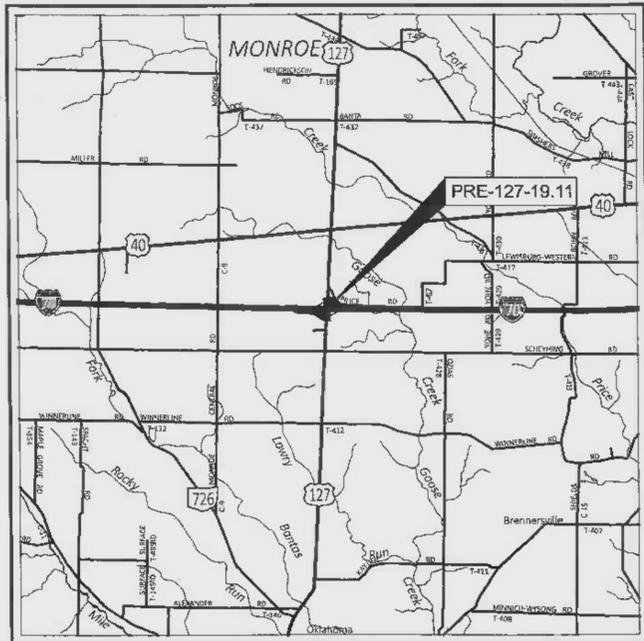


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

PRE-US 127-19.11

CITY OF EATON
PREBLE COUNTY



LOCATION MAP

LATITUDE: 39° 50' 8" LONGITUDE: -84° 37' 45"



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

DESIGN DESIGNATION

CURRENT ADT (2024)	—————	12,000
DESIGN YEAR ADT (2044)	—————	12,000
DESIGN HOURLY VOLUME (2044)	—————	1,600
DIRECTIONAL DISTRIBUTION	—————	0.55
TRUCKS (24 HOUR B&C)	—————	27%
DESIGN SPEED	—————	45
LEGAL SPEED	—————	45
DESIGN FUNCTIONAL CLASSIFICATION:		
RURAL MINOR ARTERIAL	—————	
NHS PROJECT	—————	YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:

ODOT DISTRICT 8 ENGINEERING
505 S S.R. 741
LEBANON, OHIO 45036



BURGESS & NIPLE
525 VINE ST. SUITE 1300
CINCINNATI, OH 4502

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FEDERAL PROJECT NUMBER

E161 (471)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REHABILITATE BRIDGE PRE-127-1911 WHICH CARRIES US 127 OVER I-70 BY REPLACING THE DECK, RAISING THE STRUCTURE, AND PAINTING THE STRUCTURAL STEEL. FULL DEPTH REPLACEMENT OF THE OFF RAMP FROM IR70 TO US127.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 2.7 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.1 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)*
* ROUTINE MAINTENANCE

LIMITED ACCESS

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

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 21 AND 22, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DISTRICT DEPUTY DIRECTOR

Tang K Campbell

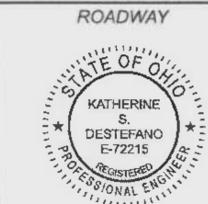
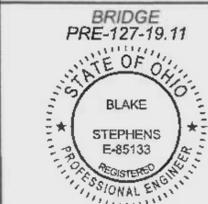
DIRECTOR, DEPARTMENT OF TRANSPORTATION

Justin M. Roberts

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS	
BP-2.1	1/21/22	MGS-4.2	7/19/13	MT-95.30	7/19/19	MT-101.75	1/17/20	HL-30.11	1/15/21	800-2019	10/21/22	
BP-2.2	1/15/21	MGS-4.3	1/18/13	MT-95.31	7/19/19	MT-101.90	7/17/20	HL-30.32	4/17/20	807	1/21/22	
BP-2.4	7/19/13	MGS-5.3	7/15/16	MT-95.32	4/19/19	MT-102.10	1/17/20			832	7/15/22	
BP-2.5	1/21/22	MGS-6.1	1/19/18	MT-95.40	1/17/20	MT-102.20	4/19/19			850	4/15/22	
BP-5.1	7/15/22			MT-95.41	1/17/20	MT-105.10	1/17/20			878	1/21/22	
DM-1.1	7/17/20	RM-1.1	1/15/21	MT-95.45	1/17/20							
DM-1.2	7/16/21	RM-4.2	4/17/20	MT-95.50	7/21/17	TC-41.20	10/18/13					
DM-4.1	7/17/20	AS-1-15	7/17/15	MT-98.22	1/17/20	TC-42.20	10/18/13					
DM-4.3	1/15/16	AS-2-15	1/18/19	MT-98.28	1/17/20	TC-52.20	10/18/13					
DM-4.4	1/15/16	BR-1-13	1/17/14	MT-98.29	1/17/20	TC-61.30	7/19/19					
		SICD-1-21	1/21/22	MT-99.20	4/19/19	TC-65.10	1/17/14					
MGS-1.1	7/16/21	SICD-2-14	1/15/21	MT-99.30	1/17/20	TC-65.11	7/15/22					
MGS-2.1	1/19/18	TVPF-1-18	7/20/18	MT-99.60	7/15/16	TC-71.10	7/15/22					
MGS-3.1	1/19/18	VPF-1-90	7/20/18	MT-101.60	1/17/20	TC-73.20	1/17/20					
MGS-3.2	1/18/13			MT-101.70	1/17/20							

ENGINEER'S SEAL

ENGINEER'S SEAL



Date: 2022.11.21
07:38:44-05'00'

2022.11.22 09:48:00-05'00'

TITLE SHEET

DESIGN AGENCY



DESIGNER
GAT

REVIEWER
KSD 11/03/22

PROJECT ID
102781

SHEET TOTAL
P.1 99

PRE-127-19.11

MODEL: Sheet: PAPER: SIZE: 34x22 (in.) DATE: 11/20/2022 TIME: 11:46:18 AM USER: glout
pwc:\hoholdd-pw-bentley.com\hoholdd-pw-02\Documents\01 Active Projects\District 08\Preble\102781\1400-Engineering\Roadway\Sheets\102781_GT001.dgn

ITEM 614, MAINTAINING TRAFFIC

US-127

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION, INCLUDING LEFT TURN LANES WHERE SHOWN IN THE PLANS SHALL BE MAINTAINED, AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC.

IR-70

MAINTAIN ALL EXISTING LANES OF TRAFFIC IN EACH DIRECTION AT ALL TIMES, EXCEPT IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE TIMES NOTE ON SHEET 6, BY USE OF THE EXISTING PAVEMENT.

RAMP REPLACEMENT: A MINIMUM OF ONE LANE OF TRAFFIC ON EACH RAMP SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 30 CONSECUTIVE CALENDAR DAYS PER RAMP, WHEN THE RAMP MAY BE DETOURED AS SHOWN ON SHEETS 21-22. ONLY ONE RAMP IS PERMITTED TO BE CLOSED AT A TIME. A DISCENSITIVE SHALL BE ASSESSED IN THE AMOUNT SHOWN IN THE LANE VALUE CONTRACT TABLE PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

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

- CHRISTMAS FOURTH OF JULY
- NEW YEAR'S LABOR DAY
- MEMORIAL DAY THANKSGIVING
- NASCAR BRICKYARD 400
- INDIANAPOLIS 500

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

DAY OF HOLIDAY TIME ALL LANES
OR EVENT MUST BE OPEN TO TRAFFIC

- SUNDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY
- MONDAY 12:00N FRIDAY THROUGH 6:00AM TUESDAY
- TUESDAY 12:00N MONDAY THROUGH 6:00AM WEDNESDAY
- WEDNESDAY 12:00N TUESDAY THROUGH 6:00AM THURSDAY
- THURSDAY 12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
- THURSDAY (THANKSGIVING ONLY)
6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
- FRIDAY 12:00N THURSDAY THROUGH 6:00AM MONDAY
- SATURDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

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

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

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

NOTICE OF CLOSURE SIGN TIME TABLE

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

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

**EXIT 10 WILL BE
CLOSED MM/DD/YYYY
FOR 30 DAYS
INFO: 513-933-6600**

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

DESIGN AGENCY



DESIGNER

GAT

REVIEWER

KSD 11/03/22

PROJECT ID

102781

SHEET TOTAL

P.6 | 99

SEQUENCE OF CONSTRUCTION

PHASE 1A
INSTALL THE NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-95.40 AND AS SHOWN IN THE PLANS, CLOSE THE RIGHT LANE OF NORTHBOUND US-127 AT THE PRIVATE DRIVE, AND CLOSE THE LEFT LANE OF SOUTHBOUND US-127 AT PRICE RD.

