UTILITIES

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

AT&T
MS. PATRICIA HARRIS
700 HURON RD.
CLEVELAND, OH 44115
PHONE: (216) 822-6535
FAX: (216) 822-6560
E-MAIL: PH1924@ATT.COM

CENTURYLINK/INVOLTA
MR. BOBBY WALTERS
3801 ELM ROAD
WARREN, OH 44483
PHONE: (440) 244-8415
E-MAIL:
BOBBY.D.WALTERS@CENTURYLINK.COM

CITY OF AKRON
WATER DISTRIBUTION DIVISION
MR. TONY PUGLIA
1460 TRIPLET BLVD.
AKRON, OH 44306
PHONE: (330) 375-2420
EMAIL: TPUGLIA@AKRONOHIO.GOV

FIRST ENERGY (TRANSMISSION)
MR. DAVE KOZY
76 S. MAIN ST.
AKRON, OH 44308
PHONE: (330) 384-5194

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 4 - ITS
MS. MICHELLE CHANEY
2088 S. ARLINGTON RD.
AKRON, OH 44306
PHONE: (330) 786-2267
FAX: (330) 786-2232
E-MAIL:
MICHELLE.CHANEY@DOT.OHIO.GOV

OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE - ITS
1606 W. BROAD STREET
COLUMBUS, OH 43223
PHONE: (614) 387-4113
E-MAIL: cen.its.lab@dot.ohio.gov

SPRINT
MR. JOSEPH J. THOMAS
11370 ENTERPRISE PARK DR.
SHARONVILLE, OH 45241
PHONE: (440) 447-6163
E-MAIL:
JOSEPH.J.THOMAS@SPRINT.COM

VERIZON
MR. AL GUEST
120 RAVINE ST.
AKRON, OH 44303
PHONE: (330) 253-8267
FAX: (918) 562-7014

OHIO EDISON (TRANSMISSION)
FIRST ENERGY SERVICE COMPANY
SUPERVISOR,
TRANSMISSION MAINTENANCE
ATTN: RYAN GRADY
(330) 252-6379
(330) 413-2046 CELL
RGRADY@FIRSTENERGYCORP.COM

DOMINION ENERGY OHIO
ATTN: MICAH RISACHER
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OH 44333
(330) 664-2638
(440) 371-1533 CELL
Micah.J.Risacher@
dominionenergy.com

AT&T OHIO
MR. PAUL THOMPSON
50 W. BOWERY ST RM 628
AKRON, OH 44308
PHONE: (330) 384-9988
FAX: (330) 384-9866

CITY OF AKRON
ENGINEERING BUREAU
MS. CHRISTINE JONKE
166 S. HIGH ST. ROOM 701
AKRON, OH 44308
PHONE: (330) 375-2495
FAX: (330) 375-2288

DOMINION EAST OHIO GAS
MS. MARY J. LONG
320 SPRINGSIDE DR.
AKRON, OH 44333
PHONE: (330) 664-2409
FAX: (888) 504-0126
E-MAIL: MARY.J.LONG@DOM.COM

CENTURYLINK
MR. DOUG HOLLOWAY
1025 ELDORADO BLVD.
SUITE 43C-402
BROOMFIELD, CO 80021
PHONE: (216) 906-6284
E-MAIL:
DOUG.HOLLOWAY
@CENTURYLINK.COM

OHIO EDISON
ATTN: DAVID MILLER
1910 W. MARKET ST. BLDG. 1
AKRON, OH 44313
PHONE: (330) 436-4055
CELL: (330) 715-4340
Millerdl@firstenergycorp.com

CHARTER COMMUNICTIONS
MR. JAMES LONG
530 S. MAIN ST. STE. 1741
AKRON, OH 44311
PHONE: (330) 312-8845
FAX: (330) 622-4106
E-MAIL:
James.Long@charter.com

WINDSTREAM BUSINESS
MR. DWAYNE LAHMANN
10070 RUTH DR,
WADSWORTH, OH 44281
PHONE: (330) 329-5495
E-MAIL:
DWAYNE.LAHMANN@
WINDSTREAM.COM

ZAYO
MR. ERIK LICIS
4199 KINROSS LAKES PARKWAY
SUITE #10
RICHFIELD, OH 44286
PHONE: (330) 237-3292
ERIK.LICIS@ZAYO.COM

WINDSTREAM OSP OHIO
LEON TAYLOR
2165 STATE ROUTE 133 SOUTH
BLANCHESTER, OHIO, 45107
937 725 5358

AKRON SEWER - CITY OF
ATTN: SCOTT DAVENPORT
2460 AKRON PENINSULA ROAD
AKRON, OH 44310
330-375-2769

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.

ODOT UTILITY COORDINATOR
MATT STEELE
330-786-4832

THE UNDERGROUND UTILITIES ON THIS PLAN HAVE BEEN LOCATED BY USING A SUBSURFACE UTILITY COMPANY (SUE), NATIONAL ENGINEERING& ARCHITECTURE SERVICES (NEAS). IF THERE ARE ANY DISCREPANCIES BETWEEN FIELD MARKINGS AND WHAT THE PLAN INDICATED PLEASE CONTACT THE PROJECT UTILITY COORDINATE PRIOR TO ANY SUBSURFACE UTILITY WORK BEING INITIATED.

EXISTING PLANS

EXISTING PLANS ENTITLED SUM-8-0.63, SUM-8-1.73/1.95, SUM-8-2.23, SUM-8-1.99, SUM-8-0.38A, SUM-8-12.31, SUM-8-1.95, AND SUM-8-1.99 MAY BE INSPECTED IN THE ODOT DISTRICT 4 IN AKRON, OHIO

ENVIRONMENTAL COMMITMENTS

1. THE CONTRACTOR WILL ADVISE THE ODOT PROJECT ENGINEER A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ODOT PROJECT ENGINEER A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO ANY LANE RESTRICTIONS/CLOSURES AND BRIDGE/RAMP CLOSURES. THE ODOT PROJECT ENGINEER WILL FORWARD THE INFORMATION TO THE ODOT-DISTRICT 4 OFFICE OF PUBLIC INFORMATION FOR USE TO NOTIFY EMERGENCY SERVICES AND COMMUNITIES A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF PROJECT CONSTRUCTION. INCLUDED IN THIS NOTIFICATION WILL BE THE PROJECTED DATES/TIMES OF THE LANE RESTRICTIONS/CLOSURES, BRIDGE/RAMP CLOSURES AND PROPOSED DETOURS.

2. PRIOR TO BRIDGE DEMOLITION ACTIVITIES, THE UNDERSIDE OF THE EXISTING BRIDGE SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF BATS, ESPECIALLY FROM APRIL 1 TO SEPTEMBER 30. IF ANY BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF THE BRIDGE, THE ECOLOGICAL STAFF OF ODOT'S OFFICE OF ENVIRONMENTAL SERVICES AND ODOT DISTRICT 4 ENVIRONMENTAL STAFF SHALL BE CONTACTED UPON IDENTIFICATION.

3. ANY AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES SHALL BE RE-SEEDED/RE-VEGETATED WITH NATIVE PLANT SPECIES, INCLUDING NATIVE RIPARIAN TREE SPECIES, AND MULCHED DURING CONSTRUCTION TO ENCOURAGE ESTABLISHMENT OF NATIVE VEGETATION COVER, DECREASE EROSION AND PREVENT EROSION OF SEDIMENTS INTO WATERS OF THE U.S.

4. EXISTING RIPARIAN HABITAT ZONES SHALL BE MAINTAINED TO THE MAXIMUM EXTENT POSSIBLE.

5. CONSTRUCTION EQUIPMENT AND MATERIAL STAGING AREAS SHALL BE KEPT AWAY FROM STREAMS TO THE EXTENT PRACTICABLE. THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN A MANNER TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER OUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

6. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT CONSTRUCTION AND DEMOLITION DEBRIS FROM ENTERING THE STREAM(S). ANY DEBRIS THAT DOES FALL INTO THE STREAM(S) SHALL BE REMOVED AS SOON AS POSSIBLE.

7. ACCESS TO LOOKOUT PARK AND FREEDOM TRAIL WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES, EXCEPT AS NEEDED TO FACILITATE BRIDGE CONSTRUCTION OVER FREEDOM TRAIL.

8. EXCEPT AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES, THE STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT WILL NOT TAKE PLACE OUTSIDE PROPOSED CONSTRUCTION LIMITS THAT ARE WITHIN THE DEFINED BOUNDARIES OF LOOKOUT PARK, ADAMS PARK AND FREEDOM TRAIL.

9. NO TREES SHALL BE REMOVED WITHIN THE PROPOSED CONSTRUCTION FOOTPRINT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO PROTECTEC BAT SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

10. ANY AREAS OF DISTURBANCE THAT OCCUR WITHIN OR ADJACENT TO THE IDENTIFIED 4(F) PROPERTIES WILL BE RESTORED TO A CONDITION AS GOOD AS OR BETTER THAN EXISTING.

11. THE CONTRACTOR SHALL ABIDE BY ALL WATERWAY PERMIT CONDITIONS THROUGHOUT DURATION OF CONSTRUCTION ACTIVITIES.

12. A CO-PERMITTEE NOTICE OF INTENT (NOI) WILL BE PREPARED AND PROVIDED TO THE CONTRACTOR BY ODOT PERSONNEL AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE CO-PERMITTEE NOI FOR COVERAGE UNDER OHIO EPA STORMWATER CONSTRUCTION GENERAL PERMIT AND SUBMITTING TO OHIO EPA FOR APPROVAL, ALONG WITH THE DEVELOPMENT OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), BEFORE CONSTRUCTION ACTIVITY CAN TAKE PLACE. SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S "CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD DRAWINGS" SHALL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL, ALONG WITH ADDITIONAL PROTECTIVE MEASURES TO AVOID IMPACTS TO ADJACENT PROPERTIES, STREAMS AND WETLANDS FROM CONSTRUCTION ACTIVITIES.

13. THE CONTRACTOR SHALL RESTRICT WORK IN THE LITTLE CUYAHOGA RIVER BETWEEN DATES OF APRIL 15TH AND JUNE 30TH TO REDUCE THE IMPACTS TO INDIGENOUS AQUATIC SPECIES AND THEIR HABITAT.

14. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOOKOUT PARK AND ADAMS PARK AT ALL TIMES DURING CONSTRUCTION ACTIVITIES, EXCEPT FOR THE TIME NEEDED TO COMPLETE CERTAIN CONSTRUCTION ACTIVITIES THAT WOULD COMPROMISE SAFETY OF THE USERS OF LOOKOUT PARK.

15. THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING ALONG THE KNOWN BOUNDARIES OF LOOKOUT PARK, FREEDOM TRAIL, AND ADAMS PARK, WITHIN THE PROJECT CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE PUBLIC AND TO MINIMIZE IMPACTS TO THE PROPERTIES. THE CONSTRUCTION FENCE SHALL BE 4'-0" (MIN.) IN HEIGHT AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION BY THE CONTRACTOR. UNIT COST SHALL INCLUDE MATERIALS AND LABOR, INCLUDING REMOVAL OF FENCING WHEN PROJECT IS COMPLETED. THE FOLLOWING OUANTITY HAS BEEN INCLUDED FOR THIS WORK:

ITEM 607 - FENCE, MISC.:
CONSTRUCTION FENCING (PLASTIC/NYLON) - 900 FT

16. PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL APPROPRIATE SIGNAGE TO ALERT USERS OF LOOKOUT PARK, FREEDOM TRAIL, AND ADAMS PARK, OF CONSTRUCTION ACTIVITIES, ANY ACCESS RESTRICTION OR CLOSURES, AND TO DIRECT USERS TO SECONDARY ACCESS POINTS.

17. THE CONTRACTOR SHALL NOT STORE OR STAGE CONSTRUCTION EQUIPMENT OR MATERIALS WITHIN THE KNOWN BOUNDARIES OF LOOKOUT PARK, FREEDOM TRAIL, AND ADAMS PARK, OUTSIDE OF THE PROPOSED CONSTRUCTION LIMITS, WITH THE EXCEPTION OF AREA(S) IDENTIFIED BY THE OFFICIAL WITH JURISDICTION TO FACILITATE THE STORAGE AND STAGING OF EQUIPMENT.

18. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT (ODOT PROJECT ENGINEER), THE CITY OF AKRON (DIRECTOR OF PUBLIC SERVICE), AND SUMMIT METRO PARKS (CHIEF OF PLANNING AND DEVELOPMENT) 30 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

19. THE CONTRACTOR SHALL LIMIT THE TEMPORARY OCCUPANCY OF ADAMS PARK AND FREEDOM TRAIL TO TWO (2) NON-CONSECUTIVE SIX (6) MONTH PERIODS. A TEMPORARY PAVED CONNECTOR PATH TO BE USED AS A HAUL ROAD FOR CONSTRUCTION PURPOSES WILL BE BUILT WITHIN ADAMS PARK, INCLUDING A TEMPORARY PATH TO THE EAST OF THE HAUL ROAD THAT WILL CONNECT TO FREEDOM TRAIL.

21. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO FREEDOM TRAIL TO ADAMS PARK VIA THE TEMPORARY PATH LOCATED TO THE EAST OF THE HAUL ROAD AND INSTALL A BARRIER TO SEPARATE THE TWO PATHS.

FREEDOM TRAIL

THE CONTRACTOR SHALL BE REQUIRED TO REPAVE ANY SECTION OF THE FREEDOM TRAIL THAT HAS BEED DISTURBED DURING CONSTRUCTION OF ACCESS ROAD 1 PRIOR TO REOPENING THE TRAIL AFTER EACH OF THE TWO (2) SCHEDULED CLOSURES. QUANTITY HAS BEEN PROVIDED IN THE PLANS FOR AGGREGATE BASE COURSE AND ASPHALT SURFACE COURSE. THE CONTRACTOR SHALL UTILIZE THE EXISTING PLANS AND REFERENCE THE PROFILE GRADE IN THE AS-BUILT PLANS. THE CONTRACTOR SHALL INSTALL THE TRAIL AT A 1.50% CROSS SLOPE FOR THE LENGTH OF THE DISTURBANCE REGARDLESS OF THE EXISTING TRAIL CROSS SLOPE. THE CONTRACTOR SHALL TRANSITION THE CROSS SLOPE FROM THE NEWLY PAVED SECTION TO EXISTING OVER A MINIMUM LENGTH OF 15 FEET. ANY SECTION OF THE TRAIL THAT EXCEEDS 1.50% SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE PROJECT. SEE TYPICAL SECTIONS SHEET 10. THE CONTRACTOR SHALL RECORD VIDEO PRE AND POST CONSTRUCTION FOR RECORD OF THE TRAIL CONDITION

FOR RECORD PLAN INFORMATION REGARDING THE EXISITNG FREEDOM TRAIL CONTACT:
SUMMIT METRO PARKS
975 TREATY LINE RD.
AKRON, OHIO 44313

ITEM SPECIAL - REMOVAL OF ELECTRICAL PLUGS

THIS ITEM OF WORK INCLUDES THE REMOVAL OF THE THREE EXISTING POLE MOUNTED RECEPTACLES USED FOR BUS MOTOR BLOCK HEATERS LOCATED CLOSEST TO THE BRIDGE. THE CONTRACTOR SHALL CONTACT DEBRA FOULK AT THE AKRON CITY SCHOOLS BUS GARAGE AT (330) 761-2805 ONE WEEK PRIOR TO PERFORMING THE WORK. THE CONTRACTOR SHALL COORDINATE THE DISCONNECT OF THE POWER PRIOR TO PERFORMING THE WORK. THIS ITEM INCLUDES THE REMOVAL OF THE RECEPTACLES, CONDUIT, CONDUCTOR, POLES, AND POLE FOUNDATIONS AS NECESSARY. THE CONTRACTOR SHALL FILL THE VOID CREATED WITH LOW STRENGTH MORTAR BACKFILL PER CMS 613. ALL MATERIAL SHALL BE RETURNED TO THE AKRON CITY SCHOOLS BUS GARAGE PERSONNEL OR DISPOSED OF PROPERLY. CONTRACTOR SHALL ENSURE THAT THE REMAINING RECEPTACLES ARE IN PROPER WORKING CONDITION UPON COMPLETION OF THE WORK. THIS WORK INCLUDES ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO REMOVE THE PORTION OF THE EXITING SYSTEM, AND SHALL BE PAID UNDER:

ITEM SPECIAL - REMOVAL OF ELECTRICAL PLUGS

CALCULATED DLT
CHECKED HRB

GENERAL NOTES

SUM-8-1.75

SHEET NUM.														PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
18	19	20		25	47	48	49	50	51	52	53	54	55	04/NHS/ 04		EXT	TOTAL			SHEET NO.
																			MAINTENANCE OF TRAFFIC	
		605												605	251	01010	605	CY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
		7,250											5,580	12,830	254	01000	12,830	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5")	
		580											617	1,197	407	20000	1,197	GAL	NON-TRACKING TACK COAT	
50														50	410	12000	50	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
10													35	45	411	10000	45	CY	STABILIZED CRUSHED AGGREGATE	
		305												305	441	50000	305	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
				680										680	614	11110	680	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
					100	810	848	2,953	2,784	6,279	1,670	2,140		17,584	614	11630	17,584	FT	INCREASED BARRIER DELINEATION	
15					2	6	3	3	2	5	2	2		40	614	12380	40	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
								1		2				3	614	12390	3	EACH	WORK ZONE IMPACT ATTENUATOR, OVER 24" AND LESS THAN 36" WIDE HAZARDS, (UNIDIRECTIONAL)	
								1						1	614	12400	1	EACH	WORK ZONE IMPACT ATTENUATOR, MISC.: WORK ZONE IMPACT ATTENUATOR FOR HAZARDS WIDER THAN 36" (UNIDIRECTIONAL)	21
	LS													LS	614	12420	LS		DETOUR SIGNING	19
		12												12	614	12484	12	EACH	WORK ZONE INCREASED PENALTIES SIGN	
						276	552	432	616	908	897	1,488		5,169	614	12801	5,169	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	24
200													1,378	1,578	614	13000	1,578	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
					45		87	88	171	240	90	87		808	614	13310	808	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
					45		31	88	171	86	90	87		598	614	13350	598	EACH	OBJECT MARKER, ONE WAY	
							28			77				105	614	13360	105	EACH	OBJECT MARKER, TWO WAY	
		100,000												100,000	614	18000	100,000	EACH	MAINTAINING TRAFFIC, MISC.: BRIDGE DECK AND PAVEMENT PATCHING	20

CALCULATED MTD
CHECKED MTR

MAINTENANCE OF TRAFFIC GENERAL SUMMARY

SUM-8-1.75

PHASE	ROAD	DIR.	BEGIN STA.	END STA.	LENGTH	WIDTH	AREA	DEPTH	411 10000 STABILIZED CRUSHED AGGREGATE	614 13000 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	615 20000 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	254 01000 PAVEMENT PLANING, ASPHALT CONCRETE	407 20000 NON-TRACKING TACK COAT (0.08 GAL/SY)
					FEET	FEET	SF	FEET	CY	CY	SY	SY	GALLON
~~P-1A-1~~	~~RAMP K~~	~~SB~~	~~84+44~~	~~88+03~~	~~365~~	~~VARIES~~	~~1,950~~	~~N/A~~			~~217~~		
P-1A-1	S.R. 8	SB	42+95	67+00	2,405	2.00	4,850	0.125		22		539	43
1A-1	RAMP K	SB	84+12	88+46	402	3.00	1,250	N/A			139		
P-1A-2	RAMP I	SB	11+92	17+16	525	VARIES	3,350	N/A			372		
P-1A-2	RAMP I	SB	17+25	17+50	35	VARIES	400	N/A			44		
1A-2	RAMP I	SB	12+24	14+19	200	VARIES	2,550	N/A			283		
P-1B	S.R. 8	SB	85+39	90+32	493	2.00	990	0.50	18				
P-1B	S.R. 8	SB	87+80	91+25	345	20.75	7,200	0.25		67		800	64
P-1B	S.R. 8	SB	93+15	98+55	540	VARIES	8,950	0.25		83		994	80
P-1B	S.R. 8	SB	58+50	67+00	850	2.00	1,700	0.125		8		189	15
1B	RAMP I	SB	319+00	320+00	100	2.00	200	0.50	4				
1C	S.R. 8	SB	212+93	214+04	111	2.00	230	0.50	4				
1C	S.R. 8	SB	219+55	220+80	125	2.00	250	0.50	5				
1D	S.R. 8	NB	215+05	223+00	795	VARIES	19,200	0.67		474			171
1D	S.R. 8	NB	223+00	224+65	165	VARIES	2,000	N/A			222		
1D	S.R. 8	NB	243+60	246+80	320	VARIES	3,650	0.125		17		406	32
1D	S.R. 8	NB	246+50	261+00	1,450	VARIES	32,000	0.583		691		2,283	183
1D	S.R. 8	SB	262+00	263+00	100	2.00	200	0.50	4				
1D	S.R. 8	NB	41+70	53+02	1,132	2.00	2,270	0.125		11		252	20
1D	S.R. 8	NB	59+75	65+00	525	2.00	1,050	0.125		5		117	9
2A-1	RAMP J	NB	9+13	12+05	292	VARIES	3,850	N/A			428		
2A-3	S.R. 8	NB	516+00	519+15	315	4.00	1,300	N/A			144		
SUBTOTALS THIS SHEET (CARRIED TO SHEET 46)									35	1,378	1,849	5,580	617

CALCULATED MTD
CHECKED MTR

SUMMARY OF TRAFFIC MAINTENANCE

SUM-8-1.75

55
801

PLOT.CEL

ms consultants, inc.
msconsultants.com

www.msconsultants.com

Ohio DOT Workspace
SUM-8

1" 0 0.5"

UCF: ohdot1V8i
PCF: 60-08326_PW

Batchplot Spec: \\msconsultants.com\files\Production\PW\60\08326\standards\plotdrv\batchplt.spc
Pen Table: N:\PW\60\08326\standards\plotdrv\V8i_ms_std.tbl
Plot Driver: \\msconsultants.com\files\Standards\ustn\ohdot\V8\ms\plotting\PDF.pltcfg

34" x 22"

View: FENCE_VIEW1
By: srifle

Model: Sheet1 @ 1:15:26 AM
Printed: 4/13/2023
File: \\msconsultants.com\files\Production\PW\60\08326\roadway\sheets\19170_GG001.dgn

SHEET NUM.												PART.					ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
12	13	161	162	163	166	335	335A	431	462	519	OFFICE CALCULATIONS	01/BRO/11	02/NHS/31	04/NHS/04	05/S>2/04	06/NHS/04						
																					ROADWAY	
	LUMP								LUMP					LUMP			201	11000	LS		CLEARING AND GRUBBING	
			1											1			202	20010	1	EACH	HEADWALL REMOVED	
		1,895									41,497			42,569	823		202	23000	43,392	SY	PAVEMENT REMOVED	
						358	20							378			202	30000	378	SF	WALK REMOVED	
			56											56			202	30600	56	SY	CONCRETE MEDIAN REMOVED	
		1,391	2,019											3,410			202	30700	3,410	FT	CONCRETE BARRIER REMOVED	
			2,169											1,111	1,058		202	32000	2,169	FT	CURB REMOVED	
		2,341	1,092											1,907	236	1,290	202	35100	3,433	FT	PIPE REMOVED, 24" AND UNDER	
		11	138											149			202	35200	149	FT	PIPE REMOVED, OVER 24"	
		870	3,404											4,146	128		202	38000	4,274	FT	GUARDRAIL REMOVED	
		1	1											2			202	47000	2	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
		16	15											26		5	202	58000	31	EACH	MANHOLE REMOVED	
		15	11											13	2	11	202	58100	26	EACH	CATCH BASIN REMOVED	
		2	3											4		1	202	58200	5	EACH	INLET REMOVED	
		162	692											340		514	SPECIAL	20270000	854	FT	FILL AND PLUG EXISTING CONDUIT	14
		4,139	2,396											5,546	989		202	75000	6,535	FT	FENCE REMOVED	
					1									1			202	75254	1	EACH	GATE REMOVED FOR REUSE	
					579									579			202	75266	579	FT	VANDAL PROTECTION FENCE REMOVED AND RESET	
						LUMP								LUMP			202	98000	LS		REMOVAL MISC.: PIPE ABANDONED - 8-INCH, CITY OF AKRON	336-338
							LUMP							LUMP			202	98000	LS		REMOVAL MISC.:8-INCH WATERLINE AND GATE VALVE REMOVED, COMPLETE, CITY OF AKRON	340
							LUMP							LUMP			202	98000	LS		~~REMOVAL MISC.: PIPE ABANDONED - 6-INCH, CITY OF AKRON~~	~~340~~
		1												1			202	98100	1	EACH	REMOVAL MISC.: UTILITY POLE AND PEDESTAL	
						2								2			202	98100	2	EACH	~~REMOVAL MISC.: MANHOLE REMOVED, CITY OF AKRON~~	~~336-338~~
							4							4			202	98100	4	EACH	REMOVAL MISC.: FIRE HYDRANT AND 6-INCH GATE VALVE ASSEMBLY REMOVED, COMPLETE, CITY OF AKRON	340
						524	142							666			202	98200	666	FT	REMOVAL MISC.: PIPE REMOVED - 6-INCH, CITY OF AKRON	336-338,340
						487								487			202	98200	487	FT	REMOVAL MISC.: PIPE REMOVED - 8-INCH, CITY OF AKRON	336-338
			220											220			202	98400	220	SF	REMOVAL MISC.: RETAINING WALL REMOVED	15
											53,427			41,693	11,734		203	10000	53,427	CY	EXCAVATION	
											52,554			51,596	958		203	20000	52,554	CY	EMBANKMENT	
										14,646		14,646					203	20001	14,646	CY	EMBANKMENT, AS PER PLAN	519
										150		150					203	35110	150	CY	GRANULAR MATERIAL, TYPE B	
					56						55,921			54,058	1,919		204	10000	55,977	SY	SUBGRADE COMPACTION	
											1,149			474	675		204	13000	1,149	CY	EXCAVATION OF SUBGRADE	
											1,149			474	675		204	30010	1,149	CY	GRANULAR MATERIAL, TYPE B	
											30			29	1		204	45000	30	HOUR	PROOF ROLLING	15
											1,723			711	1,012		204	50000	1,723	SY	GEOTEXTILE FABRIC	
											1,723			711	1,012		204	51000	1,723	SY	GEOGRID	
					3,988									3,675	313		606	15050	3,988	FT	GUARDRAIL, TYPE MGS	
					6									5	1		606	26150	6	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
					8									8			606	26550	8	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					7									6	1		606	35002	7	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					3									3			606	35102	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
					2,812									2,799	13		607	23000	2,812	FT	FENCE, TYPE CLT	
					240							240					607	23001	240	FT	FENCE, TYPE CLT, AS PER PLAN	15
					1									1			607	61200	1	EACH	GATE, TYPE CLT	
900														900			607	98000	900	FT	FENCE, MISC.: CONSTRUCTION FENCING (PLASTIC/NYLON)	12
					717									717			607	98000	717	FT	FENCE, MISC.: BIKE PATH RAILING	14
				2,969		358	20	1,116					1,116	3,347			608	10000	4,463	SF	4" CONCRETE WALK	
				3,254										3,254			608	30000	3,254	SF	AGGREGATE WALK	
				444										444			608	52000	444	SF	CURB RAMP	
				73										73			608	53020	73	SF	DETECTABLE WARNING	
				1,501										1,501			622	10140	1,501	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
				68										68			622	10141	68	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN	313

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Ohio DOT Workspace
SUM-8

1" 0 0.5"

UCF: ohdot V8i
PCF: 60-08326_PW

Batchplot Spec: \\msconsultants.com\Files\Production\PW\60\08326\standards\plotdrv\batchplt.spc
Pen Table: N:\PW\60\08326\standards\plotdrv\
Plot Driver: \\msconsultants.com\Files\Standards

Model: Sheet1
Printed: 4/13/2023 @ 12:08:50 AM
File: \\msconsultants.com\Files\Production\PW\60\08326\roadway\sheets\91710_GG002.dgn
View: FENCE_VIEW1
By: srifle

34" x 22"

SHEET NUM.															PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
13	14	15	16	17	161	163	164	165	168	169	326	520	729	OFFICE CALCULATIONS	01/BRO/11	04/NHS/04	05/S>2/04	06/NHS/04						
																							ROADWAY CONTINUED	
						1,213										1,213			622	10160	1,213	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
						3										3			622	10200	3	EACH	BARRIER TRANSITION	
						5										5			622	25000	5	EACH	CONCRETE BARRIER END SECTION, TYPE D	
						36										36			622	25014	36	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	
						8										8			622	25050	8	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
													15			15			623	40520	15	EACH	RIGHT-OF-WAY MONUMENT, TYPE B	13
																LUMP			878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	14
					LUMP											LUMP			SPECIAL	69098400	LS		REMOVAL OF ELECTRICAL PLUGS	12
		1														1			SPECIAL	69098000	1	EACH	MISC.: VERTICAL CLEARANCE	15
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 1	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 2A	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 3A	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 5A	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 6A	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 6B	326
											LUMP				LUMP				SPECIAL	69098400	LS		CONSTRUCTION ACCESS ROAD 8	326
				LUMP											LUMP				SPECIAL	69098400	LS		CONSTRUCTION VIDEO MONITORING	17
LUMP															LUMP				SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	13
																							EROSION CONTROL	
						1,182										1,182			601	11000	1,182	SY	RIPRAP, TYPE D	
						34										34			601	12000	34	SY	RIPRAP, WITH GROUT	
												875			875				601	20010	875	CY	CRUSHED AGGREGATE SLOPE PROTECTION	
							6									6			601	32200	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
2																2			659	00100	2	EACH	SOIL ANALYSIS TEST	13
4,255																4,255			659	00300	4,255	CY	TOPSOIL	13
														38,332		33,248	5,084		659	00510	38,332	SY	SEEDING AND MULCHING, CLASS 2	13
1,917																1,917			659	14000	1,917	SY	REPAIR SEEDING AND MULCHING	13
1,917																1,917			659	15000	1,917	SY	INTER-SEEDING	13
5.35																5.35			659	20000	5.35	TON	COMMERCIAL FERTILIZER	13
7.92																7.92			659	31000	7.92	ACRE	LIME	13
217																217			659	35000	217	MGAL	WATER	13
87																87			659	40000	87	MSF	MOWING	13
						2,936										2,196	740		670	00710	2,936	SY	DITCH EROSION PROTECTION MAT, TYPE A	
																LUMP			832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
																LUMP			832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
																LUMP			832	15010	~~LS~~		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
															60,000	82,000			832	30000	142,000	EACH	EROSION CONTROL	
						178										178			836	10000	~~178~~	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
						298										298			836	10020	298	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2	
																							ENVIRONMENTAL / REMEDIATION	
			1,000													1,000			SPECIAL	69065000	1,000	TON	WORK INVOLVING NON-REGULATED MATERIALS	16
			100													100			SPECIAL	69065002	100	TON	WORK INVOLVING HAZARDOUS WASTE	16
			500													500			SPECIAL	69065010	500	TON	WORK INVOLVING SOLID WASTE	16
			10,000													10,000			SPECIAL	69065022	10,000	GAL	WORK INVOLVING NON-REGULATED WATER	16
			10,000													10,000			SPECIAL	69065024	10,000	GAL	WORK INVOLVING REGULATED WATER	16
																							DRAINAGE	
							2									2			602	20000	2	CY	CONCRETE MASONRY	
									5,408	2,704						6,366	1,746		605	11100	8,112	FT	6" SHALLOW PIPE UNDERDRAINS	
	100								462	83						645			605	13300	645	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
									6,485	3,619						9,921	183		605	14000	10,104	FT	6" BASE PIPE UNDERDRAINS	
								41								41			605	31100	41	FT	AGGREGATE DRAINS	
									520	214						626	108		611	00510	734	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
	100															100			611	01500	100	FT	6" CONDUIT, TYPE F	
								36								36			611	02000	36	FT	8" CONDUIT, TYPE C	
								122								122			611	02600	122	FT	8" CONDUIT, TYPE F	
								10										10	611	04400	10	FT	12" CONDUIT, TYPE B	
								212								201		11	611	04600	212	FT	12" CONDUIT, TYPE C	
							322	448										770	611	05900	770	FT	15" CONDUIT, TYPE B	

