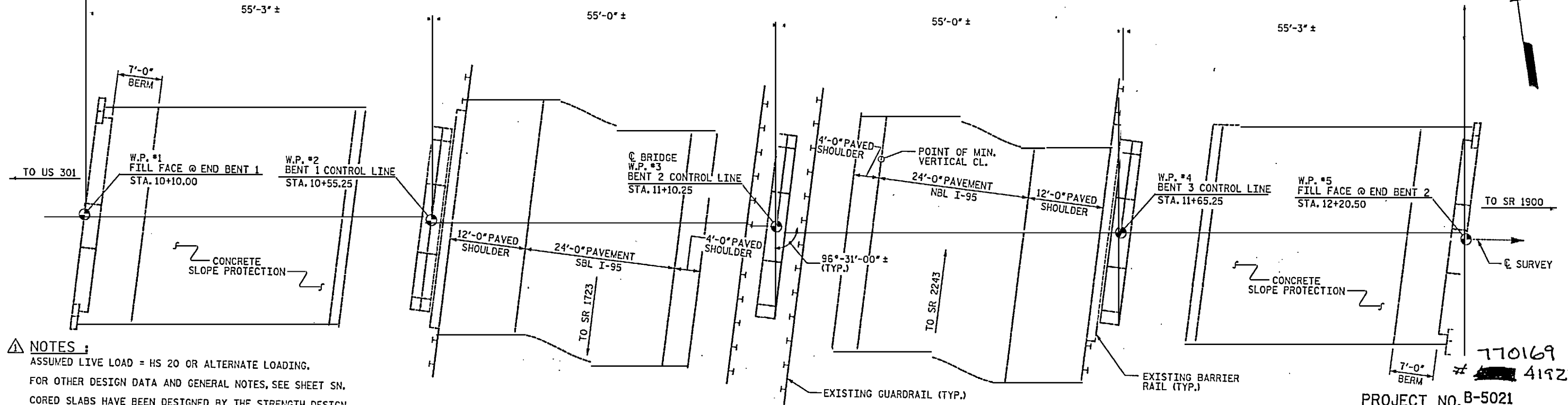


ALL DIMENSIONS IN THESE PLANS ARE BASED ON BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION AND ANY FABRICATION, CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES SUCH THAT NECESSARY ADJUSTMENTS BE MADE BY THE CONTRACTOR.

ELEVATION
(SECTIONS AT BENTS AND END BENTS ARE AT RIGHT ANGLES)

TOTAL LENGTH OF BRIDGE = 220'-6" ± (FILL FACE TO FILL FACE ALONG Q SURVEY)



PLAN

(PILES AND COLUMNS NOT SHOWN IN PLAN VIEW FOR CLARITY)

- NOTES:**
- ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.
 - FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
 - CORED SLABS HAVE BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.
 - SPAN C OF THE EXISTING STRUCTURE CONSISTING OF 55'-0" PRESTRESSED CONCRETE GIRDERS, 24'-0" CLEAR ROADWAY WIDTH, REINFORCED CONCRETE DECK SHALL BE REMOVED FOR PARTIAL REMOVAL OF EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.
 - FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.
 - FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 - FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
 - THE EXISTING 15' X 10' SIGN ATTACHED TO THE BRIDGE DECK SHALL BE REMOVED INTACT AND DELIVERED TO THE BRIDGE MAINTENANCE YARD AS DIRECTED BY THE ENGINEER. REMOVAL AND TRANSPORT OF THE EXISTING SIGN SHALL BE PAID FOR IN THE PARTIAL REMOVAL OF EXISTING STRUCTURE.
 - FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
 - FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.

REVISION #1: REVISED PER REVIEW COMMENTS
BY: TJT DATE: 5-08
CH'KD BY: KGB DATE: 5-08

TOTAL BILL OF MATERIAL						
	PARTIAL REMOVAL OF EXISTING STRUCTURE	CLASS AA CONCRETE	REINFORCING STEEL	CONCRETE BRIDGE RAIL	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS
	LUMP SUM	CU. YDS.	LBS.	LIN. FT.	LUMP SUM	LIN. FT.
SUPERSTRUCTURE	LUMP SUM			109.75	LUMP SUM	493.88
BENT 2		5.7	885			
BENT 3		4.2	787			
TOTAL	LUMP SUM	9.9	1,672	109.75	LUMP SUM	493.88

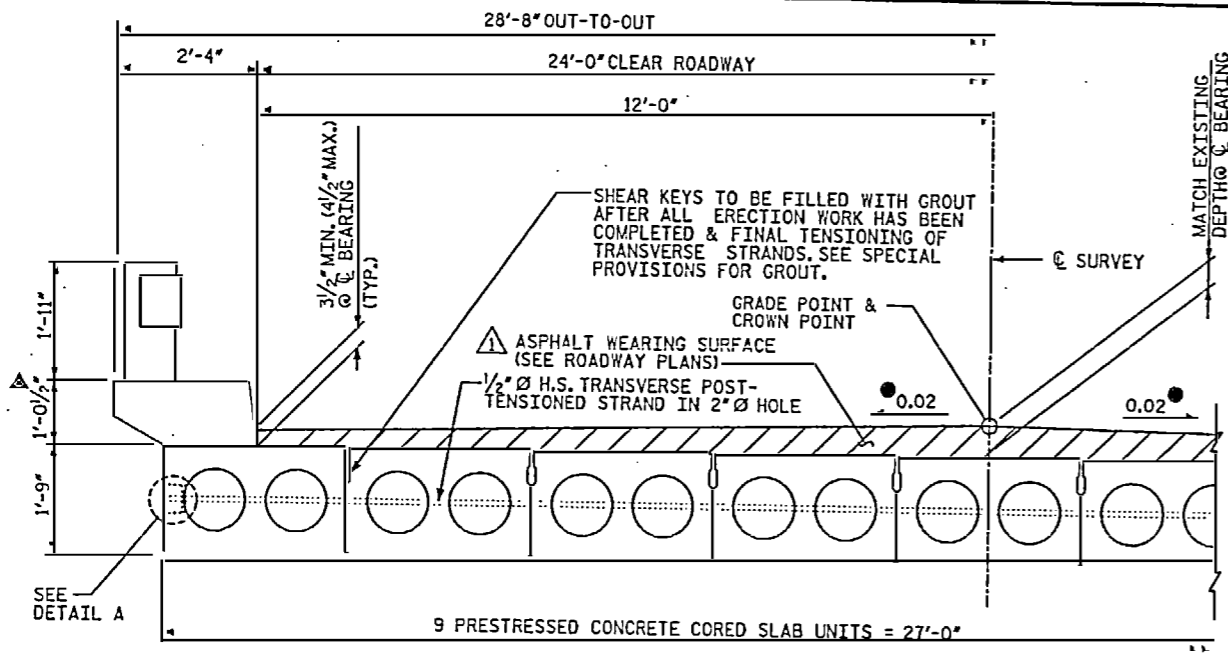
DRAWN BY: TRL DATE: 01-08
CHECKED BY: PEK DATE: 02-08

D-1809.54
STV/Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

PROJECT NO. B-5021
ROBESON COUNTY
BRIDGE: 169

MODIFICATION OF BRIDGE NO. 169
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
BRIDGE OVER I-95
ON SR 1718
BETWEEN US 301
AND SR 1900

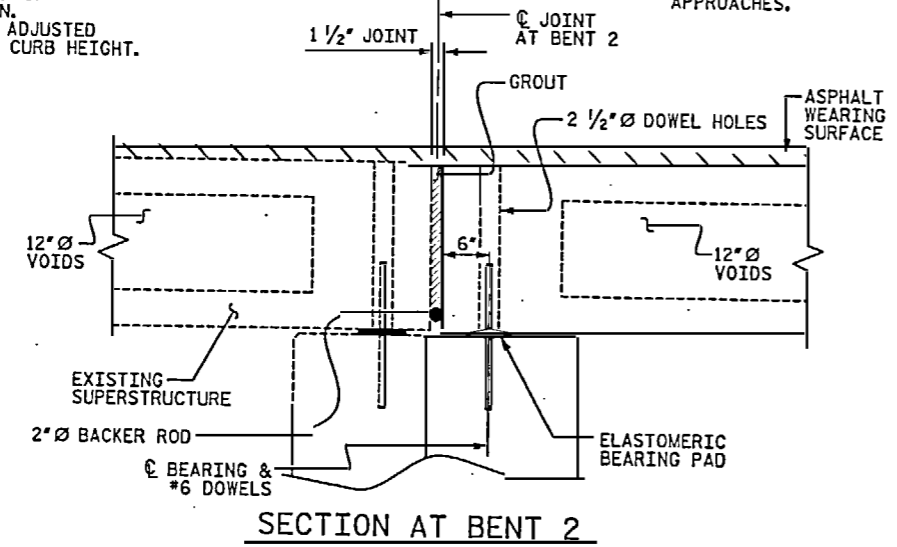
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-54
1	STV	5-08	3			TOTAL SHEETS 62
2			4			



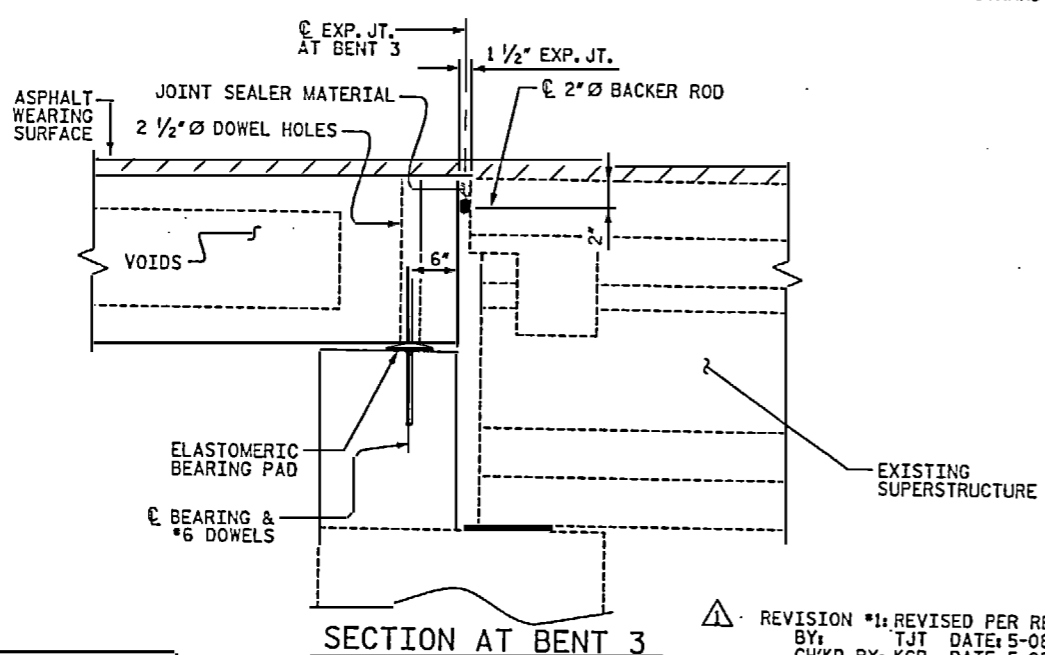
TYPICAL HALF SECTION
(BRIDGE SYMMETRIC ABOUT C SURVEY)

▲ CURB HEIGHT MAY NEED TO BE ADJUSTED TO MATCH TOP OF CURB IN ADJACENT SPAN. REINFORCING SHALL BE ADJUSTED TO MATCH THE REVISED CURB HEIGHT.