DEMOLISH AND RECONSTRUCT THE BRIDGE AND PAVEMENT FOR EASTERN SIDE OF THE BRIDGE. USE PORTABLE BARRIER TO PROTECT THE WORKZONE AND 420' OF PORTABLE BARRIER PER SIDE TO PROTECT THE TEMPORARY JACKING IN MEDIAN OF IR-70. ENSURE THAT THE PAVEMENT IS INSTALLED CORRECTLY BEFORE REMOVING THE TEMPORARY TRAFFIC CONTROL AND BEGINNING THE NEXT PHASE. LENGTH OF NEED IS 336' FOR PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY JACKING TOWER IN THE MEDIAN OF IR-70.

PHASE 1B
INSTALL THE NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH SCD MT-95.40 AND AS SHOWN IN THE PLANS, CLOSE THE LEFT LANE OF NORTHBOUND US-127 AT THE PRIVATE DRIVE, AND THE LEFT LANE OF SOUTHBOUND US-127 AT PRICE RD WILL REMAIN CLOSED.

CONSTRUCT THE PORTION OF ROADWAY ON BOTH THE NORTH SIDE AND SOUTH SIDE OF BRIDGE THAT WILL BE REQUIRED TO PROPERLY LAY OUT THE NEXT PHASE OF CONSTRUCTION. USE PORTABLE BARRIER TO PROTECT THE WORKZONE.

PHASE 2
INSTALL THE NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH SCD MT-95.40 AND AS SHOWN IN THE PLANS, THE LEFT LANE OF NORTHBOUND US-127 AT THE PRIVATE DRIVE WILL REMAIN CLOSED, AND CLOSE THE RIGHT LANE OF SOUTHBOUND US-127 AT THE PRIVATE DRIVE.

DEMOLISH AND RECONSTRUCT THE BRIDGE AND PAVEMENT FOR WESTERN SIDE OF THE BRIDGE. USE PORTABLE BARRIER TO PROTECT THE WORKZONE AND 420' OF PORTABLE BARRIER PER SIDE TO PROTECT THE TEMPORARY JACKING IN MEDIAN OF IR-70. ENSURE THAT THE PAVEMENT IS INSTALLED CORRECTLY BEFORE REMOVING THE TEMPORARY TRAFFIC CONTROL AND BEGINNING THE NEXT PHASE. LENGTH OF NEED IS 336' FOR PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY JACKING TOWER IN THE MEDIAN OF IR-70.

PERFORM ANY FINISH GRADING, APPLICATION OF PAVEMENT MARKINGS, SIGNING AND ANY OTHER INCIDENTALS BEFORE REOPENING US-127 TO FULL NORMAL OPERATIONS.

PARAPET AND VANDAL FENCE REMOVAL AS WELL AS VANDALL FENCE INSTALLATION SHALL NOT OCCUR OVER LIVE TRAFFIC. TEMPORARY LANE CLOSURES SHALL BE ESTABLISHED TO COMPLETE THIS WORK.

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

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

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

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

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

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

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

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

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

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

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

PERMITTED LANE CLOSURE TIMES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PERMITTED LANE CLOSURE NOTE. THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 8 WORK ZONE TRAFFIC CONTROL MANAGER. SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED IN THE LANE. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED. PERMITTED LANE CLOSURES SHALL ONLY BE ALLOWED DURING THE TIMES SPECIFIED IN THE LANE VALUE CONTRACT TABLE INCLUDED IN THESE PLANS. NO LANE OR SHOULDER CLOSURE SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

LANE VALUE CONTRACT TABLE			
ROUTE	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
IR-70	10 AM TO 7 PM	1 MINUTE	\$245
US-127	NO RESTRICTIONS	1 MINUTE	\$50
WB I-70 EXIT RAMP	30 DAYS	1 DAY	\$8,700
EB I-70 EXIT RAMP	30 DAYS	1 DAY	\$3,700

DELINEATION OF PORTABLE AND PERMANENT BARRIER

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

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

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

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

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

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

THE QUANTITIES HAVE BEEN ESTIMATED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY

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

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

DESIGN AGENCY



DESIGNER

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REVIEWER

KSD 11/03/22

PROJECT ID

102781

SHEET TOTAL

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SHEET NO.	PHASE														
		614	614	614	614	614	614	614	614	614	614	614	622	622	
		INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1, ONE WAY	OBJECT MARKER, TWO WAY	WORK ZONE CENTER LINE, CLASS I	WORK ZONE EDGE LINE, CLASS I, 6"	WORK ZONE CHANNELIZING LINE, CLASS I, 8"	WORK ZONE DOTTED LINE, CLASS I	WORK ZONE ARROW, CLASS I	PORTABLE BARRIER, UNANCHORED	PORTABLE BARRIER, ANCHORED			
		FT	EACH	EACH	EACH	MILE	MILE	FT	FT	EACH	FT	FT			
11	1A					0.10	0.22								
12	1A	380.00	1	9	2	0.17	0.35	60.20	189.6	3	340.0	380.0			
13	1A					0.15	0.05								
14	1B					0.23	0.03								
15	1B	1449.00	2	16	2	0.68					1449.00				
16	1B					0.11									
17	2					0.13	0.11								
18	2		1	10	2	0.20	0.35	77.61	136.38	3	350.00	400.00			
19	2					0.37	0.21	326.48	50.00	3					
20	2					0.04	0.02								
1A, 2		840.00	2								840.00				
SUBTOTALS		2669.00	6.00	35.19	6.00	1.51	2.02	464.29	375.98	9.00	2979.00	780.00			
CARRIED TO GENERAL SUMMARY		2669	6	36	6	2	3	465	376	9	2979	781			

