCTION

DECK PLAN
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

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NES	JRM

REVIEWER: RBB 8-14-26

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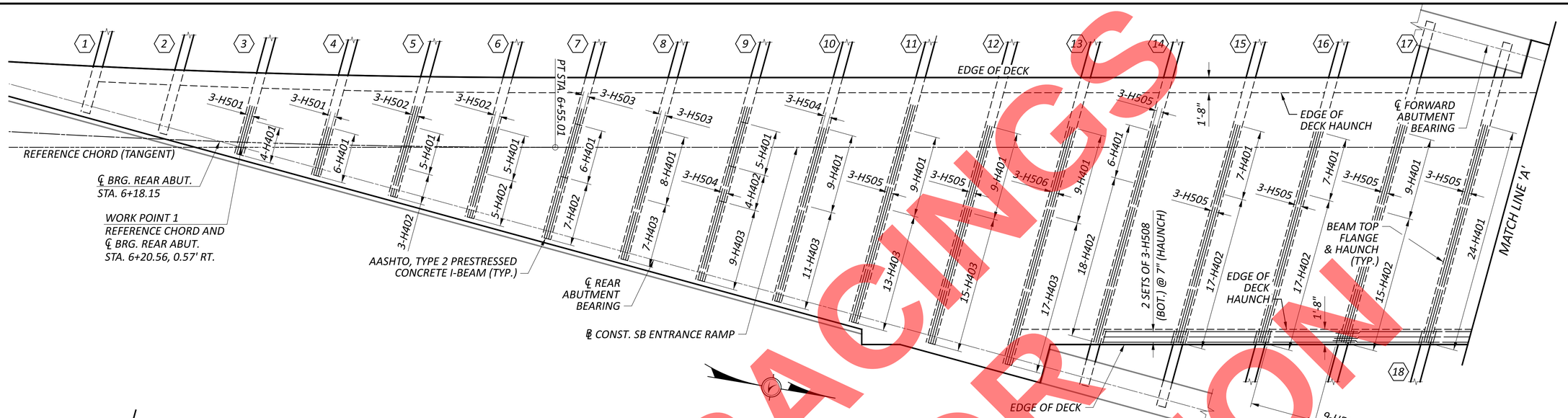
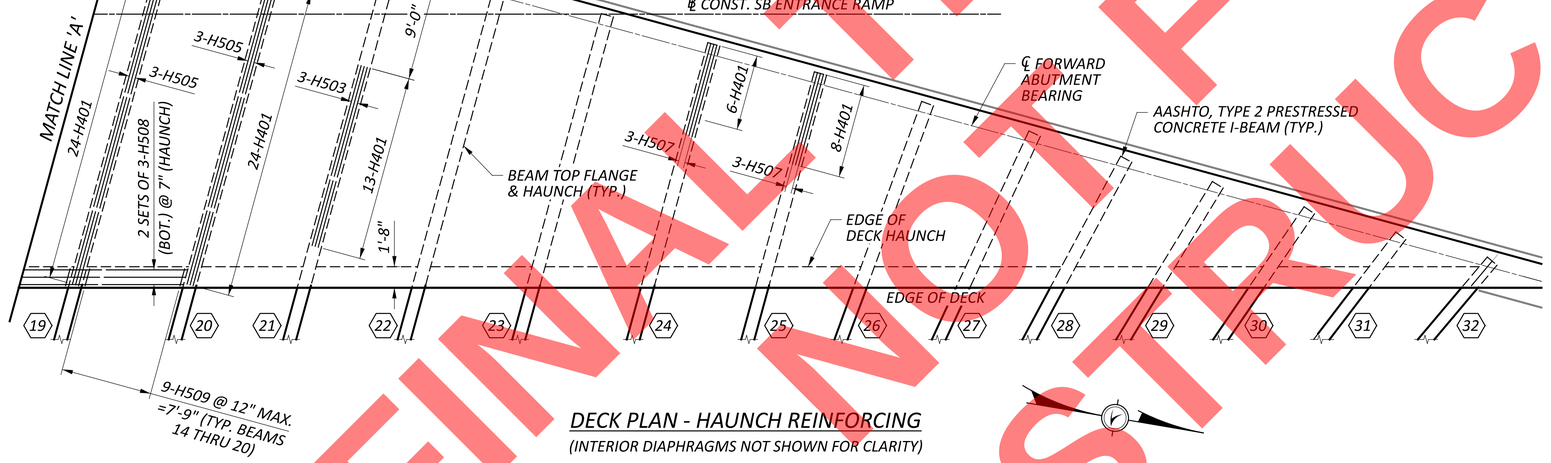


DECK PLAN - HAUNCH REINFORCING

(INTERIOR DIAPHRAGMS NOT SHOWN FOR CLARITY)

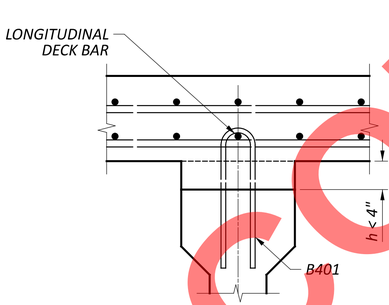


DECK PLAN - HAUNCH REINFORCING

(INTERIOR DIAPHRAGMS NOT SHOWN FOR CLARITY)

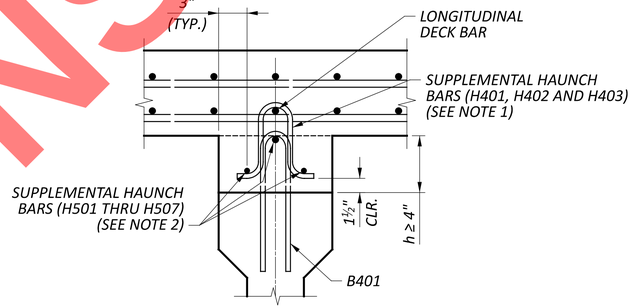
NOTES

1. SUPPLEMENTAL HAUNCH BARS (H401, H402 OR H403) SHALL BE PROVIDED WHERE HAUNCH HEIGHT IS GREATER THAN OR EQUAL TO 4". THESE BARS SHALL BE PLACED AT EACH B401 BAR AT THE LOCATIONS SHOWN IN THE DECK PLAN HAUNCH REINFORCING ON THIS SHEET. THESE BARS SHALL BE PLACED IN LINE WITH THE LONGITUDINAL DECK STEEL (PARALLEL TO REFERENCE LINE) AND MAY BE TIPPED OVER FROM VERTICAL 4:1 (V:H) TO ACCOMMODATE PLACEMENT. HAUNCH REINFORCEMENT SHALL EXTEND A MINIMUM OF 2" INTO THE DECK AND SHALL BE A MINIMUM OF 2 1/2" BELOW THE TOP OF DECK.
2. SUPPLEMENTAL HAUNCH BARS (H501 THRU H507) SHALL BE PROVIDED WHERE HEIGHT OF BEAM HAUNCH IS GREATER THAN OR EQUAL TO 4". BARS SHALL BE PLACED PARALLEL TO THE BEAM FLANGE.
3. FOR DECK PLAN, SEE SHEET 31/41 .
4. FOR TRANSVERSE SECTION, SEE SHEET 33/41 .



UNREINFORCED HAUNCH

BEAMS 1, 2, 22, 23 AND 26 THRU 32



REINFORCED HAUNCH

BEAMS 3 THRU 21, AND 24 AND 25

LEGEND

(#) BEAM NUMBER DESIGNATION

BEAM HAUNCH REINFORCING TABLE

BEAM	THEORETICAL HAUNCH DIMENSIONS		BAR MARK/QUANTITY		
	MINIMUM (IN)	MAXIMUM (IN)	H401	H402	H403
1	2"	3 3/8"	0	0	0
2	2"	4 1/4"	0	0	0
3	2"	5 1/8"	4	0	0
4	2 1/8"	6"	6	0	0
5	2 1/8"	7 3/8"	5	3	0
6	2"	8 1/4"	5	5	0
7	2 1/8"	9"	6	7	0
8	2"	9 3/4"	8	0	7
9	2 1/4"	10 1/2"	5	4	9
10	2"	10 3/4"	9	0	11
11	2"	10 3/8"	9	0	13
12	2"	9 7/8"	9	0	15
13	2 1/8"	9 1/2"	9	0	17
14	2 1/8"	9"	6	18	0
15	2 1/8"	8 5/8"	7	17	0
16	2"	8"	7	17	0
17	2"	7 5/8"	9	15	0
18	2 1/8"	7"	24	0	0
19	2 1/8"	6 3/4"	24	0	0
20	2"	6 1/8"	24	0	0
21	2"	4 5/8"	13	0	0
22	2"	3 3/4"	0	0	0
23	2"	3 3/4"	0	0	0
24	2"	4 1/8"	6	0	0
25	2"	4 3/8"	8	0	0
26	2 1/8"	3 7/8"	0	0	0
27	2"	3 5/8"	0	0	0
28	2 1/8"	3 3/4"	0	0	0
29	2"	3 1/2"	0	0	0
30	2"	3 3/8"	0	0	0
31	2 1/8"	2 3/4"	0	0	0
32	2"	2"	0	0	0

FINAL TRACINGS
NOT FOR
CONSTRUCTION

DECK HAUNCH REINFORCING
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SUM-077/008-11.65/00.00

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
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DESIGNER	CHECKER
NES	JRM

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
32	41

SHEET	TOTAL
P.470	627

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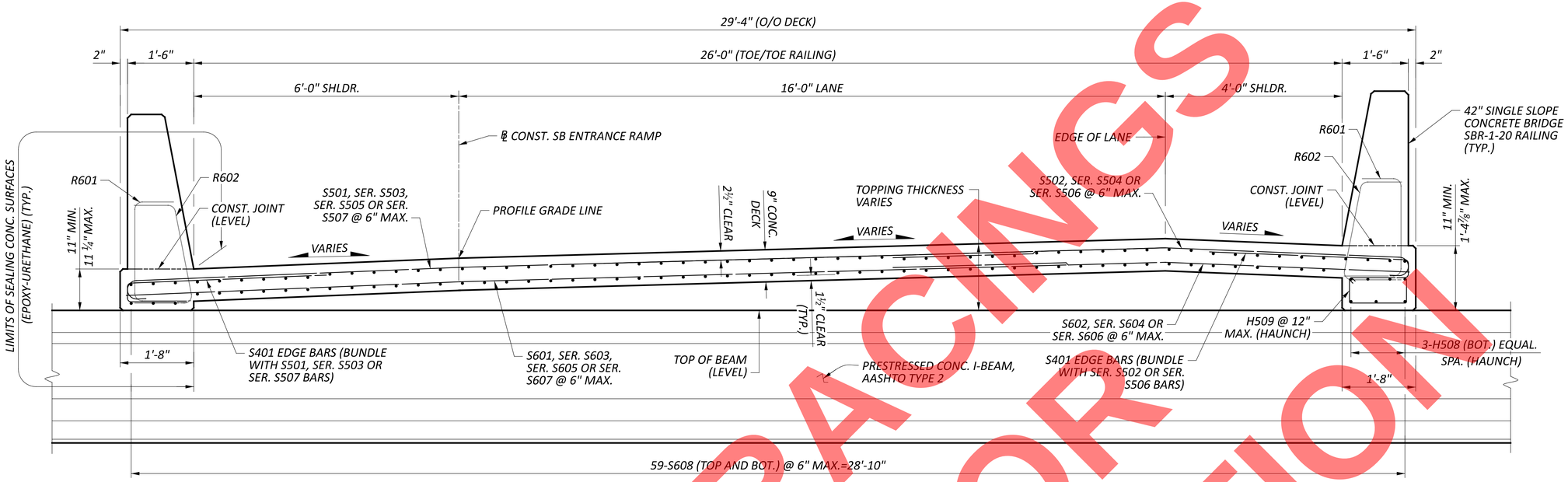
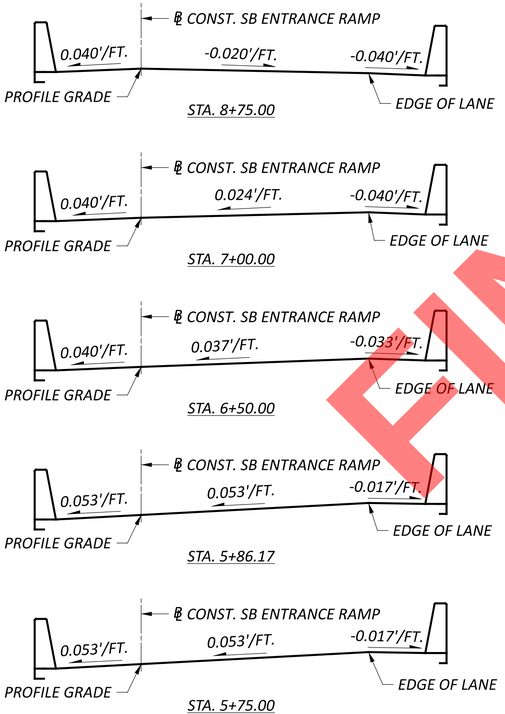
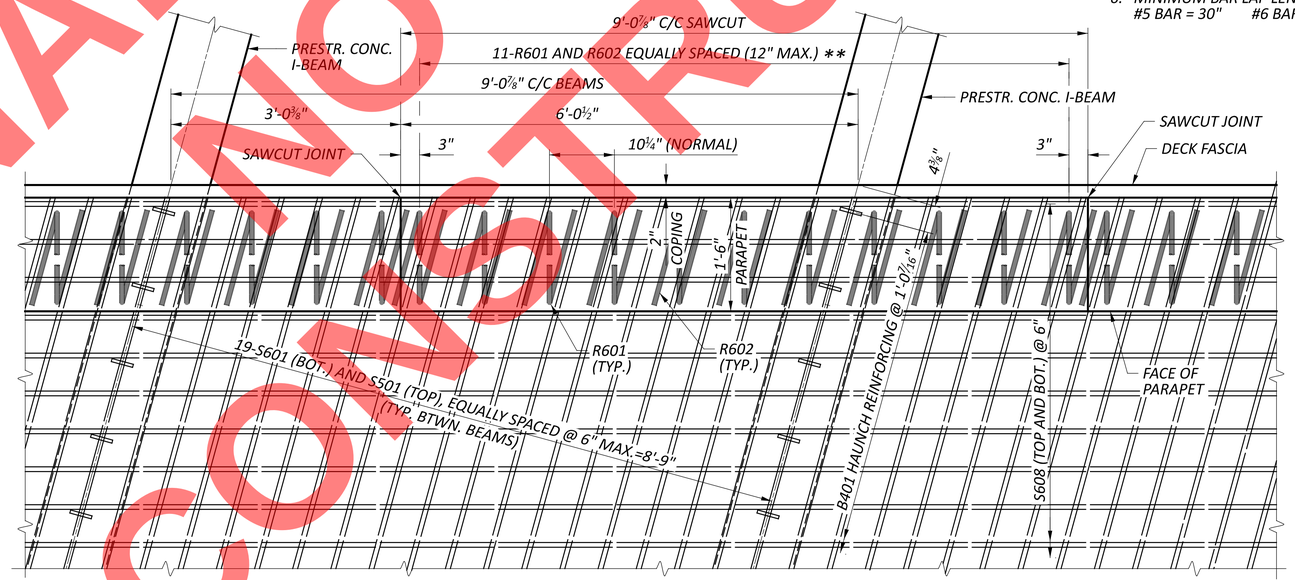


TRANSVERSE SECTION



SUPERELEVATION TRANSITION DIAGRAM



PARTIAL DECK REINFORCING PLAN

(SUPPLEMENTAL HAUNCH BARS NOT SHOWN FOR CLARITY)

NOTES

1. *DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO CMS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS.*
2. *FOR DECK PLAN, SEE SHEET* 31/41.
3. *FOR PARAPET DETAILS AND REINFORCING DETAILS, SEE SHEET* 34/41.
4. *FOR FRAMING PLAN, SEE SHEETS* 16/41 *AND* 17/41.
5. *FOR SCREED AND FINAL DECK ELEVATIONS, SEE TABLE ON SHEET* 30/41.
6. *MINIMUM BAR LAP LENGTHS ARE AS FOLLOWS EXCEPT AS NOTED:*
   #5 BAR = 30" #6 BAR = 43"

LEGEND

** *ADJUST R601 AND R602 BAR SPACING TO LAP WITH S601, S602, S603, S604, SER. S605 AND SER. S606 BARS. DO NOT EXCEED 12" SPACING.*

FINAL TRACINGS NOT FOR CONSTRUCTION

TRANSVERSE SECTION
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

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DESIGNER	CHECKER
NES	FJG

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
33	41

SHEET	TOTAL
P.471	627

SUM-077/008-11.65/00.00

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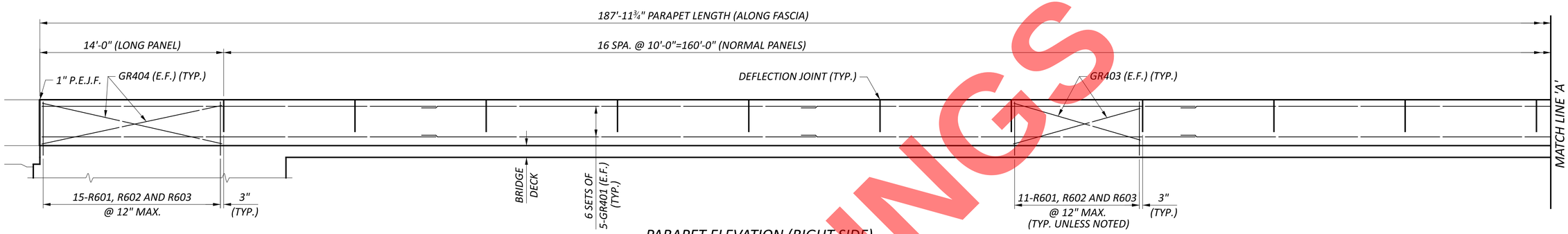
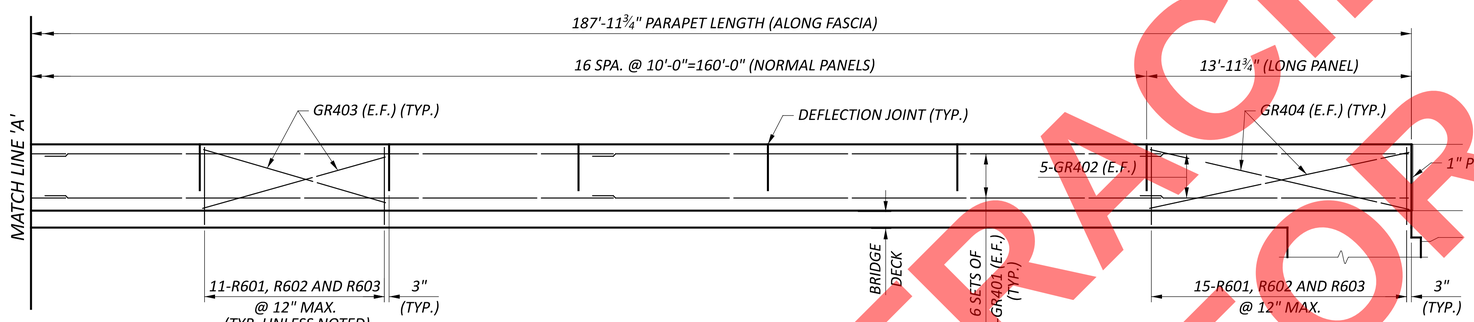
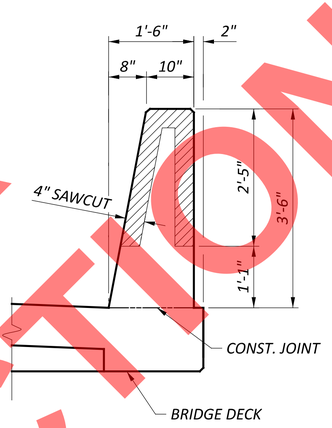


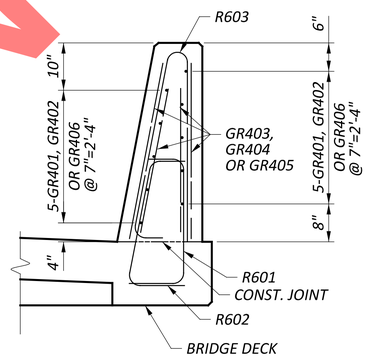
PARAPET ELEVATION (RIGHT SIDE)



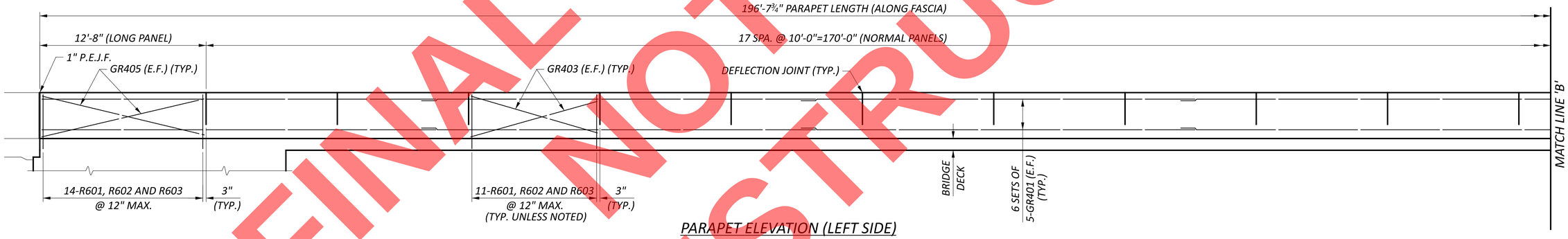
PARAPET ELEVATION (RIGHT SIDE)



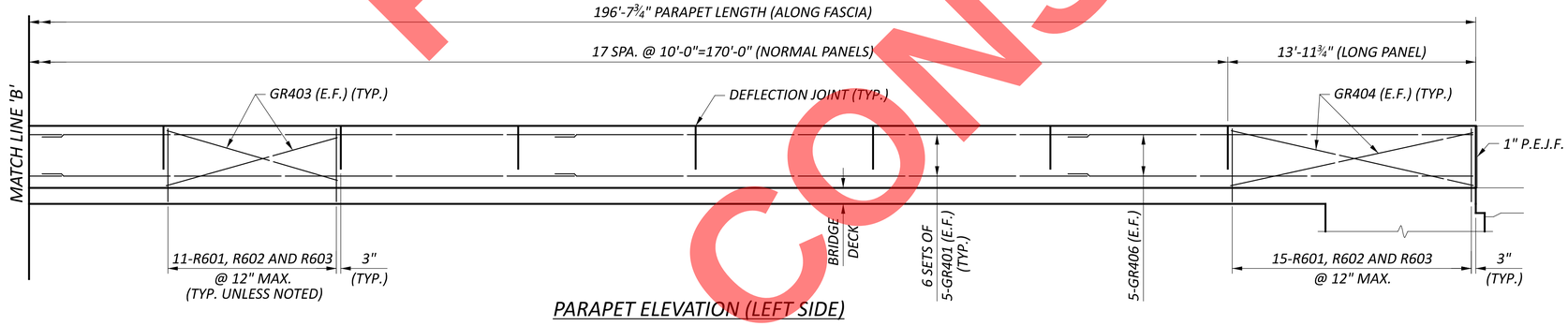
DEFLECTION JOINT DETAIL



PARAPET SECTION



PARAPET ELEVATION (LEFT SIDE)



PARAPET ELEVATION (LEFT SIDE)

FINAL TRACINGS
NOT FOR CONSTRUCTION

NOTES

1. *MINIMUM BAR LAP IS AS FOLLOWS: #4 BAR = 13"*
2. *FOR TRANSVERSE SECTION, SEE SHEET* 33/41 .
3. *FOR DECK PLAN, SEE SHEET* 31/41 .
4. *FOR ADDITIONAL BRIDGE RAILING DETAILS, SEE ODOT STANDARD DRAWING SBR-1-20.*
5. *FOR APPROACH SLAB AND APPROACH SLAB PARAPET DETAILS, SEE SHEETS* 35/41 *THRU* 38/41 .

PARAPET DETAILS
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
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DESIGNER	CHECKER
NES	FJG

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
34	41

SHEET	TOTAL
P.472	627

SUM-077/008-11.65/00.00

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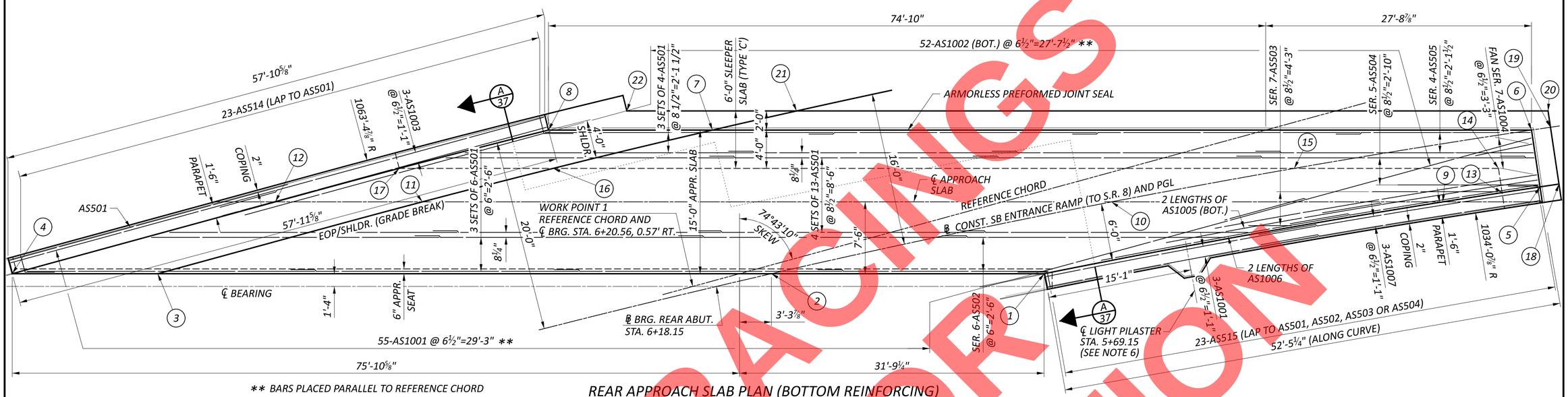
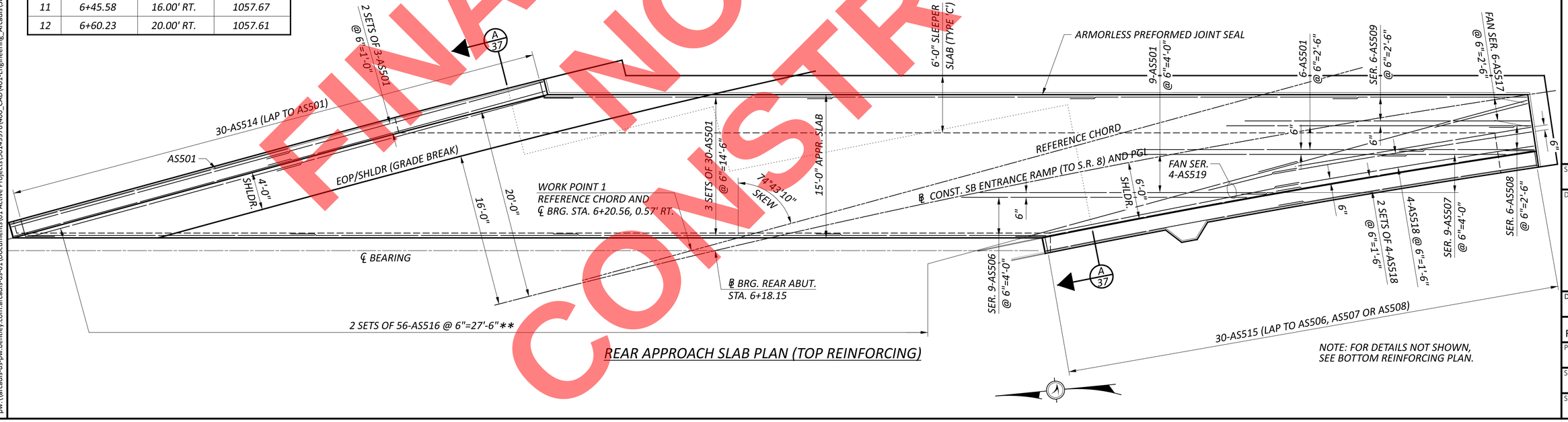


** BARS PLACED PARALLEL TO REFERENCE CHORD

REAR APPROACH SLAB PLAN (BOTTOM REINFORCING)

APPROACH SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
1	5+84.34	6.00' LT.	1055.83
2	6+12.26	0.00'	1056.64
3	6+74.05	16.00' RT.	1057.78
4	6+88.69	20.00' RT.	1057.64
5	5+31.52	6.00' LT.	1054.60
6	5+31.52	0.00'	1054.88
7	6+14.87	16.00' RT.	1057.41
8	6+31.22	20.00' RT.	1057.46
9	5+41.85	6.00' LT.	1054.86
10	5+75.99	0.00'	1055.98
11	6+45.58	16.00' RT.	1057.67
12	6+60.23	20.00' RT.	1057.61

SLEEPER SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
13	5+35.54	6.00' LT.	1053.29
14	5+35.53	3.44' LT.	1053.41
15	5+56.60	0.00'	1054.12
16	6+31.70	16.00' RT.	1056.16
17	6+46.99	20.00' RT	1056.13
18	5+29.51	6.00' LT.	1053.13
19	5+29.52	0.00'	1053.41
20	5+29.52	1.73' RT.	1053.49
21	6+05.99	16.00' RT.	1055.89
22	6+22.96	20.00' RT.	1055.97



REAR APPROACH SLAB PLAN (TOP REINFORCING)

NOTE: FOR DETAILS NOT SHOWN, SEE BOTTOM REINFORCING PLAN.

NOTES

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 30"
   #10 BARS = 72"
2. FOR ADDITIONAL APPROACH SLAB NOTES AND DETAIL, REFER TO STD. DWG. AS-1-15.
3. FOR SLEEPER SLAB DETAILS, REFER TO STD. DWG. AS-2-15.
4. FOR FORWARD APPROACH SLAB , SEE SHEET 36 / 41 .
5. FOR ADDITIONAL DETAILS, SEE SHEETS 37 / 41 AND 38 / 41 .
6. FOR PILASTER DETAILS AND REINFORCING, SEE APPROACH SLAB PARAPET DETAIL SHEET 38 / 41 . PILASTER CONCRETE TO BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QA/QC, BRIDGE DECK FOR PAYMENT.

FINAL TRACINGS
NOT FOR CONSTRUCTION

APPROACH SLAB DETAILS (1 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SUM-077/008-11.65/00.00

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SFN 7700372
DESIGN AGENCY
ARCADIS
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AKRON, OHIO 44308
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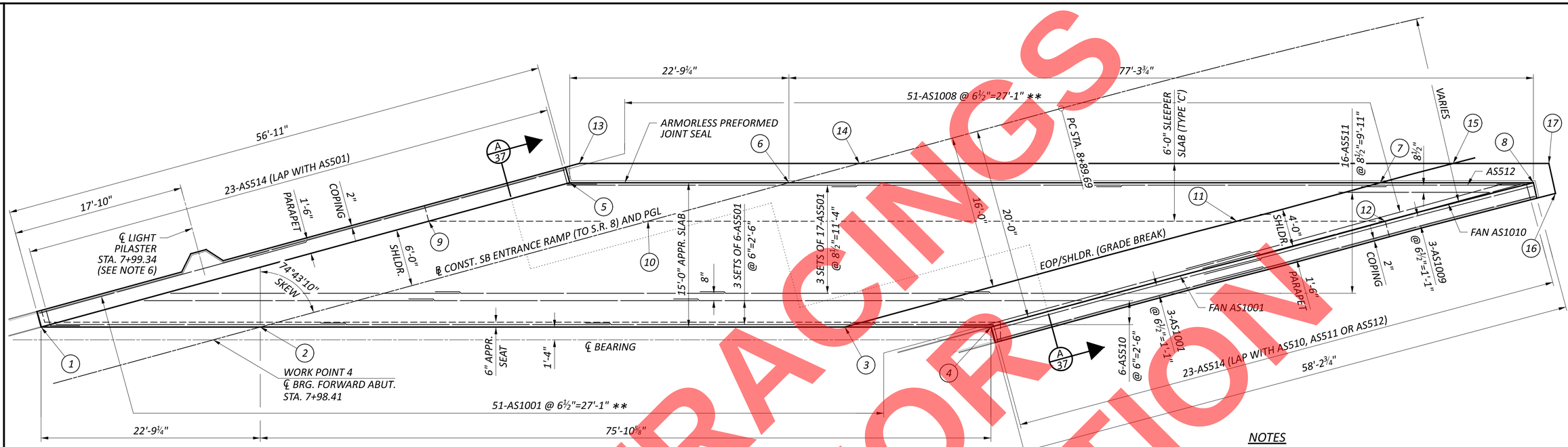
DESIGNER CAF | CHECKER NES
REVIEWER RBB 8-14-26
PROJECT ID 114685
SUBSET 35 | TOTAL 41
SHEET P.473 | TOTAL 627



FORWARD APPROACH SLAB PLAN (BOTTOM REINFORCING)

APPROACH SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
1	7+81.50	6.00' LT.	1056.77
2	8+03.47	0.00	1056.75
3	8+62.03	16.00' RT.	1055.72
4	8+76.67	20.00' RT.	1055.32
5	8+38.42	6.00' LT.	1056.06
6	8+60.38	0.00	1056.01
7	9+20.12	15.71' RT.	1054.98
8	9+35.92	19.28' RT.	1054.72

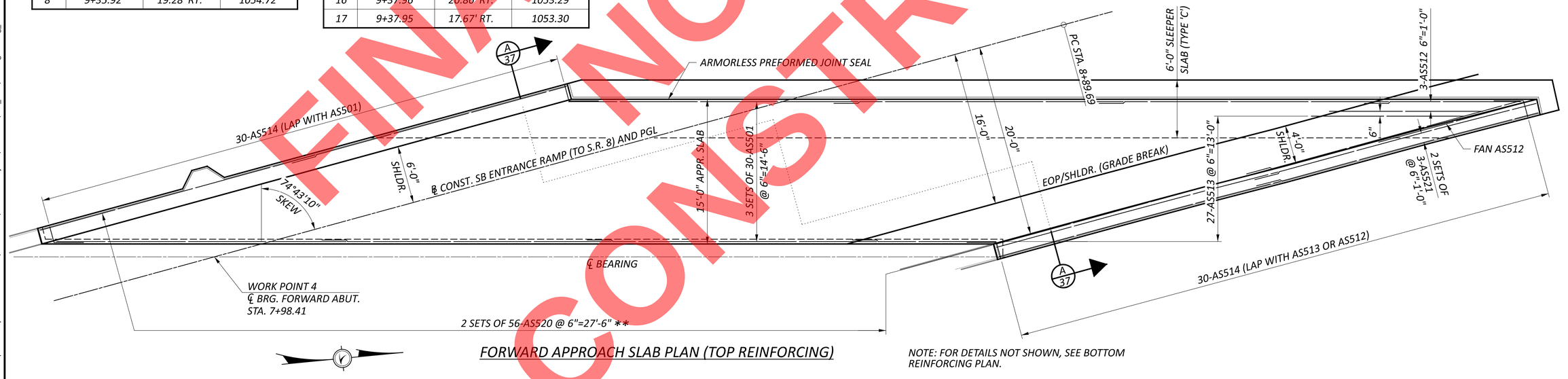
SLEEPER SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
9	8+23.24	6.00' LT.	1054.84
10	8+45.20	0.00	1054.79
11	9+04.46	16.01' RT.	1053.70
12	9+19.69	19.72' RT.	1053.40
13	8+39.91	7.67' LT.	1054.62
14	8+67.97	0.00	1054.50
15	9+28.08	15.49' RT.	1053.50
16	9+37.96	20.86' RT.	1053.29
17	9+37.95	17.67' RT.	1053.30

LEGEND

** BARS PLACED PARALLEL TO ℄ CONSTRUCTION SB ENTRANCE RAMP

NOTES

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 30"
   #10 BARS = 72"
2. FOR ADDITIONAL APPROACH SLAB NOTES AND DETAIL, REFER TO STD. DWG. AS-1-15.
3. FOR SLEEPER SLAB DETAILS, REFER TO STD. DWG. AS-2-15.
4. FOR REAR APPROACH SLAB , SEE SHEET 35/41 .
5. FOR ADDITIONAL DETAILS, SEE SHEETS 37/41 AND 38/41.
6. FOR PILASTER DETAILS AND REINFORCING, SEE APPROACH SLAB PARAPET DETAIL SHEET 38/41 . PILASTER CONCRETE TO BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QA/QC, BRIDGE DECK FOR PAYMENT.



FORWARD APPROACH SLAB PLAN (TOP REINFORCING)

NOTE: FOR DETAILS NOT SHOWN, SEE BOTTOM REINFORCING PLAN.

FINAL TRACINGS
NOT FOR CONSTRUCTION

APPROACH SLAB DETAILS (2 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
CAF	NES

REVIEWER: RBB 8-14-26

PROJECT ID: 114685

SUBSET	TOTAL
36	41

SHEET	TOTAL
P.474	627

SUM-077/008-11.65/00.00

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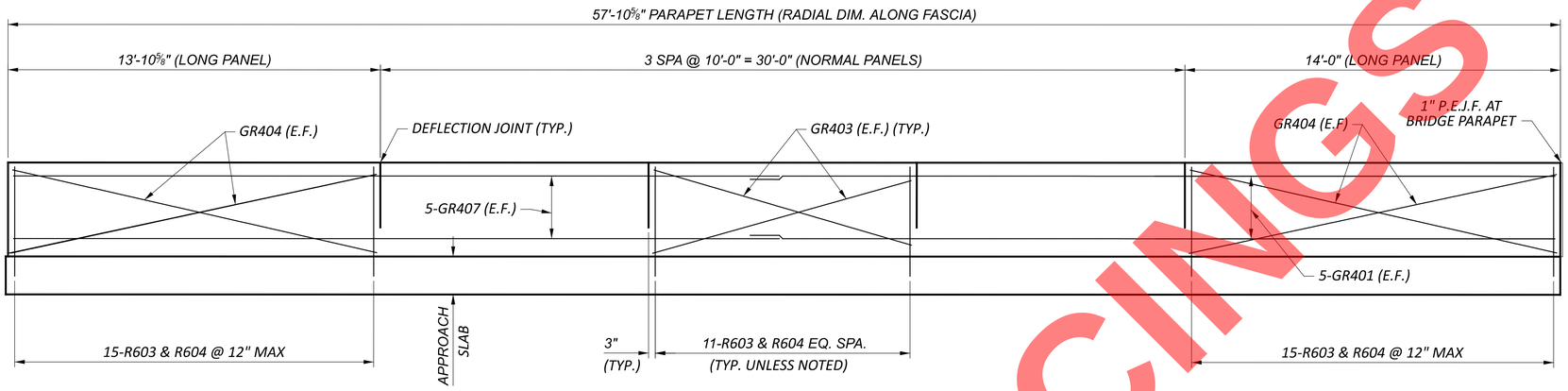
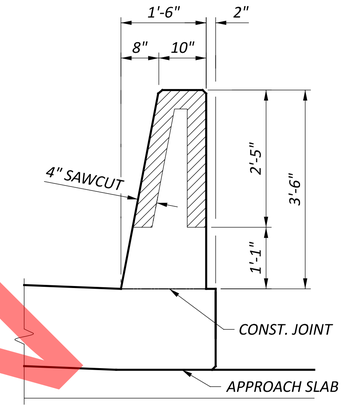
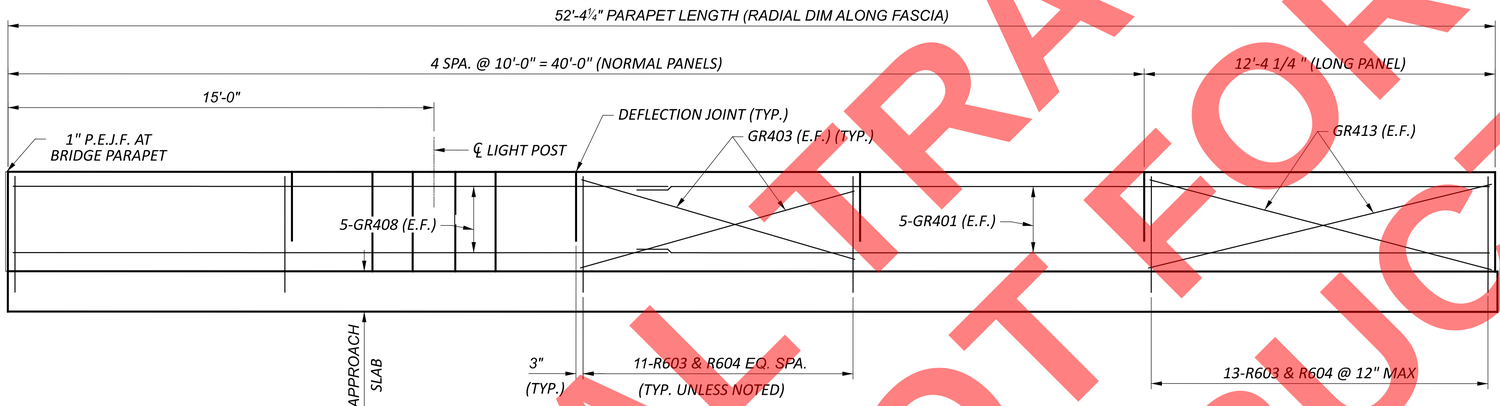


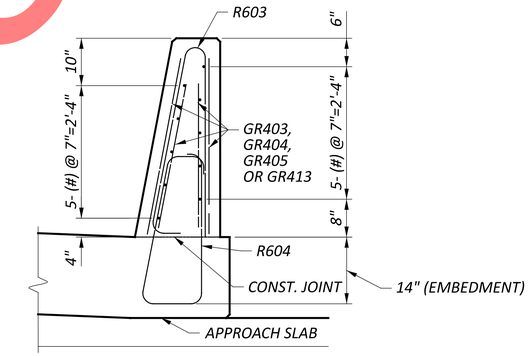
REAR APPROACH SLAB PARAPET ELEVATION (RIGHT SIDE)



DEFLECTION JOINT DETAIL



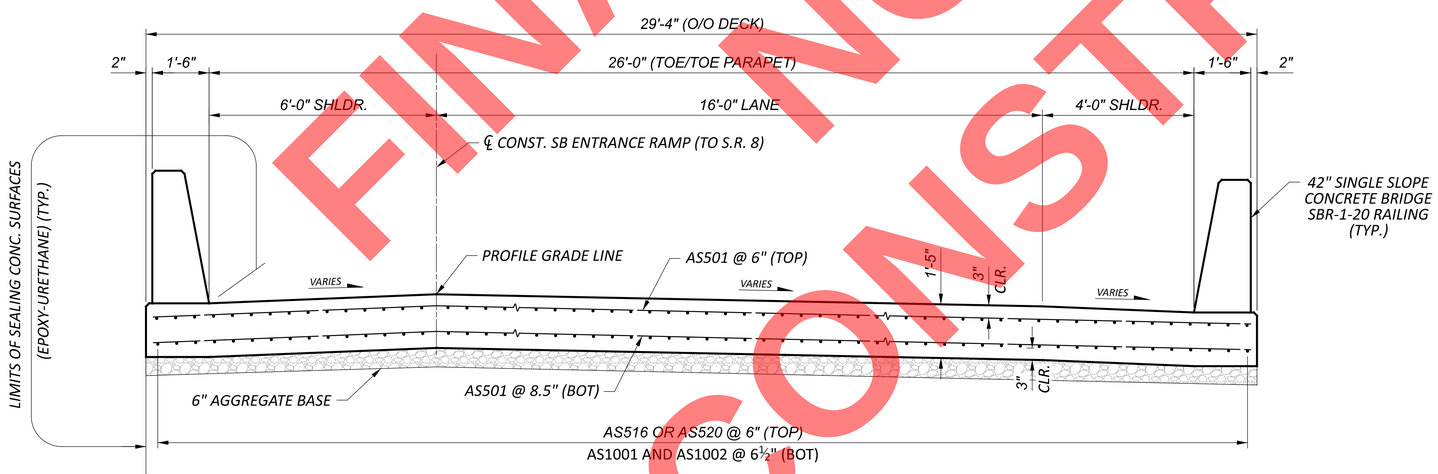
REAR APPROACH SLAB PARAPET ELEVATION (LEFT SIDE)



PARAPET SECTION

LEGEND

(#) GR401, GR407, GR408, GR409, GR410, GR411, OR GR412



A 35 / A 36 TRANSVERSE SECTION APPROACH SLAB

NOTES

1. FOR ADDITIONAL PARAPET NOTES AND DETAILS, REFER TO STD. DWG. SBR-1-20.
2. MINIMUM BAR LAP IS AS FOLLOWS: #4 BAR = 13"

FINAL TRACINGS NOT FOR CONSTRUCTION

APPROACH SLAB DETAILS (3 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
DRH	NES

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
37	41

SHEET	TOTAL
P.475	627

SUM-077/008-11.65/00.00

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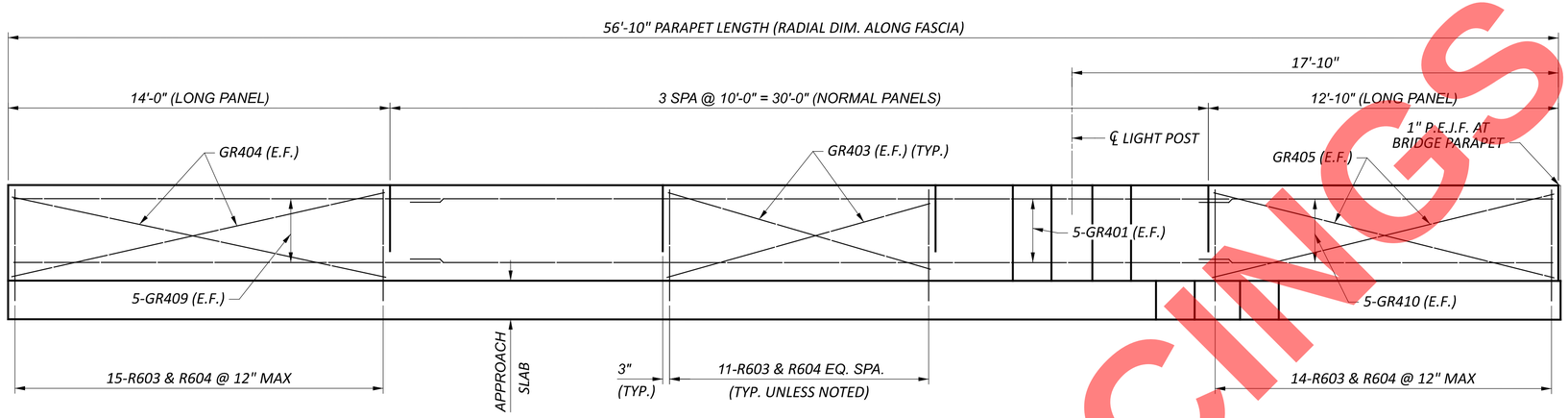
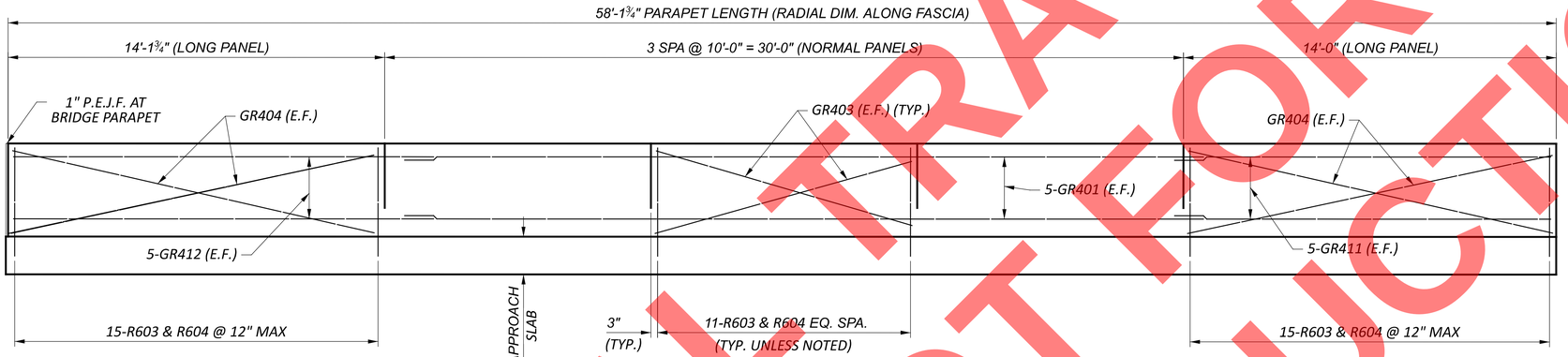
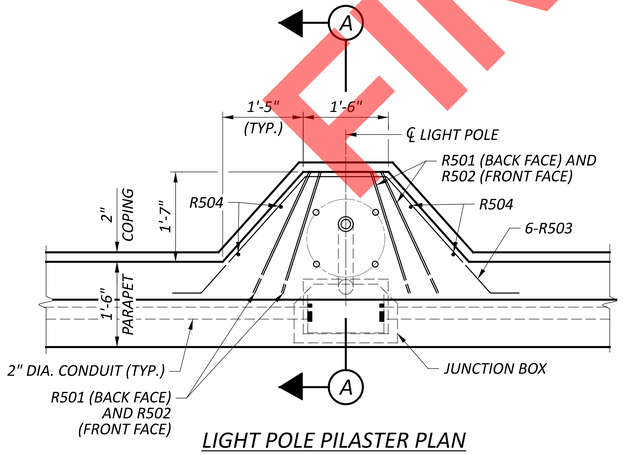


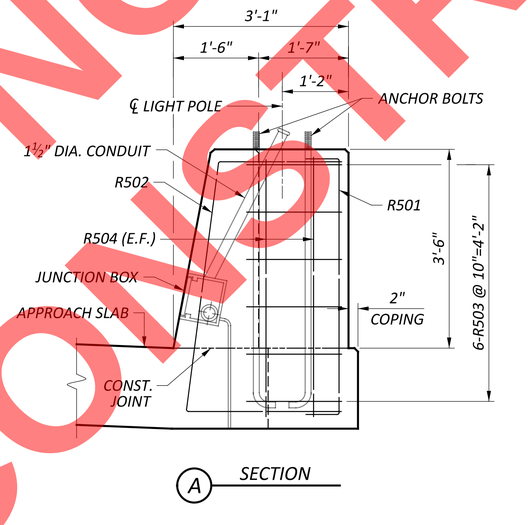
FORWARD APPROACH SLAB PARAPET ELEVATION (LEFT SIDE)



FORWARD APPROACH SLAB PARAPET ELEVATION (RIGHT SIDE)



LIGHT POLE PILASTER PLAN



NOTES

1. FOR DEFLECTION JOINT DETAIL AND PARAPET SECTION, SEE SHEET 37 41 .
2. FOR ADDITIONAL PARAPET NOTES AND DETAILS, REFER TO STD. DWG. SBR-1-20.
3. FOR SUPER ELEVATIONS, SEE ROADWAY PLAN SHEET P.194 OF 627 .
4. MINIMU BAR LAP IS AS FOLLOWS: #4 BAR = 13"
5. FOR LIGHT POLE PILASTER DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING HL-20.14.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

APPROACH SLAB DETAILS (4 OF 4)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
DRH	NES

REVIEWER RBB 8-14-26

PROJECT ID 114685

SUBSET	TOTAL
38	41

SHEET	TOTAL
P.476	627

SUM-077/008-11.65/00.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/22/2026 TIME: 9:19:38 AM USER: cferrell
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MARK	MAT'RL TYPE	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
		REAR	FWD.	TOTAL				A	B	C	D	E	INC
ABUTMENT FOOTINGS													
F401	ECSR	269	277	546	7'-11"	2887	1	2'-0"	6'-0"				
F501	ECSR	172	194	366	30'-0"	11452	STR						
F502	ECSR	22		22	25'-10"	593	STR						
F503	ECSR	22		22	20'-6"	470	STR						
F504	ECSR	22		22	7'-9"	178	38	3'-1"	0'-10"	3'-1"	0'-10"		
F505	ECSR	20	22	42	8'-3"	361	STR						
F506	ECSR		20	20	15'-4"	320	STR						
F507	ECSR		20	20	8'-1"	169	38	3'-1"	1'-0"	3'-1"	1'-0"		
F508	ECSR		20	20	10'-9"	224	STR						
F701	ECSR	418	394	812	11'-10"	19640	17	10'-2"					
F702	ECSR	118	156	274	10'-4"	5787	17	8'-8"					
F801	ECSR	269	277	546	12'-7"	18223	1	2'-0"	10'-9"				
					SUB-TOTAL	60,304							
ABUTMENTS													
A401	ECSR	272	283	556	30'-0"	11142	STR						
A402	ECSR	34		34	21'-0"	477	STR						
A403	ECSR	4	2	6	12'-0"	48	STR						
A404	ECSR	36		36	23'-9"	571	STR						
A405	ECSR	269		269	13'-0"	2336	STR						
A406	ECSR	4		4	25'-11"	69	STR						
A407	ECSR		277	277	13'-7"	2513	STR						
A408	ECSR		34	34	9'-5"	214	STR						
A409	ECSR		72	72	21'-9"	1046	STR						
A410	ECSR		2	2	11'-8"	16	STR						
A501	ECSR	267	275	542	10'-7"	5983	12	1'-11"	1'-11"	1'-9"	3'-4"	3'-1"	
A502	ECSR	5		5	7'-8"	40	1	1'-4"	6'-6"				
A503	ECSR	5		5	6'-5"	33	STR						
A504	ECSR		6	6	6'-3"	39	1	1'-5"	5'-0"				
A505	ECSR		6	6	5'-2"	32	STR						
A506	ECSR		4	4	9'-3"	39	STR						
A507	ECSR		7	7	8'-9"	64	2	3'-11"	1'-2"	3'-11"			
A508	ECSR	8	8	16	8'-8"	145	3	0'-8"	3'-4"				
A601	ECSR	269		269	14'-5"	5825	STR						
A602	ECSR	11	9	20	7'-10"	235	STR						
A603	ECSR		277	277	15'-2"	6310	STR						
A801	ECSR	48	48	96	30'-0"	7690	STR						
A802	ECSR	12		12	31'-6"	1009	STR						
A803	ECSR		6	6	20'-9"	332	STR						
A804	ECSR		12	12	27'-6"	881	STR						
					SUB-TOTAL	47,089							

MARK	MAT'RL TYPE	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
		REAR	FWD.	TOTAL				A	B	C	D	E	INC
SUPERSTRUCTURE (ABUTMENT DIAPHRAGM)													
D401	ECSR	64	64	128	4'-0"	342	STR						
D402	ECSR	27	15	42	5'-4"	150	2	1'-0"	3'-6"	1'-0"			
D403	ECSR	4		4	11'-6"	31	10	1'-10"	8'-11"	1'-7"	1'-0"		
D404	ECSR	1		1	10'-11"	7	10	0'-3"	1'-0"	1'-3"	8'-10"		
D405	ECSR		5	5	7'-4"	24	2	2'-0"	3'-6"	2'-0"			
D406	ECSR		6	6	5'-11"	24	2	1'-4"	3'-6"	1'-4"			
D407	ECSR		4	4	8'-6"	23	10	1'-7"	5'-11"	1'-7"	1'-0"		
D408	ECSR		1	1	8'-10"	6	10	0'-4"	1'-0"	1'-3"	6'-8"		

MARK	MAT'RL TYPE	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
		REAR	FWD.	TOTAL				A	B	C	D	E	INC
SUPERSTRUCTURE (ABUTMENT DIAPHRAGM) (CONTINUED)													
D501	ECSR	40	36	76	11'-3"	892	2	4'-0"	3'-6"	4'-0"			
D502	ECSR	92	66	158	9'-9"	1607	2	3'-6"	3'-0"	3'-6"			
D503	ECSR	48		48	10'-1"	505	2	3'-5"	3'-6"	3'-5"			
D504	ECSR	64		64	9'-7"	640	2	3'-2"	3'-6"	3'-2"			
D505	ECSR	48		48	8'-9"	438	2	2'-9"	3'-6"	2'-9"			
D506	ECSR	24		24	8'-5"	211	2	2'-7"	3'-6"	2'-7"			
D507	ECSR	197	284	481	9'-9"	4891	2	3'-3"	3'-6"	3'-3"			
D508	ECSR	1 SR OF 5		1 SR OF 5	10'-5" TO 12'-5"	60	2	3'-7" TO 4'-7"	3'-6"	3'-7" TO 4'-7"			0'-3"
D509	ECSR	2 SR OF 3		2 SR OF 3	9'-9" TO 10'-1"	62	2	3'-3"	3'-6" TO 3'-10"	3'-3"			0'-2"
D510	ECSR	8		8	10'-1"	84	2	3'-3"	3'-10"	3'-3"			
D511	ECSR	16		16	9'-11"	165	2	3'-3"	3'-8"	3'-3"			
D512	ECSR	16		16	9'-10"	164	2	3'-3"	3'-7"	3'-3"			
D513	ECSR	2 SR OF 8		2 SR OF 8	6'-6" TO 7'-10"	120	2	2'-6"	1'-9" TO 3'-1"	2'-6"			0'-2 ¼"
D514	ECSR	1 SR OF 7		1 SR OF 7	8'-1" TO 9'-5"	64	2	3'-6"	1'-4" TO 2'-8"	3'-6"			0'-2 ¾"
D515	ECSR		104	104	9'-1"	985	2	2'-11"	3'-6"	2'-11"			
D516	ECSR		28	28	9'-2"	268	2	2'-11"	3'-7"	2'-11"			
D517	ECSR		24	24	9'-3"	232	2	2'-11"	3'-8"	2'-11"			
D518	ECSR		12	12	9'-2"	115	2	2'-10"	3'-9"	2'-10"			
D519	ECSR		2 SR OF 4	2 SR OF 4	7'-2" TO 7'-10"	63	2	2'-10"	1'-9" TO 2'-5"	2'-10"			0'-2 ¾"
D520	ECSR		1 SR OF 3	1 SR OF 3	8'-2" TO 8'-8"	26	2	3'-6"	1'-5" TO 1'-11"	3'-6"			0'-3"
D521	ECSR		1	1	9'-1"	9	2	3'-6"	2'-4"	3'-6"			
D522	ECSR		2	2	8'-3"	17	2	2'-10"	2'-10"	2'-10"			
D523	ECSR		1	1	9'-7"	10	2	3'-6"	2'-10"	3'-6"			
D524	ECSR		2	2	8'-10"	18	2	2'-10"	3'-5"	2'-10"			
D525	ECSR		18	18	9'-11"	186	2	3'-6"	3'-2"	3'-6"			
D601	ECSR	6	5	11	7'-4"	121	1	2'-0"	5'-6"				
D602	ECSR	3		3	4'-10"	22	STR						
D603	ECSR	2		2	3'-6"	11	STR						
D604	ECSR		3	3	4'-4"	20	STR						
D605	ECSR		2	2	3'-0"	9	STR						
D801	ECSR	22	20	42	12'-11"	1448	18	10'-8 ½"	1'-0"	1'-0"			
D802	ECSR	75	60	135	30'-0"	10814	STR						
D803	ECSR	8		8	8'-4"	178	STR						
D804	ECSR	6		6	3'-2"	51	STR						
D805	ECSR	102	120	222	7'-0"	4149	STR						
D806	ECSR	46	6	52	3'-0"	417	STR						
D807	ECSR	6		6	3'-4"	53	STR						
D808	ECSR	4		4	4'-0"	43	STR						
D809	ECSR	4	4	8	3'-7"	77	STR						
D810	ECSR	2		2	23'-0"	123	STR						
D811	ECSR	3		3	12'-0"	96	STR						
D812	ECSR	1	1	2	9'-11"	53	STR						
D813	ECSR		16	16	27'-4"	1168	STR						
D814	ECSR		3	3	5'-4"	43	STR						
D815	ECSR		15	15	5'-6"	220	STR						
D816	ECSR		2	2	15'-3"	81	STR						
D817	ECSR		5	5	20'-9"	277	STR						
					SUB-TOTAL	31,913							

FINAL - NOT FOR CONSTRUCTION

REINFORCING STEEL LIST (1 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER CAF | CHECKER NES
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 39 | TOTAL 41
SHEET P.477 | TOTAL 627

SUM-077/008-11.65/00.00

SUBMITTAL DATE: S_DATE

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE (DECK SLAB)												
S401	ECSR	630	6'-5"	2700	2	4'-8"	0'-7"	1'-4"				
S501	ECSR	154	21'-7"	3467	16	21'-0"						
S502	ECSR	229	12'-7"	3006	16	12'-0"						
S503	ECSR	1 SR OF 158	6'-0" TO 25'-7"	2609	16	5'-5" TO 25'-0"						0'-1 ½"
S504	ECSR	1 SR OF 66	7'-2" TO 15'-9"	789	STR							0'-1 ½"
S505	ECSR	1 SR OF 141	7'-9" TO 25'-8"	2457	STR							0'-1 ½"
S506	ECSR	1 SR OF 86	4'-7" TO 16'-0"	927	16	4'-0" TO 15'-5"						0'-1 ½"
S507	ECSR	1 SR OF 18	4'-0" TO 5'-10"	92	16	3'-5" TO 5'-3"						0'-1 ¼"
S601	ECSR	154	22'-0"	5089	STR							
S602	ECSR	229	12'-0"	4127	STR							
S603	ECSR	1 SR OF 158	5'-5" TO 25'-0"	3609	STR							0'-1 ½"
S604	ECSR	1 SR OF 66	7'-2" TO 15'-9"	1136	STR							0'-1 ½"
S605	ECSR	1 SR OF 141	7'-9" TO 25'-8"	3539	STR							0'-1 ½"
S606	ECSR	1 SR OF 86	4'-0" TO 15'-5"	1254	STR							0'-1 ½"
S607	ECSR	1 SR OF 18	3'-5" TO 5'-3"	117	STR							0'-1 ¼"
S608	ECSR	354	30'-0"	15951	STR							
S609	ECSR	2 SR OF 3	13'-0" TO 35'-0"	216	STR							11'-0"
S801	ECSR	32	30'-6"	2606	STR							
S802	ECSR	1	27'-4"	73	STR							
S803	ECSR	1 SR OF 3	20'-1" TO 29'-3"	198	STR							4'-7"
S804	ECSR	1	18'-2"	49	STR							
S805	ECSR	1 SR OF 3	12'-8" TO 19'-6"	129	STR							3'-5"
			SUB-TOTAL	54,140								

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE (DECK HAUNCH)												
H401	ECSR	203	2'-2"	294	39	0'-4"	0'-2"	0'-9"			1½"	
H402	ECSR	86	2'-6"	144	39	0'-4"	0'-2"	0'-11"			1½"	
H403	ECSR	72	2'-9"	132	39	0'-4"	0'-2"	1'-0 ½"			1½"	
H501	ECSR	6	5'-6"	34	STR							
H502	ECSR	6	10'-6"	66	STR							
H503	ECSR	9	14'-9"	138	STR							
H504	ECSR	6	19'-9"	124	STR							
H505	ECSR	27	24'-9"	697	STR							
H506	ECSR	3	27'-0"	84	STR							
H507	ECSR	6	7'-6"	47	STR							
H508	ECSR	6	27'-10"	174	STR							
H509	ECSR	54	4'-4"	244	3	1'-4"	0'-6"					
			SUB-TOTAL	2,178								

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
DECK RAILING (EPOXY COATED REINFORCING STEEL)												
R601	ECSR	422	3'-10"	2430	40	1'-2½"	2'-2"	0'-9½"				
R602	ECSR	422	3'-10"	2430	41	1'-2½"	2'-2"	0'-9½"	0'-5"			
R603	ECSR	422	7'-0"	4437	23	0'-6"	3'-3"	3'-3"			0'-2"	
			SUB-TOTAL	9,297								
APPROACH SLAB RAILING (EPOXY COATED REINFORCING STEEL)												
R501	ECSR	8	7'-8"	64	2	1'-9"	4'-5"	1'-9"				
R502	ECSR	8	7'-9"	65	28	4'-5"	1'-9"					
R503	ECSR	12	7'-5"	93	21	1'-4"	1'-10"	0'-6"	1'-10"			
R504	ECSR	8	4'-5"	37	STR							
R603	ECSR	245	7'-0"	2576	23	0'-6"	3'-3"	3'-3"			0'-2"	
R604	ECSR	245	8'-0"	2944	37	1'-2"	0'-9 ½"	1'-5"	1'-0"	0'-7"		
			SUB-TOTAL	5,779								

MARK	MAT'RL TYPE	NUMBER TOTAL	BAR LENGTH	TOTAL LENGTH	TYPE	DIMENSIONS A	B	C	D	E	R	INC
DECK RAILING (GLASS FIBER POLYMER REINFORCEMENT - GFRP)												
GR401	GFRP	120	30'-0"	3600'-0"	STR							
GR402	GFRP	10	14'-2"	141'-8"	STR							
GR403	GFRP	132	10'-0"	1320'-0"	STR							
GR404	GFRP	12	14'-0"	168'-0"	STR							
GR405	GFRP	4	12'-8"	50'-8"	STR							
GR406	GFRP	10	22'-10"	228'-4"	STR							
			SUB-TOTAL	5508'-8"								
APPROACH SLAB RAILING (GLASS FIBER POLYMER REINFORCEMENT - GFRP)												
GR401	GFRP	40	30'-0"	1200'-0"	STR							
GR403	GFRP	52	10'-0"	520'-0"	STR							
GR404	GFRP	20	14'-0"	280'-0"	STR							
GR405	GFRP	4	12'-8"	50'-8"	STR							
GR406	GFRP	10	22'-10"	228'-4"	STR							
GR407	GFRP	10	28'-7"	285'-10"	STR							
GR408	GFRP	10	23'-1"	230'-10"	STR							
GR409	GFRP	10	15'-8"	156'-8"	STR							
GR410	GFRP	10	13'-0"	130'-0"	STR							
GR411	GFRP	10	14'-2"	141'-8"	STR							
GR412	GFRP	10	15'-10"	158'-4"	STR							
GR413	GFRP	4	12'-3"	49'-0"	STR							
			SUB-TOTAL	3431'-4"								

FINAL TRACINGS
NOT FOR
CONSTRUCTION

REINFORCING STEEL LIST (2 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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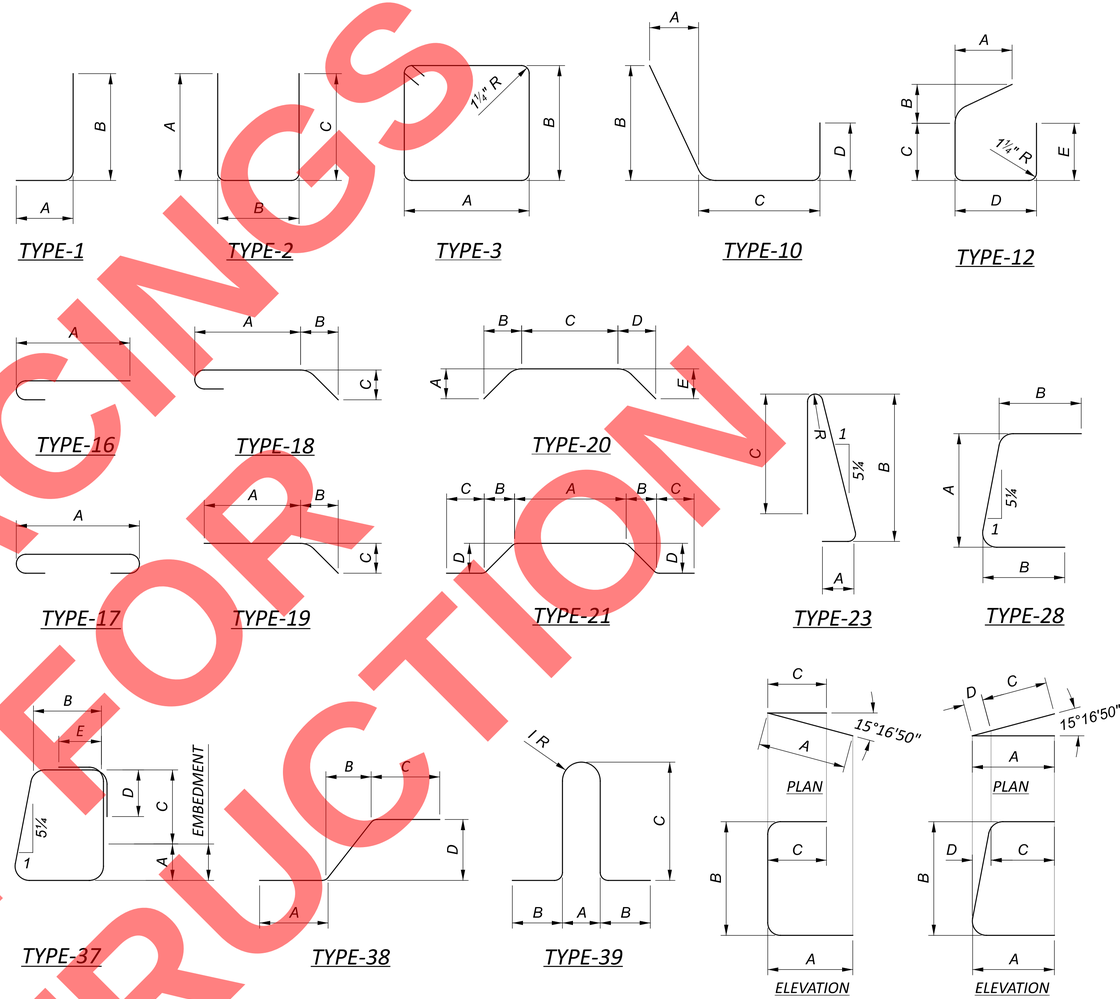
www.arcadis.com

DESIGNER CAF | CHECKER NES
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 40 | TOTAL 41
SHEET P.478 | TOTAL 627

SUM-077/008-11.65/00.00

SUBMITTAL DATE: S_DATE

MARK	MAT'RL TYPE	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
		REAR	FWD.	TOTAL				A	B	C	D	E	INC
APPROACH SLABS (SEE NOTE 6)													
AS501	ECSR	195	159	354	30'-0"	11077	STR						
AS502	ECSR ECSR ECSR	1 SR OF 6		1 SR OF 6	24'-0" TO 29'-7"	168	STR						1'-1 ½"
AS503	ECSR	1 SR OF 7		1 SR OF 7	4'-6" TO 13'-1"	64	STR						1'-5¼"
AS504	ECSR	1 SR OF 5		1 SR OF 5	3'-5" TO 14'-6"	47	STR						2'-9 ¼"
AS505	ECSR	1 SR OF 4		1 SR OF 4	20'-4" TO 29'-0"	103	STR						2'-10 ¾"
AS506	ECSR	1 SR OF 9		1 SR OF 9	24'-1" TO 29'-10"	253	STR						0'-8 ½"
AS507	ECSR	1 SR OF 9		1 SR OF 9	3'-4" TO 13'-0"	77	STR						1'-2 ½"
AS508	ECSR	1 SR OF 6		1 SR OF 6	4'-5" TO 14'-2"	58	STR						1'-11 ½"
AS509	ECSR	1 SR OF 6		1 SR OF 6	20'-4" TO 29'-10"	157	STR						1'-10 ¾"
AS510	ECSR		6	6	14'-11"	93	STR						
AS511	ECSR		16	16	15'-8"	262	STR						
AS512	ECSR		5	5	16'-3"	85	STR						
AS513	ECSR		27	27	15'-10"	446	STR						
AS514	ECSR	53	106	159	4'-8"	774	19	3'-0"	0'-5 ½"	1'-8"			
AS515	ECSR	53		53	4'-6"	249	19	3'-0"	0'-3"	1'-7"			
AS516	ECSR	112		112	29'-1"	3397	STR						
AS517	ECSR	1 SR OF 6		1 SR OF 6	10'-0" TO 25'-0"	110	STR						3'-0"
AS518	ECSR	12		12	27'-5"	343	STR						
AS519	ECSR	1 SR OF 4		1 SR OF 4	9'-6" TO 26'-9"	76	STR						5'-9"
AS520	ECSR		112	112	29'-6"	3446	STR						
AS521	ECSR		6	6	30'-2"	189	STR						
AS1001	ECSR	58	55	113	30'-0"	14587	16	28'-7"					
AS1002	ECSR	52		52	33'-1"	7403	STR						
AS1003	ECSR	3		3	35'-0"	452	STR						
AS1004	ECSR	1 SR OF 7		1 SR OF 7	6'-0" TO 34'-0"	602	STR						4'-8"
AS1005	ECSR	2		2	22'-8"	195	STR						
AS1006	ECSR	2		2	26'-2"	225	STR						
AS1007	ECSR	3		3	29'-7"	382	STR						
AS1008	ECSR		52	52	33'-11"	7589	STR						
AS1009	ECSR		3	3	35'-3"	455	STR						
AS1010	ECSR		1	1	34'-2"	147	STR						
					SUB-TOTAL	53,511							



REINFORCING BEND DIAGRAMS

REINFORCING NOTES

1. ALL STEEL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING SHALL BE MADE WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, EXCEPT AS NOTED.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. APPROACH SLAB REINFORCING SHOWN FOR REFERENCE ONLY AND INCLUDED FOR PAYMENT WITH ITEM 526-REINFORCED CONCRETE APPROACH SLABS (T=17").

REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.

EXAMPLES:
SLAB S501 # 5 BAR (S = SLAB, 501 = ID, # 5 BAR)
ABUTMENT A620 # 6 BAR (A = ABUTMENT, 620 = ID, # 6 BAR)

LOCATION MARKS USED:
A = ABUTMENT
D = ABUTMENT DIAPHRAGM
H = BEAM HAUNCH
S = SUPSERSTRUCTURE (DECK)
AS = APPROACH SLAB
F = ABUTMENT FOOTING
R = RAIL (PARAPET)

FINAL TRACINGS
NOT FOR CONSTRUCTION

REINFORCING STEEL LIST (3 OF 3)
BRIDGE NO. SUM-8-01.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4300
www.arcadis.com

DESIGNER	CHECKER
CAF	CMD

REVIEWER: RBB 8-14-26

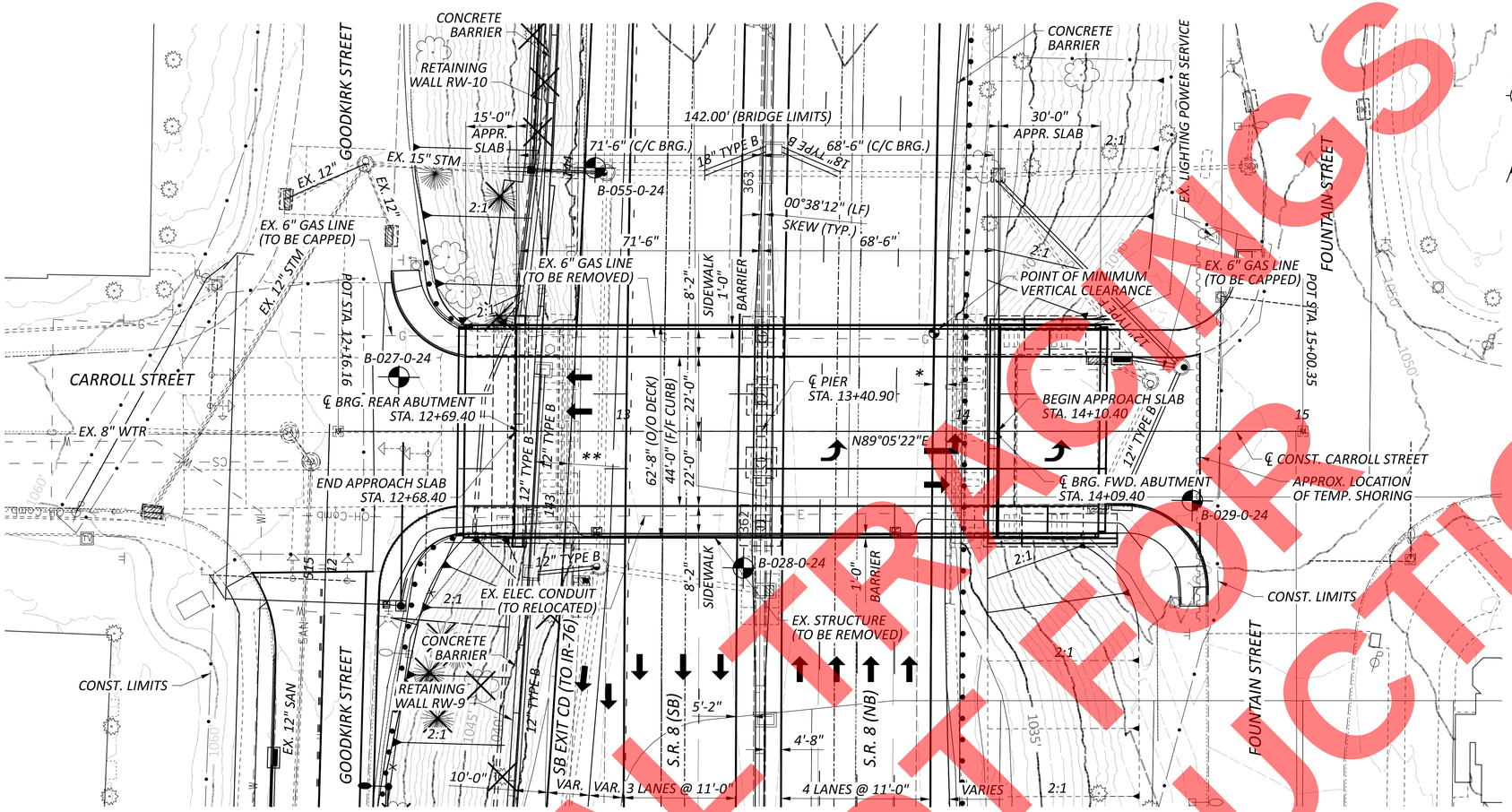
PROJECT ID: 114865

SUBSET	TOTAL
41	41

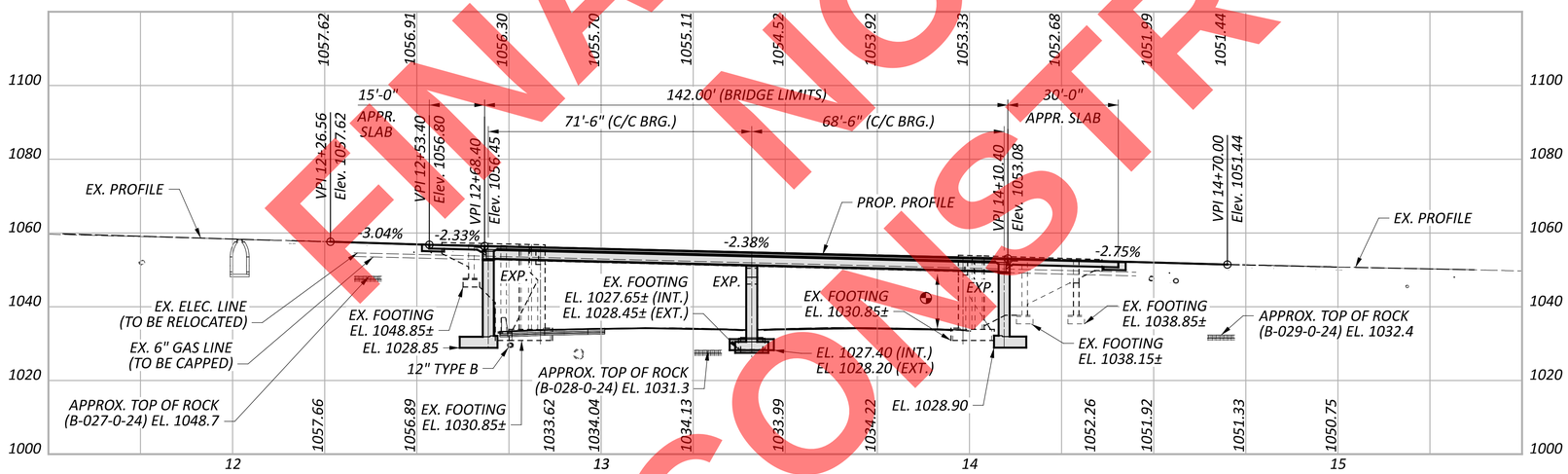
SHEET	TOTAL
P.479	627

SUM-077/008-11.65/00.00

SUBMITTAL DATE: S_DATE



PLAN



PROFILE ALONG ℄ CONSTRUCTION

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

BENCHMARK DATA

BM #1 STA.	12+16.16 ,	ELEV.	1057.09,	OFFSET	00.00 ,
BM #2 STA.	15+00.35 ,	ELEV.	1049.94,	OFFSET	00.00 ,

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET P.002 .

DESIGN TRAFFIC:

2025 ADT =	6,830	2025 ADTT =	273
2045 ADT =	6,850	2045 ADTT =	274

DIRECTIONAL DISTRIBUTION = 90/10

LEGEND

- BORING LOCATION
- 15.50' REQUIRED MINIMUM VERTICAL CLEARANCE
  15.73' ACTUAL MINIMUM VERTICAL CLEARANCE
- * - 4.00' REQUIRED MINIMUM HORIZONTAL CLEARANCE
  4.00' ACTUAL MINIMUM HORIZONTAL CLEARANCE
- ** - 10.00' REQUIRED MINIMUM HORIZONTAL CLEARANCE
  10.00' ACTUAL MINIMUM HORIZONTAL CLEARANCE
- TREE REMOVAL

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 57'-4"± , 57'-4"± (C/C BEARINGS)

ROADWAY: 44'-0"± F/F CURBS WITH 8'-1 1/4"± SIDEWALKS (EACH SIDE)
62'-6 1/2"± O/O DECK

LOADING: HS 20-44 (CASE II) AND THE ALTERNATE MILITARY LOADING

SKEW: 0°42'32"± (LF)

WEARING SURFACE: 1 1/4"± LATEX MODIFIED CONCRETE

APPROACH SLABS: AS-1-81, 15'-0"± LONG (12" THICK)

ALIGNMENT: TANGENT

CROWN: 3/16"± / FT.

