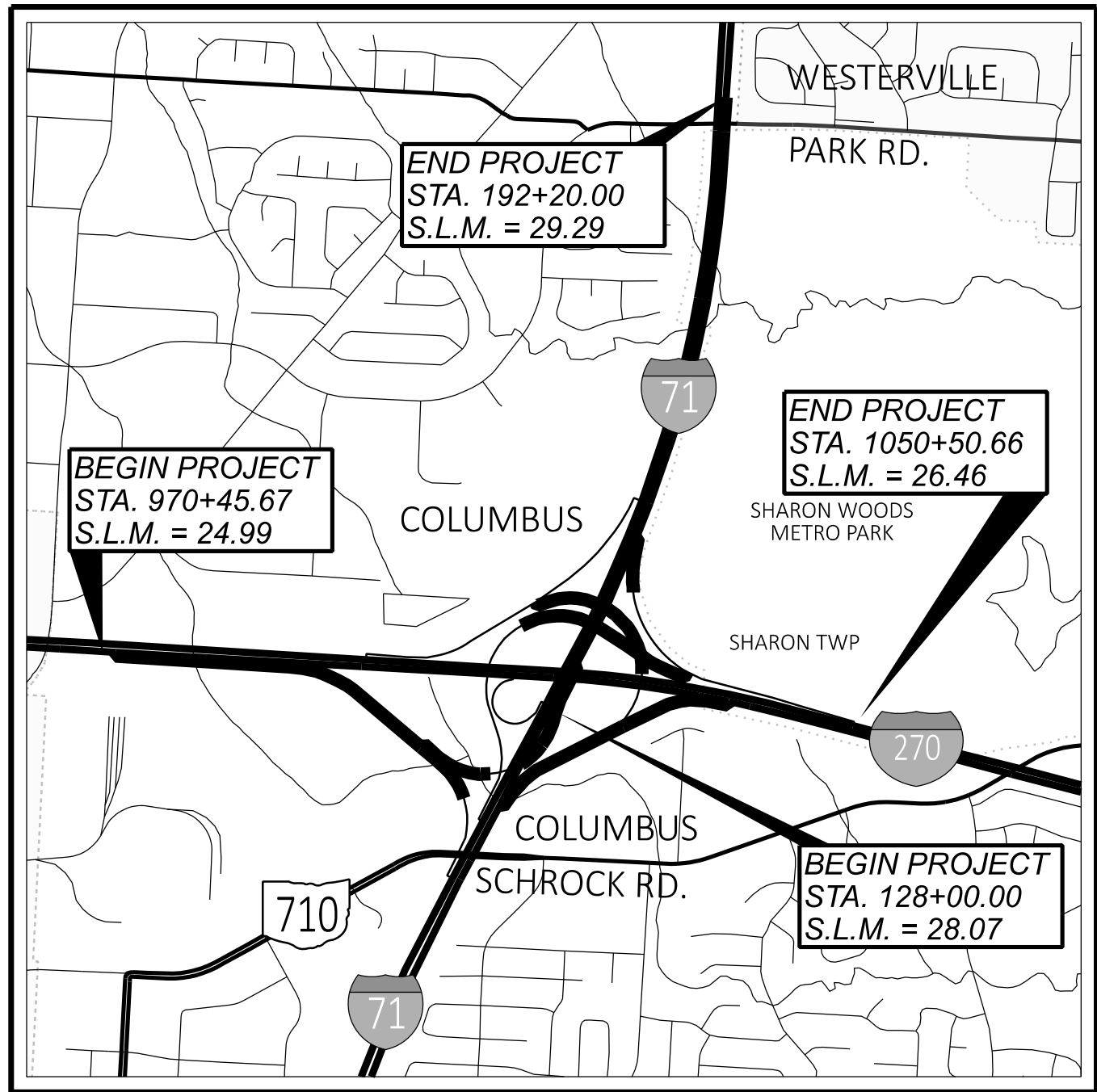




LOCATION MAP

LATITUDE: 40°06'38" LONGITUDE: 82°58'39"



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

DESIGN DESIGNATION**

	IR-270	IR-71
CURRENT ADT (2023)	179,980	162,190
DESIGN YEAR ADT (2043)	210,980	193,790
DESIGN HOURLY VOLUME (2043)	20,790	15,800
DIRECTIONAL DISTRIBUTION	50%	52%
TRUCKS (24 HOUR B&C)	20%	20%
DESIGN SPEED	70 MPH	70 MPH
LEGAL SPEED	65 MPH	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:		
[01] INTERSTATE (URBAN)		
NHS PROJECT	YES	

DESIGN EXCEPTIONS

LOCATION	DESIGN FEATURE	APPROVAL DATE	SHEET NUMBERS
71 NB	SHOULDER WIDTH	8/26/2024	P.012, P.257
RAMP K	HORIZONTAL CURVE RADIUS	8/28/2024	P.003
RAMP P	SHOULDER WIDTH	11/18/2022	P.019, P.274, P.275
RAMP P	HORIZONTAL STOPPING SIGHT DISTANCE	9/4/2024	P.004
RAMP O	HORIZONTAL STOPPING SIGHT DISTANCE	8/30/2024	P.003
RAMP K	HORIZONTAL STOPPING SIGHT DISTANCE	8/30/2024	P.003
RAMP Q	HORIZONTAL STOPPING SIGHT DISTANCE	9/11/2024	P.003, P.004
RAMP O	HORIZONTAL CURVE RADIUS	9/10/2024	P.003

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:
TRANSYSTEMS
1100 SUPERIOR AVE. E., STE 1000
CLEVELAND, OHIO 44114

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FRA-71/270-28.27/25.99A

CITY OF COLUMBUS
SHARON TOWNSHIP
FRANKLIN COUNTY

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**FOR RAMP DESIGN DESIGNATIONS, SEE SHEET P.002

STANDARD CONSTRUCTION DRAWINGS												SUPPLEMENTAL SPECIFICATIONS			
BP-2.1	1/21/22	F-3.3	7/19/13	RM-4.6	7/19/13	HL-50.21	7/15/22	MT-98.21	7/21/23	TC-41.10	7/19/13	800-2023	7/19/24	863	7/21/23
BP-3.1	1/19/24			RM-4.8	7/19/24	HL-60.11	7/21/17	MT-98.28	1/17/20	TC-41.20	10/18/13	804	7/19/24	878	1/21/22
BP-5.1	7/15/22	I-3D	7/19/24			HL-60.12	7/21/23	MT-98.29	1/17/20	TC-42.10	10/18/13	807	1/21/22	896	7/21/17
BP-8.1	7/19/24	I-3E	7/19/24	AS-1-15	1/20/23	HL-60.21	7/20/18	MT-98.30	7/16/21	TC-42.20	10/18/13	809	7/19/24	904	7/15/22
BP-9.1	1/18/19			AS-2-15	7/21/23	HL-60.31	7/19/24	MT-99.60	7/19/24	TC-51.11	1/15/16	813	7/21/23	909	7/19/24
		MGS-1.1	7/16/21	GSD-1-19	7/19/24			MT-100.00	1/19/24	TC-51.12	1/15/16	821	4/20/12	913	4/16/21
CB-3A	7/19/24	MGS-2.1	1/19/18	PCB-91	7/17/20	ITS-10.11	7/19/24	MT-101.60	4/21/23	TC-52.10	10/18/13	832	7/19/24	921	7/19/24
CB-4	7/19/24	MGS-3.1	1/19/18	SBR-1-20	7/19/24	ITS-14.11	7/19/24	MT-101.70	7/19/24	TC-52.20	1/15/21	836	1/19/24	996	7/21/23
CB-5	7/19/24	MGS-3.2	1/18/13	SICD-2-14	1/15/21	ITS-50.12	7/19/24	MT-101.75	7/21/23	TC-61.10	4/21/23	839	7/16/21		
CB-6	7/19/24	MGS-4.2	7/19/13					MT-102.10	7/21/23	TC-61.30	7/19/24	840	7/19/24		
		MGS-4.3	1/18/13	HL-10.11	7/21/23	MT-95.30	7/19/19	MT-102.20	4/19/19	TC-64.10	7/21/23	850	7/21/23		
DM-1.1	7/17/20			HL-10.13	1/20/23	MT-95.32	4/19/19			TC-65.10	1/17/14				
DM-1.2	7/16/21	MH-3	7/19/24	HL-10.31	7/15/22	MT-95.40	7/21/23	TC-12.31	4/15/22	TC-65.11	1/19/24				
DM-4.1	7/17/20			HL-20.11	7/21/23	MT-95.45	7/21/23	TC-15.116	1/19/24	TC-72.20	7/21/23				
DM-4.3	1/15/16	RM-4.2	4/17/20	HL-20.21	1/15/21	MT-95.73	7/19/24	TC-21.11	7/16/21						
DM-4.4	1/15/16	RM-4.3	1/21/22	HL-30.11	7/21/23	MT-98.10	1/17/20	TC-21.21	1/20/23						
		RM-4.4	7/19/24	HL-30.21	4/17/20	MT-98.11	1/17/20	TC-21.50	1/17/25						
F-1.1	7/19/13	RM-4.5	7/21/17	HL-30.22	1/15/21	MT-98.20	4/19/19	TC-22.20	1/17/14						

FEDERAL PROJECT NUMBER

E200 (211)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THIS PROJECT WILL IMPROVE CAPACITY AND REHABILITATE FACILITIES IN NEED OF REPAIR OR REPLACEMENT IN THE IR-270 AND IR-071 INTERCHANGE ON THE NORTH SIDE OF COLUMBUS. THERE WILL BE THE ADDITION OF CAPACITY TO THE IR-270 EASTBOUND TO IR-071 NORTHBOUND MOVEMENT. TWO RAMP BRIDGES WILL BE REPLACED, ONE BRIDGE WILL HAVE THE SUPERSTRUCTURE AND ABUTMENTS REPLACED, AND ONE BRIDGE WILL BE RESTRIPEDED.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 34.53 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 2.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 36.53 ACRES
FIRM MAP OF FRANKLIN COUNTY, OHIO 39049C0176K, 6/17/2008
FLOOD ZONE X - OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

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 AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS P.031-P.033, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

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

Pamela Boratyn
Director, Department of Transportation

4050-E

ENGINEER'S SEAL

ROADWAY, STRUCTURES, LIGHTING, TRAFFIC CONTROL

ENGINEER'S SEAL

MAINTENANCE OF TRAFFIC, TRAFFIC SURVEILLANCE

ENGINEER'S SEAL

PROJECT SITE PLAN BMP DESIGN

DESIGN AGENCY

TRANSYSTEMS

1100 SUPERIOR AVE. E., STE 1000
CLEVELAND, OHIO 44114

DESIGNER

RJG

REVIEWER

MSW 09/06/24

PROJECT ID

105435

SHEET

P.001

TOTAL

791

EARTHWORK SUMMARY

TOTALS CARRIED FROM	ALIGNMENT	203	203
		EXCAVATION	EMBANKMENT
		CY	CY
P.329	IR-71	6,728	2,826
P.364	RAMP M	11,625	2,935
P.384	RAMP P	5,201	5,786
P.402	RAMP K	1,154	11,996
P.419	RAMP O	1,536	10,618
P.423	RAMP N	229	33
P.471	RAMP Q	8,256	9,205
GRAND TOTALS CARRIED TO GENERAL SUMMARY		34,729	43,399

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING TRENCH DRAINS AND STORM SEWER THAT DRAINS THEM. LOCATION IS RAMP M LEFT FROM STA. 83+00 TO STA. 93+00. 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.

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

ITEM SPECIAL, PIPE CLEANOUT, 24" AND UNDER 1400 FT.

CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN

THIS ITEM SHALL BE USED BETWEEN BARRIER TRANSITIONS IN THE MEDIAN OF IR-71. IT SHALL FOLLOW THE DETAILS AND SPECIFICATIONS IN RM-4.3 EXCEPT THAT THE TOP WIDTH SHALL BE 48" INSTEAD OF 12".

ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER END SECTION, 81" TO 57" TRANSITION

THIS ITEM SHALL FOLLOW THE TRANSITION DETAILS SHOWN ON RM-4.8, SHEET 4 OF 4, DATED 07-19-2024. ODOT CENTRAL OFFICE INFORMED US THAT THE SCD WILL BE REVISED AND A NEW ITEM WILL REPLACE ITEM 622E25002 WITH THE JANUARY 2025 UPDATE. THIS ITEM IS A PLACEHOLDER AND WILL BE REPLACED IN THESE PLANS WITH THE NEW ITEM ONCE AVAILABLE. REVISIONS WILL BE INCLUDED IN AN ADDENDUM ISSUED PRIOR TO SALE.

ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER END SECTION, 81" TO 42" TRANSITION

THIS ITEM SHALL FOLLOW THE TRANSITION DETAILS SHOWN ON RM-4.8, SHEET 4 OF 4, DATED 07-19-2024 EXCEPT THAT THE HEIGHT SHALL TRANSITION FROM 81" TO 42" OVER A LENGTH OF 26'-0". ODOT CENTRAL OFFICE INFORMED US THAT THE SCD WILL BE REVISED IN JANUARY 2025 TO INCLUDE DETAILS FOR THIS TRANSITION AND A NEW STANDARD ITEM WILL BE ADDED TO THE ITEM MASTER AT THAT TIME. THIS ITEM IS A PLACEHOLDER AND WILL BE REPLACED IN THESE PLANS WITH THE NEW ITEM ONCE AVAILABLE. REVISIONS WILL BE INCLUDED IN AN ADDENDUM ISSUED PRIOR TO SALE.

FULL DEPTH PAVEMENT SAWING

IN ALL AREAS WHERE ONLY A PORTION OF THE EXISTING PAVEMENT IS BEING REMOVED (FOR THE PURPOSES OF PAVEMENT WIDENING OR FOR THE INSTALLATION OF NEW CONCRETE BARRIER), A NEAT JOINT SHALL BE CONSTRUCTED AT THE REMOVAL LIMIT, PER CMS SECTION 202.05. THE COST OF FULL DEPTH PAVEMENT SAWING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ASSOCIATED ITEM 202 - PAVEMENT REMOVED

ITEM 202 – REMOVAL MISC.: TRENCH DRAIN

IN ADDITION TO THE REQUIREMENTS OF ITEM 202, WORK FOR THIS ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF THE COMPLETE TRENCH DRAIN. ANY VOIDS LEFT BEHIND NOT OTHERWISE BEING FILLED BY PROPOSED PAVEMENT ITEMS SHALL BE BACKFILLED AND COMPACTED WITH THE APPROPRIATE 203 EMABANKMENT ITEMS. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE WORK AS SPECIFIED AND TO THE SATISFACTION OF THE ENGINEER. THE QUANTITY IS PROVIDED IN THE REMOVAL QUANTITIES FOR THE ABOVE NOTED WORK.