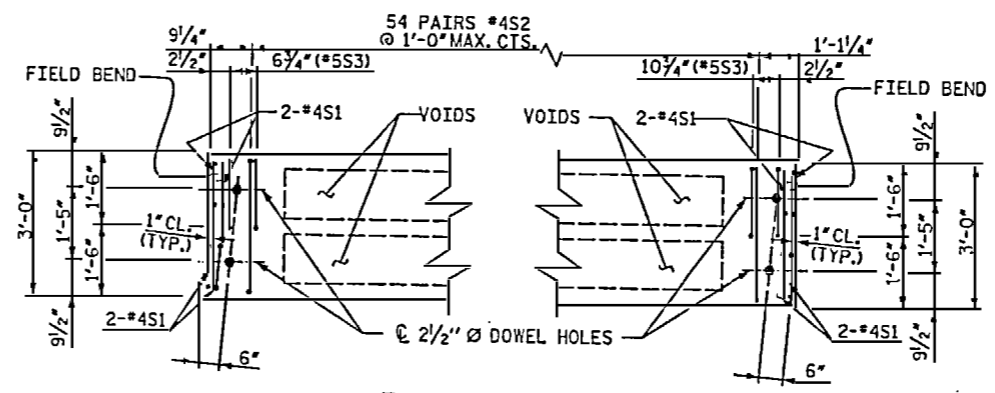
CONTRACTOR SHALL MAKE A SMOOTH TRANSITION TO MATCH EXISTING CROSS SLOPE ON ROADWAY APPROACHES.



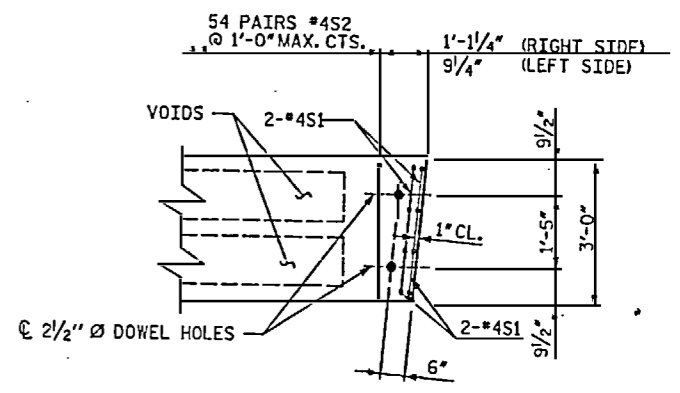
SECTION AT BENT 2



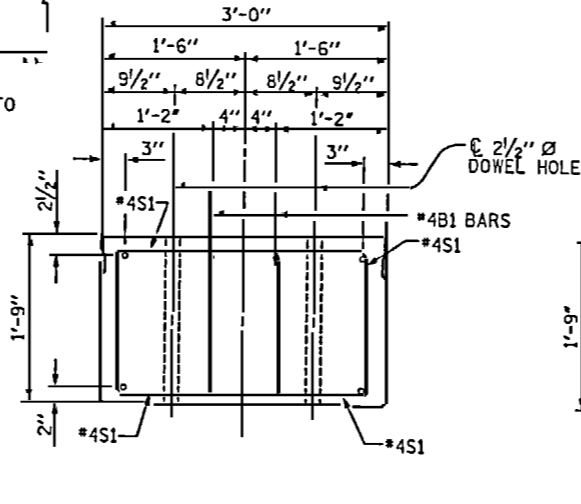
SECTION AT BENT 3



PART PLAN EXTERIOR SLAB SECTION
(LEFT SIDE SHOWN, RIGHT SIDE SIMILAR BY SYMMETRY)



PART PLAN INTERIOR SLAB SECTION
(FAR END SHOWN, NEAR END SIMILAR BY SYMMETRY)

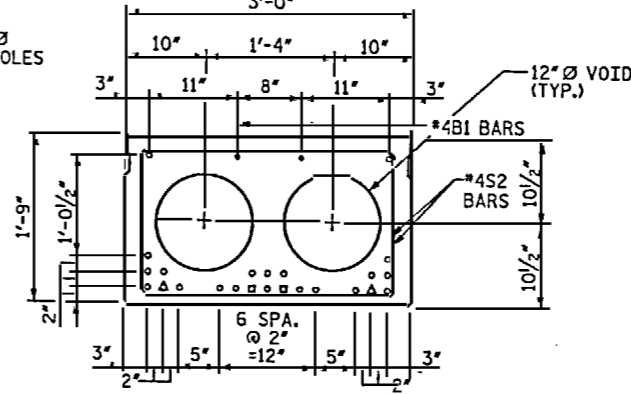


SLAB END ELEVATION

SHOWING PLACE OF DOUBLE STIRRUPS AND LOCATION OF DOWEL HOLES.

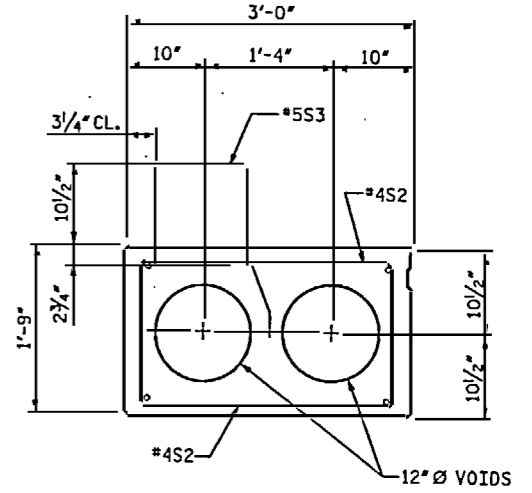
INTERIOR SLAB SECTION SHOWN, EXTERIOR SLAB SECTION SIMILAR EXCEPT SHEAR KEY LOCATION.

STRAND LAYOUT NOT SHOWN.



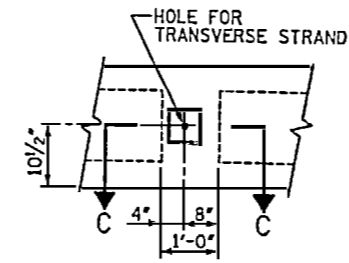
INTERIOR SLAB SECTION
(24 TOTAL STRANDS REQUIRED)

- DENOTES 1/2" Ø L.R. STRANDS
 - ▲ DENOTES SHEATHED STRAND. BOND SHALL BE BROKEN ON THESE STRANDS FOR A DISTANCE OF 4'-0" FROM END OF SLAB.
 - DENOTES SHEATHED STRAND. BOND SHALL BE BROKEN ON THESE STRANDS FOR A DISTANCE OF 6'-0" FROM END OF SLAB.
- SEE STANDARD SPECIFICATIONS ARTICLE 1078-7.

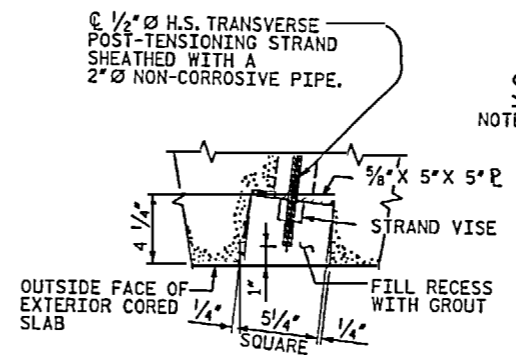


EXTERIOR SLAB SECTION
(FOR PRESTRESSED STRAND AND #4B1 BAR LAYOUT, SEE INTERIOR SLAB SECTION)

▲ NOTE: ASPHALT WEARING SURFACE IS INCLUDED IN THE QUANTITIES ON THE ROADWAY PLANS.



