

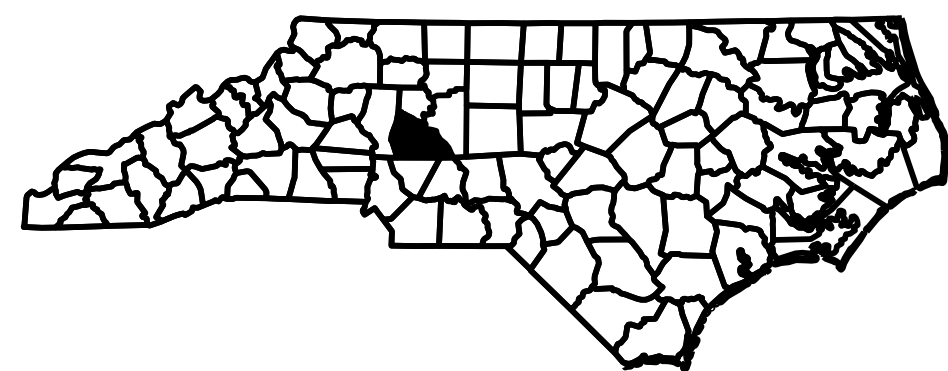
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**This file or an individual page
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PROJECT: I-5858

CONTRACT: C204244



STATE OF NORTH CAROLINA

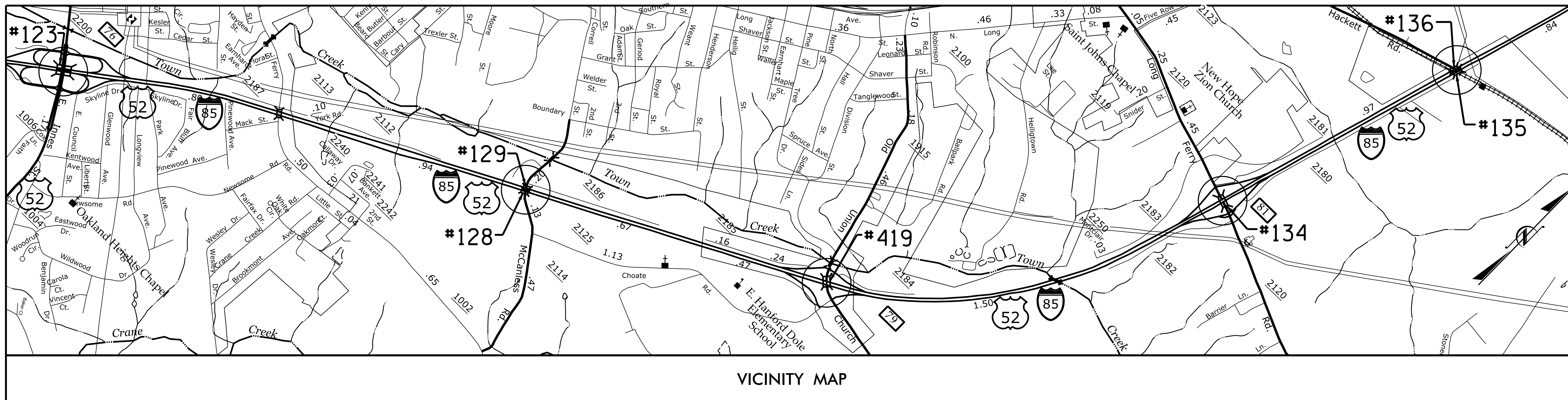
DIVISION OF HIGHWAYS

ROWAN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5858	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
53061.1.1	NHPP-0085(019)	P.E.	
53061.3.1	NHPP-0085(019)	CONST.	

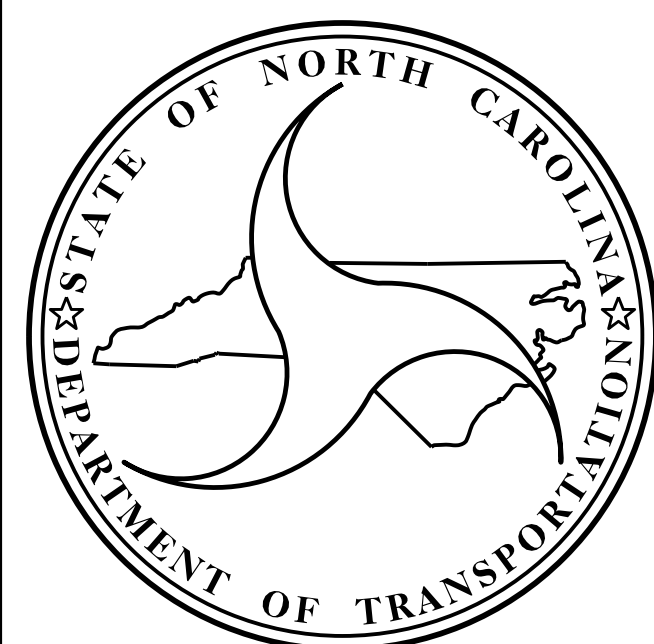
**LOCATION: BRIDGE 790123 ON I-85 OVER E. INNES ST. (US 52 SBL AND SR 2200 NBL)
 BRIDGE 790128 ON I-85 NBL/US 52 NBL OVER McCANLESS ROAD (SR 2114)
 BRIDGE 790129 ON I-85 SBL/US 52 SBL OVER McCANLESS ROAD (SR 2114)
 BRIDGE 790134 ON LONG FERRY RD. (SR 2120) OVER I-85/US 52
 BRIDGE 790135 ON I-85 NBL OVER NORFOLK SOUTHERN RAILROAD
 BRIDGE 790136 ON I-85 SBL OVER NORFOLK SOUTHERN RAILROAD
 BRIDGE 790419 ON OLD UNION CRURCH RD. (SR 1915) OVER I-85/US 52**

TYPE OF WORK: SHOTBLASTING CONCRETE DECK, SILANE DECK TREATMENT & JOINT REPLACEMENT



VICINITY MAP

STRUCTURES



DESIGN DATA

BRIDGE NO. 790123	ADT 2017	=	83,500
BRIDGE NO. 790128	ADT 2017	=	41,750
BRIDGE NO. 790129	ADT 2017	=	41,750
BRIDGE NO. 790134	ADT 2017	=	5,500
BRIDGE NO. 790135	ADT 2017	=	40,000
BRIDGE NO. 790136	ADT 2017	=	40,000
BRIDGE NO. 790419	ADT 2017	=	3,900

PROJECT LENGTH

BRIDGE NO. 790123	=	0.073 MILE
BRIDGE NO. 790128	=	0.021 MILE
BRIDGE NO. 790129	=	0.021 MILE
BRIDGE NO. 790134	=	0.038 MILE
BRIDGE NO. 790135	=	0.027 MILE
BRIDGE NO. 790136	=	0.027 MILE
BRIDGE NO. 790419	=	0.041 MILE

Prepared In the Office of:
DIVISION OF HIGHWAYS
 STRUCTURES MANAGEMENT UNIT
 1000 BIRCH RIDGE DR.
 RALEIGH, N.C. 27610

2018 STANDARD SPECIFICATIONS

LETTING DATE :

APRIL 16, 2019

A. KEITH PASCHAL, P.E.
 PROJECT ENGINEER

K. P. SEDAI, P.E.
 PROJECT DESIGN ENGINEER

PROJECT: I-5858

CONTRACT NO: C204244

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ROWAN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5858	1A	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
53061.1.1	NHPP-0085(019)	P.E.	
53061.1.3	NHPP-0085(019)	CONST.	

LOCATION: BRIDGE NO. 790123 ON I-85 OVER E. INNES ST. (US 52 SBL AND SR 2200 NBL)
 BRIDGE NO. 790128 ON I-85 NBL/US 52 NBL OVER McCANLESS ROAD (SR 2114)
 BRIDGE NO. 790129 ON I-85 SBL/US 52 SBL OVER McCANLESS ROAD (SR 2114)
 BRIDGE NO. 790134 ON LONG FERRY RD. (SR 2120) OVER I-85/US 52
 BRIDGE NO. 790135 ON I-85 NBL OVER NORFOLK SOUTHERN RAILROAD
 BRIDGE NO. 790136 ON I-85 SBL OVER NORFOLK SOUTHERN RAILROAD
 BRIDGE NO. 790419 ON OLD UNION CRURCH RD. (SR 1915) OVER I-85/US 52

INDEX OF STRUCTURES SHEETS

SHEET No. DESCRIPTION

1 TITLE SHEET
 1A INDEX OF SHEETS
 S-1 TOTAL BILL OF MATERIALS

STRUCTURE No. 790123

SI-1 TO SI-2 GENERAL DRAWING
 SI-3 TYPICAL SECTION
 SI-4 PLAN OF SPANS
 SI-5 BENT 1 - JOINT REPLACEMENT
 SI-6 TO SI-7 STRIP SEAL EXPANSION JOINT DETAILS
 SI-8 JOINT DETAILS

STRUCTURE No. 790128

S2-1 TO S2-2 GENERAL DRAWING
 S2-3 TYPICAL SECTION
 S2-4 PLAN OF SPANS
 S2-5 JOINT DETAILS

SHEET No. DESCRIPTION

STRUCTURE No. 790129
 S3-1 TO S3-2 GENERAL DRAWING
 S3-3 TYPICAL SECTION
 S3-4 PLAN OF SPANS
 S3-5 JOINT DETAILS

STRUCTURE No. 790134

S4-1 TO S4-2 GENERAL DRAWING
 S4-3 TYPICAL SECTION
 S4-4 PLAN OF SPANS
 S4-5 JOINT DETAILS

STRUCTURE No. 790135

S5-1 TO S5-2 GENERAL DRAWING
 S5-3 TYPICAL SECTION
 S5-4 PLAN OF SPANS
 S5-5 JOINT DETAILS

SHEET No. DESCRIPTION

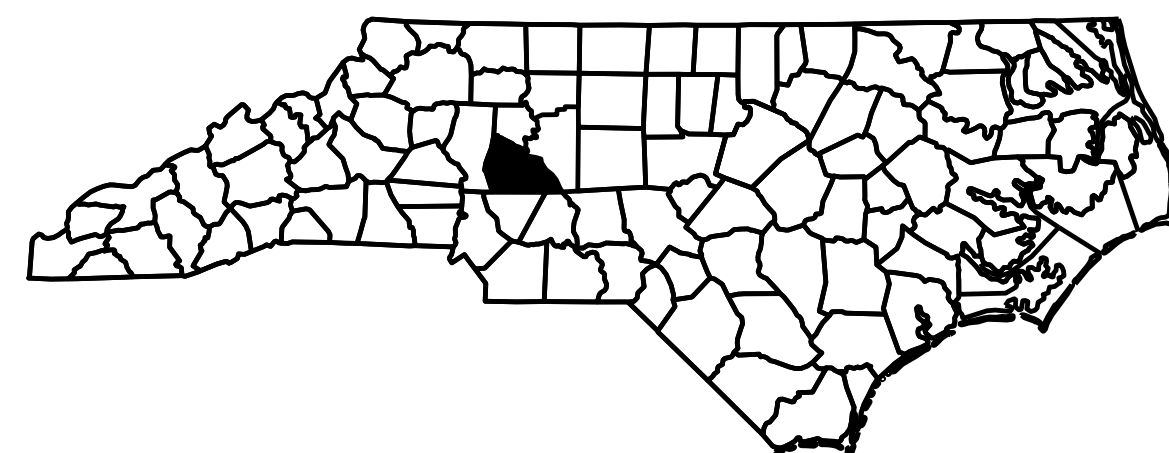
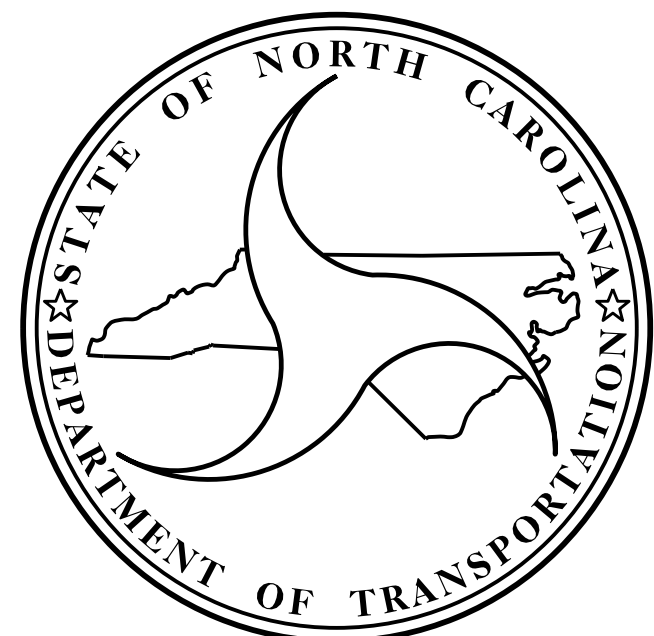
STRUCTURE No. 790136
 S6-1 TO S6-2 GENERAL DRAWING
 S6-3 TYPICAL SECTION
 S6-4 PLAN OF SPANS
 S6-5 JOINT DETAILS

STRUCTURE No. 790419

S7-1 TO S7-2 GENERAL DRAWING
 S7-3 TYPICAL SECTION
 S7-4 PLAN OF SPANS
 S7-5 JOINT DETAILS

SHEET No. DESCRIPTION

SN STANDARD NOTES



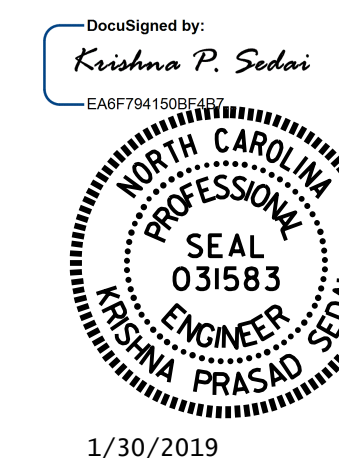
TYPE OF WORK:
 BRIDGE PRESERVATION - SHOTBLASTING
 CONCRETE DECK, SILANE DECK TREATMENT &
 JOINT REPLACEMENT

Prepared in the Office of:
DIVISION OF HIGHWAYS
 STRUCTURES MANAGEMENT UNIT
 1000 BIRCH RIDGE DR.
 RALEIGH, N.C. 27610

TOTAL BILL OF MATERIAL

BRIDGE NO.	CONCRETE REPAIRS	SHOTCRETE REPAIRS	STRIP SEALS	FOAM JOINT SEALS FOR PRESERVATION	POURABLE SILICONE JOINT SEALANT	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	CONCRETE WORK FOR JOINT REPLACEMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	CU. FT.	CU. FT.	LUMP SUM	LIN. FT.	LIN. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. YDS.	SQ. YDS.
123	5	1	LUMP SUM	143	286	126	429	5	715	6340	6340
128	---	---	---	144	---	42	144	5	---	1276	1276
129	---	---	---	144	---	42	144	5	---	1276	1276
134	---	---	---	98	---	24.5	98	5	---	1377	1377
135	---	---	---	186	---	54	186	5	---	1767	1767
136	---	---	---	186	---	54	186	5	---	1764	1764
419	---	---	---	125	---	37	125	5	---	1846	1846
TOTAL	5	1	LUMP SUM	1026	286	379.5	1312	35	715	15,646	15,646

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 123, 128, 129, 134,
135, 136, & 419



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TOTAL BILL OF MATERIAL

DRAWN BY : C. RUIZ DATE : 04/2018
 CHECKED BY : E. BAYISSA DATE : 12/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

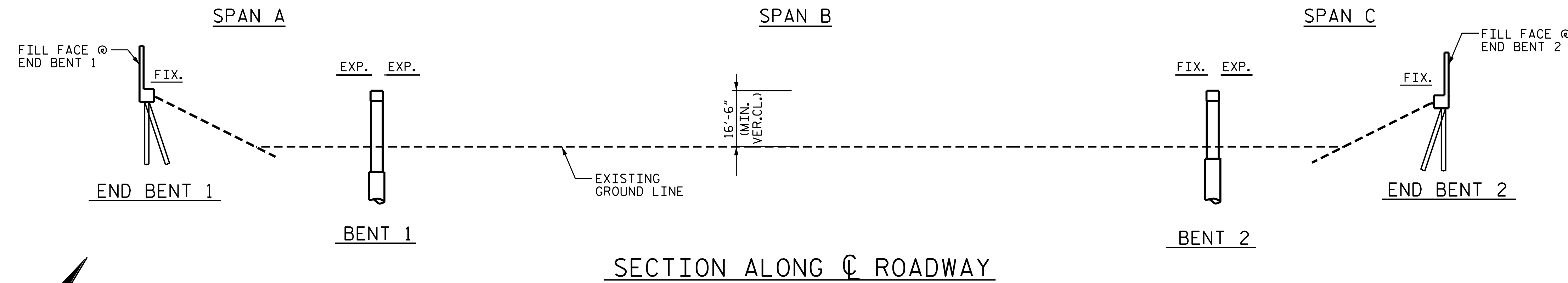
NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 09/24/2018.

BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

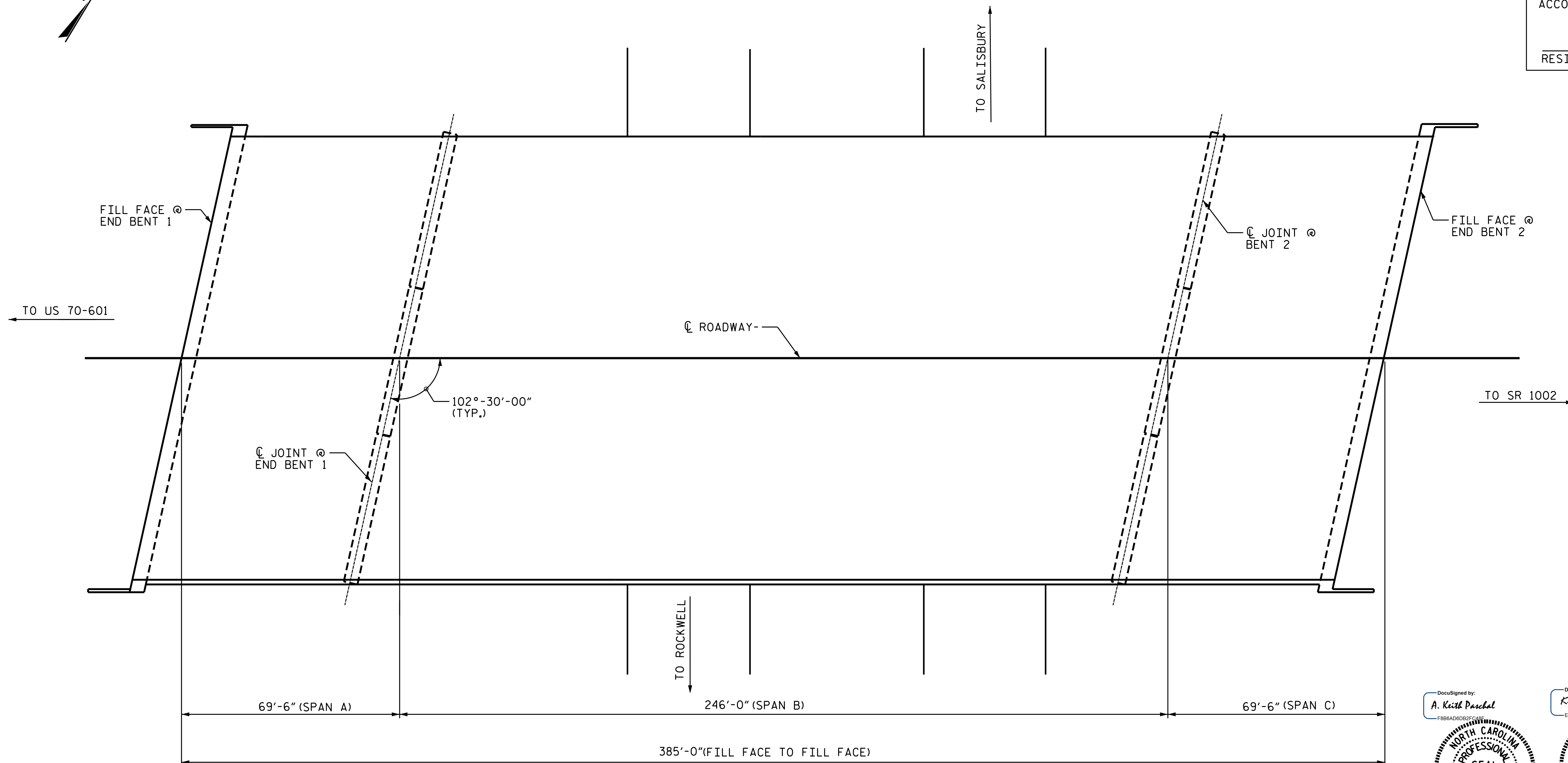
SCOPE OF WORK

- CONCRETE WORK FOR JOINT REPLACEMENT AT BENT 1.
- JOINT DEMOLITION OF EXISTING JOINT AT BENT 2.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- REPAIR CONCRETE DECK AREAS.
- PREPARE BRIDGE JOINTS AND INSTALL STRIP SEALS AT BENT 1, FOAM JOINT SEALS FOR PRESERVATION AT BENT 2 & POURABLE SILICONE JOINT SEALANT AT END BENTS.
- APPLY SILANE DECK TREATMENT.



I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____



PLAN

PROJECT NO. I-5858

ROWAN COUNTY

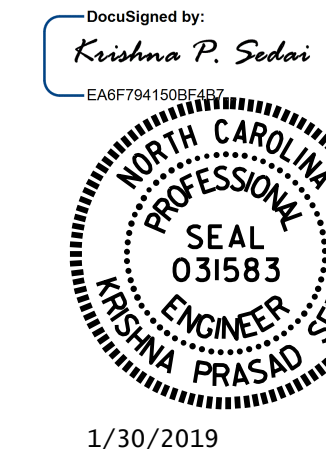
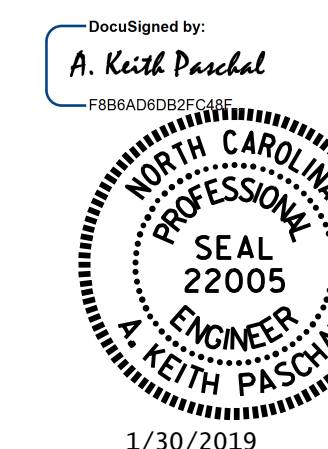
BRIDGE NO. 790123

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON I-85
OVER US52 SBL &
SR2200 NBL



DRAWN BY : E.A. BAYISSA DATE : 04/2018
CHECKED BY : FRAN. LEA DATE : 04/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-1
1			3			TOTAL SHEETS
2			4			8

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR STRIP SEALS, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

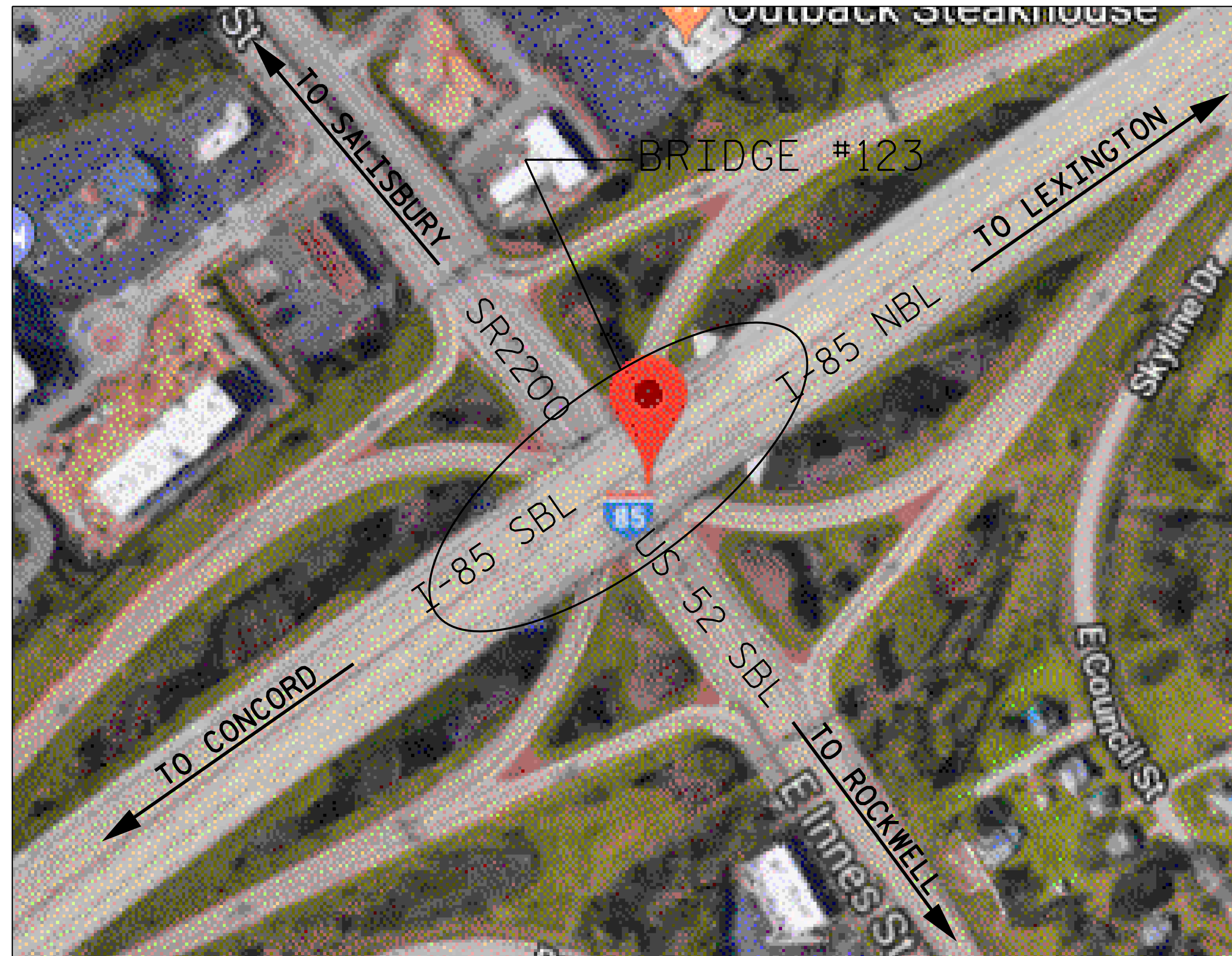
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

FOR CONCRETE WORK FOR JOINT REPLACEMENT, SEE SPECIAL PROVISIONS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.