GENERAL NOTES

DESIGN AGENCY

TRANSYSTEMS

1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER

RJG

REVIEWER

MSW 09/06/24

PROJECT ID

105435

SHEET

P.023

TOTAL

791

SHEET NO.	REFERENCE NO.	STAGE	PHASE	LOCATION	STATION		SIDE	614	614	614	614	614	614	614	615	615	622	622	622	622
								WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	WORK ZONE LANE LINE, CLASS I, 6" 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 6" 642 PAINT (YELLOW)	WORK ZONE EDGE LINE, CLASS I, 6" 642 PAINT (WHITE)	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 8" 642 PAINT	WORK ZONE GORE MARKING, CLASS II, 642 PAINT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	DUAL PORTABLE BARRIER TRANSITION/TERMINATION	PORTABLE BARRIER, ANCHORED	PORTABLE BARRIER, UNANCHORED	BARRIER MISC.: TEMPORARY BARRIER, ANCHORED, AS PER PLAN
					EA	MILE		MILE	MILE	FT	FT	FT	SY	SY	EA	FT	FT	FT		
P.212-P.213	CH-P5	STAGE 4	PHASE 1	P-RAMP	1000+36	1006+00	LT					565								
P.207, P.212-P.213	ELY-P5	STAGE 4	PHASE 1	P-RAMP	997+00	1015+64	LT			0.35										
P.207, P.213	ELW-P6	STAGE 4	PHASE 1	P-RAMP	1006+00	1016+44	LT				0.20									
P.207, P.212-P.213	LL-P3	STAGE 4	PHASE 1	P-RAMP	997+00	1016+44	LT		0.37											
P.215	PB-J1	STAGE 4	PHASE 1	J-RAMP	33+82	36+46	LT											264		
P.203-P.204	PB-K2	STAGE 4	PHASE 1	K-RAMP	12+88	19+80	RT											689		
P.203	TBA-K3	STAGE 4	PHASE 1	K-RAMP	19+80	21+66	RT												185	
P.202-P.203, P.209, P.215	PB-K3	STAGE 4	PHASE 1	K-RAMP	21+66	36+60	RT											1495		
P.203-P.204	PB-K4	STAGE 4	PHASE 1	K-RAMP	14+17	19+93	RT											567		
P.203, P.209, P.215	PB-O3	STAGE 4	PHASE 1	O-RAMP	18+23	37+43	RT											1940		
P.215	IA-19	STAGE 4	PHASE 1	J-RAMP	33+82		LT/RT	1												
P.204	IA-20	STAGE 4	PHASE 1	K-RAMP	12+88		RT	1												
P.204	IA-21	STAGE 4	PHASE 1	K-RAMP	14+17		RT	1												
P.203	IA-22	STAGE 4	PHASE 1	O-RAMP	18+23		RT	1												
P.225-P.226	CH-60	STAGE 4	PHASE 2	I-71	126+31	134+02	LT					771								
P.227-P.228	CH-61	STAGE 4	PHASE 2	I-71	152+65	157+08	LT					442								
P.225	CH-62	STAGE 4	PHASE 2	I-71	126+31	127+81	LT					148								
P.225	CH-63	STAGE 4	PHASE 2	I-71	126+31	127+81	LT					146								
P.225-P.228	ELY-14	STAGE 4	PHASE 2	I-71	124+50	159+00	LT			0.65										
P.225	ELW-26	STAGE 4	PHASE 2	I-71	124+50	126+33	LT				0.03									
P.225-P.226	ELW-27	STAGE 4	PHASE 2	I-71	130+60	141+23	RT				0.20									
P.225-P.227	ELW-28	STAGE 4	PHASE 2	I-71	126+40	152+65	LT				0.50									
P.225-P.228	LL-36	STAGE 4	PHASE 2	I-71	124+50	159+00	LT		0.65											
P.225-P.228	LL-37	STAGE 4	PHASE 2	I-71	124+50	159+00	LT		0.65											
P.228	LL-38	STAGE 4	PHASE 2	I-71	157+00	159+00	LT		0.04											
P.228	LL-39	STAGE 4	PHASE 2	I-71	157+08	159+00	LT		0.03											
P.225	DL-15	STAGE 4	PHASE 2	I-71	124+50	126+31	LT						181							
P.226-P.228	DL-16	STAGE 4	PHASE 2	I-71	134+02	157+00	LT						2290							
P.225	ELW-P7	STAGE 4	PHASE 2	P-RAMP	1020+98	1025+00	LT				0.08									
P.225	DL-P2	STAGE 4	PHASE 2	P-RAMP	1018+75	1024+74	LT						597							
P.226	PBA-15	STAGE 4	PHASE 2	I-71	134+38	140+00	RT										565			
P.226	IA-23	STAGE 4	PHASE 2	I-71	134+38		RT	1												
P.056, P.057, P.058	ELW-29	STAGE 1	NIGHT	I-270	948+85	984+33	LT				0.60		374							
P.056, P.057, P.058	CH-64	STAGE 1	NIGHT	I-270	948+85	987+50	LT					19325								
P.056, P.057, P.058	ELY-15	STAGE 1	NIGHT	I-270	948+85	987+50	LT			0.73										
P.059A, P.059B	ELW-30	STAGE 1	N. Shoulder	I-270	952+00	963+00	LT				0.21									
P.059A, P.059B	CH-65	STAGE 1	N. Shoulder	I-270	952+00	963+00	LT					5500								
P.059A, P.059B	ELY-16	STAGE 1	N. Shoulder	I-270	952+00	963+00	LT			0.21										
P.059A, P.059B	PB-16	STAGE 1	N. Shoulder	I-270	956+00	962+50	LT											650		
P.059B	IA-23	STAGE 1	N. Shoulder	I-270	962+50		LT	1												
P.059A, P.059B	PB-17	STAGE 1	N. Shoulder	I-270	956+00	963+00	LT											700		
P.059B	IA-24	STAGE 1	N. Shoulder	I-270	963+00		LT	1												
P.059B, P.059C	PB-18	STAGE 1	N. Shoulder	I-270	974+75	981+25	LT											650		
SUBSUMMARY SHEET P.042								7	1.74	1.94	1.82	26897	3442	-	-	-	-	565	6955	185
TOTALS CARRIED FROM SUBSUMMARY SHEET P.034								7	0.46	0.73	0.7	7371	1604	-	4992	32325	-	-	4212	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.035								-	6.58	2.84	2.04	21392	4432	-	-	-	-	-	-	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.036								12	0.84	2.58	3.23	3828	337	-	-	-	-	-	-	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.037								-	0.67	0.27	1.02	7397	250	139	4978	-	-	17344	7684	770
TOTALS CARRIED FROM SUBSUMMARY SHEET P.038								3	1.67	3.04	4.32	5369	238	-	-	-	2	7499	3864	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.039								2	5.36	1.53	0.73	3007	2414	-	-	-	-	10947	2102	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.040								-	8.49	3.11	3.15	13985	2045	36	-	-	-	-	-	-
TOTALS CARRIED FROM SUBSUMMARY SHEET P.041								3	0.6	2.3	2.59	8637	3884	45	-	-	1	1690	1707	-
TOTALS CARRIED TO GENERAL SUMMARY								34	26.41	37.94	97883	18646	220	9970	32325	3	38045	26524	955	

MAINTENANCE OF TRAFFIC
SUBSUMMARY

DESIGN AGENCY



DESIGNER

CMH

REVIEWER

JDH 09/06/24

PROJECT ID

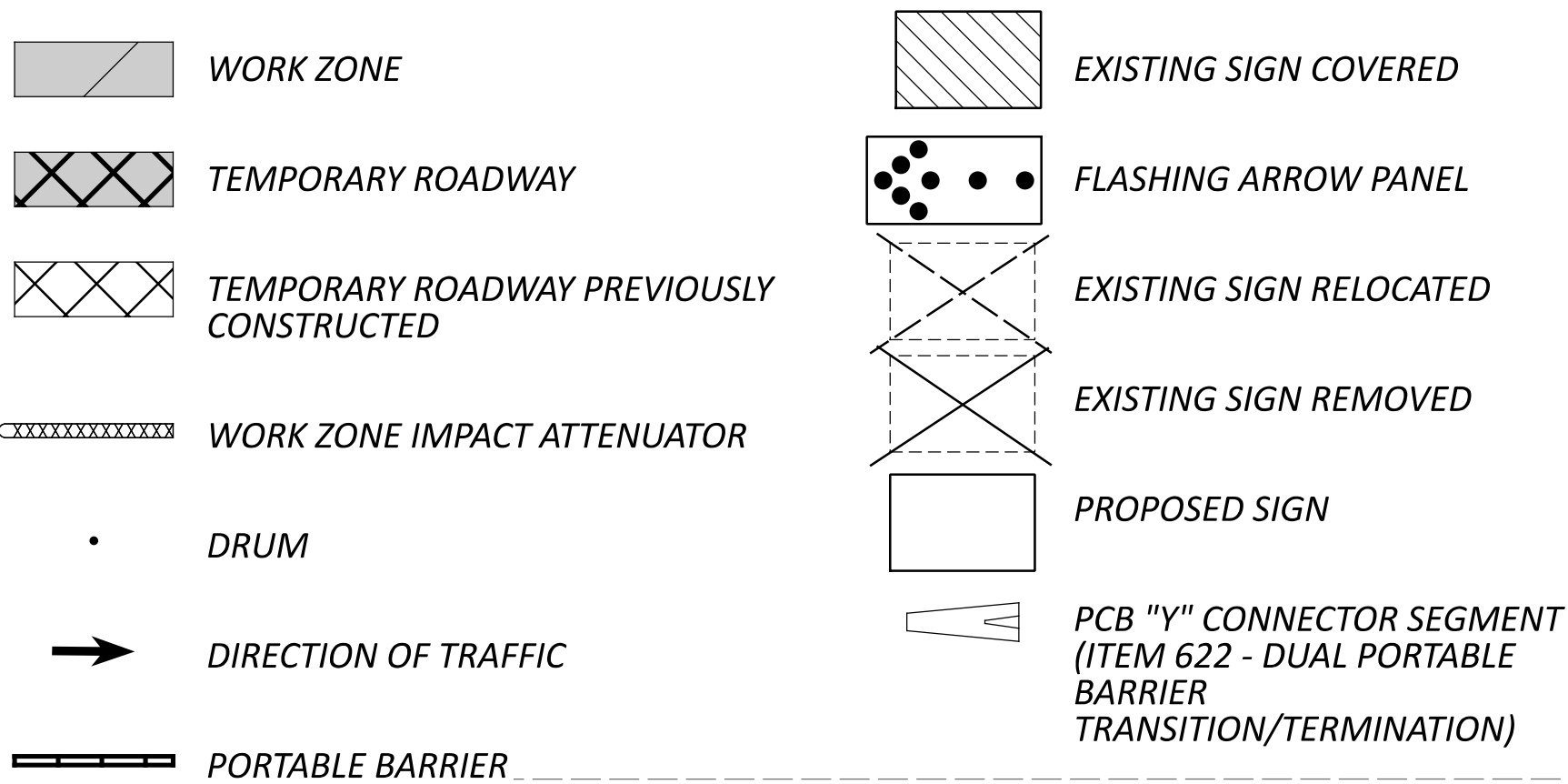
105435

SHEET

P.042

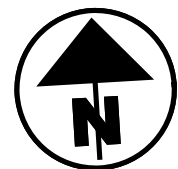
TOTAL

791



- ELY-X ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6" 642 PAINT (YELLOW)
- ELW-X ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6" 642 PAINT (WHITE)
- LL-X ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
- CH-X ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
- DL-X ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT
- GM-X ITEM 614 - WORK ZONE GORE MARKING, CLASS II, 642 PAINT
- TP-X ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A

- PBS-X ITEM 622 - BARRIER, MISC.: TEMPORARY BARRIER, ANCHORED, AS PER PLAN
- PB-X ITEM 622 - PORTABLE BARRIER, UNANCHORED
- PBA-X ITEM 622 - PORTABLE BARRIER, ANCHORED
- IA-X ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
- TBA-X ITEM 622 - BARRIER MISC.: TEMPORARY BARRIER, ANCHORED, AS PER PLAN
- IT-X ITEM 622 - DUAL PORTABLE BARRIER TRANSITION/TERMINATION



MAINTENANCE OF TRAFFIC - STAGE 1 - OVERHEAD SIGN OPERATION
IR-270 STA. 938+00.00 TO STA. 958+00.00

DESIGN AGENCY



DESIGNER

CMH

REVIEWER

JDH 09/06/24

PROJECT ID

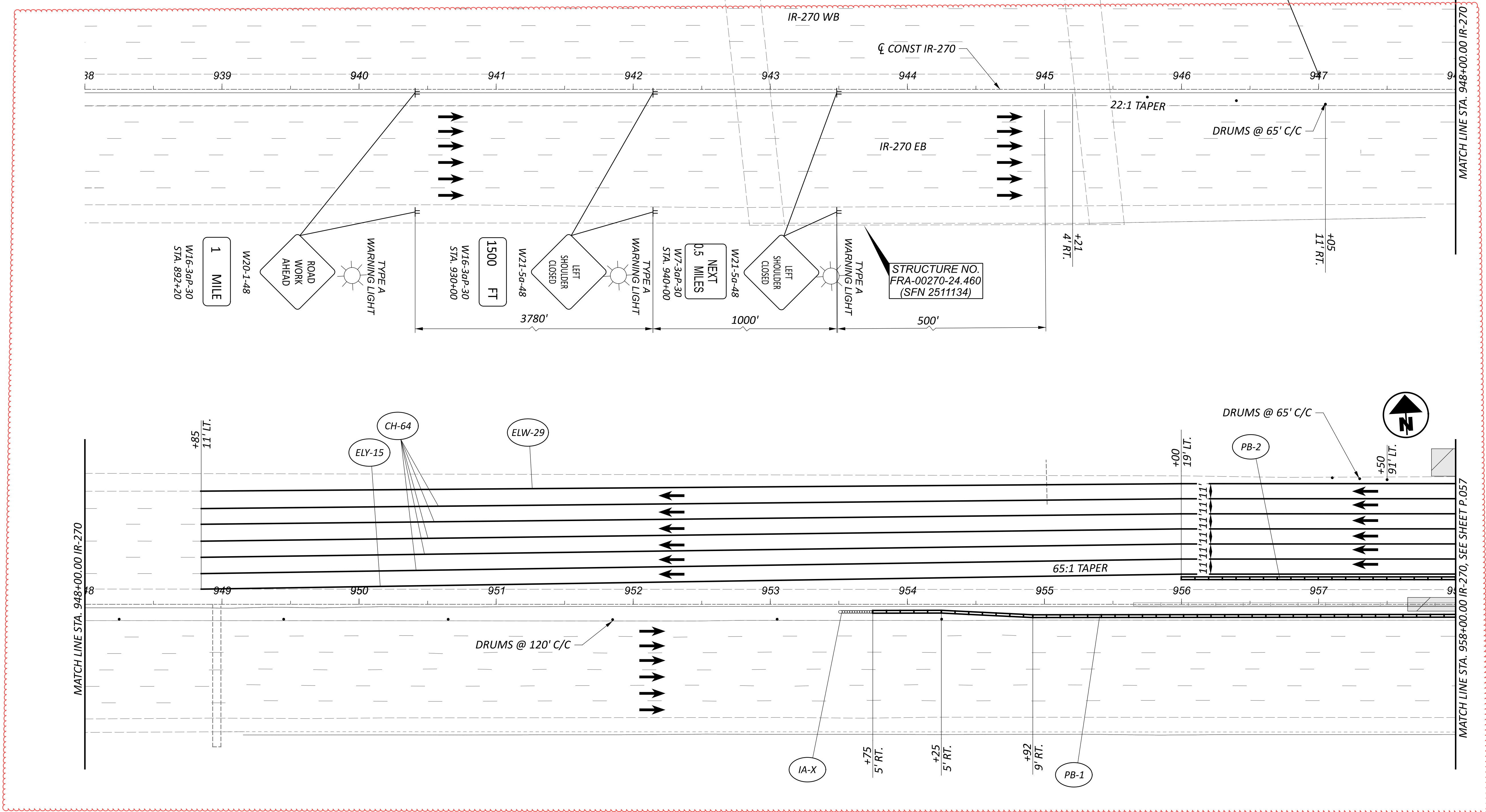
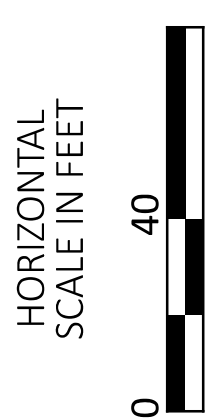
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SHEET