ELEVATION VIEW



SECTION C-C

SHEAR KEY DETAIL

NOTE: OMIT SHEAR KEY ON OUTSIDE FACE OF EXTERIOR CORED SLAB

DETAIL A
GROUTED RECESS AT END OF POST-TENSIONED STRAND CORED SLABS

REVISION #1: REVISED PER REVIEW COMMENTS
BY: TJT DATE: 5-08
CH'KD BY: KGB DATE: 5-08

DRAWN BY: TRL DATE: 2-08
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Charlotte, NC 28208

PROJECT NO. B-5021
ROBESON COUNTY

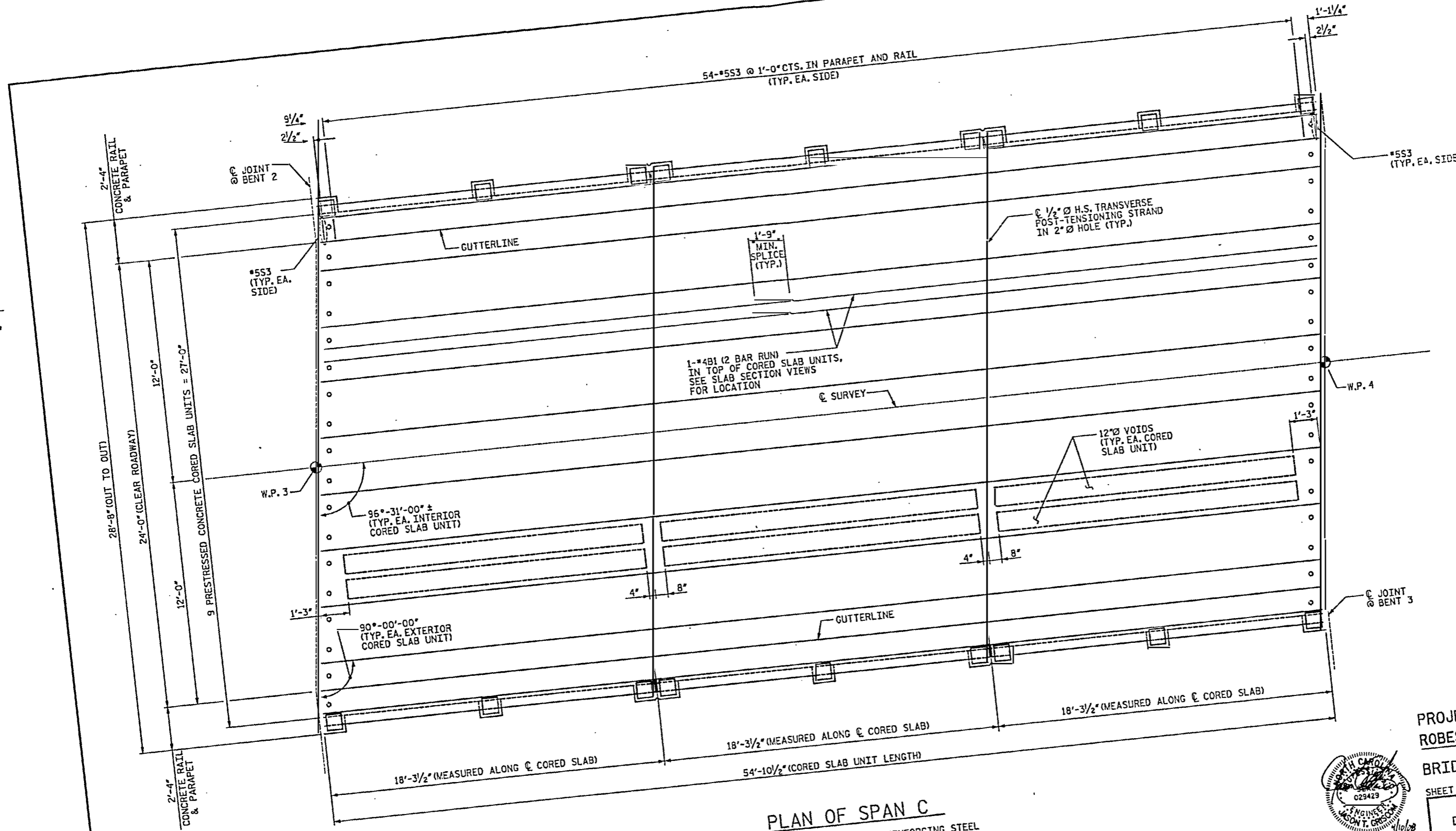
BRIDGE: 169

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

3'-0" X 1'-9"
PRESTRESSED
CORED SLAB

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-55
1	STV	5-08	3			15TH SHEETS
2			4			62



PLAN OF SPAN C

FOR ADDITIONAL CONCRETE RAIL REINFORCING STEEL & DETAILS, SEE "CONCRETE BRIDGE RAIL" SHEET.

PROJECT NO. B-5021
 ROBESON COUNTY
 BRIDGE: 169
 SHEET 2 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPAN C**



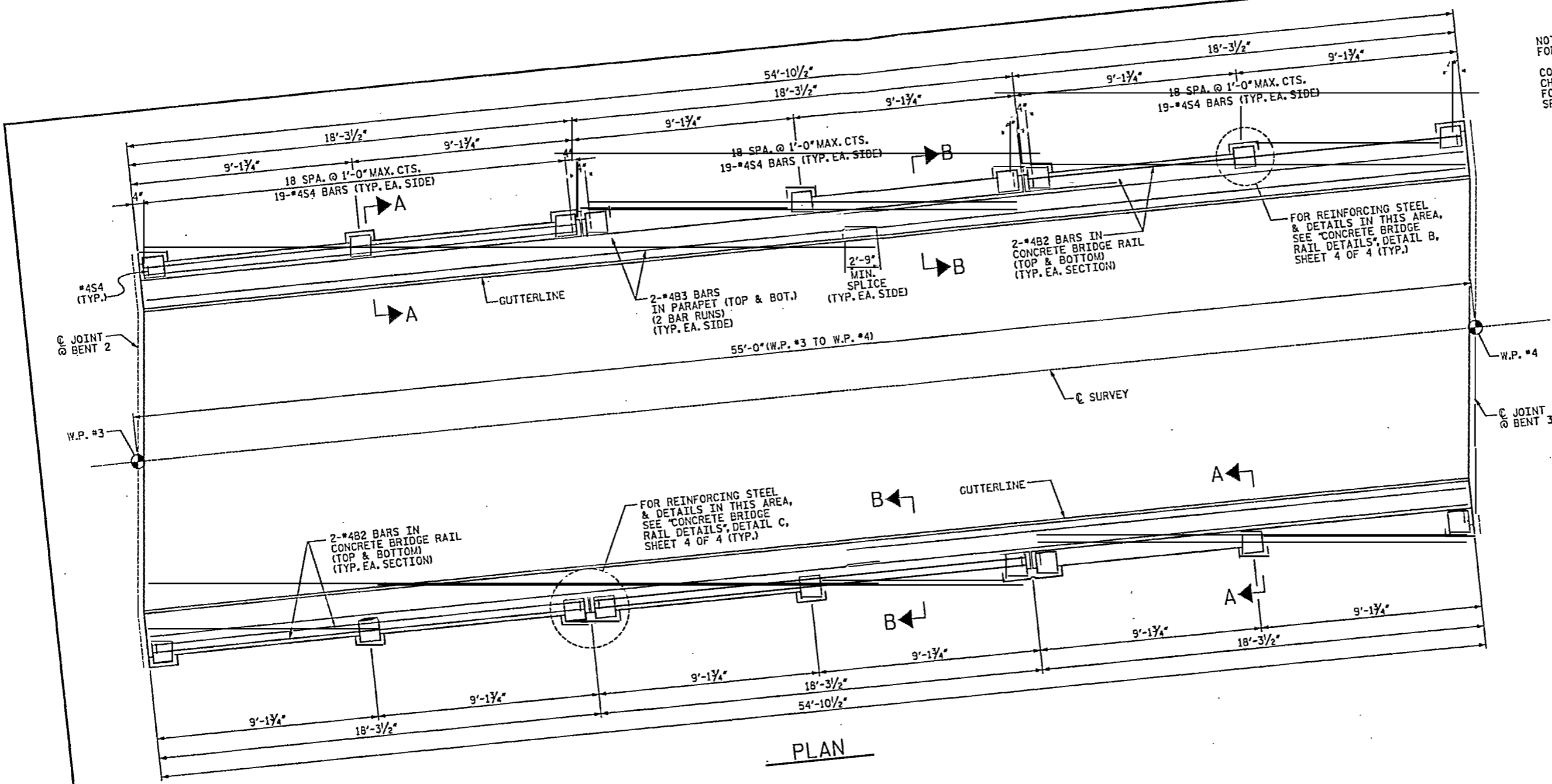
REVISIONS					SHEET NO. S-56
NO.	BY	DATE	NO.	DATE	
1			3		TOTAL SHEETS 62
2			4		

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 Charlotte, NC 28208

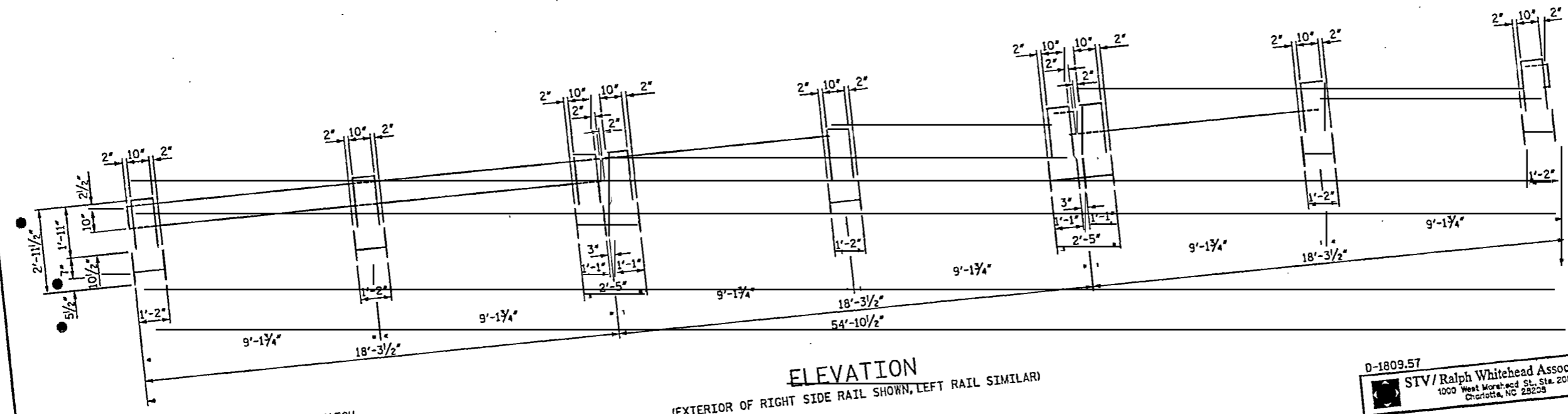
DRAWN BY: TRL DATE: 1-08
 CHECKED BY: PEX DATE: 2-08

4/10/2008

NOTE:
FOR SECTION VIEWS, SEE SHEET 4 OF 4.
CONCRETE BRIDGE RAIL SHALL BE
CHAMFERED TO MATCH EXISTING RAIL.
FOR CONCRETE BRIDGE RAIL, SEE
SPECIAL PROVISIONS.