STRUCTURE FILE NUMBER: 7700180

DATE BUILT: 1954, REHABILITATION 1984 AND 2002

DISPOSITION: TO BE REMOVED

PROPOSED STRUCTURE

TYPE: TWO SPAN CONTINUOUS ROLLED STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON SEMI-INTEGRAL WALL ABUTMENTS WITH SPREAD FOOTINGS AND REINFORCED CONCRETE CAP AND COLUMN PIER WITH SPREAD FOOTINGS

SPANS: 71'-6" AND 68'-6" C/C BEARINGS

ROADWAY: 44'-0" F/F CURB AND 8'-2" SIDEWALKS

LOADING: HL93 AND 0.060 K.S.F. FUTURE WEARING SURFACE

SKEW: 0°38'12" LF

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 15'-0" LONG, 12" THICK (REAR)
30'-0" LONG, 17" THICK (FWD.)
WITH TYPE C INSTALLATION (AS-1-15 & AS-2-15)

ALIGNMENT: TANGENT

CROWN: 3/16" / FT.

DECK AREA: 8851.3 SF

COORDINATES: LATITUDE N 41° 04' 31.15"
LONGITUDE W 81° 30' 16.28"

SITE PLAN
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4850
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
1	30

SHEET	TOTAL
P.480	627

FINAL PLANS
NOT FOR CONSTRUCTION

SUM-077/008-11.65/0.00
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	01-20-23
AS-2-15	REVISED	07-21-23
BR-2-15	REVISED	07-19-24
GSD-1-19	REVISED	07-19-24
SICD-1-21	REVISED	01-19-24
SICD-2-14	REVISED	01-15-21
VPF-1-24	DATED	07-19-24

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 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 QC1:
COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT:

EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2.5" CONCRETE COVER

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

FOUNDATION BEARING RESISTANCE

ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 18.61 KIPS (REAR), 17.09 KIPS (FWD.) AND 7.76 KIPS (FWD. WING WALLS) PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 46.01 KIPS (REAR), 44.48 KIPS (FWD.) AND 16.60 KIPS (FWD. WING WALLS) PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 118.0 KIPS (REAR) AND 141.9 KIPS (FWD. INCLUDING WING WALLS) PER SQUARE FOOT.

PIER FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 12.11 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 16.99 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 247.7 KIPS PER SQUARE FOOT.

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. 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.

DECK PLACEMENT DESIGN 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 WITH A MAXIMUM WHEEL LOAD OF 2.52 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL
OF 65 INCHES.

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OPEA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OHIO 43215

THE FORM SHALL INCLUDE:

1. THE CONTRACTORS NAME AND ADDRESS.
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURAL DEMOLITION AND/OR RENOVATION.
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS TO BE USED.
4. ALL NECESSARY FEES.

ASBESTOS NOTIFICATION (CONTINUED)

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

FOOTINGS

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATIONS SHOWN, WHICHEVER IS LOWER

ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING STRUCTURE SHALL BE REMOVED UPON RECEIVING PERMISSION FROM THE ENGINEER. REMOVE EXISTING PIER ENTIRELY AND REMOVE EXISTING ABUTMENTS TO 3 FEET BELOW FINISHED GRADE OR AS NEEDED TO CONSTRUCT THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES AND HEADACHE BALLS IS NOT PERMITTED.

ITEM 530 - SPECIAL - FORMLINER

USE FORM LINERS AT THE REAR AND FORWARD ABUTMENTS AS SHOWN ON THE PLANS FORM LINERS SHALL BE ARCHITECTURAL POLYMERS #9110, LARGE STONE OHIO DRY STACK OR EQUAL AS APPROVED BY THE ENGINEER. THE STONE FORM LINER PATTERN SHALL MATCH OTHER PARTS OF THE PROJECT (RETAINING WALLS AND ROADWAY SIDE OF NOISE WALLS) TO ENSURE UNIFORM SURFACE TREATMENTS THROUGHOUT, AS DETERMINED BY THE ENGINEER.

FORM LINERS SHALL BE CAPABLE OF WITH STANDING ANTICIPATED CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. FORM LINERS SHALL BE REMOVABLE WITHOUT CAUSING CONCRETE SURFACE DAMAGE. USE A FORM RELEASE PRODUCT AS RECOMMENDED BY THE FORM LINER MANUFACTURER. USE MANUFACTURER'S APPLICATION RATES AND ALL OTHER MANUFACTURER'S INSTRUCTIONS. FORM RELEASE PRODUCTS SHALL BE FULLY COMPATIBLE WITH THE FORM LINER MATERIAL AND THE EPOXY-URETHANE SEALER TO BE APPLIED TO THE FINISHED SURFACES.

ALIGN THE FORM LINER PATTERNS ACROSS ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS.

FORM LINERS SHALL EXTEND A MINIMUM OF 1'-0" BELOW THE PROPOSED GROUND LINE AT THE FRONT FACE OF THE WALL. FORM LINERS MAY EXTEND MORE THAN 1'-0" BELOW THE PROPOSED GROUND LINE BUT THE PAY LIMITS SHALL BE 1'-0" BELOW THE GROUND LINE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 530 - SPECIAL - FORM LINER, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTAL NECESSARY TO COMPLETE THIS ITEM AS SPECIFIED ABOVE AND IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 607 - VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN

THE VANDAL PROTECTION FENCE SHALL HAVE VERTICAL AND HORIZONTAL TUBES AS DETAILED IN THE PLANS.

PAYMENT FOR ALL NECESSARY LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 607 - VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN FOR PAYMENT.

STANDARD ABBREVIATIONS

CL	-	CENTERLINE
PL	-	PLATE
ABUT.	-	ABUTMENT
APP.	-	AS PER PLAN
APPR.	-	APPROACH
BRG.	-	BEARING
C/C	-	CENTER TO CENTER
DIA.	-	DIAMETER
DIM	-	DIMENSION
E.F.	-	EACH FACE
E.S.	-	EACH SIDE
EL.	-	ELEVATION
EX.	-	EXISTING
EXP.	-	EXPANSION
F.A.	-	FORWARD ABUTMENT
F.F.	-	FAR FACE
F.S.	-	FIELD SPLICE
F/F	-	FACE TO FACE
MAX.	-	MAXIMUM
MIN.	-	MINIMUM
N.F.	-	NEAR FACE
O/O	-	OUT TO OUT
PCPP	-	PERFORATED CORRUGATED PVC PIPE
NPCPP	-	NON-PERFORATED CORRUGATED PVC PIPE
PEJF	-	PREFORMED EXPANSION JOINT FILLER
PGL	-	PROFILE GRADE LINE
PROP.	-	PROPOSED
R.A.	-	REAR ABUTMENT
SPA.	-	SPACE
STA.	-	STATION
T/T	-	TOE TO TOE
TYP.	-	TYPICAL
VAR.	-	VARIES
W/	-	WITH
W/O	-	WITHOUT

FINAL - NOT FOR CONSTRUCTION

GENERAL NOTES
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4855
www.arcadis.com

DESIGNER	CHECKER
MJT	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
2	30

SHEET	TOTAL
P.481	627

SUM-077/008-11.65/0.00
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ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN

PERFORM THE WORK PER C&MS 513, EXCEPT AS NOTED BELOW.
SELECT ONE OF THE TWO OPTIONS DESCRIBED BELOW:

1. GALVANIZE AND SHOP PAINT EXTERIOR FASCIA BEAMS
2. METALIZE AND SHOP PAINT EXTERIOR FASCIA BEAMS

1.0 OPTION 1: SHOP GALVANIZING AND SHOP PAINTING OF FASCIA BEAMS

SHOP GALVANIZE ALL STRUCTURAL STEEL SURFACES AS DETAILED IN THESE PLANS, INCLUDING BUT NOT LIMITED TO BEAMS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, AND BEARING LOAD PLATES.

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATION 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZEALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HERIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CONSTRUCTION AND MATERIAL SPECIFICATION 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS FOR THIS SPECIFICATION. SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

SHEAR STUDS SHALL BE INSTALLED AS PER SECTION 513.22.

2.0 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL SPECIALIST, (QCS) AND GALVANIZER'S QCS COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL, INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THE SPECIFICATION.

3.0 QUALITY CONTROL

3.1 QUALITY CONTROL SPECIALIST

THE GALVANIZER'S QCS (QUALITY CONTROL SPECIALIST) REQUIRED UNDER 514, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE QCS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN 514.05.

3.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCS AND THE DEPARTMENT'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE DEPARTMENT'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK. DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE DEPARTMENT TO FINAL ACCEPTANCE.

QUALITY CONTROL POINTS

QUALITY CONTROL POINTS (QCP)	PURPOSE
A. SOLVENT CLEANING	REMOVE ASPHALTIC CEMENT, OIL, GREASE, SALT, DIRT, ETC.
B. GRINDING EDGES	REMOVE SHARP CORNERS PER AWS.
C. ABRASIVE BLASTING	BLAST SURFACES, INCLUDING REPAIR FINS, TEARS, SLIVERS OR SHARP EDGES.
D. GALVANIZING	CHECK COATING THICKNESS
E. FAYING SURFACE CLEANING	CHECK FAYING SURFACE ROUGHNESS. CHECK BOLT HOLE CLEARANCE. CHECK FOR OTHER FIELD CONNECTIONS UNIFORM COATING THICKNESS.
F. SECOND LAY DOWN	CHECK SWEEP AND CAMBER TOLERANCES OF EACH STRUCTURAL MEMBER.
G. FIELD REPAIR OF DAMAGED AREAS	CHECK FOR DAMAGE AREAS AFTER ERECTION OF STRUCTURE. PERFORM DAMAGE REPAIRS.
H. FINAL REVIEW	CLEAN STRUCTURE AS PER QCP #1. VISUALLY INSPECT SYSTEM FOR ACCEPTANCE.

A. SOLVENT CLEANING (QCP#1)

THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSPC-SP 1 SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLASTING CLEANING BEGINS. THE GALVANIZER'S QCS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SP1 AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

B. GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A $\frac{1}{16}$ INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN $1\frac{1}{2}$ INCH MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT EFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

C. ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF A OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE GALVANIZER'S QCS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

ALL FINS, TEARS, SLIVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE 513 FABRICATOR.

THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

D. GALVANIZING (QCP #4)

GALVANIZED PER 711.02 AND THIS SPECIFICATION. COATING THICKNESS MUST BE A MINIMUM OF 4 MILS MEASURED AS SPECIFIED.

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE FABRICATOR, GALVANIZER AND ERECTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. PRIOR TO GALVANIZING, SURFACE IMPERFECTIONS MAY BE REPAIRED BY THE FABRICATOR IN CONFORMANCE WITH ASTM A6. IMPERFECTIONS GREATER THAN THE LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE DEPARTMENT.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DOCUMENTATION OF COATING THICKNESS MUST BE PERFORMED BY THE GALVANIZER'S QCS. THE GALVANIZER'S QCS MUST RECORD THE GAGE READINGS AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

E. FAYING SURFACE CLEANING (QCP #5)

AREAS OF FIELD CONNECTIONS MUST HAVE A UNIFORM GALVANIZED COATING THICKNESS FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT SPLICE PLATES, BEARING OR OTHER FIELD CONNECTIONS FROM MAKING INTIMATE CONTACT.

FAYING SURFACES OF THE BOLTED SPLICES MUST BE ROUGHENED IN THE SHOP AFTER GALVANIZING BY HAND WIRE BRUSHING. POWER WIRE BRUSHING IS NOT PERMITTED. ALL FIELD SPLICE BOLT HOLES MUST BE FREE OF ZINC BUILD UP. AFTER GALVANIZING, CLEAN EACH HOLE AS NECESSARY SO THAT A DRIFT PIN $\frac{1}{16}$" LESS THAN THE DIAMETER OF THAT HOLE CAN BE FULLY INSERTED. CONSIDERATION WILL BE GIVEN TO OTHER METHODS OF TREATING THE FAYING SURFACES AND BOLT HOLES IF A WRITTEN REQUEST IS SUBMITTED TO THE OFFICE OF MATERIAL MANAGEMENT (OMM) IN ACCORDANCE WITH C&MS 108.05.

INSPECTION OF THE ROUGHENING OF THE FAYING SURFACES AND CHECKING OF HOLES WITH DRIFT PINS MUST BE PERFORMED BY THE GALVANIZER'S QCS. ACCEPTANCE OF THE FAYING SURFACES AND HOLES SHALL BE DOCUMENTED BY THE GALVANIZER'S QCS.

F. SECOND LAY DOWN (QCP #6)

AFTER GALVANIZING, MATERIALS MUST BE PLACED IN A SECOND SHOP ASSEMBLY PER C&MS SECTION 513.24 TO CHECK ALIGNMENT OF HOLES, SWEEP AND CAMBER AGAINST THE FABRICATORS ORIGINAL RECORDED LAY DOWN DIMENSIONS. THIS SHOP ASSEMBLY MAY BE PERFORMED AT THE GALVANIZER'S FACILITY, BY THE FABRICATORS PERSONNEL, IF APPROVED BY THE OFFICE OF MATERIAL MANAGEMENT (OMM). THE SECOND LAY DOWN MAY BE WAIVED BY THE OMM IF THE FABRICATOR RECORDS INDIVIDUAL BEAM CAMBERS AND SWEEPS DURING THE FIRST LAY DOWN, AND THE NEW INDIVIDUAL BEAM CAMBERS AND SWEEPS, AFTER GALVANIZING, COMPARED TO THE FIRST LAY DOWN ARE WITHIN THE FOLLOWING TOLERANCES:

BEARING POINTS AFTER GALVANIZING MUST BE WITHIN $\frac{1}{8}$ INCH OF THE APPROVED SHOP DRAWING LAY DOWN.

CAMBER POINTS AFTER GALVANIZING MUST BE $+\frac{1}{4}$ INCH OR -0 INCH FROM THE FIRST LAY DOWN.

SWEEP POINTS AFTER GALVANIZING MUST BE $\frac{3}{8}$ INCH FROM THE FIRST LAY DOWN

INDIVIDUAL BEAMS THAT EXCEED THE LISTED TOLERANCES MUST BE PLACED WITH AT LEAST TWO ADJACENT BEAMS IN LAY DOWN FOR CHECKING AGAINST THE RECORDED SHOP ASSEMBLY RECORDS PER 513.24. DOCUMENTATION OF THE SECOND LAY DOWN OR INDIVIDUAL MEMBER CAMBERS MUST BE RECORDED BY THE FABRICATOR'S QCS OR GALVANIZER'S QCS PER 513.24.

G. FIELD REPAIR OF DAMAGED AREAS (QCP #7)

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE CONTRACTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. IMPERFECTIONS MAY BE REPAIRED BY GRINDING AS ALLOWED BY ASTM A6 BY THE CONTRACTOR. IMPERFECTIONS THAT ARE GREATER THAN THE GRINDING LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THE MEMBER WILL BE AT THE DISCRETION OF THE OMM.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DAMAGED GALVANIZING WHICH WILL BE INACCESSIBLE FOR REPAIR AFTER ERECTION MUST BE REPAIRED PRIOR TO ERECTION.

IN ORDER TO MINIMIZE DAMAGE TO THE GALVANIZED STEEL, CONCRETE SPLATTER AND FORM LEAKAGE MUST BE WASHED FROM THE SURFACE OF THE STEEL SHORTLY AFTER THE CONCRETE IS PLACED AND BEFORE IT IS DRY. IF THE CONCRETE DRIES, IT MUST BE REMOVED.

TEMPORARY ATTACHMENTS, SUPPORTS FOR SCAFFOLDING AND FINISHING MACHINE OR FORMS MUST NOT DAMAGE THE COATING SYSTEM. IN PARTICULAR, SUFFICIENT SIZE SUPPORT PADS MUST BE USED ON THE FASCIAS WHERE BRACING IS USED.

DOCUMENTATION OF GALVANIZING REPAIRS MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

H. FINAL REVIEW (QCP #8)

AFTER THE ERECTION WORK HAS BEEN COMPLETED, INCLUDING ALL CONNECTIONS AND THE APPROVED REPAIR OF ANY DAMAGED BEAMS, GIRDERS OR OTHER STEEL MEMBERS, AND THE DECK HAS BEEN PLACED, THE CONTRACTOR AND ENGINEER MUST INSPECT THE STRUCTURE FOR DAMAGED COATING. (QCP #8). DAMAGED AREAS MUST BE REPAIRED BY QCP #7. AT THE COMPLETION OF CONSTRUCTION, THE GALVANIZING MUST BE UNDAMAGED AND THE SURFACES FREE FROM GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPLATTER OR OTHER SILAGE. SUCH SILAGE WILL BE REMOVED BY SOLVENT CLEANING PER SSPC-SP1 (QCP #1).

DOCUMENTATION OF FINAL REVIEW MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

4.0 TESTING EQUIPMENT

THE FABRICATOR MUST PROVIDE THE GALVANIZER'S QCS INSPECTOR THE FOLLOWING TESTING EQUIPMENT IN GOOD WORKING ORDER FOR THE DURATION OF THE PROJECT. ONE (POSITECTOR 2000 OR 6000, QUANIX 2200, OR ELCOMETER A345FBI1) AND THE CALIBRATION PLATES, 38-200 MM AND 250-625 MM [1.5-8 MILS AND 10-25 MILS] AS PER THE NBS CALIBRATION STANDARDS IN ACCORDANCE WITH ASTM D-1186.

5.0 COATING THICKNESS

GALVANIZED THICKNESS MUST BE DETERMINED BY USE OF TYPE 2 MAGNETIC GAGE IN ACCORDANCE WITH THE FOLLOWING:

FIVE SEPARATE SPOT MEASUREMENTS MUST BE MADE, SPACED EVENLY OVER ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF SURFACE AREA ON EACH STRUCTURAL MEMBER. THREE GAGE READINGS MUST BE MADE FOR EACH SPOT MEASUREMENT. THE PROBE MUST BE MOVED A DISTANCE OF 1 TO 3 INCHES FOR EACH NEW GAGE READING. ANY UNUSUALLY HIGH OR LOW GAGE READING THAT CANNOT BE REPEATED CONSISTENTLY MUST BE DISCARDED. THE AVERAGE (MEAN) OF THE 3 GAGE READINGS MUST BE USED AS THE SPOT MEASUREMENT. THE AVERAGE OF FIVE SPOT MEASUREMENTS FOR SUCH 100 SQUARE FOOT AREA MUST NOT BE LESS THAN THE SPECIFIED THICKNESS. NO SINGLE SPOT MEASUREMENT IN ANY 100 SQUARE FOOT AREA MUST NOT BE LESS THAN THE SPECIFIED THICKNESS. NO SINGLE SPOT MEASUREMENT IN ANY 100 SQUARE FOOT AREA MUST BE LESS THAN 80% OF THE SPECIFIED MINIMUM THICKNESS. ANY ONE OF 3 READINGS WHICH ARE AVERAGED TO PRODUCE EACH SPOT MEASUREMENT, MAY UNDER-RUN OR OVER-RUN BY A GREATER AMOUNT. THE 5 SPOT MEASUREMENTS MUST BE MADE FOR ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF AREA ON EACH STRUCTURAL MEMBER. ALL SPLICE MATERIAL AND SECONDARY MEMBERS MUST HAVE AT LEAST ONE SPOT MEASURED ON EACH PIECE. THE PROBE MUST BE MOVED SO THAT ONE READING IS TAKEN AT EACH END AND MIDDLE OF THE PIECE FOR A TOTAL OF THREE READINGS.

THE GALVANIZER'S QCS MUST INSPECT AND PROVIDE DOCUMENTATION OF ACTUAL DATA, THE GALVANIZED THICKNESS CHECKS WERE PERFORMED PER SPECIFICATION, AND THE COATING THICKNESS MEETS SPECIFICATION REQUIREMENTS.

6.0 SHOP PAINTING OF EXTERIOR FASCIA BEAMS

AFTER GALVANIZATION, REMOVE ZINC HIGH SPOTS SUCH AS META DRIP LINE AND OTHERS THAT WOULD DETRACT FROM THE PAINT APPEARANCE BY SSPC SP2 OR SP3. TAKE CARE THAT THE BASE GALVANIZED COATING IS NOT REMOVED. CHECK REPAIRED AREAS FOR REQUIRED COATING THICKNESS.

AFTER REMOVING HIGH SPOTS, CLEAN THE GALVANIZED COATING ACCORDING TO SSPC SP-1. THE CLEANING SOLUTION SHALL BE AN ALKALINE SOLUTION WITH A PH RANGING FROM A MINIMUM OF 11 TO A MAXIMUM OF 12. THIS SOLUTION CAN BE APPLIED BY IMMERSION, SPRAY OR SOFT NYLON BRUSH. FOLLOW CLEANING WITH A HOT WATER OR HOT PRESSURE WASHER RINSE. SEPARATE INDIVIDUAL PIECES AND POSITION TO FACILITATE DRAINAGE AND DRYING. THE PIECES SHALL BE COMPLETELY DRY BEFORE PROCEEDING.

AFTER CLEANING, ABRASIVE BLAST THE PIECES ACCORDING TO SSPC-SP7 BRISH-OFF BLAST CLEANING. THE BLASTING OPERATION SHALL ROUGHEN THE GALVANIZED SURFACE TO AN ANGULAR SURFACE PROFILE OF 0.75 TO 1.00 MILLS. SELECT THE BLASTING EQUIPMENT TECHNIQUE AND ABRASIVE MATERIAL TO PROVIDE FOR THE SPECIFIED SURFACE PROFILE WITHOUT REMOVAL OF EXCESSIVE ZINC LAYERS THE AMOUNT OF REMOVAL OF ZINC MILLAGE SHALL NOT EXCEED 1.0 MIL. REMOVE ALL ABRASIVE RESIDE WITH CLEAN COMPRESSED AIR OR OTHER METHODS ACCEPTABLE TO THE DEPARTMENT BRUSH-OFF BLAST CLEANING SHALL BE PREFORMED IN THE FIELD AFTER OBTAINING SURFACE PROFILE, FIELD APPLY A TWO COAT PAINT SYSTEM CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT. MEETING THE REQUIREMENTS OF C&MS 708.02 TO THE LIMITS SHOWN BELOW. APPLY THE EPOXY COATING WITHIN 24 HOURS OF THE BRUSH-OFF BLASTING.

FOR THE URETHANE FINISH COAT, USE AMS COLOR STANDARD 595A 15056 (BLUE).

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH EXTERIOR FASCIA BEAMS, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA BEAMS).

7.0 HANDLING AND SHIPPING

REASONABLE CARE MUST BE EXERCISED IN HANDLING THE GALVANIZED STEEL DURING SHIPPING, ERECTION, AND SUBSEQUENT CONSTRUCTION OF THE BRIDGE. THE STEEL MUST BE INSULATED FROM THE BINDING CHAINS BY SOFTENERS. HOOKS AND SLINGS USED TO HOIST STEEL MUST BE PADDED. DIAPHRAGMS AND SIMILAR PIECES MUST BE SPACED IN SUCH A WAY THAT NO RUBBING WILL OCCUR DURING SHIPMENT THAT MAY DAMAGE THE GALVANIZING. THE STEEL MUST BE STORED ON PALLETS AT THE JOB SITE, OR BY OTHER MEANS, SO THAT IT DOES NOT REST ON THE GROUND OR SO THAT COMPONENTS DO NOT FALL OR REST ON EACH OTHER.

FINAL TRACINGS NOT FOR CONSTRUCTION

GENERAL NOTES
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
MJT	SS

REVIEWER: RBB 8-14-26
PROJECT ID: 114865
SUBSET 3 | TOTAL 30
SHEET P.482 | TOTAL 627

SUM-077/008-11.65/0.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:02:06 AM USER: cterrell
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\3014997\6\400_CAD\401-Engineering_Arcadis\Structures\Carroll Street Bridge\Sheets\Bridge\Sheets\114865_CAR_SN002.dgn

8.0 SAFETY REQUIREMENT AND PRECAUTIONS

THE CONTRACTOR MUST MEET THE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), IN ADDITION TO THE SCAFFOLDING REQUIREMENTS BELOW.

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION IN ADDITION TO THE SCAFFOLDING REQUIREMENTS SPECIFIED BELOW.

9.0 SCAFFOLDING

RUBBER ROLLERS, OR OTHER PROTECTIVE DEVICES MEETING THE APPROVAL OF THE ENGINEER, MUST BE USED ON SCAFFOLD FASTENINGS. METAL ROLLERS OR CLAMPS AND OTHER TYPES OF FASTENINGS WHICH WILL MAR OR DAMAGE COATED SURFACES MUST NOT BE USED.

10.0 INSPECTION ACCESS FOR FIELD REPAIR

IN ADDITION TO THE REQUIREMENT OF 105.10, THE CONTRACTOR MUST FURNISH, ERECT, AND MOVE SCAFFOLDING AND OTHER APPROPRIATE EQUIPMENT, TO PERMIT THE INSPECTOR THE OPPORTUNITY TO INSPECT CLOSELY OBSERVE, ALL AFFECTED SURFACES. THIS OPPORTUNITY MUST BE PROVIDED TO THE INSPECTOR DURING ALL PHASES OF THE WORK AND CONTINUE FOR A PERIOD OF AT LEAST TEN (10) WORKING DAYS AFTER THE TOUCH-UP WORK HAS BEEN COMPLETED. WHEN SCAFFOLDING IS USED, IT MUST BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS. WHEN SCAFFOLDING, OR THE HANGERS ATTACHED TO THE SCAFFOLDING ARE SUPPORTED BY HORIZONTAL WIRE ROPES, OR WHEN SCAFFOLDING IS PLACED DIRECTLY UNDER THE SURFACE TO BE PAINTED, THE FOLLOWING REQUIREMENTS MUST BE COMPLIED WITH:

WHEN SCAFFOLDING IS SUSPENDED 43" OR MORE BELOW THE COATED SURFACE TO BE REPAIRED, TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING. ONE ROW OF GUARDRAIL MUST BE PLACED AT 42" ABOVE THE SCAFFOLDING AND THE OTHER ROW AT 20" ABOVE THE SCAFFOLDING.

WHEN THE SCAFFOLDING IS SUSPENDED AT LEAST 21", BUT LESS THAN 43" BELOW THE COATED SURFACE TO BE REPAIRED, A ROW OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING AT 20" ABOVE THE SCAFFOLDING.

TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF SCAFFOLDING NOT PREVIOUSLY MENTIONED. THE ROWS OF GUARDRAIL MUST BE PLACED AT 42" AND 20" ABOVE SCAFFOLDING, AS PREVIOUSLY MENTIONED.

ALL SCAFFOLDING MUST BE AT LEAST 24" WIDE WHEN GUARDRAIL IS USED AND 28" WIDE WHEN THE SCAFFOLDING IS SUSPENDED LESS THAN 21" BELOW THE COATED SURFACE TO BE REPAIRED AND GUARDRAIL IS NOT USED. IF TWO OR MORE SCAFFOLDING ARE LAID PARALLEL TO ACHIEVE THE PROPER WIDTH, THEY MUST BE RIGIDLY ATTACHED TO EACH OTHER TO PRECLUDE ANY DIFFERENTIAL MOVEMENT.

ALL GUARDRAILS MUST BE CONSTRUCTED AS A SUBSTANTIAL BARRIER WHICH IS SECURELY FASTENED IN PLACE AND IS FREE FROM PROTRUDING OBJECTS SUCH AS NAILS, SCREWS AND BOLTS. THERE MUST BE AN OPENING IN THE GUARDRAIL, PROPERLY LOCATED, TO ALLOW THE INSPECTOR ACCESS ONTO THE SCAFFOLDING.

THE RAILS AND UPRIGHTS MUST BE EITHER METAL OR WOOD. IF PIPE RAILING IS USED, THE RAILING MUST HAVE A NOMINAL DIAMETER OF NO LESS THAN ONE AND ONE HALF INCHES. IF STRUCTURAL STEEL RAILING IS USED, THE RAILS MUST BE 2x2x$\frac{3}{8}$ INCH STEEL ANGLES OR OTHER METAL SHAPES OF EQUAL OR GREATER STRENGTH. IF WOOD RAILING IS USED, THE RAILING MUST BE 2x4 INCH (NOMINAL) STOCK. ALL UPRIGHTS MUST BE SPACED AT NO MORE THAN 8 FEET ON CENTER. IF WOOD UPRIGHTS ARE USED, THE UPRIGHTS MUST BE 2x4 INCHES (NOMINAL) STOCK.

WHEN THE SURFACE TO BE INSPECTED IS MORE THAN 15 FEET ABOVE THE GROUND OR WATER, AND THE SCAFFOLDING IS SUPPORTED FROM THE STRUCTURE BEING PAINTED, THE CONTRACTOR MUST PROVIDE THE INSPECTOR WITH A SAFETY BELT AND LIFELINE. THE LIFELINE MUST NOT ALLOW A FALL GREATER THAN 6 FEET. THE CONTRACTOR MUST PROVIDE A METHOD OF ATTACHING THE LIFELINE TO THE STRUCTURE INDEPENDENT OF THE SCAFFOLDING, CABLES, OR BRACKETS SUPPORTING THE SCAFFOLDING.

WHEN SCAFFOLDING IS MORE THAN TWO AND ONE HALF FEET ABOVE THE GROUND, THE CONTRACTOR MUST PROVIDE A LADDER FOR ACCESS ONTO THE SCAFFOLDING. THE LADDER AND ANY EQUIPMENT USED TO ATTACH THE LADDER TO THE STRUCTURE MUST BE CAPABLE OF SUPPORTING 250 POUNDS WITH A SAFETY FACTOR OF AT LEAST FOUR (4). ALL RUNGS, STEPS, CLEATS, OR TREADS MUST HAVE UNIFORM SPACING AND MUST NOT EXCEED 12" ON CENTER. AT LEAST ONE SIDE RAIL MUST EXTEND AT LEAST 36" ABOVE THE LANDING NEAR THE TOP OF THE LADDER.

AN ADDITIONAL LANDING MUST BE REQUIRED WHEN THE DISTANCE FROM THE LADDER TO THE POINT WHERE THE SCAFFOLDING MAY BE ACCESSED EXCEEDS 12". THE LANDING MUST BE A MINIMUM OF AT LEAST 24" WIDE AND 24" LONG. IT MUST ALSO BE OF ADEQUATE SIZE AND SHAPE SO THAT THE DISTANCE FROM THE LANDING TO THE POINT WHERE THE SCAFFOLDING IS ACCESSED DOES NOT EXCEED 12". THE LANDING MUST BE RIGID AND FIRMLY ATTACHED TO THE LADDER, HOWEVER, IT MUST NOT BE SUPPORTED BY THE LADDER. THE SCAFFOLDING MUST BE CAPABLE OF SUPPORTING A MINIMUM OF 1000 LBS.

IN ADDITION TO THE AFOREMENTIONED REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE TO OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES.

THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC CONTROL TO PERMIT INSPECTION DURING AND AFTER ALL PHASES OF THE PROJECT.

11.0 PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR MUST INSTALL AND MAINTAIN SUITABLE SHIELDS OR ENCLOSURES TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS, TRUCKS, BOATS, OR VEHICLES TRAVELING ON, OVER, OR UNDER STRUCTURES HAVING GALVANIZED REPAIRS. THEY MUST BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATION IN THE OPEN LANES. PAYMENT FOR THE SHIELDS MUST BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING OPERATION. WORK MUST BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, MOTOR VEHICLES, BOATS, OR OTHER PROPERTY IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR MUST RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY, TO A CONDITION SIMILAR OR EQUAL TO THE EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE.

12.0 POLLUTION CONTROL

THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL AGENCIES.

13.0 OPTION 2: SHOP METALIZING AND SHOP PAINTING OF EXTERIOR FASCIA BEAMS

DELETE THE REQUIREMENTS OF 513.27. SHOP METALIZE ALL STRUCTURAL STEEL SURFACES PER SUPPLEMENTAL SPECIFICATION (SS) 845, INCLUDING BUT NOT LIMITED TO BEAMS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, AND BEARING LOAD PLATES, EXCEPT DO NOT METALIZE THE TOP SURFACE OF BEAM TOP FLANGES. APPLY A PRIME COAT, 708.01, IN THE SHOP TO THE TOP SURFACE OF BEAM TOP FLANGES. THE PRIME COAT SHALL BE A MIST COATING FROM 0.5 TO 1.5 MILS.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH EXTERIOR FASCIA BEAMS, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF EXTERIOR FASCIA BEAMS).

FOR THE URETHANE FINISH COAT, USE AMS COLOR STANDARD 595A 15056 (BLUE).

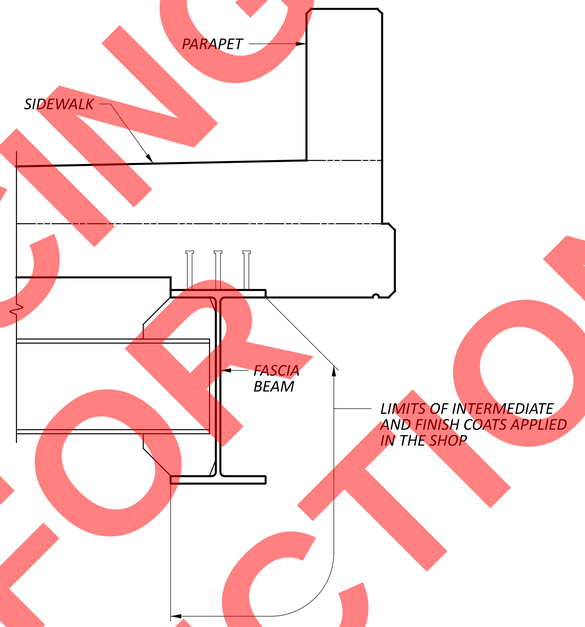
REPAIR DAMAGE TO THE METALIZING CAUSED DURING STORAGE, TRANSPORTATION, ERECTION, BOLTING, WELDING, FORMING, CONCRETE PLACEMENT, AND FORM REMOVAL OPERATION, ACCORDING TO C&MS 711.02. REPAIR DAMAGE TO THE GALVANIZED COATING ON THE NUTS, BOLTS, AND WASHERS, IN THE FIELD DUE TO THE BOLT TIGHTENING OPERATIONS, ACCORDING TO C&MS 711.02. EXERCISE EXTREME CARE WHILE HANDLING THE STEEL DURING ERECTION, AND DURING SUBSEQUENT CONSTRUCTION OF THE BRIDGE. INSULATE THE STEEL FROM THE BINDING CHAINS BY SOFTENERS AND PAD ALL HOOKS AND SLINGS THAT ARE USED TO HOIST/ERECT THE STEEL MEMBERS.

14.0 METHOD OF MEASUREMENT

THE COST OF ALL LABOR, MATERIALS, EQUIPMENT NECESSARY TO GALVANIZE OR METALIZE, FABRICATE THE STRUCTURAL STEEL IN ACCORDANCE WITH 513, APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER C&MS 514 TO THE SURFACES NOTED IN THE LIMITS OF FASCIA BEAM PAINTING DETAIL AND PERFORM ANY NECESSARY FIELD REPAIR SHALL BE INCLUDED IN THIS 513, AS PER PLAN ITEM.

15.0 BASIS OF PAYMENT

PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN.



LIMITS OF EXTERIOR FASCIA BEAM PAINTING

FINAL PLANS NOT FOR CONSTRUCTION

GENERAL NOTES
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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222 SOUTH MAIN STREET, SUITE 200
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DESIGNER	CHECKER
MJT	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
4	30

SHEET	TOTAL
P.483	627

SUM-077/008-11.65/0.00
MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:02:21 AM USER: cferrell
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\3014997\6\400_CAD\401-Engineering_Arcadis\Structures\Carroll Street Bridge\Sheets\114865_CAR_SN003.dgn

PARTICIPATION	ESTIMATED QUANTITIES					CALC. BY: RBB		DATE: 5/21/26		AS PER PLAN
						CHK'D BY: SMS		DATE: 5/21/26		
06/NHS	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT	PIER	GENERAL	STR. SHT. NO.
1	202	11003	1	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	2
147	202	22900	147	SY	APPROACH SLAB REMOVED				147	
1	503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING				1	
1,029	503	21100	1,029	CY	UNCLASSIFIED EXCAVATION		943	86		
680	503	31100	680	CY	ROCK EXCAVATION		676	4		
158,898	509	10000	158,898	LB	EPOXY COATED STEEL REINFORCEMENT	89398	51583	17917		
2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		2			
249	511	34446	249	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	249				
42	511	41012	42	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS			42		
356	511	44112	356	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING		356			
261	511	46512	261	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		211	50		
95	511	51512	95	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK	72			23	
367	512	10050	367	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	279			88	
815	512	10100	815	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	322	300	131	62	
278,478	513	10261	278,478	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN	278,478				3 , 4
3,726	513	20000	3,726	EACH	WELDED STUD SHEAR CONNECTORS	3726				
125	516	10000	125	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL				125	
125	516	10011	125	FT	ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN				125	28
91	516	13600	91	SF	1" PREFORMED EXPANSION JOINT FILLER		83		8	
143	516	13900	143	SF	2" PREFORMED EXPANSION JOINT FILLER		54		89	
152	516	14020	152	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		152			
9	516	44101	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN(1'-5"X1'-4"X2.668")	9				
18	516	44201	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN(1'-3"X1'-2"X3.273")		18			
374	517	75120	374	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)	284			90	
273	518	21200	273	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		273			
194	518	40000	194	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		194			
46	518	40010	46	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		46			
104	526	10000	104	SY	REINFORCED CONCRETE APPROACH SLABS (T=12")				104	
209	526	30000	209	SY	REINFORCED CONCRETE APPROACH SLABS (T=17")				209	
125	526	90030	125	FT	TYPE C INSTALLATION				125	
2,671	530	13000	2,671	SF	SPECIAL - FORM LINER		2671			
344	607	39911	344	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN		284		60	2 ,23,24
8	613	41200	8	CY	LOW STRENGTH MORTAR BACKFILL		5	3		

FINAL TRACINGS
NOT FOR CONSTRUCTION

ESTIMATED QUANTITIES
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
5	30

SHEET	TOTAL
P.484	627

SUM-077/008-11.65/0.00

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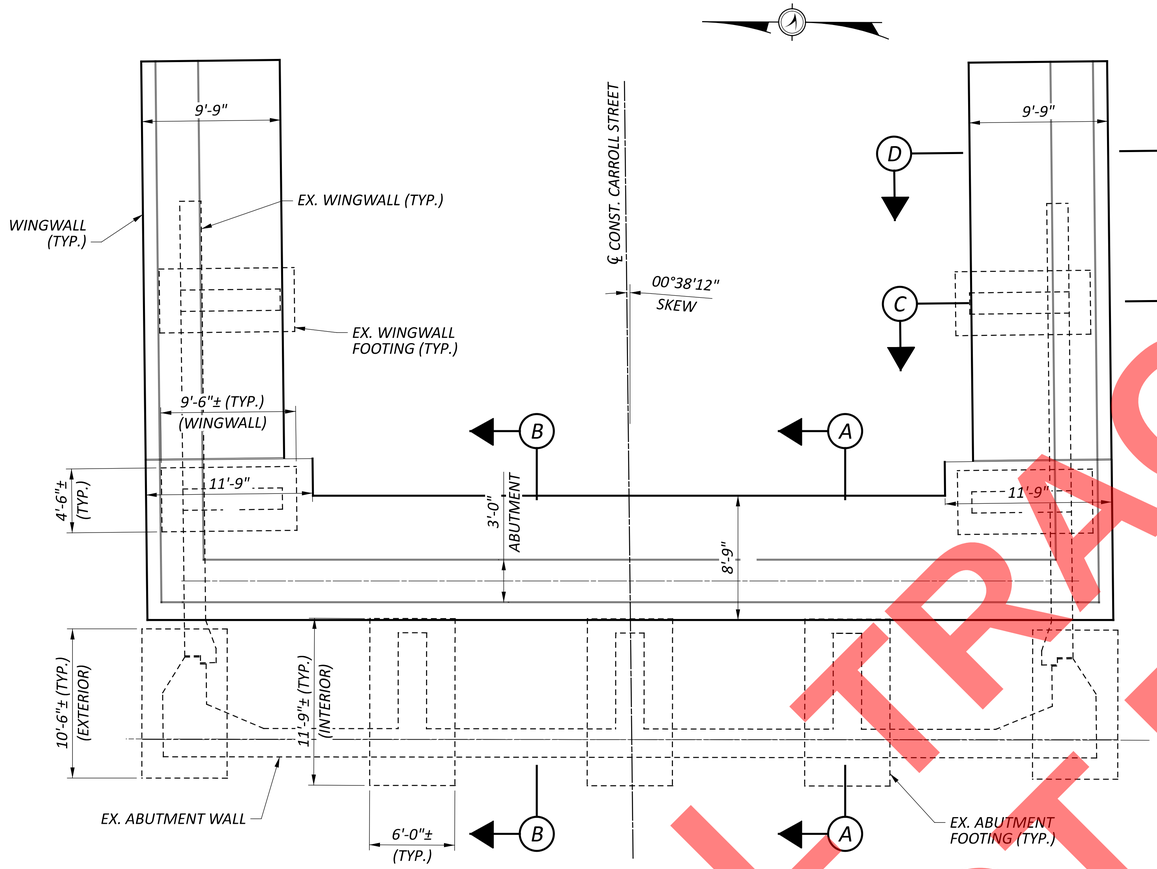
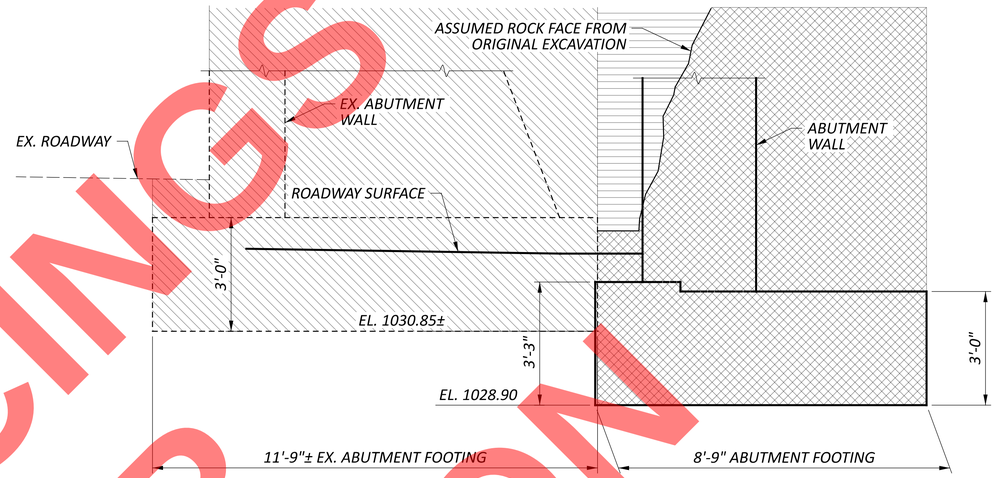


ABUTMENT FOUNDATION KEY

(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)



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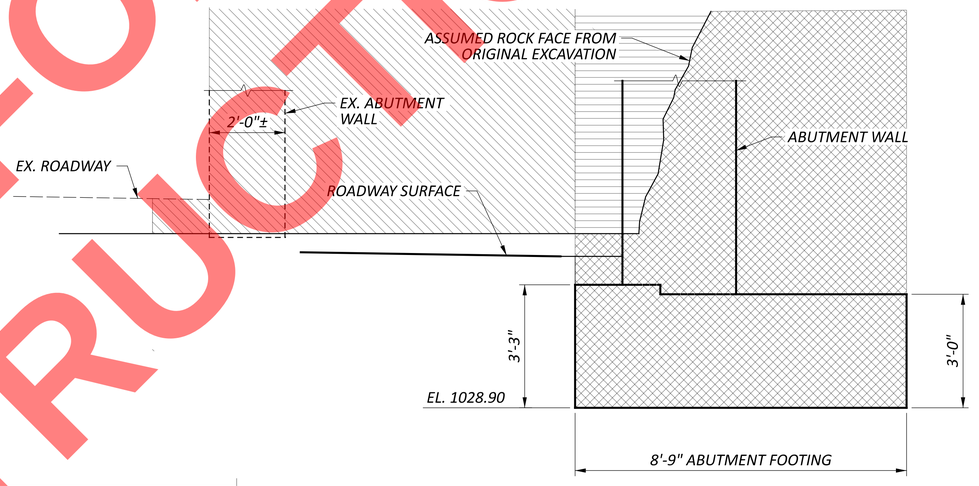

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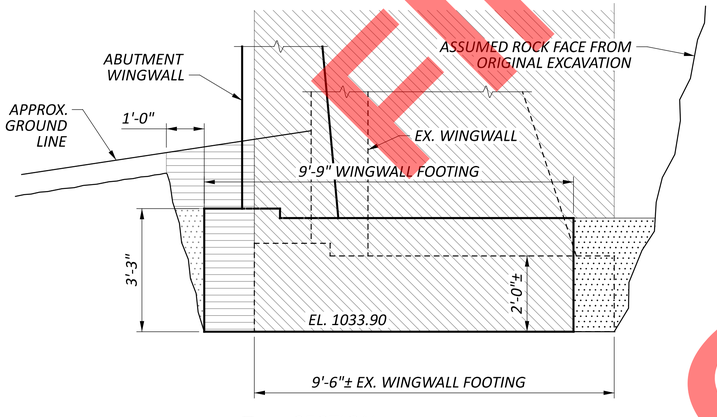

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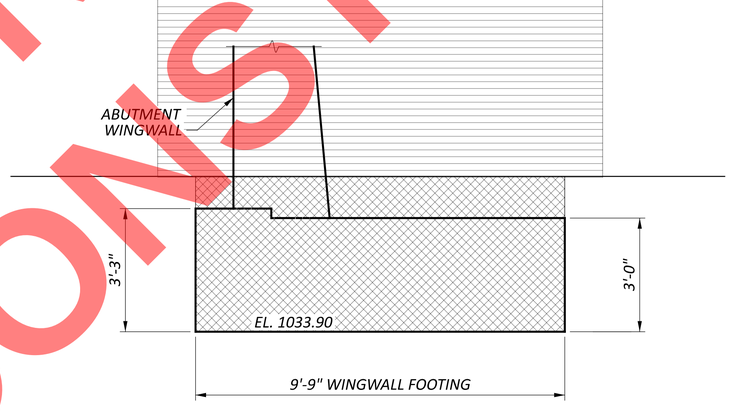

D SECTION

LEGEND:

- ITEM 202 - STRUCTURE REMOVED
- ITEM 503 - ROCK EXCAVATION
- ITEM 503 - UNCLASSIFIED EXCAVATION
- ITEM 613 - LOW STRENGTH MORTAR BACKFILL

FINAL TRACINGS
NOT FOR CONSTRUCTION

REMOVAL AND EXCAVATION DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
6	30

SHEET	TOTAL
P.485	627

SUM-077/008-11.65/0.00

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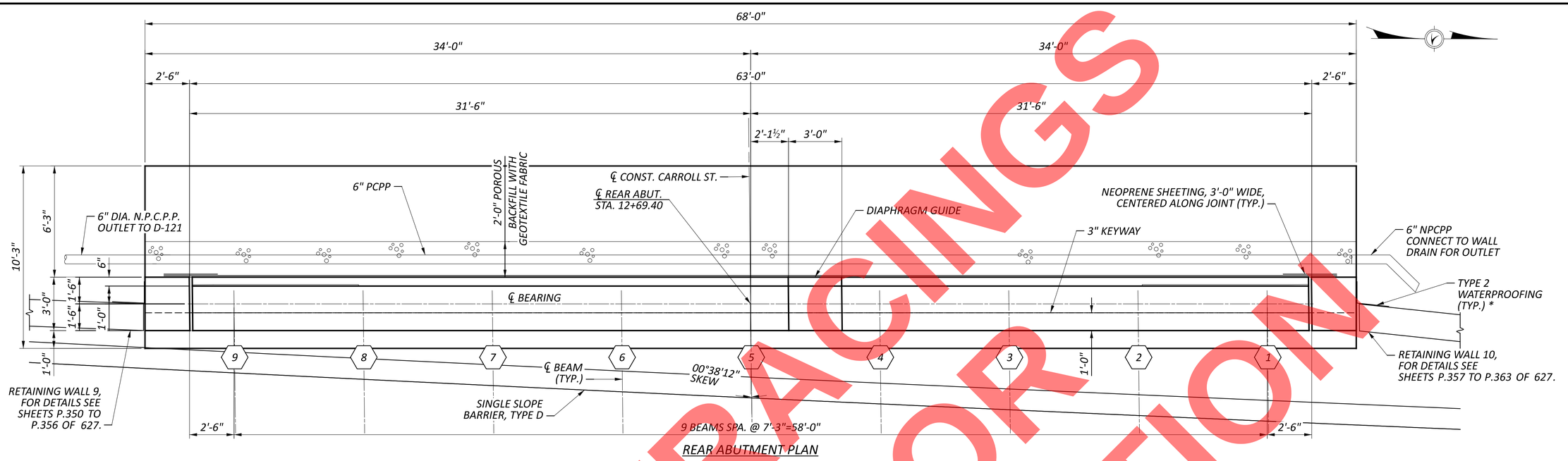
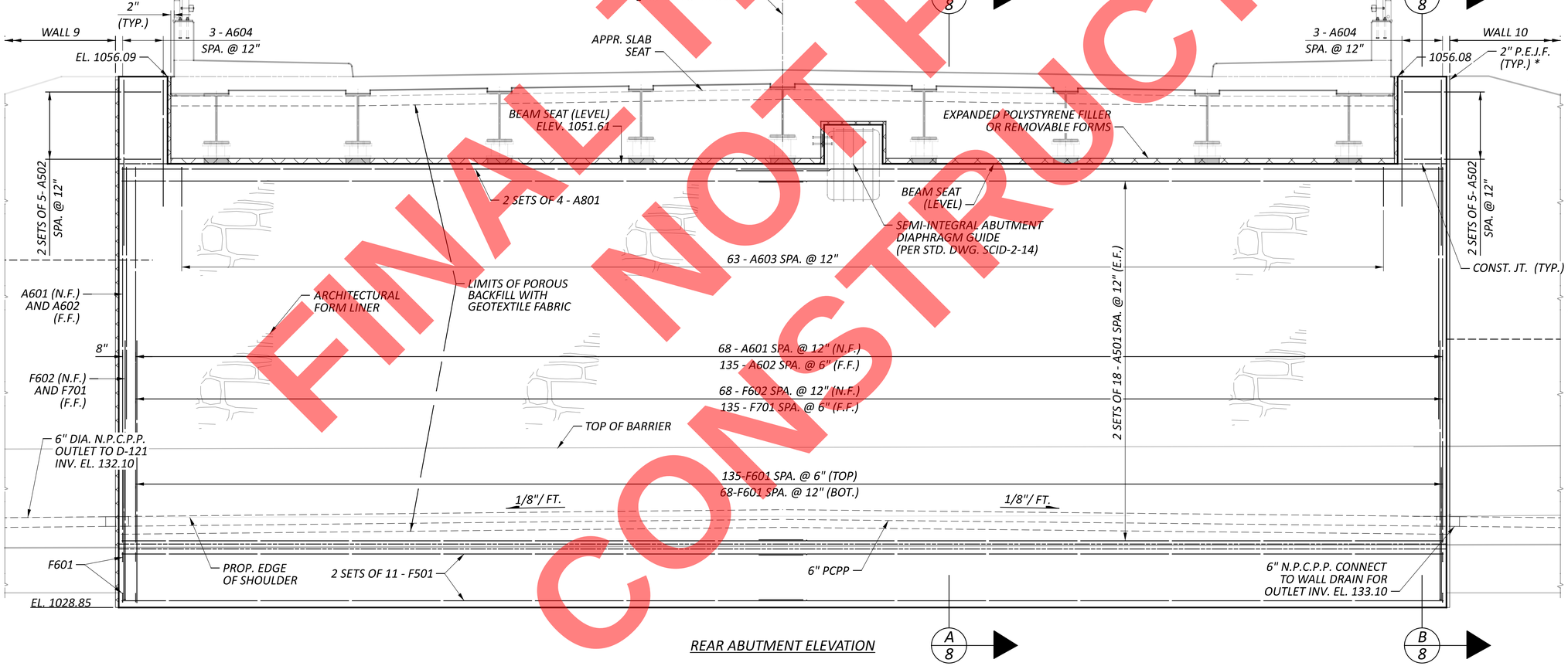


REAR ABUTMENT PLAN



REAR ABUTMENT ELEVATION

NOTES:

1. FOR ABUTMENT DIAPHRAGM REINFORCING, SEE SHEET 18 / 30
2. SEAL VERTICAL EXPANSION JOINT BETWEEN ABUTMENT AND RETAINING WALLS FROM TOP OF FOOTING TO 1 FOOT BELOW FINISH GRADE WITH TYPE 2 WATERPROOFING MATERIAL, 3'-0" WIDE CENTERED ON THE JOINT.
3. ALL DIMENSIONS ARE ALONG CENTERLINE OF BEARING UNLESS NOTED OTHERWISE.
4. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS AND REINFORCING, SEE ODOT STANDARD DRAWING SICD-2-14.
5. MINIMUM LAP LENGTHS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"
   #7 BARS = 56"
   #8 BARS = 64"

LEGEND:

* INCLUDE WITH RETAINING WALL QUANTITIES FOR PAYMENT

FINAL TRACINGS
NOT FOR CONSTRUCTION

REAR ABUTMENT DETAILS (1 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
7	30

SHEET	TOTAL
P.486	627

SUM-077/008-11.65/0.00

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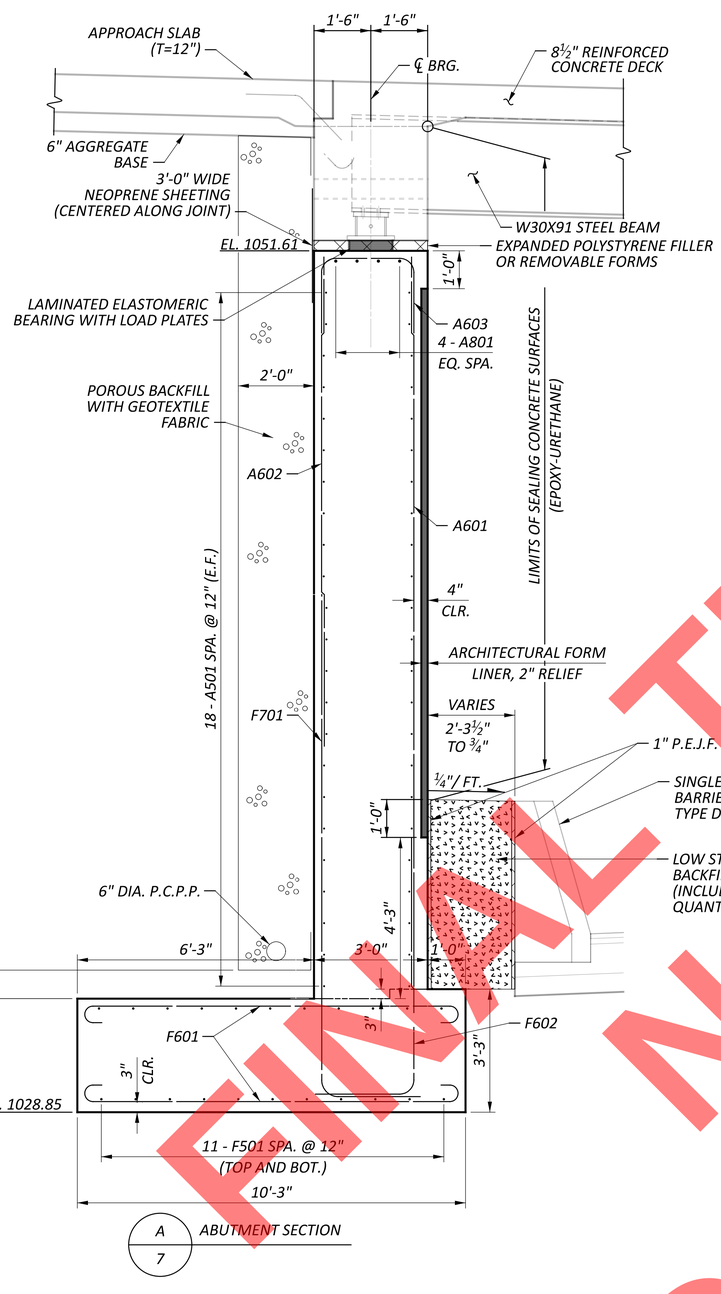

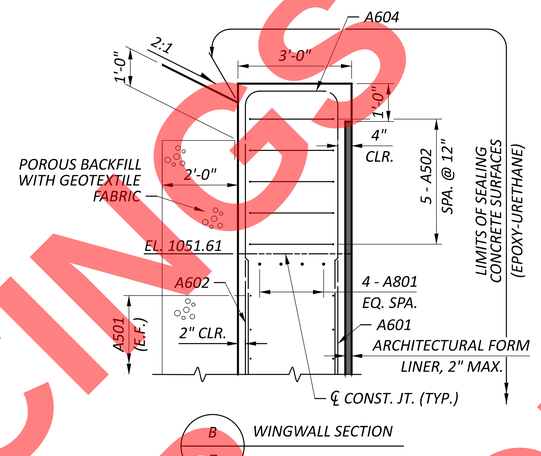

LEGEND:

* INCLUDE WITH LOW STRENGTH MORTAR BACKFILL (TYPE 1) FOR PAYMENT.

LOW STRENGTH MORTAR BACKFILL (TYPE 1) (INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT)

NOTES:

1. GEOTEXTILE FABRIC SHALL CONFORM WITH 712.09, TYPE A, AND BE INCLUDED WITH ITEM 518, POROUS BACKFILL FOR PAYMENT.
2. MINIMUM LAP LENGTHS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"
   #7 BARS = 56"
   #8 BARS = 64"

FINAL
NOT FOR
CONSTRUCTION
TRACINGS

REAR ABUTMENT DETAILS (2 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
8	30

SHEET	TOTAL
P.487	627

SUM-077/008-11.65/0.00

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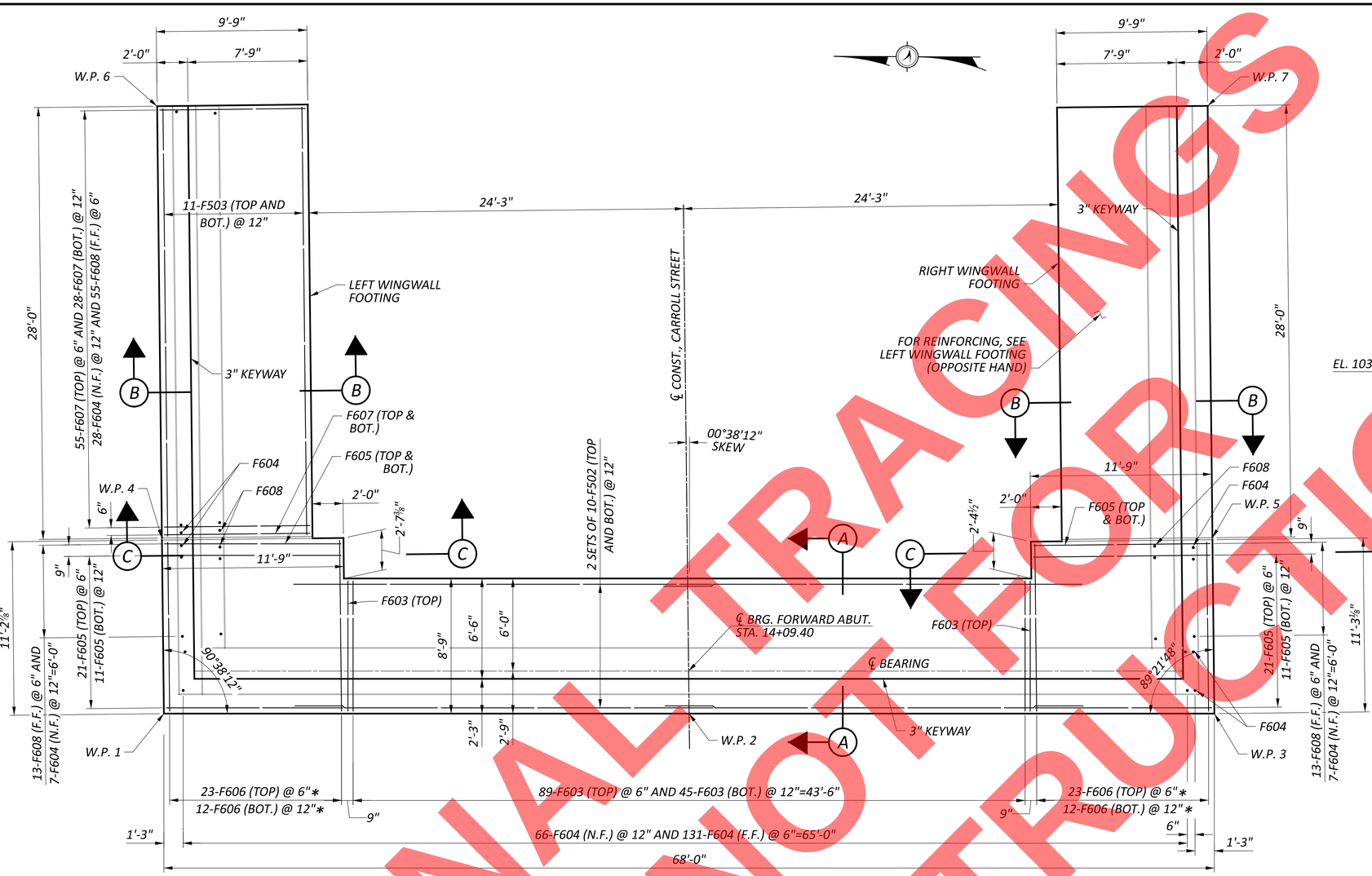
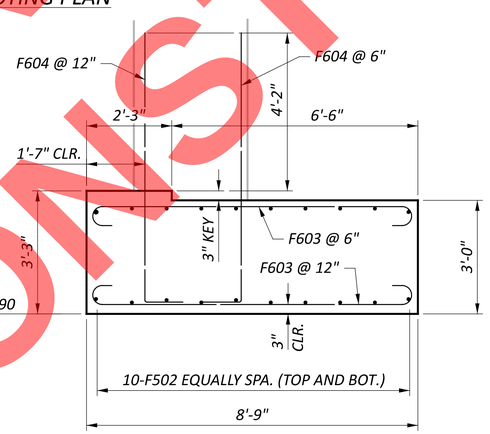


FORWARD ABUTMENT FOOTING PLAN

WORK POINT LOCATION TABLE		
POINT	STATION	OFFSET
W.P. 1	14+07.03	34.00' LT.
W.P. 2	14+06.65	0'
W.P. 3	14+06.27	34.00' RT.
W.P. 4	14+18.35	34.00' LT.
W.P. 5	14+17.62	34.00' RT.
W.P. 6	14+46.35	34.00' LT.
W.P. 7	14+45.62	34.00' RT.



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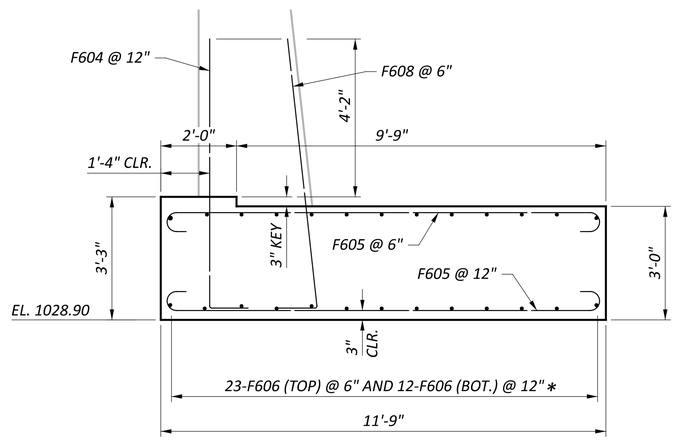

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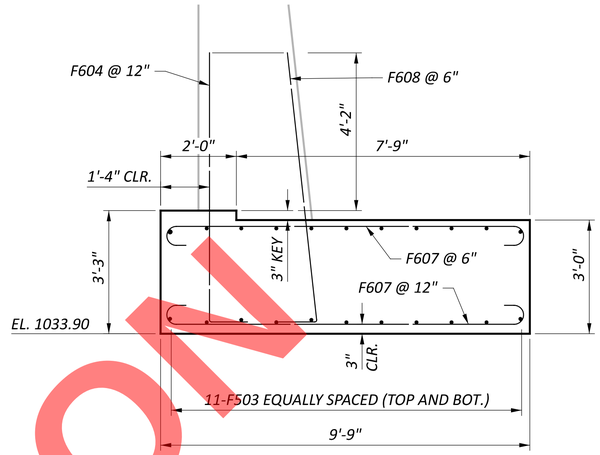

B SECTION

NOTE

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"

LEGEND

* PLACE HOOK FRONT OF FOOTING

FINAL PLANS NOT FOR CONSTRUCTION

FORWARD ABUTMENT DETAILS (1 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4555
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
9	30

SHEET	TOTAL
P.488	627

SUM-077/008-11.65/0.00

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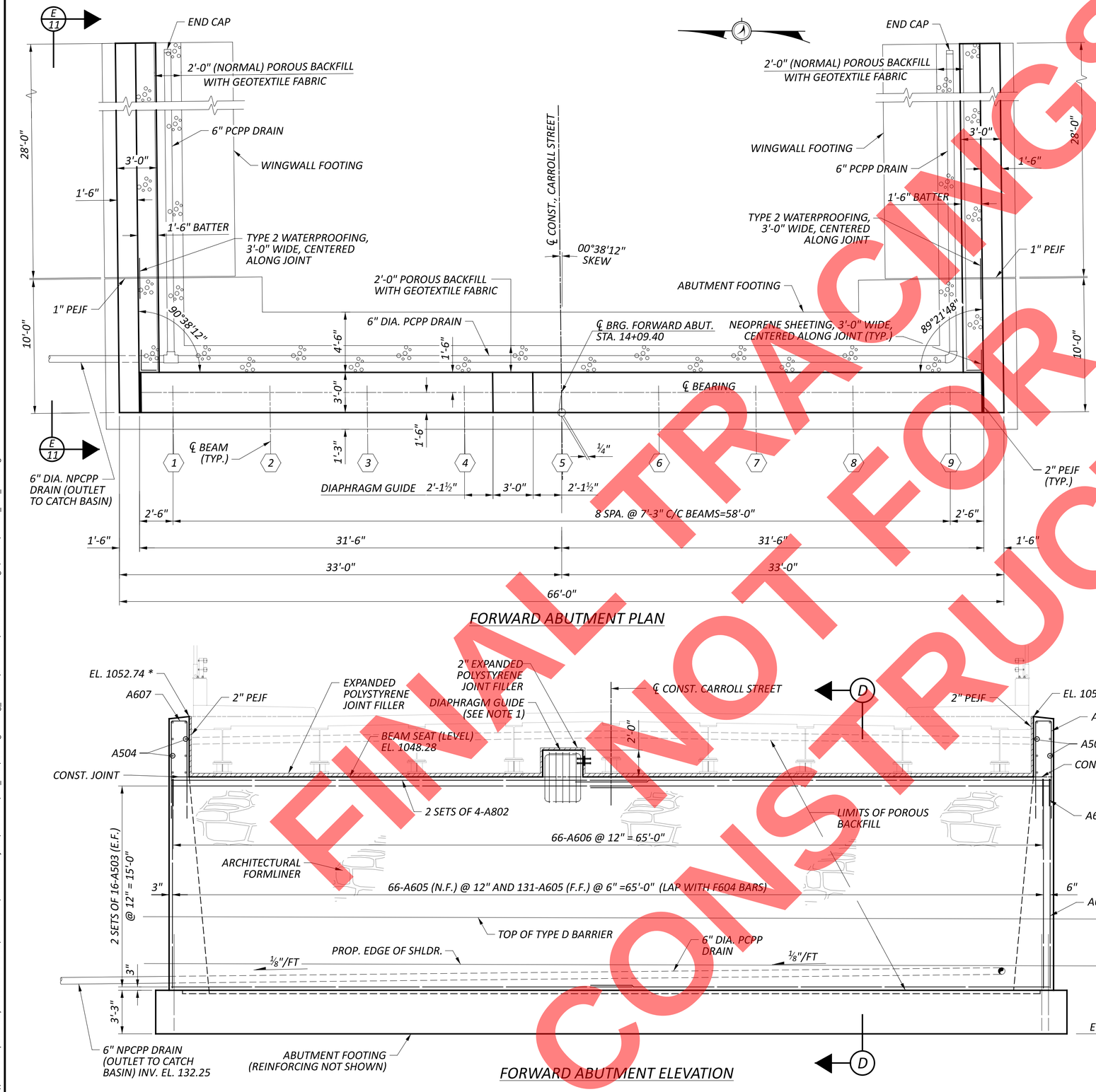
FINAL PLANS
NOT FOR
CONSTRUCTION



LEGEND:

* ELEVATIONS TAKEN AT CENTERLINE BEARING

NOTES:

1. FOR SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE DETAILS AND REINFORCING, SEE O.D.O.T. STANDARD DRAWING SICD-2-14.
2. GEOTEXTILE FABRIC SHALL CONFORM WITH 712.09, TYPE A, AND BE INCLUDED WITH ITEM 518, POROUS BACKFILL FOR PAYMENT.
3. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"
   #8 BARS = 64"
4. FOR FORWARD ABUTMENT DIAPHRAGM DETAILS, SEE SHEET 19 / 30 .
5. FOR ADDITIONAL FORWARD ABUTMENT DETAILS, SEE SHEETS 9 / 30 AND 11 / 30 .

FORWARD ABUTMENT DETAILS (2 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9955
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
10	30

SHEET	TOTAL
P.489	627

SUM-077/008-11.65/0.00

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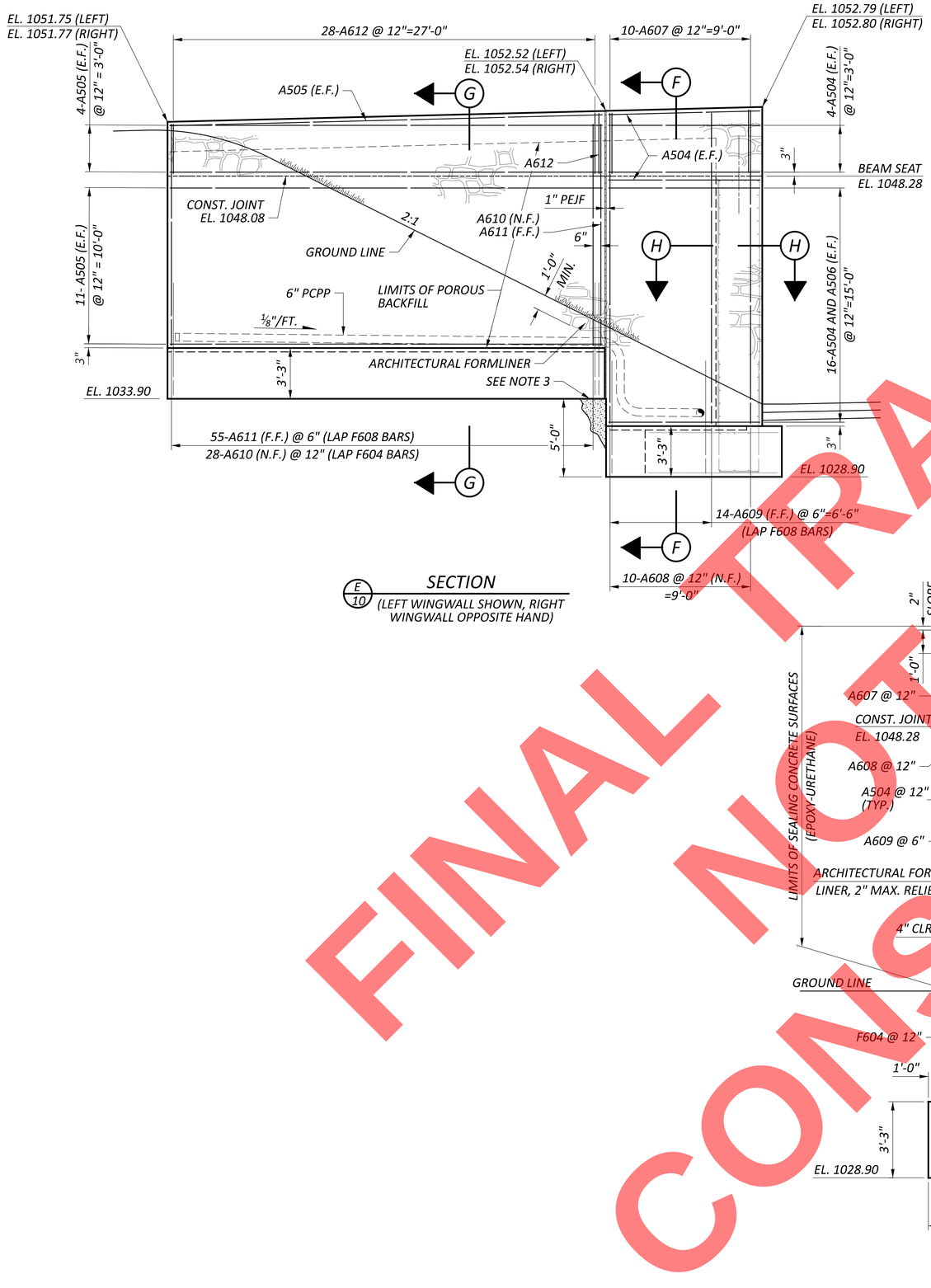
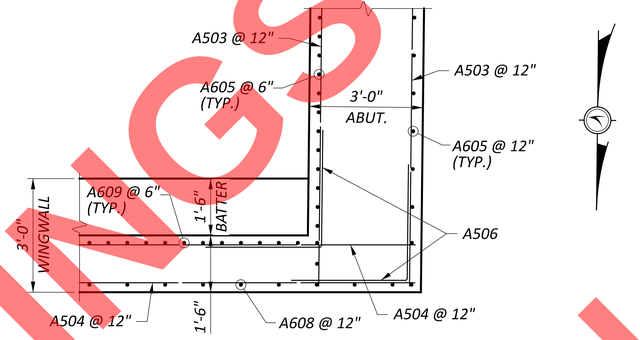
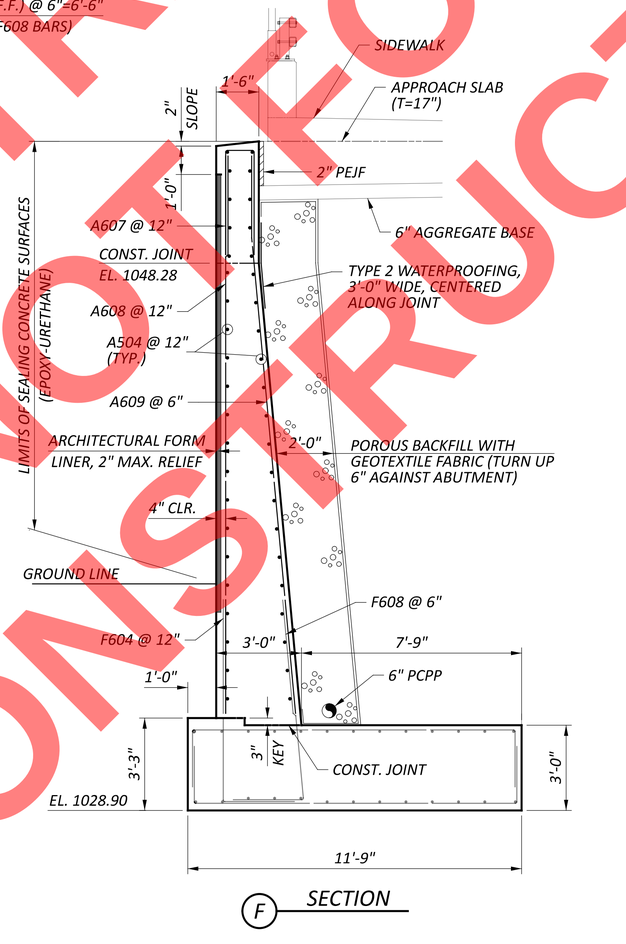


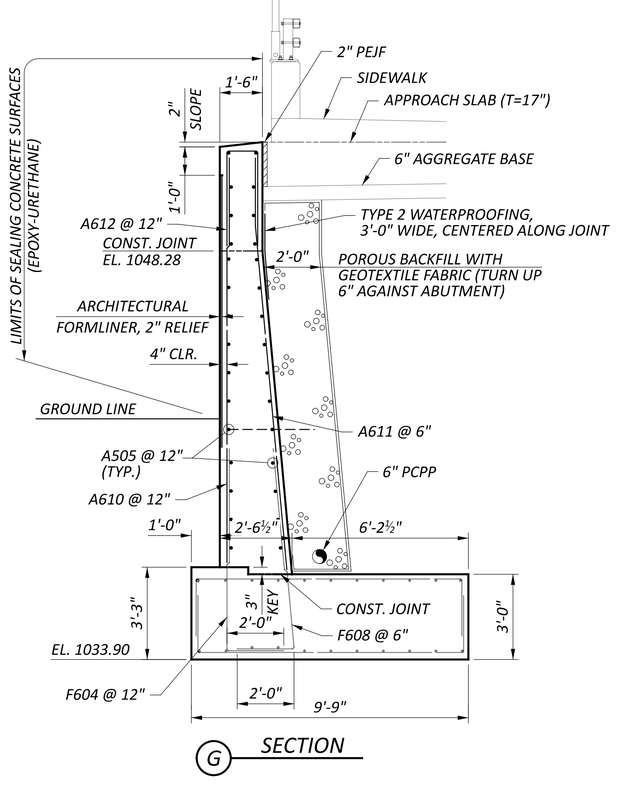
E/10 SECTION
(LEFT WINGWALL SHOWN, RIGHT WINGWALL OPPOSITE HAND)



H SECTION



F SECTION



G SECTION

NOTES:

1. GEOTEXTILE FABRIC SHALL CONFORM WITH 712.09, TYPE A, AND BE INCLUDED WITH ITEM 518, POROUS BACKFILL FOR PAYMENT.
2. PLACE WINGWALL FOOTINGS AT ELEVATIONS SHOWN, OR THREE INCHES INTO ROCK, WHICHEVER ELEVATION IS LOWER.
3. FILL VOIDS BELOW WINGWALL FOOTING WITH LOW STRENGTH MORTAR BACKFILL.
4. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BARS = 37"
   #6 BARS = 48"
   #8 BARS = 64"

FINAL TRACINGS
NOT FOR CONSTRUCTION

FORWARD ABUTMENT DETAILS (3 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
11	30

SHEET	TOTAL
P.490	627

SUM-077/008-11.65/0.00
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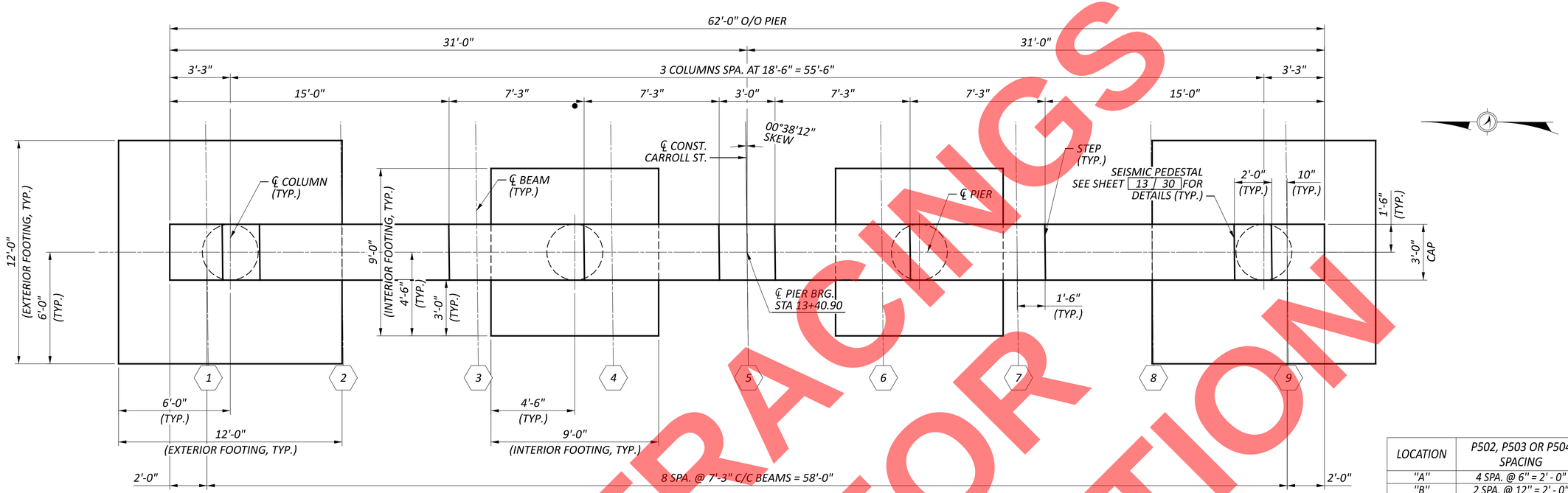
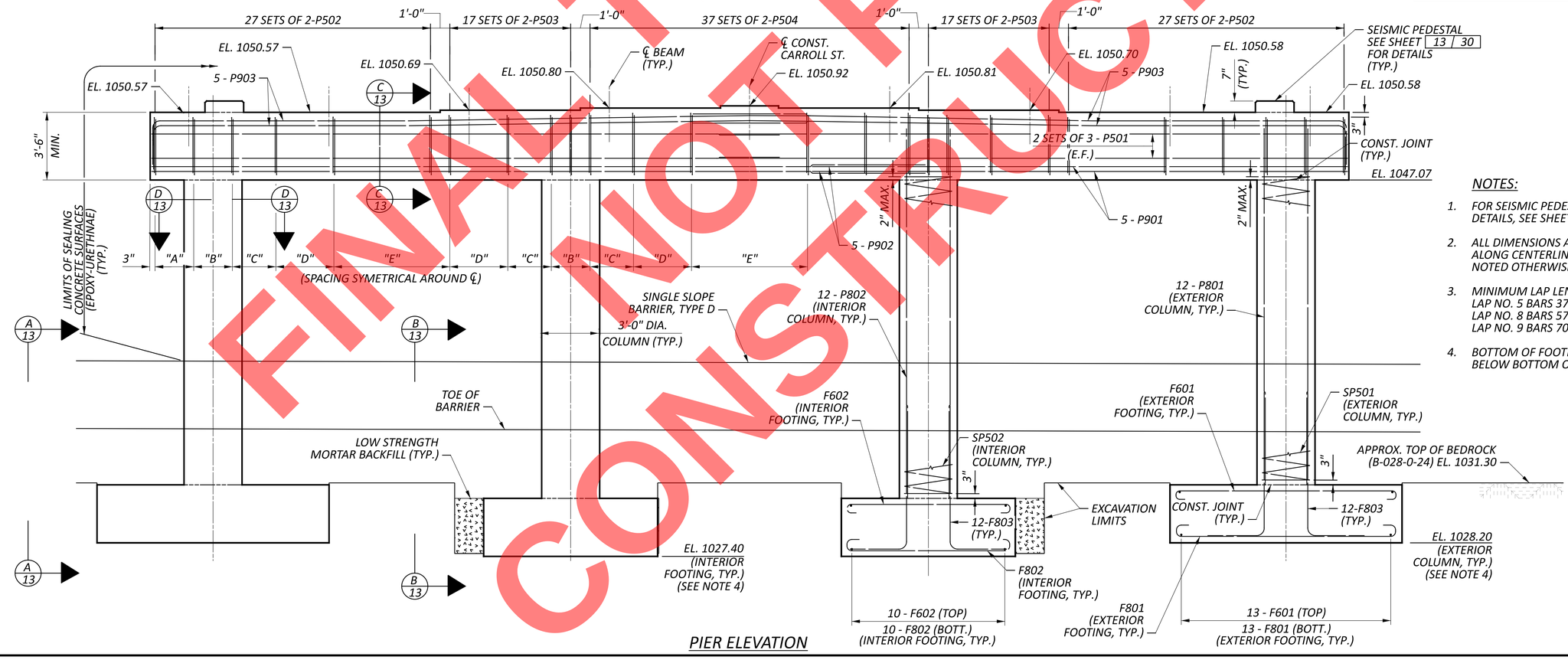


PIER PLAN

LOCATION	P502, P503 OR P504 SPACING
"A"	4 SPA. @ 6" = 2' - 0"
"B"	2 SPA. @ 12" = 2' - 0"
"C"	9 SPA. @ 3" = 2' - 3"
"D"	6 SPA. @ 6" = 3' - 0"
"E"	6 SPA. @ 12" = 6' - 0"



PIER ELEVATION

NOTES:

1. FOR SEISMIC PEDESTAL REINFORCING DETAILS, SEE SHEET 13 / 30
2. ALL DIMENSIONS AND ELEVATION ARE ALONG CENTERLINE OF BEARING UNLESS NOTED OTHERWISE.
3. MINIMUM LAP LENGTH:
   LAP NO. 5 BARS 37"
   LAP NO. 8 BARS 57"
   LAP NO. 9 BARS 70"
4. BOTTOM OF FOOTING SHALL BE 3" BELOW BOTTOM OF EXISTING FOOTING.