P.056

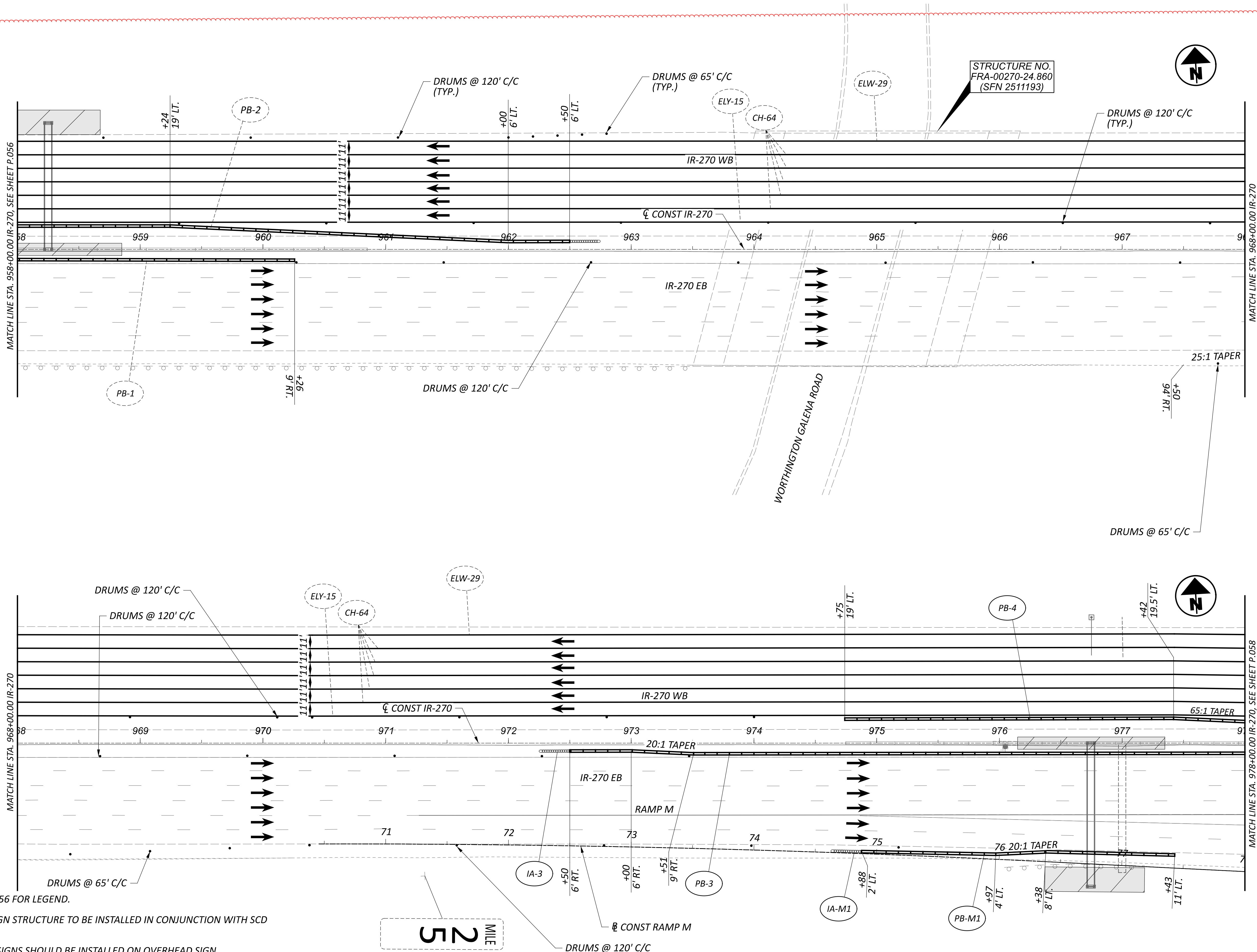
TOTAL

791



NOTES

1. SEE SHEET P.056 FOR LEGEND.
2. OVERHEAD SIGN STRUCTURE TO BE INSTALLED IN CONJUNCTION WITH SCD MT-99.60.
3. PERMANENT SIGNS SHOULD BE INSTALLED ON OVERHEAD SIGN STRUCTURES DURING STAGE 1 AND REPLACED OR COVERED AS INDICATED FOR SUBSEQUENT STAGES OF CONSTRUCTION.
4. EXISTING SIGNS TO REMAIN IN PLACE UNTIL NEW TRUSS AND SIGNS ARE INSTALLED.



MAINTENANCE OF TRAFFIC - STAGE 1 - OVERHEAD SIGN OPERATION
IR-270 STA. 958+00.00 TO STA. 978+00.00

DESIGN AGENCY



DESIGNER

CMH

REVIEWER

JDH 09/06/24

PROJECT ID

105435

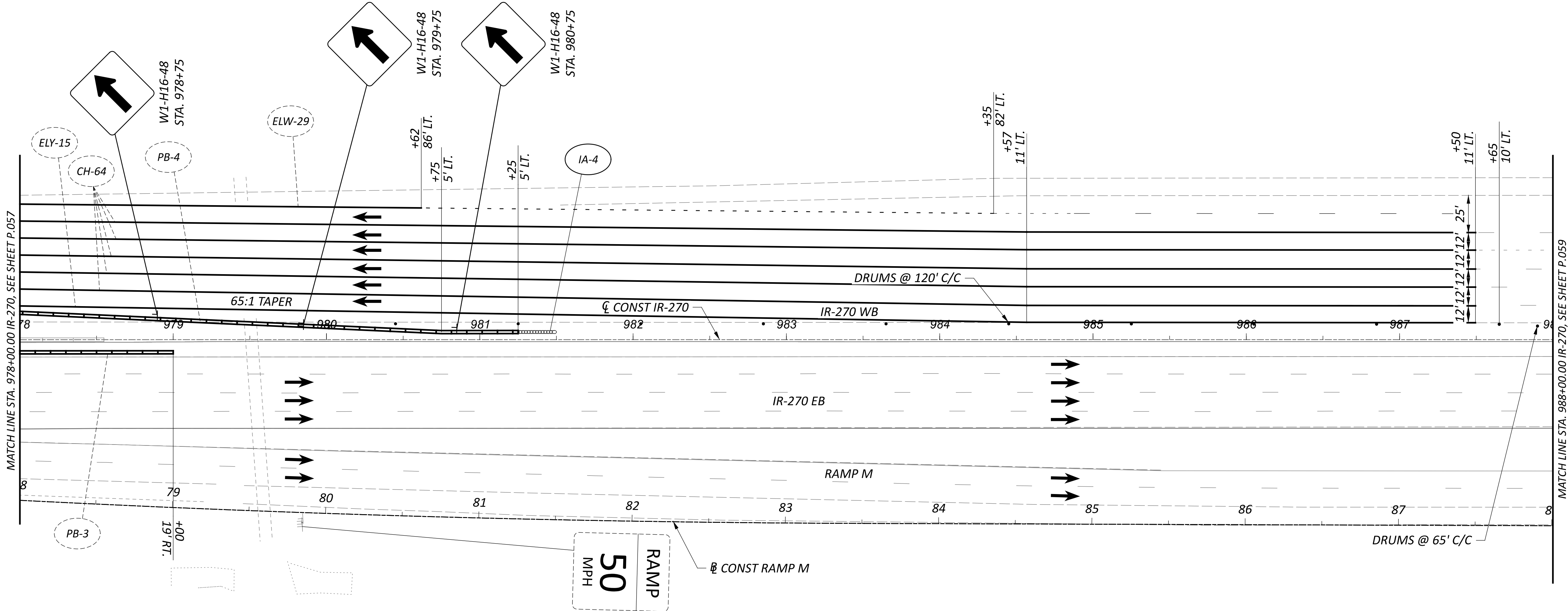
SHEET

P.057

TOTAL

791

NOTES
1. SEE SHEET P.056 FOR LEGEND



MAINTENANCE OF TRAFFIC - STAGE 1 - OVERHEAD SIGN OPERATION
IR-270 STA. 968+00.00 TO STA. 988+00.00

DESIGN AGENCY



DESIGNER

ACS

REVIEWER

JDH 09/06/24

PROJECT ID

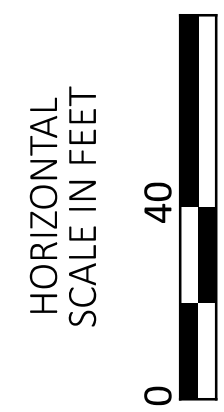
105435

SHEET

P.058

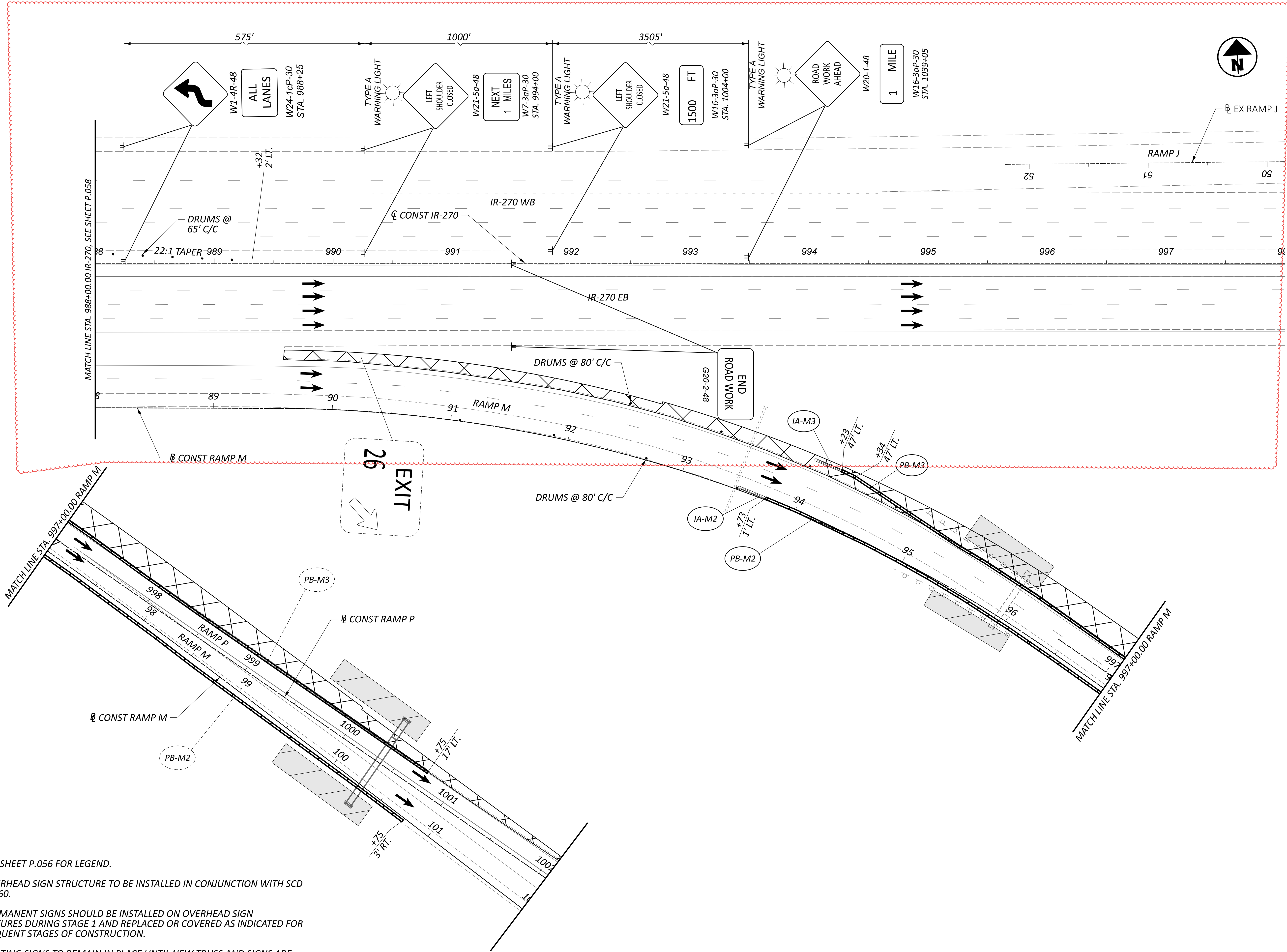
TOTAL

791



NOTES

- SEE SHEET P.056 FOR LEGEND.
- OVERHEAD SIGN STRUCTURE TO BE INSTALLED IN CONJUNCTION WITH SCD MT-99.60.
- PERMANENT SIGNS SHOULD BE INSTALLED ON OVERHEAD SIGN STRUCTURES DURING STAGE 1 AND REPLACED OR COVERED AS INDICATED FOR SUBSEQUENT STAGES OF CONSTRUCTION.
- EXISTING SIGNS TO REMAIN IN PLACE UNTIL NEW TRUSS AND SIGNS ARE INSTALLED.