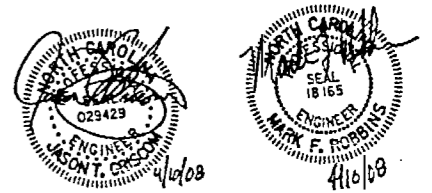
PLAN



ELEVATION

EXTERIOR OF RIGHT SIDE RAIL SHOWN, LEFT RAIL SIMILAR)

● DIMENSION MAY NEED TO BE ADJUSTED TO MATCH
TOP OF RAIL IN ADJACENT SPANS. REINFORCING
SHALL BE ADJUSTED TO MATCH THE REVISED RAIL
HEIGHT.



PROJECT NO. B-5021
ROBESON COUNTY
BRIDGE: 169
SHEET 3 OF 4

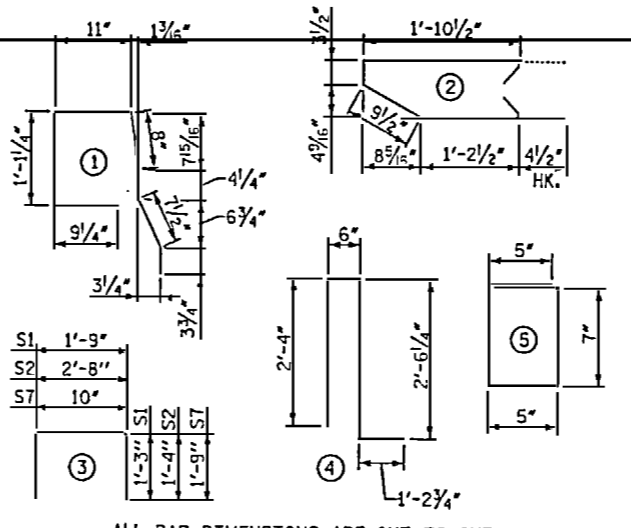
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
CONCRETE
BRIDGE RAIL

REVISIONS					SHEET NO. 5-57
NO.	BY	DATE	NO.	DATE	
1			3		TOTAL SHEETS 62
2			4		

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STV/Ralph Whitehead Associates, Inc.
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Charlotte, NC 28203

DRAWN BY: TRL DATE: 1-08
CHECKED BY: PEK DATE: 2-08

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE CORED SLAB SECTION

BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT
B1	4	#4	STR	28'-1"	75	28'-1"	75
S1	16	#4	3	4'-3"	45	4'-3"	45
S2	108	#4	3	5'-4"	385	5'-4"	385
*S3	56	#5	1	4'-9"	277		
REINFORCING STEEL				505	LBS.	505	LBS.
*EPOXY COATED REINFORCING STEEL				277	LBS.		
6000 P.S.I. CONCRETE				7.7	CY	7.7	CY
1/2" Ø L.R. STRANDS				No.	24		24

DEAD LOAD DEFLECTION AND CAMBER

	3'-0" x 1'-9"
CAMBER (SLAB ALONE IN PLACE)	1/4"
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	3/8"
FINAL CAMBER	1/2"

** INCLUDES FUTURE WEARING SURFACE

BILL OF MATERIAL FOR CONCRETE BRIDGE RAIL AND PARAPET

BAR	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
*B2	24	#4	STR	17'-10"	286
*B3	16	#4	STR	28'-8"	306
*S4	114	#4	5	2'-5"	184
*S5	36	#4	4	6'-7"	158
*S6	36	#4	2	4'-11"	118
*S7	36	#4	3	4'-4"	104
*EPOXY COATED REINFORCING STEEL				1,156	LBS.
CLASS AA CONCRETE				9.8	CY
TOTAL LIN. FT. OF CONCRETE BARRIER RAIL				109'-9"	

CORED SLABS REQUIRED

	NUMBER	LENGTH	TOTAL LENGTH
EXTERIOR C.S.	2	54'-10 1/2"	109'-9"
INTERIOR C.S.	7	54'-10 1/2"	384'-1 1/2"
TOTAL	9		493'-10 1/2"

GRADE 270 STRANDS

	1/2" Ø L.R.
AREA (SQUARE INCHES)	0.153
ULTIMATE STRENGTH (LBS. PER STRAND)	41,300
APPLIED PRESTRESS (LBS. PER STRAND)	30,980

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2 1/2" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 2 1/2" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 1/2" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE SL LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS. PAYMENT FOR JOINT SEALER MATERIAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE BRIDGE.

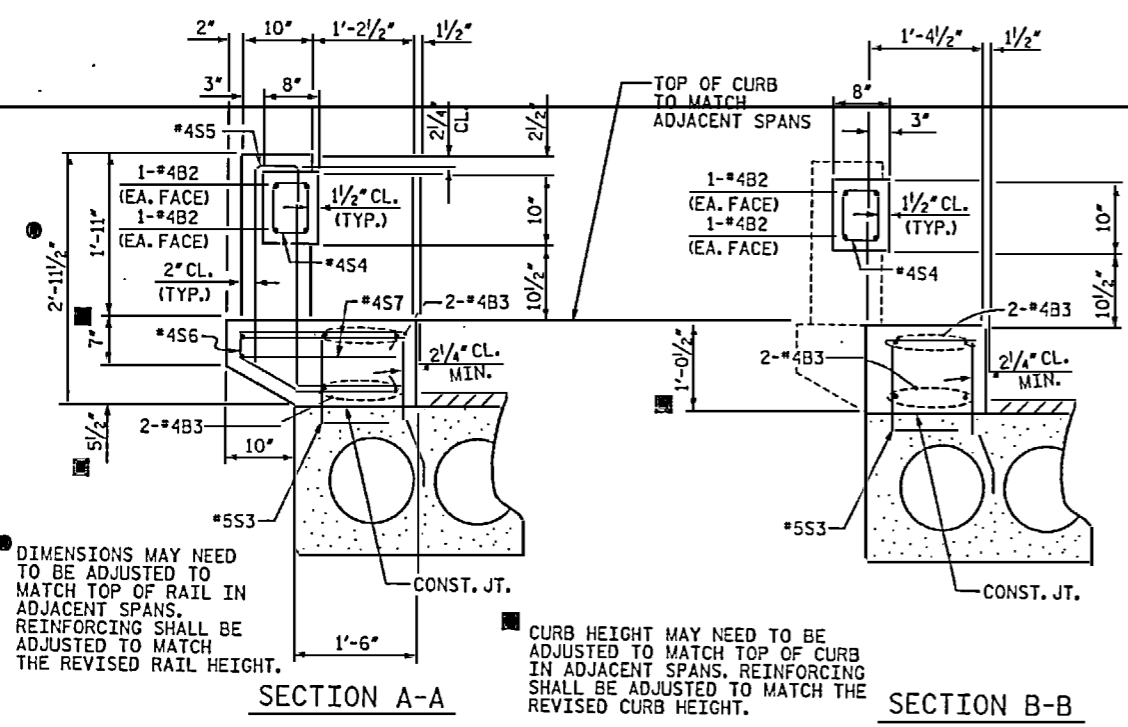
WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED RELEASE STRENGTH. AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4800 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED. PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

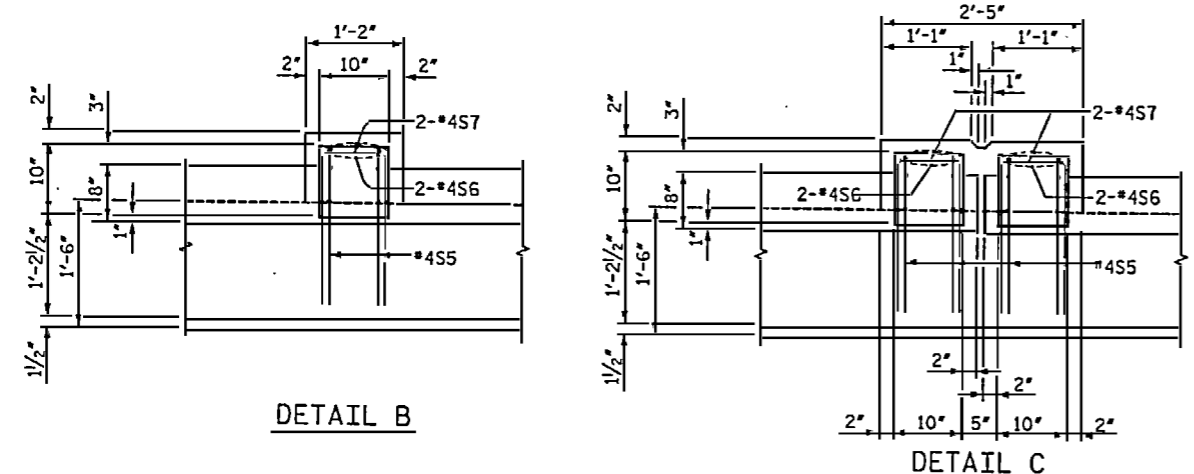
APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS.

VERTICAL GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BRIDGE RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINTS SHALL BE LOCATED AT A SPACING OF 8 FEET TO 10 FEET BETWEEN EXPANSION JOINTS AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

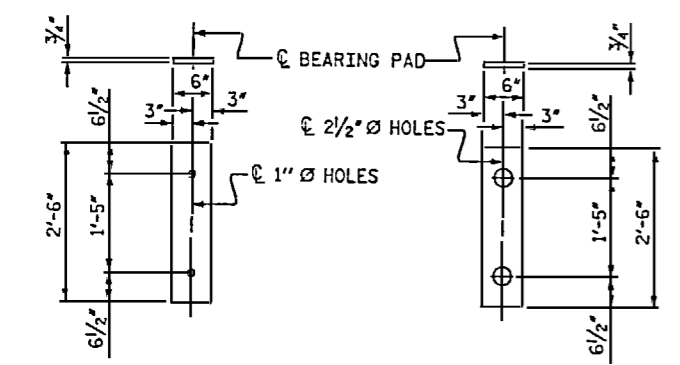


DIMENSIONS MAY NEED TO BE ADJUSTED TO MATCH TOP OF RAIL IN ADJACENT SPANS. REINFORCING SHALL BE ADJUSTED TO MATCH THE REVISED RAIL HEIGHT.