FINAL TRACINGS NOT FOR CONSTRUCTION

PIER DETAILS (1 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
12	30

SHEET	TOTAL
P.491	627

SUM-077/008-11.65/0.00

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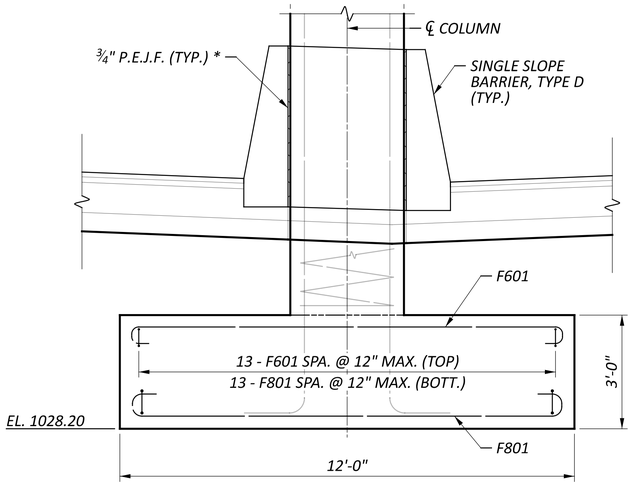
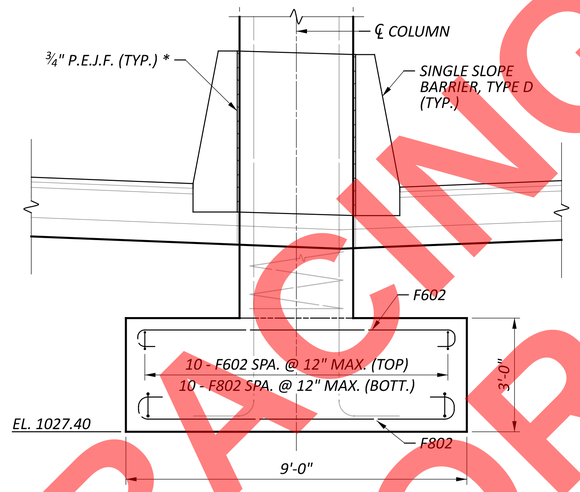
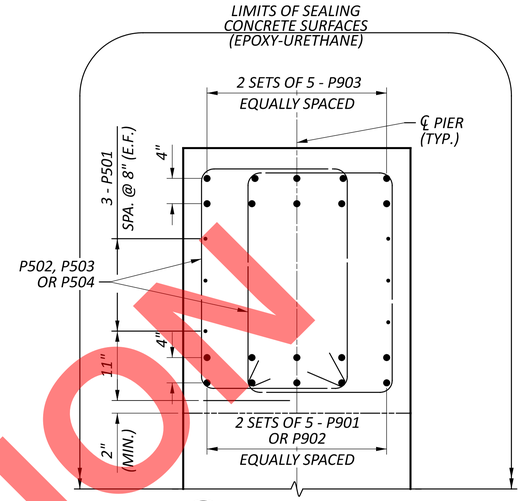


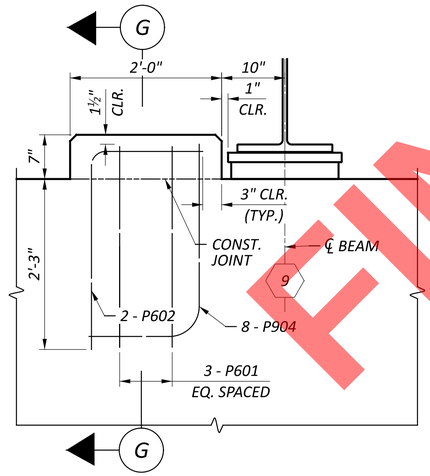
A / 12 EXTERIOR FOOTING



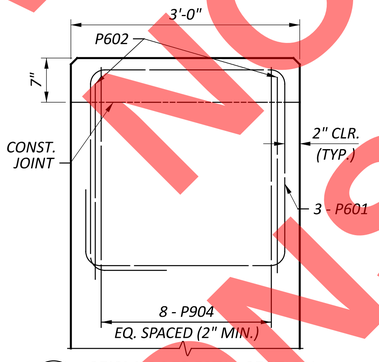
B / 12 INTERIOR FOOTING



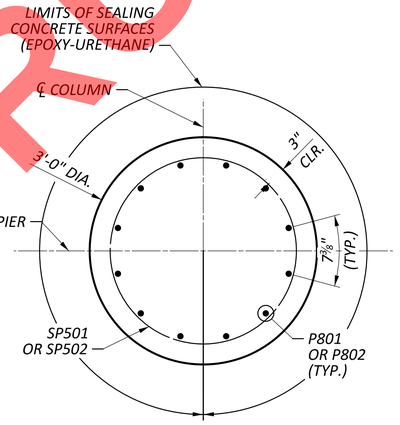
C / 12 PIER CAP SECTION



13 / 30 SEISMIC PEDESTAL ELEVATION



G SEISMIC PEDESTAL SECTION



D / 12 COLUMN SECTION

LEGEND:

* *INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT*

NOTES:

1. *THE CONCRETE SEALER SHALL NOT BE APPLIED TO THE BEAM SEATS UNDER PROPOSED BEARINGS.*
2. *SPIRAL REINFORCEMENT: TOP OF COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDDED A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.*

FINAL TRACINGS NOT FOR CONSTRUCTION

PIER DETAILS (2 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9595
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
13	30

SHEET	TOTAL
P.492	627

SUM-077/008-11.65/0.00

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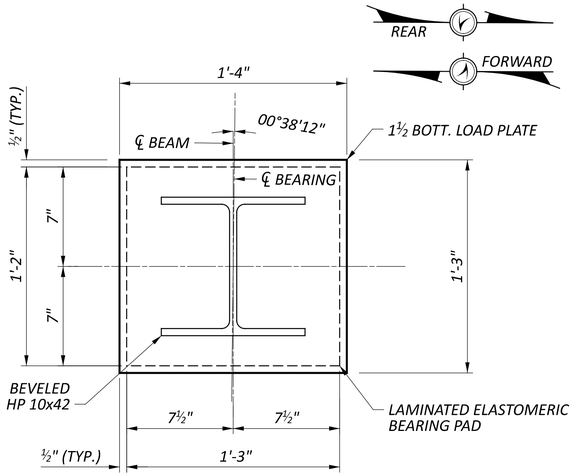
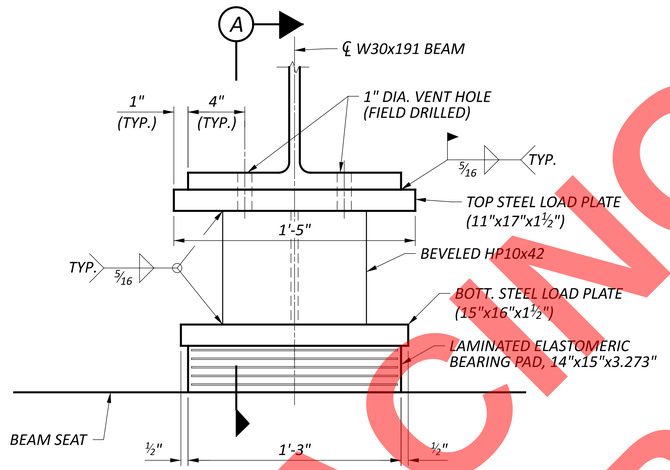


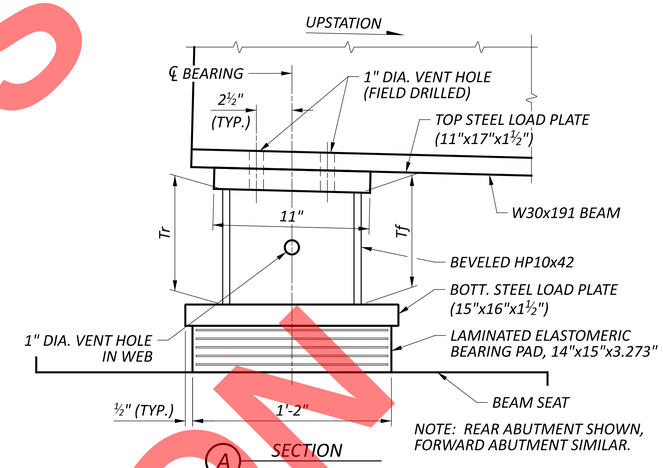
LAMINATED ELASTOMERIC BEARING (EXPANSION)

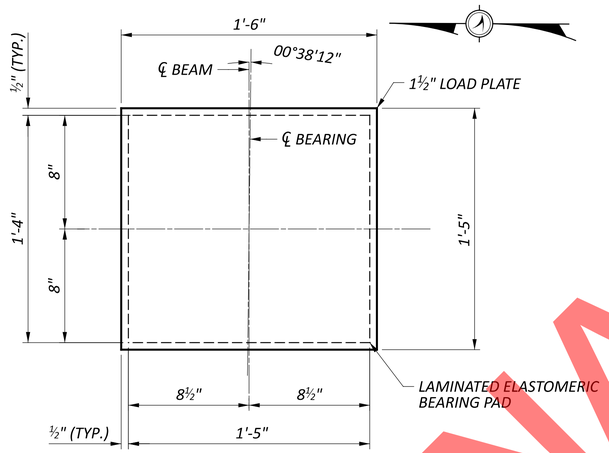
(REAR AND FORWARD ABUTMENTS)
(TOP LOAD PLATE NOT SHOWN FOR CLARITY)



LAMINATED ELASTOMERIC BEARING ELEVATION (EXPANSION)

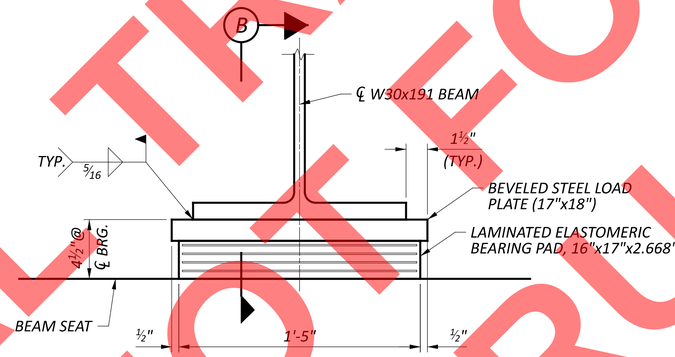
(REAR AND FORWARD ABUTMENT BEARINGS)





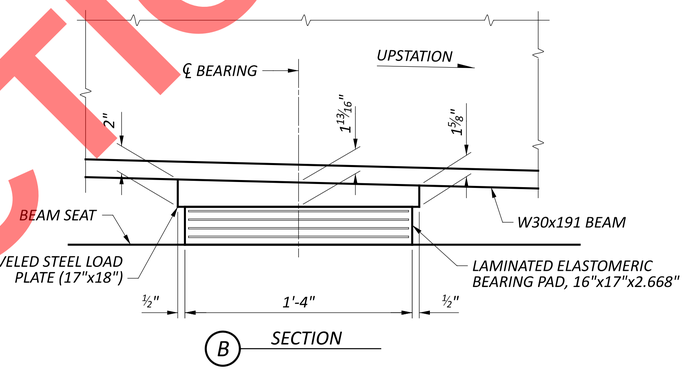
LAMINATED ELASTOMERIC BEARING (EXPANSION)

(PIER BEARING)



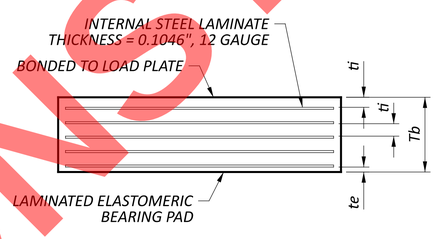
LAMINATED ELASTOMERIC BEARING ELEVATION (EXPANSION)

(PIER BEARING)



BEARING SCHEDULE

SUPPORT	BEARING TYPE	QUANTITY	DEAD LOAD KIPS	LIVE LOAD KIPS	TOTAL LOAD KIPS	ti	NUMBER OF ti's	te	NUMBER OF te's	NUMBER OF STEEL LAMINATES	Tb
REAR ABUT.	EXPANSION	9	46	71	117	0.50"	5	0.25"	1	5	3.273"
PIER	EXPANSION	9	143	106	249	0.50"	4	0.25"	1	4	2.668"
FORWARD ABUT.	EXPANSION	9	46	71	117	0.50"	5	0.25"	1	5	3.273"



BEARING PAD DETAIL

TABLE OF HP10x42 HEIGHTS "Tr" & "Tf"

LOCATION	BEAM 1		BEAM 2		BEAM 3		BEAM 4		BEAM 5		BEAM 6		BEAM 7		BEAM 8		BEAM 9	
	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf	Tr	Tf
REAR ABUT.	6¼"	6"	6¼"	6"	7⅝"	7⅜"	9⅛"	8⅞"	10½"	10¼"	9⅛"	8⅞"	7¾"	7½"	6⅜"	6⅛"	6⅜"	6⅛"
FWD. ABUT.	6¼"	6"	6¼"	6"	7⅝"	7⅜"	9⅛"	8⅞"	10½"	10¼"	9⅛"	8⅞"	7¾"	7½"	6⅜"	6⅛"	6⅜"	6⅛"

NOTES:

1. 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. THE ELASTOMERIC BEARING PADS SHALL CONFORM TO ODOT CMS 711.21.
3. THE STEEL LOAD PLATES AND THE HP10x42 SUPPORT BEAMS SHALL BE ASTM A709/A572, GRADE 50 STEEL AND SHALL HAVE THE SAME PROTECTIVE COATING AS MAIN STRUCTURAL STEEL. BOND THE STEEL LOAD PLATE BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. WELDING SHALL BE CONTROLLED 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.
5. THE DEAD, LIVE, AND TOTAL LOADS TABULATED IN THE BEARING SCHEDULE ARE UNFACTORED LOADS AND WITH NO IMPACT.
6. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
7. ALL MATERIAL, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL ELASTOMERIC BEARINGS, LOAD PLATES AND HP SUPPORT PEDESTALS, SHALL BE INCLUDED WITH ITEM 516, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN FOR PAYMENT.

FINAL PLANS
NOT FOR
CONSTRUCTION

BEARING DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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DESIGNER	CHECKER
MJT	SS

REVIEWER
RBB 8-14-26

PROJECT ID
114865

SUBSET	TOTAL
14	30

SHEET	TOTAL
P.493	627

SUM-077/008-11.65/0.00

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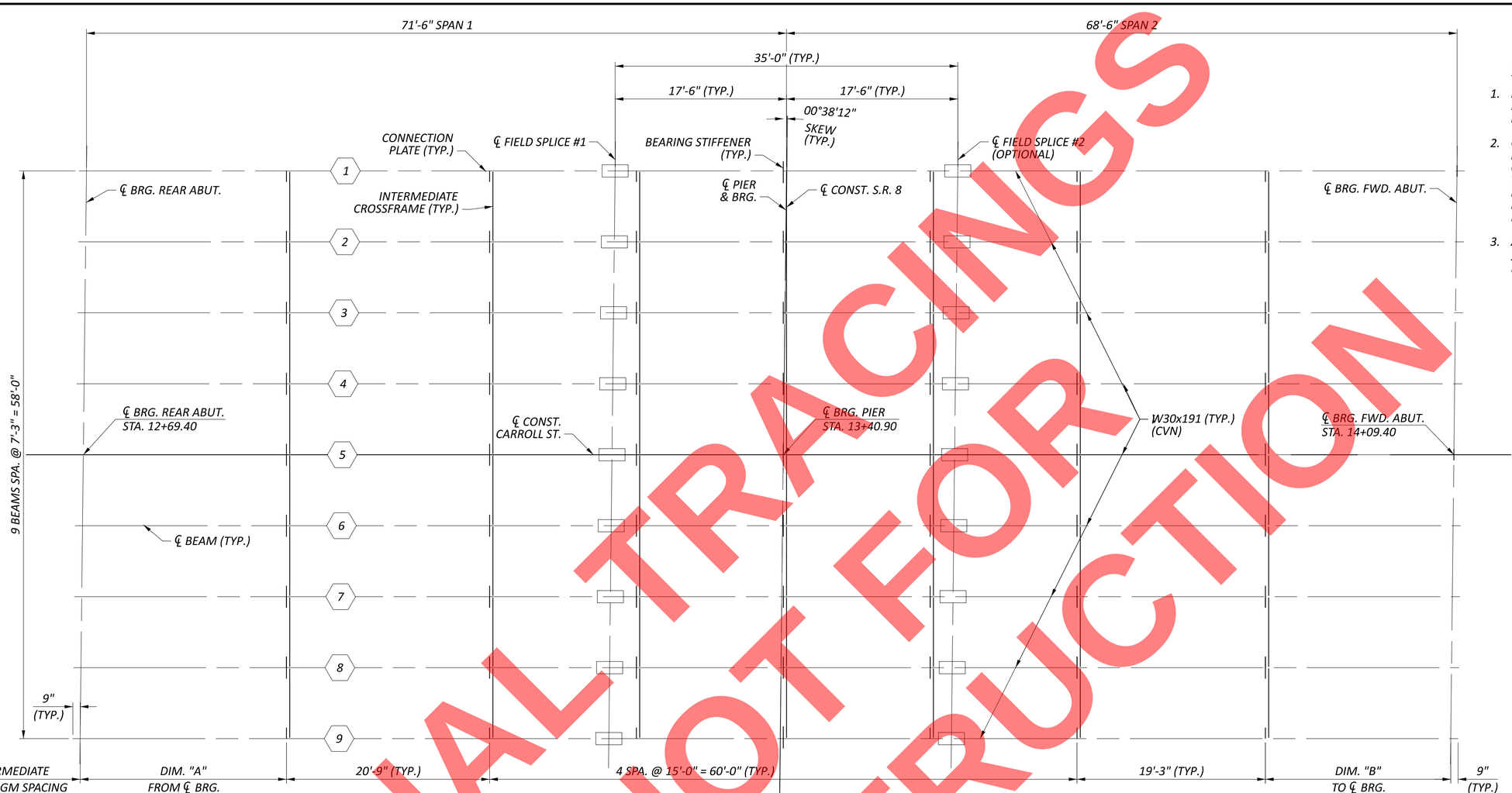
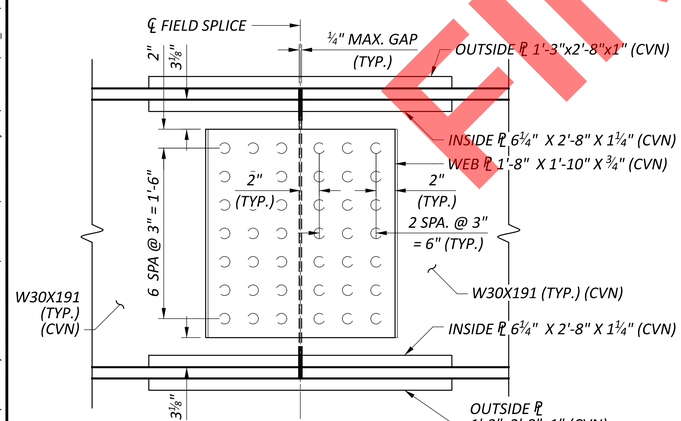


FRAMING PLAN

NOTES:

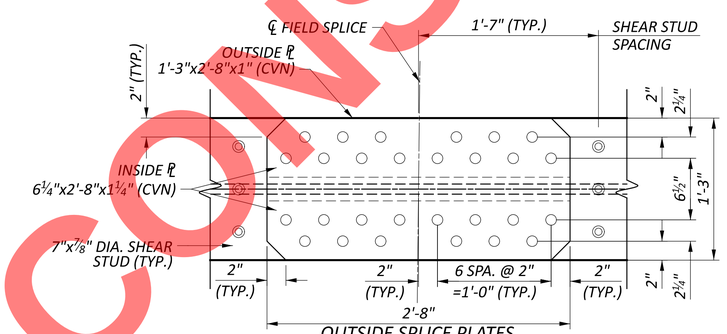
1. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER, A325 UNLESS OTHERWISE NOTED.
2. CHARPY V-NOTCH TOUGHNESS REQUIREMENT: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), THE MATERIAL SHALL MEET MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.
3. ALL BOLTS, NUTS AND WASHERS SHALL BE A-325, TYPE I WITH $1\frac{3}{16}$" DIAMETER HOLES.

CROSSFRAME SPACING		
BEAM	"A"	"B"
1	20' - 5 1/8"	19'-6 7/8"
2	20' - 6 1/8"	19'-5 7/8"
3	20' - 7 1/16"	19'-4 15/16"
4	20' - 8 1/16"	19'-3 15/16"
5	20' - 9"	19' - 3"
6	20' - 9 15/16"	19'-2 1/16"
7	20' - 10 15/16"	19'-1 1/16"
8	20' - 11 7/8"	19'-0 1/8"
9	21' - 0 7/8"	18'-11 1/8"



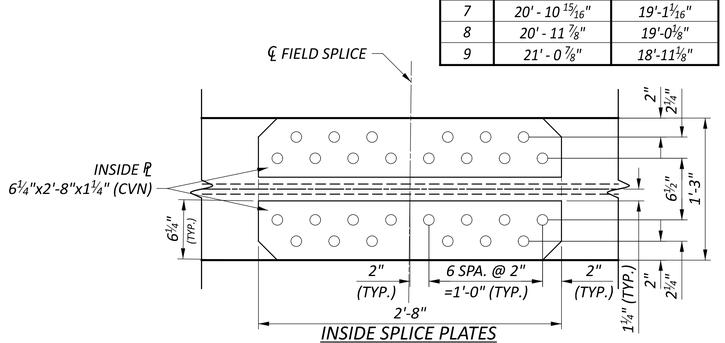
SPLICE ELEVATION

(FIELD SPLICE 1 SHOWN, FIELD SPLICE 2 SAME)



OUTSIDE SPLICE PLATES

(TOP AND BOTT. FLANGES IDENTICAL)



INSIDE SPLICE PLATES

(TOP AND BOTT. FLANGES IDENTICAL)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

BEAM AND SUPERSTRUCTURE STEEL DETAILS (1 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
15	30

SHEET	TOTAL
P.494	627

SUM-077/008-11.65/0.00

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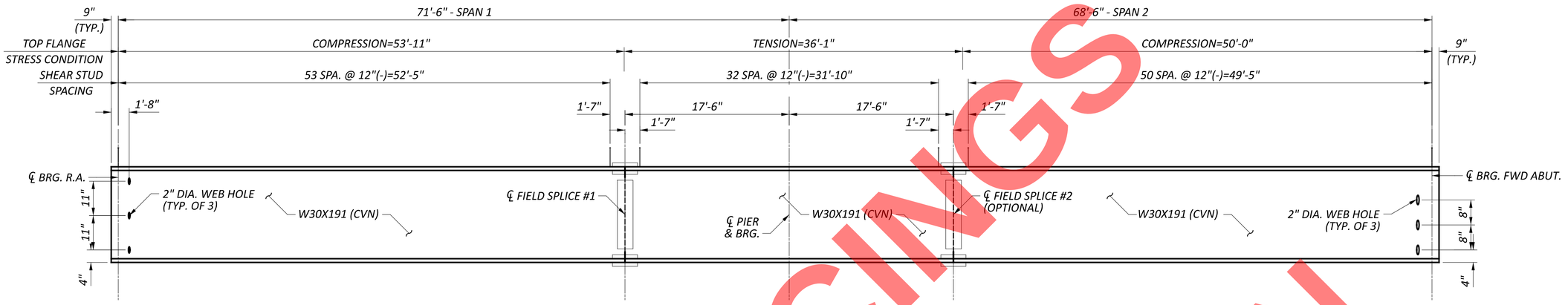
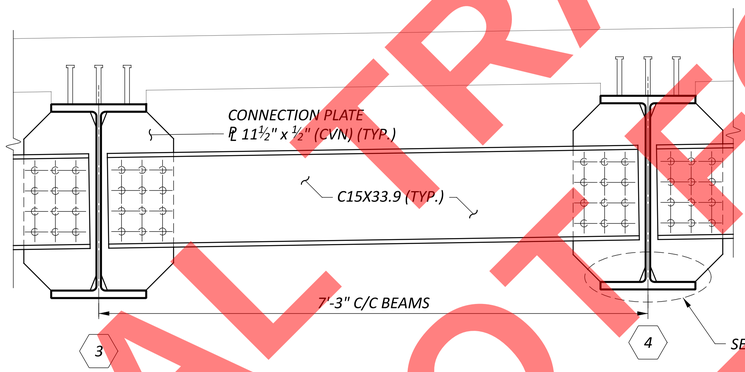
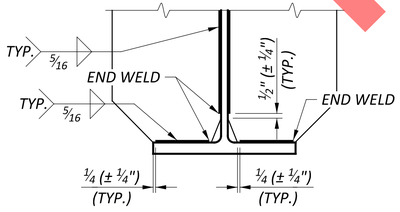


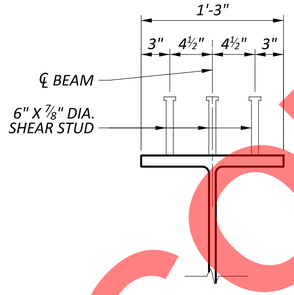
TYPICAL BEAM ELEVATION



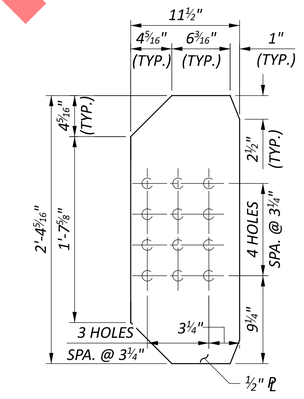
DIAPHRAGM DETAIL



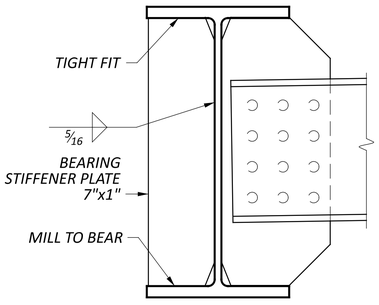
DETAIL 'A'



SHEAR CONNECTOR DETAIL



TYPICAL CONNECTION PLATE



BEARING STIFFENER AT PIER

(OUTSIDE FACE OF FASCIA BEAMS)

NOTES:

1. ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN CMS 711.01.
3. WELDED ATTACHMENT: WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". 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 THICKNESS UP TO ¾" OR ⅝" FOR GREATER THAN ¾" THICK.
4. FOR BOLTED SPLICE DETAILS, SEE SHEET 15 | 30 .
5. FOR ADDITIONAL CROSSFRAME NOTES AND DETAILS, REFER TO STANDARD DRAWING GSD-1-19.

FINAL NOT FOR CONSTRUCTION

BEAM AND SUPERSTRUCTURE STEEL DETAILS (2 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
16	30

SHEET	TOTAL
P.495	627

SUM-077/008-11.65/0.00

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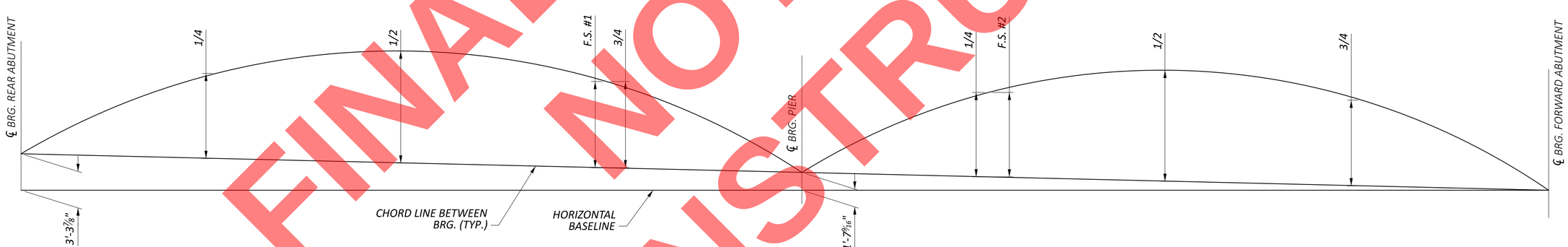
DEFLECTIONS / CAMBER TABLE												
POINTS		R.A.	1/4	1/2	3/4	F.S. #1	PIER 1	1/4	F.S. #2	1/2	3/4	F.A.
BEAMS 1-9	DEFLECTION DUE TO BEAM SELF WEIGHT	0	3/16	3/16	1/8	1/8	0	1/16	1/16	1/8	1/8	0
	DEFLECTION DUE TO NON-COPOSITE DEAD LOAD	0	5/8	3/4	3/8	3/8	0	1/4	1/4	9/16	1/2	0
	DEFLECTION DUE TO COMPOSITE DEAD LOAD	0	1/8	1/8	1/16	1/16	0	1/16	1/16	1/8	1/8	0
	REQUIRED SHOP CAMBER	0	15/16	1 1/16	9/16	9/16	0	3/8	3/8	13/16	11/16	0



CAMBER DIAGRAM

FINAL TRACINGS NOT FOR CONSTRUCTION

CAMBER AND DEFLECTION TABLE
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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REVIEWER
RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
17	30

SHEET	TOTAL
P.496	627

SUM-077/008-11.65/0.00

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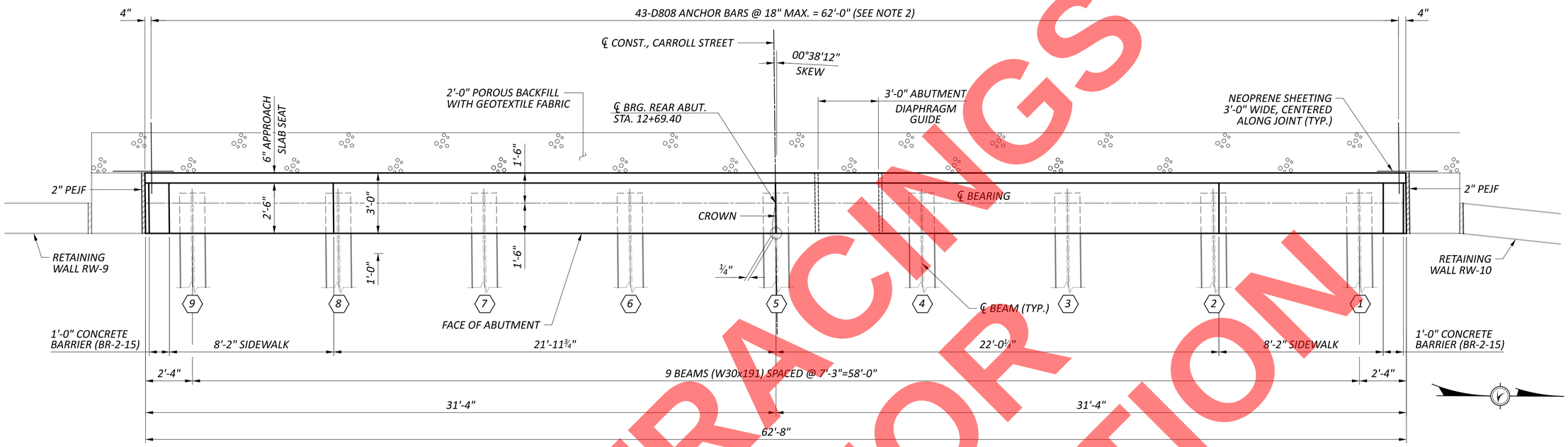
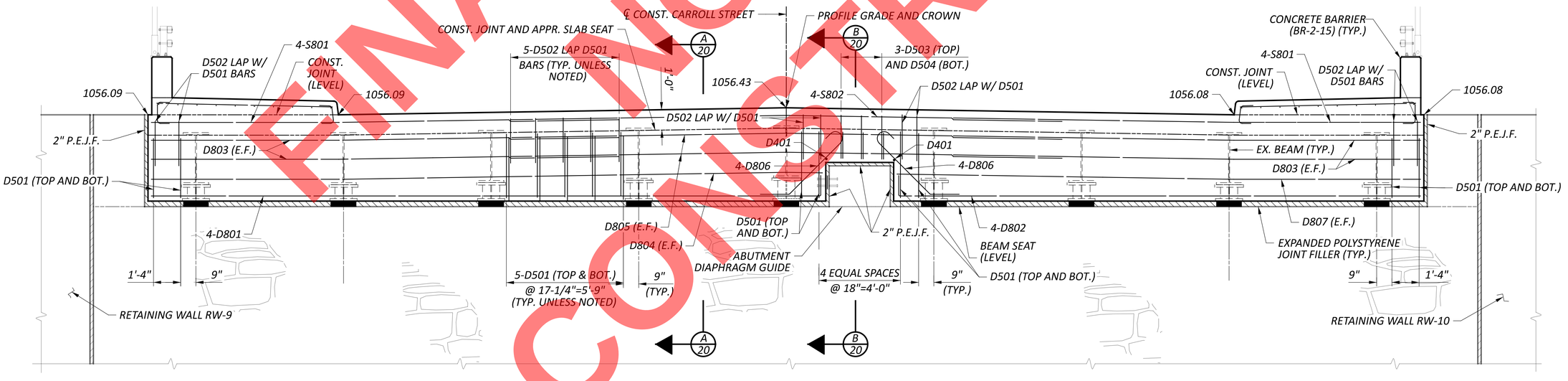


REAR ABUTMENT DIAPHRAGM PLAN

NOTES:

1. ELEVATIONS ARE TAKEN AT THE CENTERLINE OF THE ABUTMENT BEARINGS.
2. VERTICAL REINFORCING INCLUDING THE D808 ANCHOR BARS, SHALL BE PLACED PARALLEL WITH THE CENTERLINE OF THE BEAMS.
3. MINIMUM BAR LAP IS AS FOLLOWS:
   #8 BARS = 64"
   #5 BARS = 37"
4. FOR FORWARD ABUTMENT SEMI-INTEGRAL DIAPHRAGM DETAILS, SEE SHEET 19 / 30 .
5. FOR REAR ABUTMENT DETAILS, SEE SHEET 7 / 30 .
6. FOR DECK, SIDEWALK AND RAILING REINFORCING, SEE TRANSVERSE SECTION SHEET 21 / 30 .
7. FOR RETAINING WALLS 9 AND 10 DETAILS, SEE SHEETS P.350 OF 627 TO P.350 OF 627 AND P.357 OF 627 TO P.357 OF 627 .



REAR ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (1 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
18	30

SHEET	TOTAL
P.497	627

SUM-077/008-11.65/0.00

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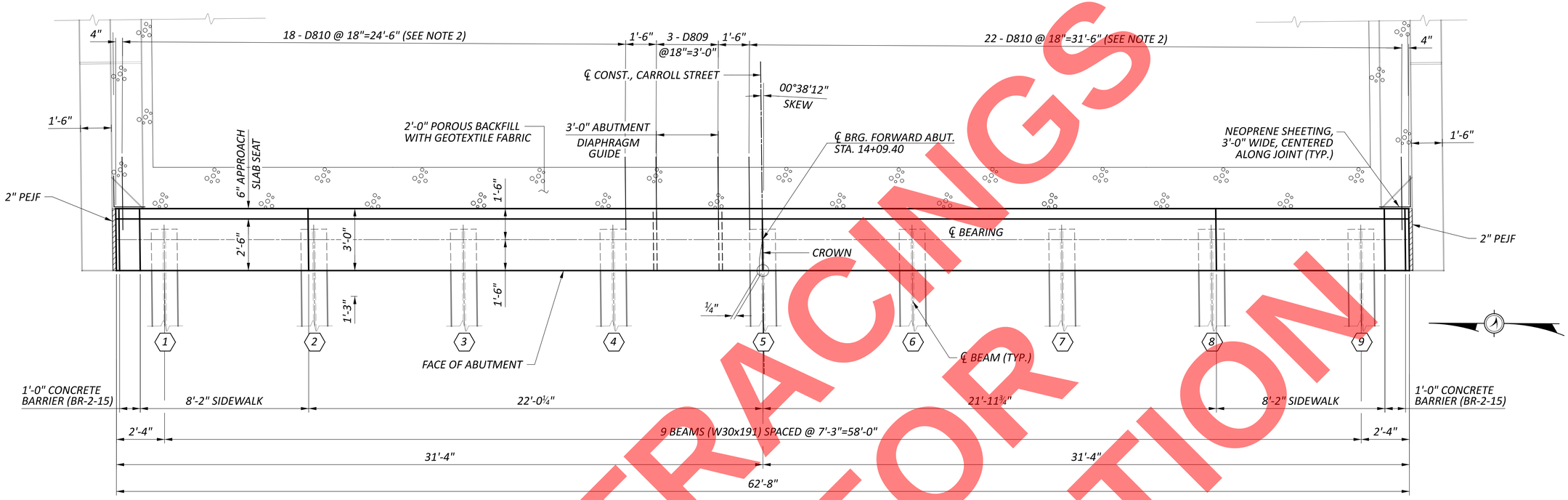
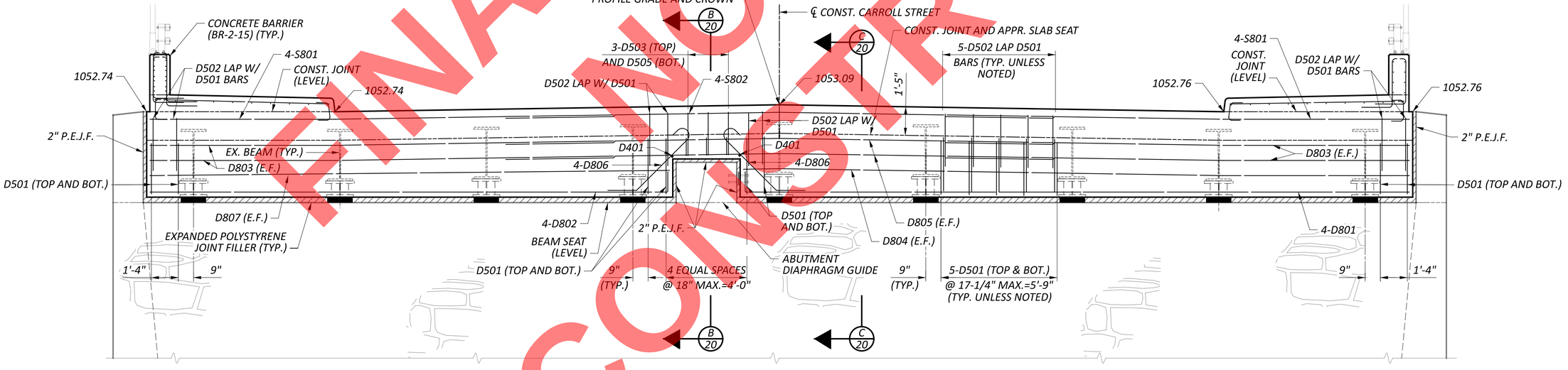


FORWARD ABUTMENT DIAPHRAGM PLAN

NOTES:

1. ELEVATIONS ARE TAKEN AT THE CENTERLINE OF THE ABUTMENT BEARINGS.
2. VERTICAL REINFORCING INCLUDING THE D810 & D809 ANCHOR BARS, SHALL BE PLACED PARALLEL WITH THE CENTERLINE OF THE BEAMS.
3. MINIMUM BAR LAP IS AS FOLLOWS:
   #5 BARS = 37"
   #8 BARS = 64"
4. FOR REAR ABUTMENT SEMI-INTEGRAL DIAPHRAGM DETAILS, SEE SHEET 18 / 30 .
5. FOR FORWARD ABUTMENT DETAILS, SEE SHEET 10 / 30 .
6. FOR DECK, SIDEWALK AND RAILING REINFORCING, SEE TRANSVERSE SECTION SHEET 21 / 30 .



FORWARD ABUTMENT DIAPHRAGM ELEVATION

FINAL TRACINGS
NOT FOR CONSTRUCTION

SUPERSTRUCTURE DETAILS (2 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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DESIGNER	CHECKER
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REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
19	30

SHEET	TOTAL
P.498	627

SUM-077/008-11.65/0.00

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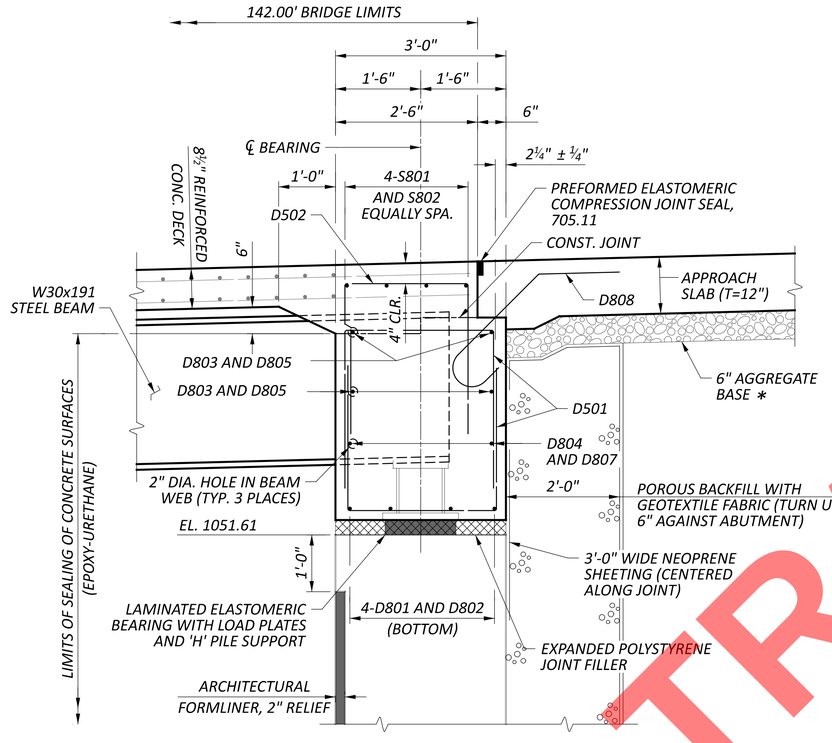
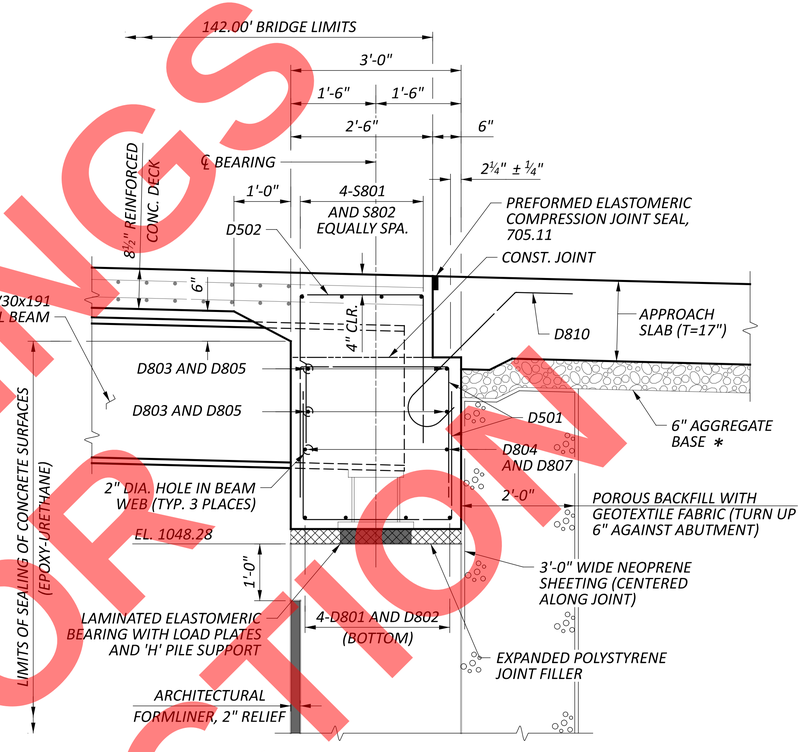
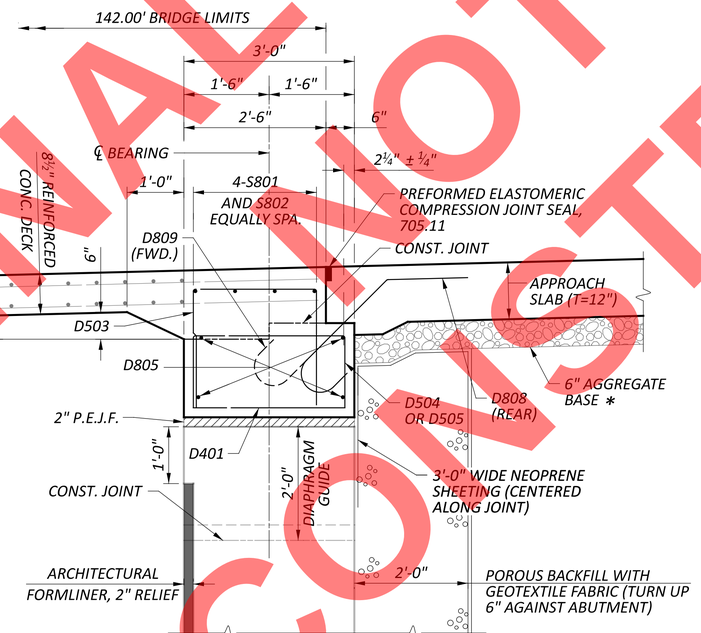


A/18 SECTION



C/19 SECTION



B/18 B/19 SECTION
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

FINAL TRACINGS
NOT FOR
CONSTRUCTION

LEGEND:

* *INCLUDE WITH ROADWAY QUANTITIES FOR PAYMENT*

NOTES:

1. *ALL CONCRETE SHALL BE CLASS QC2.*
2. *PROVIDE A 1" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.*
3. *ABUTMENT DIAPHRAGM CONCRETE: 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 ON SICD-1-21, AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
4. *EXPANDED POLYSTYRENE FILLER SHALL BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN FOR PAYMENT.*
5. *NEOPRENE SHEETING 3 FEET WIDE, CENTERED ALONG THE WINGWALL/DIAPHRAGM EXPANSION JOINTS, SHALL EXTEND FROM APPROACH SLAB DOWN TO THE BOTTOM OF HORIZONTAL NEOPRENE SHEETING.*
6. *FOR ADDITIONAL SEMI-INTEGRAL ABUTMENT DETAILS AND NOTES, SEE ODOT STANDARD DRAWING SICD-1-21.*
7. *FOR DECK PLAN, TRANSVERSE SECTION AND ADDITIONAL DETAILS AND NOTES, SEE SHEETS 21/30 AND 22/30 .*
8. *FOR APPROACH SLAB DETAILS, SEE SHEETS 27/30 AND 26/30 .*

SUPERSTRUCTURE DETAILS (3 OF 3)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
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www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
20	30

SHEET	TOTAL
P.499	627

SUM-077/008-11.65/0.00
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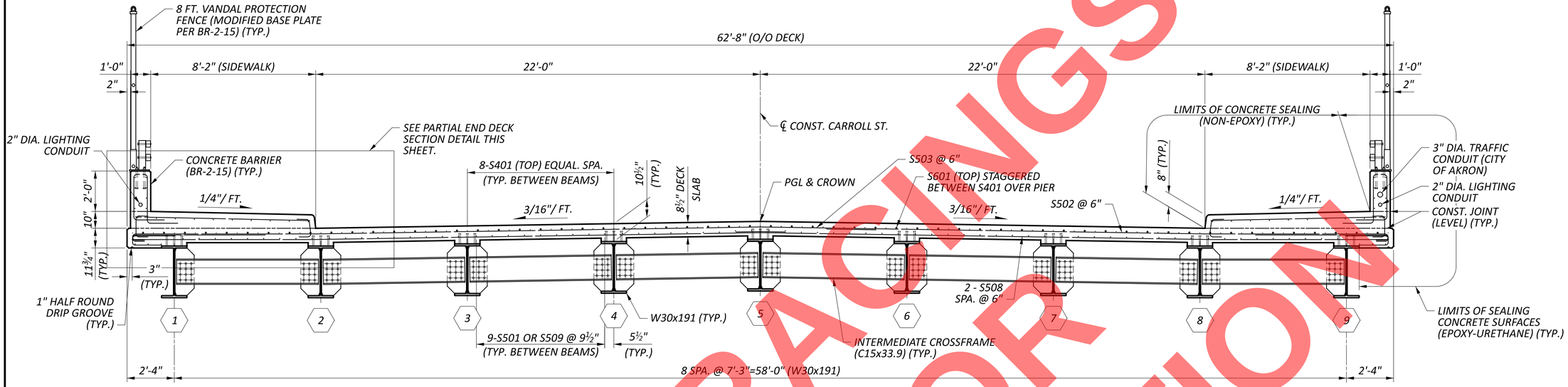
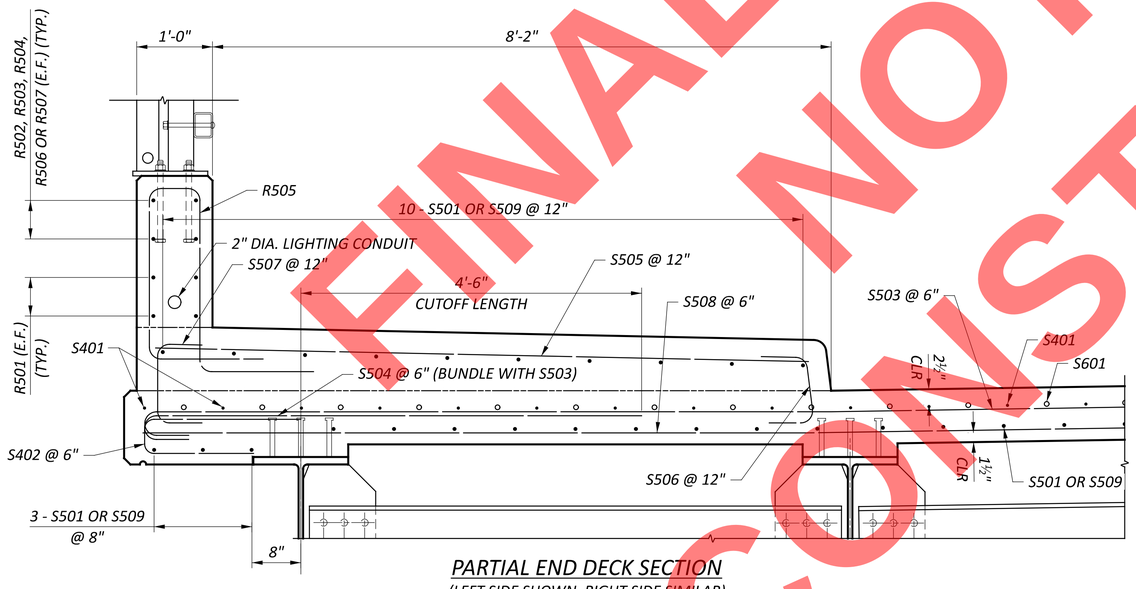


TRANSVERSE SECTION



PARTIAL END DECK SECTION
(LEFT SIDE SHOWN, RIGHT SIDE SIMILAR)

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #4 BAR = 24"
   #5 BAR = 37"
   #6 BAR = 43"

2. 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 3/16" 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 ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE IS +/- 3 INCHES.

   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 511.24.

3. FOR FENCE AND DECORATIVE PANEL DETAILS SEE SHEETS 23 / 30 AND 24 / 30 .

4. FOR INTERMEDIATE CROSSFRAME DETAILS, SEE SHEET 16 / 30 .

TRACINGS
FINAL - FOR
NOT FOR
CONSTRUCTION

TRANSVERSE SECTION AND DECK DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
21	30

SHEET	TOTAL
P.500	627

SUM-077/008-11.65/0.00

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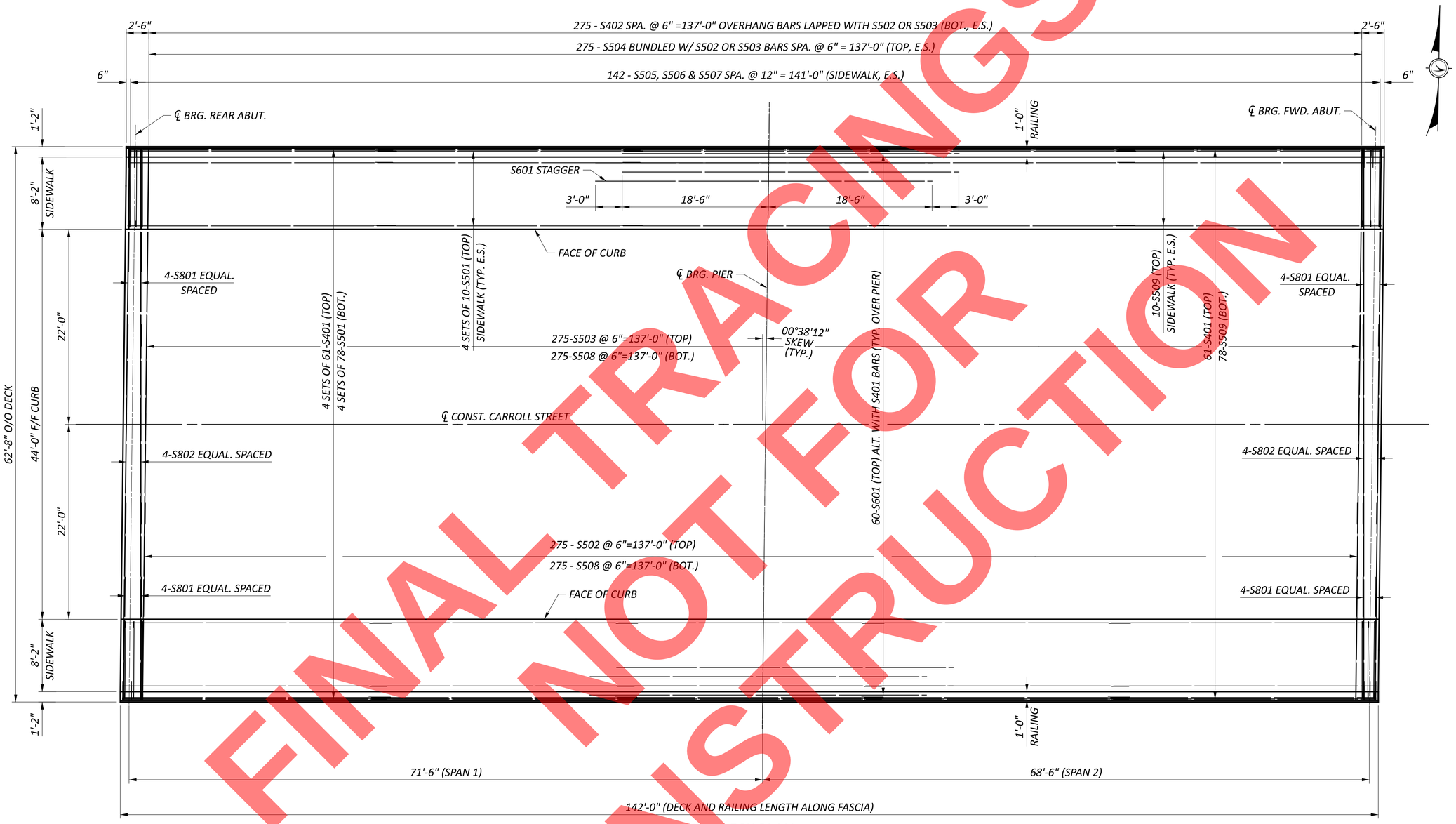

DECK PLAN

NOTE:

1. *MINIMUM BAR LAPS ARE AS FOLLOWS:*
   #4 BAR = 24"
   #5 BAR = 37"
   #6 BAR = 43"

FINAL TRACINGS NOT FOR CONSTRUCTION

DECK PLAN
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
22	30

SHEET	TOTAL
P.501	627

SUM-077/008-11.65/0.00

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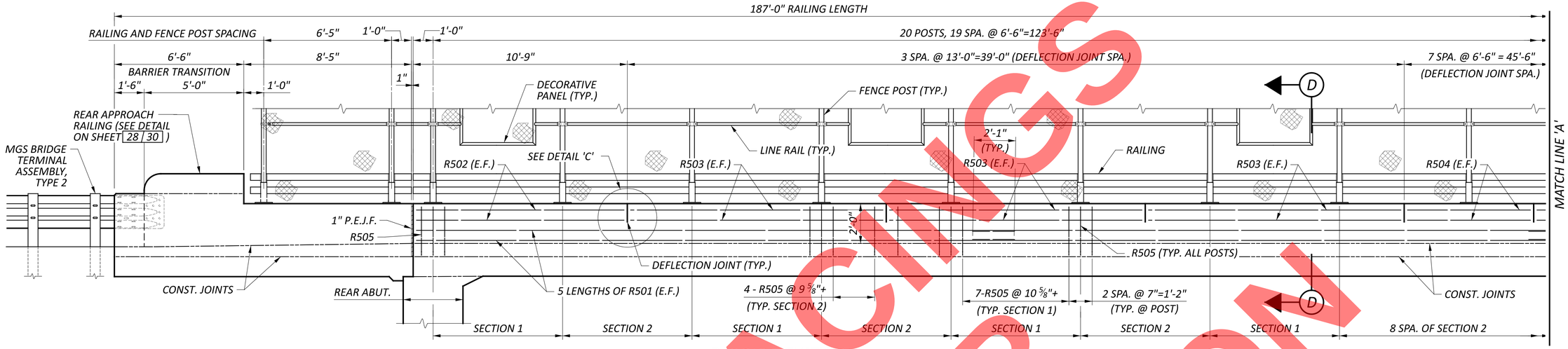
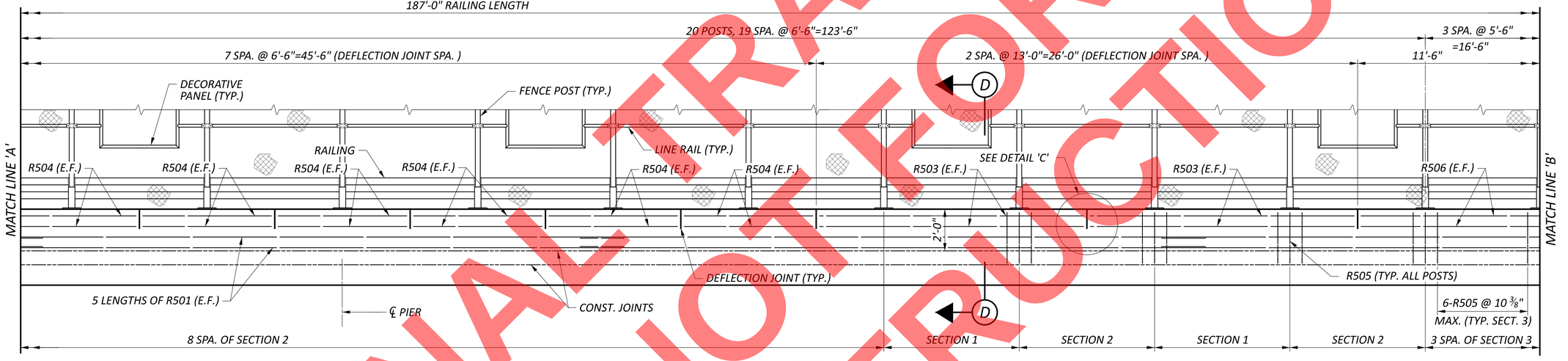


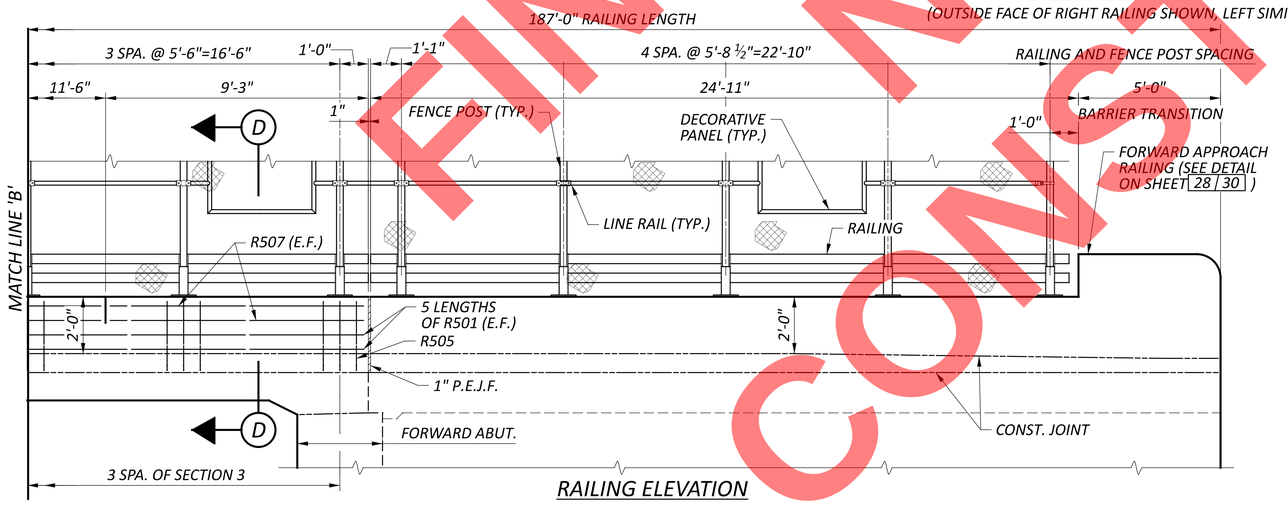
RAILING ELEVATION

(OUTSIDE FACE OF RIGHT RAILING SHOWN, LEFT SIMILAR)



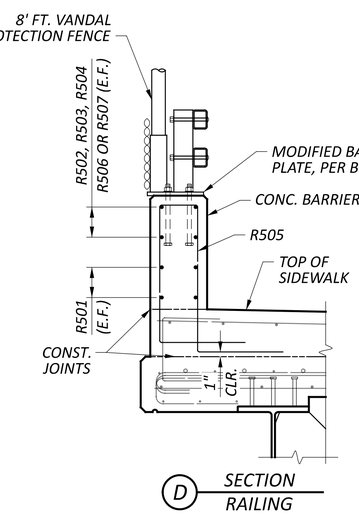
RAILING ELEVATION

(OUTSIDE FACE OF RIGHT RAILING SHOWN, LEFT SIMILAR)

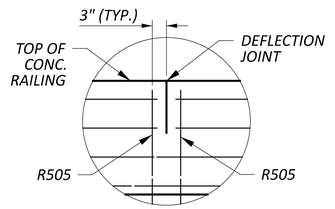


RAILING ELEVATION

(OUTSIDE FACE OF RIGHT RAILING SHOWN, LEFT SIMILAR)



D — SECTION RAILING



DETAIL 'C'

(TYPICAL ALL JOINTS)

NOTES:

1. MINIMUM BAR LAP IS AS FOLLOWS: #5 BAR = 25"
2. FOR FENCE AND DECORATIVE PANEL DETAILS SEE SHEET 24 | 30 .
3. FOR DEFLECTION JOINT DETAIL, SEE SHEET 24 | 30 .
4. FOR ADDITIONAL BRIDGE SIDEWALK RAILING WITH CONCRETE BARRIER DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING BR-2-15.

FINAL TRACINGS NOT FOR CONSTRUCTION

RAILING AND VANDAL PROTECTION FENCE DETAILS (1 OF 2)

BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER	CHECKER
MJT	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
23	30

SHEET	TOTAL
P.502	627

SUM-077/008-11.65/0.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:07:23 AM USER: cferrell
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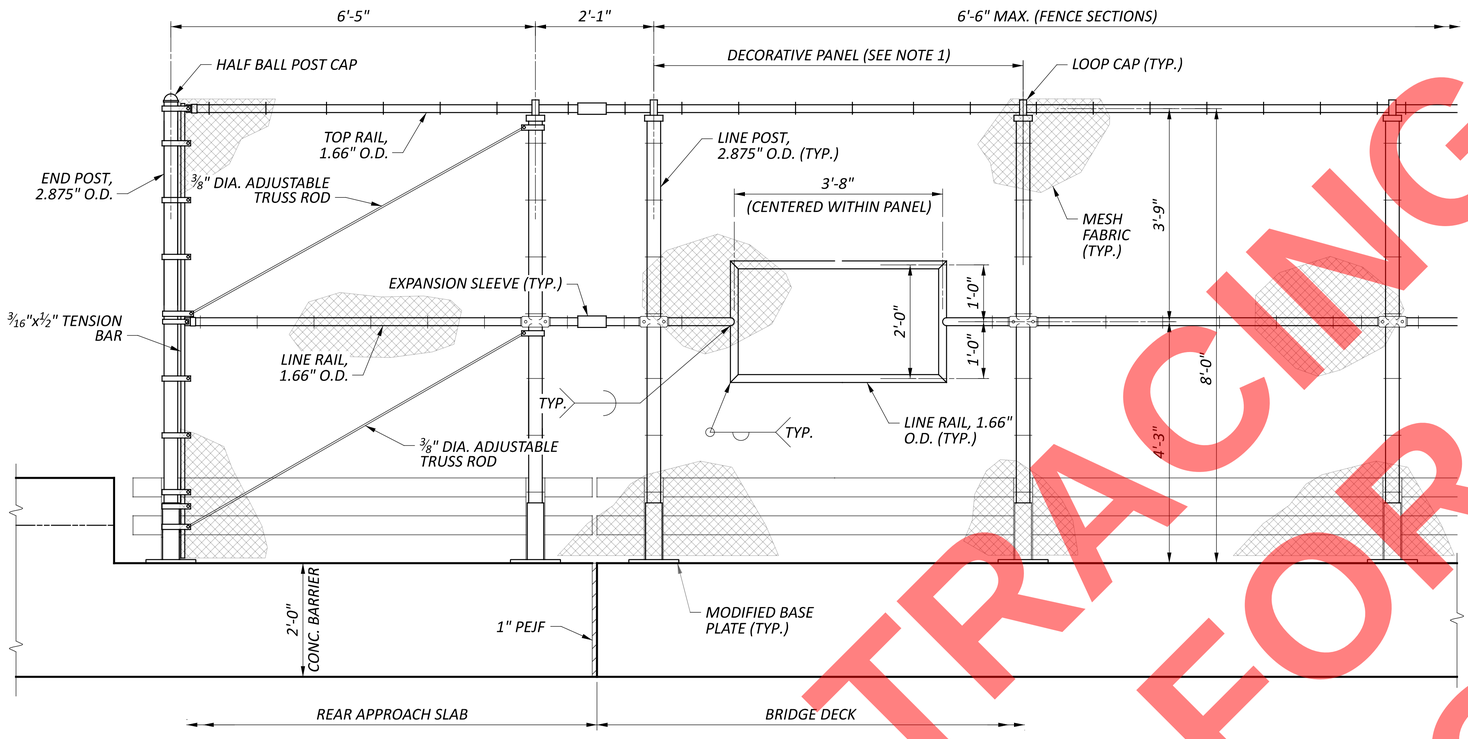
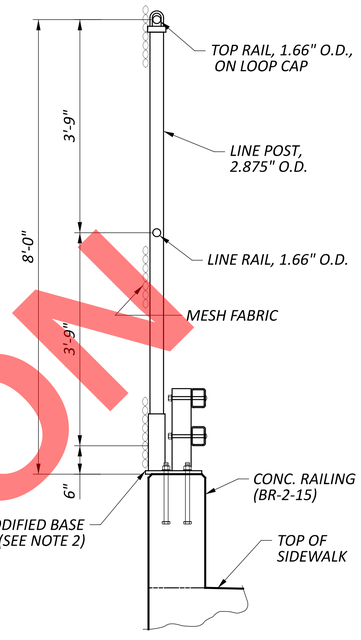
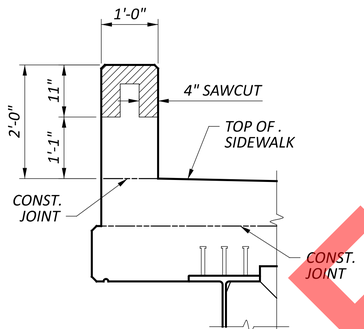


END FENCE ELEVATION

(REAR APPROACH SHOWN, FORWARD APPROACH SIMILAR)



FENCE SECTION



DEFLECTION JOINT DETAIL

NOTES:

1. DECORATIVE PANELS SHALL BE INSTALLED IN EVERY THIRD FENCE PANEL.
2. FOR MODIFIED RAILING BASE PLATE DETAILS, REFER TO ODOT STANDARD DRAWING BR-2-15, SHEET 4 OF 5.
3. ALL POSTS, RAILS, CAPS, PLATES, FENCE FABRIC AND ANY OTHER VISIBLE HARDWARE, SHALL BE GALVANIZED AND POWDER COATED BLACK (FEDERAL COLOR NO. 27038). CAULKING SHALL BE BLACK (FEDERAL COLOR NO. 27038).
4. EIGHT (8) FEET HIGH ODOT STANDARD VANDAL PROTECTIVE FENCING (1" MESH) PER ODOT STANDARD CONSTRUCTION DRAWING VPF-1-24 IS REQUIRED. 1" VANDAL PROTECTIVE MESH SHALL BE ATTACHED TO THE PROPOSED DECORATIVE FENCE.
5. FOR ADDITIONAL INFORMATION NOT SHOWN, REFER TO ODOT STANDARD DRAWING VPF-1-24 DETAILS.
6. FOR VANDAL PROTECTION FENCE POST SPACING AND CONCRETE RAILING ELEVATION AND DETAILS, SEE SHEET 23 / 30 .

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RAILING AND VANDAL PROTECTION FENCE DETAILS (2 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
MJT	SS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
24	30

SHEET	TOTAL
P.503	627

SUM-077/008-11.65/0.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:07:37 AM USER: cferrell
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FINAL DECK SURFACE ELEVATIONS

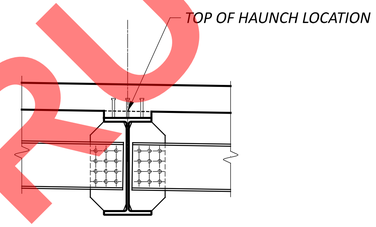
POINT ALONG BEAM		OFFSET	R.A.	1/4	1/2	3/4	F.S. #1	PIER 1	1/4	F.S. #2	1/2	3/4	F.A.
POINT A	STATION	31.33' LT	12+69.75	12+87.62	13+05.50	13+23.37	13+23.75	13+41.25	13+58.37	13+58.75	13+75.50	13+92.62	14+09.75
	FINAL DECK SURFACE EL.		1056.08	1055.65	1055.22	1054.80	1054.79	1054.37	1053.97	1053.96	1053.56	1053.15	1052.74
BEAM 1	STATION	29.00' LT	12+69.72	12+87.60	13+05.47	13+23.35	13+23.72	13+41.22	13+58.35	13+58.72	13+75.47	13+92.60	14+09.72
	FINAL DECK SURFACE EL.		1056.08	1055.65	1055.22	1054.80	1054.79	1054.37	1053.97	1053.96	1053.56	1053.15	1052.74
POINT B	STATION	22.00' LT	12+69.64	12+87.52	13+05.39	13+23.27	13+23.64	13+41.14	13+58.27	13+58.64	13+75.39	13+92.52	14+09.64
	FINAL DECK SURFACE EL.		1056.08	1055.65	1055.23	1054.80	1054.79	1054.38	1053.97	1053.96	1053.56	1053.15	1052.75
BEAM 2	STATION	21.75' LT	12+69.64	12+87.52	13+05.39	13+23.27	13+23.64	13+41.14	13+58.27	13+58.64	13+75.39	13+92.52	14+09.64
	FINAL DECK SURFACE EL.		1056.08	1055.66	1055.23	1054.81	1054.80	1054.38	1053.97	1053.96	1053.56	1053.16	1052.75
BEAM 3	STATION	14.50' LT	12+69.56	12+87.44	13+05.31	13+23.19	13+23.56	13+41.06	13+58.19	13+58.56	13+75.31	13+92.44	14+09.56
	FINAL DECK SURFACE EL.		1056.20	1055.77	1055.35	1054.92	1054.91	1054.49	1054.09	1054.08	1053.68	1053.27	1052.86
BEAM 4	STATION	7.25' LT	12+69.48	12+87.36	13+05.23	13+23.11	13+23.48	13+40.98	13+58.11	13+58.48	13+75.23	13+92.36	14+09.48
	FINAL DECK SURFACE EL.		1056.31	1055.89	1055.46	1055.04	1055.03	1054.61	1054.20	1054.19	1053.79	1053.39	1052.98
POINT C & BEAM 5	STATION	0.00' LT	12+69.40	12+87.28	13+05.15	13+23.03	13+23.40	13+40.90	13+58.03	13+58.40	13+75.15	13+92.28	14+09.40
	FINAL DECK SURFACE EL.		1056.43	1056.00	1055.58	1055.15	1055.14	1054.73	1054.32	1054.31	1053.91	1053.50	1053.08
BEAM 6	STATION	7.25' RT	12+69.32	12+87.19	13+05.07	13+22.94	13+23.32	13+40.82	13+57.94	13+58.32	13+75.07	13+92.19	14+09.32
	FINAL DECK SURFACE EL.		1056.32	1055.89	1055.46	1055.04	1055.03	1054.61	1054.21	1054.20	1053.80	1053.39	1052.98
BEAM 7	STATION	14.50' RT	12+69.24	12+87.11	13+04.99	13+22.86	13+23.24	13+40.74	13+57.86	13+58.24	13+74.99	13+92.11	14+09.24
	FINAL DECK SURFACE EL.		1056.20	1055.78	1055.35	1054.93	1054.92	1054.50	1054.10	1054.09	1053.69	1053.28	1052.87
BEAM 8	STATION	21.75' RT	12+69.16	12+87.03	13+04.91	13+22.78	13+23.16	13+40.66	13+57.78	13+58.16	13+74.91	13+92.03	14+09.16
	FINAL DECK SURFACE EL.		1056.09	1055.67	1055.24	1054.82	1054.81	1054.39	1053.98	1053.97	1053.58	1053.17	1052.76
POINT D	STATION	22.00' RT	12+69.16	12+87.03	13+04.91	13+22.78	13+23.16	13+40.66	13+57.78	13+58.16	13+74.91	13+92.03	14+09.16
	FINAL DECK SURFACE EL.		1056.09	1055.66	1055.24	1054.81	1054.80	1054.39	1053.98	1053.97	1053.57	1053.16	1052.76
BEAM 9	STATION	29.00' RT	12+69.08	12+86.95	13+04.83	13+22.70	13+23.08	13+40.58	13+57.70	13+58.08	13+74.83	13+91.95	14+09.08
	FINAL DECK SURFACE EL.		1056.09	1055.67	1055.24	1054.81	1054.81	1054.39	1053.98	1053.97	1053.57	1053.17	1052.76
POINT E	STATION	31.33' RT	12+69.05	12+86.93	13+04.80	13+22.68	13+23.05	13+40.55	13+57.68	13+58.05	13+74.80	13+91.93	14+09.05
	FINAL DECK SURFACE EL.		1056.09	1055.67	1055.24	1054.82	1054.81	1054.39	1053.98	1053.97	1053.57	1053.17	1052.76

SCREED ELEVATIONS TABLE

POINT ALONG BEAM		OFFSET	R.A.	1/4	1/2	3/4	F.S. #1	PIER 1	1/4	F.S. #2	1/2	3/4	F.A.
POINT A	STATION	31.33' LT	12+69.75	12+87.62	13+05.50	13+23.37	13+23.75	13+41.25	13+58.37	13+58.75	13+75.50	13+92.62	14+09.75
	SCREED ELEVATION		1056.07	1055.71	1055.30	1054.84	1054.83	1054.38	1053.99	1053.99	1053.62	1053.20	1052.75
POINT B	STATION	22.00' LT	12+69.64	12+87.52	13+05.39	13+23.27	13+23.64	13+41.14	13+58.27	13+58.64	13+75.39	13+92.52	14+09.64
	SCREED ELEVATION		1056.08	1055.71	1055.30	1054.84	1054.83	1054.38	1054.00	1053.99	1053.62	1053.21	1052.75
POINT C	STATION	0.00' LT	12+69.40	12+87.28	13+05.15	13+23.03	13+23.40	13+40.90	13+58.03	13+58.40	13+75.15	13+92.28	14+09.40
	SCREED ELEVATION		1056.43	1056.06	1055.65	1055.19	1055.18	1054.73	1054.35	1054.34	1053.97	1053.56	1053.10
POINT D	STATION	22.00' RT	12+69.16	12+87.03	13+04.91	13+22.78	13+23.16	13+40.66	13+57.78	13+58.16	13+74.91	13+92.03	14+09.16
	SCREED ELEVATION		1056.09	1055.72	1055.31	1054.85	154.84	1054.39	1054.01	1054.00	1053.63	1053.22	1052.77
POINT E	STATION	31.33' RT	12+69.05	12+86.93	13+04.80	13+22.68	13+23.05	13+40.55	13+57.68	13+58.05	13+74.80	13+91.93	14+09.05
	SCREED ELEVATION		1056.09	1055.73	1055.32	1054.86	1054.84	1054.39	1054.01	1054.00	1053.63	1053.22	1052.77

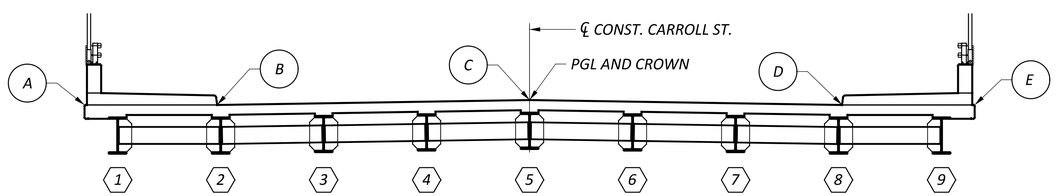
TOP OF HAUNCH ELEVATIONS TABLE

POINT ALONG BEAM / FIELD SPLICE		OFFSET	R.A.	1/4	1/2	3/4	F.S. #1	PIER 1	1/4	F.S. #2	1/2	3/4	F.A.
BEAM 1	STATION	29.00' LT	12+69.75	12+87.62	13+05.50	13+23.37	13+23.75	13+41.25	13+58.37	13+58.75	13+75.50	13+92.62	14+09.75
	TOP OF HAUNCH EL.		1055.37	1055.00	1054.59	1054.13	1054.12	1053.67	1053.29	1053.28	1052.91	1052.50	1052.04
BEAM 2	STATION	21.75' LT	12+69.64	12+87.52	13+05.39	13+23.27	13+23.64	13+41.14	13+58.27	13+58.64	13+75.39	13+92.52	14+09.64
	TOP OF HAUNCH EL.		1055.37	1055.01	1054.60	1054.14	1054.12	1053.68	1053.29	1053.28	1052.92	1052.50	1052.05
BEAM 3	STATION	14.50' LT	12+69.56	12+87.44	13+05.31	13+23.19	13+23.56	13+41.06	13+58.19	13+58.56	13+75.31	13+92.44	14+09.56
	TOP OF HAUNCH EL.		1055.49	1055.12	1054.71	1054.25	1054.24	1053.79	1053.41	1053.40	1053.03	1052.62	1052.17
BEAM 4	STATION	7.25' LT	12+69.48	12+87.36	13+05.23	13+23.11	13+23.48	13+40.98	13+58.11	13+58.48	13+75.23	13+92.36	14+09.48
	TOP OF HAUNCH EL.		1055.60	1055.24	1054.83	1054.37	1054.36	1053.91	1053.52	1053.52	1053.15	1052.73	1052.28
BEAM 5	STATION	0.00'	12+69.40	12+87.28	13+05.15	13+23.03	13+23.40	13+40.90	13+58.03	13+58.40	13+75.15	13+92.28	14+09.40
	TOP OF HAUNCH EL.		1055.72	1055.35	1054.94	1054.48	1054.47	1054.02	1053.64	1053.63	1053.26	1052.85	1052.40
BEAM 6	STATION	7.25' RT	12+69.32	12+87.19	13+05.07	13+22.94	13+23.32	13+40.82	13+57.94	13+58.32	13+75.07	13+92.19	14+09.32
	TOP OF HAUNCH EL.		1055.61	1055.24	1054.83	1054.37	1054.36	1053.91	1053.53	1053.52	1053.15	1052.74	1052.28
BEAM 7	STATION	14.50' RT	12+69.24	12+87.11	13+04.99	13+22.86	13+23.24	13+40.74	13+57.86	13+58.24	13+74.99	13+92.11	14+09.24
	TOP OF HAUNCH EL.		1055.50	1055.13	1054.72	1054.26	1054.25	1053.80	1053.42	1053.41	1053.04	1052.63	1052.17
BEAM 8	STATION	21.75' RT	12+69.16	12+87.03	13+04.91	13+22.78	13+23.16	13+40.66	13+57.78	13+58.16	13+74.91	13+92.03	14+09.16
	TOP OF HAUNCH EL.		1055.38	1055.02	1054.61	1054.15	1054.14	1053.69	1053.30	1053.30	1052.93	1052.51	1052.06
BEAM 9	STATION	29.00' RT	12+69.08	12+86.95	13+04.83	13+22.70	13+23.08	13+40.58	13+57.70	13+58.08	13+74.83	13+91.95	14+09.08
	TOP OF HAUNCH EL.		1055.38	1055.02	1054.61	1054.15	1054.13	1053.69	1053.30	1053.29	1052.93	1052.51	1052.06



NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.
3. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.



