

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAS-9-17.78

VILLAGE OF JEWETT
HARRISON COUNTY

FEDERAL PROJECT NUMBER

E210 (065)

RAILROAD INVOLVEMENT

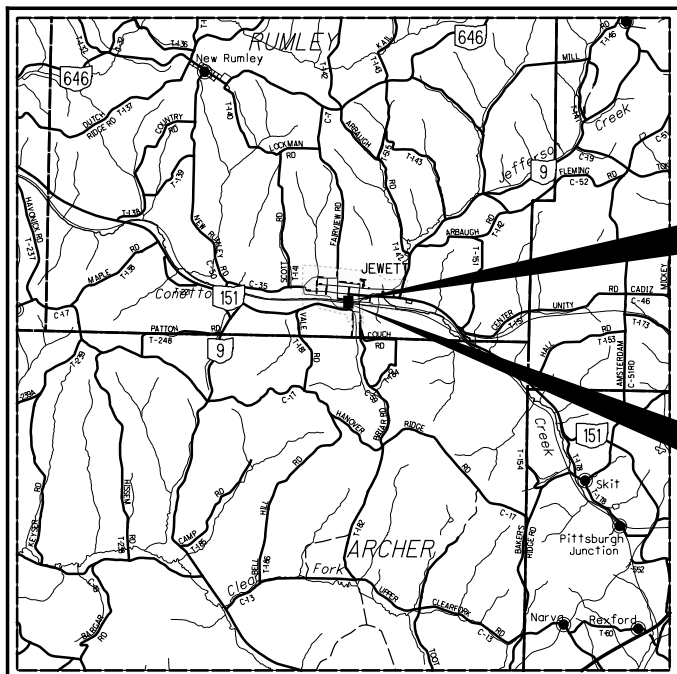
COLUMBUS & OHIO RIVER RAILROAD

PROJECT DESCRIPTION

REPAIR/REHABILITATE BRIDGE HAS-9-1778 (SFN 3400395)
CARRYING S.R. 9 OVER CONOTTON CREEK.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.2 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.2 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)



LOCATION MAP

LATITUDE: 40°22'00" LONGITUDE: 81°00'15"



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

DESIGN DESIGNATION

CURRENT ADT (2022)	2000
DESIGN YEAR ADT (2042)	2200
DESIGN HOURLY VOLUME (2022)	190
DIRECTIONAL DISTRIBUTION	57%
TRUCKS (24 HOUR B&C)	17%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
05 MAJOR COLLECTOR (RURAL)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig



OHIO 811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
CARPENTER MARTY transportation
6612 SINGLETREE DRIVE COLUMBUS, OH 43229
614.856.2424 WWW.CMTRAN.COM

INDEX OF SHEETS:

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ENGINEER'S SEAL:

FOR STRUCTURES OVER 20' SPAN

SIGNED: *Alexander Matthew Reger*
DATE: 05/05/2022

ENGINEER'S SEAL:

FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20' SPAN

SIGNED: *Tony W. Grieshop*
DATE: 05/05/2022

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/21/22	EXJ-5-93	1/19/18	800-2019	4/22/22		
BP-5.1	1/21/22	PSBD-2-07	7/20/18	832	10/19/18		
BP-7.1	1/21/22	TST-1-99	1/15/21	848	1/15/21		
DM-4.3	1/15/16	MT-97.10	4/19/19				
DM-4.4	1/15/16	MT-101.60	1/17/20				
		MT-105.10	1/17/20				
MGS-1.1	7/16/21	MT-110.10	7/19/13				
MGS-2.1	1/19/18						
MGS-3.1	1/19/18	TC-41.20	10/18/13				
		TC-42.20	10/18/13				
RM-4.2	4/17/20	TC-52.10	10/18/13				
		TC-52.20	1/15/21				
AS-1-15	7/17/15	TC-61.30	7/19/19				
AS-2-15	1/18/19						
DBR-3-11	7/15/11						

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 6.

Revised note for detour.

Revised SCD

Revised SS

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

DESIGN AGENCY



DESIGNER

JJL

REVIEWER

TWG 5-4-22

PROJECT ID

114172

SHEET

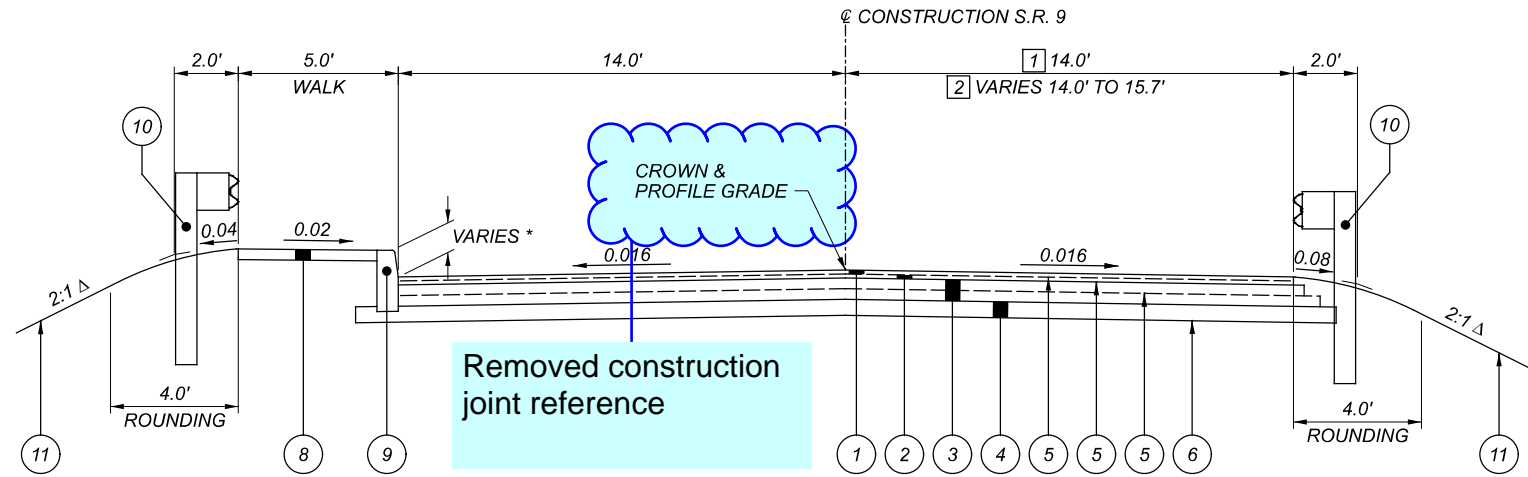
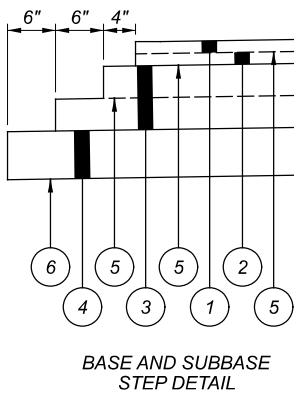
TOTAL

1 | 30

HAS-9-17.78

MODEL: Sheet PAPER: 17x11 (in.) DATE: 5/6/2022 TIME: 1:38:34 PM USER: CMT008
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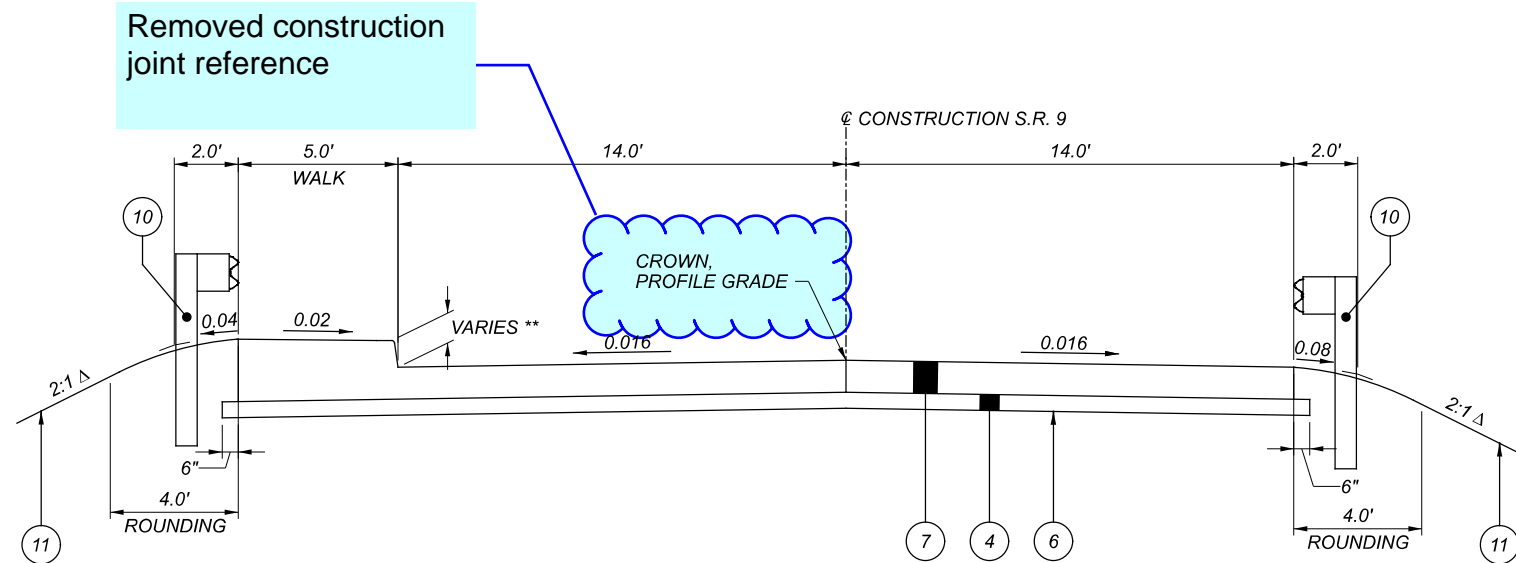
TITLE SHEET



PROPOSED NORMAL SECTION - S.R. 9

SECTION APPLIES

- 1 STA. 3+45.00 TO STA. 3+53.18
- 2 STA. 4+24.20 TO STA. 4+35.00



PROPOSED APPROACH SLAB SECTION - S.R. 9

SECTION APPLIES:

- STA. 3+53.18 TO STA. 3+68.18
- STA. 4+09.20 TO STA. 4+24.20

LEGEND

- 1 ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (PG70-22M)
- 2 ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- 3 ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22, (449)
- 4 ITEM 304 - 6" AGGREGATE BASE
- 5 ITEM 407 - TACK COAT
- 6 ITEM 204 - SUBGRADE COMPACTION
- 7 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12")
- 8 ITEM 608 - 4" CONCRETE WALK
- 9 ITEM 609 - CURB, TYPE 6
- 10 ITEM 606 - GUARDRAIL, TYPE MGS
- 11 ITEM 659 - SEEDING AND MULCHING

- (A) EX. ASPHALT CONCRETE
- (B) EX. 1 3/4" ASPHALT CONCRETE
- (C) EX. 5" BITUMINOUS AGGREGATE BASE
- (D) EX. CURB
- (E) EX. 4" CONCRETE WALK
- (F) EX. GUARDRAIL

NOTES

* TRANSITION CURB HEIGHT 0" TO 9" FROM STA. 3+45.00 TO BEGINNING OF APPROACH SLAB. SEE CURB RAMP DETAILS ON SHEET 8.

** TRANSITION CURB HEIGHT 9" TO 10" FROM STA. 3+53.18 TO STA. 3+68.18.

Δ OR AS SHOWN IN CROSS SECTIONS

DESIGN AGENCY



DESIGNER	JJL
REVIEWER	TWG
PROJECT ID	114172
SHEET	2
TOTAL	30

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 60 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 6. A DISINCENTIVE SHALL BE ASSESSED IN ACCORDANCE WITH C&MS 108.07 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

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.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL TWENTY FOUR HOURS A DAY FOR THE DURATION OF THIS PROJECT. THIS WILL INCLUDE THE FURNISHING, PLACING, MAINTAINING, AND SUBSEQUENTLY REMOVING ALL TRAFFIC CONTROL DEVICES NECESSARY FOR ALL PROPOSED CONSTRUCTION OPERATIONS AFFECTING THE FLOW OF TRAFFIC WITHIN THE LIMITS OF THIS PROJECT.

ACCESS FOR ABUTTING PROPERTY OWNERS SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THESE NOTES AND PLAN SPECIFICATIONS. THE CONTRACTOR SHALL WORK WITH THE PROPERTY OWNERS TO MAINTAIN SPECIAL ACCESS PROVISIONS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD 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.

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

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-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.

SR 9/SR 151 WILL BE
CLOSED MMM-DD
FOR 60 DAYS
INFO: 330-339-6633

W20-H13-60

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

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B	10 CY
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	10 CY
ITEM 616, WATER	10 MGAL.

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

100 FT. BEFORE BEGIN PROJECT AND 100 FT. AFTER END PROJECT

THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES AT LOCATIONS SHOWN ON THE DETOUR SHEET (SHEET 6).

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.

CONOTTON CREEK TRAIL

ACCESS TO THE CONOTTON CREEK TRAIL SHALL BE MAINTAINED AT ALL TIMES.

TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE TRAIL AND THE PUBLIC.

APPROPRIATE SIGNAGE SHALL BE INSTALLED TO ALERT USERS OF THE CONOTTON CREEK TRAIL OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE REQUIRED TO CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT DISTRICT 11 AND THE HARRISON COUNTY ENGINEER: DOUGLAS BACHMAN AT 740-942-8867 PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

PAYMENT FOR SIGNAGE AND FENCING SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

WORK ZONE MARKINGS

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

ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT	0.02 MILE
ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	0.04 MILE

DUST CONTROL

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

ITEM 616, WATER	1 MGAL.
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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 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 DRIVEABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER

NOTIFICATION TIME TABLE

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 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF 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.

DROP OFFS IN WORKZONE ADJACENT TO RAILROAD PROPERTY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PROTECTION AS APPROVED BY THE ENGINEER DURING ANY POINT THERE IS A DROP OFF EXCEEDING THE REQUIREMENTS OF MT-101.90 ON RAILROAD PROPERTY.