MAINTENANCE OF TRAFFIC SUBSUMMARY

DESIGN AGENCY

 DESIGNER
 GAT
 REVIEWER
 KSD 11/03/22
 PROJECT ID
 102781
 SHEET TOTAL
 P.9 | 99

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	9	24A	24B	24C	25	30	42	50		01/MS/14	02/MS/04						
ROADWAY																		
LS						7,170					LS	LS	201	11000	LS		CLEARING AND GRUBBING	
											1,850	5,320	202	23000	7,170	SY	PAVEMENT REMOVED	
			1,583								664	919	202	38200	1,583	FT	GUARDRAIL REMOVED FOR REUSE	
			4								4		202	42010	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
			4								4		202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
								830	589	1,362	830	1,951	203	10000	2,781	CY	EXCAVATION	
								11	3	14	11	17	203	20000	28	CY	EMBANKMENT	
						7,470					1,922	5,548	204	10000	7,470	SY	SUBGRADE COMPACTION	
						3,320					854	2,466	204	13000	3,320	CY	EXCAVATION OF SUBGRADE	
						3,320					854	2,466	204	30020	3,320	CY	GRANULAR MATERIAL, TYPE C	
						4					1	3	204	45000	4	HOUR	PROOF ROLLING	
						7,470					1,922	5,548	204	50000	7,470	SY	GEOTEXTILE FABRIC	
			1,594								675	919	606	16050	1,594	FT	GUARDRAIL REBUILT, TYPE MGS	
			2								2		606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
			2								2		606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			2								2		606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			2								2		606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
											LS	LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
EROSION CONTROL																		
2						2						4	601	21050	4	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
			167									167	601	21060	167	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
2											2		659	00100	2	EACH	SOIL ANALYSIS TEST	
105											42	63	659	00300	105	CY	TOPSOIL	
948								188	360		948	548	659	10000	1,496	SY	SEEDING AND MULCHING	
47											19	28	659	14000	47	SY	REPAIR SEEDING AND MULCHING	
47											19	28	659	15000	47	SY	INTER-SEEDING	
0.13											0.05	0.08	659	20000	0.13	TON	COMMERCIAL FERTILIZER	
0.2											0.08	0.12	659	31000	0.2	ACRE	LIME	
5.2											2.08	3.12	659	35000	5.2	MGAL	WATER	
											10,000	5,000	832	30000	15,000	EACH	EROSION CONTROL	
DRAINAGE																		
						4,809					4,809		605	14000	4,809	FT	6" BASE PIPE UNDERDRAINS	
100						450					550		605	13300	550	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
						33					33		611	00510	33	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
1						1					2		611	99710	2	EACH	PRECAST REINFORCED CONCRETE OUTLET	
					704						704		625	25500	704	FT	CONDUIT, 3", 725.04	
PAVEMENT																		
			169								169		252	01500	169	FT	FULL DEPTH PAVEMENT SAWING	
						1,220					313	907	304	20000	1,220	CY	AGGREGATE BASE	
						152					152		SPECIAL	45131000	152	FT	PRESSURE RELIEF JOINT, TYPE B	
						7,170					1,850	5,320	452	15020	7,170	SY	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
			65								65		609	24000	65	FT	CURB, TYPE 4-A	
						0.7						0.7	850	20010	0.7	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	
TRAFFIC CONTROL																		
						130					130		621	00100	130	EACH	RPM	
						112						112	621	00300	112	EACH	RPM REFLECTOR	
						4					4		625	29900	4	EACH	JUNCTION BOX	
						4					4		625	30700	4	EACH	PULL BOX, 725.08, 18"	
						15					15		625	00110	15	EACH	BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL	
						39					13	26	630	03100	39	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
						11					11		630	80100	11	SF	SIGN, FLAT SHEET	
						1						1	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
						4					2	2	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
						2					2		642	01312	2	EACH	LANE REDUCTION ARROW, TYPE 1	
						4						4	642	01322	4	EACH	WRONG WAY ARROW, TYPE 1	
						1.51					0.81	0.7	646	10010	1.51	MILE	EDGE LINE, 6"	
						0.68					0.68		646	10110	0.68	MILE	LANE LINE, 6"	
						793					793		646	10310	793	FT	CHANNELIZING LINE, 12"	

DESIGN AGENCY

 DESIGNER
GAT
 REVIEWER
 KSD 11/03/22
 PROJECT ID
 102781
 SHEET TOTAL
 P.23A 99

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	9	24C								01/IMS/14	02/IMS/04						
		818								818		646	10600	818	FT	TRAFFIC CONTROL (CONT.)	
		0.77								0.77		646	10200	0.77	MILE	CENTER LINE	
		341								341		646	10800	341	SF	ISLAND MARKING	
		6								6		646	20300	6	EACH	LANE ARROW	
																STRUCTURE OVER 20 FOOT SPAN (PRE-127-19.11)	68
																MAINTENANCE OF TRAFFIC	
256										200	56	614	11110	256	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
										2,669		614	11630	2,669	FT	INCREASED BARRIER DELINEATION	
										6		614	12380	6	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
										LS	LS	614	12420	LS		DETOUR SIGNING	
		36								36		614	13310	36	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
		6								6		614	13360	6	EACH	OBJECT MARKER, TWO WAY	
6										4	2	614	18600	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN	
		1.51								1.51		614	21000	1.51	MILE	WORK ZONE CENTER LINE, CLASS I	
		2.02								2.02		614	22010	2.02	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
		465								465		614	23000	465	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"	
		376								376		614	24000	376	FT	WORK ZONE DOTTED LINE, CLASS I	
		9								9		614	30000	9	EACH	WORK ZONE ARROW, CLASS I	
2										2		616	10000	2	MGAL	WATER	
										2,979		622	41100	2,979	FT	PORTABLE BARRIER, UNANCHORED	
										781		622	41110	781	FT	PORTABLE BARRIER, ANCHORED	
																INCIDENTALS	
										LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
										LS	LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS	LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
GAT
 REVIEWER
KSD 11/03/22
 PROJECT ID
102781
 SHEET TOTAL
P.23B 99

GENERAL NOTES:

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD DRAWINGS:

AS-1-15	REVISED 07-17-2015
AS-2-15	REVISED 01-18-2019
SBR-1-20	REVISED 07-17-2020
SICD-1-21	REVISED 01-21-2022
SICD-2-14	REVISED 01-15-2021
TVPF-1-18	DATED 07-20-2018
VPF-1-90	REVISED 07-20-2018
HL-20.14	REVISED 04-17-2020
HL-30.32	REVISED 04-17-2020

REFERENCE SHALL BE MADE TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800 DATED 5-02-2022

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50

STEEL HP SECTIONS - ASTM A572 - YIELD STRENGTH 50 KSI

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE LFRD BRIDGE DESIGN SPECIFICATIONS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DECK DESIGN LOADING

DESIGN LOADING INCLUDES:

VEHICULAR LIVE LOAD: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT

EXISTING STRUCTURE PLANS

THE EXISTING STRUCTURE PLANS ARE AVAILABLE ONLINE THROUGH THE FOLLOWING WEBSITE:
ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/D08-102781/Reference%20Files/

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL PERTINENT EXISTING DRAWINGS AND DETAILS RELEVANT TO THIS PROJECT.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

CUT LINE CONSTRUCTION JOINT PREPARATION

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS WORK CONSISTS OF REMOVAL OF THE EXISTING BARRIER, EXISTING FENCE, EXISTING EXPANSION JOINTS, EXISTING PIER BEARINGS, EXISTING ABUTMENT BEARINGS, PORTIONS OF THE EXISTING ABUTMENT BACKWALL AND WINGWALLS. WHEN REPLACING THE ABUTMENT BEARINGS USE TEMPORARY SUPPORTS DURING CONSTRUCTION, SEE ITEM 516-JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE FOR DETAILS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL OF CONCRETE. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

THE CONTRACTOR MUST REVIEW THE STRUCTURE WHEN PREPARING HIS BID. THE CONTRACTOR WILL REVIEW THE CONDITION OF THE STRUCTURE TO DETERMINE WHAT DEBRIS WILL FALL FROM THE STRUCTURE DURING REMOVAL. THE CONTRACTOR WILL DETERMINE THE CORRESPONDING COST TO CLEAN UP ANY AND ALL DEBRIS WHICH FALLS FROM THE STRUCTURE DURING ANY REMOVAL OPERATION. THE COST TO CLEAR AND CLEAN UP ALL DEBRIS DURING REMOVAL SHALL BE INCLUDED WITH THE BID FOR THIS ITEM OF WORK. NO ADDITIONAL COST WILL BE RECOGNIZED TO CLEAN DEBRIS RESULTING FROM THE STRUCTURE REMOVAL OPERATION.

ALL UTILITIES MUST REMAIN ACTIVE DURING CONSTRUCTION UNLESS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL TEMPORARILY SUPPORT ANY CONDUITS AND ELECTRICAL BOXES AS NECESSARY TO PERFORM THE REPAIRS.

REMOVALS SHALL BE PERFORMED IN ACCORDANCE WITH MAINTENANCE OF TRAFFIC PLANS AND NOTES.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN

ITEM 510 - DOWEL HOELS WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

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 PRODUCTS ARE AVAILABLE AT:

WWW.ICC-ES.ORG/EVALUATION_REPORTS/INDEX.SHTML

SELECT FROM ON THE FOLLOWING APPROVED PRODUCTS:

DEWALT/POWERS FASTENERS PURE 110+ EPOXY ADHESIVE ANCHOR SYSTEM (ICCES REPORT ESR-3298)

ADHESIVES TECHNOLOGY CORPORATION (ATC) ULTRABOND HS1CC ADHESIVE ANCHOR SYSTEM (ICCES REPORT ESR-4057)

HILT HIT-HY 200 ADHESIVE ANCHOR SYSTEM (ICCES REPORT ESR-3187)

INSTALL ADHESIVE ANCHORS ACCORDING THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN SECTION 4.3 OF THE ICCES REPORTS LISTED ABOVE. THE MINIMUM EMBEDMENT DEPTH FOR ANCHORS SHALL BE AS SHOWN IN THE PLANS.