MAINTENANCE OF TRAFFIC - STAGE 1 - OVERHEAD SIGN OPERATION
IR-270 STA. 988+00.00 TO STA. 998+00.00

DESIGN AGENCY



DESIGNER

ACS

REVIEWER

JDH 09/06/24

PROJECT ID

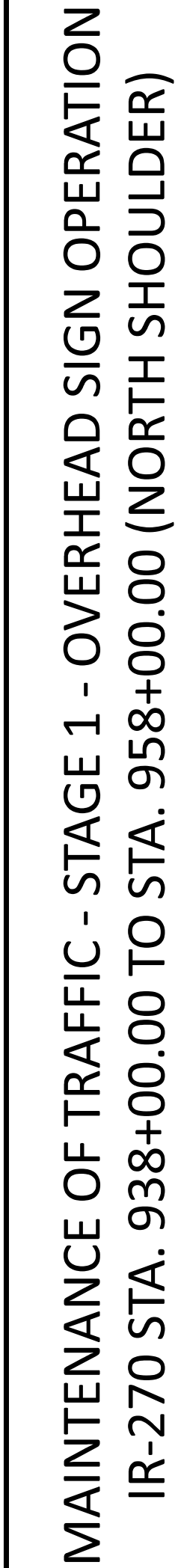
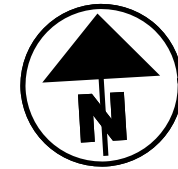
105435

SHEET

P.059

TOTAL

791



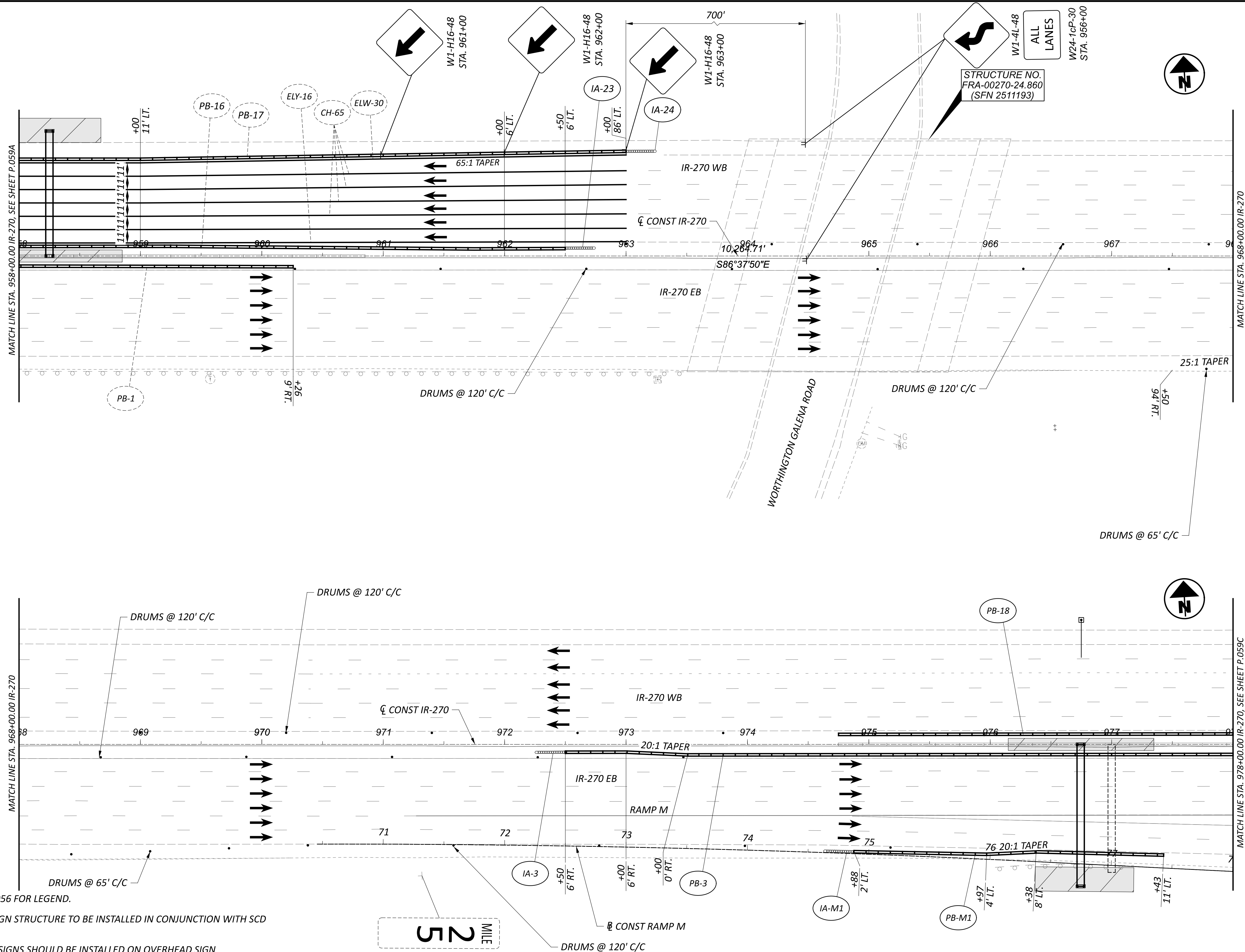
DESIGN AGENCY



DESIGNER	
CMH	
REVIEWER	
JDH	03/31/
PROJECT ID	
105435	
SHEET	TOTAL
P.059A	79

NOTES

1. SEE SHEET P.056 FOR LEGEND.
2. OVERHEAD SIGN STRUCTURE TO BE INSTALLED IN CONJUNCTION WITH SCD MT-99.60.
3. PERMANENT SIGNS SHOULD BE INSTALLED ON OVERHEAD SIGN STRUCTURES DURING STAGE 1 AND REPLACED OR COVERED AS INDICATED FOR SUBSEQUENT STAGES OF CONSTRUCTION.
4. EXISTING SIGNS TO REMAIN IN PLACE UNTIL NEW TRUSS AND SIGNS ARE INSTALLED.

MAINTENANCE OF TRAFFIC - STAGE 1 - OVERHEAD SIGN OPERATION
IR-270 STA. 958+00.00 TO STA. 978+00.00 (NORTH SHOULDER)

DESIGN AGENCY



DESIGNER

CMH

REVIEWER

JDH 03/31/25

PROJECT ID

105435

SHEET

P.059B

TOTAL

791



STRAND
ASSOCIATES

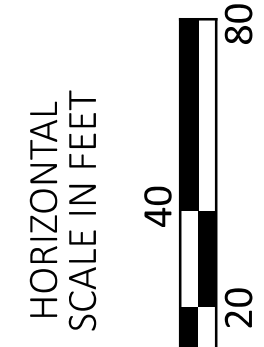
CMH

REVIEWER

JDH 03/31/

PROJECT ID
105435

SHEET	TOTAL
P.059C	79



SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.021	P.022	P.023	P.240	P.247	P.248	P.249	P.250	P.251			01/IMS/21	02/IMS/10	03/IMS/13						
LS											LS			201	11000	LS		ROADWAY	
			2								2			202	20010	2	EACH	CLEARING AND GRUBBING	
			61,954								61,954			202	23000	61,954	SY	HEADWALL REMOVED	
			1,663								1,663			202	30700	1,663	FT	PAVEMENT REMOVED	
			267								267			202	32000	267	FT	CONCRETE BARRIER REMOVED	
			144								144			202	35100	144	FT	CURB REMOVED	
																		PIPE REMOVED, 24" DIAMETER AND UNDER	
			11								11			202	35200	11	FT	PIPE REMOVED, OVER 24" DIAMETER	
			8,759								8,759			202	38000	8,759	FT	GUARDRAIL REMOVED	
			23								23			202	42010	23	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
			16								16			202	42040	16	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
			23								23			202	47000	23	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
			3								3			202	58100	3	EACH	CATCH BASIN REMOVED	
		1,400									1,400			SPECIAL	20270110	1,400	FT	PIPE CLEANOUT, 24" AND UNDER	P.023
			402								402			202	75000	402	FT	FENCE REMOVED	
			47								47			202	98100	47	EACH	REMOVAL MISC.: NOISE BARRIER POST AND FOUNDATION REMOVAL	P.022
			299								299			202	98200	299	FT	REMOVAL MISC.: TRENCH DRAIN	P.023
			13,545								13,545			202	98400	13,545	SF	REMOVAL MISC.: NOISE BARRIER PANEL REMOVAL AND DISPOSAL	P.022
		34,729									34,729			203	10000	34,729	CY	EXCAVATION	
		43,399									43,399			203	20000	43,399	CY	EMBANKMENT	
								803			803			204	10000	803	SY	SUBGRADE COMPACTION	
								9,725			9,725			204	13000	9,725	CY	EXCAVATION OF SUBGRADE	
								9,725			9,725			204	30010	9,725	CY	GRANULAR MATERIAL, TYPE B	
								41			41			204	45000	41	hour	PROOF ROLLING	
								29,174			29,174			204	50000	29,174	SY	GEOTEXTILE FABRIC	
								194			194			206	10500	194	TON	CEMENT	
								74,993			74,993			206	11000	74,993	SY	CURING COAT	
								74,993			74,993			206	15010	74,993	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
								LS			LS			206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
			7,576								7,576			606	15050	7,576	FT	GUARDRAIL, TYPE MGS	
			15								15			606	26150	15	EACH	ANCHOR ASSEMBLY, MGS TYPE E [MASH 2016]	
			14								14			606	26550	14	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			16								16			606	35002	16	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			15								15			606	35102	15	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
			415								415			607	23000	415	FT	FENCE, TYPE CLT	
			815								815			609	24510	815	FT	CURB, TYPE 4-C	
			307								307			622	10100	307	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	
			113								113			622	10101	113	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN	P.023
			2,824								2,824			622	10160	2,824	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
			4,595								4,595			622	10180	4,595	FT	CONCRETE BARRIER, SINGLE SLOPE, 81"	
			2								2			622	10200	2	EACH	BARRIER TRANSITION	
			1								1			622	24850	1	EACH	CONCRETE BARRIER END SECTION, TYPE B1	
			14								14			622	25000	14	EACH	CONCRETE BARRIER END SECTION, TYPE D	
			12								12			622	25006	12	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1	
			15								15			622	25050	15	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
			38								38			622	25080	38	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, 81"	
			1								1			622	90200	1	EACH	BARRIER, MISC.:CONCRETE BARRIER END SECTION, 81" TO 57" TRANSITION	P.023
			2								2			622	90200	2	EACH	BARRIER, MISC.:CONCRETE BARRIER END SECTION, 81" TO 42" TRANSITION	P.023
																		EROSION CONTROL	
	10				145	18	10	12			32			601	21050	32	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
					3	6					163			601	21060	163	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
9.07											9			601	32204	9	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
2											9.07			654	11000	9.07	TON	COMMERCIAL FERTILIZER	
											2			659	00100	2	EACH	SOIL ANALYSIS TEST	
7,216											7,216			659	00300	7,216	CY	TOPSOIL	
65,012											65,012			659	10000	65,012	SY	SEEDING AND MULCHING	
3,251											3,251			659	14000	3,251	SY	REPAIR SEEDING AND MULCHING	
3,251											3,251			659	15000	3,251	SY	INTER-SEEDING	
13.43											13.43			659	31000	13.43	ACRE	LIME	

GENERAL SUMMARY

DESIGN AGENCY
TRANSYSTMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER

RJG

REVIEWER

MSW 09/06/24

PROJECT ID

105435

SHEET

P.232

TOTAL

791

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.021	P.022	P.029	P.247	P.248	P.249	P.250	P.251	P.256	P.570		01/IMS/21	02/IMS/10	03/IMS/13						
																		EROSION CONTROL (CONT.)	
360											360			659	35000	360	MGAL	WATER	
146											146			659	40000	146	MSF	MOWING	
								12,911			12,911			670	00200	12,911	SY	VEGETATED SWALE EROSION PROTECTION	
			799	125							924			670	00720	924	SY	DITCH EROSION PROTECTION MAT, TYPE B	
								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	
								356,639			356,639			832	30000	356,639	EACH	EROSION CONTROL	
			33								33			836	10000	33	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
				4							4			836	10020	4	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2	
																		DRAINAGE	
			2.1	2.4							4.5			602	20000	4.5	CY	CONCRETE MASONRY	
	200					600					800			605	13300	800	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
					24,392	18,641					43,033			605	14000	43,033	FT	6" BASE PIPE UNDERDRAINS	
					494	439					933			611	00510	933	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
			24								24			611	00900	24	FT	6" CONDUIT, TYPE B	
	200										200			611	01500	200	FT	6" CONDUIT, TYPE F	
			1,882	919							2,801			611	05900	2,801	FT	15" CONDUIT, TYPE B	
			60	337							397			611	06100	397	FT	15" CONDUIT, TYPE C	
			131	75							206			611	06700	206	FT	15" CONDUIT, TYPE F 707.05 TYPE C, 707.21, OR 707.33	
			10								10			611	07200	10	FT	18" CONDUIT, TYPE A	
			485								485			611	07400	485	FT	18" CONDUIT, TYPE B	
			64								64			611	07600	64	FT	18" CONDUIT, TYPE C	
				20							20			611	10600	20	FT	24" CONDUIT, TYPE C	
			10								10			611	19600	10	FT	42" CONDUIT, TYPE C, 707.05 OR 707.07	
			2	1							3			611	98180	3	EACH	CATCH BASIN, NO. 3A	
			1								1			611	98230	1	EACH	CATCH BASIN, NO. 4	
			1	1							2			611	98300	2	EACH	CATCH BASIN, NO. 5	
			1								1			611	98370	1	EACH	CATCH BASIN, NO. 6	
			1	3							4			611	98630	4	EACH	CATCH BASIN ADJUSTED TO GRADE	
			1								1			611	98631	1	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	P.022
			11	1							12			611	99114	12	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
			4	12							16			611	99080	16	EACH	BARRIER INLET, SINGLE SLOPE, 81"	
			3								3			611	99574	3	EACH	MANHOLE, NO. 3	
	5				5	6					16			611	99710	16	EACH	PRECAST REINFORCED CONCRETE OUTLET	
			375								375			839	29000	375	FT	TRENCH DRAIN, TYPE A WITH STANDARD GRATE	
		1,250																PAVEMENT	
											217,156			254	01000	218,406	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEEP)	
											27,020			302	56000	27,020	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
											13,332			304	20000	13,332	CY	AGGREGATE BASE	
											32,747			407	20000	32,747	GAL	NON-TRACKING TACK COAT	
											12,072			442	10000	12,072	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
											3,570			442	10100	3,570	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
											624			452	13010	624	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
											398			452	14010	398	SY	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
											1,752			452	15010	1,752	SY	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
									30		30			625	00450	30	EACH	CONNECTION, FUSED PULL APART	
									42		42			625	00480	42	EACH	CONNECTION, UNFUSED PERMANENT	
									1		1			625	13200	1	EACH	LIGHT TOWER, BBBB100	
									3		3			625	14200	3	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP	
									7		7			625	15200	7	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP	
									1		1			625	21400	1	EACH	LIGHT TOWER MAINTENANCE PLATFORM, MISC.: REMOVE PLATFORM	P.568
									1,002		1,002			625	23304	1,002	FT	NO. 8 AWG 600 VOLT DISTRIBUTION CABLE	
									9,825		9,825			625	24320	9,825	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
									316		316			625	25200	316	FT	CONDUIT, 1-1/4", 725.04	
									927		927			625	25908	927	FT	CONDUIT, JACKED OR DRILLED, 725.052, HDPE (3")	

GENERAL SUMMARY

DESIGN AGENCY
TRANSYSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER

RJG

REVIEWER

MSW 09/06/24

PROJECT ID

105435

SHEET	TOTAL
P.233	791

TRANSYSTEMS 1100 SUPERIOR AVE. E. STE 1000 CLEVELAND, OHIO 44114	
DESIGNER	RJG
REVIEWER	MSW 09/06/24
PROJECT ID	105435
SHEET	TOTAL
P.236	791