PAYMENT FOR THE PROTECTION SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON SHEET NO. 6. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (PG70-22M)	10 CU. YD.
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ITEM 407, TACK COAT	15 GAL.
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ITEM 617, COMPACTED AGGREGATE	15 CU. YD.
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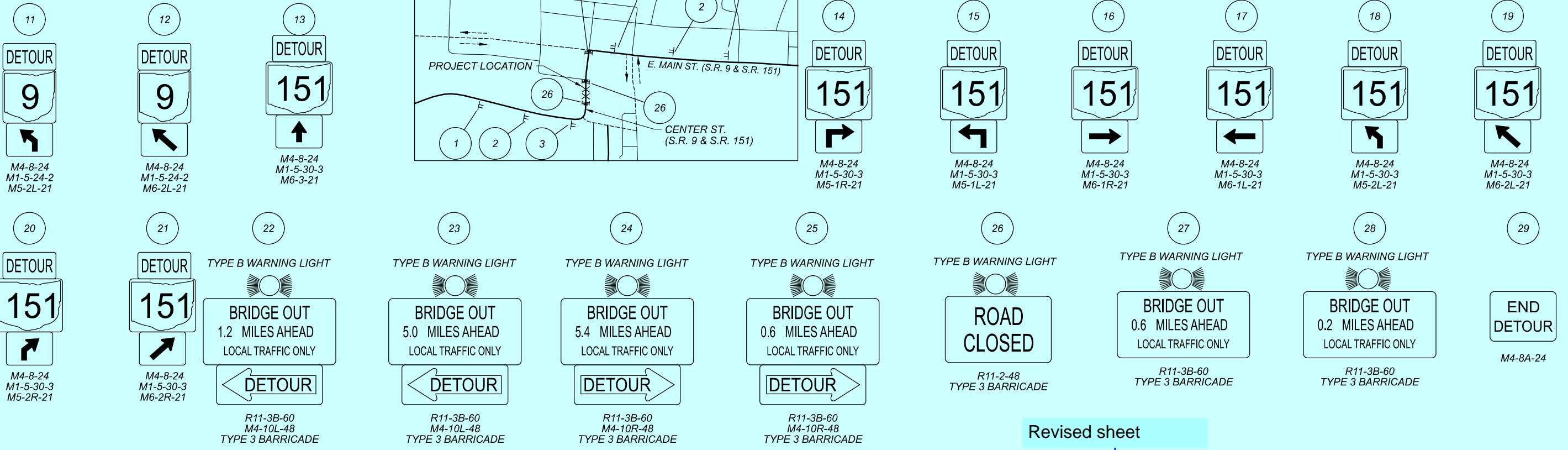
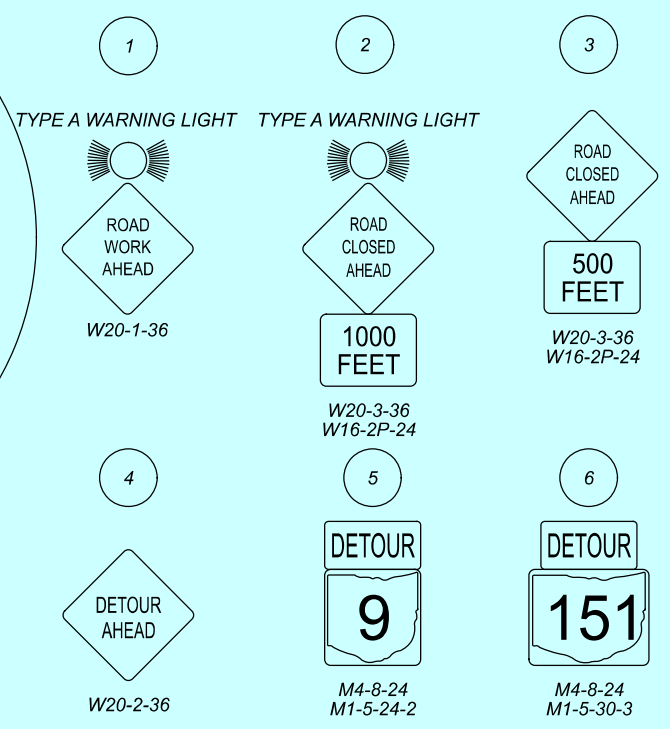
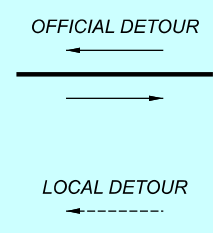
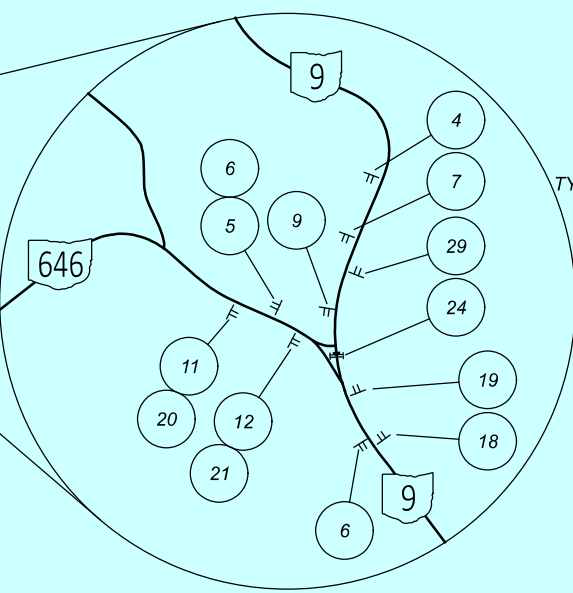
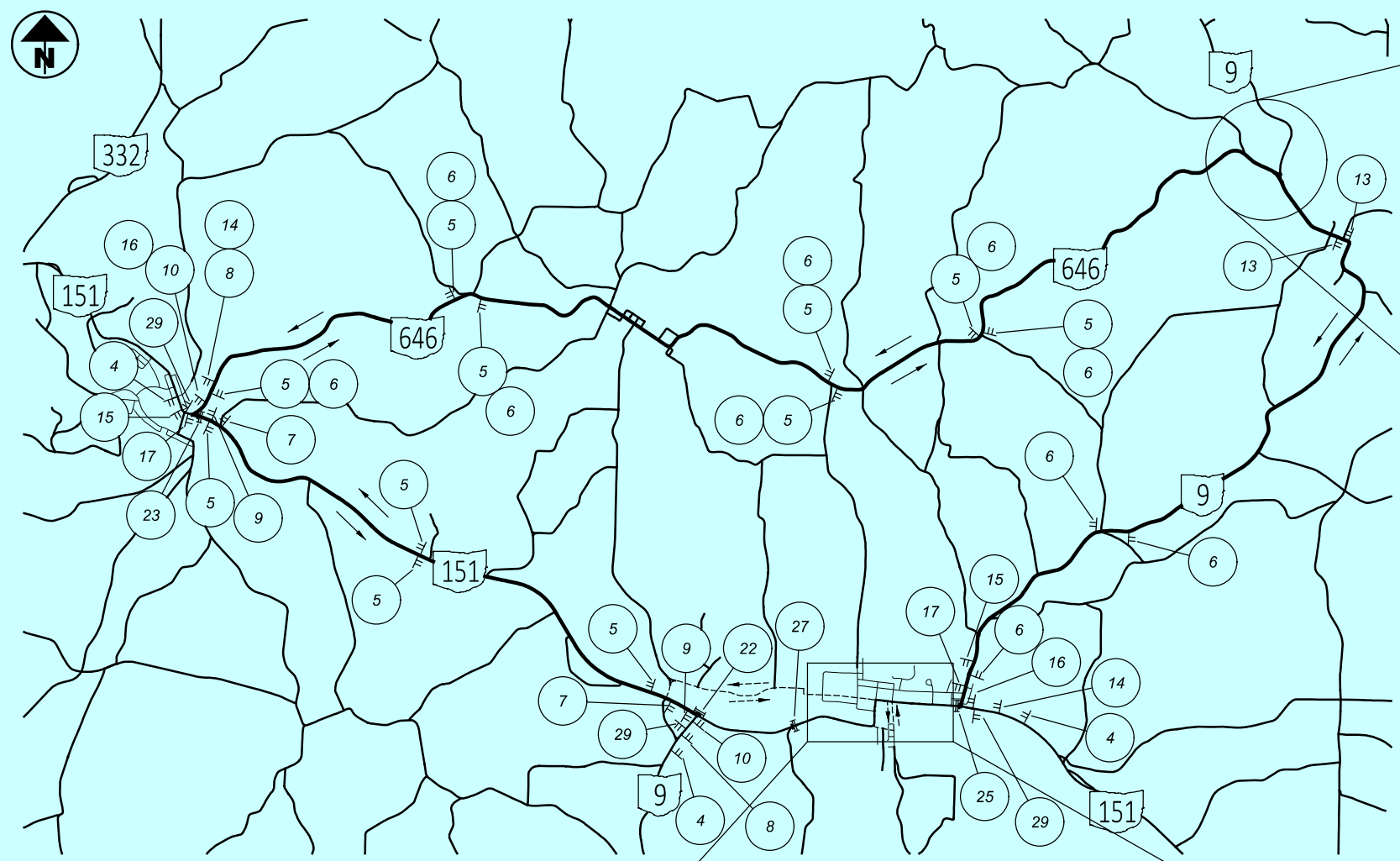
ITEM 617, WATER	1 M GAL.
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ITEM 614, DETOUR SIGNING

THE CONTRACTOR SHALL PROVIDE THE DETOUR SIGNING AS SHOWN ON SHEET 6. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT FOR ITEM 614 - DETOUR SIGNING.

DETOUR SIGNS	
CODE	TOTAL
	EACH
M1-5-24-2	24
M1-5-30-3	26
M4-8-24	50
M4-8A-24	4
M4-10L-48	2
M4-10R-48	2
M5-1L-21	4
M5-1R-21	5
M5-2L-21	2
M5-2R-21	1
M6-1L-21	4
M6-1R-21	5
M6-2L-21	2
M6-2R-21	1
M6-3-21	2
R11-2-48	4
R-11-3B-60	6
W16-2P-24	4
W20-1-36	2
W20-2-36	4
W20-3-36	4

Revised sheet




MAINTENANCE OF TRAFFIC
DETOUR PLAN - S.R. 9 AND S.R. 151

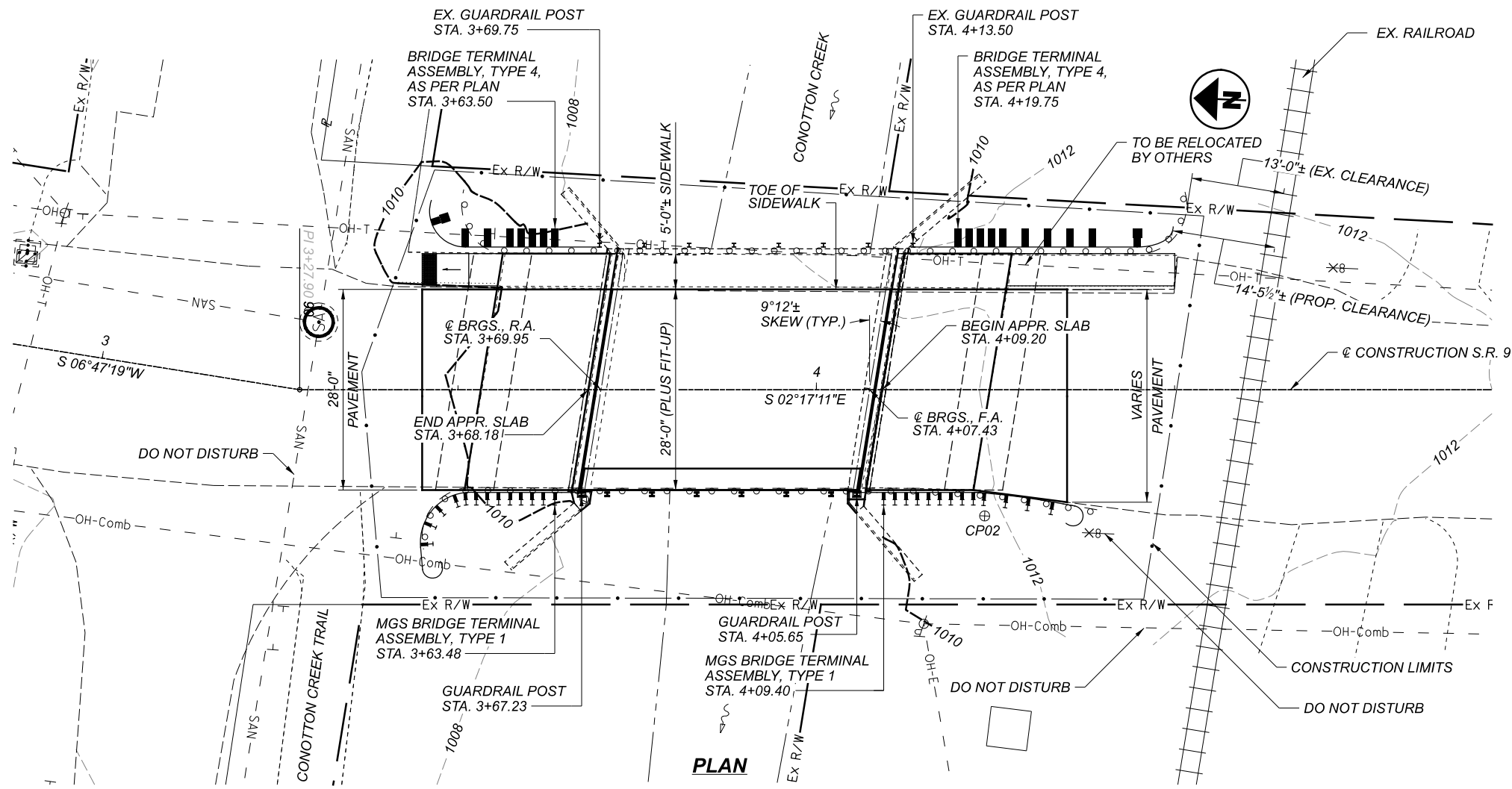
DESIGN AGENCY	CARPENTER MARTY
DESIGNER	JJL
REVIEWER	TWC 5-4-22
PROJECT ID	114172
SHEET	TOTAL
6	30

Revised sheet

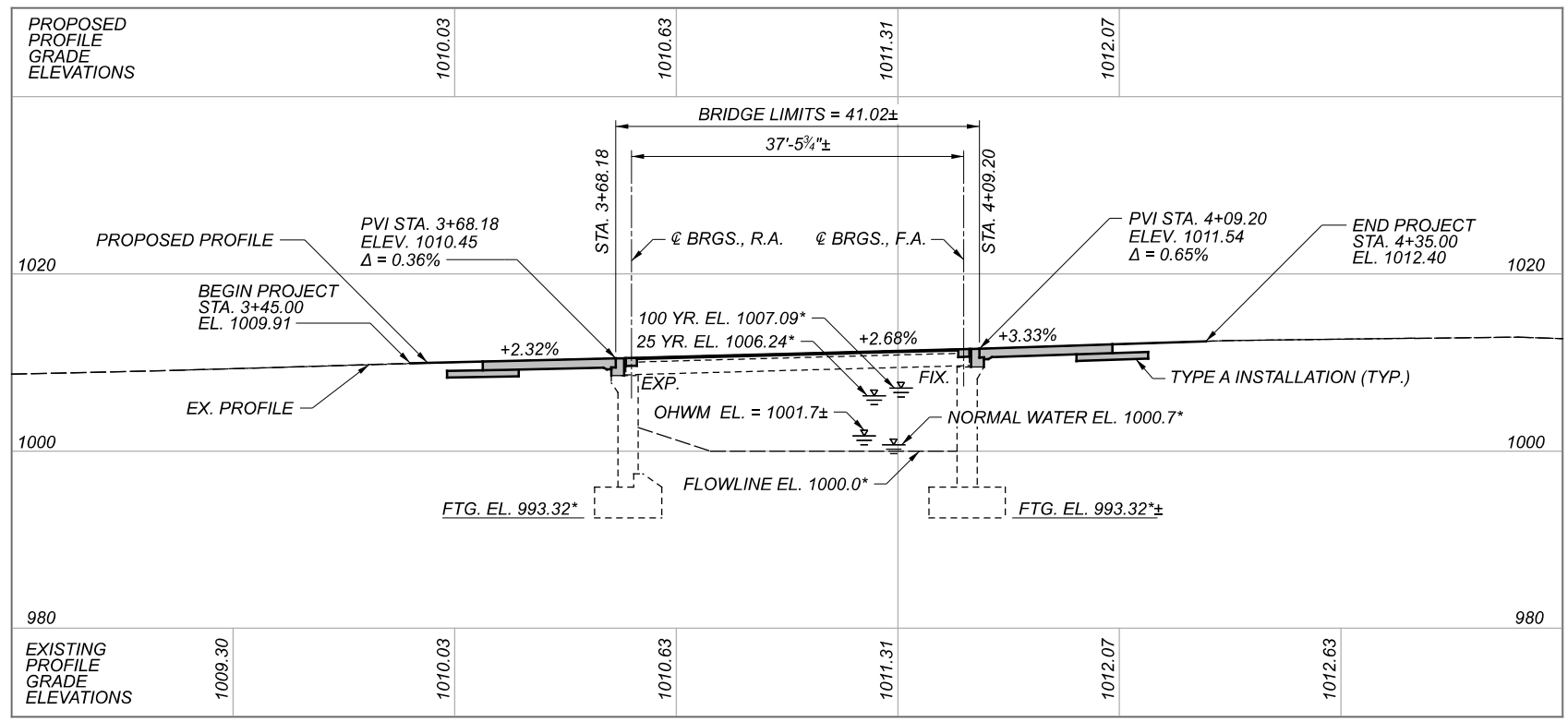
SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	
							4	5	9	12	OFFICE CALCS	01/NHS/BR		EXT	TOTAL					
							LS						LS	201	11000	LS			ROADWAY	
												60	60	202	23000	60	SY		CLEARING AND GRUBBING	
													153	202	30000	153	SF		PAVEMENT REMOVED	
													34	202	32000	34	FT		WALK REMOVED	
													124	202	38000	124	FT		CURB REMOVED	
																			GUARDRAIL REMOVED	
													51	203	10000	51	CY		EXCAVATION	
													1	203	20000	1	CY		EMBANKMENT	
												184	184	204	10000	184	SY		SUBGRADE COMPACTION	
													4	606	20050	4	EACH		ROUNDED END SECTION	
													2	606	35002	2	EACH		MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
													2	606	35141	2	EACH		BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	4
													124	608	10000	124	SF		4" CONCRETE WALK	
													29	608	52000	29	SF		CURB RAMP	
																			EROSION CONTROL	
							2						2	659	00100	2	EACH		SOIL ANALYSIS TEST	
							8						8	659	00300	8	CY		TOPSOIL	
													76	659	10000	76	SY		SEEDING AND MULCHING	
							4						4	659	14000	4	SY		REPAIR SEEDING AND MULCHING	
							0.01						0.01	659	20000	0.01	TON		COMMERCIAL FERTILIZER	
							0.02						0.02	659	31000	0.02	ACRE		LIME	
							1						1	659	35000	1	MGAL		WATER	
													1,000	832	30000	1,000	EACH		EROSION CONTROL	
																			PAVEMENT	
													14	301	56000	14	CY		ASPHALT CONCRETE BASE, PG64-22, (449)	
													30	304	20000	30	CY		AGGREGATE BASE	
													12	407	10000	12	GAL		TACK COAT	
													2	441	70101	2	CY		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (PG70-22M)	4
													3	441	70300	3	CY		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
													32	609	26000	32	FT		CURB, TYPE 6	
																			TRAFFIC CONTROL	
													6	626	00110	6	EACH		BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	
													14	630	03100	14	FT		GROUND MOUNTED SUPPORT, NO. 3 POST	
													1	630	85100	1	EACH		REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
													1	630	86002	1	EACH		REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
													0.04	646	10010	0.04	MILE		EDGE LINE, 6"	
													0.02	646	10200	0.02	MILE		CENTER LINE	
																			STRUCTURE OVER 20 FOOT SPAN (HAS-00009-17.780)	19
																			MAINTENANCE OF TRAFFIC	
													15	407	10000	15	GAL		TACK COAT	
													10	441	70101	10	CY		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (PG70-22M)	4
													10	410	12000	10	CY		TRAFFIC COMPACTED SURFACE, TYPE A OR B	
													LS	614	12420	LS			DETOUR SIGNING	
													10	614	13000	10	CY		ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
													0.02	614	21550	0.02	MILE		WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
													0.04	614	22360	0.04	MILE		WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
													1	616	10000	1	MGAL		WATER	
													15	617	10100	15	CY		COMPACTED AGGREGATE	
													1	617	25000	1	MGAL		WATER	
																			INCIDENTALS	
							LS						LS	614	11000	LS			MAINTAINING TRAFFIC	
													5	619	16000	5	MNTH		FIELD OFFICE, TYPE A	
													LS	623	10000	LS			CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS			MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

 DESIGNER: JLL
 REVIEWER: TWG 5-4-22
 PROJECT ID: 114172
 SHEET TOTAL: 7 | 30



PLAN



PROFILE ALONG $\text{\textcircled{C}}$ CONSTRUCTION S.R. 9

BENCHMARK DATA

CP01 STA.	8+50.44,	ELEV.	1007.98,	OFFSET	10.51,	RT.
CP02 STA.	4+23.49,	ELEV.	1012.47,	OFFSET	17.62',	RT.
CP03 STA.	0+03.79,	ELEV.	1014.08,	OFFSET	16.49,	LT.

