				SHEET	Γ NUM.			 PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	
6	26	27	39	43	44			1/NHS/BR 2/NHS/OT	3/NHS/OT	'''	EXT	TOTAL	Oiti	DESCRIPTION	NO.	CALC
_								16 16		201	11000	LC		ROADWAY		7
_S		2,474						LS LS 2,474		201	11000 23001	LS 2,474	SY	CLEARING AND GRUBBING PAVEMENT REMOVED. AS PER PLAN	29	$\dashv$
	444	2,414						444		202	38000	444	FT	GUARDRAIL REMOVED	23	$\dashv$
	777		130					130		203	10000	130	CY	EXCAVATION		$\dashv$
			267					267		203	20000	267	CY	EMBANKMENT		$\dashv$
																$\exists$
		2,701						2,701		204	10000	2,701	SY	SUBGRADE COMPACTION		7
								80		204	13000	80	CY	EXCAVATION OF SUBGRADE		٦
								80		204	30010	80	CY	GRANULAR MATERIAL, TYPE B		
								2		204	45000	2	HOUR	PROOF ROLLING		
9								239		204	50000	239	SY	GEOTEXTILE FABRIC		4
	707							707			45050	7.07		OLLARDATE TYPE HOC		4
	363 3							363		606	15050	363 3	FT	GUARDRAIL, TYPE MGS	7	4
	1		-					3		606 606	26100	1	EACH EACH	ANCHOR ASSEMBLY, TYPE E ANCHOR ASSEMBLY, TYPE T	1	$\dashv$
	4							4		606	26500 35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		$\dashv$
	4							4		000	33002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLT, TIFE T		$\dashv$
														EROSION CONTROL		$\dashv$
	4			15				4 15		601	21050	19	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		$\exists$
	24							24		601	21060	24	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT		_
	4							4		601	32200	4	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
								2		659	00100	2	EACH	SOIL ANALYSIS TEST		
	74							257		659	00300	257	CY	TOPSOIL		
			1,652					1,652		659	10000	1,652	SY	SEEDING AND MULCHING		
								83		659	14000	83	SY	REPAIR SEEDING AND MULCHING		
								83		659	15000	83	SY	INTER-SEEDING		_
								0.23		659	20000	0.23	TON	COMMERCIAL FERTILIZER		_
			1					0.34		659	31000	0.34	ACRE	LIME		_
										050	75000		MON	TWATER OF THE PROPERTY OF THE		_
	670	1	1					9 670		659 670	35000 00700	9 670	MGAL	WATER DITCH EROSION PROTECTION		_
	610							LS		832	15000	LS	SY	STORM WATER POLLUTION PREVENTION PLAN		_
				-				LS		832	15000	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
								LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS  STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		_
		1								032	15010	LJ		STORM WATER TOLEGISM TREVERTION THOSE ECTION SOFTWARE		-
								8,000 8,000		832	30000	16,000	EACH	EROSION CONTROL		_
												·				
														DRAINAGE		
	0.4							0.4		602	20000	0.4	CY	CONCRETE MASONRY		
	926							926		605	11110	926	FT	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
1								250		605	13410	250	FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		_
				80				80		611	00200	80	FT	4" CONDUIT, TYPE C		_
								100		611	01500	100	FT	6" CONDUIT, TYPE F		_
	F 7									C11	0.4000		СТ	40% CONDUIT TYPE O		_
	53	1						53		611 611	04600 98180	53 2	FT EACH	12" CONDUIT, TYPE C CATCH BASIN, NO. 3A		_
	2	1	1	8			+	6 8		611	99710	14	EACH	PRECAST REINFORCED CONCRETE OUTLET		_
				- 0						011	33710	17	LACII	TRECAST REIN ORGED CONGRETE OUTEET		=
														PAVEMENT		-
		2,232						2,232		254	01000	2,232	SY	PAVEMENT PLANING, ASPHALT CONCRETE - 3"		-
		662						662		301	46000	662	CY	ASPHALT CONCRETE BASE, PG64-22		_
		449						449		304	20000	449	CY	AGGREGATE BASE		_
		890						890		407	20000	890	GAL	NON-TRACKING TACK COAT		
								100		408	10001	100	GAL	PRIME COAT, AS PER PLAN	7	
		202						202		441	50000	202	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 AS PER PLAN	6	
		202						202		441	50200	202	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)		
		7						7		441	50300	7	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) VARIABLE DEPTH		_
	102							102		609	24000	102	FT	CURB, TYPE 4-A		_
	88		1					88		609	26000	88	FT	CURB, TYPE 6		_
		-	-					15		017	10101	45	0)/	COMPLIATED ACCEPTATE AS DED DIAM	7	_
								15		617	10101	15	CY	COMPACTED AGGREGATE, AS PER PLAN	7	
		1	1											LICUTING		_
					24			24		625	00480	24	EACH	LIGHTING CONNECTION, UNFUSED PERMANENT		
		1	+		4			4	1	625	13400	4	EACH	LIGHT TOWER, BBBBBB100		_
		1	1		3			3		625	15100	3	EACH	LIGHT TOWER, BOBBBBIOU  LIGHT TOWER FOUNDATION, 36" X 20' DEEP		-
					1				1	625	15200	1 1	EACH	LIGHT TOWER FOUNDATION, 36" X 25" DEEP		_
		1	1		573			573	1	625	23200	573	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE		$\dashv$
		1	1		010			1 010		- JEJ		V 1 V		Inter a sing a four profit of the first of t		

