

**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS**

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

NONE

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

844 DATED 04-20-18

**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.

**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. THIS WORK WILL ALSO INCLUDE THE REMOVAL OF THE EXISTING ROCKER BEARINGS AND THE EXISTING SHIM PLATES AT THE ABUTMENTS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER 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. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. 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.

**ITEM 511, CLASS QC1 CONCRETE, MISC.: SHOULDER PIER BARRIER REPAIR**

REPAIRS TO THE MIDDLE PIER COLUMN OF PIER 1 SHALL BE PERFORMED ONE-HALF OF THE COLUMN AT A TIME. DO NOT BEGIN REPAIRS ON THE SECOND HALF OF THE COLUMN UNTIL THE BARRIER AND COLUMN CONCRETE HAS CURED FOR AT LEAST 3 DAYS.

REMOVAL OF EXISTING BARRIER CONCRETE SHALL BE INCLUDED IN THIS PAY ITEM. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION. CHIPPING HAMMERS WILL SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNT CHISEL TYPE TOOLS.

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS A MINIMUM OF 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM	ITEM EXT.	TOTAL 01/IMS/13	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER STRUCT.	GENERAL	SHEET REF.
510	10000	14	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT				14	
511	53010	3	CU YD	CLASS QC1 CONCRETE, MISC.: SHOULDER PIER BARRIER REPAIR				3	
512	10100	51	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	51				
512	10300	822	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			822		
512	74000	31	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	31				
514	27700	175	SQ FT	FIELD PAINTING, MISC.: COATING OF BEAM ENDS			175		
514	00504	2	MNHR	GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			2		
516	31000	55	FT	JOINT SEALER	55				3
516	44301	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN			8		7
516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN					3
519	11101	216	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN				216	
844	10000	57	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION		57			

**ITEM 514 – FIELD PAINTING, MISC.: COATING OF BEAM ENDS**

PREPARE THE BEAM ENDS PER SSPC SP10 OR SSPC SP11 TO BARE METAL ACHIEVING A 1.5 TO 3.5 MIL PROFILE. PAINT THE BEAM ENDS WITH ORGANIC ZINC PRIME COAT PER C&MS 514. PROVIDE THE PRIME COAT THICKNESS AS PER C&MS 514.20. EXTEND THE LIMITS OF THE BEAM PREPARATION AND PAINTING 1-FT BEYOND THE LIMITS OF THE ABUTMENT BRESTWALL. PAINT COLOR TO CLOSELY MATCH EXISTING AT THE APPROVAL OF THE ENGINEER.

THE DEPARTMENT WILL PAY FOR ALL ABOVE LABOR AND AT THE CONTRACT BID PRICE FOR ITEM 514 – FIELD PAINTING, MISC: COATING OF BEAM ENDS.

**ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN**

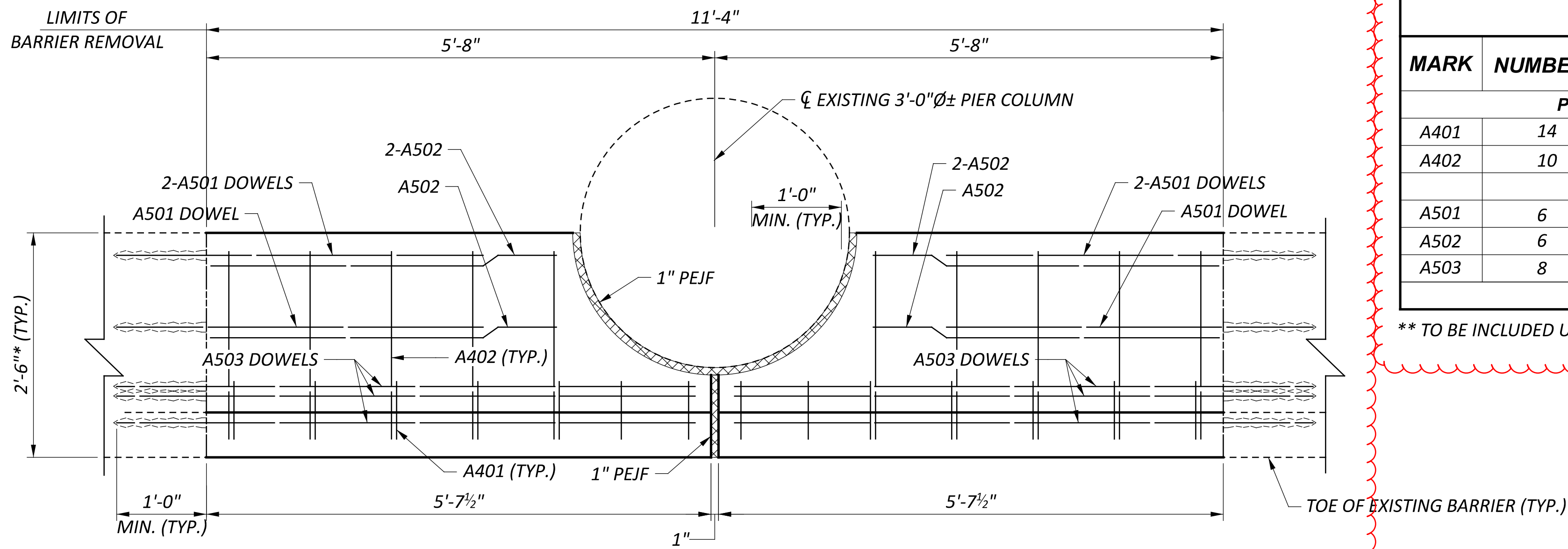
PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT,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