FOR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLAN SHEET 4/30.

NOTES

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
- DESIGN TRAFFIC:
 2022 ADT = 2000 2022 ADTT = 340
 2042 ADT = 2200 2042 ADTT = 374
 DIRECTIONAL DISTRIBUTION = 0.57

LEGEND

- * - FROM EXISTING PLANS
- \oplus - BENCHMARK

Removed phase construction dimensions

HYDRAULIC DATA (FROM EX. PLANS)

DRAINAGE AREA = 11.72 SQ. MILES
 Q (25) = 1180 CFS V (25) = 8.23 FT/S
 Q (100) = 1610 CFS V (100) = 9.31 FT/S
 STRUCTURE CLEARS THE 25 YEAR DESIGN HW BY 5.18 FEET.

EXISTING STRUCTURE

TYPE: COMPOSITE PRESTRESSED CONCRETE BEAMS WITH REINFORCED CONCRETE SUBSTRUCTURE
 SPAN: 37'-5 $\frac{3}{4}$ "± C/C BRGS.
 ROADWAY: 28'-0"± WITH 5'-0"± SIDEWALK LEFT SIDE
 VEHICULAR LIVE LOAD: HS20-44 & ALTERNATE MILITARY
 SKEW: 9°12'± L.F.
 WEARING SURFACE: MONOLITHIC CONCRETE (5 $\frac{1}{2}$ "± MIN.)
 APPROACH SLABS: AS-1-81 (15'-0"± LONG, 1'-0"± THICK)
 ALIGNMENT: TANGENT
 CROWN: 0.016± FT/FT
 STRUCTURE FILE NUMBER: 3400395
 DATE BUILT: 1931 REHABILITATED: 1992
 DISPOSITION: TO BE REHABILITATED

PROPOSED STRUCTURE

PROPOSED WORK: REPLACE FASCIA BEAM AND INSTALL TST-1-99 RAILING RIGHT SIDE. RETROFIT DBR RAILING LEFT SIDE. INSTALL 1 $\frac{1}{2}$ " MICRO-SILICA MODIFIED CONCRETE OVERLAY. REPLACE EXPANSION JOINTS AND PORTIONS OF ABUTMENTS. INSTALL NEW APPROACH SLABS.
 SPAN: 37'-5 $\frac{3}{4}$ "± C/C BRGS.
 ROADWAY: 28'-0"± WITH 5'-0"± SIDEWALK LEFT SIDE
 VEHICULAR LIVE LOAD (PROPOSED WORK): HL93
 SKEW: 9°12'± L.F.
 WEARING SURFACE: 1 $\frac{1}{2}$ " MICRO-SILICA OVERLAY
 APPROACH SLABS: 15'-0" LONG, 1'-0" THICK (AS-1-15, AS-2-15 TYPE A)
 ALIGNMENT: TANGENT
 CROWN: 0.016± FT/FT
 COORDINATES: LATITUDE: 40°21'58.68" N
 LONGITUDE: 81°00'13.39" W
 DECK AREA: 1381 SF

SITE PLAN
 BRIDGE NO. HAS-0009-17.78
 OVER CONNOTTON CREEK

DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	TOTAL
1	14
SHEET	TOTAL
17	30

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

- AS-1-15 REVISED 7-17-2015
- AS-2-15 REVISED 1-18-2019
- DBR-3-11 DATED 7-15-2011
- EXJ-5-93 REVISED 1-19-2018
- PSBD-2-07 REVISED 7-20-2018
- TST-1-99 REVISED 1-15-2021

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

848 DATED 1-15-2021

DESIGN SPECIFICATIONS

WORK PERFORMED ON THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

CONCRETE FOR PRESTRESSED BEAMS:
 COMPRESSIVE STRENGTH (FINAL) - 5.5 KSI
 COMPRESSIVE STRENGTH (RELEASE) - 4.0 KSI

PRESTRESSING STRAND:
 AREA = 0.167 IN²
 ULTIMATE STRENGTH = 270 KSI
 INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

VEHICULAR LIVE LOAD: HL-93 (PROPOSED WORK)

HS20-44 AND ALTERNATE MILITARY LOADING (EXISTING STRUCTURE)

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

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

DECK REMOVALS - COMPOSITE DECK DESIGNS - PRESTRESSED SUPERSTRUCTURES: DUE TO THE PRESENCE OF COMPOSITE REINFORCING STEEL BETWEEN THE DECK AND THE PRESTRESSED BEAM FLANGES, SUBMIT A DETAILED PROCEDURE OF THE DECK REMOVAL TO THE ENGINEER AT LEAST 7 DAYS BEFORE CONSTRUCTION BEGINS. DEPARTMENT ACCEPTANCE IS NOT REQUIRED. THE PROCEDURE SHALL INCLUDE ALL DETAILS, EQUIPMENT AND METHODS OF REMOVAL OVER THE PRESTRESSED BEAMS AND AROUND THE COMPOSITE REINFORCING STEEL. REPLACE OR REPAIR PRESTRESSED MEMBERS AND COMPOSITE REINFORCING DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

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.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL BE MORE THAN 35 POUND FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202-PORCTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON 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.

BEARING PAD SHIMS

PLACE 1/8" THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 6 INCHES BY 12 INCHES, UNDER THE ELASTOMERIC BEARING PADS WHERE REQUIRED FOR PROPER BEARING. FURNISH TWO SHIMS PER BEAM. THE DEPARTMENT WILL MEASURE THIS ITEM BY THE TOTAL NUMBER SUPPLIED. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516 - 1/8" PREFORMED BEARING PADS. ANY UNUSED SHIMS WILL BECOME THE PROPERTY OF THE STATE.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN:

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW REINFORCING STEEL OF THE SAME SIZE AND COATING AT NO COST TO THE DEPARTMENT.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

FOR SEALED SIDEWALKS, INTEGRATE 1 1/2 LBS PER SQUARE YARD OF SILICA SAND INTO THE SURFACE OF THE SECOND COAT TO PRODUCE A NONSKID SURFACE SATISFACTORY TO THE ENGINEER.

ITEM 519 - PATCHING CONCRETE STRUCTURES, 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.

PROPOSED WORK

1. REPLACE RIGHT FASCIA BOX BEAM WITH A NEW BEAM.
2. INSTALL TWIN STEEL TUBE RAILING ALONG THE RIGHT SIDE ONLY AND RETROFIT EXISTING DEEP BEAM RAILING ON THE LEFT SIDE.
3. REMOVE 1 1/2" OF EXISTING DECK USING HYDRODEMOLITION AND PLACE 1 1/2" MICRO SILICA CONCRETE OVERLAY.
4. REPLACE BACKWALLS.
5. REPLACE EXPANSION JOINTS.
6. REPLACE APPROACH SLABS.

ASBESTOS SURVEY

AN ASBESTOS SURVEY FOR HAS-00009-17.780 SCHEDULED FOR DEMOLITION WORK WAS CONDUCTED BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. A COPY OF THE ASBESTOS INSPECTION REPORT FOR THE STRUCTURE IS INCLUDED IN THE PLAN PACKAGE FOR THIS PROJECT. THE ASBESTOS INSPECTION REPORT DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ABOVE REGULATORY LIMITS.

DISPOSE ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE OHIO DEPARTMENT OF HEALTH AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. THE REMOVAL AND DISPOSAL OF ALL ASBESTOS CONTAINING MATERIAL MUST COMPLY WITH THE OHIO ADMINISTRATIVE CODE (OAC) REGULATIONS AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHA) STANDARD FOR ASBESTOS.

ELECTRONIC SUBMISSION:

SUBMIT A COMPLETED ELECTRONIC NOTIFICATION OF DEMOLITION AND RENOVATION FORM (NDRF), APPLICABLE FEES, AND THE ASBESTOS INSPECTION REPORT TO THE OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH. SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT USING THE OEPA EBUSINESS CENTER. SUBMIT ONE ELECTRONIC PDF COPY AND ONE HARD COPY OF THE NDRF TO THE ENGINEER. THE ENGINEER WILL PROVIDE ONE COPY TO THE DISTRICT ENVIRONMENTAL STAFF.

HARD COPY SUBMISSION:

THE CONTRACTOR MAY SUBMIT A HARD COPY OF THE COMPLETED NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT. FOLLOW THE MAILING INSTRUCTIONS ON THE NDRF. CHECK WITH LOCAL HEALTH DEPARTMENT TO DETERMINE IF THEY REQUIRE A HARD COPY SUBMITTAL.

SUBMIT THE COMPLETED NDRF TO OEPA AT LEAST 10 DAYS PRIOR TO DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH. RETAIN TWO HARD COPIES OF THE NDRF AND SUBMIT ONE COPY TO THE ENGINEER AND ONE COPY TO THE ODOT DISTRICT ENVIRONMENTAL COORDINATOR AT: THOMAS.STRATTON@DOT.OHIO.GOV.

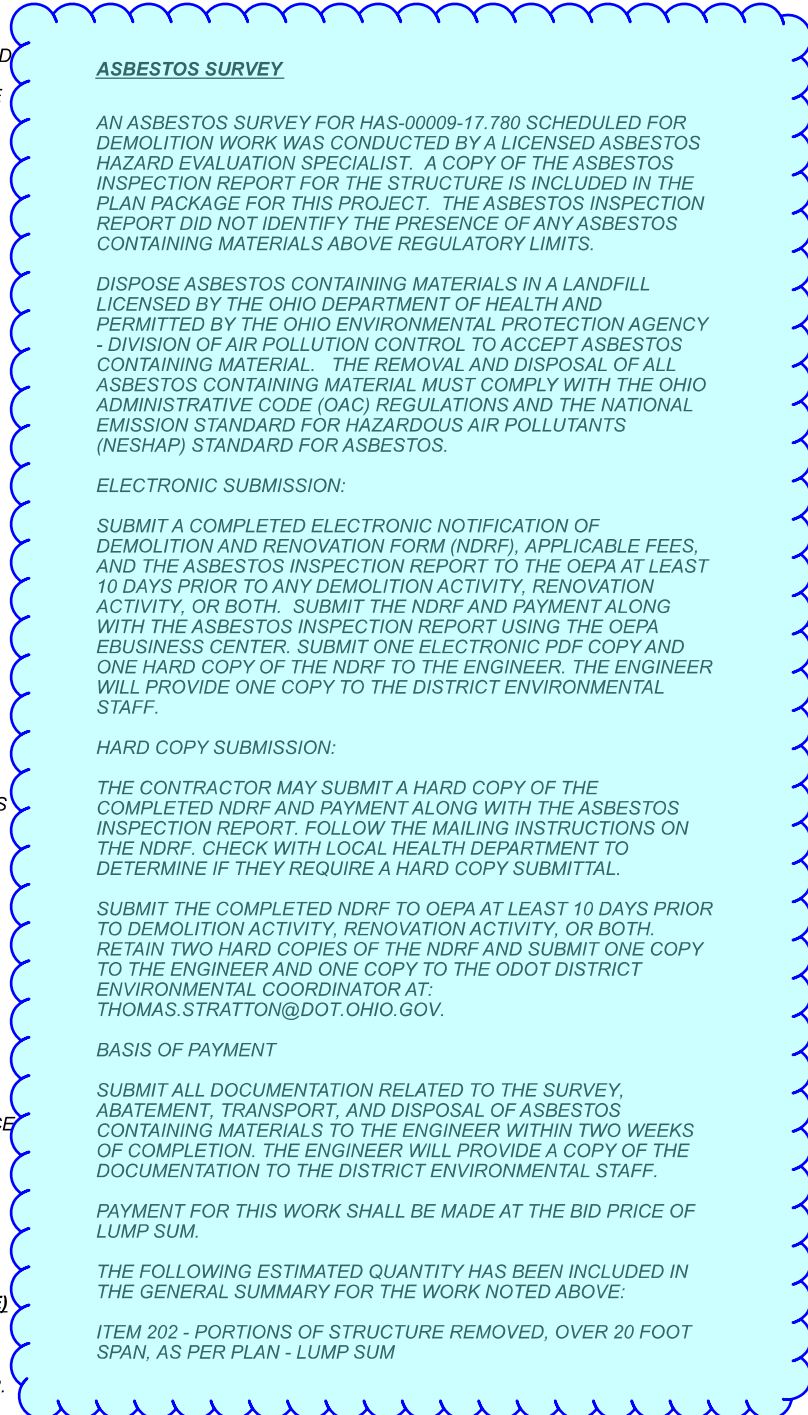
BASIS OF PAYMENT

SUBMIT ALL DOCUMENTATION RELATED TO THE SURVEY, ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS TO THE ENGINEER WITHIN TWO WEEKS OF COMPLETION. THE ENGINEER WILL PROVIDE A COPY OF THE DOCUMENTATION TO THE DISTRICT ENVIRONMENTAL STAFF.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE BID PRICE OF LUMP SUM.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