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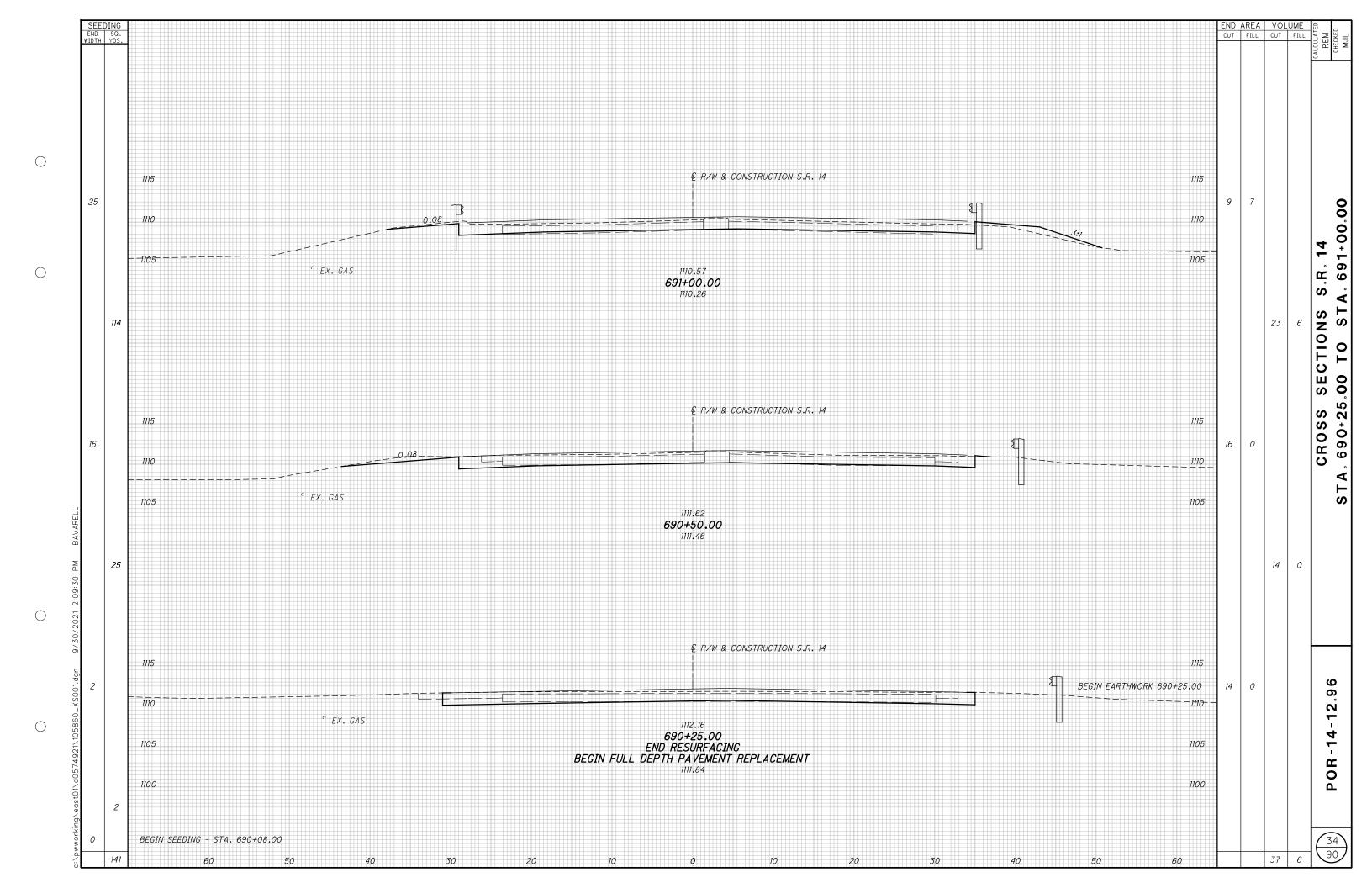
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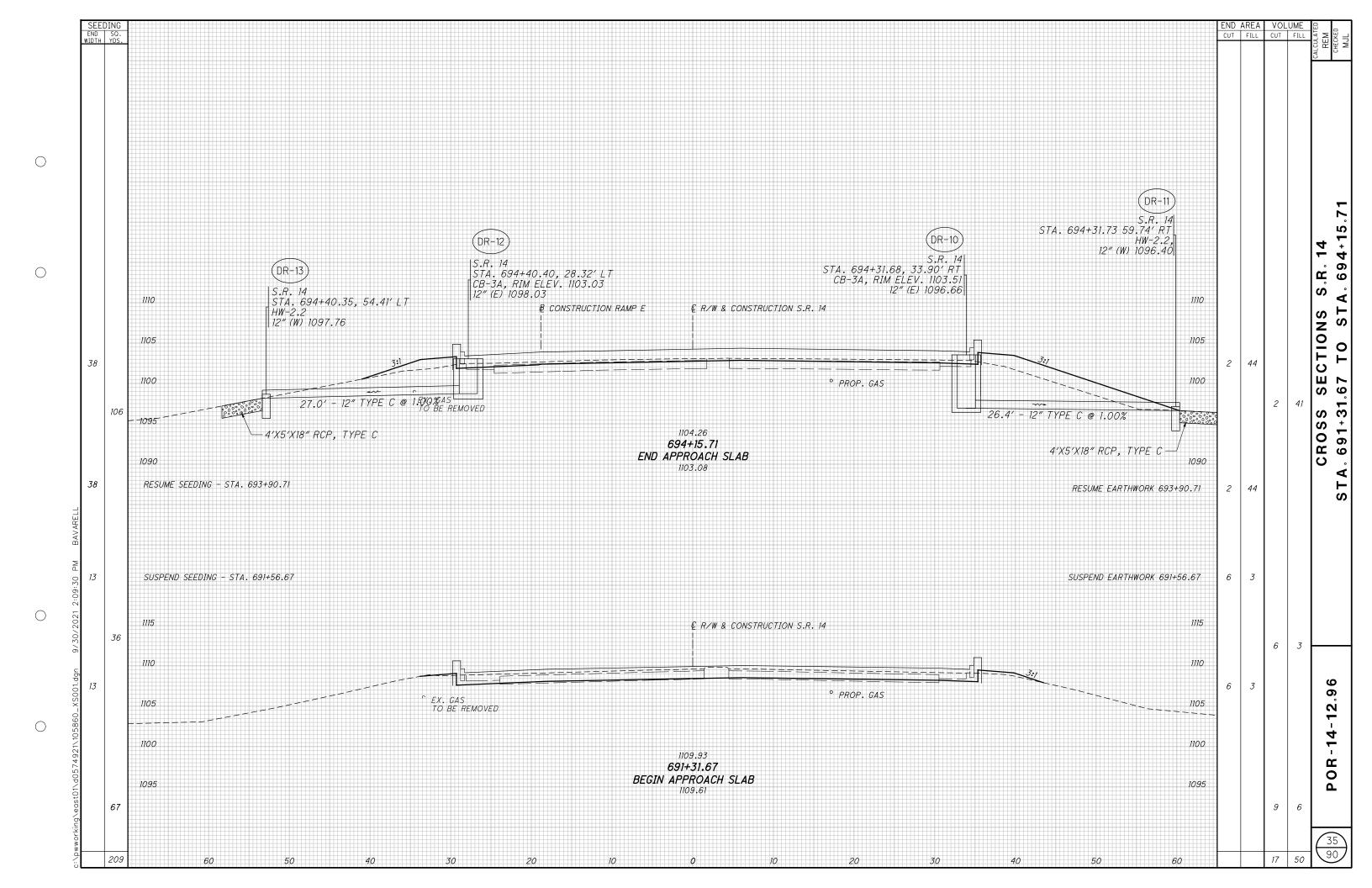
				SHEET	Γ NUM.		, ,	_,		PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEE1	
,	8	9	10	11	12	26	44		1/NHS/BR	2/NHS/OT 3/NHS/OT		EXT	TOTAL	ONT		NO.	
							2,364			2,364	625	24320	2,364	FT	LIGHTING (CONT.) 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES		$\dashv$
							161			161	625	25902	161		CONDUIT, JACKED OR DRILLED, 725.04 4"		
							24			24	625	26263	24	EACH	LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN SYMMETRIC, 475W, 480V, TYPE V	43	_
							2,274			2,274 8	625 625	29000 30706	2,274 8	FT EACH	TRENCH PULL BOX, 725.08, 24"		$\dashv$
																	$\Box$
							8			8	625	32000	8	EACH	GROUND ROD		_
							1 2 274			1 2 274	625	34001	1 2 274		POWER SERVICE, AS PER PLAN	43	_
							2,274			2,274	625 625	36011 76000	2 <b>,</b> 274		UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN ARC FLASH CALCULATIONS AND LABEL SR 5/14	43	$\dashv$
							1 1			1	633	67200	1		CONTROLLER WORK PAD		$\dashv$
									30		630	02100	30	FT	TRAFFIC CONTROL		-
						32			30 32		630	03100	30 32		GROUND MOUNTED SUPPORT, NO. 2 POST GROUND MOUNTED SUPPORT, NO. 3 POST		$\dashv$
						1 32			4		630	80100	4		SIGN, FLAT SHEET, 730.20		$\dashv$
									4		630	84900	4		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
						1			1		630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		
						2			6		630	86002	6	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
						0.39			0.39		642	00100	6 0.39		EDGE LINE, 4", TYPE 1		_
						0.36			0.36		642	00200	0.36		LANE LINE, 4", TYPE 1		
						0.25			0.25		642	00300	0.25	MILE	CENTER LINE, TYPE 1		
						28			28		642	00500	28	FT	STOP LINE, TYPE 1		
															STRUCTURE OVER 20 FOOT SPAN (POR-14-1296)	51	-
															WINTENNOS OF TRAFFIA		
_	150				1				50	100	614	11110	150	HOUR	MAINTENANCE OF TRAFFIC  LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		_
	100			4	4				8	100	614	12384	8		WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)		_
	LS								LS		614	12420	LS		DETOUR SIGNING		_
	5								5		614	13000	5		ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		
				18	44				62		614	13310	62	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)		
		12							12		614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8	_
			0.35						0.35		614	20550	0.35		WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT		_
				0.79					0.79		614	21000	0.79	MILE	WORK ZONE CENTER LINE, CLASS I		
			0.24						0.24		614	21550	0.24		WORK ZONE CENTER LINE, CLASS III, 642 PAINT		
				2.16					2.16		614	22000	2.16	MILE	WORK ZONE EDGE LINE, CLASS I, 4"		
			0.38						0.38		614	22350	0.38	MILE	WORK ZONE EDGE LINE, CLASS III, 4", 642 PAINT		
				155					155		614	23000	155		WORK ZONE CHANNELIZING LINE, CLASS I, 8"		
				1,311	175				1,486		614	24000	1,486		WORK ZONE DOTTED LINE, CLASS I		
					31				31		614	26000	31		WORK ZONE STOP LINE, CLASS I		
				4	2				6		614	30000	6	EACH	WORK ZONE ARROW, CLASS I		_
		8							8		616	10000	8	MGAL	WATER		
				606	1,876				2,482		622	41100	2,482		PORTABLE BARRIER, UNANCHORED	9	_
				284	254				538		622	41110	538	FT	PORTABLE BARRIER, ANCHORED	9	_
															INCIDENTALS		-
	LS								LS		614	11000	LS		MAINTAINING TRAFFIC		
									12		619	16010	12	MNTH	FIELD OFFICE, TYPE B		
_									LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
									LS LS		624 SPECIAL	10000 69098400	LS LS		MOBILIZATION SURVEY CONTROL VERIFICATION	6	_
									LJ		31 LOTAL	03030400	LS		SOLVET CONTROL VENTICATION		
-																	_
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			<b></b>			-	<del>                                     </del>	$\rightarrow$			-	1					

