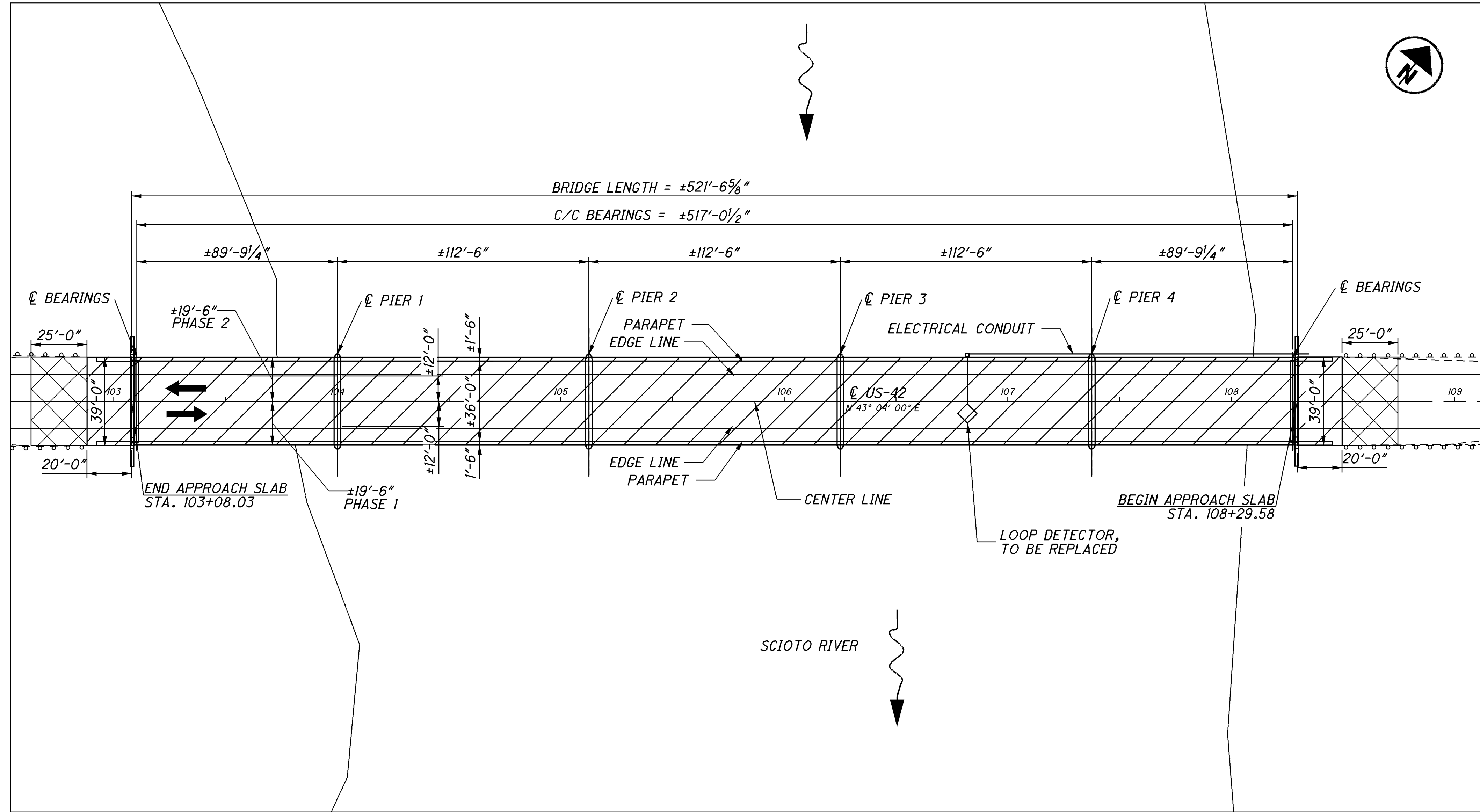


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BRIDGE PLAN VIEW

INDEX OF STRUCTURAL WORK ITEMS:

1. REMOVE AND REPLACE TOP 4" OF BOTH ABUTMENT BACKWALLS.
2. REMOVE EXISTING MONOLITHIC CONCRETE WEARING SURFACE TO A DEPTH OF ±0.50" BY SCARIFICATION OR HYDRO-DEMOLITION. REMOVE AN ADDITIONAL ±1.00" BY HYDRO-DEMOLITION.
3. PERFORM FULL AND PARTIAL DEPTH DECK REPAIRS.
4. PERFORM ±1.50" SUPERPLASTICIZED DENSE CONCRETE OVERLAY.
5. REMOVE AND REPLACE TOP ±6.00" OF THE PARAPETS.
6. SEAL CONCRETE ABUTMENTS, WINGWALLS, PIERS (TO WATER LEVEL), AND PARAPETS.

NOTES:

- GROUND PENETRATING RADAR EVALUATION OF DECK WAS USED TO GENERATE PARTIAL AND FULL DEPTH REPAIR QUANTITIES. THIS EVALUATION IS AVAILABLE UPON REQUEST.
- LOOP DETECTOR SIZE AND LOCATION IS APPROXIMATE.