GRE-00071-01.500

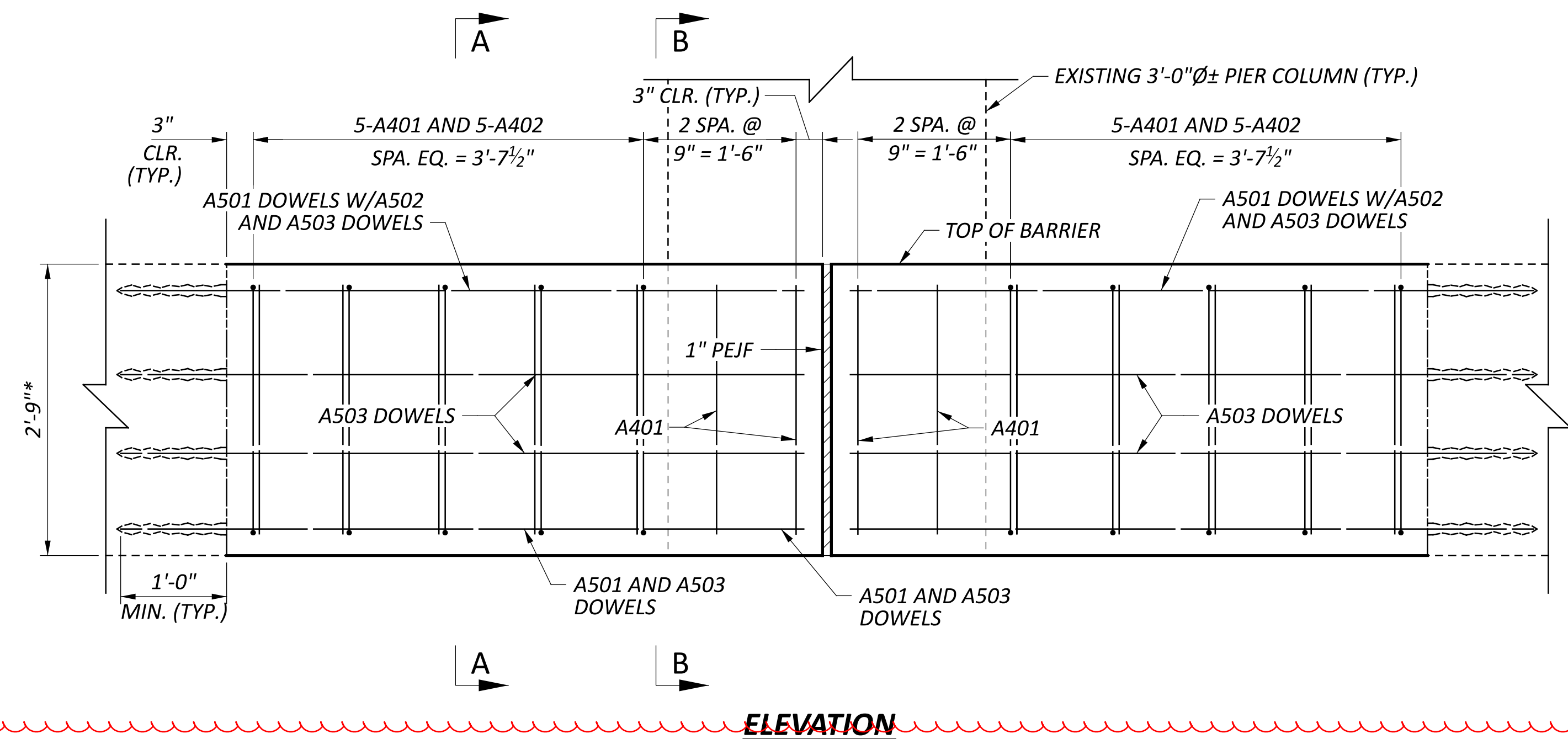
MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/14/2025 TIME: 3:01:28 PM USER: scott-w  
pw:\pewinp04.pewin.private.palmernet.com\Palmer\_Engineering\Documents\Ohio\ODOT\08\GRE\112979\400-Engineering\Structures\SFN\_2901714\Sheet\112979\_SFN2901714\_SN001.dgn