ITEM 512 - SEALING OF CONCRETE STRUCTURES, AS PER PLAN

SEAL ALL EXPOSED SURFACES OF THE BARRIER EXCEPT THE FORM LINER, DECK EDGES, PIERS, AND ABUTMENTS WITH EPOXY URETHANE SEALER, FEDERAL COLOR 17778.

ITEM 512 - SEALING OF CONCRETE STRUCTURES, AS PER PLAN (CONTINUED)

DUE TO THE RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE QPL OR ELECT TO SUBSTITUTE BRIDGE COTE XL-70 W/SILANE THAT IS LISTED ON THE APPROVED NOISE SUPPLIER LIST UNDER APPROVED SEALERS FOR NOISE BARRIERS. APPROVEDNOISESUPPLIERSLIST.PDF (OHIO.GOV) .

IF BRIDGE COTE XL-70 W/SILANE IS CHOSEN, MEET THE REQUIREMENTS OF THE BRIDGE COTE XL-70 W/SILANE TECHNICAL DATA SHEET WITH THE EXCEPTION OF THE SURFACE PREPARATION THAT WILL STILL FOLLOW THE REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE SEALERS.

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL

FIELD PAINT THE EXISTING STRUCTURAL STEEL USING OZEU SPECIFICATIONS. COLOR TO BE FEDERAL COLOR NUMBER 14277.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF TEMPORARILY SUPPORTING THE EXISTING STRUCTURES TO COMPLETE THE WORK AS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

THE EXISTING STRUCTURE WILL BE RAISED AN AVERAGE OF APPROXIMATELY 9 INCHES TO PROVIDE INCREASED VERTICAL CLEARANCES. IT IS ASSUMED THE BRIDGE WILL BE JACKED AFTER THE DECK AND BARRIERS HAVE BEEN REMOVED, RESULTING IN THE FOLLOWING DEAD LOAD REACTIONS (KIPS) DURING JACKING:

	REAR ABUT.	PIER 1	PIER 2	PIER 3	FWD ABUT.
EXTERIOR BEAMS	4.3	19.5	22.8	19.5	4.3
INTERIOR BEAMS	4.5	20.3	23.7	20.3	4.5

JACKING SHALL BE DONE IN ACCORDANCE WITH CMS 501.05.B.5 WITH CAREFUL ATTENTION TO ENSURE BEAMS ARE RAISED UNIFORMLY.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

ESITMATED QUANTITES ARE BASED ON THE MOST RECENT IN-DEPTH INSPECTION OF THE STRUCTURE. AREAS TO BE PATCHED HAVE BEEN DETAILED IN THE PLANS.

IT IS POSSIBLE THAT ADDITIONAL AREAS REQUIRING PATCHING MAY HAVE DEVELOPED SINCE THE MOST RECENT INSPECTION OF THE STRUCTURE. THEREFORE, THE CONTRACTOR SHALL SOUND THE SURROUNDING PERIMETER OF THE AREA TO BE PATCHED AND PATCH NEW AREAS APPROVED BY THE ENGINEER THAT HAVE NOT BEEN DETAILED IN THE PLANS.

MEASUREMENT AND PAYMENT:
THE PLAN QUANTITIES INCLUDE AN INCREASE OF THE FIELD MEASURED QUANTITIES. THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE MEASURED AND PAID BY ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 530 - SPECIAL - FORM LINER

DESCRIPTION:
THIS ITEM SHALL INCLUDE MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO INCORPORATE DECORATIVE FORM LINER ON THE EXTERIOR FACES OF THE CONCRETE PARAPETS.

THE ADDITIONAL THICKNESS OF THE DECORATIVE FORM LINER SHALL BE ADDED TO THE EXTERIOR FACE OF THE STANDARD SBR-1-20 PARAPET SHOWN HERIN. THE INCORPORATION OF THIS FORM LINER SHALL NOT RESULT IN ANY REDUCTION TO THE PROPOSED ROADWAY WIDTH.

ITEM 530 - SPECIAL - FORM LINER (CONTINUED)

FORM LINER:
ACCEPTABLE FORM LINER MANUFACTURERS INCLUDE CUSTOMROCK FORM LINER, WWW.CUSTOMROCK.COM, PHONE 1-800-637-2447 OR APPROVED EQUAL.

ACCEPTABLE FORM LINER PATTERNS INCLUDE #1103 RUSTIC ASHLAR (KEYED) OR APPROVED EQUAL.

VANDAL PROTECTION FENCING:

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

INSPECTION OF EXISTING STRUCTURAL STEEL:

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO C&MS 511.07, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511 - SUPERSTRUCTURE CONCRETE. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION ADMINISTRATION, BRIDGE CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME THE RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.24 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

ABUT. - ABUTMENT	O/O - OUT TO OUT
APPR. - APPROACH	P.C.P.P - PERFORATED CORRUGATED PLASTIC PIPE
BTM. - BOTTOM	P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
BRG. - BEARING	PG - PROFILE GRADE
BRGS. - BEARINGS	PGL - PROFILE GRADE LINE
@ - CENTERLINE	PROP. - PROPOSED
C/C - CENTER TO CENTER	PT - POINT OF TANGENCY
CIP - CAST-IN-PLACE	PVC - POINT OF VERTICAL CURVATURE
C.J. - CONSTRUCTION JOINT	PVI - POINT OF VERTICAL INTERSECTION
CLR. - CLEARANCE	PVT - POINT OF VERTICAL TANGENCY
CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS	R. - RADIUS
CONC. - CONCRETE	R.A. - REAR ABUTMENT
CONSTR. - CONSTRUCTION	RF - RIGHT FORWARD
CONTR. - CONTRACTION	RT. - RIGHT
CU YD - CUBIC YARD	R/W - RIGHT OF WAY
DIA. - DIAMETER	SAN. - SANITARY
E.F. - EACH FACE	SER. - SERIES
ELEV., EL. - ELEVATION	SHT. - SHEET
EQ. - EQUAL	S.O. - SERIES OF
EX. - EXISTING	SPA. - SPACES OR SPACING
EXP. - EXPANSION	SR - STATE ROUTE
F.A. - FORWARD ABUTMENT	STA. - STATION
F.F. - FAR FACE	STD. - STANDARD
F.S. - FIELD SPLICE	STM. - STORM
FT/FT - FOOT PER FOOT	STR. - STRAIGHT
FTG. - FOOTING	TBM - TEMPORARY BENCH MARK
FWD. - FORWARD	TEMP. - TEMPORARY
GALV. = GALVANIZED	T.O.S. - TOE OF SLOPE
GEN. - GENERAL	T/PARAPET - TOE OF PARAPET
LF - LEFT FORWARD	T/T - TOE TO TOE
LT. - LEFT	TYP. - TYPICAL
MAX. - MAXIMUM	U.G. - UNDERGROUND
MIN. - MINIMUM	VAR. - VARIES
MISC. - MISCELLANEOUS	VC - VERTICAL CURVE
MOT - MAINTENANCE OF TRAFFIC	VERT. - VERTICAL
N.F. - NEAR FACE	W/O - WITHOUT
N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE	
NO./# - NUMBER	

GENERAL NOTES
BRIDGE NO. PRE-127-1911
U.S. 127 OVER I.R. 70

SFN	6802702
DESIGN AGENCY	
B&N	burgessniple.com
DESIGNER	CHECKER
BCS	XAC
REVIEWER	
SJA	3-23-22
PROJECT ID	102781
SUBSET	TOTAL
2	34
SHEET	TOTAL
P.67	P.99