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SHEET NUM.													PART.					ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
13	14	15	161	162	163	164	165	166	335	335A	519	OFFICE CALCULATIONS	01/BRO/11	04/NHS/04	05/S>2/04	06/NHS/04	07/S>2/04						
																						DRAINAGE CONTINUED	
						334	355							475		214		611	06100	689	FT	15" CONDUIT, TYPE C	
						98								56	42			611	06700	98	FT	15" CONDUIT, TYPE F	
						67											67	611	07400	67	FT	18" CONDUIT, TYPE B	
						807	224							831	200			611	07600	1,031	FT	18" CONDUIT, TYPE C	
						241								202	39			611	09100	241	FT	21" CONDUIT, TYPE C	
						295								29		266		611	10400	295	FT	24" CONDUIT, TYPE B	
						428								190		238		611	10600	428	FT	24" CONDUIT, TYPE C	
						53										53		611	11200	53	FT	24" CONDUIT, TYPE F	
						814										814		611	16400	814	FT	36" CONDUIT, TYPE B	
						76	164							208		32		611	16600	240	FT	36" CONDUIT, TYPE C	
							240							240				611	19600	240	FT	42" CONDUIT, TYPE C	
							206									206		611	96600	206	FT	CONDUIT, BORED OR JACKED, 15"	
							131									131		611	96600	131	FT	CONDUIT, BORED OR JACKED, 18"	
							142							142				611	96600	142	FT	CONDUIT, BORED OR JACKED, 36"	15
										16				16				611	97400	16	FT	CONDUIT, MISC.: 4-INCH STORM LATERAL, CITY OF AKRON	340
						63								63				611	97400	63	FT	CONDUIT, MISC.: 36" CONDUIT UNDER RAILROAD	15
						1	2								1	2		611	98150	3	EACH	CATCH BASIN, NO. 3	
						3	2							3		2		611	98151	5	EACH	CATCH BASIN, NO. 3, AS PER PLAN	14
						4										4		611	98181	4	EACH	CATCH BASIN, NO. 3A, AS PER PLAN	14
						13	3							9	2	4	1	611	98410	16	EACH	CATCH BASIN, NO. 8	
							1							1				611	98434	1	EACH	CATCH BASIN, NO. 8A	
							2							2				611	98470	2	EACH	CATCH BASIN, NO. 2-2B	
							5							1		4		611	99110	5	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1	
						2										2		611	99114	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
						1										1		611	99115	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN	323, 324
						12	15							23		4		611	99574	27	EACH	MANHOLE, NO. 3	
							4							4				611	99660	4	EACH	MANHOLE RECONSTRUCTED TO GRADE	
																						PAVEMENT	
			1,177	1,673						236				2,763	87			252	01500	2,850	FT	FULL DEPTH PAVEMENT SAWING	
685			44						377	236				1,342				253	01000	1,342	SY	PAVEMENT REPAIR	
		20,534										2,895		23,429				254	01000	23,429	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH (3.25"	
	19											9,694		9,713				301	56000	9,713	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
											260	9,371	260	9,051	320			304	20000	9,631	CY	AGGREGATE BASE	
								13				8,610		8,623				407	20000	8,623	GAL	NON-TRACKING TACK COAT	
		713										34		747				441	50000	747	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
												359		359				441	70000	359	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
								6						6				441	70500	6	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
								8						8				441	70600	8	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (DRIVEWAYS)	
												159		159				441	70801	159	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS I	13
												1,837		1,837				442	10301	1,837	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS	14
		143										2,199		2,342				442	20200	2,342	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)	
												7,303		5,461	1,842			452	16010	7,303	SY	13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
					799									799				609	24510	799	FT	CURB, TYPE 4-C	
					1,487									1,447	40			609	26000	1,487	FT	CURB, TYPE 6	
					218									218				609	50000	218	SY	4" CONCRETE TRAFFIC ISLAND	
												9,985		9,985				618	40100	9,985	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
																						WATER WORK	
										36				36				SPECIAL	63820088	36	FT	8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS,	340
																						CITY OF AKRON	
										324				324				SPECIAL	63820176	324	FT	12" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS,	340
																						CITY OF AKRON	
										1				1				SPECIAL	63820554	1	EACH	8" GATE VALVE WITH VALVE BOX, CITY OF AKRON	340
										358				358				SPECIAL	63820770	358	FT	1" COPPER WATER SERVICE LINE, CITY OF AKRON	340
										3				3				638	98000	3	EACH	WATER WORK, MISC.: FIRE HYDRANT AND 6-INCH GATE VALVE	340
																						ASSEMBLY, COMPLETE, CITY OF AKRON	
										1				1				638	98000	1	EACH	WATER WORK, MISC.: TYING INTO 6-INCH MAIN, CITY OF AKRON	340
										2				2				638	98000	2	EACH	WATER WORK, MISC.: TYING INTO 10-INCH MAIN, CITY OF AKRON	340
										LUMP				LUMP				638	98100	LS		WATER WORK, MISC.:DRINKING FOUNTAIN, COMPLETE, CITY OF	340
																						AKRON	
										LUMP				LUMP				638	98100	LS		WATER WORK, MISC.: HOT BOX ENCLOSURE ASSEMBLY,	340
																						COMPLETE, CITY OF AKRON	
																						SANITARY SEWER	
									466					466				611	97400	466	FT	CONDUIT, MISC.:8-INCH SANITARY SEWER, CITY OF AKRON	336-338
									275					275				611	97400	275	FT	CONDUIT, MISC.:RECONNECT LATERAL, CITY OF AKRON	336-338
									2					2				611	99690	2	EACH	MANHOLE, MISC.:MANHOLE-2A ON 8" SANITARY SEWER, CITY OF	336-338
																						AKRON	

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SHEET NUM.														PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
388	389	391	392	395	396	397	398	399	400	401	401A	403	520	01/BRO/11	04/NHS/04	05/S>2/04						
																					LIGHTING	
				28	24	28	28	32							130	10	625	00450	140	EACH	CONNECTION, FUSED PULL APART	
				10											10		625	00460	10	EACH	CONNECTION, UNFUSED PULL APART	
				10	6	3	3	15	27	15	6			48	34	3	625	00480	85	EACH	CONNECTION, UNFUSED PERMANENT	
				3											3		625	10490	3	EACH	LIGHT POLE, CONVENTIONAL, AT12B40	
				2											2		625	10490	2	EACH	LIGHT POLE, CONVENTIONAL, AT15B40	
					2	14	6								22		625	10491	22	EACH	LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40	391
				2	3			8							13		625	10491	13	EACH	LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40	391
				7	7		8	8							25	5	625	10491	30	EACH	LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40	391
				2											2		625	10503	2	EACH	LIGHT POLE (INSTALLATION ONLY), AS PER PLAN	391
					8	56	24								88		625	10614	88	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	
				12	7		8	8							30	5	625	14100	35	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
				4	3			5							12		625	14306	12	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP	
								3							3		625	14307	3	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	391
				2,163	2,883	6,546	3,360	4,878	2,682	4,296	4,452			11,430	19,830		625	23200	31,260	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
									4,575	822				5,397			625	23300	5,397	FT	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE	
									3,633		1,962			5,595			625	23302	5,595	FT	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
				2,262	2,034	2,100	2,100	3,024							10,770	750	625	23400	11,520	FT	NO. 10 AWG POLE AND BRACKET CABLE	
				726											726		625	24100	726	FT	1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES	
				942	990	40	1,055	985	520					520	3,369	643	625	24320	4,532	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
									520					520			625	24330	520	FT	1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES	
					732	4,379	1,758		2,840	2,782	1,412			7,034	6,869		625	25400	13,903	FT	CONDUIT, 2", 725.04	
				26	131			26	435		124			559	183		625	25500	742	FT	CONDUIT, 3", 725.04	
				42				189							231		625	25902	231	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
				222											222		625	25910	222	FT	CONDUIT CLEANED AND CABLES REMOVED	
				2											2		625	26253	2	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN,	391
																					IES 2-M, 13,500-15,000 LUMENS	
				3											3		625	26253	3	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN,	391
																					IES 3-M, 13,500-15,000 LUMENS	
				11	15	14	14	24							73	5	625	26253	78	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN,	391
																					IES 3-M, 13,500-15,000 LUMENS, DARK BRONZE	
				2											2		625	27561	2	EACH	LUMINAIRE, INSTALLATION ONLY, AS PER PLAN	390
				1,569	1,092	97	1,219	911	809		223			1,032	4,273	615	625	29002	5,920	FT	TRENCH, 24" DEEP	
					4	20	8		14	20	7			41	32		625	29900	73	EACH	JUNCTION BOX	
					1			2							3		625	29930	3	EACH	MEDIAN JUNCTION BOX	
				2	3	2	4	3	4		4			8	13	1	625	30700	22	EACH	PULL BOX, 725.08, 18"	
				1					4					4	1		625	30706	5	EACH	PULL BOX, 725.08, 24"	
				16	10		8	16							45	5	625	32000	50	EACH	GROUND ROD	
							2								2		625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM	
				1	1			1							2	1	625	34001	2	EACH	POWER SERVICE, AS PER PLAN	390
				1,569	1,092	97	1,219	911	809		223			1,032	4,273	615	625	36011	5,920	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	390
		LUMP													LUMP		SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	391
		5													5		SPECIAL	62540010	5	EACH	REPLACEMENT OF EXISTING LIGHTING UNIT	391
												57			57		625	75400	57	EACH	LIGHT POLE REMOVED	
												2			2		625	75410	2	EACH	LIGHT POLE REMOVED FOR REUSE	
												57			57		625	75506	57	EACH	LUMINAIRE REMOVED	
												2			2		625	75508	2	EACH	LUMINAIRE REMOVED FOR REUSE	
					2										2		625	75510	2	EACH	POWER SERVICE REMOVED	
												38			38		625	75522	38	EACH	LUMINAIRE SUPPORT FOUNDATION REMOVED	
				4											4		625	75800	4	EACH	DISCONNECT CIRCUIT	
		1													1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'BW')	
		1													1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'BE')	
		1													1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'SB')	
			1												1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'X')	
			1												1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'Y')	
			1												1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (CC-'Z')	
									2		1			3			625	98000	3	EACH	LIGHTING, MISC.:POWER SERVICE, 240 VOLT	392
									5	5	2			12			625	98000	12	EACH	LIGHTING, MISC.:SERVICE TO AESTHETIC LIGHTING	392
																					TRAFFIC SURVEILLANCE	
LUMP															LUMP		202	98000	LS		REMOVAL MISC.: ITS CABINET AND CCTV CAMERA SYSTEM	378
1															1		202	98100	1	EACH	REMOVAL MISC.: CCTV CONCRETE POLE, 70 FEET	378
1															1		202	98100	1	EACH	REMOVAL MISC.: LOWERING UNIT	378
487	86														573		625	25408	573	FT	CONDUIT, 2", 725.051	
	92														92		625	25902	92	FT	CONDUIT, JACKED OR DRILLED, 725.04, 2"	
	13														13		625	25910	13	FT	CONDUIT CLEANED AND CABLES REMOVED	

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Ohio DOT Workspace
SUM-8

0 0.5" 1"

PCF: 60-08326_PW
UCF: ohdot V8i

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By: srifle
View: FENCE_VIEW1
File: \\msconsultants.com\Files\Production\PW\60\08326\roadway\sheets\91710_GG004.dgn

34" x 22"

CALCULATED DNO
CHECKED HRB

GENERAL SUMMARY

SUM-8-1.75

REF NO.	SHEET NO.	STATION TO STATION					202 CONCRETE BARRIER REMOVED (FT)	202 PIPE REMOVED, 24" AND UNDER (FT)	202 GUARDRAIL REMOVED (FT)	202 BRIDGE TERMINAL ASSEMBLY REMOVED (EACH)	202 MANHOLE REMOVED (EACH)	202 CATCH BASIN REMOVED (EACH)	202 INLET REMOVED (EACH)	202 PIPE REMOVED, OVER 24" (FT)	202 PAVEMENT REMOVED (SY)	202 FENCE REMOVED (FT)	SPECIAL FILL AND PLUG EXISTING CONDUIT (FT)	202 REMOVAL MISC.: UTILITY POLE AND PEDESTAL (EACH)	253 PAVEMENT REPAIR (SY)	252 FULL DEPTH PAVEMENT SAWING (FT)	SPECIAL SPECIAL - REMOVAL OF ELECTRICAL PLUGS
R1	173	514+65.00	LT	TO	524+87.26	RT	1021														
R1A	172	87+80.00	CL	TO	91+25.00	CL	345														
R2	173	214+65.00	LT	TO	214+89.74	LT	25														
R3	173	214+89.37	LT	TO	218+01.75	LT			288	1											
R4	173	214+89.62	LT	TO	214+94.36	LT		10													
R5	173	214+94.31	LT	TO	214+92.87	LT		19				1									
R6	173	315+75.70 RT (RAMP I)		TO	214+92.87	LT		129				1									
R7	173	215+37.72	RT	TO	515+47.84	RT		23					1								
R7A	173	214+65.00	BL	TO	218+00.00	LT/BL														689	
R7B	173	514+65.00	BL	TO	517+10.05	BL/RT														293	
R8		NOT USED																			
R9	175	217+98.89	LT	TO	219+53.94	LT		156				1									
R10	175	217+98.89	LT	TO	217+92.58	RT		78					1								
R11	175	517+92.71	RT	TO	418+06.66	LT		90			1										
R12	175	220+89.75	LT	TO	224+99.01	RT			413												
R13	173	214+92.87	LT	TO	217+98.89	LT		307			1										
R14	177	223+44.18	LT	TO	223+72.14	LT		61													
R15	177	223+72.14	LT	TO	224+19.13	LT		77			1										
R16	177	223+94.77	LT	TO	224+13.39	LT		21				1									
R17	177	224+13.39	LT	TO	523+98.79	RT		40				1					162				
R17A	177	224+31.56	LT															1			
R18	177	224+31.65	LT	TO	225+42.83	RT		117			1										
R19	177	225+42.83	RT	TO	525+47.63	RT		90			1										
R20	177	525+44.67	RT	TO	525+47.63	RT		8				1									
R21	177	525+47.63	RT	TO	525+68.29	RT		21			1										
R22	177	524+04.93	RT	TO	523+98.79	RT		31			1										
R23	177	223+94.79	LT	TO	224+18.67	LT			27												
R24	179	527+28.99	LT	TO	527+40.75	LT								11							
R25	179	527+50.99	RT	TO	527+40.75	LT		58				1									
R26	179	527+40.75	LT	TO	528+01.68	LT		61			1										
R27	179	528+01.68	LT	TO	528+08.99	RT		7			1										
R28	179	528+82.28	RT	TO	528+66.49	LT		47				1									
R29	179	528+66.97	LT	TO	528+66.46	LT		11				1									
R30	179	530+32.31	LT	TO	531+02.89	RT		71			1										
R31	179	531+02.89	LT	TO	531+66.55	LT		64			1										
R32	179	531+66.55	LT	TO	531+80.42	RT		14			1										
R33	182	533+79.88	LT	TO	534+74.14	LT		92			1								44		
R34	182	534+74.14	LT	TO	535+12.19	LT		39				1									
R35	182	534+74.14	LT	TO	535+12.24	RT		81				1									
R36	182	533+09.24	LT	TO	533+43.47	LT									1895						
R37	182	532+72.22	RT	TO	534+53.83	RT										310					
R37A	182	532+42.00	LT	TO	532+78.40	RT			142												
R37B	182	532+74.63	LT	TO	532+75.64	RT															LUMP
R37C	182	532+73.17	RT	TO	534+67.74	RT														195	
R38	185	540+37.45	RT	TO	540+93.99	RT		59			1										
R38A	185	540+93.99	RT	TO	541+00.86	RT		23				1									
R39	185	540+37.45	RT	TO	540+34.03	RT		14			1										
R40	185	540+34.03	RT	TO	540+34.28	LT		82				1									
R41	185	540+34.28	LT	TO	540+36.93	LT		15				1									
R42	185	540+36.93	LT	TO	543+22.56	LT		282			1										
R43	185	540+93.99	RT	TO	541+27.97	RT		43				1									
R44	185	540+80.95	RT	TO	553+86.00	RT										1353					
R45	185	240+92.98	LT	TO	265+60.38	LT										2476					
TOTALS CARRIED TO GENERAL SUMMARY							1391	2341	870	1	16	15	2	11	1895	4139	162	1	44	1177	LS

CALCULATED APS
CHECKED ACW

SUBSUMMARY

SUM-8-1.75

REF NO.	SHEET NO.	CULVERT FILE NO. (CFN)	STATION TO STATION					611 15" CONDUIT, TYPE B FT	611 15" CONDUIT, TYPE C FT	611 15" CONDUIT, TYPE F FT	611 18" CONDUIT, TYPE B FT	611 18" CONDUIT, TYPE C FT	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN EACH	611 21" CONDUIT, TYPE C FT	611 24" CONDUIT, TYPE B FT	611 24" CONDUIT, TYPE C FT	611 24" CONDUIT, TYPE F FT	611 36" CONDUIT, TYPE B FT	611 36" CONDUIT, TYPE C FT	611 CONDUIT, MISC.: 36" CONDUIT UNDER RAILROAD FT	611 CATCH BASIN, NO. 3, AS PER PLAN EACH	611 CATCH BASIN, NO. 3A, AS PER PLAN EACH	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 8 EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1 EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D EACH	611 MANHOLE, NO. 3 EACH	602 CONCRETE MASONRY CY	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CY
D1	194	1988725	258+25.00	LT		258+00.00	LT	25													1								
D2	194	1988728	258+00.00	LT		255+50.00	LT											250									1			
D4	194	1988723	558+12.13	RT		558+12.13	RT	20																1						
D5	192	1988699	255+50.00	LT		252+91.20	LT											255									1			
D7	192	1988705	253+41.00	LT		252+91.20	LT	49																						
D8	192	1988701	252+91.20	LT		251+50.00	LT						1					138									1			
D10	192	1988703	252+41.00	LT		252+91.20	LT	49																			1			
D11	190	1988702	251+50.00	LT		249+75.00	LT											171									1			
D12	188	1988685	243+83.74	RT		243+68.91	LT								90		53													
D13	188		546+00.00	LT		543+67.83	LT		229															1						
D14	188		543+67.83	LT																									0.46	1.56
D16	185	1988679	541+39.00	RT		541+50.00	RT		11												1									
D16A	185	1988680	541+50.00	RT		541+50.00	LT	75														1								
D17	185	1988681	541+39.00	LT		541+50.00	LT	11													1									
D17A	185		541+50.00	LT		541+50.00	LT		24												1									
D18	185		241+61.95	RT		241+70.28	RT					23												1						
D19	185		241+70.28	RT		541+50.00	LT							202								1								
D20	185		241+70.27	LT		241+70.27	LT			56												1								
D20C	185		241+70.27	LT																									0.27	
D22	190	1988706	249+75.00	LT		249+64.63	LT												32								1			
D22A	190		249+64.63	LT		249+50.00	LT												44								1			
D23	190		249+50.00	LT																									0.76	3
D27	175	1988657	418+00.00	RT		418+20.46	RT				67													1						
D28	175		418+20.46	RT		420+20.00	RT					200												1						
D29	175		420+20.00	RT		420+59.19	RT							39										1						
D30	175		420+20.65	RT		420+20.00	RT			42															1					
D32	175	1988658	420+59.19	RT		423+00.00	RT									238								1						
D33	177	1988672	423+00.00	RT		524+75.08	RT								176												1			
D34	177		524+75.08	RT		524+75.01	RT								29												1			
D35	199		12+50.00	LT		14+00.00	LT					149												1						
D36	200		14+00.00	LT		16+50.00	LT					251												1						
D37	200		16+50.00	LT		17+43.71	LT					99												1						
D37A	200		17+43.71	LT		17+91.79	LT					52															1			
D37B	200		17+91.79	LT		224+00.88	LT					33															1	0.33	1.33	
D39	177	1988673	524+75.00	LT		524+75.08	RT	93																1						
D40	177		524+75.01	RT		524+75.01	RT									27											1			
D42	177		524+75.01	RT		525+20.42	RT									47								1						
D43	177		524+04.72	RT		524+75.01	RT		70																					
D44	177		525+20.42	RT		525+52.41	RT									32								1						
D45	177		525+52.41	RT		525+52.15	RT									84											1			
D46	177		525+52.15	RT		525+77.38	RT													63							1			
TOTALS CARRIED TO GENERAL SUMMARY								322	334	98	67	807	1	241	295	428	53	814	76	63	3	4	1	13	2	12	2	6	

CALCULATED APS
CHECKED ACW

ROADWAY SUBSUMMARY

SUM-8-1.75

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1" 0.5" 0

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34" x 22"

CALCULATED APS
CHECKED ACW

ROADWAY SUBSUMMARY

SUM-8-1.75

REF NO.	SHEET NO.	CULVERT FILE NO. (CFN)	STATION TO STATION				611 8" CONDUIT, TYPE C FT	611 8" CONDUIT, TYPE F FT	611 12" CONDUIT, TYPE B FT	611 12" CONDUIT, TYPE C FT	611 15" CONDUIT, TYPE B FT	611 15" CONDUIT, TYPE C FT	611 18" CONDUIT, TYPE C FT	611 CONDUIT, BORED OR JACKED 15" FT	605 AGGREGATE DRAINS FT	611 CONDUIT, BORED OR JACKED, 18" FT	611 CONDUIT, BORED OR JACKED, 36" FT	611 36" CONDUIT, TYPE C FT	611 42" CONDUIT, TYPE C FT	611 CATCH BASIN, NO. 2-2B EACH	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 3, AS PER PLAN EACH	611 CATCH BASIN, NO. 8 EACH	611 CATCH BASIN, NO. 8A EACH	611 INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1 EACH	611 MANHOLE RECONSTRUCTED TO GRADE EACH	611 MANHOLE, NO. 3 EACH
D50	173	1988649	214+89.62	LT	214+94.31	LT				11	19												1				
D53	173	1930145	515+48.04	RT	515+47.84	LT			10																		
D54	173	1930144	515+47.84	LT	214+92.87	LT					13															1	
D59	179		527+28.99	LT	527+37.00	LT												11									
D61	190		551+44.28	RT																				1			
D59A	179		527+28.99	LT	528+08.99	LT							80														1
D64	179		530+32.30	RT	530+32.31	LT													28								1
D65	179		530+32.31	LT	530+32.31	LT													8								1
D66	179		530+62.23	LT	531+50.23	LT		86											88								1
D67	179		531+50.23	LT	531+50.20	RT													55								1
D68	179		531+50.20	RT	531+75.20	RT													25								1
D70	194	1988731	560+14.23	RT	558+12.13	RT						203									1						
D71	194	1988722	558+12.13	RT	558+12.13	LT										61											1
D72	194	1988730	259+64.19	LT	61+94.60 LT (RAMP B)						218											1					
D73	194	1988729	259+64.19	LT	258+25.00	LT					139											1					
D74	194	1988726	60+67.46	LT	560+14.23	RT					59										1						
D75	194		560+24.41	RT	560+14.23	RT						15												1			
D80	179		527+37.00	LT	527+81.28	LT												44									1
D81	179		527+81.28	LT	528+66.28	LT											85										1
D82	179		528+66.28	LT	529+75.00	LT												109									1
D83	179		529+75.00	LT	530+32.31	LT											57										1
D84	179		530+32.31	LT	530+62.23	LT													36								1
D85	177		224+79.56	LT	225+28.33	LT						88												1			
D85A	177		225+28.33	LT	225+48.81	LT						49															1
D86	177		225+48.81	LT	525+52.15	RT							144							1							
D87	179		227+68.67	LT	227+93.22	LT	36	36		36																	1
D88	179		227+78.67	LT	227+93.22	RT				38																	1
D89	208		628+40.33	RT	628+99.56	RT				127										1							
D90	190		248+66.26	LT																						1	
D91	190		551+68.98	LT																						1	
D92	192		554+51.04	LT																						1	
D93	194		557+24.09	LT																						1	
D94	235		223+20.00	RT											11												
D95	235		223+70.00	RT											10												
D96	235		224+20.00	RT											10												
D97	236		224+62.84	RT											10												
D3	194	1988724	258+00.00	RT	258+00.00	LT										70										1	
D6	192	1988700	255+50.00	RT	255+50.00	LT								66												1	
D9	192	1988704	552+99.91	LT	252+91.20	LT								72												1	
D26	175	1988653	518+00.02	LT	518+00.00	RT								68												1	
TOTALS CARRIED TO GENERAL SUMMARY							36	122	10	212	448	355	224	206	41	131	142	164	240	2	2	2	3	1	5	4	15

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SUM-8

UCF: ohdotV8i
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34" x 22"

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SEE SHEETS 199 - 205
FOR COVERAGE OF RAMPS I & J.

SEE SHEETS 161 - 169
FOR QUANTITIES.

SEE SHEET 176
FOR PROFILE.

SEE SHEETS 209-292
FOR CROSS SECTIONS.

SEE SHEET 307
FOR GORE DETAILS.

T.H. 3
LEVEL A TEST HOLE #3
TOP OF GROUND = 1049.28
TOP OF PIPE = 1044.77
2.5" UNKNOWN STEEL PIPE

C2

P.I. Sta. 520+82.85
Δ = 14° 12' 04" (RT)
Dc = 4° 15' 00"
R = 1,348.14'
T = 167.93'
L = 334.14'
E = 10.42'
P.C. Sta. 519+14.92
P.T. Sta. 522+49.06
V (des) = 60 MPH
e (max) = 0.060

C8

P.I. Sta. 98+03.68
Δ = 14° 11' 40" (RT)
Dc = 1° 57' 48"
R = 2,918.12'
T = 363.33'
L = 722.93'
E = 22.53'
P.C. Sta. 94+40.35
P.T. Sta. 101+63.28

C1

P.I.Sta. 223+10.69
Δ = 14° 12' 04" (RT)
Dc = 4° 15' 00"
R = 1,348.14'
T = 167.93'
L = 334.14'
E = 10.42'
PC Sta. 221+42.76
Sta 224+76.90 BK
V (des) = 60 MPH
e (max) = 0.060

▨ = PAVEMENT PLANING AND RESURFACING

(TBR) = TO BE REMOVED
(DND) = DO NOT DISTURB

0 20 40
HORIZONTAL SCALE IN FEET

CALCULATED DWH
CHECKED HRB

PLAN - S.R. 8 NB/SB
STA. 517+00/217+00 TO STA. 522+00/222+00

SUM-8-1.75

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Ohio DOT Workspace
SUM-8

UCF: ohdotV8i
PCF: 60-08326_PW

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34" x 22"

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SEE SHEETS 199 - 205 FOR COVERAGE OF RAMPS I & J.

SEE SHEETS 430 - 436 FOR HARDSCAPE PLANS.

SEE SHEETS 161 - 169 FOR QUANTITIES.

SEE SHEET 178 FOR PROFILE.

SEE SHEETS 209-292 FOR CROSS SECTIONS.

SEE SHEET 307 FOR GORE DETAILS.

C1

P.I.Sta. 222+97.31
Δ = 14° 12' 04" (RT)
Dc = 4° 15' 00"
R = 1,348.14'
T = 167.93'
L = 334.14'
E = 10.42'
PC Sta. 221+29.38
PT Sta 224+63.52 BK
V (des) = 60 MPH
e (max) = 0.060

C7

P.I. STA. 422+88.00
Ls = 200.00'
θ s = 6° 00' 14"
LT = 133.41'
ST = 66.74'
x = 199.78'
y = 6.98'
k = 99.96'
p = 1.75'
CS Sta. 422+21.27
ST Sta. 424+21.27
V (des) = 50 MPH
e (max) = 0.059

(TBR) = TO BE REMOVED
(DND) = DO NOT DISTURB

T.H. 13
LEVEL A TEST HOLE #13
TOP OF GROUND = 1002.51
TOP OF PIPE = 997.74
EXPOSED 2.5" STEEL F.O.
T.H. 14
LEVEL A TEST HOLE #14
TOP OF GROUND = 1002.92
TOP OF PIPE = 999.82
EXPOSED 2.5" STEEL F.O.

* = DITCH EROSION PROTECTION MAT TYPE A 103' X 7.5' & ITEM 659 TOP SOIL SEE CROSS SECTIONS FOR LIMITS

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED DWH
CHECKED HRB

PLAN - S.R. 8 NB/SB
STA. 522+00/222+00 TO STA. 527+00/227+00

SUM-8-1.75

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Ohio DOT Workspace
SUM-8

0 0.5" 1"

UCF: ohdotV8i
PCF: 60-08326_PW

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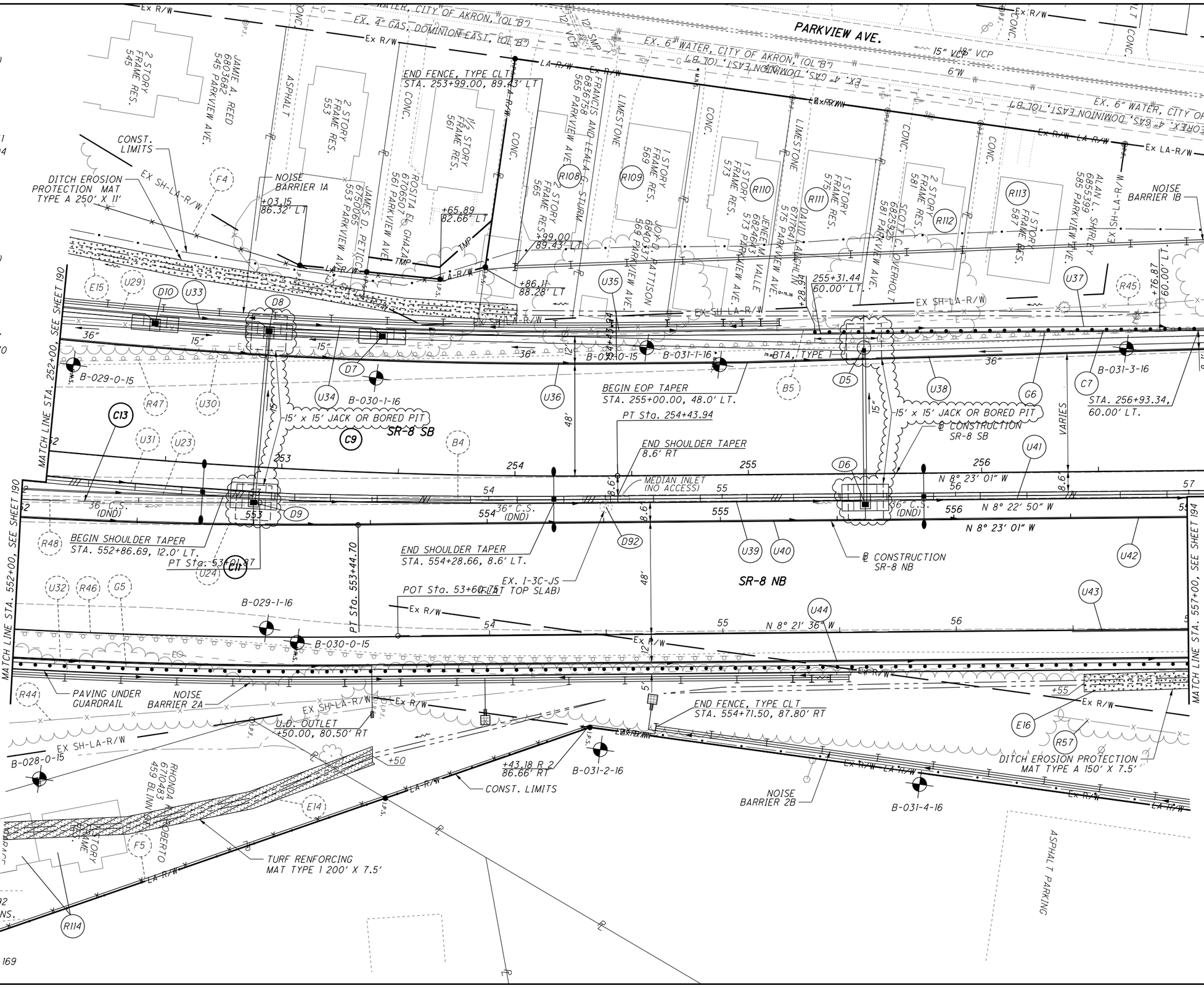
File: \\msconsultants.com\Files\Production\PW\60\08326\roadway\sheets\91770_GP009.dgn
View: FENCE_VIEW1
By: srifle

34" x 22"

C9
P.I.Sta. 248+70.39
Δ = 29° 20' 09" (LT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 599.88'
L = 1,173.43'
E = 77.21'
P.C. Sta. 242+70.51
P.T. Sta. 254+43.94
V (des) = 60 MPH
e (max) = 0.051

C11
P.I.Sta. 547+71.15
Δ = 29° 20' 09" (LT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 599.88'
L = 1,173.43'
E = 77.21'
P.C. Sta. 541+71.27
P.T. Sta. 553+44.70
V (des) = 60 MPH
e (max) = 0.051

C13
P.I.Sta. 47+28.49
Δ = 29° 19' 35" (LT)
Dc = 2° 30' 00"
R = 2,291.83'
T = 599.68'
L = 1,173.06'
E = 77.16'
P.C. Sta. 41+28.81
P.T. Sta. 53+01.87



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED DWH
CHECKED HRB

PLAN
STA. 552+00 / 252+00 TO STA. 557+00 / 257+00

SUM-8-1.75

192
801

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Ohio DOT Workspace
SUM-8

0 0.5" 1"

UCF: ohdot\V8i
PCF: 60-08326.PW

Batchplot Spec: \\msconsultants.com\files\Production\PW\60\08326\standards\plotdrv\batchplt.spc
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Model: Sheet
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View: FENCE_VIEW1
By: srifle

34" x 22"

* TRANSITION CURB FROM 6" TO 0" IN 10'

PERKINS ST.