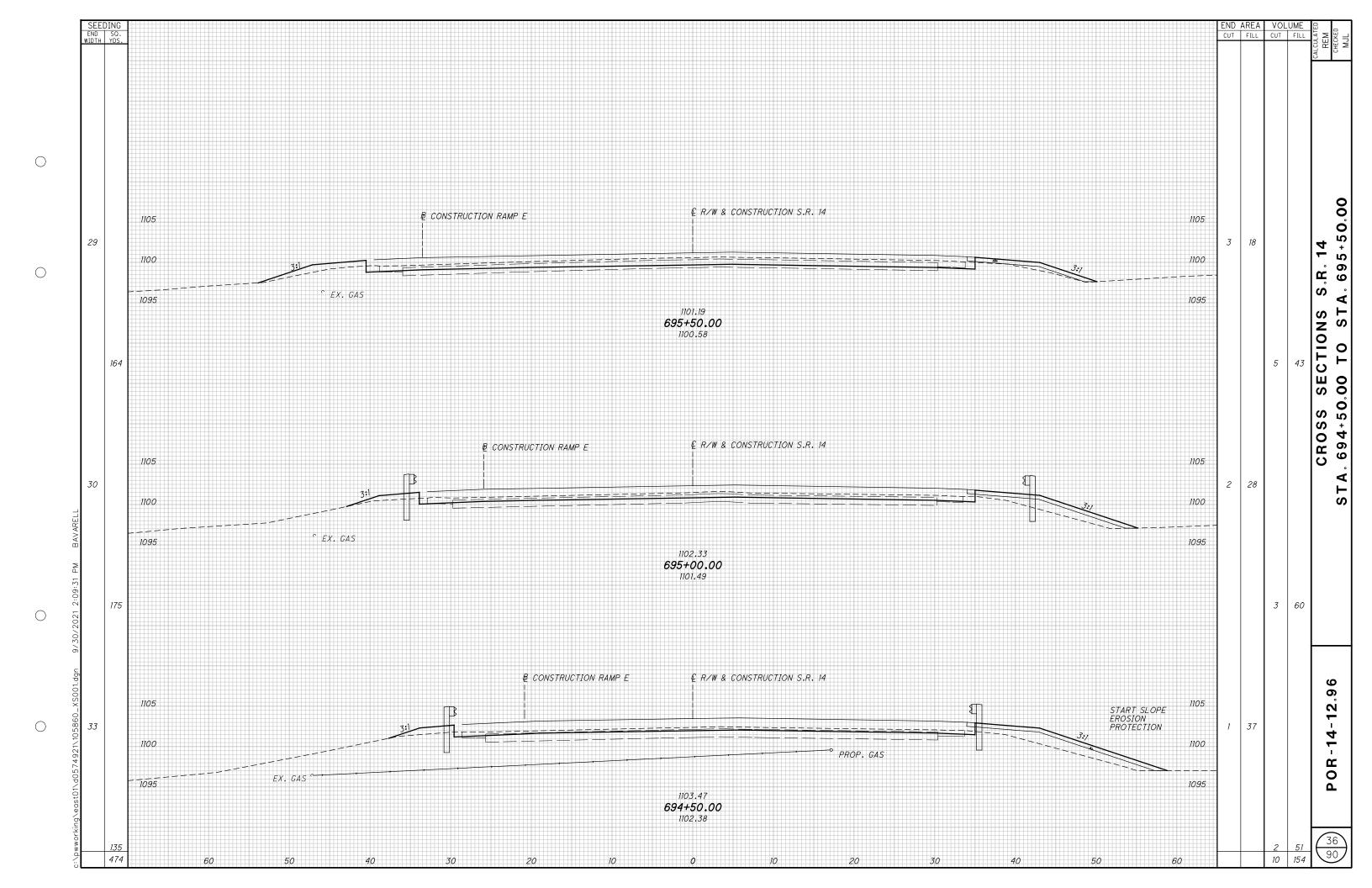
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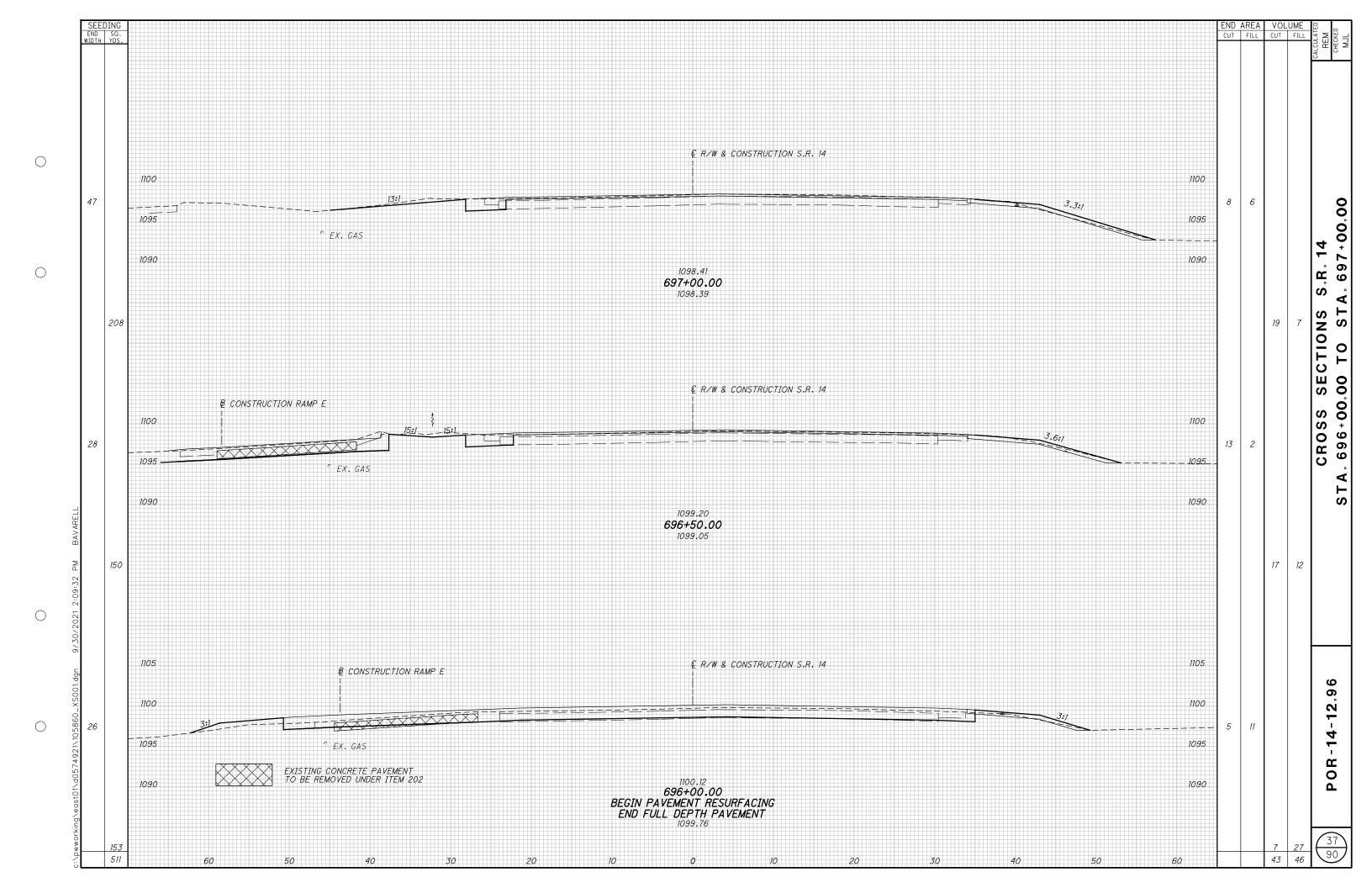
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