LATITUDE:35°39'27.17"; LONGITUDE:80°27'33.86"

LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

TOTAL BILL OF MATERIAL

BRIDGE NO. 123	CONCRETE REPAIRS	SHOTCRETE REPAIRS	STRIP SEALS	FOAM JOINT SEALS FOR PRESERVATION	PPOURABLE SILICONE JOINT SEALANT	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	CONCRETE WORK FOR JOINT REPLACEMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	CU. FT.	CU. FT.	LUMP SUM	LIN. FT.	LIN. FT.	CU. FT.	SO. FT.	SO. FT.	SO. FT.	SO. YDS.	SO. YDS.
TOTAL	* 5	1.0	LUMP SUM	143	286	126	429	5	715	6340	6340

* CONCRETE REPAIR IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

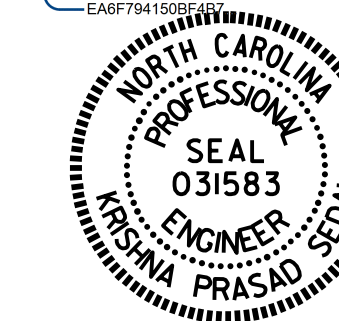
PROJECT NO. I-5858

ROWAN COUNTY

BRIDGE NO. 790123

SHEET 2 OF 2

DocuSigned by:
Krishna P. Sedai
EA8F79A15056672



1/30/2019

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

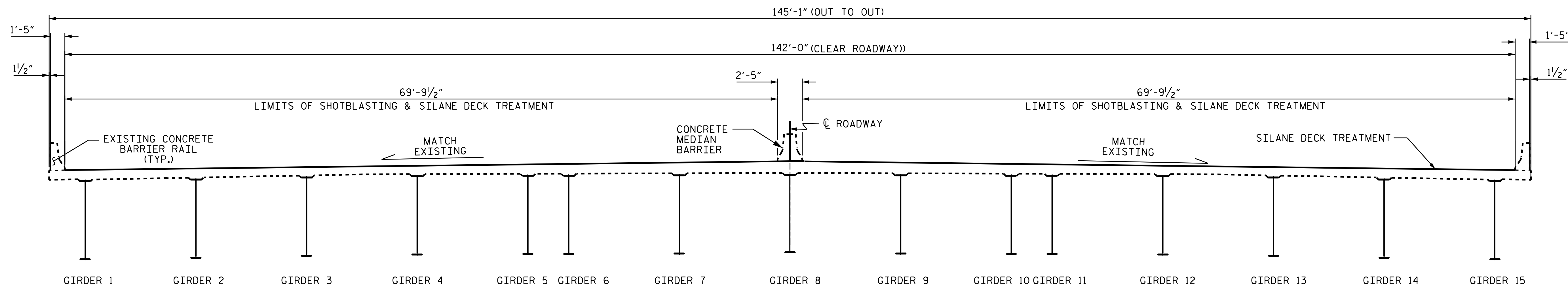
GENERAL DRAWING

FOR BRIDGE ON I-85
OVER US52 SBL &
SR2200 NBL

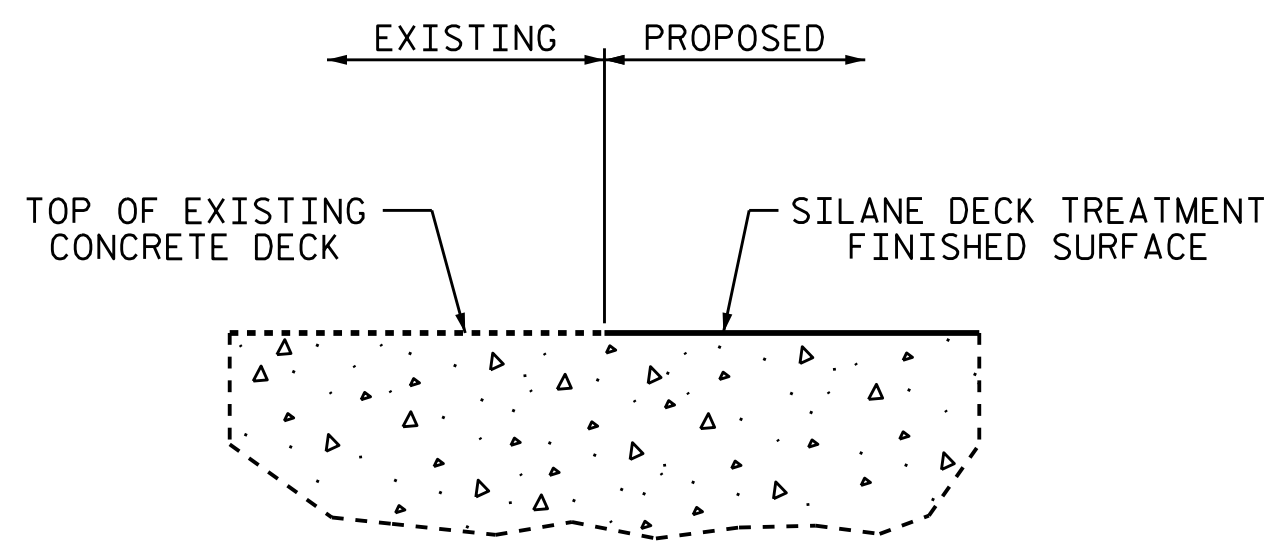
DRAWN BY : E.A. BAYISSA DATE : 04/2018
CHECKED BY : FRAN, LEA DATE : 04/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-2
2			4			TOTAL SHEETS 8

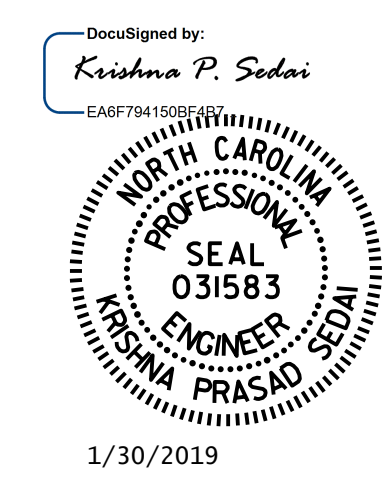


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790123


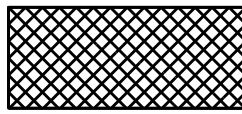
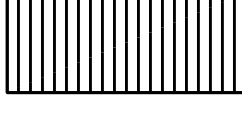
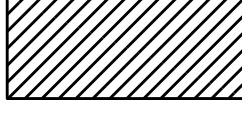


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : E.A.BAYISSA DATE : 04/2018
 CHECKED BY : FRAN.LEA DATE : 04/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			8
2			4			

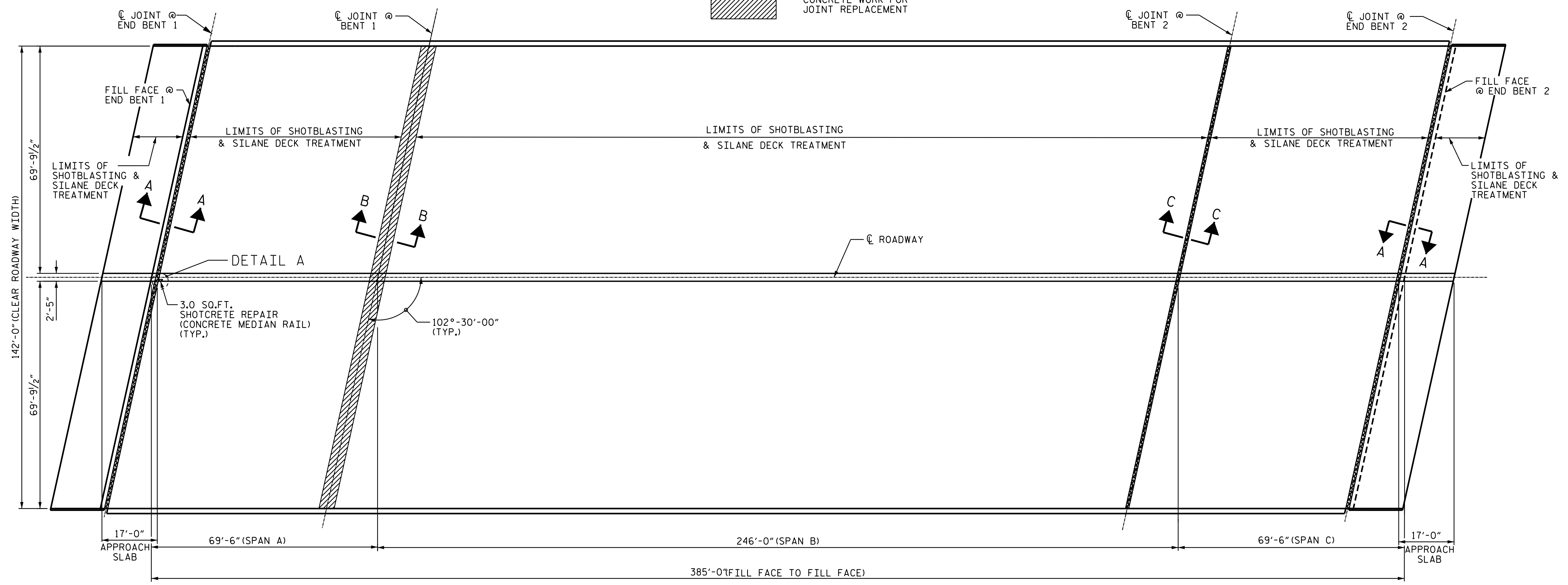
-  SILANE DECK TREATMENT
-  BRIDGE JOINT DEMOLITION
-  SHOTCRETE REPAIR
-  CONCRETE WORK FOR JOINT REPLACEMENT

NOTES:

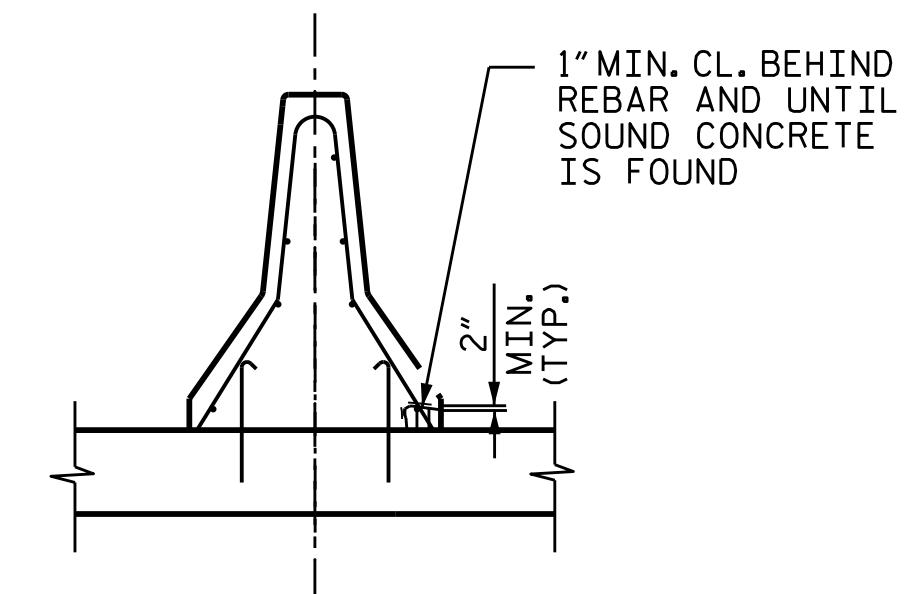
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS, AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.
FOR SECTIONS A-A, B-B & C-C, SEE "JOINT DETAILS" SHEET.

CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.



PLAN OF SPANS A, B AND C



MEDIAN RAIL (SBL)

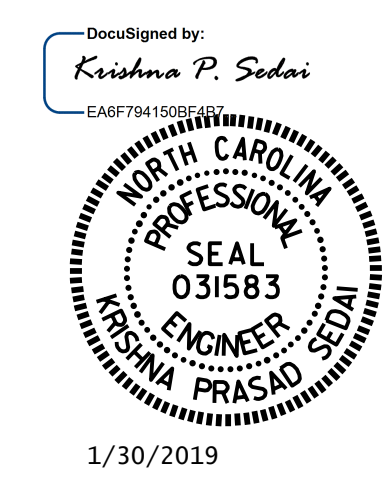
DETAIL A

CONCRETE MEDIAN RAIL REPAIR DETAIL

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	515 SQ.YDS.	
SILANE DECK TREATMENT	515 SQ.YDS.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	429 SQ.FT.	
CONCRETE WORK FOR JOINT REPLACEMENT	715 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 5.0 SQ.FT.	
SHOTBLASTING BRIDGE DECK	5825 SQ.YDS.	
SILANE DECK TREATMENT	5825 SQ.YDS.	
SHOTCRETE REPAIRS (SPAN A)	1.0 CU.FT.	

* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790123

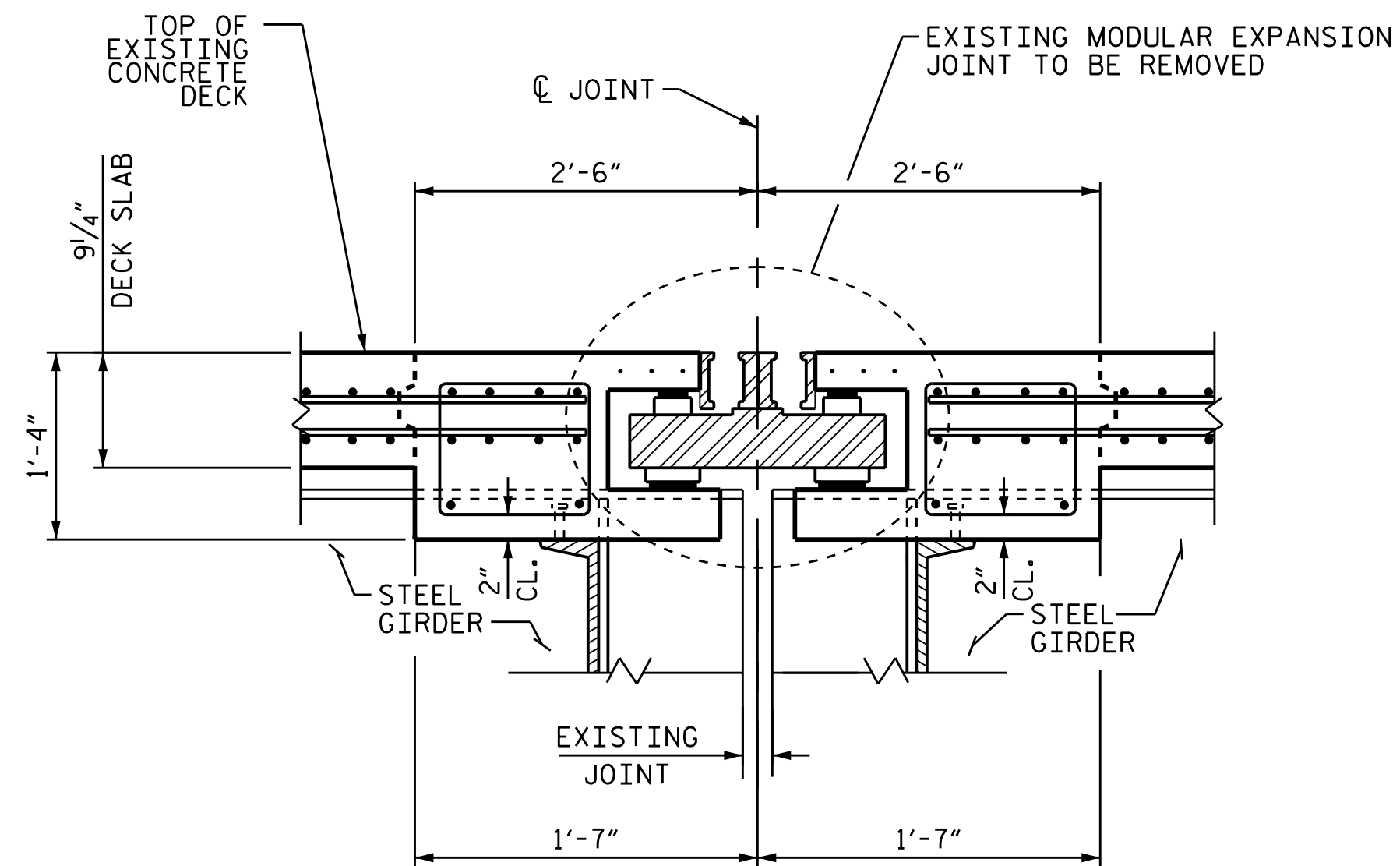


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
**SUPERSTRUCTURE
SILANE DECK TREATMENT
& CONCRETE MEDIAN RAIL
REPAIR**

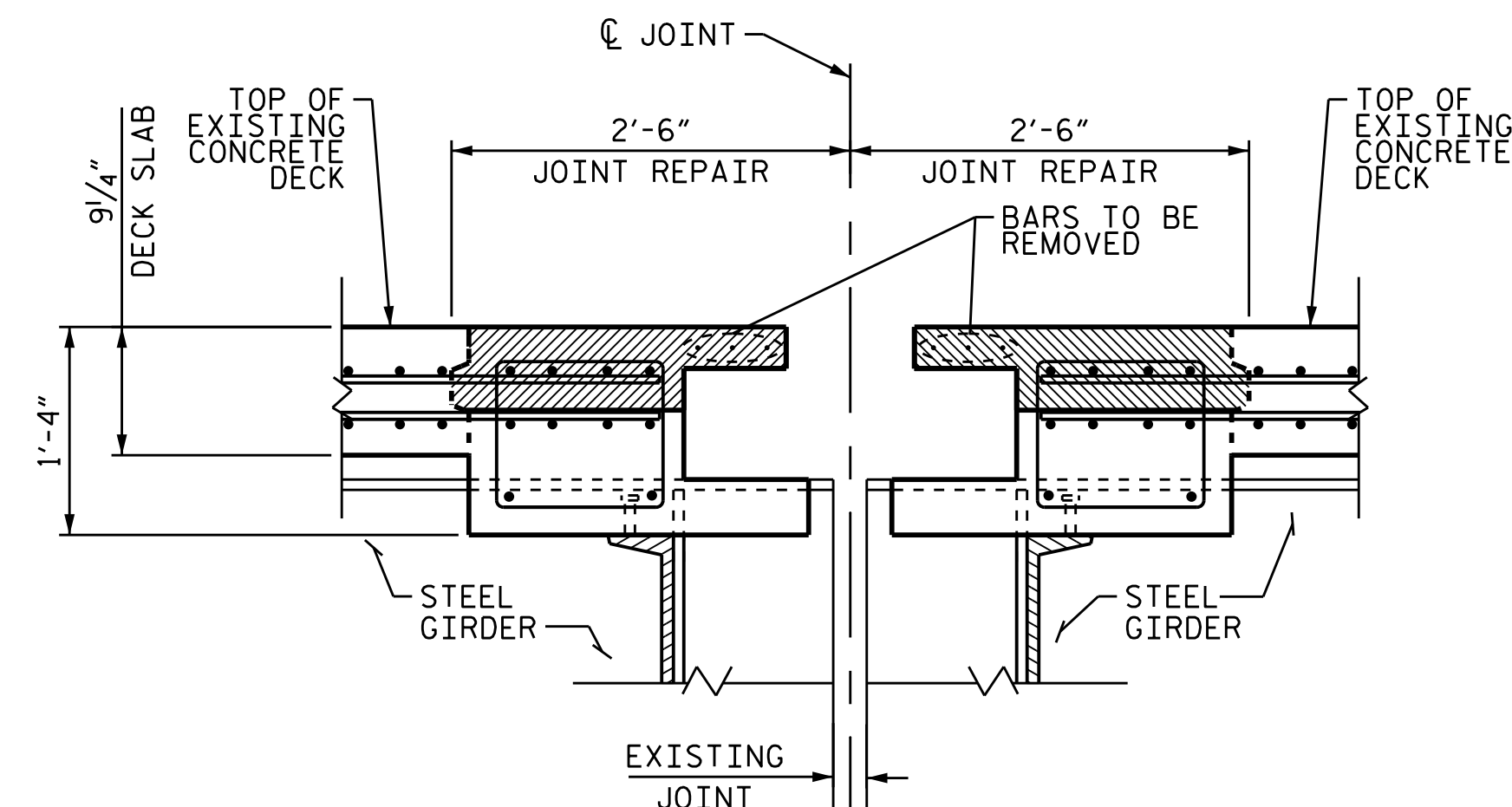
DRAWN BY: E. A. BAYISSA DATE: 04/2018
CHECKED BY: FRAN.LEA DATE: 04/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-4
2			4			TOTAL SHEETS 8

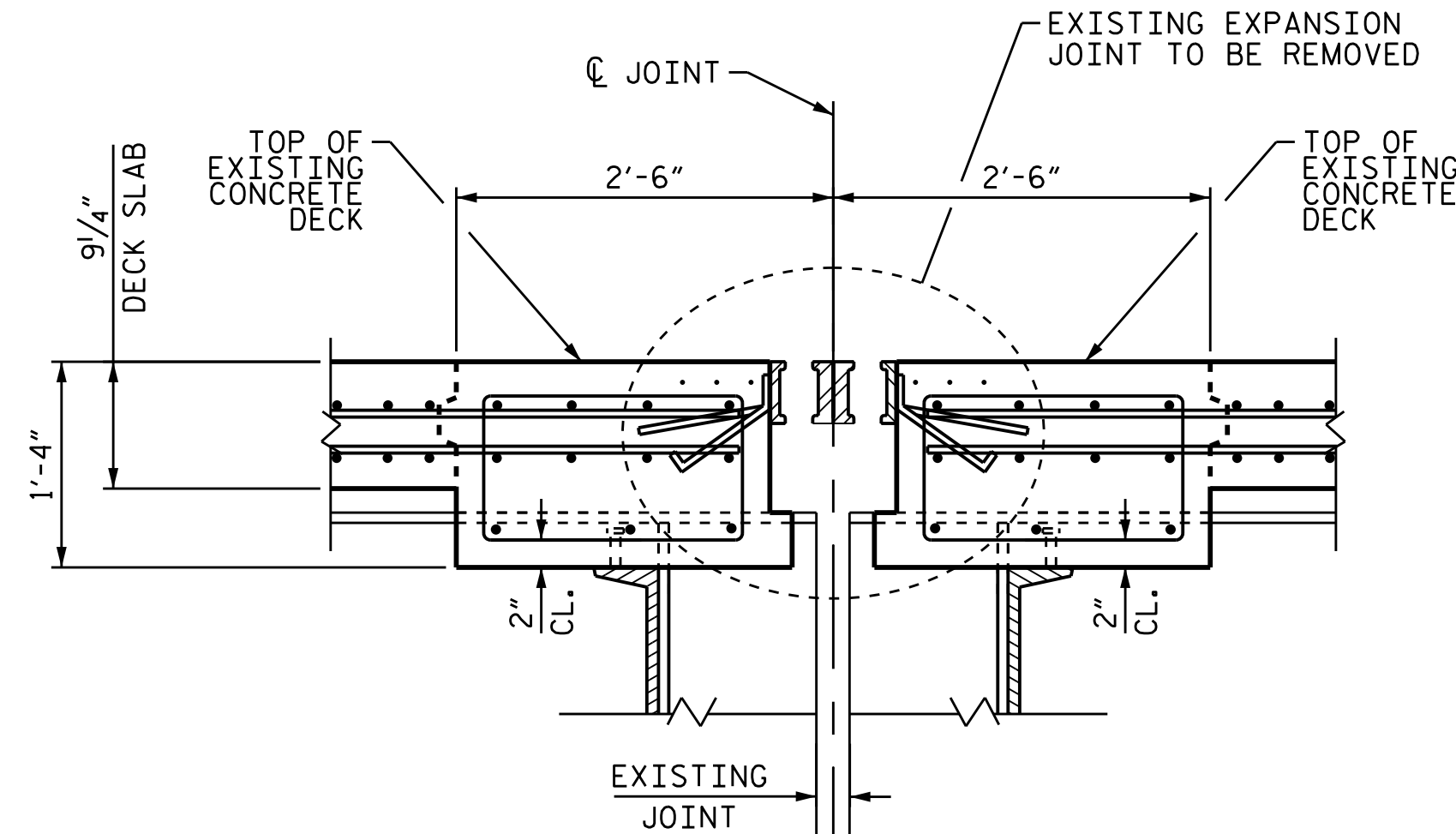
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



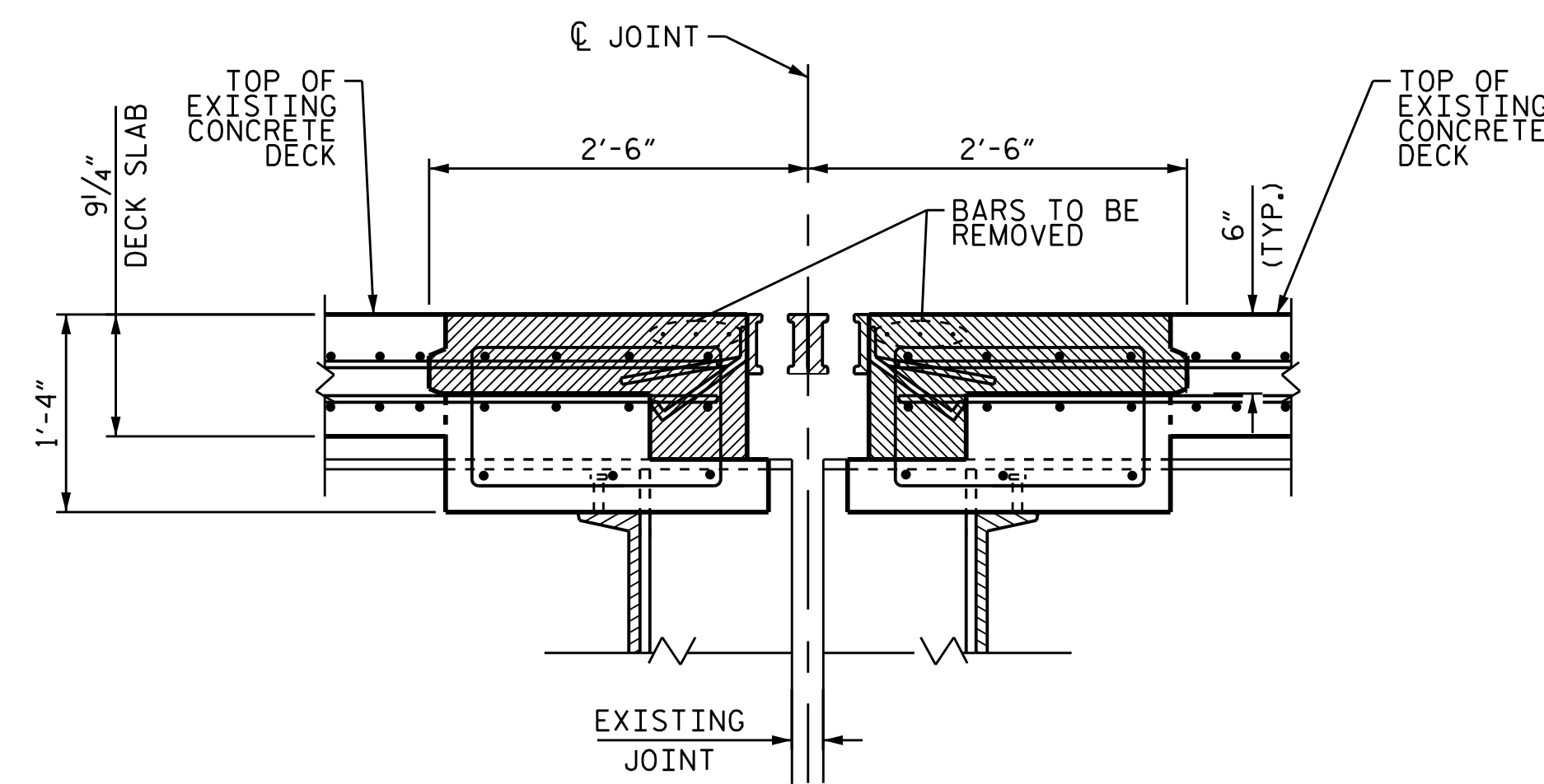
SECTION B-B
EXISTING MODULAR JOINT
(AT MODULAR JT. BOXES)



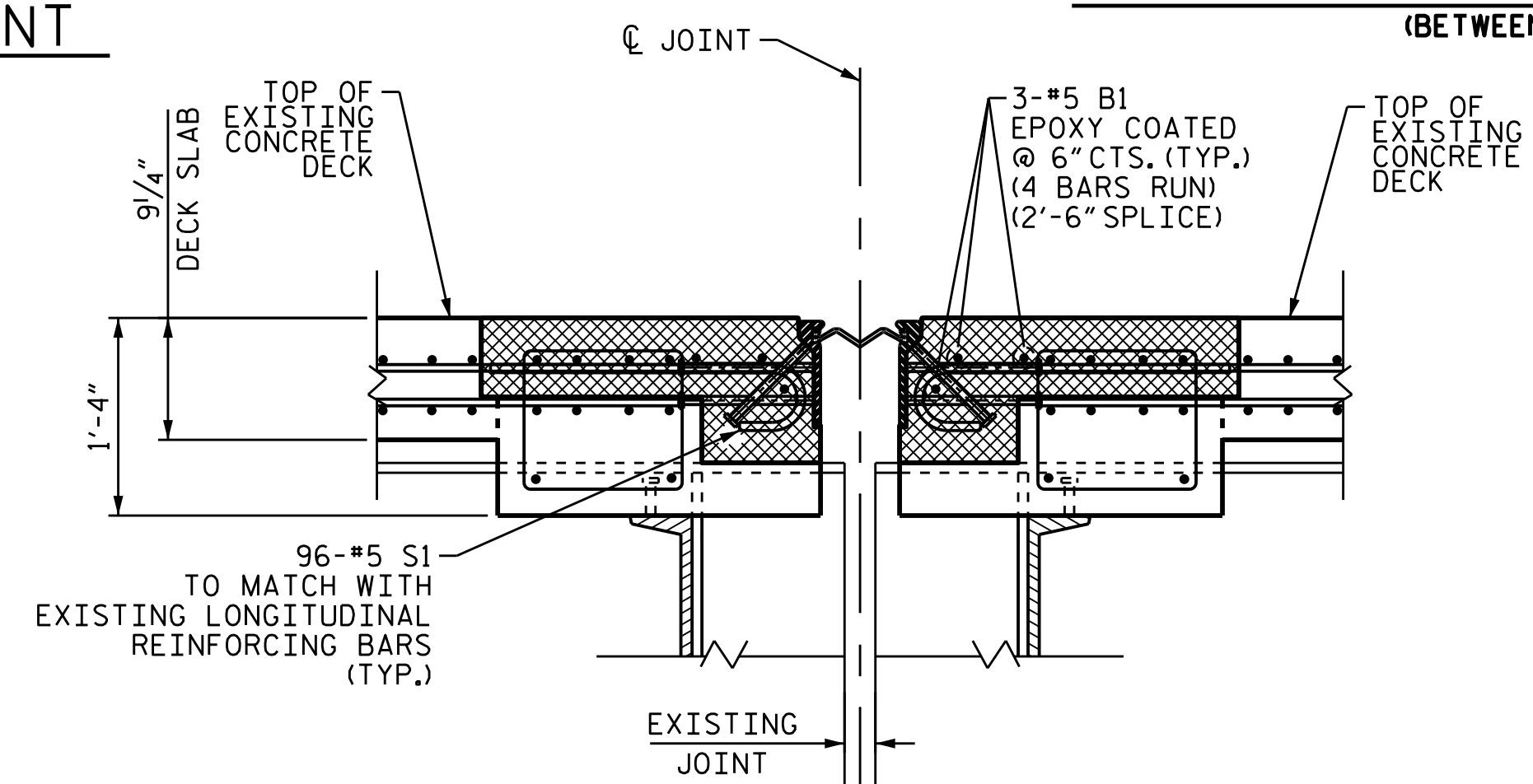
SECTION B-B
MODULAR JOINT TO BE REMOVED
(AT MODULAR JT. BOXES)



SECTION B-B
EXISTING MODULAR JOINT
(BETWEEN MODULAR JT. BOXES)



SECTION B-B
MODULAR JOINT TO BE REMOVED
(BETWEEN MODULAR JT. BOXES)



SECTION B-B
PROPOSED STRIP
SEAL EXPANSION JOINT
(FOR DETAILS, SEE "STRIP SEAL EXPANSION JOINT DETAILS" SHEET)

BILL OF MATERIAL FOR BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	24	#5	STR	36'-9"	920
S1	192	#5	1	2'-9"	551
EPOXY COATED REINFORCING STEEL (FOR BENT 1)					1471 LBS.
BAR TYPES					

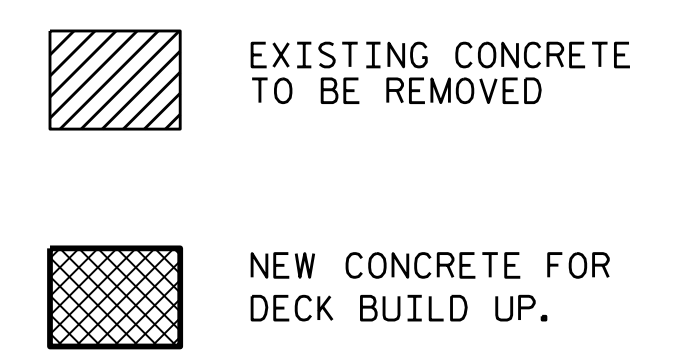
NOTES:

EXISTING MODULAR EXPANSION JOINT DETAILS ARE SHOWN FOR INFORMATION ONLY. ACTUAL FIELD CONDITIONS MAY VARY. THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT IF ACTUAL CONDITIONS VARY FROM WHAT IS SHOWN IN THESE PLANS

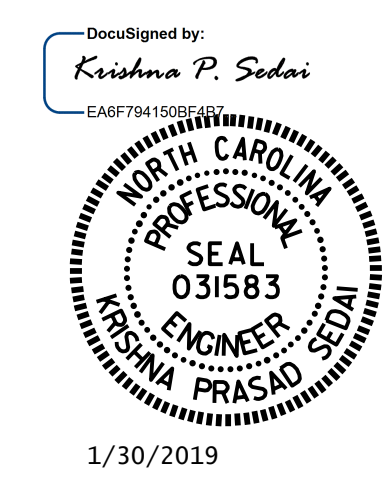
THE CONTRACTOR SHALL HAVE A REPRESENTATIVE FROM THE JOINT MANUFACTURER PRESENT DURING INSTALLATION OF PROPOSED EXPANSION JOINT SEAL

ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.