ADOLPH ST.

T.H. 4
LEVEL A TEST HOLE #4
TOP OF GROUND = 1053.25
TOP OF PIPE = 1049.05
EXPOSED 8" STEEL GAS

STA. 414+81.82 ℄ RAMP J =
STA. 51+33.89 ℄ R/W PERKINS ST.

POT Sta. 414+81.82

SEE SHEET 305-306
FOR INTERSECTION DETAILS.

SEE SHEETS 161 - 169
FOR QUANTITIES.

BEGIN WORK
RAMP J
STA. 415+09.61

PC Sta. 94+40.35

PC Sta. 519+14.92

SR-8 NB

B-001-0-15
B-002-0-15
B-001-2-15
B-001-3-16
B-001-4-15
B-003-1-15
B-003-2-15

PAVING UNDER GUARDRAIL
ANCHOR ASSEMBLY, TYPE T
DITCH EROSION PROTECTION MAT TYPE A 283' X 7.5'
℄ CONSTRUCTION RAMP J
N 2° 36' 03" E
ITEM 670 DITCH EROSION PROTECTION MAT TYPE A 247' X 7.5'
& ITEM 659 TOP SOIL
SEE CROSS SECTIONS FOR LIMITS
ITEM 670 DITCH EROSION PROTECTION MAT TYPE A 200 X 7.5'
& ITEM 659 TOP SOIL
SEE CROSS SECTIONS FOR LIMITS
NOISE BARRIER 4
7' TEMP. GRAVEL WALK (2" MIN. THICKNESS)
CONST. LIMITS
MH (TBR)
EX. CB (TBR)
EX. ELEC, (OL "C")
MATCH LINE STA. 419+50, SEE SHEET205

Ex LA-R/W
Ex R/W
Ex. R/W
EOR
EOL
SAN
CONC.
BRICK W/ ASPH. SURF.

61.00' VC
P.V.I. STA 415+40.11
ELEV = 1,052.34'
SSD = 246
K = 12
-0.30 %
-5.30 %
STA. 415+09.61
ELEV. 1,052.44
STA. 415+70.61
ELEV. 1,050.73

EXISTING GROUND
PROPOSED PROFILE
RAMP J

EX. 16" WATER
EX. 8" GAS
EX. ELEC.

℄ STA 415+09.61 RAMP J =
℄ R/W STA 51+35.59 PERKINS ST

BEGIN PROFILE
RAMP J
STA. 415+09.61

STA. 416+40.00 ELEV. 1,047.05

STA 418+86.40, 27.75' LT
(TBR) EX. CB-3, GRATE ELEV 1034.49
EX. 15" RCP S 1031.68
EX. 12" RCP N 1032.25

STA 418+06.54, 25.18' LT
(TBR) EX. MH-1, GRATE ELEV 1036.14
EX. 15" RCP N 1031.67
EX. 18" RCP W 1031.67

-5.30 %
+1.02 %
EX. 15" RCP (TBR)
EX. 12" RCP (TBR)
18" TYPE B

500.00' VC
P.V.I. STA 418+90.00
ELEV = 1,033.79'
K = 79

MATCH LINE STA. 419+50, SEE SHEET205

1052.29 1051.65 1050.49 1049.17 1047.84 1046.52 1045.27 1044.09 1042.99 1041.98 1041.04 1040.18 1039.40 1038.70 1038.08 1037.53 1037.07 1036.68
1052.46 1051.04 1049.04 1048.73 1049.17 1050.13 1050.35 1048.74 1045.91 1041.92

1055 1050 1045 1040 1035 1030 1025

415+00 416+00 417+00 418+00 419+00

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED DNO
CHECKED HRB

PLAN AND PROFILE - RAMP J
STA. 414+81.82 TO STA. 419+50

SUM-8-1.75

204
801

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Ohio DOT Workspace
SUM-8

1" 0 0.5"

DGF: ohdot\V8i
DGF: 60-08326_PW

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34" x 22"

View: SHEET
By: srifle

Model: Sheet
Printed: 4/12/2023 @ 2:29:53 PM
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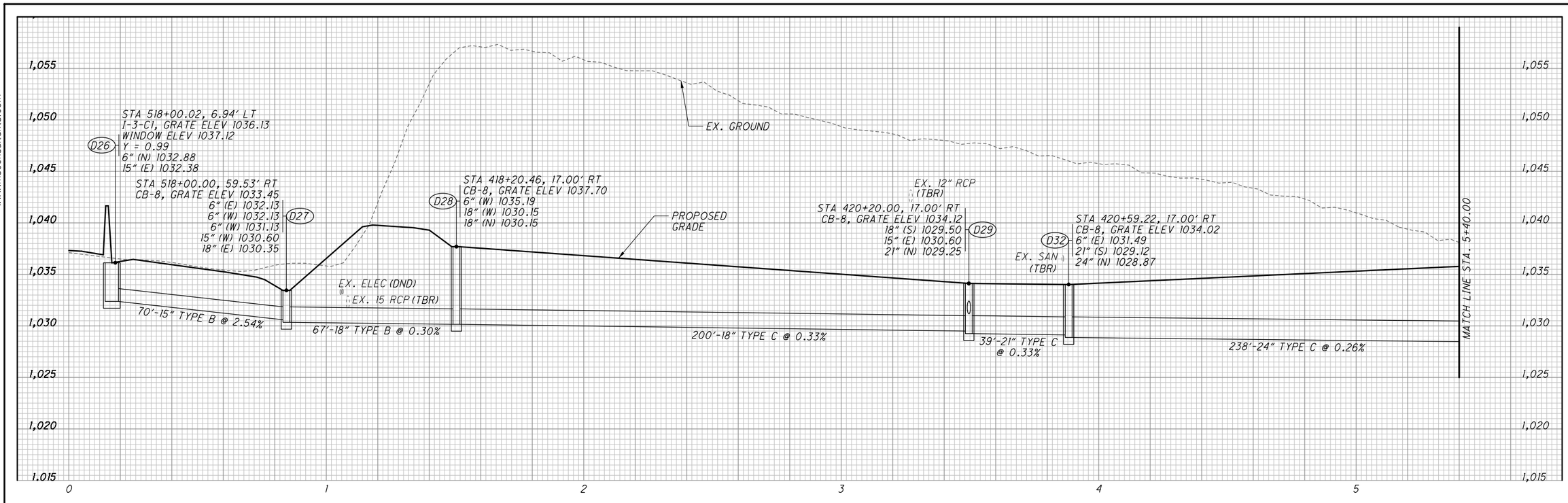
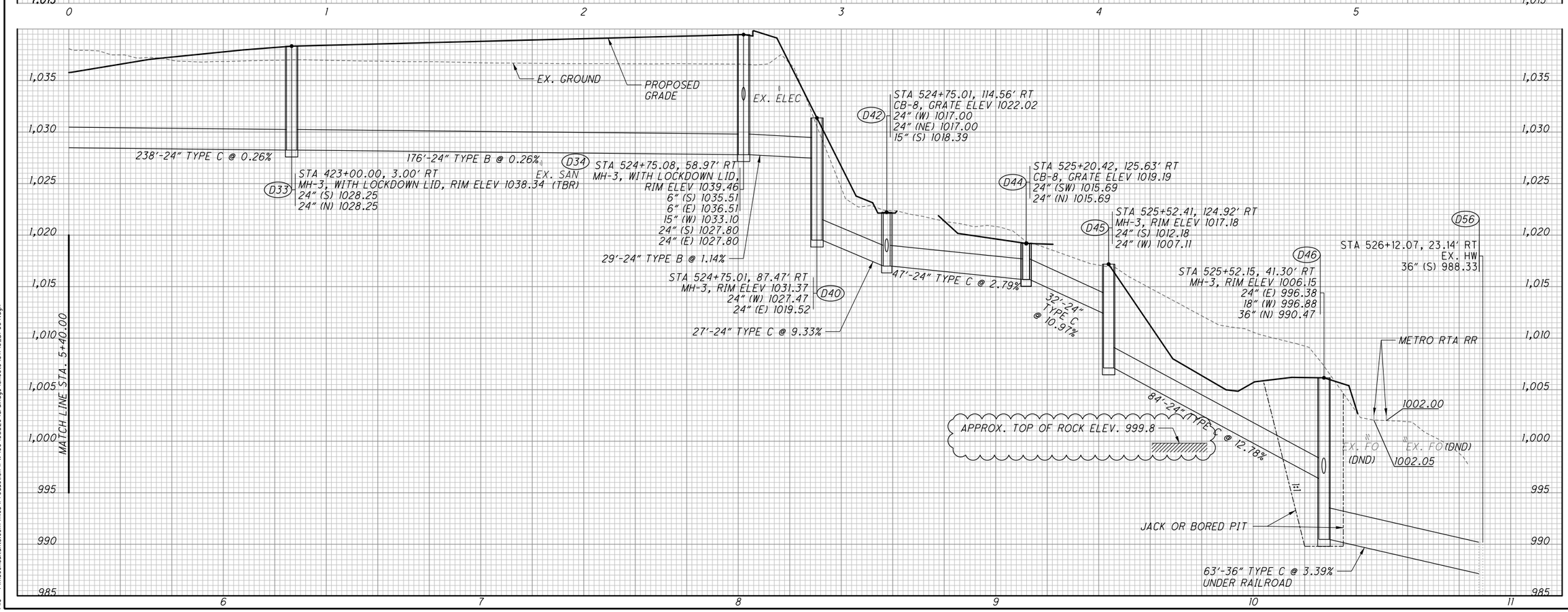
CALCULATED DNO
CHECKED HRB

STORM SEWER PROFILES

SUM-8-1.75

316
801





PLOT.CEL

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Ohio DOT Workspace
SUM-8

1" / 0.5" / 0

DGF: ohdot1V8i
TBF: 60-08326_PW

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34" x 22"

View= FENCE_VIEW1
By= srittle

Model= Sheet
Printed= 4/12/2023 @ 2:46:43 PM
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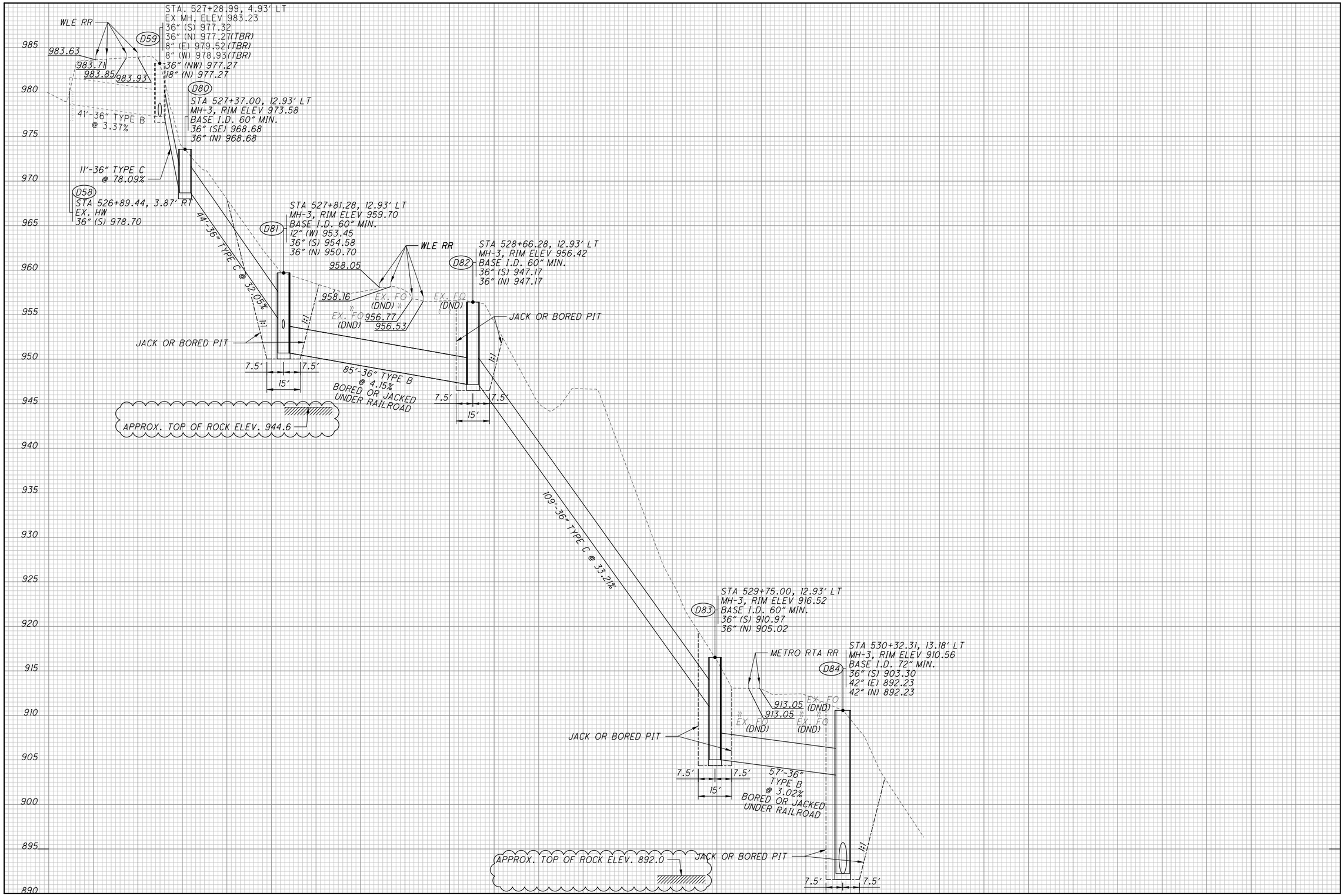

CALCULATED DNO
CHECKED HRB

STORM SEWER PROFILES

SUM-8-1.75

PLOT.CEL

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Ohio DOT Workspace
SUM-8
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1" 0.5" 0

Batchplot Spec: \\msconsultants.com\files\Production\PW\60\08326\standards\plotdrv\batchplt.spf UCF: ohdot1V8i PCF: 60-08326.PW
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Plot Driver: \\msconsultants.com\files\Standards\usetn\ohdot1\v8i\ms\plotting\PDF.pltcfg

34" x 22"

View: FENCE_VIEW1
By: kryan
Model: Sheet @ 9:00:38 AM
Printed: 4/11/2023
File: \\msconsultants.com\files\Production\PW\60\08326\lighting\sheets\91710_LS001.dgn

CALCULATED JRH
CHECKED KWR

ROADWAY LIGHTING SUBSUMMARY

SUM-8-1.75

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT12B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT15B40 EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS, DARK BRONZE EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 LIGHT POLE (INSTALLATION ONLY), AS PER PLAN EACH	625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH	625 LIGHT POLE FOUNDATION, 24" X 8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 3" FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 CONDUIT CLEANED AND CABLES REMOVED FT	625 LUMINAIRE, INSTALLATION ONLY, AS PER PLAN EACH	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 GROUND ROD EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	625 POWER SERVICE REMOVED EACH	625 DISCONNECT CIRCUIT EACH
405	CKT 'IK'																																								
	508+98		CL	IK-6	1	1																																			1
	508+98	510+41	CL	IK-6 - IK-7																				306																
	510+41		CL	IK-7														112	1			1																		
	510+37		CL	IK-7 MJ	1	1																																		
	510+37	511+82	CL	IK-7 MJ - IK-8 MJ																				310																
	511+86		CL	IK-8														112	1			1																		
	511+82		CL	IK-8 MJ	1	1																																		
	511+82	513+22	CL	IK-8 MJ - IK-9																				300																
	513+22		CL	IK-9	1	1																																		1
	513+22	515+32	CL	IK-9 - BW1-11																																				
	CKT '3K'																																							
	100+77 'K1'		LT	3K-16	1	1						1	1					110				1																		
	100+77	102+52	LT	3K-16 - 3K-17																					185						175	175								
	102+52		LT	3K-17	1	1						1	1					110				1																		
	102+52	103+51	LT	3K-17 - PB-26																					109						99	99								
	103+51		LT	PB-26			2																														1			
	3+34 'GOOD'		RT	3K-15	1	1																																		1
	3+34	103+51 'K1'	R/L	3K-15 - PB-26																					20						10	10								
	103+51	103+51	L/R	PB-26 - PB-27																				104					42											
	103+51		RT	PB-27			2																														1			
	103+51	104+23	RT	PB-27 - 3K-18																					82						72	72								
	104+23		RT	3K-18	1	1					1			1				104				1																		1
	104+23	105+80	RT	3K-18 - 3K-19																					167						157	157								
	105+80		RT	3K-19	1	1					1			1				104				1																		1
	105+80	7+30 'GOOD'	RT	3K-19 - 3K-20																					163						153	153								
	7+30		RT	3K-20	1	1					1			1				104				1																		1
	CKT 'BW1'																																							
	515+32		LT	BW1-10				1							2	228					1																		1
	515+36		LT	BW1-10 MJ	2																																			
	515+36	516+92	LT	BW1-10 MJ - BW1-9 MJ																				498																
	516+92		LT	BW1-9 MJ	2																																			
	516+88		LT	BW1-9				1							2	228					1																		1
	516+92	518+00	LT	BW1-9 MJ - (ML)																				339																
	CKT '2FG'																																							
	514+25		RT	2FG-5																																					1
	CKT 'BW1'																																							
	9+59 '1'		LT	BW1-5	2					1					1	150					1																		1
	9+59	11+11	LT	BW1-5 - BW1-4																						160					150	150								
	11+11		LT	BW1-4	2					1					1	150					1																		1
	11+11	12+07	LT	BW1-4 - (ML)																						87					82	82								
	CKT 'BE1'																																							
	415+52 'J'		RT	BE1-1	2					1					1	150					1																		1
	415+52	416+84	RT	BE1-1 - BE1-2																						142					132	132								
	416+84		RT	BE1-2	2					1					1	150					1																		1
	416+84	418+17	RT	BE1-2 - (ML)																						137					132	132								
406	CKT 'BW1'																																							
	12+07 '1'	12+63	LT	(ML) - BW1-3																						73					68	68								
	12+63		LT	BW1-3	2					1					1	150					1																		1
	12+63	14+15	LT	BW1-3 - BW1-2																						161					151	151								
	14+15		LT	BW1-2	2					1					1	150					1																		1
	14+15	15+64	LT	BW1-2 - BW1-1																						159					149	149								
	15+64		LT	BW1-1	2					1					1	150					1																		1
	15+64	15+82	LT	BW1-1 - PB-1																						23					13	13								
	15+82		LT	PB-1			6																														1			
	15+82	15+69	LT	PB-1 - PB 'BW'																				192				22		22	22								
	15+69	15+69	LT	PB 'BW' - CC 'BW'																				114				4		4	4								
	15+69		LT	CC 'BW'																																		1			
	TOTALS CARRIED TO GENERAL SUMMARY				28	10	10		2	7	3	2	2	3	11	2262	2		12	4		2163	726	942		26	42	1569	1569	222	2			2	1	16		1		4

ROADWAY LIGHTING SUBSUMMARY

SUM-8-1.75

CALCULATED JRH
CHECKED KWR

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT12B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT15B40 EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS, DARK BRONZE EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 LIGHT POLE (INSTALLATION ONLY), AS PER PLAN EACH	625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH	625 LIGHT POLE FOUNDATION, 24" X 8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 3" FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 CONDUIT CLEANED AND CABLES REMOVED FT	625 LUMINAIRE, INSTALLATION ONLY, AS PER PLAN EACH	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 GROUND ROD EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	625 POWER SERVICE REMOVED EACH	625 DISCONNECT CIRCUIT EACH
406	CKT 'BW2'																																						
	15+82 'I'	17+20	LT	PB-1 - BW2-1																				148				138	138										
	17+20		LT	BW2-1	2					1						1	150			1														1				
	17+20	224+46 'SB'	LT	BW2-1 - BW2-2																		160				150	150										
	224+46		LT	BW2-2	2					1						1	150			1														1				
	224+46	224+49	LT	BW2-2 - PB-4																		13				3	3										
	224+49		LT	PB-4			3																											1				
	224+49	225+20	LT	PB-4 - JB-1																	252			74				51	51								
	225+20		LT	JB-1																											1						
	225+20	225+93	LT	JB-1 - BW2-3																	249			73							1						
	225+93		LT	BW2-3	2			1							1	150		4												1						
	225+93	227+42	LT	BW2-3 - BW2-4																	477			149													
	227+42		LT	BW2-4	2			1							1	150		4												1						
	227+42	228+12	LT	BW2-4 - (ML)																	225			70													
	224+53		RT	PB-7																											1						
	224+53	225+25	RT	PB-7 - JB-4																				79				5	5								
	225+25		RT	JB-4																											1						
	225+25	228+12	RT	JB-4 - ML																				287													
	EXIST. CC 'AW'																																						
	224+32		LT	CC 'AW'																																			1
	CKT 'BW1'																																						
	518+00 'NB'	518+42	LT	(ML) - BW1-8 MJ																	141																	
	518+42		LT	BW1-8 MJ	2																																	
	518+38		LT	BW1-8					1						2	228			1														1				
	518+42	519+96	LT	BW1-8 MJ - BW1-7 MJ																	492																	
	519+96		LT	BW1-7 MJ	2																																	
	519+92		LT	BW1-7					1						2	228			1														1				
	519+96	521+43	LT	BW1-7 MJ - BW1-6 MJ																	471																	
	521+43		LT	BW1-6 MJ	2																																	
	521+39		LT	BW1-6					1						2	228			1														1				
	521+43	521+59	LT	BW1-6 MJ - MJ-1																	78																	
	521+59		LT	MJ-1																														1				
	521+59	15+82 'I'	LT	MJ-1 - PB-1																	342				104			104	104								
	CKT 'BE1'																																						
	418+17 'J'	418+35	RT	(ML) - BE1-3																				24				19	19								
	418+35		RT	BE1-3	2					1					1	150			1														1				
	418+35	419+63	RT	BE1-3 - PB-11																				138				128	128								
	419+63		RT	PB-11			3																											1				
	419+63	419+63	RT	PB-11 - PB 'BE'																	93				21			21	21								
	419+63	419+63	RT	PB 'BE' - CC 'BE'																	63				6			6	6								
	419+63		RT	CC ' BE'																																1			
	EXIST. CC 'AE'																																						
	423+51		RT	CC 'AE'																																			1
	419+63	419+85	RT	PB-11 - BE1-4																				33				23	23								
	419+85		RT	BE1-4	2					1					1	150			1														1				
	419+85	421+37	RT	BE1-4 - BE1-5																				161				151	151								
	421+37		RT	BE1-5	2					1					1	150			1														1				
	421+37	421+40	RT	BE1-5 - FUND SPLIT																				8				3	3								
	421+40	422+82	RT	FUND SPLIT - BE1-6																				145				140	140								
	422+82		RT	BE1-6	2					1					1	150			1														1				
	422+82	424+33	RT	BE1-6 - BE1-7																				160				150	150								
	424+33		RT	BE1-7	2					1					1	150			1														1				
	TOTALS CARRIED TO GENERAL SUMMARY				24		6	2	3	7					15	2034		8	7	3		2883		990	732	131		1092	1092			4	1	3		10		1	2	

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0 0.5" 1"

"UCF: ohdotV8i
PCF: 60-08326.PW

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34" x 22"

View: FENCE_VIEW1
By: kryan

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT12B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT15B40 EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS, DARK BRONZE EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 LIGHT POLE (INSTALLATION ONLY), AS PER PLAN EACH	625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH	625 LIGHT POLE FOUNDATION, 24" X 8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 3" FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 CONDUIT CLEANED AND CABLES REMOVED FT	625 LUMINAIRE, INSTALLATION ONLY, AS PER PLAN EACH	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 GROUND ROD EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	625 POWER SERVICE REMOVED EACH	625 DISCONNECT CIRCUIT EACH
406	CKT 'BE1'																																										
	424+33	424+63	RT	BE1-7 - PB-13																					40				30	30												
	424+63		RT	PB-13			3																													1						
	424+63	525+41 'NB'	RT	PB-13 - JB-6																			309			93			62	62												
	525+41		RT	JB-6																												1										
	525+41	525+81	RT	JB-3 - BE1-8																			150			40																
	525+81		RT	BE1-8	2			1							1	150		4														1									
	525+81	527+30	RT	BE1-8 - BE1-9																			477			149																
	527+30		RT	BE1-9	2			1							1	150		4														1									
	527+30	528+00	RT	BE1-9 - (ML)																			225			70																
	524+68		LT	PB-8																												1									
	524+68	525+46	LT	PB-8 - JB-5																						93			5	5												
	525+46		LT	JB-5																												1									
	525+46	528+00	LT	JB-5 - (ML)																						254																
407	CKT 'BW2'																																										
	228+12 'SB'	228+90	LT	(ML) - BW2-5																			249			78																
	228+90		LT	BW2-5	2			1							1	150		4														1									
	228+90	230+40	LT	BW2-5 - BW2-6																			480			150																
	230+40		LT	BW2-6	2			1							1	150		4														1									
	230+40	231+98	LT	BW2-6 - BW2-7																			504			158																
	231+98		LT	BW2-7	2			1							1	150		4														1									
	231+98	233+40	LT	BW2-7 - BW2-8																			456			142																
	233+40		LT	BW2-8	2			1							1	150		4														1									
	233+40	234+90	LT	BW2-8 - BW2-9																			480			150																
	234+90		LT	BW2-9	2			1							1	150		4														1									
	234+90	236+46	LT	BW2-9 - BW2-10																			498			156																
	236+46		LT	BW2-10	2			1							1	150		4														1									
	236+46	237+90	LT	BW2-10 - BW2-11																			462			144																
	237+90		LT	BW2-11	2			1							1	150		4														1									
	237+90	238+12	LT	BW2-11 - (ML)																			81			22																
	228+12	230+47	RT	(ML) - JB-12																						235																
	230+47		RT	JB-12																												1									
	230+47	235+62	RT	JB-12 - JB-13																						515																
	235+62		RT	JB-13																												1									
	235+62	238+12	RT	JB-13 - (ML)																						250																
	528+00 'NB'	530+54	LT	(ML) - JB-14																						254																
	530+54		LT	JB-14																												1									
	530+54	535+61	LT	JB-14 - JB-15																						507																
	535+61		LT	JB-15																												1									
	535+61	538+00	LT	JB-15 - (ML)																						239																
	CKT 'BE1'																																										
	528+00	528+80	RT	(ML) - BE1-10																			255			80																
	528+80		RT	BE1-10	2			1							1	150		4														1									
	528+80	530+30	RT	BE1-10 - BE1-11																			480			150																
	530+30		RT	BE1-11	2			1							1	150		4														1									
	530+30	531+80	RT	BE1-11 - BE1-12																			480			150																
	531+80		RT	BE2-1-12	2			1							1	150		4														1									
	531+80	533+29	RT	BE2-1-12 - BE1-13																			477			149																
	533+29		RT	BE1-13	2			1							1	150		4														1									
	533+29	534+80	RT	BE1-13 - BE1-14																			483			151																
	534+80		RT	BE1-14	2			1							1	150		4														1									
	TOTALS CARRIED TO GENERAL SUMMARY				28		3	14							14	2100		56					6546		40	4379			97	97			20		2						

CALCULATED JRH
CHECKED KWR

ROADWAY LIGHTING SUBSUMMARY

SUM-8-1.75

397
801

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0 0.5" 1"

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34" x 22"

CALCULATED JRH
CHECKED KWR

ROADWAY LIGHTING SUBSUMMARY

SUM-8-1.75

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT12B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT15B40 EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS, DARK BRONZE EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 LIGHT POLE (INSTALLATION ONLY), AS PER PLAN EACH	625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH	625 LIGHT POLE FOUNDATION, 24" X 8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 3" FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 CONDUIT CLEANED AND CABLES REMOVED FT	625 LUMINAIRE, INSTALLATION ONLY, AS PER PLAN EACH	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 GROUND ROD EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	625 POWER SERVICE REMOVED EACH	625 DISCONNECT CIRCUIT EACH
407	CKT 'BE1'																																										
	534+80	536+34	RT	BE1-14 - BE1-15																			492			154																
	536+34		RT	BE1-15	2			1								1	150		4													1										
	536+34	537+74	RT	BE1-15 - BE1-16																			450			140																
	537+74		RT	BE1-16	2			1								1	150		4													1										
	537+74	538+00	RT	BE1-16 - (ML)																			93			26																
	STRUCTURE GROUNDING																																									
	234+36 'SB'		LT	PIER 3																																					1		
	533+54 'NB'		RT	PIER 3																																					1		
408	CKT 'BW2'																																										
	238+12 'SB'	239+40	LT	(ML) - BW2-12																			399			128																
	239+40		LT	BW2-12	2			1								1	150		4													1										
	239+40	240+86	LT	BW2-12 - BW2-13																			468			146																
	240+86		LT	BW2-13	2			1								1	150		4													1										
	240+86	241+56	LT	BW2-13 - PB-18																			273			81				54	54										
	241+56		LT	PB-18			3																													1						
	241+56	242+32	LT	PB-18 - BW2-14																					86				76	76											
	242+32		LT	BW2-14	2				1							1	150			1																		1			
	242+32	243+79	LT	BW2-14 - BW2-15																					157				147	147											
	243+79		LT	BW2-15	2				1							1	150			1																		1			
	243+79	245+26	LT	BW2-15 - BW2-16																					157				147	147											
	245+26		LT	BW2-16	2				1							1	150			1																		1			
	238+12	240+80	RT	(ML) - JB-21																						268																
	240+80		RT	JB-21																																						
	240+80	241+51	RT	JB-21 - PB-19																						80				47	47											
	241+51		RT	PB-19																																	1					
	538+00 'NB'	540+68	LT	(ML) - JB-22																						268																
	540+68		LT	JB-22																																						
	540+68	541+56	LT	JB-22 - PB-20																						97				64	64											
	541+56		LT	PB-20																																	1					
	CKT 'BE1'																																									
	538+00	539+23	RT	(ML) - BE1-17																			384			123																
	539+23		RT	BE1-17	2			1								1	150		4													1										
	539+23	540+74	RT	BE1-17 - BE1-18																			483			151																
	540+74		RT	BE1-18	2			1								1	150		4													1										
	540+74	541+60	RT	BE1-18 - PB-22																			318			96				69	69											
	541+60		RT	PB-22																																	1					
	541+60	542+23	RT	PB-22 - BE1-19																					73				63	63											
	542+23		RT	BE1-19	2				1							1	150			1																		1			
	542+23	543+74	RT	BE1-19 - BE1-20																					161				151	151											
	543+74		RT	BE1-20	2				1							1	150			1																		1			
	543+74	545+23	RT	BE1-20 - BE1-21																					159				149	149											
	545+23		RT	BE1-21	2				1							1	150			1																		1			
	CKT 'SB1'																																									
	246+73 'SB'		RT	SB1-16	2				1							1	150			1																		1			
	246+73	247+96	RT	SB1-16 - (ML)																					130				125	125											
	546+73 'NB'		LT	SB1-18	2				1							1	150			1																		1			
	546+73	548+00	LT	SB1-18 - (ML)																					132				127	127											
	TOTALS CARRIED TO GENERAL SUMMARY				28		3	6		8						14	2100		24	8			3360		1055	1758			1219	1219			8		4		8	2			