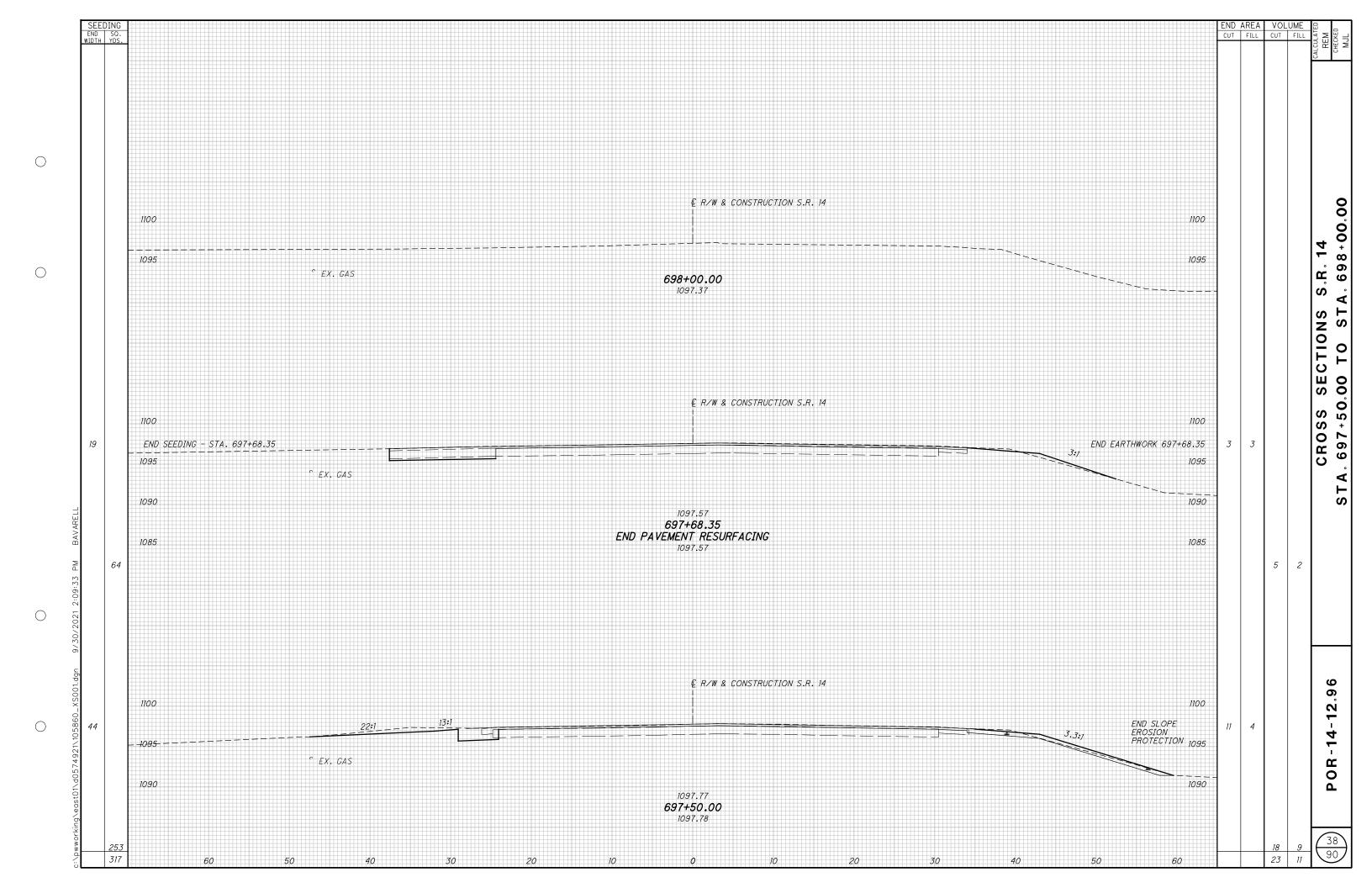
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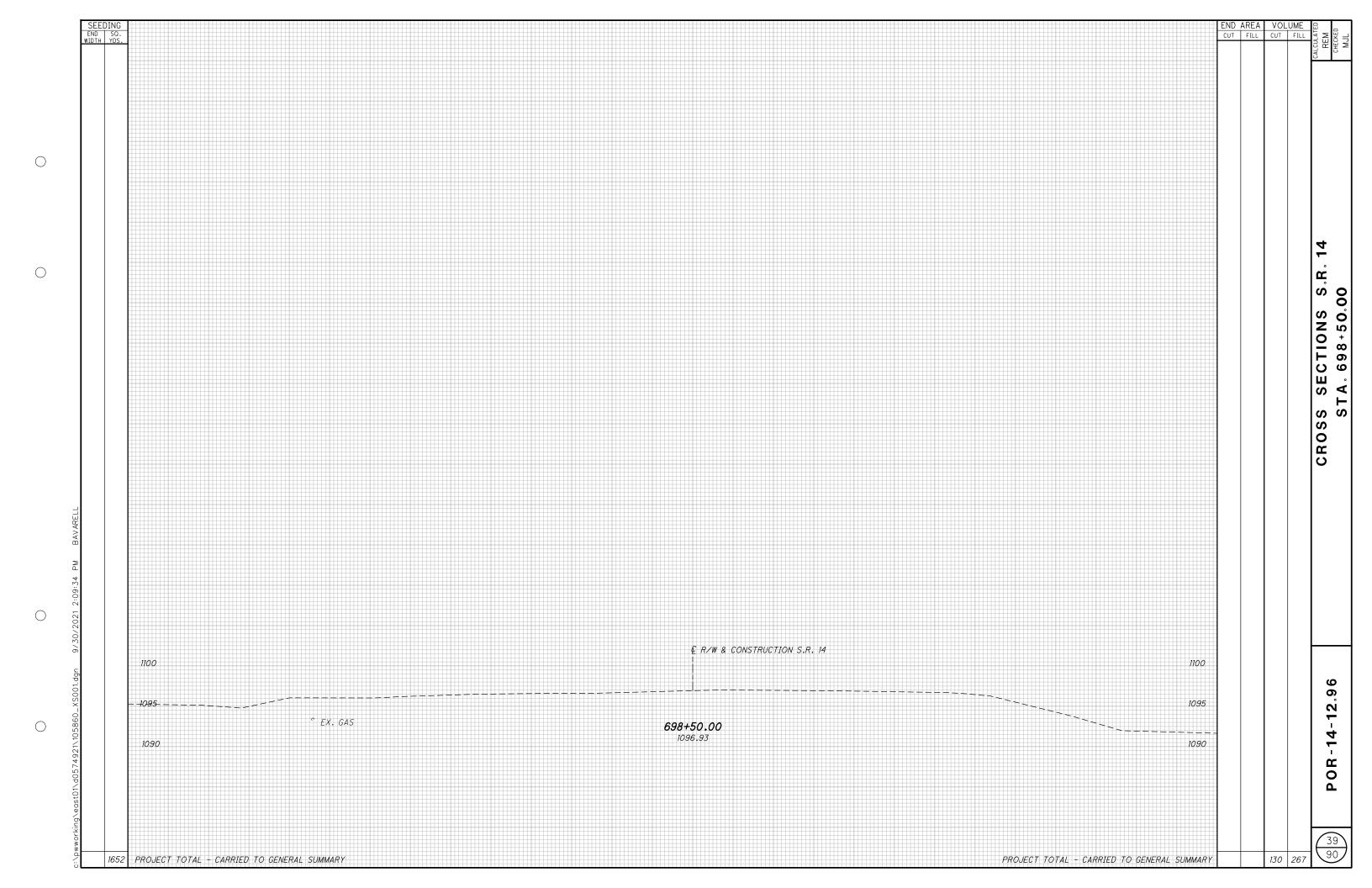