THE CONTRACTOR SHALL PREPARE THE BOTTOM SURFACE OF BLOCKOUT TO BE PARALLEL WITH THE PLANE OF THE ROADWAY AND PROVIDE A UNIFORM SURFACE



PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790123
 SHEET 1 OF 4

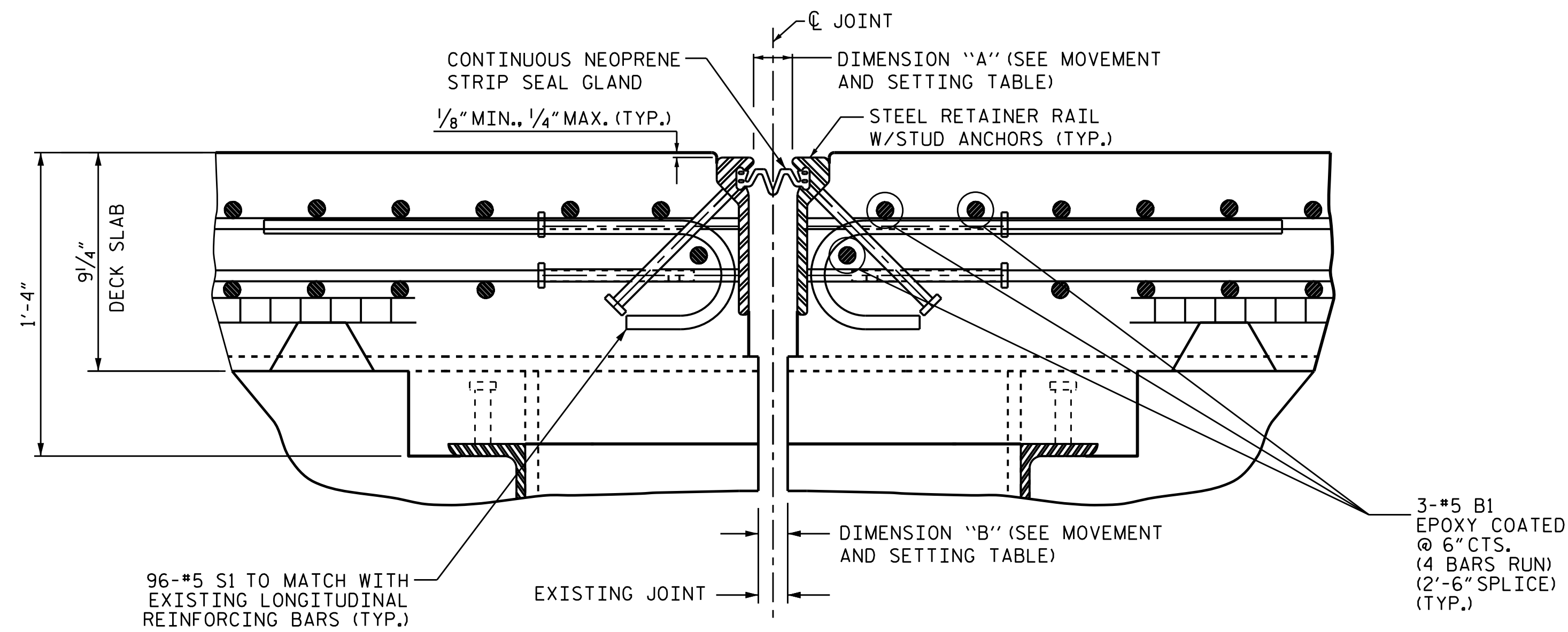


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**BENT 1
 JOINT REPLACEMENT**

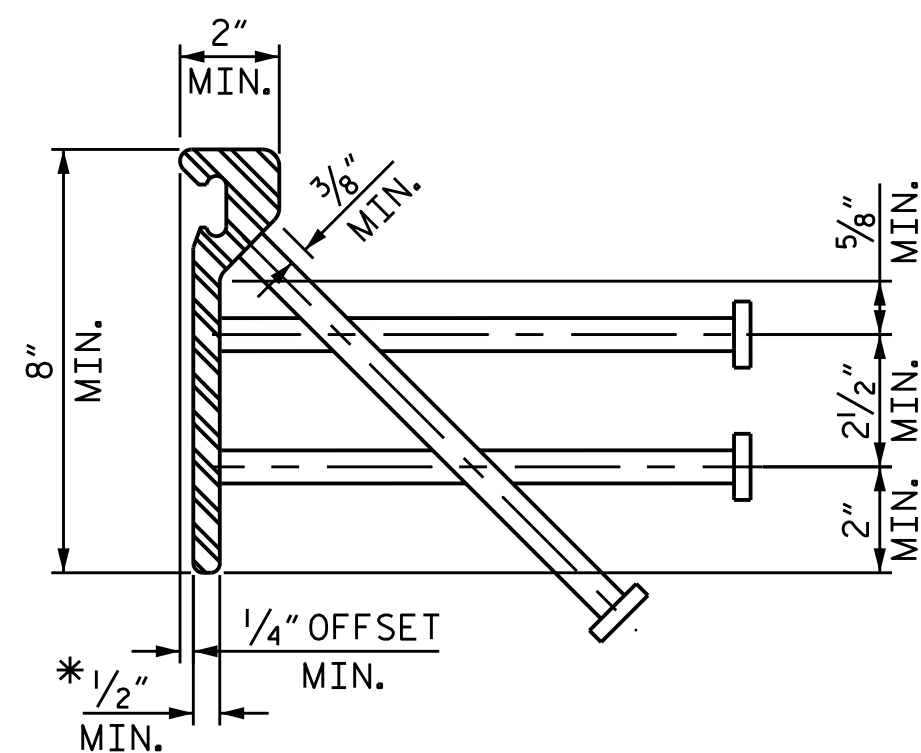
DRAWN BY: E.A. BAYISSA DATE: 04/2018
 CHECKED BY: FRAN. LEA DATE: 04/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-5
2			4			TOTAL SHEETS 8

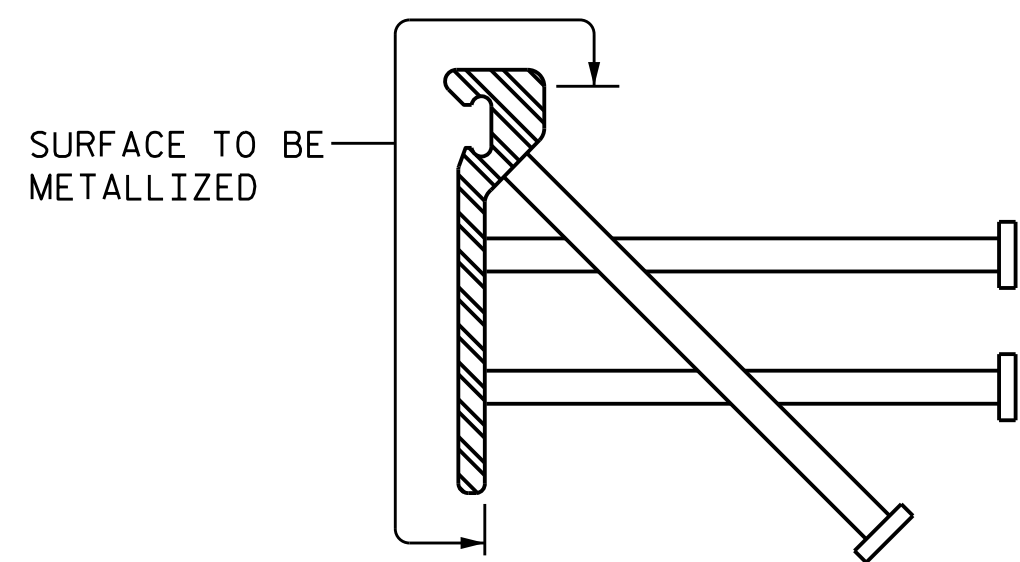


**SECTION B-B
STRIP SEAL EXPANSION JOINT DETAILS**
SECTION NORMAL TO JOINT -- STEEL SUPERSTRUCTURE

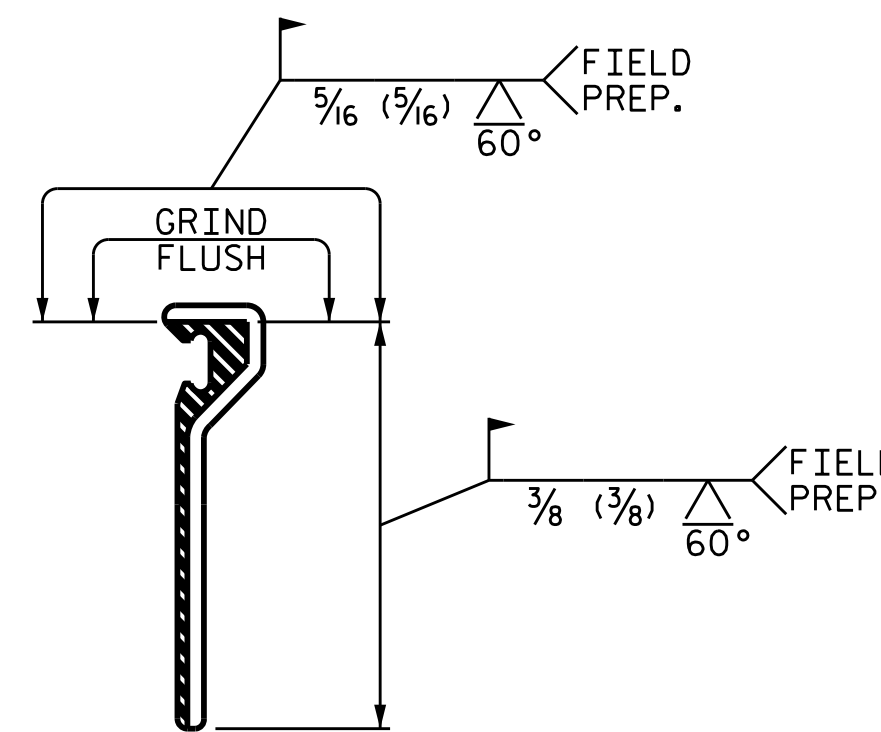


**TYPICAL SECTION
STEEL RETAINER RAIL**

* DIMENSION "B" BASED ON STEEL RETAINER RAIL TOP OFFSET TO FACE OF RAIL OF 1/4" MINIMUM. IF ACTUAL OFFSET IS GREATER ADJUST DIMENSION "B" AS REQUIRED.



METALLIZING DETAIL



**STEEL RETAINER RAIL
(FIELD SPLICE DETAIL)**

JOINT INSTALLATION PROCEDURE:

1. INSTALL THE STRIP SEAL EXPANSION JOINT AS RECOMMENDED BY THE STRIP SEAL EXPANSION JOINT MANUFACTURER.
2. A MANUFACTURER'S REPRESENTATIVE IS TO BE PRESENT DURING INSTALLATION OF THE JOINT.
3. PLACE STEEL RETAINER RAILS IN JOINT OPENING. PROPERLY ALIGN THE RAILS BOTH HORIZONTALLY AND VERTICALLY.
4. SHIFT SLIGHTLY, AS NECESSARY, CONFLICTING REINFORCING STEEL.
5. DECK SLAB CONCRETE PLACEMENT OPERATIONS SHALL COMMENCE PER THE POURING SEQUENCE AFTER FINAL JOINT ALIGNMENT IS SET.
6. CARE MUST BE TAKEN DURING THE CONCRETE POUR TO PROTECT THE STEEL RETAINER RAILS FROM BEING FOULED BY CONCRETE SPILLOVER.
7. ON APPROACH SLAB SIDE OF JOINT, RE-LEVEL AND RE-ALIGN STEEL RETAINER RAIL AS REQUIRED.
8. PLACE APPROACH SLAB CONCRETE.
9. ONCE THE CONCRETE HAS HARDENED SUFFICIENTLY ON BOTH SIDES OF JOINT, STEEL RETAINER RAILS SHALL BE CLEANED THOROUGHLY AND SEAL CHANNELS SHALL BE INSPECTED TO ASCERTAIN THE ABSENCE OF CONCRETE AND DEBRIS.
10. COAT THE STRIP SEAL LUGS WITH LUBRICANT-ADHESIVE AND INSTALL THE NEOPRENE STRIP SEAL GLAND AS RECOMMENDED BY THE STRIP SEAL EXPANSION JOINT MANUFACTURER.

GENERAL NOTES

FOR STRIP SEALS, SEE SPECIAL PROVISIONS.

STEEL RETAINER RAILS SHALL CONFORM TO AASHTO M270 GRADE 36 OR GRADE 50W STEEL. ALL STUD ANCHORS SHALL CONFORM TO AASHTO M169, GRADES 1010 THRU 1020 OR APPROVED EQUAL. ALL CONCRETE INSERTS SHALL BE CLOSEDEND AND SHALL CONFORM TO AASHTO M169, GRADE 12L14. TENSILE CAPACITY SHALL BE 3000 LBS. MIN.

ONLY STEEL RETAINER RAILS OF ONE-PIECE CONSTRUCTION ARE PERMITTED. STEEL RETAINER RAILS CONSISTING OF TWO OR MORE COMPONENTS WELDED TOGETHER TO OBTAIN THEIR FINAL CROSS-SECTIONAL SHAPE ARE NOT PERMITTED.

NEOPRENE STRIP SEAL GLAND SHALL BE CONTINUOUS THROUGHOUT THE JOINT AND SHALL BE COMPATIBLE WITH THE STEEL RETAINER RAILS.

STUD ANCHORS SHALL BE SHOP WELDED AND SHALL BE ELECTRIC ARC END WELDED WITH COMPLETE FUSION.

SURFACES COMING IN CONTACT WITH STRIP SEAL GLAND SHALL BE GROUND SMOOTH PRIOR TO METALLIZING.

UPON COMPLETION OF SHOP FABRICATION, THE STEEL RETAINER RAILS SHALL BE METALLIZED AS SHOWN IN THE "METALLIZING DETAIL". SEE SPECIAL PROVISIONS FOR THERMAL SPRAYED COATINGS (METALLIZATION).

INSTALLED STEEL RETAINER RAILS SHALL FOLLOW THE ROADWAY SLOPE.

FIELD SPLICES OF THE RETAINER RAILS SHALL BE KEPT TO A MINIMUM. CONTRACTOR SHALL FURNISH DETAILED PLANS SHOWING PROPOSED SPLICE LOCATIONS FOR APPROVAL.

NO ALTERNATE JOINT DETAILS SHALL BE PERMITTED IN LIEU OF THOSE SHOWN ON THESE PLANS.

THE CONTRACTOR MAY, AT HIS OPTION, USE ADHESIVELY ANCHORED ANCHOR BOLTS IN PLACE OF CONCRETE INSERTS FOR COVER PLATES. THE YIELD LOAD OF THE 3/4" Ø BOLT IS 10 KIPS. FIELD TESTING OF THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL JOINT SEAL WIDTH FOR THE SIZE OPENING ON THE PLANS AND ACCOMMODATE THE TOTAL MOVEMENT SHOWN ON THE PLANS.

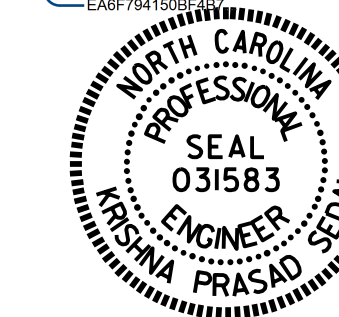
MOVEMENT AND SETTING TABLE

LOCATION	SKEW ANGLE	TOTAL MOVEMENT (ALONG C RDWY)	DIMENSION "A"			DIMENSION "B"		
			PERPENDICULAR JOINT OPENING AT 45° F	PERPENDICULAR JOINT OPENING AT 60° F	PERPENDICULAR JOINT OPENING AT 90° F	PERPENDICULAR JOINT OPENING AT 45° F	PERPENDICULAR JOINT OPENING AT 60° F	PERPENDICULAR JOINT OPENING AT 90° F
BENT 1	102°-30'-00"	2 3/8"	2 9/16"	2 3/16"	1 1/2"	3 1/16"	2 11/16"	2"

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790123

SHEET 2 OF 4

DocuSigned by:
 Krishna P. Sedai
 EA8P79A1555676



1/30/2019

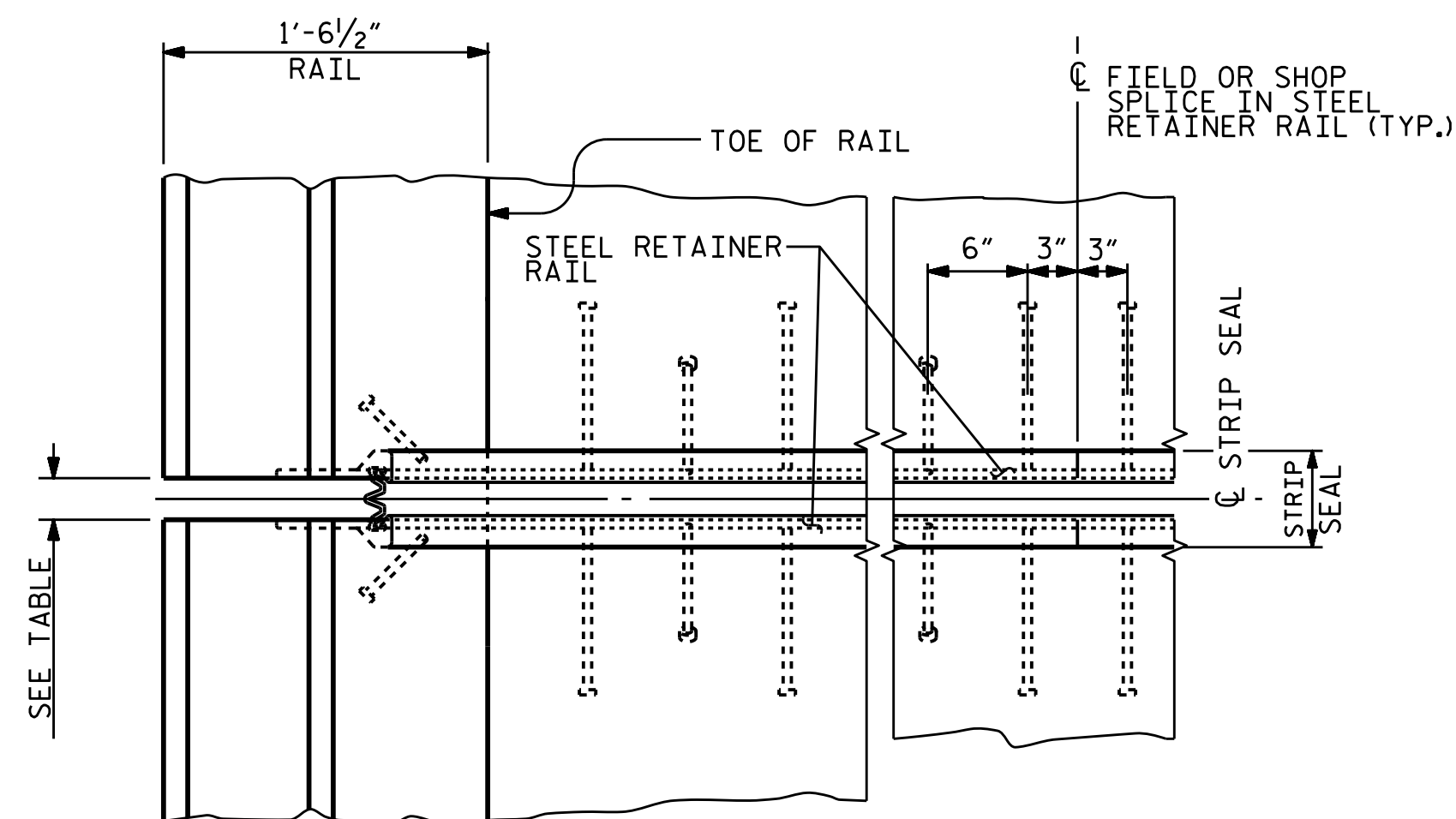
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
**STRIP SEAL EXPANSION
 JOINT DETAILS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S1-6
2			4			8

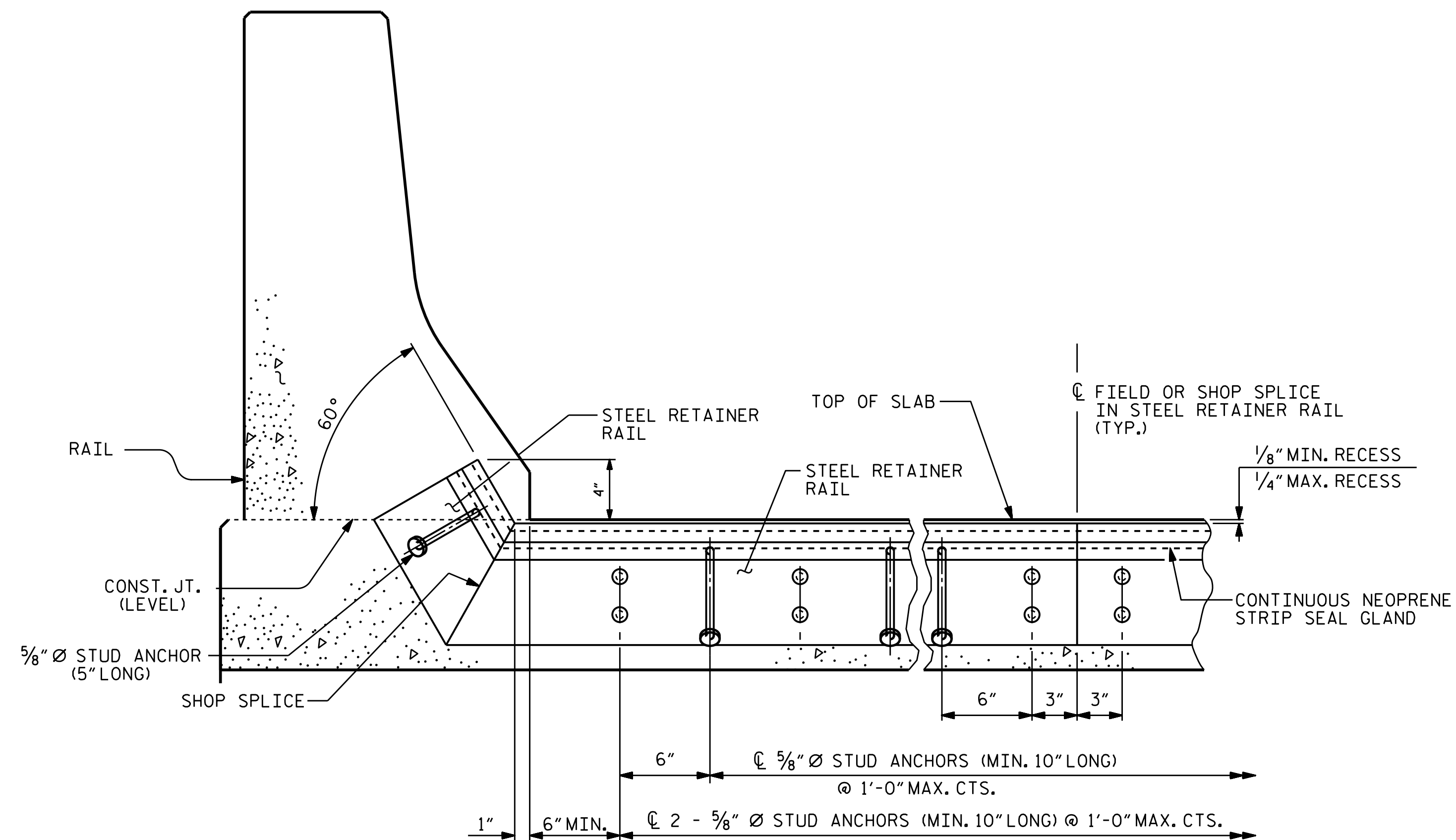
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

ASSEMBLED BY : E.A. BAYISSA DATE : 04/2018
 CHECKED BY : FRAN. LEA DATE : 04/2018

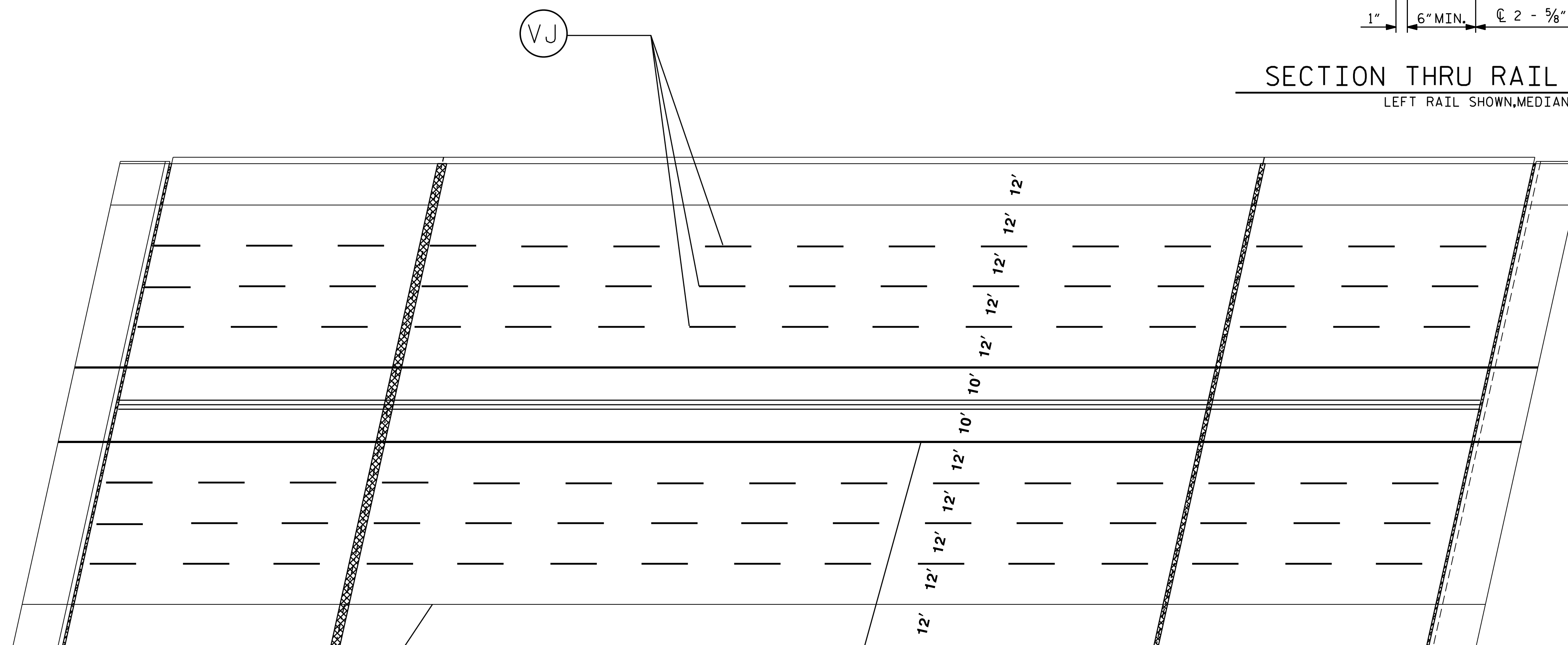
DRAWN BY : MAA 6/17
 CHECKED BY : BNB 6/17



PLAN OF STRIP SEAL EXPANSION JOINT



SECTION THRU RAIL NORMAL TO JOINT
LEFT RAIL SHOWN, MEDIAN RAIL SIMILAR



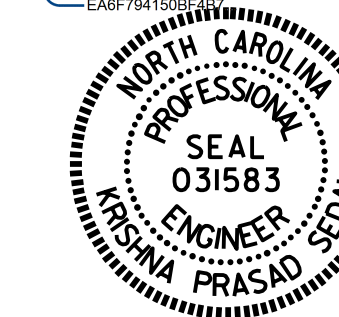
PAVEMENT MARKING SKETCH

- (V6) POLYUREA WHITE EDGELINE (6", 20 MIL)
- (V7) POLYUREA YELLOW EDGELINE (6", 20 MIL)
- (VJ) POLYUREA 10 FT. WHITE SKIP (6", 20 MIL)

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790123

SHEET 3 OF 4

DocuSigned by:
 Krishna P. Sedai
 EA8P79A155587F



1/30/2019

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 STRIP SEAL EXPANSION
 JOINT DETAILS

DRAWN BY : E.A. BAYISSA DATE : 04/2018
 CHECKED BY : FRAN. LEA DATE : 04/2018

DOCUMENT NOT CONSIDERED
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-7
2			4			TOTAL SHEETS 8

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

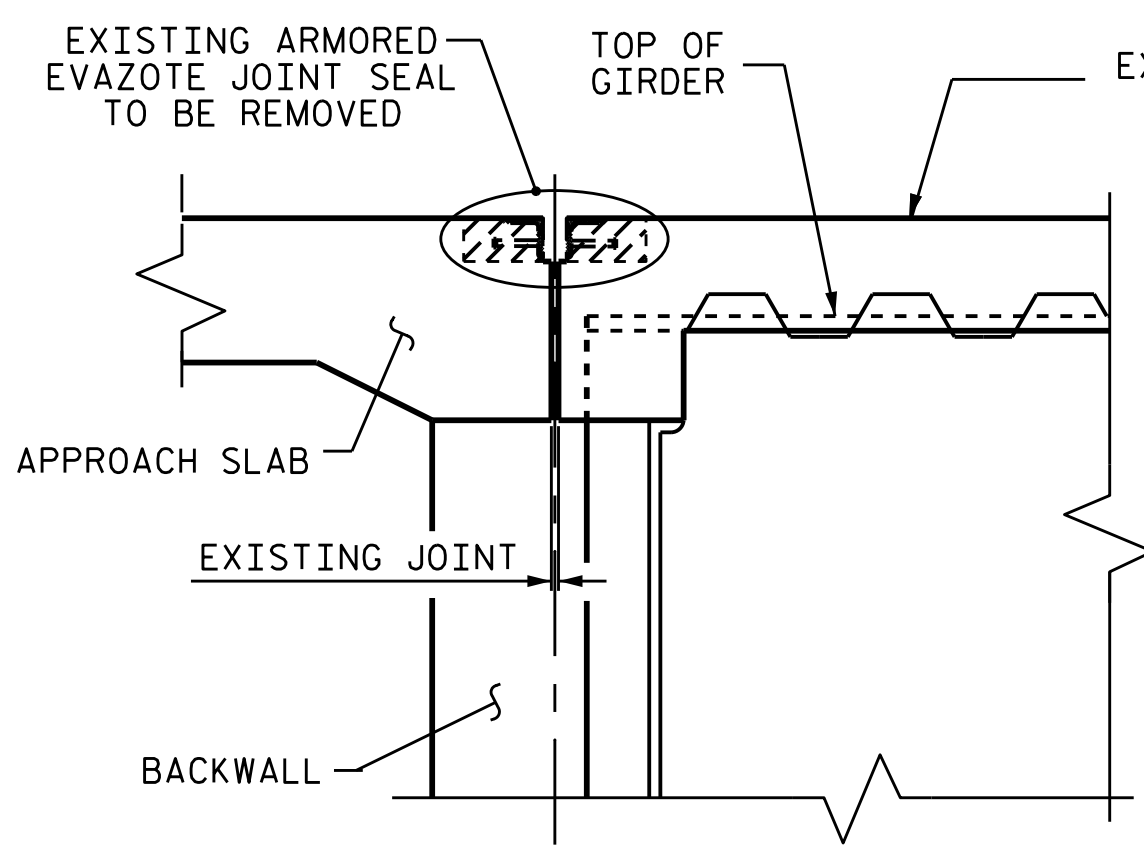
THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.