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



Added note


SFN	3400395
DESIGNER	CARPENTER MARTY
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	TOTAL
2	14
SHEET	TOTAL
18	30

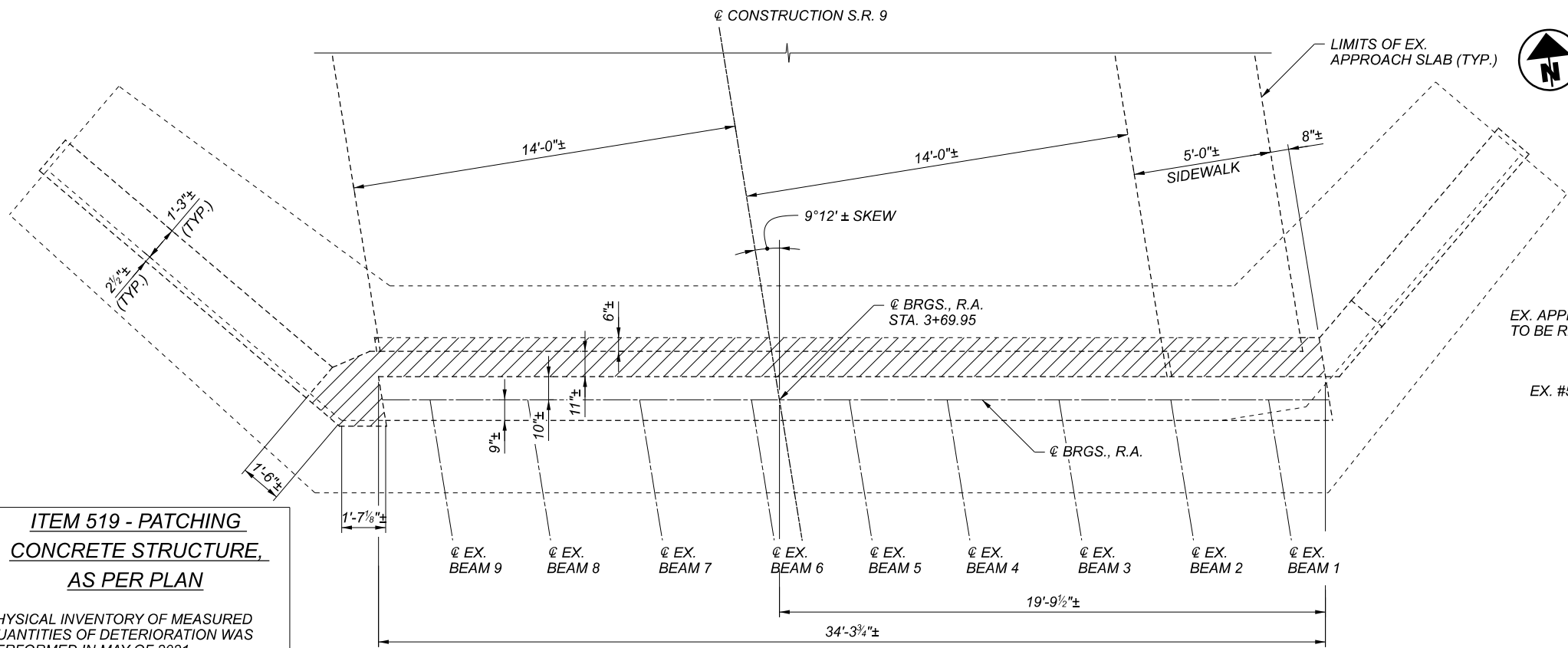
ESTIMATED QUANTITIES						DESIGN: AMR DATE: 4/21/2022		CHECK: JMV DATE: 4/21/2022	
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	SUPER.	GEN.	SHEET #	
202	11203	LS	-	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LS	2	
202	22900	110	SY	APPROACH SLAB REMOVED			110		
503	21300	LS	-	UNCLASSIFIED EXCAVATION		LS			
509	10000	1452	LB	EPOXY COATED REINFORCING STEEL	1087	365			
509	20000	448	LB	REINFORCING STEEL REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	309	139		2	
511	31610	6	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE		6			
511	45710	8	CY	CLASS QC1 CONCRETE, ABUTMENT	8				
512	10100	155	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	107	48			
512	33000	29	SY	TYPE 2 WATERPROOFING	29				
515	12021	1	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-36, AS PER PLAN (LENGTH = 38'-6")		1		9	
516	11211	69	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN		69		8	
516	13600	7	SF	1" PREFORMED EXPANSION JOINT FILLER	7				
516	41100	2	EACH	1/8" PREFORMED BEARING PAD		2			
516	43100	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (6" X 12" X 1" THICK)		4			
517	70000	44	FT	RAILING (TWIN STEEL TUBE)		44			
517	75601	44	FT	DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN		44		12	
518	21200	8	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	8				
519	11101	29	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	29			2	
526	10000	110	SY	REINFORCED CONCRETE APPROACH SLABS (T=12")			110		
526	90010	67	FT	TYPE A INSTALLATION			67		
848	10000	120	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (T = 1 1/2")		120			
848	20000	103	SY	SURFACE PREPARATION USING HYDRODEMOLITION		103			
848	30000	5	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY		5			
848	50000	10	SY	HAND CHIPPING		10			
848	50100	LS	-	TEST SLAB		LS			

Updated quantity

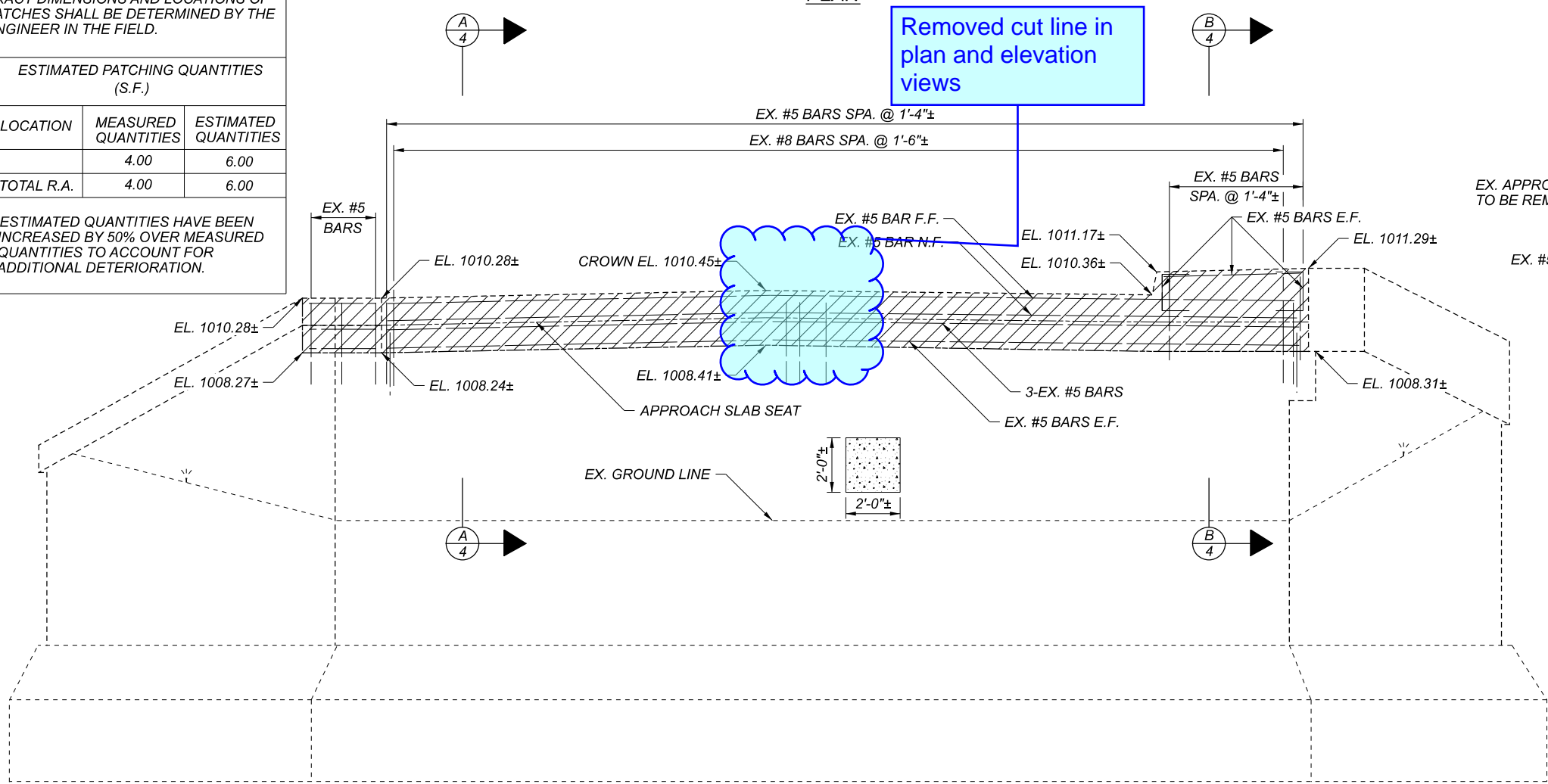
Removed item No. 512E10300 and revised Type 2 Waterproofing item

ESTIMATED QUANTITIES
 BRIDGE NO. HAS-0009-17.780
 OVER CONOTTON CREEK

SFN	3400395
DESIGN AGENCY	
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
DATE	1-3-2022
PROJECT ID	114172
SUBSET	TOTAL
3	14
SHEET	TOTAL
19	30



PLAN



ELEVATION

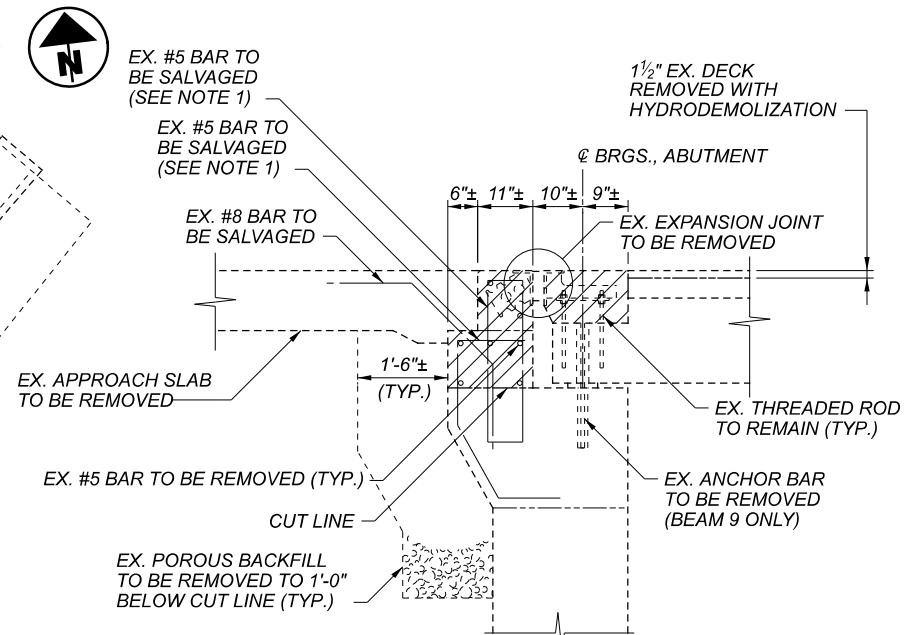
ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETEIORATION WAS PERFORMED IN MAY OF 2021.

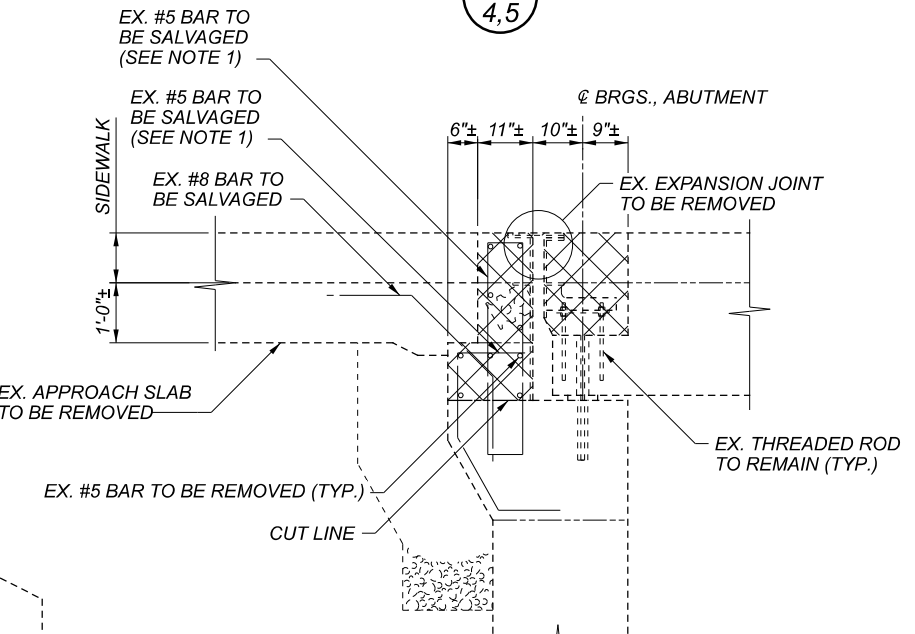
EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ESTIMATED PATCHING QUANTITIES (S.F.)		
LOCATION	MEASURED QUANTITIES	ESTIMATED QUANTITIES
	4.00	6.00
TOTAL R.A.	4.00	6.00

*- ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETEIORATION.



A SECTION 4,5



B SECTION 4,5

NOTES

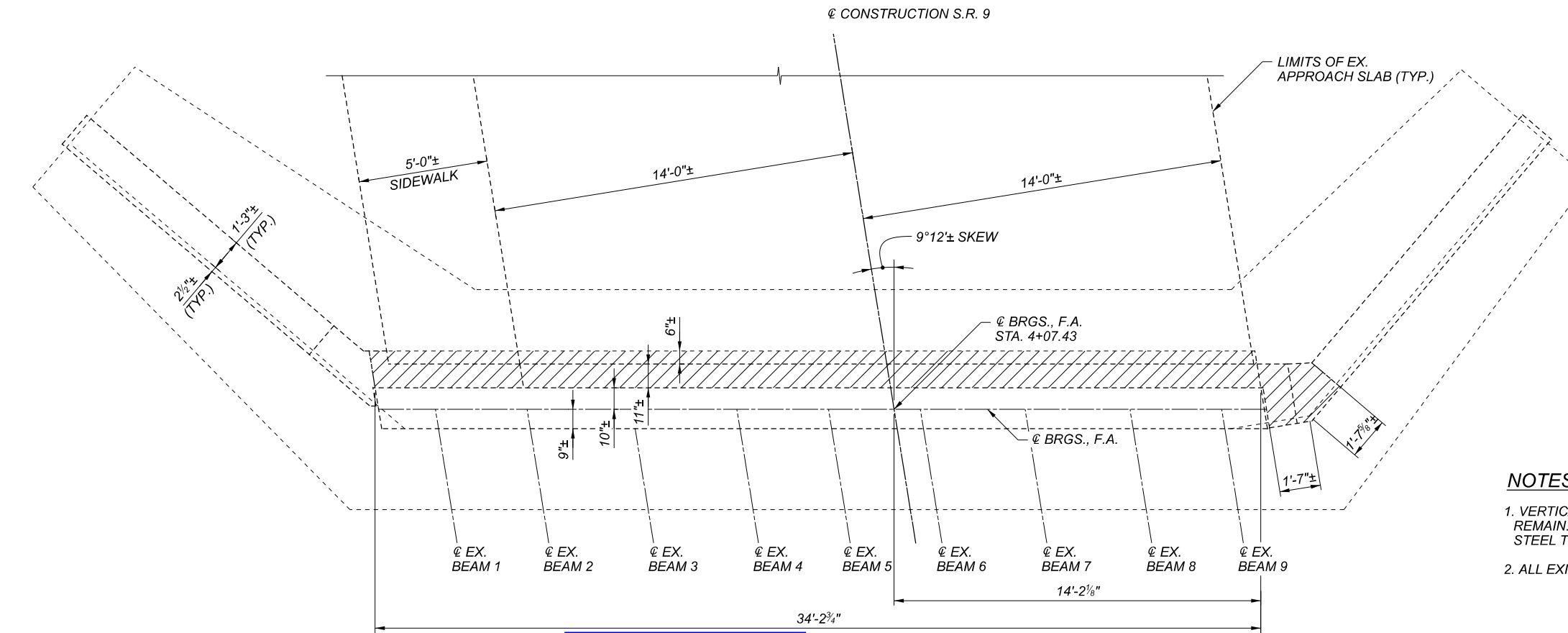
1. VERTICAL PORTION OF EXISTING VERTICAL REINFORCING STEEL TO REMAIN. HORIZONTAL PORTION OF EXISTING VERTICAL REINFORCING STEEL TO BE REMOVED.
2. ALL EXISTING HORIZONTAL REINFORCING STEEL TO BE REMOVED.
3. REMOVAL OF EXISTING POROUS BACKFILL SHALL BE INCLUDED FOR PAYMENT WITH ITEM 518, POROUS BACKFILL WITH GEOTEXTILE FABRIC.