LEGEND:

- SDC OVERLAY WORK AREA
- MILL AND FILL WORK AREA

DESIGN TRAFFIC:
2012 ADT = 8050
2032 ADT = 10,300
DIRECTIONAL DISTRIBUTION = 0.50

EXISTING STRUCTURE

TYPE: 5 SPAN CONTINUOUS STEEL PLATE GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: ±90'-0", ±112'-6", ±112'-6", ±112'-6", ±90'-0"
ROADWAY: ±36'-0" T/T PARAPET
LOADING: HS 20-44 (CASE II) & ALTERNATE MILITARY LOADING
SKEW: NONE
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: ±20'-0" LONG (AS-1-81)
ALIGNMENT: TANGENT
CROWN: ±3/8"/FT
STRUCTURAL FILE NUMBER: 2101742
DATE BUILT: 1946; RE-DECKED 1992
DISPOSITION: BRIDGE DECK OVERLAY. REPAIR OF ABUTMENT BACKWALLS. PATCHING OF PARAPETS. SEALING CONCRETE. MILL & FILL APPROACH PAVEMENT.

PROPOSED STRUCTURE

TYPE: 5 SPAN CONTINUOUS STEEL PLATE GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: ±90'-0", ±112'-6", ±112'-6", ±112'-6", ±90'-0"
ROADWAY: ±36'-0" T/T PARAPET
LOADING: NO CHANGE
SKEW: NONE
WEARING SURFACE: ±1.5" SDC OVERLAY
APPROACH SLABS: ±20'-0" LONG (AS-1-81)
ALIGNMENT: TANGENT
CROWN: ±3/8"/FT
COORDINATES: LATITUDE N 40° 14' 38"
LONGITUDE W 83° 8' 52"

SITE PLAN
BRIDGE NO. DEL-42-0197
US-42 OVER THE SCIOTO RIVER

DEL-42-1.97
PID No. 89096

1 / 7
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DESIGN AGENCY
ODOT DISTRICT SIX
IN-HOUSE DESIGN

DATE
11/17/11
REVIEWED
KRF
STRUCTURE FILE NUMBER
2101742

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REVISED
GKF

DEL-42-0197
STA. 103+08.03
STA. 108+29.58

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

STANDARD DRAWINGS: AS-1-81 DATED 7/19/2002
PCB-91 DATED 7/19/2002

SUPPLEMENTAL SPEC: 848 DATED 4/15/2011

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE ODOT BRIDGE DESIGN MANUAL, 2004 EDITION.

DESIGN DATA:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 PSI

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI

DECK PROTECTION METHOD:

1 1/2" SDC OVERLAY

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 CONSTRUCTION MATERIAL AND SPECIFICATIONS (CMS) SECTION 102.05. CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENTIONS, WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ALIGNMENT AND PROFILE:

THE ALIGNMENT OF THE EXISTING OVERLAY WILL NOT BE CHANGED. THE PROPOSED PROFILE GRADE ELEVATIONS ARE TO BE THE SAME AS THE EXISTING.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED AS DIRECTED BY THE ENGINEER, UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM INCLUDES THE REMOVAL OF THE TOP OF PARAPETS, TOP OF BACKWALL AND PORTION OF APPROACH SLAB AS DETAILED IN PLANS. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. ALL REINFORCING STEEL SHALL BE PRESERVED UNLESS OTHERWISE NOTED IN THE PLANS OR THE ENGINEER FINDS THE REINFORCING STEEL TO BE UNSUITABLE. IF REINFORCING STEEL TC REMAIN BECOMES DAMAGED, THE CONTRACTOR WILL ASSUME THE COST OF REPLACEMENT. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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 EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT. A CONTINGENCY QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE PLANS.

ITEM 621 - RAISED PAVEMENT MARKER REMOVED:

ALL RAISED PAVEMENT MARKERS ON THE BRIDGE DECK SHALL BE COMPLETELY REMOVED. NO RAISED PAVEMENT MARKERS WILL BE INSTALLED IN THE NEW BRIDGE DECK.

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS ARE USED WITHIN THE PLAN:

ABUT: ABUTMENT
APPR: APPROACH
BRG: BEARING
C/C: CENTER TO CENTER
CL: CENTERLINE
CONST: CONSTRUCTION
DIA: DIAMETER
EQ: EQUAL
EX: EXISTING
EXP: EXPANSION
FS: FAR SIDE
FWD: FORWARD
FWS: FUTURE WEARING SURFACE
MIN: MINIMUM
NS: NEAR SIDE
PCB: PORTABLE CONCRETE BARRIER
PERF: PERFORATED
PEJF: PREFORMED EXPANSION JOINT FILLER
PRO: PROPOSED
SER: SERIES
SPA: SPACE
TOS: TOP OF SLOPE
TYP: TYPICAL

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT:

DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING NONSHRINK NONMETALLIC GROUT. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO THE INSIDE (AWAY FROM PARAPET FACE) OF EXISTING BAR. THE DEPARTMENT WILL PAY FOR ALL DOWEL HOLES AND GROUTING WITH ITEM 510.