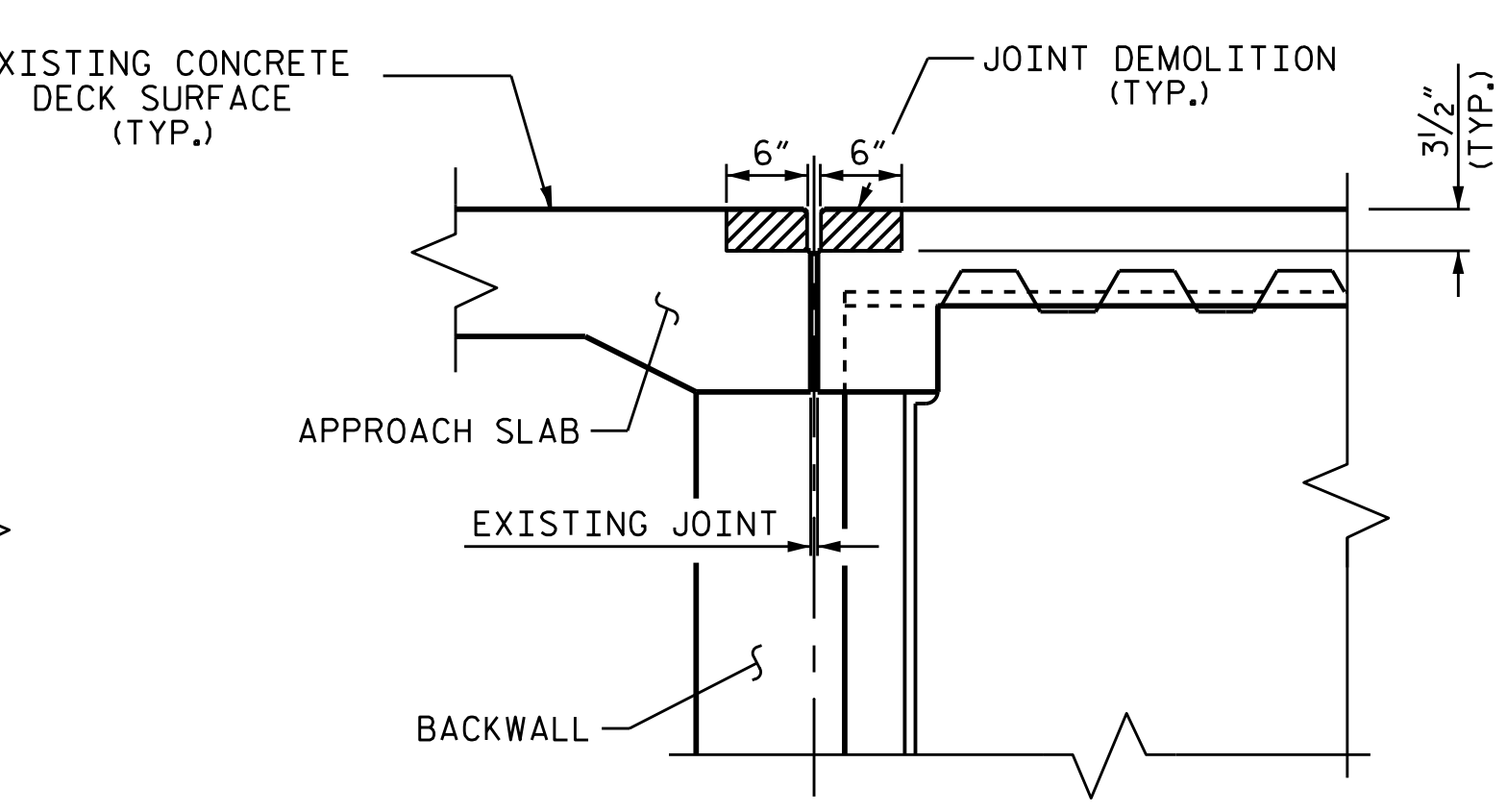
THE INSTALLED FOAM JOINTS SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

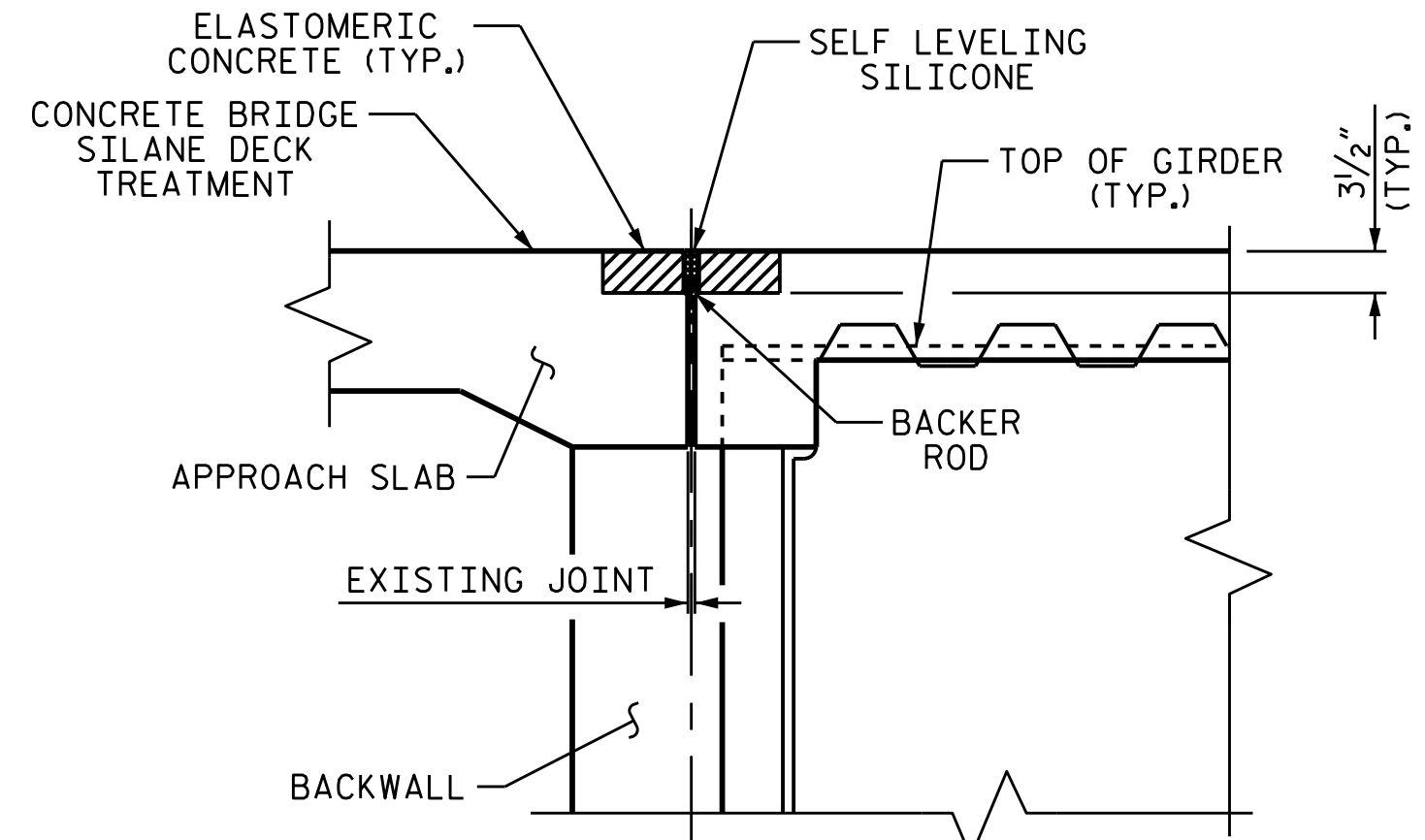
FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.



EXISTING JOINT



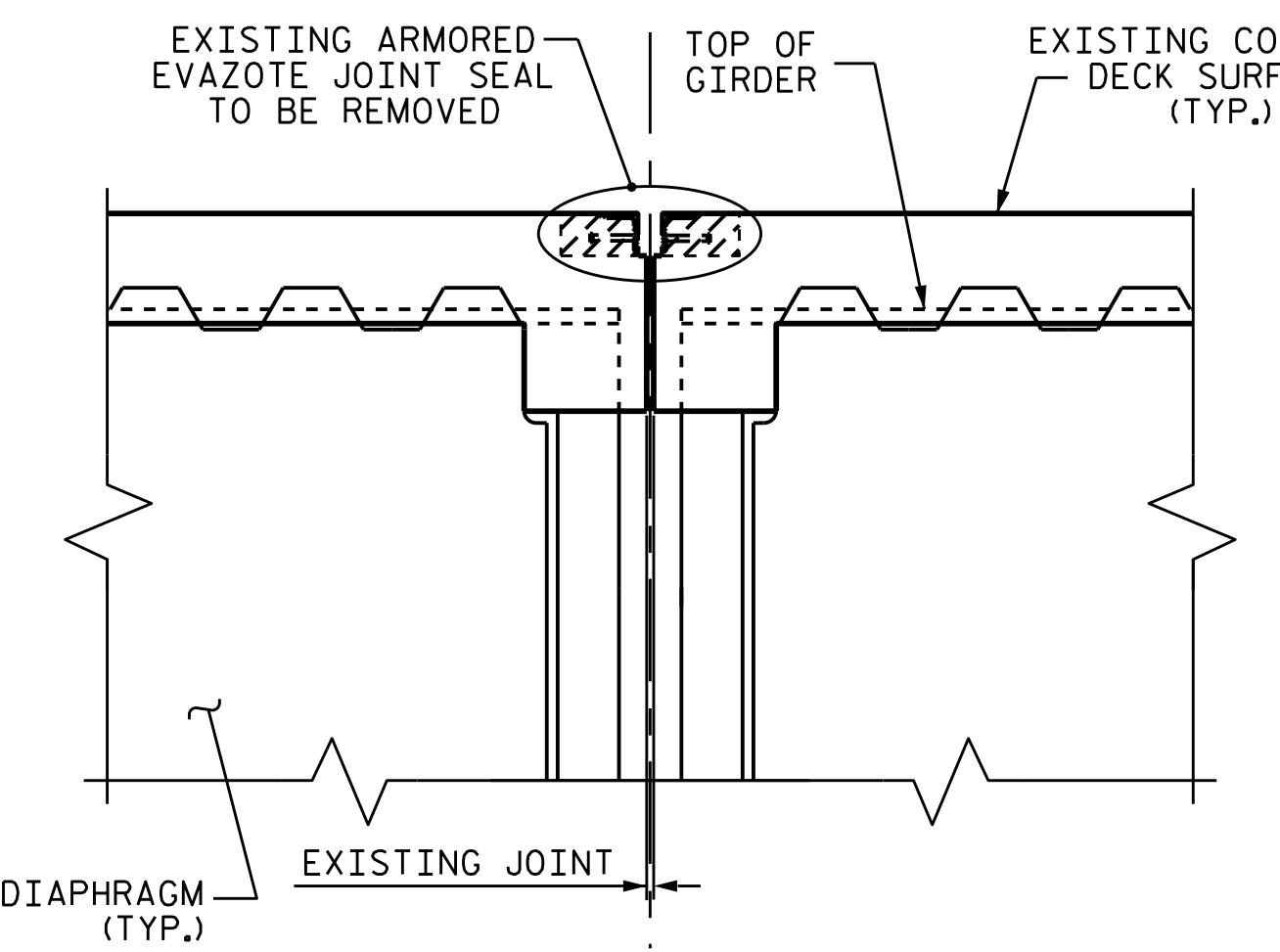
MINIMUM EXISTING JOINT DEMOLITION



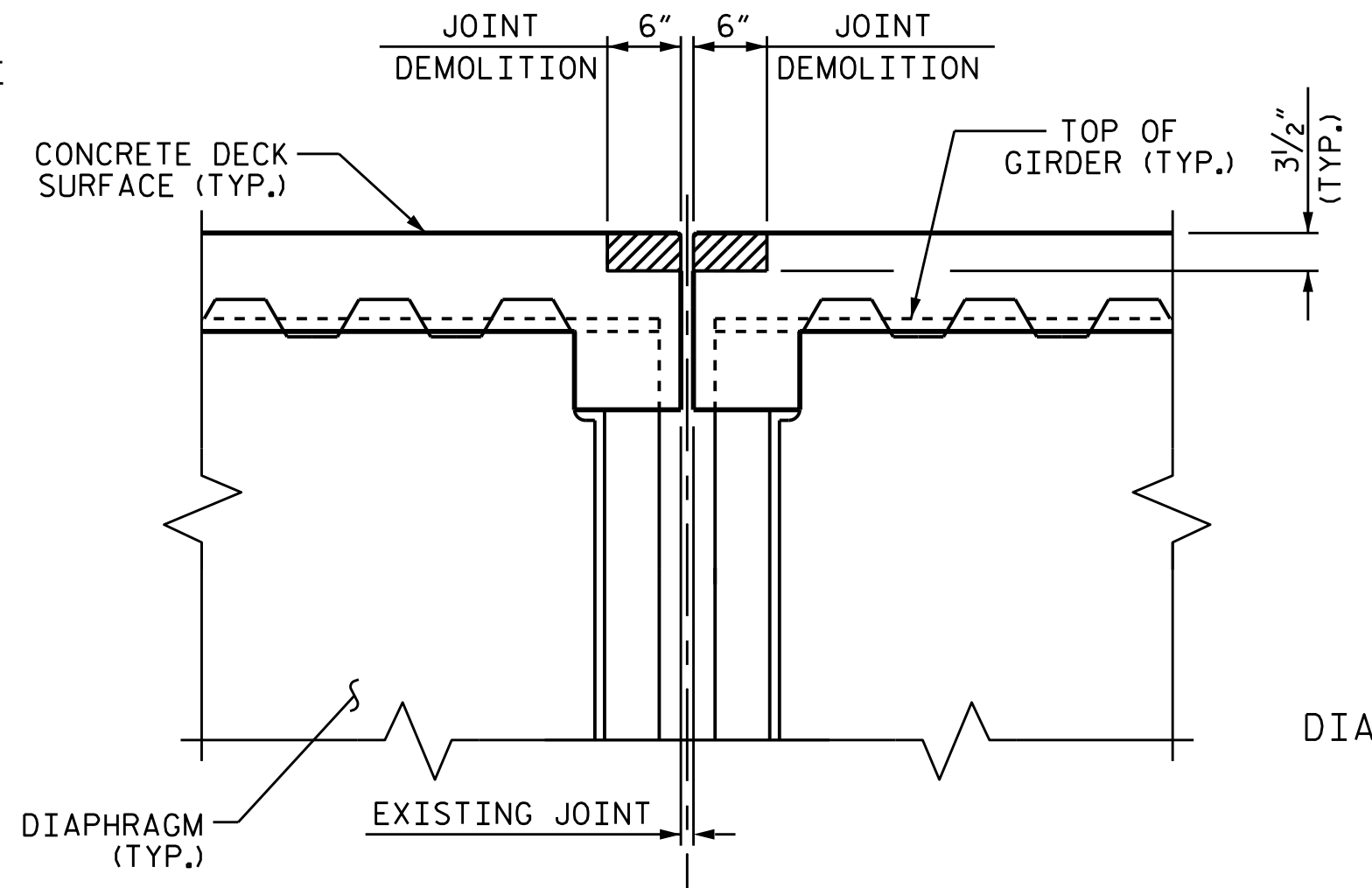
PROPOSED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

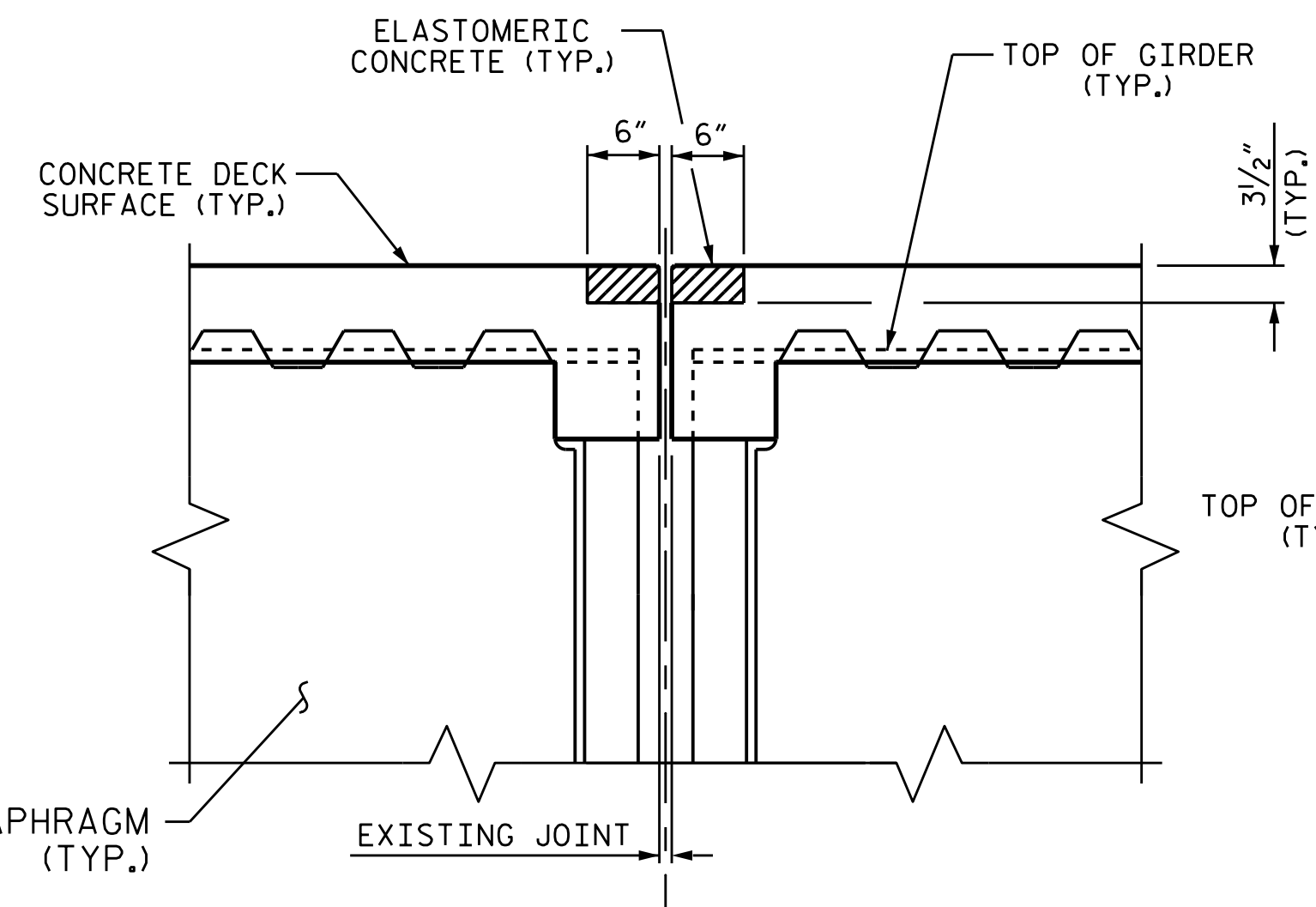
SECTION A-A



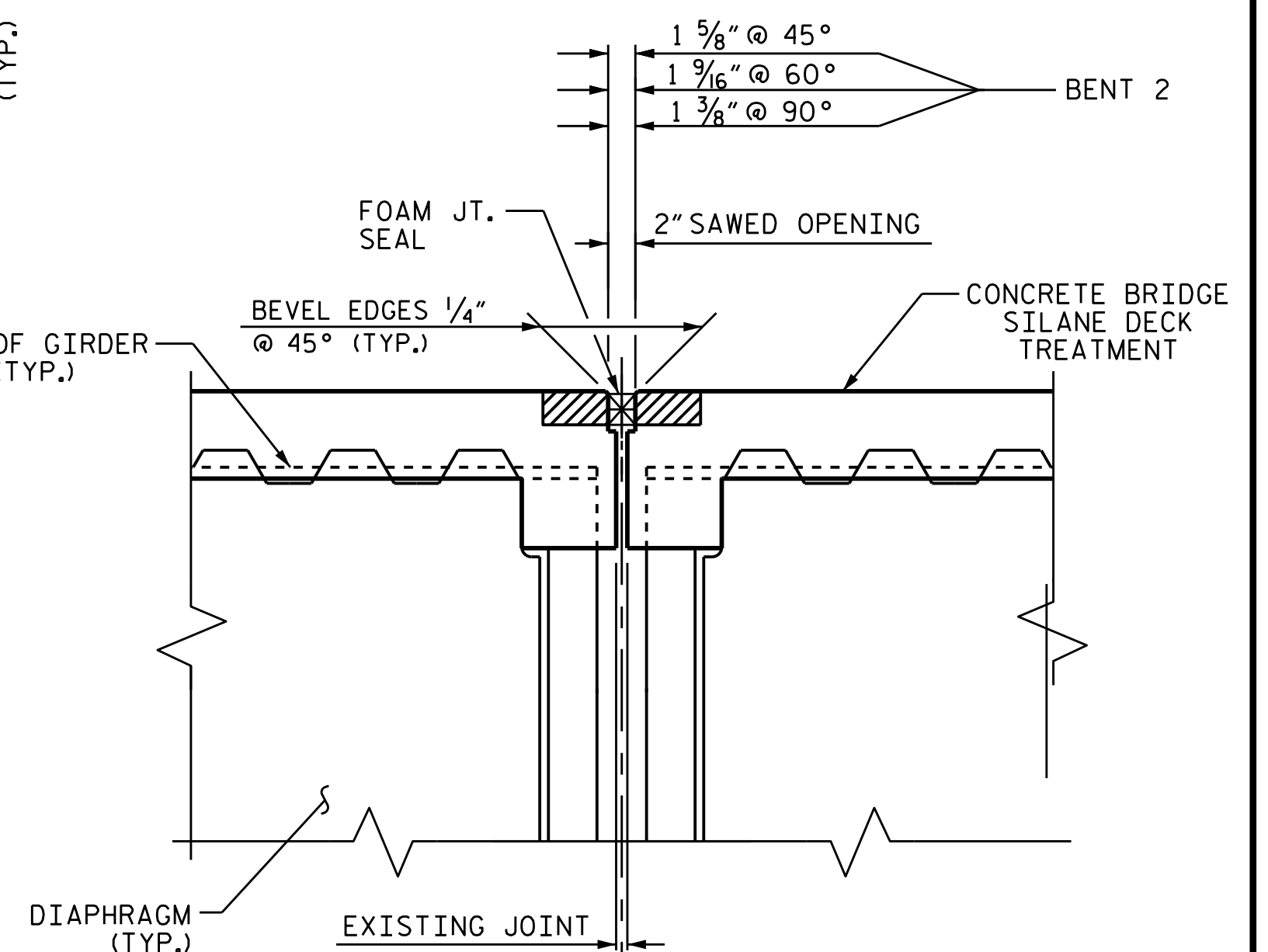
EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