SHEET NUM.						PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.651	P.652					01/IMS/21	02/IMS/10	03/IMS/13						
													STRUCTURE OVER 20 FOOT SPAN (FRA-00071-28.294)	
LS							LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	P.649
135							135		202	22900	135	SY	APPROACH SLAB REMOVED	
1,031							1,031		202	23500	1,031	SY	WEARING COURSE REMOVED	
78							78		203	35110	78	CY	GRANULAR MATERIAL, TYPE B	
2							2		SPECIAL	20365000	2	EACH	SETTLEMENT PLATFORM	P.650
LS							LS		503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	P.650
160							160		503	21100	160	CY	UNCLASSIFIED EXCAVATION	
LS							LS		505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
3,850							3,850		507	00500	3,850	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
4,070							4,070		507	00550	4,070	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
1,050							1,050		507	00700	1,050	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
1,125							1,125		507	00750	1,125	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
59							59		507	93300	59	EACH	STEEL POINTS OR SHOES	
96,438							96,438		509	10000	96,438	LB	EPOXY COATED STEEL REINFORCEMENT	
7,498							7,498		509	30020	7,498	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
2							2		511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
250							250		511	34446	250	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
73							73		511	34450	73	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
30							30		511	41012	30	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	
85							85		511	44112	85	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	
154							154		511	46512	154	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
1,072							1,072		512	10100	1,072	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
34							34		512	33000	34	SY	TYPE 2 WATERPROOFING	
227,000							227,000		513	10300	227,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5	
2,862							2,862		513	20000	2,862	EACH	WELDED STUD SHEAR CONNECTORS	
11,000							11,000		514	00060	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
11,000							11,000		514	00066	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
75							75		516	10010	75	FT	ARMORLESS PREFORMED JOINT SEAL	
172							172		516	13600	172	SF	1" PREFORMED EXPANSION JOINT FILLER	
154							154		516	13900	154	SF	2" PREFORMED EXPANSION JOINT FILLER	
76							76		516	14020	76	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
8							8		516	44201	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x16"x3.607" WITH 15"x20"x1.5" LOAD PLATE)	P.669
4							4		516	44201	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14.75"x18"x3.128" WITH 15.75"x26"x1.5" LOAD PLATE)	P.670
65							65		518	20000	65	SY	PREFABRICATED GEOCOMPOSITE DRAIN	
12							12		518	21200	12	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
157							157		518	40000	157	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
3							3		523	20001	3	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	P.649
3							3		523	20501	3	EACH	RESTRIKE, AS PER PLAN	P.649
	249						249		526	30010	249	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")	
	75						75		526	90030	75	FT	TYPE C INSTALLATION	
	57						57		601	21000	57	SY	CONCRETE SLOPE PROTECTION	
	4,175						4,175		840	20000	4,175	SF	MECHANICALLY STABILIZED EARTH WALL	
	1,255						1,255		840	21000	1,255	CY	WALL EXCAVATION	
	732						732		840	22000	732	SY	FOUNDATION PREPARATION	
	3,036						3,036		840	23000	3,036	CY	SELECT GRANULAR BACKFILL	
	488						488		840	23001	488	CY	SELECT GRANULAR BACKFILL, AS PER PLAN	P.666

FRA-71/270-28.27/25.99A

MODEL: Steel-07 PAPER SIZE: 34x22 (in.) DATE: 3/28/2025 TIME: 12:54:26 PM USER: mswlht
 pw:\hqpwin01\ae.transyscorp-pw\1Documents\Projects_2020\CL402\402200080\Agency_Folders\400-Engineering\Roadway\Sheets\105435_GG001.dgn

SHEET NUM.							PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
P.652	P.699	P.700					01/IMS/21	02/IMS/10	03/IMS/13					
														STRUCTURE OVER 20 FOOT SPAN (FRA-00071-28.294) (CONT.)
299								299		840	23050	299	CY	NATURAL SOIL
753								753		840	25010	753	FT	6" DRAINAGE PIPE, PERFORATED
17								17		840	25020	17	FT	6" DRAINAGE PIPE, NON-PERFORATED
304								304		840	26000	304	FT	CONCRETE COPING
4,175								4,175		840	26050	4,175	SF	AESTHETIC SURFACE TREATMENT
5								5		840	27000	5	DAY	ON-SITE ASSISTANCE
LS								LS		840	28000	LS		SGB INSPECTION AND COMPACTION TESTING
2,421								2,421		863	00100	2,421	SY	GEOGRID, TYPE P1
LS								LS		867	00100	LS		TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL
														STRUCTURE OVER 20 FOOT SPAN (FRA-00270-25.990A)
	LS								LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
	134									134	22900	134	SY	APPROACH SLAB REMOVED
	913									913	23500	913	SY	WEARING COURSE REMOVED
	25									25	35110	25	CY	GRANULAR MATERIAL, TYPE B
	LS								LS	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN
	578									578	21100	578	CY	UNCLASSIFIED EXCAVATION
	LS								LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION
	4,500								4,500	507	00500	4,500	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN
	4,860								4,860	507	00550	4,860	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED
	72								72	507	93300	72	EACH	STEEL POINTS OR SHOES
	116,515								116,515	509	10000	116,515	LB	EPOXY COATED STEEL REINFORCEMENT
	7,592								7,592	509	30020	7,592	FT	NO. 4 DEFORMED GFRP REINFORCEMENT
	2								2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE
	253								253	511	34446	253	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK
	75								75	511	34450	75	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)
	33								33	511	41012	33	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS
	130								130	511	44112	130	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING
	167								167	511	46512	167	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING
	1,009								1,009	512	10100	1,009	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
	50								50	512	10600	50	FT	CONCRETE REPAIR BY EPOXY INJECTION
	72								72	512	33000	72	SY	TYPE 2 WATERPROOFING
	114								114	512	74000	114	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES
	259,000								259,000	513	10260	259,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3
	6,165								6,165	513	20000	6,165	EACH	WELDED STUD SHEAR CONNECTORS
	2,500								2,500	514	00060	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT
	2,500								2,500	514	00066	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT
	100								100	516	10010	100	FT	ARMORLESS PREFORMED JOINT SEAL
	17								17	516	13600	17	SF	1" PREFORMED EXPANSION JOINT FILLER
	224								224	516	13900	224	SF	2" PREFORMED EXPANSION JOINT FILLER
	107								107	516	14020	107	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL
	6								6	516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11.5"x13"x2.168" WITH 12.5"x18"x1.5" LOAD PLATE)
	12								12	516	44201	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x12"x3.128" WITH 11"x18"x1.5" LOAD PLATE)
	6								6	516	44201	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11.5"x13"x2.168" WITH 12.5"x24"x1.5" LOAD PLATE)
	78								78	518	20000	78	SY	PREFABRICATED GEOCOMPOSITE DRAIN
	16								16	518	21200	16	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
	142								142	518	40000	142	FT	6" PERFORATED CORRUGATED PLASTIC PIPE
	71								71	518	40010	71	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS
		850							850	SPECIAL	51900100	850	SF	COMPOSITE FIBER WRAP SYSTEM
		24							24	519	11100	24	SF	PATCHING CONCRETE STRUCTURE

GENERAL SUMMARY

DESIGN AGENCY TRANSYSTEMS 1100 SUPERIOR AVE. E. STE 1000 CLEVELAND, OHIO 44114	
DESIGNER	
RJG	
REVIEWER	
MSW 09/06/24	
PROJECT ID	
105435	
SHEET	TOTAL
P.238	791

GENERAL SUMMARY	
DESIGNER RJG DESIGN AGENCY TRANSYSTEMS 1100 SUPERIOR AVE. E., STE 1000 CLEVELAND, OHIO 44114	
PROJECT ID 105435	REVIEWER MSW 09/06/24
SHEET P.239	TOTAL 791

DESIGN AGENCY	
TRANSYSTEMS	1100 SUPERIOR AVE., STE. 1000 CLEVELAND, OHIO 44114
DESIGNER	
RJG	
REVIEWER	
MSW	09/06/24
PROJECT ID	
105435	
SHEET	TOTAL
P.251	791

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SUBTOTAL CARRIED TO SHEET P.251

DESIGN AGENCY

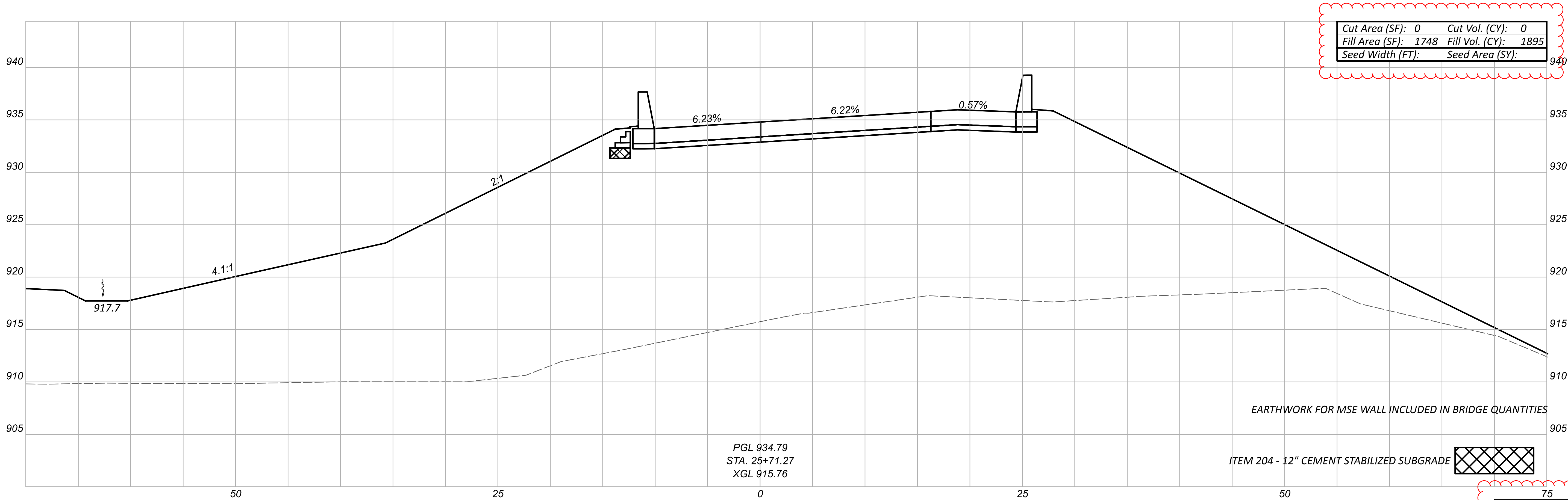
DESIGNER

REVIEWER

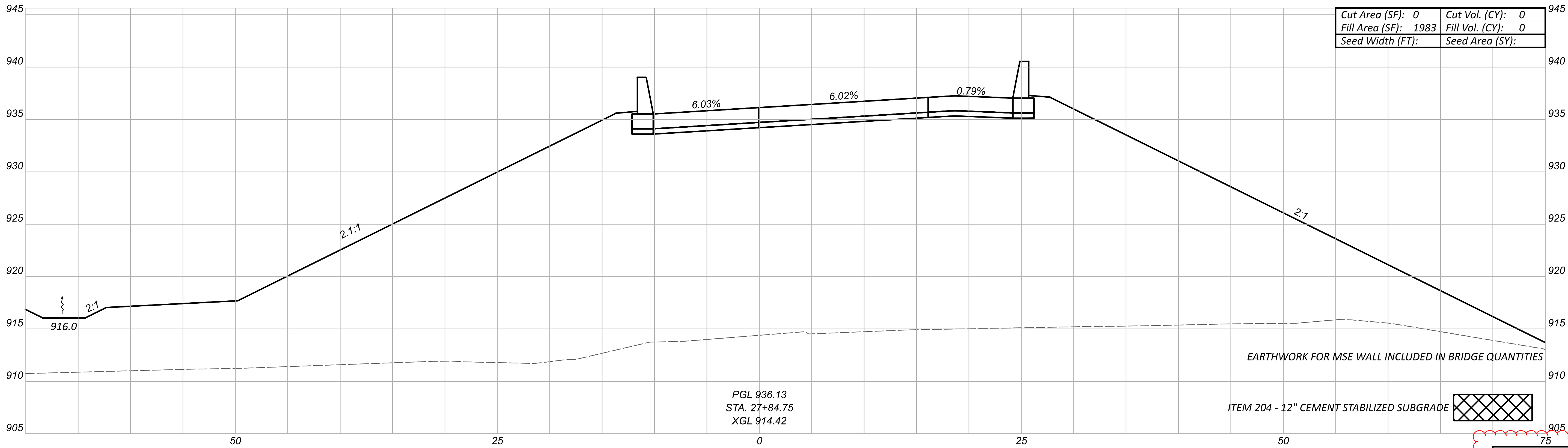
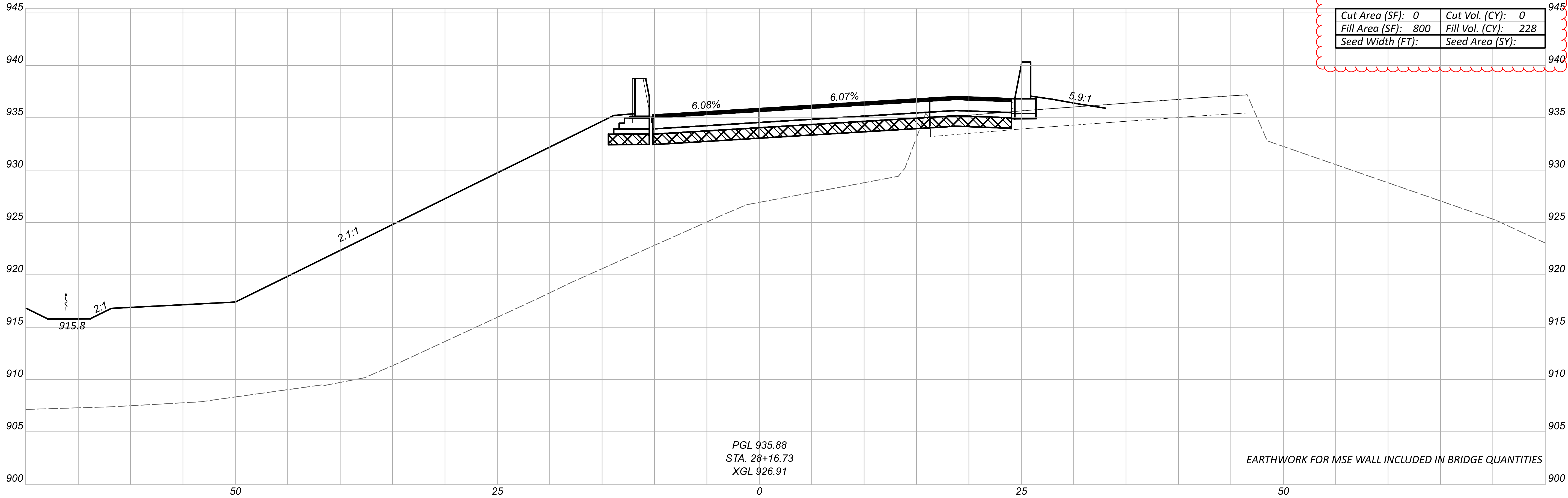
MSW 09/06/24