LEGEND

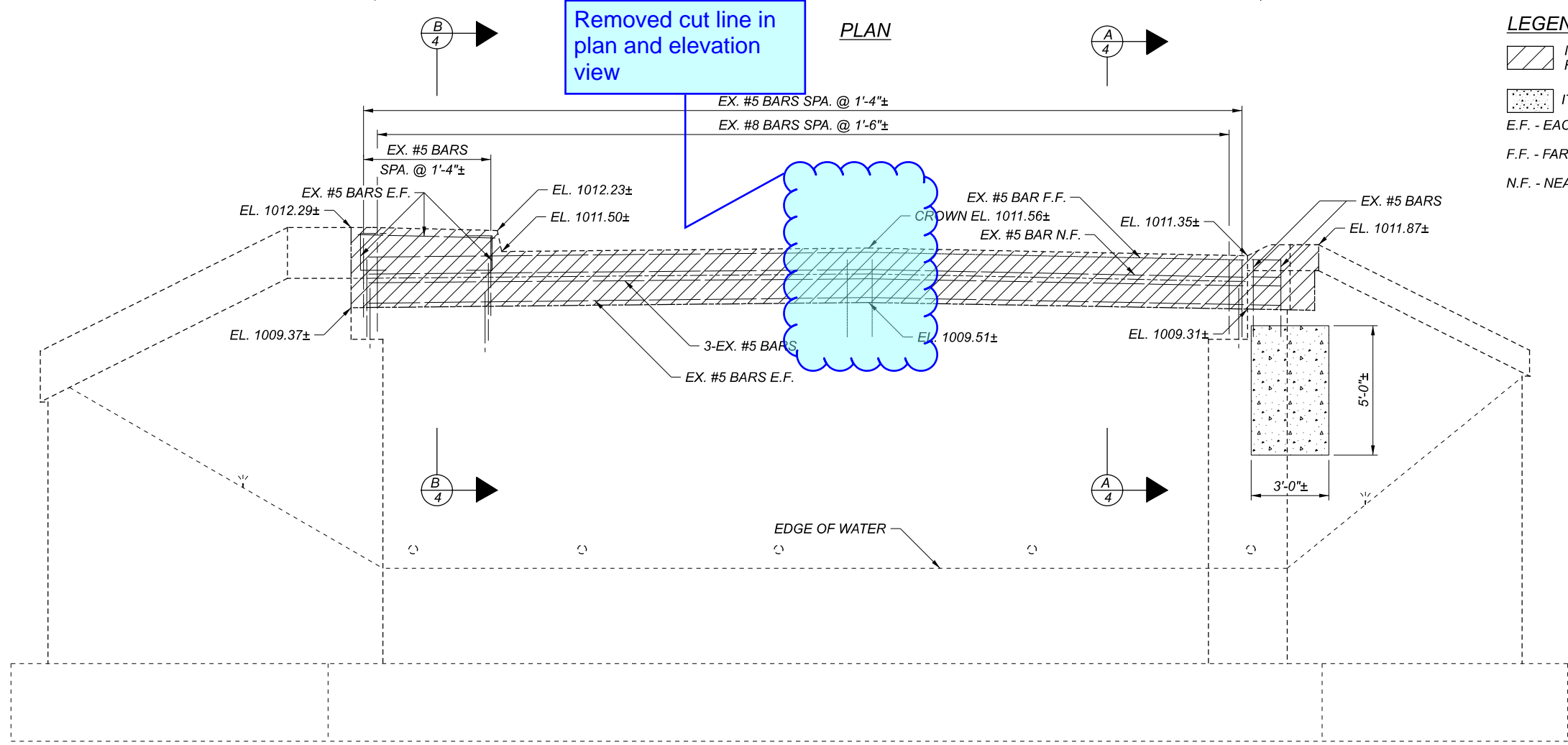
- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN
- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE

REAR ABUTMENT REMOVAL DETAILS
 BRIDGE NO. HAS-0009-17.780
 OVER CONOTTON CREEK

SFN	3400395
DESIGN AGENCY	CARPENTER MARTY
DESIGNER/CHECKER	JMV / AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	4 / 14
SHEET	20 / 30



PLAN



ELEVATION



NOTES

1. VERTICAL PORTION OF EXISTING VERTICAL REINFORCING STEEL TO REMAIN. HORIZONTAL PORTION OF EXISTING VERTICAL REINFORCING STEEL TO BE REMOVED.
2. ALL EXISTING HORIZONTAL REINFORCING STEEL TO BE REMOVED.

LEGEND

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN
- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE

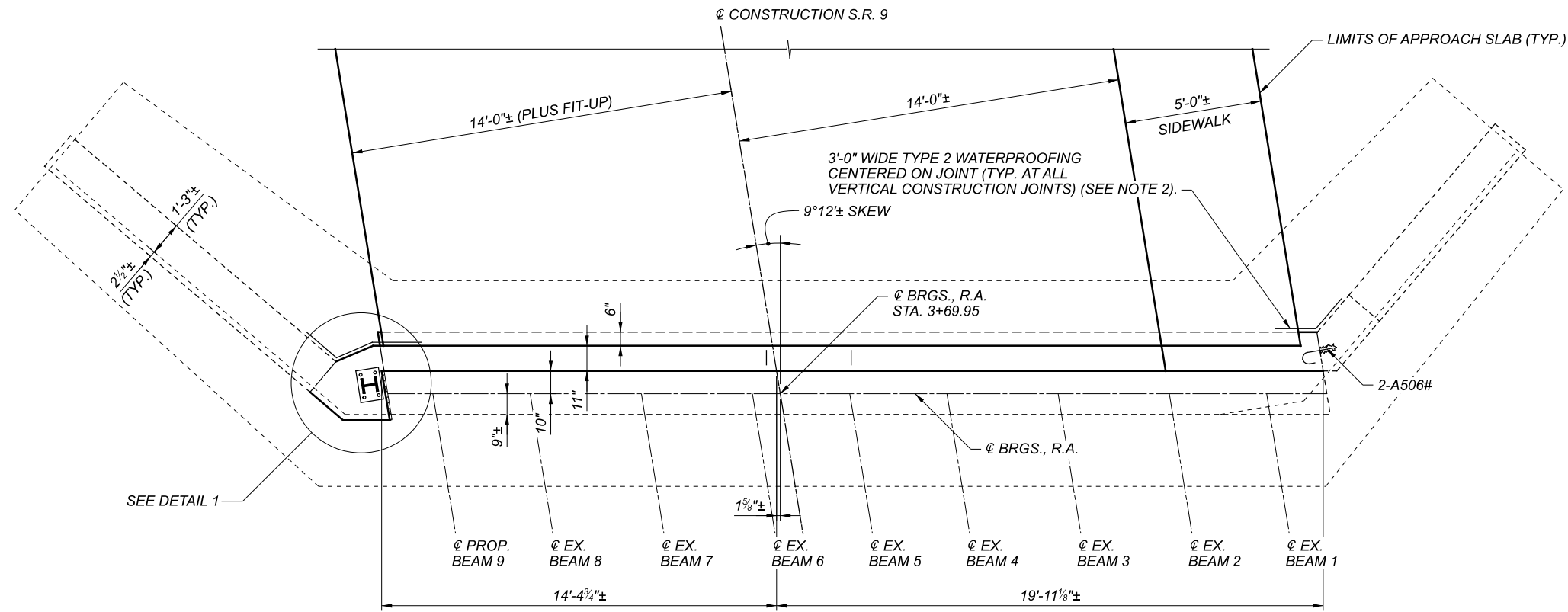
ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN MAY OF 2021.

EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

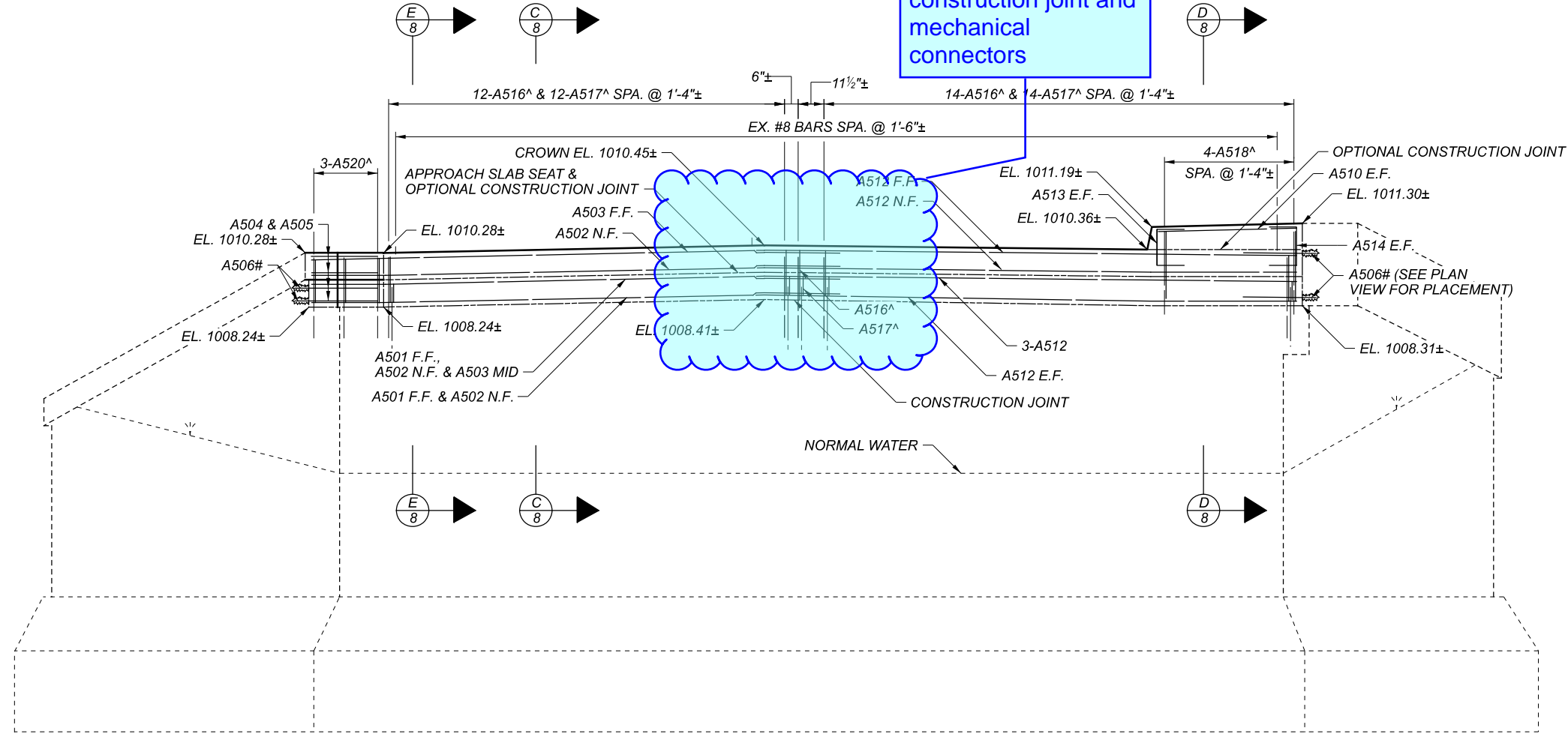
ESTIMATED PATCHING QUANTITIES (S.F.)		
LOCATION	MEASURED QUANTITIES	ESTIMATED QUANTITIES
	15.00	22.50
TOTAL R.A.	15.00	22.50

*- ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ACCOUNT FOR ADDITIONAL DETERIORATION.



PLAN

Removed construction joint and mechanical connectors



ELEVATION

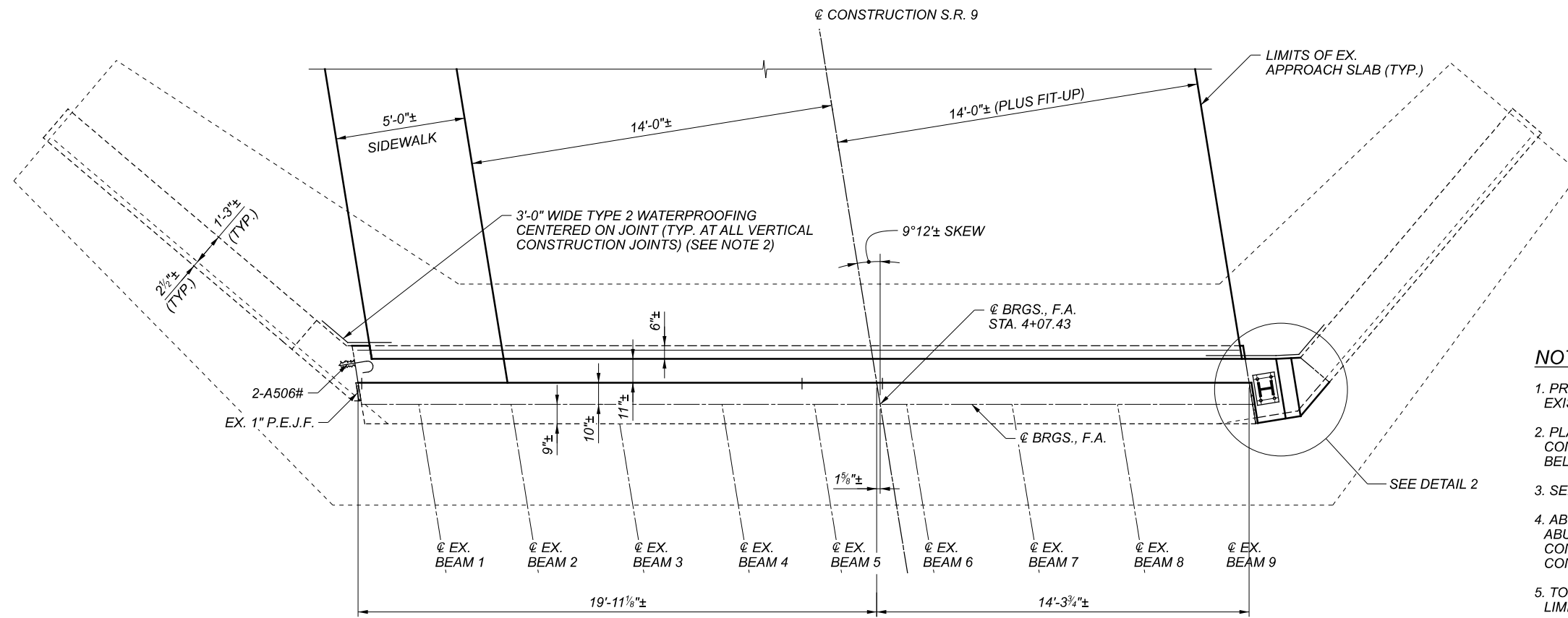
NOTES

1. PROPOSED ELEVATIONS SHALL MATCH FIELD VERIFIED EXISTING ELEVATIONS.
2. PLACE WATERPROOFING AT VERTICAL CONSTRUCTION JOINTS ON THE BACKSIDE FROM 1'-0" BELOW CUT LINE TO THE APPROACH SLAB SEAT.
3. SEE SHEET 8/14 FOR DETAIL 1.
4. ABUTMENT CONCRETE: DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAM HAS BEEN ERECTED.
5. TOP OF BACKWALL ELEVATIONS GIVEN AT BRIDGE LIMITS.
6. MINIMUM EMBEDMENT DEPTH FOR DOWEL BARS: #5 BARS = 8 INCHES
7. MINIMUM LAP LENGTH: #5 BARS = 37 INCHES

LEGEND

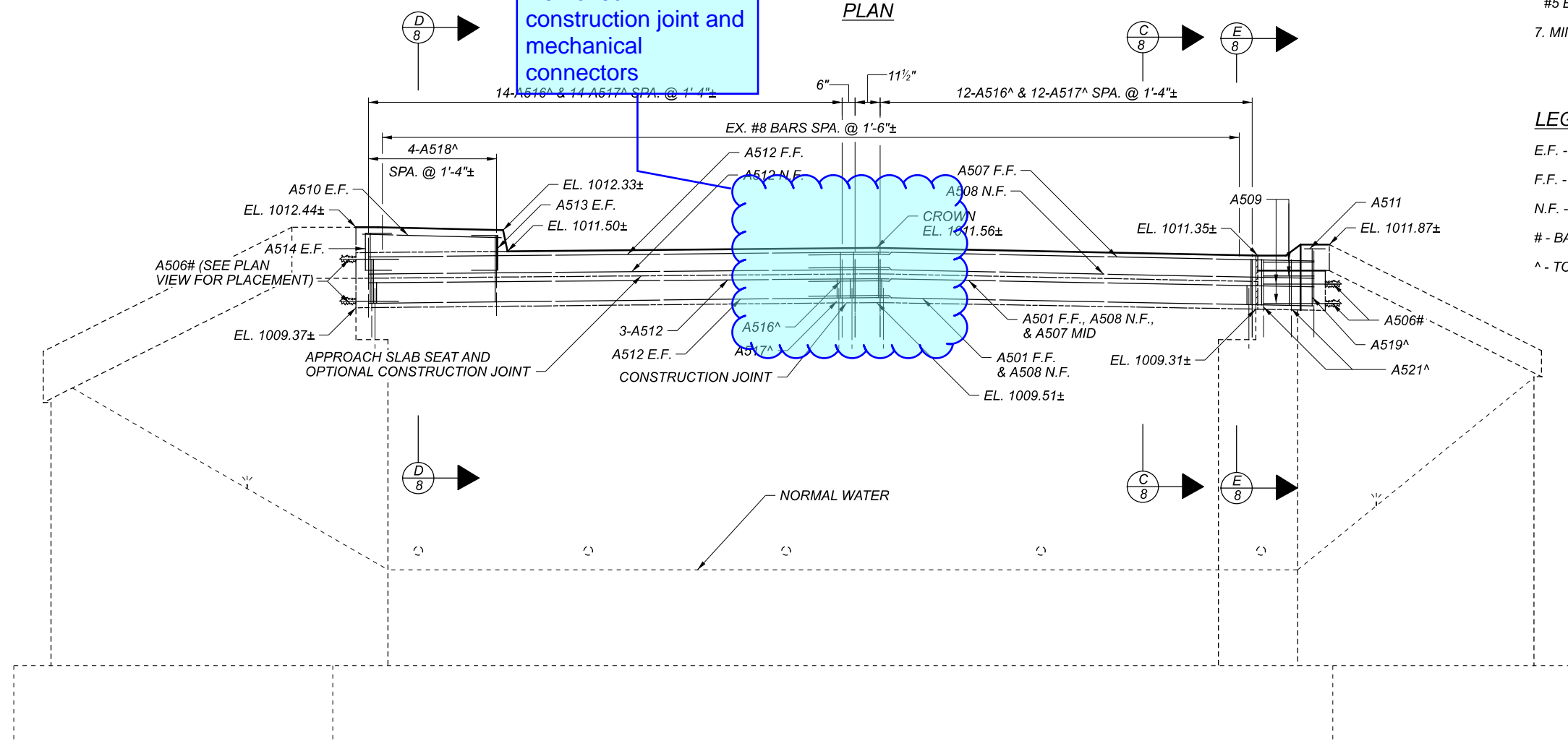
- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE
- # - BAR TO BE DOWELED INTO EXISTING ABUTMENT
- ^ - TO LAP EX. #5 BARS