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PCF: 60-08326.PW

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By: kryan

Model: Sheet
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ROADWAY LIGHTING SUBSUMMARY

SUM-8-1.75

CALCULATED JRH
CHECKED KWR

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, A10BB40 EACH	625 LIGHT POLE, CONVENTIONAL, AS PER PLAN, AT10B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT12B40 EACH	625 LIGHT POLE, CONVENTIONAL, AT15B40 EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-II-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS EACH	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, 13,500-15,000 LUMENS, DARK BRONZE EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FT	625 LIGHT POLE (INSTALLATION ONLY), AS PER PLAN EACH	625 LIGHT POLE ANCHOR BOLTS ON STRUCTURE EACH	625 LIGHT POLE FOUNDATION, 24" X 8' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP EACH	625 MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN EACH	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 3" FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 CONDUIT CLEANED AND CABLES REMOVED FT	625 LUMINAIRE, INSTALLATION ONLY, AS PER PLAN EACH	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 GROUND ROD EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	625 POWER SERVICE REMOVED EACH	625 DISCONNECT CIRCUIT EACH
409	CKT 'SB1'																																									
	247+96 'SB'	248+20	RT	(ML) - SB1-15																																							
	248+20		RT	SB1-15	2					1						1	150				1																						
	248+20	248+27	RT	SB1-15 - MJ-2																																							
	248+27		RT	MJ-2			3																													1						
	548+00 'NB'	548+24	LT	(ML) - SB1-17																																						
	548+24		LT	SB1-17	2					1						1	150				1																						
	548+24	248+27	LT	SB1-17 - MJ-2																																							
	248+27 'SB'	549+79 'NB'	R/L	MJ-2 - SB1-14 MJ																							471																
	549+79		LT	SB1-14 MJ	2																																						
	549+75		LT	SB1-14					1							2	228				1																						
	549+79	551+31	LT	SB1-14 MJ - SB1-13 MJ																							486																
	551+31		LT	SB1-13 MJ	2																																						
	551+27		LT	SB1-13					1							2	228				1																						
	551+31	552+82	LT	SB1-13 MJ - SB1-12 MJ																							483																
	552+82		LT	SB1-12 MJ	2																																						
	552+78		LT	SB1-12					1							2	228				1																						
	552+82	554+33	LT	SB1-12 MJ - SB1-11 MJ																							483																
	554+33		LT	SB1-11 MJ	2																																						
	554+29		LT	SB1-11					1							2	228				1																						
	554+33	555+91	LT	SB1-11 MJ- SB1-10 MJ																							504																
	555+91		LT	SB1-10 MJ	2																																						
	555+87		LT	SB1-10					1							2	228				1																						
	555+91	557+50	LT	SB1-10 MJ - SB1-9 MJ																							507																
	557+50		LT	SB1-9 MJ	2																																						
	557+46		LT	SB1-9					1							2	228					1																						
	557+50	558+00	LT	SB1-9 MJ - (ML)																							165																
410	558+00	559+08	LT	(ML) - SB1-8 MJ																							339																
	559+08		LT	SB1-8 MJ	2																																						
	559+04		LT	SB1-8					1							2	228					1																						
	559+08	560+58	LT	SB1-8 MJ - SB1-7 MJ																							480																
	560+58		LT	SB1-7 MJ	2																																						
	560+54		LT	SB1-7					1							2	228					1																						
	560+58	260+96 'SB'	L/R	SB1-7 MJ - MJ-3																							180																
	260+96		RT	MJ-3			3																													1						
	260+96	260+96	R/L	MJ-3 - PB-23																							285					85										
	260+96		LT	PB-23			3																														1						
	260+96	261+44	LT	PB-23 - PB-24																									58					48	48								
	261+44		LT	PB-24			3																														1						
	261+44	261+43	LT	PB-24 - PB 'SB'																							93				21		21	21								
	261+43	261+41	LT	PB 'SB' - CC 'SB'																							60				5		5	5								
	261+41		LT	CC 'SB'																																						1	
	261+44	261+62	LT	PB-24 - SB1-1																									28					18	18								
	261+62		LT	SB1-1	2					1						1	150				1																						
	261+62	263+25	LT	SB1-1 - SB1-2																									176					166	166								
	263+25		LT	SB1-2	2					1						1	150				1																						
	263+25	264+84	LT	SB1-2 - SB1-3																									178					168	168								
	264+84		LT	SB1-3	2					1						1	150				1																						
	260+96	561+08 'NB'	RT	MJ-3 - PB-25																							342					104										
	561+08		RT	PB-25			3																														1						
	561+08	561+85	RT	PB-25 - SB1-4																									88					78	78								
	561+85		RT	SB1-4	2					1						1	150				1																						
	561+85	563+51	RT	SB1-4 - SB1-5																									174					164	164								
	563+51		RT	SB1-5	2					1						1	150				1																						
	563+51	565+23	RT	SB1-5 - SB1-6																									182					172	172								
	565+23		RT	SB1-6	2					1						1	150				1																						
	TOTALS CARRIED TO GENERAL SUMMARY				32		15		8	8						24	3024				8	5	3	4878		985		26	189	911	911				2	3		16		1	

399
801

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1" 0.5" 0

UCF: ohdot\V8i
PCF: 60-08326_PW

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34" x 22"

View: SHEET
By: kryan
@ 3:04:45 PM

Model: Sheet
Printed: 4/11/2023
File: \\msconsultants.com\files\Production\PW\60\08326\lighting\sheets\91710_LS101.dgn

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, UNFUSED PERMANENT EACH	625 NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 LIGHTING, MISC.; POWER SERVICE, 240 VOLT EACH	625 LIGHTING, MISC.; SERVICE TO AESTHETIC LIGHTING EACH
	~~CC 'X'~~																		
406	15+74 (RAMP I)		LT	CC 'X'														1	
	15+74	15+74	LT	CC 'X' - PB		114	57	57		8			4	4					
	15+74	15+90	LT	PB - PB-2		216	108	108		52			26	26					
	15+90		LT	PB-2													1		
	15+90	224+05 SB	LT	PB-2 - PB-3		1482	741	741		237			237	237					
	~~224+05~~		LT	PB-3													1		
	224+05	223+99	L/R	PB-3 - PB-6		360	360			110			110	110					
	223+99		RT	PB-6												1			
	223+99	224+95	RT	PB-6 - PB-9		318	318		96				96	96					
	224+95		RT	PB-9	3											1			1
	224+95	225+11	RT	PB-9 - PB-10			78		16				16	16					
	225+11		RT	PB-10	3											1			1
	224+05	224+54	LT	PB-3 - PB-5		189		189	106				53	53					
	224+54		LT	PB-5												1			
	224+54	225+25	LT	PB-5 - JB-2		255		255	150				53	53					
	225+25		LT	JB-2											1				
	225+25	227+48	LT	JB-2 - JB-3		699		699	446										
	227+48		LT	JB-3	3										1				1
	227+48	227+58	LT	JB-3 - JB-3A				60	20										
	227+58		LT	JB-3A											1				
	227+58	227+68	LT	JB-3A - JB-3B				60	20										
	227+68		LT	JB-3B											1				
	227+68	227+78	LT	JB-3B - JB-3C				60	20										
	227+78		LT	JB-3C											1				
	227+78	228+12	LT	JB-3C - ML				111	32										
	~~CC 'Y'~~																		
	419+58 RAMP J		RT	CC 'Y'														1	
	419+58	419+58	RT	CC 'Y' - PB			60	60		5			5	5					
	419+58	419+58	RT	PB - PB-12			99	99		23			23	23					
	419+58		RT	PB-12	6												1		
	419+58	424+68	RT	PB-12 - PB-14							520	520	122	122					
	424+68		RT	PB-14	6												1		
	~~424+68~~	~~525+46 NB~~	RT	~~PB-14 - JB-7~~			~~342~~	~~342~~	~~208~~				~~64~~	~~64~~					
	525+46		RT	JB-7											1				
	525+46	527+69	RT	JB-7 - JB-8			699	699	446										
	527+69		RT	JB-8	3										1				1
	527+69	527+79	RT	JB-8 - JB-8A				60	20										
	527+79		RT	JB-8A											1				
	527+79	527+89	RT	JB-8A - JB-8B				60	20										
	527+89		RT	JB-8B											1				
	527+89	527+99	RT	JB-8B - JB-8C				60	20										
	527+99		RT	JB-8C											1				
	527+99	528+00	RT	JB-8C - ML				18	2										
407	228+12 SB	230+81	LT	ML - JB-9				837	538										
	230+81		LT	JB-9	3										1				1
	230+81	230+91	LT	JB-9 - JB-9A					20										
	230+91		LT	JB-9A											1				
	230+91	231+01	LT	JB-9A - JB-9B					20										
	231+01		LT	JB-9B											1				
	231+01	231+11	LT	JB-9B - JB9C					20										
	231+11		LT	JB-9C											1				
	~~231+11~~	~~234+21~~	LT	~~JB-9C - JB-10~~					~~620~~										
	TOTALS CARRIED TO GENERAL SUMMARY				27	3633	2862	4575	2840	435	520	520	809	809	14	4	4	2	5

CALCULATED JRH
CHECKED KWR

SUM-8-1.75 AESTHETIC LIGHTING SUBSUMMARY

400
801

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Ohio DOT Workspace
SUM-8

0 0.5" 1"

UCF: ohdot\V8i
PCF: 60-08326_PW

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34" x 22"

View: SHEET
By: kryan

Model: Sheet @ 9:00:44 AM
Printed: 4/11/2023
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SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, UNFUSED PERMANENT EACH	625 NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE FT	625 CONDUIT, 2", 725.04 FT	625 CONDUIT, 3", 725.04 FT	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES FT	625 1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES FT	625 TRENCH, 24" DEEP FT	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN FT	625 JUNCTION BOX EACH	625 PULL BOX, 725.08, 18" EACH	625 PULL BOX, 725.08, 24" EACH	625 LIGHTING, MISC.; POWER SERVICE, 240 VOLT EACH	625 LIGHTING, MISC.; SERVICE TO AESTHETIC LIGHTING EACH
	CC - 'Z'																		
	234+21		LT	JB-10											1				
	234+21	234+31	LT	JB-10 - JB-10A					20										
	234+31		LT	JB-10A											1				
	234+31	234+41	LT	JB-10A - JB-10B					20										
	234+41		LT	JB-10B	3										1				1
	234+41	234+51	LT	JB-10B - JB-10C			120		20										
	234+51		LT	JB-10C											1				
	234+51	236+61	LT	JB-10C - JB-11			1320		420										
	236+61		LT	JB-11	3										1				1
	236+61	236+71	LT	JB-11 - JB-11A			60		20										
	236+71		LT	JB-11A											1				
	236+71	236+81	LT	JB-11A - JB-11B			60		20										
	236+81		LT	JB-11B											1				
	236+81	236+91	LT	JB-11B - JB-11C			60		20										
	236+91		LT	JB-11C											1				
	236+91	238+12	LT	JB-11C - ML			378		242										
	CC - 'Y'																		
	528+00 NB	530+69	RT	ML - JB-16				822	538										
	530+69		RT	JB-16	3										1				1
	530+69	530+79	RT	JB-16 - JB-16A					20										
	530+79		RT	JB-16A											1				
	530+79	530+89	RT	JB-16A - JB-16B					20										
	530+89		RT	JB-16B											1				
	530+89	530+99	RT	JB-16B - JB-16C					20										
	530+99		RT	JB-16C											1				
	530+99	533+34	RT	JB-16C - JB-17					470										
	533+34		RT	JB-17											1				
	533+34	533+44	RT	JB-17 - JB-17A					20										
	533+44		RT	JB-17A											1				
	533+44	533+64	RT	JB-17A - JB-17B					40										
	CC - 'Z'																		
	533+64		RT	JB-17B	3										1				1
	533+64	533+74	RT	JB-17B - JB-17C			120		20										
	533+74		RT	JB-17C											1				
	533+74	536+19	RT	JB-17C - JB-18			1530		490										
	536+19		RT	JB-18	3										1				1
	536+19	536+29	RT	JB-18 - JB-18A			60		20										
	536+29		RT	JB-18A											1				
	536+29	536+39	RT	JB-18A - JB-18B			60		20										
	536+39		RT	JB-18B											1				
	536+39	536+49	RT	JB-18B - JB-18C			60		20										
	536+49		RT	JB-18C											1				
	536+49	538+00	RT	JB-18C - ML			468		302										
	TOTALS CARRIED TO GENERAL SUMMARY				15		4296	822	2782						20				5

CALCULATED JRH
CHECKED KWR

AESTHETIC LIGHTING SUBSUMMARY

SUM-8-1.75

401
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34" x 22"

SHEET NO.	STATION FROM	STATION TO	SIDE	POLE/PULL BOX NO.	625 CONNECTION, UNFUSED PERMANENT	625 NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	625 NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE	625 CONDUIT, 2", 725.04	625 CONDUIT, 3", 725.04	625 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	625 1-1/2" DUCT CABLE WITH THREE NO. 2 AWG 2400 VOLT CABLES	625 TRENCH, 24" DEEP	625 UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	625 JUNCTION BOX	625 PULL BOX, 725.08, 18"	625 PULL BOX, 725.08, 24"	625 LIGHTING, MISC.; POWER SERVICE, 240 VOLT	625 LIGHTING, MISC.; SERVICE TO AESTHETIC LIGHTING
					EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
	CC - 'Z'																		
407	234+ 07 SB		LT	CC - 'Z'														1	
	234+07	234+19	LT	CC-'Z' - PB		162	324			24			12	12					
	234+19	234+32	LT	PB - PB-16		60	120			10			10	10					
	234+32		LT	PB-16												1			
	234+32	234+41	LT	PB-16 - JB-10B		720	1440												
	234+19	533+60 NB	L/R	PB - PB-15		300	600			90			90	90					
	533+60		RT	PB-15												1			
	533+60	533+64	RT	PB-15 - JB-17B		720	1440												
408	238+12 SB	238+91	LT	ML - JB-19			231		144										
	238+91		LT	JB-19	3										1				1
	238+91	239+01	LT	JB-19 - JB-19A					20										
	239+01		LT	JB-19A											1				
	239+01	239+11	LT	JB-19A - JB-19B					20										
	239+11		LT	JB-19B											1				
	239+11	239+21	LT	JB-19B - JB-19C					20										
	239+21		LT	JB-19C											1				
	239+21	240+80	LT	JB-19 - JB-20					318										
	240+80		LT	JB-20											1				
	240+80	241+51	LT	JB-20 - PB-17					160				47	47					
	241+51		LT	PB-17												1			
	538+00 NB	538+94	RT	ML - JB-23			297		188										
	538+94		RT	JB-23	3										1				1
	538+94	540+68	RT	JB-23 - JB-24					348										
	540+68		RT	JB-24											1				
	540+68	541+54	RT	JB-24 - PB-21					194				64	64					
	541+54		RT	PB-21												1			
	TOTALS CARRIED TO GENERAL SUMMARY				6	1962	4452		1412	124			223	223	7	4		1	2

CALCULATED JRH
CHECKED KWR

AESTHETIC LIGHTING SUBSUMMARY

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1"
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UCF: ohdot\V8i
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By: kryan

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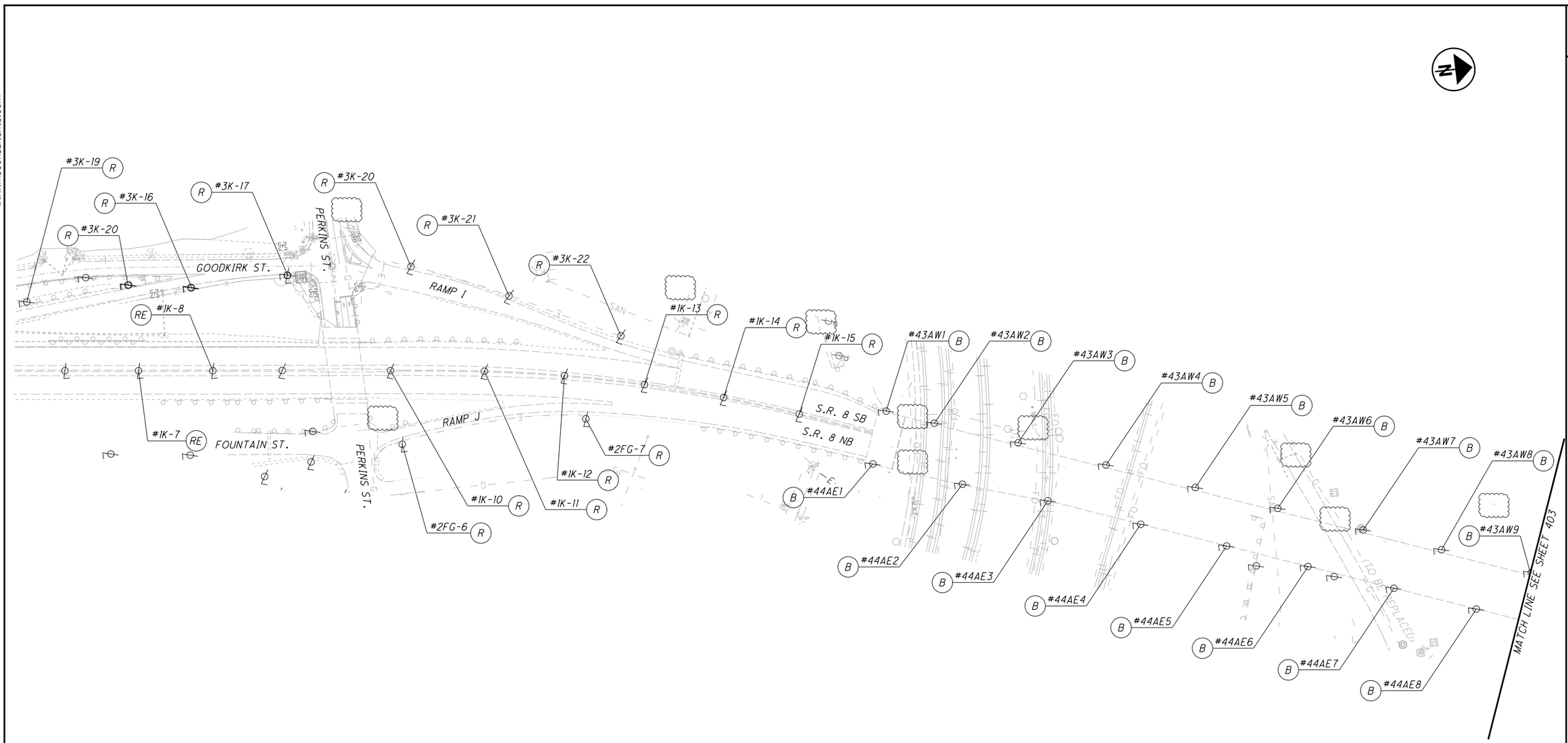

LEGEND

- EXISTING LIGHT POLE TO REMAIN
- LIGHT POLE AND LUMINAIRE TO BE REMOVED — (R)
- BRIDGE MOUNTED LIGHT POLE AND LUMINAIRE TO BE REMOVED — (B)
- LIGHT POLE AND LUMINAIRE TO BE REMOVED AND REERECTED (SEE PLAN SHEETS FOR ADDITIONAL INFORMATION) — (RE)

CALCULATED KWR
CHECKED DRB

LIGHTING REMOVALS

SUM-8-1.75

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PCF: 60-08326_PW

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CALCULATED KWR
CHECKED DRB

LIGHTING PLAN LEGEND

PLAN LEGEND

EXIST.	PROP.	ITEM
		LIGHT POLE, EXISTING TO REMAIN
		LIGHT POLE, 40', W/ DAVIT ARM, 10' & LED LUMINAIRE*
		LIGHT POLE, 40', W/ DOUBLE DAVIT ARMS, 10' & LED LUMINAIRES*
	(2)	LIGHT POLE, ODOT STANDARD CONVENTIONAL, AT15B40, W/ LED LUMINAIRE**
	(3)	LIGHT POLE, ODOT STANDARD CONVENTIONAL, AT12B40, W/ LED LUMINAIRE***
		LIGHT POLE, LOW MAST, 50', W/ 400 W HPS LUMINAIRE, EXISTING TO REMAIN
	(RE)	LIGHT POLE, LOW MAST, REERECTED ON NEW FOUNDATION
		1 ½" DUCT CABLE IN 24" DEEP TRENCH
		POWER SERVICE
CKT	CKT	INDICATES CIRCUIT & NO. OF SINGLE CONDUCTORS IN CABLE OR CONDUIT (NO. 4 AWG UNLESS INDICATED OTHERWISE)
(JB-2)	(JB-2)	JUNCTION BOX, IDENTIFICATION NO.
(MJ-2)	(MJ-2)	MEDIAN JUNCTION BOX, IDENTIFICATION NO.
(PB-2)	(PB-2)	PULL BOX, IDENTIFICATION NO.
(PB-R)		PULL BOX, EXISTING TO BE REMOVED
		(1, 2 OR 3)-3" CONDUITS, 725.04 (AS INDICATED ON THE PLANS)
		3" CONDUIT, 725.04
		STUB AND CAP CONDUIT ELL
		STRUCTURE GROUND

* LUMINAIRE, CONVENTIONAL, LED, TYPE III, 13,500-15,000 LUMENS, DARK BRONZE, AS PER PLAN
** LUMINAIRE, CONVENTIONAL, LED, TYPE II, 13,500-15,000 LUMENS, AS PER PLAN
*** LUMINAIRE, CONVENTIONAL, LED, TYPE III, 13,500-15,000 LUMENS, AS PER PLAN

SUM-8-1.75

404
801

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NOTE:

EXISTING CONTROL CENTER 'K' IS LOCATED ON THE SW CORNER OF MARKET ST. & GOODKIRK ST. (CKTS 1K & 3K ARE 480V, 2-WIRE, GROUNDED NEUTRAL CIRCUITS)

3K-15 STA. 3+34±, RT
DISCONNECT EXIST. CKT 3K FROM NORTH

STA. 100+77, 14.5' LT
AT15B40 3K-16

3K-17 STA. 102+52, 14.5' LT
AT15B40

3K-14 DND

TO CC 'K'

CKT 3K

JACKED/ DRILLED

STA. 103+51, 14.5' LT
18" (2 SPLICES) PB-26

PB-27 STA. 103+51, 27.5' RT
18" (2 SPLICES)

3K-19 STA. 105+80, 11.5' RT
AT12B40

STA. 104+23, 11.5' RT
AT12B40 3K-18

3K-20 STA. 7+30, 11.5' RT
AT12B40

STA. 48+40
COMBINATION SIGNAL SUPPORT
SEE SIGNAL PLAN SHEET 382 FOR ADDITIONAL LIGHTING ITEMS

STA. 47+22
COMBINATION SIGNAL SUPPORT
SEE SIGNAL PLAN SHEET 382 FOR ADDITIONAL LIGHTING ITEMS

PERKINS ST.

GOODKIRK ST.

RAMP K1

STA. 9+59, 12.5' LT
AT10B40 BW1-5

STA. 11+11, 14.5' LT
AT10B40 BW1-4

CKT BW1

RAMP I

LIMITS OF MEDIAN BARRIER REMOVAL/REPLACEMENT

509+72.6

513+17.6

#1K-9
STA. 513+22

BW1-9 STA. 516+88, 10.0' LT
A10BB40
(W/MJ @ STA. 516+92)

+65

S.R. 8 SB

S.R. 8 NB

CKT 1K

#1K-6
STA. 508+98

RE #1K-7
STA. 510+41
(W/MJ @ STA. 510+37)

RE #1K-8
STA. 511+86
(W/MJ @ STA. 511+82)

DISCONNECT AND REMOVE EXIST. LIGHTING CONDUCTORS NORTH OF POLE #1K-9

EMPTY CONDUIT BETWEEN #1K-9 & BW1-10

STA. 515+32, 10.0' LT
A10BB40 BW1-10
(W/MJ @ STA. 515+36)

MATCH LINE STA. 518+00, SEE SHEET 406

RAMP L1

RAMP J

FOUNTAIN ST.

CKT 2FG

TO CC 'FG'

#2FG-2

#2FG-3

#2FG-4

#2FG-5
DISCONNECT EXIST. CKT #2FG FROM NORTH

CKT BE1

STA. 415+52, 12.5' RT
AT10B40 BE1-1

STA. 416+84, 14.0' RT
AT10B40 BE1-2

NOTE:

EXISTING CONTROL CENTER 'FG' IS LOCATED ON THE NE CORNER OF FORGE ST. & FOUNTAIN ST. (CKT 2FG IS A 480V, 2-WIRE, GROUNDED NEUTRAL CIRCUIT)

NOTES:

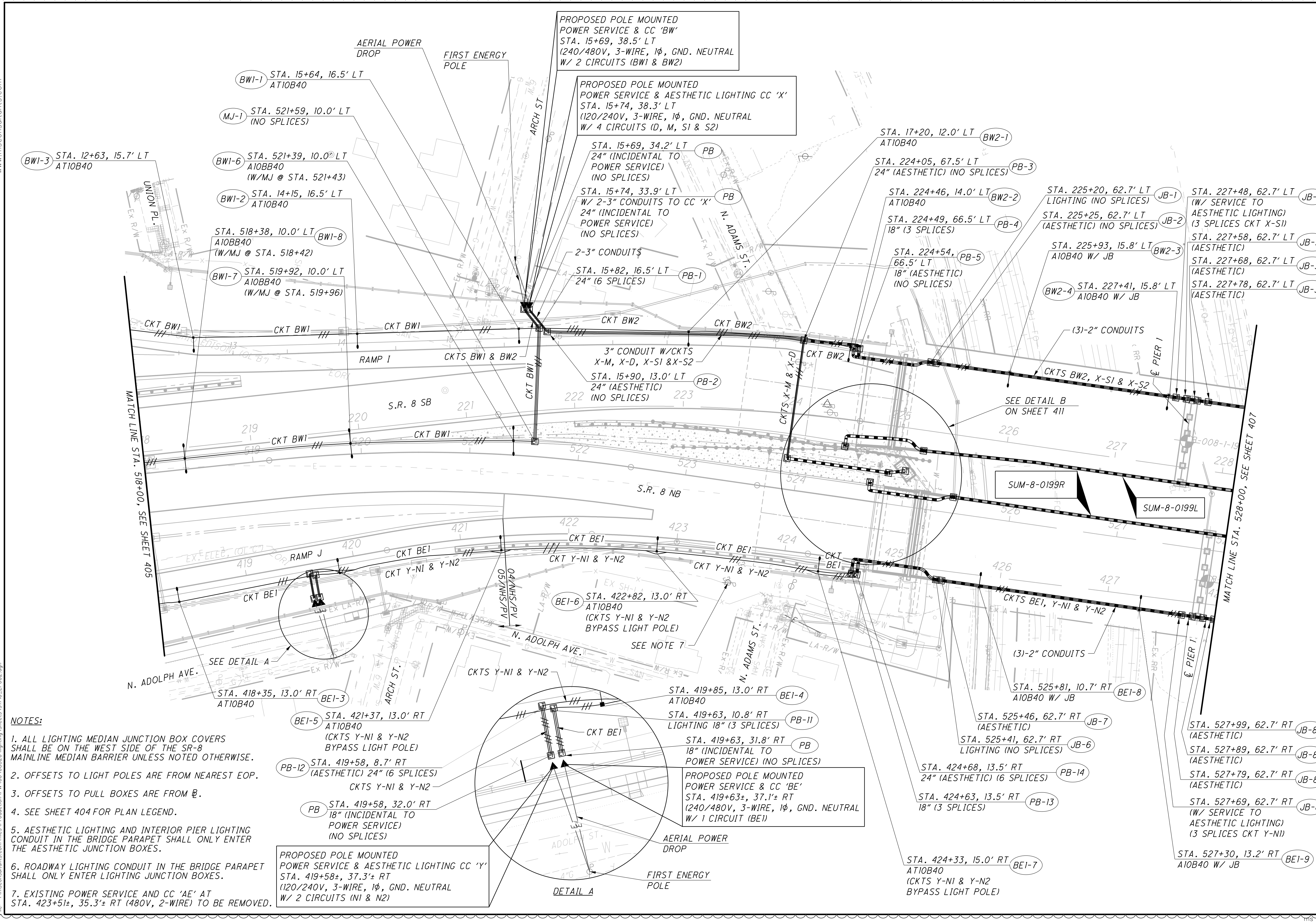
1. ALL LIGHTING MEDIAN JUNCTION BOX COVERS SHALL BE ON THE WEST SIDE OF THE SR-8 MAINLINE MEDIAN BARRIER UNLESS NOTED OTHERWISE.
2. OFFSETS TO LIGHT POLES ARE FROM NEAREST EOP.
3. OFFSETS TO PULL BOXES ARE FROM ℄.
4. SEE SHEET 404 FOR PLAN LEGEND.