SHEET	TOTAL
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79



CROSS SECTIONS - RAMP O
STA. 25+71.27

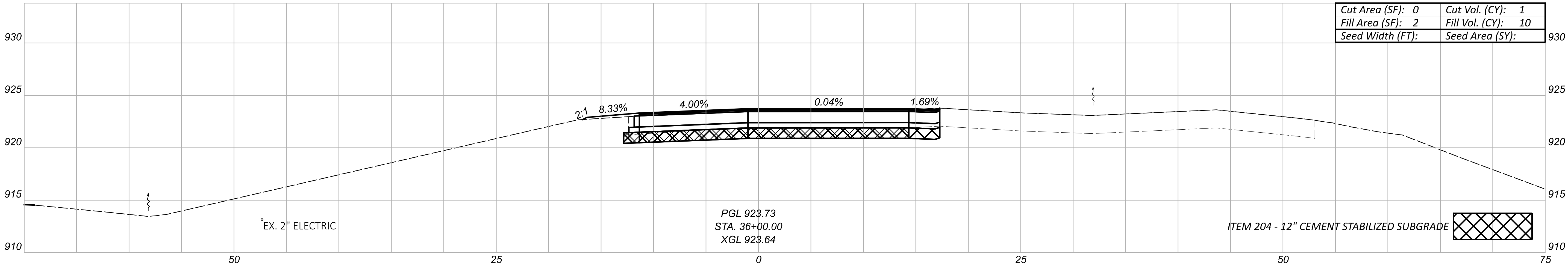
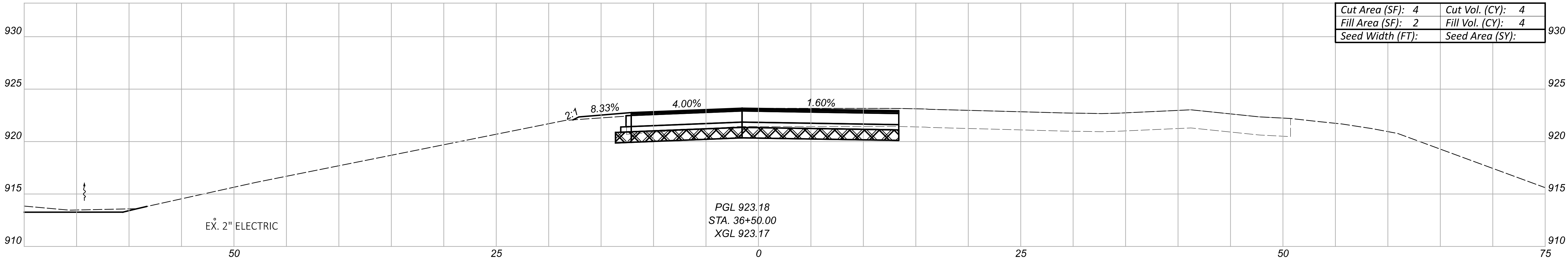
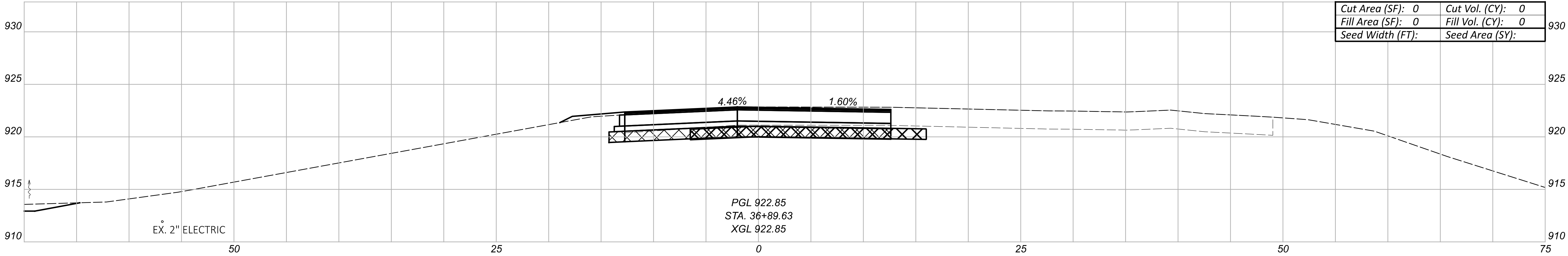


NOTE: ALL SEEDING QUANTITIES HAVE BEEN GENERATED USING PLAN VIEW
AREAS BASED ON THE 3-D MODEL. FOR QUANTITIES, SEE SHEET P.021

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
0	0	228	P.412	791

CROSS SECTIONS - RAMP O
STA. 27+84.75 TO STA. 28+16.73

DESIGN AGENCY
TRANSYSTEMS 1100 SUPERIOR AVE. E. STE 1000 CLEVELAND, OHIO 44114
DESIGNER
RJG
REVIEWER
MSW 09/06/24
PROJECT ID
105435



NOTE: ALL SEEDING QUANTITIES HAVE BEEN GENERATED USING PLAN VIEW
AREAS BASED ON THE 3-D MODEL. FOR QUANTITIES, SEE SHEET P.021

Ramp O Totals		Sheet Totals	
Cut	Fill	Seeding	Cut
1536	10618	•	5

CROSS SECTIONS - RAMP O
STA. 36+00.00 TO STA. 36+89.63

DESIGN AGENCY
TRANSYSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

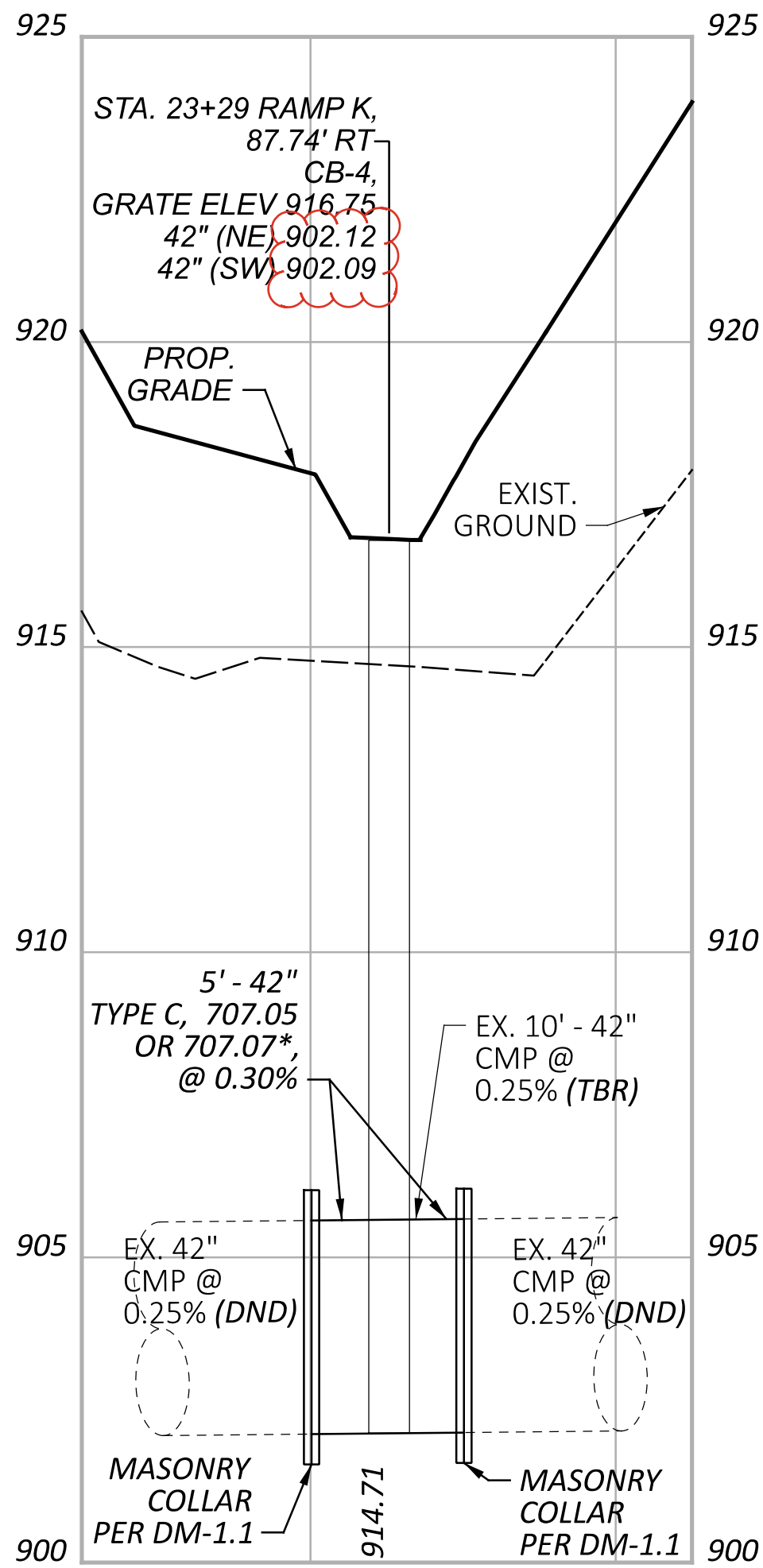
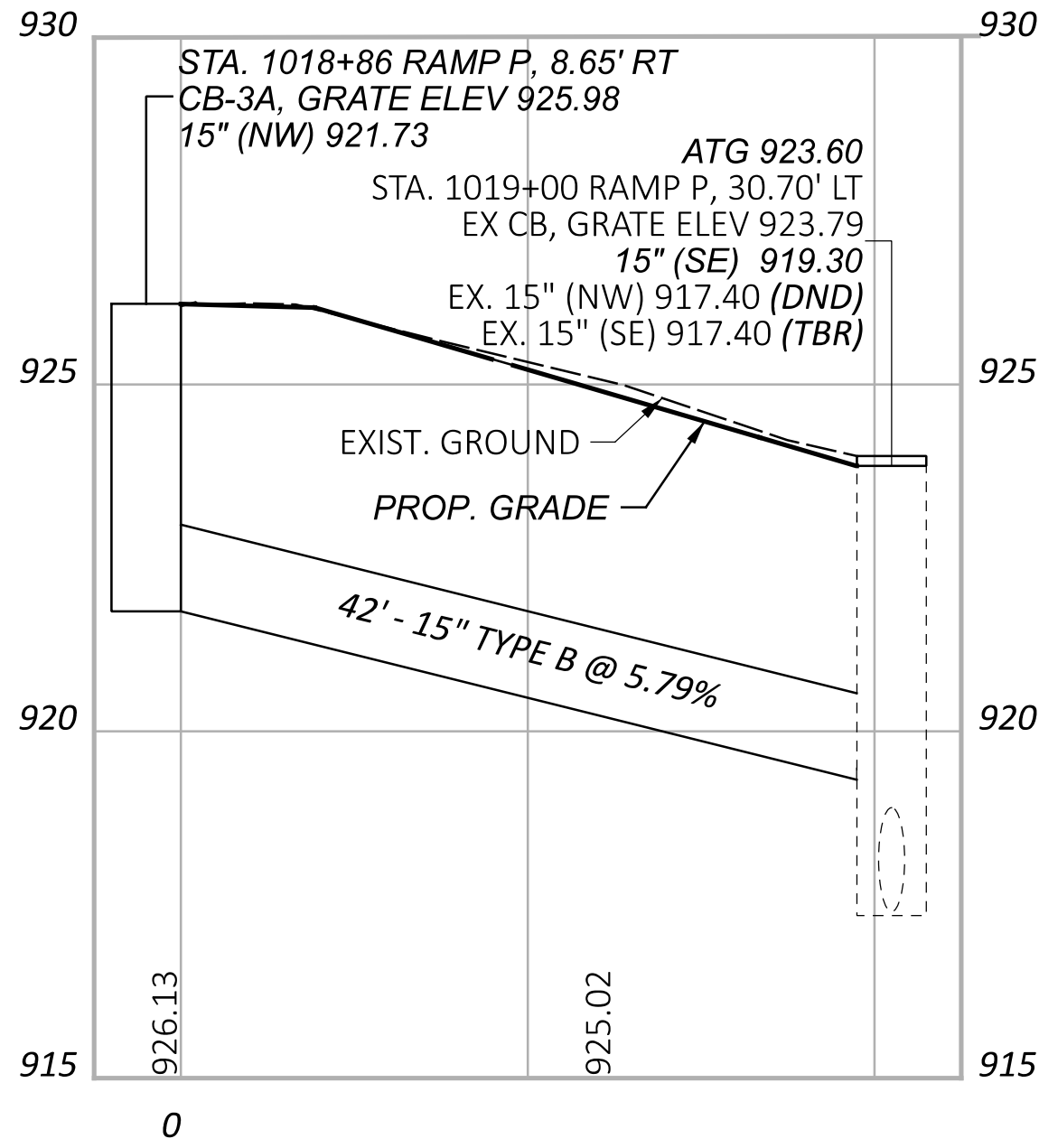
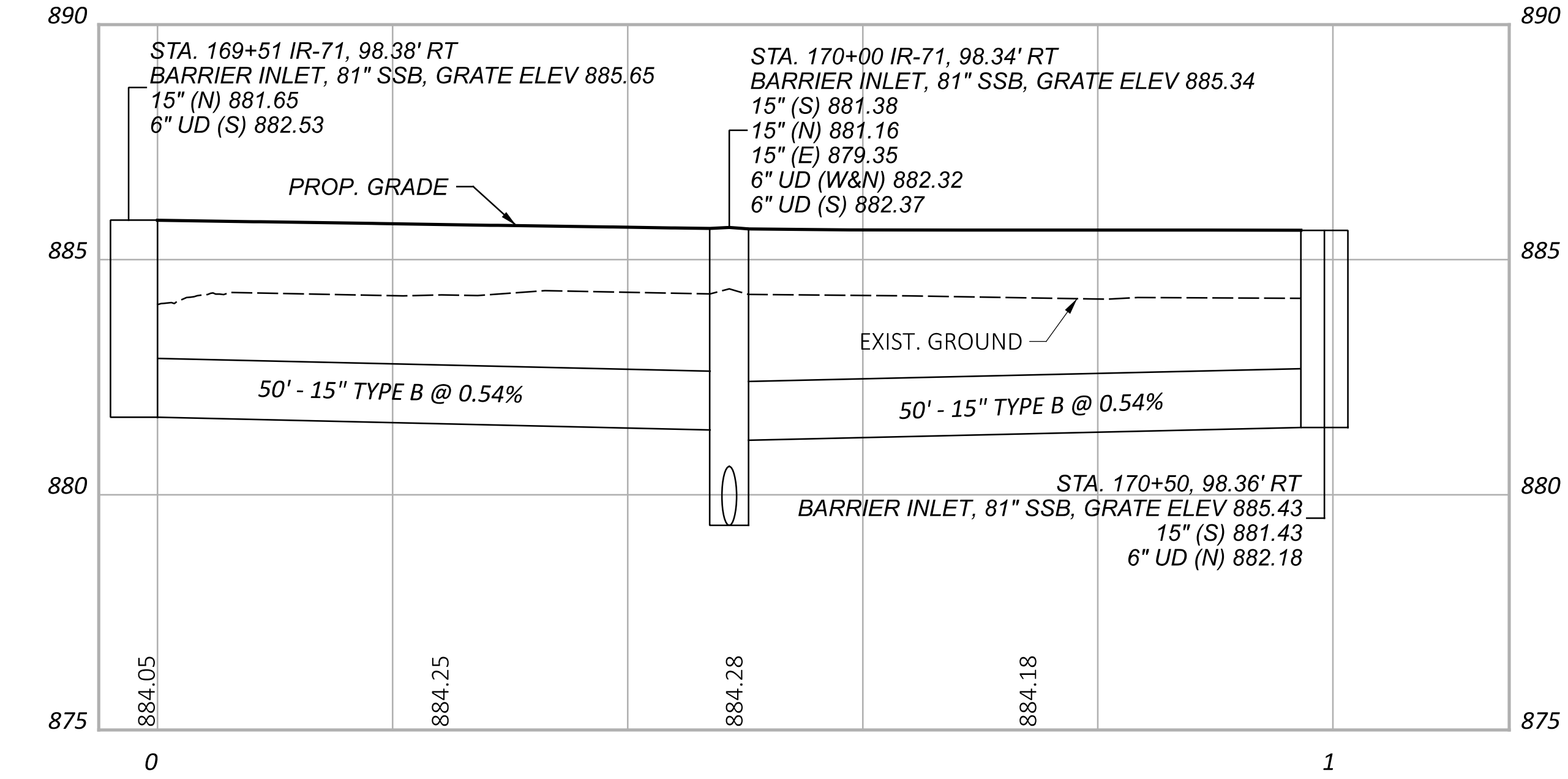
DESIGNER
RJG