TRANSVERSE SECTION KEY

FINAL PLANS
NOT FOR CONSTRUCTION

FINAL DECK SURFACE, SCREED, AND TOP OF HAUNCH ELEVATIONS

BRIDGE NO.: SUM-8-01.162

CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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(330) 434-9555
www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
25	30

SHEET	TOTAL
P.504	627

SUM-077/008-11.65/0.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:07:50 AM USER: cferrell
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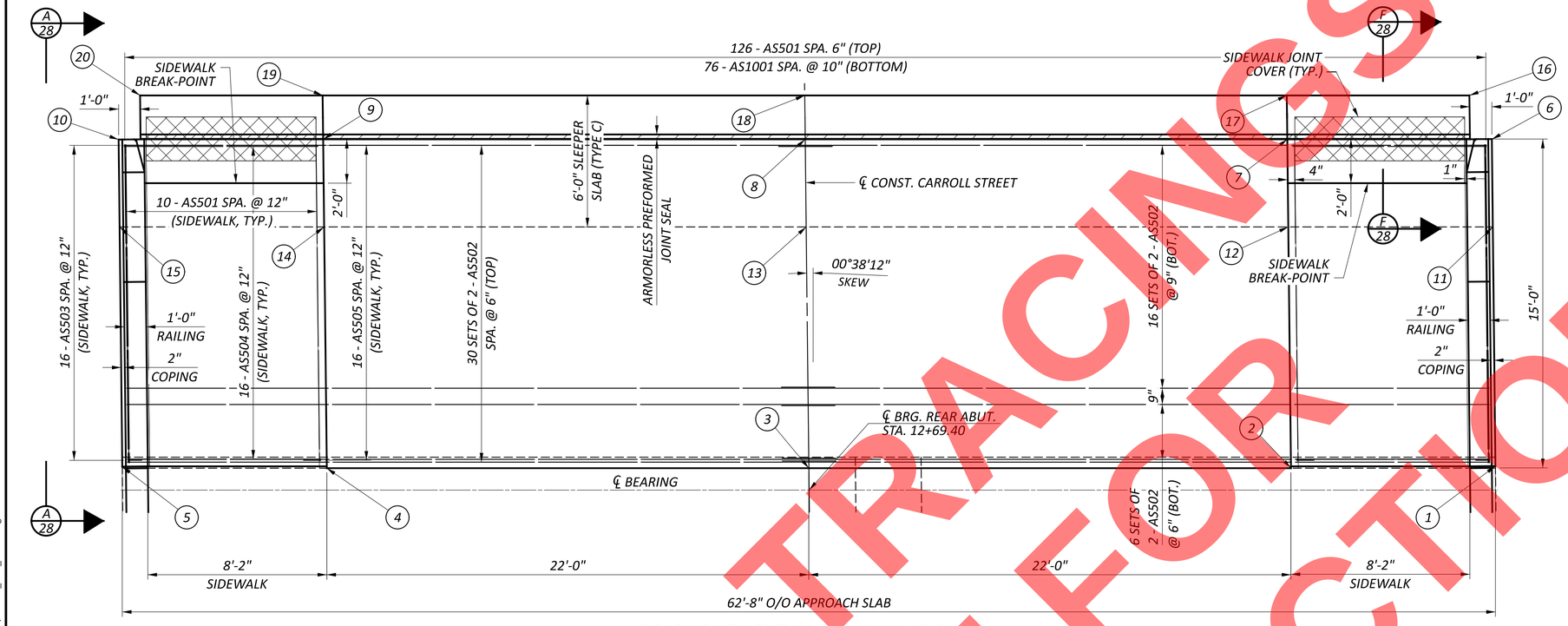
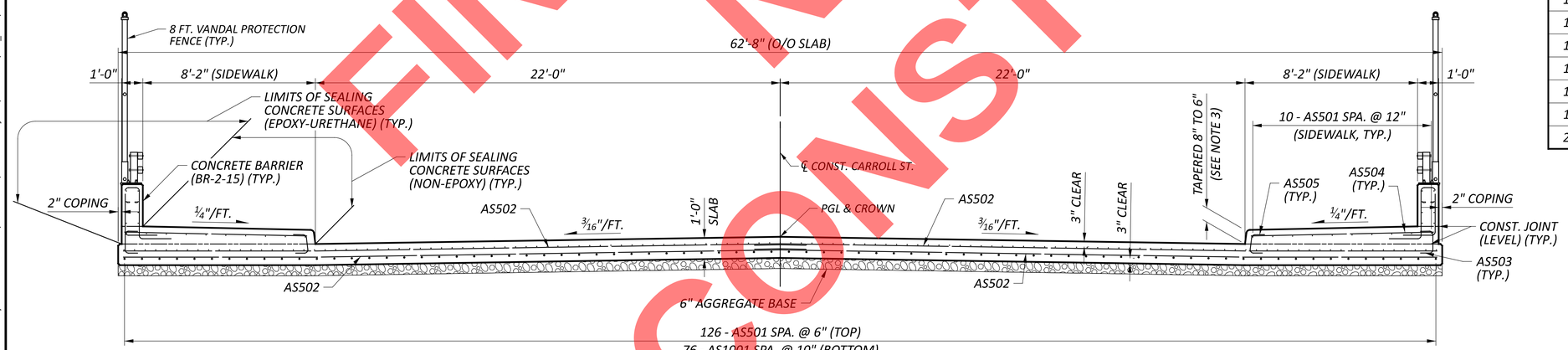


REAR ABUTMENT APPROACH SLAB PLAN



REAR APPROACH SLAB SECTION

NOTES:

1. *MINIMUM BAR LAPS ARE AS FOLLOWS: #5 BAR = 30"*
2. *FOR ADDITIONAL APPROACH SLAB NOTES AND DETAILS, REFER TO ODOT STANDARD DRAWING AS-1-15.*
3. *FOR ADDITIONAL APPROACH SLAB INSTALLATION NOTE AND DETAILS, REFER TO ODOT STANDARD DRAWING AS-2-15.*
4. *TRANSITION THE HEIGHT OF THE CURB FROM 8" (BRIDGE HEIGHT) TO 6" (ROADWAY HEIGHT) AS SHOWN ON THE PLAN.*
5. *FOR FORWARD APPROACH SLAB PLAN, SEE SHEET 27/30.*
6. *BLOCK OUT TYPE C INSTALLATION (12"x24") AS SHOWN ON THE PLANS TO ALLOW FOR THE INSTALLATION OF GUARDRAIL POST.*

APPROACH SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
1	12+68.75	31.33' LT.	1056.10
2	12+68.64	22.00' LT.	1056.10
3	12+68.40	0.00'	1056.45
4	12+68.16	22.00' RT.	1056.12
5	12+68.05	31.33' RT.	1056.12
6	12+53.75	31.33' LT.	1056.45
7	12+53.64	22.00' LT.	1056.45
8	12+53.40	0.00'	1056.80
9	12+53.16	22.00' RT.	1056.47
10	12+53.05	31.33' RT.	1056.47

SLEEPER SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
11	12+57.75	31.33' LT.	1055.36
12	12+57.64	22.00' LT.	1055.36
13	12+57.40	0.00'	1055.71
14	12+57.16	22.00' RT.	1055.38
15	12+57.05	31.33' RT.	1055.38
16	12+51.75	30.33' LT.	1055.50
17	12+51.67	22.00' LT.	1055.50
18	12+51.40	0.00'	1055.85
19	12+51.16	22.00' RT.	1055.52
20	12+51.05	30.33' RT.	1055.52

FINAL TRACINGS
NOT FOR CONSTRUCTION

REAR APPROACH SLAB DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

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DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
26	30

SHEET	TOTAL
P.505	627

SUM-077/008-11.65/0.00

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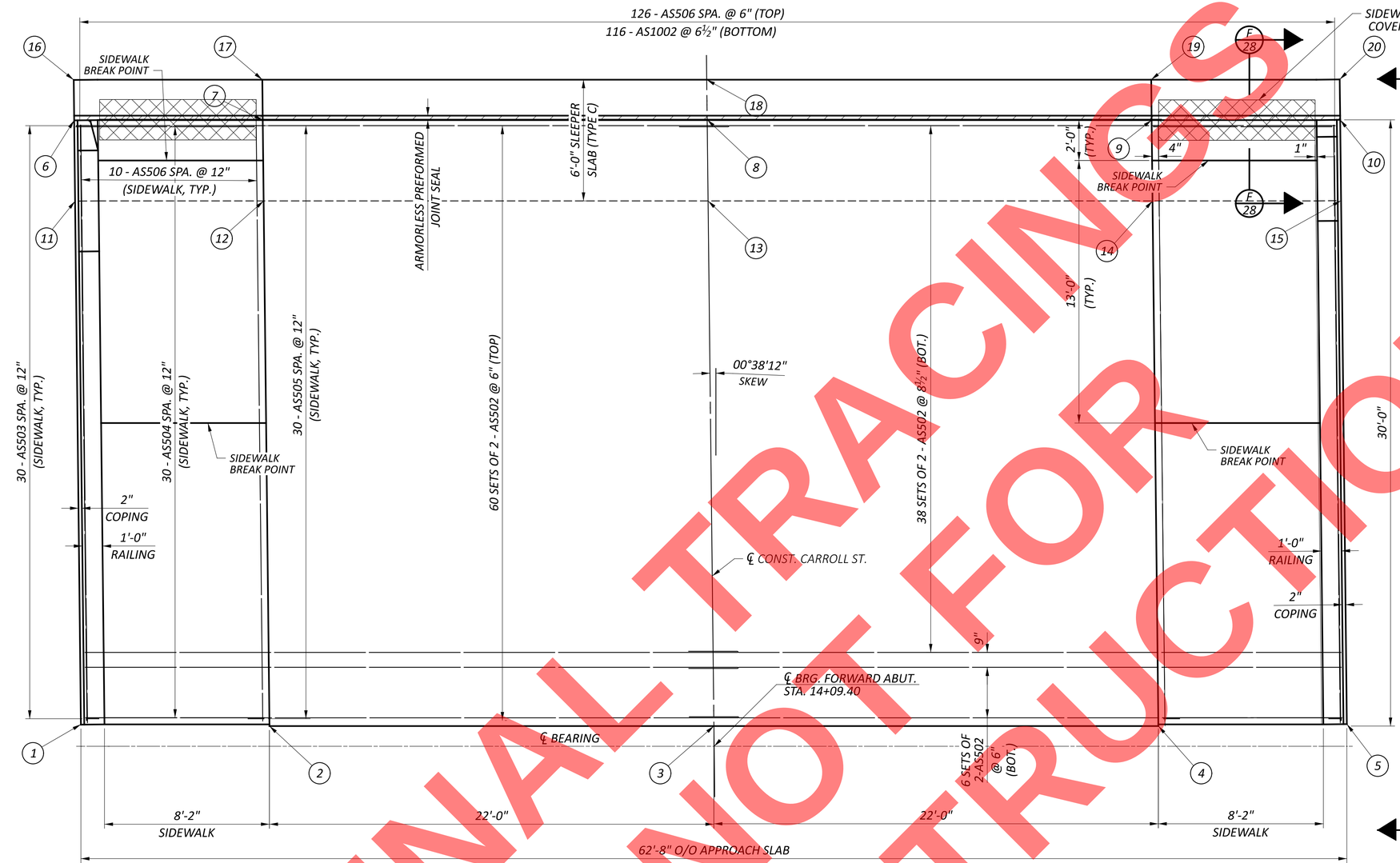
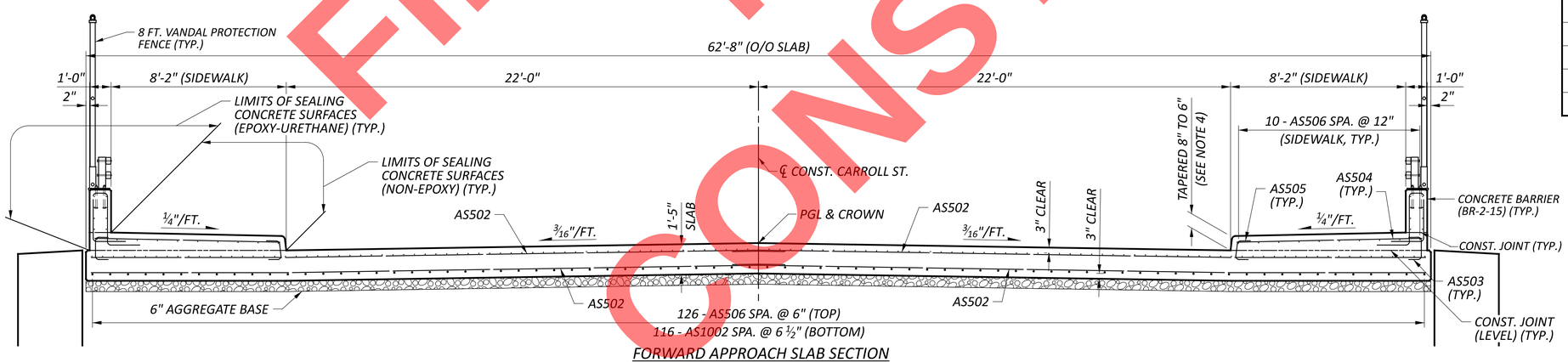


FORWARD APPROACH SLAB PLAN



FORWARD APPROACH SLAB SECTION

NOTES:

1. MINIMUM BAR LAPS ARE AS FOLLOWS:
   #5 BAR = 30"
2. FOR ADDITIONAL APPROACH SLAB NOTES AND DETAILS, REFER TO ODOT STANDARD DRAWING AS-1-15.
3. FOR ADDITIONAL APPROACH SLAB INSTALLATION NOTE AND DETAILS, REFER TO ODOT STANDARD DRAWING AS-2-15.
4. TRANSITION THE HEIGHT OF THE CURB FROM 8" (BRIDGE HEIGHT) TO 6" (ROADWAY HEIGHT) AS SHOWN ON THE PLAN.
5. FOR REAR APPROACH SLAB PLAN, SEE SHEET 26 / 30 .

APPROACH SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
1	14+10.75	31.33' LT.	1052.73
2	14+10.64	22.00' LT.	1052.73
3	14+10.40	0.00'	1053.08
4	14+10.16	22.00' RT.	1052.74
5	14+10.05	31.33' RT.	1052.75
6	14+40.75	31.33' LT.	1051.90
7	14+40.64	22.00' LT.	1051.90
8	14+40.40	0.00'	1051.25
9	14+40.16	22.00' RT.	1051.92
10	14+40.05	31.33' RT.	1051.92

SLEEPER SLAB SURFACE			
NO.	STATION	OFFSET	ELEV.
11	14+36.75	31.33' LT.	1050.60
12	14+36.64	22.00' LT.	1050.60
13	14+36.40	0.00'	1050.95
14	14+36.16	22.00' RT.	1050.61
15	14+36.05	31.33' RT.	1050.61
16	14+42.75	31.33' LT.	1050.43
17	14+42.64	22.00' LT.	1050.43
18	14+42.40	0.00'	1050.78
19	14+42.16	22.00' RT.	1050.45
20	14+42.05	31.33' RT.	1050.45

FINAL TRACINGS
NOT FOR CONSTRUCTION

FORWARD APPROACH SLAB DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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www.arcadis.com

DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
27	30

SHEET	TOTAL
P.506	627

SUM-077/008-11.65/0.00
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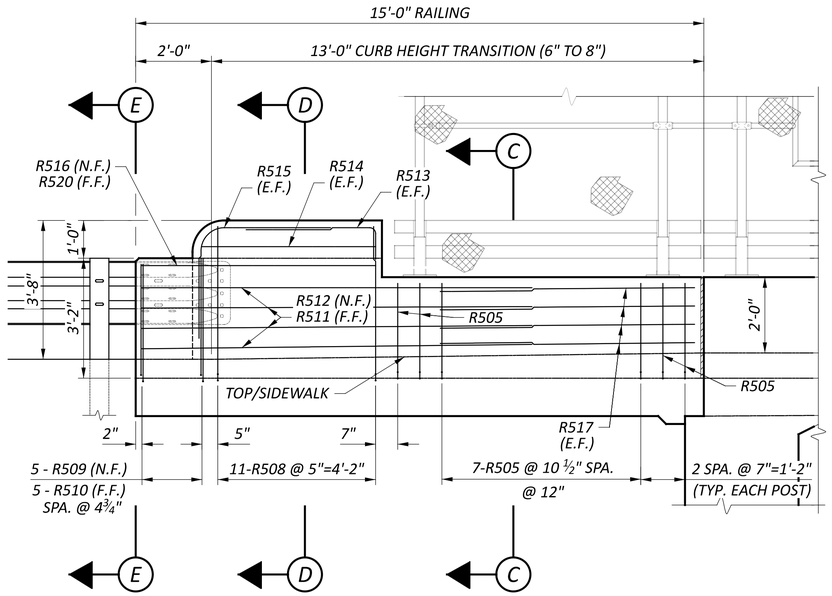
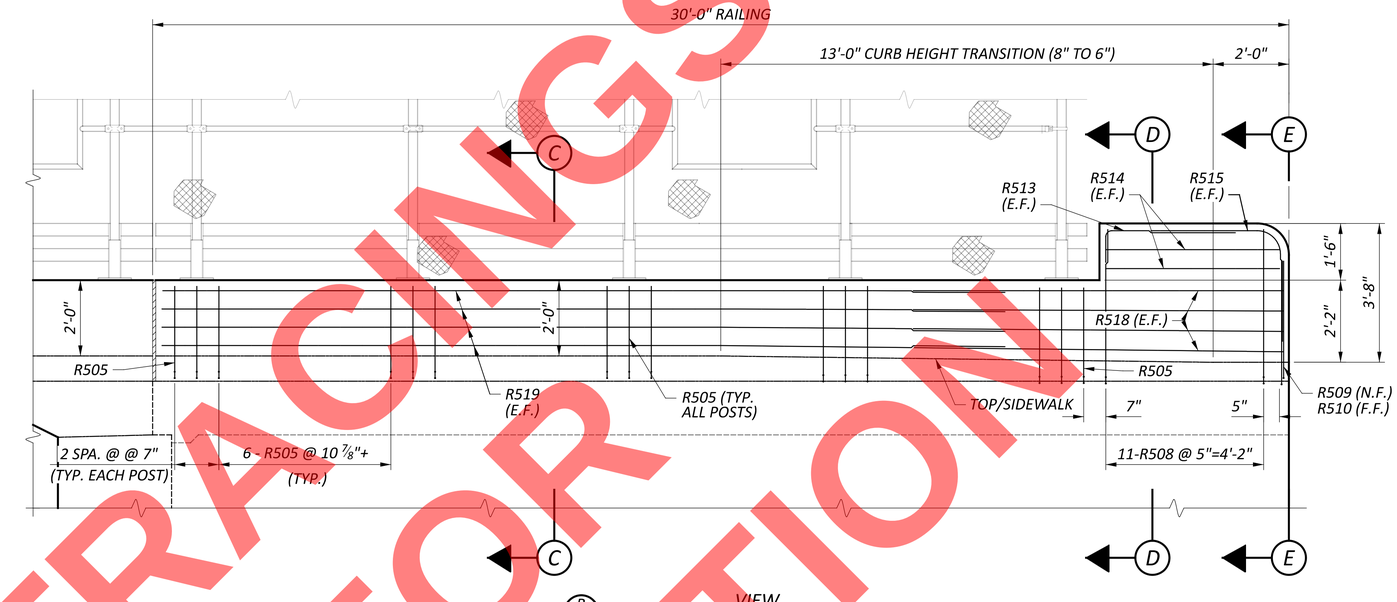
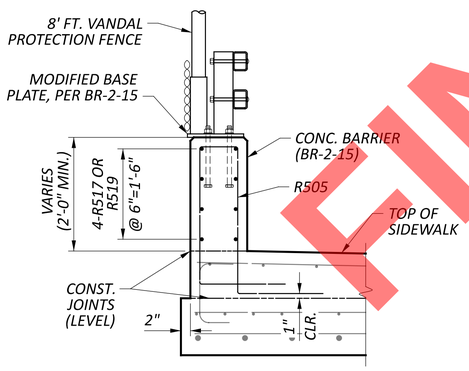


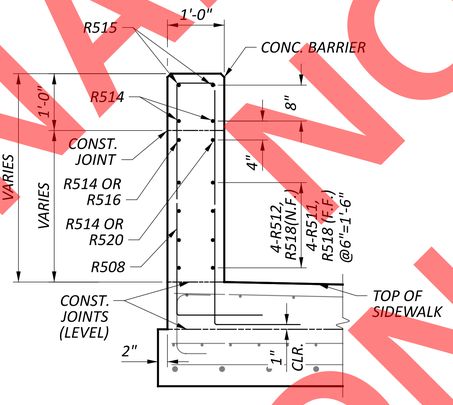
A/26 VIEW
REAR APPROACH SLAB RAILING
(RIGHT RAILING SHOWN, LEFT RAILING SIMILAR)



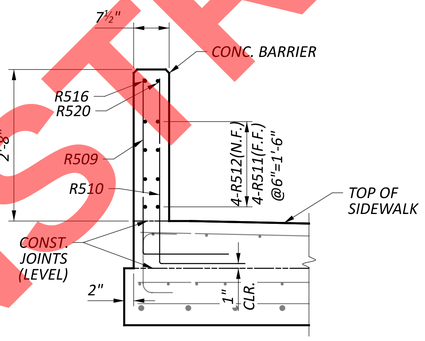
B/27 VIEW
FORWARD APPROACH SLAB RAILING
(RIGHT RAILING SHOWN, LEFT RAILING SIMILAR)



C/SECTION



D/SECTION



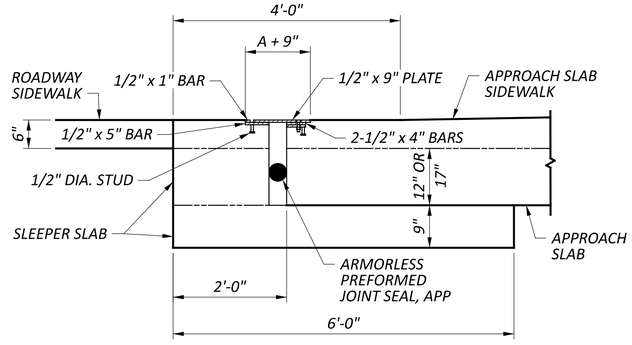
E/SECTION

LEGEND:

* FOR A DIMENSION, REFER TO ODOT STD. DWG. AS-2-15

NOTES:

1. MINIMUM BAR LAP IS AS FOLLOWS:
   #5 BAR = 25"
2. FOR FENCE AND DECORATIVE PANEL DETAILS SEE SHEET 24 / 30 .
3. FOR DEFLECTION JOINT DETAILS, SEE SHEET 24 / 30 .
4. FOR ADDITIONAL BRIDGE SIDEWALK RAILING WITH CONCRETE BARRIER DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING BR-2-15.
5. FOR SLEEPER SLAB DETAILS, SEE STD. DWG. AS-2-15.
6. FOR ADDITIONAL DETAILS, REFER TO STD. DWG. EXJ-2-81, PAGES 2 AND 3. STEEL BARS, STEEL PLATES, BOLTS AND STUDS SHALL BE INCLUDED WITH ITEM 516 ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.



F/26 F/27 SECTION
(SIDEWALK JOINT COVER, SEE NOTE 6)

FINAL TRACINGS NOT FOR CONSTRUCTION

APPROACH SLAB PARAPET AND SIDEWALK DETAILS
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
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DESIGNER	CHECKER
MJT	SMS

REVIEWER: RBB 8-14-26

PROJECT ID: 114865

SUBSET	TOTAL
28	30

SHEET	TOTAL
P.507	627

SUM-077/008-11.65/0.00

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:08:35 AM USER: dferrell
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MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	INC
ABUTMENT FOOTING													
F501	ECSR	44		44	35'-5"	1625	STR						
F502	ECSR		40	40	27'-1"	1130	STR						
F503	ECSR		44	44	27'-8"	1270	STR						
F601	ECSR	205		205	11'-3"	3464	17	9'-11"					
F602	ECSR	69		69	7'-11"	820	1	1'-0"	7'-1"				
F603	ECSR		134	134	9'-9"	1962	17	8'-5"					
F604	ECSR		273	273	7-11"	3246	1	1'-0"	7'-1"				
F605	ECSR		68	68	12'-9"	1302	17	11'-5"					
F606	ECSR		72	72	11'-8"	1262	16	11'-0"					
F607	ECSR		170	170	10'-9"	2745	17	9'-5"					
F608	ECSR		140	140	8'-11"	1875	11	0'-8"	7'-1"	2'-0"			
F701	ECSR	136		136	13'-8"	3799	1	1'-2"	12'-8"				
					SUB-TOTAL	24,500							
ABUTMENT													
A501	ECSR	76		76	35'-5"	2807	STR						
A502	ECSR	20		20	6'-3"	130	2	2'-0"	2'-6"	2'-0"			
A503	ECSR		64	64	34'-5"	2297	STR						
A504	ECSR		88	88	9'-8"	887	STR						
A505	ECSR		68	68	27'-8"	1962	STR						
A506	ECSR		64	64	6'-0"	401	1	3'-1"	3'-1"				
A601	ECSR	69		69	19'-2"	1986	STR						
A602	ECSR	136		136	13'-8"	2792	STR						
A603	ECSR	63		63	8'-2"	773	2	3'-0"	2'-6"	3'-0"			
A604	ECSR	6		6	18'-10"	170	2	8'-4"	2'-6"	8'-4"			
A605	ECSR		199	199	15'-10"	4733	STR						
A606	ECSR		67	67	6'-2"	621	2	2'-0"	2'-6"	2'-0"			
A607	ECSR		20	20	8'-6"	255	2	3'-10"	1'-2"	3'-10"			
A608	ECSR		20	20	20'-1"	603	STR						
A609	ECSR		28	28	20'-3"	852	19	4'-1"	16'-1"	1'-6"			
A610	ECSR		58	58	14'-0"	1220	STR						
A611	ECSR		112	112	14'-4"	2411	19	3'-3"	11'-1"	1'-0"			
A612	ECSR		58	58	7'-4"	639	2	3'-3"	1'-2"	3'-3"			
A801	ECSR	8		8	36'-8"	783	STR						
A802	ECSR		8	8	35'-7"	761	STR						
					SUB-TOTAL	27,083							

NOTE:

1. FOR NOTES, SEE SHEET 30.

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PIER FOOTING												
F601	ECSR	52	12'-11"	1009	17	11'-7"						
F602	ECSR	40	9'-11"	596	17	8'-7"						
F801	ECSR	52	13'-3"	1840	17	11'-7"						
F802	ECSR	40	10'-5"	1113	17	8'-7"						
F803	ECSR	48	8'-8"	1111	1	1'-4"	7'-7"					
			SUB-TOTAL	5,669								
PIER												
SP501	ECSR	2	319'-5"	666	27	0'-5"	2'-6"	16'-0"				
SP502	ECSR	2	334'-10"	698	27	0'-5"	2'-6"	16'-10"				
P501	ECSR	12	32'-5"	406	STR							
P502	ECSR	108	11'-0"	1239	3	2'-0"	3'-2"					
P503	ECSR	68	11'-2"	792	3	2'-0"	3'-3"					
P504	ECSR	74	11'-4"	875	3	2'-0"	3'-4"					
P601	ECSR	6	12'-0"	108	33	2'-8"	2'-9"					
P602	ECSR	4	4'-1"	25	1	1'-7"	2'-8"					
P801	ECSR	24	18'-10"	1207	STR							
P802	ECSR	24	19'-8"	1260	STR							
P901	ECSR	10	27'-6"	935	STR							
P902	ECSR	10	40'-0"	1360	STR							
P903	ECSR	20	36'-2"	2459	1	2'-8"	33'-9"					
P904	ECSR	16	4'-0"	218	1	1'-7"	2'-8"					
			SUB-TOTAL	12,248								

REINFORCING BEND DIAGRAMS

FINAL TRACINGS
NOT FOR CONSTRUCTION

REINFORCING STEEL LIST (1 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
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DESIGNER	CHECKER
MJT	SMS

REVIEWER RBB 8-14-26

PROJECT ID 114865

SUBSET	TOTAL
29	30

SHEET	TOTAL
P.508	627

SUM-077/008-11.65/0.00

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/21/2026 TIME: 10:08:48 AM USER: cferrell
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MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	INC
SUPERSTRUCTURE (ABUTMENT DIAPHRAGM)													
D401	ECSR	2	2	4	2'-8"	7	STR						
D501	ECSR	86	86	172	7'-5"	1331	2	2'-6"	2'-8"	2'-6"			
D502	ECSR	43	43	86	7'-9"	695	2	2'-11"	2'-2"	2'-11"			
D503	ECSR	3	3	6	6'-3"	39	2	2'-2"	2'-2"	2'-2"			
D504	ECSR	3		3	4'-11"	15	2	1'-3"	2'-8"	1'-3"			
D505	ECSR		3	3	4'-1"	13	2	0'-10"	2'-8"	0'-10"			
D801	ECSR	4	4	8	34'-4"	733	1	1'-6"	33'-1"				
D802	ECSR	4	4	8	27'-1"	579	1	1'-6"	25'-10"				
D803	ECSR	8	8	16	23'-0"	983	STR						
D804	ECSR	2	2	4	33'-1"	353	STR						
D805	ECSR	4	4	8	27'-1"	578	STR						
D806	ECSR	8	8	16	6'-2"	263	18	4'-0"	1'-0"	1'-0"			
D807	ECSR	2	2	4	25'-10"	276	STR						
D808	ECSR	43		43	4'-7"	526	18	2'-4"	1'-0"	1'-0"			
D809	ECSR		3	3	5'-4"	43	38	3'-1"	1'-0"	1'-0"			
D810	ECSR		40	40	5'-1"	543	18	2'-10"	1'-0"	1'-0"			
					SUB-TOTAL	6,977							

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE (DECK SLAB)												
S401	ECSR	305	30'-0"	6112	STR							
S402	ECSR	550	4'-2"	1531	2	2'-2"	0'-6 ½"	1'-7"				
S501	ECSR	392	30'-0"	12266	STR							
S502	ECSR	275	29'-8"	8509	16	29'-1"						
S503	ECSR	275	36'-11"	10589	16	36'-4"						
S504	ECSR	550	7'-3"	4159	16	6'-8"						
S505	ECSR	284	8'-8"	2567	STR							
S506	ECSR	284	2'-7"	765	2	1'-0"	0'-10"	1'-0"				
S507	ECSR	284	2'-9"	814	2	1'-0"	1'-0"	1'-0"				
S508	ECSR	550	32'-9"	18787	STR							
S509	ECSR	98	31'-4"	3203	STR							
S601	ECSR	60	40'-0"	3605	STR							
S801	ECSR	16	23'-0"	983	STR							
S802	ECSR	8	27'-1"	578	STR							
			SUB-TOTAL	74,468								

MARK	MAT'RL TYPE	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
RAILING												
R501	ECSR	40	30'-0"	1252	STR							
R502	ECSR	8	10'-5"	87	STR							
R503	ECSR	40	12'-8"	528	STR							
R504	ECSR	56	6'-2"	360	STR							
R505	ECSR	464	8'-2"	3952	30	1'-6"	0'-8"	2'-7"	2'-5"			
R506	ECSR	8	11'-2"	93	STR							
R507	ECSR	8	8'-11"	74	STR							
R508	ECSR	44	11'-2"	512	30	1'-6"	0'-8"	4'-1"	3'-11"			
R509	ECSR	12	4'-5"	55	1	1'-6"	3'-1"					
R510	ECSR	12	4'-7"	57	1	1'-6"	3'-3"					
R511	ECSR	8	10'-1"	84	STR							
R512	ECSR	8	10'-1"	84	19	8'-8"	1'-4"	0'-5"				
R513	ECSR	8	4'-1"	34	1	0'-10"	3'-5"					
R514	ECSR	12	4'-7"	57	STR							
R515	ECSR	8	6'-2"	51	39	3'-5"	2'-11"				0'-7⅜"	
R516	ECSR	2	6'-2"	13	STR							
R517	ECSR	16	6'-9"	113	STR							
R518	ECSR	16	9'-9"	163	STR							
R519	ECSR	16	22'-3"	371	STR							
R520	ECSR	2	6'-3"	13	19	4'-10"	1'-4"	0'-5"				
			SUB-TOTAL	7,953								

MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	INC
APPROACH SLAB													
AS501	ECSR	146		146	14'-6"	2208	STR						
AS502	ECSR	104	208	312	32'-5"	10549	STR						
AS503	ECSR	32	60	92	2'-9"	264	2	1'-0"	1'-0"	1'-0"			
AS504	ECSR	32	60	92	8'-8"	832	STR						
AS505	ECSR	32	60	92	2'-7"	248	2	1'-0"	0'-10"	1'-0"			
AS506	ECSR		146	146	29'-6"	4492	STR						
AS1001	ECSR	76		76	15'-11"	5205	16	14'-6"					
AS1002	ECSR		116	116	30'-11"	15432	16	29'-6"					
					SUB-TOTAL	39,230		(SEE NOTE 6)					

REINFORCING NOTES

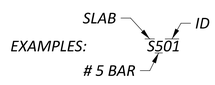
1. ALL STEEL REINFORCEMENT BARS SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING, SHALL BE MADE WITH ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.
2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
3. "SER OF" DENOTES SERIES OF BARS, E.G "X" SER OF "Y" = "X" SERIES OF "Y" BARS/SERIES.
4. REFER TO C.M.S SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
6. APPROACH SLAB REINFORCING SHOWN FOR REFERENCE ONLY AND INCLUDED FOR PAYMENT WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS.
7. FOR REINFORCING BEND DIAGRAMS, SEE SHEET 29.

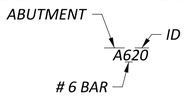
REINFORCING CALLOUT NOMENCLATURE

BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK.

LOCATION: THE BEGINING 1 OR 2 LETTERS INDICATES WHERE THE BAR IS INITIALLY CAST INTO.
SIZE: THE FIRST NUMBER (IF 3 TOTAL NUMBERS) OR TWO NUMBERS (IF 4 TOTAL NUMBERS)
UNIQUE ID: THE LAST TWO NUMBERS ARE AN INDEX NUMBER. THE INDEX NUMBER NEED NOT BE SEQUENTIAL, IT IS SIMPLY TO ALLOW A UNIQUE IDENTIFICATION OF BARS OF THE SAME SIZE AND IN THE SAME LOCATION WITHIN THE STRUCTURE.

EXAMPLES:





LOCATION MARKS USED:

A = ABUTMENT
S = SLAB (DECK)
P = PIER
D = ABUTMENT DIAPHRAGM
R = RAIL (PARAPET)
AS = APPROACH SLAB

FINAL TRACINGS
NOT FOR CONSTRUCTION

REINFORCING STEEL LIST (2 OF 2)
BRIDGE NO.: SUM-8-01.162
CARROLL STREET OVER S.R. 8

SFN 7700373

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4865
www.arcadis.com

DESIGNER MJT | CHECKER SMS
REVIEWER RBB 8-14-26
PROJECT ID 114865
SUBSET 30 | TOTAL 30
SHEET P.509 | TOTAL 627

SUM-077/008-11.65/0.00

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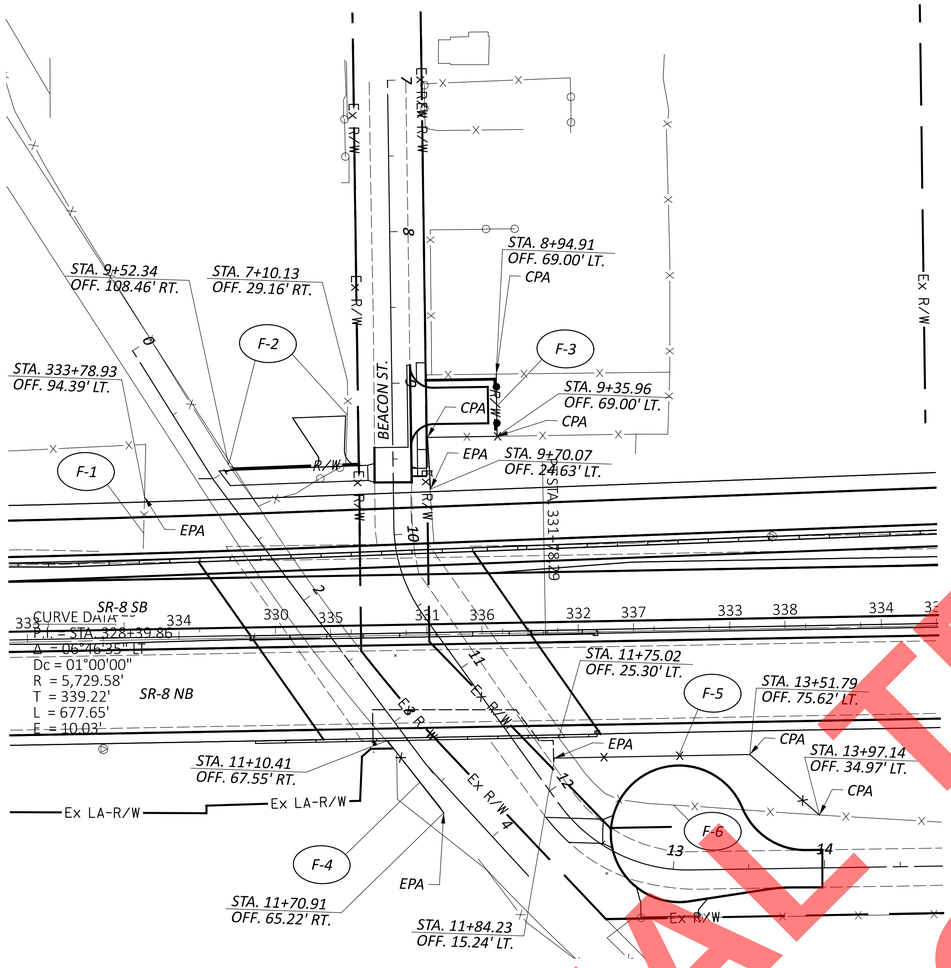

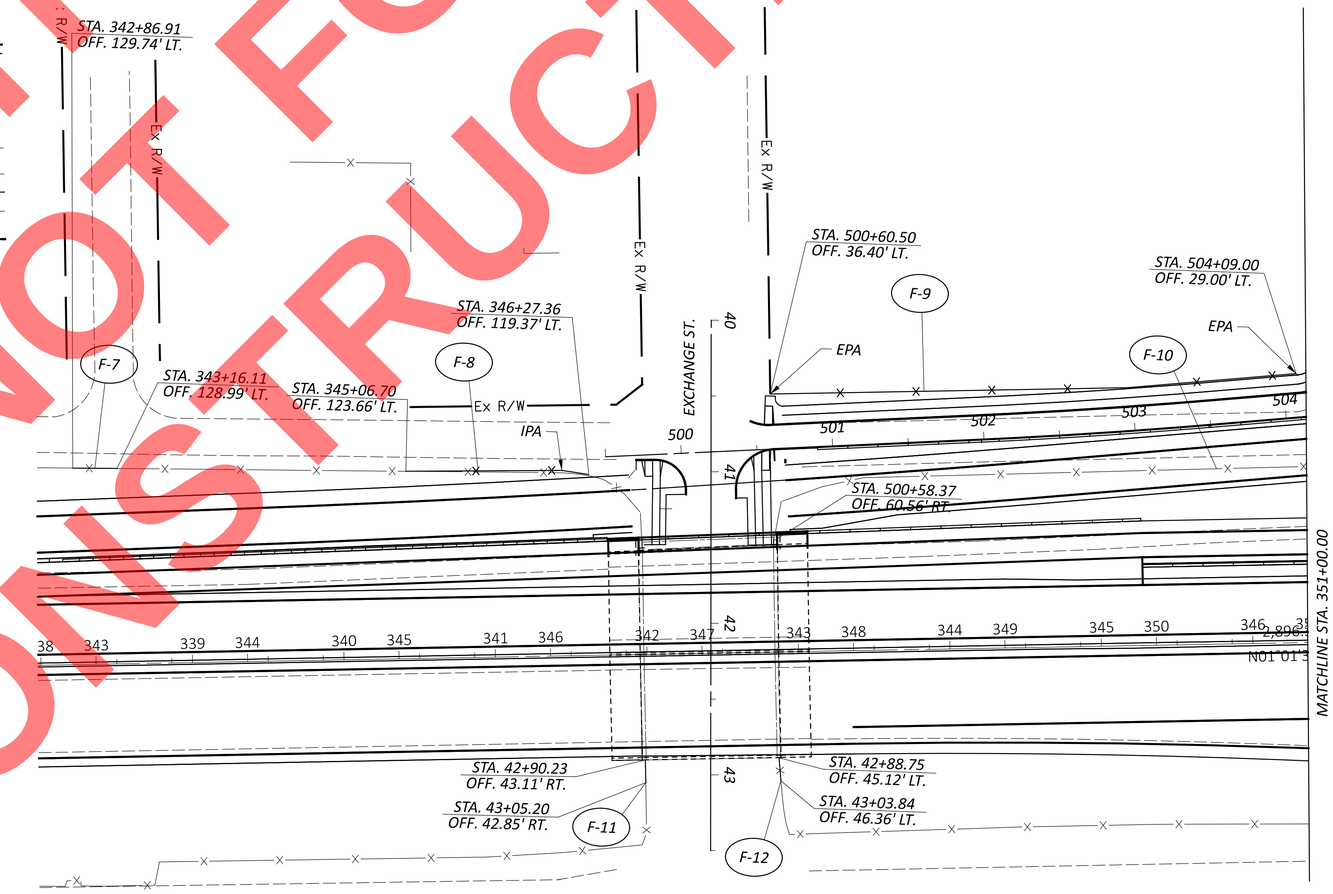

LEGEND

CPA - CORNER POST ASSEMBLY
EPA - END POST ASSEMBLY
IPA - INTERMEDIATE POST ASSEMBLY

REFERENCE NO.	LOCATION	STATION		STATION	SIDE	ITEM 202 - FENCE REMOVED	ITEM 202 - GATE REMOVED	ITEM 607 - FENCE, TYPE CLT	ITEM 607 - GATE, TYPE CLT	ITEM 607 - FENCELINE SEEDING AND MULCHING
						FT	EACH	FT	EACH	FT
F - 1	SR 8	333+78.00	TO	333+79.00	LT	33				
F - 2	BEACON ST	8+98.00	TO	9+80.00	RT	31	1			
F - 3	BEACON ST	8+95.00	TO	9+70.00	LT	117		99	1	99
F - 4	BEACON ST	11+10.00	TO	11+71.00	LT	61		61		61
F - 5	BEACON ST	11+84.00	TO	13+97.00	LT			190		190
F - 6	BEACON ST	11+75.00	TO	13+97.00	LT	191				
F-7	SR 8	342+87.00	TO	343+16.00	LT	30		30		30
F-8	SR 8	345+07.00	TO	346+27.00	LT	121		121		121
F-9	GOODKIRK	500+60.00	TO	504+09.00	LT			348		348
F-10	GOODKIRK	500+58.00	TO	508+72.00	RT	814				
F-11	EXCHANGE	42+90.00	TO	43+05.00	RT	15		15		15
F-12	EXCHANGE	42+89.00	TO	43+04.00	LT	15		15		15
TOTALS CARRIED TO NEXT SHEET						1428	1	879	1	879

FINAL PLANS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

FENCE PLAN
STA. 333+00.00 TO STA. 351+00.00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-4696
www.arcadis.com

DESIGNER
SMG

REVIEWER
KDK MM-DD-YY

PROJECT ID
114865

SHEET P.510 | TOTAL 627

SUM-077/008-11.65/00.00

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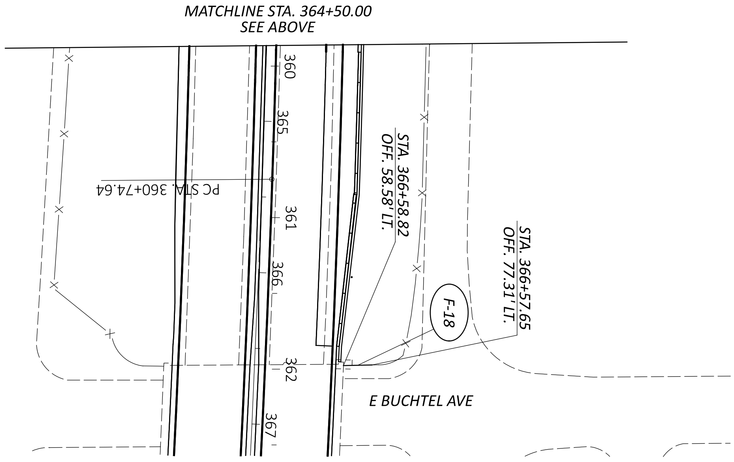
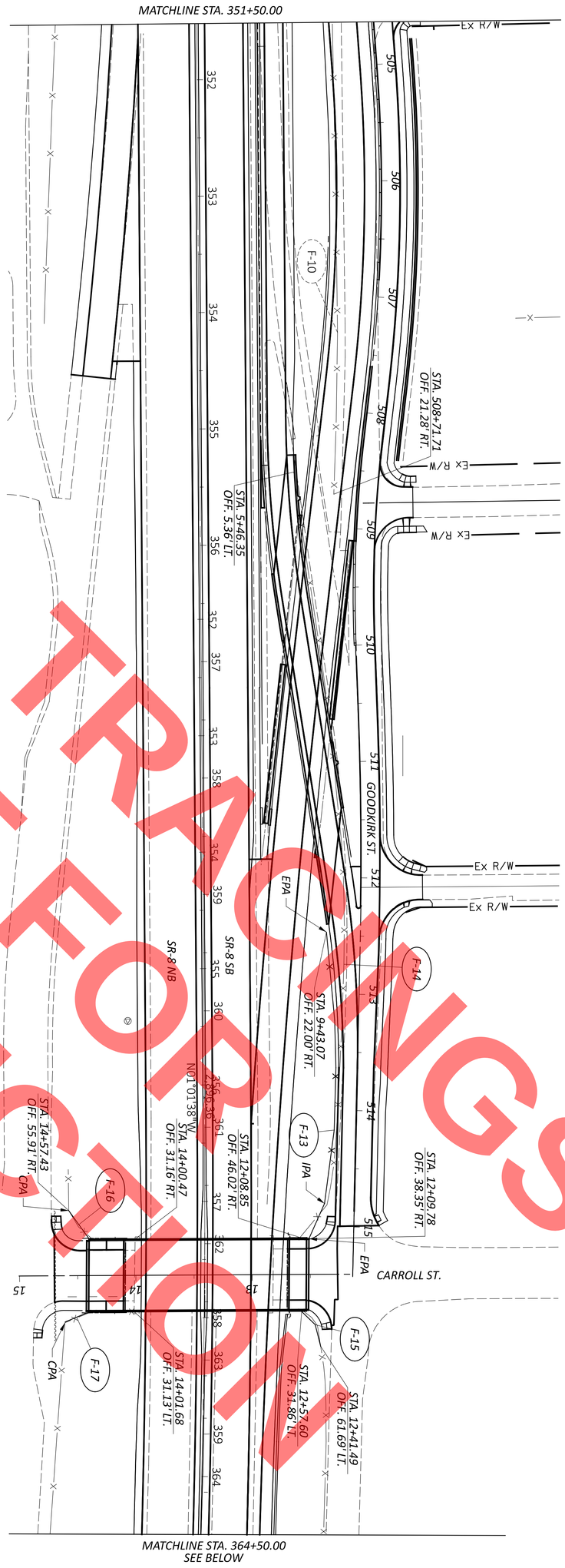
LEGEND
CPA - CORNER POST ASSEMBLY
EPA - END POST ASSEMBLY
IPA - INTERMEDIATE POST ASSEMBLY

REFERENCE NO.	LOCATION	STATION		STATION	SIDE	ITEM 202 - FENCE REMOVED	ITEM 202 - GATE REMOVED	ITEM 607 - FENCE, TYPE CLT	ITEM 607 - GATE, TYPE CLT	ITEM 607 - FENCELINE SEEDING AND MULCHING
						FT	EACH	FT	EACH	FT
F-13	ENT RAMP	9+43.00	TO	12+10.00	RT			271		271
F-14	ENT RAMP	5+46.00	TO	12+09.00	RT	670				
F-15	CARROLL	12+41.00	TO	12+58.00	LT	37		36		36
F-16	CARROLL	14+40.00	TO	14+58.00	RT	30		30		30
F-17	CARROLL	14+41.00	TO	14+61.00	LT	23		23		23
F-18	SR 8	366+59.00	TO	366+59.00	LT	22		22		22
TOTALS CARRIED TO GENERAL SUMMARY						2210	1	1261	1	1261





FINAL TRACINGS
NOT FOR
CONSTRUCTION

FENCE PLAN
STA. 351+50.00 R2 TO STA. 367+25.00 R2

HORIZONTAL SCALE IN FEET
0 25 50 100

PROJECT DESCRIPTION

ROADWAY IMPROVEMENT PROJECT SUM-77/SR8-11.65/0.00 (PID 114865) ALONG IR-77 JUST NORTH OF LOVERS LANE TO SR-8 AND ALONG SR-8 FROM IR-77 TO JUST NORTH OF PERKINS STREET IN SUMMIT COUNTY, OHIO. THE PROPOSED PROJECT CONSISTS OF SERVICE ROAD AND RAMPS RECONFIGURATIONS, WIDENING AND RESURFACING SR- 8 AND ITS ASSOCIATED RAMPS, THE ABANDONMENT OF ONE BRIDGE, THE ADDITION OF A RAMP BRAID, THE CONSTRUCTION OF 10 RETAINING WALLS, AND THE WIDENING OF ONE BRIDGE, THE REPLACEMENT OF ONE BRIDGE, AND THE CONSTRUCTION OF TWO NEW BRIDGES.

HISTORIC RECORDS

A HISTORIC RECORD SEARCH WAS PERFORMED THROUGH ODOT TIMS. TWO PROJECT'S REPORTS/PLANS WERE AVAILABLE FOR REVIEW, WHICH ARE SUM- 8- 0.63 (PID 20356, SUBBATCH 19060), DATED 2000 AND SUM-76/77 PHASE III (PID 102329), DATED APRIL 25, 2020. THIRTY-EIGHT (38) HISTORICAL BORINGS WERE UTILIZED IN DESIGN OF THE PROJECT AND ARE PRESENTED IN THE GEOTECHNICAL PROFILE SHEETS.

GEOLOGY

THE PROJECT SITE IS LOCATED WITHIN THE AKRON- CANTON INTERLOBATE PLATEAU, PART OF THE GLACIATED ALLEGHENY PLATEAUS. THE GEOLOGY AT THE PROJECT SITE IS MAPPED AS AN AVERAGE OF 20 FT OF WISCONSINAN- AGE TILL, UNDERLAIN BY PENNSYLVANIAN AGE SHALE, SANDSTONE, LIMESTONE, AND COAL BEDROCK. THE TILL IS DESCRIBED AS AN UNSORTED MIX OF CLAY, SILT, SAND, GRAVEL, AND BOULDERS AND MAY CONTAIN SILT, SAND, AND GRAVEL LENSES. TILL IN DEEP BURIED VALLEYS IS NOTED AS POTENTIALLY BEING OLDER THAN WISCONSINAN.

RECONNAISSANCE

A FIELD RECONNAISSANCE VISIT FOR THE OVERALL PROJECT AREA WAS CONDUCTED ON OCTOBER 4, 2022, ALONG SR-8 BETWEEN JOHNSTON STREET AND PERKINS STREET.

THE LAND USE OF MOST OF THE PROJECT AREA CONSISTS OF 1) INDUSTRIAL PROPERTIES; 2) RESIDENTIAL PROPERTIES; 3) COMMERCIAL PROPERTIES; AND 4) INSTITUTIONAL PROPERTIES.

PROPOSED RETAINING WALL – NORTH OF JOHNSTON STREET
THE EXISTING SLOPE IN THE AREA OF THE PROPOSED RETAINING WALL WAS OBSERVED TO BE APPROXIMATELY 2H:1V (2 FT HORIZONTAL TO 1 FT VERTICAL). THE SLOPE ITSELF WAS LIGHTLY VEGETATED, WHILE THE AREA AT THE TOP OF THE SLOPE WAS HEAVILY VEGETATED. A TRAFFIC BARRIER/RETAINING WALL WAS OBSERVED AT THE TOE OF THE SLOPE AND APPEARED TO BE IN EXCELLENT CONDITION, WITH NO SIGNS OF WEAR. THE SLOPE APPEARED STABLE, WITH NO INDICATIONS OF GEOTECHNICAL ISSUES.

BRIDGE CARRYING SR-8 OVER ABANDONED BEACON STREET
THE EXISTING BRIDGE CARRYING SR- 8 OVER BEACON STREET IS A TWO- SPAN, STEEL MULTI- BEAM BRIDGE WITH FOUR LANES OF TRAFFIC IN EACH DIRECTION ON A CONCRETE DECK WITH A CONCRETE WEARING COURSE. THE BRIDGE SITS ATOP FULL-HEIGHT WALL-TYPE CONCRETE ABUTMENTS AND A CAP AND COLUMN PIERS. THE FOUNDATION TYPE WAS UNKNOWN AT THE TIME OF THE SITE VISIT. THE ROADWAY EMBANKMENT SLOPES AT THE SITE GENERALLY APPEARED TO BE STABLE, WITH NO SIGNS OF INSTABILITY OBSERVED DURING OUR SITE VISIT. THE EXISTING ROADWAY EMBANKMENTS APPEARED TO HAVE A 2 HORIZONTAL TO 1 VERTICAL (2H:1V) SLOPE AND WERE HEAVILY VEGETATED.

OVERALL, THE BRIDGE APPEARED TO BE IN GOOD CONDITION, WITH MINOR WEAR AND DEGRADATION OBSERVED ON THE BRIDGE SUBSTRUCTURES. BOTH THE CONCRETE BRIDGE DECK AND THE MAIN STEEL SUPERSTRUCTURE BEAMS WERE OBSERVED TO BE IN EXCELLENT CONDITION. SOME WATER INFILTRATION THROUGH THE EXPANSION JOINTS WAS OBSERVED. A STEEL RETAINING WALL AT THE SOUTHEAST CORNER OF THE BRIDGE WAS OBSERVED TO BE IN FAIR CONDITION, WITH RUST AND THROUGH-HOLING CONCENTRATED ON THE TOP OF THE WALL. NO APPARENT SIGNS OF STRUCTURAL DISTRESS DUE TO GEOTECHNICAL CONCERNS WERE OBSERVED DURING OUR FIELD RECONNAISSANCE VISIT.

IN GENERAL, THE EXISTING BRIDGE STRUCTURE APPEARED TO BE ADEQUATELY DRAINED, WITH NO SIGNS OF SIGNIFICANT EROSION AT THE BRIDGE SITE. THE CONCRETE WEARING COURSE WAS OBSERVED TO BE IN GOOD CONDITION, WITH SOME SIGNS OF SURFACE WEAR. SOME CONCRETE POP-OUTS WERE OBSERVED. WATER APPEARED TO RUN DOWN THE SHOULDERS OF THE BRIDGE TO THE ROAD GOING NORTHWARDS.

SR-8 BETWEEN EXCHANGE STREET AND PERKINS STREET
IN GENERAL, THE PAVEMENT CONDITION OF THE SR-8 IN THIS SECTION WAS OBSERVED TO BE FAIR, WITH SIGNS OF WEATHERING AND SURFACE WEAR. MODERATE SEVERITY LONGITUDINAL AND TRANSVERSE CRACKING WAS COMMON ALONG THIS SECTION, ALONG WITH POTHOLING, RAVELING, AND CRACK SEALING DEFICIENCIES. THE ON AND OFF RAMPS WERE OBSERVED TO BE IN WORSE CONDITION THAT THE MAINLINE SR-8, SHOWING POOR CONDITION OVERALL. MODERATE SEVERITY LONGITUDINAL AND TRANSVERSE CRACKING WAS COMMON, AS WELL AS POTHOLING, PATCHING, RAVELING, MAP CRACKING, AND CRACK SEALING DEFICIENCIES. THE PROJECT AREA IN THIS SECTION IS SITUATED IN A CUT BELOW THE SURROUNDING LAND, WITH SLOPES UP TO THE SURROUNDING LAND OF ROUGHLY 3H:1V (3 FT HORIZONTAL TO 1 FT VERTICAL). THE ROADWAY IN THIS SECTION OF THE PROJECT DRAINS TO DRAINAGE DITCHES OFF BOTH SHOULDERS, WHICH EVENTUALLY DRAINS TO DRAINAGE BASINS, AS WELL AS TO DRAINAGE BASINS BETWEEN THE RAMPS AND SR-8. THE AREA IS MODERATELY VEGETATED, AND NO SIGNS OF STANDING WATER WERE OBSERVED. NO ISSUES DUE TO GEOTECHNICAL CONDITIONS WERE NOTED.

FOUNTAIN STREET
IN GENERAL, THE PAVEMENT CONDITION OF THE PROJECT PORTION OF FOUNTAIN STREET WAS OBSERVED TO BE GOOD TO FAIR, WITH SIGNS OF WEATHERING AND SURFACE WEAR. MODERATE POTHOLING, D-CRACKING, AND PATCHING WITH ASPHALT WERE OBSERVED BUT WERE CONFINED TO A FEW LOCATIONS. THE PROJECT AREA IN THIS SECTION WAS OBSERVED TO BE LEVEL WITH THE SURROUNDING LAND. THE ROADWAY IN THIS SECTION OF THE PROJECT DRAINS TO DRAINAGE BASINS IN BOTH CURBS OF THE ROADWAY. THE AREA IS LIGHTLY VEGETATED, AND NO SIGNS OF STANDING WATER WERE OBSERVED. NO ISSUES DUE TO GEOTECHNICAL CONDITIONS WERE OBSERVED.

RECONNAISSANCE (CONTINUED ON SHEET 2)

PROJECT LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
GRAVEL AND/OR STONE FRAGMENTS	A-1-a	1	-
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	13	25
GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT	A-2-4	8	22
FINE SAND	A-3	-	1
COARSE AND FINE SAND	A-3a	14	16
SANDY SILT	A-4a	40	15
SILT	A-4b	7	8
SILT AND CLAY	A-6a	9	13
SILTY CLAY	A-6b	2	1
CLAY	A-7-6	4	3
	TOTAL	98	107

HISTORIC LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
STONE FRAGMENTS WITH SAND	A-1-b	1	-
STONE FRAGMENTS WITH SAND AND SILT	A-2-4	8	7
FINE SAND	A-3	-	3
COARSE AND FINE SAND	A-3a	12	9
SANDY SILT	A-4a	36	20
SILT	A-4b	6	1
SILT AND CLAY	A-6a	11	9
SILTY CLAY	A-6b	-	6
CLAY	A-7-6	-	2
	TOTAL	74	57
SILTSTONE	VISUAL		
SANDSTONE	VISUAL		
SHALE	VISUAL		
UNCONTROLLED FILL	VISUAL		
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		

PROJECT BORING LOCATION - PLAN VIEW.

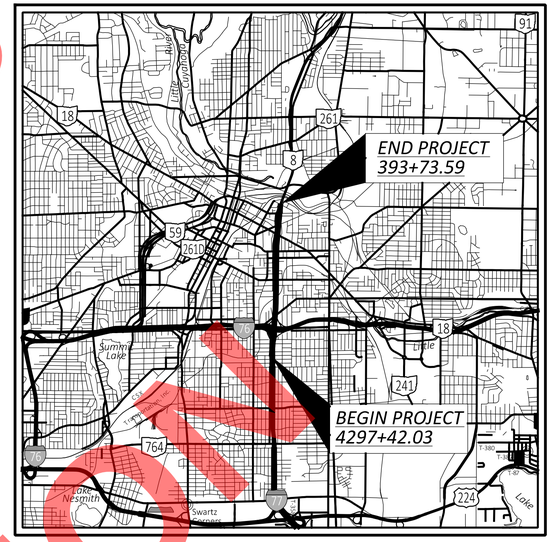
HISTORIC BORING LOCATION - PLAN VIEW.

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.

N — INDICATES STANDARD PENETRATION RESISTANCE.



LOCATION MAP

SCALE IN MILES

0 1 2 3 4

N

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
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE	

X/D"	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.
X/Y/D''	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y/D"= NUMBER OF BLOWS (UNCORRECTED) FOR D'' OF PENETRATION AT REFUSAL.
W	INDICATES FREE WATER ELEVATION.
▼	INDICATES STATIC WATER ELEVATION.
⊖	INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25% OR GREATER THAN 19% WITH A WET APPEARANCE.
NP	INDICATES A NON-PLASTIC SAMPLE.
NQ	"N" SERIES ROCK CORE BARREL OF "Q" WIRELINE BIT SIZE.
Qu	INDICATES UNCONFINED COMPRESSION TEST, ASTM D7012 (ROCK).
SO_4	INDICATES SULFATE CONTENT IN PARTS PER MILLION (ppm).
SS	INDICATES A SPLIT SPOON SAMPLE.
TR	INDICATES TOP OF ROCK ELEVATION.

RECON. - DL, 10/04/22
DRILLING - JA, JL, RW, 03/07/23 - 10/28/24
DRAWN - RS, 09/23/26
REVIEWED - CH, 09/23/26

FINAL TRACINGS NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 1 TOTAL 116
SHEET P.512 TOTAL 627

SUM-077/008-11.65/00.00

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RECONNAISSANCE, (CONT.)

BRIDGE CARRYING CARROLL STREET OVER SR-8

THE EXISTING BRIDGE CARRYING CARROLL STREET OVER SR-8 CONSISTS OF CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK SUPPORTED ON SPREAD FOOTINGS. NO APPARENT SIGNS OF STRUCTURAL DISTRESS OF THE BRIDGE DUE TO GEOTECHNICAL CONCERNS WERE OBSERVED DURING OUR FIELD RECONNAISSANCE VISIT. IN GENERAL, THE EXISTING BRIDGE STRUCTURE APPEARED TO BE ADEQUATELY DRAINED WITH NO SIGNS OF SIGNIFICANT EROSION AT THE BRIDGE SITE.

SUBSURFACE EXPLORATION

THE PROJECT SUBSURFACE EXPLORATION WAS CONDUCTED BY NEAS BETWEEN MARCH 7, 2023, AND OCTOBER 28, 2024, AND INCLUDED 53 BORINGS DRILLED TO DEPTHS BETWEEN 6.1 FT AND 70.9 FT BELOW GROUND SURFACE.

PROJECT BORINGS WERE DRILLED USING A CME 45B, CME 55X, CME 55T, OR CME 55TB TRUCK-MOUNTED DRILLING RIG WITH A 3.25-INCH (INNER DIAMETER) HOLLOW STEM AUGER. IN GENERAL, SOIL SAMPLES WERE RECOVERED CONTINUOUSLY OR AT 2.5-FT INTERVAL TO THE TOP OF BEDROCK USING AN 18-INCH SPLIT SPOON SAMPLER (AASHTO T-206 "STANDARD METHOD FOR PENETRATION TEST AND SPLIT BARREL SAMPLING OF SOILS."). THE SOIL SAMPLES OBTAINED FROM THE EXPLORATION PROGRAM WERE VISUALLY OBSERVED IN THE FIELD BY THE NEAS FIELD REPRESENTATIVE AND PRESERVED FOR REVIEW BY A GEOLOGIST FOR POSSIBLE LABORATORY TESTING. STANDARD PENETRATION TESTS (SPT) WERE CONDUCTED USING A CME AUTO HAMMER CALIBRATED TO BE 72.6%, 79% AND 63.4% EFFICIENT FOR CME 45B, CME 55X, CME 55T RIGS, RESPECTIVELY, ON JANUARY 24, 2022, AND 89% EFFICIENT FOR THE CME 55TB ON JULY 30, 2024. THE CME 55T WAS RE-CALIBRATED ON MAY 15, 2025 TO HAVE AN ENERGY RATIO (ER) OF 71%.

EXPLORATION FINDINGS

THE SUBGRADE CONDITIONS IN THE PROJECT AREA ARE RELATIVELY CONSISTENT AND GENERALLY COMPRISE EXISTING PAVEMENT SECTIONS UNDERLAIN BY COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. THE PAVEMENT SECTIONS ARE COMPOSED OF ASPHALT AND CONCRETE RANGING IN THICKNESS FROM FIVE TO TWELVE INCHES AND EIGHT TO NINE INCHES, RESPECTIVELY. UNDERNEATH THE ASPHALT LAYER, A BASE LAYER ENCOUNTERED RANGING FROM ZERO TO TWELVE AND A HALF INCHES IN THICKNESS. THE COHESIVE FINE-GRAINED SOILS ARE CLASSIFIED AS A-4A, A-4B, A-6A, A-6B, AND A-7-6, WHILE THE NON-COHESIVE COARSE-GRAINED SOILS ARE CLASSIFIED AS A-1-B, A-2-4, A-3A, AND NON-PLASTIC A-4A.

SR-8

THIS SECTION CONSISTS OF 41 BORINGS ALONG SR-8, DESIGNATED AS P-011-0-20 TO P-020-0-20, P-022-0-20, P-024-0-20, P-025-0-20, P-027-0-20, P-028-0-20, P-030-0-20, P-032-0-20, R-002-0-99, R-004-0-99 TO R-006-0-99, R-008-0-99, R-010-0-99, R-012-0-99, B-003-0-22, B-005-0-22 TO B-013-0-22, B-018-0-22 TO B-020-0-22, B-028-0-24, B-044-0-24, B-055-0-24 AND B-057-0-24.
ALONG SR-8, TWENTY-FIVE PERCENT (25%) OF THE SAMPLES TAKEN WERE CLASSIFIED AS COHESIVE FINE-GRAINED SOILS, WHICH WERE COMPRISED OF: 1) SANDY SILT (A-4A, 15% OF SAMPLES); 2) SILT (A-4B, 2% OF SAMPLES); 3) SILT AND CLAY (A-6A, 5% OF SAMPLES); 4) SILTY CLAY (A-6B, 2% OF SAMPLE); AND 5) CLAY (A-7-6, 1% OF SAMPLES). IN TERMS OF CONSISTENCY OF THE COHESIVE SOILS, THE DESCRIPTION VARIES FROM STIFF TO HARD. NATURAL MOISTURE CONTENTS RANGED FROM 6 TO 16 PERCENT.
THIRTY-FIVE PERCENT (35%) OF THE SAMPLES TAKEN ALONG SR-8 WERE CLASSIFIED AS NON-COHESIVE COARSE-GRAINED SOILS, WHICH WERE COMPRISED OF: 1) GRAVEL AND STONE FRAGMENTS WITH SAND (A-1-B, 7% OF SAMPLES); 2) GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT (A-2-4, 9% OF SAMPLES); 3) COARSE AND FINE SAND (A-3A, 15% OF SAMPLES); AND 4) NON-COHESIVE SANDY SILT (A-4A, 4% OF SAMPLES). WITH RESPECT TO THE RELATIVE DENSITY OF THE NON-COHESIVE GRANULAR SOILS, THE MATERIAL DESCRIPTION VARIES FROM LOOSE TO VERY DENSE. THE NATURAL MOISTURE CONTENT OF GRANULAR SOIL RANGED FROM 6 TO 14 PERCENT.
THIRTY-TWO PERCENT (32%) OF THE REMAINING SAMPLES ARE CLASSIFIED AS A COMBINATION OF CLAYSTONE, SHALE, AND SANDSTONE. BEDROCK WAS ENCOUNTERED IN 8 BORINGS BELOW THE PROPOSED SUBGRADE AT DEPTHS RANGED FROM 0 FT TO 1.9 FT.

EXIST RAMP TO I-76

THIS SECTION CONSISTS OF 19 BORINGS, DESIGNATED AS B-004-0-99, R-009-0-99, P-012-0-20, P-032-0-20, E3-001-0-20 TO E3-004-0-20,, B-001-0-22, B-002-0-22, B-023-0-24, B-028-0-24, B-030-0-24, B-031-0-24, B-042-0-24, B-050-0-24, B-051-0-24, B-053-0-24, B-055-0-24.
ALONG THE EXIT RAMP TO I-76, NINETEEN PERCENT (19%) OF THE SAMPLES TAKEN WERE CLASSIFIED AS COHESIVE FINE-GRAINED SOILS, WHICH WERE COMPRISED OF: 1) SANDY SILT (A-4A, 14% OF SAMPLES); 2) SILT AND CLAY (A-6A, 3% OF SAMPLES); AND 3) CLAY (A-7-6, 3% OF SAMPLES). IN TERMS OF CONSISTENCY OF THE COHESIVE SOILS, THE DESCRIPTION VARIES FROM STIFF TO HARD. NATURAL MOISTURE CONTENTS RANGED FROM 8 TO 16 PERCENT.
THIRTY-FIVE PERCENT (35%) OF THE SAMPLES TAKEN ALONG THE EXIT RAMP WERE CLASSIFIED AS NON-COHESIVE COARSE-GRAINED SOILS, WHICH WERE COMPRISED OF: 1) GRAVEL AND STONE FRAGMENTS WITH SAND (A-1-B, 8% OF SAMPLES); 2) COARSE AND FINE SAND (A-3A, 11% OF SAMPLES); 3) NON-COHESIVE SANDY SILT (A-4A, 5% OF SAMPLES); AND 4) GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT (A-2-4, 11% OF SAMPLES). WITH RESPECT TO THE RELATIVE DENSITY OF THE NON-COHESIVE GRANULAR SOILS, THE MATERIAL DESCRIPTION VARIES FROM MEDIUM DENSE TO VERY DENSE. THE NATURAL MOISTURE CONTENT OF GRANULAR SOIL RANGED FROM 7 TO 12 PERCENT.
FORTY-SIX PERCENT (46%) OF THE REMAINING SAMPLES ARE CLASSIFIED AS A COMBINATION OF SANDSTONE AND SILTSTONE. BEDROCK WAS ENCOUNTERED IN 10 BORINGS BELOW THE PROPOSED SUBGRADE AT DEPTHS RANGED FROM 0 FT TO 1.9 FT.

GOODKIRK STREET

THIS SECTION CONSISTS OF 6 BORINGS, DESIGNATED AS B-004-0-99, B-006-0-99, B-008-0-99, R-009-0-99, R-011-0-99, AND R-013-0-99.

ALONG GOODKIRK STREET, THIRTY-EIGHT PERCENT (38%) OF THE SAMPLES TAKEN WERE CLASSIFIED AS COHESIVE FINE-GRAINED SOILS, WHICH WERE COMPRISED OF: 1) SANDY SILT (A-4A, 34% OF SAMPLES); AND 2) SILT AND CLAY (A-6A, 4% OF SAMPLES). IN TERMS OF CONSISTENCY OF THE COHESIVE SOILS, THE DESCRIPTION VARIES FROM MEDIUM STIFF TO VERY STIFF. NATURAL MOISTURE CONTENTS RANGED FROM 14 TO 17 PERCENT.

EIGHT PERCENT (8%) OF THE SAMPLES TAKEN ALONG THE EXIT RAMP WERE CLASSIFIED AS NON-COHESIVE COARSE-GRAINED SOILS, WHICH WERE COMPRISED OF GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT (A-2-4, 8% OF SAMPLES). WITH RESPECT TO THE RELATIVE DENSITY OF THE NON-COHESIVE GRANULAR SOILS, THE MATERIAL IS DESCRIBED AS MEDIUM DENSE. THE NATURAL MOISTURE CONTENT OF GRANULAR SOIL WAS 11 PERCENT.

EXPLORATION FINDINGS (CONT.)

FIFTY-FOUR PERCENT (54%) OF THE REMAINING SAMPLES ARE CLASSIFIED AS SANDSTONE. BEDROCK WAS ENCOUNTERED IN 1 BORING BELOW THE PROPOSED SUBGRADE AT THE DEPTH OF 0 FT. UNCONTROLLED FILL WAS ENCOUNTERED IN BORING R-009-0-99 IMMEDIATELY BELOW THE PROPOSED SUBGRADE TO THE DEPTH OF 4.5 FT. BEDROCK WAS ENCOUNTERED IN THE BORINGS AT GREATER DEPTHS BELOW THE PROPOSED SUBGRADE: 6.5 FEET IN B-004-0-99, 4.0 FEET IN B-006-0-99, 4.5 FEET IN R-011-0-99, 4.0 FEET IN R-013-0-99, AND 4.0 FEET IN B-088-0-99.

SR-8 BRIDGE OVER ABANDONED BEACON STREET

THREE BORINGS WERE PERFORMED AT THE SR-8 BRIDGE OVER ABANDONED BEACON STREET, DESIGNATED AS B-003-0-22 THROUGH B-005-0-22. AT THE BRIDGE SITE OF SR-8 OVER BEACON STREET, FILL SOILS WERE ENCOUNTERED AT THE REAR ABUTMENT LOCATION IN BORING B-003-0-22, IMMEDIATELY BENEATH THE PAVEMENT SECTION, AND EXTENDED 15.5 FT BELOW GROUND SURFACE (BGS). AT THE REAR ABUTMENT, THE FILLS WERE ENCOUNTERED BETWEEN ELEVATIONS 1063 FT AND 1047.5 FT. HOWEVER, AT THE FORWARD ABUTMENT AND CENTER PIER LOCATIONS, NO FILLS WERE ENCOUNTERED DURING OUR SUBSURFACE EXPLORATION. THE FILLS CONSISTED OF STONE FRAGMENTS WITH SAND (A-1-B), STONE FRAGMENTS WITH SAND, SILT AND CLAY (A-2-6), AND SANDY SILT (A-4A). THE COHESIVE FILLS CAN BE DESCRIBED AS HAVING A STIFF TO HARD CONSISTENCY. THESE NON-COHESIVE FILLS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE.

BELOW THE FILLS, THE SUBSURFACE SOILS ENCOUNTERED PRIMARILY CONSISTED OF COHESIVE FINE-GRAINED SOILS, WITH NON-COHESIVE COARSE-GRAINED SOILS PRESENT SECONDARILY. AT THE REAR ABUTMENT, COHESIVE SOILS WERE ENCOUNTERED BETWEEN ELEVATIONS 1047.5 FT AND 1035.5 FT, AND BETWEEN 1024.7 FT AND 1019.7 FT. AT THE CENTER PIER LOCATION, COHESIVE SOILS WERE ENCOUNTERED BETWEEN ELEVATIONS 1026.3 FT AND 1019.3 FT, AND BETWEEN 1016.3 FT AND 1013.3 FT. AT THE FORWARD ABUTMENT LOCATION, COHESIVE SOILS WERE ENCOUNTERED BETWEEN ELEVATIONS 1041.8 FT AND 993.8 FT. THE REMAINING SOILS CONSISTED OF GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SANDY SILT (A-4A), SILT (A-4B), AND SILT AND CLAY (A-6A). THE COHESIVE SOILS CAN BE DESCRIBED AS BEING STIFF TO HARD. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B), STONE FRAGMENTS WITH SAND, SILT AND CLAY (A-2-6), COARSE AND FINE SAND (A-3A), NON-PLASTIC SANDY SILT (A-4A), AND NON-PLASTIC SILT (A-4B). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF LOOSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. GROUNDWATER WAS ENCOUNTERED IN ONLY ONE OF THE PROJECT BORINGS (B-004-0-22) DURING DRILLING, AT A DEPTH OF 15 FT BGS, CORRESPONDING TO AN ELEVATION OF 1018.3 FT AMSL. IT SHOULD BE NOTED THAT GROUNDWATER LEVELS CAN BE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS IN THE AREA AND MAY FLUCTURATE FROM THOSE MEASURED AT THE TIME OF THE EXPLORATION.

BEDROCK WAS ENCOUNTERED IN ALL THREE STRUCTURE BORINGS AT THE SITE, WITH DEPTHS RANGING FROM 993.8 FT TO 1017.5 FT. THE BEDROCK IS DESCRIBED AS SLIGHTLY WEATHERED, WEAK TO SLIGHTLY STRONG SHALE. THE RECOVERY OF SHALE RANGES FROM 83% TO 91%, AND THE RQD OF THE SHALE RANGED FROM 0% TO 62%.

SR-8 BRIDGE OVER EXCHANGE STREET

TWO HISTORIC BORINGS WERE UTILIZED AT THE SR-8 BRIDGE OVER EXCHANGE STREET, DESIGNATED AS GB-001-0-99 AND GB-002-0-99. AT THE BRIDGE SITE OF SR-8 OVER EXCHANGE STREET, FILL SOILS WERE ENCOUNTERED AT THE FORWARD ABUTMENT LOCATION IN BORING GB-002-0-99, IMMEDIATELY BENEATH THE TOPSOIL, EXTENDING TO A DEPTH OF 8.0 FT BELOW GROUND SURFACE. AT THE FORWARD ABUTMENT, THE FILLS WERE ENCOUNTERED BETWEEN ELEVATIONS 1022.2 FT AND 1015.6 FT. AT THE REAR ABUTMENT, NO FILLS WERE ENCOUNTERED DURING THE SUBSURFACE EXPLORATION. THE FILLS CONSISTED OF SANDY SILT (A-4A) AND SHALE, SANDSTONE CONCRETE FRAGMENTS. THE GRANULAR FILLS CAN BE DESCRIBED AS HAVING A MEDIUM DENSE COMPACTNESS.

BELOW THE FILLS, THE SUBSURFACE SOILS ENCOUNTERED WERE PRIMARILY NON-COHESIVE COARSE-GRAINED SOILS. COHESIVE SOILS WERE ONLY ENCOUNTERED AT THE REAR ABUTMENT, BETWEEN ELEVATIONS 1015.4 FT AND 1012.9 FT. THE REMAINDER OF THE SOILS WERE GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SILT AND CLAY (A-6A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A VERY STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS COARSE AND FINE SAND (A-3A) AND NON-PLASTIC SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF LOOSE TO MEDIUM DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. GROUNDWATER WAS ENCOUNTERED IN ONE OF THE HISTORICAL BORINGS (GB-001-0-99) AT A DEPTH OF 8.5 FT BGS, CORRESPONDING TO AN ELEVATION OF 1014.9 FT AMSL. IT SHOULD BE NOTED THAT GROUNDWATER LEVELS CAN BE INFLUENCED BY VARIOUS HYDROLOGIC CHARACTERISTICS IN THE AREA AND MAY VARY FROM THOSE MEASURED DURING EXPLORATION.

BEDROCK WAS ENCOUNTERED IN BOTH HISTORICAL BORINGS AT THE SITE, RANGING FROM ELEVATIONS 1012.9 FT TO 1020.5 FT. THE BEDROCK IS DESCRIBED AS MODERATELY WEATHERED, SOFT TO MODERATELY HARD SHALE. THE RQD OF SHALE RANGES FROM 13% TO 88%.