GENERAL NOTES AND GENERAL SUMMARY  
BRIDGE NO. GRE-00071-01.500  
T.R. 57 (ORCHARD GROVE ROAD) OVER I.R.-71

SFN	2901714
DESIGN AGENCY	
8350 EAST KEMPER ROAD SUITE B CINCINNATI, OH 45249 (513) 469-1600	
DESIGNER SDW	CHECKER MLJ
REVIEWER BJF	10/10/24
PROJECT ID	112979
SUBSET	TOTAL
2	7
SHEET	TOTAL
P.33	61



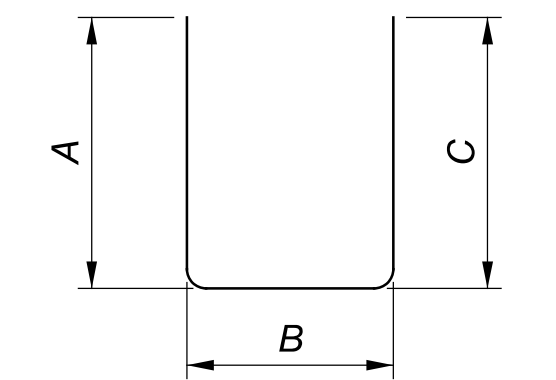
PIER 1 - CENTER COLUMN PLAN



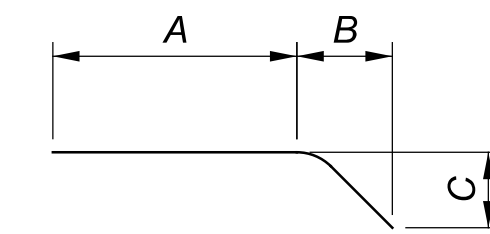
ELEVATION

REINFORCING STEEL LIST							
MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS		
					A	B	C
PIER BARRIER (GALVANIZED STEEL REINFORCEMENT - GSR)							
A401	14	2'-5"	23	19	1'-6"	0'-11"	0'-3"
A402	10	5'-10"	39	2	1'-8"	2'-3"	2'-1"
A501	6	4'-1"	26	STR			
A502	6	3'-11"	25	STR			
A503	8	6'-5"	54	STR			
TOTAL			167 **				