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ITEM 513 - STRUCTURAL STEEL, MISC.: BEAM RETROFIT PLATES:

THE EXISTING BEAMS SHALL HAVE RETROFIT PLATES INSTALLED AS INDICATED IN THE PLANS. STEEL SHALL BE ASTM A709, GRADE 50 (MINIMUM YIELD 50,000 PSI) AND BOLTS SHALL BE ASTM F3125, GRADE A325, TYPE 1 BOLT HOLES IN THE RETROFIT PLATES SHALL BE DRILLED IN THE SHOP AND RETROFIT PLATES SHALL BE USED AS TEMPLATES FOR THE DRILLING OF THE HOLES IN THE EXISTING BEAMS. THE WELDS IN THE EXISTING BEAM OR PROTRUSIONS IN THE FLANGE AREA SHALL BE GROUND FLUSH WHERE NECESSARY TO ENSURE PROPER CONTACT FIT. THE GRINDING SHALL BE IN THE DIRECTION OF THE LONGITUDINAL AXIS OF THE BEAM. RETROFIT PLATES SHALL FIT FLAT AGAINST THE EXISTING BEAM AND FILL PLATES SHALL BE USED TO COMPENSATE FOR ANY MISALIGNMENT OF MORE THAN 1/16". AFTER HOLES ARE DRILLED IN THE BEAM BUT BEFORE FINAL ASSEMBLY, THE CONTACT SURFACES OF THE EXISTING BEAM AND THE ENTIRE SURFACE OF THE RETROFIT PLATES AND FILLER PLATES SHALL HAVE SURFACES PREPARED AND GIVEN A PRIME COAT AS PER 514. ALL BURS AND FINS PRODUCED BY DRILLING OF HOLES SHALL BE REMOVED, BOLTS SHALL BE INSTALLED WITH HEADS DOWN. BASIS FOR PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE RETROFIT PLATES.

## ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN:

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. 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.

#### **DECK PLACEMENT DESIGN ASSUMPTIONS:**

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.2 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

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

# PLANS OF EXISTING BRIDGE

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 4 OFFICE, 2088 SOUTH ARLINGTON ROAD, AKRON, OHIO 44306 AND ARE AVAILABLE FOR REFERENCE.

<u>ITEM 514 - FIELD PAINTING EXISTING STRUCTURAL STEEL.</u> PRIME COAT:

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL. INTERMEDIATE COAT:

# ITEM 514 - FIELD PAINTING STRUCTURAL STEEL. FINISH COAT:

PAINTED AREAS THAT ARE DAMAGED BY WELDING, DRILLING, CUTTING OR OTHER MEANS TO REHABILITATE THIS BRIDGE ARE DESIGNATED IN THE PROJECT PLANS.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL NECESSARY EQUIPMENT TO INSPECT THIS WORK. THE MAJORITY OF THE AREAS TO BE REPAIR PAINTED ARE:

- 1. NEW CROSSFRAME CONNECTIONS BETWEEN BEAMS D AND E
- 2. EXISTING BEAM RETROFIT PLATE LOCATIONS
- 3. BEAM END AT EACH ABUTMENT

EXISTING STEEL AREAS SHALL RECEIVE A PRIME, INTERMEDIATE, AND FINISH COAT, PROPOSED STEEL SHALL BE SHOP PRIMED AND RECEIVE AN INTERMEDIATE AND FINISH COAT.

TINT THE FINISH COAT TO APPROXIMATELY THE SAME COLOR AS THE EXISTING FINISH COLOR, FEDERAL COLOR #15526. MATCH THE COLOR TO THE ENGINEERS SATISFACTION.

## ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE. AS PER PLAN:

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE 6" DIAMETER PERFORATED CORRUGATED PLASTIC AS PER 707.33 TYPE SP. ALSO INCIDENTAL TO THIS ITEM SHALL BE THE PLUGGING OF THE EXISTING WEEPHOLES. THE EXISTING WEEPHOLES SHALL BE FLUSHED OUT TO REMOVE ANY LOOSE DEBRIS AND FILLED ENTIRELY WITH CLASS QC1 CONCRETE AS PER ITEM 499.

# ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLANS

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 601 - CRUSHED AGGREGATE SLOPE PROTECTION. AS PER PLAN

WITH PRIOR APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY REDRESS THE SLOPES WITH THE EXISTING CRUSHED AGGREGATE. WHERE ADDITIONAL MATERIAL IS REQUIRED, FURNISH AND PLACED CRUSHED AGGREGATE IN ACCORDANCE WITH CMS SECTION 601. AN ESTIMATED QUANTITY OF 100 SQUARE YARDS HAS BEEN PROVIDED FOR BID PURPOSES. ACTUAL QUANTITIES OF SLOPE TO BE REDRESSED SHALL BE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL ALSO INCLUDE THE INSTALLATION OF THE ABUTMENT DRAINAGE PIPE OUTLETS. ALL COSTS OF LABOR, MATERIALS AND INCIDENTALS NECESSARY TO REDRESS THE SLOPES AND INSTALL THE DRAINAGE PIPE OUTLETS SHALL BE INCLUDED IN ITEM 601 -CRUSHED AGGREGATE SLOPE PROTECTION, 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, 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.

# ASBESTOS NOTIFICATION:

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION:

THE INSPECTION DETERMINED THAT 1540 LINEAR FEET (2420 SQUARE FEET) OF TRANSITE PIPE THAT CONTAINS ASBESTOS. THE ASBESTOS CONTAINING MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT. TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS IS SUBMITTED TO THE PROJECT ENGINEER FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW.