REVIEWER
MSW 09/06/24

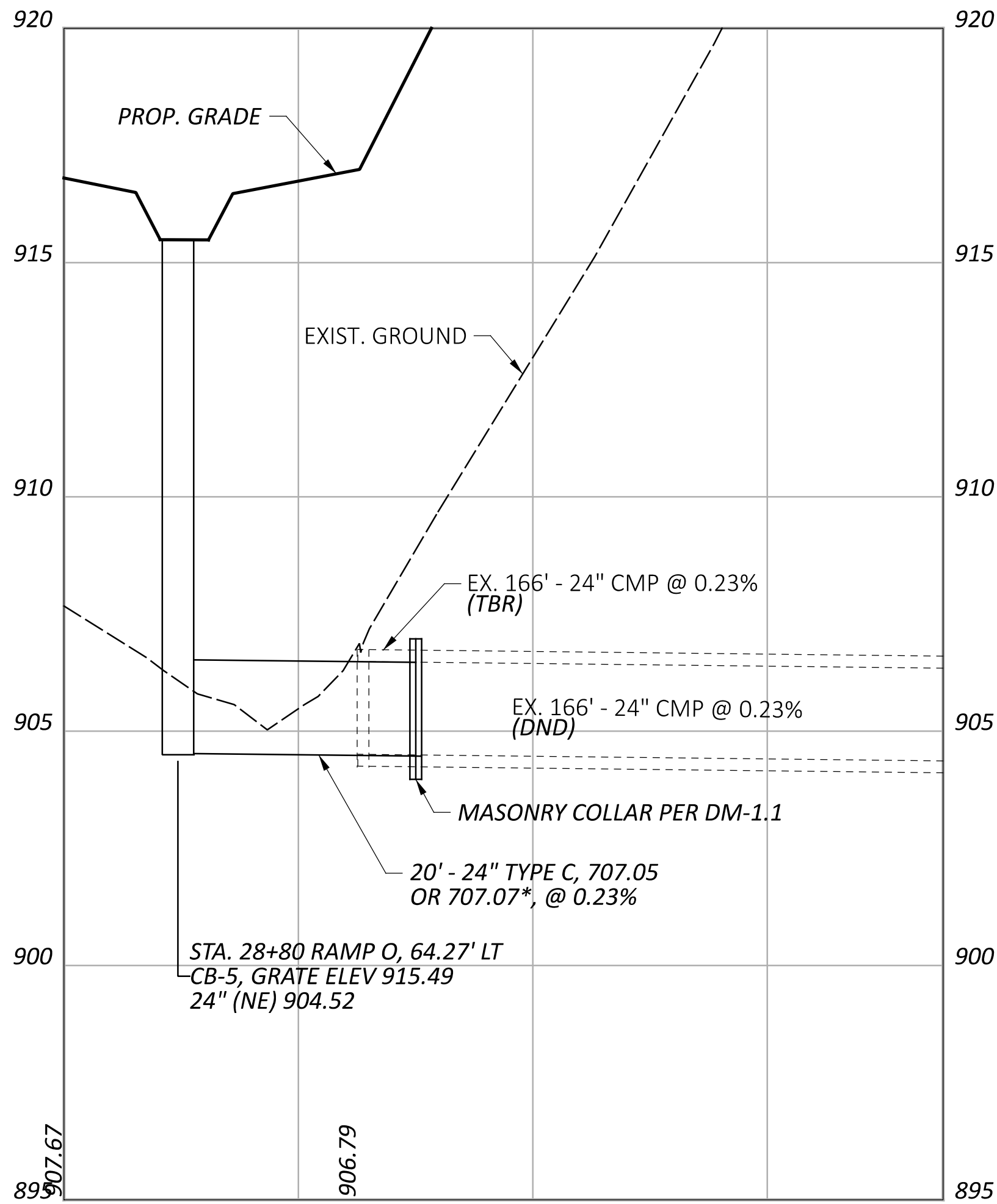
PROJECT ID
105435

SHEET
P.419

TOTAL
791



* CONTRACTOR TO FIELD VERIFY AND
MATCH DIMENSIONS OF CORRUGATIONS



* CONTRACTOR TO FIELD VERIFY AND
MATCH DIMENSIONS OF CORRUGATIONS

STORM SEWER PROFILES
IR-71, RAMP P AND O

DESIGN AGENCY

TRANSYSTMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER

MHT

REVIEWER

NFF 09/06/24

PROJECT ID

105435

SHEET

P.496

TOTAL

791

FRA-71/270-28.27/25.99A

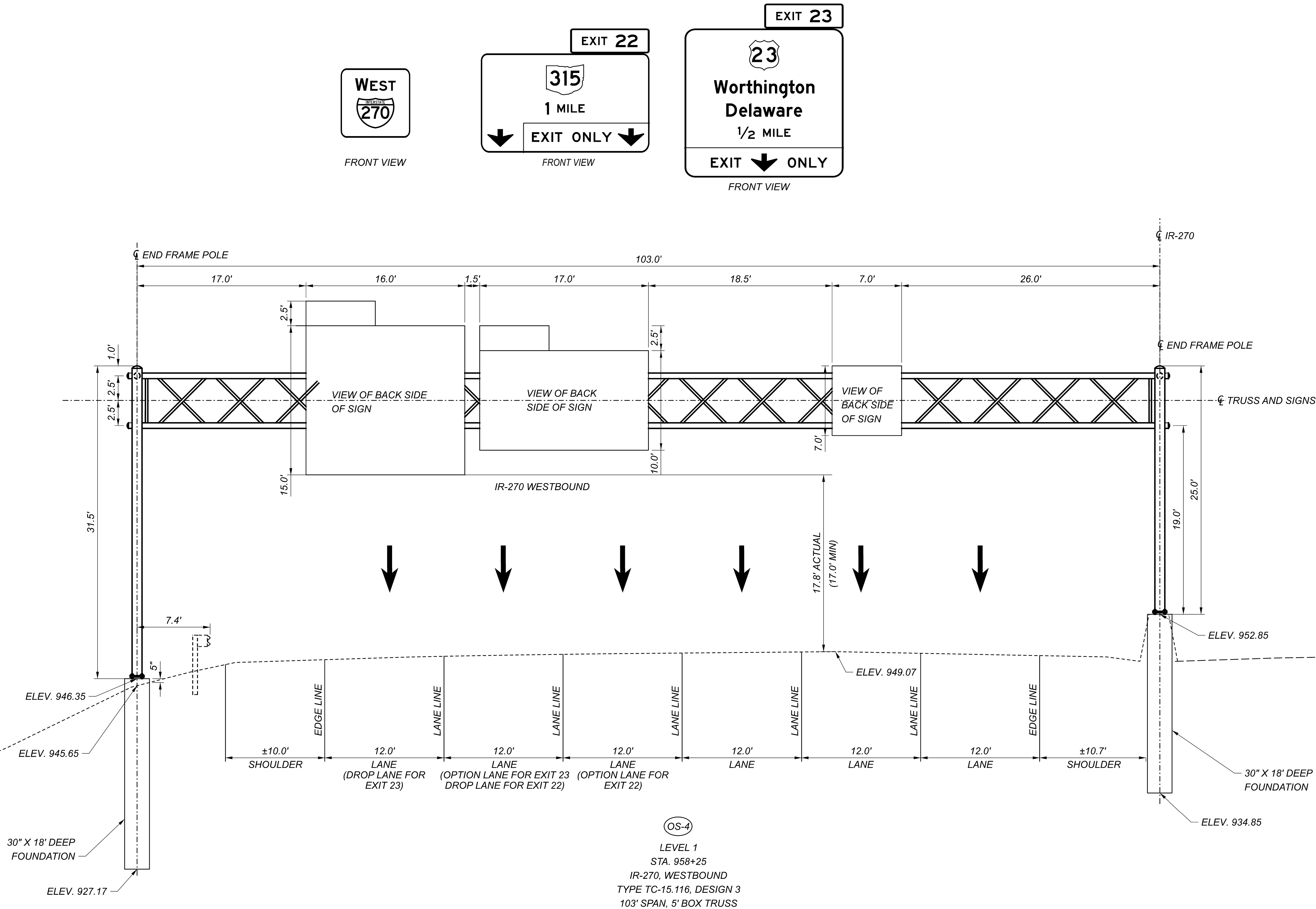
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SIGNING SUBSUMMARY

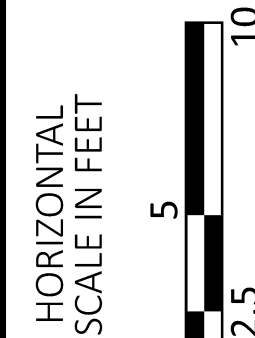




NOTES:

- FOR PLAN VIEW DETAILS, SEE SHEET P.521.
- INSTALL OVERHEAD TRUSS SUPPORT PER SCD TC-15.116 AND FOUNDATIONS PER TC-21.11 AND TC-21.50.

SIGN ELEVATION VIEW
IR-270 - STA. 958+25



DESIGN AGENCY

TRANSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER

ZS

REVIEWER

SS 09/06/24

PROJECT ID

105435

SHEET

P.542

TOTAL

791

SFN: 2511372

ESTIMATED QUANTITIES								CALCULATED BY: SLL DATE: 06/20/2024	
								CHECKED BY: IS DATE: 06/25/2024	
ITEM	EXTENSION	TOTAL 02/IMS/10	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET REF.
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3 / 48
202	22900	134	SY	APPROACH SLAB REMOVED				134	
202	23500	1,041	SY	WEARING COURSE REMOVED				1,041	
203	35110	78	CY	GRANULAR MATERIAL, TYPE B	78				
SPECIAL	20365000	2	EACH	SETTLEMENT PLATFORM	2				4 / 48
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	LS				4 / 48
503	21100	186	CY	UNCLASSIFIED EXCAVATION				186	
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00500	4,290	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	4,290				
507	00550	4,510	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4,510				
507	00700	1,050	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1,050			
507	00750	1,125	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1,125			
507	93300	59	EACH	STEEL POINTS OR SHOES	44	15			
509	10000	95,964	LB	EPOXY COATED STEEL REINFORCEMENT	12,012	13,712	70,240		
509	30020	7,486	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			7,486		
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
511	34446	253	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			253		
511	34450	74	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			74		
511	41012	31	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		31			
511	44112	80	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	80				
511	46512	149	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	107	42			
512	10100	1,038	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	122	102	493	321	
512	33000	34	SY	TYPE 2 WATERPROOFING	34				
513	10300	231,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			231,000		
513	20000	2,835	EACH	WELDED STUD SHEAR CONNECTORS			2,835		
514	00060	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			11,000		
514	00066	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			11,000		
516	10010	76	FT	ARMORLESS PREFORMED JOINT SEAL				76	
516	13600	165	SF	1" PREFORMED EXPANSION JOINT FILLER				165	
516	13900	156	SF	2" PREFORMED EXPANSION JOINT FILLER				156	
516	14020	76	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	76				
516	44201	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	8				23 / 48
				(14"x16"x3.607" WITH 15"x20"x1.5" LOAD PLATE)					
516	44201	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN		4			24 / 48
				(14.75"x18"x3.128" WITH 15.75"x26"x1.5" LOAD PLATE)					
518	20000	59	SY	PREFABRICATED GEOCOMPOSITE DRAIN	59				
518	21200	12	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	12				
518	40000	147	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	147				
523	20001	3	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2	1			3 / 48
523	20501	3	EACH	RESTRIKE, AS PER PLAN	2	1			3 / 48

ESTIMATED QUANTITIES - 1
BRIDGE NO. FRA-00071-28.265
IR-71 UNDER RAMP K IR-270 WB TO IR-71 SB

SFN
2511372

DESIGN AGENCY
TRANSYSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER
BTA

CHECKER
EA

REVIEWER
NFF

PROJECT ID
105435

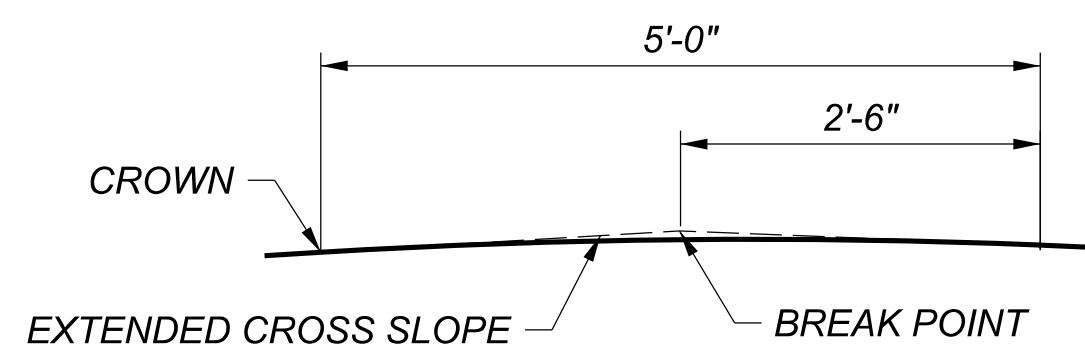
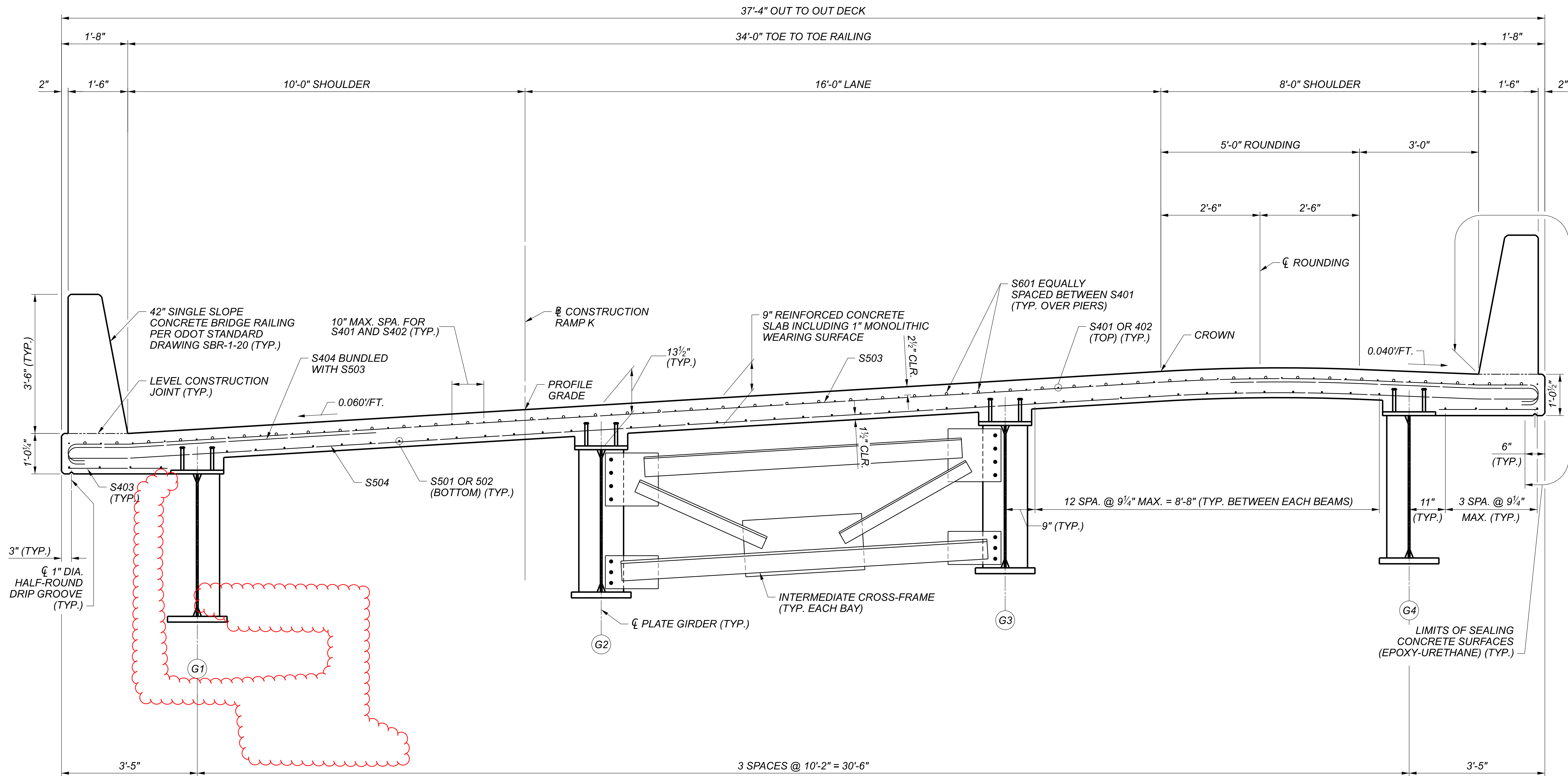
SUBSET
5

TOTAL
48

SHEET
P.603

TOTAL
791

06/21/24

ROUNDING DETAIL

TRANSVERSE SECTION
(RAILING REINFORCING NOT SHOWN FOR CLARITY)

NOTES:

- FOR FRAMING PLAN AND GIRDER ELEVATION, SEE SHEETS 25 AND 26 OF 48.
- FOR SCREED, TOP OF HAUNCH, AND FINAL DECK ELEVATIONS, SEE SHEETS 37 AND 38 OF 48.
- FOR DECK PLAN, SEE SHEET 32 OF 48.
- FOR RAILING PLAN AND ELEVATION, SEE SHEET 33 AND 34 OF 48.
- FOR CONCRETE REINFORCEMENT BAR LISTS, SEE SHEET 45 THRU 48 OF 48.
- DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENT END DIAPHRAGMS.
- 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 GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4 1/2" INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.
- THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE 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 511.23.