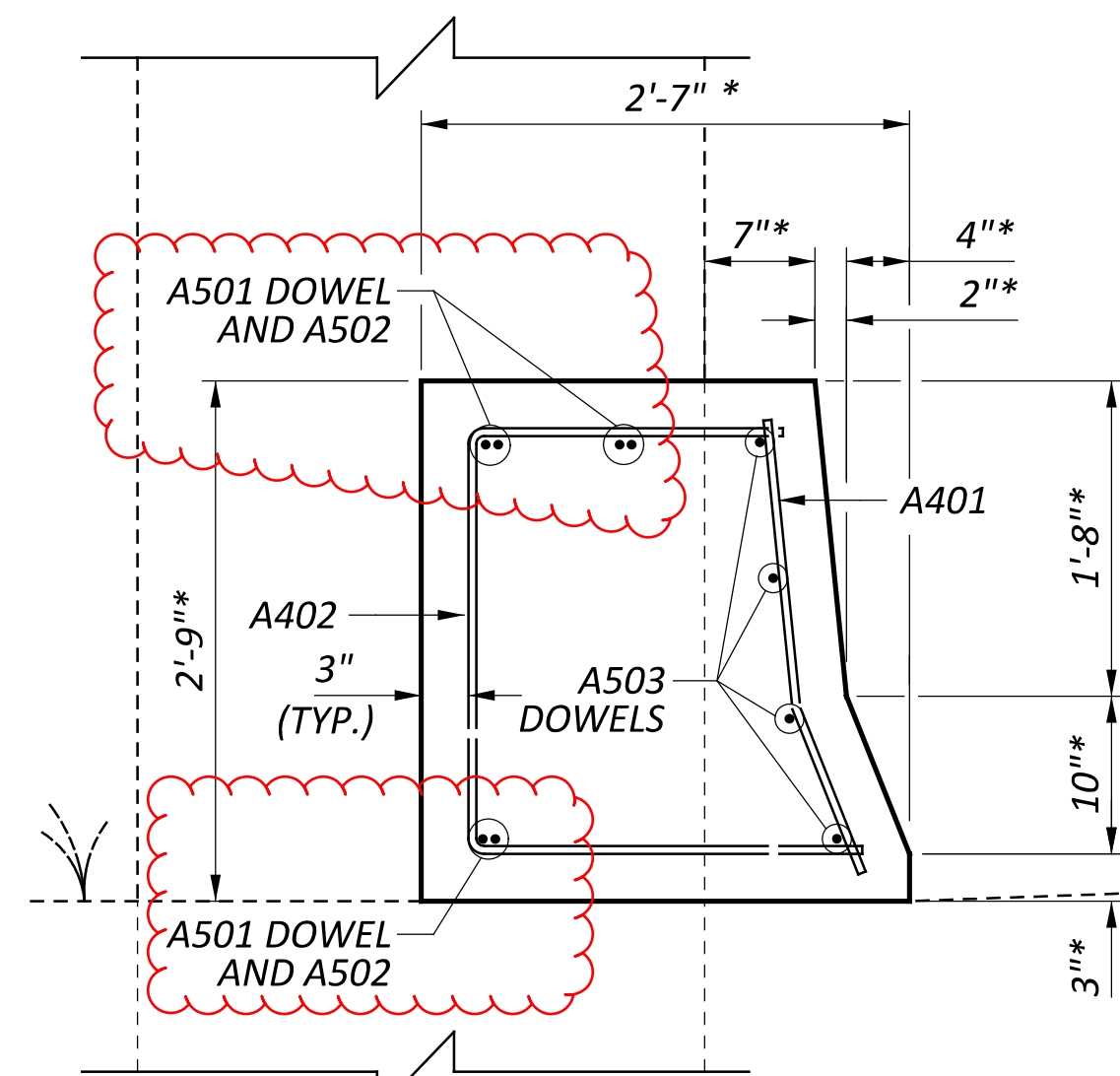
\*\* TO BE INCLUDED UNDER ITEM 511 - CLASS QC1 CONCRETE, MISC: SHOULDER PIER BARRIER REPAIR