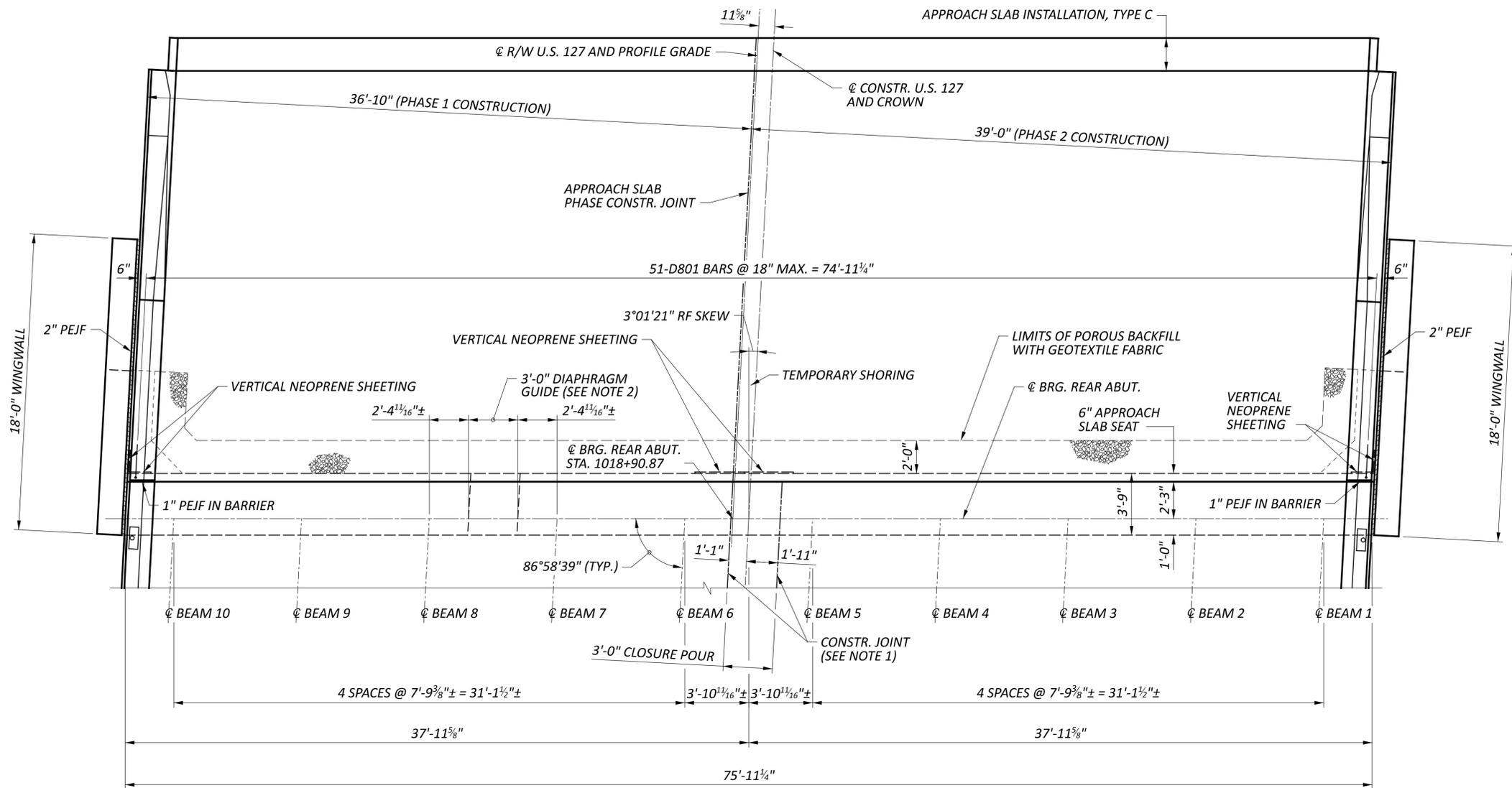
ESTIMATED QUANTITIES							CALC. XAC	DATE 3-04-22	CHK'D BCS	DATE 3-14-22
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GENERAL	SHT. REF.	
202	11203	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	2/34	
202	22900	414	SY	APPROACH SLAB REMOVED				414		
202	75260	564	FT	VANDAL FENCE REMOVED			564			
503	11101	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	LS				2/34	
503	21100	65	CY	UNCLASSIFIED EXCAVATION	65					
509	10000	195,340	LB	EPOXY COATED REINFORCING STEEL	2,702	2,806	189,832			
509	30020	10,589	FT	NO. 4 GFRP DEFORMED BARS			10,589			
510	10001	624	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	204	420			2/34	
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2					
511	34446	731	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			731			
511	34449	101	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN			101		30 & 31/34	
511	42510	15	CY	CLASS QC1 CONCRETE, PIER CAP		15				
511	46010	30	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	30					
512	10101	1,224	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	140	389	695		2/34	
512	74000	346	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	152	194				
512	10601	202	FT	CONCRETE REPAIR BY EPOXY INJECTION, AS PER PLAN	155	47				
513	20000	9,090	EACH	WELDED SHEAR CONNECTORS			9,090			
513	95020	LS	LS	STRUCTURAL STEEL, MISC.: CUT AND SPLICE EXISTING CROSSFRAME MEMBERS			LS		18/34	
514	00050	32,332	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			32,332			
514	00056	32,332	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			32,332			
514	00062	32,332	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			32,332			
514	00066	32,332	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, FINISH COAT			32,332			
514	00504	47	MNHR	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			47			
514	10000	10	EACH	FINAL INSPECTION REPAIR			10			
516	10010	152	FT	ARMORLESS PREFORMED JOINT SEAL				152		
516	13600	16	SF	1" PREFORMED EXPANSION JOINT FILLER			16			
516	13900	154	SF	2" PREFORMED EXPANSION JOINT FILLER	154					
516	14020	248	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	248					
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1'-3"x1'-6"x2 ⁵ / ₈ ", AS PER PLAN			10		21/34	
516	44201	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1'-3 ¹ / ₂ "x1'-6"x3", AS PER PLAN			20		20/34	
516	44301	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), 1'-0"x1'-2"x4 ¹ / ₂ ", AS PER PLAN			20		19/34	
516	47001	LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LS	2/34	
518	21200	92	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	92					
519	11101	22	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	10	12			2/34	
526	25000	422	SY	REINFORCED CONCRETE APPROACH SLABS (T=15")				422		
526	90030	152	FT	TYPE C INSTALLATION				152		
530	13000	1961	SF	SPECIAL - FORM LINER			1961		2/34	
607	39900	550	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			550			
607	39994	564	FT	TEMPORARY VANDAL FENCE, TYPE B			564			
625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM			2			