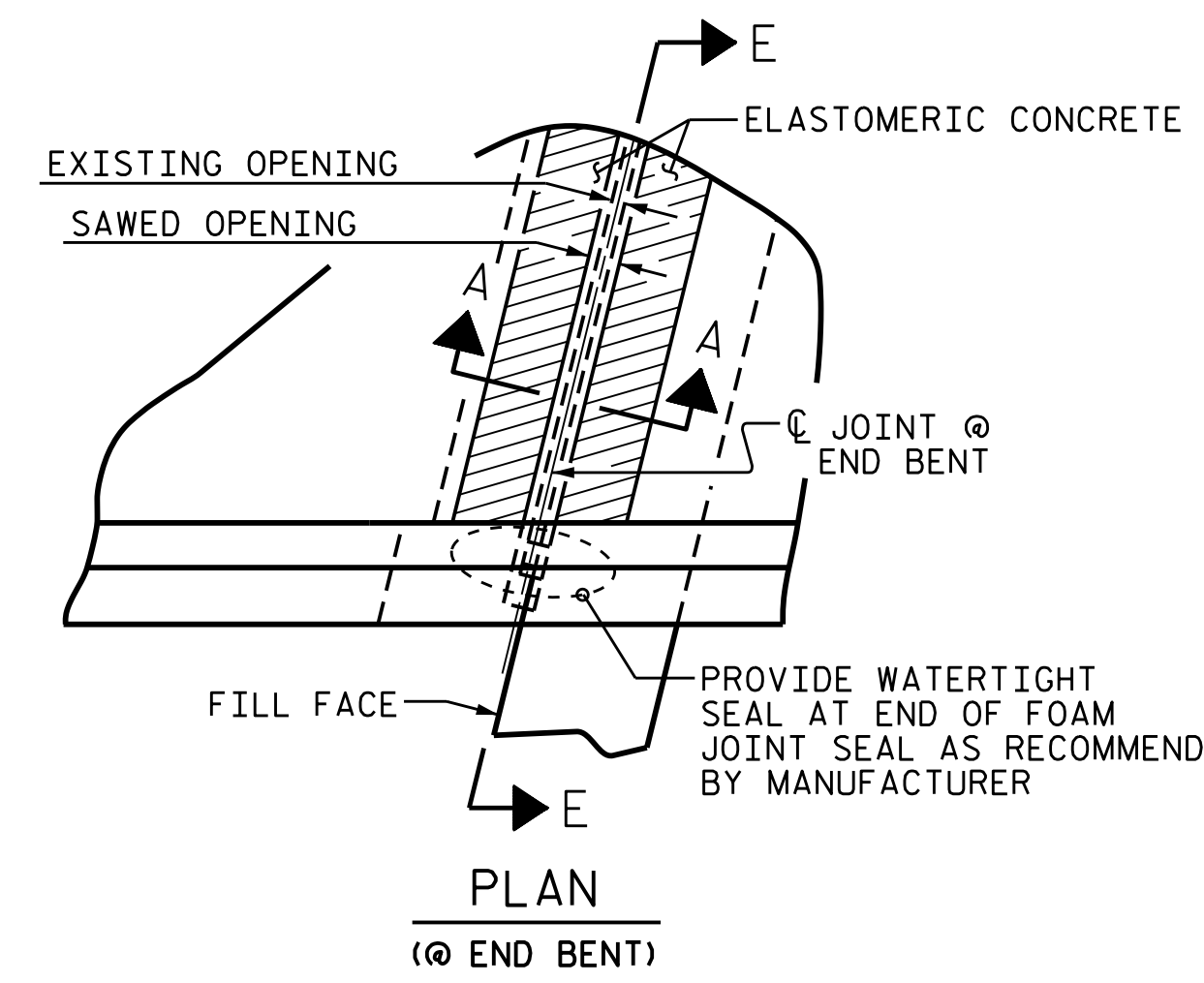
PROPOSED JOINT PRE-SAWED DIMENSIONS



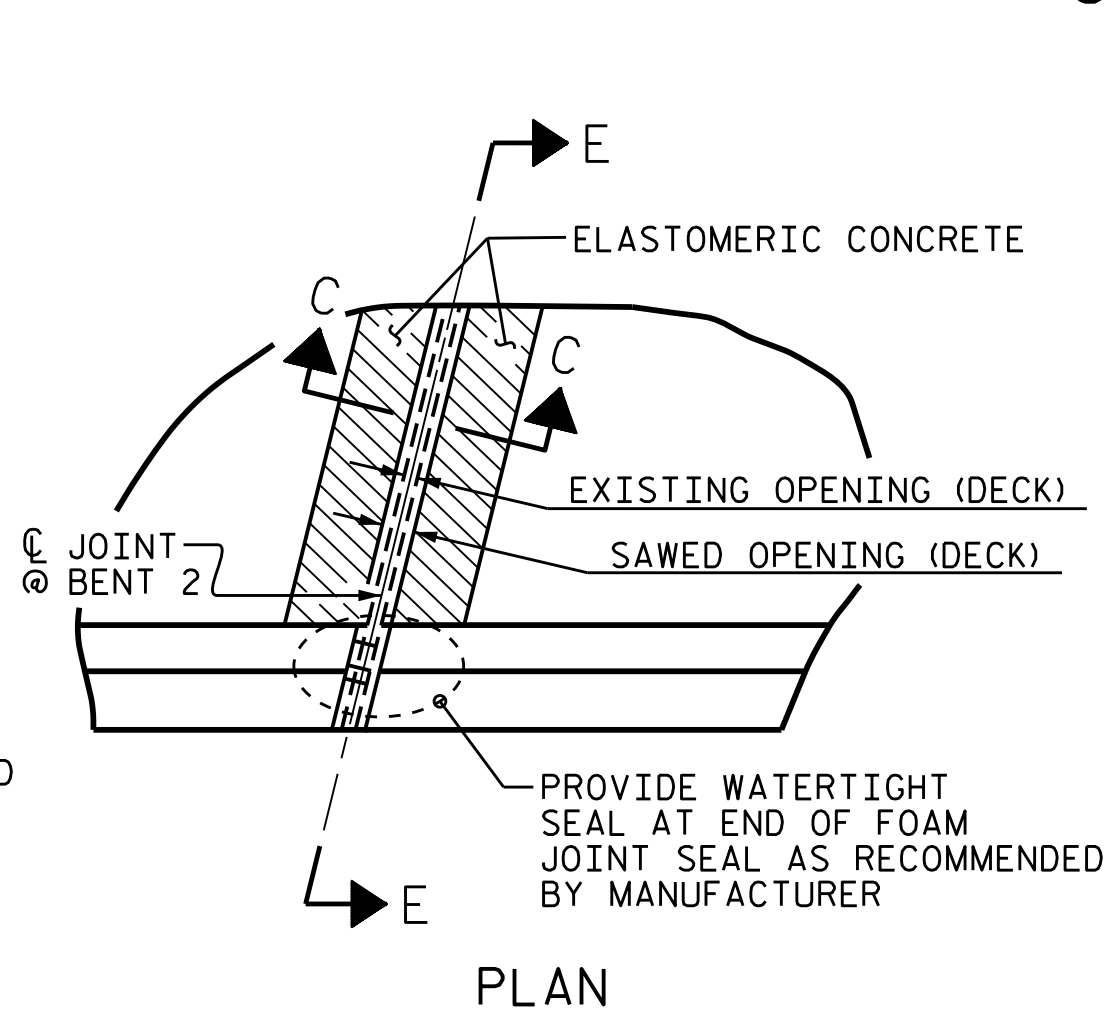
PROPOSED FOAM JOINT SEAL BENT 2

JOINT INSTALLATION SEQUENCE AT BENT 2

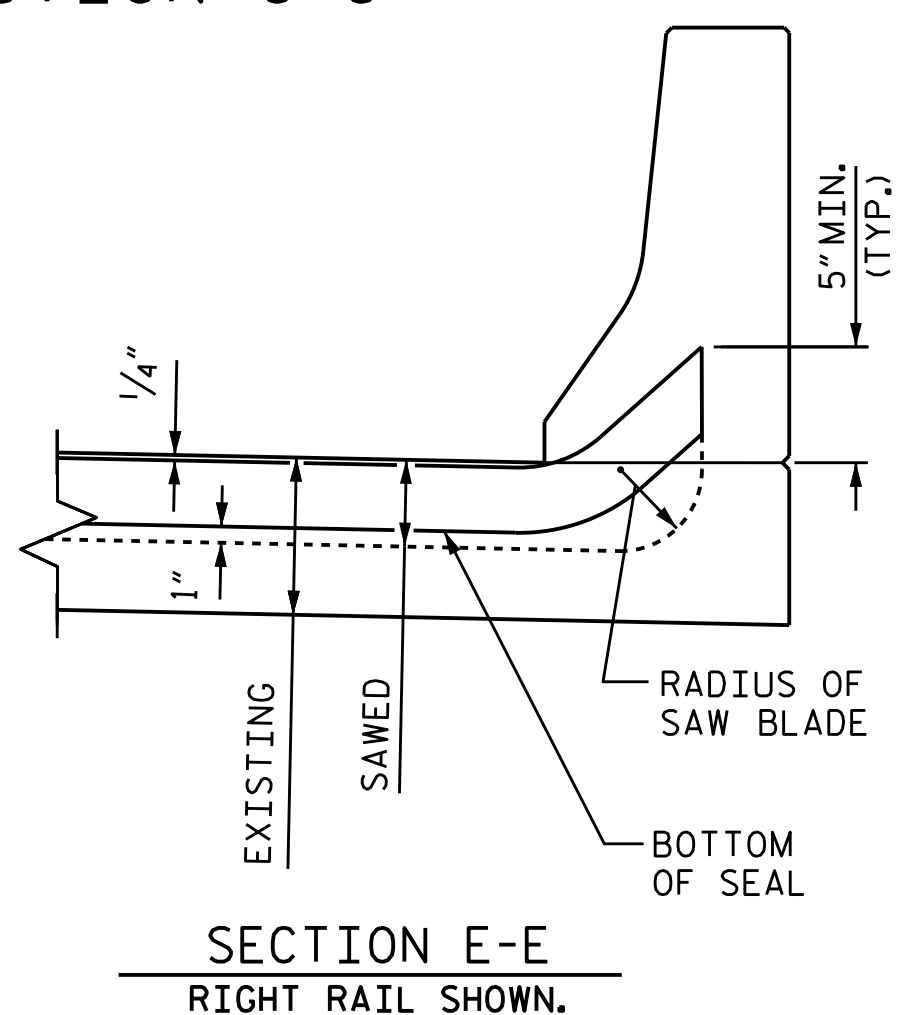
SECTION C-C



PLAN (@ END BENT)



PLAN (@ BENT 2)



SECTION E-E RIGHT RAIL SHOWN, MEDIAN RAIL SIMILAR

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	42 CU. FT.
END BENT 2	42 CU. FT.
BENT 2	42 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
BENT 2	143 LIN. FT.
POURABLE SILICONE JOINT SEALANT	
END BENT 1	143 LIN. FT.
END BENT 2	143 LIN. FT.



PROJECT NO. I-5858
 ROWAN COUNTY
 BRIDGE NO. 790123

SHEET 4 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : E.A.BAYISSA DATE : 04/2018
 CHECKED BY : FRAN.LEA DATE : 04/2018

REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			8

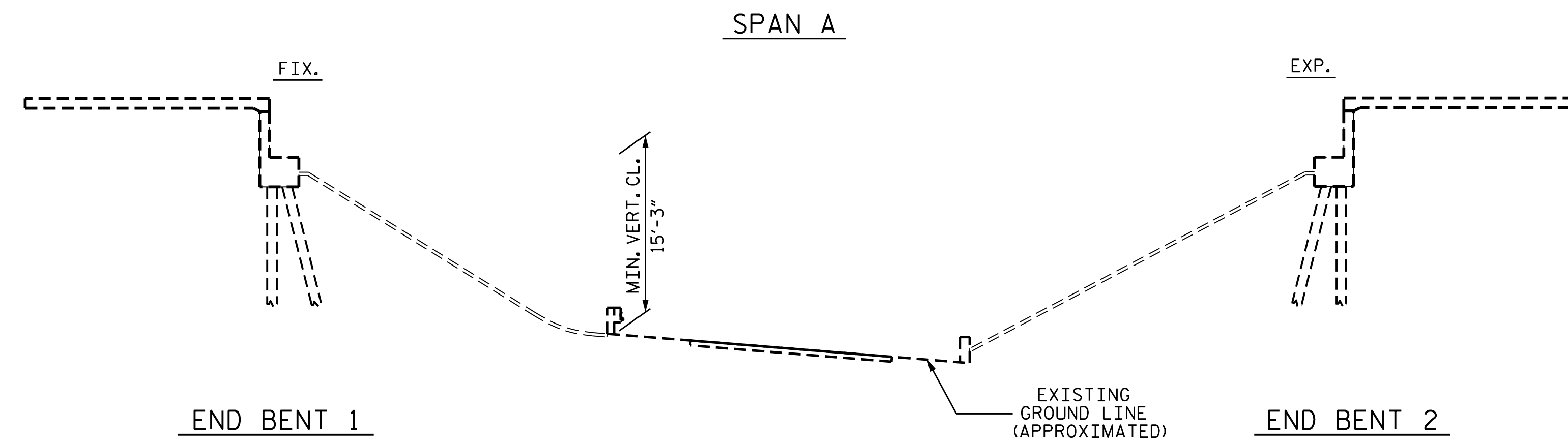
NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND ROUTINE INSPECTION REPORT DATED 06/20/2018.

BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

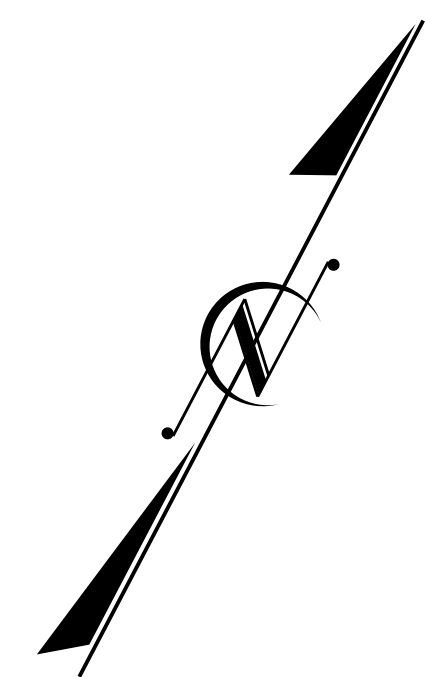
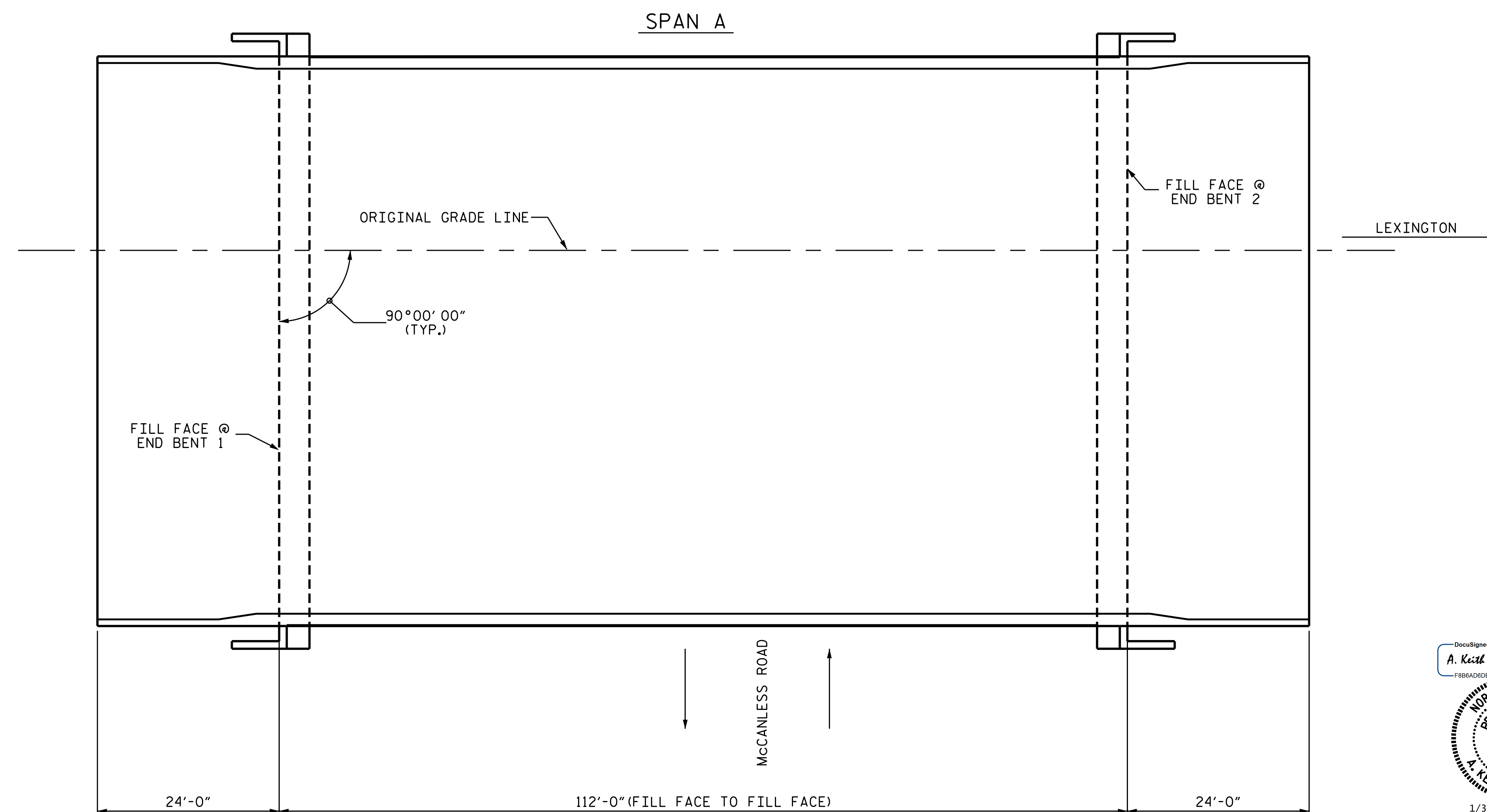
- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.



SECTION ALONG ORIGINAL GRADE LINE

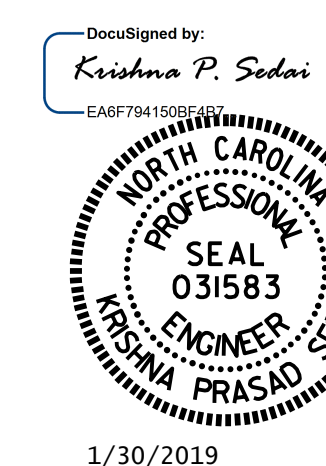
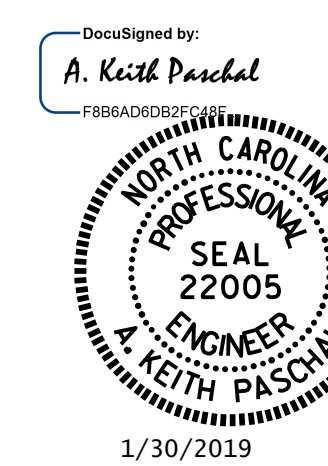
I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790128

SHEET 1 OF 2



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

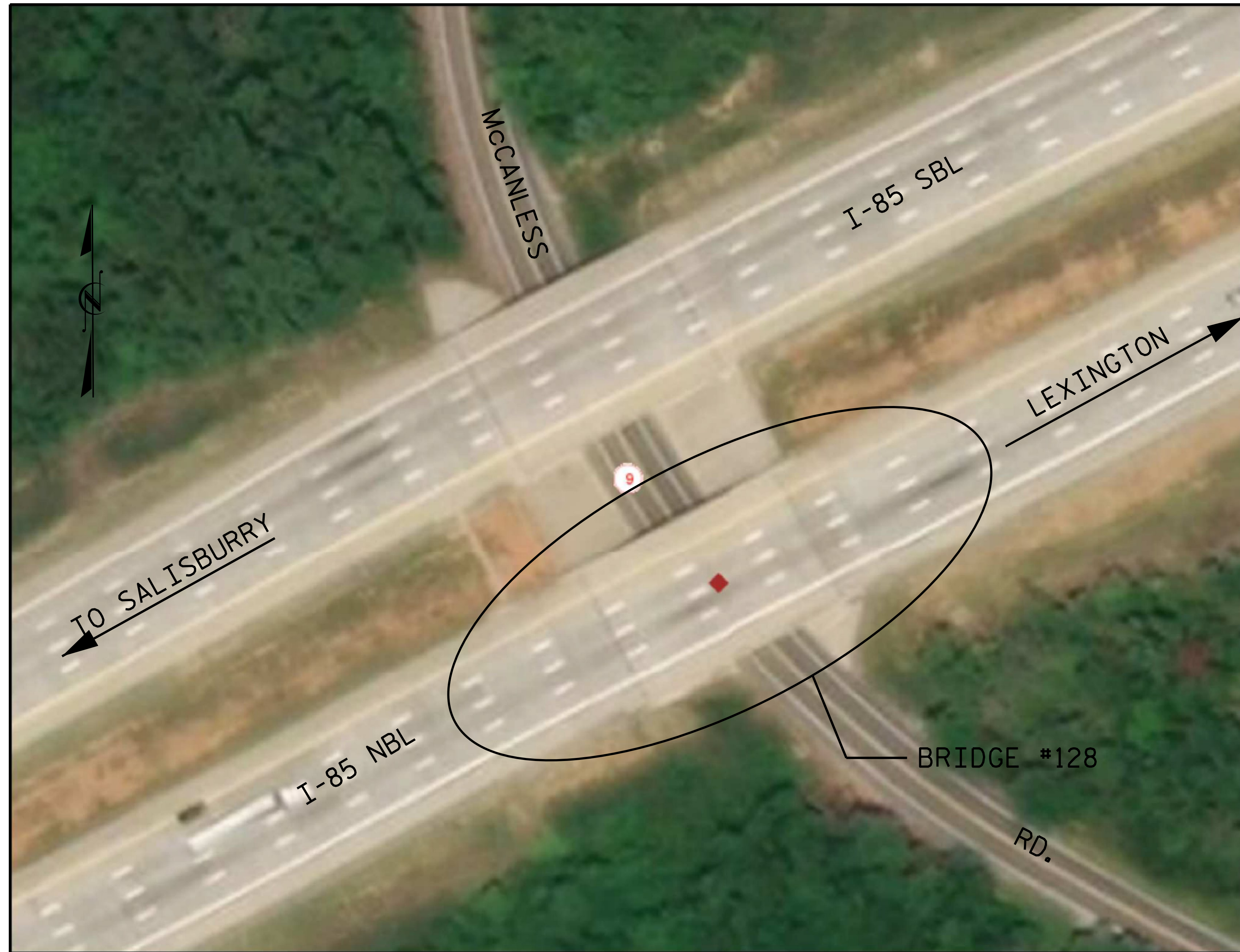
GENERAL DRAWING
 FOR BRIDGE ON I-85 NBL/US52 NBL
 OVER SR2114 (McCANLESS RD.)

DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

PLAN

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1			3			S2-1
2			4			5



LATITUDE: 35°40'12.29"; LONGITUDE: 80°25'58.69"

LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

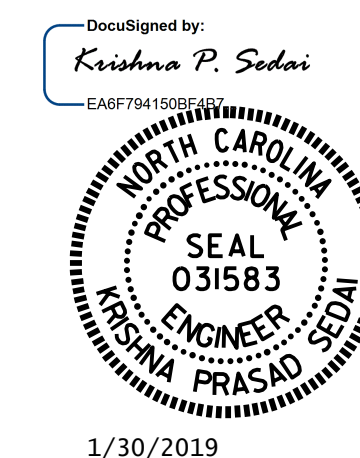
NOTES

- EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.
- FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.
- EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN IN THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.
- FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL						
BRIDGE NO. 128	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SO. FT.	SO. FT.	SO. YD.	SO. YD.
TOTAL	144	42	144	5	1276	1276

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790128

SHEET 2 OF 2



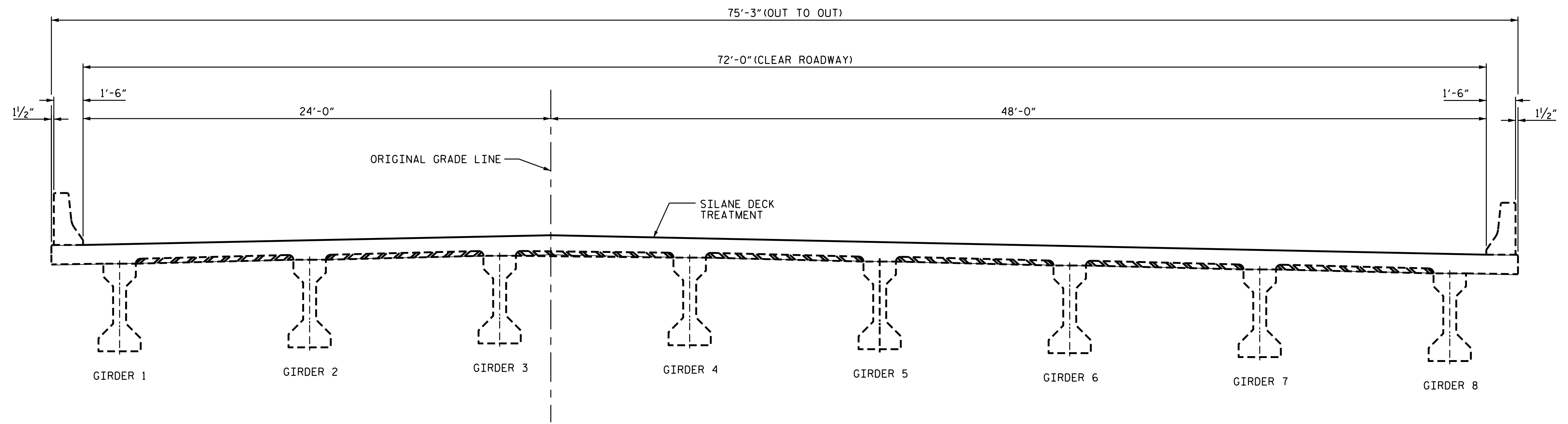
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE
 ON I-85 NBL/US52 NBL
 OVER SR2114 (McCANLESS RD.)

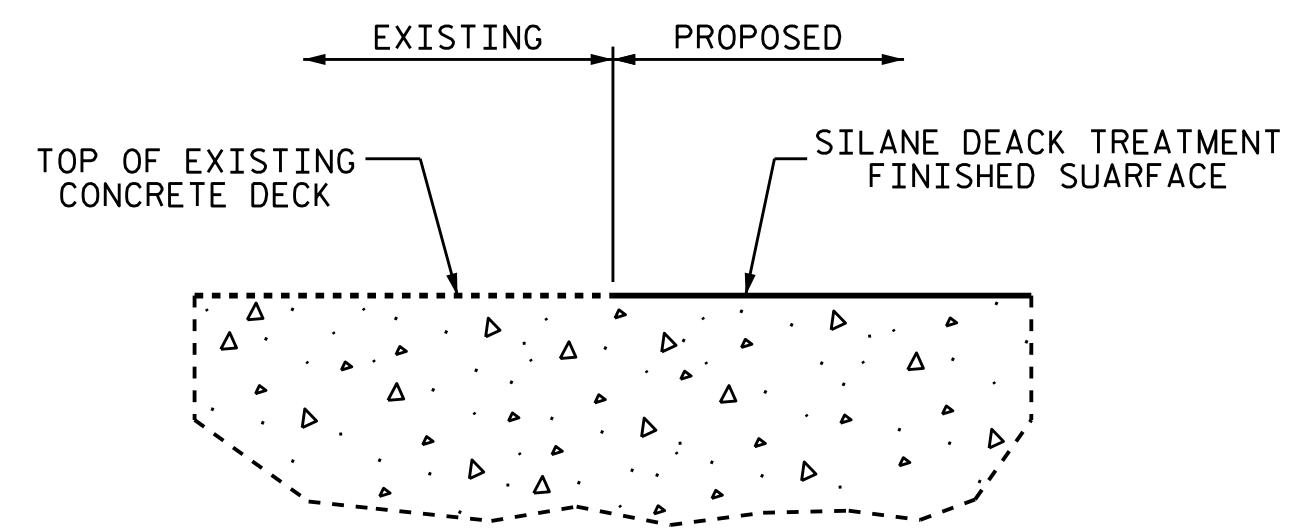
DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

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2			4			5

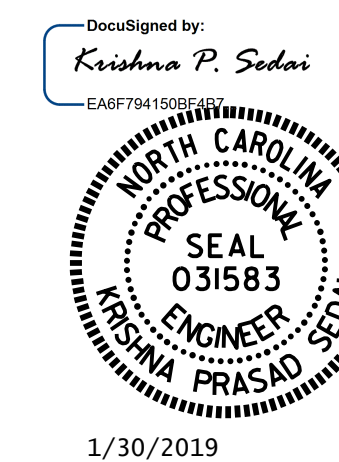


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790128

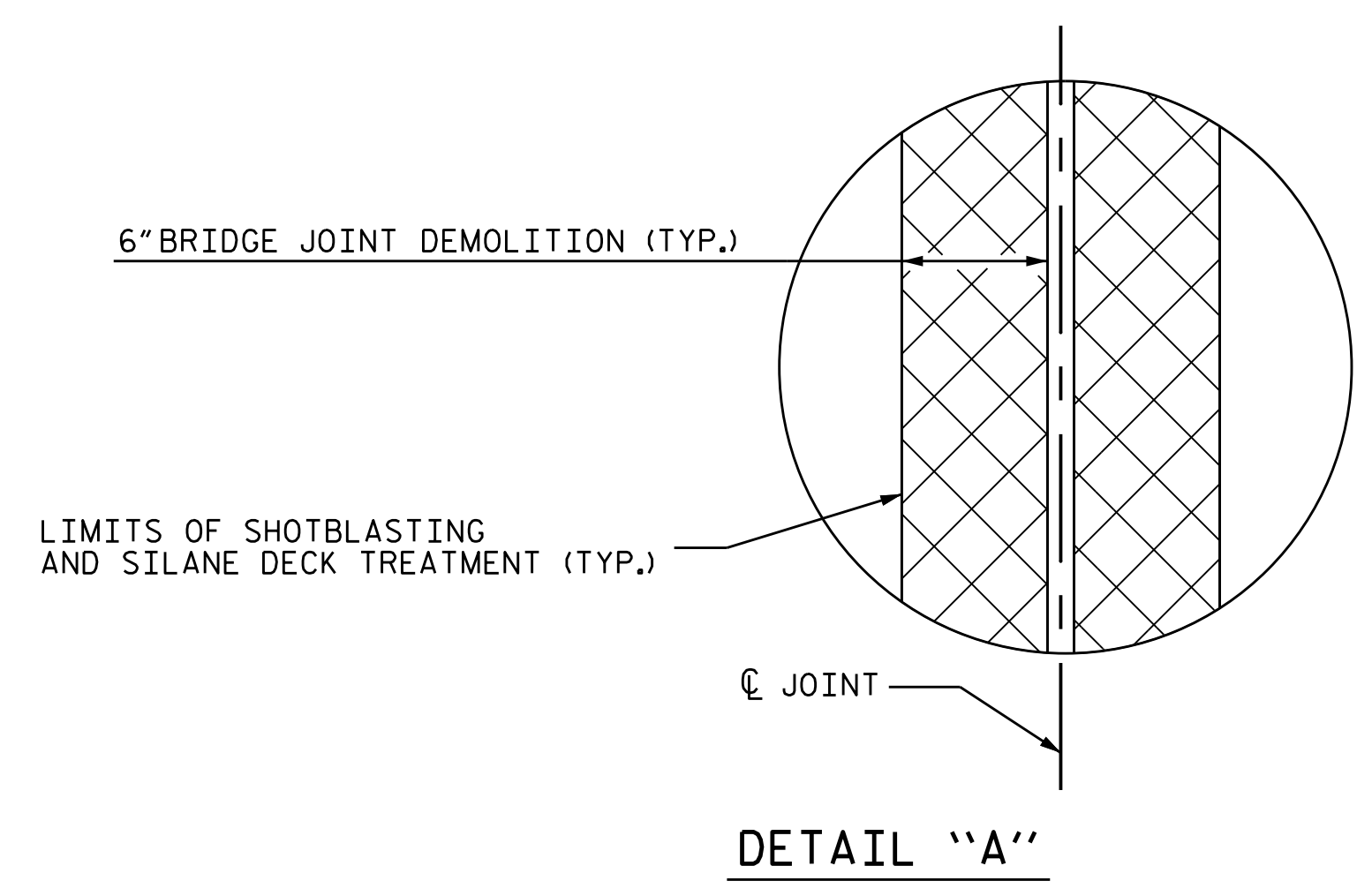


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 5/2018

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2			4			5



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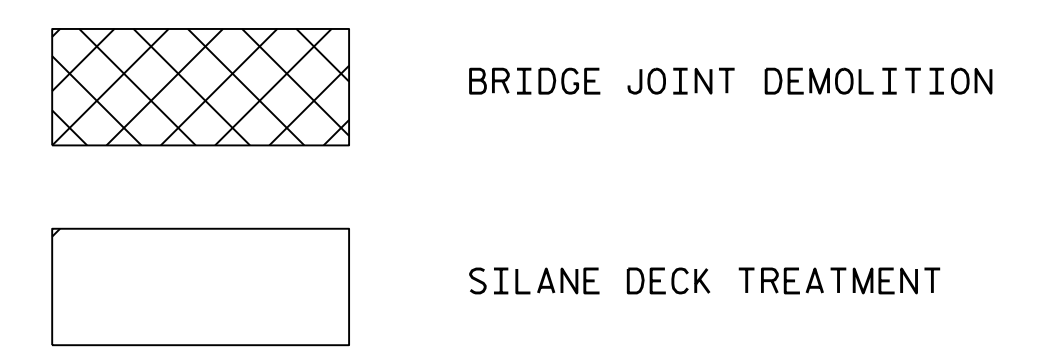
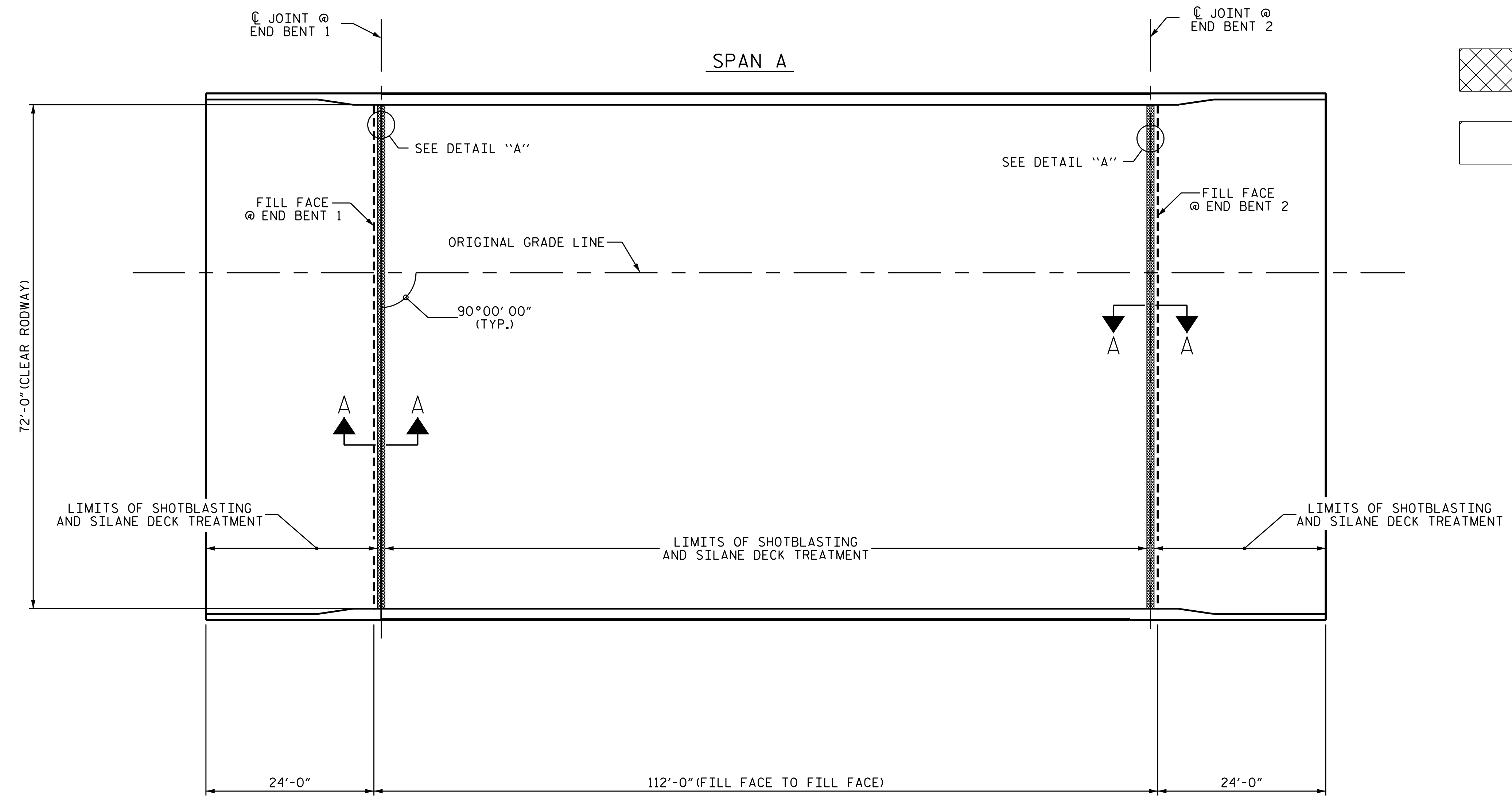
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