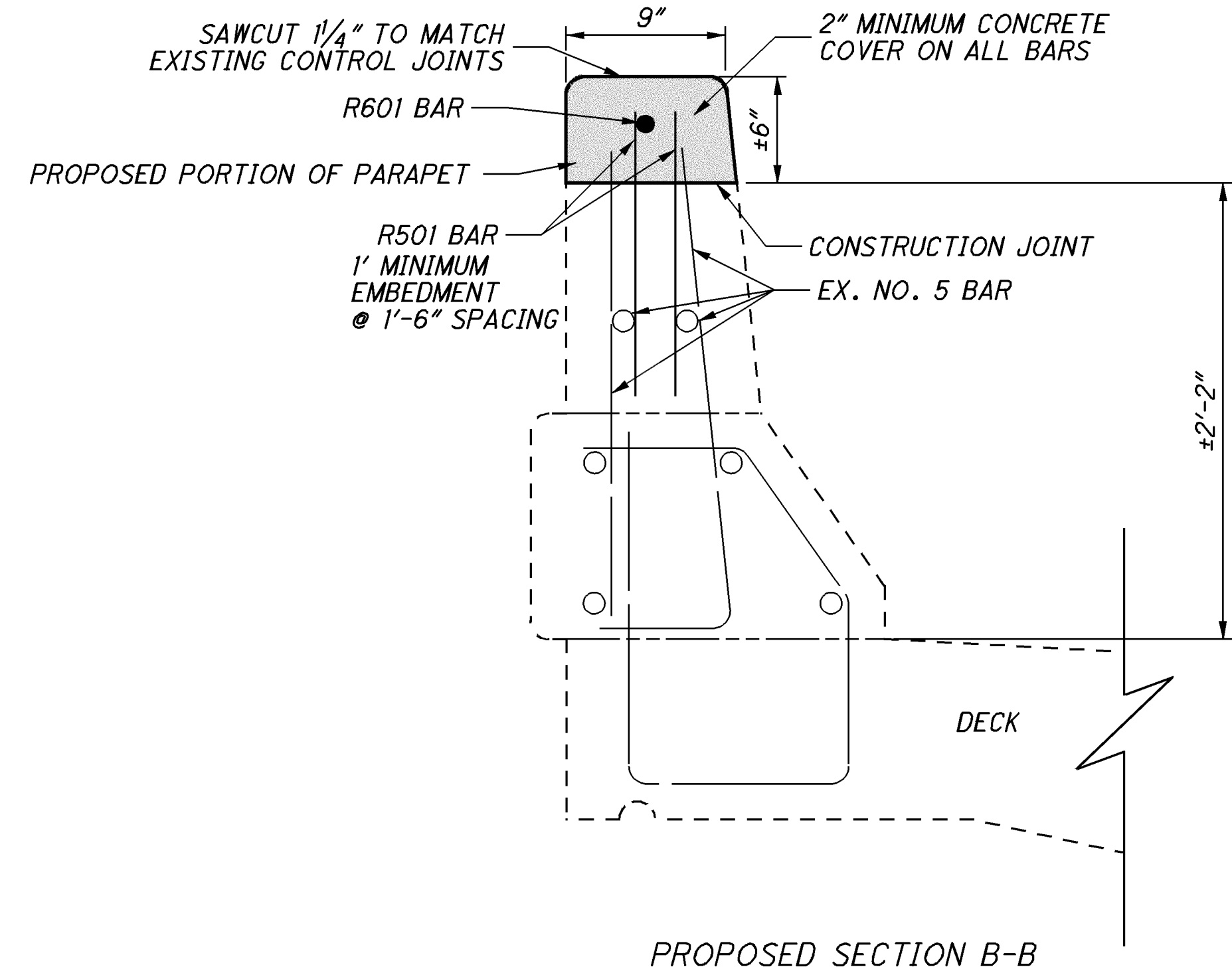
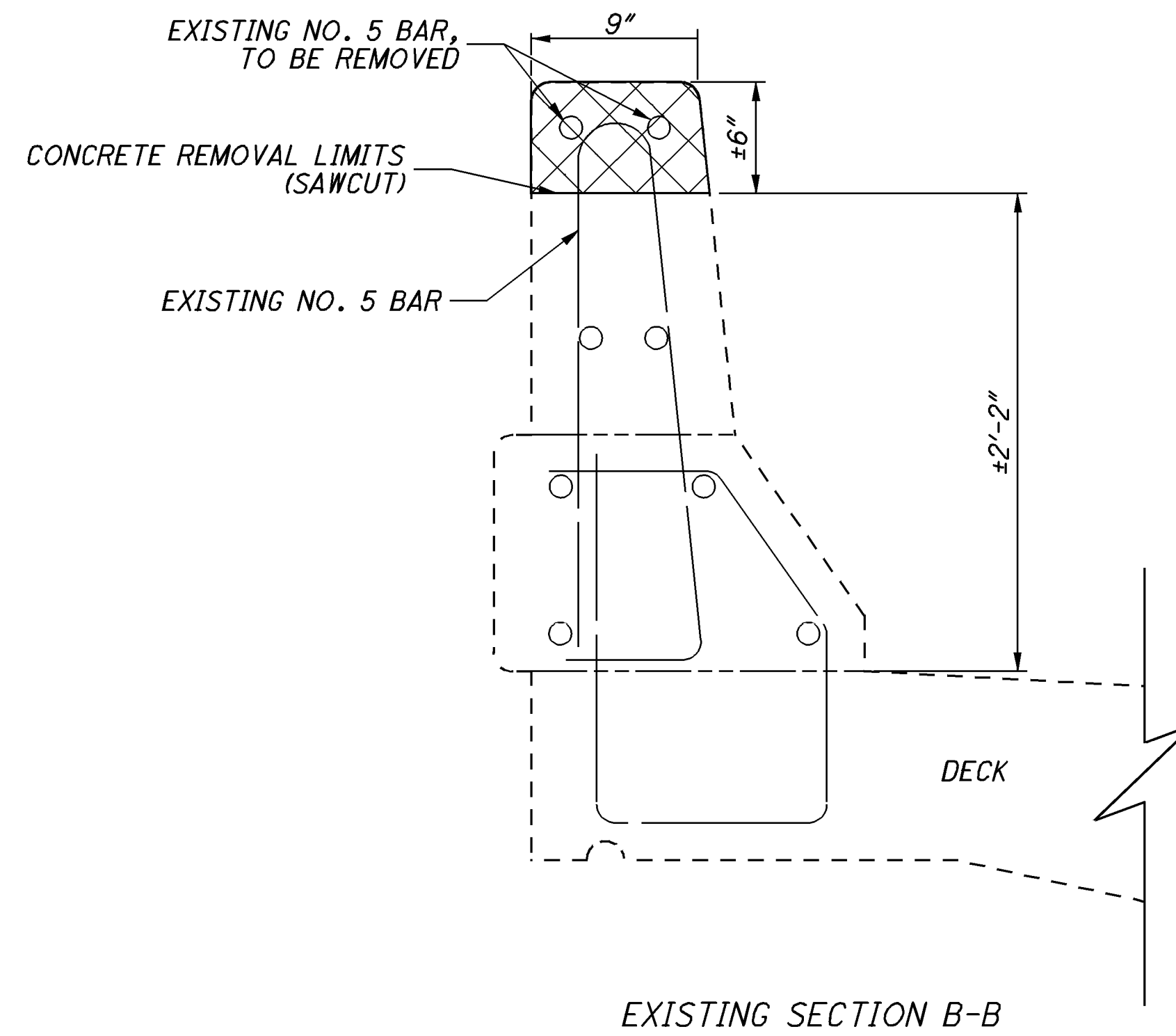
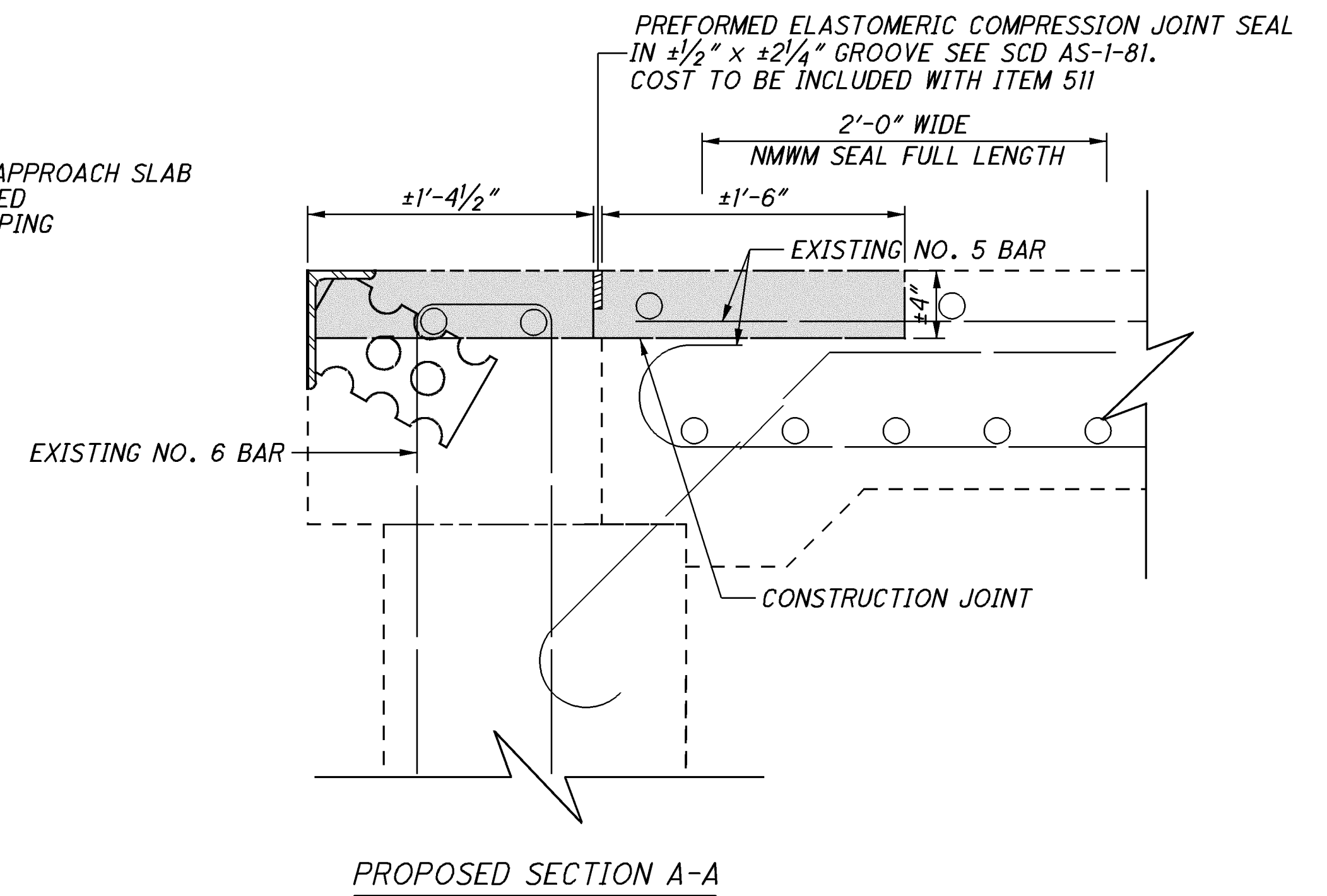