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN
STA. 508+98 TO STA. 518+00
SUM-8-1.75

405
801


PROPOSED POLE MOUNTED POWER SERVICE & CC 'BW' STA. 15+69, 38.5' LT (240/480V, 3-WIRE, 1ϕ, GND. NEUTRAL W/ 2 CIRCUITS (BW1 & BW2)
PROPOSED POLE MOUNTED POWER SERVICE & AESTHETIC LIGHTING CC 'X' STA. 15+74, 38.3' LT (120/240V, 3-WIRE, 1ϕ, GND. NEUTRAL W/ 4 CIRCUITS (D, M, S1 & S2)
AERIAL POWER DROP
FIRST ENERGY POLE
BW1-1 STA. 15+64, 16.5' LT A10B40
MJ-1 STA. 521+59, 10.0' LT (NO SPLICES)
BW1-3 STA. 12+63, 15.7' LT A10B40
BW1-6 STA. 521+39, 10.0' LT A10BB40 (W/MJ @ STA. 521+43)
BW1-2 STA. 14+15, 16.5' LT A10B40
BW1-8 STA. 518+38, 10.0' LT A10BB40 (W/MJ @ STA. 518+42)
BW1-7 STA. 519+92, 10.0' LT A10BB40 (W/MJ @ STA. 519+96)
PB STA. 15+69, 34.2' LT 24" (INCIDENTAL TO POWER SERVICE) (NO SPLICES)
PB STA. 15+74, 33.9' LT W/ 2-3" CONDUITS TO CC 'X' 24" (INCIDENTAL TO POWER SERVICE) (NO SPLICES)
2-3" CONDUITS
PB-1 STA. 15+82, 16.5' LT 24" (6 SPLICES)
PB-2 STA. 15+90, 13.0' LT 24" (AESTHETIC) (NO SPLICES)
3" CONDUIT W/CKTS X-M, X-D, X-S1 & X-S2
BW2-1 STA. 17+20, 12.0' LT A10B40
PB-3 STA. 224+05, 67.5' LT 24" (AESTHETIC) (NO SPLICES)
BW2-2 STA. 224+46, 14.0' LT A10B40
PB-4 STA. 224+49, 66.5' LT 18" (3 SPLICES)
PB-5 STA. 224+54, 66.5' LT 18" (AESTHETIC) (NO SPLICES)
JB-1 STA. 225+20, 62.7' LT LIGHTING (NO SPLICES)
JB-2 STA. 225+25, 62.7' LT (AESTHETIC) (NO SPLICES)
BW2-3 STA. 225+93, 15.8' LT A10B40 W/ JB
BW2-4 STA. 227+41, 15.8' LT A10B40 W/ JB
JB-3 STA. 227+48, 62.7' LT (W/ SERVICE TO AESTHETIC LIGHTING) (3 SPLICES CKT X-S1)
JB-3A STA. 227+58, 62.7' LT (AESTHETIC)
JB-3B STA. 227+68, 62.7' LT (AESTHETIC)
JB-3C STA. 227+78, 62.7' LT (AESTHETIC)
(3)-2" CONDUITS
CKT BW1
CKT BW2
CKTS BW1 & BW2
CKTS X-M & X-D
CKTS BW2, X-S1 & X-S2
RAMP I
S.R. 8 SB
S.R. 8 NB
UNION PL.
ARCH ST
N. ADAMS ST.
SEE DETAIL B ON SHEET 411
SUM-8-0199R
SUM-8-0199L
℄ PIER 1
MATCH LINE STA. 518+00, SEE SHEET 405
MATCH LINE STA. 528+00, SEE SHEET 407
RAMP J
CKT BE1
CKT Y-N1 & Y-N2
CKTS BE1, Y-N1 & Y-N2
04/NHS/PV
05/NHS/PV
N. ADOLPH AVE.
BE1-6 STA. 422+82, 13.0' RT A10B40 (CKTS Y-N1 & Y-N2 BYPASS LIGHT POLE)
SEE NOTE 7
SEE DETAIL A
BE1-3 STA. 418+35, 13.0' RT A10B40
BE1-5 STA. 421+37, 13.0' RT A10B40 (CKTS Y-N1 & Y-N2 BYPASS LIGHT POLE)
PB-12 STA. 419+58, 8.7' RT (AESTHETIC) 24" (6 SPLICES)
CKTS Y-N1 & Y-N2
PB STA. 419+58, 32.0' RT 18" (INCIDENTAL TO POWER SERVICE) (NO SPLICES)
PROPOSED POLE MOUNTED POWER SERVICE & AESTHETIC LIGHTING CC 'Y' STA. 419+58±, 37.3'± RT (120/240V, 3-WIRE, 1ϕ, GND. NEUTRAL W/ 2 CIRCUITS (N1 & N2)
BE1-4 STA. 419+85, 13.0' RT A10B40
PB-11 STA. 419+63, 10.8' RT LIGHTING 18" (3 SPLICES)
PB STA. 419+63, 31.8' RT 18" (INCIDENTAL TO POWER SERVICE) (NO SPLICES)
PROPOSED POLE MOUNTED POWER SERVICE & CC 'BE' STA. 419+63±, 37.1'± RT (240/480V, 3-WIRE, 1ϕ, GND. NEUTRAL W/ 1 CIRCUIT (BE1)
DETAIL A
PB-14 STA. 424+68, 13.5' RT 24" (AESTHETIC) (6 SPLICES)
PB-13 STA. 424+63, 13.5' RT 18" (3 SPLICES)
BE1-7 STA. 424+33, 15.0' RT A10B40 (CKTS Y-N1 & Y-N2 BYPASS LIGHT POLE)
BE1-8 STA. 525+81, 10.7' RT A10B40 W/ JB
JB-7 STA. 525+46, 62.7' RT (AESTHETIC)
JB-6 STA. 525+41, 62.7' RT LIGHTING (NO SPLICES)
JB-8C STA. 527+99, 62.7' RT (AESTHETIC)
JB-8B STA. 527+89, 62.7' RT (AESTHETIC)
JB-8A STA. 527+79, 62.7' RT (AESTHETIC)
JB-8 STA. 527+69, 62.7' RT (W/ SERVICE TO AESTHETIC LIGHTING) (3 SPLICES CKT Y-N1)
BE1-9 STA. 527+30, 13.2' RT A10B40 W/ JB
HORIZONTAL SCALE IN FEET
0 20 40 80

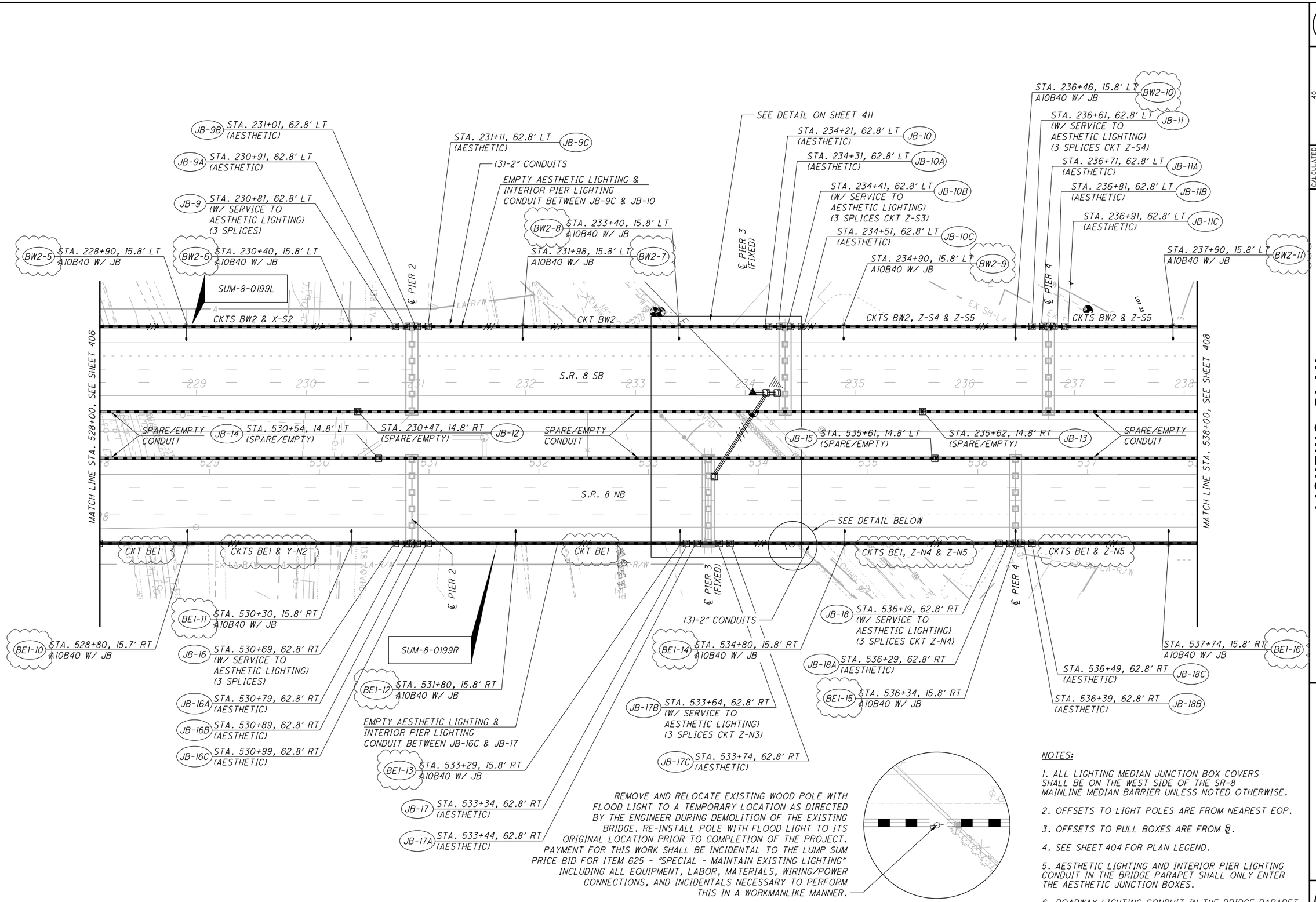
NOTES:

1. ALL LIGHTING MEDIAN JUNCTION BOX COVERS SHALL BE ON THE WEST SIDE OF THE SR-8 MAINLINE MEDIAN BARRIER UNLESS NOTED OTHERWISE.
2. OFFSETS TO LIGHT POLES ARE FROM NEAREST EOP.
3. OFFSETS TO PULL BOXES ARE FROM ℄.
4. SEE SHEET 404 FOR PLAN LEGEND.
5. AESTHETIC LIGHTING AND INTERIOR PIER LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER THE AESTHETIC JUNCTION BOXES.
6. ROADWAY LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER LIGHTING JUNCTION BOXES.
7. EXISTING POWER SERVICE AND CC 'AE' AT STA. 423+51±, 35.3'± RT (480V, 2-WIRE) TO BE REMOVED.

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN
STA. 518+00 TO STA. 528+00

SUM-8-1.75



NOTES:

1. ALL LIGHTING MEDIAN JUNCTION BOX COVERS SHALL BE ON THE WEST SIDE OF THE SR-8 MAINLINE MEDIAN BARRIER UNLESS NOTED OTHERWISE.
2. OFFSETS TO LIGHT POLES ARE FROM NEAREST EOP.
3. OFFSETS TO PULL BOXES ARE FROM ℄.
4. SEE SHEET 404 FOR PLAN LEGEND.
5. AESTHETIC LIGHTING AND INTERIOR PIER LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER THE AESTHETIC JUNCTION BOXES.
6. ROADWAY LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER LIGHTING JUNCTION BOXES.

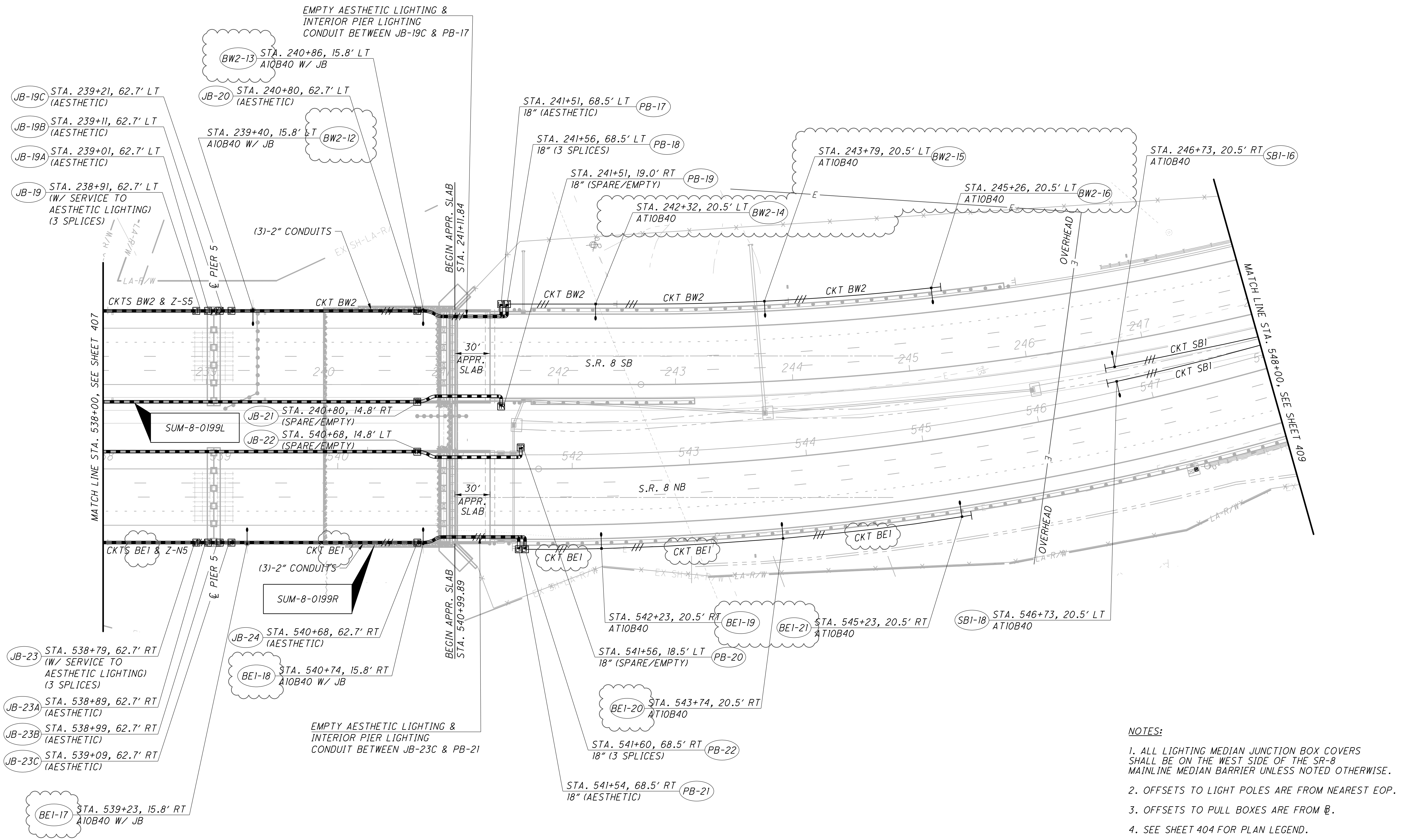
HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN
STA. 528+00 TO STA. 538+00

SUM-8-1.75

407
801



NOTES:

1. ALL LIGHTING MEDIAN JUNCTION BOX COVERS SHALL BE ON THE WEST SIDE OF THE SR-8 MAINLINE MEDIAN BARRIER UNLESS NOTED OTHERWISE.

2. OFFSETS TO LIGHT POLES ARE FROM NEAREST EOP.

3. OFFSETS TO PULL BOXES ARE FROM ℄.

4. SEE SHEET 404 FOR PLAN LEGEND.

5. AESTHETIC LIGHTING AND INTERIOR PIER LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER THE AESTHETIC JUNCTION BOXES.

6. ROADWAY LIGHTING CONDUIT IN THE BRIDGE PARAPET SHALL ONLY ENTER LIGHTING JUNCTION BOXES.

0 20 40 80
HORIZONTAL SCALE IN FEET

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN
STA. 538+00 TO STA. 548+00

SUM-8-1.75

408
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Ohio DOT Workspace SUM-8
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Ohio DOT Workspace
SUM-8

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PROPOSED POLE MOUNTED
POWER SERVICE & CC 'SB'
(TO BE LOCATED IMMEDIATELY
ADJACENT TO CC 'PW')
STA. 261+37±, 100.7'± LT
(240/480V, 3-WIRE, 1ϕ, GND. NEUTRAL)
W/ 2 CIRCUITS (SB1 & SB2 (FUTURE USE)

EXIST. CONTROL CENTER 'PW'
W/2-WIRE CIRCUITS '1PW' & '2PW'
CKT '2PW' TO REMAIN
CKT '1PW' TO BE DEACTIVATED

PB — STA. 261+38, 96.0' LT
24" (INCIDENTAL TO POWER SERVICE)
(NO SPLICES)

PB-24 — STA. 261+44, 76.0' LT
18" (3 SPLICES)

PB-23 — STA. 260+96, 74.5' LT
18" (3 SPLICES)

MJ-3 — STA. 260+96, 10.0' RT
18" (3 SPLICES)

STA. 261+62, 12.1' LT — SB1-1
AT10B40

STA. 263+12±, 96.7'± LT
DND

#A1011C
DND

STA. 263+25, 13.8' LT — SB1-2
AT10B40

STA. 264+84, 13.6' LT — SB1-3
AT10B40

PARKVIEW AVE.

E. GLENWOOD AVE.

GORGE BLVD.

RAMP B

RAMP A

S.R. 8 SB

S.R. 8 NB

MATCH LINE STA. 558+00, SEE SHEET 409

CKT SB1
CKT 2PW
CKT 4GW
JACKED/DRILLED

#A1012C
DND

#A1014C
DND

#A1013D
DND

#A1012D
DND

#A1015D
DND

SB1-8 — STA. 559+04, 10.0' LT
A10BB40
(W/MJ @ STA. 559+08)

SB1-7 — STA. 560+54, 10.0' LT
A10BB40
(W/MJ @ STA. 560+58)

PB-25 — STA. 561+08, 94.0' RT
18" (3 SPLICES)

CAUTION: DO NOT DISTURB
EXIST. CKT 4GW WHEN
TRENCHING

STA. 561+85, 10.2' RT — SB1-4
AT10B40

STA. 561+70±, 107.2'± RT
DND

STA. 563+51, 9.0' RT — SB1-5
AT10B40

SB1-6 — STA. 565+23, 9.0' RT
AT10B40

EXIST. CONTROL CENTER 'GW'
W/2-WIRE CIRCUITS '3GW' & '4GW'
CKT '4GW' TO REMAIN
CKT '3GW' TO BE DEACTIVATED

NOTES:

1. ALL LIGHTING MEDIAN JUNCTION BOX COVERS SHALL BE ON THE WEST SIDE OF THE SR-8 MAINLINE MEDIAN BARRIER UNLESS NOTED OTHERWISE.
2. OFFSETS TO LIGHT POLES ARE FROM NEAREST EOP.
3. OFFSETS TO PULL BOXES ARE FROM ℄.
4. SEE SHEET 404 FOR PLAN LEGEND.

HORIZONTAL SCALE IN FEET
20 40 80

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN
STA. 558+00 TO END PROJECT

SUM-8-1.75

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Ohio DOT Workspace
SUM-8

0 0.5" 1"

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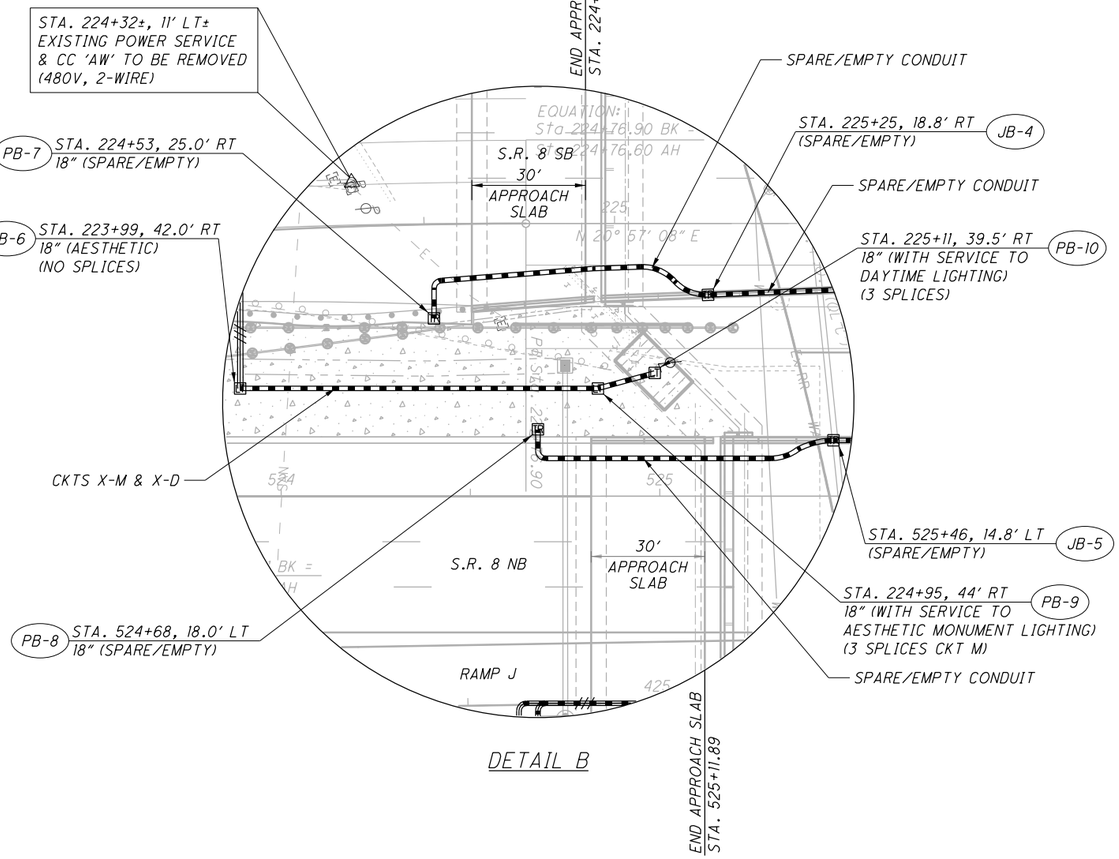
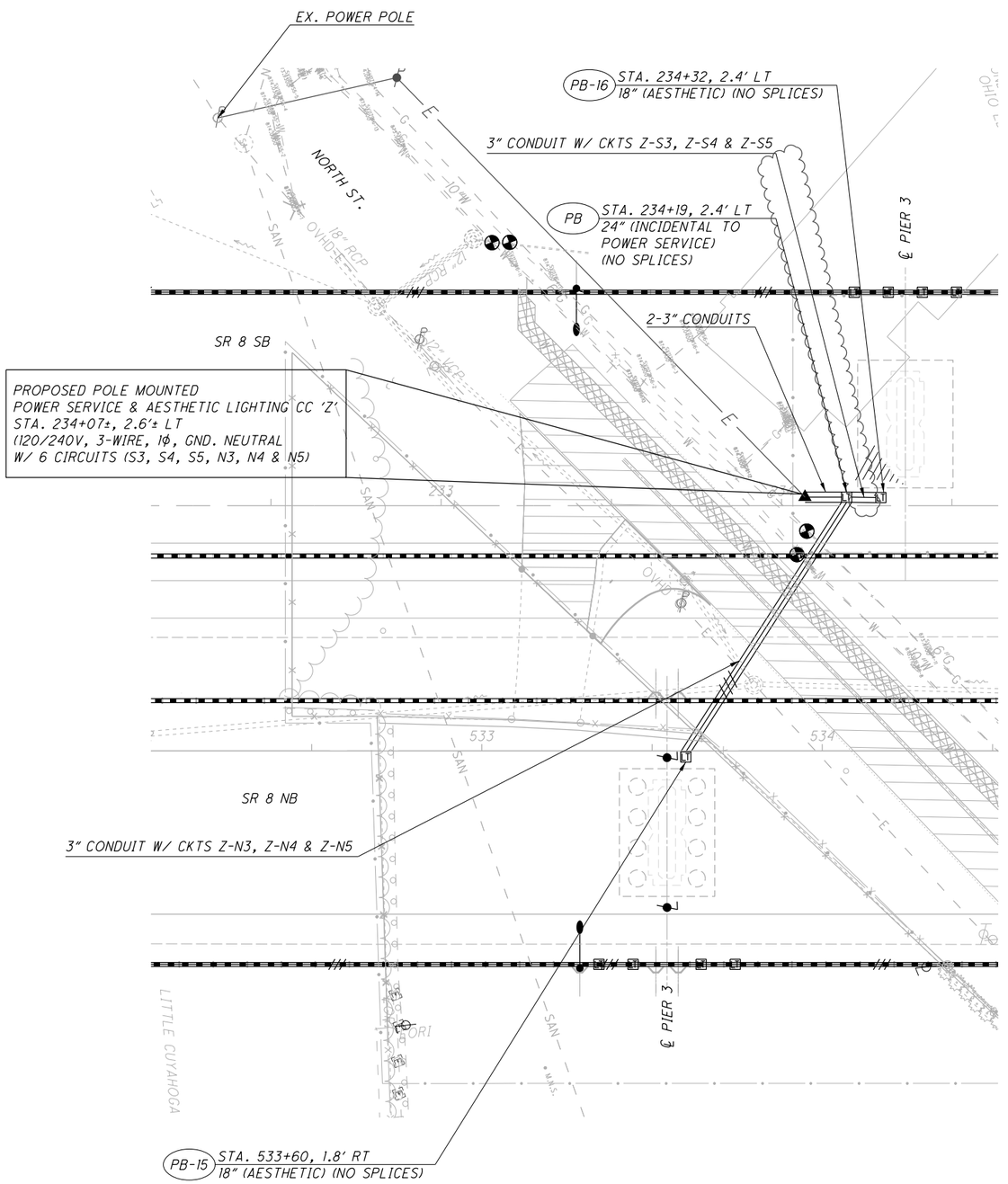
By: kryan

34" x 22"



DETAIL B



POWER SERVICE (CC-'Z')

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KWR
CHECKED DRB

LIGHTING PLAN DETAIL B
AESTHETIC LIGHTING POWER SERVICE 'Z'

SUM-8-1.75

411
801

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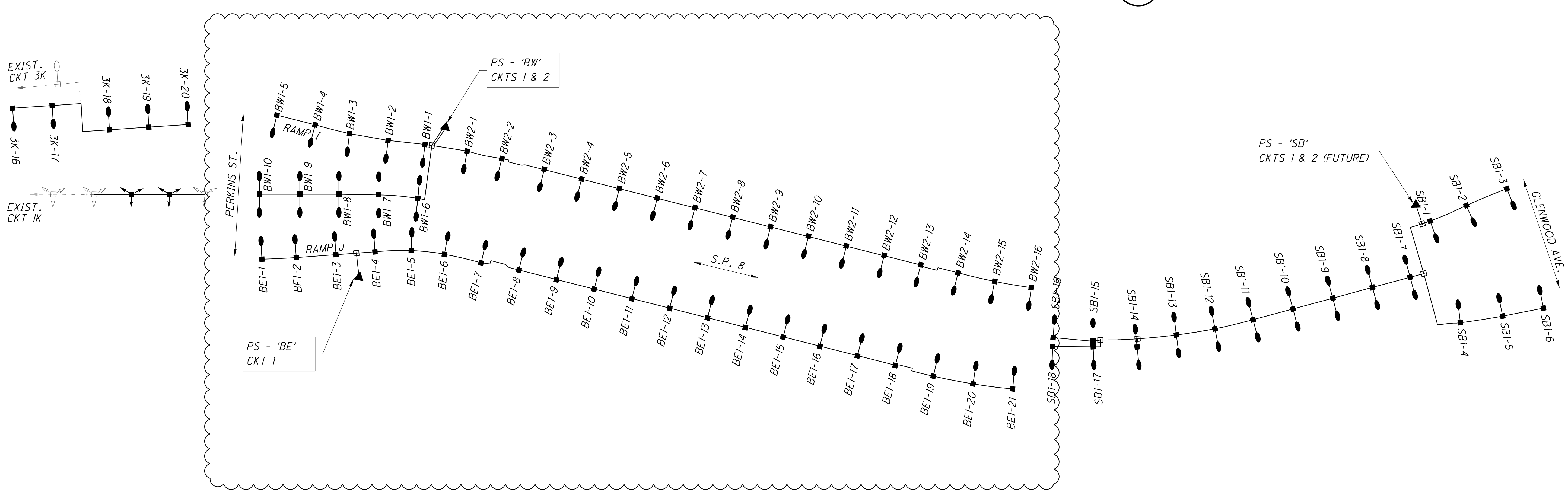
CONTROL CENTER DATA (ROADWAY)									
CONTROL CENTER DESIGNATION	LINE VOLTS	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CONDUCTOR SIZE - AWG	ENCLOSURE RATING (AMPS)	CIRCUIT NO.	CIRCUIT LOAD AMPS	CIRCUIT FUSE SIZE AMPS	CIRCUIT CABLE SIZE AWG	MAINTAINING AGENCY
BW	480	5.1	1/0	60	1	5.10	10	4	CITY OF AKRON
					2	5.44	10	4	
BE	480	3.4	1/0	60	1	7.14	10	4	CITY OF AKRON
SB	480	4.2	1/0	60	1	8.84	20	4	CITY OF AKRON
					2		FUTURE		

PROP.	LEGEND
■—●	LIGHT POLE W/LED LUMINAIRE
▲ PS	POWER SERVICE
⊡	PULL BOX WITH SPLICES *

* ONLY PULL BOXES FOR BRANCH CIRCUITS ARE SHOWN IN CIRCUIT DIAGRAM



CONTROL CENTER DATA (AESTHETIC)									
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
X	240	11.1	1/0	60	M	12.09	20	6	CITY OF AKRON
					D	34.17	50	4	
					S1	12.53	20	6	
					S2	19.69	30	2	
Y	240	7.7	1/0	60	N1	12.53	20	4	CITY OF AKRON
					N2	19.69	30	2	
Z	240	24.9	1/0	200	S3	19.69	30	6	CITY OF AKRON
					S4	19.69	30	4	
					S5	12.53	20	4	
					N3	19.69	30	6	
					N4	19.69	30	4	
					N5	12.53	20	4	

NOTE: SEE SHEET 413 FOR THE AESTHETIC LIGHTING CIRCUIT SCHEMATIC.

CALCULATED KWR
CHECKED DRB

CIRCUIT SCHEMATICS - SR 8

SUM-8-1.75

PS 'X'- AESTHETIC CKTS M, D, S1 & S2

JB-3 SERVICE TO AESTHETIC LIGHTING (CKT X-S1)

JB-9 SERVICE TO AESTHETIC LIGHTING (CKT X-S2)

JB-10B SERVICE TO AESTHETIC LIGHTING (CKT Z-S3)

JB-11 SERVICE TO AESTHETIC LIGHTING (CKT Z-S4)

JB-19 SERVICE TO AESTHETIC LIGHTING (CKT Z-S5)

CKT X-S1 (NO. 6 AWG)
CKT X-S2 (NO. 2 AWG)

CKT X-S2 (NO. 2 AWG)

CKT Z-S4 (NO. 4 AWG)
CKT Z-S5 (NO. 4 AWG)

CKT Z-S5 (NO. 4 AWG)

CKT Z-S3 (NO. 6 AWG)
CKT Z-S4 (NO. 4 AWG)
CKT Z-S5 (NO. 4 AWG)
CKT Z-N3 (NO. 6 AWG)
CKT Z-N4 (NO. 4 AWG)
CKT Z-N5 (NO. 4 AWG)

PIER 1 | PIER 2 | PIER 3 | PIER 4 | PIER 5

S.R. 8 SB

PB-9 SERVICE TO AESTHETIC LIGHTING (MONUMENT)

PB-16

PS 'Z' - AESTHETIC CKTS S3, S4, S5, N3, N4 & N5

CKT X-M (NO. 6 AWG)
CKT X-D (NO. 4 AWG)

PB-10 SERVICE TO AESTHETIC LIGHTING (DAYTIME)

CKT Z-N3 (NO. 6 AWG)
CKT Z-N4 (NO. 4 AWG)
CKT Z-N5 (NO. 4 AWG)

PB-15

S.R. 8 NB

CKT Y-N1 (NO. 4 AWG)
CKT Y-N2 (NO. 2 AWG)

CKT Y-N2 (NO. 2 AWG)

JB-17 SERVICE TO AESTHETIC LIGHTING (CKT Z-N3)

CKT Z-N4 (NO. 4 AWG)
CKT Z-N5 (NO. 4 AWG)

CKT Z-N5 (NO. 4 AWG)

PS 'Y'- AESTHETIC CKTS N1 & N2

JB-8 SERVICE TO AESTHETIC LIGHTING (CKT Y-N1)

JB-16 SERVICE TO AESTHETIC LIGHTING (CKT Y-N2)

JB-18 SERVICE TO AESTHETIC LIGHTING (CKT Z-N4)

JB-23 SERVICE TO AESTHETIC LIGHTING (CKT Z-N5)

PLAN VIEW
(NOT TO SCALE)

CKTS Y-N1 & Y-N2 (NB)
CKTS X-S1 & X-S2 (SB)

CKT Y-N2 (NB)
CKT X-S2 (SB)

CKTS Z-N4 & Z-N5 (NB)
CKTS Z-S4 & Z-S5 (SB)

CKT Z-N5 (NB)
CKT Z-S5 (SB)

PIER 1
2" CONDUIT TO SOUTH FACE OF PIER (CKT Y-N1 OR X-S1)
2" CONDUIT TO NORTH FACE OF PIER (CKT Y-N1 OR X-S1)
2" CONDUIT TO BOTTOM OF PIER (CKT Y-N1 OR X-S1)

PIER 2
2" CONDUIT TO NORTH FACE OF PIER (CKT Y-N2 OR X-S2)
2" CONDUIT TO SOUTH FACE OF PIER (CKT Y-N2 OR X-S2)
2" CONDUIT TO BOTTOM OF PIER (CKT Y-N2 OR X-S2)

PIER 3
2" CONDUIT TO NORTH FACE OF PIER (CKT Z-N3 OR Z-S3)
2" CONDUIT TO SOUTH FACE OF PIER (CKT Z-N3 OR Z-S3)
3" CONDUIT TO BOTTOM OF PIER (CKTS Z-N3, Z-N4 & Z-N5) OR (CKTS Z-S3, Z-S4 & Z-S5)

PIER 4
2" CONDUIT TO NORTH FACE OF PIER (CKT Z-N4 OR Z-S4)
2" CONDUIT TO SOUTH FACE OF PIER (CKT Z-N4 OR Z-S4)
2" CONDUIT TO BOTTOM OF PIER (CKT Z-N4 OR Z-S4)

PIER 5
2" CONDUIT TO NORTH FACE OF PIER (CKT Z-N5 OR Z-S5)
2" CONDUIT TO SOUTH FACE OF PIER (CKT Z-N5 OR Z-S5)
2" CONDUIT TO BOTTOM OF PIER (CKT Z-N5 OR Z-S5)

ELEVATION VIEW
TYPICAL FOR BOTH BRIDGES
(NOT TO SCALE)

POWER SERVICE/ CONTROL CENTER — X
CIRCUIT — S1

PIER NO.