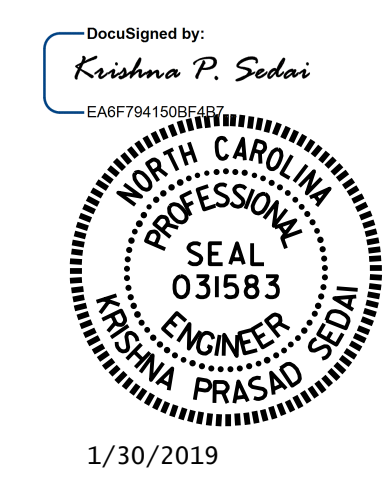
APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	396 SQ.YD.	
SILANE DECK TREATMENT	396 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	144 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3 SQ.FT.	
SHOTBLASTING BRIDGE DECK	880 SQ.YD.	
SILANE DECK TREATMENT	880 SQ.YD.	

* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.



PLAN

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790128



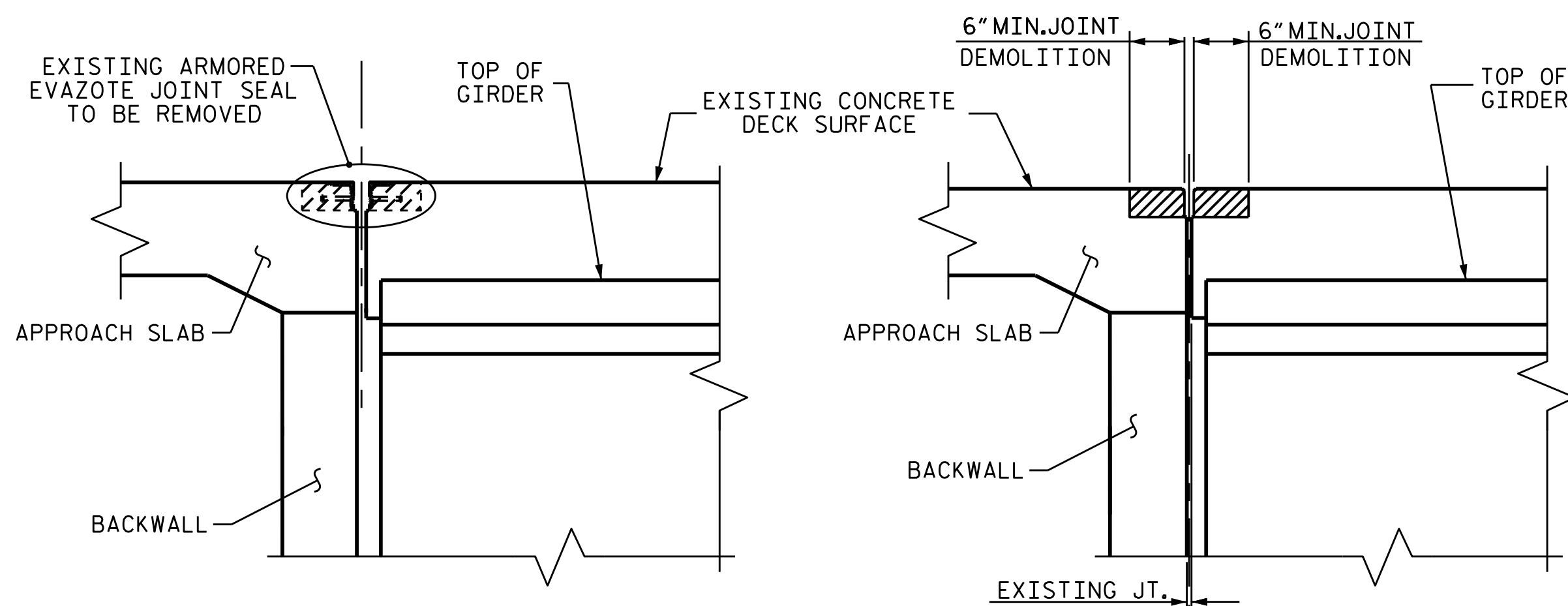
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

LIMITS OF SHOTBLASTING AND SILANE DECK TREATMENT

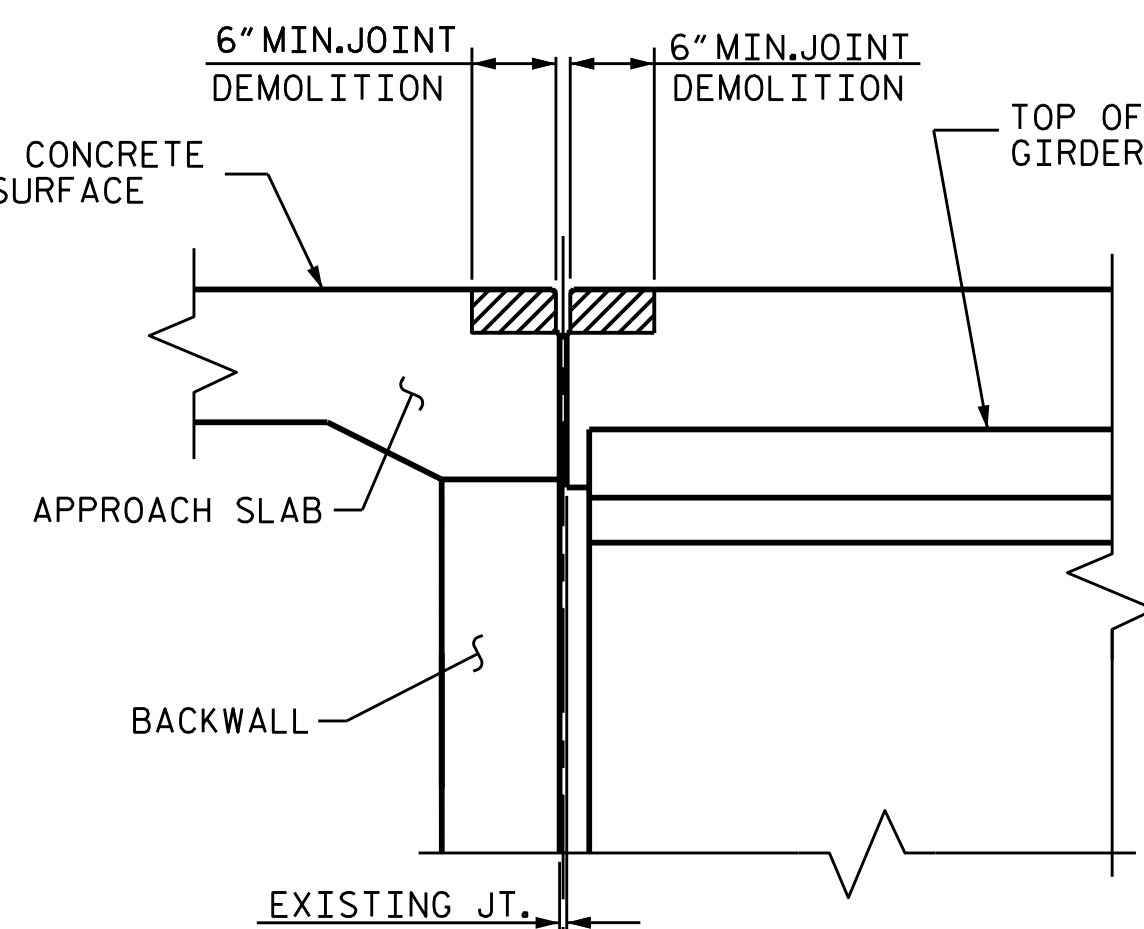
DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

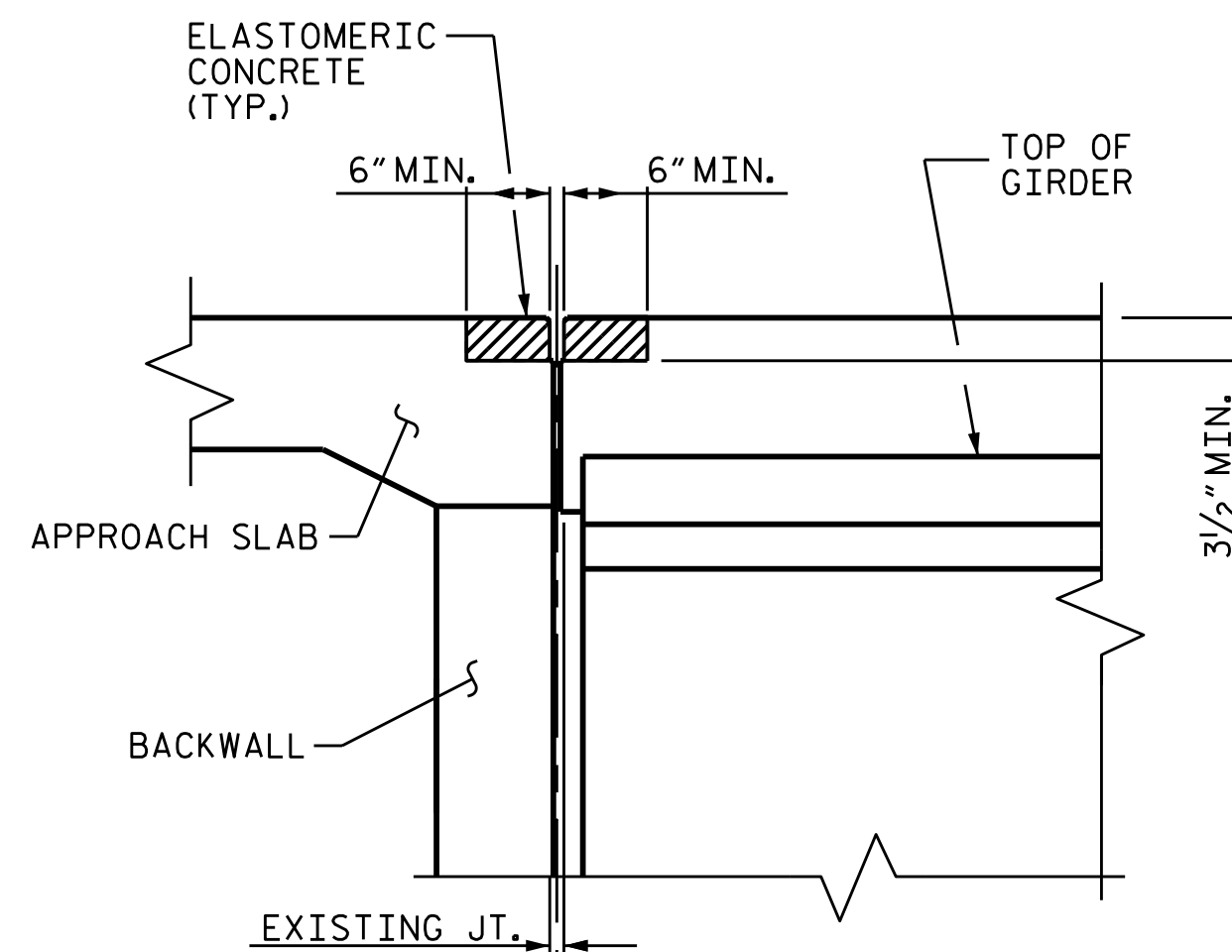
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S2-4
2			4			5



EXISTING JOINT

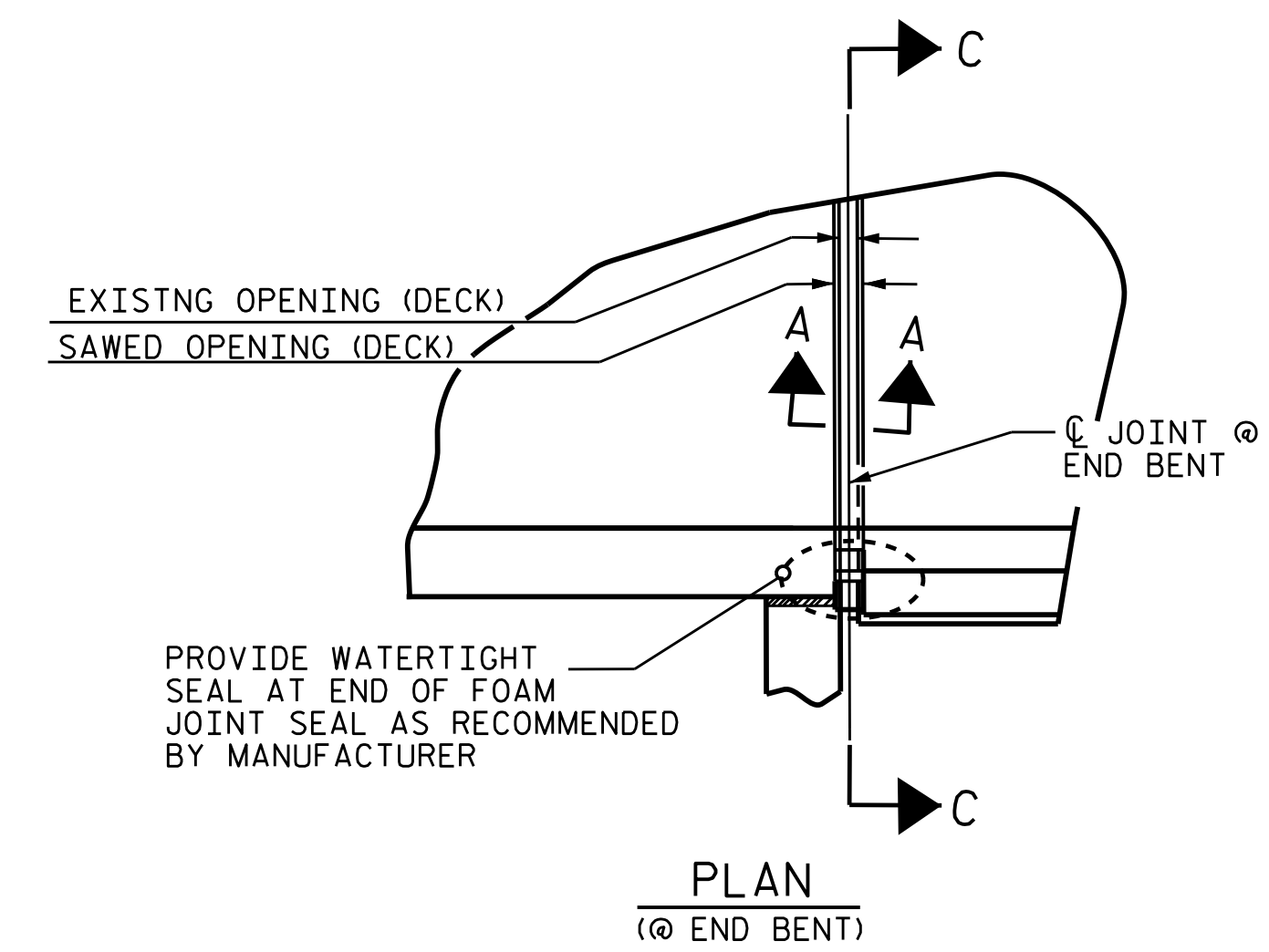


MINIMUM EXISTING JOINT DEMOLITION

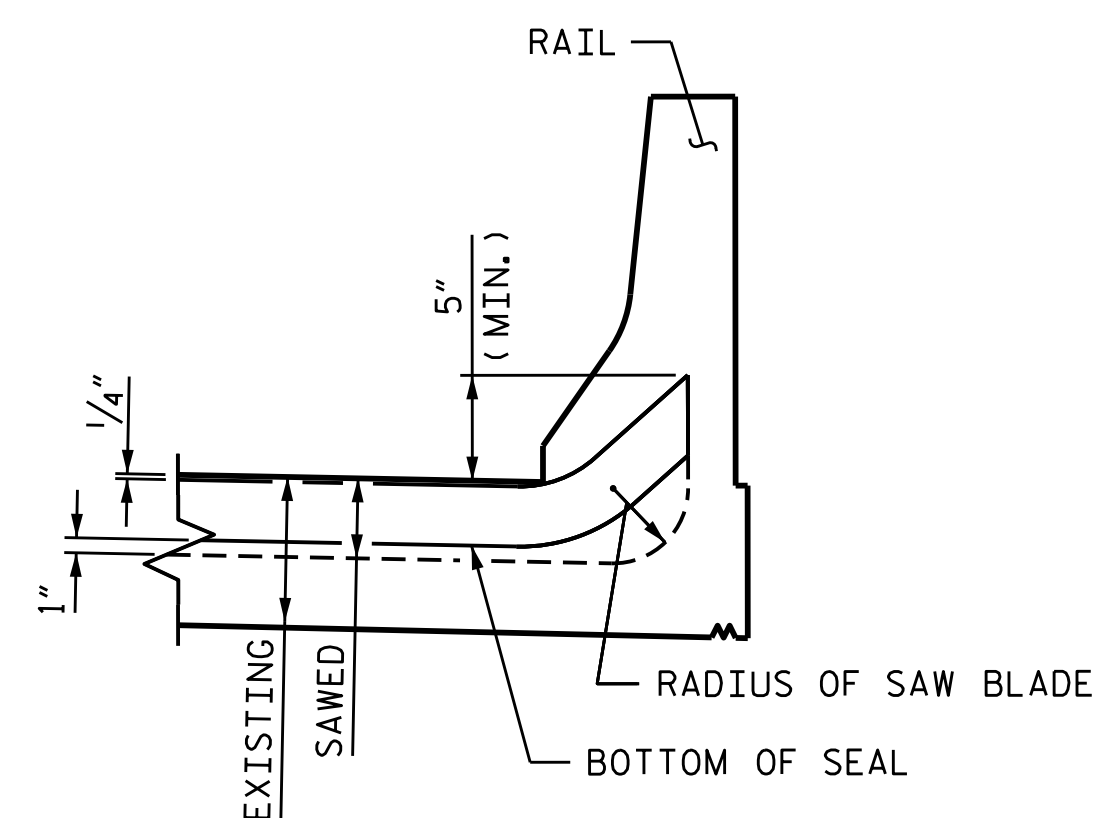


PROPOSED JOINT PRE-SAWED DIMENSIONS

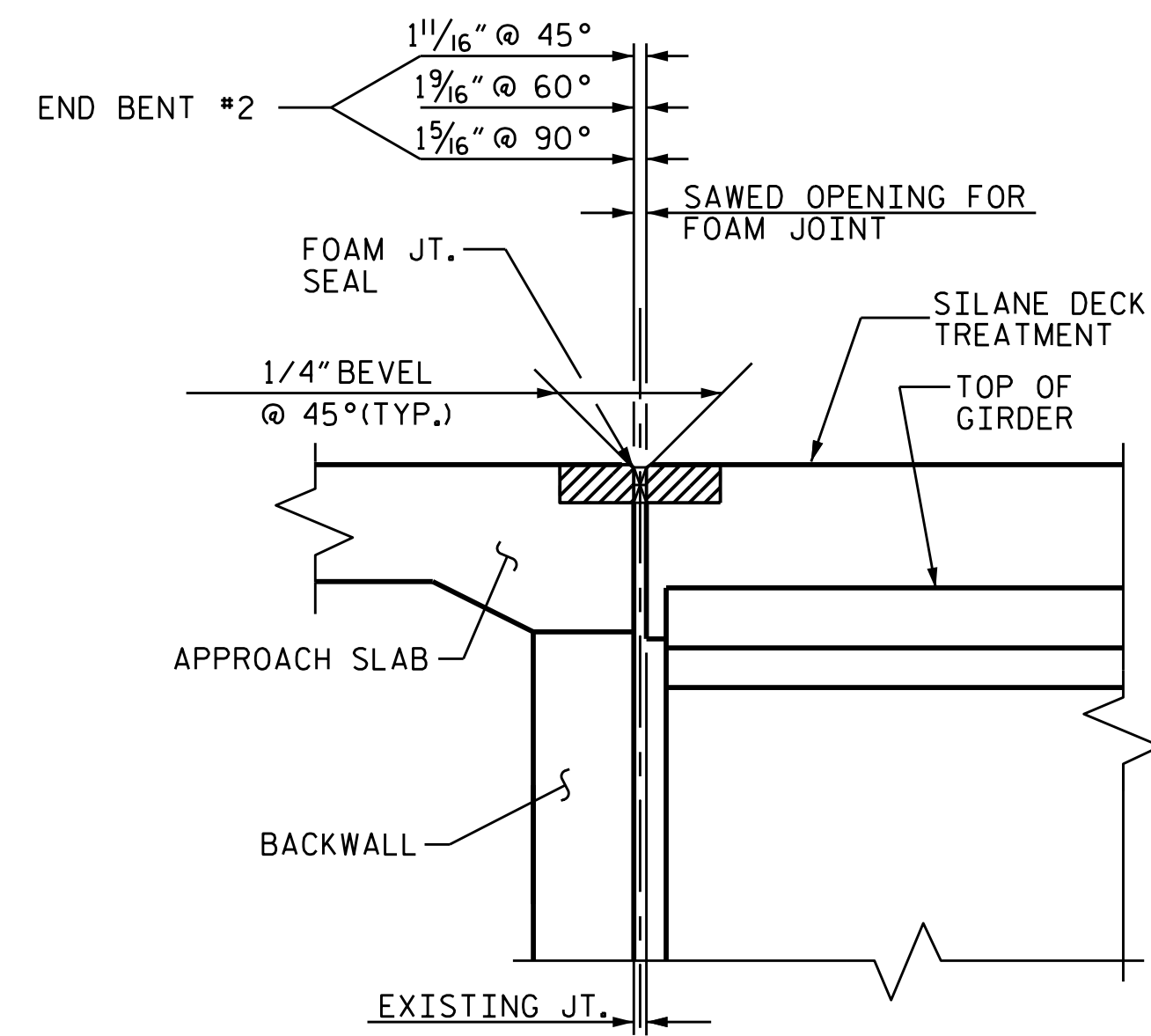
JOINT SEAL INSTALLATION SEQUENCE AT END BENTS
SECTION A-A



PLAN (@ END BENT)



SECTION C-C



PROPOSED FOAM JOINT SEAL

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

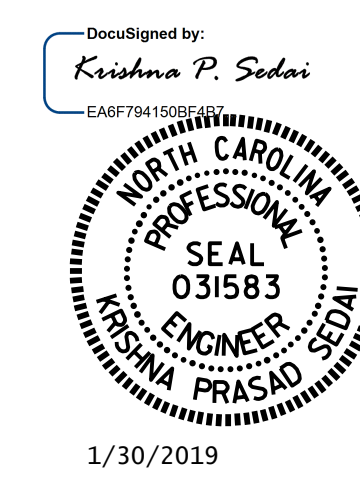
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	21 CU. FT.
END BENT 2	21 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	72 LIN. FT.
END BENT 2	72 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	* 1 SQ. FT.
END BENT 2	* 1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790128



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : C. RUIZ DATE : 04/18
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND ROUTINE INSPECTION REPORT DATED 06/20/2018.