SFN	3400395
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
DATE	1-3-2022
PROJECT ID	114172
SUBSET	TOTAL
6	14
SHEET	TOTAL
22	30



Removed construction joint and mechanical connectors

PLAN



ELEVATION



NOTES

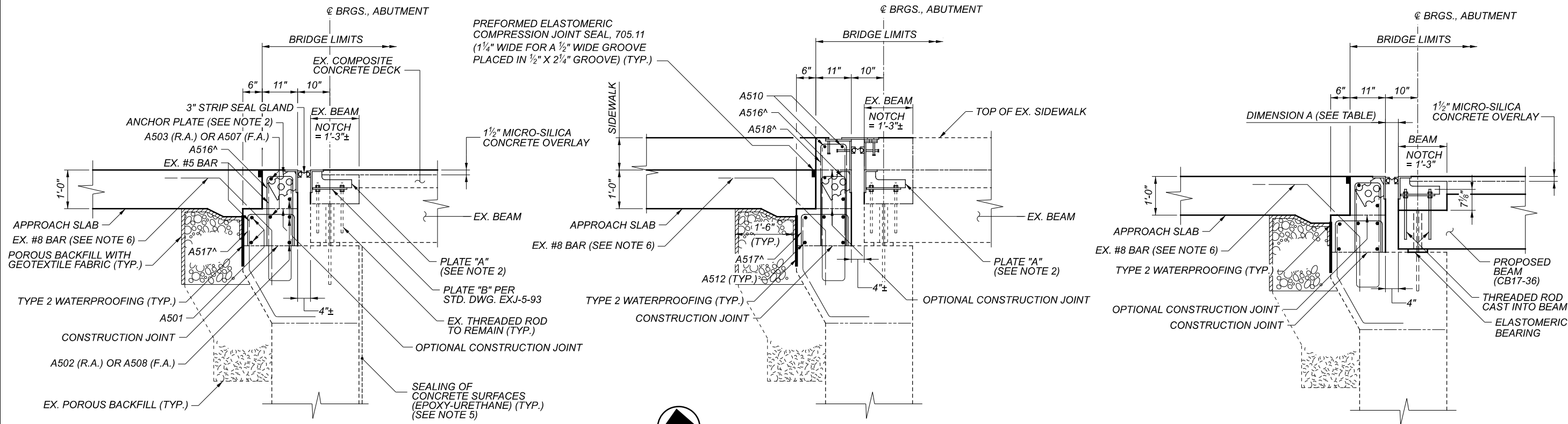
1. PROPOSED ELEVATIONS SHALL MATCH FIELD VERIFIED EXISTING ELEVATIONS.
2. PLACE WATERPROOFING AT VERTICAL CONSTRUCTION JOINTS ON THE BACKSIDE FROM 1'-0" BELOW CUT LINE TO THE APPROACH SLAB SEAT.
3. SEE SHEET 8/14 FOR DETAIL 2.
4. ABUTMENT CONCRETE: DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAM HAS BEEN ERECTED.
5. TOP OF BACKWALL ELEVATIONS GIVEN AT BRIDGE LIMITS.
6. MINIMUM EMBEDMENT DEPTH FOR DOWEL BARS:
#5 BARS = 8 INCHES
7. MINIMUM LAP LENGTH:
#5 BARS = 37 INCHES

LEGEND

- E.F. - EACH FACE
- F.F. - FAR FACE
- N.F. - NEAR FACE
- # - BAR TO BE DOWELED INTO EXISTING ABUTMENT
- ^ - TO LAP EX. #5 BARS

FORWARD ABUTMENT PLAN AND ELEVATION
BRIDGE NO. HAS-0009-17.780
OVER CONNOTTON CREEK

SFN	3400395
DESIGN AGENCY	CARPENTER MARTY
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
DATE	1-3-2022
PROJECT ID	114172
SUBSET	7
TOTAL	14
SHEET	23
TOTAL	30



C SECTION
6,7

D SECTION
6,7

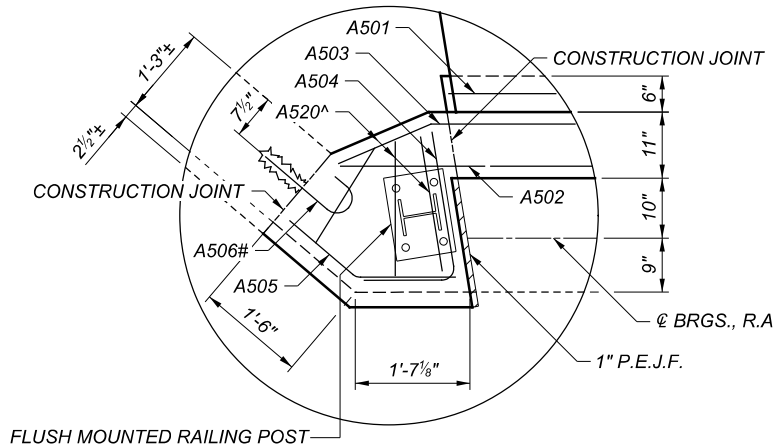
E SECTION
6,7
SEE SECTION C FOR REINFORCING

LEGEND

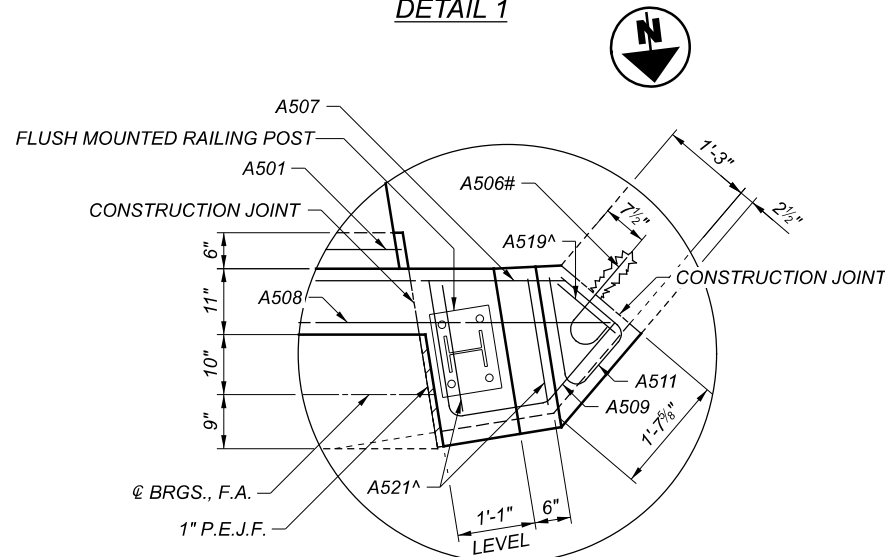
- # - BAR TO BE DOWELED INTO EXISTING ABUTMENT
- ^ - TO LAP EX. #5 BARS

NOTES

1. REFER TO STD. DWGS. EXJ-5-93 AND PSBD-2-07 FOR ADDITIONAL NOTES AND DETAILS.
2. PLATE "A" AND ANCHOR PLATE SHALL BE MODIFIED FROM DETAILS SPECIFIED IN STD. DWG. EXJ-5-93 TO FIT THE EXISTING BRIDGE GEOMETRY.
3. THE CONTRACTOR SHALL WELD ANCHOR PLATES IN THE FIELD TO AVOID THE EXISTING VERTICAL STEEL IN THE ABUTMENTS.
4. STRIP SEAL GLAND SHALL BE INSTALLED AS A CONTINUOUS PIECE.
5. SEAL EXPOSED SURFACES OF ABUTMENT TO EXISTING GROUND LINE OR NORMAL WATER.
6. THE CONTRACTOR HAS THE OPTION OF AN ALTERNATIVE DESIGN TO REMOVE A PORTION OF THE VERTICAL BAR AND USE A MECHANICAL CONNECTOR AND NEW BAR AT HIS/HER OWN EXPENSE.
7. MINIMUM EMBEDMENT DEPTH FOR DOWEL BARS:
#5 BARS = 8 INCHES



DETAIL 1



DETAIL 2

DIMENSION A TABLE		
AMBIENT TEMPERATURE	REAR ABUTMENT	FORWARD ABUTMENT
30°F	1 3/4"	2"
40°F	1 3/4"	2"
50°F	1 3/4"	2"
60°F	1 3/4"	2"
70°F	1 5/8"	2"
80°F	1 5/8"	2"
90°F	1 5/8"	2"

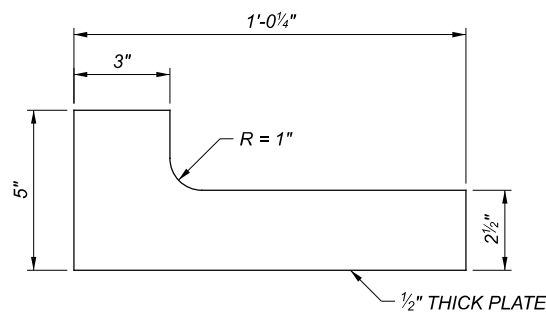
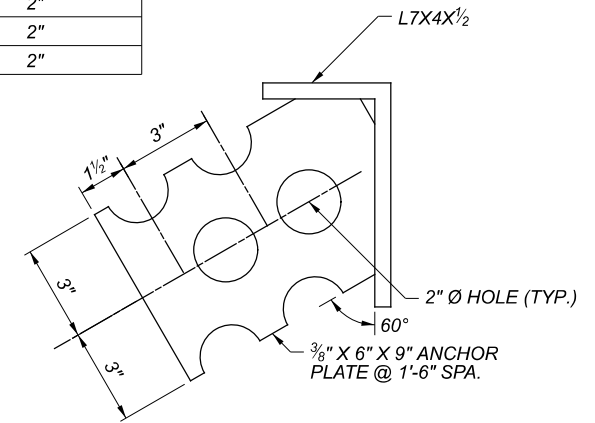
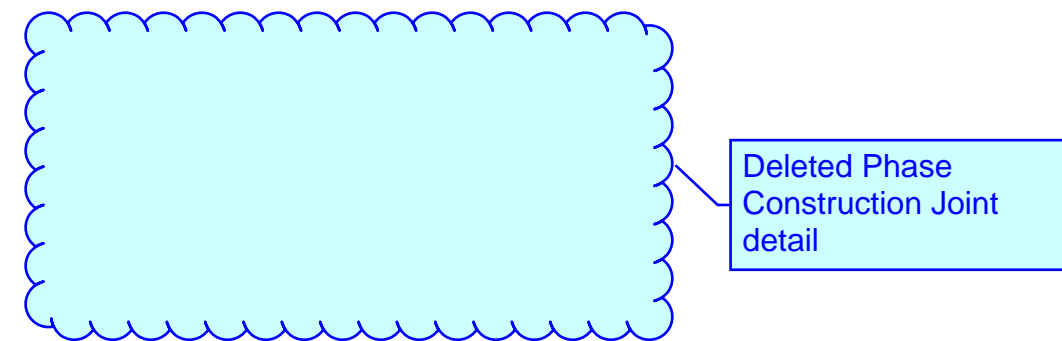


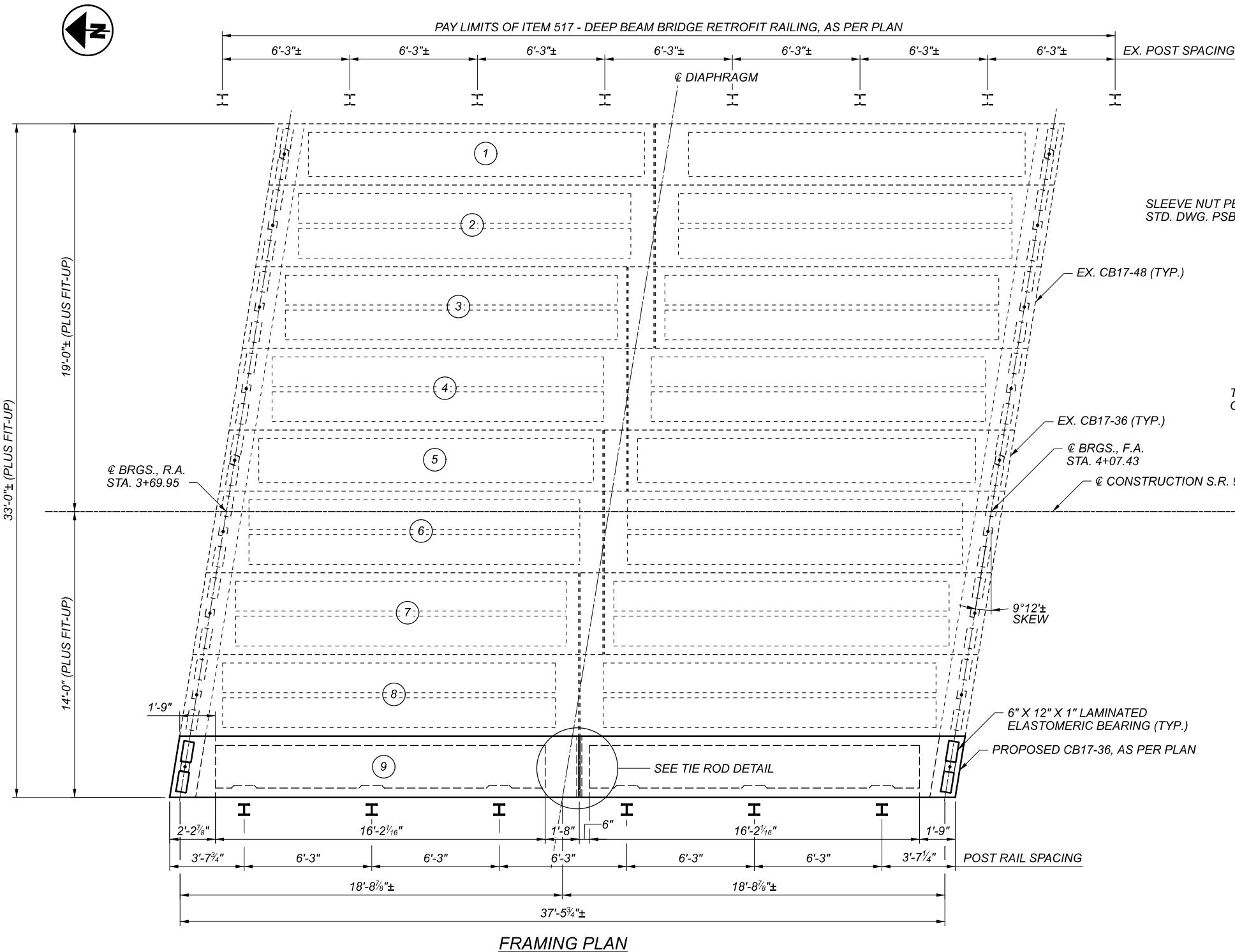
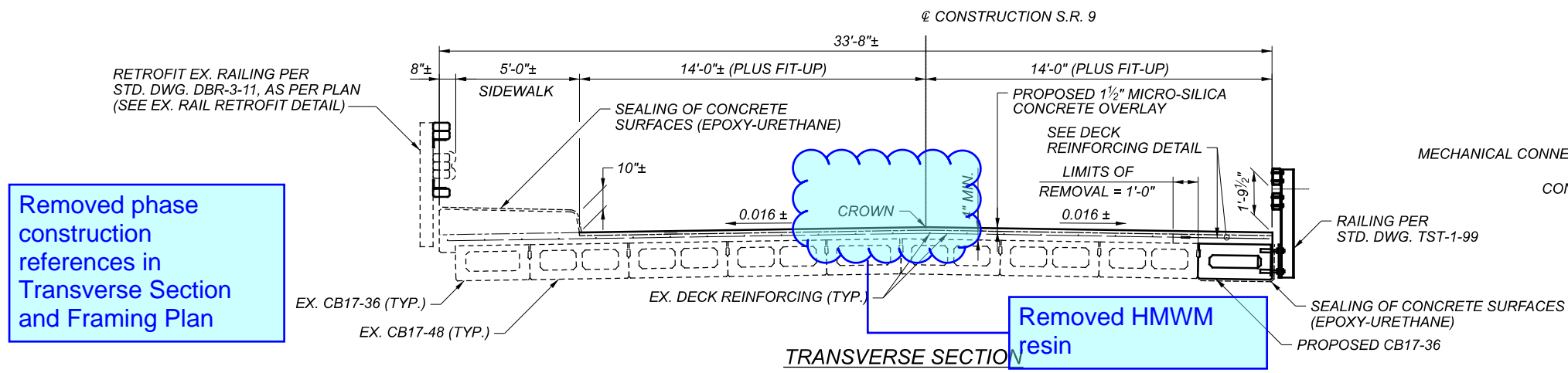
PLATE "A" DETAIL