S = SOUTHBOUND BRIDGE
N = NORTHBOUND BRIDGE
M = MONUMENT
D = DAYTIME

NOTES:

1. SEE AESTHETIC LIGHTING PLANS FOR ADDITIONAL INFORMATION.

2. SEE SHEET 412 FOR AESTHETIC LIGHTING CONTROL CENTER DATA.

CALCULATED KWR
CHECKED DRB

AESTHETIC LIGHTING CIRCUIT SCHEMATIC

SUM-8-1.75

CIRCUIT 'BW1'

VOLTAGE: 480V

WIRE FACTOR USED (TWO - NO. 4 AWG WIRES): 0.62 OHMS/MFT/1000

Section			Amperes		Ampere-Feet	AWG	Voltage Drop		% Drop	At Point
From	To	Design Feet	At Point	Accum.			In Section	Accum.		
BW1-10	BW1-9	166	0.68	0.68	113	4	0.07	1.08	0.23	BW1-10
BW1-9	BW1-8	160	0.68	1.36	218	4	0.13	1.01	0.21	BW1-9
BW1-8	BW1-7	163	0.68	2.04	333	4	0.21	0.88	0.18	BW1-8
BW1-7	BW1-6	157	0.68	2.72	427	4	0.26	0.67	0.14	BW1-7
BW1-6	PB-1	138	0.68	3.40	469	4	0.29	0.41	0.08	BW1-6
BW1-5	BW1-4	160	0.34	0.34	54	4	0.03	0.49	0.10	BW1-5
BW1-4	BW1-3	162	0.34	0.68	110	4	0.07	0.45	0.09	BW1-4
BW1-3	BW1-2	161	0.34	1.02	164	4	0.10	0.38	0.08	BW1-3
BW1-2	BW1-1	159	0.34	1.36	216	4	0.13	0.28	0.06	BW1-2
BW1-1	PB-1	29	0.34	1.70	49	4	0.03	0.15	0.03	BW1-1
PB-1	PS - 'BW'	37	0.00	5.10	189	4	0.12	0.12	0.02	PB-1

CIRCUIT 'BW2'

VOLTAGE: 480V

WIRE FACTOR USED (TWO - NO. 4 AWG WIRES): 0.62 OHMS/MFT/1000

Section			Amperes		Ampere-Feet	AWG	Voltage Drop		% Drop	At Point
From	To	Design Feet	At Point	Accum.			In Section	Accum.		
BW2-16	BW2-15	157	0.34	0.34	53	4	0.03	4.68	0.97	BW2-16
BW2-15	BW2-14	157	0.34	0.68	107	4	0.07	4.64	0.97	BW2-15
BW2-14	BW2-13	157	0.34	1.02	160	4	0.10	4.58	0.95	BW2-14
BW2-13	BW2-12	155	0.34	1.36	211	4	0.13	4.48	0.93	BW2-13
BW2-12	BW2-11	160	0.34	1.70	272	4	0.17	4.35	0.91	BW2-12
BW2-11	BW2-10	160	0.34	2.04	326	4	0.20	4.18	0.87	BW2-11
BW2-10	BW2-9	160	0.34	2.38	381	4	0.24	3.98	0.83	BW2-10
BW2-9	BW2-8	160	0.34	2.72	435	4	0.27	3.74	0.78	BW2-9
BW2-8	BW2-7	160	0.34	3.06	490	4	0.30	3.47	0.72	BW2-8
BW2-7	BW2-6	159	0.34	3.40	541	4	0.34	3.17	0.66	BW2-7
BW2-6	BW2-5	159	0.34	3.74	595	4	0.37	2.83	0.59	BW2-6
BW2-5	BW2-4	160	0.34	4.08	653	4	0.40	2.46	0.51	BW2-5
BW2-4	BW2-3	159	0.34	4.42	703	4	0.44	2.06	0.43	BW2-4
BW2-3	BW2-2	159	0.34	4.76	757	4	0.47	1.62	0.34	BW2-3
BW2-2	BW2-1	178	0.34	5.10	908	4	0.56	1.15	0.24	BW2-2
BW2-1	PS - 'BW'	175	0.34	5.44	952	4	0.59	0.59	0.12	BW2-1

CIRCUIT 'BE1'

VOLTAGE: 480V

WIRE FACTOR USED (TWO - NO. 4 AWG WIRES): 0.62 OHMS/MFT/1000

Section			Amperes		Ampere-Feet	AWG	Voltage Drop		% Drop	At Point
From	To	Design Feet	At Point	Accum.			In Section	Accum.		
BE1-21	BE1-20	159	0.34	0.34	54	4	0.03	5.41	1.13	BE1-21
BE1-20	BE1-19	161	0.34	0.68	109	4	0.07	5.38	1.12	BE1-20
BE1-19	BE1-18	160	0.34	1.02	163	4	0.10	5.31	1.11	BE1-19
BE1-18	BE1-17	160	0.34	1.36	218	4	0.13	5.21	1.08	BE1-18
BE1-17	BE1-16	159	0.34	1.70	270	4	0.17	5.07	1.06	BE1-17
BE1-16	BE1-15	155	0.34	2.04	316	4	0.20	4.90	1.02	BE1-16
BE1-15	BE1-14	160	0.34	2.38	381	4	0.24	4.71	0.98	BE1-15
BE1-14	BE1-13	160	0.34	2.72	435	4	0.27	4.47	0.93	BE1-14
BE1-13	BE1-12	160	0.34	3.06	490	4	0.30	4.20	0.88	BE1-13
BE1-12	BE1-11	160	0.34	3.40	544	4	0.34	3.90	0.81	BE1-12
BE1-11	BE1-10	159	0.34	3.74	595	4	0.37	3.56	0.74	BE1-11
BE1-10	BE1-9	160	0.34	4.08	653	4	0.40	3.19	0.67	BE1-10
BE1-9	BE1-8	159	0.34	4.42	703	4	0.44	2.79	0.58	BE1-9
BE1-8	BE1-7	159	0.34	4.76	757	4	0.47	2.35	0.49	BE1-8
BE1-7	BE1-6	160	0.34	5.10	816	4	0.51	1.88	0.39	BE1-7
BE1-6	BE1-5	153	0.34	5.44	832	4	0.52	1.38	0.29	BE1-6
BE1-5	BE1-4	161	0.34	5.78	931	4	0.58	0.86	0.18	BE1-5
BE1-4	PB-11	33	0.34	6.12	202	4	0.13	0.28	0.06	BE1-4
BE1-1	BE1-2	142	0.34	0.34	48	4	0.03	0.34	0.07	BE1-1
BE1-2	BE1-3	161	0.34	0.68	109	4	0.07	0.31	0.07	BE1-2
BE1-3	PB-11	138	0.34	1.02	141	4	0.09	0.25	0.05	BE1-3
PB-11	PS - 'BE'	36	0.00	7.14	257	4	0.16	0.16	0.03	PB-11

CIRCUIT 'SB1'

VOLTAGE: 480V

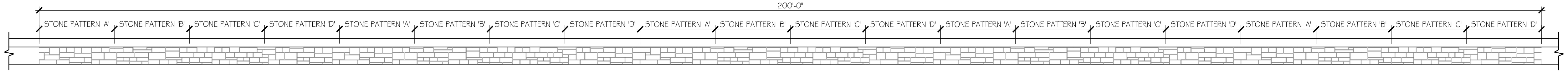
WIRE FACTOR USED (TWO - NO. 4 AWG WIRES): 0.62 OHMS/MFT/1000

Section			Amperes		Ampere-Feet	AWG	Voltage Drop		% Drop	At Point
From	To	Design Feet	At Point	Accum.			In Section	Accum.		
SB1-18	SB1-17	160	0.34	0.34	54	4	0.03	4.24	0.88	SB1-18
SB1-17	MJ-2	26	0.34	0.68	18	4	0.01	4.21	0.88	SB1-17
SB1-16	SB1-15	158	0.34	0.34	54	4	0.03	4.24	0.88	SB1-16
SB1-15	MJ-2	19	0.34	0.68	13	4	0.01	4.21	0.88	SB1-15
MJ-2	SB1-14	153	0.00	1.36	208	4	0.13	4.20	0.87	MJ-2
SB1-14	SB1-13	160	0.68	2.04	326	4	0.20	4.07	0.85	SB1-14
SB1-13	SB1-12	160	0.68	2.72	435	4	0.27	3.87	0.81	SB1-13
SB1-12	SB1-11	161	0.68	3.40	547	4	0.34	3.60	0.75	SB1-12
SB1-11	SB1-10	168	0.68	4.08	685	4	0.42	3.26	0.68	SB1-11
SB1-10	SB1-9	169	0.68	4.76	804	4	0.50	2.83	0.59	SB1-10
SB1-9	SB1-8	168	0.68	5.44	914	4	0.57	2.33	0.49	SB1-9
SB1-8	SB1-7	160	0.68	6.12	979	4	0.61	1.77	0.37	SB1-8
SB1-7	MJ-3	64	0.68	6.80	435	4	0.27	1.16	0.24	SB1-7
SB1-6	SB1-5	170	0.34	0.34	58	4	0.04	1.13	0.23	SB1-6
SB1-5	SB1-4	174	0.34	0.68	118	4	0.07	1.09	0.23	SB1-5
SB1-4	MJ-3	202	0.34	1.02	206	4	0.13	1.02	0.21	SB1-4
MJ-3	PB-24	143	0.00	7.82	1,118	4	0.69	0.89	0.19	MJ-3
SB1-3	SB1-2	179	0.34	0.34	61	4	0.04	0.33	0.07	SB1-3
SB1-2	SB1-1	176	0.34	0.68	120	4	0.07	0.29	0.06	SB1-2
SB1-1	PB-24	28	0.34	1.02	29	4	0.02	0.22	0.04	SB1-1
PB-24	PS - 'SB'	36	0.00	8.84	318	4	0.20	0.20	0.04	PB-24

CALCULATED KWR
CHECKED DRB

VOLTAGE DROP CALCULATIONS

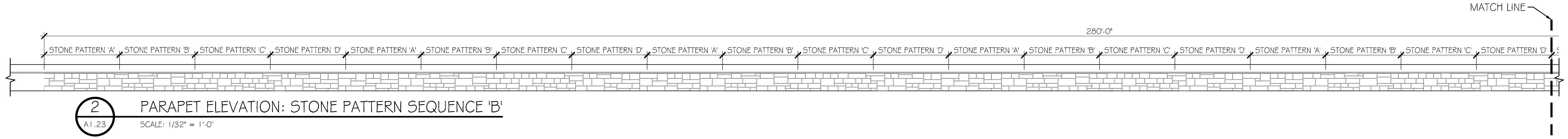
SUM-8-1.75



PARAPET ELEVATION: STONE PATTERN SEQUENCE 'A'

1 / A1.23

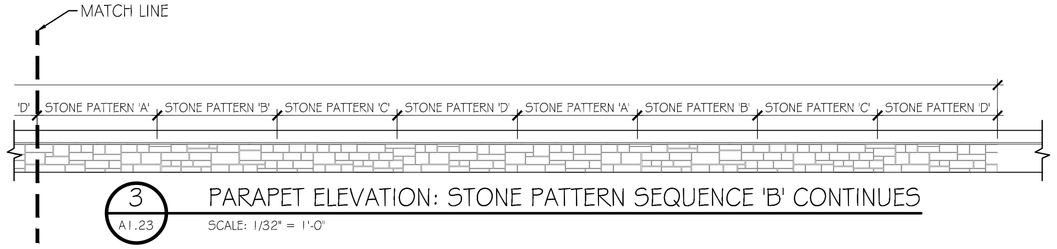
SCALE: 1/32" = 1'-0"



PARAPET ELEVATION: STONE PATTERN SEQUENCE 'B'

2 / A1.23

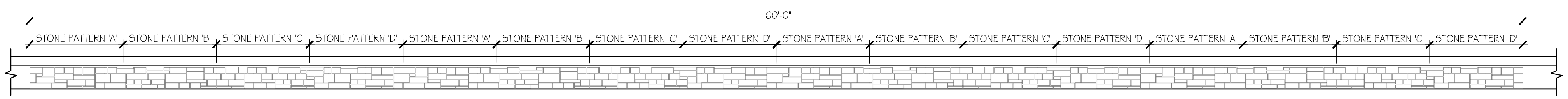
SCALE: 1/32" = 1'-0"



PARAPET ELEVATION: STONE PATTERN SEQUENCE 'B' CONTINUES

3 / A1.23

SCALE: 1/32" = 1'-0"



PARAPET ELEVATION: STONE PATTERN SEQUENCE 'C'

4 / A1.23

SCALE: 1/32" = 1'-0"

ACRYLIC STAIN

A. GENERAL

1. STAIN THE SIMULATED STONE SURFACES USING AN ACRYLIC RESIN-BASED STAIN AS RECOMMENDED BY THE MANUFACTURER. APPLY ONE BASE COLOR STAIN FOLLOWED BY RANDOM APPLICATION OF ONE SURFACE AND TWO ACCENT COLORS TO ACHIEVE NATURAL STONE EFFECT.

B. PRODUCTS

2. PRODUCT SHALL CREATE A SURFACE FINISH THAT IS BREATHABLE (ALLOWING WATER VAPOR TRANSMISSION), AND THAT RESISTS DETERIORATION FROM WATER, ACID, ALKALI, FUNGI, SUNLIGHT OR WEATHERING.

3. STAIN MIX SHALL BE A WATER BORNE, LOW VOC MATERIAL (LESS THAN 289 GRAMS/LITER), AND SHALL MEET REQUIREMENTS FOR WEATHERING RESISTANCE OF 2000 HOURS ACCELERATED EXPOSURE MEASURED IN ACCORDANCE WITH ASTM G 23. SCRUB TEST 1000 REVOLUTIONS. ABRASIVE REABRASIVE RESISTANCE (TABOR CF 10) 500 CYCLES. ADHESION ASTM D 3359 1.00MM CROSS CUTS ON GLASS PASS 3 OR HIGHER ON A SCALE OF 1 TO 5. SUPPLY INFORMATION PERTAINING TO CHEMICAL RESISTANCE ASTM D 1308 TO 87.

C. EXECUTION

4. PROVIDE THE ENGINEER WITH THE MANUFACTURER'S SPECIFICATIONS FOR PRODUCT APPLICATION. APPLY THE PRODUCT IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS WITH EXCEPTIONS AS NOTED.

5. CLEAN SURFACE PRIOR TO APPLICATION OF STAIN MATERIALS BY PRESSURE WASHING WITH WATER, MINIMUM 3000 PSI (A RATE OF THREE TO FOUR GALLONS PER MINUTE), USING FAN NOZZLE PERPENDICULAR TO AND AT A DISTANCE OF ONE OR TWO FEET FROM SURFACE. COMPLETE SURFACE. COMPLETED SURFACE SHALL BE FREE OF BLEMISHES, DISCOLORATION, SURFACE VOIDS AND UNNATURAL FORM WORKS. DO NOT SANDBLAST. ETCHING IS NOT REQUIRED.

6. STAIN SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER.

7. THE SIMULATED STONE STAIN SHALL CLOSELY MATCH THE SAMPLE COLOR IMAGE AS SHOWN IN SHEET A4.6.

8. USE BASE STAIN SIMILAR TO THE RECOMMENDED FEDERAL COLOR NUMBER 36586. THREE ADDITIONAL RECOMMENDED COLORS FOR SURFACE AND ACCENT COLORS SHALL BE FEDERAL COLOR NUMBER 33446 (SURFACE), 34201, (ACCENT) AND 36473 (ACCENT). ACTUAL COLORS USED ARE SUBJECT TO CHANGE AT THE DIRECTION OF THE ENGINEER ON REVIEW OF THE APPEARANCE OF THE MOCKUP. USE COLOR AND TECHNIQUES AS APPROVED FOR THE FINAL MOCKUP.

9. WHERE EXPOSED SOIL OR PAVEMENTS IS ADJACENT WHICH MAY SPLATTER DIRT OR SOIL FROM RAINFALL, OR WHERE SURFACE MAY BE EXPOSED TO OVERSPRAY FROM OTHER PROCESSES, PROVIDE TEMPORARY COVER OF FINISHED WORK.

D. METHOD OF MEASUREMENT AND BASIS OF PAYMENT

10. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 512 -SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN. QUANTITIES ARE BASED ON THE PLAN AREA, PER SQUARE FOOT, OF FORMLINER TEXTURED SURFACES, WITH NO DEDUCTIONS MADE FOR THE GROUT LINES NOT STAINED AND NO ADDITIONS FOR THE ADDITIONAL STAIN REQUIRED TO COAT THE TEXTURED SURFACES.

ITEM 512- SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN

1. STAIN AND SEALER SAHLL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER.
2. USE A CLEAR SEALER, UNLESS SPECIFIED OTHERWISE.
3. VERIFY THE PRODUCT FURNISHED IS COMPATIBLE WITH THE PROPOSED STAIN PRODUCT. PROVIDE WRITTEN VERIFICATION TO THE ENGINEER.
4. THE ACRYLIC STAIN AND NON-EPOXY SEALER WILL BE PAID UNDER ITEM 512-SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN.

GENERAL CONCRETE SURFACE FINISH AND COLOR

1. SURFACE POINTING. ONCE CAST, TIE RECESSES, MINOR HONEYCOMBING AND BUG HOLES IN THE SURFACE OF THE CONCRETE SHALL BE REPAIRED BY POINTED WITH CONCRETE MORTAR THAT CLOSELY MATCHES THE COLOR AND CONSISTENCY OF THE BASE FOUR.
2. SURFACE CLEANING AND FINISHING.
   a. PRESSURE WASHING WITH WATER (MINIMUM 3000 PSI) IS THE PREFERRED METHOD OF REMOVING LATENT CONCRETE FROM RAISED RELIEF OR RECESSED AESTHETIC TREATMENTS. FOLLOWING SURFACE CLEANING, THE FINAL SURFACE SHALL BE FREE OF BLEMISHES, DISCOLORATIONS, VOIDS, AND FORM MARKS, TO THE SATISFACTION OF THE ENGINEER.
   b. SANDBLASTING SHALL NOT BE ALLOWED FOR CLEANING CONCRETE SURFACES WITHIN AREAS OF AESTHETIC TREATMENTS, INCLUDING BAS-RELIEFS, RECESSED TEXT, MEDALLIONS, OR STANDARD FORM LINER FINISHES, AS IT WILL COMPROMISE THE CONTRAST AND CLARITY OF THE IMAGES.
   c. GROUT CLEANING AND RUBBED SURFACE FINISHING SHALL NOT BE USED WITHIN AREAS OF AESTHETIC TREATMENTS, AS THESE METHODS WILL COMPROMISE THE CONTRAST AND CLARITY OF THE IMAGES.
3. SURFACE COLOR.
   a. CONCRETE SEALER. A NON-EPOXY SEALER SHALL BE APPLIED TO ALL EXPOSED AREAS OF CONCRETE AS SPECIFIED IN THE FINISH ELEVATIONS FROM SHEET A4.3 THROUGH A4.7.
4. THE APPROVED SAMPLE PANELS SHALL BE THE BASIS FOR DETERMINING ACCEPTABILITY OF THE COLOR/STAIN APPLICATION. ANY AREAS LACKING UNIFORM APPEARANCE OR CONSISTENCY WITH THE APPROVED SAMPLE PANELS WILL BE RECOLORED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CLIENT.

GENERAL SHEET NOTE

1. DO NOT SCALE OFF DRAWING.
2. DRAWINGS ARE ONLY A GRAPHIC REPRESENTATION. ALL REQUIRED STRUCTURAL COMPONENTS & INFORMATION ARE OMITTED AND/OR MINIMIZED FOR THE PURPOSE OF GRAPHIC CLARITY. CONTRACTOR SHALL REFER TO STRUCTURAL DRAWINGS FOR INFORMATION OF ALL STRUCTURAL COMPONENTS REQUIREMENTS.
3. CONTRACTOR TO REFER TO STRUCTURAL DRAWINGS FOR ACCURATE DIMENSIONS OF BRIDGE SPAN AND ALL ASSOCIATED COMPONENTS.
4. CONTRACTOR TO SEE SHEET A3.0 FOR PARAPET CONCRETE STONE PATTERN INFORMATION & DETAILS.

DESIGN AGENCY
CDR

DESIGNED	DRAWN	REVIEWED	DATE
SW	BT	JH	12/18/2020
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JH		7700370/7700371	

PARAPET ELEVATION: TYPICAL STONE PATTERNS

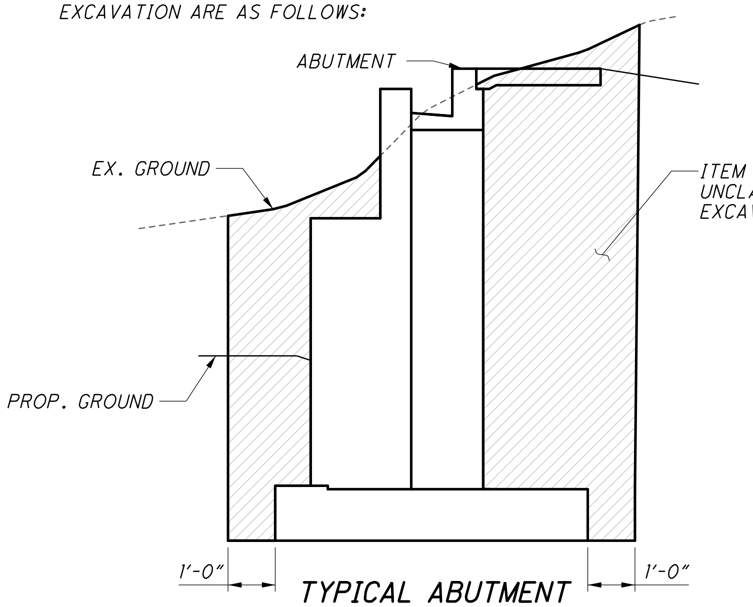
SUM-8-1.75

PID No. 91710

A1.23

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THE BACKFILL MATERIAL BEHIND ABUTMENTS SHALL BE PLACED AND COMPACTED IN 6" MAXIMUM LIFTS. THE LIMITS OF UNCLASSIFIED EXCAVATION ARE AS FOLLOWS:



TYPICAL ABUTMENT

PIER 5L CONTAMINATED SOIL

THIS WORK SHALL CONSIST OF EXCAVATION FOR THE SUM-8-0199L (SOUTHBOUND) PIER 5 FOOTING. CONTAMINATED SOILS ARE ANTICIPATED TO EXIST AT THE FORMER ABC DEMOLITION/HARRIS STREET LANDFILL. LIMITS OF THE CONTAMINATED SOILS AS ENCOUNTERED IN BORING B-015-1-16 ARE SHOWN ON SHEET 541 OF 801. ALL REASONABLE AND FEASIBLE EXCAVATION OPTIONS SHALL BE UTILIZED BY THE CONTRACTOR TO MINIMIZE GRADING, EXCAVATION, AND SHORING TO THIS AREA. ANY HAZARDOUS/CONTAMINATED EXCAVATION MATERIAL ENCOUNTERED SHALL BE REMOVED AND DISPOSED OF ACCORDING TO THE CONTAMINATED SOIL NOTE ON PAGE 16/801 OF THE ROADWAY PLAN NOTES. FOLLOW ROADWAY PLAN NOTES FOR PAYMENT.

ITEM 503 - STRUCTURAL EXCAVATION, MISC.: LAUNCHING PIT

THIS WORK SHALL CONSIST OF ALL LABOR, MATERIAL AND EQUIPMENT TO CONSTRUCT THE TEMPORARY WALLS AND LAUNCHING PIT IN ACCORDANCE WITH THE PLANS AND DESIGN REQUIREMENTS SPECIFIED IN THE CONTRACT PLANS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - STRUCTURAL EXCAVATION, MISC.: LAUNCHING PIT REFER TO THE STRUCTURAL STEEL ERECTION SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. ANY FILL MATERIAL PLACED SHALL BE COMPACTED IN 6" LIFTS.

ITEM 503 - STRUCTURAL EXCAVATION, MISC.: RECEIVING PIT

THIS WORK SHALL CONSIST OF ALL LABOR, MATERIAL AND EQUIPMENT TO CONSTRUCT THE TEMPORARY WALLS AND RECEIVING PIT IN ACCORDANCE WITH THE PLANS AND DESIGN REQUIREMENTS SPECIFIED IN THE CONTRACT PLANS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 503 - STRUCTURAL EXCAVATION, MISC.: RECEIVING PIT REFER TO THE STRUCTURAL STEEL ERECTION SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. ANY FILL MATERIAL PLACED SHALL BE COMPACTED IN 6" LIFTS.

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 CMS 501.05 EXCEPT AS REQUIRED FOR SHORING ADJACENT TO RAILROADS AS OUTLINED IN THE NOTE, STRUCTURE EXCAVATION AND SHORING ADJACENT TO RAILROADS, ON SHEET 20/226. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

ITEM 511 - CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN

CONCRETE SHALL CONFORM TO CMS 511 WITH THE EXCEPTION THAT THE CONCRETE SHALL BE 5 KSI FOR PIER CAPS AS DETAILED IN THE PLANS.

ITEM 511 - CLASS QC1 CONCRETE, MISC.: FOOTING APRON

THIS ITEM SHALL CONSIST OF ALL THE LABOR, MATERIAL, AND EQUIPMENT FOR THE CONCRETE APRON TO BE INSTALLED AT PIER 5 FOR BOTH NORTHBOUND AND SOUTHBOUND BRIDGES IN ACCORDANCE WITH THE PLANS AND DESIGN REQUIREMENTS SPECIFIED IN THE CONTRACT PLANS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR ITEM 511 - CLASS QC1 CONCRETE, MISC.: FOOTING APRON.

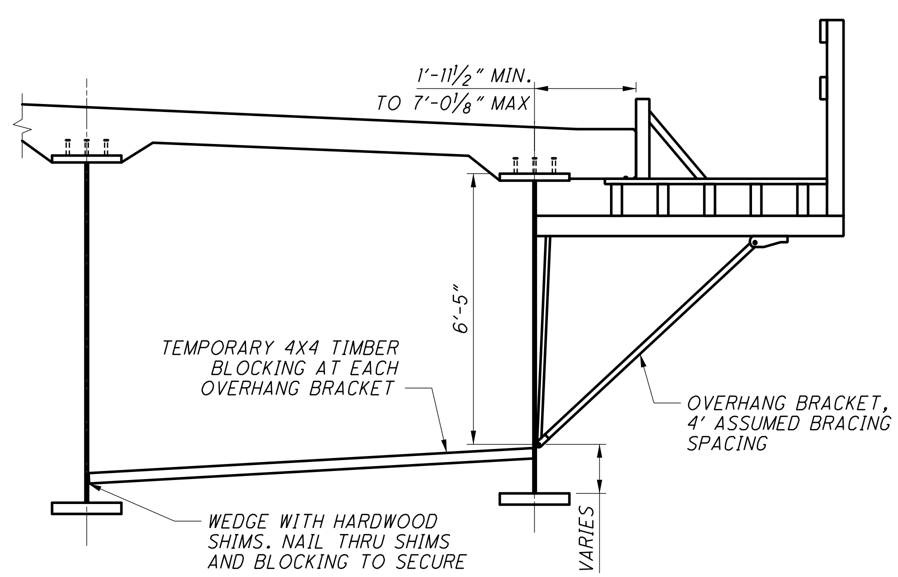
ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN

LOCATE THE LOWER CONTACT POINT OF THE OVERHANG FALSEWORK AT LEAST 42 INCHES ±2 IN. ABOVE THE TOP OF THE GIRDER'S BOTTOM FLANGE. THE BRACKET CONTACT POINT LOCATION REQUIREMENTS OF CMS 508 DO NOT APPLY. IN ADDITION TO THE WORK REQUIREMENTS OF 511, THE CONTRACTOR MAY EITHER PROVIDE TRADITIONAL BRIDGE FORMS, CONFORMING TO CMS 508 OR DESIGN, BUILD, PROVIDE, AND CONSTRUCT GALVANIZED STEEL STAY-IN-PLACE (SIP) FABRICATED METAL FORMS CONFORMING TO CMS 508. SUBMIT 501.06 TEST REPORTS AND WRITTEN ACCEPTANCE LETTERS TO THE ENGINEER. MATERIALS INSPECTION AND ACCEPTANCE IS PERFORMED BY THE ENGINEER AT THE PROJECT SITE. FURNISH FORM, SUPPORT MATERIALS AND HARDWARE CONFORMING TO THE FOLLOWING:

A. FORM AND SUPPORT MATERIAL, ASTM A653 HAVING A COATING DESIGNATION OF G235, AND CONFORMING TO THE MECHANICAL PROPERTIES THE DESIGN REQUIRES.
B. PROVIDE DECK FORMS WITH A 2-INCH MINIMUM FORM DEPTH.
C. PROVIDE MINIMUM MATERIAL THICKNESS AS FOLLOWS: SIP FORMS (20 GAGE), SUPPORT ANGLES (20 GAGE) AND SUPPORT BARS (12 GAGE).
D. SUPPLY ZINC COATED DECK, SELF DRILLING FASTENERS. THE HEADS OF THESE FASTENERS WILL BE A HIGHLY VISIBLE COLOR, RED OR OTHER, TO AID THE INSPECTION.

THE DEPARTMENT WILL NOT SEPARATELY PAY FOR SIP FORMS. THE COST OF THIS WORK IF CHOSEN BY THE CONTRACTOR SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID FOR ITEM 511. THE DEPARTMENT WILL NOT PAY FOR ANY ADDITIONAL CONCRETE, REINFORCING STEEL, OR STRUCTURAL STEEL THAT MAY BE REQUIRED WHEN USING SIP FORMS. ANY ADDITIONAL COST AND/OR DESIGN ASSOCIATED WITH THE USE OF SIP FORMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE ADDITIONAL DEAD LOAD OF THE SIP FORM PLUS THE WEIGHT OF THE ADDITIONAL CONCRETE WAS CALCULATED AS SPECIFIED IN THE DESIGN LOADS AND WAS INCLUDED IN THE DESIGN OF THE THE BRIDGE BEAMS OR GIRDERS, CAMBER DIAGRAMS, DECK SCREED TABLES, BRIDGE BEARINGS AND SUBSTRUCTURES. SHOULD THE CONTRACTOR CHANGE ANY LOAD SPECIFIED IN THE DESIGN LOADS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DESIGN, FABRICATION, AND INSTALLATION MODIFICATIONS TO THE BRIDGE COMPONENTS INCLUDING THE BRIDGE BEAMS OR GIRDERS, CAMBER DIAGRAMS, DECK SCREED TABLES, BRIDGE BEARINGS, AND SUBSTRUCTURES. ALL PLAN MODIFICATIONS SHALL BE PREPARED AS PER 501.

PROVIDE TEMPORARY BLOCKING TO SUPPORT LOWER CONTACT POINT. SUGGESTED DETAIL SHOWN BELOW.

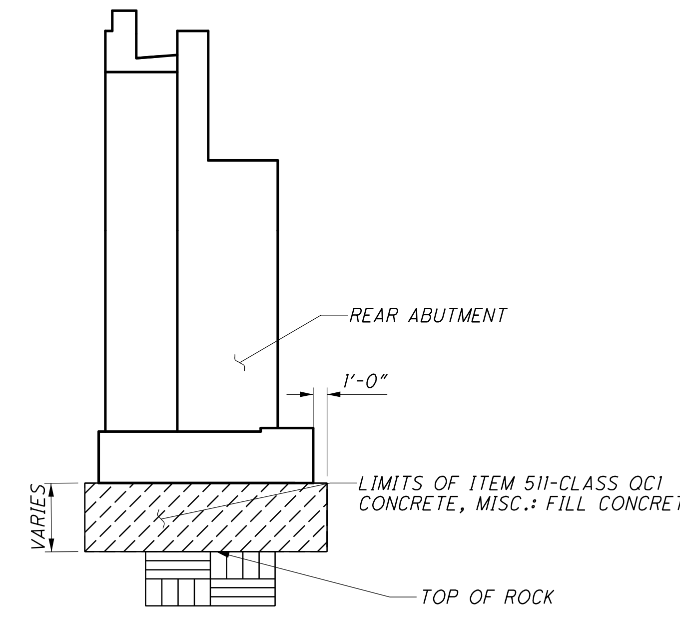


ITEM 511 - CLASS QC1 CONCRETE, MISC: FILL CONCRETE

PLACE CLASS QC1 CONCRETE, MISC.: FILL CONCRETE FROM A DISTANCE OF THE BOTTOM OF REAR ABUTMENT FOOTING TO THE TOP OF BEDROCK, AS DETERMINED BY THE ENGINEER. CLASS QC1 CONCRETE, MISC.: FILL CONCRETE SHALL BE PLACED NEAT AGAINST NATIVE ROCK.