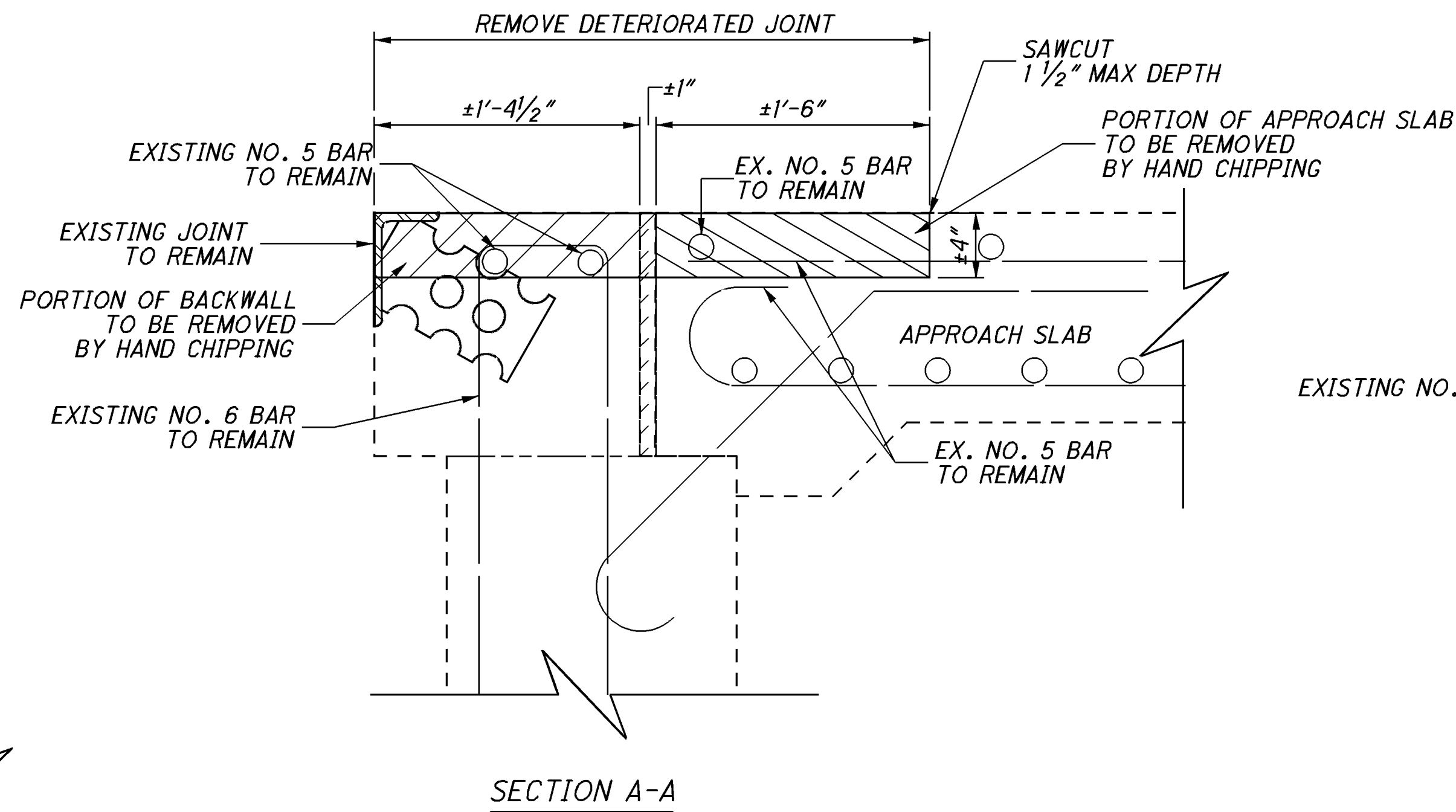
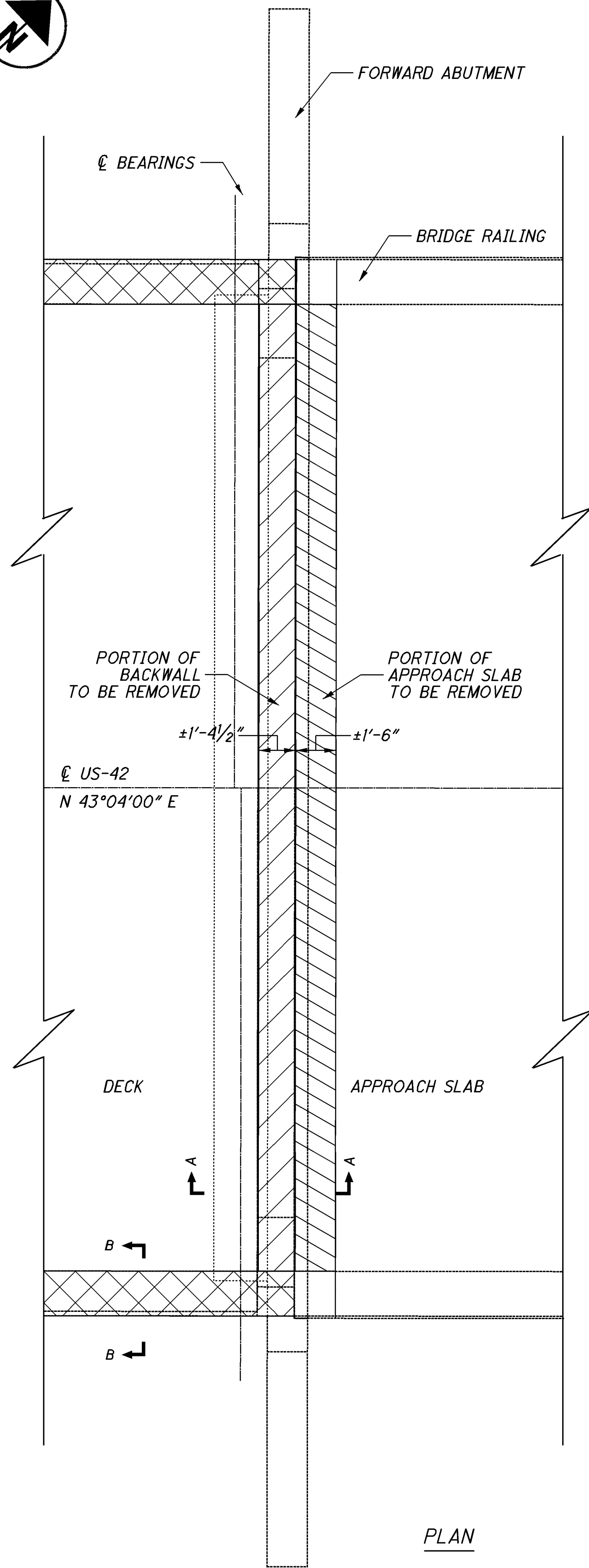
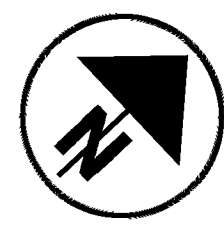
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STRUCTURE NOTES BRIDGE NO. DEL-42-0197 US-42 OVER SCIOTO RIVER	DESIGNED	<i>NJF</i>
	CHECKED	<i>TSP</i>
	REVISD	<i>GKF</i>
	STRUCTURE FILE NUMBER	
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LEGEND:

- PORTION OF BACKWALL TO BE REMOVED
- PORTION OF APPROACH SLAB TO BE REMOVED
- PORTION OF PARAPET TO BE REMOVED
- CLASS S CONCRETE, SUPERSTRUCTURE

NOTES:

- CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE EXISTING STEEL TO REMAIN.

STRUCTURE DETAILS
BRIDGE NO. DEL-42-0197
US-42 OVER SCIOTO RIVER

DEL-42-1.97
PID No. 89096

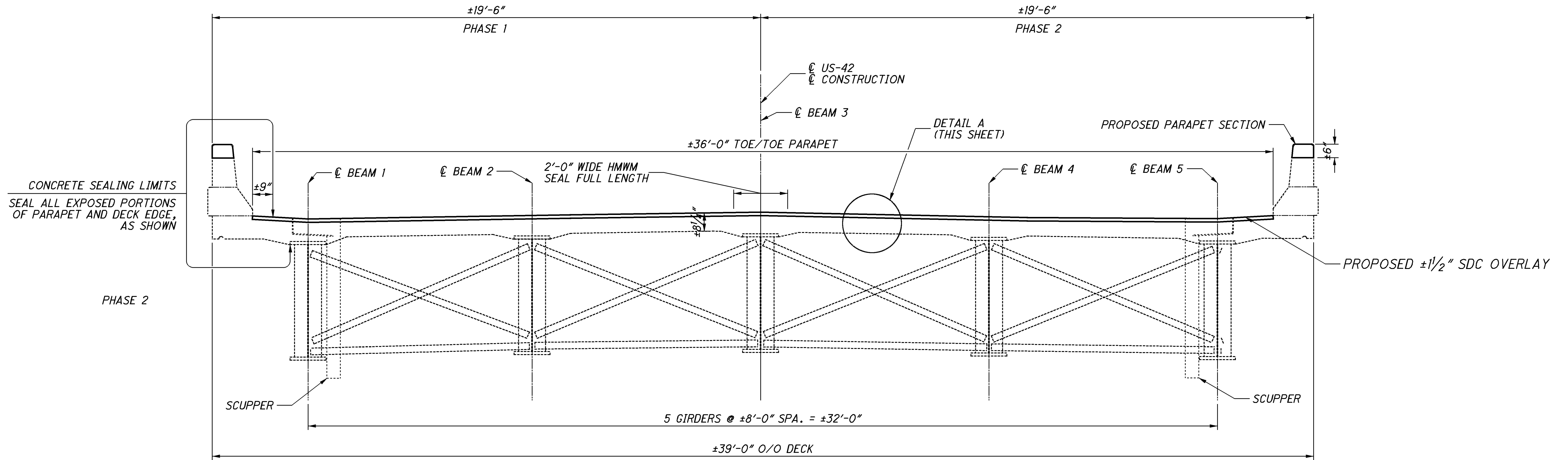
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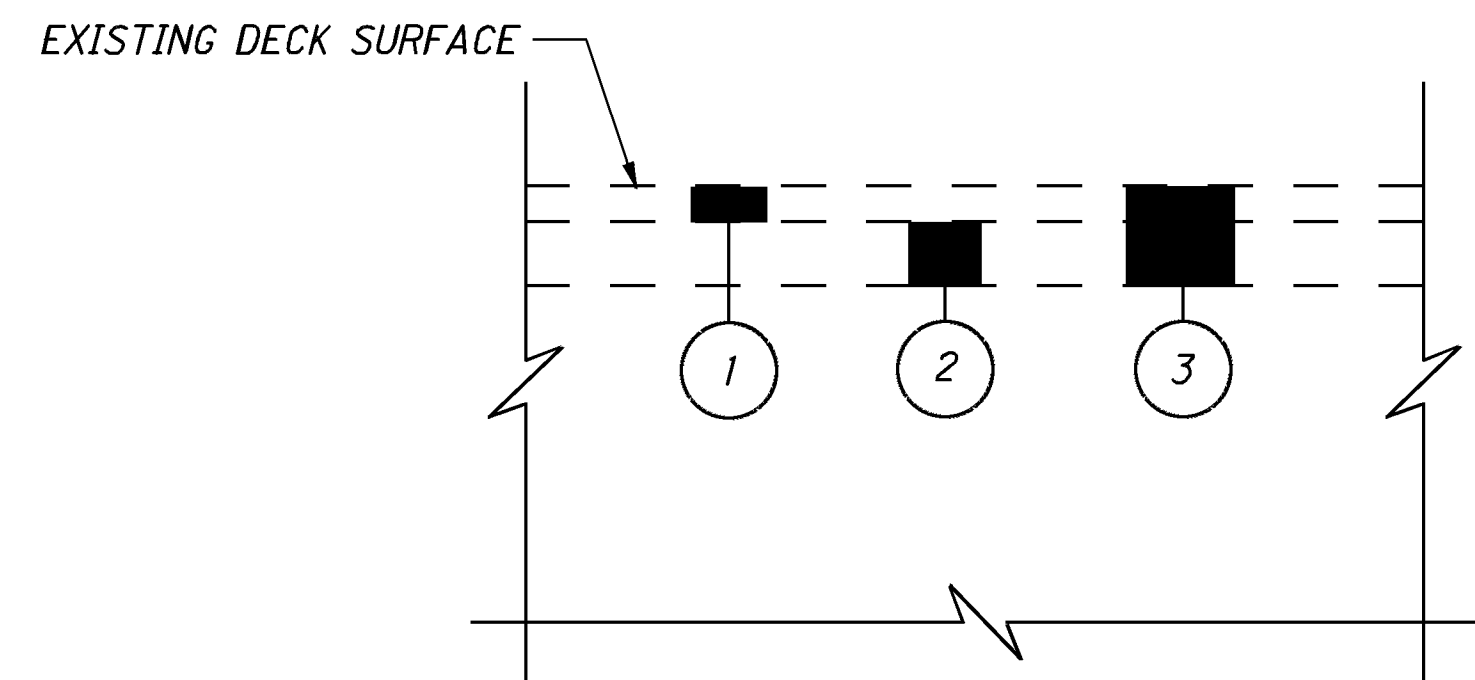
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DESIGN AGENCY
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PROPOSED TRANSVERSE SECTION



DETAIL A

- 1 REMOVAL OF EXISTING CONCRETE SURFACE BY PLANING OR HYDRODEMOLITION (0.5")
COST TO BE INCLUDED WITH SURFACE PREPARATION USING HYDRODEMOLITION
- 2 ITEM 848: SURFACE PREPERATION USING HYDRODEMOLITION (1.0")
- 3 ITEM 848: SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (1.5")

NOTES:

- FOR PROSPOSED PARAPET SECTION DETAILS, SEE SHEET 4/7.