CURB HEIGHT MAY NEED TO BE ADJUSTED TO MATCH TOP OF CURB IN ADJACENT SPANS. REINFORCING SHALL BE ADJUSTED TO MATCH THE REVISED CURB HEIGHT.



CONCRETE BRIDGE RAIL DETAILS



ELASTOMERIC BEARING DETAILS

SUPERSTRUCTURE REINFORCING STEEL LENGTHS ARE BASED ON THE FOLLOWING MINIMUM SPLICE LENGTHS

BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	2'-0"	1'-9"	2'-0"	1'-9"	2'-9"
#5	2'-6"	2'-2"	2'-6"	2'-2"	3'-5"
#6	3'-0"	2'-7"	3'-10"	2'-7"	4'-4"
#7	5'-3"	3'-6"			
#8	6'-10"	4'-7"			

PROJECT NO. B-5021
 ROBESON COUNTY
 BRIDGE: 169
 SHEET 4 OF 4

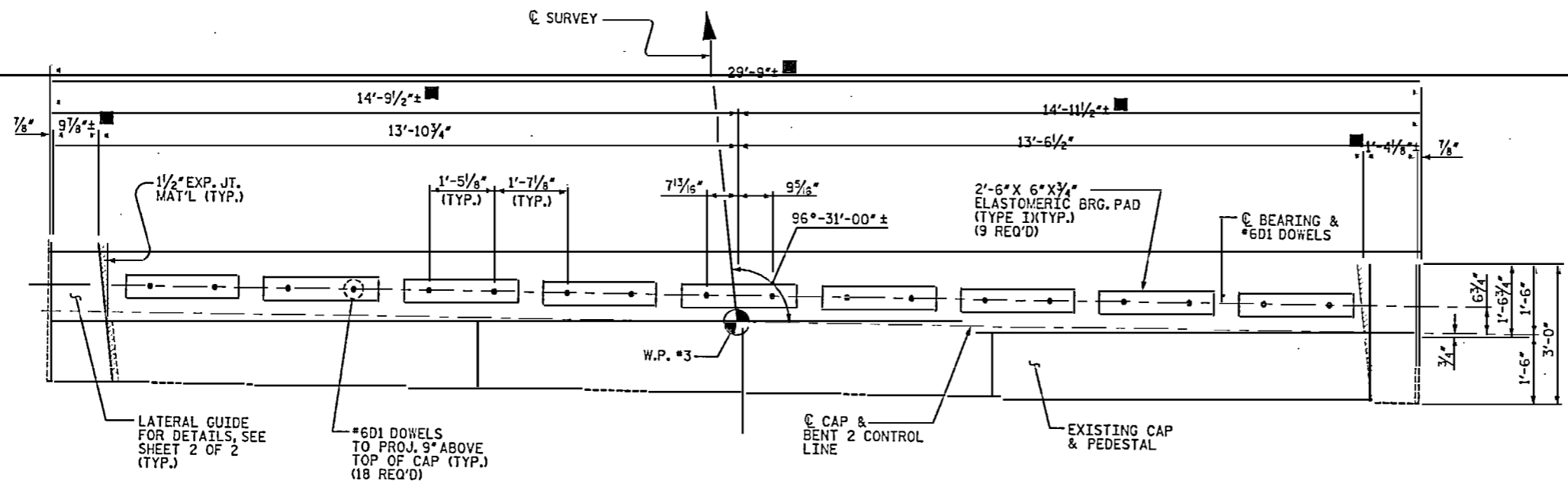


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE CONCRETE BRIDGE RAIL DETAILS

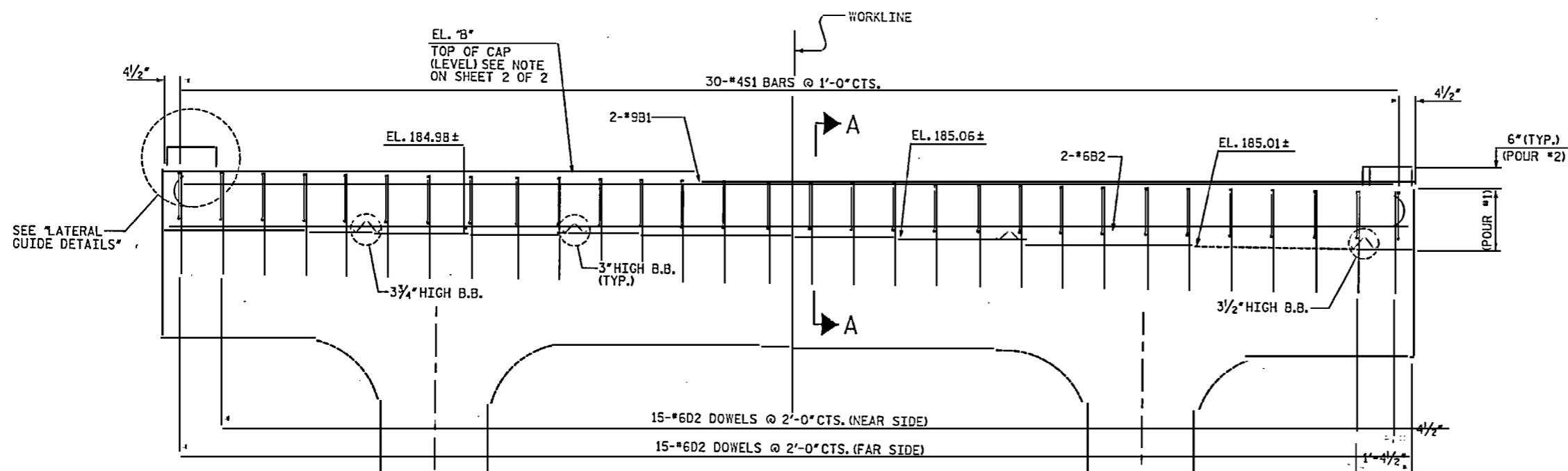
REVISIONS						SHEET NO. S-58
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 62
2			4			

DRAWN BY: TRL DATE: 1-08
 CHECKED BY: PEK DATE: 2-08

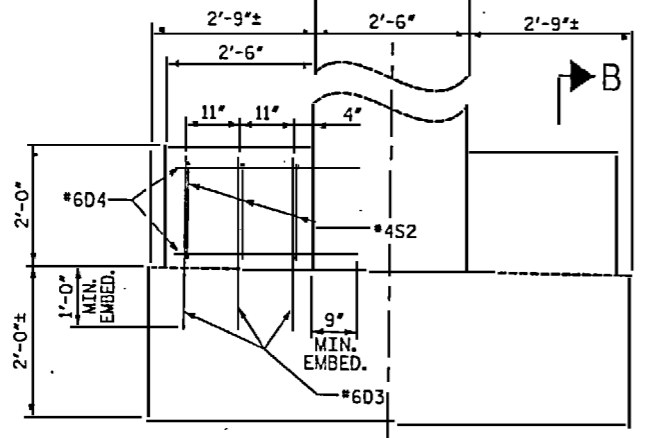
D-1809.58
 STV/Ralph Whitehead Associates, Inc.
 1000 West Morehead St., Ste. 200
 Charlotte, NC 28208



PLAN



NOTE: DIMENSIONS AND REINFORCING SHOWN FOR FOOTING STIFFENER IS THE SAME IN ALL STIFFENERS



ELEVATION
(LOOKING UPSTATION)

NOTES

- REINFORCING STEEL MAY BE SHIFTED AS NECESSARY TO CLEAR DOWELS.
- THE LATERAL GUIDES ARE NOT TO BE POURED UNTIL AFTER THE CORED SLAB UNITS ARE IN PLACE.
- ALL ELEVATIONS ARE TO BE VERIFIED BY THE ENGINEER.
- A HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE SHALL BE USED TO ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI PRIOR TO PLACING CORED SLAB UNITS. SEE STANDARD SPECIFICATION SECTION 1000 FOR DETAILS.
- *6D2, *6D3, AND *6D4 DOWELS SHALL BE ADHESIVELY ANCHORED USING AN APPROVED ADHESIVE CONSIDERING LOAD RESISTANCE, IN-SERVICE AND INSTALLATION TEMPERATURE, AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS, AND CREEP. ANCHORS SHALL BE INSTALLED TO THE MINIMUM EMBEDMENT DEPTHS AS SHOWN ON PLANS. LEVEL ONE FIELD TESTING IS REQUIRED, AND THE YIELD LOAD OF THE DOWEL IS 26 KIPS. FOR ADHESIVELY ANCHORED DOWELS, SEE SPECIAL PROVISIONS.
- DIMENSIONS AND ELEVATIONS ARE BASED ON AS-BUILT DIMENSIONS AND FIELD SURVEY INFORMATION. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. REINFORCING AND CONCRETE CAP EXTENSIONS SHALL BE ADJUSTED TO MATCH FIELD VERIFIED DIMENSIONS PROVIDED THAT THE OUT-TO-OUT DIMENSIONS REMAIN AS DETAILED.