CARROLL STREET BRIDGE OVER SR-8

THREE BORINGS WERE PERFORMED AT THE CARROLL STREET BRIDGE OVER SR-8, DESIGNATED AS B-024-0-24 THROUGH B-029-0-24. AT THE CARROLL STREET BRIDGE OVER SR-8, THE SUBSURFACE SOILS ENCOUNTERED CONSISTED PRIMARILY OF NON-COHESIVE, COARSE-GRAINED SOILS. COHESIVE SOILS WERE ONLY ENCOUNTERED AT THE REAR ABUTMENT BETWEEN THE ELEVATIONS 1057.1 FT AND 1050.1 FT, AND AT THE FORWARD ABUTMENT BETWEEN ELEVATIONS 1033.9 FT AND 1032.4 FT. THE REMAINING SOILS WERE ALL GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SANDY SILT (A-4A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A STIFF TO VERY STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND AND SILT (A-2-4) AND COARSE AND FINE SAND (A-3A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE PROJECT BORINGS. HOWEVER, IT SHOULD BE NOTED THAT GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS IN THE AREA AND MAY FLUCTUATE OVER TIME.

EXPLORATION FINDINGS (CONT.)

BEDROCK WAS ENCOUNTERED IN ALL THREE BORINGS AT THE SITE, AT DEPTHS RANGING FROM ELEVATIONS 1031.3 FT TO 1048.7 FT. THE BEDROCK IS DESCRIBED AS SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG SANDSTONE. THE UNCONFINED COMPRESSIVE STRENGTH OF THE SANDSTONE RANGES FROM 2,600 PSI TO 6,587 PSI. THE RQD OF THE SHALE RANGES FROM 72% TO 90%.

BRAID BRIDGE

FOUR BORINGS WERE PERFORMED AT THE BRAID BRIDGE, DESIGNATED AS B-023-0-24 THROUGH B-026-0-24. AT THE PROPOSED BRAID BRIDGE, THE SUBSURFACE SOILS ENCOUNTERED CONSISTED PRIMARILY OF NON-COHESIVE, COARSE-GRAINED MATERIALS. COHESIVE SOILS WERE ONLY ENCOUNTERED IN BORING B-025-0-24, BETWEEN ELEVATIONS 1049.7 FT AND 1046.9 FT. THE REMAINING SOILS CONSISTED ENTIRELY OF GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOG AS SANDY SILT (A-4A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A HARD CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B), STONE FRAGMENTS WITH SAND AND SILT (A-2-4), COARSE AND FINE SAND (A-3A) AND NON-PLASTIC SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE PROJECT BORINGS. HOWEVER, IT SHOULD BE NOTED THAT GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS IN THE AREA AND MAY FLUCTUATE OVER TIME.

BEDROCK WAS ENCOUNTERED IN ALL FOUR PROJECT BORINGS AT DEPTHS RANGING FROM ELEVATIONS 1033.7 FT TO 1041.4 FT. THE BEDROCK IS DESCRIBED AS SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG SANDSTONE. THE UNCONFINED COMPRESSIVE STRENGTH OF THE SANDSTONE RANGES FROM 1,752 PSI TO 6,808 PSI. THE RQD OF THE SHALE RANGES FROM 62.8% TO 82%. IN BORING LOG B-024-0-24, A 2.5-FT-THICK SHALE LAYER WAS INTERBEDDED WITH SANDSTONE BETWEEN ELEVATIONS 1026.7 FT AND 1024.2 FT. THE SHALE IS DESCRIBED AS GRAY, MODERATELY WEATHERED, AND WEAK.

RETAINING WALL 1

THREE BORINGS WERE PERFORMED AT RETAINING WALL 1, DESIGNATED AS B-001-0-22, B-002-0-22, AND B-030-0-24. IN ADDITION, TWO RECENT PROJECT BORINGS FROM A NEARBY PROJECT, E3-003-0-20 AND E3-004-0-20, WERE ALSO UTILIZED. AT THE PROPOSED RW 1 SITE, 1-FT-THICK LAYER OF UNCONTROLLED FILL WAS ENCOUNTERED AT THE BEGINNING OF RW1 IN BOTH HISTORICAL BORINGS E3-003-0-20 AND E3-004-0-20. BELOW THE FILL AND PAVEMENT SECTION, THE SUBSURFACE SOILS CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. AT THE BEGINNING (SOUTH) OF RW 1, COHESIVE SOILS WERE ENCOUNTERED BETWEEN ELEVATIONS BETWEEN 1097.3 FT AND 1083 FT. AT THE END (NORTH) OF RW 1, NON-COHESIVE SOILS WERE ENCOUNTERED BETWEEN ELEVATIONS 1089 FT AND 1086.5 FT AND BETWEEN 1090.6 FT AND 1085.6 FT. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED IN THE BORING LOGS AS SANDY SILT (A-4A) AND SILT (A-4B). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A STIFF TO HARD CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B), AND NON-COHESIVE SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF DENSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. GROUNDWATER WAS ENCOUNTERED IN ONLY ONE HISTORICAL BORINGS (E3-004-0-20) DURING DRILLING, AT A DEPTH OF 48 FT BGS, CORRESPONDING TO AN ELEVATION OF 1050.3 FT AMSL. HOWEVER, GROUNDWATER LEVELS ARE AFFECTED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.

BEDROCK WAS ENCOUNTERED IN ALL FOUR STRUCTURE BORINGS AT DEPTHS RANGING FROM ELEVATIONS 1083 FT TO 1087.3 FT. THE BEDROCK CONSISTS OF MODERATELY TO HIGHLY WEATHERED, WEAK TO MODERATELY STRONG SANDSTONE, UNWEATHERED TO SLIGHTLY WEATHERED, WEAK SHALE AND SLIGHTLY TO MODERATELY WEATHERED, VERY WEAK TO SLIGHTLY STRONG SILTSTONE. BEDROCK RECOVERY AT THE RW1 SITE RANGES FROM 39% TO 100%, WITH RQD VALUES BETWEEN 0% AND 42%.

RETAINING WALL 2

TEN BORINGS WERE PERFORMED AT RETAINING WALL 2, DESIGNATED AS B-021-0-24, AND B-031-0-24 THROUGH B-039-0-24. IN ADDITION, ONE RECENT PROJECT BORING FROM A NEARBY PROJECT, B2-001-0-20, WAS ALSO UTILIZED. AT THE PROPOSED RW 2 SITE, A 22-FT-THICK LAYER OF FILL WAS ENCOUNTERED IN BORING B-033-0-24; NO FILL SOILS WERE ENCOUNTERED IN OTHER AREAS OF RW 2. BELOW THE FILL AND PAVEMENT SECTION, THE SUBSURFACE SOILS CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SANDY SILT (A-4A), SILT (A-4B), SILT AND CLAY (A-6A), SILTY CLAY (A-6B) AND CLAY (A-7-6). THESE SOILS EXHIBIT A STIFF TO HARD CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED IN THE BORING LOGS AS COARSE AND FINE SAND (A-3A), FINE SAND (A-3), STONE FRAGMENTS WITH SAND (A-1-B), GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT (A-2-4), GRAVEL WITH SAND, SILT AND CLAY (A-2-6), NON-COHESIVE SANDY SILT (A-4A), AND NON-COHESIVE SILT (A-4B). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF LOOSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. GROUNDWATER WAS ENCOUNTERED IN TWO STRUCTURE BORINGS AT THE RW2 SITE (B-035-0-24 AND B2-001-0-20) DURING DRILLING. GROUNDWATER WAS ENCOUNTERED AT A DEPTH OF 14 FT BGS IN BORING B-035-0-24 (AT AN ELEVATION OF 993.1 FT AMSL) AND AT A DEPTH OF 33 FT BGS IN BORING B2-001-0-20 (AT AN ELEVATION OF 1031.1 FT AMSL). HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.

BEDROCK WAS NOT ENCOUNTERED IN ONLY TWO STRUCTURE BORINGS (B-035-0-24 AND B2-001-0-20). IN ALL OTHER STRUCTURE BORINGS, BEDROCK WAS ENCOUNTERED AT ELEVATIONS RANGING FROM 999.9 FT TO 1054.2 FT. THE BEDROCK CONSISTS OF SEVERELY TO SLIGHTLY WEATHERED, VERY WEAK TO MODERATELY STRONG SHALE AND SILTSTONE. BEDROCK RECOVERY AT THE RW2 SITE RANGES FROM 82% TO 100%, WITH RQD VALUES BETWEEN 18% AND 86%.

FINAL NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
RECONNAISSANCE (CONT.)

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DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 2 TOTAL 116
SHEET P.513 TOTAL 627

SUM-077/008-11.65/00.00
MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:54:03 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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EXPLORATION FINDINGS (CONT.)

RETAINING WALL 3

ONE BORING WAS PERFORMED AT RETAINING WALL 3, DESIGNATED AS B-022-0-24. IN ADDITION, ONE HISTORIC BORING, R-003-0-99, WAS ALSO UTILIZED. AT THE PROPOSED RW 3 SITE, THE SUBSURFACE SOILS ENCOUNTERED BELOW THE PAVEMENT SECTION CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED IN THE BORING LOGS AS SANDY SILT (A-4A) AND WERE ENCOUNTERED AT DEPTHS OF 0.5 FT TO 4.5 FT AND 12.0 TO 14.5 FT BELOW GROUND SURFACE. THESE SOILS EXHIBIT A STIFF TO VERY STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED IN THE BORING LOGS AS STONE FRAGMENTS WITH SAND AND SILT (A-2-4), WHICH WAS ENCOUNTERED AT 4.5 FT TO 12.0 FT AND 14.5 TO 20.0 FT BELOW GROUND SURFACE (BGS). THESE SOILS EXHIBIT A RELATIVE COMPACTNESS RANGING FROM MEDIUM DENSE TO VERY DENSE.

GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. GROUNDWATER WAS NOT ENCOUNTERED IN THE STRUCTURE BORINGS AT THE RW3 SITE DURING DRILLING. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.

BEDROCK WAS ENCOUNTERED IN THE STRUCTURE BORING AT A DEPTH OF 20.0 FT BELOW GROUND SURFACE, AT AN APPROXIMATE ELEVATION OF 1014.3 FT. THE BEDROCK CONSISTS OF GRAY TO DARK GRAY, HIGHLY WEATHERED TO SLIGHTLY WEATHERED, VERY WEAK TO WEAK SHALE. BEDROCK RECOVERY AT THE RW3 SITE IS 100%, WITH A RQD OF 78%.

RETAINING WALL 4

THREE BORINGS WERE PERFORMED AT RETAINING WALL 4, DESIGNATED AS B-040-0-24 THROUGH B-042-0-24. IN ADDITION, ONE HISTORIC BORING, GB-002-0-99, WAS ALSO UTILIZED. AT THE PROPOSED RW 4 SITE, AN 8 FT DEEP FILL LAYER WAS ENCOUNTERED AT THE BEGINNING OF RW4 IN HISTORICAL BORING GB-002-0-99. THE UPPER 3 FT OF THIS FILL CONSISTED OF SANDY SILT (A-4A), WHILE THE LOWER 5 FT CONTAINED SHALE, SANDSTONE, CONCRETE, AND GRAVEL. NO FILL WAS ENCOUNTERED IN STRUCTURE BORINGS B-040-0-24 TO B-041-0-24. BENEATH THE FILL AND PAVEMENT SECTION, THE SUBSURFACE SOILS ENCOUNTERED CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. THE COHESIVE SOILS WERE FOUND BETWEEN ELEVATIONS 1032.7 FT AND 1027.2 FT, WHILE THE NON-COHESIVE SOILS WERE PRESENTED BETWEEN ELEVATIONS 1016.1 FT AND 1027.2 FT. THE COHESIVE GLACIAL TILL SOILS, CLASSIFIED AS SANDY SILT (A-4A), EXHIBITED A VERY STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED IN THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B), AND GRAVEL WITH SAND AND SILT (A-2-4). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE TO VERY DENSE.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN ALL FOUR STRUCTURE BORINGS AT THE SITE, AT ELEVATIONS RANGING FROM 1016.1 FT TO 1025.8 FT. THE BEDROCK CONSISTED OF HIGHLY TO MODERATELY WEATHERED,WEAK TO MODERATELY STRONG SANDSTONE AND HIGHLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK SHALE. BEDROCK RECOVERY AT THE RW4 SITE RANGED FROM 30% TO 90%, WITH RQD VALUES BETWEEN 13% AND 70%.

RETAINING WALL 5

THREE BORINGS WERE PERFORMED AT RETAINING WALL 5, DESIGNATED AS B-024-0-24, B-043-0-24 AND B-044-0-24. AT THE PROPOSED RW 5 SITE, THE SUBSURFACE SOILS ENCOUNTERED CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. COHESIVE SOILS WERE ENCOUNTERED ONLY IN BORING B-043-0-24, BETWEEN ELEVATIONS 1034.3 FT AND 1032.3 FT, WHILE THE REST OF SOILS AT THE SITE CONSISTED OF GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS, CLASSIFIED AS SANDY SILT (A-4A), EXHIBITED A HARD CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS COARSE AND FINE SAND (A-3A), AND GRAVEL WITH SAND AND SILT (A-2-4). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF DENSE TO VERY DENSE.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN ALL THREE STRUCTURE BORINGS AT THE SITE AT ELEVATIONS RANGING FROM 1032.3 FT TO 1035.5 FT. THE BEDROCK CONSISTS OF SANDSTONE AND INTERBEDDED SANDSTONE AND SHALE. BEDROCK RECOVERY AT THE RW5 SITE RANGES FROM 93% TO 99%, WITH RQD VALUES BETWEEN 68% AND 78%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK RANGES FROM 1,752 PSI TO 6,775 PSI.

RETAINING WALL 6

THREE BORINGS WERE PERFORMED AT RETAINING WALL 6, DESIGNATED AS B-045-0-24 THROUGH B-047-0-24. AT THE PROPOSED RW 6 SITE, THE SUBSURFACE SOILS ENCOUNTERED BENEATH THE PAVEMENT SECTION CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. COHESIVE SOILS WERE ENCOUNTERED ONLY IN BORING B-046-0-24, BETWEEN ELEVATIONS 1049.9 FT AND 1045.4 FT, WHILE THE REMAINING SOILS CONSISTED OF GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SANDY SILT (A-4A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B), GRAVEL WITH SAND AND SILT (A-2-4), COARSE AND FINE SAND (A-3A), FINE SAND (A-3) AND NON-COHESIVE SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF DENSE TO VERY DENSE CORRELATING TO N60 VALUES BETWEEN 10 BPF AND REFUSAL. THE NATURAL MOISTURE CONTENT OF THE NON-COHESIVE SOILS RANGED FROM 5 TO 15 PERCENT.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN ALL THREE STRUCTURE BORINGS AT ELEVATIONS RANGING FROM 1028.4 FT TO 1035.4 FT. THE BEDROCK CONSISTS OF SLIGHTLY TO MODERATELY WEATHERED SLIGHTLY TO MODERATELY STRONG SANDSTONE AND MODERATELY WEATHERED, WEAK SHALE. BEDROCK RECOVERY AT THE RW6 SITE RANGES FROM 90% TO 100%, WITH RQD VALUES BETWEEN 0% AND 78%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK WAS MEASURED 5,536 PSI.

EXPLORATION FINDINGS (CONT.)

RETAINING WALL 7

TWO BORINGS WERE PERFORMED AT RETAINING WALL 7, DESIGNATED AS B-048-0-24 AND B-049-0-24. AT THE PROPOSED RW 7 SITE, THE SUBSURFACE SOILS ENCOUNTERED BELOW THE PAVEMENT SECTION CONSISTED OF ONLY NON-COHESIVE COARSE-GRAINED SOILS, WHICH WERE ENCOUNTERED BETWEEN ELEVATIONS 1040.4 FT AND 1031.6 FT. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED IN THE BORING LOGS AS GRAVEL WITH SAND AND SILT (A-2-4), COARSE AND FINE SAND (A-3A) AND NON-COHESIVE SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF VERY DENSE.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN BOTH STRUCTURE BORINGS AT ELEVATIONS RANGING FROM 1031.6 FT TO 1037.4 FT. THE BEDROCK CONSISTS OF SLIGHTLY TO HIGHLY WEATHERED, SLIGHTLY TO MODERATELY STRONG SANDSTONE. THE RECOVERY OF BEDROCK AT THE RW7 SITE RANGES FROM 96% TO 97%, WITH RQD VALUES BETWEEN 48% AND 72%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK RANGED FROM 6,540 PSI TO 6,916 PSI.

RETAINING WALL 8

TWO BORINGS WERE PERFORMED AT RETAINING WALL 8, DESIGNATED AS B-050-0-24 AND B-051-0-24. AT THE PROPOSED RW 8 SITE, THE SUBSURFACE SOILS ENCOUNTERED BELOW THE PAVEMENT SECTION CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. COHESIVE SOILS WERE ONLY ENCOUNTERED IN BORING B-050-0-24, BETWEEN ELEVATIONS 1038.1 FT AND 1033.6 FT. THE REMAINING SOILS WERE ALL GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED IN THE BORING LOGS AS SANDY SILT (A-4A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A HARD CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS STONE FRAGMENTS WITH SAND (A-1-B) AND GRAVEL WITH SAND AND SILT (A-2-4). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF DENSE TO VERY DENSE.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME IN THE AREA AND MAY VARY FROM THOSE MEASURED AT THE TIME OF THE EXPLORATION.
BEDROCK WAS ENCOUNTERED IN BOTH STRUCTURE BORINGS AT THE SITE, RANGING FROM ELEVATIONS 1030.1 FT TO 1033.7 FT. THE BEDROCK CONSISTS OF SLIGHTLY TO MODERATELY WEATHERED,SLIGHTLY TO MODERATELY STRONG SANDSTONE. THE RECOVERY OF BEDROCK AT THE RW8 SITE RANGES FROM 96% TO 97%, WITH AN RQD OF BEDROCK BETWEEN 46% AND 67%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK WAS 4,620 PSI.

RETAINING WALL 9

THREE BORINGS WERE PERFORMED AT RETAINING WALL 9, DESIGNATED AS B-052-0-24 THROUGH B-054-0-24. AT THE PROPOSED RW 9 SITE, BELOW PAVEMENT SECTION, SUBSURFACE SOILS ENCOUNTERED CONSISTED OF ONLY NON-COHESIVE COARSE-GRAINED SOILS BETWEEN THE ELEVATION OF 1031.5 FT AND 1056.2 FT. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS COARSE AND FINE SAND (A-3A) AND NON-COHESIVE SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE TO VERY.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN BOTH STRUCTURE BORINGS AT THE SITE, AT ELEVATIONS RANGING FROM 1031.5 FT TO 1046.2 FT. THE BEDROCK ENCOUNTERED INCLUDES SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG SANDSTONE. BEDROCK RECOVERY AT THE RW9 SITE RANGES FROM 97% TO 98%, AND THE RQD RANGES FROM 59% TO 83%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK RANGED FROM 4,942 PSI TO 4,874 PSI.

RETAINING WALL 10

THREE BORINGS WERE PERFORMED AT RETAINING WALL 10, DESIGNATED AS B-055-0-24 THROUGH B-057-0-24. AT THE PROPOSED RW 10 SITE, BELOW THE PAVEMENT SECTION, SUBSURFACE SOILS ENCOUNTERED CONSISTED OF BOTH COHESIVE FINE-GRAINED SOILS AND NON-COHESIVE COARSE-GRAINED SOILS. THE COHESIVE SOILS WERE ONLY ENCOUNTERED IN BORING B-056-0-24 BETWEEN ELEVATIONS 1051.1 FT AND 1048.6 FT, WHILE THE REMAINING SOILS CONSISTED OF GRANULAR MATERIALS. THE COHESIVE GLACIAL TILL SOILS ARE CLASSIFIED ON THE BORING LOGS AS SANDY SILT (A-4A). THE COHESIVE SOILS CAN BE DESCRIBED AS HAVING A VERY STIFF CONSISTENCY. THE NON-COHESIVE GLACIAL TILL SOILS ENCOUNTERED ARE CLASSIFIED ON THE BORING LOGS AS GRAVEL WITH SAND AND SILT (A-2-4) AND NON-COHESIVE SANDY SILT (A-4A). THESE NON-COHESIVE SOILS ARE DESCRIBED AS HAVING A RELATIVE COMPACTNESS OF MEDIUM DENSE TO VERY DENSE.
GROUNDWATER MEASUREMENTS WERE TAKEN DURING THE DRILLING PROCEDURES AND/OR IMMEDIATELY FOLLOWING THE COMPLETION OF EACH BOREHOLE. NO GROUNDWATER WAS ENCOUNTERED IN ANY OF THE NEARBY BORINGS. HOWEVER, GROUNDWATER LEVELS ARE INFLUENCED BY VARIOUS HYDROLOGIC FACTORS AND MAY FLUCTUATE OVER TIME.
BEDROCK WAS ENCOUNTERED IN BOTH STRUCTURE BORINGS AT THE SITE, RANGING FROM ELEVATIONS 1031.9 FT TO 1056.2 FT. THE BEDROCK ENCOUNTERED INCLUDES UNWEATHERED TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG SANDSTONE. BEDROCK RECOVERY AT THE RW10 SITE RANGES FROM 97% TO 98%, AND THE RQD OF THE BEDROCK RANGES FROM 72% TO 92%. THE UNCONFINED COMPRESSIVE STRENGTH OF THE BEDROCK RANGED FROM 5,520 PSI TO 5,541 PSI.

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 2025 .

AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE GEOTECHNICAL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

BEDROCK TEST SUMMARY

BORING ID	SAMPLE ELEVATION	SAMPLE DEPTH	Sc (PSI)	Qu (PSI)	LITHOLOGY
B-022-0-24	1001.6' - 1001.2'	32.7' - 33.1'	-	390	SHALE
B-023-0-24	1028.4' - 1028.0'	14.9' - 15.3'	-	5315	SANDSTONE
B-024-0-24	1028.8' - 1028.4'	7.4' - 7.8'	-	1752	SANDSTONE
B-025-0-24	1035.8' - 1035.4'	15.6' - 16.0'	-	4242	SANDSTONE
B-026-0-24	1028.8' - 1028.5'	7.3' - 7.6'	-	2936	SANDSTONE
B-026-0-24	1020.3' - 1020.0'	15.8' - 16.1'	-	6808	SANDSTONE
B-027-0-24	1043.1' - 1042.7'	14.0' - 14.4'	-	2600	SANDSTONE
B-028-0-24	1027.5' - 1027.1'	6.3' - 6.7'	-	6587	SANDSTONE
B-029-0-24	1031.5' - 1031.1'	19.4' - 19.8'	-	5519	SANDSTONE
B-030-0-24	1055.0' - 1054.5'	16.3' - 16.8'	-	4843	SHALE
B-031-0-24	1048.5' - 1048.1'	18.2' - 18.6'	-	6083	SHALE
B-042-0-24	1023.3' - 1022.9'	13.7' - 14.1'	-	5900	SANDSTONE
B-043-0-24	1029.9' - 1029.5'	8.9' - 9.3'	-	6775	SANDSTONE & SHALE
B-044-0-24	1030.7' - 1030.3'	7.8' - 8.2'	-	6400	SANDSTONE & SHALE
B-046-0-24	1030.5' - 1030.1'	19.4' - 19.8'	-	5536	SANDSTONE
B-048-0-24	1026.2' - 1025.8'	11.6' - 12.0'	-	6916	SANDSTONE
B-049-0-24	1031.8' - 1031.4'	8.6' - 9.0'	-	6540	SANDSTONE
B-051-0-24	1027.4' - 1027.0'	11.3' - 11.7'	-	4620	SANDSTONE
B-052-0-24	1035.8' - 1035.4'	17.9' - 18.3'	-	2331	SANDSTONE
B-053-0-24	1028.3' - 1027.9'	6.2' - 6.6'	-	4942	SANDSTONE
B-054-0-24	1039.8' - 1039.4'	16.4' - 16.8'	-	4874	SANDSTONE
B-055-0-24	1027.9' - 1027.5'	6.5' - 6.9'	-	5520	SANDSTONE
B-057-0-24	1032.6' - 1032.2'	6.7' - 7.1'	-	5541	SANDSTONE

FINAL PLANS NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
EXPLORATION FINDINGS (CONT.) AND BEDROCK TEST SUMMARY

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DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 3 TOTAL 116
SHEET P.514 TOTAL 627

SUM-077/008-11.65/00.00

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INDEX OF SHEETS

RECONNAISSANCE (CONT.), SHEET 2.
EXPLORATION FINDINGS (CONT.) AND BEDROCK TEST SUMMARY, SHEET 3.
INDEX OF SHEETS, SHEET 4.
SUMMARY OF SOIL TEST DATA, SHEETS 5 - 7.

LOCATION		PLAN	PROFILE	STRUCTURE INCLUDED	
FROM STA.	TO STA.			BRIDGE NO.	SFN
SR-8 MAINLINE					
4325+00	331+75	8	8	-	-
331+75	344+25	9	9	-	-
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET					
BEGIN	END	10	11	SUM-8-0.770	7700091
SR-8 MAINLINE					
344+25	356+75	12	12	-	-
356+75	369+25	13	13	-	-
369+25	381+75	14	14	-	-
381+75	394+25	15	15	-	-
SB EXIT RAMP CD (TO IR-76)					
100+00	112+50	16	16	-	-
112+50	125+00	17	17	-	-
125+00	137+50	18	18	-	-
BRIDGE NO. SUM-8-0.987 SB EXIT RAMP CD (TO IR-76) OVER EXCHANGE STREET					
BEGIN	END	19	19	SUM-8-0.987	7700156
SB EXIT RAMP CD (TO IR-76)					
137+50	END	20	20	-	-
GOODKIRK STREET					
500+50	515+50	21	21	-	-
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)					
BEGIN	END	22	23	SUM-8-1.040	7700372

INDEX OF SHEETS (CONT.)

LOCATION		PLAN	PROFILE	STRUCTURE INCLUDED	
FROM STA.	TO STA.			BRIDGE NO.	SFN
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8					
BEGIN	END	24	24	SUM-8-1.162	7700373
RETAINING WALL RW-1					
0+00	2+10	25	25	-	-
2+10	END	26	26	-	-
RETAINING WALL RW-2					
0+00	5+00	27	28	-	-
5+00	10+00	29	30	-	-
10+00	END	31	32	-	-
RETAINING WALL RW-3					
BEGIN	END	33	33	-	-
RETAINING WALL RW-4					
BEGIN	END	34	34	-	-
RETAINING WALL RW-5					
BEGIN	END	35	35	-	-
RETAINING WALL RW-6					
BEGIN	END	36	36	-	-
RETAINING WALL RW-7					
BEGIN	END	37	37	-	-
RETAINING WALL RW-8					
BEGIN	END	38	38	-	-
RETAINING WALL RW-9					
BEGIN	END	39	39	-	-
RETAINING WALL RW-10					
BEGIN	END	40	40	-	-
SR-8 RAMP P					
30+00	42+00	41	41	-	-
42+00	END	42	42	-	-
SR-8 RAMP Q					
12+00	27+00	43	43	-	-

BORING LOGS, ROCK CORE PHOTOS AND HISTORIC BORING LOGS, SHEETS 44 - 116.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
INDEX OF SHEETS

DESIGN AGENCY
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SUMMARY OF SOIL TEST DATA
SR-8

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
P-012-0-20	1.20	-	2.70	SS-1	17	72	3.50	4	15	13	39	29	24	15	9	16	A-4a (7)	-
STA. 4326+01, 91' LT.	3.50	-	4.90	SS-2	19/24/50/5"	6		14	17	32	26	11	17	NP	NP	9	A-4a (0)	-
LATITUDE = 41.063861	6.00	-	7.50	SS-3	39	50		5	20	42	20	13	19	NP	NP	12	A-3a (0)	-
LONGITUDE = -81.504878	8.50	-	10.00	SS-4	88	56			GREY, CLAY, TRACE SAND & GRAVEL, SIMILAR TO GREY CLAYSTONE.							6	A-7-6 (VISUAL)	-
P-011-0-20	1.00	-	2.50	SS-1	20	44		19	54	10	5	12	21	14	7	10	A-2-4 (0)	-
STA. 4326+28, 12' LT.	3.50	-	4.30	SS-2	6/50/4"	100		4	22	32	34	8	20	NP	NP	6	Rock (VISUAL)	-
LATITUDE = 41.063858	6.00	-	6.60	SS-3	23/50/1"	100					SAME AS SS2					5	Rock (VISUAL)	-
LONGITUDE = -81.504556	8.50	-	9.10	SS-4	30/50/1"	100					SAME AS SS3					6	Rock (VISUAL)	-
P-013-0-20	1.00	-	2.50	SS-1	15	56	4.00	0	19	30	40	11	24	16	8	14	A-4a (3)	-
STA. 4327+97, 48' LT.	3.50	-	4.10	SS-2	31/50/1"	100		0	32	23	35	10	28	17	11	6	Rock (VISUAL)	-
LATITUDE = 41.064340	6.00	-	6.40	SS-3	50/5"	100					SAME AS SS2					6	Rock (VISUAL)	-
LONGITUDE = -81.504591	8.50	-	8.90	SS-4	50/5"	100					SAME AS SS3					7	Rock (VISUAL)	-
P-014-0-20	1.10	-	2.60	SS-1	50	78		27	15	31	13	14	NP	NP	NP	12	A-2-4 (0)	-
STA. 4329+22, 31' RT.	3.50	-	4.40	SS-2	7/50/5"	82		1	17	28	41	13	28	22	6	7	Rock (VISUAL)	-
LATITUDE = 41.064663	6.00	-	6.40	SS-3	50/5"	80					SAME AS SS2					5	Rock (VISUAL)	-
LONGITUDE = -81.504279	8.50	-	9.20	SS-4	27/50/2"	100					SAME AS SS3					4	Rock (VISUAL)	-
P-015-0-20	1.00	-	1.80	SS-1	23/50/4"	90		0	12	48	29	11	24	19	5	4	Rock (VISUAL)	-
STA. 327+44, 9' RT.	3.50	-	3.90	SS-2	50/3"	100		11	27	25	27	10				5	Rock (VISUAL)	-
LATITUDE = 41.065760	6.00	-	6.10	SS-3	50/3"	33					SAME AS SS2					4	Rock (VISUAL)	-
LONGITUDE = -81.504185	8.50	-	8.75	SS-4	50/3"	100					SAME AS SS3					4	Rock (VISUAL)	-
P-016-0-20	1.20	-	2.70	SS-1	31	56	4.00	2	8	24	44	22	22	17	5	10	A-4a (6)	-
STA. 328+48, 42' LT.	3.50	-	4.40	SS-2	23/50/5"	82		0	4	10	65	21	25	22	3	6	Rock (VISUAL)	-
LATITUDE = 41.066053	6.00	-	6.90	SS-3	16/50/5"	82					SAME AS SS2					6	Rock (VISUAL)	-
LONGITUDE = -81.504384	8.50	-	8.90	SS-4	50/5"	100					SAME AS SS3					5	Rock (VISUAL)	-
P-017-0-20	1.10	-	2.60	SS-1	43	78	4.00	0	7	7	52	34	25	18	7	13	A-4b (8)	-
STA. 331+43, 8' RT.	3.50	-	4.90	SS-2	16/47/50/2"	71	4.00	0	25	11	39	25	27	14	13	11	A-6a (7)	-
LATITUDE = 41.066858	6.00	-	6.90	SS-3	17/50/5"	100		CLAYSTONE, GRY, DECOMPOSED TO HIGH WEATHERED, VERY WEAK, VERY FINE GRAINED.								8	Rock (VISUAL)	-
LONGITUDE = -81.504167	8.50	-	9.25	SS-4	29/50/3"	100					SAME AS SS3					6	Rock (VISUAL)	-
P-018-0-20	1.00	-	2.50	SS-1	11	56	3.25	23	54	10	4	9	NP	NP	NP	8	A-1-b (0)	-
STA. 332+50, 11' LT.	3.50	-	5.00	SS-2	15	72		21	15	32	19	13	17	15	2	11	A-2-4 (0)	-
LATITUDE = 41.067149	6.00	-	7.50	SS-3	42	67		2	11	26	26	35	21	14	7	11	A-4a (5)	-
LONGITUDE = -81.504219	8.50	-	10.00	SS-4	67	72			SHALE, BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED.							9	Rock (VISUAL)	-
R-002-0-99	1.00	-	2.50	SS-1	5/5/12	100		39	12	14	24	11	25	17	8	12	A-2-4 (0)	-
STA. 333+35, 43' LT.	3.50	-	5.00	SS-2	10/11/9	100					BROWN, SILT & CLAY.						A-6a (VISUAL)	-
LATITUDE = 41.067381	6.00	-	7.50	SS-3	9/7/9	100					SAME AS SS2						A-6a (VISUAL)	-
LONGITUDE = -81.504350	8.50	-	10.00	SS-4	6/19/19	100					SANDSTONE, BROWN, MODERATELY WEATHERED.						Rock (VISUAL)	-
P-019-0-20	1.00	-	2.50	SS-1	27	50		19	24	20	21	16	NP	NP	NP	8	A-4a (0)	-
STA. 334+68, 61' RT.	3.50	-	5.00	SS-2	8	44	1.25	0	25	29	30	16	21	16	5	12	A-4a (2)	-
LATITUDE = 41.067750	6.00	-	7.50	SS-3	6	39		5	24	36	23	12	20	NP	NP	11	A-3a (0)	-
LONGITUDE = -81.503970	8.50	-	10.00	SS-4	7	11			BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND & SILT, LITTLE CLAY.							13	A-2-4 (VISUAL)	-
P-020-0-20	1.00	-	2.50	SS-1	29	50		43	8	19	18	12				11	A-4a (VISUAL)	-
STA. 336+52, 50' LT.	3.50	-	5.00	SS-2	14	11		ORANGISH BRN, GRAVEL AND STONE FRAGMENTS WITH SAND & SILT, TRACE CLAY.								4	A-2-4 (VISUAL)	-
LATITUDE = 41.068249	6.00	-	7.50	SS-3	14	56		0	10	8	55	27	28	20	8	11	A-4b (8)	-
LONGITUDE = -81.504397	8.50	-	10.00	SS-4	13	67		0	14	48	31	7	NP	NP	NP	15	A-4a (1)	-
P-022-0-20	1.20	-	2.70	SS-1	36	56		9	12	32	28	19	18	15	3	13	A-4a (2)	-
STA. 340+04, 43' LT.	3.50	-	5.00	SS-2	35	72		5	8	32	39	16	17	15	2	11	A-4a (4)	-
LATITUDE = 41.069214	6.00	-	7.50	SS-3	45	78		0	15	41	32	12	16	14	2	10	A-4a (2)	-
LONGITUDE = -81.504357	8.50	-	10.00	SS-4	15	72		7	10	41	28	14	15	15	NP	11	A-4a (1)	-
R-004-0-99	1.00	-	2.50	SS-1	6/15/29	100					BROWN, COARSE & FINE SAND.						A-3a (VISUAL)	-
STA. 340+90, 17' LT.	3.50	-	5.00	SS-2	22/20/31	100		4	8	25	48	15	30	15	15	12	A-6a (8)	-
LATITUDE = 41.069453	6.00	-	7.50	SS-3	15/18/22	100		4	8	25	48	15	30	15	15	12	A-6a (8)	-
LONGITUDE = -81.504272	8.50	-	10.00	SS-4	11/18/14	100		4	8	25	48	15	30	15	15	12	A-6a (8)	-
P-024-0-20	1.00	-	2.50	SS-1	31	44		0	17	45	28	10	18	17	1	9	A-4a (1)	-
STA. 344+04, 55' LT.	3.50	-	5.00	SS-2	39	72		1	4	16	56	23	21	18	3	13	A-4b (8)	-
LATITUDE = 41.070312	6.00	-	7.50	SS-3	38	72		13	8	33	28	18	16	15	1	11	A-4a (2)	-
LONGITUDE = -81.504432	8.50	-	10.00	SS-4	31	72		20	10	56	11	3	NP	NP	NP	5	A-3a (0)	-
R-005-0-99	1.00	-	2.50	SS-1	21/15/13	100					SANDY SILT.						A-4a (VISUAL)	-
STA. 345+25, 52' RT.	3.50	-	5.00	SS-2	10/16/11	100					BROWN, FINE SAND.						A-3 (VISUAL)	-
LATITUDE = 41.070650	6.00	-	7.50	SS-3	3/16/17	100					SANDY SILT.						A-4a (VISUAL)	-
LONGITUDE = -81.504033	8.50	-	10.00	SS-4	5/10/21	100					SAME AS SS3						A-4a (VISUAL)	-
P-025-0-20	1.00	-	2.50	SS-1	36	50		17	30	32	15	6	NP	NP	NP	7	A-3a (0)	-
STA. 347+84, 59' RT.	3.50	-	5.00	SS-2	14	44		10	25	35	22	8	14	NP	NP	9	A-3a (0)	-
LATITUDE = 41.071338	6.00	-	7.50	SS-3	7	17		BROWN, GRAVEL & STONE FRAGMENTS WITH SAND AND SILT, TRACE TO LITTLE CLAY.								7	A-2-4 (VISUAL)	-
LONGITUDE = -81.504014	8.50	-	10.00	SS-4	6	17					SAME AS SS3					9	A-2-4 (VISUAL)	-
R-006-0-99	1.00	-	2.50	SS-1	6/4/6	100					SANDY SILT (FILL).						A-4a (VISUAL)	-
STA. 349+25, 44' LT.	3.50	-	5.00	SS-2	3/23/28	100					UNCONTROLLED FILL						UCF (VISUAL)	-
LATITUDE = 41.071744	6.00	-	7.50	SS-3	19/26/19	100					SANDY SILT (FILL).						A-4a (VISUAL)	-
LONGITUDE = -81.504392	8.50	-	10.00	SS-4	26/33/31	100					UNCONTROLLED FILL						UCF (VISUAL)	-
P-027-0-20	1.00	-	2.50	SS-1	35	50		33	20	17	15	15				11	A-3a (VISUAL)	-
STA. 351+75, 80' RT.	3.50	-	4.25	SS-2A	20	44		52	17	19	9	3				5	A-2-4 (VISUAL)	-
LATITUDE = 41.072435	4.25	-	5.00	SS-2B	-	-	1.75		BROWN, SILT CLAY, TRACE TO LITTLE SAND, TRACE TO LITTLE GRAVEL.							12	A-6b (VISUAL)	-
LONGITUDE = -81.503947	6.00	-	7.50	SS-3	15	44	2.25	3	14	33	27	23	25	15	10	14	A-6b (VISUAL)	-
				SS-4	10	56	3.75				SAME AS SS3					14	A-6b (VISUAL)	-

FINAL TRACINGS
NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:56:00 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ID003.dgn

FINAL TRACINGS
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CONSTRUCTION

SUMMARY OF SOIL TEST DATA
SR-8 (CONT.)

P-028-0-20	1.20	-	2.70	SS-1	47	61		27	16	28	17	12	NP	NP	NP	11	A-3a (VISUAL)	-
STA. 352+04, 72' LT.	3.50	-	5.00	SS-2	10	56	1.25	4	19	37	25	15	20	16	4	14	A-4a (1)	-
LATITUDE = 41.072509	6.00	-	7.40	SS-3	4/6/50/5"	76	4.00	0	17	24	35	24	22	15	7	13	A-4a (5)	-
LONGITUDE = -81.504521	8.50	-	8.70	SS-4	50/2"	100		SANDSTONE, ORANGISH BRN, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK.								5	Rock (VISUAL)	-
R-008-0-99	1.00	-	2.50	SS-1	32/44/42	100		14	14	30	26	16	21	13	8	11	A-4a (1)	-
STA. 353+24, 10' RT.	3.50	-	3.75	SS-2	50/3"	100		14	14	30	26	16	21	13	8	11	A-4a (1)	-
LATITUDE = 41.072842	6.00	-	6.83	SS-3	12/50/4"	100		BROWN, SILT & CLAY.									A-6a (VISUAL)	-
LONGITUDE = -81.504206																		
P-029-0-20	1.10	-	2.60	SS-1	33	56		8	3	58	15	16	NP	NP	NP	10	A-3a (0)	-
STA. 354+06, 85' LT.	3.50	-	5.00	SS-2	33	39	4.00	9	7	24	34	26	23	16	7	11	A-4a (5)	-
LATITUDE = 41.073065	6.00	-	7.50	SS-3	20	44		32	7	28	17	16	19	16	3	11	A-2-4 (0)	-
LONGITUDE = -81.504556	8.50	-	10.00	SS-4	71	56		2	2	61	18	17	17	16	1	9	A-3a (0)	-
P-030-0-20	1.00	-	2.50	SS-1	28	44		48	42	3	5	2				8	A-3a (VISUAL)	-
STA. 355+21, 111' RT.	3.50	-	3.75	SS-2A	29	33		0	26	33	34	7	20	18	2	10	A-4a (1)	-
LATITUDE = 41.073381	3.75	-	5.00	SS-2B	-	-	4.00	BROWN, CLAY, TRACE SAND & GRAVEL.								13	A-7-6 (VISUAL)	-
LONGITUDE = -81.503868	6.00	-	6.40	SS-3	50/5"	20		SANDSTONE, BRN, HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, MEDIUM GRAINED.								6	Rock (VISUAL)	-
				SS-4	50/5"	20		SAME AS SS3								6	Rock (VISUAL)	-
R-010-0-99	1.00	-	1.08	SS-1	50/1"	100		22	13	35	30		NP	NP	NP	8	A-2-4 (0)	-
STA. 356+85, 17' LT.	3.50	-	3.67	SS-2	50/2"	100		22	13	35	30		NP	NP	NP	8	A-2-4 (0)	-
LATITUDE = 41.073831	6.00	-	6.25	SS-3	50/3"	100		22	13	35	30		NP	NP	NP	8	A-2-4 (0)	-
LONGITUDE = -81.504311	8.50	-	8.75	SS-4	50/3"	100		SHALE, GRAY, WEATHERED.									Rock (VISUAL)	-
B-006-0-22	1.50	-	2.17	SS-1	40/50/2"	75		0	3	71	20	6	NP	NP	NP	8	A-3a (0)	0
STA. 357+15, 56' RT.	3.00	-	3.58	SS-2	35/50/1"	86		SAME AS SS1								8	A-3a (VISUAL)	-
LATITUDE = 41.073915	4.50	-	5.42	SS-3	13/50/5"	91		4	15	41	27	13	NP	NP	NP	11	A-4a (1)	-
LONGITUDE = -81.504048	6.00	-	6.50	SS-4	50/6"	83		SANDSTONE, DARK GRAY AND BROWN, HIGHLY WEATHERED, WEAK.								11	Rock (VISUAL)	-
P-032-0-20	1.00	-	2.50	SS-1	99	61		15	2	56	13	14	NP	NP	NP	9	A-3a (0)	-
STA. 360+05, 53' LT.	3.50	-	3.70	SS-2	6/50/2"	100	1.75	0	16	49	20	15	20	17	3	12	A-3a (0)	-
LATITUDE = 41.074705	6.00	-	6.40	SS-3	50/5"	100		BROWN, GRAVEL & STONE FRAGMENTS WITH SAND & SILT.								9	A-2-4 (VISUAL)	-
LONGITUDE = -81.504453	8.50	-	8.70	SS-4	50/2"	100		SANDSTONE, BRN, DECOMPOSED TO HIGHLY WEATHERED, VERY WK TO WK, FINE GRAINED.								8	Rock (VISUAL)	-
R-012-0-99	1.00	-	2.50	SS-1	20/50/50	100		SANDSTONE, WEATHERED.									Rock (VISUAL)	-
STA. 360+76, 38' RT.	3.50	-	5.00	SS-2	50/50/50	100		SAME AS SS1									Rock (VISUAL)	-
LATITUDE = 41.074906																		
LONGITUDE = -81.504122																		
B-007-0-22	1.50	-	3.00	SS-1	34	33		2	5	75	13	5	NP	NP	NP	10	A-3a (0)	120
STA. 364+72, 55' RT.	3.00	-	4.00	SS-2	17/50/6"	75		SAME AS SS1								11	A-3a (VISUAL)	-
LATITUDE = 41.075986	4.50	-	4.92	SS-3	50/5"	60		SANDSTONE, BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY STRONG.								9	Rock (VISUAL)	-
LONGITUDE = -81.504043	6.00	-	6.08	SS-4	50/1"	100		SAME AS SS3								8	Rock (VISUAL)	-
B-008-0-22	1.50	-	3.00	SS-1	39	33		34	19	16	23	8	NP	NP	NP	6	A-2-4 (0)	327
STA. 368+33, 54' LT.	3.00	-	4.50	SS-2	37	28		6	7	68	14	5	NP	NP	NP	7	A-3a (0)	-
LATITUDE = 41.076990	4.50	-	6.00	SS-3	44	56		SAME AS SS2								9	A-3a (VISUAL)	-
LONGITUDE = -81.504379	6.00	-	6.75	SS-4	16/50/3"	78		SANDSTONE, BROWN, MODERATELY WEATHERED, SLIGHTLY STRONG.								9	Rock (VISUAL)	-
B-009-0-22	1.50	-	3.00	SS-1	45	78		3	6	67	18	6	NP	NP	NP	9	A-3a (0)	13
STA. 372+71, 55' RT.	3.00	-	4.50	SS-2	71	67		SANDSTONE, LIGHT BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG.								8	Rock (VISUAL)	-
LATITUDE = 41.078164	4.50	-	6.00	SS-3	45	28		SAME AS SS2								8	Rock (VISUAL)	-
LONGITUDE = -81.503859	6.00	-	7.50	SS-4	39	44		SAME AS SS3								9	Rock (VISUAL)	-
B-013-0-22	1.50	-	1.92	SS-1	50/5"	80		SANDSTONE, LIGHT BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY STRONG.								6	Rock (VISUAL)	-
STA. 390+97, 57' LT.	3.00	-	3.25	SS-2	50/3"	67		SAME AS SS1								4	Rock (VISUAL)	-
LATITUDE = 41.083172	4.50	-	4.75	SS-3	50/3"	67		SAME AS SS2								5	Rock (VISUAL)	-
LONGITUDE = -81.503430	4.75	-	6.10	SS-4	50/1"	-		SS-4 CONTAINS NO RECOVERY								-	-	-

2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 TELEPHONE: 614.714.0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:56:44 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ID002.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SUMMARY OF SOIL TEST DATA
EXIT RAMP I-76

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
E3-001-0-20	1.00	-	2.50	SS-1	29	72		5	5	19	38	33	27	16	11	13	A-6a (8)	-
STA. 102+32, 23 LT.	3.50	-	5.00	SS-2	30	83		13	6	21	41	19	26	20	6	12	A-4a (5)	-
LATITUDE = 41.064138	6.00	-	7.50	SS-3	44	78		14	2	13	54	17	28	22	6	8	A-4b (7)	-
LONGITUDE = -81.504881	8.50	-	9.42	SS-4	20/50/5"	45					SAME AS SS3					8	A-4b (VISUAL)	-
E3-002-0-20	1.00	-	2.50	SS-1	40	94		7	18	9	34	32	30	17	13	12	A-6a (7)	-
STA. 103+59, 18 LT.	3.50	-	5.00	SS-2	62	83		12	7	17	33	31	29	17	12	11	A-6a (7)	-
LATITUDE = 41.064471	6.00	-	7.50	SS-3	43	67		SANDSTONE, LIGHT BRN, HIGHLY WEATHERED, WK TO MODERATELY STRONG, FINE GRAINED.								6	Rock (VISUAL)	-
LONGITUDE = -81.504774	8.50	-	10.00	SS-4	43	100					SAME AS SS3					6	Rock (VISUAL)	-
E3-004-0-20	1.00	-	2.50	SS-1	52	61		10	11	16	37	26	26	16	10	10	A-4a (6)	-
STA. 106+33, 13 LT.	3.50	-	5.00	SS-2	52	67					SAME AS SS1					9	A-4a (VISUAL)	-
LATITUDE = 41.065216	6.00	-	7.50	SS-3	36	83		11	9	18	45	17	29	21	8	14	A-4a (5)	-
LONGITUDE = -81.504644	8.50	-	9.83	SS-4	7/39/50/4"	100		4	6	12	58	20	29	21	8	10	A-4b (8)	-
B-001-0-22	2.50	-	3.92	SS-1	11/17/50/5"	59	4.50	16	11	22	38	13	28	21	7	10	A-4a (3)	-
STA. 108+46, 23 LT.	5.00	-	6.50	SS-2	35	89		GRAY, STONE FRAGMENTS WITH SAND, SOME SILT, TRACE CLAY.								8	A-1-b (VISUAL)	-
LATITUDE = 41.065799	7.50	-	9.00	SS-3	29	78	3.75	15	5	14	52	14	29	21	8	12	A-4b (6)	-
LONGITUDE = -81.504614	10.00	-	10.75	SS-4	20/50/3"	56	3.50				SAME AS SS3					12	A-4b (VISUAL)	-
B-002-0-22	2.50	-	4.00	SS-1	52	44		18	8	20	42	12	NP	NP	NP	7	A-4a (4)	-
STA. 109+81, 16 LT.	5.00	-	5.67	SS-2	25/50/2"	50		SILTSTONE, GRAY, MODERATELY WEATHERED, WEAK.								7	Rock (VISUAL)	-
LATITUDE = 41.066166																		
LONGITUDE = -81.504561																		

SUMMARY OF SOIL TEST DATA
GOODKIRK STREET

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-004-0-99	1.00	-	2.50	SS-1	12/8/7	100		13	9	23	39	16	19	15	4	14	A-4a (4)	-
STA. 505+04, 3' RT.	3.50	-	5.00	SS-2	11/11/8	100		13	9	23	39	16	19	15	4	14	A-4a (4)	-
LATITUDE = 41.072478	6.00	-	7.50	SS-3	8/7/8	100		13	9	23	39	16	19	15	4	14	A-4a (4)	-
LONGITUDE = -81.504790	8.50	-	9.17	SS-4	29/50/2"	100				GRAY, SLIGHTLY WEATHERED SANDSTONE.							Rock (VISUAL)	-
R-009-0-99	1.00	-	1.42	SS-1	50/5"	100					UNCONTROLLED FILL.						UCF (VISUAL)	-
STA. 506+94, 1' RT.	3.50	-	3.75	SS-2	50/3"	100					SAME AS SS1						UCF (VISUAL)	-
LATITUDE = 41.072997	6.00	-	6.42	SS-3	50/5"	100					SANDY SILT.						A-4a (VISUAL)	-
LONGITUDE = -81.504798	8.50	-	8.67	SS-4	50/2"	100					SAME AS SS3						A-4a (VISUAL)	-
B-006-0-99	1.00	-	2.50	SS-1	12/13/9	100		1	10	64	19	6	NP	NP	NP	11	A-2-4	-
STA. 509+42, 21' LT.	3.50	-	5.00	SS-2	10/14/9	100		1	10	64	19	6	NP	NP	NP	11	A-2-4	-
LATITUDE = 41.073677	6.00	-	7.25	SS-3	27/42/50/3"	100				BROWN, WEATHERED SANDSTONE.							Rock (VISUAL)	-
LONGITUDE = -81.504805																		
R-011-0-99	1.00	-	2.50	SS-1	4/7/10	100		11	9	28	39	13	18	14	4	14	A-4a (3)	-
STA. 510+59, 19' LT.	3.50	-	5.00	SS-2	8/10/12	100		11	9	28	39	13	18	14	4	14	A-4a (3)	-
LATITUDE = 41.073995	6.00	-	6.33	SS-3	50/4"	100				BROWN, WEATHERED SANDSTONE.							Rock (VISUAL)	-
LONGITUDE = -81.504810	8.50	-	8.83	SS-4	50/4"	100					SAME AS SS3						Rock (VISUAL)	-
R-013-0-99	1.00	-	2.50	SS-1	3/3/4	100		13	15	33	27	12	20	15	5	15	A-4a (1)	-
STA. 514+63, 12' LT.	3.50	-	5.00	SS-2	6/4/3	100		13	15	33	27	12	20	15	5	15	A-4a (1)	-
LATITUDE = 41.075106	6.00	-	7.50	SS-3	25/31/32	100				BROWN, WEATHERED SANDSTONE.							Rock (VISUAL)	-
LONGITUDE = -81.504771	8.50	-	8.58	SS-4	50/1"	100					SAME AS SS3						Rock (VISUAL)	-
B-008-0-99	1.00	-	2.50	SS-1	9/5/4	100					BROWN, SANDY SILT.						A-4a (VISUAL)	-
STA. 514+97, 4' RT.	3.50	-	5.00	SS-2	3/3/4	100		14	13	29	31	13	27	12	15	17	A-6a (3)	-
LATITUDE = 41.075198	6.00	-	7.50	SS-3	4/7/15	100		14	13	29	31	13	27	12	15	17	A-6a (3)	-
LONGITUDE = -81.504708	8.50	-	9.92	SS-4	34/12/50/5"	100				LIGHT BROWN, WEATHERED SANDSTONE.							Rock (VISUAL)	-

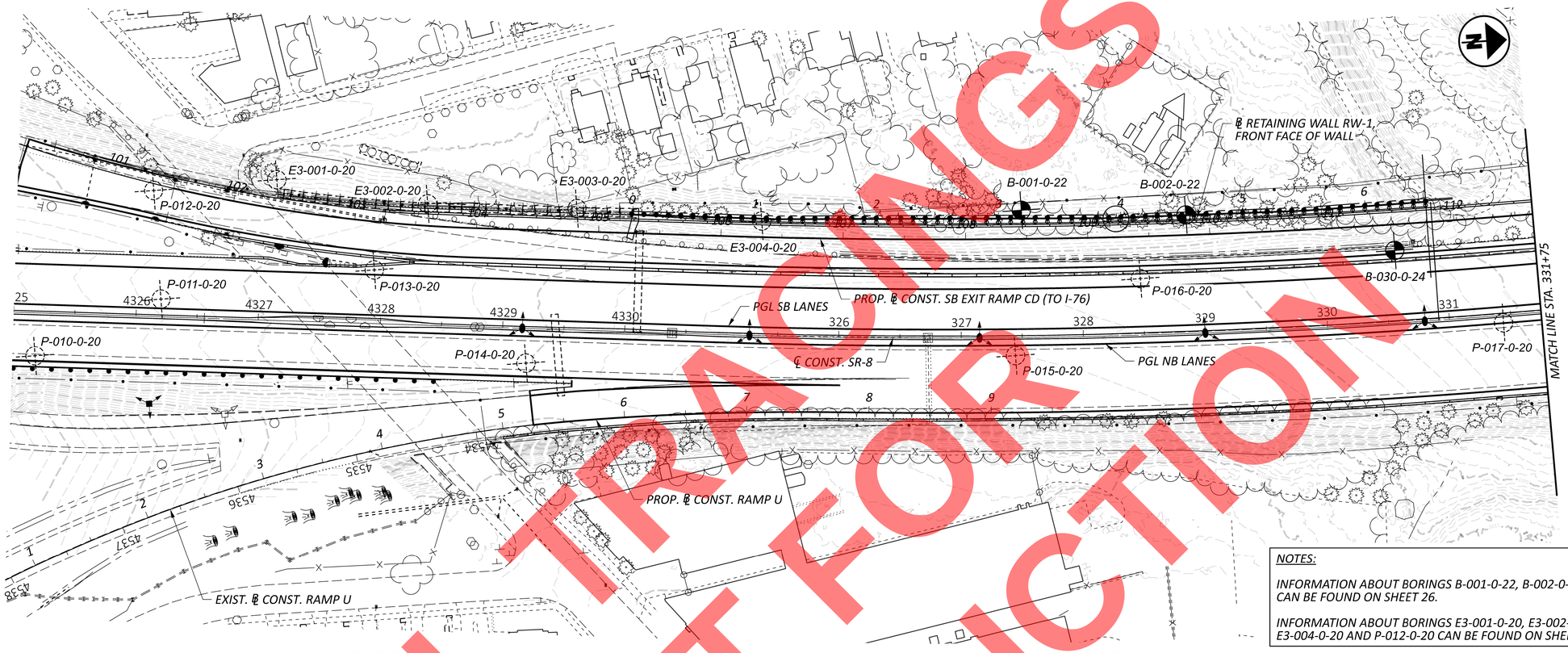
DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
PROJECT ID 114865
SUBSET 7 TOTAL 116
SHEET P.518 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA

FINAL PLANS NOT FOR CONSTRUCTION

RESIDENTIAL | INDUSTRIAL



NOTES:

INFORMATION ABOUT BORINGS B-001-0-22, B-002-0-22 AND B-030-0-24 CAN BE FOUND ON SHEET 26.

INFORMATION ABOUT BORINGS E3-001-0-20, E3-002-0-20, E3-003-0-20, E3-004-0-20 AND P-012-0-20 CAN BE FOUND ON SHEET 16.

RESIDENTIAL | INDUSTRIAL



NOTE: *BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. SR-8.*

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 4325+00 TO STA. 331+75

DESIGN AGENCY
NEAS
Nelson Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	8
TOTAL	116
SHEET	P.519
TOTAL	627

SUM-077/008-11.65/00.00

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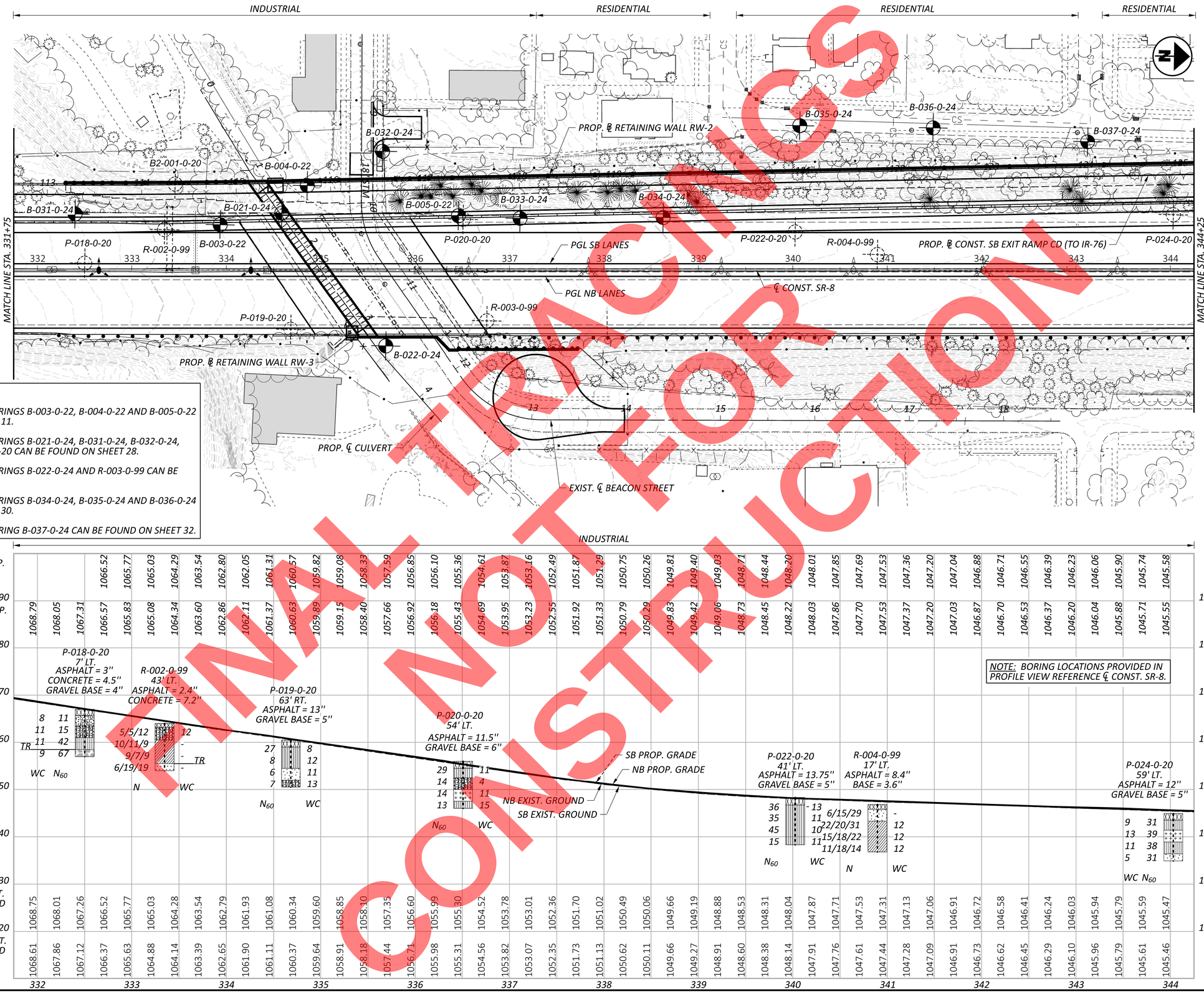

NOTES:

INFORMATION ABOUT BORINGS B-003-0-22, B-004-0-22 AND B-005-0-22 CAN BE FOUND ON SHEET 11.

INFORMATION ABOUT BORINGS B-021-0-24, B-031-0-24, B-032-0-24, B-033-0-24 AND B2-001-0-20 CAN BE FOUND ON SHEET 28.

INFORMATION ABOUT BORINGS B-022-0-24 AND R-003-0-99 CAN BE FOUND ON SHEET 33.

INFORMATION ABOUT BORINGS B-034-0-24, B-035-0-24 AND B-036-0-24 CAN BE FOUND ON SHEET 30.

INFORMATION ABOUT BORING B-037-0-24 CAN BE FOUND ON SHEET 32.

FINAL NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 331+75 TO STA. 344+25

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 9 TOTAL 116
SHEET P.520 TOTAL 627

SUM-077/008-11.65/00.00

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INDUSTRIAL

INDUSTRIAL

RESIDENTIAL

PROP. ℄ RETAINING WALL RW-2

B-032-0-24

18" STM

B2-001-0-20

B-004-0-22

B-021-0-24

B-003-0-22

R-002-0-99

B-005-0-22

P-020-0-20

B-033-0-24

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

PGL SB LANES

PGL NB LANES

℄ CONST. SR-8

R-003-0-99

P-019-0-20

PROP. ℄ RETAINING WALL RW-3

B-022-0-24

PROP. ℄ CULVERT

EXIST. ℄ BEACON STREET

INDUSTRIAL

NOTES:

INFORMATION ABOUT BORINGS B-003-0-22, B-004-0-22 AND B-005-0-22 CAN BE FOUND ON SHEET 11.

INFORMATION ABOUT BORINGS B-021-0-24, B-032-0-24, B-033-0-24 AND B2-001-0-20 CAN BE FOUND ON SHEET 28.

INFORMATION ABOUT BORINGS B-022-0-24 AND R-003-0-99 CAN BE FOUND ON SHEET 33.

INFORMATION ABOUT BORINGS P-019-0-20, P-020-0-20 AND R-002-0-99 CAN BE FOUND ON SHEET 9.

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700091

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	CHECKER
RS	DT

REVIEWER CH 09/23/26

PROJECT ID 114865

SUBSET	TOTAL
10	116

SHEET	TOTAL
P.521	627

SUM-077/008-11.65/00.00

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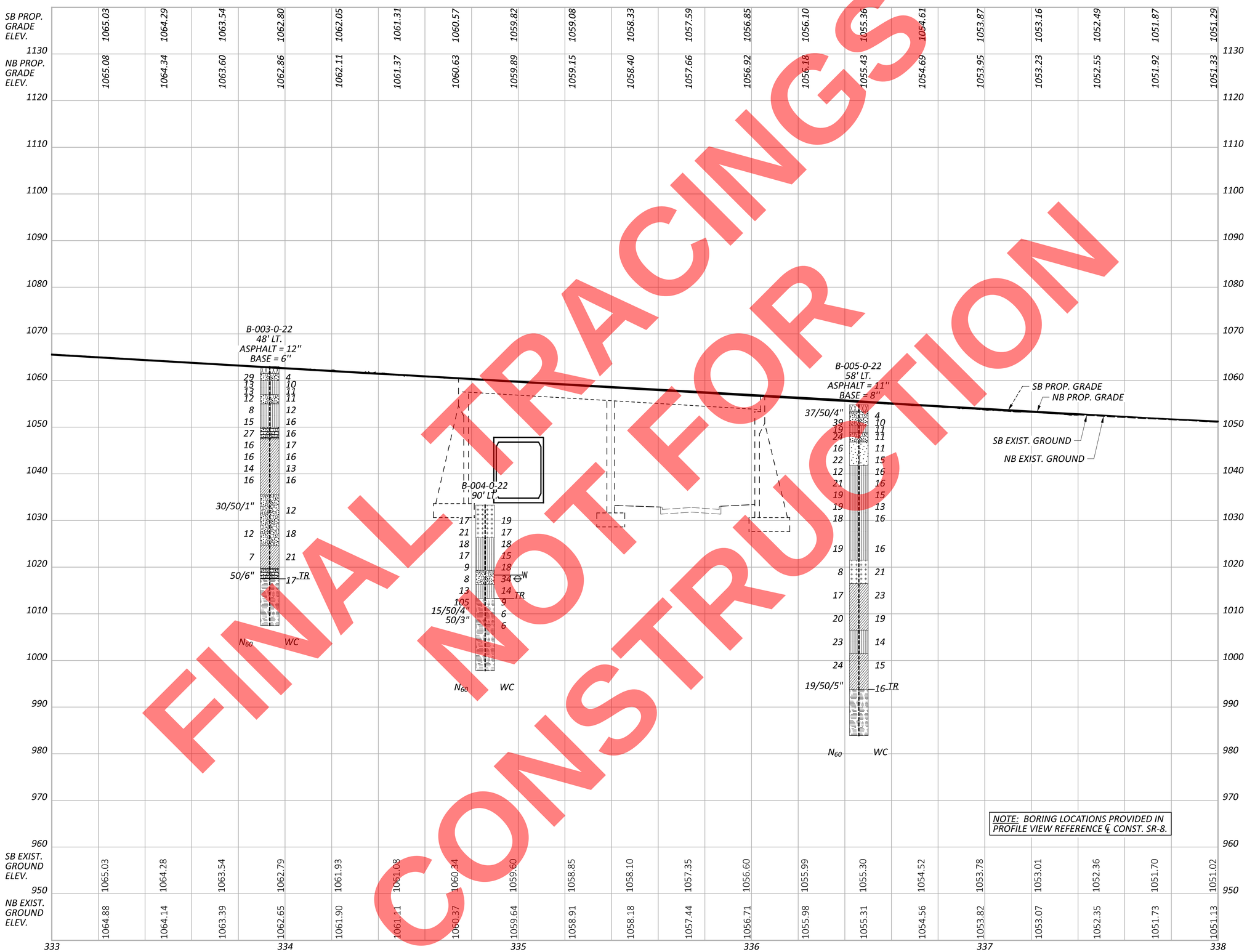

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. SR-8.

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET 0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770
OVER BIKE TRAIL AND ABANDONED BEACON STREET

SFN 7700091

DESIGN AGENCY NEAS National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	CHECKER
RS	DT

REVIEWER CH 09/23/26

PROJECT ID 114865

SUBSET	TOTAL
11	116

SHEET	TOTAL
P.522	627

SUM-077/008-11.65/00.00

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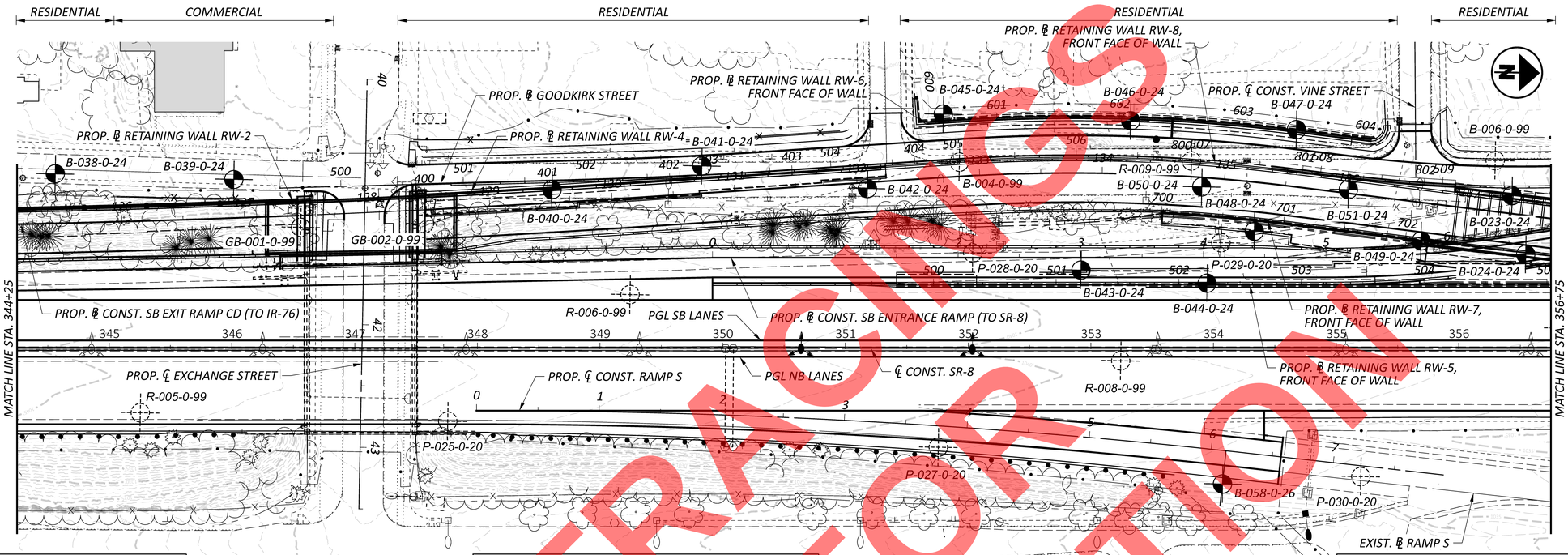

NOTES:

INFORMATION ABOUT BORINGS B-004-0-99, B-006-0-99 AND R-009-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-023-0-24 AND B-024-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-043-0-24 AND B-044-0-24 CAN BE FOUND ON SHEET 35.

NOTES (CONT.):

INFORMATION ABOUT BORINGS B-038-0-24 AND B-039-0-24 CAN BE FOUND ON SHEET 32.

INFORMATION ABOUT BORINGS B-040-0-24, B-041-0-24 AND B-042-0-24 CAN BE FOUND ON SHEET 34.

INFORMATION ABOUT BORINGS B-045-0-24, B-046-0-24 AND B-047-0-24 CAN BE FOUND ON SHEET 36.

NOTES (CONT.):

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

INFORMATION ABOUT BORINGS B-050-0-24 AND B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORINGS GB-001-0-99 AND GB-002-0-99 CAN BE FOUND ON SHEET 19.



NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. SR-8.

FINAL NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 344+25 TO STA. 356+75

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 12 TOTAL 116
SHEET P.523 TOTAL 627

SUM-077/008-11.65/00.00

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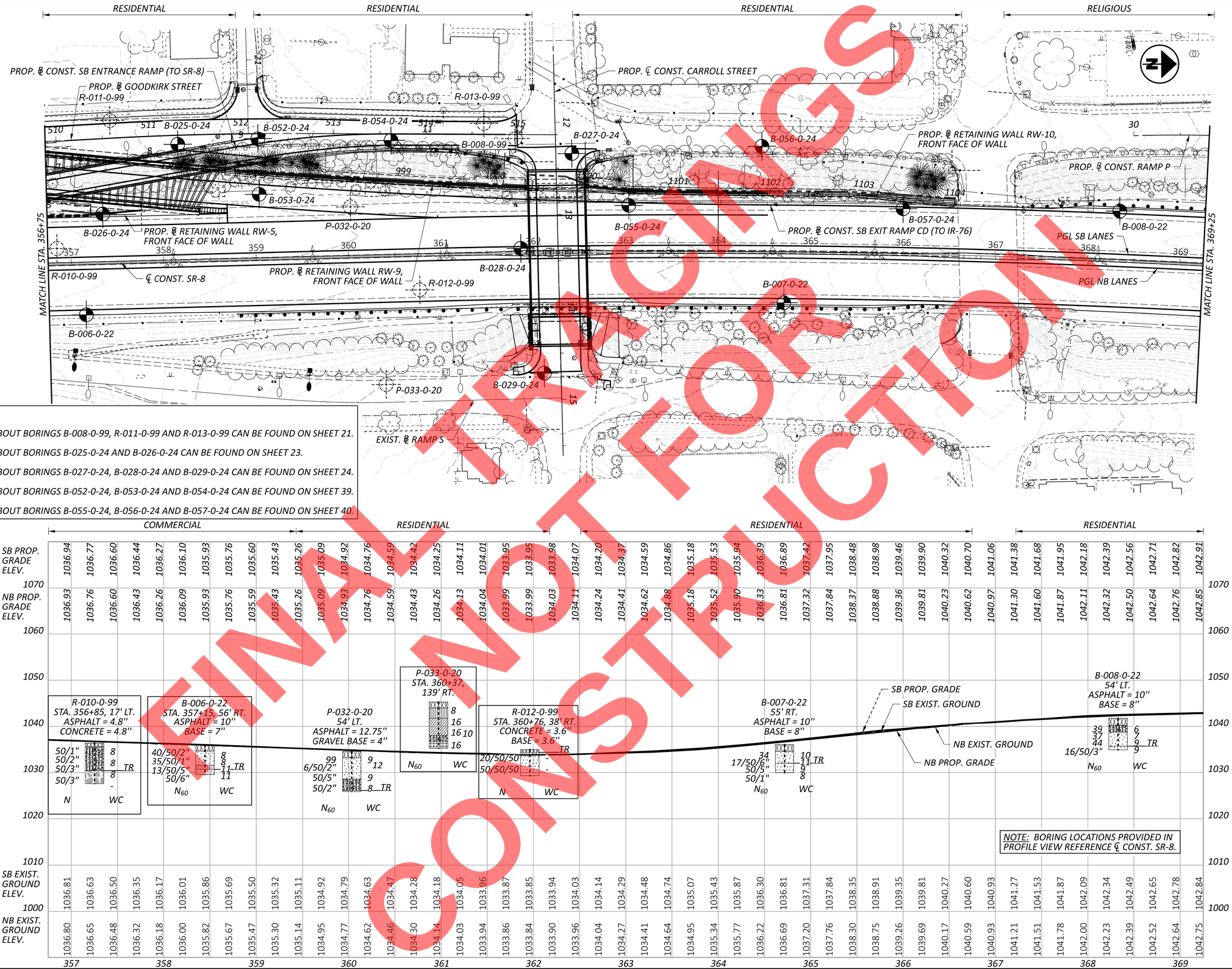

NOTES:

INFORMATION ABOUT BORINGS B-008-0-99, R-011-0-99 AND R-013-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-027-0-24, B-028-0-24 AND B-029-0-24 CAN BE FOUND ON SHEET 24.

INFORMATION ABOUT BORINGS B-052-0-24, B-053-0-24 AND B-054-0-24 CAN BE FOUND ON SHEET 39.

INFORMATION ABOUT BORINGS B-055-0-24, B-056-0-24 AND B-057-0-24 CAN BE FOUND ON SHEET 40.

FINAL PLANS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 356+75 TO STA. 369+25

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
13	116
SHEET	TOTAL
P.524	627

SUM-077/008-11.65/00.00

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SUM-077/008-11.65/00.00

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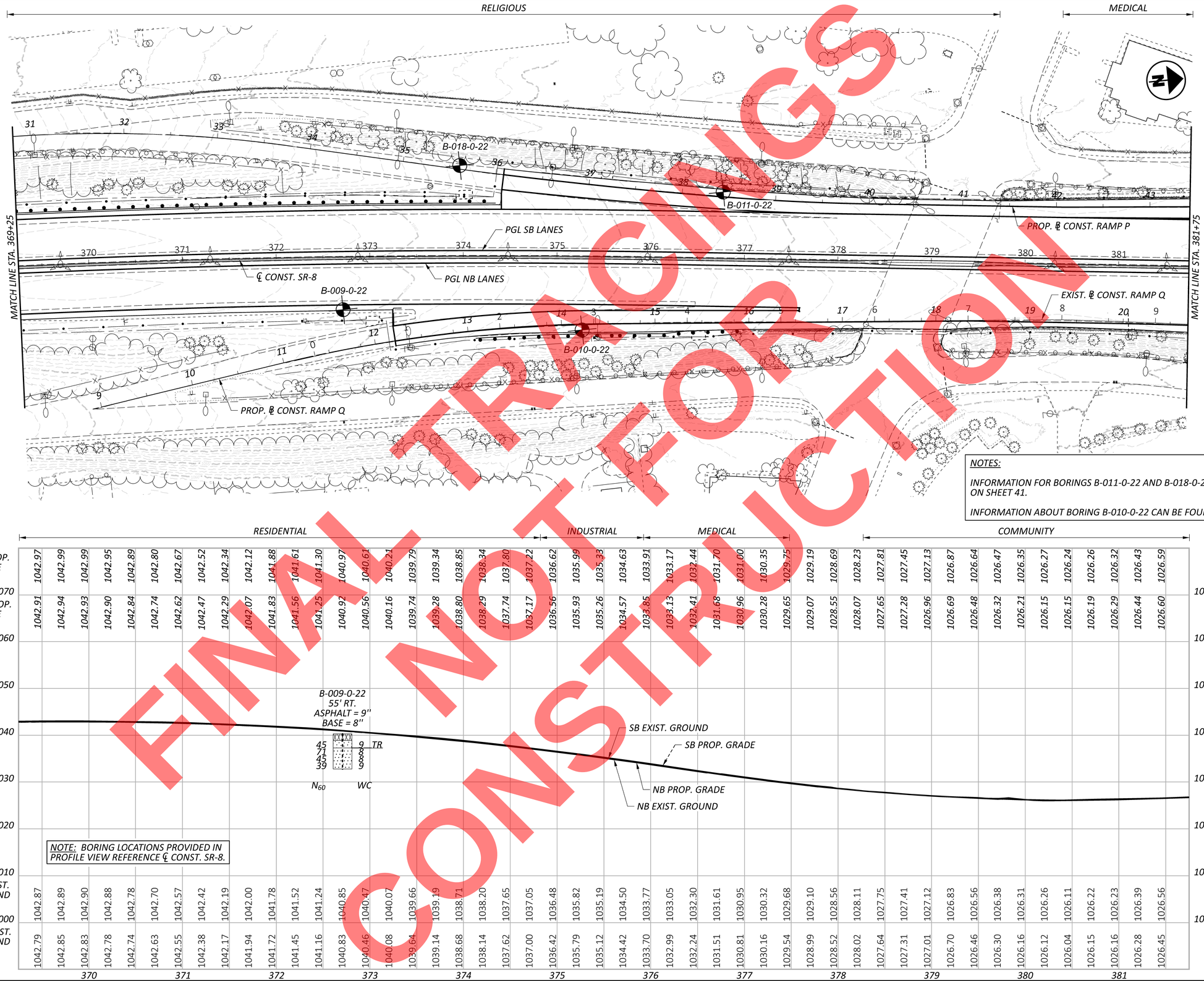


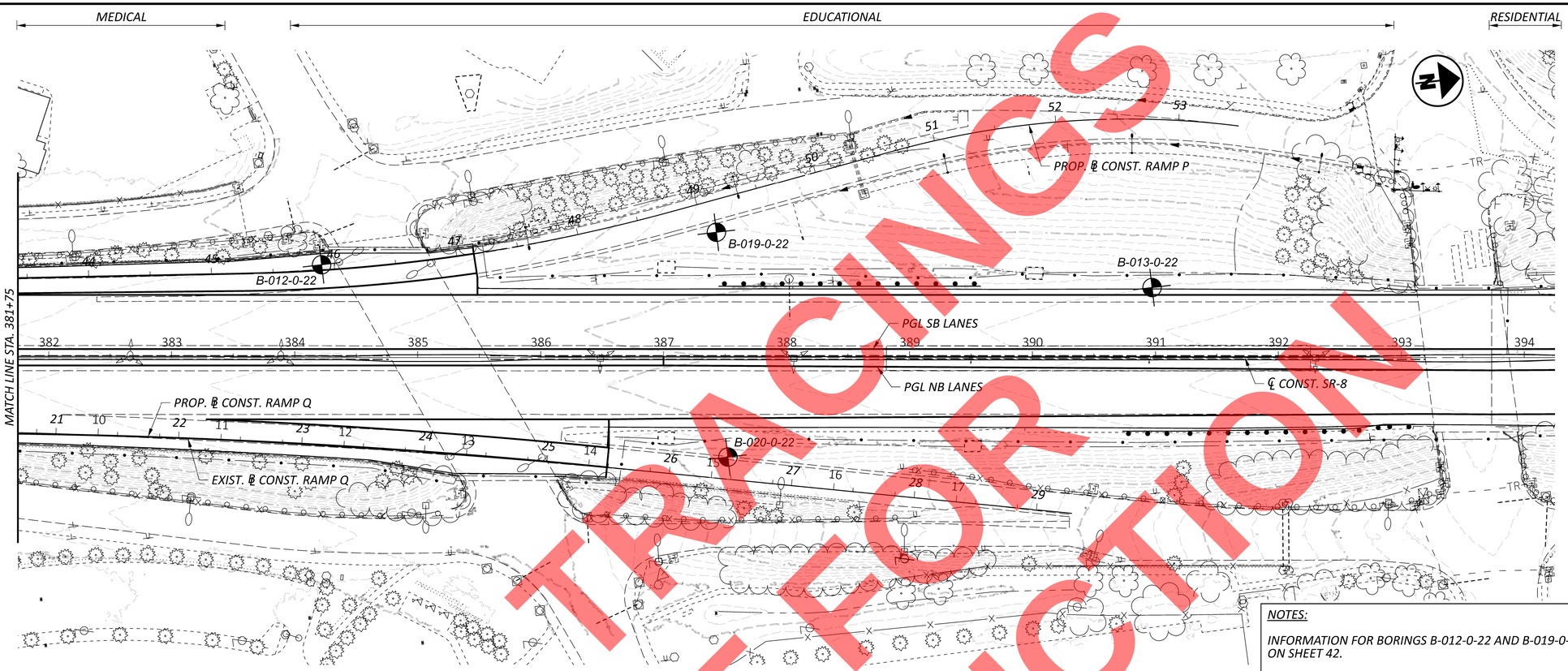
FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 369+25 TO STA. 381+75

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
14	116
SHEET	TOTAL
P.525	627





NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. SR-8.