ESTIMATED QUANTITIES
 BRIDGE NO. PRE-127-1911
 U.S. 127 OVER I.R. 70

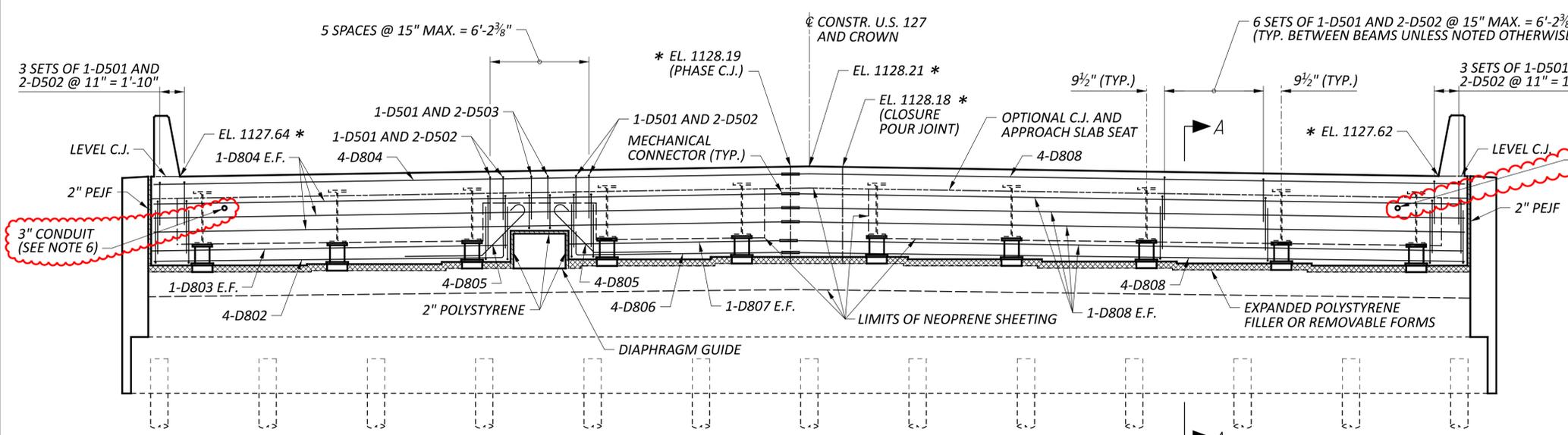
SFN
 6802702
 DESIGN AGENCY

B&N
 burgessniple.com

DESIGNER	CHECKER
BCS	XAC
REVIEWER	
SJA	3-23-22
PROJECT ID	
102781	
SUBSET	TOTAL
3	34
SHEET	TOTAL
P.68	P.99



PLAN

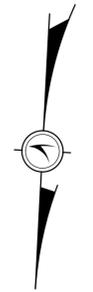


ELEVATION

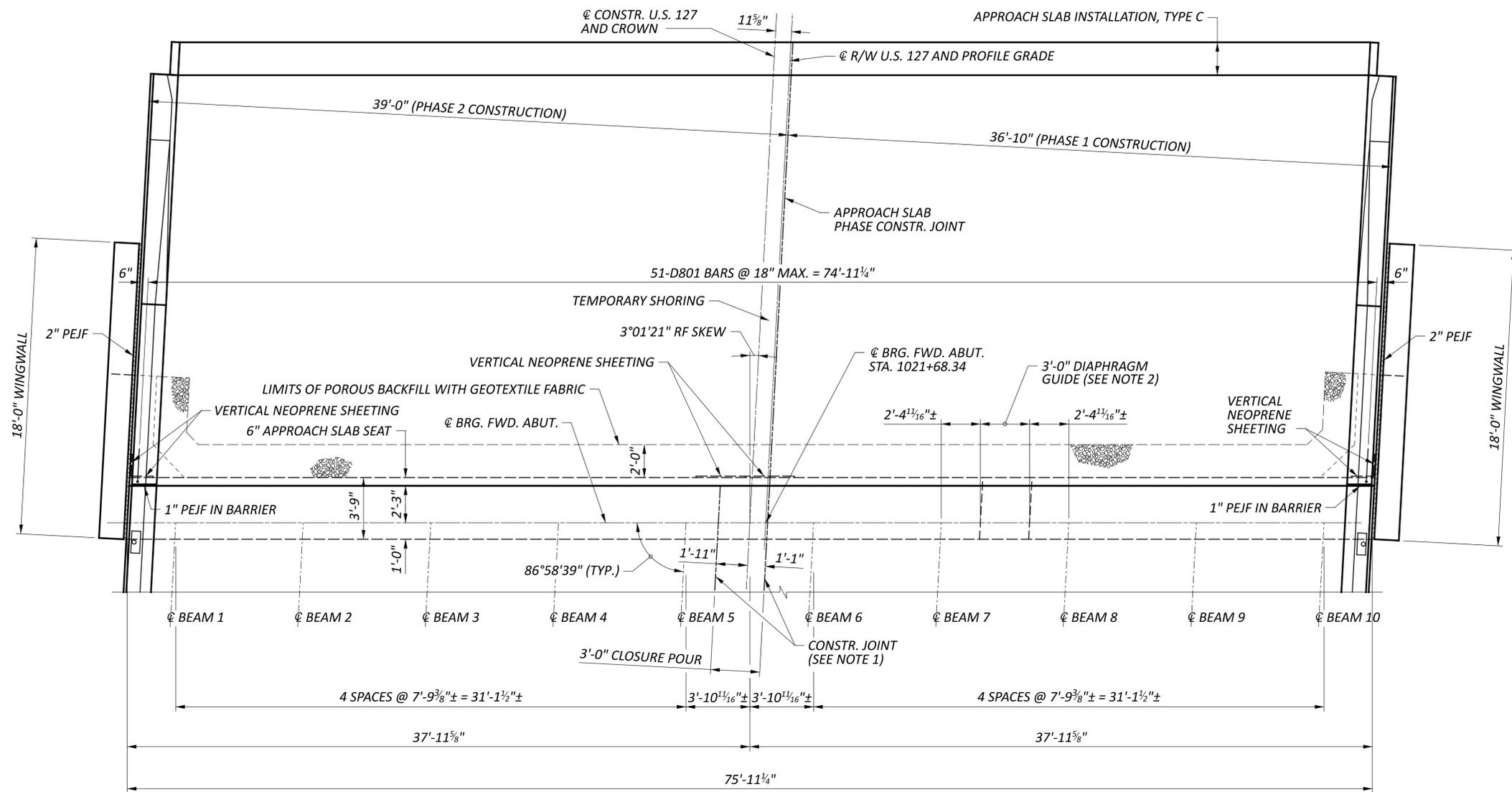
* FOR ELEVATION LOCATION, SEE SECTION A-A

NOTES:

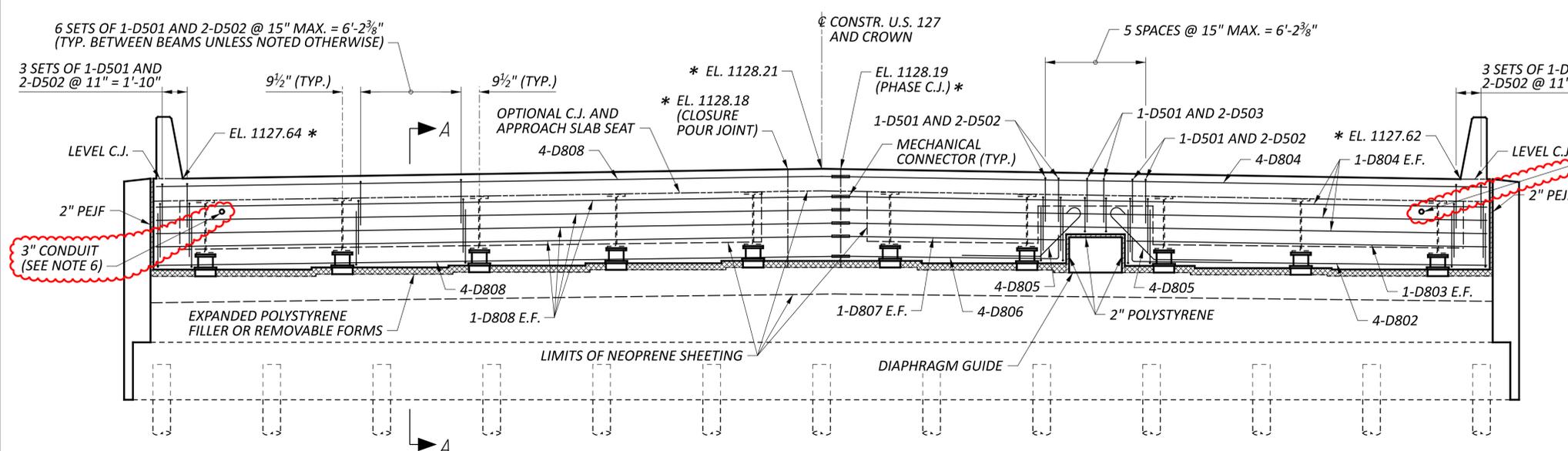
1. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON STD. DWG. SICD-1-96 AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
2. FOR SECTION A-A AND DIAPHRAGM GUIDE DETAILS, SEE SHEET 15/34.
3. FOR WINGWALL DETAILS, SEE SHEET 16/34.
4. ALL VERTICAL DIAPHRAGM REINFORCING SHALL BE PLACE PARALLEL TO BEAMS.
5. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-21.
6. INSTALL 3" DIA. CONDUIT PER STANDARD DRAWING HL-30.32. TWO LOCATIONS ARE REQUIRED FOR THE REAR ABUTMENT.