TRANSVERSE SECTION
BRIDGE NO. FRA-00071-28.265
IR-71 UNDER RAMP K IR-270 WB TO IR-71 SB

SFN
2511372

DESIGN AGENCY

TRANSYSYSTEMS
1100 SUPERIOR AVE., STE. 1000
CLEVELAND, OHIO 44114

DESIGNER
BTA

CHECKER
EA

REVIEWER
NFF 06/21/24

PROJECT ID
105435

SUBSET TOTAL
31 48

SHEET TOTAL
P.629 791

SFN: 2511224

ESTIMATED QUANTITIES										CALCULATED BY: SLL DATE: 06/21/2024	
										CHECKED BY: IS DATE: 06/24/2024	
ITEM	EXTENSION	TOTAL 02/IMS/10	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET REF.		
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3 / 48		
202	22900	135	SY	APPROACH SLAB REMOVED				135			
202	23500	1,031	SY	WEARING COURSE REMOVED				1,031			
203	35110	78	CY	GRANULAR MATERIAL, TYPE B	78						
SPECIAL	20365000	2	EACH	SETTLEMENT PLATFORM	2				4 / 48		
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	LS				4 / 48		
503	21100	160	CY	UNCLASSIFIED EXCAVATION		160					
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS			
507	00500	3,850	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	3,850						
507	00550	4,070	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4,070						
507	00700	1,050	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1,050					
507	00750	1,125	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1,125					
507	93300	59	EACH	STEEL POINTS OR SHOES	44	15					
509	10000	96,438	LB	EPOXY COATED STEEL REINFORCEMENT	13,180	13,800	69,458				
509	30020	7,498	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			7,498				
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2						
511	34446	250	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			250				
511	34450	73	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			73				
511	41012	30	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		30					
511	44112	85	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	85						
511	46512	154	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	112	42					
512	10100	1,072	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	126	102	489	355			
512	33000	34	SY	TYPE 2 WATERPROOFING	34						
513	10300	227,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			227,000				
513	20000	2,862	EACH	WELDED STUD SHEAR CONNECTORS			2,862				
514	00060	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			11,000				
514	00066	11,000	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			11,000				
516	10010	75	FT	ARMORLESS PREFORMED JOINT SEAL				75			
516	13600	172	SF	1" PREFORMED EXPANSION JOINT FILLER				172			
516	13900	154	SF	2" PREFORMED EXPANSION JOINT FILLER				154			
516	14020	76	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	76						
516	44201	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	8				23 / 48		
				(14"x16"x3.607" WITH 15"x20"x1.5" LOAD PLATE)							
516	44201	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN		4			24 / 48		
				(14.75"x18"x3.128" WITH 15.75"x26"x1.5" LOAD PLATE)							
518	20000	65	SY	PREFABRICATED GEOCOMPOSITE DRAIN	65						
518	21200	12	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	12						
518	40000	157	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	157						
523	20001	3	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2	1			3 / 48		
523	20501	3	EACH	RESTRIKE, AS PER PLAN	2	1			3 / 48		

ESTIMATED QUANTITIES - 1
BRIDGE NO. FRA-00071-28.294
IR-71 UNDER RAMP O IR-71 NB TO IR-270 WB

SFN
2511224

DESIGN AGENCY
TRANSYSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER
BTA

CHECKER
EA

REVIEWER
NFF

PROJECT ID
105435

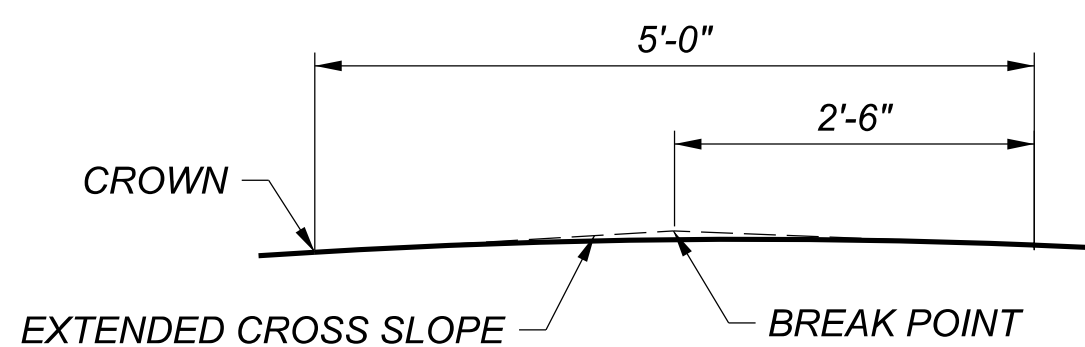
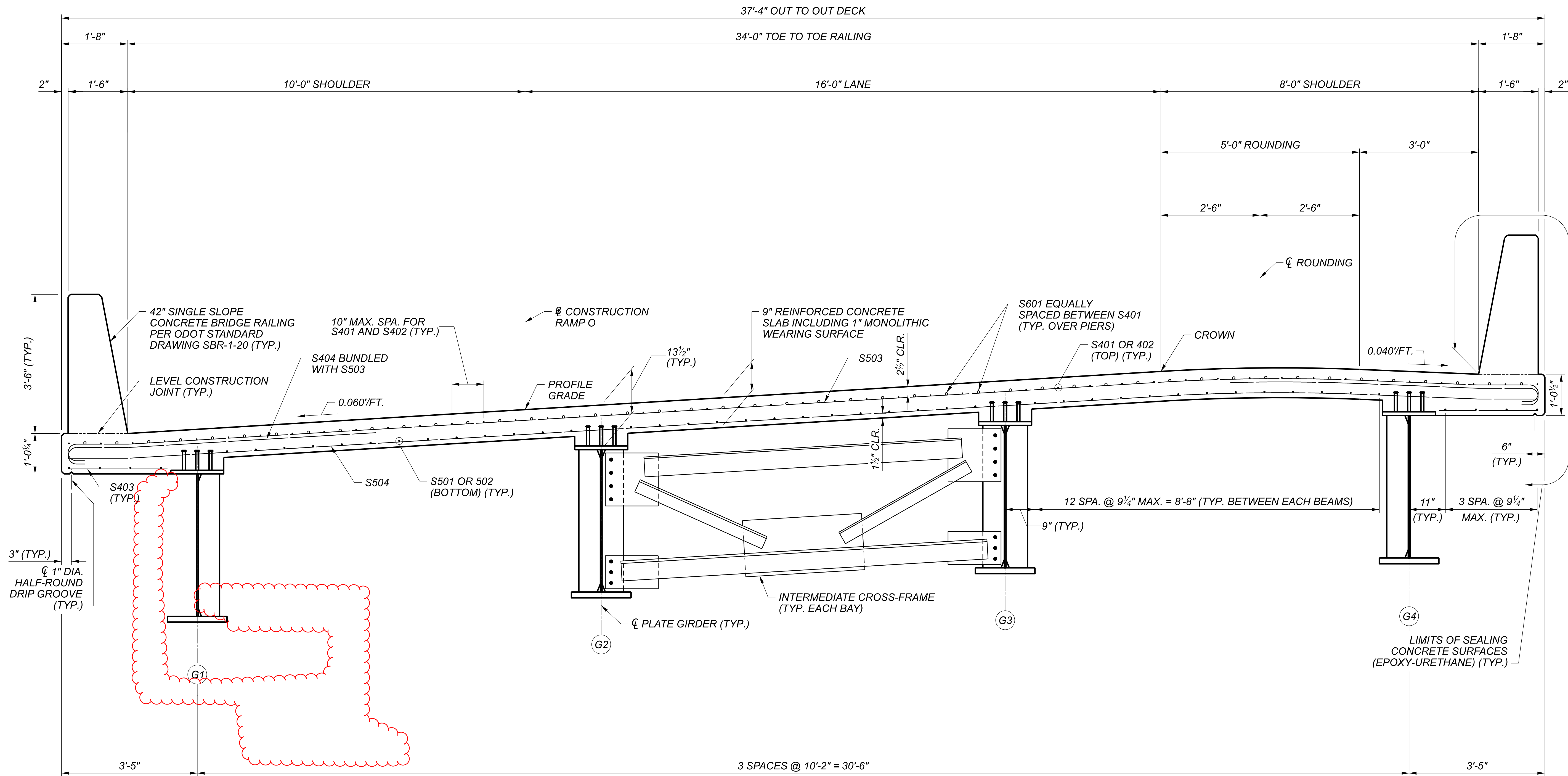
SUBSET
5

TOTAL
48

SHEET
P.651

TOTAL
791

06/21/24

ROUNDING DETAIL

TRANSVERSE SECTION
(RAILING REINFORCING NOT SHOWN FOR CLARITY)

NOTES:

- FOR FRAMING PLAN AND GIRDER ELEVATION, SEE SHEETS 25 AND 26 OF 48.
- FOR SCREED, TOP OF HAUNCH, AND FINAL DECK ELEVATIONS, SEE SHEETS 37 AND 38 OF 48.
- FOR DECK PLAN, SEE SHEET 32 OF 48.
- FOR RAILING PLAN AND ELEVATION, SEE SHEETS 33 AND 34 OF 48.
- FOR CONCRETE REINFORCEMENT BAR LISTS, SEE SHEETS 45 THRU 48 OF 48.
- DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENT END DIAPHRAGMS.
- 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 GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4 1/2" INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.
- THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE 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 511.23.

TRANSVERSE SECTION
BRIDGE NO. FRA-00071-28.294
IR-71 UNDER RAMP O IR-71 NB TO IR-270 WB

SFN
2511224

DESIGN AGENCY

TRANSYSYSTEMS
1100 SUPERIOR AVE., STE. 1000
CLEVELAND, OHIO 44114

DESIGNER
BTA

CHECKER
EA

REVIEWER
NFF 06/21/24

PROJECT ID
105435

SUBSET TOTAL
31 48

SHEET TOTAL
P.677 791

SFN: 2511460

ESTIMATED QUANTITIES										CALCULATED BY: SLL DATE: 06/24/2024		CHECKED BY: EA DATE: 06/25/2024	
ITEM	EXTENSION	TOTAL 02/IMS/10	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET REF.				
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3 / 47				
202	22900	134	SY	APPROACH SLAB REMOVED				134					
202	23500	913	SY	WEARING COURSE REMOVED			913						
203	35110	25	CY	GRANULAR MATERIAL, TYPE B	25								
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	4 / 47				
503	21100	578	CY	UNCLASSIFIED EXCAVATION				578					
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS					
507	00500	4,500	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	4,500								
507	00550	4,860	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4,860								
507	93300	72	EACH	STEEL POINTS OR SHOES	72								
509	10000	116,515	LB	EPOXY COATED STEEL REINFORCEMENT	34,714	7,341	74,460						
509	30020	7,592	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			7,592						
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2								
511	34446	253	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			253						
511	34450	75	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			75						
511	41012	33	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		33							
511	44112	130	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	130								
511	46512	167	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	167								
512	10100	1,009	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	145	367	497						
512	10600	50	FT	CONCRETE REPAIR BY EPOXY INJECTION		50							
512	33000	72	SY	TYPE 2 WATERPROOFING	72								
512	74000	114	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		114							
513	10260	259,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			259,000						
513	20000	6,165	EACH	WELDED STUD SHEAR CONNECTORS			6,165						
514	00060	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			2,500						
514	00066	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			2,500						
516	10010	100	FT	ARMORLESS PREFORMED JOINT SEAL				100					
516	13600	17	SF	1" PREFORMED EXPANSION JOINT FILLER				17					
516	13900	224	SF	2" PREFORMED EXPANSION JOINT FILLER	224								
516	14020	107	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL				107					
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11.5"x13"x2.168" WITH 12.5"x18"x1.5" LOAD PLATE)		6							
516	44201	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x12"x3.128" WITH 11"x18"x1.5" LOAD PLATE)	12				23 / 47				
516	44201	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11.5"x13"x2.168" WITH 12.5"x24"x1.5" LOAD PLATE)		6			25 / 47				
518	20000	78	SY	PREFABRICATED GEOCOMPOSITE DRAIN	78								
518	21200	16	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	16								
518	40000	142	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	142								
518	40010	71	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	71								

ESTIMATED QUANTITIES - 1
BRIDGE NO. FRA-00270-25.990A
RAMP K IR-270 WB TO IR-71 SB OVER RAMP O IR-71 NB TO IR-270 WB

SFN
2511460

DESIGN AGENCY
TRANSYSYSTEMS
1100 SUPERIOR AVE. E. STE 1000
CLEVELAND, OHIO 44114

DESIGNER
BTA

CHECKER
EA

REVIEWER
NFF

PROJECT ID
105435

SUBSET
5

TOTAL
47

SHEET
P.699

TOTAL
791

06/21/24

SFN: 2511460

[illegible]

CALCULATED BY: SLL DATE: 06/24/2024
CHECKED BY: EA DATE: 06/25/2024

SFN		2511460	
DESIGN AGENCY			
TRANSYSTEMS		1100 SUPERIOR AVE. E. STE. 1000 CLEVELAND, OHIO 44114	
DESIGNER		CHECKER	
BTA		EA	
REVIEWER			
NFF		06/21/24	
PROJECT ID			
105435			
SUBSET		TOTAL	
6		47	
SHEET		TOTAL	
P.700		791	

ESTIMATED QUANTITIES - 2
BRIDGE NO. FRA-00270-25.990A
RAMP K IR-270 WB TO IR-71 SB OVER RAMP O IR-71 NB TO IR-270 WB