THIS ITEM CONSISTS OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR EXCAVATION TO THE TOP OF BEDROCK AS WELL AS DEWATERING AND CONCRETE PLACEMENT. NO PAYMENT WILL BE MADE FOR OVER-EXCAVATION AND PLACEMENT IN EXCESS OF THE LATERAL LIMITS LOCATED ONE FOOT BEYOND THE LIMIT OF THE PROPOSED FOOTING OR AS INDICATED ON THE PLANS. ADDITIONAL EXCAVATION AND PLACEMENT OF AREAS TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS WILL BE CONSIDERED INCIDENTAL TO THIS WORK.

ITEM 511 - CLASS QC1 CONCRETE, MISC: FILL CONCRETE (CONTINUED)



REAR ABUTMENT SECTION

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN

APPLY A PERMANENT ANTI-GRAFFITI COATING QUALIFIED ACCORDING TO SUPPLEMENT 1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE ANTI-GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

ITEM 512 - SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN

SEALING AND COLOR STAINING OF REAR ABUTMENT, PIERS AND PARAPETS SHALL BE IN ACCORDANCE WITH THE PIER AND AESTHETIC DETAIL SHEETS.

ITEM 513 - STRUCTURAL STEEL, MISC.: MONUMENT

THIS WORK SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND ERECT THE STEEL MONUMENT. ALL PROVISIONS OF 513 SHALL APPLY.

ITEM 513 - STRUCTURAL STEEL, MISC.: STRUCTURAL STEEL ERECTION EQUIPMENT

THIS WORK SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND ERECT THE LAUNCHING NOSE, LAUNCHING TAIL, KINGPOST, TEMPORARY BRACING, ROLLERS, AND ALL OTHER TEMPORARY DETAILS NECESSARY. REFER TO THE STRUCTURAL STEEL ERECTION SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

ITEM 513 - STRUCTURAL STEEL MEMBERS, HYBRID GIRDER, LEVEL SIX (6) FABRICATION, AS PER PLAN

A. DESCRIPTION

1. THIS WORK CONSISTS OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND ERECT STRUCTURAL STEEL MEMBERS UTILIZING THE LAUNCHING METHODS SHOWN IN THESE PLANS AND AS PER SPECIAL PROVISIONS PROVIDED IN THE FINAL BID DOCUMENTS.

2. ALL STEEL MEMBERS SHALL BE DESIGNATED AS LEVEL 6 FABRICATION.

3. THIS WORK SHALL BE PERFORMED PER ITEM 513 STRUCTURAL STEEL MEMBER, LEVEL SIX EXCEPT AS MODIFIED BY THE STEEL BRIDGE FABRICATION GUIDE SPECIFICATIONS (AASHTO/NSBA STEEL BRIDGE COLLABORATION 2018), AND AS MODIFIED IN THESE PLAN NOTES.

B. MATERIALS

1. STEEL FOR GIRDER WEBS AND FLANGES SHALL BE A COMBINATION OF ASTM A709 GRADE HPS70W MANUFACTURED BY THE THERMO-MECHANICAL CONTROLLED PROCESSING (TMCP) OR QUENCHED AND TEMPERED HEAT TREATMENT PROCESSING ALONG WITH ASTM A588/709 GRADE 50W. ALL OTHER STEEL SHALL BE ASTM A709 GRADE 50W.

2. STEEL DESIGNATED CVN SHALL BE IMPACT TESTED TO EXCEED THE TEST VALUES OF ASTM A709 TABLE S1.2 NON-FRACTURE CRITICAL IMPACT TEST REQUIREMENTS FOR ZONE 2, TEMPERATURE RANGE.

DESIGN AGENCY: ms consultants, inc. 2221 Schrock Road Columbus, Ohio 43229

DESIGNED ABD | CHECKED ELP | DRAWN ABD | REVISED | REVIEWED GLG | DATE 20-APR | STRUCTURE FILE NUMBER 7700370/7700371

GENERAL NOTES (3 OF 7)

BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS (CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

SUM-8-1.75

PID No. 91710

ITEM 517 – RAILING, MISC: DECORATIVE RAILING WITH CHAIN LINK FENCE, AS PER PLAN

DESCRIPTION:

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO FABRICATE, GALVANIZE, CLEAN, APPLYING A TWO COAT SHOP PAINT SYSTEM (EPOXY/URETHANE) AND INSTALLING THE DECORATIVE RAILING WITH CHAIN LINK FENCE AS DETAILED IN THESE PLANS AND NOTES. UNLESS OTHERWISE SPECIFIED IN THE PLANS, INSTALL POSTS AND POST SLEEVES PLUMB. FOR ADDITIONAL DETAILS, SEE AESTHETIC PLANS.

SHOP DRAWINGS DETAILING FENCE FABRICATION:

SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH 501.04 AND INCLUDE DETAILS THAT CLEARLY IDENTIFY ALL OF THE REQUIREMENTS LISTED HEREIN. PROVIDE CONNECTIONS CONSISTENT WITH CONCEPTS SHOWN ON THE DRAWING. INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH AND TYPE OF EACH WELD. IDENTIFY GRINDING FINISH AND PROFILE OF WELDS AS DEFINED HEREIN. INDICATE TYPE, SIZE, FINISH AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS. IDENTIFY HIGH STRENGTH BOLTED SLIP-CRITICAL DIRECT-TENSIONED SHEAR/BEARING CONNECTIONS. CLEARLY INDICATE WHICH SURFACES OR EDGES ARE EXPOSED AND WHAT CLASS OF SURFACE PREPARATION IS BEING USED. INDICATE SPECIAL TOLERANCES AND ERECTION REQUIREMENT AS NOTED ON THE DRAWINGS OR DEFINED HEREIN.

SUBMIT MANUFACTURER'S COLOR CHARTS:

SUBMIT SAMPLES OF EACH COLOR AND MATERIAL TO BE APPLIED, WITH TEXTURE TO SIMULATE ACTUAL CONDITIONS, ON REPRESENTATIVE SAMPLE, OF THE ACTUAL SUBSTRATE. PROVIDE STEPPED SAMPLES, DEFINING EACH SEPARATE COAT, INCLUDING BLOCK FILLERS AND PRIMERS. USE REPRESENTATIVE COLORS WHEN PREPARING SAMPLES FOR REVIEW. RESUBMIT UNTIL REQUIRED SHEEN, COLOR, AND TEXTURE ARE ACHIEVED. PROVIDE A LIST OF MATERIAL AND APPLICATION FOR EACH COAT OF EACH SAMPLE; LABEL EACH SAMPLE AS TO LOCATION AND APPLICATION. SUBMIT SAMPLES ON THE FOLLOWING SUBSTRATES FOR THE FIELD ENGINEER'S REVIEW OF COLOR AND TEXTURE ONLY: FERROUS METAL: TWO 8 INCH LONG SAMPLE OF SOLID METAL FOR EACH COLOR AND FINISH.

FABRIC:

FABRIC SHALL CONSIST OF A 1 INCH INTERCRIMP WOVEN WIRE MESH USING 0.12 INCH DIA. (11 GAGE) CRIMPED WIRE CONFORMING TO ASTM E2016 EXCEPT AS NOTED. THE PVC COATING SHALL BE BROWN IN COLOR CLOSELY APPROACHING FEDERAL COLOR STANDARD NO. 20059 UNLESS OTHERWISE SPECIFIED IN THE PLANS. HANDLE ALL PVC COATED FABRIC WITH CARE. IF THE PVC COATING IS DAMAGED, REPLACE THE DAMAGED PORTION OF THE FABRIC AT NO COST TO THE DEPARTMENT. THE INSTALLATION SHOULD BE AS PER 709.

FABRICATION:

FABRICATION OF THE RAILING SHALL BE IN ACCORDANCE WITH CMS 513, UF LEVEL. COATING OF THE RAILING SHALL BE IN ACCORDANCE WITH CMS 514, EXCEPT AS NOTED BELOW.

THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT PRE-QUALIFIED AS A FABRICATION SHOP UNDER SUPPLEMENT 1078, BUT THE PRE-QUALIFIED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, RE-FABRICATION AND ADDITIONAL ASSEMBLIES REQUIRED TO ASSURE THE FABRICATED STEEL MEETS THE PLAN REQUIREMENTS.

THE TWO SHOP COATS SHALL BE APPLIED IN A STRUCTURAL STEEL FABRICATION SHOP HAVING PERMANENT BUILDINGS PER 513.04 AND PRE-QUALIFIED AT THE UF LEVEL. THE PAINT QUALITY CONTROL SPECIALIST (QCS) SHALL BE QUALIFIED AS SPECIFIED IN 514.04.

PRIOR TO GALVANIZING, ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES SHALL HAVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE.

GALVANIZE THE FABRICATED RAILING AND HARDWARE ACCORDING TO CMS 711.02, EXCEPT THAT FABRICATED RAILING ELEMENTS SHALL NOT BE POST TREATED WITH WATER QUENCHING OR CHROMATE CONVERSION COATED.

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.

REPAIR GALVANIZED COATINGS DAMAGED IN THE SHOP ACCORDING TO ASTM A780 METHOD A3. REPAIR GALVANIZED COATINGS DAMAGED IN THE FIELD ACCORDING TO ASTM A780 METHOD A1.

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 BRUSH-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 FINAL ZINC MILAGE SHALL NOT BE LESS THAN 4.0 MILS. REMOVE ALL ABRASIVE RESIDUES WITH CLEAN COMPRESSED AIR OR OTHER METHODS ACCEPTABLE TO THE DEPARTMENT.

AFTER OBTAINING SURFACE PROFILE, SHOP APPLIES A TWO COAT PAINT SYSTEM ACCORDING TO 514 CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT MEETING THE REQUIREMENTS OF CMS 708.02. THE FINISH COAT SHALL MATCH FEDERAL COLOR STANDARD NO. 20059. APPLY THE EPOXY COATING WITHIN 24 HOURS OF THE BRUSH-OFF BLASTING.

FENCE POST:

FENCE POST, TOP AND BOTTOM RAILS SHALL BE 2.5 INCH BY 2.5 INCH (OUTSIDE DIMENSION) SQUARE TUBING OR SQUARE CHANNEL CMS 707.10, GRADE 36 OR 50 STEEL TUBE GALVANIZED ACCORDING TO 711.02 WITH A WALL THICKNESS OF 0.25 INCH.

FENCE MIDDLE RAILS:

FENCE MIDDLE RAILS SHALL BE 1.5 INCH BY 1.5 INCH (OUTSIDE DIMENSION) SQUARE CMS 707.10, GRADE 36 OR 50 STEEL TUBE GALVANIZED ACCORDING TO 711.02 WITH A WALL THICKNESS OF 0.125 INCH.

POST SLEEVES:

POST SLEEVES SHALL BE 2.75 INCH BY 2.75 INCH (OUTSIDE DIMENSION) STEEL CMS 707.10, 25,000 PSI MINIMUM YIELD STRENGTH, AND 4.75 LB/FT, GALVANIZED ACCORDING TO 711.02. HEXAGON SOCKET SET SCREW SHALL BE SAE 4140 ALLOY STEEL, HEAT TREATED, WITH FLAT OR OVAL POINT.

BASE PLATE:

BASE PLATES SHALL BE ASTM A709 GRADE 36 OR 50 GALVANIZED ACCORDING TO 711.02.

FASTENERS:

THE 3/8 INCH DIA. STAINLESS STEEL BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH C&MS 730.10.

THE 1/2 INCH DIA. THREADED ROD FOR ADHESIVE ANCHORS SHALL BE ASTM A193, GRADE B7, WITH ASTM A 563 NUTS AND ASTM F 436 WASHERS. MECHANICALLY GALVANIZE ALL ANCHOR HARDWARE ACCORDING TO ASTM B 695, CLASS 65.

USE AN ANCHOR ADHESIVE EVALUATED ACCORDING TO ICCES REPORT AC308, "ACCEPTANCE CRITERIA FOR POST INSTALLED ADHESIVE ANCHORS IN CONCRETE ELEMENTS", FOR CRACKED AND UNCRACKED CONCRETE APPLICATIONS. PUBLISHED ICCES REPORTS FOR ACCEPTABLE PRODUCT ARE AVAILABLE AT: WWW.ICC-ES.ORG/EVALUATION_REPORTS/INDEX_SHTML

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

POWERS PE1000+ EPOXY ADHESIVE ANCHOR SYSTEM
(ICCES REPORT ESR-2583)

CHEMFAST C-RE 385 EPOXY ADHESIVE ANCHOR SYSTEM
(ICCES REPORT ESR-2538)

SIMPSON STRONG- TIE SET -XP ADHESIVE ANCHORS
(ICCES REPORT ESR-2508)

WURTH WIT-PE500 EPOXY ADHESIVE ANCHORS
(ICCES REPORT ESR-3051)

INSTALL ADHESIVE ANCHORS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN SECTION 4.3 OF THE ICCES REPORT LISTED ABOVE. THE MINIMUM EMBEDMENT DEPTH FOR ANCHORS SHALL BE 7 INCHES.

FABRIC TIES AND HOG RINGS:

FABRIC TIES AND HOG RINGS SHALL BE 0.148 INCH CORE DIAMETER GALVANIZED PVC COATED STEEL WIRE AND 0.120 INCH ANNEALED STAINLESS STEEL WIRE CONFORMING TO ASTM A478 RESPECTIVELY. TO CONNECT THE FABRIC TO THE LINE POSTS, SUPPLY ONE FABRIC TIE FOR EACH ONE FOOT OF FABRIC HEIGHT. CONNECT THE FABRIC TO THE TENSION WIRE USING HOG RINGS 2-3 INCHES ON EACH SIDE OF THE POSTS AND AT SPACINGS NOT TO EXCEED 12 INCHES BETWEEN POSTS. THE PVC COATING SHALL BE THE SAME AS THAT FOR THE STEEL FABRIC.

FILLET WELDS:

FILLET WELDS SHALL CONFORM TO ODOT 513.

SHIM PLATES:

SHIP PLATES SHALL BE MADE FROM ANY MULTI-POLYMER PLASTIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI IN ORDER TO INSTALL POSTS PLUMB, ENDS OF POSTS AND SLEEVES MAY BE CUT ON A BIAS.

CAULKING COMPOUND:

CAULKING COMPOUND SHALL CONFORM TO FEDERAL SPECIFICATION TT-S-00230 TYPE II, CLASS A, ALUMINUM GRAY. WHEN APPLYING CAULK TO THE BASE PLATE, PROVIDE A 1 INCH OPENING THROUGH THE CAULKING ON LOW SIDE OF BASE PLATE.

SILICONE CAULK:

SILICONE CAULK SHALL CONFORM TO ASTM C-920, TYPE -S, GRADE-NS, CLASS 25, USE NT TEST REQUIREMENTS. COLOR: CLEAR.

CONSTRUCTION PROCEDURE:

1. FIELD VERIFY THE PLAN LOCATIONS OF ALL BASE PLATES AND MARK PARAPET ACCORDINGLY.
2. MARK AND DRILL HOLES FOR THE INCH HIGH STRENGTH THREADED ANCHORS OR 1/2 INCH BOLTS USING A BASE PLATE OR TEMPLATE.
3. INSTALL 1/2 IN DIAMETER HIGH STRENGTH THREADED ANCHORS OR 1/2 INCH BOLTS.
4. INSTALL POSTS AND BASE PLATES AND SHIMS WHERE REQUIRED.
5. CAULK EDGES OF BASE PLATES, SHIMS AND SLEEVES.
6. COMPLETE INSTALLATION OF THE RAIL.

INSTALL FENCING FOR EACH CONSTRUCTION PHASE PRIOR TO OPENING THAT PHASE TO VEHICULAR AND/OR PEDESTRIAN TRAFFIC.

METHOD OF MEASUREMENT:

THE DEPARTMENT WILL MEASURE THE QUANTITY BY THE FOOT. THE DEPARTMENT WILL MEASURE ALONG THE BOTTOM OF THE RAIL INCLUDING END POST.

BASIS OF PAYMENT:

THE DEPARTMENT WILL MAKE PAYMENT FOR THE COMPLETED AND ACCEPTED QUANTITIES AT CONTRACT PRICE AS FOLLOWS:

ITEM	EXT	UNIT	DESCRIPTION
517	75301	FOOT	RAILING, MISC: DECORATIVE RAILING WITH CHAIN LINK FENCE, AS PER PLAN

DESIGN AGENCY: ms consultants, inc.
2221 Schrock Road
Columbus, Ohio 43229

DESIGNED	DRAWN	REVIEWED	DATE
ATM	ATM	GLG	20-APR
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ELP	—	7700370/7700371	

GENERAL NOTES (6 OF 7)
BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS
(CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

SUM-8-1.75
PID No. 91710

ESTIMATED QUANTITIES

CALC.	DATE	CHK'D	DATE
ATM	2019 SEP	ELP	2019 SEP

ITEM	ITEM EXT.	TOTAL SOUTHBOUND	TOTAL NORTHBOUND	PART. 01/BRO/11	PART. 02/NHS/31**	PART. 03/NH S/20	PART. 04/NH S/04	UNIT	DESCRIPTION	SOUTHBOUND ABUT.	SOUTHBOUND PIERS	SOUTHBOUND SUPER.	SOUTHBOUND GEN.	NORTHBOUND ABUT.	NORTHBOUND PIERS	NORTHBOUND SUPER.	NORTHBOUND GEN.	SHEET REF.
202	11003		LUMP	LUMP					STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN									15/226
202	22900		521	521				SY	APPROACH SLAB REMOVED								521	
203	20001	12,924	1,722	14,646				CY	EMBANKMENT, AS PER PLAN *	12,924				1,722				15/226
203	35110	75	75	150				CY	GRANULAR MATERIAL, TYPE B *		75				75			
304	20000	130	130	260				CY	AGGREGATE BASE *		130				130			
503	11101	LUMP	LUMP	LUMP					COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN									16/226
503	21101	4,506	7,675	12,181				CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	2,015	2,491			5,854	1,821			16/226
503	31100		829	829				CY	ROCK EXCAVATION					664	165			
503	31500	LUMP	LUMP	LUMP					STRUCTURAL EXCAVATION, MISC.: LAUNCHING PIT									16/226
503	31500	LUMP	LUMP	LUMP					STRUCTURAL EXCAVATION, MISC.: RECEIVING PIT									16/226
505	11100	LUMP	LUMP	LUMP					PILE DRIVING EQUIPMENT MOBILIZATION									
507	00600	2,200	1,855	4,055				FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	2,200				1,855				
507	00650	2,400	2,120	4,520				FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	2,400				2,120				
507	00700	3,910	3,450	7,360				FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		3,910				3,450			
507	00750	4,140	3,680	7,820				FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		4,140				3,680			14/226
509	10000	3,006,458	3,016,127	6,011,568	11,017			LB	EPOXY COATED STEEL REINFORCEMENT	201,151	1,245,219	1,560,088		235,878	1,236,580	1,543,669		
509	30020	53,782	53,366	107,148				FT	NO. 4 DEFORMED GFRP REINFORCEMENT			53,782				53,366		
510	10000	612	612	1224				EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT		612				612			
511	34447	4,414	4,349	8,763				CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			4,407	7			4,340	9	16/226
511	34450	515	506	1,021				CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			495	20			486	20	
511	42012	1,570	1,649	3,219				CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		1,570				1,649			
511	42512	91	91	182				CY	CLASS QC1 CONCRETE WITH QC/QA, PIER CAP		91				91			
511	44112	495	526	1021				CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	495				526				
511	45602	2,074	2,071	4,145				CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA	529	1,545			526	1,545			
511	45603	4,999	4,854	9,853				CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN		4,999				4,854			16/226
511	46012	131	406	537				CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	131				406				
511	46512	479	624	1,103				CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	479				624				
511	53010	114		114				CY	CLASS QC1 CONCRETE, MISC.: FILL CONCRETE	114								16/226
511	53010	147			147			CY	CLASS QC1 CONCRETE, MISC.: MONUMENT				147					
511	53010	250	250	500				CY	CLASS QC1 CONCRETE, MISC.: FOOTING APRON		250				250			16/226
512	10001	1,808	1,957	3,765				SY	SEALING OF CONCRETE SURFACES, AS PER PLAN	420	1,388			569	1,388			16/226
512	10050	1,835	1,872	3,707				SY	SEALING OF CONCRETE SURFACES, (NON-EPOXY)	191		1,644		259		1,613		
512	10051	7,341	7,666	14,751	256			SY	SEALING OF CONCRETE SURFACES, (NON-EPOXY), AS PER PLAN	420	4,810	2,111		825	4,770	2,071		16/226
512	33000	129	156	285				SY	TYPE 2 WATERPROOFING	129				156				
513	10401	8,253,152	7,779,001	16,032,153				LB	STRUCTURAL STEEL MEMBERS, HYBRID GIRDER, LEVEL SIX (6) FABRICATION, AS PER PLAN			8,253,152				7,779,001		16/226
513	20000	23,330	23,248	46,578				EACH	WELDED STUD SHEAR CONNECTORS	326		23,004		316		22,932		
513	90000	35,909			35,909			LB	STRUCTURAL STEEL, MISC.: MONUMENT				35,909					16/226
513	95020	LUMP	LUMP	LUMP					STRUCTURAL STEEL, MISC.: STRUCTURAL STEEL ERECTION EQUIPMENT									16/226
514	00060	39,124	39,028	78,152				SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			39,124				39,028		
514	00066	39,124	39,028	78,152				SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			39,124				39,028		
514	27700		3,727		3,727			SF	FIELD PAINTING, MISC.: MONUMENT DECORATIVE STEEL								3,727	18/226
516	12400	162	157	319				FT	SPECIAL - MODULAR EXPANSION JOINT	162				157				17/226
516	13600	271	344	615				SF	1" PREFORMED EXPANSION JOINT FILLER	142	129			215	129			
516	13900	102	102	204				SF	2" PREFORMED EXPANSION JOINT FILLER	102				102				

LEGEND:

* QUANTITY CARRIED TO GENERAL SUMMARY

** QUANTITY APPLIES TO THE REAR ABUTMENT MONUMENT

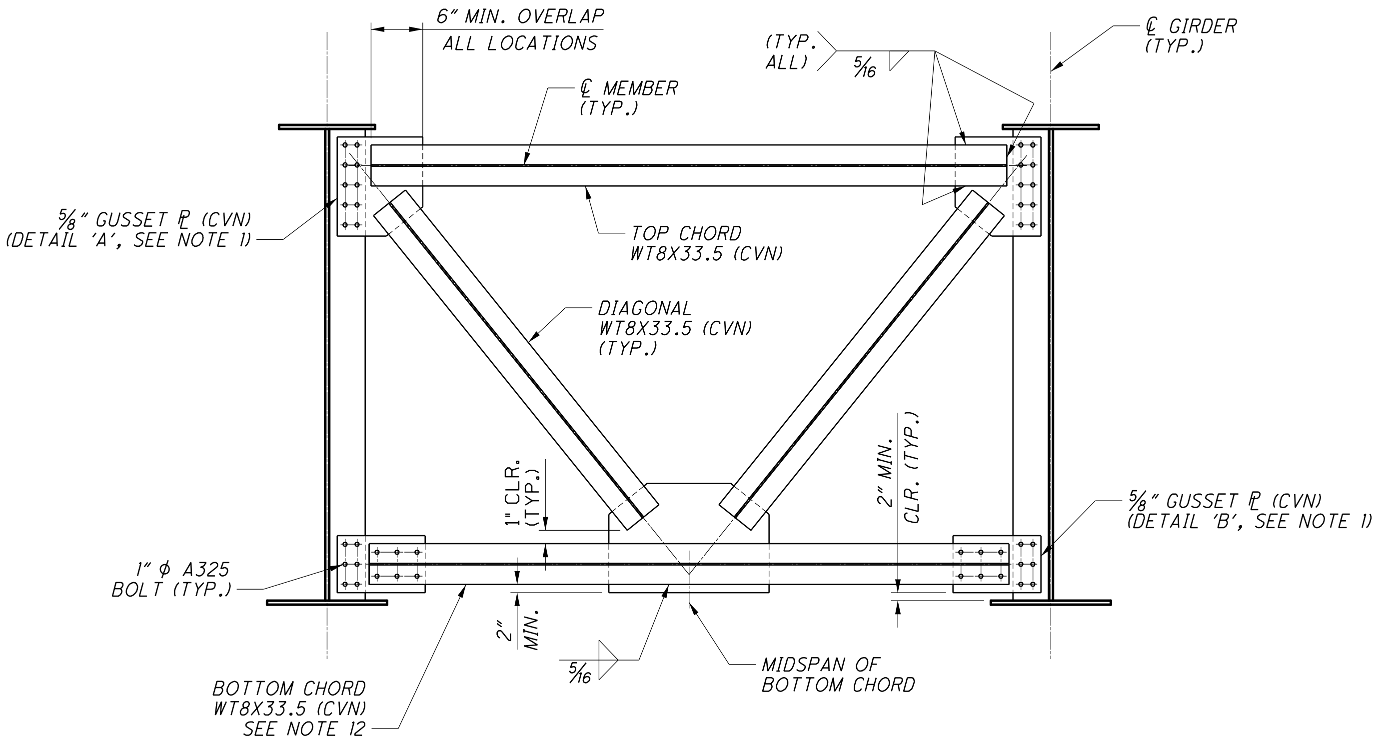
CALCULATED BY: ATM DATE: 2019 SEPT.
CHECKED BY: ELP DATE: 2019 SEPT.

ESTIMATED QUANTITIES (1 OF 2)
BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS (CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

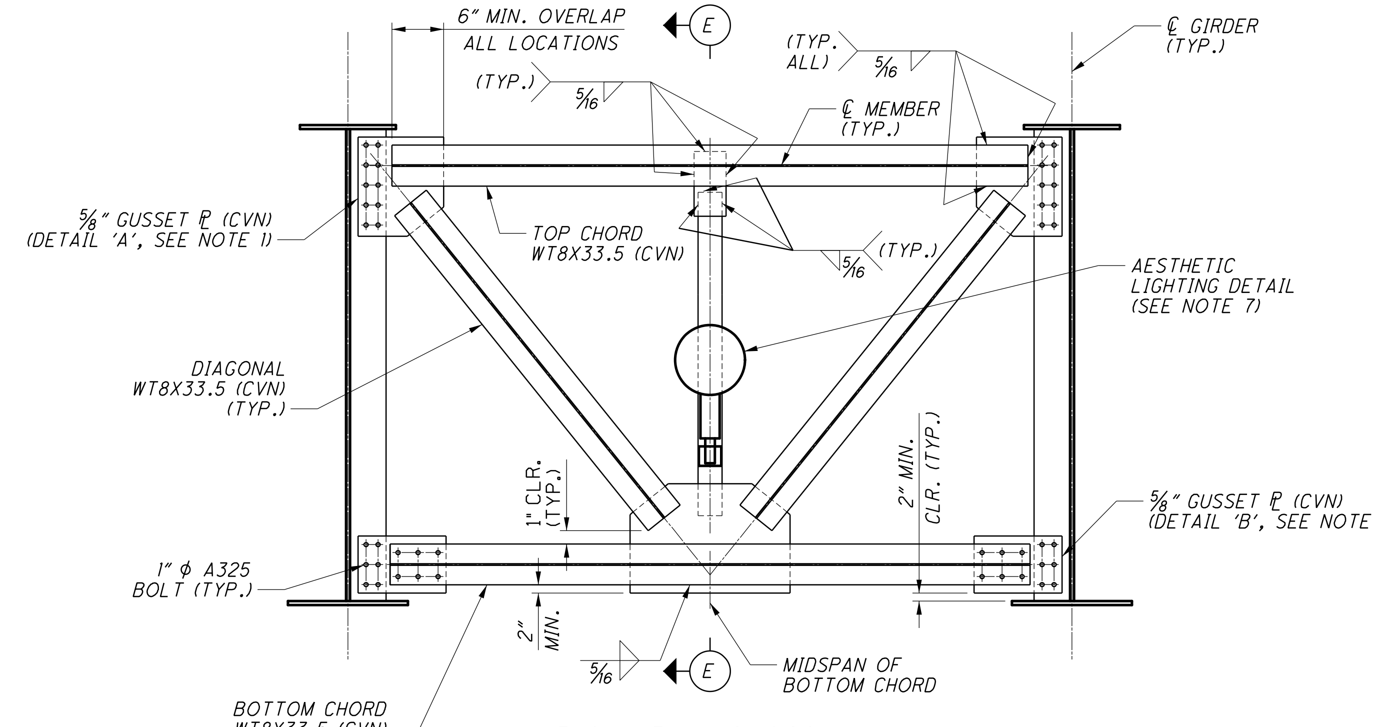
SUM-8-1.75
PID No. 91710

DESIGNED ATM | CHECKED ELP | DRAWN ATM | REVIEWED GLG | DATE 20-APR | STRUCTURE FILE NUMBER 7700370/7700371

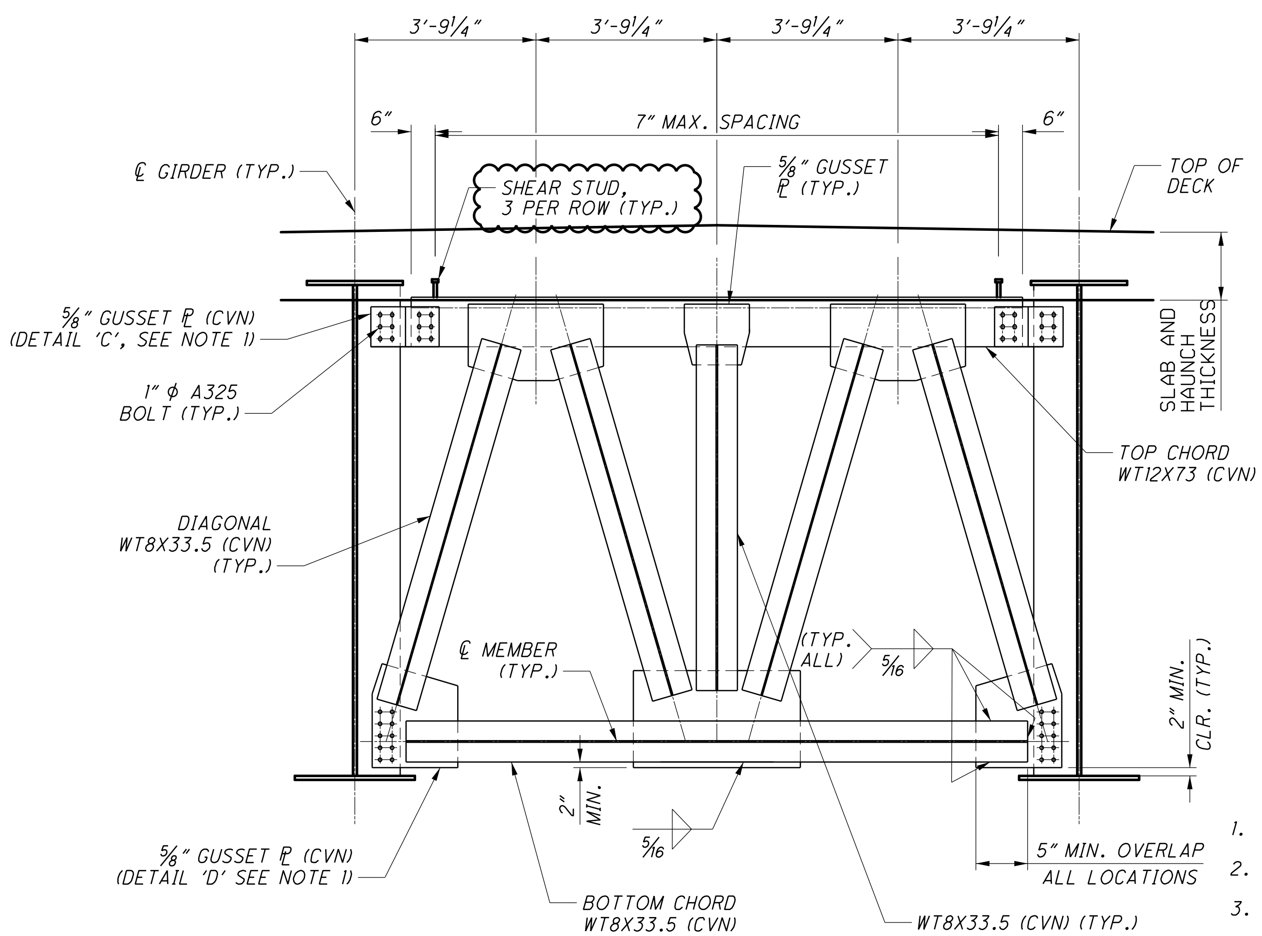
DESIGN AGENCY ms consultants, inc. 2221 Schrock Road Columbus, Ohio 43229