SFN	6802702
DESIGN AGENCY	B&N burgessniple.com
DESIGNER	CHECKER
BCS	MAB
REVIEWER	
SJA	3-23-22
PROJECT ID	102781
SUBSET	TOTAL
13	34
SHEET	TOTAL
P.78	P.99



PLAN



ELEVATION

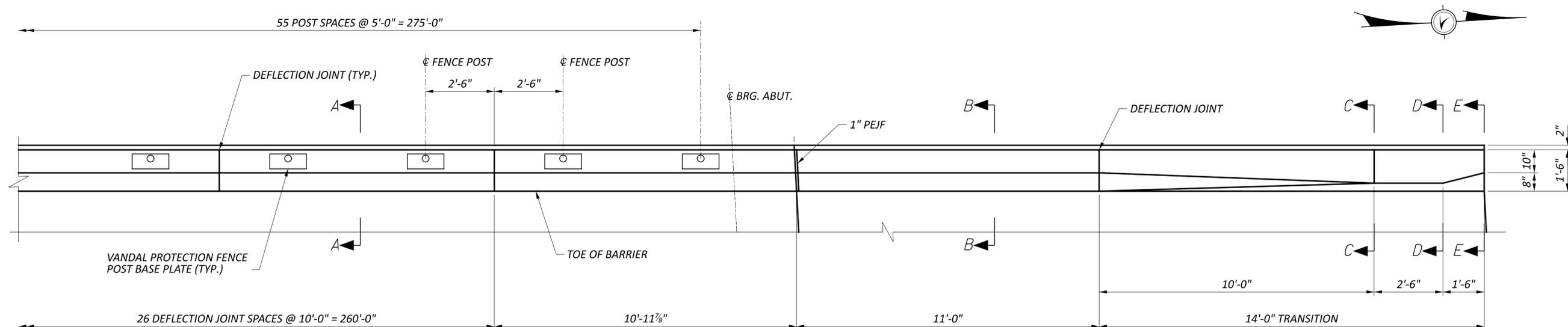
* FOR ELEVATION LOCATION, SEE SECTION A-A

NOTES:

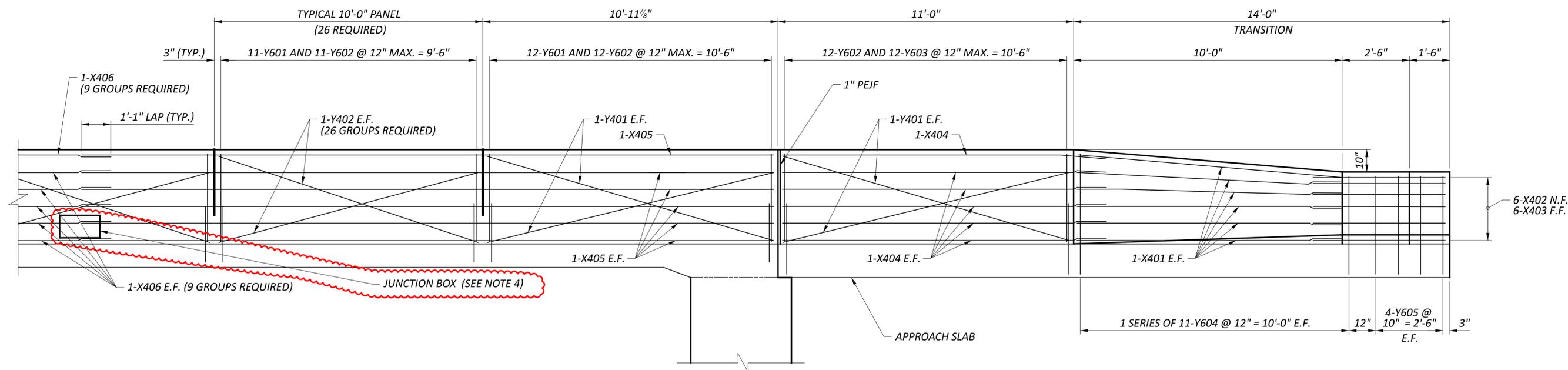
1. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASE THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON STD. DWG. SICD-1-96 AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
2. FOR SECTION A-A AND DIAPHRAGM GUIDE DETAILS, SEE SHEET 15/34.
3. FOR WINGWALL DETAILS, SEE SHEET 16/34.
4. ALL VERTICAL DIAPHRAGM REINFORCING SHALL BE PLACE PARALLEL TO BEAMS.
5. FOR ADDITIONAL DETAILS, SEE STD. DWG. SICD-1-21.
6. INSTALL 3" DIA. CONDUIT PER STANDARD DRAWING HL-30.32. TWO LOCATIONS REQUIRED FOR THE FORWARD ABUTMENT.



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DESIGN AGENCY	
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DESIGNER	CHECKER
BCS	MAB
REVIEWER	
SJA 3-23-22	
PROJECT ID	
102781	
SUBSET	TOTAL
14	34
SHEET	TOTAL
P.79	P.99



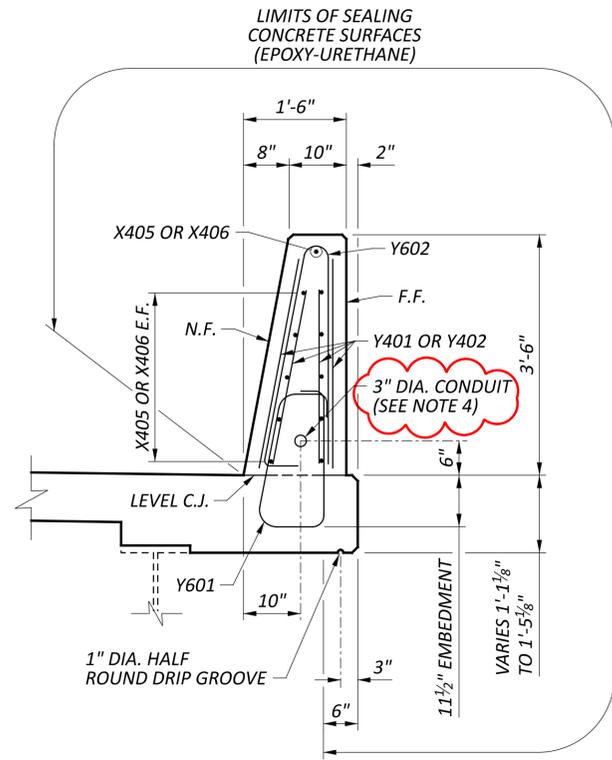
PARTIAL RAILING PLAN
 (NORTHWEST CORNER SHOWN,
 OTHER CORNERS ARE SIMILAR)



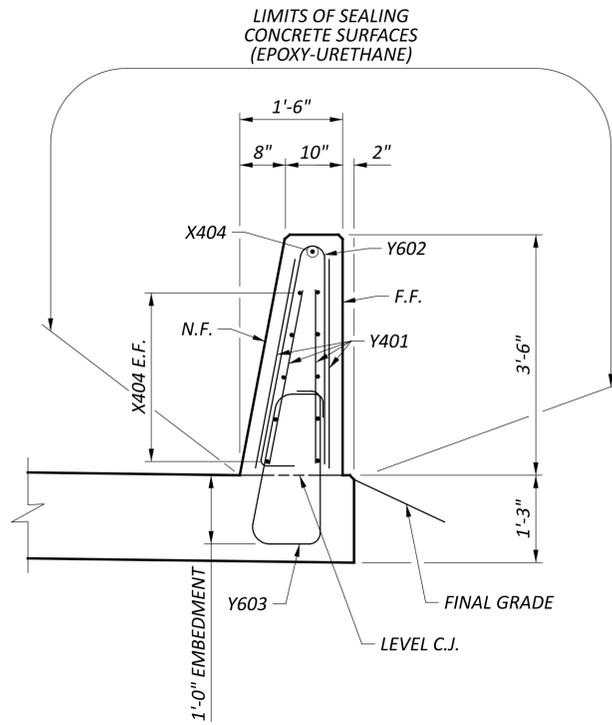
PARTIAL RAILING ELEVATION
 (NORTHWEST CORNER SHOWN, OTHER CORNERS ARE SIMILAR)
 (VANDAL PROTECTION FENCE NOT SHOWN)