NOTES:

INFORMATION FOR BORINGS B-012-0-22 AND B-019-0-22 CAN BE FOUND ON SHEET 42.

INFORMATION ABOUT BORING B-020-0-22 CAN BE FOUND ON SHEET 43.

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 - STA. 381+75 TO STA. 394+25

SUM-077/008-11.65/00.00

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DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
15	116
SHEET	TOTAL
P.526	627

FINAL PLANS NOT FOR CONSTRUCTION

MODEL: 114865_JP008 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:34:14 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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SUM-077/008-11.65/00.00

RESIDENTIAL

INDUSTRIAL

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

E3-001-0-20

E3-002-0-20

E3-003-0-20

E3-004-0-20

B-001-0-22

B-002-0-22

℄ RETAINING WALL RW-1, FRONT FACE OF WALL

MATCH LINE STA. 112+50

P-012-0-20

P-013-0-20

P-016-0-20

B-030-0-24

P-011-0-20

P-017-0-20

PGL SB LANES

PGL NB LANES

℄ CONST. SR-8

P-014-0-20

P-015-0-20

P-010-0-20

EXIST. ℄ CONST. RAMP U

PROP. ℄ CONST. RAMP U

TRANSPORTATION

RESIDENTIAL

INDUSTRIAL

PROP. GRADE ELEV.

EXIST. GROUND ELEV.

E3-001-0-20
23' LT.

E3-002-0-20
18' LT.

E3-003-0-20
19' LT.

E3-004-0-20
13' LT.

B-001-0-22
23' LT.
ASPHALT = 11"
BASE = 8"

B-002-0-22
16' LT.
ASPHALT = 11"
BASE = 8"

P-012-0-20
6' RT.
ASPHALT = 5.25"
CONCRETE = 8.5"
SUBBASE = 4"

B-030-0-24
21' RT.
ASPHALT = 8"
BASE = 12.5"

PROP. GRADE

EXIST. GROUND

N_{60} WC

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76).

NOTES:

INFORMATION ABOUT BORINGS P-010-0-20, P-011-0-20, P-013-0-20, P-014-0-20, P-015-0-20, P-016-0-20 AND P-017-0-20 CAN BE FOUND ON SHEET 8.

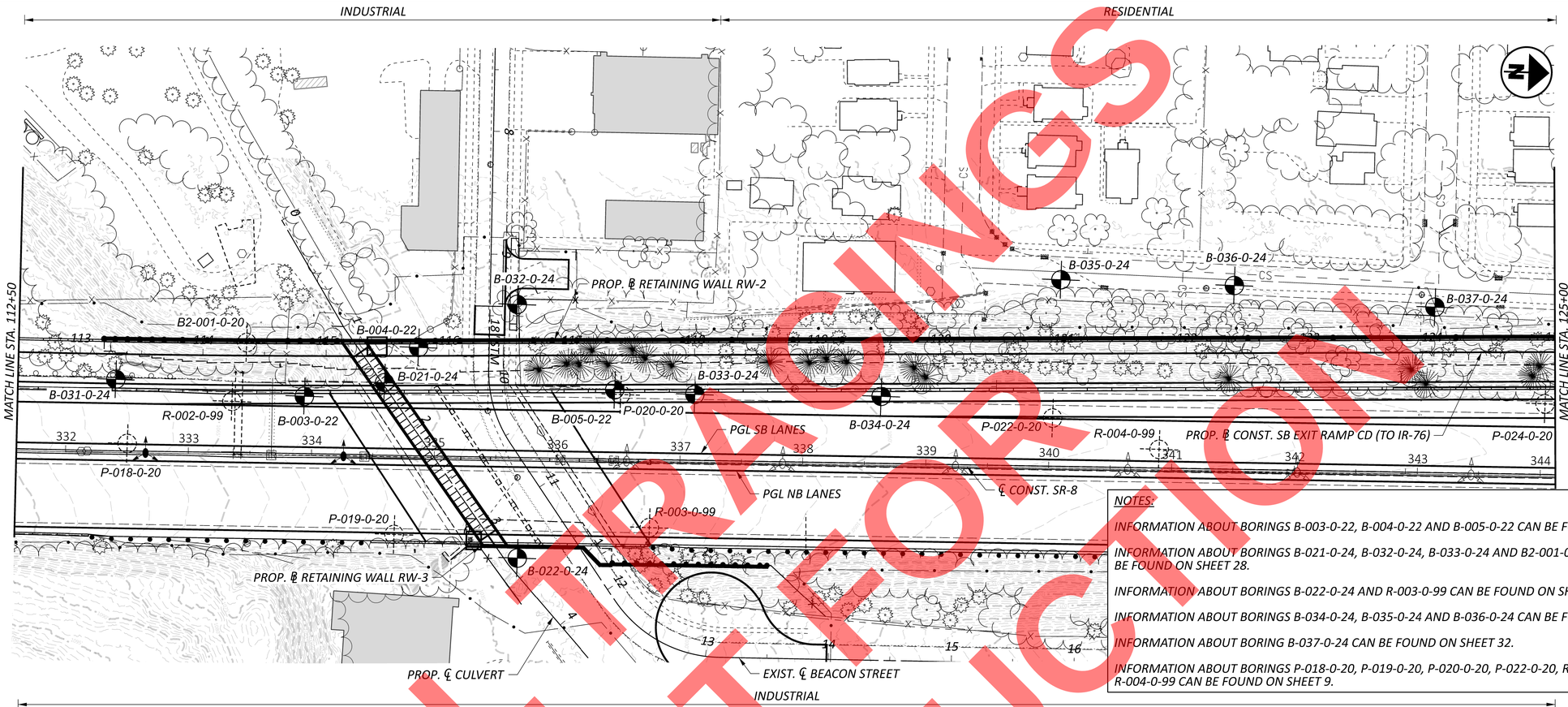
HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SB EXIT RAMP CD (TO IR-76) - STA. 100+00 TO STA. 112+50

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	TOTAL
16	116
SHEET	TOTAL
P.527	627

FINAL PLANS
NOT FOR
CONSTRUCTION





NOTES:

INFORMATION ABOUT BORINGS B-003-0-22, B-004-0-22 AND B-005-0-22 CAN BE FOUND ON SHEET 11.

INFORMATION ABOUT BORINGS B-021-0-24, B-032-0-24, B-033-0-24 AND B2-001-0-20 CAN BE FOUND ON SHEET 28.

INFORMATION ABOUT BORINGS B-022-0-24 AND R-003-0-99 CAN BE FOUND ON SHEET 33.

INFORMATION ABOUT BORINGS B-034-0-24, B-035-0-24 AND B-036-0-24 CAN BE FOUND ON SHEET 30.

INFORMATION ABOUT BORING B-037-0-24 CAN BE FOUND ON SHEET 32.

INFORMATION ABOUT BORINGS P-018-0-20, P-019-0-20, P-020-0-20, P-022-0-20, R-002-0-99 AND R-004-0-99 CAN BE FOUND ON SHEET 9.

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SB EXIT RAMP CD (TO IR-76) - STA. 112+50 TO STA. 125+00

SUM-077/008-11.65/00.00

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DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
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DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	17
TOTAL	116
SHEET	P.528
TOTAL	627

NOTES:

INFORMATION ABOUT BORING B-006-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORING B-024-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-038-0-24 AND B-039-0-24 CAN BE FOUND ON SHEET 32.

NOTES (CONT.):

INFORMATION ABOUT BORINGS B-040-0-24, B-041-0-24 AND B-042-0-24 CAN BE FOUND ON SHEET 34.

INFORMATION ABOUT BORINGS B-043-0-24 AND B-044-0-24 CAN BE FOUND ON SHEET 35.

INFORMATION ABOUT BORINGS B-045-0-24, B-046-0-24 AND B-047-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

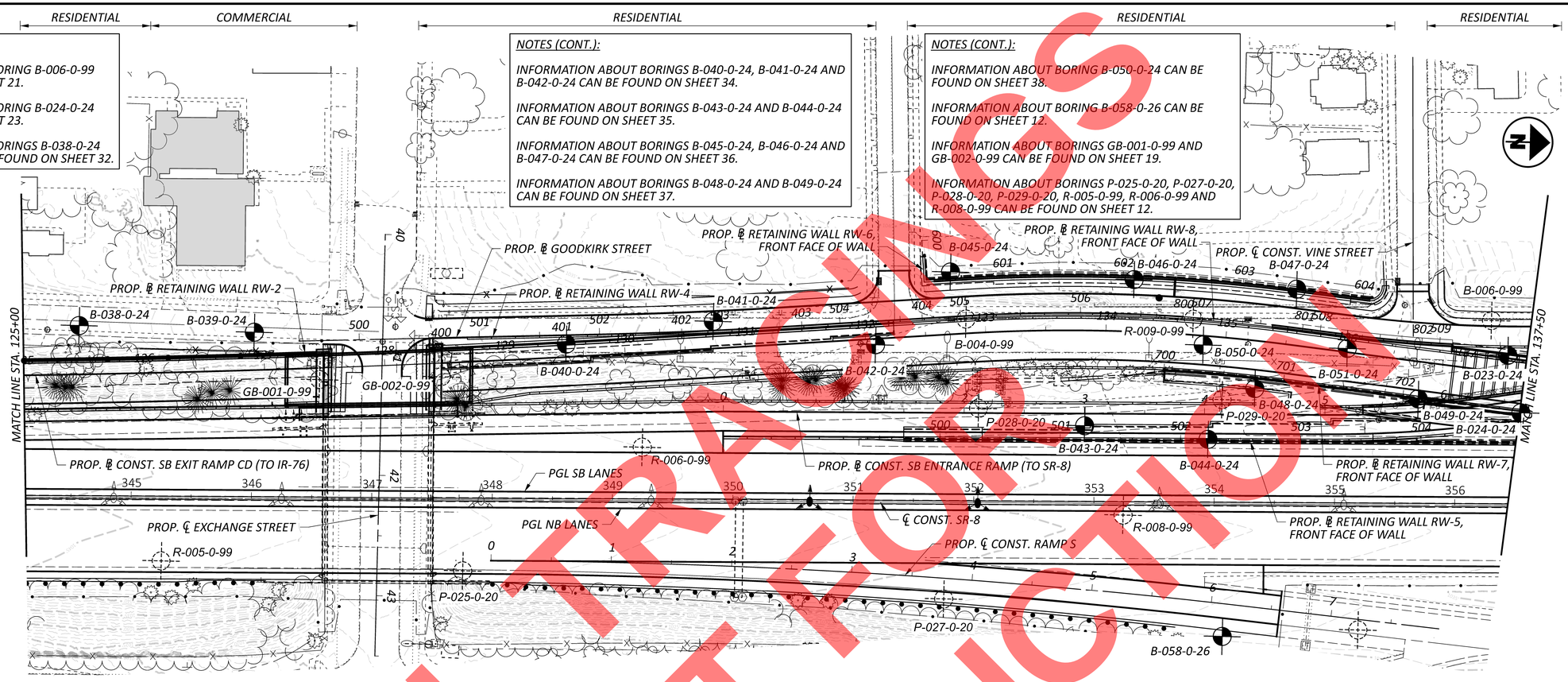
NOTES (CONT.):

INFORMATION ABOUT BORING B-050-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORING B-058-0-26 CAN BE FOUND ON SHEET 12.

INFORMATION ABOUT BORINGS GB-001-0-99 AND GB-002-0-99 CAN BE FOUND ON SHEET 19.

INFORMATION ABOUT BORINGS P-025-0-20, P-027-0-20, P-028-0-20, P-029-0-20, R-005-0-99, R-006-0-99 AND R-008-0-99 CAN BE FOUND ON SHEET 12.





FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SB EXIT RAMP CD (TO IR-76) - STA. 125+00 TO STA. 137+50

DESIGN AGENCY
NEAS
Noble Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 18 TOTAL 116
SHEET P.529 TOTAL 627

SUM-077/008-11.65/00.00

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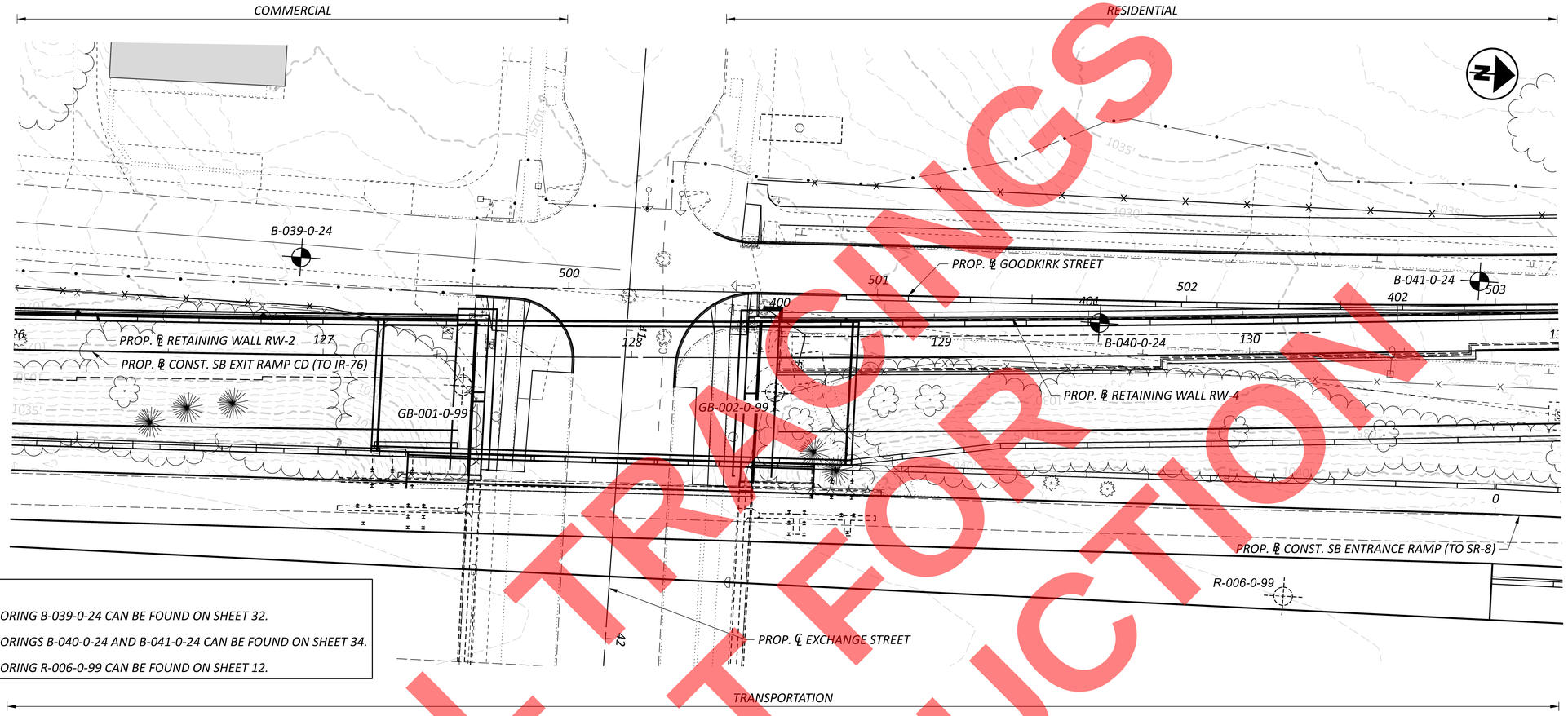
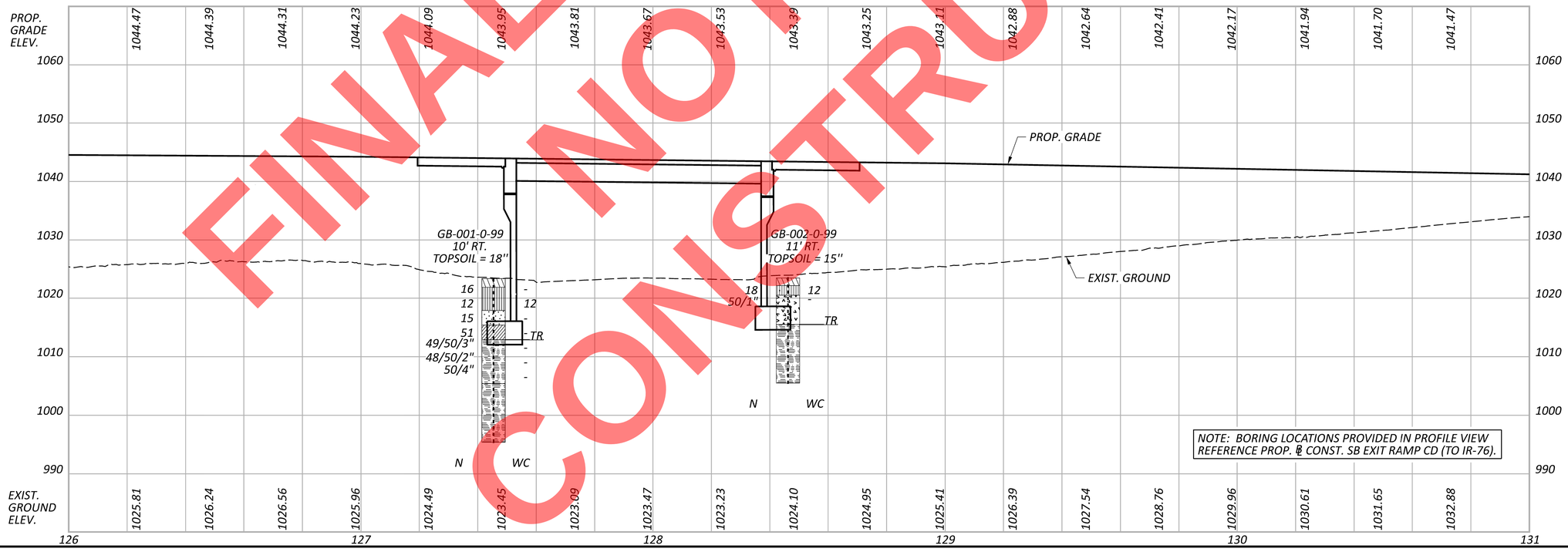


NOTES:

INFORMATION ABOUT BORING B-039-0-24 CAN BE FOUND ON SHEET 32.

INFORMATION ABOUT BORINGS B-040-0-24 AND B-041-0-24 CAN BE FOUND ON SHEET 34.

INFORMATION ABOUT BORING R-006-0-99 CAN BE FOUND ON SHEET 12.



NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76).

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.987
SB EXIT RAMP CD (TO IR-76) OVER EXCHANGE STREET

SFN 7700156

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	CHECKER
RS	DT

REVIEWER
CH 09/23/26

PROJECT ID 114865

SUBSET	TOTAL
19	116

SHEET	TOTAL
P.530	627

SUM-077/008-11.65/00.00

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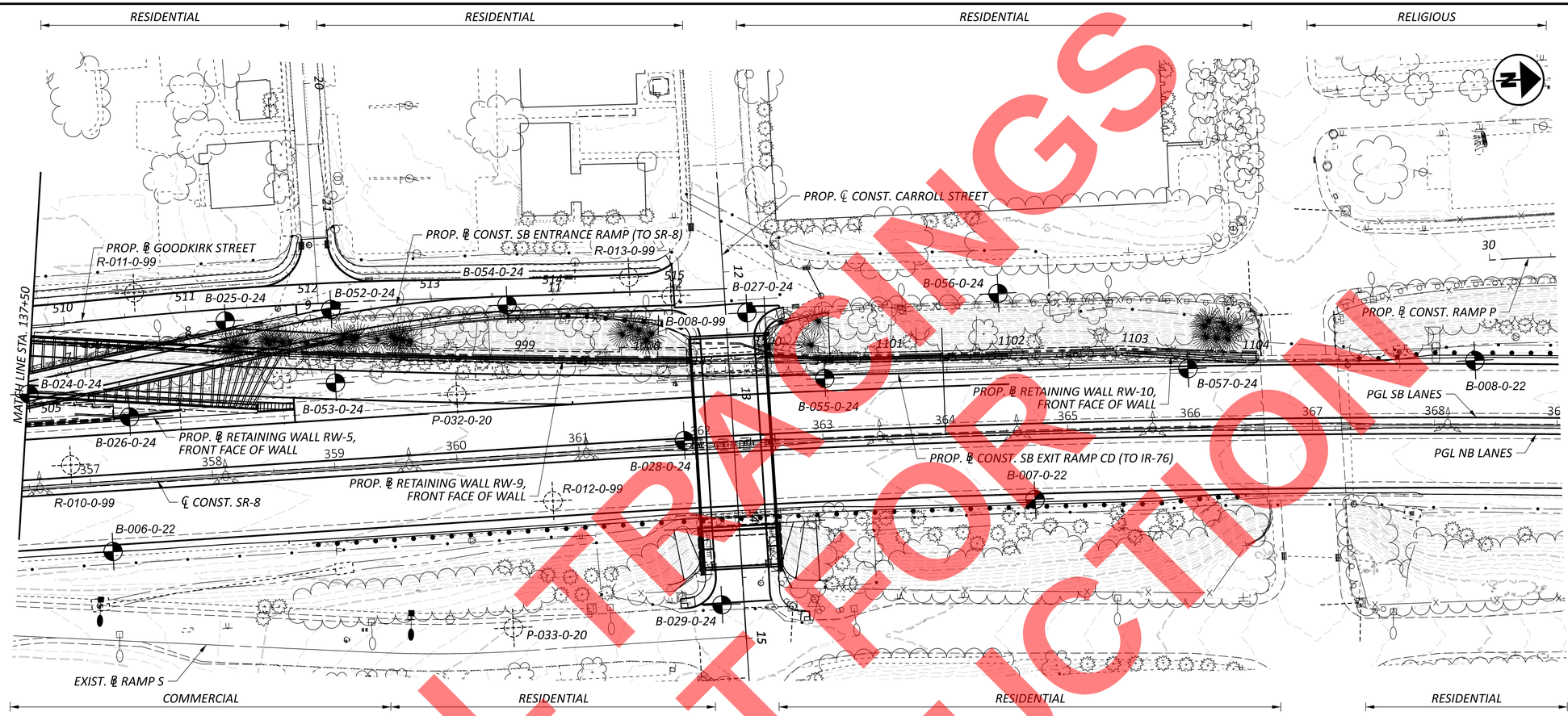
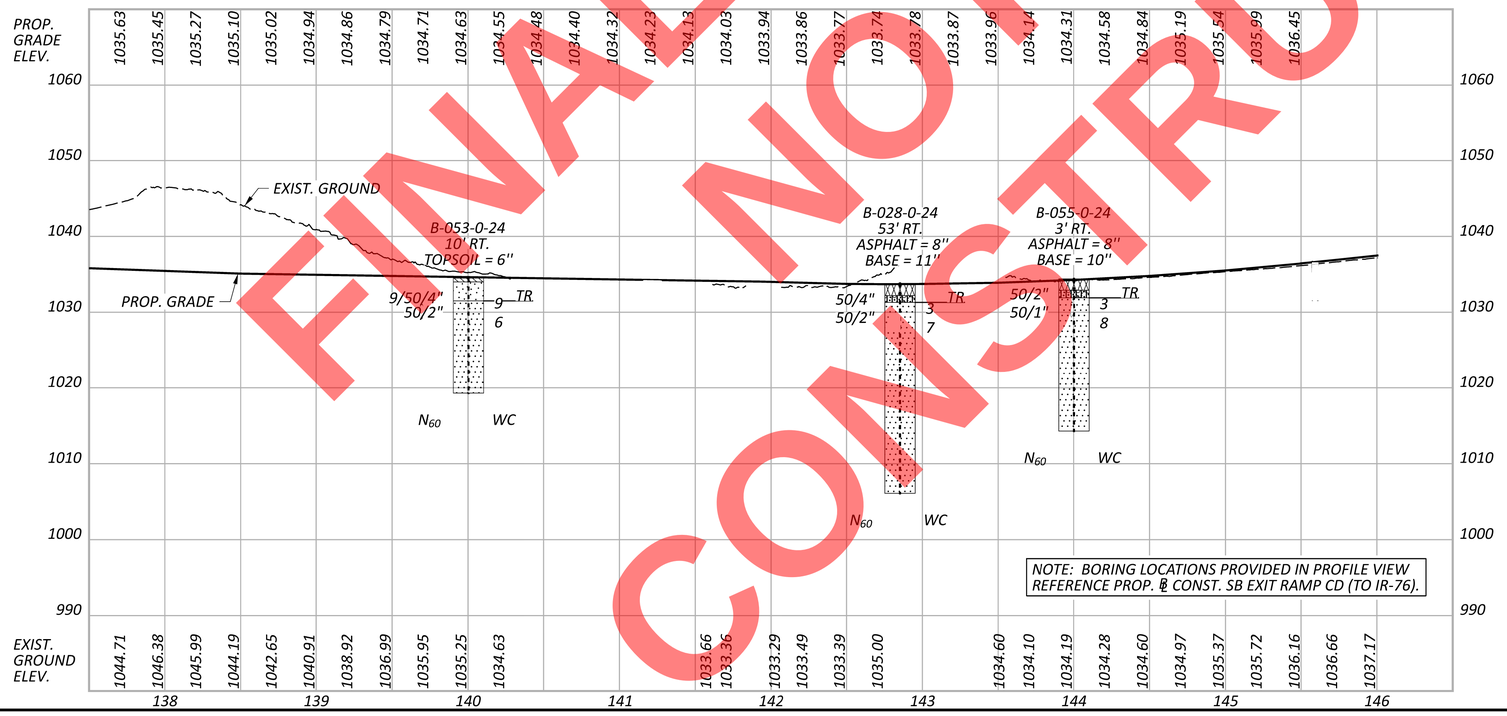
FINAL PLANS
NOT FOR
CONSTRUCTION





NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76).

NOTES:

INFORMATION ABOUT BORINGS B-006-0-22, B-007-0-22, B-008-0-22, P-032-0-20, P-033-0-20, R-010-0-99 AND R-012-0-99 CAN BE FOUND ON SHEET 13.

INFORMATION ABOUT BORINGS B-008-0-99, R-011-0-99 AND R-013-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-027-0-24 AND B-029-0-24 CAN BE FOUND ON SHEET 24.

INFORMATION ABOUT BORINGS B-052-0-24, B-053-0-24 AND B-054-0-24 CAN BE FOUND ON SHEET 39.

INFORMATION ABOUT BORINGS B-055-0-24, B-056-0-24 AND B-057-0-24 CAN BE FOUND ON SHEET 40.

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SB EXIT RAMP CD (TO IR-76) - STA. 137+50 TO END

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	20
TOTAL	116
SHEET	P.531
TOTAL	627

SUM-077/008-11.65/00.00

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RESIDENTIAL | RESIDENTIAL | RESIDENTIAL | RESIDENTIAL

NOTES:

INFORMATION ABOUT BORINGS B-006-0-22, P-032-0-20, R-010-0-99 AND R-012-0-99 CAN BE FOUND ON SHEET 13.

INFORMATION ABOUT BORINGS B-023-0-24, B-024-0-22, B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORING B-028-0-24 CAN BE FOUND ON SHEET 24.

INFORMATION ABOUT BORINGS B-040-0-24, B-041-0-24 AND B-042-0-24 CAN BE FOUND ON SHEET 34.

INFORMATION ABOUT BORINGS B-043-0-24 AND B-044-0-24 CAN BE FOUND ON SHEET 35.

INFORMATION ABOUT BORINGS B-045-0-24, B-046-0-24 AND B-047-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

NOTES (CONT.):

INFORMATION ABOUT BORINGS B-050-0-24 AND B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORINGS B-052-0-24, B-053-0-24 AND B-054-0-24 CAN BE FOUND ON SHEET 39.

INFORMATION ABOUT BORING B-058-0-26 CAN BE FOUND ON SHEET 12.

NOTES (CONT.):

INFORMATION ABOUT BORING GB-002-0-99 CAN BE FOUND ON SHEET 19.

INFORMATION ABOUT BORINGS P-025-0-20, P-027-0-20, P-028-0-20, P-029-0-20, P-030-0-20, R-006-0-99 AND R-008-0-99 CAN BE FOUND ON SHEET 12.

PROP. ℄ CONST. VINE STREET

PROP. ℄ RETAINING WALL RW-6, FRONT FACE OF WALL

PROP. ℄ RETAINING WALL RW-8, FRONT FACE OF WALL

PROP. ℄ GOODKIRK STREET

PROP. ℄ CONST. CARROLL STREET

PROP. ℄ RETAINING WALL RW-4

B-041-0-24 | B-045-0-24 | B-046-0-24 | B-047-0-24 | R-009-0-99 | B-006-0-99 | R-011-0-99 | B-025-0-24 | B-052-0-24 | B-054-0-24 | R-013-0-99 | B-008-0-99

B-004-0-99 | B-050-0-24 | B-048-0-24 | B-051-0-24 | B-023-0-24 | B-024-0-24 | B-049-0-24 | B-053-0-24 | P-032-0-20

B-040-0-24 | B-042-0-24 | GB-002-0-99 | P-028-0-20 | P-029-0-20 | B-044-0-24 | B-026-0-24

R-006-0-99 | PROP. ℄ RETAINING WALL RW-5, FRONT FACE OF WALL | B-043-0-24 | PROP. ℄ RETAINING WALL RW-7, FRONT FACE OF WALL | R-010-0-99 | PROP. ℄ RETAINING WALL RW-9, FRONT FACE OF WALL

PGL SB LANES | PROP. ℄ CONST. SB RAMP EXIT CD (TO IR-76)

PGL NB LANES

℄ CONST. SR-8 | PROP. ℄ CONST. SB ENTRANCE RAMP (TO SR-8)

R-008-0-99 | B-006-0-22 | R-012-0-99 | B-028-0-24

P-025-0-20 | P-027-0-20 | PROP. ℄ CONST. RAMP S | B-058-0-26 | P-030-0-20 | EXIST. ℄ RAMP S

RESIDENTIAL | INDUSTRIAL | COMMERCIAL | RESIDENTIAL

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ GOODKIRK STREET.

PROP. GRADE ELEV.: 1024.69 1025.45 1026.48 1027.60 1028.71 1029.83 1030.95 1032.07 1033.18 1034.28 1035.25 1036.10 1036.81 1037.40 1037.86 1038.18 1038.38 1038.45 1038.39 1038.27 1038.14 1038.02 1037.89 1037.84 1037.88 1038.02 1038.26 1038.59 1039.02 1039.55 1040.18 1040.91 1041.73 1042.65 1043.67 1044.78 1045.91 1047.04 1048.16 1049.29 1050.42 1051.54 1052.57 1053.45 1054.19 1054.78 1055.24 1055.54 1055.72 1055.87 1056.02 1056.17 1056.32 1056.47 1056.62 1056.77 1056.91

EXIST. GROUND ELEV.: 1025.01 1025.64 1026.50 1027.48 1028.63 1029.76 1030.87 1031.99 1033.17 1034.21 1035.11 1035.89 1036.51 1036.87 1037.13 1037.23 1037.77 1038.01 1038.22 1038.38 1038.53 1038.60 1038.76 1038.67 1038.40 1038.06 1038.08 1038.20 1038.52 1038.99 1039.50 1040.12 1040.98 1041.93 1043.11 1044.34 1045.64 1046.89 1048.15 1049.40 1050.50 1051.48 1052.35 1052.99 1053.56 1054.05 1054.54 1055.00 1055.41 1055.82 1056.22 1056.41 1056.51 1056.71 1056.94 1057.20 1057.49 1057.84

B-004-0-99 3' RT. ASPHALT = 2.4'' BASE = 9.6''
20 25 20 — 14 14 14 TR — 29/50/2" — N WC

R-009-0-99 1' RT. ASPHALT = 2.4'' CONCRETE = 3.6''
50/5" 50/3" 50/5" 50/2" — N WC

B-006-0-99 21' LT. ASPHALT = 2.4'' BASE = 9.6''
29 30 — 11 11 TR — 27/42/50/3" — N WC

R-011-0-99 19' LT. ASPHALT = 2.4'' CONCRETE = 6''
22 29 — 14 14 TR — 50/4" 50/4" — N WC

PROP. GRADE — EXIST. GROUND

R-013-0-99 STA. 514+63, 12' LT. ASPHALT = 1.2'' CONCRETE = 7.2'' BASE = 1.2''
9 9 83 — 15 15 TR — 50/1 — N WC

B-008-0-99 4' RT. ASPHALT = 2.4'' BASE = 9.6''
12 9 29 — 17 17 TR — 34/12/50/5" — N WC

501 502 503 504 505 506 507 508 509 510 511 512 513 514 515

HORIZONTAL SCALE IN FEET: 0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
GOODKIRK STREET - STA. 500+50 TO STA. 515+50

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH, 43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 21 TOTAL 116
SHEET P.532 TOTAL 627

SUM-077/008-11.65/00.00

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FINAL - NOT FOR CONSTRUCTION

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

NOTES:

INFORMATION ABOUT BORINGS B-006-0-22 AND R-010-0-99 CAN BE FOUND ON SHEET 13.

INFORMATION ABOUT BORINGS B-006-0-99 AND R-011-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-023-0-24, B-024-0-24, B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORING B-047-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORING B-049-0-24 CAN BE FOUND ON SHEET 37.

INFORMATION ABOUT BORING B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORINGS B-052-0-24 AND B-053-0-24 CAN BE FOUND ON SHEET 39.

INFORMATION ABOUT BORING P-030-0-20 CAN BE FOUND ON SHEET 12.

PROP. ℄ CONST. VINE STREET

PROP. ℄ RETAINING WALL RW-6, FRONT FACE OF WALL

B-047-0-24

PROP. ℄ RETAINING WALL RW-8, FRONT FACE OF WALL

B-051-0-24

PROP. ℄ RETAINING WALL RW-7, FRONT FACE OF WALL

B-049-0-24

B-024-0-24

PROP. ℄ RETAINING WALL RW-5, FRONT FACE OF WALL

PGL SB LANES

PGL NB LANES

B-006-0-99

B-023-0-24

R-011-0-99

PROP. ℄ GOODKIRK STREET

B-025-0-24

B-052-0-24

PROP. ℄ CONST. SB ENTRANCE RAMP (TO SR-8)

B-026-0-24

B-053-0-24

R-010-0-99

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

PROP. ℄ RETAINING WALL RW-9, FRONT FACE OF WALL

℄ CONST. SR-8

B-006-0-22

PROP. ℄ CONST. RAMP S

P-030-0-20

INDUSTRIAL

TRANSPORTATION

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	CHECKER
RS	DT

REVIEWER CH 09/23/26

PROJECT ID 114865

SUBSET	TOTAL
22	116

SHEET	TOTAL
P.533	627

SUM-077/008-11.65/00.00

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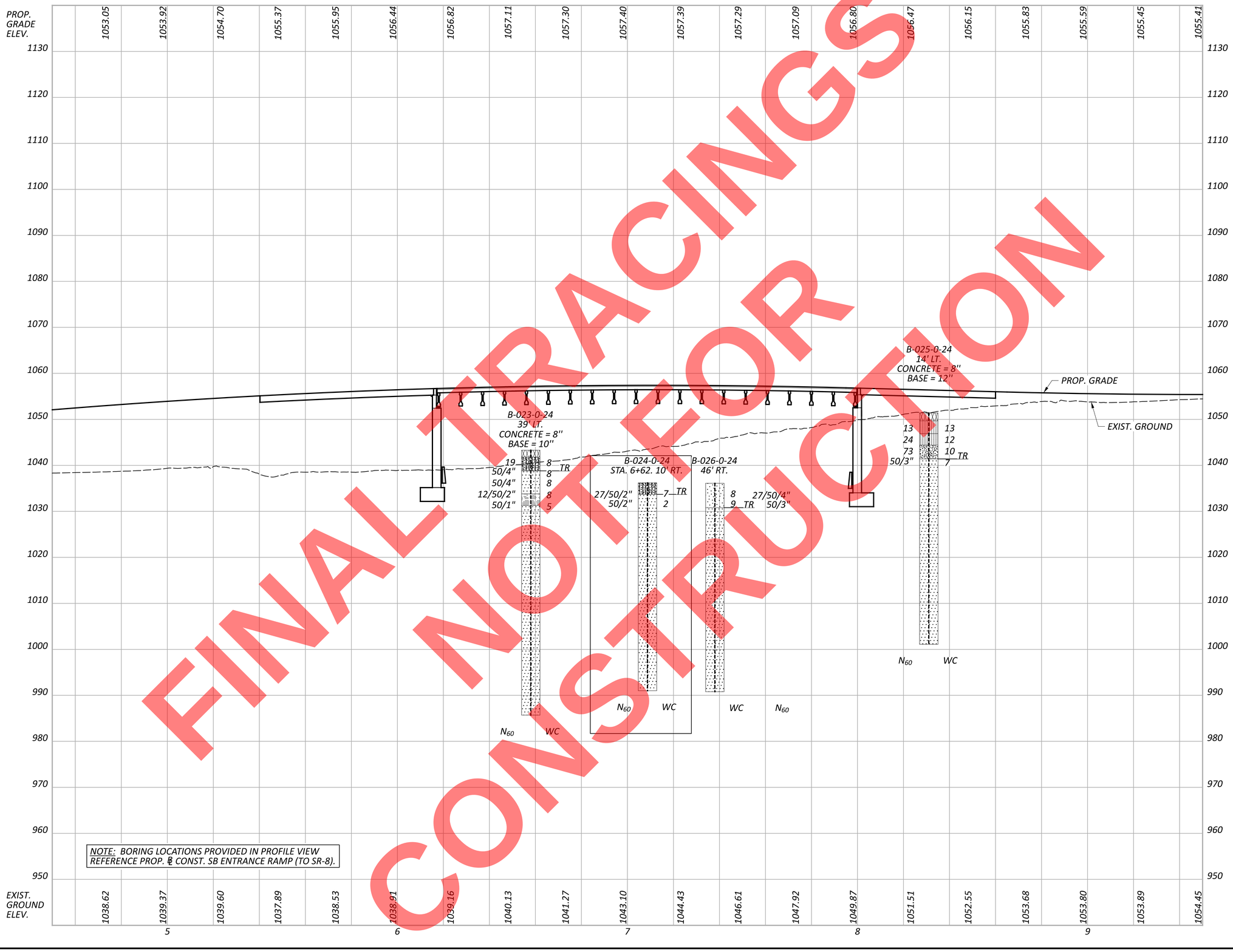

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040
SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)

SFN 7700372

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
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DESIGNER	CHECKER
RS	DT

REVIEWER
CH 09/23/26

PROJECT ID
114865

SUBSET	TOTAL
23	116

SHEET	TOTAL
P.534	627

SUM-077/008-11.65/00.00

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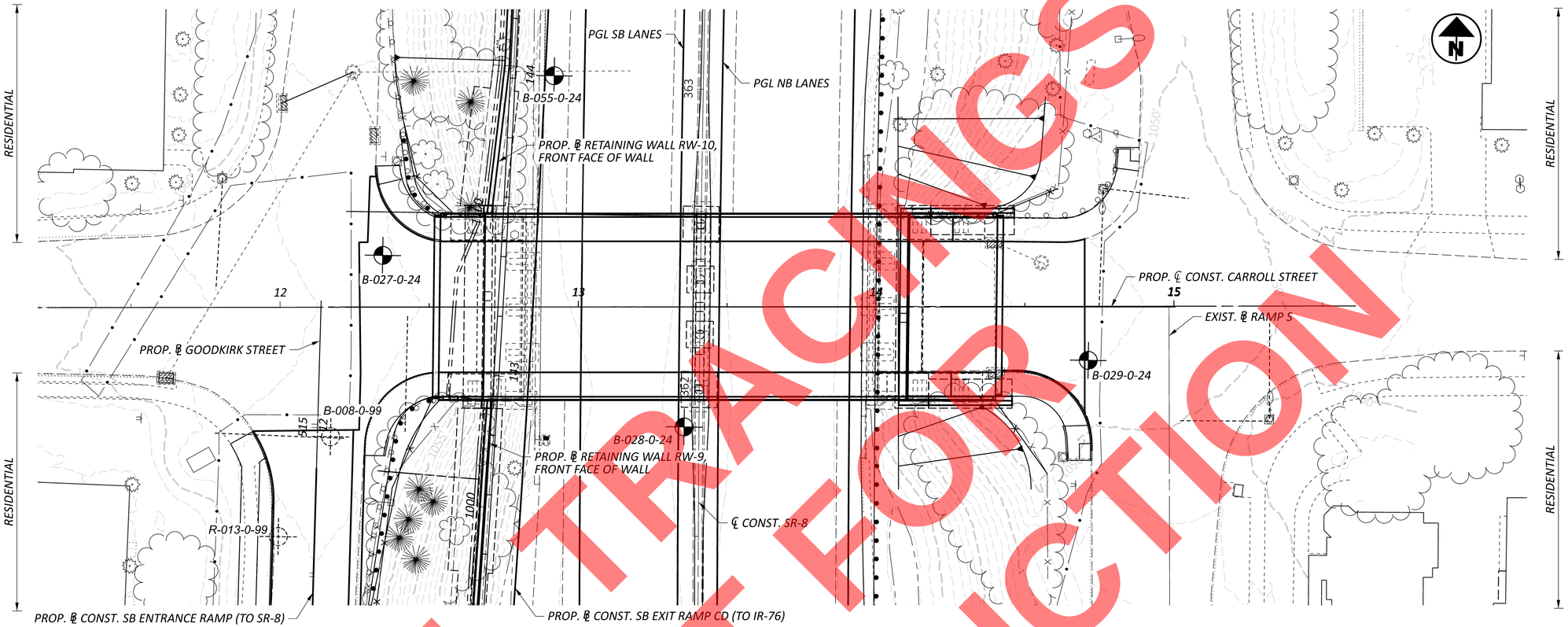

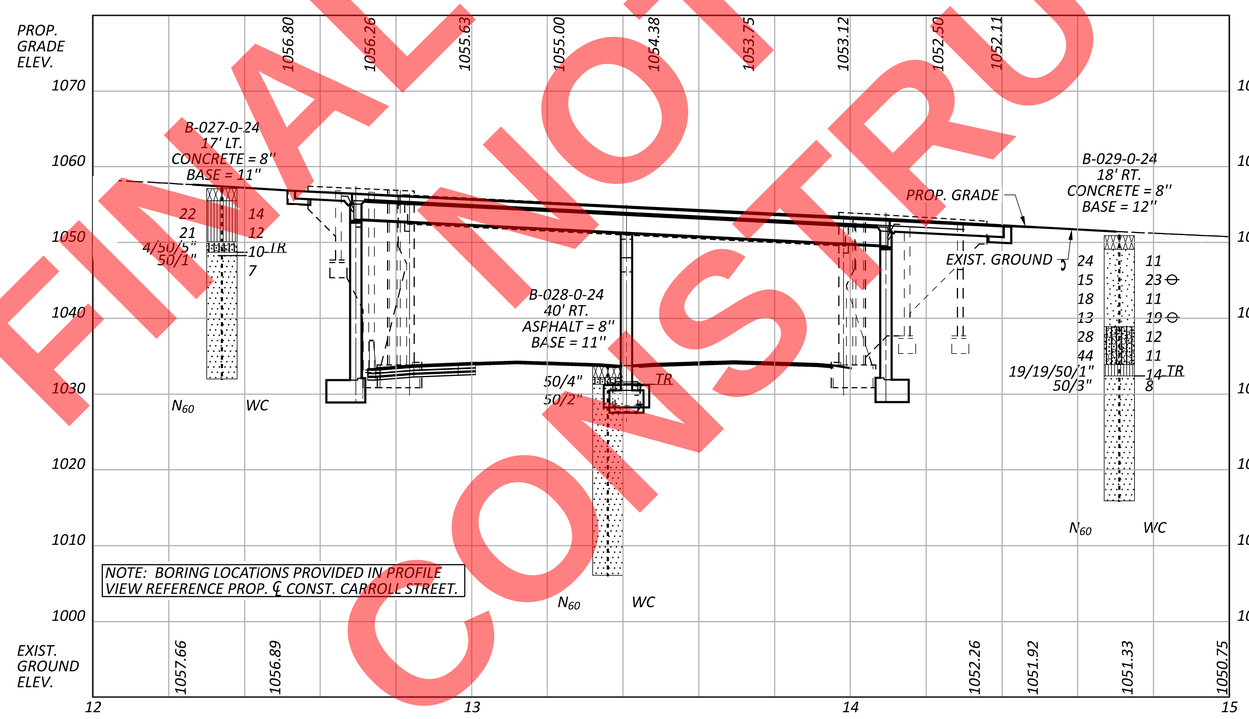

NOTES:

INFORMATION ABOUT BORINGS B-008-0-99 AND R-013-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORING B-055-0-24 CAN BE FOUND ON SHEET 40.

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162
CARROLL STREET OVER SR-8

SFN 7700373

DESIGN AGENCY
NEAS Network Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	CHECKER
RS	DT

REVIEWER: CH 09/23/26

PROJECT ID: 114865

SUBSET	TOTAL
24	116

SHEET	TOTAL
P.535	627

SUM-077/008-11.65/00.00

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FINAL TRACINGS
NOT FOR
CONSTRUCTION

INDUSTRIAL

TRANSPORTATION

STA. 0+00 AH
STA. 2+90.00 BK

℄ RETAINING WALL RW-1,
FRONT FACE OF WALL

MATCH LINE STA. 2+10

E3-002-0-20

E3-003-0-20

E3-004-0-20

103 104 105 106 107

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

P-013-0-20

PGL SB LANES

℄ CONST. SR-8

PGL NB LANES

4328 4329 4330 326

NOTE:

INFORMATION ABOUT BORING P-013-0-20 CAN BE FOUND ON SHEET 8.

TOP OF WALL ELEV.

PROP. GRADE ELEV. AT FACE OF WALL

EXIST. GROUND ELEV.

1079.91 1079.91 1079.91 1079.91 1080.91 1081.91 1085.91 1088.91 1091.91 1092.91 1092.91 1089.91 1088.91 1086.41 1086.41 1086.41 1087.41 1087.41 1088.41 1088.41 1090.41

1069.44 1069.71 1070.05 1070.47 1070.95 1071.46 1071.99 1072.53 1073.05 1073.54 1073.98 1074.38 1074.61 1074.95 1075.25 1075.50 1075.72 1075.90 1076.03 1076.13 1076.18

1079.30 1079.28 1078.86 1079.17 1079.04 1071.82 1072.42 1073.24 1074.01 1075.73 1081.46 1084.06 1085.71 1084.53 1085.50 1084.87 1085.54 1086.57 1086.93 1087.26 1088.58

1110 1100 1090 1080 1070 1060 1050 1040

E3-002-0-20 4' LT.

40 62 43 43 13 94 14/50/5" 35/50/3" 50/5" 50/5" 50/4" 50/3" 50/2" 50/3" 50/2" 50/3" 50/3" 50/3" 50/2" 50/4"

12 11 TR 6 6

N_{60} WC

EXIST. GROUND

PROP. GRADE

E3-003-0-20 4' LT.

46 33 68 97 50/5" 50/5" 70 81 50/5" 50/4" 50/5" 50/2" 50/2" 50/2" 37/50/4" 36/50/5" 50/3" 50/5" 50/1" 50/1"

8 14 TR 6 4

N_{60} WC

TOP OF WALL

BOTTOM OF WALL

E3-004-0-20 1' RT.

52 52 36 7/39/50/4" 17/50/5" 15/50/4" 50/5" 50/3" 50/3" 50/3" 50/3" 50/2"

10 9 14 10 TR 9 7

N_{60} WC

3'-6"Φ DRILLED SHAFT (TYP.)

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. RETAINING WALL RW-1.

0 1 2 0 1 2

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1

SUM-077/008-11.65/00.00

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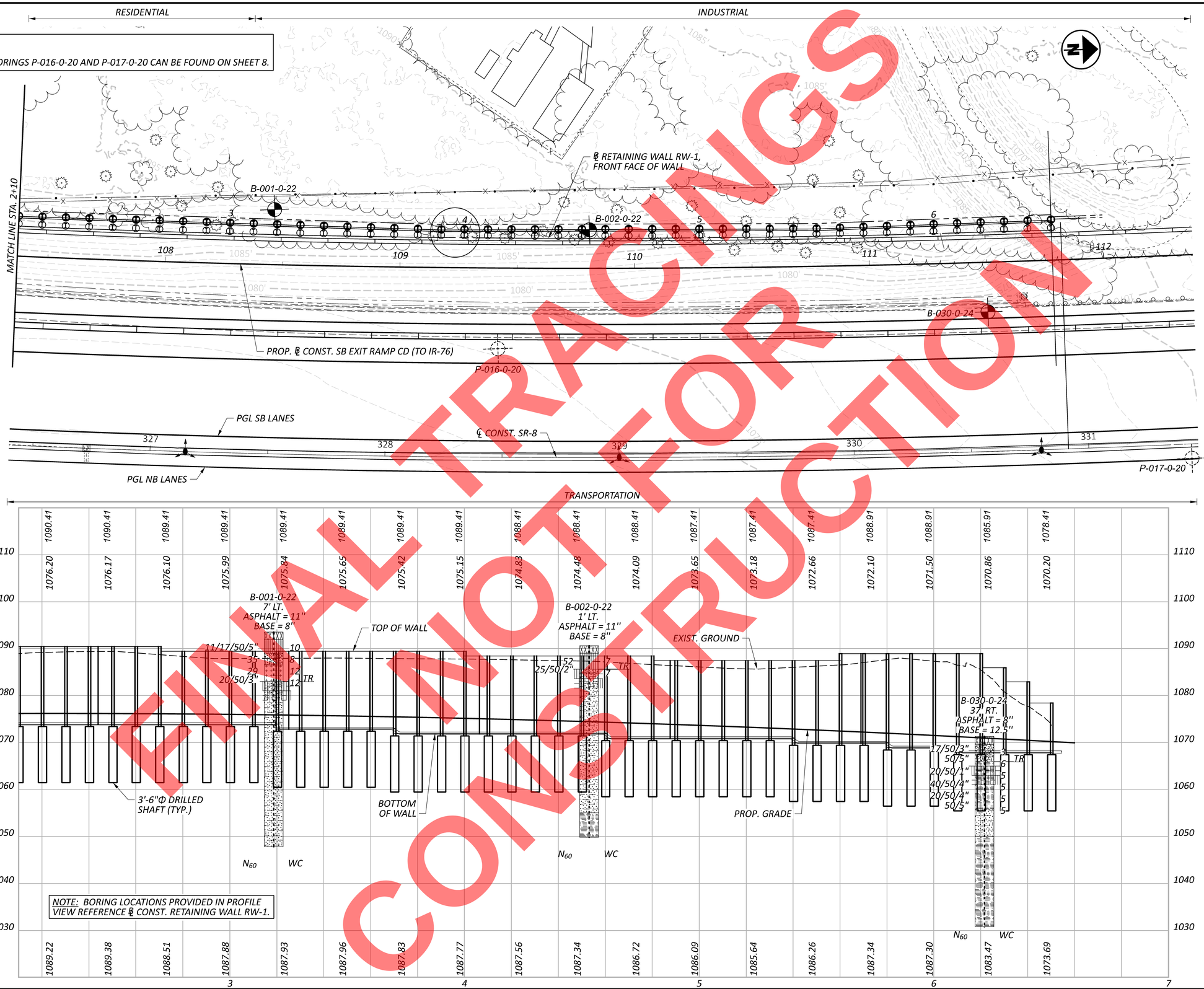
DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
25	116
SHEET	TOTAL
P.536	627

NOTE:

INFORMATION ABOUT BORINGS P-016-0-20 AND P-017-0-20 CAN BE FOUND ON SHEET 8.



FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-1 (CONT.)

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER RS

REVIEWER CH 09/23/26

PROJECT ID 114865

SUBSET 26 TOTAL 116

SHEET P.537 TOTAL 627

SUM-077/008-11.65/00.00

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INDUSTRIAL

EXIST. ℄ BEACON STREET

PROP. ℄ CULVERT

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

PROP. ℄ RETAINING WALL RW-2

PROP. ℄ RETAINING WALL RW-3

B-032-0-24

B2-001-0-20

B-031-0-24

B-004-0-22

B-021-0-24

B-005-0-22

R-002-0-99

B-003-0-22

P-020-0-20

B-033-0-24

P-018-0-20

℄ CONST. SR-8

PGL SB LANES

PGL NB LANES

P-019-0-20

R-003-0-99

B-022-0-24

18" STM

MATCH LINE STA. 5+00

INDUSTRIAL

NOTES:

INFORMATION ABOUT BORINGS B-003-0-22, B-004-0-22 AND B-005-0-22 CAN BE FOUND ON SHEET 11.

INFORMATION ABOUT BORINGS B-021-0-24, B-031-0-24, B-032-0-24, B-033-0-24 AND B2-001-0-20 CAN BE FOUND ON SHEET 28.

INFORMATION ABOUT BORINGS B-022-0-24 AND R-003-0-99 CAN BE FOUND ON SHEET 33.

INFORMATION ABOUT BORINGS P-018-0-20, P-019-0-20, P-020-0-20 AND R-002-0-99 CAN BE FOUND ON SHEET 9.

FINAL TRACINGS
NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	27
TOTAL	116
SHEET	P.538
TOTAL	627

SUM-077/008-11.65/00.00

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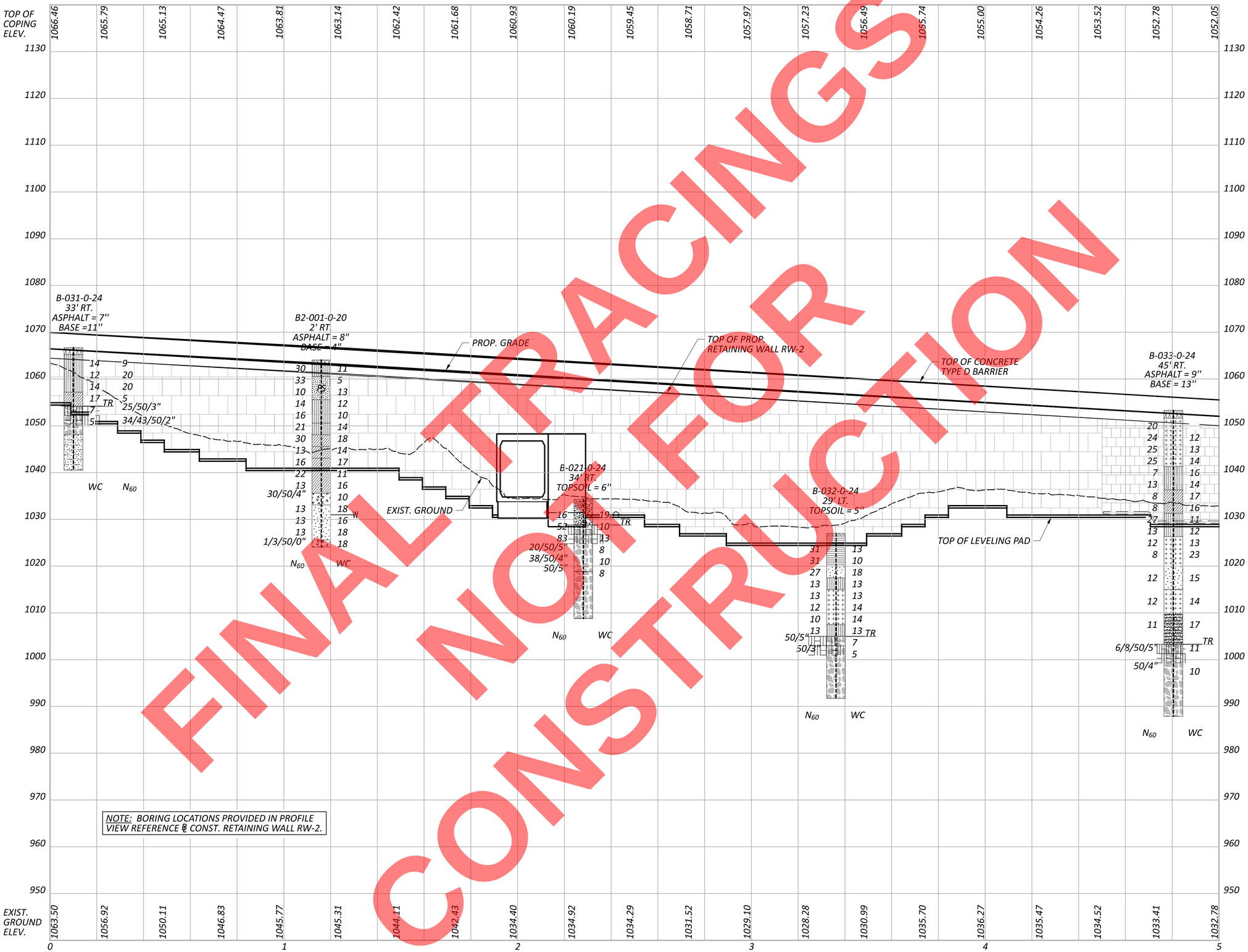

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-2

SUM-077/008-11.65/00.00

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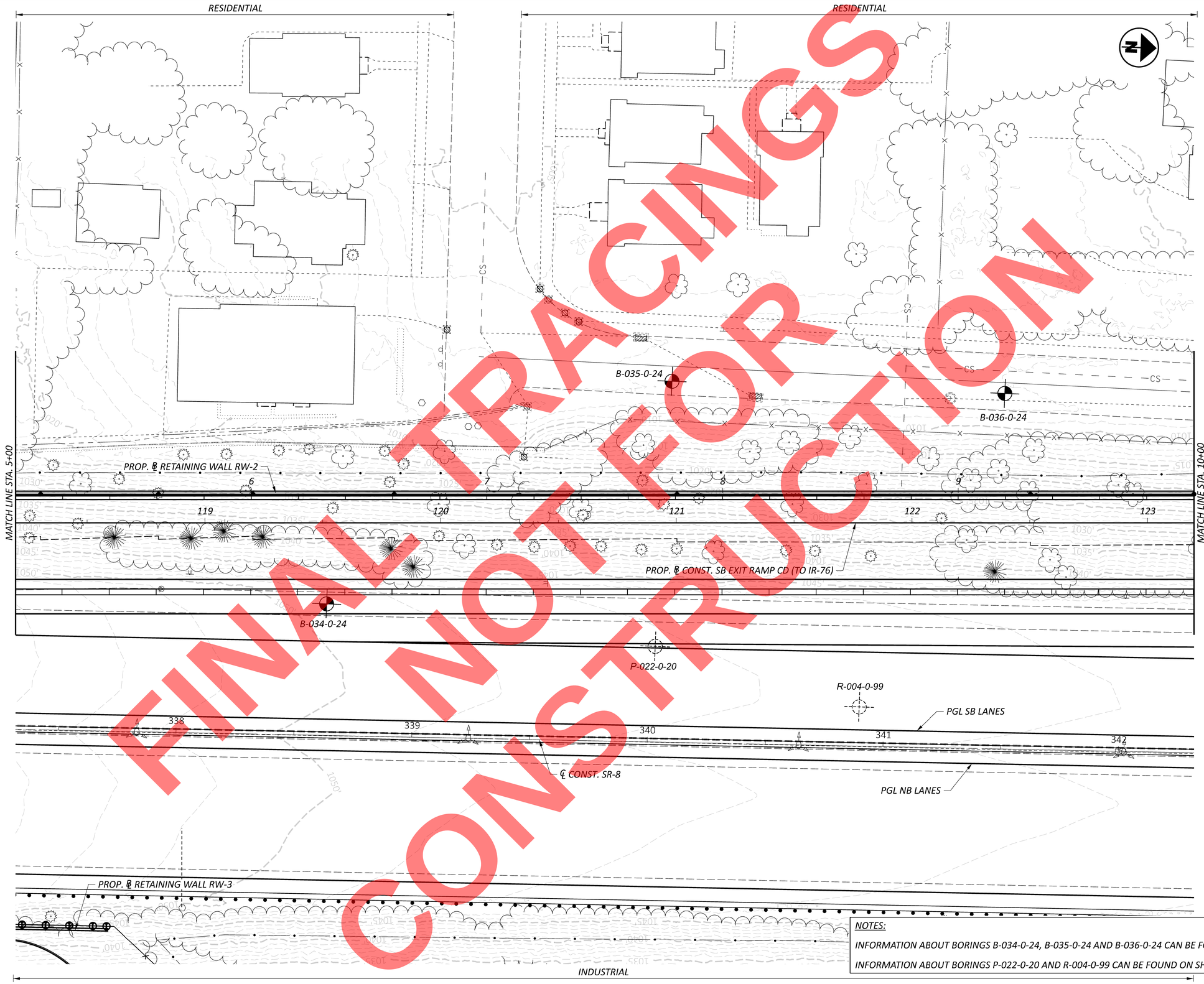
DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	28
TOTAL	116
SHEET	P.539
TOTAL	627

FINAL PLANS
NOT FOR CONSTRUCTION



NOTES:

INFORMATION ABOUT BORINGS B-034-0-24, B-035-0-24 AND B-036-0-24 CAN BE FOUND ON SHEET 30.

INFORMATION ABOUT BORINGS P-022-0-20 AND R-004-0-99 CAN BE FOUND ON SHEET 9.

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2 (CONT.)

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	29
TOTAL	116
SHEET	P.540
TOTAL	627

SUM-077/008-11.65/00.00

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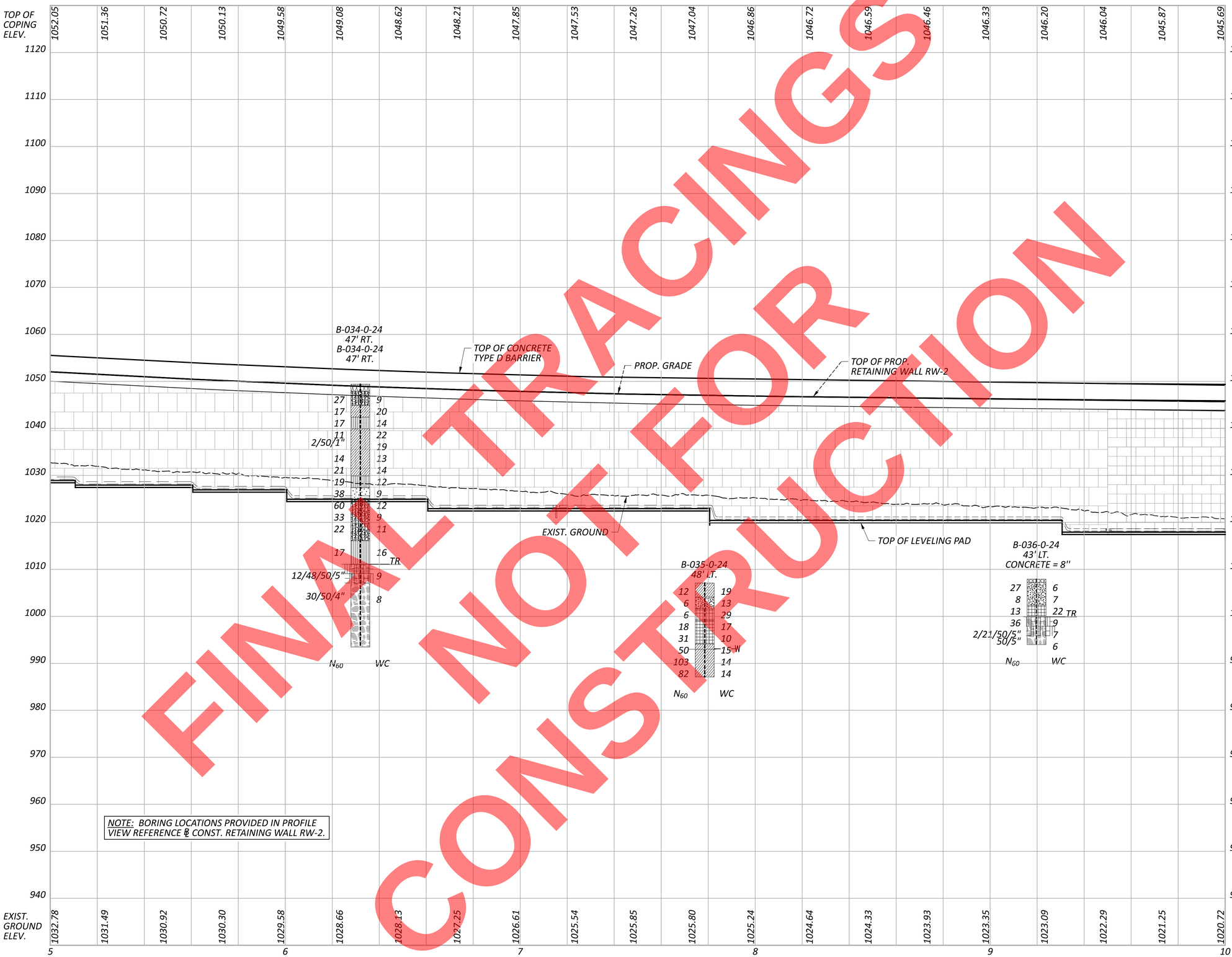

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-2 (CONT.)

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	30
TOTAL	116
SHEET	P.541
TOTAL	627

SUM-077/008-11.65/00.00

MODEL: 114865_ZF003 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:10:09 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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RESIDENTIAL

RESIDENTIAL

COMMERCIAL

MATCH LINE STA. 10+00

B-037-0-24

B-038-0-24

B-039-0-24

PROP. ℄ GOODKIRK STREET

500

11

12

13

14

124

125

126

PROP. ℄ RETAINING WALL RW-2

127

128

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

GB-001-0-99

P-024-0-20

PROP. ℄ EXCHANGE STREET

PGL SB LANES

343

344

345

346

347

℄ CONST. SR-8

PGL NB LANES

R-005-0-99

INDUSTRIAL

COMMERCIAL

40

42

CS

1010'

1015'

1020'

1025'

1030'

1035'

1040'

1045'

1050'

NOTES:

INFORMATION ABOUT BORINGS B-037-0-24, B-038-0-24 AND B-039-0-24 CAN BE FOUND ON SHEET 32.

INFORMATION ABOUT BORING GB-001-0-99 CAN BE FOUND ON SHEET 19.

INFORMATION ABOUT BORING P-024-0-20 CAN BE FOUND ON SHEET 9.

INFORMATION ABOUT BORING R-005-0-99 CAN BE FOUND ON SHEET 12.

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL
SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2 (CONT.)

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	31
TOTAL	116
SHEET	P.542
TOTAL	627

SUM-077/008-11.65/00.00

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OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4

FINAL TRACINGS
NOT FOR
CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 20 40
10

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2 (CONT.)

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	32
TOTAL	116
SHEET	P.543
TOTAL	627

SUM-077/008-11.65/00.00

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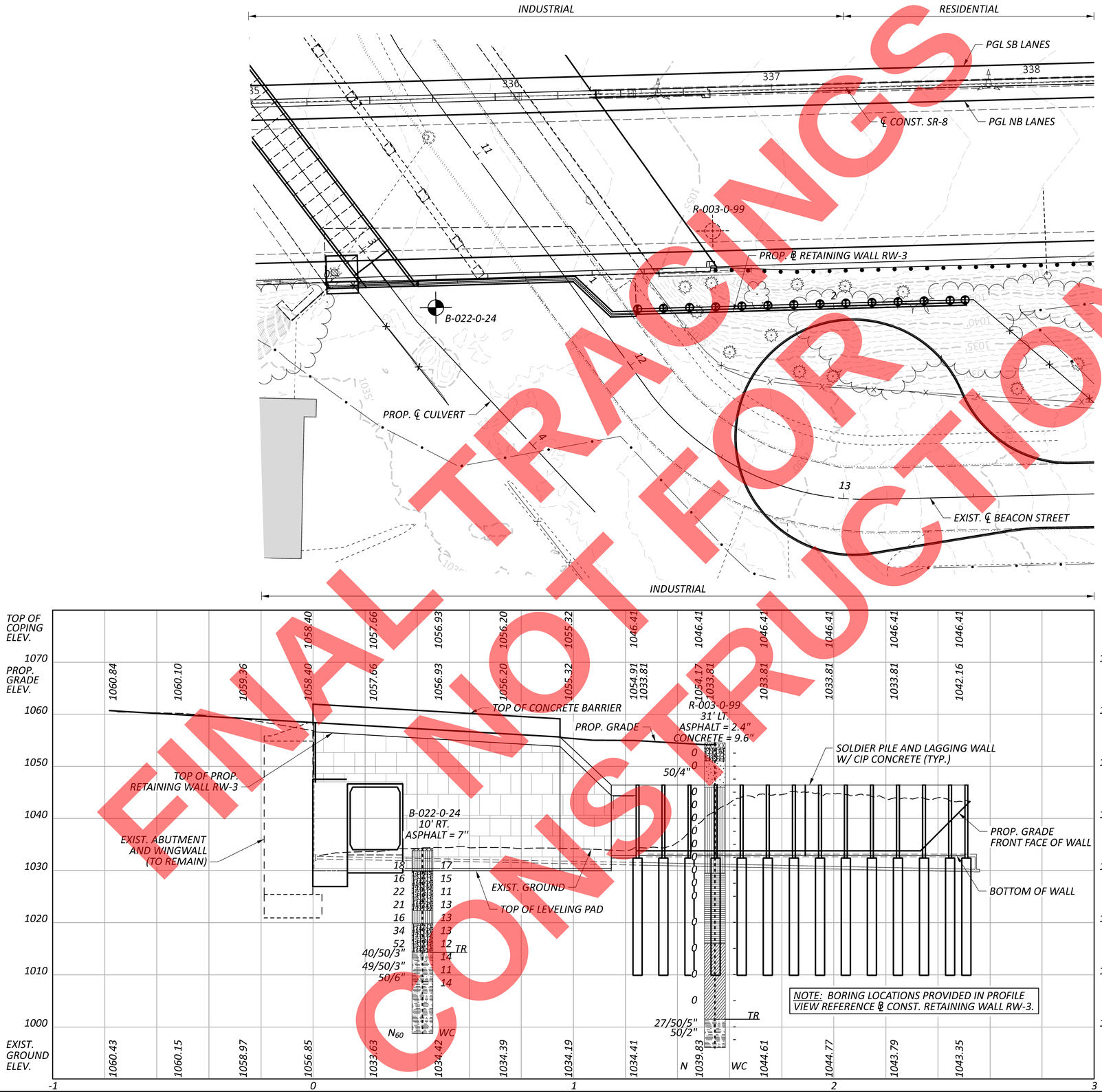
OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4

FINAL TRACINGS
NOT FOR CONSTRUCTION



HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-3

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
33	116
SHEET	TOTAL
P.544	627

SUM-077/008-11.65/00.00

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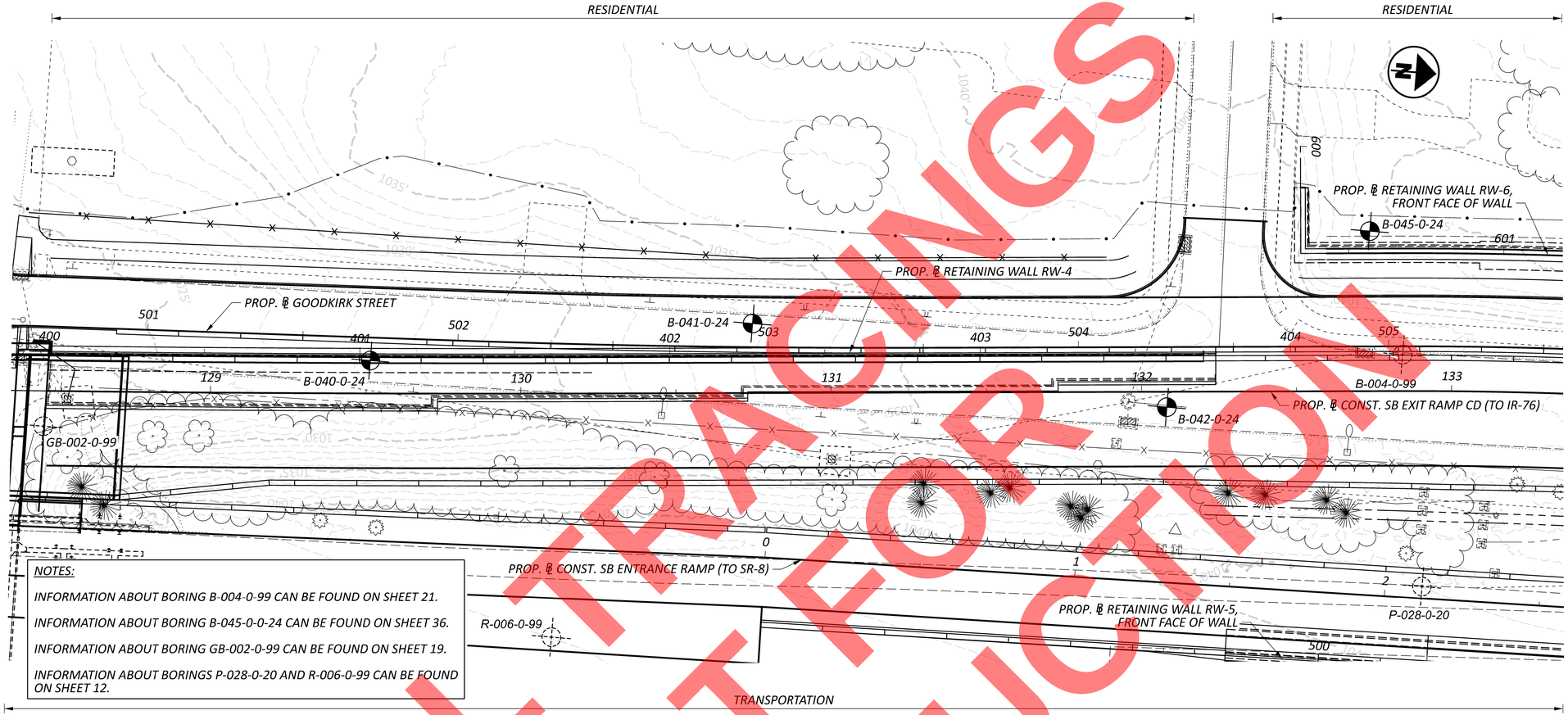
FINAL PLANS NOT FOR CONSTRUCTION



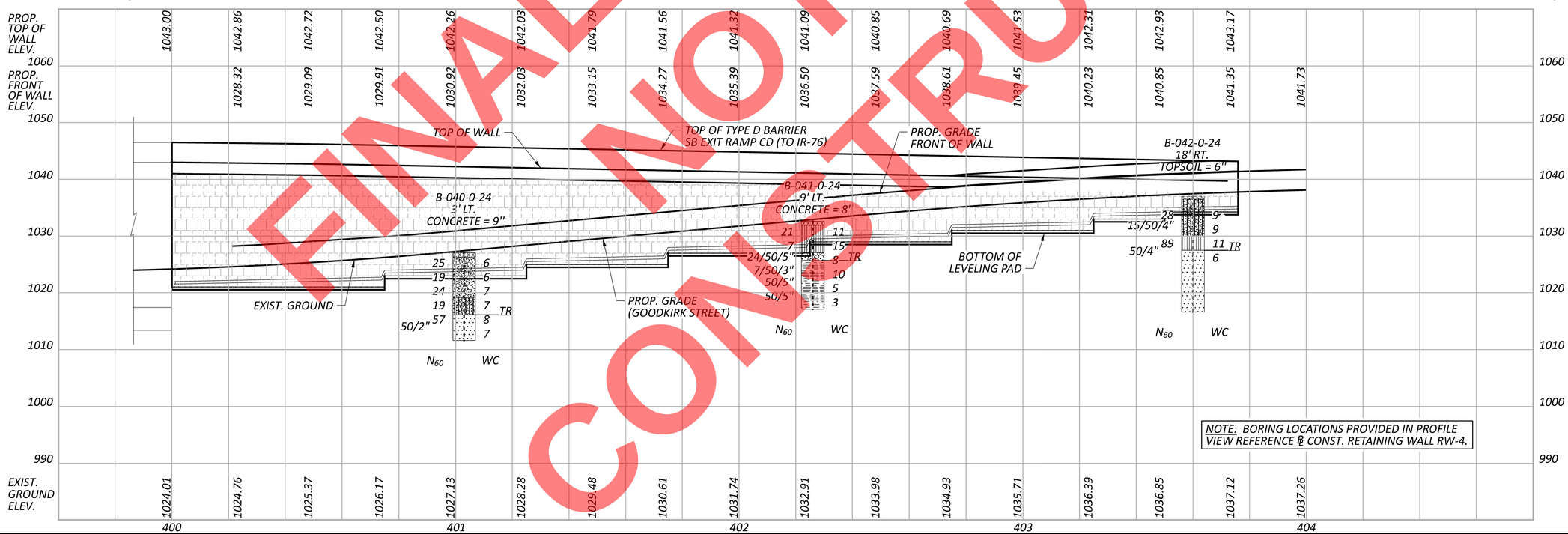
NOTES:

INFORMATION ABOUT BORING B-004-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORING B-045-0-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORING GB-002-0-99 CAN BE FOUND ON SHEET 19.

INFORMATION ABOUT BORINGS P-028-0-20 AND R-006-0-99 CAN BE FOUND ON SHEET 12.



HORIZONTAL SCALE IN FEET
0 10 20 40

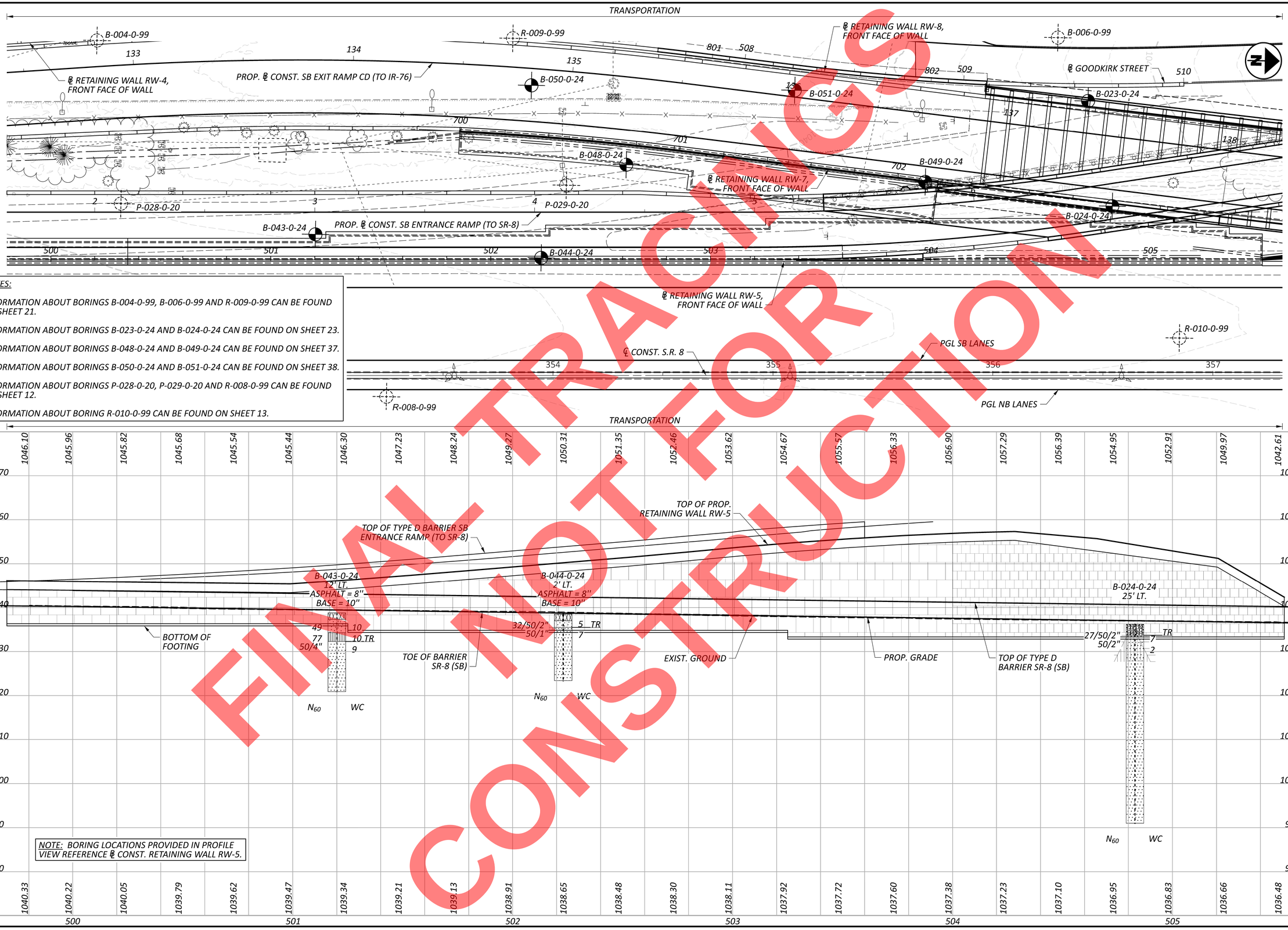
GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-4

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc
2800 CORPORATE EXCHANGE DR, SUITE 240
COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
34	116
SHEET	TOTAL
P.545	627

SUM-077/008-11.65/00.00

MODEL: 114865_IP015 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:14:09 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_IP015.dgn



NOTES:

INFORMATION ABOUT BORINGS B-004-0-99, B-006-0-99 AND R-009-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-023-0-24 AND B-024-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

INFORMATION ABOUT BORINGS B-050-0-24 AND B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORINGS P-028-0-20, P-029-0-20 AND R-008-0-99 CAN BE FOUND ON SHEET 12.

INFORMATION ABOUT BORING R-010-0-99 CAN BE FOUND ON SHEET 13.

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. RETAINING WALL RW-5.