TRANSVERSE SECTION
BRIDGE NO. DEL-42-0197
US-42 OVER SCIOTO RIVER

DEL-42-1.97
PID No. 89096

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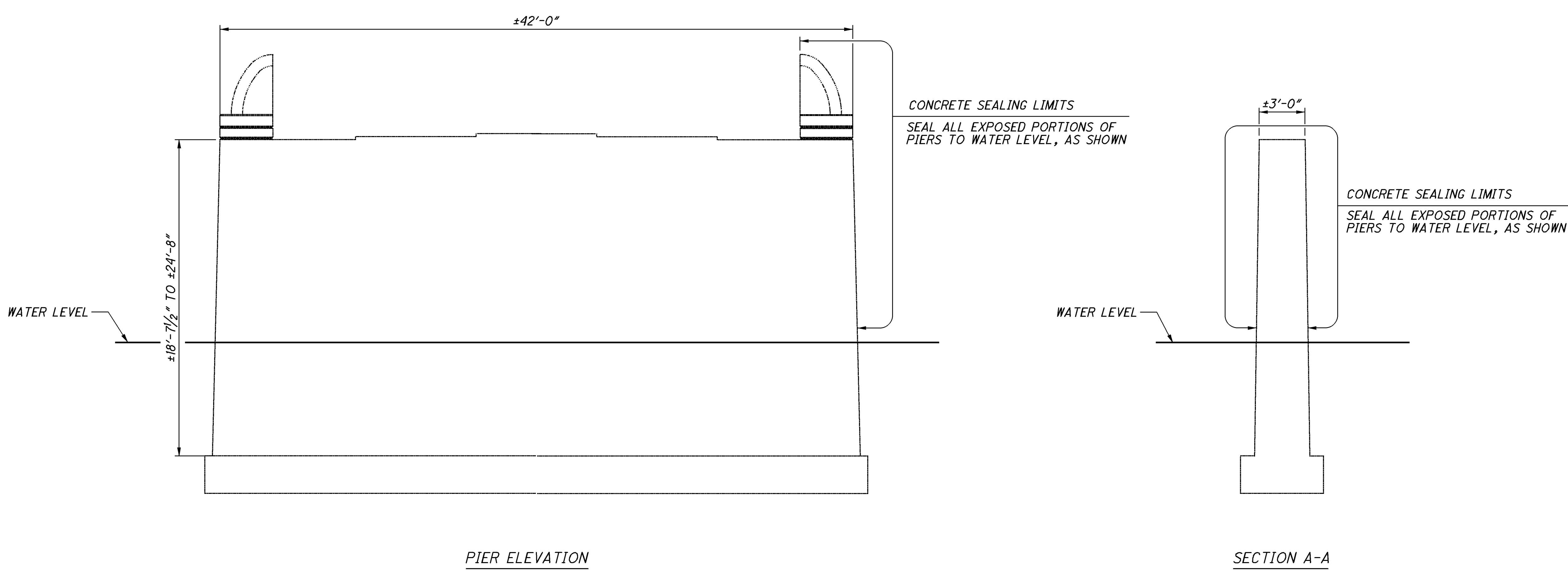
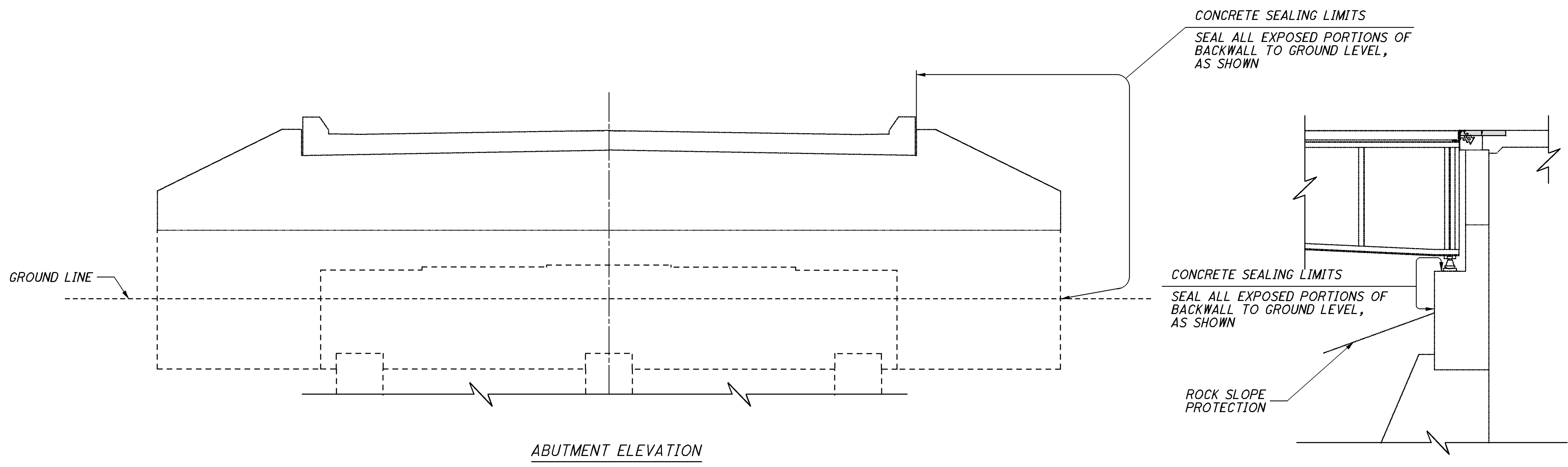
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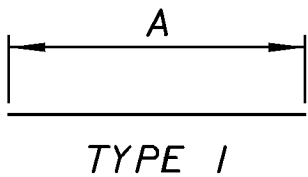
SEE SHEET 5 / 7 FOR PARAPET
CONCRETE SEALING LIMITS

DEL-42-1.97 PID No. 89096	CONCRETE SEALING DETAILS BRIDGE NO. DEL-42-0197 US-42 OVER SCIOTO RIVER				DESIGN AGENCY ODOT DISTRICT SIX IN-HOUSE DESIGN	
	6 / 7	DESIGNED NJF	DRAWN NJF	REVIEWED KRF	DATE 11/17/11	STRUCTURE FILE NUMBER 2101742

MARK	NUMBER REQ'D	LENGTH	WEIGHT	TYPE	DIMENSIONS								
					A	B	C	D	E	F	G	R	INC.
SUPERSTRUCTURE													
R501	1392	1' - 4"	1936	1	1' - 4"								
R601	42	30' - 0"	1893	1	30' - 0"								
SUPERSTRUCTURE SUB-TOTAL			3,829	(CARRIED TO SHEET 3 / 7)									

R601 MINIMUM LAP LENGTH = 4'-4"

BENDING DIAGRAMS:



NOTES:

- THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.
- ALL BARS TO BE EPOXY COATED.