NOTES:

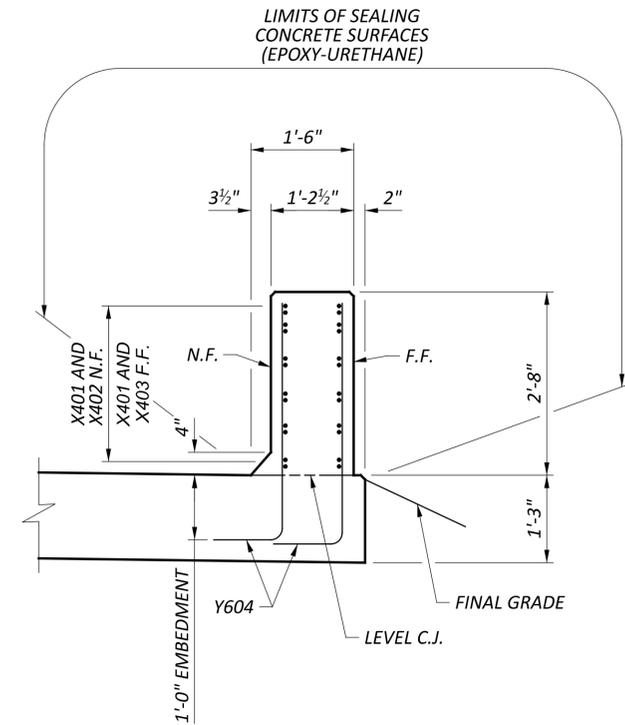
- FOR VANDAL PROTECTION FENCE POST BASE PLATE DETAILS, SEE STD. DWG. VPF-1-90.
- FOR DEFLECTION JOINT DETAILS AND ADDITIONAL RAILING DETAILS, SEE STD. DWG. SBR-1-20.
- FOR RAILING SECTIONS, SEE SHEET 31/34.
- LOCATE JUNCTION BOX 30' FROM END OF BRIDGE. TWO JUNCTION BOXES REQUIRED PER RAILING, SEE STANDARD DRAWING HL-20.14. JUNCTION BOXES SHALL BE INCLUDED WITH ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN.



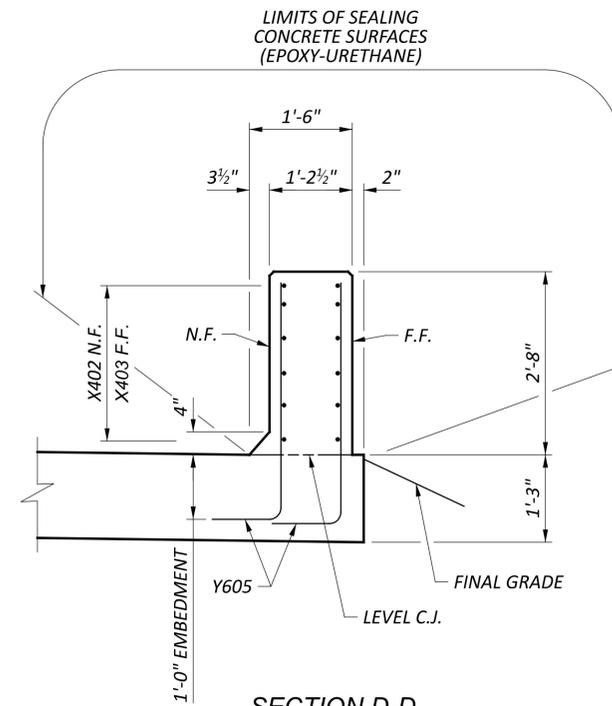
SECTION A-A
 (VANDAL PROTECTION FENCE
 AND FORM LINER
 NOT SHOWN FOR CLARITY)



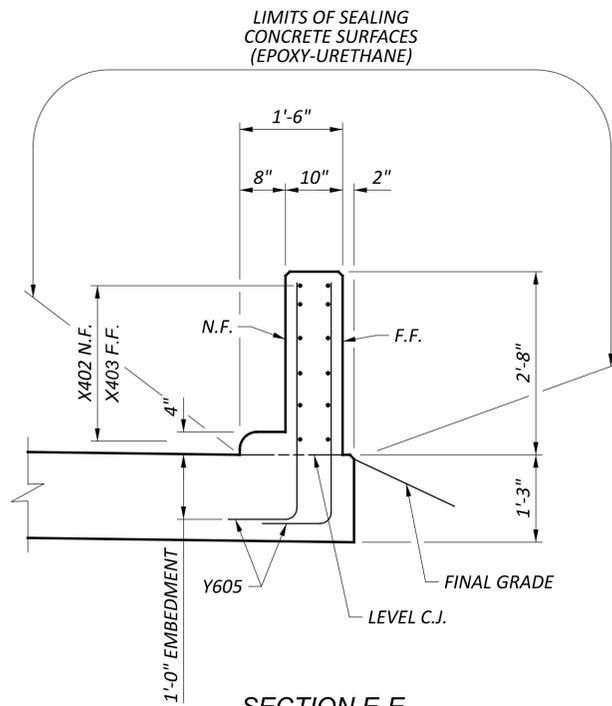
SECTION B-B
 (FORM LINER NOT SHOWN FOR CLARITY)



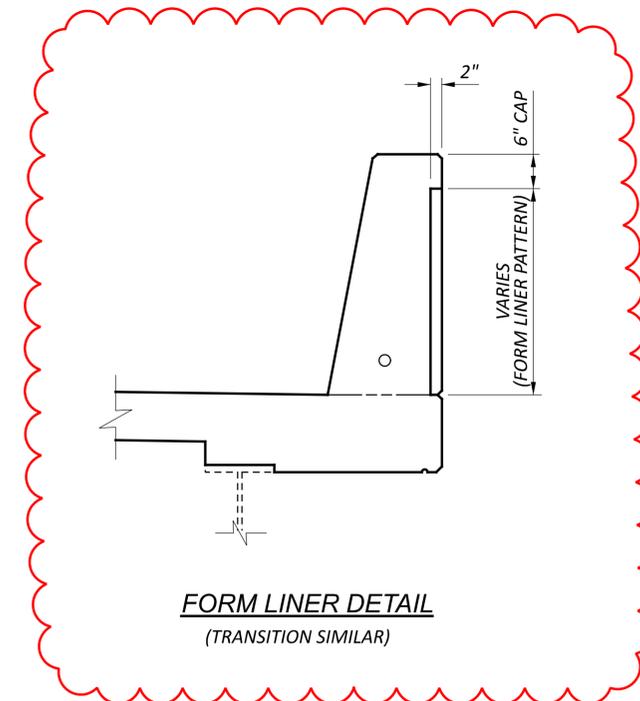
SECTION C-C
 (FORM LINER NOT SHOWN FOR CLARITY)



SECTION D-D
 (FORM LINER NOT SHOWN FOR CLARITY)



SECTION E-E
 (FORM LINER NOT SHOWN FOR CLARITY)



FORM LINER DETAIL
 (TRANSITION SIMILAR)

NOTES:

1. FOR VANDAL PROTECTION FENCE POST BASE PLATE DETAILS, SEE STD. DWG. VPF-1-90.
2. FOR DEFLECTION JOINT DETAILS AND ADDITIONAL RAILING DETAILS, SEE STD. DWG. SBR-1-20.
3. FOR ADDITIONAL FORM LINER INFORMATION, SEE SHEET 2/34.
4. 3" DIAMETER CONDUIT SHALL BE INCLUDED WITH ITEM 511 - CLASS QC2 BRIDGE DECK (PARAPET), AS PER PLAN