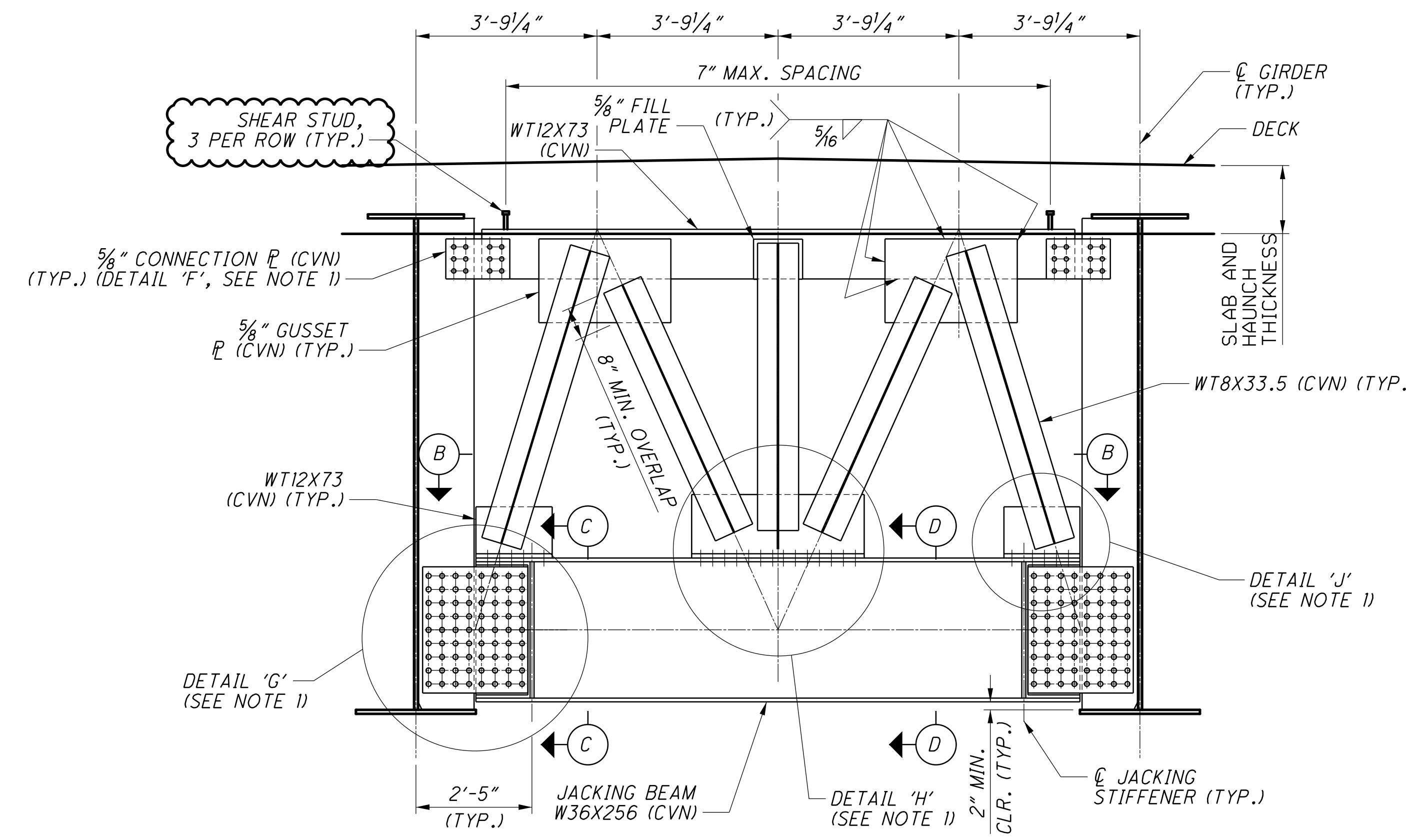
TYPICAL INTERMEDIATE CROSSFRAME



TYPICAL PIER CROSSFRAME



FORWARD ABUTMENT END CROSSFRAME



REAR ABUTMENT END CROSSFRAME

NOTES:

1. FOR DETAIL 'A' THRU 'J' AND SECTIONS B-B THRU E-E, SEE SHEET 121/226.
2. FOR STRUCTURAL STEEL NOTES, SEE SHEET 107/226.
3. FOR SOUTHBOUND FRAMING PLAN, SEE SHEETS 108/226 AND 109/226.
4. FOR NORTHBOUND FRAMING PLAN, SEE SHEET 113/226 AND 114/226.
5. FOR BEARING STIFFENER DETAILS, SEE SHEET 118/226.
6. FOR DECK REINFORCING PLAN, SEE SHEETS 148/226 THRU 152/226.
7. FOR TYPICAL AESTHETIC LIGHTING DETAILS, SEE SHEET LT1/LT14.
8. HIGH STRENGTH BOLTS SHALL BE 1" ASTM A325, UNLESS OTHERWISE NOTED.
9. SHEAR STUDS SHALL BE PAID FOR UNDER ITEM 513 - WELDED STUD SHEAR CONNECTORS. FOR DETAILS, SEE SHEETS 112/226 AND 117/226.
10. ALL WELDS SHALL BE 5/16" FILLET WELDS, UNLESS OTHERWISE NOTED.
11. CROSSFRAMES, BUMPER PLATES AND ASSOCIATED HARDWARE SHALL BE PAID FOR UNDER ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 6.
12. FOR TYPICAL INTERMEDIATE CROSSFRAME MODIFIED BOTTOM CHORD DETAIL, SEE SHEET 121/226.

TYPICAL STEEL DETAILS (3 OF 8)
BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS
(CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

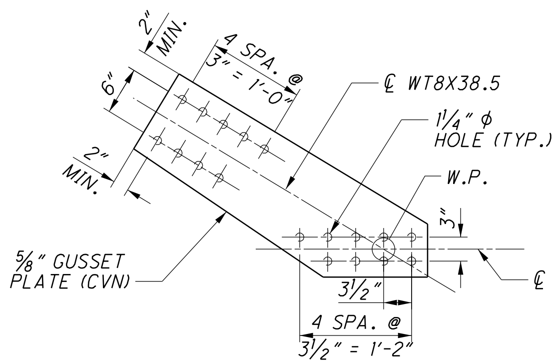
DESIGNED	DRAWN	REVIEWED	DATE
ABD	KRM	GLG	20-APR
CHECKED	REVISED	STRUCTURE FILE NUMBER	
ELP		7700370/7700371	

DESIGN AGENCY
ms consultants, inc.
2221 Schrock Road
Columbus, Ohio 43229

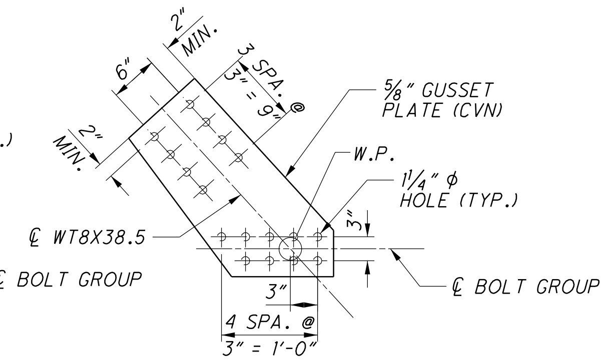
SUM-8-1.75
PID No. 91710

PLOT.CEL

ms consultants, inc.
msconsultants.com



TYPE "A" GUSSET PLATE DETAIL

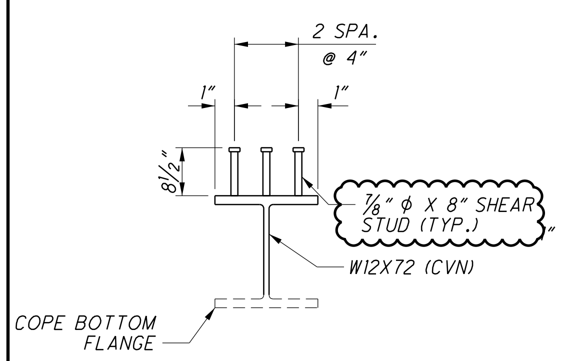


TYPE "B" GUSSET PLATE DETAIL

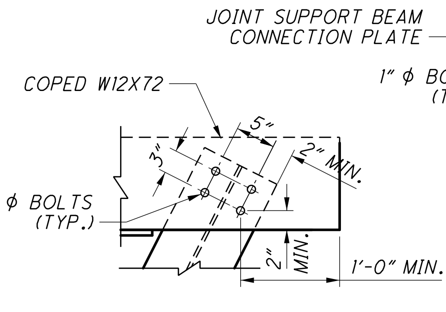
GUSSET PLATE LATERAL BRACING PLAN VIEWS

NOTES:

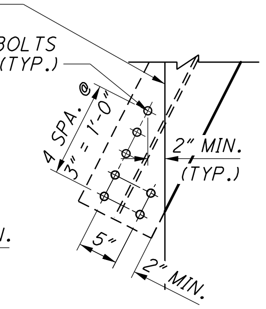
1. FOR ADDITIONAL LATERAL BRACING DETAILS, SEE SHEET 122/226 .
2. SEE SECTION A-A, THIS SHEET.



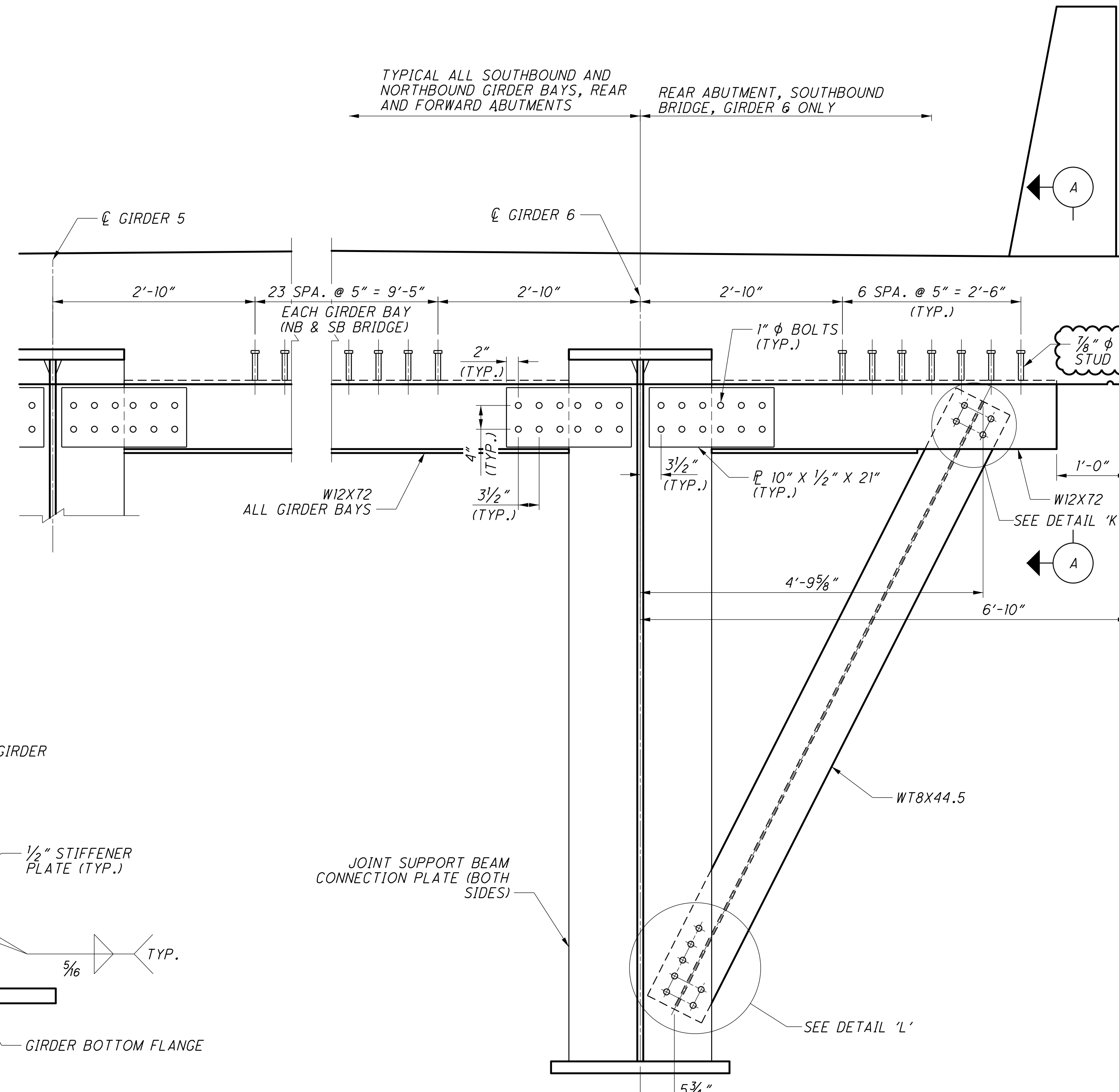
SECTION A-A



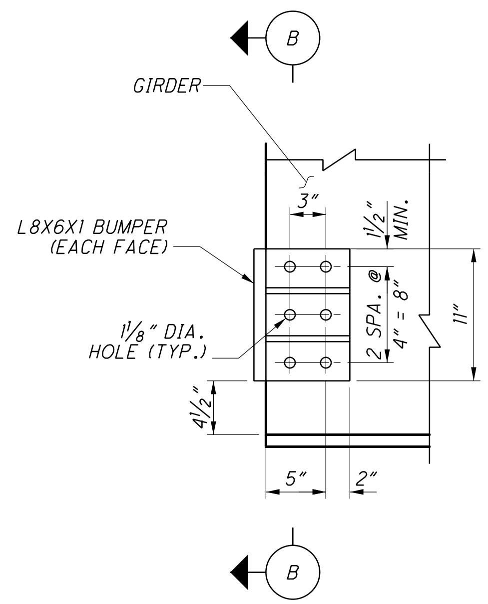
DETAIL 'K'



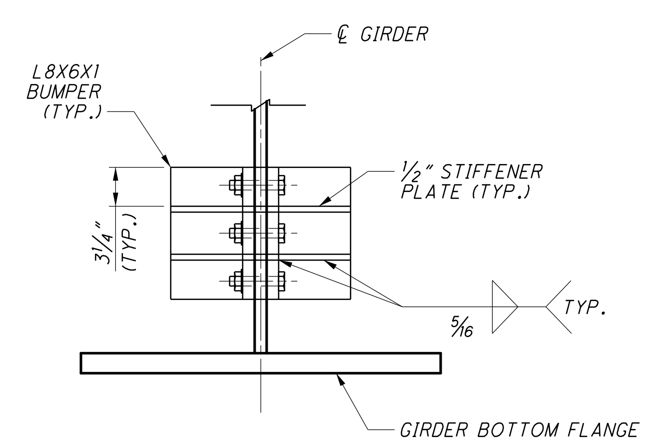
DETAIL 'L'



JOINT SUPPORT BEAM ELEVATION



ELEVATION



SECTION B-B

BUMPER ATTACHMENT

TYPICAL EACH GIRDER END

DESIGN AGENCY	ms consultants, inc. 2221 Schrock Road Columbus, Ohio 43229
DESIGNED ATM	CHECKED ELP
DRAWN CDH	REVISED
REVIEWED GLG	DATE 20-APR
STRUCTURE FILE NUMBER	7700370/7700371

TYPICAL STEEL DETAILS (6 OF 8)

BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS (CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

SUM-8-1.75
PID No. 91710

LOCATION	BEARING MARK	VERTICAL LOADS				TRANSVERSE LOADS (X DIR.)				LONGITUDINAL LOADS (Y DIR.)				FUTURE JACKING FORCES		MOVEMENT		ROTATION	ROTATION
		(+) LL	(-) LL	DC	DW	WL	WS	CE	EQ	WL	WS	BR	TU	DL	LL			STRENGTH I	SERVICE I
		KIPS	KIPS	KIPS	KIPS	KIPS	KIPS	KIP	KIPS	KIPS	KIPS	KIPS	KIPS	KIPS	KIPS	Y DIR. (in)	X DIR. (in)	RADIANS	RADIANS
REAR ABUTMENT	RAG1	153	-37	280	71	0	0	0	0	0	0	0	0	456	199	6.99	0.27	0.010	0.008
	RAG2	187	-22	291	73	4	17	0	136	0	0	0	0	472	243	6.99	0.00	0.009	0.008
	RAG3	168	-19	294	73	3	13	0	136	0	0	0	0	477	218	6.99	0.00	0.009	0.008
	RAG4	168	-22	292	73	6	29	0	136	0	0	0	0	474	219	6.99	0.00	0.009	0.008
	RAG5	193	-25	292	73	7	53	0	136	0	0	0	0	473	250	6.99	0.00	0.010	0.008
	RAG6	153	-37	287	71	0	0	0	0	0	0	0	0	464	199	6.99	0.27	0.011	0.008
PIER 1	P1G1	283	-52	968	240	0	0	0	0	0	0	0	0	1569	368	4.18	0.27	0.031	0.021
	P1G2	328	-31	1028	251	10	49	0	476	0	0	0	0	1661	426	4.18	0.00	0.028	0.019
	P1G3	305	-27	1055	255	8	38	0	476	0	0	0	0	1703	396	4.18	0.00	0.028	0.019
	P1G4	305	-28	1057	255	7	34	0	476	0	0	0	0	1705	397	4.18	0.00	0.028	0.019
	P1G5	328	-31	1031	251	10	78	0	476	0	0	0	0	1666	427	4.18	0.00	0.029	0.020
	P1G6	283	-52	971	240	0	0	0	0	0	0	0	0	1573	368	4.18	0.27	0.034	0.022
PIER 2	P2G1	303	-56	1028	258	0	0	0	0	0	0	0	0	1671	394	1.32	0.27	0.019	0.013
	P2G2	343	-31	1089	270	8	35	0	505	0	0	0	0	1767	445	1.32	0.00	0.017	0.012
	P2G3	319	-26	1115	274	6	24	0	505	0	0	0	0	1805	414	1.32	0.00	0.016	0.012
	P2G4	319	-26	1116	274	6	27	0	505	0	0	0	0	1807	414	1.32	0.00	0.016	0.012
	P2G5	343	-31	1091	271	8	54	0	505	0	0	0	0	1769	445	1.32	0.00	0.017	0.012
	P2G6	303	-56	1026	258	0	0	0	0	0	0	0	0	1668	394	1.32	0.27	0.019	0.013
PIER 3	P3G1	284	-64	858	220	0	0	0	0	1	6	3	2	1401	369	0.00	0.27	0.027	0.018
	P3G2	326	-40	913	231	7	28	0	424	3	14	10	5	1487	423	0.00	0.00	0.023	0.016
	P3G3	305	-36	935	234	5	21	0	424	9	40	29	15	1519	397	0.00	0.00	0.022	0.015
	P3G4	305	-36	934	234	5	18	0	424	9	40	29	15	1517	396	0.00	0.00	0.022	0.015
	P3G5	326	-40	912	231	7	45	0	424	3	14	10	5	1485	423	0.00	0.00	0.023	0.016
	P3G6	284	-64	859	220	0	0	0	0	1	6	3	2	1402	369	0.00	0.27	0.027	0.018
PIER 4	P4G1	237	-69	595	156	0	0	0	0	2	12	6	2	975	308	0.00	0.27	0.046	0.030
	P4G2	290	-52	636	164	8	33	0	296	5	29	17	6	1038	377	0.00	0.00	0.040	0.026
	P4G3	269	-47	651	165	5	21	0	296	13	73	44	14	1060	349	0.00	0.00	0.039	0.025
	P4G4	269	-48	651	165	5	23	0	296	13	73	44	14	1061	349	0.00	0.00	0.039	0.025
	P4G5	290	-52	636	164	8	51	0	296	5	29	17	6	1039	377	0.00	0.00	0.041	0.026
	P4G6	237	-69	595	156	0	0	0	0	2	13	6	2	975	308	0.00	0.27	0.047	0.030
PIER 5	P5G1	225	-39	676	178	0	0	0	0	0	0	0	0	1108	292	4.83	0.27	0.038	0.025
	P5G2	283	-24	723	187	8	41	0	337	0	0	0	0	1182	367	4.83	0.00	0.034	0.022
	P5G3	263	-21	740	189	5	27	0	337	0	0	0	0	1207	341	4.83	0.00	0.032	0.022
	P5G4	263	-21	741	189	6	29	0	337	0	0	0	0	1208	341	4.83	0.00	0.032	0.022
	P5G5	283	-24	723	187	8	60	0	337	0	0	0	0	1183	367	4.83	0.00	0.034	0.022
	P5G6	225	-39	675	177	0	0	0	0	0	0	0	0	1108	292	4.83	0.27	0.038	0.025
FORWARD ABUTMENT	FAG1	131	-29	209	55	0	0	0	0	0	0	0	0	343	171	6.48	0.27	0.021	0.014
	FAG2	174	-16	218	57	4	20	0	103	0	0	0	0	357	226	6.48	0.00	0.019	0.013
	FAG3	154	-14	220	57	3	15	0	103	0	0	0	0	360	201	6.48	0.00	0.018	0.012
	FAG4	154	-14	221	57	3	15	0	103	0	0	0	0	360	201	6.48	0.00	0.018	0.012
	FAG5	174	-16	218	57	4	36	0	103	0	0	0	0	357	226	6.48	0.00	0.019	0.013
	FAG6	131	-29	209	55	0	0	0	0	0	0	0	0	342	171	6.48	0.27	0.021	0.014

LEGEND:

LL VEHICULAR LIVE LOAD NOT INCLUDING DYNAMIC LOAD ALLOWANCE
DC DEAD LOAD (DC1 + DC2)
DW WEARING SURFACE LOAD
WL WIND ON LIVE LOAD
WS WIND ON SUPERSTRUCTURE
BR VEHICULAR BRAKING FORCE
CE VEHICULAR CENTRIFUGAL FORCE
EQ EARTHQUAKE
TU THERMAL

ALL LOADS ARE UNFACTORED. COMBINE PER AASHTO FOR WORSE CASE DESIGN REACTIONS.

NOTES:

1. FOR COORDINATE SYSTEM DEFINITION, SEE SHEET 138/226.
2. BEARING DIMENSIONS SHOWN ARE NOMINAL VALUES ONLY, AND WILL VARY WITH THE SELECTED MANUFACTURER.
3. MAKE ALL NECESSARY ADJUSTMENTS TO DIMENSIONS AND ELEVATIONS AS REQUIRED TO INCORPORATE THE SPECIFIC BEARINGS SELECTED.
4. THE MOVEMENT VALUES IN THE TABLES ARE IN ONE DIRECTION FOR A 90°F TEMPERATURE CHANGE.
5. ROTATION VALUES IN THE TABLES INCLUDE AN ALLOWANCE OF 0.005 RADIANS FOR UNCERTAINTIES.
6. ANCHORS FOR BEARINGS SHALL BE SET BY USE OF A STEEL TEMPLATE WITH A MINIMUM THICKNESS OF 1/4".
7. THE PIER AND ABUTMENT BEAM SEAT ELEVATIONS ARE BASED ON BEARING HEIGHTS PROVIDED IN THE TABLE. IF THE CONTRACTOR'S SELECTED BEARING MANUFACTURER HAS A DESIGN THAT DOES NOT CONFORM TO THE HEIGHTS PROVIDED IN THE TABLE, ADJUST THE BEARING SEAT ELEVATIONS AT NO ADDITIONAL COST TO THE STATE. ADJUST THE LOCATION OF REINFORCING STEEL HORIZONTALLY AS NECESSARY TO AVOID INTERFERENCE WITH THE BEARING ANCHOR BOLTS. MAINTAIN THE MINIMUM CONCRETE COVER AND MINIMUM SPACING REQUIRED BY THE PROJECT PLANS. IF THE REINFORCING STEEL CANNOT BE MOVED TO PROVIDE THE REQUIRED POSITION FOR THE ANCHOR BOLTS, THE CONTRACTOR'S BEARING MANUFACTURER SHALL REDESIGN THE BEARINGS TO ACCOMODATE AN ACCEPTABLE ANCHOR BOLT CONFIGURATION.
8. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UPSTATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.
9. FUTURE JACKING FORCES FOR BEARING REPLACEMENT PROVIDED ARE PER JACK, ASSUMING A SINGLE JACK AT BEARING LOCATIONS, AND INCLUDE ADDITION OF FUTURE WEARING SURFACE.
10. REFER TO SS869 FOR ADDITIONAL NOTES AND REQUIREMENTS.

SOUTHBOUND BRIDGE BEARING TABLES (1 OF 2)

BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS
(CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

SUM-8-1.75
PID No. 91710

DESIGN AGENCY
ms consultants, inc.
2221 Schrock Road
Columbus, Ohio 43229

DESIGNED TVB | DRAWN TVB | REVIEWED GLG | DATE 20-APR
CHECKED ELP | REVISED | STRUCTURE FILE NUMBER 7700370/7700371

LOCATION	BEARING MARK	VERTICAL LOADS (+) LL KIPS	VERTICAL LOADS (-) LL KIPS	VERTICAL LOADS DC KIPS	VERTICAL LOADS DW KIPS	TRANSVERSE LOADS (X DIR.) WL KIPS	TRANSVERSE LOADS (X DIR.) WS KIPS	TRANSVERSE LOADS (X DIR.) CE KIP	TRANSVERSE LOADS (X DIR.) EQ KIPS	LONGITUDINAL LOADS (Y DIR.) WL KIPS	LONGITUDINAL LOADS (Y DIR.) WS KIPS	LONGITUDINAL LOADS (Y DIR.) BR KIPS	LONGITUDINAL LOADS (Y DIR.) TU KIPS	FUTURE JACKING FORCES DL KIPS	FUTURE JACKING FORCES LL KIPS	MOVEMENT Y DIR. (in)	MOVEMENT X DIR. (in)	ROTATION STRENGTH I RADIANS	ROTATION SERVICE I RADIANS
REAR ABUTMENT	RAG7	153	-36	282	73	0	0	0	0	0	0	0	0	462	198	6.23	0.27	0.014	0.011
	RAG8	189	-19	296	76	5	21	0	139	0	0	0	0	483	246	6.23	0.00	0.013	0.010
	RAG9	167	-17	298	75	4	18	0	139	0	0	0	0	485	217	6.23	0.00	0.013	0.010
	RAG10	167	-17	300	75	4	18	0	139	0	0	0	0	487	217	6.23	0.00	0.013	0.010
	RAG11	189	-19	302	76	5	38	0	139	0	0	0	0	490	246	6.23	0.00	0.013	0.010
	RAG12	153	-36	295	73	0	0	0	0	0	0	0	0	479	199	6.23	0.27	0.014	0.011
PIER 1	P1G7	270	-44	907	232	0	0	0	0	0	0	0	0	1481	351	4.03	0.27	0.011	0.009
	P1G8	316	-24	977	245	10	48	0	457	0	0	0	0	1588	410	4.03	0.00	0.010	0.008
	P1G9	297	-21	1018	250	8	40	0	457	0	0	0	0	1649	386	4.03	0.00	0.010	0.008
	P1G10	297	-21	1022	250	8	40	0	457	0	0	0	0	1653	386	4.03	0.00	0.010	0.008
	P1G11	316	-24	992	245	10	67	0	457	0	0	0	0	1607	411	4.03	0.00	0.010	0.008
	P1G12	270	-44	938	232	0	0	0	0	0	0	0	0	1521	351	4.03	0.27	0.011	0.009
PIER 2	P2G7	272	-60	817	208	0	0	0	0	0	0	0	0	1332	353	1.50	0.27	0.011	0.009
	P2G8	316	-38	878	219	7	29	0	408	0	0	0	0	1426	410	1.50	0.00	0.010	0.008
	P2G9	296	-34	913	224	6	24	0	408	0	0	0	0	1478	384	1.50	0.00	0.010	0.008
	P2G10	295	-34	913	224	6	25	0	408	0	0	0	0	1477	384	1.50	0.00	0.010	0.008
	P2G11	316	-38	880	219	7	48	0	408	0	0	0	0	1428	410	1.50	0.00	0.010	0.008
	P2G12	272	-60	822	208	0	0	0	0	0	0	0	0	1339	353	1.50	0.27	0.011	0.009
PIER 3	P3G7	261	-63	750	195	0	0	0	0	1	7	4	3	1229	339	0.00	0.27	0.011	0.009
	P3G8	307	-41	808	206	6	26	0	376	3	16	11	7	1318	399	0.00	0.00	0.010	0.008
	P3G9	287	-37	839	210	5	21	0	376	9	43	31	18	1364	373	0.00	0.00	0.010	0.008
	P3G10	287	-37	838	210	5	21	0	376	9	42	31	18	1362	373	0.00	0.00	0.010	0.008
	P3G11	307	-41	807	206	6	43	0	376	3	15	11	7	1317	399	0.00	0.00	0.010	0.008
	P3G12	261	-63	750	196	0	0	0	0	1	7	4	2	1228	340	0.00	0.27	0.011	0.009
PIER 4	P4G7	261	-53	797	204	0	0	0	0	2	9	5	2	1301	340	0.00	0.27	0.011	0.008
	P4G8	309	-32	859	216	7	33	0	400	5	25	15	6	1397	402	0.00	0.00	0.010	0.008
	P4G9	288	-28	894	220	6	27	0	400	13	72	45	19	1448	375	0.00	0.00	0.010	0.008
	P4G10	288	-28	893	220	6	28	0	400	13	72	45	19	1447	374	0.00	0.00	0.010	0.008
	P4G11	309	-32	860	216	7	52	0	400	5	24	15	6	1398	402	0.00	0.00	0.010	0.008
	P4G12	262	-53	801	205	0	0	0	0	2	9	5	3	1306	340	0.00	0.27	0.011	0.008
PIER 5	P5G7	234	-48	671	178	0	0	0	0	0	0	0	0	1103	304	5.32	0.27	0.009	0.008
	P5G8	289	-30	734	190	7	36	0	345	0	0	0	0	1201	376	5.32	0.00	0.009	0.007
	P5G9	270	-27	770	194	6	31	0	345	0	0	0	0	1253	351	5.32	0.00	0.009	0.007
	P5G10	270	-27	775	194	6	31	0	345	0	0	0	0	1260	351	5.32	0.00	0.009	0.007
	P5G11	289	-30	748	190	7	56	0	345	0	0	0	0	1219	376	5.32	0.00	0.009	0.007
	P5G12	234	-48	691	178	0	0	0	0	0	0	0	0	1130	304	5.32	0.27	0.009	0.008
FORWARD ABUTMENT	FAG7	131	-33	204	54	0	0	0	0	0	0	0	0	336	170	6.98	0.27	0.010	0.008
	FAG8	175	-20	216	56	4	20	0	103	0	0	0	0	353	228	6.98	0.00	0.009	0.008
	FAG9	154	-17	220	56	3	16	0	103	0	0	0	0	357	200	6.98	0.00	0.009	0.008
	FAG10	154	-17	224	56	4	17	0	103	0	0	0	0	363	200	6.98	0.00	0.009	0.008
	FAG11	175	-20	225	56	4	32	0	103	0	0	0	0	364	228	6.98	0.00	0.009	0.008
	FAG12	131	-33	218	54	0	0	0	0	0	0	0	0	354	170	6.98	0.27	0.010	0.008

LEGEND:

LL VEHICULAR LIVE LOAD NOT INCLUDING IMPACT
DC DEAD LOAD (DC1 + DC2)
DW WEARING SURFACE LOAD
WL WIND ON LIVE LOAD
WS WIND ON SUPERSTRUCTURE
BR VEHICULAR BRAKING FORCE
CE VEHICULAR CENTRIFUGAL FORCE
EQ EARTHQUAKE
TU THERMAL

ALL LOADS ARE UNFACTORED. COMBINE PER AASHTO FOR WORSE CASE DESIGN REACTIONS.

NOTES:

1. FOR BEARING TABLE NOTES, SEE SHEET 139/226.

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NORTHBOUND BRIDGE BEARING TABLES (1 OF 2)
BRIDGE NO. SUM-8-0199L/R - OVER RAILROADS
(CSXT, W&LE, AND METRO RTA), LITTLE CUYAHOGA RIVER, AND EAST NORTH STREET

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