PROJECT NO. B-5021
ROBESON COUNTY
BRIDGE: 169
SHEET 1 OF 2



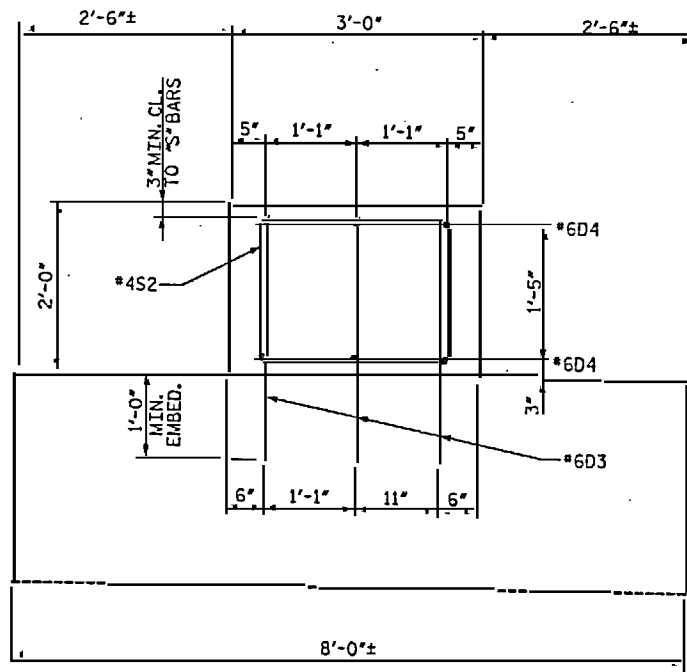
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUBSTRUCTURE
BENT 2

DRAWN BY: TRL DATE: 1-08
CHECKED BY: PEK DATE: 2-08

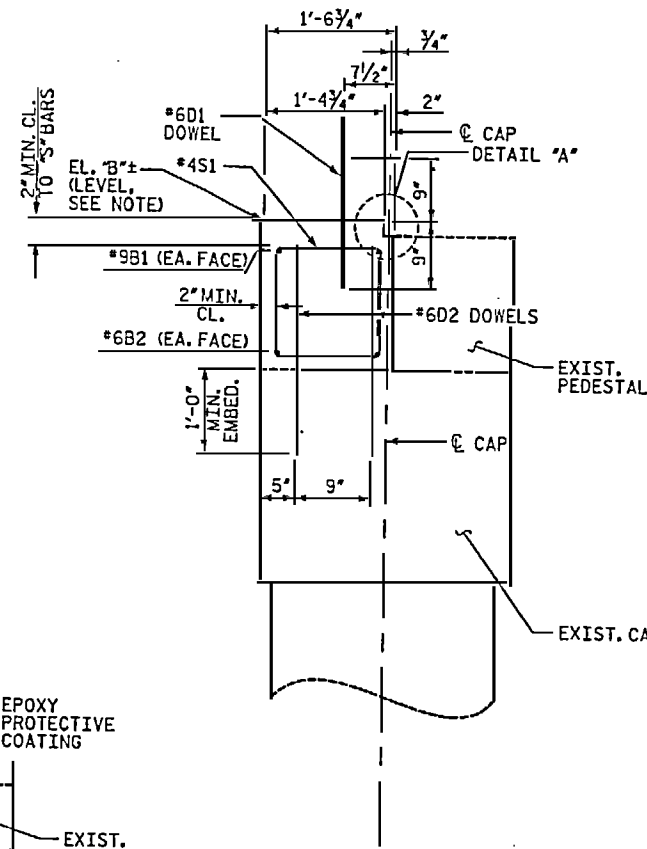
REVISION *1: REVISED PER REVIEW COMMENTS
BY: TJT DATE: 5-08
CH'KD BY: KGB DATE: 5-08

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Charlotte, NC 28208

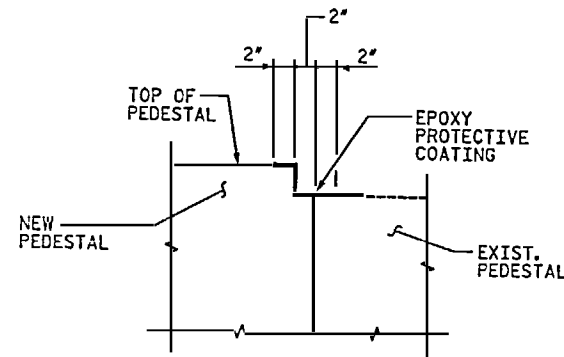
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-59
1	STV	5-08	3			TOTAL SHEETS 62
2			4			



SECTION B-B

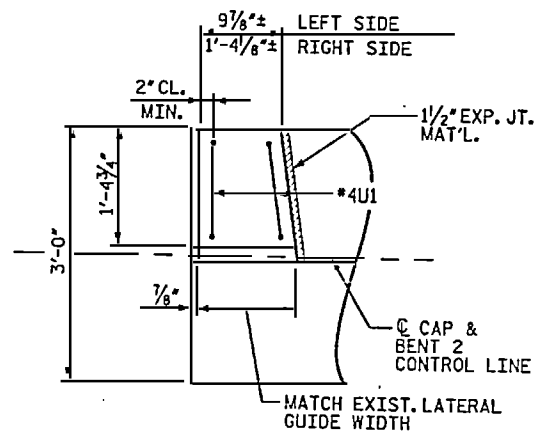


SECTION A-A

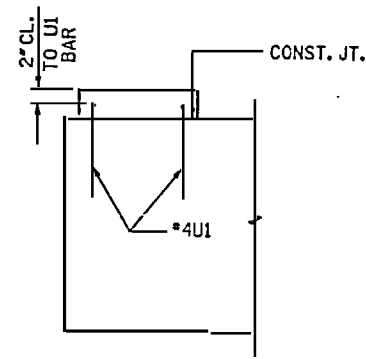


DETAIL "A"

NOTE: THE TOP SURFACES OF THE NEW AND EXISTING PEDESTAL SHALL BE CURED A MINIMUM OF 2" FROM THE COLD JOINT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.



PLAN



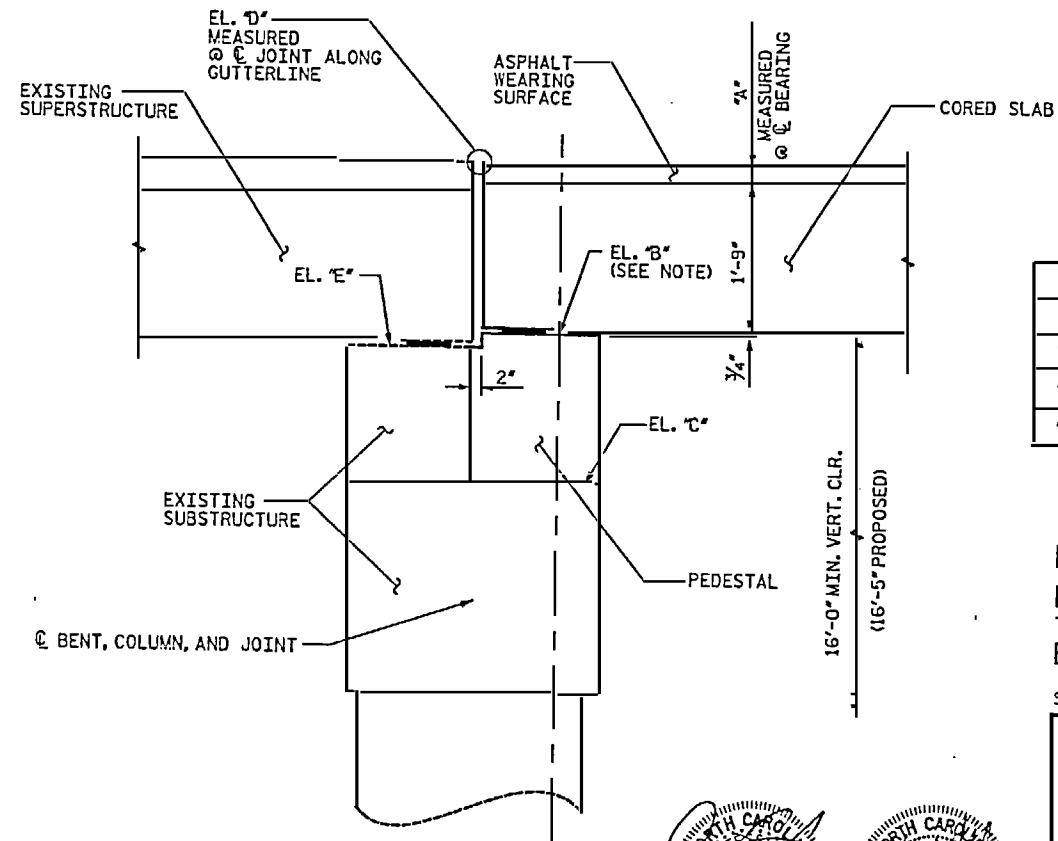
ELEVATION

LATERAL GUIDE DETAILS
(LEFT SIDE SHOWN, RIGHT SIDE SIMILAR)

BAR TYPES					BILL OF MATERIAL				
					BENT 2				
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT				
B1	2	9	(1)	31'-9"	216				
B2	2	6	STR.	29'-3"	88				
D1	18	6	STR.	1'-6"	41				
D2	30	6	STR.	2'-0"	90				
D3	36	6	STR.	2'-9"	149				
D4	24	6	STR.	3'-0"	108				
S1	30	4	(2)	5'-4"	107				
S2	12	4	(2)	9'-4"	75				
U1	4	4	(3)	4'-0"	11				
REINFORCING STEEL					LBS.	885			
CLASS AA CONCRETE BREAKDOWN									
POUR 1 (CAP & FOOTING) CY					5.6				
POUR 2 (LATERAL GUIDE) CY					0.1				
TOTAL					GY	5.7			

ALL BAR DIMENSIONS ARE OUT TO OUT

NOTE: DIMENSIONS AND ELEVATIONS SHOWN ARE FROM BEST INFORMATION AVAILABLE. CONTRACTOR SHALL MAKE ADJUSTMENTS TO PEDESTAL EL. 'B' TO MAINTAIN 3/2" (4/2" MAX.) ASPHALT WEARING SURFACE @ C BEARING, MATCH EL. 'D', AND TO MAINTAIN THE 16'-0" MIN. VERTICAL CLEARANCE. IF ANY ELEVATIONS ARE MODIFIED, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE REINFORCING TO FIT THE PEDESTAL HEIGHT.