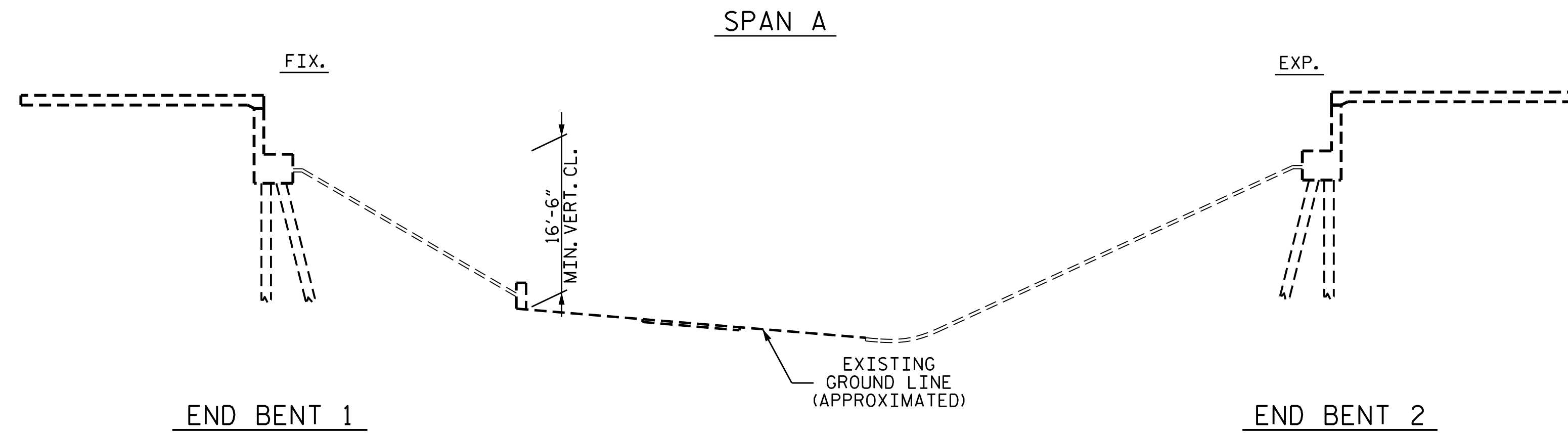
BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

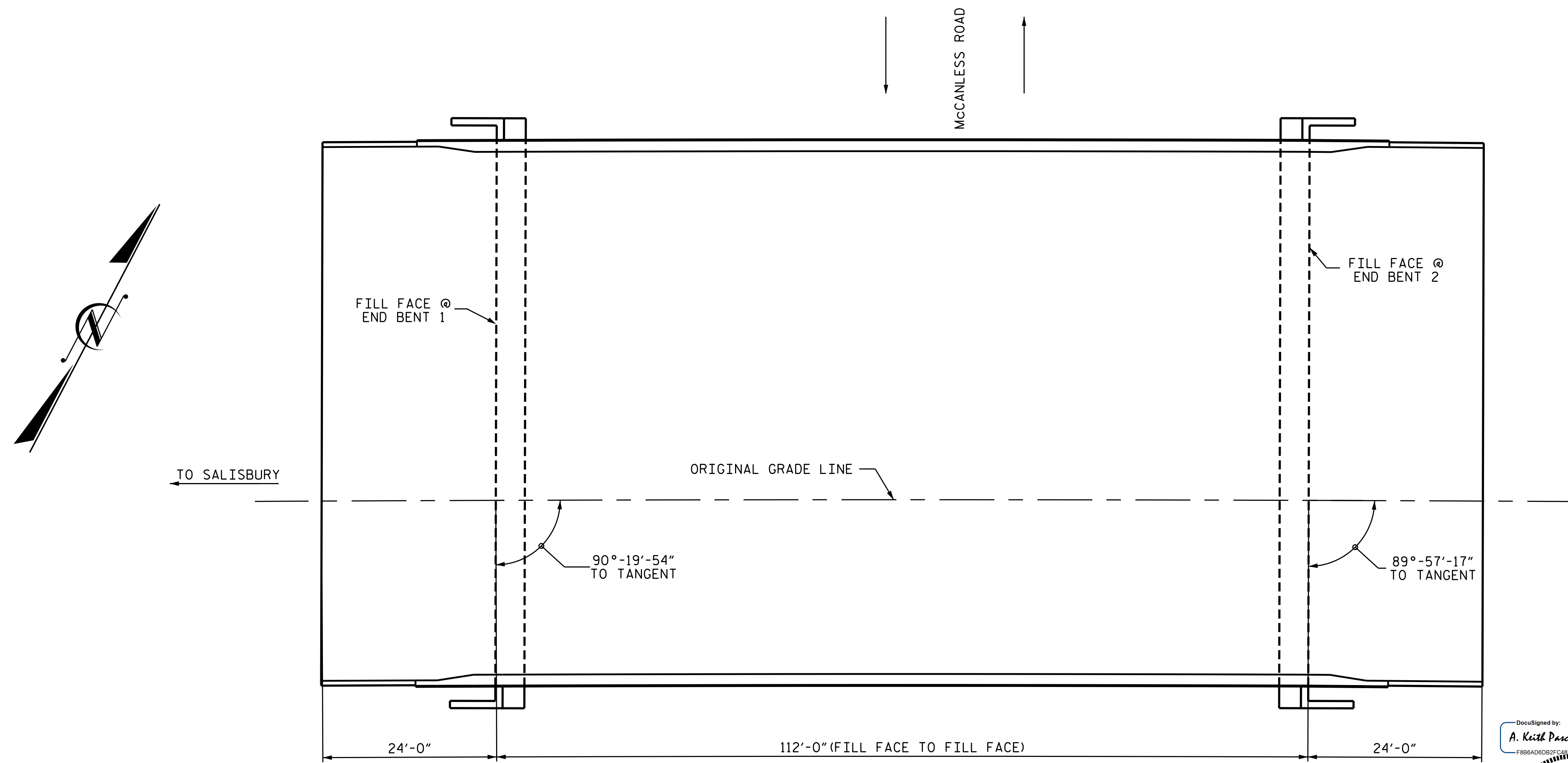
- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____



SECTION ALONG ORIGINAL GRADE LINE



SPAN A

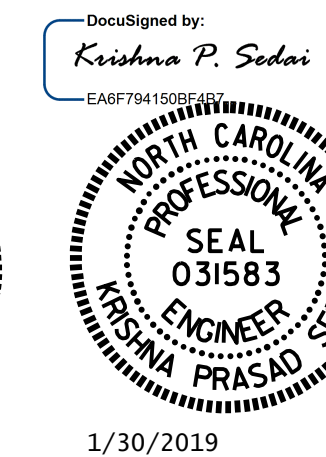
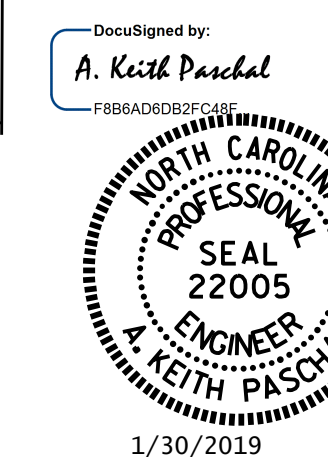
PLAN

PROJECT NO. I-5858

ROWAN COUNTY

BRIDGE NO. 790129

SHEET 1 OF 2



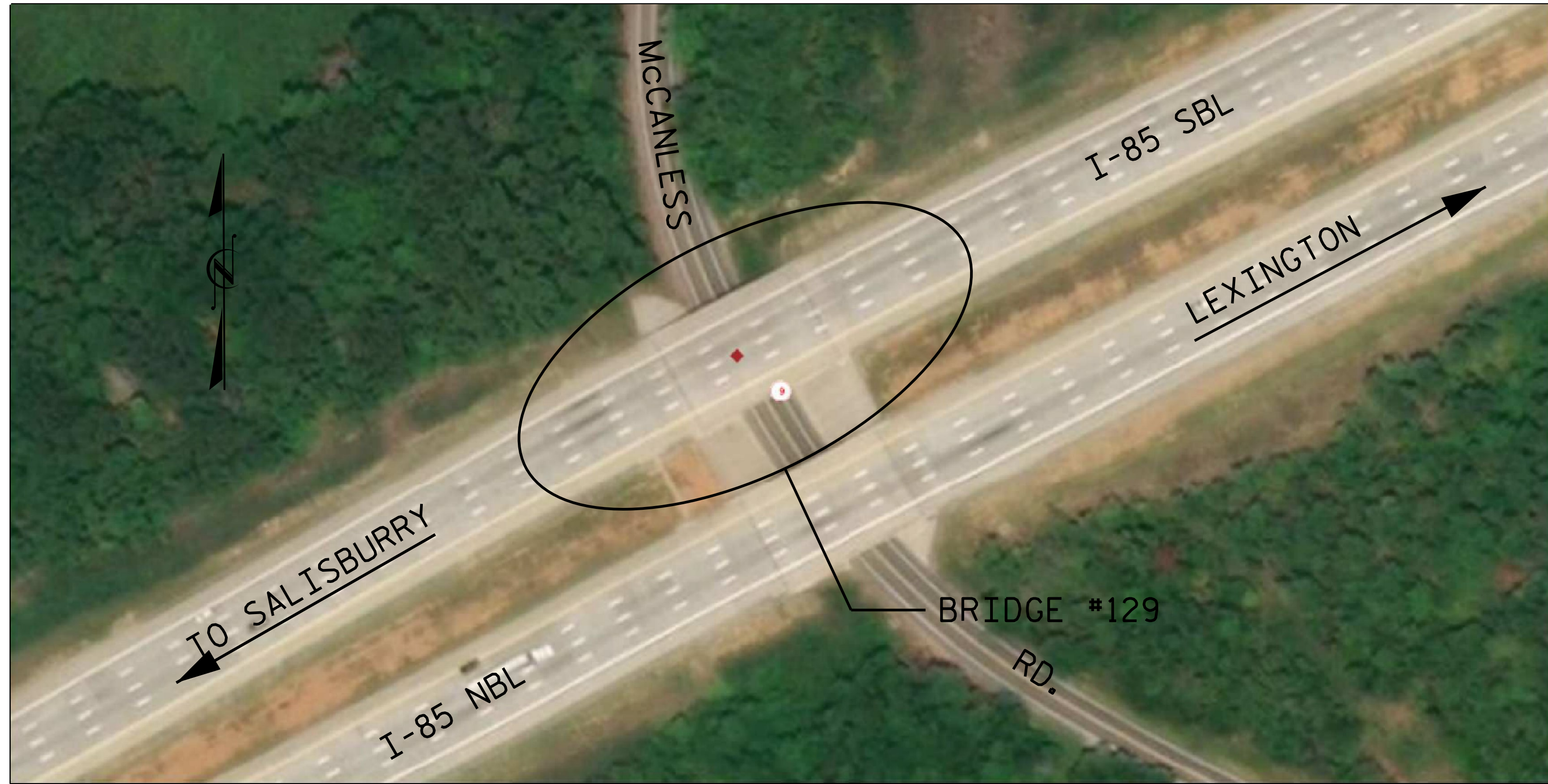
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON I-85 SBL/US52 SBL
OVER SR2114 (McCANLESS RD.)

DRAWN BY : C. RUIZ DATE : 03/2018
CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S3-1
2			4			5



LATITUDE:35°40'13.11"; LONGITUDE:80°25'59.4"

LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN IN THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

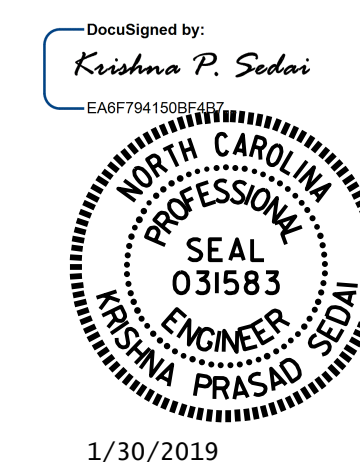
FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

BRIDGE NO. 129	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
TOTAL	144	42	144	5	1276	1276

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790129

SHEET 2 OF 2

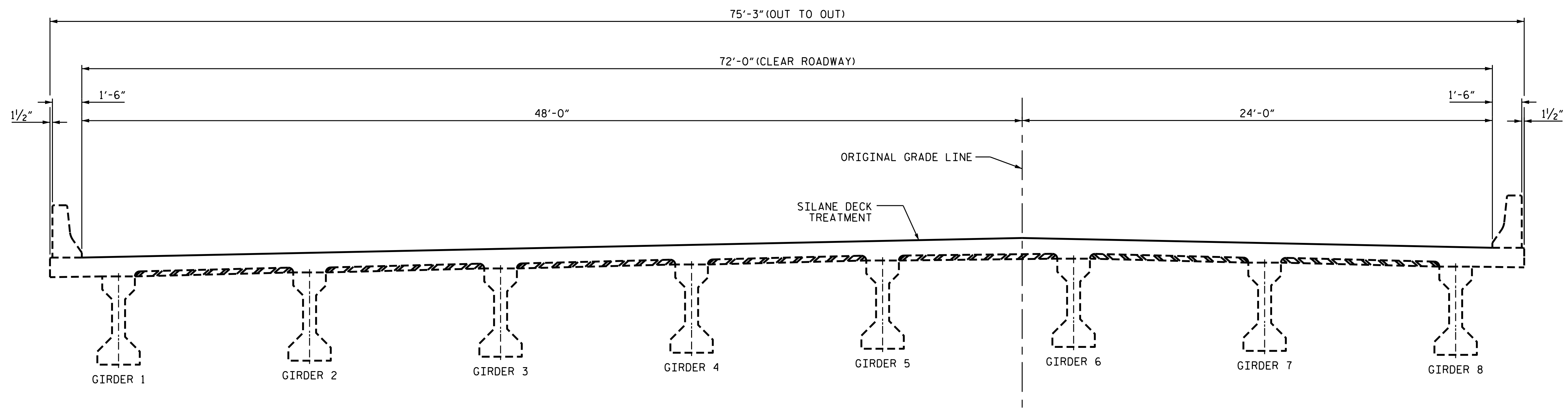


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 FOR BRIDGE ON I-85 SBL/US52 SBL
 OVER SR2114 (MCCANLESS RD.)

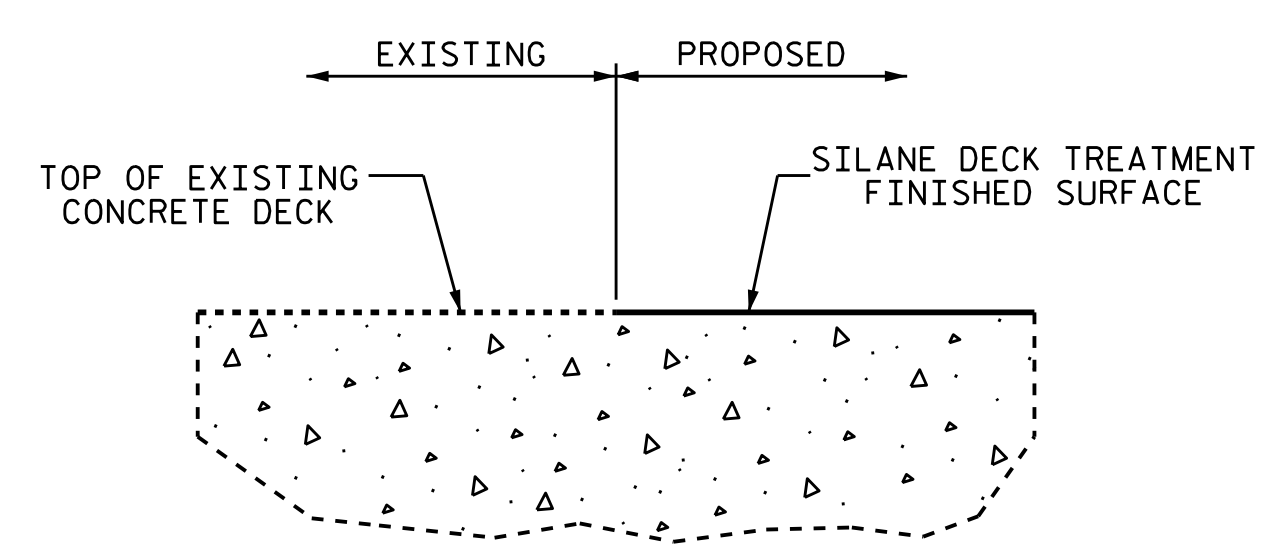
DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
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2			4			

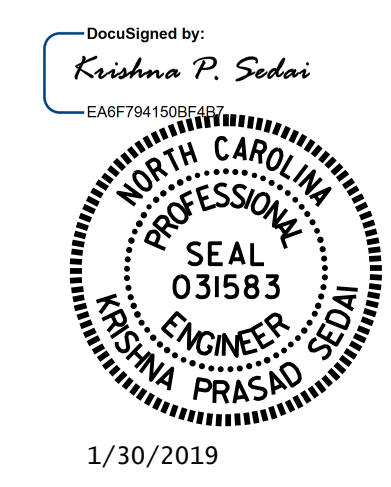


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790129



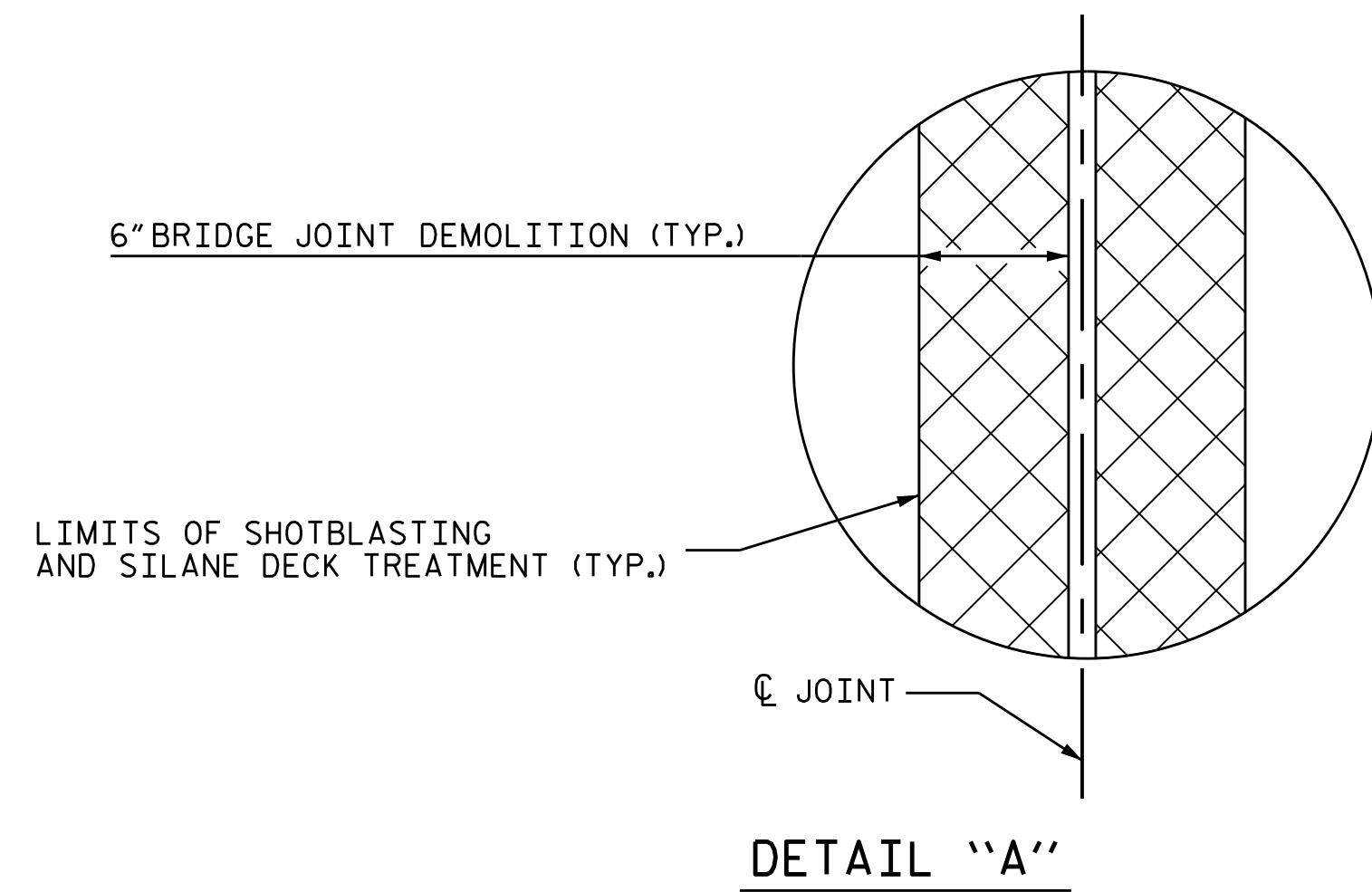
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



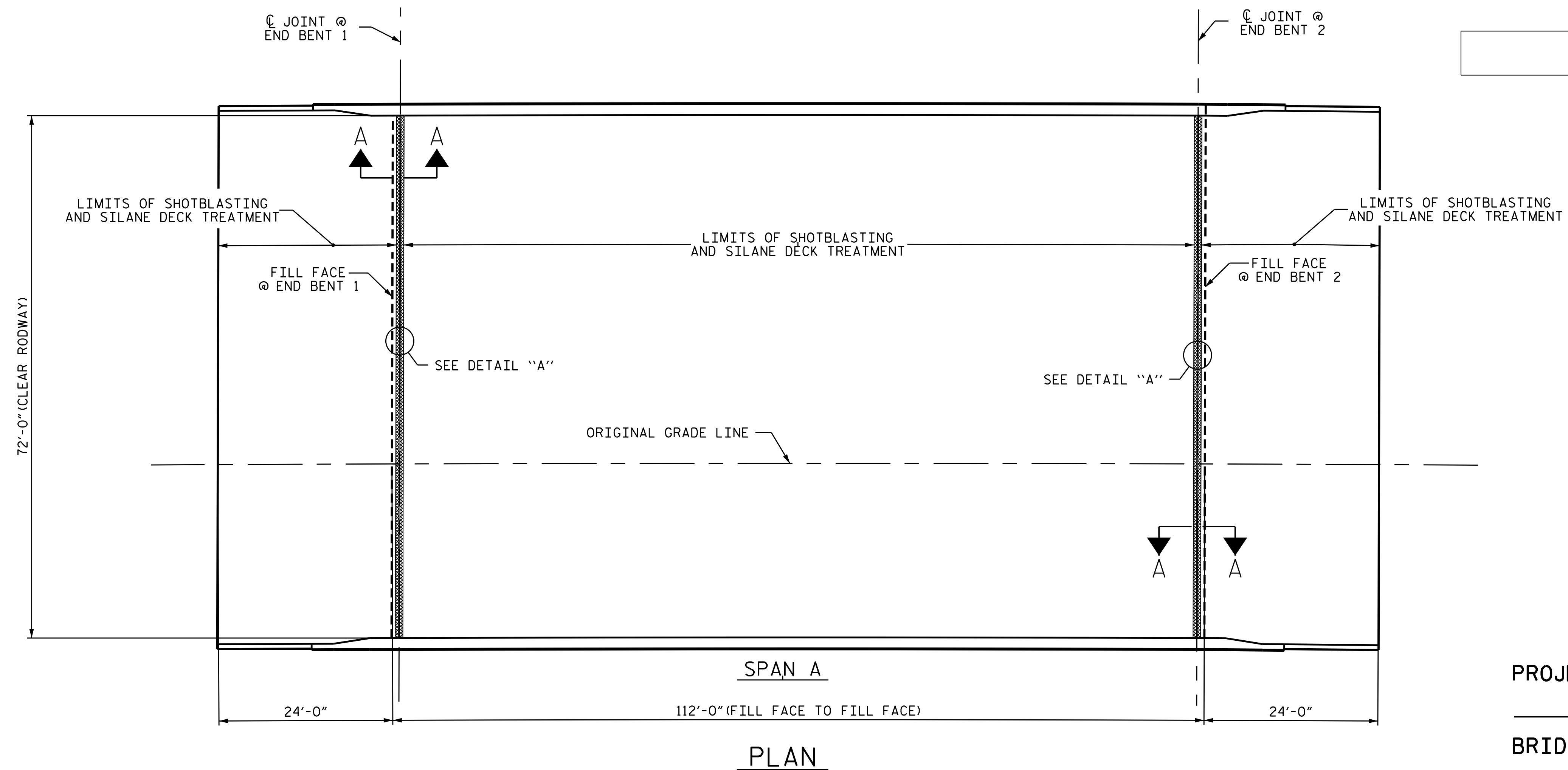
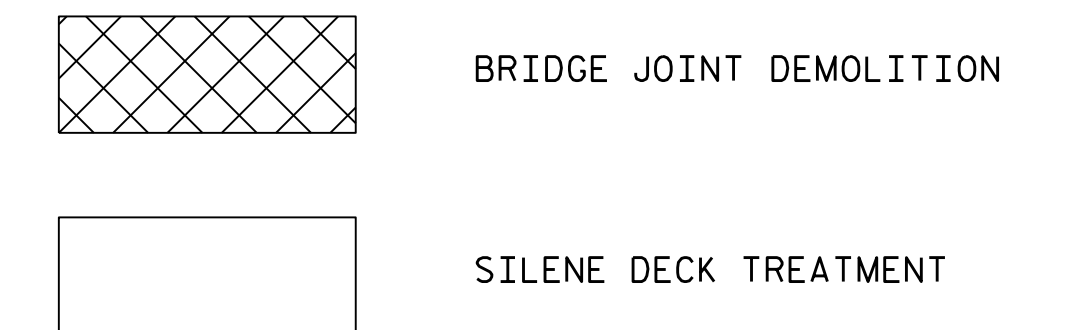
NOTES:

REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

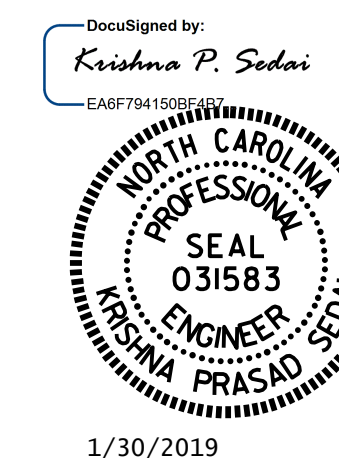
FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.
FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	396 SQ.YD.	
SILANE DECK TREATMENT	396 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	144 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3 SQ. FT.	
SHOTBLASTING BRIDGE DECK	880 SQ.YD.	
SILANE DECK TREATMENT	880 SQ.YD.	

* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.



PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790129



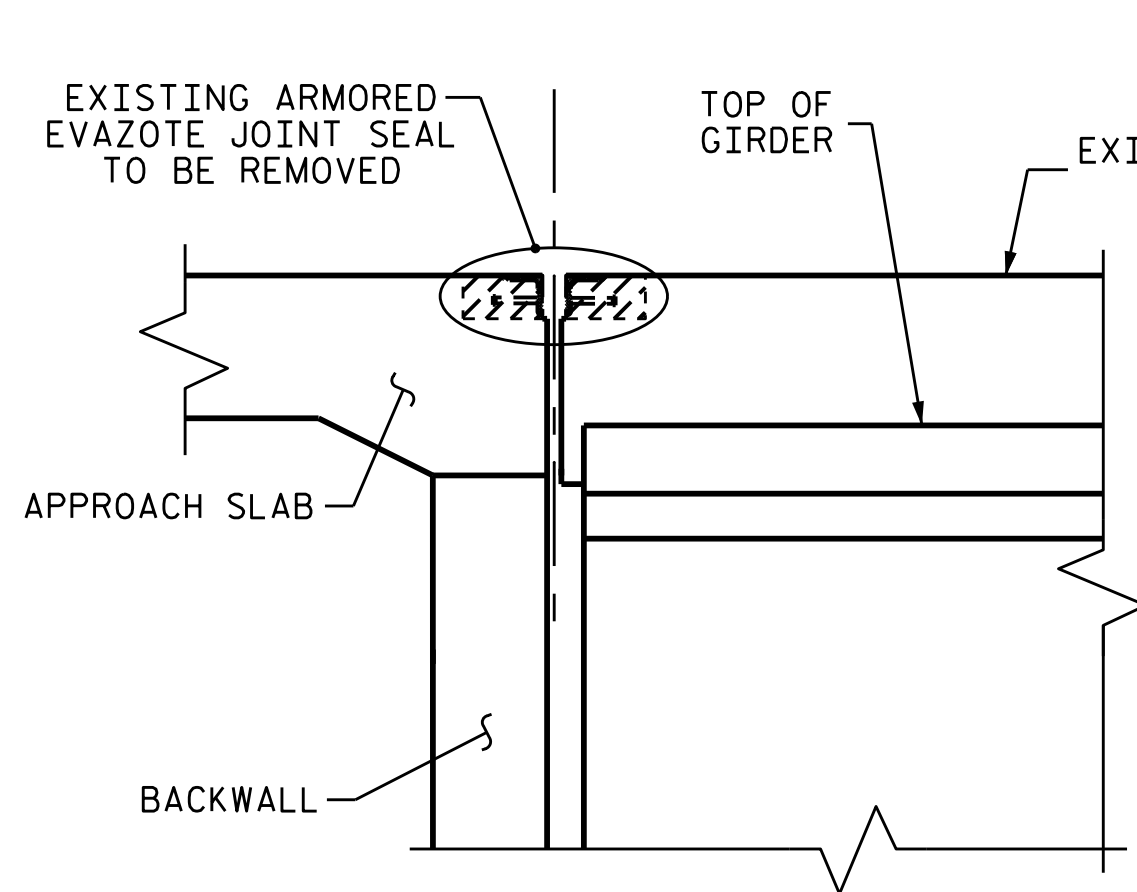
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

LIMITS OF SHOTBLASTING
 AND SILANE DECK TREATMENT

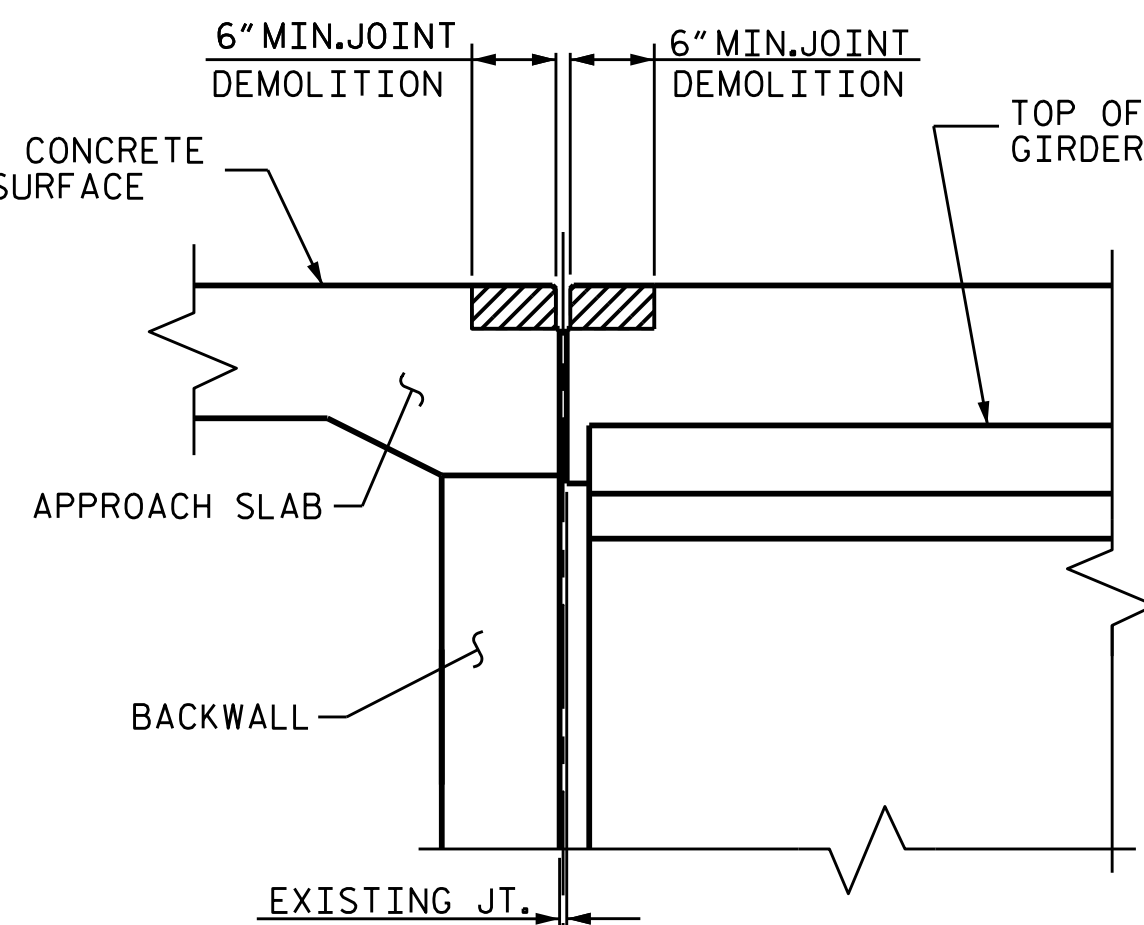
DRAWN BY : C. RUIZ DATE : 03/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