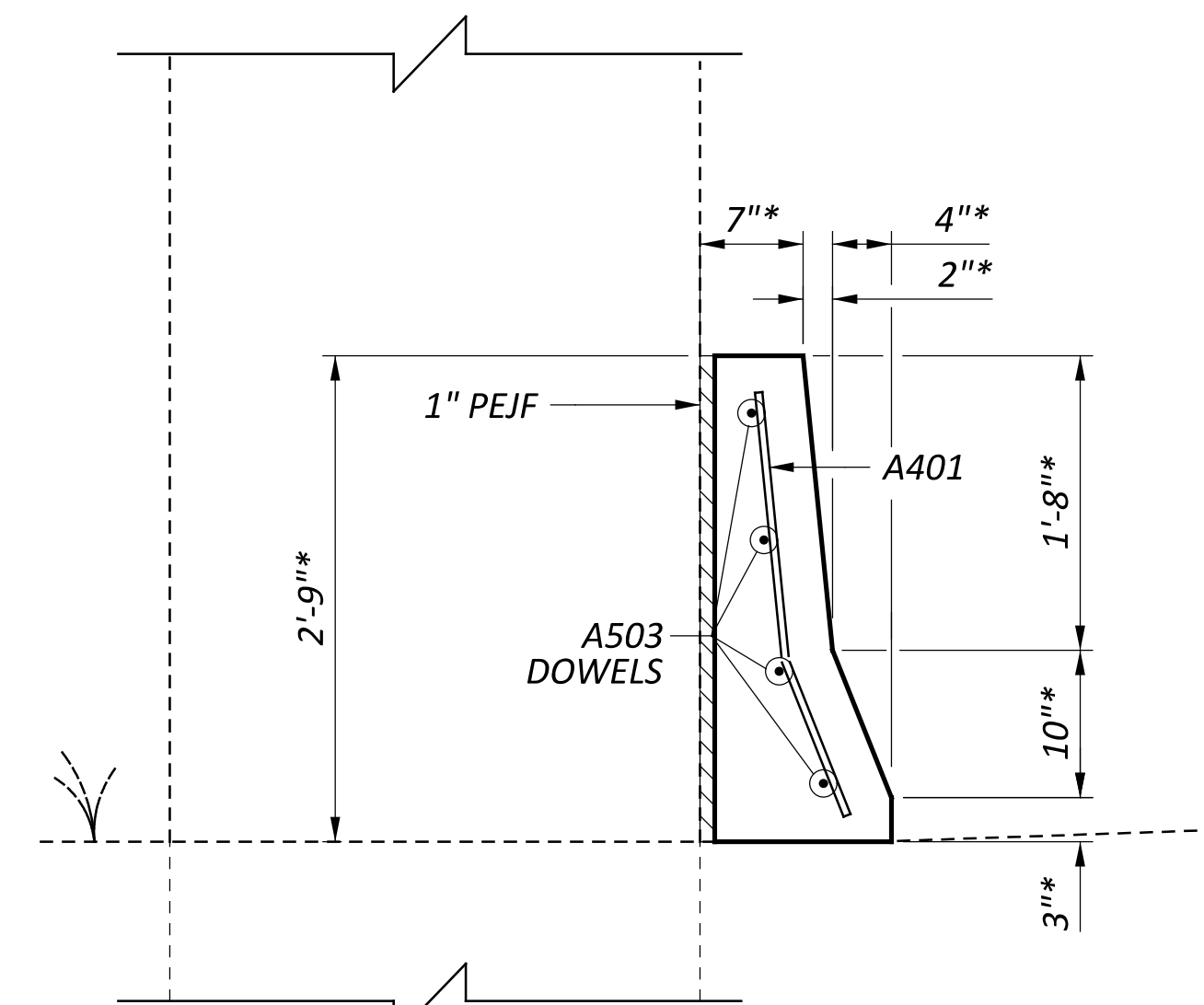
TYPE-2



TYPE-19



SECTION A-A



SECTION B-B

**LAP LENGTH**

#5 BARS = 3'-1"

**LEGEND**

\* = MATCH SHAPE, HEIGHT AND DEPTH OF EXISTING BARRIER

**NOTES**

1) DOWELS TO USE ITEM - DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL, IN THE AREA OF THE DOWEL HOLE, AND RELOCATE AS NEEDED TO AVOID DAMAGING OF EXISTING REINFORCING STEEL. THIS ITEM WILL PAY FOR ALL COSTS ASSOCIATED WITH THE DOWELS, EXCEPT FOR STEEL MATERIAL COST WHICH IS INCLUDED WITH ITEM 511- SHOULDER PIER BARRIER REPAIR.

2) REPAIRS TO THE MIDDLE PIER COLUMN OF PIER 1 SHALL BE PERFORMED ONE-HALF OF THE COLUMN AT A TIME. SEE GENERAL NOTES [2/7].

DESIGNER	CHECKER
SDW	MLJ
REVIEWER	
BJF	10/10/24
PROJECT ID	112979
SUBSET	TOTAL
5	7
SHEET	TOTAL
P.36	61