ANCHOR PLATE

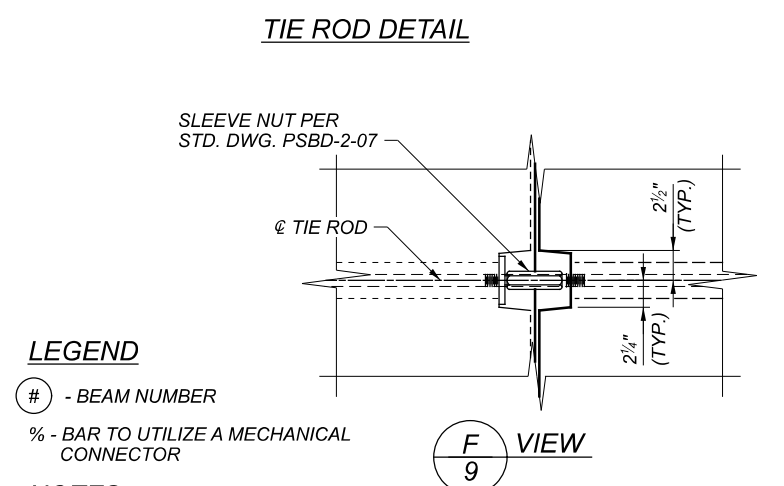
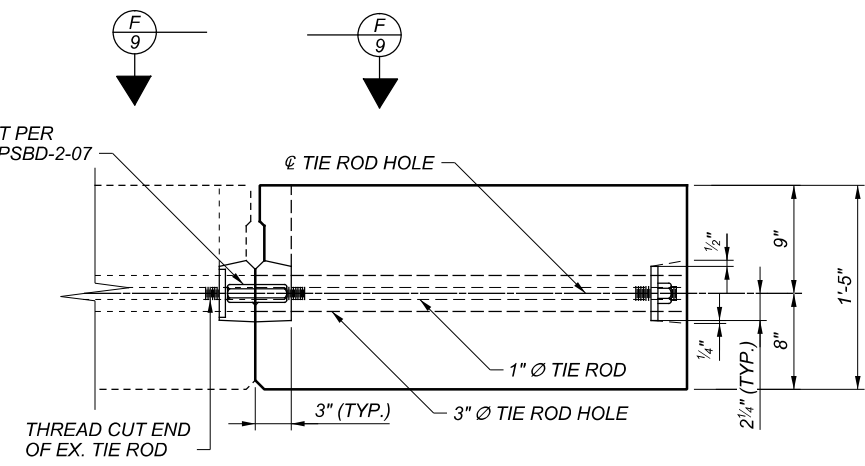
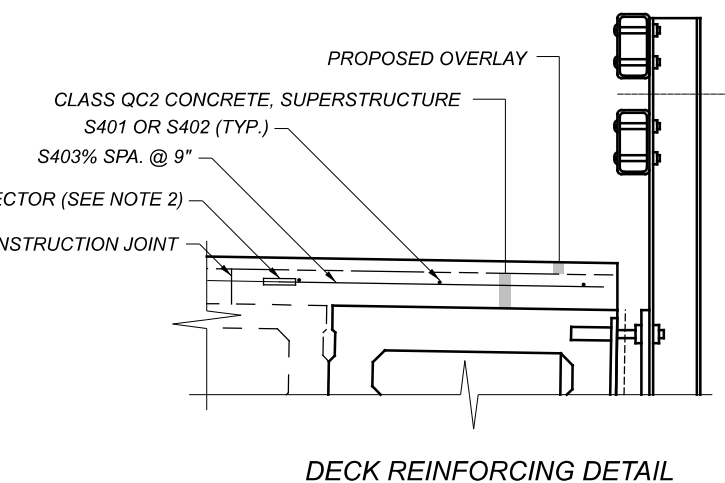


SFN	3400395
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	8
TOTAL	14
SHEET	24
TOTAL	30



Removed phase construction references in Transverse Section and Framing Plan

Removed HMWM resin



LEGEND

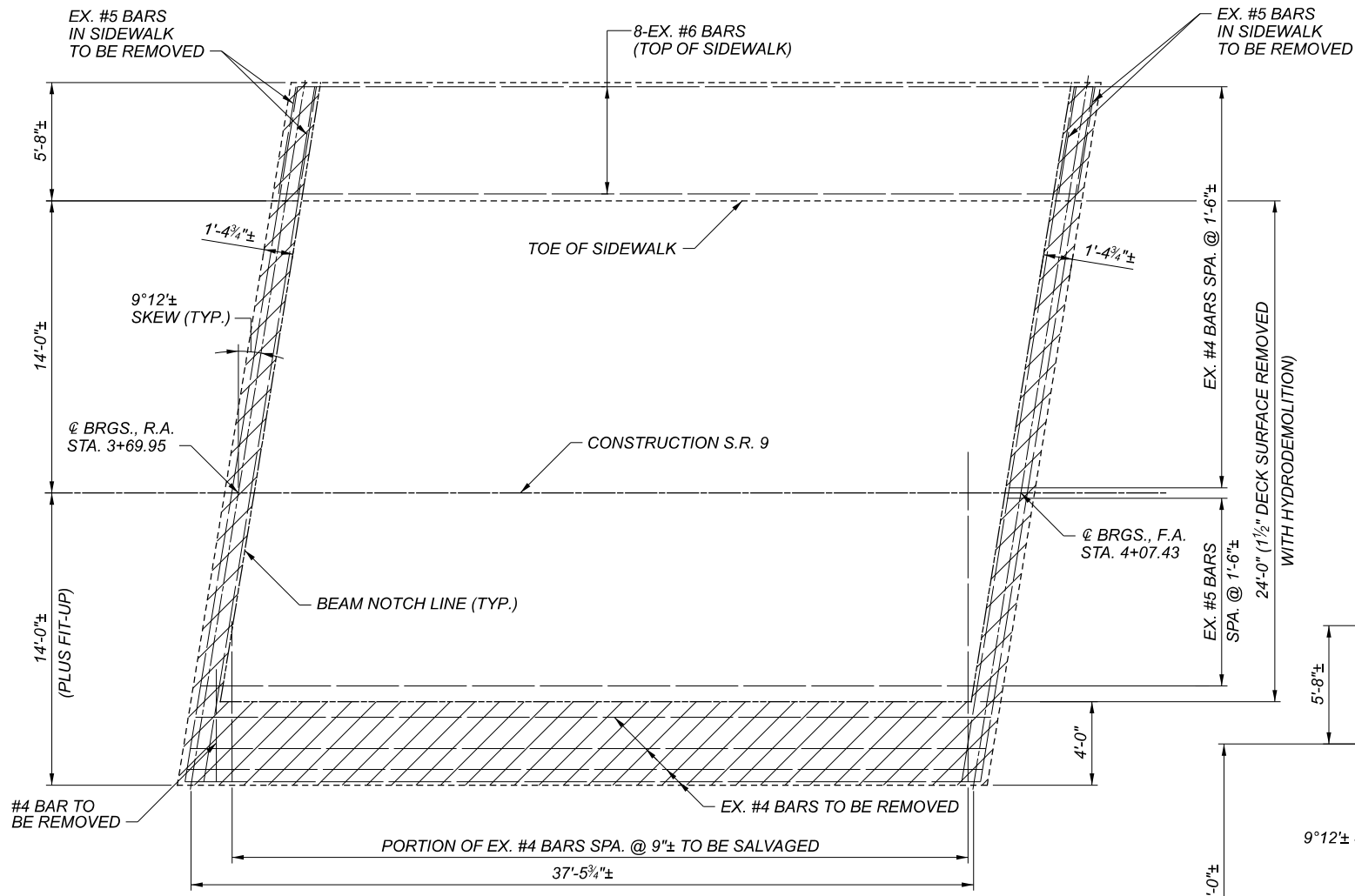
- BEAM NUMBER

% - BAR TO UTILIZE A MECHANICAL CONNECTOR

NOTES

- REFER TO STD. DWGS. DBR-3-11, PSBD-2-07, AND TST-1-99 FOR ADDITIONAL NOTES AND DETAILS.
- SALVAGE A PORTION OF EXISTING TRANSVERSE DECK REINFORCING BEYOND THE LIMITS OF DECK REMOVAL TO ALLOW FOR INSTALLATION OF MECHANICAL CONNECTOR. MECHANICAL CONNECTOR TO BE DAYTON SUPERIOR D250L BAR LOCK L-SERIES COUPLER OR ENGINEER APPROVED EQUIVALENT.
- SEE DETAIL 1 FOR TIE ROD HOLE DETAILS. THE PROPOSED TIE ROD WILL BE COUPLED TO THE EXISTING BY USE OF A SLEEVE NUT. WHEN REMOVING THE EXISTING FACIA BEAM, CUT THE EXISTING TIE ROD THAT ATTACHES TO THE EXISTING FACIA BEAM. THE EXISTING TIE ROD SHALL BE THREADED PRIOR TO COUPLING WITH THE PROPOSED BEAM.
- SEE SHEET 10/14 FOR SUPERSTRUCTURE AND ELASTOMERIC BEARING DETAILS.

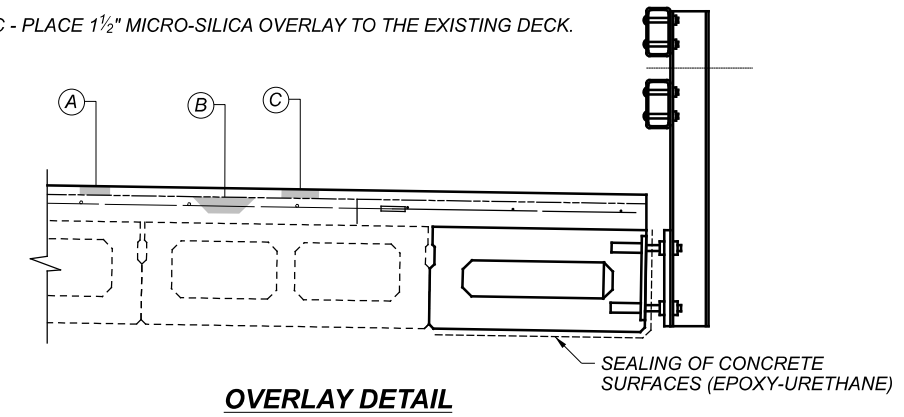
SFN	3400395
DESIGN AGENCY	CARPENTER MARTY
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	9
TOTAL	14
SHEET	25
TOTAL	30



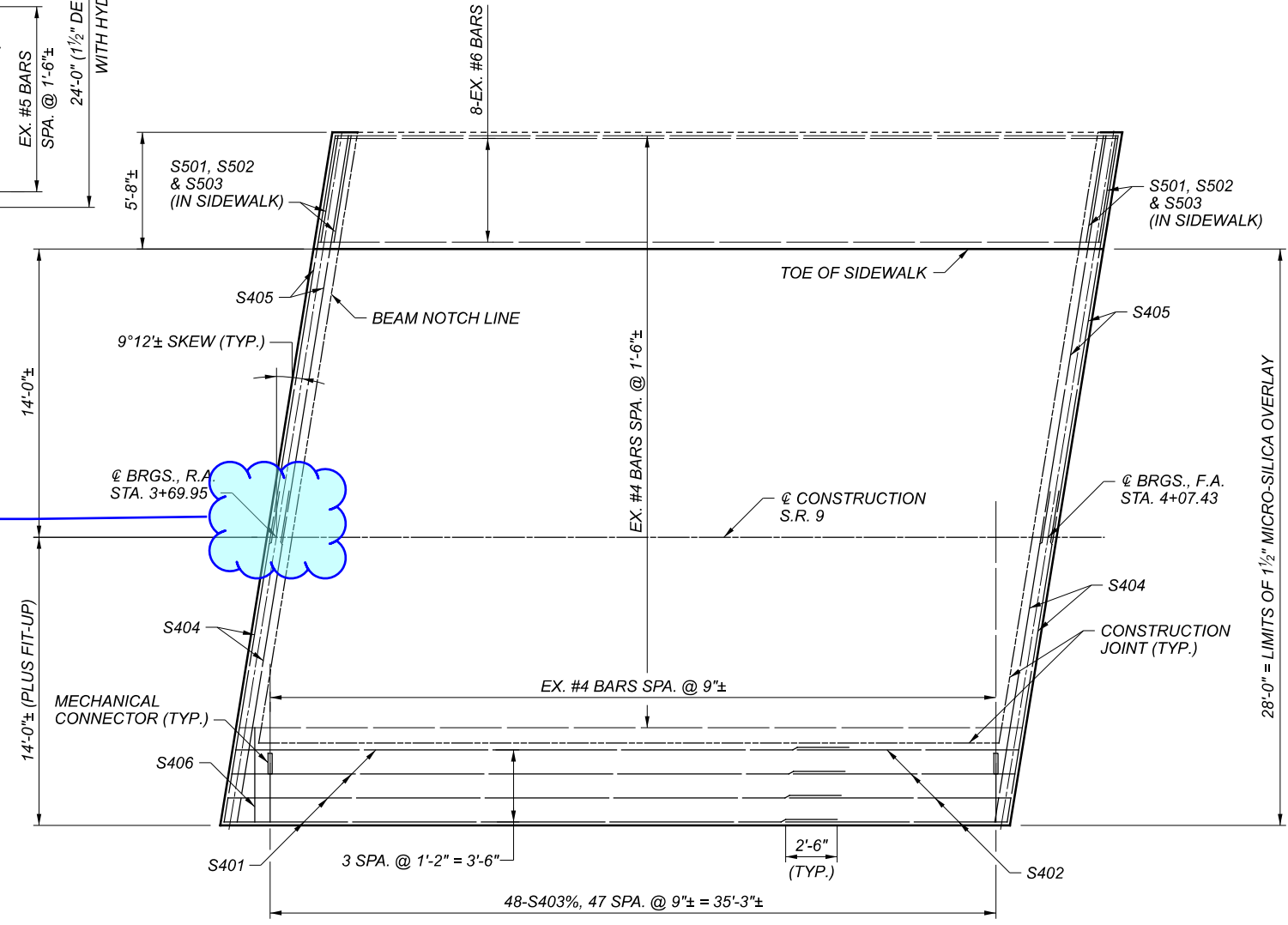
EXISTING DECK REMOVAL PLAN

PROPOSED WORK

- A - HYDRODEMOLIZE 1 1/2" OF THE EXISTING DECK
- B - HAND CHIPPING
- C - PLACE 1 1/2" MICRO-SILICA OVERLAY TO THE EXISTING DECK.



OVERLAY DETAIL



PROPOSED DECK PLAN

LEGEND

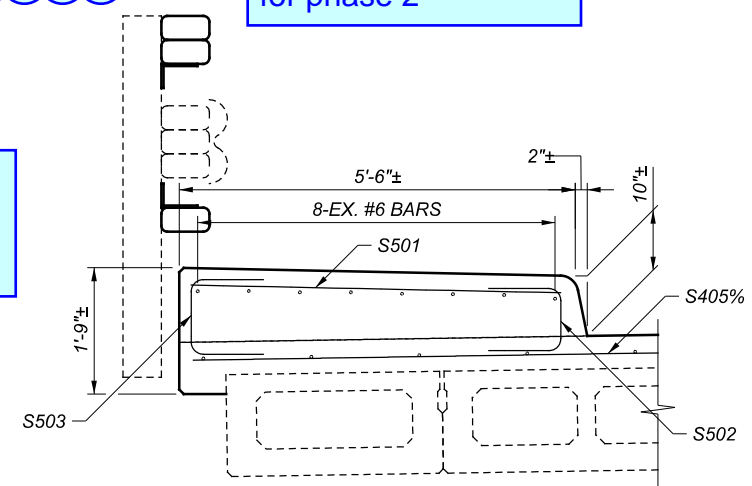
- ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

% - BAR TO UTILIZE A MECHANICAL CONNECTOR

Removed mechanical connectors for phase construction

Removed hatching for phase 2

Removed cut lines in removal plan and removed construction joints in proposed plan view.