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OH 43216-1049

ASBESTOS PROGRAM OHIO EPA, DAPC 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:

- 1. THE CONTRACTORS NAME AND ADDRESS
- 2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
- 3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
- 4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN.

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM SPECIAL - STRUCTURES, REMOVAL OF ASBESTOS CONTAINING **MATERIAL** 

#### VANDAL PROTECTION FENCING

INSTALL FENCING FOR EACH CONSTRUCTION PHASE PRIOR TO OPENING THAT PHASE TO VEHICULAR TRAFFIC.

# ITEM 690 - SPECIAL - DOMINION ENERGY OHIO STABILIZER AND SUPPORTS:

UNDER THIS ITEM THE ODOT CONTRACTOR WILL INSTALL THE SPECIAL PIPE STABILIZERS (SUPPLIED BY DEO) AND ANGLE SUPPORT FRAMES AT ALL CROSSFRAME LOCATIONS BETWEEN BEAMS F AND G TO SUPPORT THE GAS LINE. INSTALLATION OF THE SUPPORTS AND PIPE SHALL OCCUR PRIOR TO THE COMPLETION OF THE DECK POUR. THE ODOT CONTRACTOR IS TO FIELD VERIFY ALL PIPE SUPPORT LOCATIONS AND ALL OTHER DIMENSIONS BEFORE PERFORMING ANY WORK.

SPECIAL STABILIZER ROLLER SUPPORTS AND ALL ASSOCIATED HARDWARE NEEDED TO INSTALL THE SUPPORT WILL BE PURCHASED FROM LB&A BY DOMINION ENERGY AND SUPPLIED TO THE ODOT CONTRACTOR. SUPPORTS WILL BE MANUFACTURED BY THE FOLLOWING OR AN APPROVED EQUAL:

LB&A. INC. P.O. BOX 540 WESTTOWN, PA, 19395

THESE ITEMS WILL BE FULLY FIELD-ADJUSTABLE AND BE PROVIDED WITH ALL REQUIRED HARDWARE AND FASTENERS FOR A COMPLETE OPERABLE SYSTEM. DOMINION ENERGY OHIO GAS COMPANY (DEO) SHALL BE CONTACTED TO COORDINATE INSTALLATION OF THE GAS LINES, SUPPLIED AND INSTALLED BY DEO. ADVANCE NOTICE (3 WEEKS) SHOULD BE GIVEN TO DEO AND IT IS THE ODOT CONTRACTOR'S RESPONSIBILITY TO COORDINATE THIS WORK SUCH THAT IT WILL NOT CAUSE ANY DELAY. ALL MATERIALS AND FABRICATION WHICH IS ASSOCIATED WITH THE INSTALLATION OF THE GAS LINE ANGLE SUPPORT FRAMES ATTACHED TO THE EXISTING CROSSFRAMES SHALL BE IN ACCORDANCE WITH C&MS 513. ANY FIELD CUTS, WELDS OR DAMAGE TO THE HOT DIPPED GALVANIZED COATING OF THE ANGLE SUPPORT FRAMES DURING THE INSTALLATION SHALL BE REPAIRED PER C&MS 711.02.

DOMINION ENERGY OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OH 44333 CONTACT: GENE ONABIYI PHONE: (330) 664-2625

REQUIREMENTS FOR GAS LINE INSTALLATION SHALL BE THE RESPONSIBILITY OF DEO. THE DEO CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE SUPPORTS AND STABILIZERS PER THE MANUFACTURER'S SPECIFICATIONS ONCE THE GAS LINE IS INSTALLED.

ALSO INCLUDED UNDER THIS ITEM, THE ODOT CONTRACTOR WILL SUPPLY AND INSTALL THE 8" DIAMETER SCHEDULE 40 PVC CASING PIPE AND FITTINGS WITH 18" OF PIPE EXTENDING OUT FROM THE EXPOSED FACE OF THE CONCRETE END DIAPHRAGM IN ORDER TO ACCOMMODATE LINK-SEAL AND BOOT SEAL. DEO TO PROVIDE AND INSTALL LINK SEAL AND BOOT SEAL. THE PVC CASING PIPE SHALL EXTEND OUT FROM THE BACK OF THE END DIAPHRAGM, THROUGH THE GEOTEXTILE FABRIC WALL AND 18" BEYOND THE LIMITS OF THE APPROACH SLAB SLEEPER SLAB. THE TOP OF THE PVC CASING PIPE SHALL BE SET BELOW THE AGGREGATE BASE FOR THE SLEEPER SLAB. PVC PIPE CAN BE CUT TO LENGTH IF EXCESS REMAINS AFTER SEALS ARE INSTALLED.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED FOR PAYMENT PER BID FOR EACH COMPLETED AND INSTALLED, ITEM 690, SPECIAL - DOMINION ENERGY OHIO STABILIZERS AND SUPPORTS.