PEDESTAL HEIGHT

"A"	3 1/2"
"B"	186.89
"C"	185.16
"D"	188.99
"E"	186.66

PROJECT NO. B-5021
ROBESON COUNTY
BRIDGE: 169
SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT 2

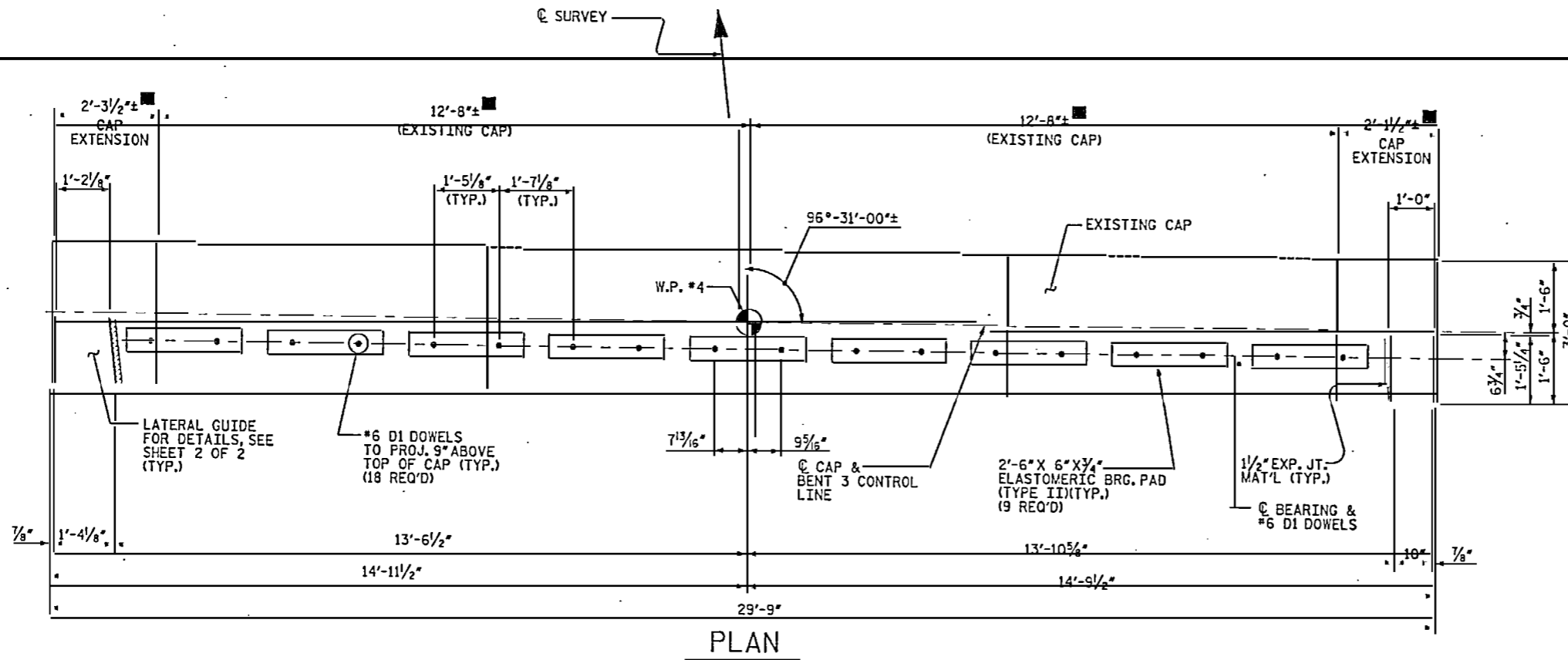
DRAWN BY: TRL DATE: 1-08
CHECKED BY: PEK DATE: 2-08

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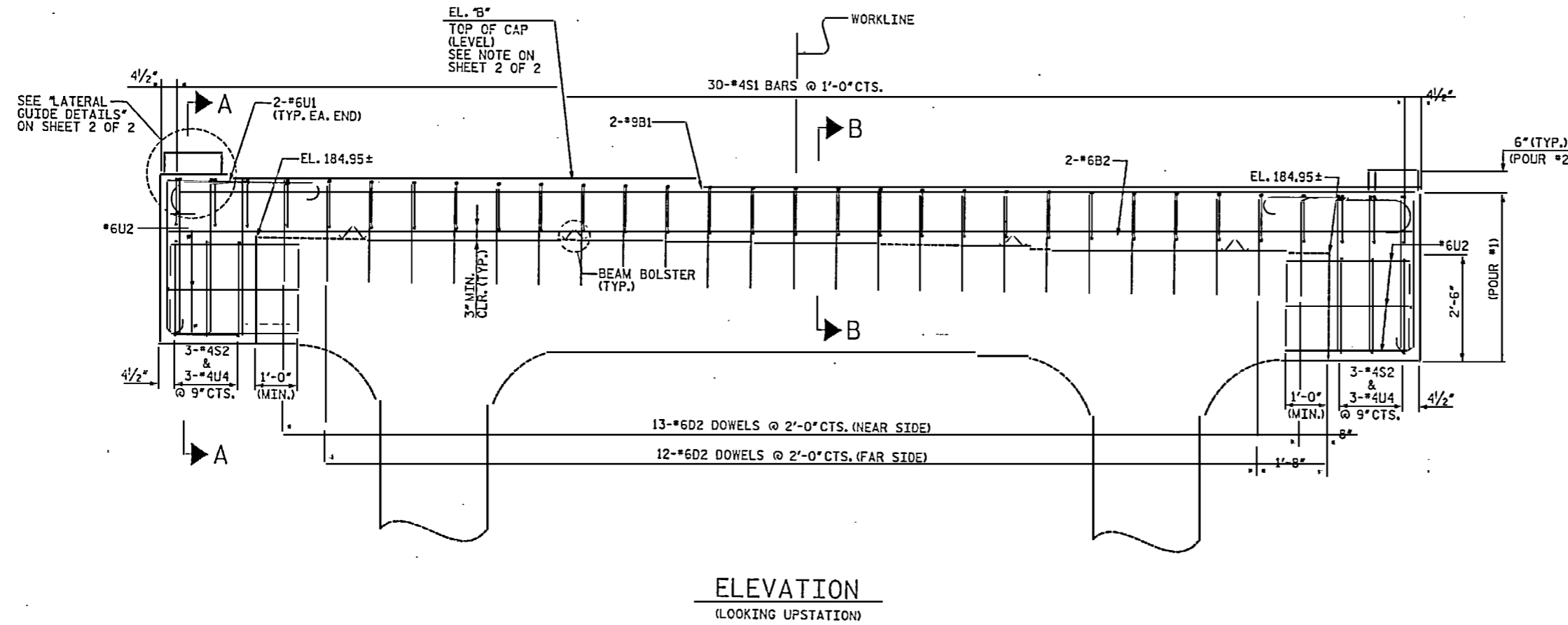
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NOTES

- REINFORCING STEEL MAY BE SHIFTED AS NECESSARY TO CLEAR DOWELS.
- THE LATERAL GUIDES ARE NOT TO BE POURED UNTIL AFTER THE CORED SLAB UNITS ARE IN PLACE.
- ALL ELEVATIONS ARE TO BE VERIFIED BY THE ENGINEER.
- A HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE SHALL BE USED TO ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI PRIOR TO PLACING CORED SLAB UNITS. SEE STANDARD SPECIFICATION SECTION 1000 FOR DETAILS.
- #6D2 & #6U2 DOWELS SHALL BE ADHESIVELY ANCHORED USING AN APPROVED ADHESIVE CONSIDERING LOAD RESISTANCE, IN-SERVICE AND INSTALLATION TEMPERATURE, AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS, AND CREEP. ANCHORS SHALL BE INSTALLED TO THE MINIMUM EMBEDMENT DEPTHS AS SHOWN ON PLANS. LEVEL ONE FIELD TESTING IS REQUIRED, AND THE YIELD LOAD OF THE DOWEL IS 26 KIPS. FOR ADHESIVELY ANCHORED DOWELS, SEE SPECIAL PROVISIONS.
- DIMENSIONS AND ELEVATIONS ARE BASED ON AS-BUILT DIMENSIONS AND FIELD SURVEY INFORMATION. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. REINFORCING AND CONCRETE CAP EXTENSIONS SHALL BE ADJUSTED TO MATCH FIELD VERIFIED DIMENSIONS PROVIDED THAT THE OUT-TO-OUT DIMENSIONS REMAIN AS DETAILED.