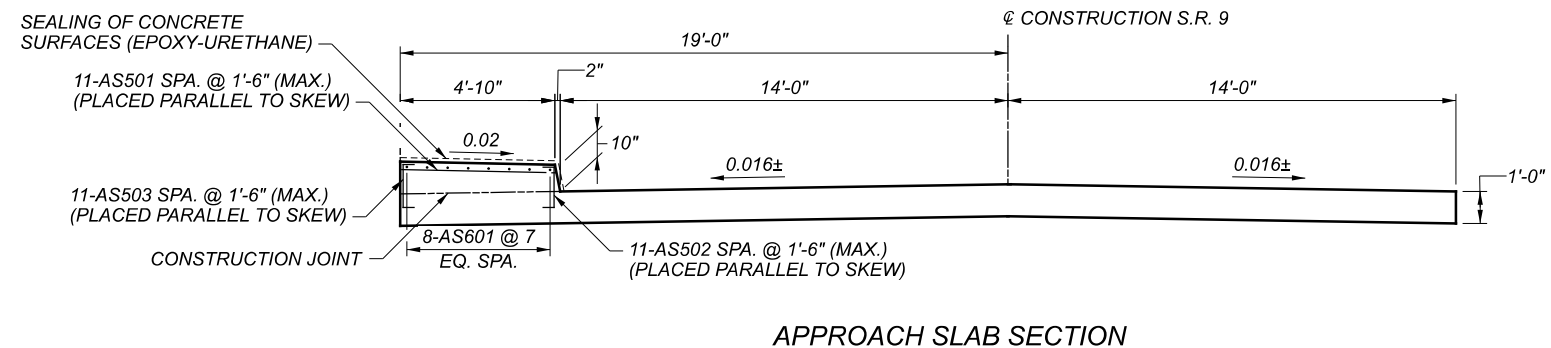
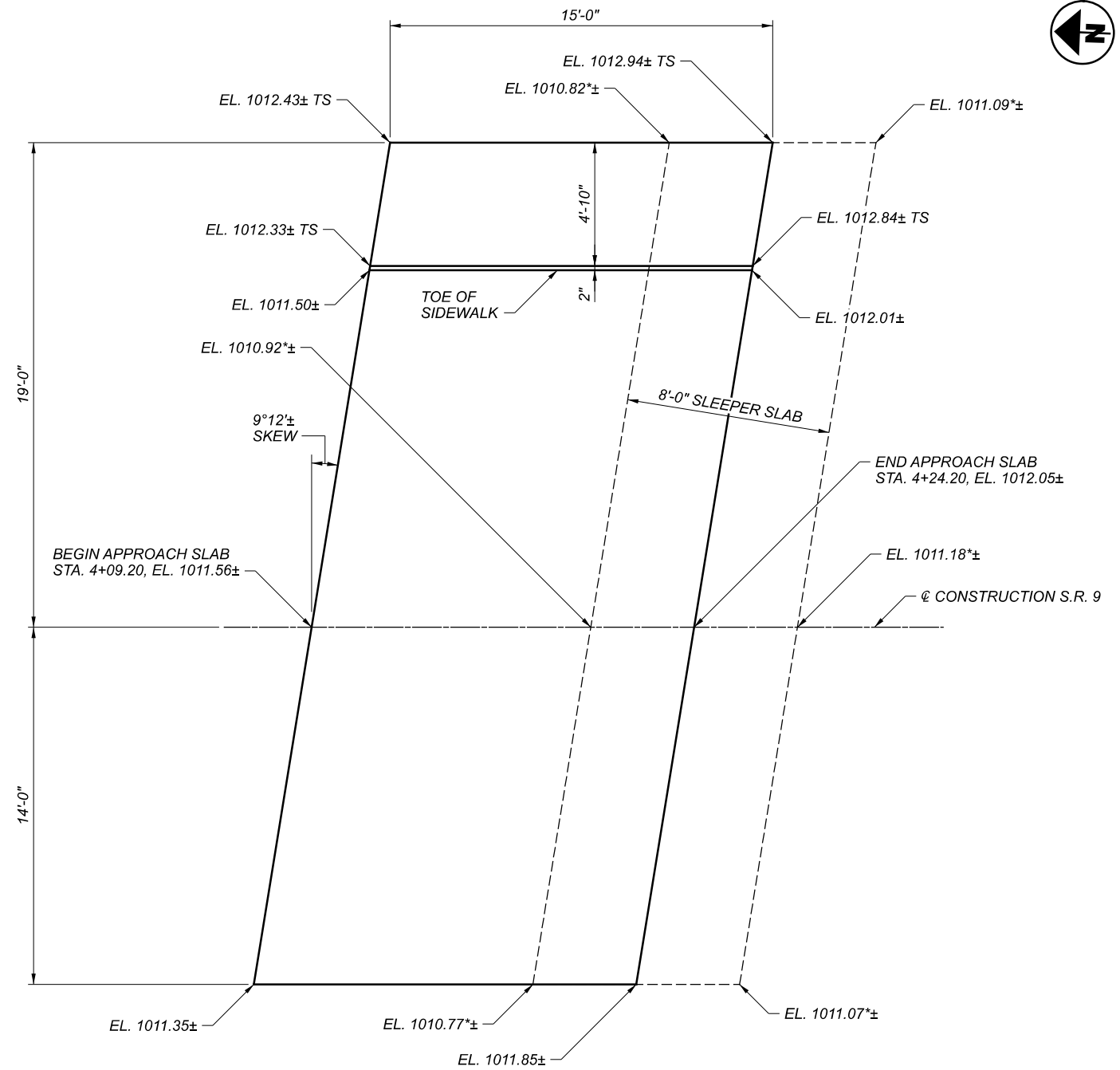
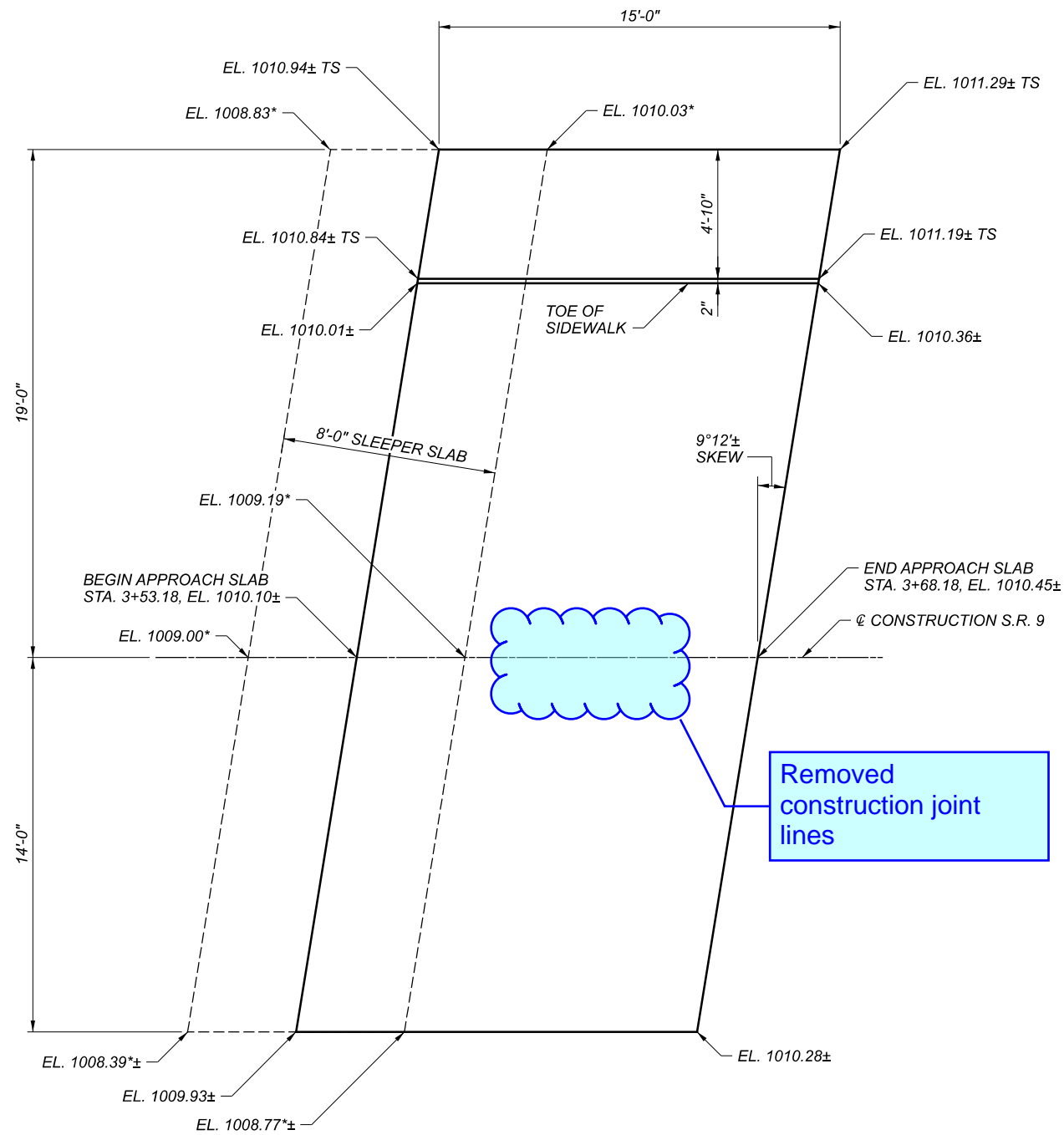
PROPOSED SIDEWALK ELEVATION

NOTE

SALVAGE ALL EXISTING DECK AND SIDEWALK LONGITUDINAL REINFORCING AND TRIM AS NECESSARY TO PROVIDE 2" CLEAR FROM PROPOSED DECK LIMITS. SALVAGE 6" OF EXISTING TRANSVERSE DECK REINFORCING BEYOND THE LIMITS OF DECK REMOVAL TO ALLOW FOR INSTALLATION OF MECHANICAL CONNECTORS.

SFN	3400395
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	TOTAL
11	14
SHEET	TOTAL
27	30





LEGEND

- * - SLEEPER SLAB ELEVATION
- TS - ELEVATION AT TOP OF SIDEWALK

NOTES

- PROPOSED ELEVATIONS SHALL MATCH FIELD VERIFIED EXISTING ELEVATIONS.
- SLEEPER SLAB ELEVATIONS ARE TAKEN AT THE TOP OF THE SLEEPER SLAB.
- ADDITIONAL CONCRETE AND REINFORCING IN SIDEWALK ON APPROACH SLAB SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=12).
- OMIT POLYMER MODIFIED ASPHALT JOINT SYSTEM SHOWN ON STD DWG AS-2-15.



APPROACH SLAB DETAILS
 BRIDGE NO. HAS-0009-17.780
 OVER COTTON CREEK

SFN	3400395
DESIGNER	JMV
CHECKER	AMR
REVIEWER	STK
PROJECT ID	114172
SUBSET	TOTAL
13	14
SHEET	TOTAL
29	30

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS				
	REAR	FWD	TOTAL				A	B	C	D	INC
ABUTMENTS											
A501	2	2	4	17'-0"	71	STR					
A502	3		3	18'-10"	59	STR					
A503	2		2	18'-9"	40	19	17'-5"	1'-3"	7"		
A504	4		4	3'-4"	14	11	4"	2'-2"	1'-4"		
A505	4		4	2'-6"	11	19	1'-4"	11"	9"		
A506#	4	4	8	1'-11"	16	16	1'-4"				
A507		2	2	19'-3"	41	STR					
A508		3	3	19'-10"	63	STR					
A509		4	4	4'-6"	19	10	1'-1"	11"	1'-4"	1'-11"	
A510	2	2	4	4'-6"	19	STR					
A511		1	1	3'-4"	4	9	1'-1"	1'-3"	1'-2"	1'-2"	
A512	7	7	14	20'-0"	289	STR					
A513	2	2	4	3'-1"	13	2	1'-0"	1'-4"	1'-0"		
A514	2	2	4	3'-2"	14	2	1'-0"	1'-5"	1'-0"		
A515	2	2	4	5'-5"	23	STR					
A516	27	27	54	3'-8"	207	2	1'-8"	7"	1'-8"		
A517	27	27	54	2'-0"	113	2	7"	1'-1"	7"		
A518	4	4	8	4'-9"	40	2	2'-4"	6"	2'-4"		
A519		1	1	5'-0"	6	2	2'-2"	11"	2'-2"		
A520	3		3	4'-7"	15	2	1'-8"	1'-6"	1'-8"		
A521		2	2	4'-9"	10	2	1'-8"	1'-8"	1'-8"		
SUB-TOTAL					1087						

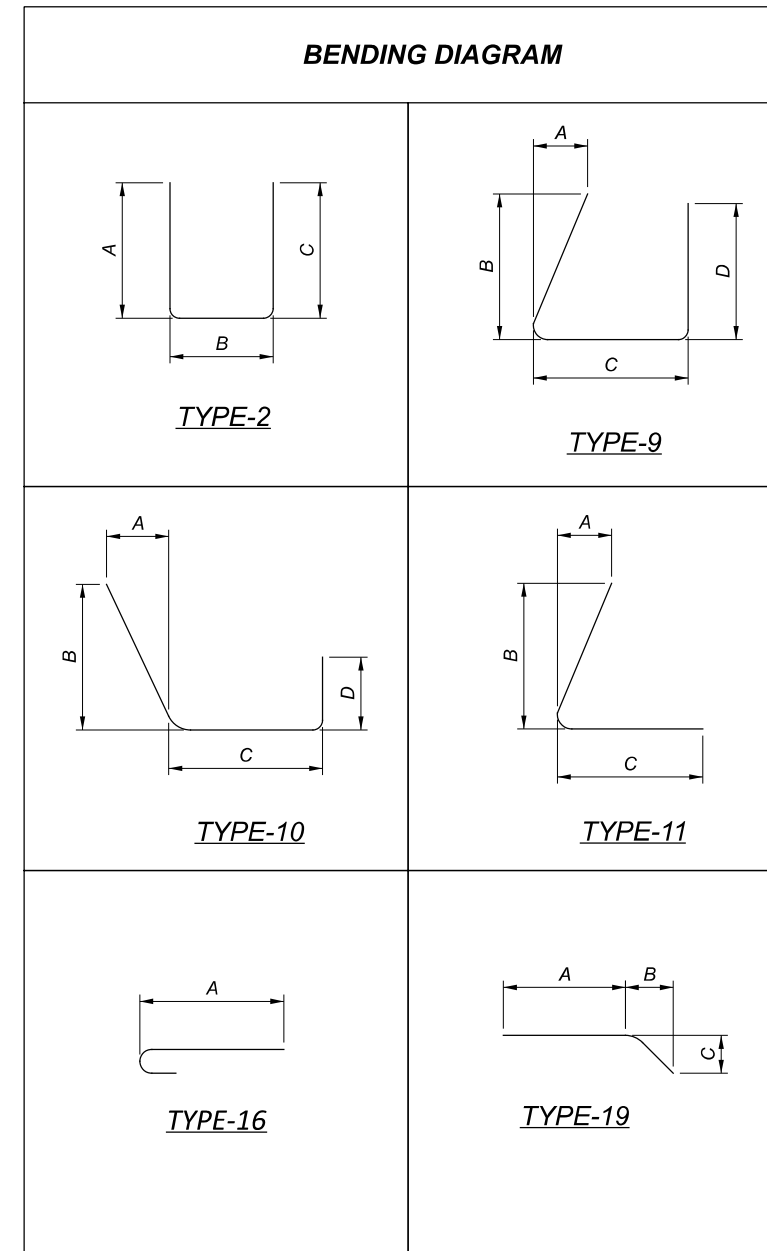
MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS		
					A	B	C
SUPERSTRUCTURE							
S401	4	30'-0"	81	STR			
S402	4	10'-8"	29	STR			
S403%	48	3'-4"	107	STR			
S404	4	16'-3"	44	STR			
S405	4	20'-0"	54	STR			
S406	1	5'-2"	4	STR			
S501	4	5'-2"	22	STR			
S502	4	2'-9"	12	2	1'-0"	1'-0"	1'-0"
S503	4	2'-10"	12	2	1'-0"	1'-1"	1'-0"
SUB-TOTAL			365				

Abutment and superstructure rebar lengths updated for detour

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSION		
	REAR	FWD	TOTAL				A	B	C
APPROACH SLABS									
AS501	11	11	22	4'-6"	104	STR			
AS502	11	11	22	3'-1"	71	2	1'-0"	1'-4"	1'-0"
AS503	11	11	22	3'-2"	73	2	1'-0"	1'-5"	1'-0"
AS601	8	8	16	14'-6"	349	STR			
SUB-TOTAL					597				

NOTES

1. THE BAR NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN, THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A501 IS A NO. 5 BAR. BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL TO BE EPOXY COATED.
3. PAYMENT FOR MECHANICAL CONNECTORS SHALL BE INCLUDED WITH ITEM 509, EPOXY COATED REINFORCING STEEL.
4. PAYMENT FOR APPROACH SLAB REINFORCING SHALL BE INCLUDED WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS.



LEGEND

% - BAR TO UTILIZE A MECHANICAL CONNECTOR.
 BAR LENGTH IS MEASURED TO THE END OF THE EXISTING DECK TRANSVERSE BAR THAT IS BEING SALVAGED. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY, DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

- BAR TO BE DOWELED INTO EXISTING ABUTMENT