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					ESTIMATED QUANTITIES					CMR DATE: 01/21/2 JTW DATE: 01/22/
ITEM	EXTENSION	TOTAL 01/NHS/BR	TOTAL 03/NHS/OT	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
202	11203	LS			PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3, 4& 24 / 44
202	22900	306		SY	APPROACH SLAB REMOVED				306	
202	23500	1862		SY	WEARING COURSE REMOVED				1862	
503	11100	LS			COFFERDAMS AND EXCAVATION BRACING				LS	3 / 44
503	21101	130		CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	130				3/44
509	10000	176929		LB	EPOXY COATED REINFORCING STEEL	9565	6631	160733		
509	20001	100		LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				100	3 / 44
509	30020	8092		FT	NO. 4 GFRP DEFORMED BARS			8092		
510	10001	822		EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	450	372			3 / 44
<i>-</i> 11	77500			54011	CENT INTEGRAL PROPERTY OF THE					
511 511	33500 34412	2 69		EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2		69		
511 511	34447	446		CY CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE  CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			446		23 / 44
511 511	34450	80		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN  CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			80		23 / 44
511 511	43212	33		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)  CLASS QC1 CONCRETE WITH QC/QA. PIER		33	00		31 / 44
511	43512	58		CY	CLASS QCI CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	58				
F10	10101	10.70		CV	CEALTHO OF CONCRETE CUREACES (FRONK URETHANE) AS DED DIAM	77	F70	005		7.0.00 / 44
512 512	10101 10600	1272 100		SY FT	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN  CONCRETE REPAIR BY EPOXY INJECTION	77 50	570 50	625		3 & 22 / 44
512 512	33000	57		SY	TYPE 2 WATERPROOFING	50	50	5		
512	74000	542		SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	32	510			
513	10201	2192		LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			2192		3 / 44
513 513	20000 95020	6928		EACH	WELDED STUD SHEAR CONNECTORS			6928		20 / 44
513 513	95020	LS 96		EACH	STRUCTURAL STEEL, MISC.: BEAM END REPAIR  STRUCTURAL STEEL, MISC.: BEAM RETROFIT PLATES			LS 96		26 / 44 4 & 25 / 44
313	33030	30		EAUT	STRUCTURAL STEEL, MISC. DEAM RETROTTI FLATES			30		4 & 23 / 44
514	00050	2845		SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			2845		
514	00056	2845		SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			2845		
514	00060	2320		SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			2320		
514	00066	2320		SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			2320		
514	00504	15		MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			15		
514	10000	10		EACH	FINAL INSPECTION REPAIR			10		
516	10010	132		FT	ARMORLESS PREFORMED JOINT SEAL			+	132	
516	13600	17		SF	1" PREFORMED EXPANSION JOINT FILLER				17	
516	13900	205		SF	2" PREFORMED EXPANSION JOINT FILLER				205	
516	14020	155		FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	155				
<i>516</i>	44201	16		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	16				28 / 44
					(12"x14"x3.885" WITH 14"x15"x1.50" LOAD PLATE)					
516	44201	24		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN		24			29 / 44
516	47001	LS			(14"x16"x3.848" WITH 15"x17"x1.75" LOAD PLATE)  JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN			LS		4 & 26 / 44
310	47007	LJ			DACKING AND TEMPORART SOFT ORT OF SOFERSTROCTORE, AS TER TEAM			LS		9 & 20 / 99
518	21200	98		CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	98		1		
518	40001	167		FT	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN	167				4 , 12 & 15 / 44
518	40010	130		FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	130				
SPECIAL	51900100	1980		SF	SPECIAL - COMPOSITE FIBER WRAP SYSTEM (SEE PROPOSAL NOTE)		1980	-		22 / 44
519	11101	220		SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	25	195			4 / 44
							·			
526 526	25010 90030	359 131		SY FT	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")  TYPE C INSTALLATION			1	359 131	
JZU	30030	131		FI	THE GINGIALLATION				131	
SPECIAL	53001300	1540		FT	SPECIAL - STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL			1540		4 / 44
601	20001	100		SY	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN			1	100	2 & 4 / 44
607	39900	350		SY FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			350	100	Z & 4/44
SPECIAL	69098400	500	LS		SPECIAL - DOMINION ENERGY OHIO STABLIZER AND SUPPORTS			1 300	LS	4,27&34/44
								+		<del> </del>

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O21 HOR ENGINERING, INC.
MBER CLEVELAND, OHIO 44114
216-912-4240

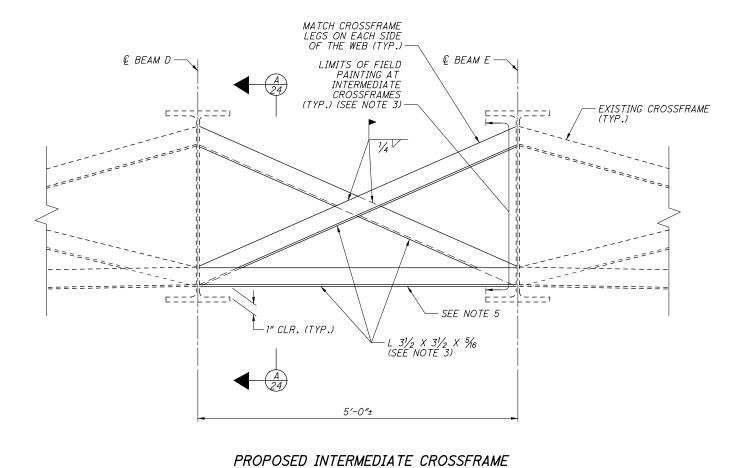
ESTIMATED QUANTITIES
BRIDGE NO. POR-14-1296
S.R. 14 OVER S.R. 5

POR-14-12.96 PID No. 105860

51 90



POR-14-12.96 105860 ° N PID



L 4×4×5/6' (TYP.)

TYPICAL END CROSSFRAME REMOVAL DETAIL

EXISTING BEAM

(TO REMAIN) (TYP.)

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# BEAM FLANGE (TYP.) BEAM WEB L 31/2 X 31/2 X 5/6 2" CLR. 4'-0" LIMITS OF FIELD PAINTING AT INTERMEDIATE CROSSFRAMES (SEE NOTE 3)

# SECTION A-A

# € BEAM -7/8″ ¢ AUTOMATIC WELDED STUD SHEAR CONNECTOR (TYP.) (TYP.) 9'-0"± - *€ BEAM* (TYP.) END DAM SHEAR STUD DETAIL

# NOTES:

- 1. COORDINATE END CROSSFRAME REMOVAL WITH STAGED CONSTRUCTION. FOR ADDITIONAL DETAILS SEE SHEETS 6 /44 AND 7 /44 .
- 2. FOR ADDITIONAL END CROSSFRAME DETAILS, SEE THE EXISTING PLANS.
- 3. PROPOSED INTERMEDIATE CROSSFRAMES SHALL BE SHOP PRIMED AND FIELD PAINTED WITH AN OZEU THREE COAT PAINT SYSTEM PER CMS 514. INTERMEDIATE AND FINISH COATS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT AND ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT.

EXISTING STRUCTURAL STEEL COATINGS DAMAGED BY THE INSTALLATION OF PROPOSED CROSSFRAMES SHALL BE SURFACE PREPPED AND FIELD PAINTED WITH AN OZEU THREE COAT PAINT SYSTEM PER CMS 514. SEE DETAIL THIS SHEET FOR LIMITS OF REPAIR.

- 4. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 WITH A CVN DESIGNATION.
- 5. FOR ADDITIONAL CROSSFRAME DETAILS, SEE ARCHIVED STD. DWG. GSD-1-96.

# LEGEND:

INDICATES AREAS TO BE REMOVED AS PER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

INDICATES LIMITS OF SURFACES TO BE PAINTED WITH SYSTEM OZEU, SEE NOTES THIS SHEET