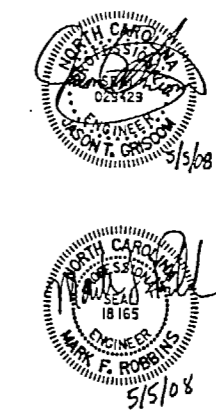


PROJECT NO. B-5021
 ROBESON COUNTY
 BRIDGE: 169

SHEET 1 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 BENT 3

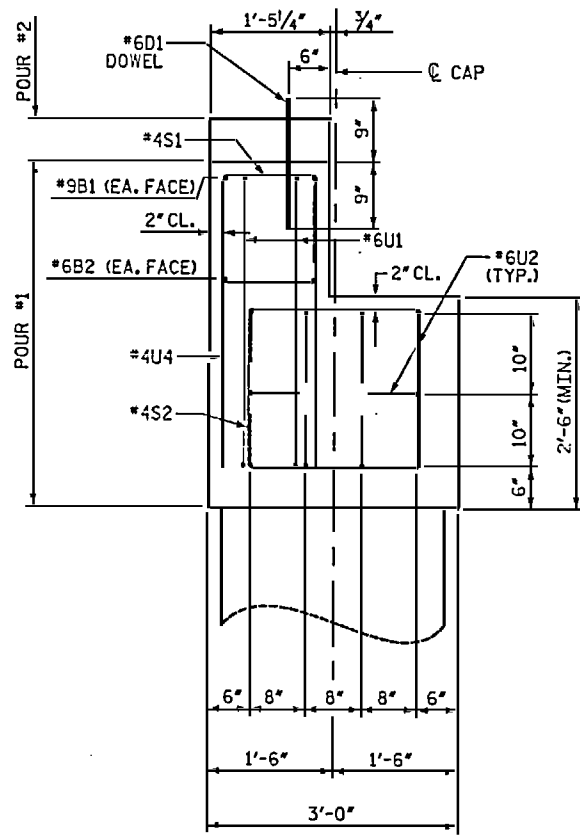


REVISION #1: REVISED PER REVIEW COMMENTS
 BY: TJT DATE: 5-08
 CH'KD BY: KGB DATE: 5-08

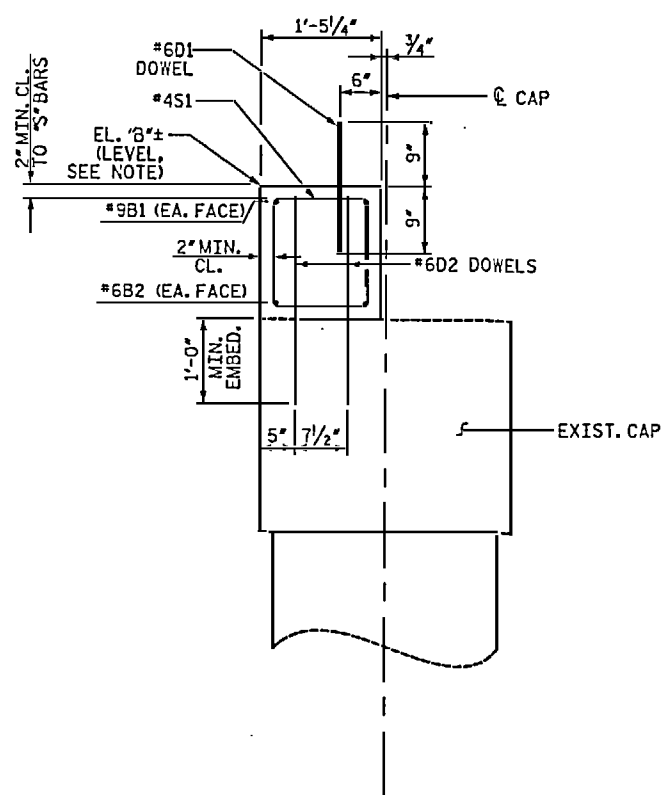
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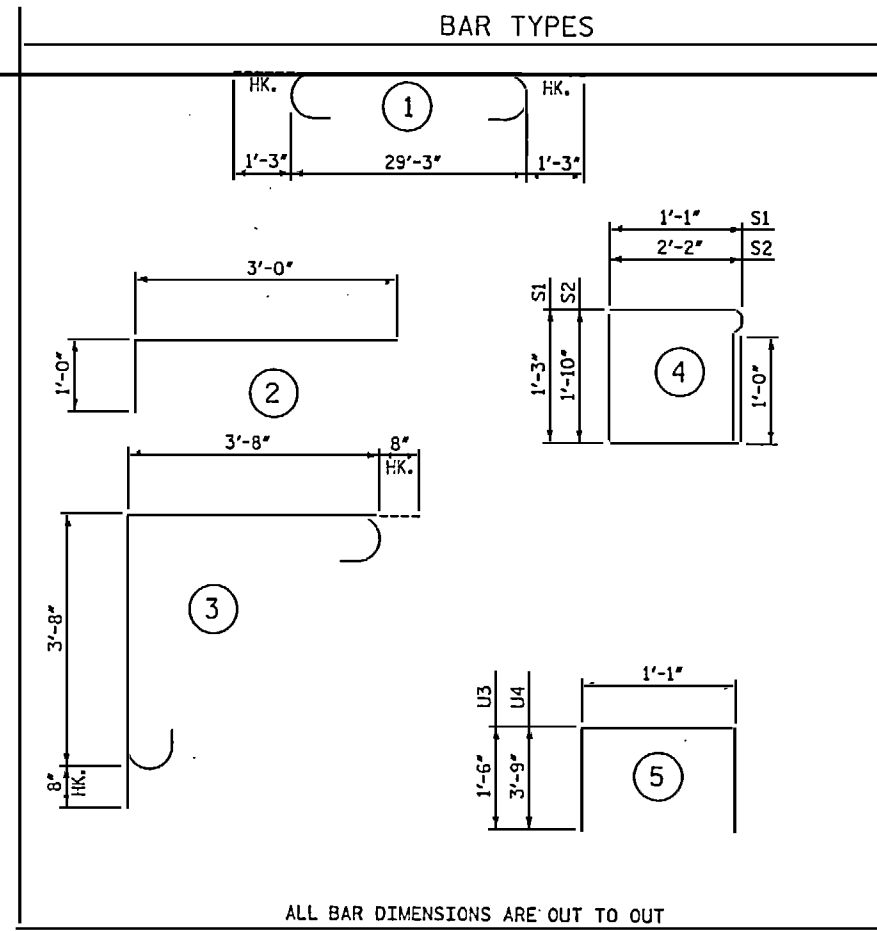
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2			4			



SECTION A-A

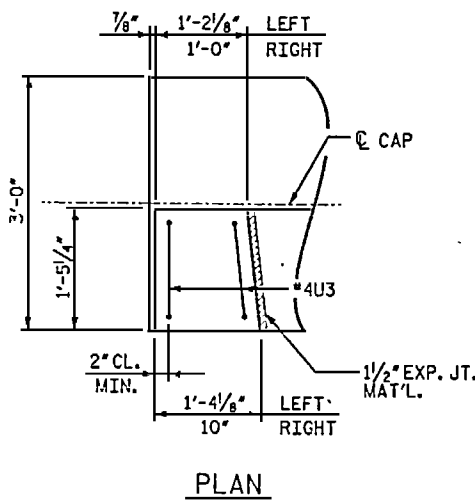


SECTION B-B



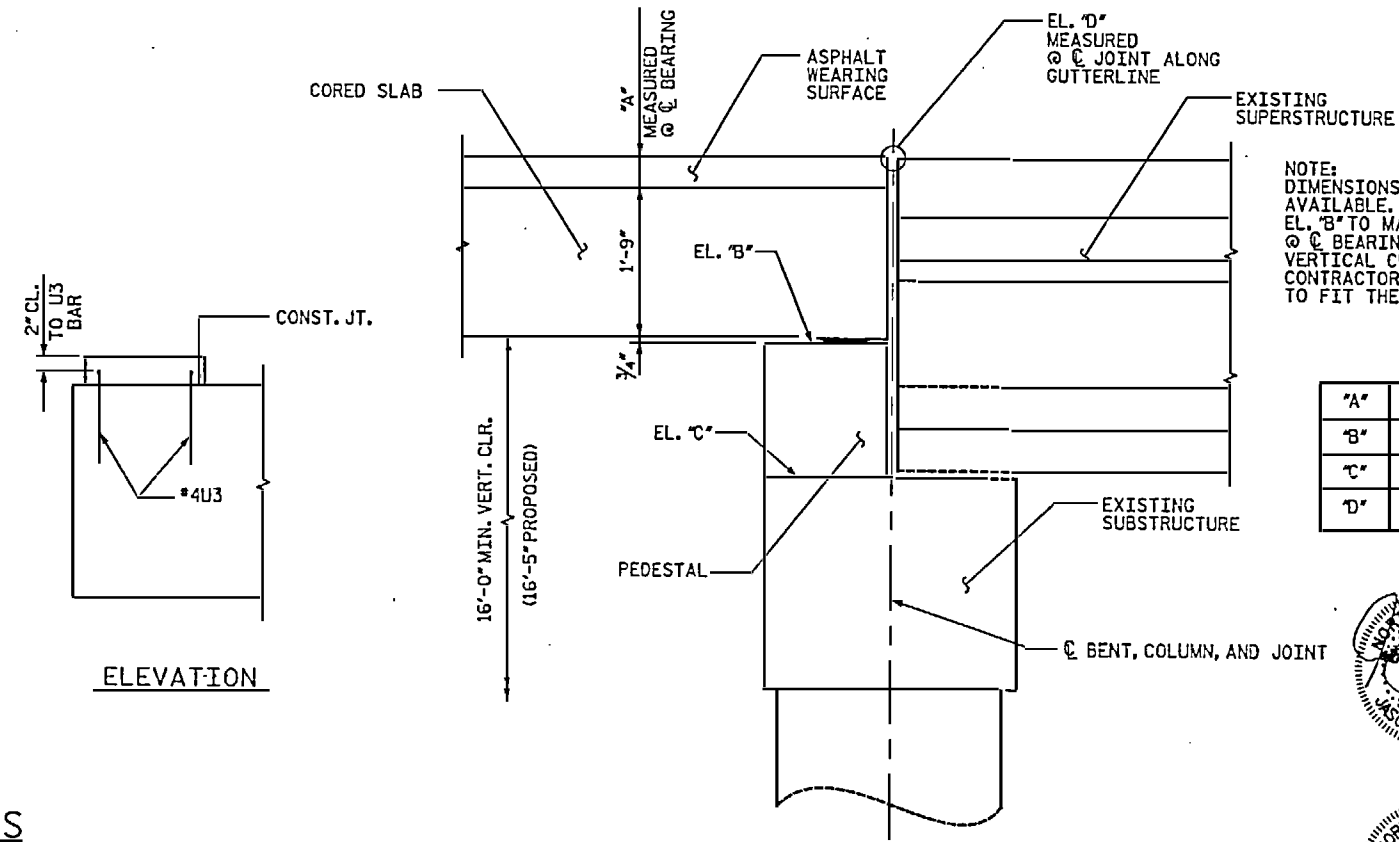
BILL OF MATERIAL

BENT 3					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	2	9	(1)	31'-9"	216
B2	2	6	STR.	29'-3"	88
D1	18	6	STR.	1'-6"	41
D2	25	6	STR.	2'-0"	75
S1	30	4	(4)	5'-8"	114
S2	6	4	(4)	9'-0"	36
U1	4	6	(3)	8'-8"	52
U2	20	6	(2)	4'-0"	120
U3	4	4	(5)	4'-1"	11
U4	6	4	(5)	8'-7"	34
REINFORCING STEEL					LBS. 787
CLASS AA CONCRETE BREAKDOWN					
POUR 1 (CAP)					CY 4.1
POUR 2 (LATERAL GUIDE)					CY 0.1
TOTAL					CY 4.2



PLAN

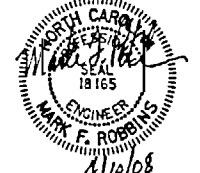
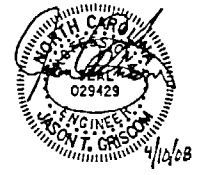
LATERAL GUIDE DETAILS



NOTE: DIMENSIONS AND ELEVATIONS SHOWN ARE FROM BEST INFORMATION AVAILABLE. CONTRACTOR SHALL MAKE ADJUSTMENTS TO PEDESTAL EL. 'B' TO MAINTAIN 3/2" (4/2" MAX.) ASPHALT WEARING SURFACE @ C BEARING, MATCH EL. 'D' AND TO MAINTAIN THE 16'-0" MIN. VERTICAL CLEARANCE. IF ANY ELEVATIONS ARE MODIFIED, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE REINFORCING TO FIT THE PEDESTAL HEIGHT.

"A"	3 1/2"
"B"	186.74
"C"	184.95
"D"	188.84

PROJECT NO. B-5021
ROBESON COUNTY
BRIDGE: 169
SHEET 2 OF 2



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT 3

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4/10/2008

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