FINAL NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-5

DESIGN AGENCY	NEAS
	2800 CORPORATE EXCHANGE DR, SUITE 240 COLUMBUS, OH, 43231 TEL:614.714.0299 WWW.NEASINC.COM
DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET / TOTAL	35 / 116
SHEET / TOTAL	P.546 / 627

SUM-077/008-11.65/00.00
MODEL: 114865_IP016 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:15:29 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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FINAL PLANS NOT FOR CONSTRUCTION

NOTES:

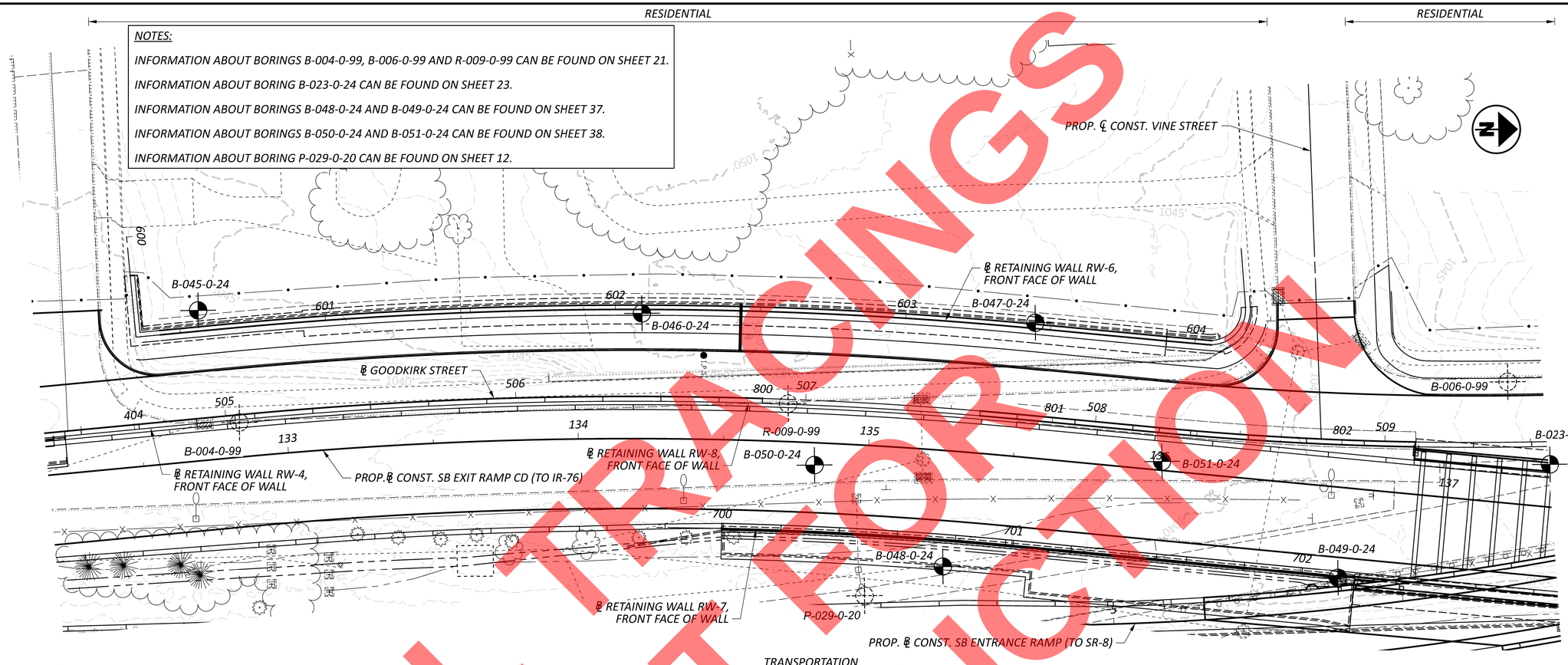
INFORMATION ABOUT BORINGS B-004-0-99, B-006-0-99 AND R-009-0-99 CAN BE FOUND ON SHEET 21.

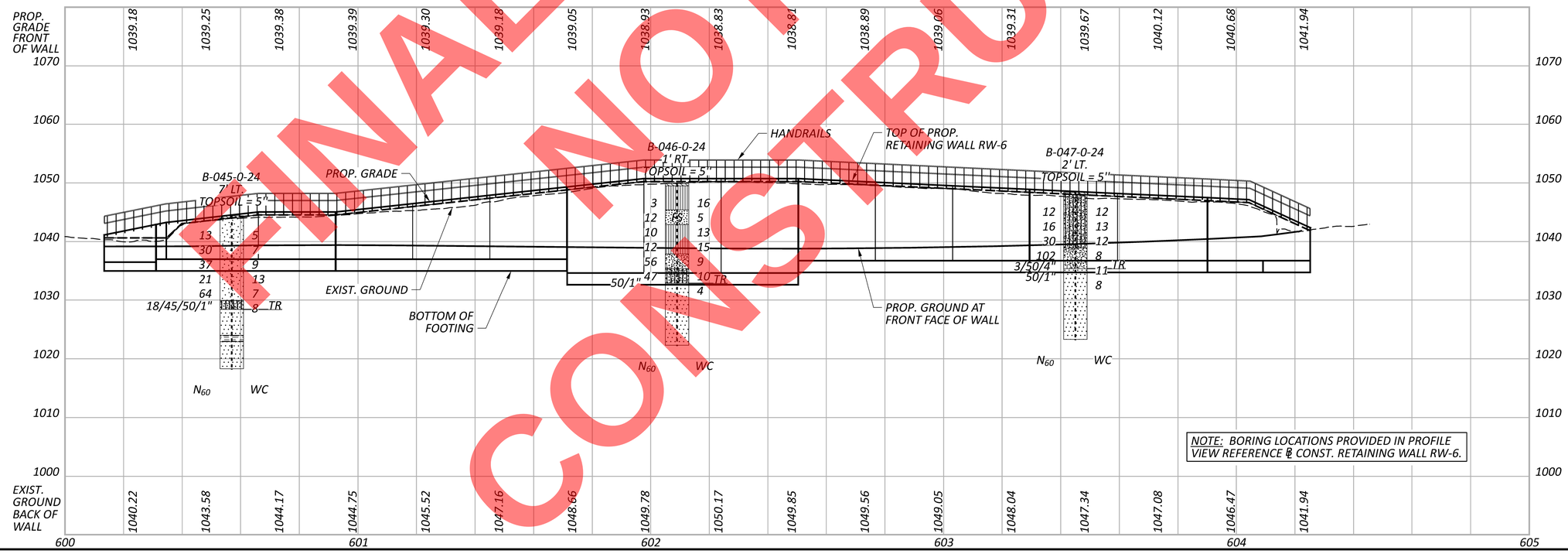
INFORMATION ABOUT BORING B-023-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

INFORMATION ABOUT BORINGS B-050-0-24 AND B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORING P-029-0-20 CAN BE FOUND ON SHEET 12.





NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. RETAINING WALL RW-6.

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-6

DESIGN AGENCY
NEAS
National Engineering & Architectural Services Inc.
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COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 36 TOTAL 116
SHEET P.547 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_IP017 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:16:56 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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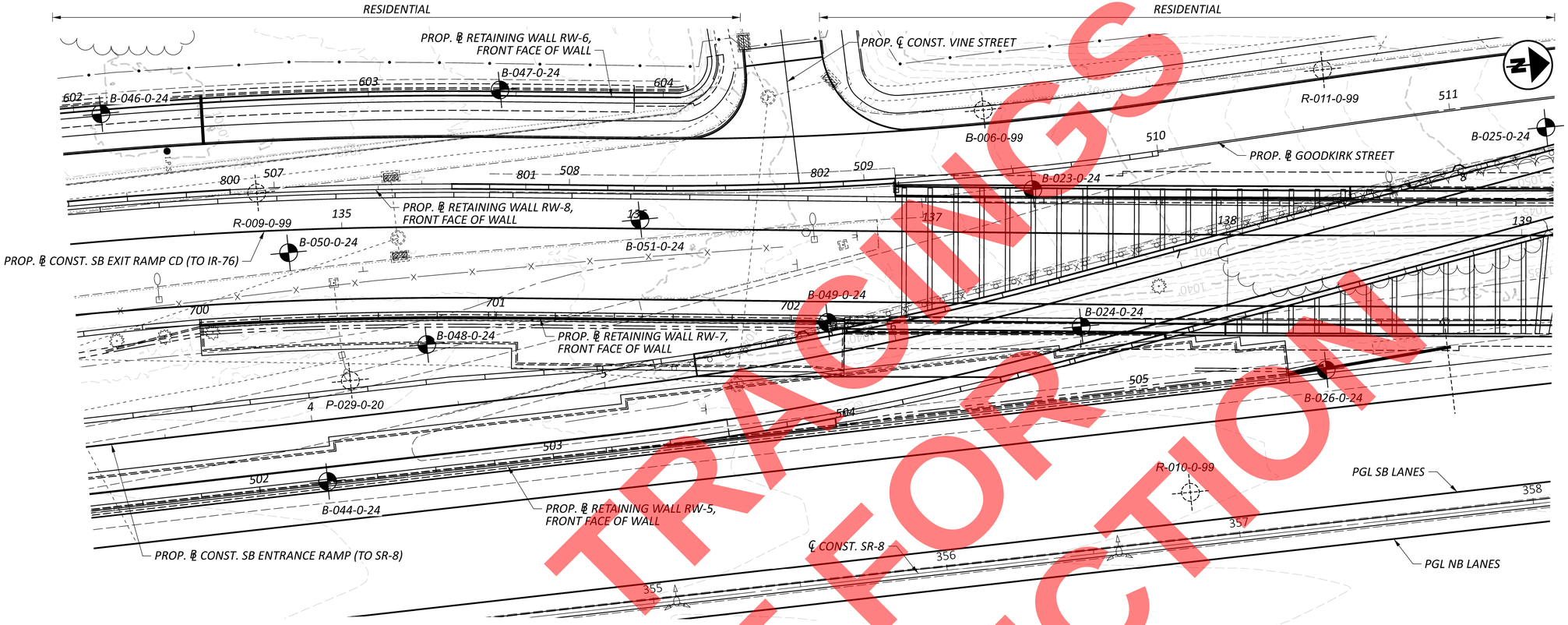

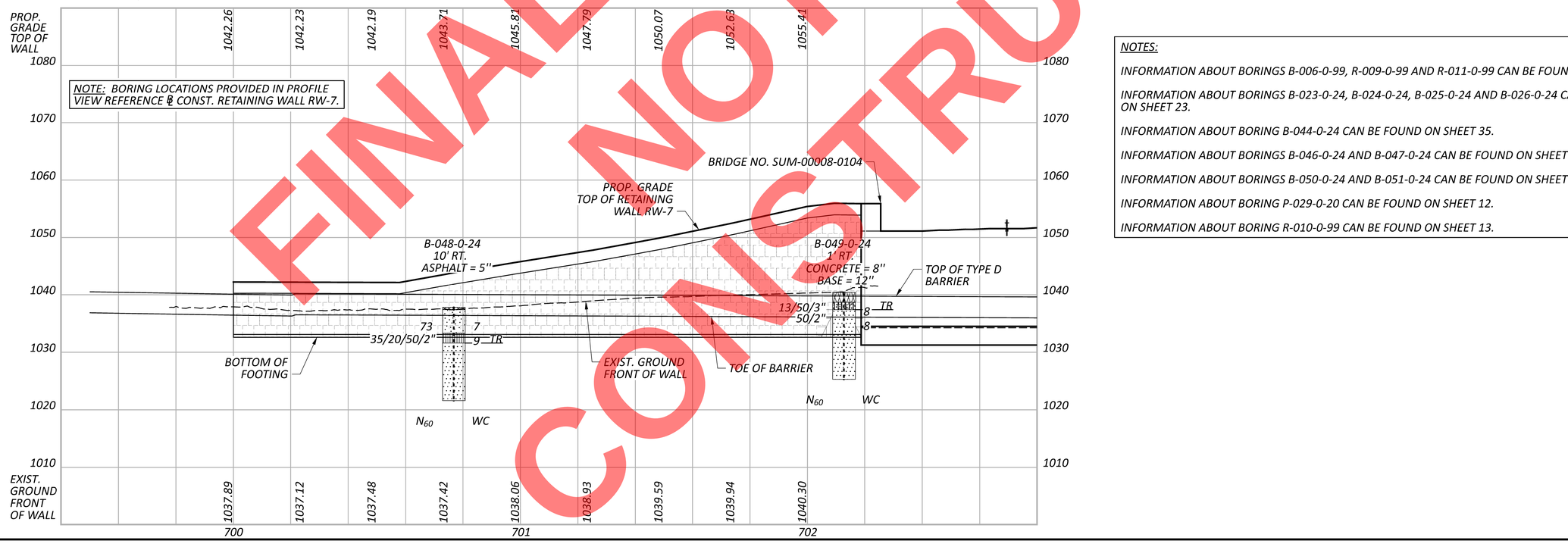

NOTES:

INFORMATION ABOUT BORINGS B-006-0-99, R-009-0-99 AND R-011-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-023-0-24, B-024-0-24, B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORING B-044-0-24 CAN BE FOUND ON SHEET 35.

INFORMATION ABOUT BORINGS B-046-0-24 AND B-047-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORINGS B-050-0-24 AND B-051-0-24 CAN BE FOUND ON SHEET 38.

INFORMATION ABOUT BORING P-029-0-20 CAN BE FOUND ON SHEET 12.

INFORMATION ABOUT BORING R-010-0-99 CAN BE FOUND ON SHEET 13.

FINAL TRACINGS NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-7

DESIGN AGENCY
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DESIGNER RS

REVIEWER CH 09/23/26

PROJECT ID 114865

SUBSET 37 | TOTAL 116

SHEET P.548 | TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_IP018 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:18:09 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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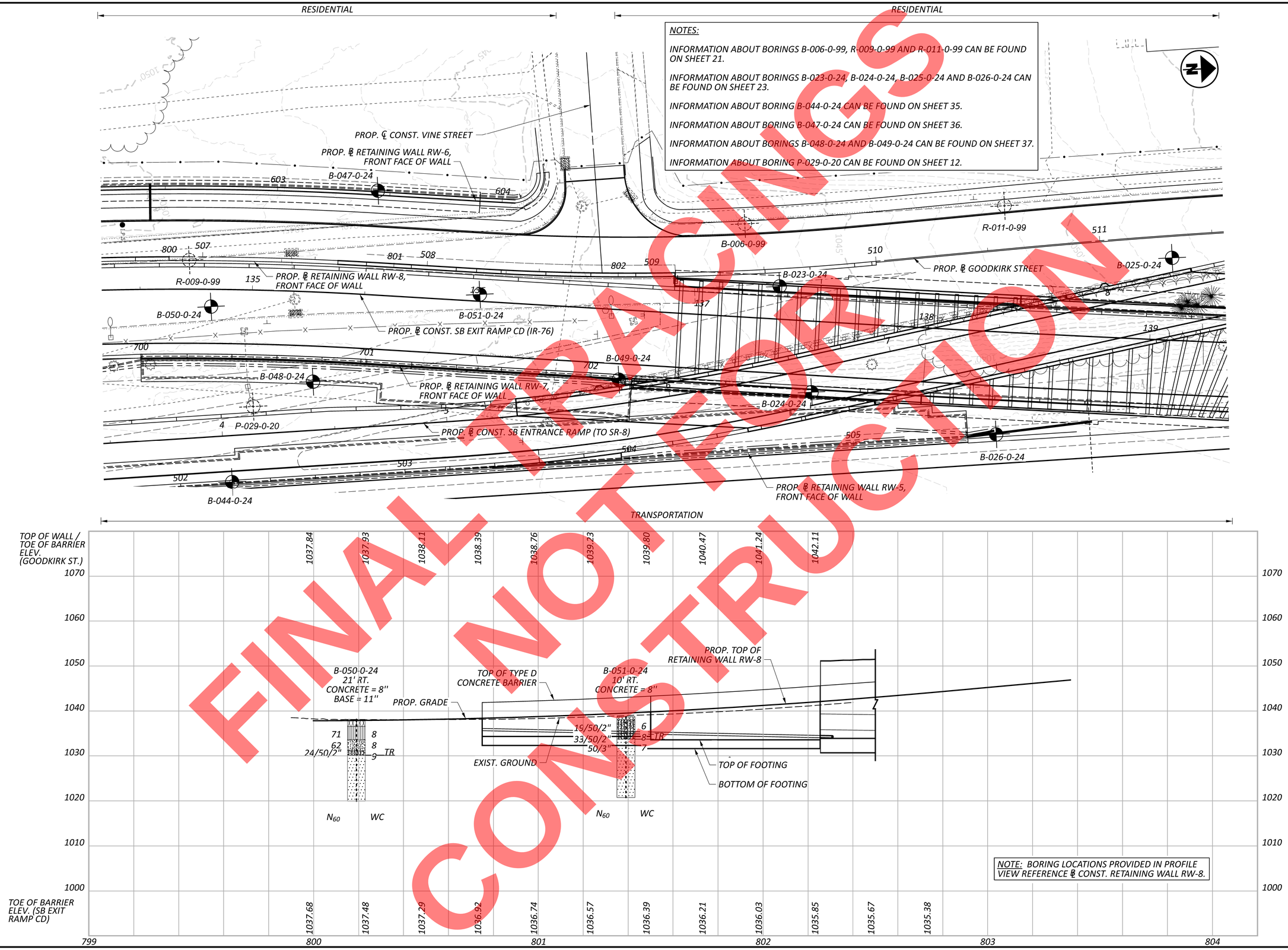

NOTES:

INFORMATION ABOUT BORINGS B-006-0-99, R-009-0-99 AND R-011-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-023-0-24, B-024-0-24, B-025-0-24 AND B-026-0-24 CAN BE FOUND ON SHEET 23.

INFORMATION ABOUT BORING B-044-0-24 CAN BE FOUND ON SHEET 35.

INFORMATION ABOUT BORING B-047-0-24 CAN BE FOUND ON SHEET 36.

INFORMATION ABOUT BORINGS B-048-0-24 AND B-049-0-24 CAN BE FOUND ON SHEET 37.

INFORMATION ABOUT BORING P-029-0-20 CAN BE FOUND ON SHEET 12.

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℞ CONST. RETAINING WALL RW-8.

FINAL TRACINGS NOT FOR CONSTRUCTION

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-8

DESIGN AGENCY
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DESIGNER: RS
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 38 TOTAL: 116
SHEET: P.549 TOTAL: 627

SUM-077/008-11.65/00.00

MODEL: 114865_IP019 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:19:45 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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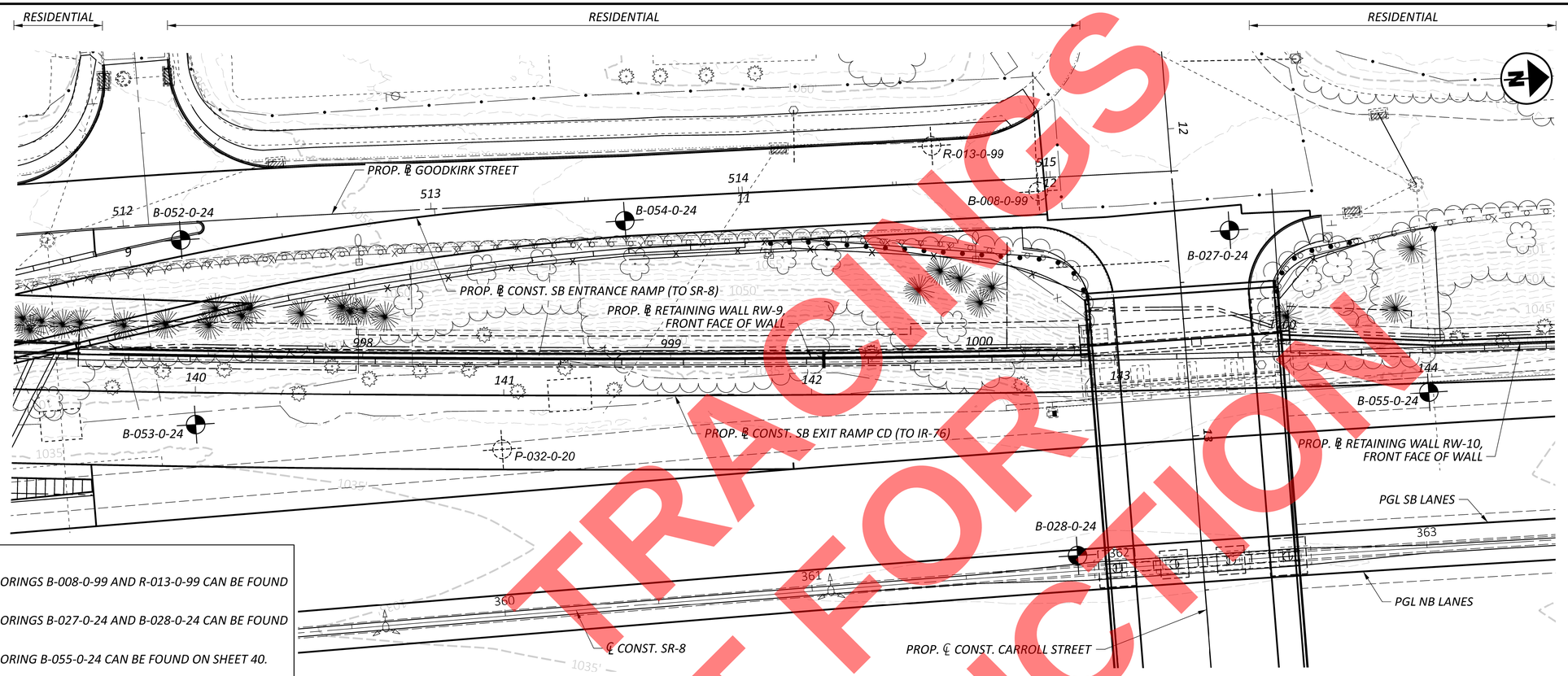


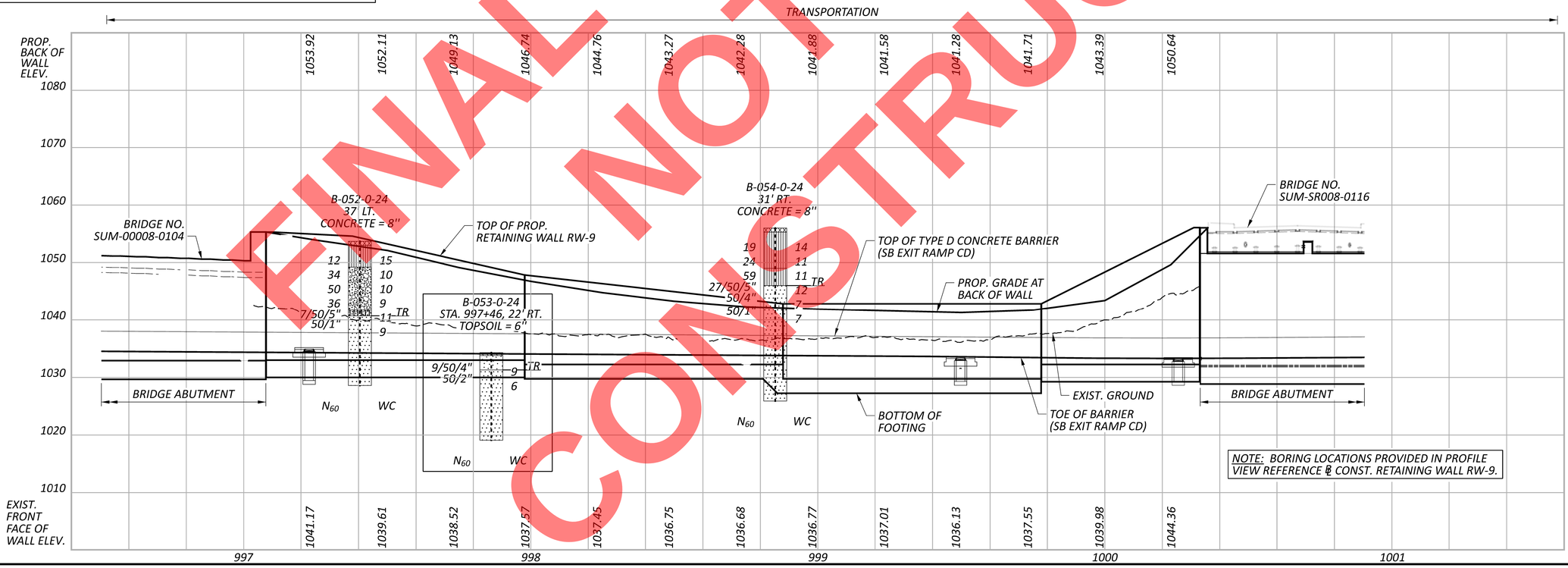
NOTES:

INFORMATION ABOUT BORINGS B-008-0-99 AND R-013-0-99 CAN BE FOUND ON SHEET 21.

INFORMATION ABOUT BORINGS B-027-0-24 AND B-028-0-24 CAN BE FOUND ON SHEET 24.

INFORMATION ABOUT BORING B-055-0-24 CAN BE FOUND ON SHEET 40.

INFORMATION ABOUT BORING P-032-0-20 CAN BE FOUND ON SHEET 13.



NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. RETAINING WALL RW-9.

FINAL CONSTRACTINGS
NOT FOR CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-9

SUM-077/008-11.65/00.00

MODEL: 114865_IP020 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:21:04 PM PLTDRV: OHDOT_PDF.plt℄ PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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55_IP020.dgn

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DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
39	116
SHEET	TOTAL
P.550	627

FINAL TRACINGS
NOT FOR
CONSTRUCTION

RESIDENTIAL

TRANSPORTATION

B-056-0-24

PROP. ℄ RETAINING WALL RW-10, FRONT FACE OF WALL

B-055-0-24

B-057-0-24

PROP. ℄ CONST. SB EXIT RAMP CD (TO IR-76)

PGL SB LANES

PGL NB LANES

℄ CONST. SR-8

BRIDGE NO. SUM-SR008-0116

TOP OF TYPE D BARRIER (SB EXIT RAMP CD)

PROP. GRADE BACK OF WALL

TOP OF PROP. RETAINING WALL RW-10

EXIST. E. BUCHTEL AVENUE BRIDGE

BRIDGE ABUTMENT

BRIDGE ABUTMENT

BOTTOM OF FOOTING

EXIST. GROUND FRONT FACE OF WALL

N_{60} WC

PROP. BACK OF WALL ELEV.

EXIST. FRONT FACE OF WALL ELEV.

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE ℄ CONST. RETAINING WALL RW-10.

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10

SUM-077/008-11.65/00.00

MODEL: 114865_IP021 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:22:30 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12
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DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
40	116
SHEET	TOTAL
P.551	627

FINAL TRACINGS
NOT FOR CONSTRUCTION

MODEL: 114865_IP024 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:41:31 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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SUM-077/008-11.65/00.00

RELIGIOUS

B-018-0-22
B-011-0-22
B-008-0-22
B-009-0-22
B-010-0-22

PGL SB LANES
PGL NB LANES
℄ CONST. SR-8
PROP. ℄ CONST. RAMP P
EXIST. ℄ CONST. RAMP Q
PROP. ℄ CONST. RAMP Q
MATCH LINE STA. 42+00

RESIDENTIAL
INDUSTRIAL
MEDICAL
COMMUNITY

NOTES:

INFORMATION ABOUT BORING B-008-0-22 CAN BE FOUND ON SHEET 13.

INFORMATION ABOUT BORING B-009-0-22 CAN BE FOUND ON SHEET 14.

INFORMATION ABOUT BORING B-010-0-22 CAN BE FOUND ON SHEET 43.

PROP. GRADE ELEV.
EXIST. GROUND ELEV.

B-018-0-22
4' LT.
ASPHALT = 9"
BASE = 8"
50/4" 50/1" 50/4" 50/2"
N_{60}
TR
WC

PROP. GRADE
EXIST. GROUND

B-011-0-22
5' LT.
ASPHALT = 8"
BASE = 10"
23 13 39 31/50/4"
N_{60}
TR
WC

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ CONST. RAMP P.

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 RAMP P - STA. 30+00 TO STA. 42+00

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DESIGNER	RS
REVIEWER	CH 09/23/26
PROJECT ID	114865
SUBSET	41
TOTAL	116
SHEET	P.552
TOTAL	627

FINAL PLANS
NOT FOR
CONSTRUCTION



NOTES:

INFORMATION ABOUT BORING B-013-0-22 CAN BE FOUND ON SHEET 15.

INFORMATION ABOUT BORING B-020-0-22 CAN BE FOUND ON SHEET 43.

HORIZONTAL SCALE IN FEET
0 25 50 100

GEOTECHNICAL PROFILE - ROADWAY
SR-8 RAMP P - STA. 42+00 TO END

SUM-077/008-11.65/00.00

MODEL: 114865_JP025 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:42:40 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_JP025.dgn

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DESIGNER	
RS	
REVIEWER	
CH	09/23/26
PROJECT ID	
114865	
SUBSET	TOTAL
42	116
SHEET	TOTAL
P.553	627

FINAL TRACINGS
NOT FOR CONSTRUCTION

RELIGIOUS | MEDICAL | EDUCATIONAL

B-018-0-22 B-011-0-22 B-012-0-22 B-019-0-22

PROP. ℄ CONST. RAMP P

PGL SB LANES

℄ CONST. SR-8

PGL NB LANES

EXIST. ℄ CONST. RAMP Q

PROP. ℄ CONST. RAMP Q

B-010-0-22 B-020-0-22

RESIDENTIAL | INDUSTRIAL | MEDICAL | COMMUNITY | COMMUNITY

NOTES:

INFORMATION ABOUT BORINGS B-011-0-22 AND B-018-0-22 CAN BE FOUND ON SHEET 41.

INFORMATION ABOUT BORINGS B-012-0-22 AND B-019-0-22 CAN BE FOUND ON SHEET 42.

HORIZONTAL SCALE IN FEET
0 25 50 100

PROP. GRADE ELEV.
1038.23 1037.68 1037.35 1036.87 1036.40 1035.87 1035.35 1034.85 1034.35 1033.75 1033.15 1032.47 1031.80 1031.07 1030.35 1029.73 1029.11 1028.94 1028.87 1028.79 1028.72 1028.65 1028.58 1028.50 1028.43 1028.36 1028.29 1028.21 1028.14 1028.07 1028.00 1027.92 1027.85 1027.78 1027.70 1027.63 1027.56 1027.49 1027.41 1027.36 1027.49 1027.62 1027.74 1027.89 1028.04 1028.12 1028.21 1028.38 1028.54 1028.70 1028.87 1028.95 1029.03 1029.13

B-010-0-22
6' RT.
ASPHALT = 10"
BASE = 6"
50/4" 50/4" 50/3" 50/3" — 4 4 5 5 — IR
N_{60} WC

B-020-0-22
18' LT.
ASPHALT = 8"
BASE = 7"
13/50/3" 50/5" 50/6" 50/2" — 7 6 5 5 — IR
N_{60} WC

PROP. GRADE

EXIST. GROUND

NOTE: BORING LOCATIONS PROVIDED IN PROFILE VIEW REFERENCE PROP. ℄ CONST. RAMP Q.

EXIST. GROUND ELEV.
1038.18 1037.67 1037.21 1036.67 1036.11 1035.59 1035.12 1034.65 1034.16 1033.67 1033.06 1032.43 1031.75 1031.06 1030.36 1029.65 1029.07 1028.50 1028.04 1027.58 1027.17 1026.80 1026.51 1026.27 1026.05 1025.91 1025.84 1025.77 1025.79 1025.85 1025.94 1026.05 1026.17 1026.31 1026.46 1026.62 1026.77 1026.91 1027.04 1027.16 1027.30 1027.47 1027.61 1027.75 1027.89 1028.03 1028.17 1028.31 1028.45 1028.56 1028.71 1028.85 1029.03 1029.33 1029.70 1030.03 1030.46 1030.96 1031.58

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

GEOTECHNICAL PROFILE - ROADWAY
SR-8 RAMP Q - STA. 12+00 TO STA. 27+00

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DESIGNER RS
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 43 TOTAL 116
SHEET P.554 TOTAL 627

SUM-077/008-11.65/00.00

MODEL: 114865_IP026 PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 2:43:52 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:33:43 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL001.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 3/16/23 END: 3/17/23

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / ASHBAUGH
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 63.4

STATION / OFFSET: 3+19, 7' LT.
ALIGNMENT: RETAINING WALL 1
ELEVATION: 1093.5 (MSL) EOB: 45.7 ft.
LAT / LONG: 41.065799, -81.504614

EXPLORATION ID B-001-0-22
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 8.0" BASE (DRILLERS DESCRIPTION)	1093.5																	
HARD, BROWN AND GRAY, **SANDY SILT**, LITTLE STONE FRAGMENTS, LITTLE CLAY, DAMP	1091.9		11 17 50/5"	-	59	SS-1	4.50	16	11	22	38	13	28	21	7	10	A-4a (3)	
DENSE, GRAY, **STONE FRAGMENTS WITH SAND**SOME SILT, TRACE CLAY, DAMP	1089.0		10 18 15	35	89	SS-2	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
VERY STIFF, GRAY, **SILT**, LITTLE SAND, LITTLE STONE FRAGMENTS, LITTLE CLAY, STONE FRAGMENTS ARE VERY WEAK SILTSTONE, DAMP	1086.5		8 10 17	29	78	SS-3	3.75	15	5	14	52	14	29	21	8	12	A-4b (6)	
	1083.0	TR	20 50/3"	-	56	SS-4	3.50	-	-	-	-	-	-	-	-	12	A-4b (V)	
SILTSTONE, GRAY, SLIGHTLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK, VERY THIN TO THICK BEDDED, ARGILLACEOUS MOTTLES FROM 35.7'-45.7', CONTAINS 1/2" CLAY SEAMS AT 27.0' AND 27.7', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY/DISTURBED/SEAMY TO DISINTIGRATED, INTACT FROM 35.7'-44.4', FAIR TO VERY GOOD SURFACE CONDITION; RQD 42%, REC 73%.			36		69	NQ2-1											CORE	
			29		62	NQ2-2											CORE	
@27.0' BECOMES ARGILLACEOUS			25		78	NQ2-3											CORE	
	1047.8	EOB	77		82	NQ2-4											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:25 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

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43231
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DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 44 TOTAL 116
SHEET P.555 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
BORING LOG FOR B-001-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:34:36 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL002.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	10.7'	15.7'	41.5/ 60	69%	21.75/60	36%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-22



Run #:	Depth		Recovery		RQD	
NQ2-2	15.7'	25.7'	74/120	62%	34.5/120	29%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.556	627

SUBSET	TOTAL
45	116

PROJECT ID: 114865

REVIEWER: CH 09/23/26

DESIGNER: DT

DESIGN AGENCY
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GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTOS FOR B-001-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:34:59 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL003.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-22



Run #:	Depth		Recovery		RQD	
NQ2-3	25.7'	35.7'	94/120	78%	30/120	25%

SUM-77/SR8-11.65/0.00 PID 114865

FOR TRACINGS
NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-22



Run #:	Depth		Recovery		RQD	
NQ2-4	35.7'	45.7'	98/120	82%	92/120	77%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.557	627

SUBSET	TOTAL
46	116

PROJECT ID: 114865

REVIEWER: CH 09/23/26

DESIGNER: DT

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COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTOS FOR B-001-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:35:21 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL004.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 3/15/23 END: 3/16/23

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 63.4

STATION / OFFSET: 4+53, 1' LT.
ALIGNMENT: RETAINING WALL 1
ELEVATION: 1090.6 (MSL) EOB: 40.8 ft.
LAT / LONG: 41.066166, -81.504561

EXPLORATION ID B-002-0-22
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
	1090.6																	
11.0" ASPHALT AND 8.0" BASE (DRILLERS DESCRIPTION)	1089.0																	
VERY DENSE, GRAY, **SANDY SILT**, LITTLE STONE FRAGMENTS, LITTLE CLAY, RELIC ROCK STRUCTURE, DAMP	1085.6		10 12 37	52	44	SS-1	-	18	8	20	42	12	NP	NP	NP	7	A-4a (4)	
SILTSTONE, GRAY, MODERATELY WEATHERED, WEAK.	1084.8	TR	25 50/2"	-	50	SS-2	-	-	-	-	-	-	-	-	-	7	Rock (V)	
SILTSTONE, GRAY, SLIGHTLY TO MODERATELY WEATHERED, SEVERELY WEATHERED FROM 10.8'-11.9', VERY WEAK TO SLIGHTLY STRONG, VERY THIN TO THICK BEDDED, CONTAINS 1/2" CLAY SEAMS AT 11.6' AND 14.8', FOSSILIFEROUS, CONTAINS ARGILLACEOUS MOTTLES FROM 26.8'-35.6', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY/DISTURBED/SEAMY TO DISINTIGRATED, INTACT FROM 28.9'-35.6', POOR TO GOOD SURFACE CONDITION; RQD 41%, REC 81%.			8		52	NQ2-1											CORE	
			13		82	NQ2-2											CORE	
			58		85	NQ2-3											CORE	
SHALE, DARK GRAY, UNWEATHERED, WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 32.0'-33.8', HIGHLY FRACTURED TO MODERATELY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO VERY GOOD SURFACE CONDITION; RQD 93%, REC 96%.	1055.0		96		98	NQ2-4											CORE	
	1049.8	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 5/31/26 11:25 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\JOINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 47 TOTAL 116
SHEET P.558 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
BORING LOG FOR B-002-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:36:08 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL005.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	5.8'	10.8'	31/60	52%	4.5/60	8%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-22



Run #:	Depth		Recovery		RQD	
NQ2-2	10.8'	20.8'	98.5/120	82%	15.5/120	13%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
T 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH 09/23/26
PROJECT ID 114865
SUBSET 48 TOTAL 116
SHEET P.559 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTOS FOR B-002-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:36:29 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL006.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-22



Run #:	Depth		Recovery		RQD	
NQ2-3	20.8'	30.8'	102/120	85%	69/120	58%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-22



Run #:	Depth		Recovery		RQD	
NQ2-4	30.8'	40.8'	117.5/120	98%	115/120	96%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH. 43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH 09/23/26
PROJECT ID 114865
SUBSET 49 TOTAL 116
SHEET P.560 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTOS FOR B-002-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:36:52 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL007.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 3/14/23 END: 3/15/23

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 63.4

STATION / OFFSET: 333+93, 48' LT.
ALIGNMENT: EX. SR-8
ELEVATION: 1063.0 (MSL) EOB: 55.5 ft.
LAT / LONG: 41.067542, -81.504370

EXPLORATION ID B-003-0-22
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 6.0" BASE (DRILLERS DESCRIPTION)	1063.0																	
	1061.5																	
MEDIUM DENSE, GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP **(FILL)**	1060.0	1	15 14 13	29	50	SS-1	-	52	17	13	14	4	NP	NP	NP	4	A-1-b (0)	
STIFF, BROWN AND GRAY, **SANDY SILT**, "AND" STONE FRAGMENTS, LITTLE CLAY, CONTAINS PLASTIC TRASH FRAGMENTS, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP **(FILL)**	1057.0	2	4 6 6	13	33	SS-2	-	36	11	17	25	11	23	15	8	10	A-4a (0)	
MEDIUM DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, CONTAINS PLASTIC TRASH FRAGMENTS, DAMP **(FILL)**	1055.0	3	6 6 6	13	50	SS-3	-	-	-	-	-	-	-	-	-	11	A-4a (V)	
HARD, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, CONTAINS PLASTIC TRASH FRAGMENTS, DAMP TO MOIST **(FILL)**	1050.0	4	7 5 6	12	22	SS-4	-	-	-	-	-	-	-	-	-	11	A-1-b (V)	
		5	3 3 5	8	22	SS-5	4.50	10	8	32	29	21	21	14	7	12	A-4a (3)	
		6	3 7 7	15	78	SS-6	4.25	-	-	-	-	-	-	-	-	16	A-4a (V)	
MEDIUM DENSE, BROWN WITH BLACK AND GRAY, **STONE FRAGMENTS WITH SAND, SILT, AND CLAY** CONTAINS CONCRETE FRAGMENTS AND IRON STAINING, MOIST **(FILL)**	1047.5	7	3 18 8	27	56	SS-7	-	-	-	-	-	-	-	-	-	16	A-2-6 (V)	
VERY STIFF TO HARD, BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL, DAMP		8	4 8 7	16	78	SS-8	4.50	5	7	22	41	25	29	17	12	17	A-6a (7)	
		9	2 5 10	16	56	SS-9	4.50	-	-	-	-	-	-	-	-	16	A-6a (V)	
		10	6 5 8	14	17	SS-10	4.25	19	9	18	33	21	29	18	11	13	A-6a (4)	
		11	4 6 9	16	56	SS-11	3.75	-	-	-	-	-	-	-	-	16	A-6a (V)	
	1035.5	12																
MEDIUM DENSE TO VERY DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, DAMP TO MOIST		13	30 50/1"	-	100	SS-12	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
@35.0'; ss-13 is slightly organic		14	5 6 5	12	56	SS-13	-	-	-	-	-	-	-	-	-	18	A-1-b (V)	
	1024.7	15																
VERY STIFF, BROWNISH GRAY AND BLACK, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL, SLIGHTLY ORGANIC, MOIST		16	6 4 3	7	100	SS-14	4.00	9	8	9	42	32	34	20	14	21	A-6a (9)	
	1019.7	17																
VERY DENSE, BROWNISH GRAY AND BLACK, **STONE FRAGMENTS WITH SAND, SILT, AND CLAY**, RELIC ROCK STRUCTURE, MOIST	1017.5	18	50	-	100	SS-15	-	-	-	-	-	-	-	-	-	17	A-2-6 (V)	
SHALE, GRAY, SLIGHTLY WEATHERED, WEAK TO SLIGHTLY STRONG, LAMINATED, FISSILE, SILTY, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 46.2'-47.5', 48.2'-48.5', AND 54.6'-54.9', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD SURFACE CONDITION; RQD 62%, REC 88%.		TR																
		19	62		88	NQ2-1											CORE	
	1007.5	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:25 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS Geotechnical & Transportation Services
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 50 TOTAL 116
SHEET: P.561 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
BORING LOG FOR B-003-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:37:46 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL008.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-003-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	45.5'	55.5'	105.5/120	88%	74/120	62%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P-562	627

SUBSET	TOTAL
51	116

PROJECT ID
114865

REVIEWER
CH 09/23/26

DESIGNER
DT

DESIGN AGENCY
ARCADIS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
ROCK CORE PHOTO FOR B-003-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:38:04 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL009.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 3/9/23 END: 3/9/23

DRILLING FIRM / OPERATOR: NEAS / J. HODGES
SAMPLING FIRM / LOGGER: NEAS / J. HODGES
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55X
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 79

STATION / OFFSET: 334+86, 90' LT.
ALIGNMENT: EX. SR-8
ELEVATION: 1033.3 (MSL) EOB: 35.5 ft.
LAT / LONG: 41.067795, -81.504522

EXPLORATION ID B-004-0-22
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)	HOLE SEALED
STIFF TO HARD, BROWN AND ORANGISH BROWN, **SILT**, SOME SAND, LITTLE CLAY, TRACE GRAVEL, IRON STAINING, DAMP	1033.3																	
			4 5 8	17	100	SS-1	1.50	1	5	19	57	18	28	19	9	19	A-4b (8)	
			3 7 9	21	100	SS-2	4.50	-	-	-	-	-	-	-	-	17	A-4b (V)	
	1026.3																	
VERY STIFF TO HARD, BROWN WITH TRACE GRAY MOTTLES, **SANDY SILT**, LITTLE TO SOME GRAVEL, LITTLE TO SOME CLAY, TRACE IRON STAINING, DAMP			4 6 8	18	100	SS-3	4.50	-	-	-	-	-	-	-	-	18	A-4a (V)	
			4 6 7	17	100	SS-4	4.50	29	16	14	27	14	27	18	9	15	A-4a (1)	
SS-5 CONTAINS A 2.25" STONE FRAGMENT			3 3 4	9	17	SS-5	3.75	-	-	-	-	-	-	-	-	18	A-4a (V)	
	1019.3																	
LOOSE, BROWN, **GRAVEL WITH SAND** LITTLE SILT, TRACE CLAY, WET		▽ 1018.3																
			1 2 4	8	100	SS-6	-	-	-	-	-	-	-	-	-	34	A-1-b (V)	
	1016.3																	
MEDIUM DENSE, GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP			2 2 8	13	39	SS-7	-	22	8	13	43	14	NP	NP	NP	14	A-4a (4)	
	1013.3	TR																
SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK TO WEAK, FISSILE.			20 30 50	105	100	SS-8	-	-	-	-	-	-	-	-	-	9	Rock (V)	
			15 50/4"	-	80	SS-9	-	-	-	-	-	-	-	-	-	6	Rock (V)	
	1007.8		50/3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	6	Rock (V)	
SHALE, GRAY, SEVERELY TO MODERATELY WEATHERED, VERY WEAK TO WEAK, LAMINATED, FISSILE, INTERBEDDED 1/8" CLAY SEAMS, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, LAMINATED, POOR TO FAIR SURFACE CONDITION: RQD 0%, REC 83%.			0		83	NQ2-1											CORE	
	997.8	EOB																

NOTES: GROUNDWATER ENCOUNTERED AT 15.0' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 50 GAL. BENTONITE GROUT

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:25 - X:\1ACTIVE PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM
DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 52 TOTAL: 116
SHEET: P.563 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
BORING LOG FOR B-004-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:38:53 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL010.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-004-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	25.5'	35.5'	99.75/120	83%	0/120	0%

SUM-77/SR8-11.65/0.00 PID 114865

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-005-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	60.9'	70.9'	109/120	91%	42/120	35%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	TOTAL
P-564	627

SUBSET	TOTAL
53	116

PROJECT ID: 114865

REVIEWER	DATE
CH	09/23/26

DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
ROCK CORE PHOTOS FOR B-004-0-22 & B-005-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:39:17 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL011.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 3/13/23 END: 3/14/23

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 63.4

STATION / OFFSET: 336+46, 58' LT.
ALIGNMENT: EX. SR-8
ELEVATION: 1054.8 (MSL) EOB: 70.9 ft.
LAT / LONG: 41.068235, -81.504410

EXPLORATION ID B-005-0-22
PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV. 1054.8	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 8.0" BASE (DRILLERS DESCRIPTION)	1053.3																	
DENSE TO VERY DENSE, GRAY BECOMING BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP @3.0'; SS-2 CONTAINS INTERBEDDED A-3 SEAMS	1050.3	1	37 50/4"	-	40	SS-1	-	33	27	16	19	5	NP	NP	NP	4	A-1-b (0)	
		2																
		3	26 19 18	39	56	SS-2	-	-	-	-	-	-	-	-	-	10	A-1-b (V)	
		4																
MEDIUM DENSE, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, CONTAINS INTERBEDDED A-3 SEAMS, DAMP	1048.8	5	10 8 10	19	78	SS-3	-	7	7	38	36	12	NP	NP	NP	11	A-4a (3)	
MEDIUM DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, DAMP	1046.8	6	8 9 14	24	22	SS-4	-	-	-	-	-	-	-	-	-	11	A-1-b (V)	
MEDIUM DENSE, BROWN, **COARSE AND FINE SAND** TRACE TO LITTLE SILT, TRACE TO LITTLE GRAVEL, TRACE CLAY, DAMP TO MOIST	1041.8	7																
		8	5 6 9	16	56	SS-5	-	-	-	-	-	-	-	-	-	11	A-3a (V)	
		9																
		10																
		11	5 8 13	22	100	SS-6	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
		12																
HARD, BROWN, **SANDY SILT**, LITTLE TO SOME CLAY, TRACE GRAVEL, DAMP		13																
		14	6 6 5	12	89	SS-7	4.50	3	6	20	49	22	23	16	7	16	A-4a (7)	
		15																
		16																
		17	7 9 11	21	100	SS-8	4.50	-	-	-	-	-	-	-	-	16	A-4a (V)	
		18																
		19	5 8 10	19	78	SS-9	4.50	2	7	23	46	22	25	17	8	15	A-4a (7)	
		20																
		21																
		22	6 9 9	19	78	SS-10	4.50	5	7	26	42	20	24	16	8	13	A-4a (5)	
		23																
		24	7 9 8	18	83	SS-11	4.50	-	-	-	-	-	-	-	-	16	A-4a (V)	
		25																
		26																
		27																
		28																
		29																
@30.0'; SS-12 CONTAINS NO INTACT SOIL FOR HP READINGS		30																
		31	10 8 10	19	89	SS-12	-	7	6	25	46	16	23	17	6	16	A-4a (5)	
		32																
	1021.5	33																
VERY STIFF, BROWNISH GRAY, **SILT**, SOME CLAY, LITTLE SAND, TRACE GRAVEL, MOIST		34																
		35																
		36	4 3 5	8	83	SS-13	3.50	0	3	12	61	24	27	19	8	21	A-4b (8)	
	1016.5	37																
VERY STIFF, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **SILT AND CLAY**, TRACE TO SOME SAND, TRACE GRAVEL, IRON STAINING, MOIST		38																
		39																
		40																
		41	5 7 9	17	89	SS-14	3.25	0	2	8	60	30	34	20	14	23	A-6a (10)	
		42																
		43																
		44																
		45																
		46	5 9 10	20	100	SS-15	2.50	3	7	14	49	27	32	18	14	19	A-6a (10)	
	1006.5	47																
VERY STIFF, ORANGISH BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, IRON STAINING, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP		48																
		49																
		50																
		51	7 11 11	23	100	SS-16	-	6	11	30	36	17	24	16	8	14	A-4a (4)	
	1001.5	52																
STIFF TO HARD, GRAY, **SILT AND CLAY**, SOME SAND, TRACE TO LITTLE GRAVEL AND STONE FRAGMENTS, MOIST		53																
		54																
		55																
		56	9 12 11	24	100	SS-17	4.50	-	-	-	-	-	-	-	-	15	A-6a (V)	
		57																
		58																
		59																

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 54 TOTAL 116
SHEET P.565 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
BORING LOG FOR B-005-0-22

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:40:18 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL012.dgn

PID: 114865 | SFN: | PROJECT: SUM-IR-77/SR8-11.65/0.00 | STATION / OFFSET: 336+46, 58' LT. | START: 3/13/23 | END: 3/14/23 | PG 2 OF 2 | B-005-0-22

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
@60.0'; SS-18 CONTAINS A RELIC ROCK STRUCTURE	994.8		19 50/5"	-	91	SS-18	2.00	-	-	-	-	-	-	-	-	16	A-6a (V)	
SHALE, GRAY, MODERATELY WEATHERED, WEAK TO SLIGHTLY STRONG, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 63.7'-64.2' AND 64.5'-64.9', HIGHLY TO MODERATELY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, FAIR TO GOOD SURFACE CONDITION; RQD 35%, REC 91%.	993.8	TR 61 62 63 64 65 66 67 68 69 70	35		91	NQ2-1											CORE	
	983.9	EOB																

FINAL TRACINGS
NOT FOR
CONSTRUCTION

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT | REVIEWER CH | 09/23/26

PROJECT ID 114865

SUBSET 55 TOTAL 116

SHEET P.566 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.770 OVER BIKE TRAIL AND ABANDONED BEACON STREET
BORING LOG FOR B-005-0-22 (CONT.)

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:41:04 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL013.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: CULVERT
PID: 114865 SFN:
START: 10/28/24 END: 10/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 2+28, 34' RT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1034.3 (MSL) EOB: 25.5 ft.
LAT / LONG: 41.067670, -81.504477

EXPLORATION ID B-021-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1034.3	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
6.0" TOPSOIL (DRILLERS DESCRIPTION)	1033.9																	
MEDIUM DENSE, DARK GRAY, **GRAVEL AND STONE FRAGMENTS WITH SAND**, TRACE CLAY, TRACE SILT, WET			3 5 6	16	72	SS-1	-	21	30	37	5	7	NP	NP	NP	19	A-1-b (0)	
	1028.8	TR																
SHALE, GRAY AND ORANGISH BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, FISSILE.			9 17 18	52	78	SS-2	-	-	-	-	-	-	-	-	-	10	Rock (V)	
			10 18 38	83	44	SS-3	-	-	-	-	-	-	-	-	-	13	Rock (V)	
			20 50/5"	-	55	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			38 50/4"	-	40	SS-5	-	-	-	-	-	-	-	-	-	10	Rock (V)	
	1018.8		50/5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	8	Rock (V)	
SHALE, DARK GRAY, MODERATELY WEATHERED, WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 16.8'-17.2', 22.9'-23.8', HIGHLY FRACTURED TO MODERATELY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, LAMINATED/SHEARED, FAIR SURFACE CONDITION; RQD 43%, REC 97%.			43		97	NQ2-1											CORE	
	1008.8	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECT\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

FINAL NOT FOR CONSTRUCTION
TRACINGS

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-021-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	15.5'	25.5'	116/120	97%	51/120	43%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
(614) 714-0299
WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH
09/23/26
PROJECT ID: 114865
SUBSET: 56 TOTAL: 116
SHEET: P-567 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG & ROCK CORE PHOTO FOR B-021-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:41:34 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL014.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 10/7/24 END: 10/7/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 0+42, 10' RT.
ALIGNMENT: RETAINING WALL 3
ELEVATION: 1034.3 (MSL) EOB: 35.5 ft.
LAT / LONG: 41.068026, -81.503908

EXPLORATION ID B-022-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1034.3	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
7.0" ASPHALT (DRILLERS DESCRIPTION)	1033.8																	
STIFF, BROWN, **SANDY SILT**, SOME GRAVEL, LITTLE CLAY, IRON STAINING, DAMP	1029.8	1 2 3 4	4 6 6	18	72	SS-1	1.50	24	17	15	31	13	26	20	6	17	A-4a (2)	
MEDIUM DENSE, BROWN, **GRAVEL WITH SAND AND SILT**, TRACE CLAY, MOIST	1022.3	5 6 7 8 9 10 11	3 5 6	16	78	SS-2	-	-	-	-	-	-	-	-	-	15	A-2-4 (V)	
			3 6 9	22	78	SS-3	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
			5 7 7	21	50	SS-4	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	
VERY STIFF, DARK GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE GRAVEL, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	1019.8	12 13 14	3 4 7	16	72	SS-5	-	15	14	15	39	17	24	16	8	13	A-4a (4)	
DENSE TO VERY DENSE, DARK GRAY, **STONE FRAGMENTS WITH SAND AND SILT**TRACE CLAY, RESIDUAL ROCK, STONE FRAGMENTS ARE VERY WEAK SHALE, DAMP	1014.3	15 16 17 18 19 20	6 9 14	34	83	SS-6	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	
			8 13 22	52	94	SS-7	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
SHALE, GRAY AND DARK GRAY, HIGHLY WEATHERED, VERY WEAK, LAMINATED, FISSILE.	1008.8	TR 21 22 23 24 25	40 50/3"	-	44	SS-8	-	-	-	-	-	-	-	-	-	14	Rock (V)	
			49 50/3"	-	100	SS-9	-	-	-	-	-	-	-	-	-	11	Rock (V)	
			50	-	50	SS-10	-	-	-	-	-	-	-	-	-	14	Rock (V)	
SHALE, DARK GRAY, SLIGHTLY WEATHERED, VERY WEAK TO WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO FAIR SURFACE CONDITION; RQD 78%, REC 100%.		26 27 28 29 30 31 32 33 34 35	78		100	NQ2-1											CORE	
@32.7'-33.1'; Qu = 390 PSI @ 2.0% STRAIN (DRY UNIT WEIGHT= 146.6 PCF)	998.8	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS Geotechnical & Environmental Services
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 57 TOTAL: 116
SHEET: P.568 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-3
BORING LOG FOR B-022-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:42:27 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL015.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-022-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	25.5'	35.5'	120/120	100%	94/120	78%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240
COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26
PROJECT ID 114865
SUBSET 58 TOTAL 116
SHEET P.569 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-3
ROCK CORE PHOTO FOR B-022-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:42:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL016.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 8/27/24 END: 8/27/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 6+58, 39' LT.
ALIGNMENT: PR. SB ENTRANCE RAMP
ELEVATION: 1043.3 (MSL) EOB: 57.6 ft.
LAT / LONG: 41.073715, -81.504701

EXPLORATION ID B-023-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1043.3	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
8.0" CONCRETE AND 10.0" BASE (DRILLERS DESCRIPTION)	1041.8																	
MEDIUM DENSE, BROWN AND LIGHT GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, DAMP	1038.8	TR	6 5 8	19	11	SS-1	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
SANDSTONE, BROWN, SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG.	1033.8		50/4"	-	75	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			50/4"	-	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
SHALE, GRAY, MODERATELY WEATHERED, WEAK.	1031.3		12 50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	
SANDSTONE BROWN AND ORANGISH BROWN AND GRAY, MODERATELY TO SLIGHTLY WEATHERED, MODERATELY STRONG, VERY FINE TO MEDIUM GRAINED, THIN TO VERY THICK BEDDED, CONTAINS SHALE INCLUSIONS AND LAMINATIONS FROM 12.6'-34.0', CONTAINS 0.5" CLAY SEAMS AT 19.1' AND 19.2', CONTAINS SIDERITE NODULES, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 43.4'-43.6', FRACTURED TO INTACT, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO FAIR SURFACE CONDITION; RQD 82%, REC 95%. @14.9'-15.3'; Qu = 5315 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 136.2 PCF)			50/1"	-	100	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			64		96	NQ2-1											CORE	
			69		93	NQ2-2											CORE	
			93		96	NQ2-3											CORE	
@44.0' BECOMES GRAY, UNWEATHERED			98		98	NQ2-4											CORE	
			88		88	NQ2-5											CORE	
	985.7	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\JOINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS Design Engineering & Technical Services
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
614.714.0299 WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH
09/23/26

PROJECT ID: 114865
SUBSET: 59 TOTAL: 116
SHEET: P.570 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
BORING LOG FOR B-023-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:43:48 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL017.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-023-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	12.6'	22.6'	115/120	96%	77/120	64%
SUM-77/SR8-11.65/0.00 PID 114865						

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-023-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	22.6'	32.6'	112/120	93%	82.5/120	69%
SUM-77/SR8-11.65/0.00 PID 114865						

FOR TRACINGS
NOT FOR
CONSTRUCTION

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER
P.571	60	114865	CH 09/23/26	DT
TOTAL 627	TOTAL 116			

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-023-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:44:12 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL018.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-023-0-24



Run #:	Depth		Recovery		RQD	
NQ2-3	32.6’	42.6’	115.5/120	96%	111.5/120	93%
SUM-77/SR8-11.65/0.00 PID 114865						

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-023-0-24



Run #:	Depth		Recovery		RQD	
NQ2-4	42.6’	52.6’	117/120	98%	117/120	98%
SUM-77/SR8-11.65/0.00 PID 114865						

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER
P.572	61	114865	CH 09/23/26	DT
TOTAL 627	TOTAL 116			

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
T 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-023-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:44:35 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL019.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-023-0-24



Run #:	Depth		Recovery		RQD	
NQ2-5	52.6'	57.6'	53/60	88%	53/60	88%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 62 TOTAL 116
SHEET P.573 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTO FOR B-023-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:44:54 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL020.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 7/10/24 END: 7/11/24

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T 2024
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 5/15/24
ENERGY RATIO (%): 71

STATION / OFFSET: 6+62, 10' RT.
ALIGNMENT: PR. SB ENTRANCE RAMP
ELEVATION: 1036.2 (MSL) EOB: 45.2 ft.
LAT / LONG: 41.073746, -81.504528

EXPLORATION ID B-024-0-24
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
BROWN, **GRAVEL WITH SAND AND SILT** TRACE CLAY, **(DRILLERS DESCRIPTION)** DAMP	1036.2																	
	1033.7	TR																
SANDSTONE BROWN AND ORANGISH BROWN AND GRAY, MODERATELY TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, VERY FINE TO MEDIUM GRAINED, THIN TO VERY THICK BEDDED, CONTAINS SHALE INCLUSIONS AND LAMINATIONS FROM 5.2'-35.0', CONTAINS 0.125"-0.5" CLAY SEAMS FROM 15.5'-24.2', CONTAINS SIDERITE NODULES, BEDDING DISCONTINUITIES: LOW TO MODERATE ANGLE, FRACTURED TO INTACT, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO FAIR SURFACE CONDITION; RQD 71%, REC 93%. @7.4'-7.8'; Qu = 1752 PSI @ 0.9% STRAIN (DRY UNIT WEIGHT= 135.0 PCF)			27 50/2"	-	25	SS-1	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			50/2"	-	200	SS-2	-	-	-	-	-	-	-	-	-	-	2	Rock (V)	
			45		77	NQ2-1												CORE
			60		99	NQ2-2												CORE
			79		98	NQ2-3												CORE
@35.2'; BECOMES GRAY, UNWEATHERED			99		99	NQ2-4												CORE
	991.0	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TEL 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26
PROJECT ID 114865
SUBSET 63 TOTAL 116
SHEET P.574 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
BORING LOG FOR B-024-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:45:51 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL021.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-024-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.2'	15.2'	92.5/120	77%	54/120	45%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-024-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	15.2'	25.2'	119/120	99%	72.5/120	60%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.575	64	114865	CH 09/23/26	DT	NEAS
TOTAL 627	TOTAL 116				2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-024-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:46:15 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL022.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-024-0-24



Run #:	Depth		Recovery		RQD	
NQ2-3	25.2'	35.2'	118/120	98%	94.5/120	79%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-024-0-24



Run #:	Depth		Recovery		RQD	
NQ2-4	35.2'	45.2'	119/120	99%	119/120	99%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.576	65	114865	CH 09/23/26	DT	NEAS
TOTAL 627	TOTAL 116				2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-024-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:46:38 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL023.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 8/27/24 END: 8/27/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 8+31, 14' LT.
ALIGNMENT: PR. SB ENTRANCE RAMP
ELEVATION: 1051.4 (MSL) EOB: 50.3 ft.
LAT / LONG: 41.074196, -81.504711

EXPLORATION ID B-025-0-24
PAGE 1 OF 1

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
8.0" CONCRETE AND 12.0" BASE (DRILLERS DESCRIPTION)	1051.4																	
	1049.7																	
HARD, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, DAMP			7 5 4	13	78	SS-1	4.50	10	13	25	35	17	23	15	8	13	A-4a (3)	
	1046.9																	
MEDIUM DENSE, BROWN, **SANDY SILT**, LITTLE GRAVEL, LITTLE CLAY, DAMP			7 8 8	24	78	SS-2	-	16	5	42	24	13	NP	NP	NP	12	A-4a (0)	
	1044.4																	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP			26 25 24	73	100	SS-3	-	-	-	-	-	-	-	-	-	10	A-1-b (V)	
	1041.4	TR	50/3"	-	67	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	
SANDSTONE, BROWN AND ORANGISH BROWN AND GRAY, UNWEATHERED TO SLIGHTLY WEATHERED, MODERATELY STRONG, VERY FINE TO MEDIUM GRAINED, THIN TO THICK BEDDED, VUGGY, CONTAINS SHALE INCLUSIONS AND LAMINATIONS FROM 10.3'-30.8', CONTAINS CONCRETIONS, CONTAINS SIDERITE NODULES, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 11.0' TO 11.7' AND 12.1'-12.5', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO FAIR SURFACE CONDITION; RQD 71%, REC 90%. @15.6'-16.0'; Qu = 4242 PSI @ 1.2% STRAIN (DRY UNIT WEIGHT= 138.0 PCF)			32		79	NQ2-1											CORE	
			78		93	NQ2-2											CORE	
			83		94	NQ2-3											CORE	
			92		95	NQ2-4											CORE	
	1001.1	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS Geotechnical & Environmental Services
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM
DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 66 TOTAL 116
SHEET: P.577 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
BORING LOG FOR B-025-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:47:33 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL024.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-025-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	10.3'	20.3'	95/120	79%	38/120	32%
SUM-77/SR8-11.65/0.00 PID 114865						

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-025-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	20.3'	30.3'	111/120	93%	93/120	78%
SUM-77/SR8-11.65/0.00 PID 114865						

SHEET P.578 TOTAL 627
SUBSET 67 TOTAL 116
PROJECT ID 114865
REVIEWER CH 09/23/26
DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240
COLUMBUS, OH. 43231
(614) 714-0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-025-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:47:57 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL025.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-025-0-24



Run #:	Depth		Recovery		RQD	
NQ2-3	30.3'	40.3'	112.5/120	94%	99/120	83%
SUM-77/SR8-11.65/0.00 PID 114865						

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-025-0-24



Run #:	Depth		Recovery		RQD	
NQ2-4	40.3'	50.3'	114/120	95%	110/120	92%
SUM-77/SR8-11.65/0.00 PID 114865						

SHEET P.579 TOTAL 627
SUBSET 68 TOTAL 116
PROJECT ID 114865
CH 09/23/26
REVIEWER DT
DESIGNER

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
T 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-025-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:48:21 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL026.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 4/16/24 END: 4/18/24

DRILLING FIRM / OPERATOR: NEAS / ASHBAUGH
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 63.4

STATION / OFFSET: 7+38, 46' RT.
ALIGNMENT: PR. SB ENTRANCE RAMP
ELEVATION: 1036.1 (MSL) EOB: 45.3 ft.
LAT / LONG: 41.073969, -81.504443

EXPLORATION ID B-026-0-24

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
VERY DENSE, BROWN AND GRAY, **COARSE AND FINE SAND**, SOME SILT, TRACE CLAY, TRACE TO LITTLE STONE FRAGMENTS, RESIDUAL ROCK, STONE FRAGMENTS ARE FRIABLE SANDSTONE, DAMP	1036.1		27 50/4"	-	60	SS-1	-	6	11	53	21	9	NP	NP	NP	8	A-3a (0)	
	1030.8	TR	50/3"	-	100	SS-2	-	-	-	-	-	-	-	-	-	9	A-3a (V)	
SANDSTONE LIGHT GRAY AND BROWN BECOMING LIGHT BROWN AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, VERY FINE TO MEDIUM GRAINED, LAMINATED TO THICK BEDDED, CONTAINS INTERBEDDED THIN SHALE LAMINATIONS, CONTAINS INTERBEDDED 1/8"-1/2" CLAY SEAMS, CONTAINS CLAY FILLED VUGS, BEDDING DISCONTINUITIES: LOW TO MODERATE ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 8.8'-9.4', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY BECOMING INTACT, POOR TO GOOD SURFACE CONDITION; RQD 62.8%, REC 94.6%. @7.3'-7.6'; Qu = 2936 PSI @ 2.8% STRAIN (DRY UNIT WEIGHT= 147.8 PCF)			27		85	NQ2-1											CORE	
@15.8'-16.1'; Qu = 6808 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 138.7 PCF)			54		98	NQ2-2											CORE	
			83		98	NQ2-3											CORE	
	990.8	EOB	87		98	NQ2-4											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. BORING OFFSET 30.0' SOUTH.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

SHEET	TOTAL
P.580	627

SUBSET	TOTAL
69	116

PROJECT ID 114865

CH 09/23/26

REVIEWER

DESIGNER DT

DESIGN AGENCY NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
BORING LOG FOR B-026-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:49:20 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL027.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-026-0-22



Run #:	Depth		Recovery		RQD	
NQ2-1	5.3'	15.3'	102/120	85%	32/120	27%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-026-0-22



Run #:	Depth		Recovery		RQD	
NQ2-2	15.3'	25.3'	117/120	98%	65.25/120	54%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.581	627

SUBSET	TOTAL
70	116

PROJECT ID
114865

REVIEWER	
CH	09/23/26

DESIGNER
DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH. 43231
TEL: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-026-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:49:43 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL028.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-026-0-22



Run #:	Depth		Recovery		RQD	
NQ2-3	25.3'	35.3'	118/120	98%	99.5/120	83%

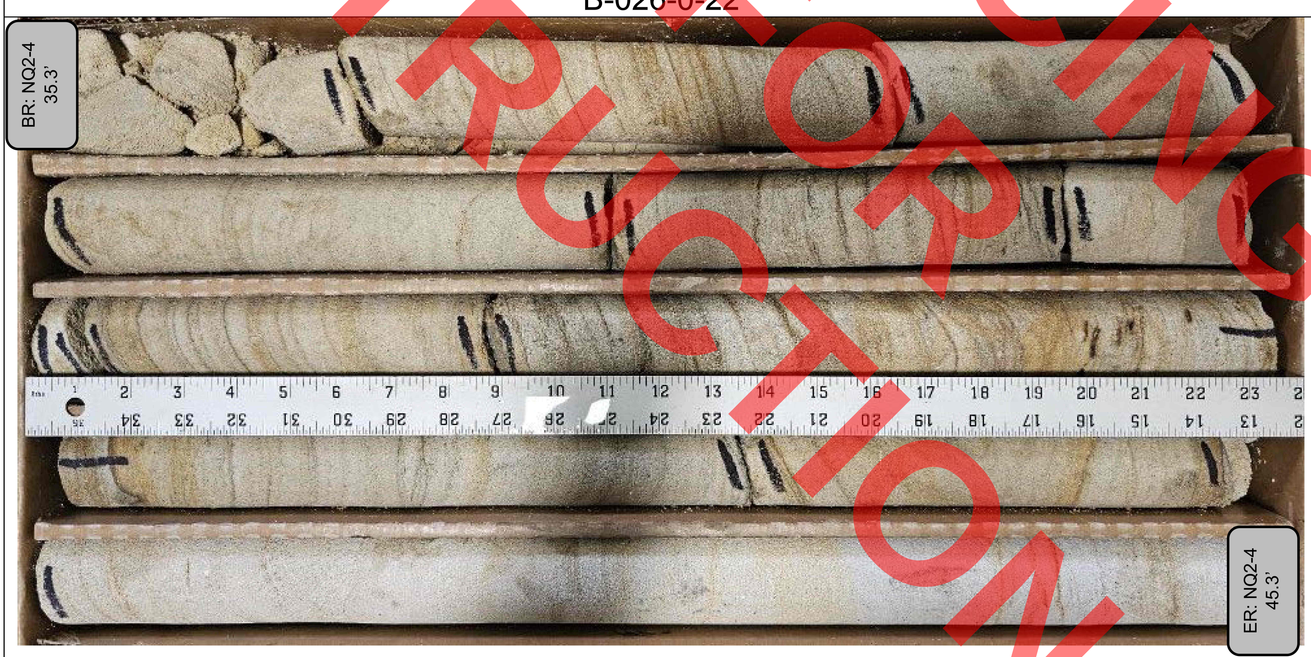
SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-026-0-22



Run #:	Depth		Recovery		RQD	
NQ2-4	35.3'	45.3'	117/120	98%	104.5/120	87%

SUM-77/SR8-11.65/0.00 PID 114865

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2800 CORPORATE EXCHANGE DR.
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COLUMBUS, OH.
43231
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DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 71 TOTAL 116
SHEET P.582 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.040 SB ENTRANCE RAMP (TO SR-8) OVER SB EXIT RAMP CD (TO IR-76)
ROCK CORE PHOTOS FOR B-026-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:50:07 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL029.dgn

STANDARD ODOT SOIL BORING LOG (8.5" X 11") - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00	DRILLING FIRM / OPERATOR: NEAS / JL	DRILL RIG: CME 55TB	STATION / OFFSET: 12+34, 17' LT.	EXPLORATION ID B-027-0-24
TYPE: BRIDGE	SAMPLING FIRM / LOGGER: NEAS / JL	HAMMER: CME AUTOMATIC	ALIGNMENT: PR. CAROL STREET	
PID: 114865 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 7/30/24	ELEVATION: 1057.1 (MSL) EOB: 25.1 ft.	PAGE 1 OF 1
START: 10/2/24 END: 10/2/24	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 89	LAT / LONG: 41.075365, -81.504645	

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
1057.1																		
8.0" CONCRETE AND 11.0" BASE (DRILLERS DESCRIPTION)	1055.5																	
STIFF TO VERY STIFF, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE TO LITTLE GRAVEL, SS-1 CONTAINS IRON STAINING, DAMP	1050.1		8 8 7	22	78	SS-1	1.50	10	11	36	30	13	23	17	6	14	A-4a (2)	
			4 4 10	21	83	SS-2	3.00	14	10	24	36	16	22	16	6	12	A-4a (3)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP	1048.7	TR	4 50/5"	-	82	SS-3	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
SANDSTONE, BROWN AND ORANGISH BROWN AND GRAY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, FRIABLE, VUGGY, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS CONCRETIONS, CONTAINS 1/8" CLAY SEAM AT 19.6', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 11.2-11.9' AND 15.8-16.9', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, VERY BLOCKY, GOOD TO POOR SURFACE CONDITION; RQD 79%, REC 97%. @14.0'-14.4'; Qu = 2600 PSI @ 1.2% STRAIN (DRY UNIT WEIGHT= 139.7 PCF)			50/1"	-	100	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			75		98	NQ2-1											CORE	
			88		95	NQ2-2											CORE	
	1032.0	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-027-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	10.1'	20.1'	117/120	98%	89.5/120	75%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P-583	627

SUBSET	TOTAL
72	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 (614) 714-0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
BORING LOG & ROCK CORE PHOTO FOR B-027-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:50:35 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL030.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-027-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	20.1'	25.1'	57/60	95%	52.5/60	87.5%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
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43231
TELE: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH 09/23/26
PROJECT ID 114865
SUBSET 73 TOTAL 116
SHEET P.584 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
ROCK CORE PHOTO FOR B-027-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:50:51 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL031.dgn

STANDARD ODOT SOIL BORING LOG (8.5" x 11") - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00	DRILLING FIRM / OPERATOR: NEAS / JL	DRILL RIG: CME 55TB	STATION / OFFSET: 13+36, 40' RT.	EXPLORATION ID B-028-0-24
TYPE: BRIDGE	SAMPLING FIRM / LOGGER: NEAS / JL	HAMMER: CME AUTOMATIC	ALIGNMENT: PR. CAROL STREET	
PID: 114865 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 7/30/24	ELEVATION: 1033.8 (MSL) EOB: 27.7 ft.	PAGE 1 OF 1
START: 9/24/24 END: 9/25/24	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 89	LAT / LONG: 41.075208, -81.504277	

MATERIAL DESCRIPTION AND NOTES	ELEV. 1033.8	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
8.0" ASPHALT AND 11.0" BASE (DRILLERS DESCRIPTION)	1032.2																	
BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP, (DRILLERS DESCRIPTION)	1031.3	TR	50/4"	-	50	SS-1	-	-	-	-	-	-	-	-	-	3	Rock (V)	
SANDSTONE, BROWN AND ORANGISH BROWN AND GRAY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, VUGGY, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS CONCRETIONS, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO POOR SURFACE CONDITION; RQD 90%, REC 97%. @6.3'-6.7'; Qu = 6587 PSI @ 0.7% STRAIN (DRY UNIT WEIGHT= 133.5 PCF)			50/2"	-	100	SS-2	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			85		96	NQ2-1											CORE	
			93		98	NQ2-2											CORE	
	1006.1	EOB	100		100	NQ2-3											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-028-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.2'	15.2'	115/120	95.83%	102/120	85%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER
P-585	627	74	116	114865	09/23/26	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
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43231
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WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
BORING LOG & ROCK CORE PHOTO FOR B-028-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:51:19 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL032.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-028-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	15.2'	25.2'	118/120	98.33%	111/120	92.5%

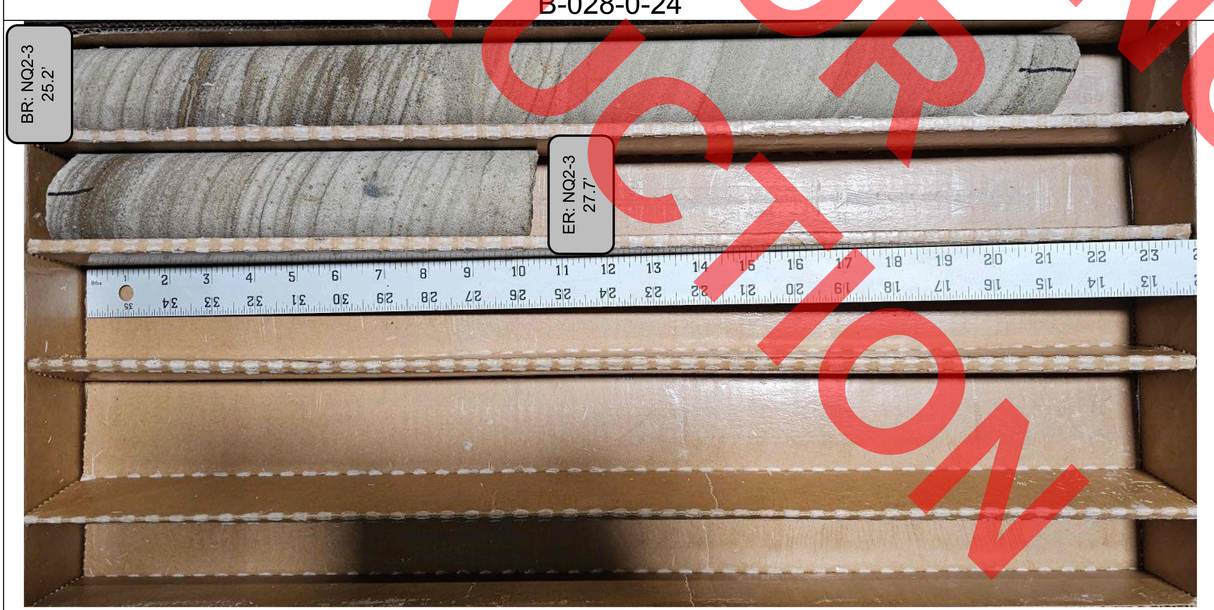
SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-028-0-24



Run #:	Depth		Recovery		RQD	
NQ2-3	25.2'	27.7'	30/30	100%	30/30	100%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.586	627

SUBSET	TOTAL
75	116

PROJECT ID: 114865

REVIEWER: CH 09/23/26

DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
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GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
ROCK CORE PHOTOS FOR B-028-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:51:41 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL033.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: BRIDGE
PID: 114865 SFN:
START: 10/3/24 END: 10/3/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 14+71, 18' RT.
ALIGNMENT: PR. CAROL STREET
ELEVATION: 1050.9 (MSL) EOB: 35.0 ft.
LAT / LONG: 41.075271, -81.503786

EXPLORATION ID B-029-0-24
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
8.0" CONCRETE AND 12.0" BASE (DRILLERS DESCRIPTION)	1050.9																	
	1049.1																	
MEDIUM DENSE, BROWN, **COARSE AND FINE SAND** TRACE TO LITTLE SILT, TRACE CLAY, TRACE GRAVEL, MOIST TO WET			10 9 7	24	78	SS-1	-	7	27	49	9	8	NP	NP	NP	11	A-3a (0)	
			4 5 5	15	83	SS-2	-	-	-	-	-	-	-	-	-	23	A-3a (V)	
			3 5 7	18	78	SS-3	-	4	31	48	11	6	NP	NP	NP	11	A-3a (0)	
	1038.9		3 4 5	13	33	SS-4	-	-	-	-	-	-	-	-	-	19	A-3a (V)	
MEDIUM DENSE TO DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**,TRACE CLAY, DAMP			4 9 10	28	67	SS-5	-	34	6	28	25	7	NP	NP	NP	12	A-2-4 (0)	
			21 15 15	45	94	SS-6	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
	1033.9																	
STIFF, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL AND STONE FRAGMENTS, DAMP			19 19 50/1"	-	38	SS-7	1.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
	1032.4	TR	50/3"	-	100	SS-8	-	-	-	-	-	-	-	-	-	8	Rock (V)	
SANDSTONE BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO THICK BEDDED, FERRIFEROUS, VUGGY, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS CONCRETIONS, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO POOR SURFACE CONDITION; RQD 72%, REC 90%. @19.4'-19.8'; Qu = 5519 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 137.5 PCF)			80		89	NQ2-1											CORE	
			57		92	NQ2-2											CORE	
	1015.9	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
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DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 76 TOTAL 116
SHEET P.587 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
BORING LOG FOR B-029-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:52:35 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL034.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-029-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	19.3'	29.3'	106.5/120	88.75%	96//120	80%
SUM-77/SR8-11.65/0.00 PID 114865						

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-029-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	29.3'	35'	63/68.4	92.11%	39/68.4	57.02%
SUM-77/SR8-11.65/0.00 PID 114865						

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	TOTAL
P-588	627

SUBSET	TOTAL
77	116

PROJECT ID
114865

REVIEWER	
CH	09/23/26

DESIGNER
DT

DESIGN AGENCY
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2800 CORPORATE EXCHANGE DR.
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GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-1.162 CARROLL STREET OVER SR-8
ROCK CORE PHOTOS FOR B-029-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:52:59 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL035.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 10/24/24 END: 10/24/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T 2024
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 5/15/24
ENERGY RATIO (%): 71

STATION / OFFSET: 6+22, 37' RT.
ALIGNMENT: RETAINING WALL 1
ELEVATION: 1071.3 (MSL) EOB: 40.5 ft.
LAT / LONG: 41.066627, -81.504407

EXPLORATION ID B-030-0-24
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
8.0" ASPHALT AND 12.5" BASE (DRILLERS DESCRIPTION)	1071.3																	
	1069.6																	
VERY DENSE, GRAY, **STONE FRAGMENTS WITH SAND** LITTLE SILT, TRACE CLAY, RESIDUAL ROCK, DAMP			17 50/3"	-	78	SS-1	-	54	15	14	11	6	NP	NP	NP	3	A-1-b (0)	
	1065.9	TR	50/5"	-	100	SS-2	-	-	-	-	-	-	-	-	-	6	A-1-b (V)	
SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK TO WEAK, FISSILE.			20 50/1"	-	43	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			40 50/4"	-	30	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			20 50/4"	-	100	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)	
	1055.8		50/5"	-	100	SS-6	-	-	-	-	-	-	-	-	-	5	Rock (V)	
SILTSTONE, GRAY AND DARK GRAY, SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, VERY THIN TO THIN BEDDED, ARGILLACEOUS, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO MODERATELY FRACTURED, NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 89%, REC 100%.	1050.0		82		92	NQ2-1											CORE	
SHALE, DARK GRAY, UNWEATHERED TO SLIGHTLY WEATHERED, WEAK, LAMINATED, FISSILE, SILTY, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 31.3'-31.8', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD SURFACE CONDITION; RQD 61%, REC 91%.			45		95	NQ2-2											CORE	
@16.3'-16.8'; Qu = 4843 PSI @ 1.1% STRAIN (DRY UNIT WEIGHT= 148.4 PCF)			82		93	NQ2-3											CORE	
	1030.8	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 78 TOTAL 116
SHEET P.589 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
BORING LOG FOR B-030-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:53:51 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL036.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-030-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	15.5'	25.5'	110/120	92%	98/120	82%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-030-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	25.5'	35.5'	113.5/120	95%	54.5/120	45%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P 590	627

SUBSET	TOTAL
79	116

PROJECT ID
114865

REVIEWER
CH 09/23/26

DESIGNER
DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
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COLUMBUS, OH.
43231
TELEPHONE 614.714.0299
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GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTOS FOR B-030-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:54:15 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL037.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-030-0-24



Run #:	Depth		Recovery		RQD	
NQ2-3	35.5'	40.5'	56/60	93%	49/60	82%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	P.591
TOTAL	627
SUBSET	80
TOTAL	116
PROJECT ID	114865
REVIEWER	CH 09/23/26
DESIGNER	DT

DESIGN AGENCY
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GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
ROCK CORE PHOTO FOR B-030-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:54:36 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL038.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00	DRILLING FIRM / OPERATOR: NEAS / JL	DRILL RIG: CME 55T 2024	STATION / OFFSET: 0+10, 33' RT.	EXPLORATION ID B-031-0-24
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / JL	HAMMER: CME AUTOMATIC	ALIGNMENT: RETAINING WALL 2	
PID: 114865 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 5/15/24	ELEVATION: 1066.7 (MSL) EOB: 26.2 ft.	PAGE 1 OF 1
START: 10/22/24 END: 10/23/24	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 71	LAT / LONG: 41.067120, -81.504408	

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
7.0" ASPHALT AND 11.0" BASE (DRILLERS DESCRIPTION)	1066.7																	
	1065.2																	
HARD, BROWN MOTTLED WITH GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, TRACE IRON STAINING, DAMP		1 2 3 4 5 6 7 8 9 10	5 5 3	9	44	SS-1	4.50	10	12	16	41	21	27	18	9	14	A-4a (5)	
			5 8 9	20	56	SS-2	4.50	5	11	25	37	22	26	17	9	12	A-4a (5)	
	1057.2		3 8 9	20	67	SS-3	4.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
STIFF TO VERY STIFF, BROWN MOTTLED WITH GRAY, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL, DAMP		11 12	2 2 2	5	50	SS-4	2.00	-	-	-	-	-	-	-	-	17	A-6a (V)	
	1054.2	TR																
SHALE, GRAY AND BROWN, SEVERELY WEATHERED, VERY WEAK, FISSILE, IRON STAINING.		13 14 15 16	25 50/3"	-	33	SS-5	-	-	-	-	-	-	-	-	-	7	Rock (V)	
	1050.5		34 43 50/2"	-	21	SS-6	-	-	-	-	-	-	-	-	-	5	Rock (V)	
SHALE, DARK GRAY, SLIGHTLY TO MODERATELY WEATHERED, WEAK TO MODERATELY STRONG, LAMINATED, FISSILE, SILTY, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO MODERATELY FRACTURED, NARROW, SLIGHTLY ROUGH, LAMINATED/SHEARED, FAIR SURFACE CONDITION; RQD 18%, REC 82%. @18.2'-18.6'; Qu = 6083 PSI @ 1.3% STRAIN (DRY UNIT WEIGHT= 156.2 PCF)	1048.2	17 18 19 20 21 22 23 24 25	70		96	NQ2-1											CORE	
SILTSTONE, GRAY AND DARK GRAY, SLIGHTLY WEATHERED, MODERATELY STRONG, THIN TO VERY THICK BEDDED, ARGILLACEOUS, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO INTACT, NARROW, SLIGHTLY ROUGH TO VERY ROUGH, INTACT, GOOD SURFACE CONDITION; RQD 86%, REC 100%.	1040.5	EOB 26																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-031-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	16.2'	26.2'	115/120	97%	95.8/120	70.4%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER
P.592	627	81	116	114865	CH 09/23/26	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG & ROCK CORE PHOTO FOR B-031-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:55:05 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL039.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 10/8/24 END: 10/8/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 3+36, 29' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1027.0 (MSL) EOB: 35.3 ft.
LAT / LONG: 41.068013, -81.504656

EXPLORATION ID B-032-0-24
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
5.0" TOPSOIL (DRILLERS DESCRIPTION)	1027.0																	
HARD, BROWN MOTTLED WITH GRAY, **SILTY CLAY**, LITTLE SAND, TRACE GRAVEL, DAMP	1026.6		5 9 12	31	72	SS-1	4.50	5	4	11	50	30	34	18	16	13	A-6b (10)	
			7 10 11	31	78	SS-2	4.50	-	-	-	-	-	-	-	-	10	A-6b (V)	
MEDIUM DENSE, BROWN, **COARSE AND FINE SAND** LITTLE SILT, LITTLE CLAY, TRACE GRAVEL, MOIST	1020.0		8 12 6	27	72	SS-3	-	-	-	-	-	-	-	-	-	18	A-3a (V)	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	1017.5		4 4 5	13	94	SS-4	4.50	6	8	18	47	21	20	15	5	13	A-4a (7)	
VERY STIFF TO HARD, GRAY, **SILT**, SOME CLAY, LITTLE SAND, TRACE GRAVEL, DAMP	1015.0		3 4 5	13	83	SS-5	4.50	-	-	-	-	-	-	-	-	13	A-4b (V)	
			3 3 5	12	78	SS-6	4.50	4	5	13	55	23	21	16	5	14	A-4b (8)	
			2 3 4	10	50	SS-7	4.00	-	-	-	-	-	-	-	-	14	A-4b (V)	
VERY STIFF, GRAY, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL AND STONE FRAGMENTS, DAMP	1007.5		2 4 5	13	67	SS-8	3.00	13	10	14	42	21	22	15	7	13	A-4a (6)	
SHALE, DARK GRAY, SLIGHTLY WEATHERED, WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO SLIGHTLY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO FAIR SURFACE CONDITION, RQD 70%, REC 100%.	1005.0 TR		50/5"	-	100	SS-9	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			50/3"	-	100	SS-10	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			70		100	NQ2-1											CORE	
	991.7 EOB																	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH
PROJECT ID: 114865
SUBSET: 82 TOTAL: 116
SHEET: P.593 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG FOR B-032-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:55:57 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL040.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-032-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	25.3'	35.3'	120/120	100%	84/120	70%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH. 43231
TELEPHONE: 614.794.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH
09/23/26
PROJECT ID 114865
SUBSET 83 TOTAL 116
SHEET P.594 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
ROCK CORE PHOTO FOR B-032-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:56:15 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL041.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 10/21/24 END: 10/22/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T 2024
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 5/15/24
ENERGY RATIO (%): 71

STATION / OFFSET: 4+80, 45' RT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1053.3 (MSL) EOB: 65.4 ft.
LAT / LONG: 41.068414, -81.504402

EXPLORATION ID B-033-0-24

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
9.0" ASPHALT AND 13.0" BASE (DRILLERS DESCRIPTION)	1053.3																	
	1051.6																	
MEDIUM DENSE, BROWN BECOMING BROWN AND MAROONISH BROWN, **SILT**, SOME SAND, LITTLE CLAY, TRACE GRAVEL, DAMP **(FILL)**			12 10 7	20	39	SS-1	-	-	-	-	-	-	-	-	-	15	A-4b (V)	
			6 12 8	24	72	SS-2	-	8	7	17	53	15	NP	NP	NP	12	A-4b (7)	
			6 12 9	25	67	SS-3	-	-	-	-	-	-	-	-	-	13	A-4b (V)	
			8 12 9	25	72	SS-4	-	-	-	-	-	-	-	-	-	14	A-4b (V)	
	1041.3																	
STIFF TO VERY STIFF, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP **(FILL)**			3 3 3	7	78	SS-5	2.00	5	8	22	44	21	24	16	8	16	A-4a (6)	
			3 6 5	13	78	SS-6	3.00	-	-	-	-	-	-	-	-	14	A-4a (V)	
	1036.3																	
STIFF TO VERY STIFF, BROWN AND BLACK, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL, CONTAINS GLASS FRAGMENTS AND IRON STAINING, SLIGHTLY ORGANIC, DAMP **(FILL)**			3 3 4	8	83	SS-7	2.50	-	-	-	-	-	-	-	-	17	A-6a (V)	
			3 3 4	8	61	SS-8	2.00	-	-	-	-	-	-	-	-	16	A-6a (V)	
	1031.3																	
MEDIUM DENSE, BROWN, **SANDY SILT**, SOME GRAVEL, TRACE CLAY, DAMP			12 11 12	27	61	SS-9	-	27	7	26	30	10	NP	NP	NP	11	A-4a (1)	
			6 5 6	13	50	SS-10	-	-	-	-	-	-	-	-	-	12	A-4a (V)	
	1026.3																	
MEDIUM STIFF TO VERY STIFF, BROWN AND GRAY, **SILT**, SOME CLAY, TRACE SAND, TRACE GRAVEL, DAMP TO MOIST			5 6 4	12	39	SS-11	2.50	-	-	-	-	-	-	-	-	13	A-4b (V)	
			8 5 2	8	44	SS-12	1.00	0	1	8	66	25	28	20	8	23	A-4b (8)	
	1020.0																	
MEDIUM DENSE, BROWN, **COARSE AND FINE SAND** LITTLE SILT, TRACE GRAVEL, TRACE CLAY, MOIST			3 5 5	12	83	SS-13	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
	1015.0																	
VERY STIFF, GRAY, **SILT**, SOME CLAY, SOME SAND, TRACE GRAVEL, DAMP			3 6 4	12	72	SS-14	4.00	5	7	14	50	24	21	15	6	14	A-4b (8)	
	1010.0																	
MEDIUM DENSE, BROWN AND GRAY, **GRAVEL WITH SAND, SILT, AND CLAY** MOIST			3 4 5	11	67	SS-15	-	-	-	-	-	-	-	-	-	17	A-2-6 (V)	
	1003.3	TR																
SHALE, DARK GRAY, MODERATELY WEATHERED, WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 55.4'-55.7', 56.4'-56.9', 62.6'-63.1', HIGHLY FRACTURED TO MODERATELY FRACTURED, NARROW, SLIGHTLY ROUGH, LAMINATED/SHEARED, FAIR SURFACE CONDITION; RQD 21%, REC 94%.			6 8 50/5"	-	53	SS-16	-	-	-	-	-	-	-	-	-	11	Rock (V)	
			50/4"	-	75	SS-17	-	-	-	-	-	-	-	-	-	10	Rock (V)	

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 84 TOTAL 116
SHEET P.595 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG FOR B-033-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:57:13 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL042.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PID: 114865 | SFN: | PROJECT: SUM-IR-77/SR8-11.65/0.00 | STATION / OFFSET: 4+80, 45' RT. | START: 10/21/24 | END: 10/22/24 | PG 3 OF 3 | B-033-0-24

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
	991.2	63																
		64																
	987.9	65 EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-033-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	55.4'	65.4'	113.5/120	94.6%	25.5/120	21.3%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.596	627

SUBSET	TOTAL
85	116

PROJECT ID: 114865

REVIEWER: CH 09/23/26

DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG & ROCK CORE PHOTO FOR B-033-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:57:36 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL043.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 10/21/24 END: 10/21/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55T 2024
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 5/15/24
ENERGY RATIO (%): 71

STATION / OFFSET: 6+32, 47' RT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1049.4 (MSL) EOB: 55.9 ft.
LAT / LONG: 41.068830, -81.504409

EXPLORATION ID B-034-0-24
PAGE 1 OF 1

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
8.0" ASPHALT AND 10.0" BASE (DRILLERS DESCRIPTION)	1049.4																	
	1047.9																	
MEDIUM DENSE, BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**,TRACE CLAY, DAMP	1044.9		15 16 7	27	67	SS-1	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
VERY STIFF, BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL, MOIST	1042.4		4 8 6	17	61	SS-2	4.00	2	5	9	38	46	29	18	11	20	A-6a (8)	
MEDIUM DENSE, BROWN, **SANDY SILT**, TRACE CLAY, TRACE GRAVEL, DAMP	1039.9		4 8 6	17	83	SS-3	-	3	9	30	48	10	NP	NP	NP	14	A-4a (5)	
SOFT TO VERY STIFF, GRAY AND BROWN, **SILT AND CLAY**, TRACE SAND, TRACE GRAVEL, MOIST TO DAMP	1029.9		7 5 4	11	83	SS-4	0.50	-	-	-	-	-	-	-	-	22	A-6a (V)	
			2 50/1"	-	43	SS-5	1.25	-	-	-	-	-	-	-	-	19	A-6a (V)	
			9 6 6	14	78	SS-6	2.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
			3 11 7	21	39	SS-7	2.00	-	-	-	-	-	-	-	-	14	A-6a (V)	
MEDIUM DENSE, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, DAMP	1027.4		6 8 8	19	83	SS-8	-	9	17	34	27	13	NP	NP	NP	12	A-4a (1)	
DENSE, BROWN, **COARSE AND FINE SAND**,LITTLE SILT, TRACE CLAY, TRACE GRAVEL, DAMP	1024.9		12 15 17	38	89	SS-9	-	-	-	-	-	-	-	-	-	9	A-3a (V)	
MEDIUM DENSE TO VERY DENSE, BROWN AND GRAY, **STONE FRAGMENTS WITH SAND AND SILT**,TRACE CLAY, DAMP	1016.1		12 34 17	60	83	SS-10	-	30	8	30	24	8	NP	NP	NP	12	A-2-4 (0)	
			16 11 17	33	83	SS-11	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
			10 11 8	22	67	SS-12	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
STIFF TO VERY STIFF, BROWN, **SANDY SILT**, SOME CLAY, TRACE GRAVEL, DAMP	1011.1	TR	3 4 10	17	67	SS-13	2.00	3	9	24	42	22	25	16	9	16	A-4a (6)	
SHALE, DARK GRAY, MODERATELY WEATHERED, WEAK, LAMINATED, FISSILE, PYRITIC, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 49.7'-50.3', HIGHLY FRACTURED TO MODERATELY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH TO SLICKENSIDED, LAMINATED/SHEARED, FAIR TO POOR SURFACE CONDITION; RQD 53%, REC 92%.			12 48 50/5"	-	94	SS-14	-	-	-	-	-	-	-	-	-	9	Rock (V)	
			30 50/4"		90	SS-15		-	-	-	-	-	-	-	-	8	Rock (V)	
			53		92	NQ2-1											CORE	
	993.5	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:26 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114885)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

SHEET	TOTAL
P.597	627

SUBSET	TOTAL
86	116

PROJECT ID: 114865
REVIEWER: CH 09/23/26
DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG FOR B-034-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:58:32 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL044.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-034-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	45.9'	55.9'	110/120	92%	64/120	53%

SUM-77/SR8-11.65/0.00 PID 114865

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
ROCK CORE PHOTO FOR B-034-0-24

SHEET	P.598
TOTAL	627
SUBSET	87
TOTAL	116
PROJECT ID	114865
REVIEWER	CH 09/23/26
DESIGNER	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:58:51 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL045.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / RW
SAMPLING FIRM / LOGGER: NEAS / RW
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 7+79, 48' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1007.1 (MSL) EOB: 20.0 ft.
LAT / LONG: 41.069225, -81.504765

EXPLORATION ID B-035-0-24
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
VERY STIFF, BROWN, ORANGISH BROWN, AND BLACK, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, SLIGHTLY ORGANIC, CONTAINS IRON STAINING, DAMP	1007.1		7 5 5	12	50	SS-1	3.75	6	13	21	36	24	33	19	14	19	A-6a (7)	
LOOSE, BROWN, **GRAVEL WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP	1004.1		1 3 2	6	17	SS-2	-	-	-	-	-	-	-	-	-	13	A-1-b (V)	
VERY STIFF, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, SOME SILT, TRACE SAND, TRACE GRAVEL, IRON STAINING, MOIST	1001.6		2 3 2	6	72	SS-3	3.00	0	4	6	29	61	52	28	24	29	A-7-6 (16)	
HARD, GRAY AND ORANGISH BROWN, **CLAY**, "AND" SILT, TRACE TO LITTLE SAND, TRACE GRAVEL, RESIDUAL ROCK, CONTAINS IRON STAINING, DAMP	999.1		2 5 10	18	56	SS-4	4.50	1	5	6	49	39	41	26	15	17	A-7-6 (10)	
	994.1		16 13 13	31	56	SS-5	4.50	-	-	-	-	-	-	-	-	10	A-7-6 (V)	
HARD, GRAY, **SILT AND CLAY**, SOME SAND, TRACE GRAVEL, SS-6, SS-7, SS-8 CONTAIN NO INTACT SOIL FOR HP READINGS, DAMP		W 993.1	7 13 28	50	56	SS-6	-	0	16	15	46	23	34	20	14	15	A-6a (8)	
			16 37 48	103	89	SS-7	-	-	-	-	-	-	-	-	-	14	A-6a (V)	
	987.1	EOB	33 37 31	82	61	SS-8	-	-	-	-	-	-	-	-	-	14	A-6a (V)	

NOTES: GROUNDWATER ENCOUNTERED AT 15.0' DURING DRILLING. HOLE DID NOT CAVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 9+20, 43' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1007.9 (MSL) EOB: 13.9 ft.
LAT / LONG: 41.069613, -81.504760

EXPLORATION ID B-036-0-24
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
8.0" CONCRETE (DRILLERS DESCRIPTION)	1007.2																	
LOOSE TO MEDIUM DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, RESEMBLES GRANULAR BASE, DAMP	1002.4		10 8 14	27	22	SS-1	-	50	22	10	14	4	NP	NP	NP	6	A-1-b (0)	
			5 4 3	8	17	SS-2	-	-	-	-	-	-	-	-	-	7	A-1-b (V)	
HARD, GRAY, **CLAY**, "AND" SILT, TRACE SAND, TRACE GRAVEL, RESIDUAL ROCK, DAMP	999.9		2 3 8	13	56	SS-3	4.50	0	3	6	37	54	46	27	19	22	A-7-6 (13)	
SHALE, GRAY, MODERATELY TO HIGHLY WEATHERED, WEAK.		TR	2 8 22	36	44	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	
			2 21 50/5"	-	65	SS-5	-	-	-	-	-	-	-	-	-	7	Rock (V)	
	994.0	EOB	50/5"	-	80	SS-6	-	-	-	-	-	-	-	-	-	6	Rock (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 13' 6". DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

SHEET	TOTAL
P.599	627

SUBSET	TOTAL
88	116

PROJECT ID: 114865
REVIEWER: CH 09/23/26
DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOGS FOR B-035-0-24 & B-036-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 3:59:41 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL046.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 10+83, 24' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1009.9 (MSL) EOB: 14.3 ft.
LAT / LONG: 41.070062, -81.504710

EXPLORATION ID B-037-0-24
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
9.0" CONCRETE (DRILLERS DESCRIPTION)	1009.1																	
STIFF TO HARD, BROWN MOTTLED WITH GRAY AND ORANGISH BROWN, **CLAY**, SOME SILT, LITTLE SAND, TRACE GRAVEL, IRON STAINING, MOIST TO DAMP		1	3 3 3	7	33	SS-1	2.00	-	-	-	-	-	-	-	-	29	A-7-6 (V)	
		2																
		3																
		4	2 4 6	12	72	SS-2	3.00	6	6	6	28	54	47	25	22	23	A-7-6 (14)	
		5																
		6																
		7	1 2 6	10	50	SS-3	4.25	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
	1000.9	8																
		TR																
SHALE, GRAY AND ORANGISH BROWN, MODERATELY TO HIGHLY WEATHERED, VERY WEAK TO WEAK.	999.4	9	2 17 31	58	44	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	
VERY STIFF, GRAY AND ORANGISH BROWN, **SILTY CLAY**, SOME SAND, TRACE GRAVEL, RESIDUAL ROCK, DAMP		10																
		11																
		12	2 6 23	35	44	SS-5	3.00	10	14	13	37	26	35	19	16	15	A-6b (8)	
	996.9	13																
SHALE, GRAY AND ORANGISH BROWN, MODERATELY TO HIGHLY WEATHERED, VERY WEAK TO WEAK.	995.6	14	2 50/3"	-	22	SS-6	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 12' 7". DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 12+27, 28' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1014.6 (MSL) EOB: 14.3 ft.
LAT / LONG: 41.070457, -81.504738

EXPLORATION ID B-038-0-24
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
9.0" CONCRETE (DRILLERS DESCRIPTION)	1014.6																	
	1013.8																	
MEDIUM DENSE TO VERY DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, RESEMBLES GRANULAR BASE, DAMP		1	17 27 19	56	44	SS-1	-	51	20	10	15	4	NP	NP	NP	6	A-1-b (0)	
		2																
		3																
		4	4 10 9	23	33	SS-2	-	-	-	-	-	-	-	-	-	7	A-1-b (V)	
	1009.1	5																
VERY STIFF, GRAY, **SILT AND CLAY**, SOME STONE FRAGMENTS, LITTLE SAND, RESIDUAL ROCK, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP		6	6 7 8	18	39	SS-3	-	34	11	9	31	15	33	20	13	9	A-6a (3)	
	1006.1	7																
		8																
		TR																
SHALE, GRAY, MODERATELY WEATHERED, VERY WEAK TO WEAK.		9	39 50/3"	-	56	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		10																
		11	7 50/3"	-	44	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		12																
		13																
	1000.3	14	9 50/4"	-	0	SS-6	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 12' 3". DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	TOTAL
P.600	627

SUBSET	TOTAL
89	116

PROJECT ID: 114865
REVIEWER: CH 09/23/26
DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOGS FOR B-037-0-24 & B-038-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:00:29 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL047.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 13+73, 19' LT.
ALIGNMENT: RETAINING WALL 2
ELEVATION: 1022.2 (MSL) EOB: 16.0 ft.
LAT / LONG: 41.070856, -81.504724

EXPLORATION ID B-039-0-24

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
9.0" CONCRETE (DRILLERS DESCRIPTION)	1022.2 / 1021.4																
MEDIUM DENSE, GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, RESEMBLES GRANULAR BASE, DAMP		8 9 6	18	17	SS-1	-	-	-	-	-	-	-	-	-	6	A-1-b (V)	
		4 6 7	16	22	SS-2	-	53	20	9	14	4	NP	NP	NP	7	A-1-b (0)	
	1016.2																
SHALE, GRAY, HIGHLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK.	TR	2 4 13	21	22	SS-3	-	-	-	-	-	-	-	-	-	7	Rock (V)	
		4 6 8	17	28	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	
		4 50/5"	-	36	SS-5	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		50/3"	-	0	SS-6	-	-	-	-	-	-	-	-	-	4	Rock (V)	
	1006.2 EOB																
AUGER REFUSAL AT 16.0'																	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 13' 2". DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865

SUBSET 90 TOTAL 116
SHEET P.601 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
BORING LOG FOR B-039-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:01:00 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL048.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 401+03, 3' LT.
ALIGNMENT: RETAINING WALL 4
ELEVATION: 1027.1 (MSL) EOB: 15.5 ft.
LAT / LONG: 41.071567, -81.504695

EXPLORATION ID B-040-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1027.1	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
9.0" CONCRETE (DRILLERS DESCRIPTION)	1026.3																	
MEDIUM DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, RESEMBLES GRANULAR BASE, DAMP			5 11 10	25	22	SS-1	-	-	-	-	-	-	-	-	-	6	A-1-b (V)	
			4 7 9	19	22	SS-2	-	48	22	10	16	4	NP	NP	NP	6	A-1-b (0)	
			10 10 10	24	28	SS-3	-	-	-	-	-	-	-	-	-	7	A-1-b (V)	
MEDIUM DENSE, GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	1019.1		4 11 5	19	28	SS-4	-	38	18	13	21	10	NP	NP	NP	7	A-2-4 (0)	
SANDSTONE, GRAY AND ORANGISH BROWN, MODERATELY WEATHERED, WEAK TO MODERATELY STRONG, IRON STAINING.	1016.1	TR	3 9 38	57	50	SS-5	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			60/2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	
AUGER REFUSAL AT 15.5'	1011.6	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 8'. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: CME 45B
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 1/24/22
ENERGY RATIO (%): 72.6

STATION / OFFSET: 402+26, 9' LT.
ALIGNMENT: RETAINING WALL 4
ELEVATION: 1032.6 (MSL) EOB: 15.5 ft.
LAT / LONG: 41.071900, -81.504772

EXPLORATION ID B-041-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1032.6	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
8.0" CONCRETE (DRILLERS DESCRIPTION)	1031.9																	
VERY STIFF, BROWN AND ORANGISH BROWN, **SANDY SILT**, LITTLE CLAY, TRACE TO LITTLE GRAVEL, IRON STAINING, DAMP			7 10 7	21	56	SS-1	3.00	16	11	27	30	16	24	16	8	11	A-4a (2)	
	1027.1		2 4 4	7	50	SS-2	2.75	7	16	31	30	16	25	16	9	15	A-4a (2)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, STONE FRAGMENTS ARE FRIABLE SANDSTONE, DAMP	1025.7	TR	24 50/5"	-	55	SS-3	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
SHALE, GRAY, HIGHLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK.			7 50/3"	-	33	SS-4	-	-	-	-	-	-	-	-	-	10	Rock (V)	
			50/5"	-	80	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)	
	1017.1		50/5"	-	0	SS-6	-	-	-	-	-	-	-	-	-	3	Rock (V)	
AUGER REFUSAL AT 15.5'		EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE CAVED AT 13'. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	TOTAL
P.602	627

SUBSET	TOTAL
91	116

PROJECT ID: 114865
REVIEWER: CH 09/23/26
DESIGNER: DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-4
BORING LOGS FOR B-040-0-24 & B-041-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:01:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL049.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/10/24 END: 9/10/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 403+60, 18' RT.
ALIGNMENT: RETAINING WALL 4
ELEVATION: 1037.0 (MSL) EOB: 20.4 ft.
LAT / LONG: 41.072273, -81.504709

EXPLORATION ID B-042-0-24
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
6.0" TOPSOIL (DRILLERS DESCRIPTION)	1037.0																	
MEDIUM DENSE TO VERY DENSE, BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, RESIDUAL SANDSTONE ROCK STRUCTURE, DAMP	1036.5		4 6 13	28	78	SS-1	-	33	13	23	22	9	NP	NP	NP	9	A-2-4 (0)	
			15 50/4"	-	90	SS-2	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
	1030.0																	
HARD, DARK GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, RESIDUAL SHALE ROCK STRUCTURE, DAMP	1027.5		16 29 31	89	44	SS-3	4.50	-	-	-	-	-	-	-	-	11	A-4a (V)	
SANDSTONE, GRAY AND BROWN AND DARK GRAY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO THIN FROM 10.4'-17.7', THIN TO THICK BEDDED FROM 17.7'-20.4', CONTAINS 1/4" CLAY SEAM AT 15.4', CONTAINS INTERBEDDED SHALE LAMINATIONS AND INCLUSIONS, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 11.4'-11.6', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO POOR SURFACE CONDITION; RQD 34%, REC 95%. @13.7'-14.1'; Qu = 5900 PSI @ 1.4% STRAIN (DRY UNIT WEIGHT= 145.1 PCF)		TR	50/4"	-	100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	
	1016.6	EOB	34		95	NQ2-1											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. BORING OFFSET 20.0' SOUTHWEST DUE TO UTILITIES.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-042-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	10.4'	20.4'	114/120	95%	41/120	34.17%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.603	627

SUBSET	TOTAL
92	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240
COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-4
BORING LOG & ROCK CORE PHOTO FOR B-042-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:02:14 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL050.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/27/24 END: 9/27/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 501+20, 12' LT.
ALIGNMENT: RETAINING WALL 5
ELEVATION: 1038.8 (MSL) EOB: 17.9 ft.
LAT / LONG: 41.072750, -81.504473

EXPLORATION ID B-043-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1038.8	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
8.0" ASPHALT AND 10.0" BASE (DRILLERS DESCRIPTION)	1037.3																	
DENSE, BROWN, **COARSE AND FINE SAND**, LITTLE SILT, TRACE CLAY, TRACE GRAVEL, IRON STAINING, DAMP	1034.3		11 13 20	49	61	SS-1	-	2	7	65	17	9	NP	NP	NP	10	A-3a (0)	
HARD, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE STONE FRAGMENTS, RESIDUAL ROCK, CONTAINS NO INTACT SOIL FOR HP READINGS, STONE FRAGMENTS ARE FRIABLE SANDSTONE, DAMP	1032.3	TR	24 18 34	77	83	SS-2	-	5	13	37	29	16	25	19	6	10	A-4a (2)	
INTERBEDDED SANDSTONE (85%) AND SHALE (15%), VERY THICK BEDDED FROM 7.9'-11.9', VERY THIN TO MEDIUM BEDDED FROM 11.9'-17.9', CONTAINS SHALE INCLUSIONS, CONTAINS INTERBEDDED CLAY SEAMS, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO INTACT, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY, GOOD TO POOR SURFACE CONDITION, RQD 68%, REC. 99%; **SANDSTONE**, BROWN AND GRAY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED; **SHALE**, DARK GRAY, MODERATELY WEATHERED, WEAK, FISSILE. @8.9'-9.3'; Qu = 6775 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 131.4 PCF)	1020.9	EOB	50/4"	-	100	SS-3	-	-	-	-	-	-	-	-	-	9	Rock (V)	
			68		99	NQ2-1											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-043-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	7.9'	17.9'	119/120	99.17%	82/120	68.33%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM
DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 93 TOTAL: 116
SHEET: P.604 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-5
BORING LOG & ROCK CORE PHOTO FOR B-043-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:02:40 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL051.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/25/24 END: 9/25/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 502+23, 2' LT.
ALIGNMENT: RETAINING WALL 5
ELEVATION: 1038.5 (MSL) EOB: 15.1 ft.
LAT / LONG: 41.073034, -81.504437

EXPLORATION ID B-044-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1038.5	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
8.0" ASPHALT AND 10.0" BASE (DRILLERS DESCRIPTION)	1037.0																	
VERY DENSE, BROWN, **COARSE AND FINE SAND**, SOME STONE FRAGMENTS, LITTLE SILT, TRACE CLAY, RESIDUAL ROCK, DAMP	1035.5	TR	32 50/2"	-	63	SS-1	-	24	18	36	16	6	NP	NP	NP	5	A-3a (0)	
INTERBEDDED SANDSTONE (82%) AND SHALE (18%), CONTAINS A 0.5" CLAY SEAM AT 11.9', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 9.1'-9.7', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY, FAIR TO POOR SURFACE CONDITION, RQD 78%, REC. 97%; **SANDSTONE**, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO MEDIUM BEDDED; **SHALE**, DARK GRAY, MODERATELY WEATHERED, WEAK, FISSILE. @7.8'-8.2'; Qu = 6400 PSI @ 1.4% STRAIN (DRY UNIT WEIGHT= 143.4 PCF)			50/1"	-	100	SS-2	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			78		97	NQ2-1											CORE	
	1023.4	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-044-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.1'	15.1'	116/120	97%	93/120	78%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS Ohio's Engineering & Technical Resource
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TEL: 614.714.0299 WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 94 TOTAL: 116
SHEET: P.605 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-5
BORING LOG & ROCK CORE PHOTO FOR B-044-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:03:05 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL052.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/6/24 END: 9/6/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 600+57, 7' LT.
ALIGNMENT: RETAINING WALL 6
ELEVATION: 1044.4 (MSL) EOB: 26.1 ft.
LAT / LONG: 41.072442, -81.504931

EXPLORATION ID B-045-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1044.4	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
5.0" TOPSOIL (DRILLERS DESCRIPTION)	1044.0																	
MEDIUM DENSE TO VERY DENSE, BROWN AND LIGHT BROWN, **COARSE AND FINE SAND**, LITTLE TO SOME SILT, LITTLE GRAVEL AND STONE FRAGMENTS, TRACE TO LITTLE CLAY, SS-1 CONTAINS ROOT HAIRS, SS-1 AND SS-2 CONTAIN IRON STAINING, DAMP			4 5 4	13	72	SS-1	-	16	29	30	16	9	NP	NP	NP	5	A-3a (0)	
			7 8 12	30	72	SS-2	-	-	-	-	-	-	-	-	-	7	A-3a (V)	
			5 10 15	37	67	SS-3	-	-	-	-	-	-	-	-	-	9	A-3a (V)	
			4 7 7	21	78	SS-4	-	16	17	32	23	12	NP	NP	NP	13	A-3a (0)	
			4 36 7	64	78	SS-5	-	-	-	-	-	-	-	-	-	7	A-3a (V)	
	1029.9																	
VERY DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, RESIDUAL ROCK, DAMP	1028.4	TR	18 45 50/1"	-	100	SS-6	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
SANDSTONE, ORANGISH BROWN AND GRAY, SLIGHTLY TO MODERATELY WEATHERED, STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO THIN BEDDED, FERRIFEROUS, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO MODERATELY FRACTURED, NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 78%, REC 100%.	1024.0		69		99	NQ2-1											CORE	
SHALE, DARK GRAY, MODERATELY WEATHERED, WEAK, LAMINATED, FISSILE, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED, NARROW, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, FAIR SURFACE CONDITION; RQD 0%, REC 92%.	1022.9																	
SANDSTONE, ORANGISH BROWN AND GRAY, SLIGHTLY WEATHERED, STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, FERRIFEROUS, SLIGHTLY VUGGY, CONTAINS TRACE SHALE LAMINATIONS AND INCLUSIONS, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY, GOOD SURFACE CONDITION; RQD 76%, REC 100%.	1018.3	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. BORING OFFSET 25.0' NORTHWEST.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2.0 BAGS HOLE PLUG, SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-045-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	16.1'	26.1'	119/120	99%	82.5/120	69%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.606	627

SUBSET	TOTAL
95	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-6
BORING LOG & ROCK CORE PHOTO FOR B-045-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:03:34 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL053.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/5/24 END: 9/5/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 602+09, 1' RT.
ALIGNMENT: RETAINING WALL 6
ELEVATION: 1049.9 (MSL) EOB: 27.6 ft.
LAT / LONG: 41.072861, -81.504915

EXPLORATION ID B-046-0-24
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
5.0" TOPSOIL (DRILLERS DESCRIPTION)	1049.5																	
VERY STIFF, BROWN AND DARK BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, CONTAINS ROOT HAIRS, DAMP	1045.4		2 1 1	3	67	SS-1	3.00	5	7	32	40	16	23	17	6	16	A-4a (4)	
MEDIUM DENSE, LIGHT BROWN, **FINE SAND**, LITTLE COARSE SAND, LITTLE SILT, TRACE CLAY, TRACE GRAVEL, DAMP	1042.9		2 3 5	12	78	SS-2	-	-	-	-	-	-	-	-	-	5	A-3 (V)	
LOOSE TO MEDIUM DENSE, BROWN, **SANDY SILT**, LITTLE GRAVEL AND STONE FRAMENTS, LITTLE CLAY, SS-4 CONTAINS IRON STAINING, DAMP TO MOIST	1037.9		3 3 4	10	72	SS-3	-	11	8	24	46	11	NP	NP	NP	13	A-4a (4)	
			2 4 4	12	89	SS-4	-	-	-	-	-	-	-	-	-	15	A-4a (V)	
VERY DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, DAMP	1035.4		18 18 20	56	89	SS-5	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
DENSE, BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	1032.9		17 13 19	47	83	SS-6	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO THIN BEDDED, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 20.9'-21.4' AND 25.5'-26.3', HIGHLY FRACTURED TO MODERATELY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, VERY BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 55%, REC 90%. @19.4'-19.8': Qu = 5536 PSI @ 1.3% STRAIN (DRY UNIT WEIGHT= 137.1 PCF)	1022.3	TR EOB	50/1" 55	-	100 90	SS-7 NQ2-1	-	-	-	-	-	-	-	-	4	Rock (V) CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 3.0 BAGS HOLE PLUG, SHOVELED SOIL CUTTINGS

FINAL TRACINGS NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-046-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	17.6'	27.6'	107.5/120	89.58%	66/120	55%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER
P.607	627	96	116	114865	CH 09/23/26	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-6
BORING LOG & ROCK CORE PHOTO FOR B-046-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:04:02 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL054.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/5/24 END: 9/5/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 603+45, 2' LT.
ALIGNMENT: RETAINING WALL 6
ELEVATION: 1048.4 (MSL) EOB: 25.1 ft.
LAT / LONG: 41.073232, -81.504892

EXPLORATION ID B-047-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1048.4	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
5.0" TOPSOIL (DRILLERS DESCRIPTION)	1048.0																	
MEDIUM DENSE, BROWN AND ORANGISH BROWN BECOMING BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE TO LITTLE CLAY, DAMP			3 3 5	12	72	SS-1	-	15	15	37	20	13	24	15	9	12	A-2-4 (0)	
			4 6 5	16	39	SS-2	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)	
			4 7 13	30	89	SS-3	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, RESIDUAL ROCK, DAMP	1038.9		5 32 37	102	50	SS-4	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
	1035.4	TR	3 50/4"	-	90	SS-5	-	-	-	-	-	-	-	-	-	11	A-1-b (V)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO THICK BEDDED, FERRIFEROUS, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS CONCRETIONS, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 20.5'-21.0', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH, BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 71%, REC 98%.			50/1"	-	100	SS-6	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			71		98	NQ2-1											CORE	
	1023.3	EOB																

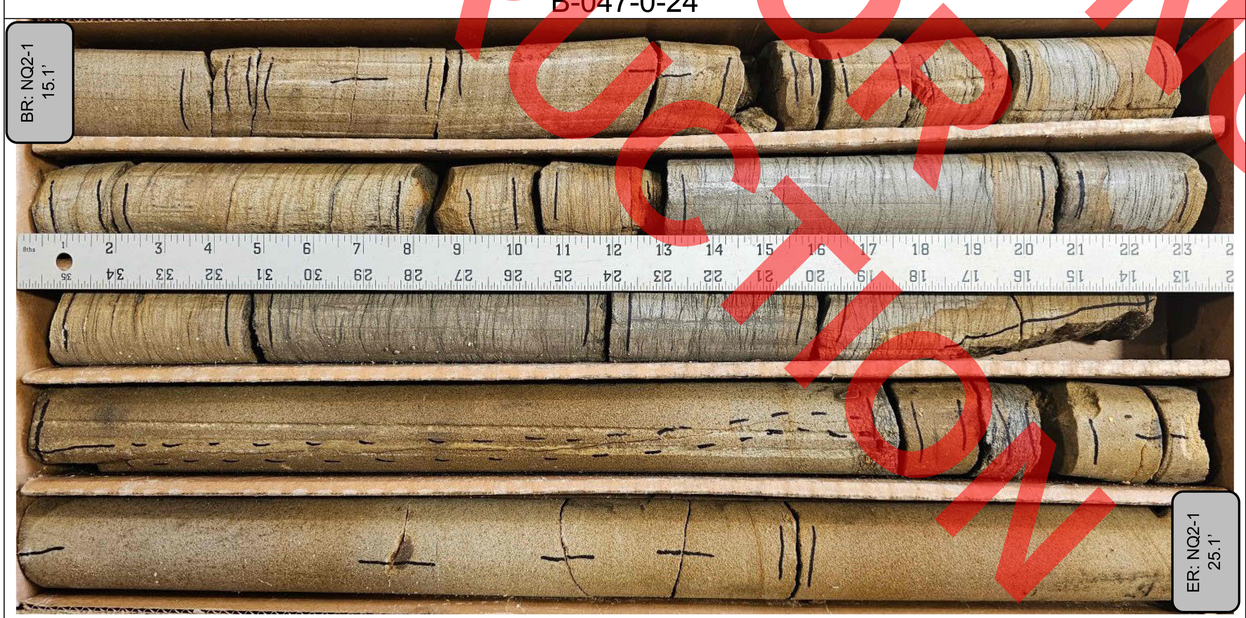
NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 2.0 BAGS HOLE PLUG, SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-047-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	15.1'	25.1'	117/120	98%	85/120	71%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.608	627

SUBSET	TOTAL
97	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-6
BORING LOG & ROCK CORE PHOTO FOR B-047-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:04:29 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/26/24 END: 9/26/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 700+77, 10' RT.
ALIGNMENT: RETAINING WALL 7
ELEVATION: 1037.8 (MSL) EOB: 16.2 ft.
LAT / LONG: 41.073139, -81.504590

EXPLORATION ID B-048-0-24
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
5.0" ASPHALT (DRILLERS DESCRIPTION)	1037.4																	
VERY DENSE, BROWN, **COARSE AND FINE SAND**, SOME SILT, TRACE CLAY, TRACE GRAVEL, DAMP	1033.3		20 25 24	73	61	SS-1	-	1	15	54	21	9	NP	NP	NP	7	A-3a (0)	
VERY DENSE, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, RESIDUAL ROCK, DAMP	1031.6	TR	35 20 50/2"	-	86	SS-2	-	6	13	44	23	14	NP	NP	NP	9	A-4a (0)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, CONTAINS SHALE SEAMS, LAMINATIONS, AND INCLUSIONS, VUGGY, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 10.1'-11.1', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO FAIR SURFACE CONDITION; RQD 72%, REC 97%. @11.6'-12.0'; Qu = 6916 PSI @ 1.1% STRAIN (7.361 Gpa Elastic Modulus) (DRY UNIT WEIGHT= 144.1 PCF)	1021.6	EOB	72		97	NQ2-1											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 1.0 BAG HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-048-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	6.2'	16.2'	116/120	97%	86/120	72%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 98 TOTAL 116
SHEET P.609 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-7
BORING LOG & ROCK CORE PHOTO FOR B-048-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:04:56 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL056.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00	DRILLING FIRM / OPERATOR: NEAS / JL	DRILL RIG: CME 55TB	STATION / OFFSET: 702+13, 1' RT.
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / JL	HAMMER: CME AUTOMATIC	ALIGNMENT: RETAINING WALL 7
PID: 114865 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 7/30/24	ELEVATION: 1040.4 (MSL) EOB: 15.1 ft.
START: 9/26/24 END: 6/26/24	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 89	LAT / LONG: 41.073513, -81.504566

EXPLORATION ID B-049-0-24

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1040.4	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
8.0" CONCRETE AND 12.0" BASE (DRILLERS DESCRIPTION)	1038.7																	
VERY DENSE, LIGHT BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	1037.4	TR	13 50/3"	-	22	SS-1	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
SANDSTONE, ORANGISH BROWN AND BROWN AND GRAY, MODERATELY TO HIGHLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, CONTAINS A SHALE SEAM FROM 9.4'-9.9', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 5.2'-6.3' AND 14.3'-15.1', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, FAIR TO POOR SURFACE CONDITION; RQD 48%, REC 96%. @8.6'-9.0'; Qu = 6540 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 133.0 PCF)			60/2"	-	100	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			48		96	NQ2-1											CORE	
	1025.3	EOB																

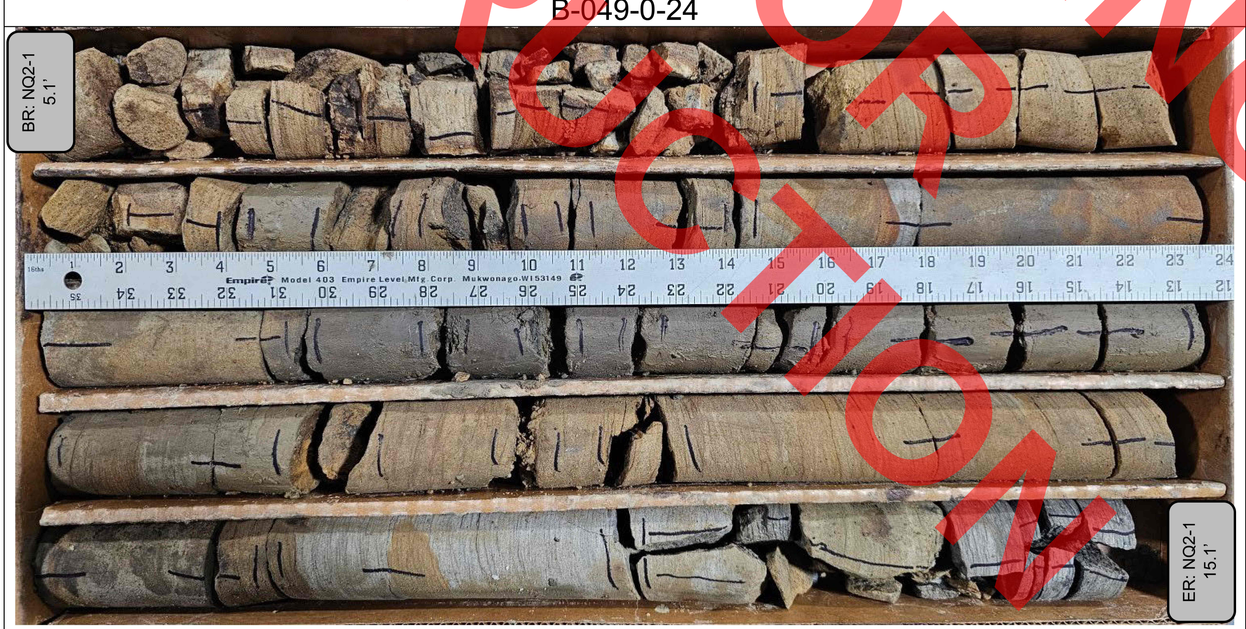
NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-049-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.1'	15.1'	115/120	95.83%	57/120	47.5%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR., SUITE 240, COLUMBUS, OH, 43231
TEL:614.714.0299
WWW.NEASINC.COM

DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 99 TOTAL: 116
SHEET: P.610 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-7
BORING LOG & ROCK CORE PHOTO FOR B-049-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:05:22 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL057.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/4/24 END: 9/4/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 800+19, 21' RT.
ALIGNMENT: RETAINING WALL 8
ELEVATION: 1038.1 (MSL) EOB: 18.2 ft.
LAT / LONG: 41.073021, -81.504721

EXPLORATION ID B-050-0-24
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
8.0" CONCRETE AND 11.0" BASE (DRILLERS DESCRIPTION)	1038.1																	
	1036.5																	
HARD, BROWN, **SANDY SILT**, LITTLE CLAY, LITTLE STONE FRAGMENTS, STONE FRAGMENTS ARE FRIABLE SANDSTONE, RESIDUAL ROCK, CONTAINS TRACE IRON STAINING, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	1033.6		18 22 26	71	83	SS-1	-	13	18	20	34	15	25	17	8	8	A-4a (3)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, STONE FRAGMENTS ARE FRIABLE SANDSTONE, RESIDUAL ROCK, DAMP	1031.1		8 12 30	62	78	SS-2	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, STONE FRAGMENTS ARE FRIABLE SANDSTONE, RESIDUAL ROCK, DAMP	1030.1	TR	24 50/2"	-	63	SS-3	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, STRONG, FINE TO MEDIUM GRAINED, THIN TO MEDIUM BEDDED, FERRIFEROUS, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 8.4-8.7', 9.0-9.6', AND 10.5-11.0', FRACTURED TO SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH, VERY BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 67%, REC 97%.	1019.9	EOB	67		97	NQ2-1											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. BORING OFFSET 18.0' EAST.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-050-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	8.2'	18.2'	116.25/120	97%	80/120	67%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER
P.611 TOTAL 627	100 TOTAL 116	114865	CH 09/23/26	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-8
BORING LOG & ROCK CORE PHOTO FOR B-050-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:05:48 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL058.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/28/24 END: 8/28/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 801+39, 10' RT.
ALIGNMENT: RETAINING WALL 8
ELEVATION: 1038.7 (MSL) EOB: 18.0 ft.
LAT / LONG: 41.073349, -81.504716

EXPLORATION ID B-051-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1038.7	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
8.0" CONCRETE (DRILLERS DESCRIPTION)	1038.0																	
VERY DENSE, GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	1033.7	TR	19 50/2"	-	63	SS-1	-	45	11	16	18	10	NP	NP	NP	6	A-2-4 (0)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO MEDIUM BEDDED, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, VUGGY, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH, BLOCKY, GOOD TO FAIR SURFACE CONDITION; RQD 46%, REC 96%.			33 50/2"	-	88	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
@11.3'-11.7'; Qu = 4620 PSI @ 1.1% STRAIN (DRY UNIT WEIGHT= 139.6 PCF)			50/3"	-	100	SS-3	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			46		96	NQ2-1											CORE	
	1020.7	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-051-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	8'	18'	115.5/120	96.25%	55/120	45.83%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.612	627

SUBSET	TOTAL
101	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 (614) 714-0299 WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-8
BORING LOG & ROCK CORE PHOTO FOR B-051-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:06:14 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL059.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/29/24 END: 8/29/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 1000+22, 37' LT.
ALIGNMENT: RETAINING WALL 9
ELEVATION: 1053.7 (MSL) EOB: 25.1 ft.
LAT / LONG: 41.074433, -81.504727

EXPLORATION ID B-052-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1053.7	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
8.0" CONCRETE (DRILLERS DESCRIPTION)	1053.0																	
STIFF, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, TRACE IRON STAINING, DAMP	1049.2		3 3 5	12	78	SS-1	1.50	4	12	26	41	17	22	15	7	15	A-4a (5)	
DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, DAMP	1041.7		3 13 10	34	72	SS-2	-	-	-	-	-	-	-	-	-	10	A-1-b (V)	
			8 18 16	50	94	SS-3	-	50	2	32	9	7	NP	NP	NP	10	A-1-b (0)	
			14 14 10	36	67	SS-4	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
VERY DENSE, LIGHT BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, TRACE IRON STAINING, DAMP	1040.7	TR	7 50/5"	-	82	SS-5	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, VUGGY, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS 1/2" CLAY SEAMS AT 17.7' AND 24.4', BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 16.5'-16.9', HIGHLY FRACTURED TO SLIGHTLY FRACTURED, NARROW TO OPEN, SLIGHTLY ROUGH, BLOCKY, GOOD TO POOR SURFACE CONDITION; RQD 53%, REC 95%. @17.9'-18.3'; Qu = 2331 PSI @ 1.2% STRAIN (DRY UNIT WEIGHT= 137.6 PCF)	1028.6	EOB	50/1" 53	-	100 95	SS-6 NQ2-1	-	-	-	-	-	-	-	-	-	9 CORE	Rock (V)	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-052-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	15.1'	25.1'	114/120	95%	63/120	52.5%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.613	627

SUBSET	TOTAL
102	116

PROJECT ID 114865

REVIEWER CH 09/23/26

DESIGNER DT

DESIGN AGENCY NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TELEPHONE 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-9
BORING LOG & ROCK CORE PHOTO FOR B-052-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:06:43 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL060.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00	DRILLING FIRM / OPERATOR: NEAS / JL	DRILL RIG: CME 55TB	STATION / OFFSET: 1000+28, 23' RT.	EXPLORATION ID B-053-0-24
TYPE: RETAINING WALL	SAMPLING FIRM / LOGGER: NEAS / JL	HAMMER: CME AUTOMATIC	ALIGNMENT: RETAINING WALL 9	
PID: 114865 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 7/30/24	ELEVATION: 1034.5 (MSL) EOB: 15.2 ft.	PAGE 1 OF 1
START: 9/9/24 END: 9/9/24	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 89	LAT / LONG: 41.074434, -81.504509	

MATERIAL DESCRIPTION AND NOTES	ELEV. 1034.5	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
6.0" TOPSOIL (DRILLERS DESCRIPTION)	1034.0																	
VERY DENSE, BROWN AND BROWNISH GRAY, **COARSE AND FINE SAND**, LITTLE SILT, LITTLE GRAVEL, TRACE CLAY, DAMP	1031.5	TR	9 50/4"	-	80	SS-1	-	11	7	60	15	7	NP	NP	NP	9	A-3a (0)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO MEDIUM BEDDED, VUGGY, FERRIFEROUS, CONTAINS SHALE INCLUSIONS AND LAMINATIONS, BEDDING DISCONTINUITIES: LOW ANGLE, JOINT DISCONTINUITIES: HIGH ANGLE FROM 5.7'-5.9' AND 14.1'-14.4', FRACTURED TO SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH, BLOCKY/DISTURBED/SEAMY, FAIR TO POOR SURFACE CONDITION; RQD 83%, REC 98% @6.2'-6.6'; Qu = 4942 PSI @ 1.0% STRAIN (DRY UNIT WEIGHT= 135.4 PCF)			60/2"	-	100	SS-2	-	-	-	-	-	-	-	-	-	6	Rock (V)	
			83		98	NQ2-1											CORE	
	1019.3	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 1 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-053-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.2'	15.2'	118/120	98.33%	100/120	83.33%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET P.614	SUBSET 103	PROJECT ID 114865	REVIEWER CH 09/23/26	DESIGNER DT	DESIGN AGENCY NEAS	GEOTECHNICAL PROFILE - ROADWAY RETAINING WALL RW-9 BORING LOG & ROCK CORE PHOTO FOR B-053-0-24	
TOTAL 627	TOTAL 116				2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM		

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:07:08 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL061.dgn

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 8/29/24 END: 8/29/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 1001+29, 31' RT.
ALIGNMENT: RETAINING WALL 9
ELEVATION: 1056.2 (MSL) EOB: 30.1 ft.
LAT / LONG: 41.074829, -81.504710

EXPLORATION ID B-054-0-24
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
8.0" CONCRETE (DRILLERS DESCRIPTION)	1055.5																	
MEDIUM DENSE, BROWN, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, TRACE IRON STAINING, DAMP	1056.2		6 4 9	19	61	SS-1	-	-	-	-	-	-	-	-	-	14	A-4a (V)	
			2 5 11	24	72	SS-2	-	8	9	31	38	14	NP	NP	NP	11	A-4a (3)	
VERY DENSE, BROWN, **SANDY SILT**, LITTLE STONE FRAGMENTS, LITTLE CLAY, DAMP	1049.2		4 7 33	59	72	SS-3	-	18	6	36	26	14	NP	NP	NP	11	A-4a (1)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, MODERATELY TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, VERY FINE TO MEDIUM GRAINED, LAMINATED TO MEDIUM BEDDED, CONTAINS SHALE LAMINATIONS AND INCLUSIONS, CONTAINS CONCRETIONS, VUGGY, CONTAINS 1/8" CLAY SEAM AT 24.6', BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO SLIGHTLY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH, BLOCKY, GOOD TO POOR SURFACE CONDITION; RQD 59%, REC 97%.	1046.2 TR		27 50/5"	-	109	SS-4	-	-	-	-	-	-	-	-	-	12	Rock (V)	
			50/4"	-	100	SS-5	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			50/1"	-	100	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	
@16.4'-16.8'; Qu = 4874 PSI @ 1.4% STRAIN (DRY UNIT WEIGHT= 138.0 PCF)			46		95	NQ2-1											CORE	
			85		100	NQ2-2											CORE	
	1026.1 EOB																	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 5/31/26 11:27 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER
P.615 / TOTAL 627	104 / TOTAL 116	114865	CH 09/23/26	DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-9
BORING LOG FOR B-054-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:08:02 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL062.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-054-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	15.1'	25.1'	114.5/120	95.42%	55.5/120	46.25%

SUM-77/SR8-11.65/0.00 PID 114865

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-054-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	25.1'	30.1'	60/60	100%	51/60	85%

SUM-77/SR8-11.65/0.00 PID 114865

SHEET	TOTAL
P.616	627

SUBSET	TOTAL
105	116

PROJECT ID
114865

CH	REVIEWER
09/23/26	

DESIGNER
DT

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-9
ROCK CORE PHOTOS FOR B-054-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:08:26 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL063.dgn

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/31/26 11:19 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/24/24 END: 9/24/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 1100+49, 15' RT.
ALIGNMENT: RETAINING WALL 10
ELEVATION: 1034.4 (MSL) EOB: 20.1 ft.
LAT / LONG: 41.075531, -81.504438

EXPLORATION ID B-055-0-24
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
8.0" ASPHALT AND 10.0" BASE (DRILLERS DESCRIPTION)	1034.4																	
	1032.9																	
BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP, **(DRILLERS DESCRIPTION)**	1031.9	TR	50/2"	-	100	SS-1	-	-	-	-	-	-	-	-	-	3	Rock (V)	
SANDSTONE, BROWN AND GRAY AND ORANGISH BROWN, SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO COARSE GRAINED, LAMINATED TO MEDIUM BEDDED, CONTAINS SHALE LAMINATIONS AND INCLUSIONS FROM 7.0'-8.0', BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO SLIGHTLY FRACTURED, NARROW TO OPEN, SLIGHTLY ROUGH, BLOCKY TO INTACT, GOOD TO FAIR SURFACE CONDITION; RQD 92%, REC 98%. @6.5'-6.9'; Qu = 5520 PSI @ 0.9% STRAIN (DRY UNIT WEIGHT= 132.9 PCF)			50/1"	-	100	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			90		98	NQ2-1											CORE	
			97		97	NQ2-2											CORE	
	1014.3	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL - TRACINGS NOT FOR CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-055-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.1'	15.1'	118/120	98%	108/120	90%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 614.714.0299 WWW.NEASINC.COM
DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 106 TOTAL: 116
SHEET: P.617 TOTAL: 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
BORING LOG & ROCK CORE PHOTO FOR B-055-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:08:54 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL064.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-055-0-24



`Run #:	Depth		Recovery		RQD	
NQ2-2	15.1'	20.1'	58/60	97%	58/60	97%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH 09/23/26
PROJECT ID 114865
SUBSET 107 TOTAL 116
SHEET P.618 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
ROCK CORE PHOTO FOR B-055-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:09:12 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/4/24 END: 9/4/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 1101+91, 51' LT.
ALIGNMENT: RETAINING WALL 10
ELEVATION: 1060.6 (MSL) EOB: 35.1 ft.
LAT / LONG: 41.075930, -81.504659

EXPLORATION ID
B-056-0-24

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
8.0" CONCRETE AND 10.0" BASE (DRILLERS DESCRIPTION)	1060.6																	
	1059.1																	
MEDIUM DENSE, BROWN AND ORANGISH BROWN BECOMING BROWN, **SANDY SILT**, TRACE TO LITTLE CLAY, TRACE TO LITTLE GRAVEL AND/OR STONE FRAGMENTS, DAMP TO MOIST			3 5 7	18	72	SS-1	-	-	-	-	-	-	-	-	-	16	A-4a (V)	
			4 5 4	13	94	SS-2	-	10	16	28	35	11	NP	NP	NP	13	A-4a (2)	
			3 4 6	15	89	SS-3	-	-	-	-	-	-	-	-	-	17	A-4a (V)	
	1051.1																	
VERY STIFF, BROWN, **SANDY SILT**, SOME CLAY, LITTLE GRAVEL, DAMP			4 9 9	27	94	SS-4	3.50	15	4	15	36	30	27	18	9	17	A-4a (6)	
	1048.6																	
MEDIUM DENSE TO DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**TRACE CLAY, DAMP TO MOIST			4 6 5	16	50	SS-5	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
			9 14 17	46	94	SS-6	-	-	-	-	-	-	-	-	-	10	A-2-4 (V)	
			6 6 6	18	56	SS-7	-	-	-	-	-	-	-	-	-	12	A-2-4 (V)	
	1041.1	TR																
SANDSTONE LIGHT BROWN AND MAROONISH BROWN, UNWEATHERED TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO VERY THICK BEDDED, CONTAINS CONCRETIONS, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO INTACT, NARROW, SLIGHTLY ROUGH, INTACT, GOOD SURFACE CONDITION; RQD 72%, REC 98%.			50/1" - - / 100			SS-8	-	-	-	-	-	-	-	-	-	6	Rock (V)	
			73		97	NQ2-1											CORE	
			69		100	NQ2-2											CORE	
	1025.5	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; SHOVELED SOIL CUTTINGS

FINAL TRACINGS
NOT FOR CONSTRUCTION

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 5/31/26 11:27 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-0.00.GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26

PROJECT ID 114865
SUBSET 108 TOTAL 116
SHEET P.619 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
BORING LOG FOR B-056-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:10:06 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL066.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-056-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	20.1'	30.1'	116/120	97%	87.5/120	73%
SUM-77/SR8-11.65/0.00 PID 114865						

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-056-0-24



Run #:	Depth		Recovery		RQD	
NQ2-2	30.1'	35.1'	60/60	100%	41.5/60	69%
SUM-77/SR8-11.65/0.00 PID 114865						

FINAL TRACINGS
NOT FOR
CONSTRUCTION

SHEET	SUBSET	PROJECT ID	CH	REVIEWER	DESIGNER	DESIGN AGENCY
P.620 / TOTAL 627	109 / TOTAL 116	114865	09/23/26	DT		NEAS

2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
ROCK CORE PHOTOS FOR B-056-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:10:32 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL067.dgn

STANDARD ODOT SOIL BORING LOG (8.5" X 11") - OH_DOT.GDT - 5/31/26 11:20 - X:\1ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77-SR8-11.65-0.00 (114865)\GINT FILES\SUM-77-SR8-11.65-

PROJECT: SUM-IR-77/SR8-11.65/0.00
TYPE: RETAINING WALL
PID: 114865 SFN:
START: 9/23/24 END: 9/23/24

DRILLING FIRM / OPERATOR: NEAS / JL
SAMPLING FIRM / LOGGER: NEAS / JL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT / NQ2

DRILL RIG: CME 55TB
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 7/30/24
ENERGY RATIO (%): 89

STATION / OFFSET: 1103+45, 12' RT.
ALIGNMENT: RETAINING WALL 10
ELEVATION: 1039.3 (MSL) EOB: 20.1 ft.
LAT / LONG: 41.076345, -81.504404

EXPLORATION ID B-057-0-24
PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1039.3	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
7.0" ASPHALT AND 11.0" BASE (DRILLERS DESCRIPTION)	1037.8																	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, TRACE CLAY, DAMP	1034.8		16 37 36	108	50	SS-1	-	26	19	31	17	7	NP	NP	NP	7	A-2-4 (0)	
SANDSTONE, BROWN AND LIGHT BROWN, UNWEATHERED TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, THIN TO MEDIUM BEDDED, CONTAINS SIDERITE INCLUSIONS, BEDDING DISCONTINUITIES: LOW ANGLE, FRACTURED TO SLIGHTLY FRACTURED, NARROW TO TIGHT, SLIGHTLY ROUGH, INTACT TO BLOCKY, GOOD SURFACE CONDITION; RQD 90%, REC 97%. @6.7'-7.1'; Qu = 5541 PSI @ 1.1% STRAIN (DRY UNIT WEIGHT= 133.5 PCF)	1019.2	TR EOB	50/1"	-	100	SS-2	-	-	-	-	-	-	-	-	-	2	Rock (V)	
			85		96	NQ2-1											CORE	
			100		100	NQ2-2											CORE	

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. DRILLED AS STAKED.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2.0 BAGS HOLE PLUG; PLACED SOIL CUTTINGS

FINAL - TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-057-0-24



Run #:	Depth		Recovery		RQD	
NQ2-1	5.1'	15.1'	115/120	96%	102/120	85%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY: NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231 (614) 714-0299 WWW.NEASINC.COM
DESIGNER: DT
REVIEWER: CH 09/23/26
PROJECT ID: 114865
SUBSET: 110 TOTAL 116
SHEET: P.621 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
BORING LOG & ROCK CORE PHOTO FOR B-057-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:10:59 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL068.dgn

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-057-0-24



`Run #:	Depth		Recovery		RQD	
NQ2-1	15.1'	20.1'	60/60	100%	60/60	100%

SUM-77/SR8-11.65/0.00 PID 114865

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH 09/23/26
PROJECT ID 114865
SUBSET 111 TOTAL 116
SHEET P.622 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-10
ROCK CORE PHOTO FOR B-057-0-24

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:11:16 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
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GB-001-0-99
STA. 5+53, 96' LT

Client: ODOT | Project: SUM - 8 - 0087 | Job No. 9921-3077.00

LOG OF: Boring GB-1 | Location: Station 45+53, 95.8' Left | Date Drilled: 12/9/99

WATER OBSERVATIONS:
Water seepage at: 8.5'
Water level at completion: 8.5' (prior to coring)

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press	Hand Penetrometer (tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0	1023.4						Topsoil - 18"						
1.5	1021.9	5 3 8 7		1									
5		1 2 6 11		2		1.25	Medium dense brown SANDY SILT (A-4a), trace gravel; damp to moist.	7	22	---	33	29	9
5.5	1017.9	6 5 5 12		3			Loose to medium dense brown COARSE AND FINE SAND (A-3a), some silty clay, somer gravel; damp.						
8.0	1015.4	1 11 23 12		4		2.25	Very stiff brown SILT AND CLAY (A-6a), trace gravel; wet. (Decomposed SHALE)						
10		49 50/3 10		5			Gray weathered SHALE.						
10.5	1012.9	48 50/2 8		6									
15		50/4 4		7									
18.0	1005.4	Core 120"	Rec 120"	RQD 88%			Soft to moderately hard gray SHALE; thin bedded; weathered; broken.						
20													
25	998.4												

STANDARD PENETRATION (N) — Blows per foot: 10 20 30 40; 50+; 50+

Moisture Content - % — PL X Natural X LL; 10 20 30 40

GB-002-0-99
STA. 6+54, 99' LT

Client: ODOT | Project: SUM - 8 - 0087 | Job No. 9921-3077.00

LOG OF: Boring GB-2 | Location: Station 46+54, 98.9' Left | Date Drilled: 12/9/99

WATER OBSERVATIONS:
Water seepage at: None
Water level at completion: ---

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press	Hand Penetrometer (tsf)	DESCRIPTION	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0	1023.5						Topsoil - 15"						
1.3	1022.2	3 4 8 9		1		---	FILL: Medium dense brown SANDY SILT (A-4a); damp.	6	18	---	35	28	13
3.0	1020.5	50/1	0				Began coring at 3.0'.						
5		Core 60"	Rec 18"	RQD 13%			FILL: Cored through apparent random fill. Recovered material consisted of SHALE, SANDSTONE, CONCRETE fragments and gravel. Loss believed to be due to washing away of soil matrix.						
8.0	1015.5	Core 60"	Rec 23"	RQD 22%			Soft to moderately hard gray SHALE; thin bedded; moderately weathered to weathered; broken.						
10													
15		Core 60"	Rec 54"	RQD 70%									
18.0	1005.5						Bottom of Boring - 18.0'						
20													
25													

STANDARD PENETRATION (N) — Blows per foot: 10 20 30 40; 50+

Moisture Content - % — PL X Natural X LL; 10 20 30 40

FINAL TRACINGS
NOT FOR
CONSTRUCTION

GEOTECHNICAL PROFILE - ROADWAY
BRIDGE NO. SUM-8-0.987 SB EXIT RAMP CD (TO IR-76) OVER EXCHANGE STREET
HISTORIC BORING LOGS FOR GB-001-0-99 & GB-002-0-99

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TEL: 614.714.0299
WWW.NEASINC.COM

DESIGNER DT | REVIEWER CH | PROJECT ID 114865 | SUBSET 112 TOTAL 116 | SHEET P.623 TOTAL 627 | 09/23/26

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:12:06 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL070.dgn

PROJECT: INTERSTATE 76/77
TYPE:
PID: 102329 SFN:
START: 7/10/20 END: 7/10/20

DRILLING FIRM / OPERATOR: DLZ-AD / BEAHR
SAMPLING FIRM / LOGGER: DLZ / MORGAL
DRILLING METHOD: 3.25" HSA
SAMPLING METHOD: SPT

DRILL RIG: '18 CME 55-TATV-265
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 4/26/18
ENERGY RATIO (%): 90*

STATION / OFFSET: 4329+57, 94' LT.
ALIGNMENT: RETAINING WALL 1
ELEVATION: 1093.2 (MSL) EOB: 50.0 ft.
LAT / LONG: 41.064805, -81.504724

EXPLORATION ID E3-003-0-20
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)	SO4 ppm	HOLE SEALED
UNCONTROLLED FILL, 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.	1092.2																		
STIFF TO VERY STIFF, BROWN, **SANDY SILT**, TRACE SAND, CONTAINS ROOTHAIRS, DAMP			6 12 17	44	89	SS-1	-	5	7	18	49	21	24	15	9	8	A-4a (7)	220	
			4 5 16	32	83	SS-2	-	-	-	-	-	-	-	-	-	14	A-4a (V)	-	
	1087.2	TR																	
SANDSTONE, LIGHT BROWN, MODERATELY TO HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO THIN BEDDED, FRIABLE.			8 21 22	65	78	SS-3	-	54	4	26	-	16 -	-	-	-	6	Rock (V)	-	
			30 35 26	92	94	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	-	
			50/5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/5"	-	60	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	1077.2																		
SHALE, GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED.			17 20 24	66	78	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			21 21 30	77	94	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/5"	-	40	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/4"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/5"	-	60	SS-11	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/2"	-	100	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/2"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			37 50/4"	-	80	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			36 50/5"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/5"	-	80	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/1"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	1043.2	EOB																	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT LOG W/ SULFATES (11 X 17) - OH DOT.GDT - 9/24/25 14:14 - P:\OHDOT_V3\WORKSETS\114865\400-ENGINEERING\GEOTECHNICAL\BASEMAPS\GINTUSED FILES 02042024\STRUCTURE BORINGS\RW1\1822-1016-00 I-76_77 EL ROBINSON (11-25-2020 TNS).GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER
CH 09/23/26
PROJECT ID 114865
SUBSET 113 TOTAL 116
SHEET P.624 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
HISTORIC BORING LOG FOR E3-003-0-20

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:12:57 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL071.dgn

PROJECT: INTERSTATE 76/77
TYPE:
PID: 102329 SFN:
START: 7/9/20 END: 7/9/20

DRILLING FIRM / OPERATOR: DLZ-AD / BEAHR
SAMPLING FIRM / LOGGER: DLZ / MORGAL
DRILLING METHOD: 3.25" HSA / NQ2
SAMPLING METHOD: SPT

DRILL RIG: '18 CME 55-TATV-265
HAMMER: CME AUTOMATIC
CALIBRATION DATE: 4/26/18
ENERGY RATIO (%): 90*

STATION / OFFSET: 4330+72, 89' LT.
ALIGNMENT: RETAINING WALL 1
ELEVATION: 1098.3 (MSL) EOB: 50.0 ft.
LAT / LONG: 41.065216, -81.504644

EXPLORATION ID E3-004-0-20
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)	SO4 ppm	HOLE SEALED
UNCONTROLLED FILL, 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.	1098.3																		
STIFF TO VERY STIFF, BROWN, **SANDY SILT**, TRACE GRAVEL, TRACE SAND, CONTAINS ROOTHAIRS, DAMP	1097.3		6 17 16	50	61	SS-1	-	10	11	16	37	26	26	16	10	10	A-4a (6)	160	
			5 16 17	50	67	SS-2	-	-	-	-	-	-	-	-	-	9	A-4a (V)	-	
			5 11 12	35	83	SS-3	-	11	9	18	45	17	29	21	8	14	A-4a (5)	-	
VERY STIFF, GREYISH BROWN, **SILT**, DAMP	1089.8		7 39 50/4"	-	100	SS-4	-	4	6	12	58	20	29	21	8	10	A-4b (8)	-	
SHALE, GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1087.3	TR	17 50/5"	-	82	SS-5	-	-	-	-	-	-	-	-	-	9	Rock (V)	-	
			15 50/4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	-	
SHALE, BROWN, DECOMPOSED WEATHERED, VERY WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED; RQD 0%, REC 41%.	1083.3			-	RC-1 NQ2-RC-1		-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
SHALE, GREYISH BROWN, DECOMPOSED WEATHERED, VERY WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED, ARGILLACEOUS; RQD 1%, REC 88%.	1082.3			-	RC-2 NQ2-RC-2		-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
SHALE, GREYISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, THIN BEDDED; RQD 0%, REC 100%.	1075.3			-	RC-3 NQ2-RC-3		-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
SHALE, GREYISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, THIN BEDDED; RQD 0%, REC 39%.	1072.3			-	RC-4 NQ2-RC-4		-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
SHALE, GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1062.3		50/5"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/3"	-	67	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
			50/3"	-	67	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
		EOB	50/2"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	-	
	1048.3																		

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

FINAL TRACINGS NOT FOR CONSTRUCTION

STANDARD ODOT LOG W/ SULFATES (11 X 17) - OH DOT.GDT - 9/24/25 14:14 - P:\OHDOT_V3\WORKSETS\114865\400-ENGINEERING\GEOTECHNICAL\BASEMAPS\GINTUSED FILES 02042024\STRUCTURE BORINGS\RW1\1822-1016-00 I-76_77 EL ROBINSON (11-25-2020 TNS).GPJ

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
614.714.0299
WWW.NEASINC.COM

DESIGNER DT
REVIEWER CH
09/23/26
PROJECT ID 114865
SUBSET 114 TOTAL 116
SHEET P.625 TOTAL 627

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-1
HISTORIC BORING LOG FOR E3-004-0-20

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:13:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL072.dgn

PROJECT: INTERSTATE 76/77 | DRILLING FIRM / OPERATOR: DLZ-AD / BEAHR | DRILL RIG: '18 CME 55-TATV-265 | STATION / OFFSET: 333+51, 52' LT. | EXPLORATION ID B2-001-0-20
TYPE: ROADWAY | SAMPLING FIRM / LOGGER: DLZ / MORGAL | HAMMER: CME AUTOMATIC | ALIGNMENT:
PID: 102329 SFN: | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 4/26/18 | ELEVATION: 1064.1 (MSL) EOB: 40.0 ft. | PAGE 1 OF 2
START: 7/15/20 END: 7/15/20 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 95.2 | COORD: 511889.9690 N, 2242981.6090 E

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)	HOLE SEALED
PAVEMENT AND BASE, 8" ASPHALT 4" GRANULAR BASE	1063.1																	
STIFF, BROWN, **SANDY SILT**, LITTLE FINE SAND, TRACE GRAVEL, DAMP	1060.6		5 9 10	30	89	SS-1	-	8	8	23	37	24	25	17	8	11	A-4a (5)	
MEDIUM DENSE, LIGHT TAN BROWN, **FINE SAND**, SOME GRAVEL, LITTLE SILT, DAMP	1055.6		2 8 13	33	78	SS-2	-	-	-	-	-	-	-	-	-	5	A-3 (V)	
			2 2 4	10	33	SS-3	-	-	-	-	-	-	-	-	-	13	A-3 (V)	
MEDIUM STIFF, BROWN, **SANDY SILT**, LITTLE FINE SAND, TRACE GRAVEL, SAND LENSES, DAMP	1050.6		3 4 5	14	83	SS-4	-	4	13	31	27	25	24	14	10	12	A-4a (3)	
			2 3 7	16	72	SS-5	-	-	-	-	-	-	-	-	-	10	A-4a (V)	
MEDIUM STIFF, BROWN, **SANDY SILT**, LITTLE TO SOME FINE SAND, DAMP	1048.1		4 6 7	21	56	SS-6	-	5	8	30	42	15	22	16	6	14	A-4a (4)	
STIFF, BROWN, **SILT AND CLAY**, TRACE SAND, TRACE GRAVEL, QUARTZITE FRAGMENTS, DAMP	1045.6		4 10 9	30	94	SS-7	-	6	3	12	51	28	30	18	12	18	A-6a (9)	
VERY STIFF, BROWN, **SILT AND CLAY**, LITTLE GRAVEL, TRACE SAND, DAMP	1043.1		3 4 4	13	83	SS-8	-	6	7	20	40	27	29	18	11	14	A-6a (7)	
STIFF, BROWN, **SILT AND CLAY**, TRACE SAND, CONTAINS ROOT HAIRS, DAMP	1040.6		3 4 6	16	83	SS-9	-	-	-	-	-	-	-	-	-	17	A-6a (V)	
STIFF, GREENISH GREY, **SILT AND CLAY**, CONTAINS SHALE FRAGMENTS AND GRAVEL, DAMP	1035.6		6 7 7	22	72	SS-10	-	-	-	-	-	-	-	-	-	11	A-6a (V)	
			3 3 5	13	72	SS-11	-	-	-	-	-	-	-	-	-	16	A-6a (V)	
			30 50/4"	-	100	SS-12	-	-	-	-	-	-	-	-	-	10	UCF (V)	

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/16/24 11:29 - P:\22-0033 (113208-114865 SUM-77 SR8-11.650.00 & SUM-77SR8-9.650.00)\113208-114865\ADMIN\CONTRACTS\SL

PID: 102329 SFN: PROJECT: INTERSTATE 76/77 STATION / OFFSET: 333+51, 52' LT. START: 7/15/20 END: 7/15/20 PG 2 OF 2 B2-001-0-20

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)	HOLE SEALED
VERY DENSE, BLACK, **UNCONTROLLED FILL**, CONTAINS COAL, SLAG, BRICK, DARK GREY CLAY, DAMP *(continued)*	1033.1																	
MEDIUM DENSE, BLACK, **COARSE AND FINE SAND**, LITTLE SILT, TRACE GRAVEL, DAMP TO MOIST		W	3 4 4	13	83	SS-13	-	11	23	56	4	6	-	-	-	18	A-3a (V)	
			3 4 4	13	61	SS-14	-	-	-	-	-	-	-	-	-	16	A-3a (V)	
	1025.6		2 3 5	13	56	SS-15	-	-	-	-	-	-	-	-	-	18	A-3a (V)	
VERY DENSE, BLACK, **UNCONTROLLED FILL**, CONTAINS SLAG, DAMP	1024.1	EOB	1 3 50/0"	-	25	SS-16	-	-	-	-	-	-	-	-	-	18	UCF (V)	

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT

FINAL TRACINGS NOT FOR CONSTRUCTION

SHEET	TOTAL
P.626	627

SUBSET	TOTAL
115	116

PROJECT ID 114865

CH REVIEWER 09/23/26

DESIGNER DT

DESIGN AGENCY NEAS
2800 CORPORATE EXCHANGE DR. SUITE 240 COLUMBUS, OH. 43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
RETAINING WALL RW-2
HISTORIC BORING LOG FOR B2-001-0-20

MODEL: Sheet_SurvFt PAPERSIZE: 34x22 (in.) DATE: 9/23/2026 TIME: 4:14:35 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_PenC.tbl USER: WORKSPACE: OHDOTCEv2_10.12 WORKSET: 400_CAD PRODUCT: OpenRoadsDesigner 10.12.02.4
pw:\\arcadis-us-pw.bentley.com:arcadis-us-01\Documents\01 Active Projects\30149976\400_CAD\403-Engineering_NEAS\Geotechnical\Sheets\114865_ZL073.dgn

STANDARD ODOT SOIL BORING LOG (8.5" X 11") - OH DOT.SDT - 8/6/26 12:48 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\SUM-77 SR-8 CCTV BORING\GINT FILES\SUM-77_SR-8_CCTV.GP.

PROJECT: SUM-77 SR-8 CCTV	DRILLING FIRM / OPERATOR: NEAS INC. / J. HODGES	DRILL RIG: CME 55X	STATION / OFFSET: 354+07, 110' RT.	EXPLORATION ID B-058-0-26
TYPE: LIGHT TOWER	SAMPLING FIRM / LOGGER: NEAS INC. / J. HODGES	HAMMER: CME AUTOMATIC	ALIGNMENT: SR-8	
PID: SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 3/25/26	ELEVATION: 1036.3 (MSL) EOB: 20.5 ft.	PAGE 1 OF 1
START: 5/27/26 END: 5/27/26	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 83	LAT / LONG: 41.073072, -81.503844	

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)	HOLE SEALED
DENSE, BROWN, **GRAVEL AND STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, DAMP	1036.3		13 17 13	42	100	SS-1	-	38	19	21	16	6	NP	NP	NP	8	A-1-b (0)	
MEDIUM DENSE, BROWN, **GRAVEL**, SOME SAND, TRACE SILT, TRACE CLAY, MOIST	1031.8		4 6 7	18	100	SS-2	-	68	11	10	8	3	NP	NP	NP	6	A-1-a (0)	
VERY DENSE, BROWNISH GRAY, **COARSE AND FINE SAND**, LITTLE STONE FRAGMENTS, LITTLE SILT, TRACE CLAY, RESIDUAL SOIL, DAMP	1029.3		8 50/5"	-	82	SS-3	-	-	-	-	-	-	-	-	-	7	A-3a (V)	
SANDSTONE, GRAY, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG.	1027.9	TR	50	-	83	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	
INTERBEDDED SANDSTONE (62%) AND SHALE (38%), CONTAINS LAMINATIONS AND INCLUSIONS OF SHALE, BEDDING DISCONTINUITIES: LOW ANGLE, HIGHLY FRACTURED TO MODERATELY FRACTURED, OPEN TO NARROW, SLIGHTLY ROUGH TO VERY ROUGH, BLOCKY/DISTURBED/SEAMY, GOOD TO FAIR SURFACE CONDITION, RQD 26%, REC. 96%; **SANDSTONE**, LIGHT GRAY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY STRONG, FINE TO MEDIUM GRAINED, LAMINATED TO VERY THIN BEDDED; **SHALE**, DARK GRAY, MODERATELY WEATHERED, VERY WEAK TO WEAK.	1025.8		26		96	NQ2-1											CORE	
	1015.8	EOB																

NOTES: GROUNDWATER NOT ENCOUNTERED DURING DRILLING. HOLE DID NOT CAVE. BORING OFFSET 17.0' WEST (3.6' EAST OF PAVEMENT, IN FRONT OF WRONG WAY ROAD SIGN).
ABANDONMENT METHODS, MATERIALS, QUANTITIES: PUMPED 50.0 GAL. BENTONITE GROUT; POURED 2.0 BAGS HOLE PLUG

FINAL TRACINGS
NOT FOR
CONSTRUCTION

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-058-0-26



Run #:	Depth		Recovery		RQD	
NQ2-1	10.5'	20.5'	115/120	96%	31/120	26%

SUM-77 SR-8 CCTV

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER
P.627	627	116	116	114865	CH 09/23/26	RS

DESIGN AGENCY
NEAS
2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OH.
43231
TELEPHONE: 614.714.0299
WWW.NEASINC.COM

GEOTECHNICAL PROFILE - ROADWAY
LIGHT TOWER
BORING LOG & ROCK CORE PHOTOS FOR B-058-0-26