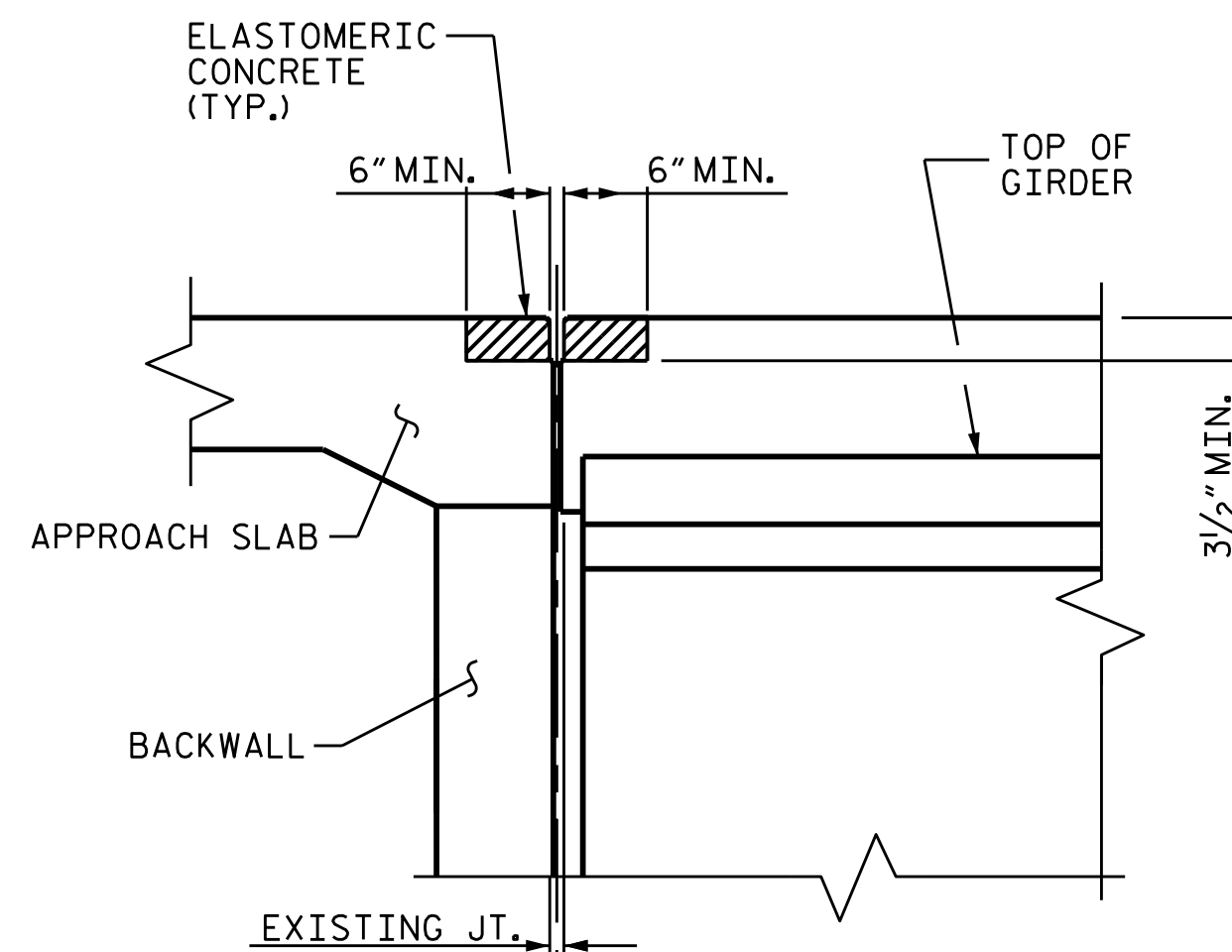
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



EXISTING JOINT

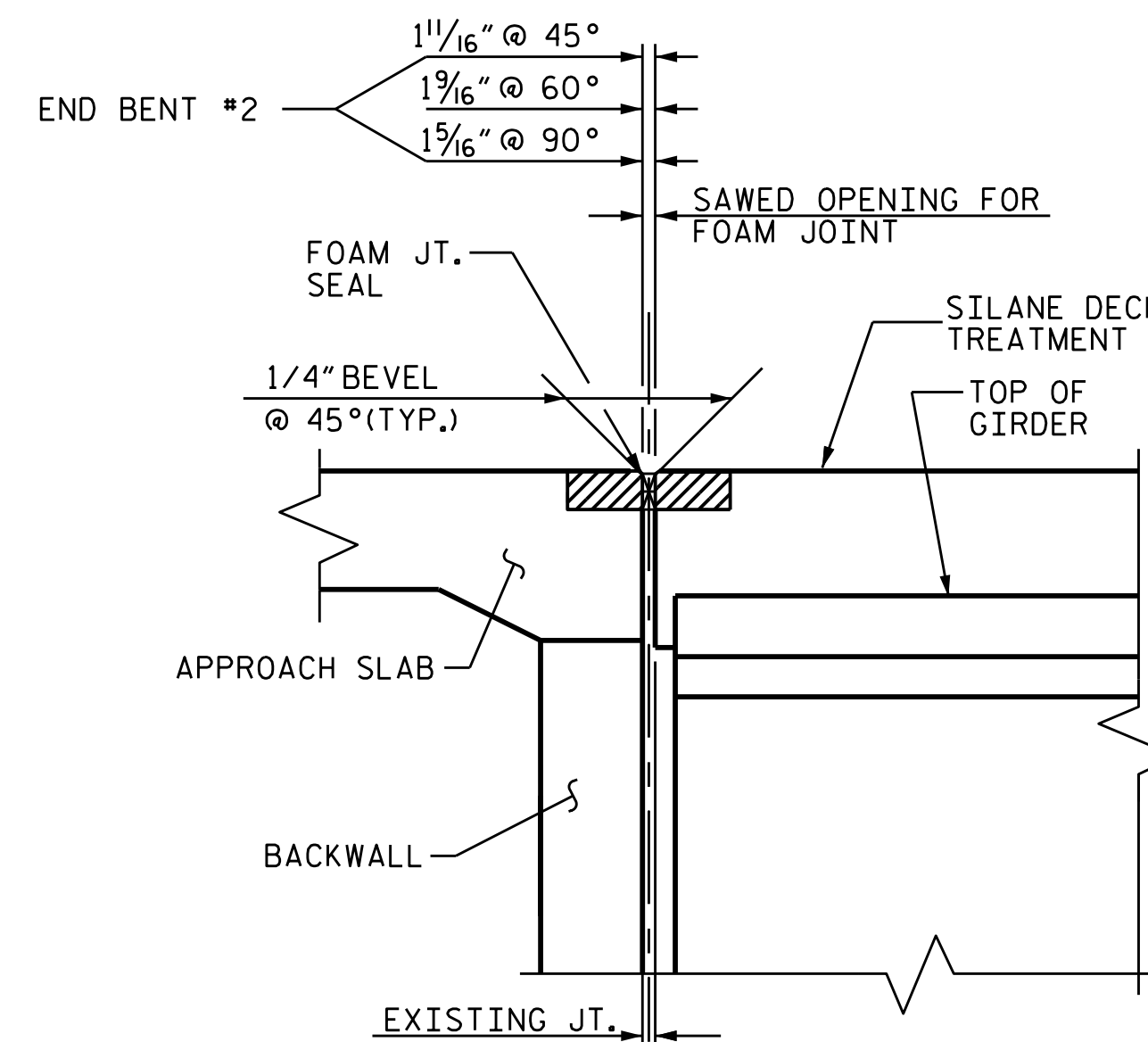


MINIMUM EXISTING JOINT DEMOLITION

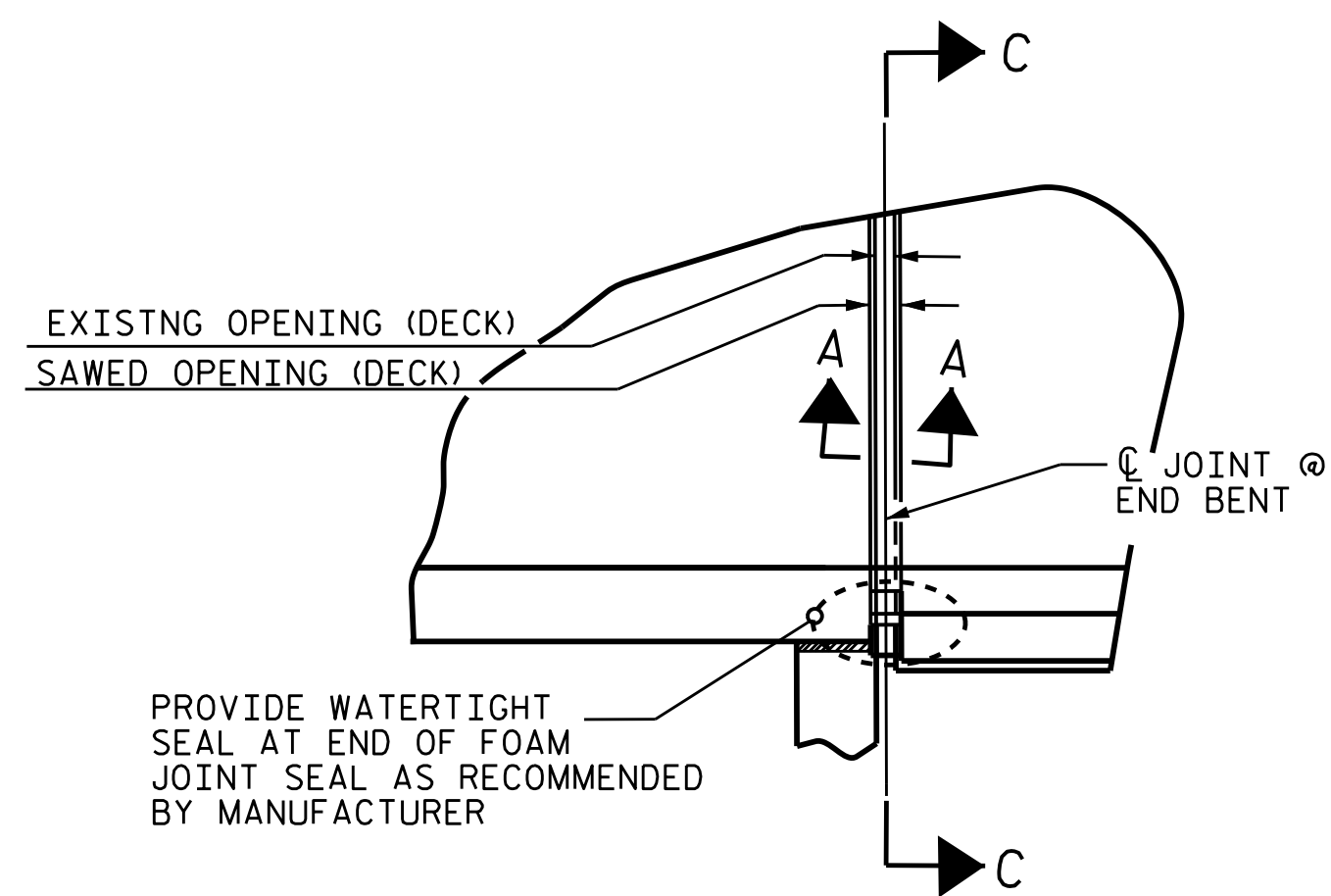


PROPOSED JOINT PRE-SAWED DIMENSIONS

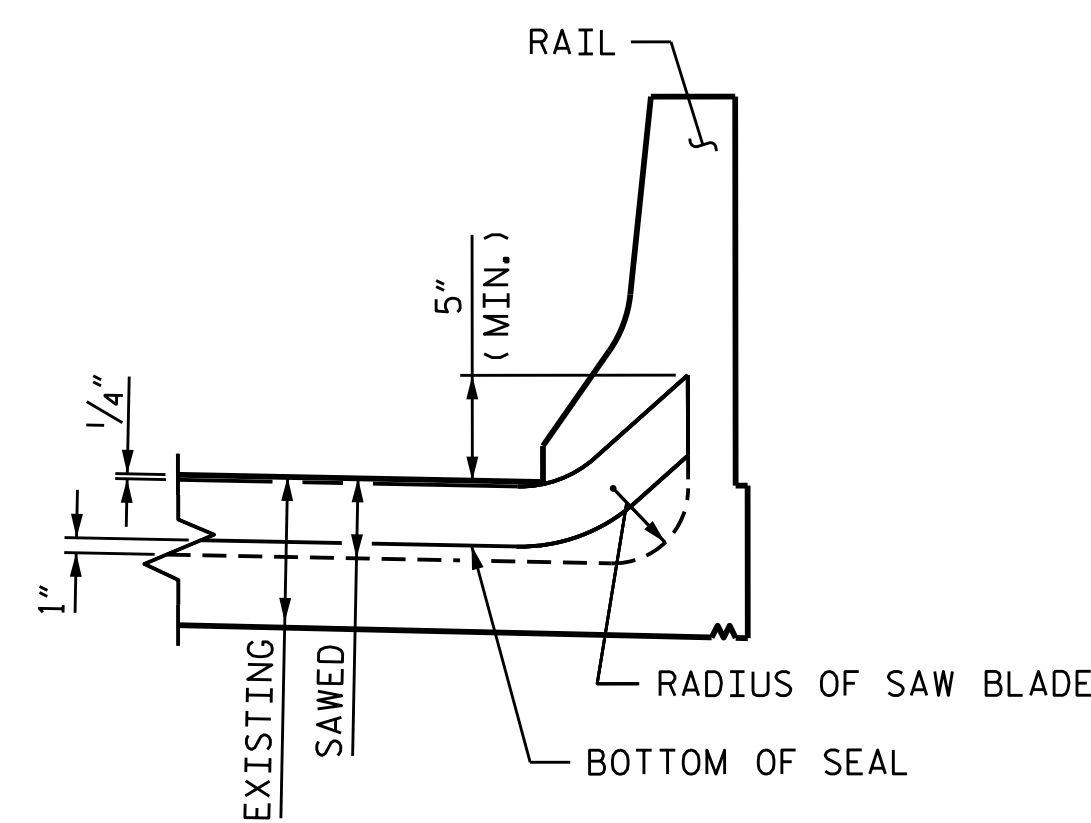
JOINT SEAL INSTALLATION SEQUENCE AT END BENTS
SECTION A-A



PROPOSED FOAM JOINT SEAL



PLAN
(@ END BENT)



SECTION C-C

FOAM JOINT SEAL DETAILS

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

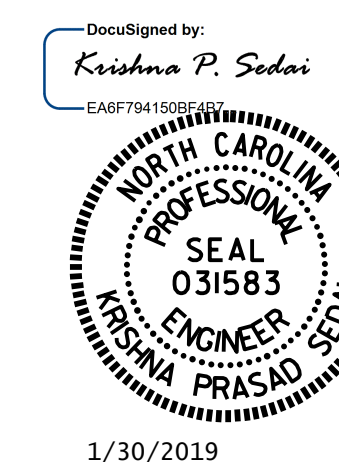
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	21 CU. FT.
END BENT 2	21 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	72 LIN. FT.
END BENT 2	72 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	*1 SQ. FT.
END BENT 2	*1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790129

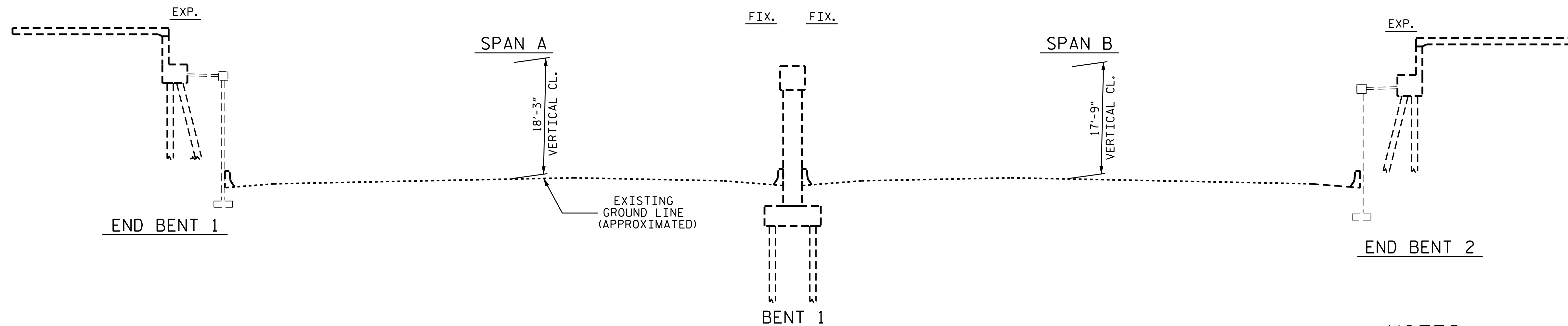


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : C. RUIZ DATE : 04/18
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

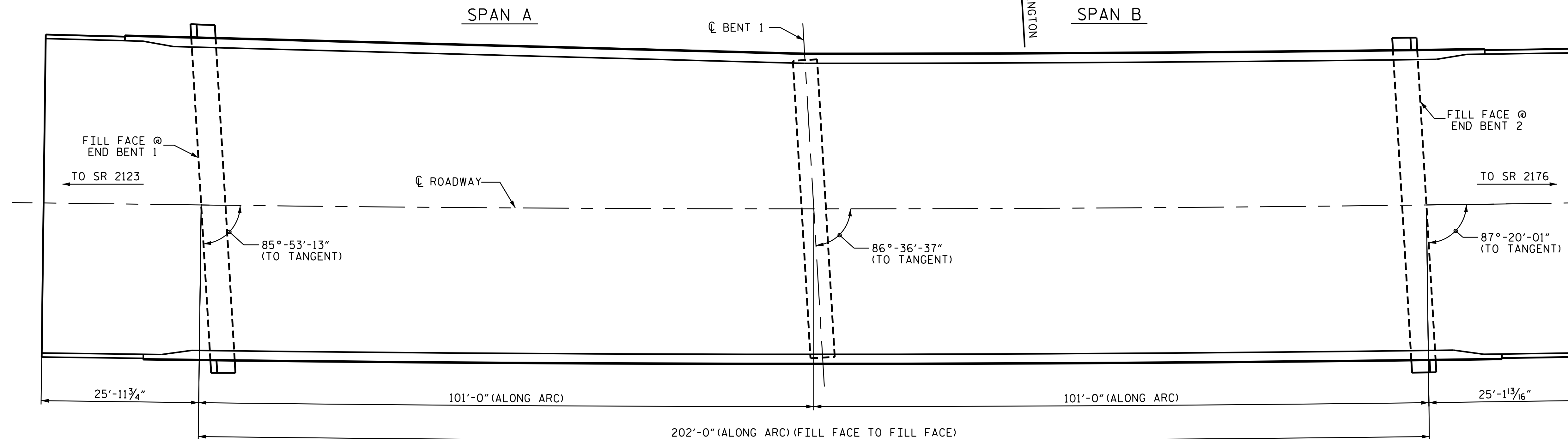
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG $\text{\textcircled{C}}$ ROADWAY

NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND ROUTINE INSPECTION REPORT DATED 03/06/2017.
BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.



PLAN

SCOPE OF WORK

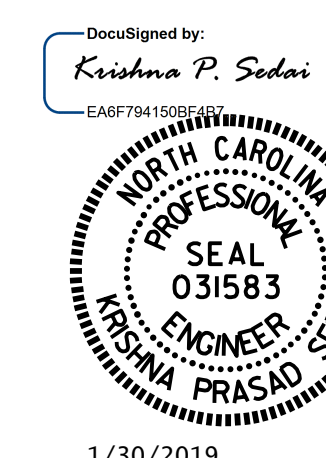
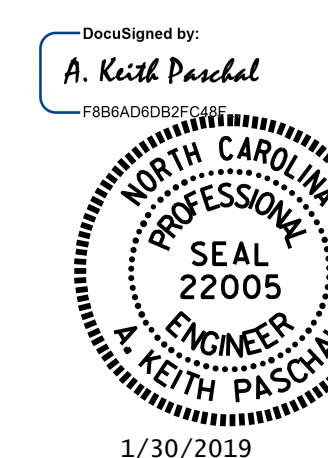
- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____

PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790134

SHEET 1 OF 2



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

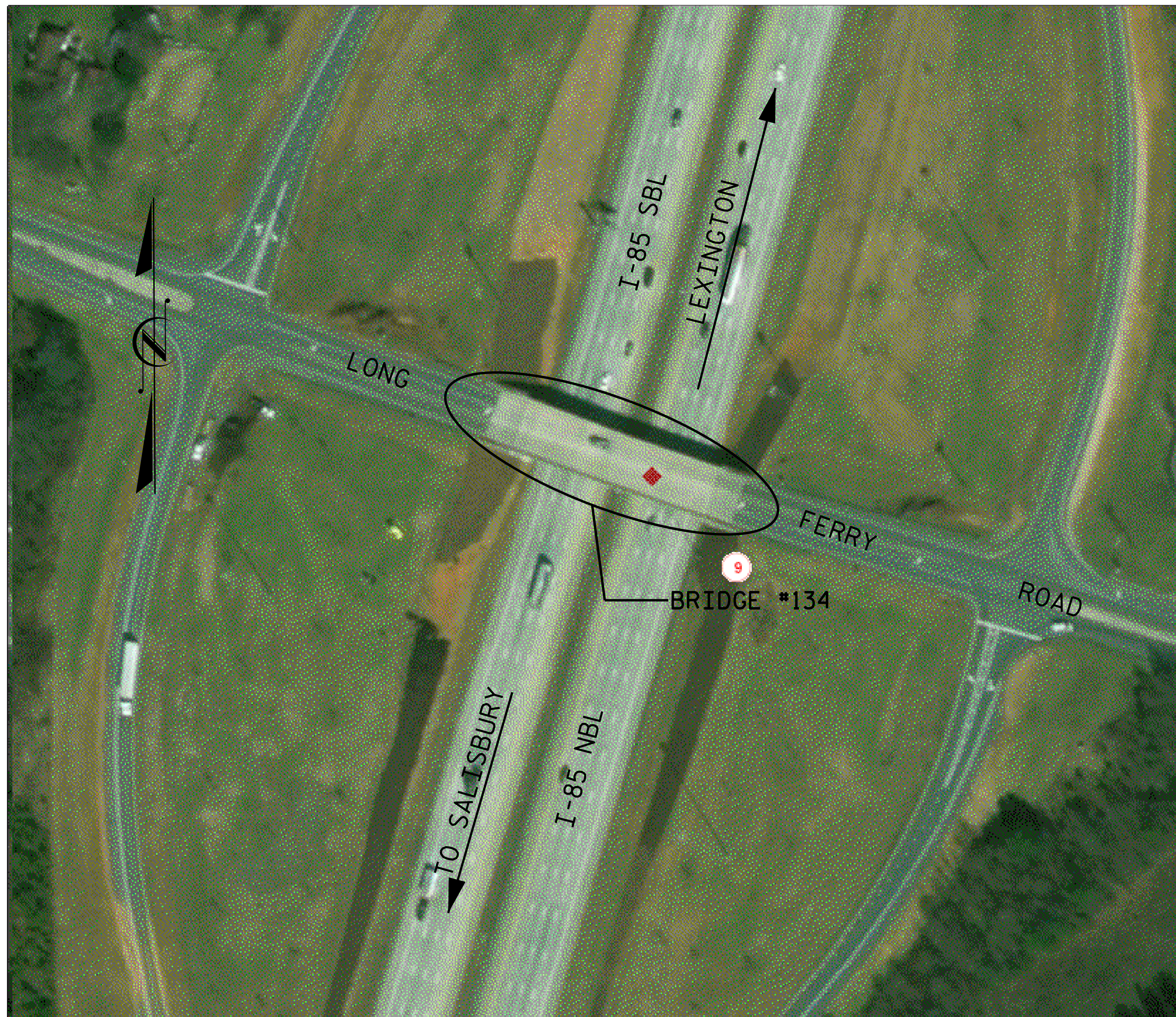
GENERAL DRAWING

FOR BRIDGE ON SR2120
(LONG FERRY RD.)
OVER I-85/US52

DRAWN BY : C. RUIZ DATE : 3/2018
CHECKED BY : FRANCESCA LEA DATE : 5/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



LATITUDE:35°41'43.63"; LONGITUDE:80°24'03.24"

LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

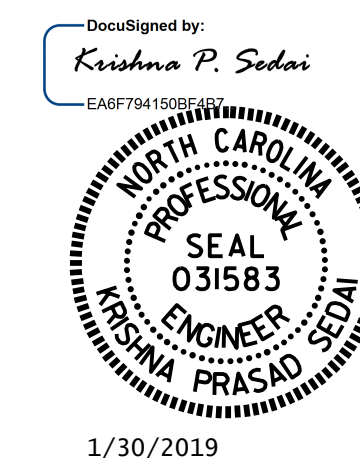
NOTES

- EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.
- FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.
- EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN IN THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.
- FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL						
BRIDGE NO. 134	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
TOTAL	98	24.5	98	5	1377	1377

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790134

SHEET 2 OF 2

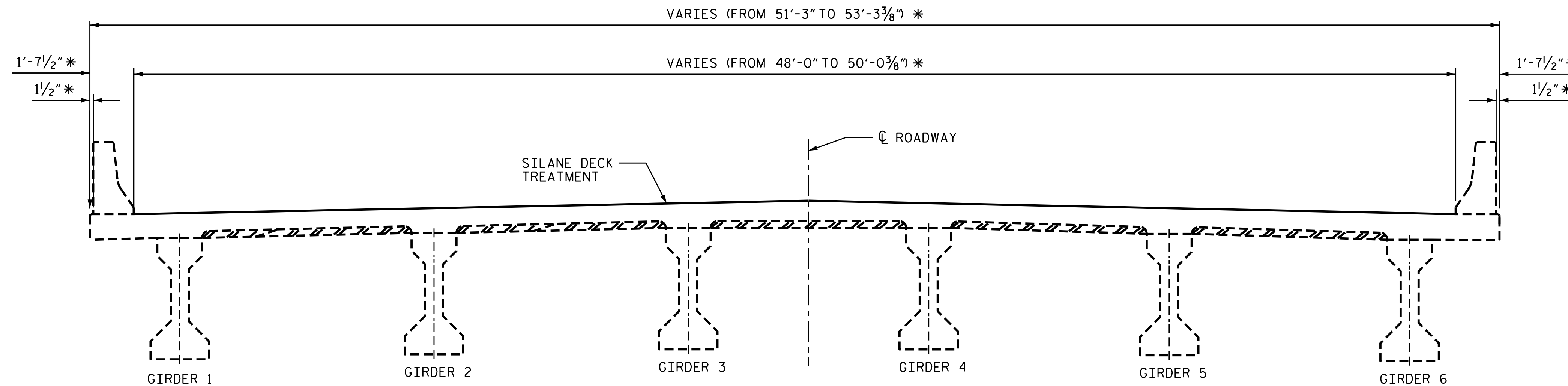


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE
 ON SR2120 (LONG FERRY RD.)
 OVER I-85/US52

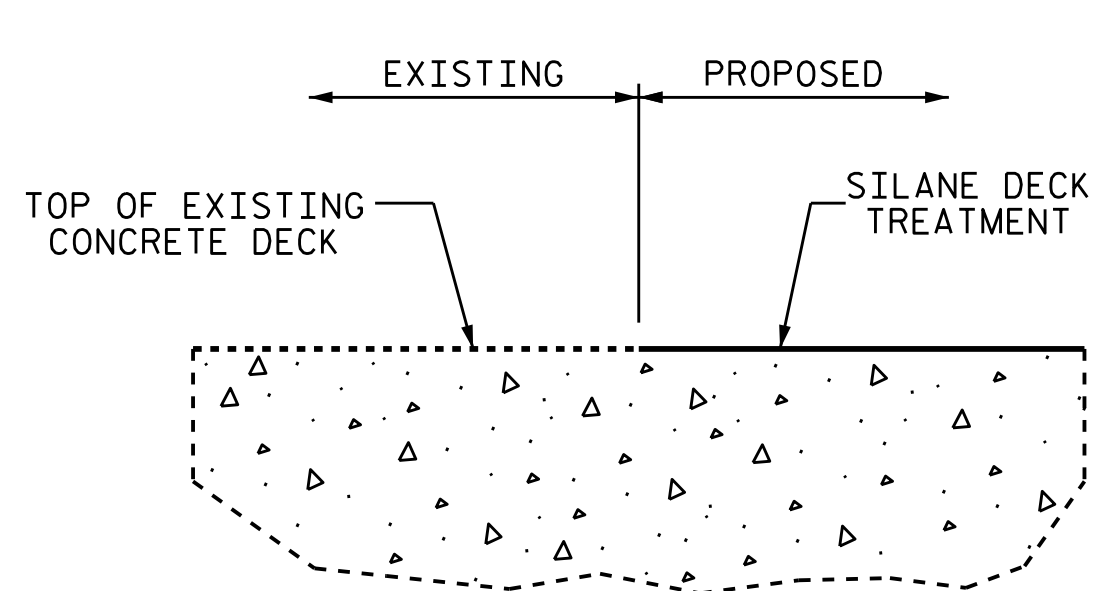
DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

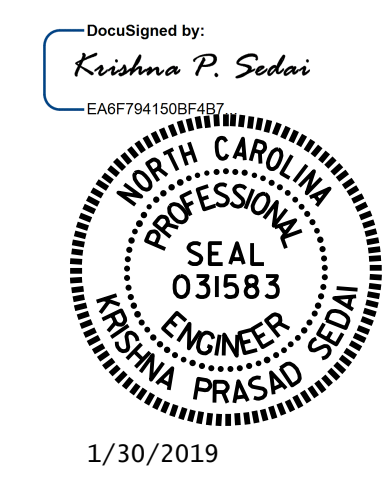


TYPICAL SECTION
* DENOTES RADIAL DIMENSIONS



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790134



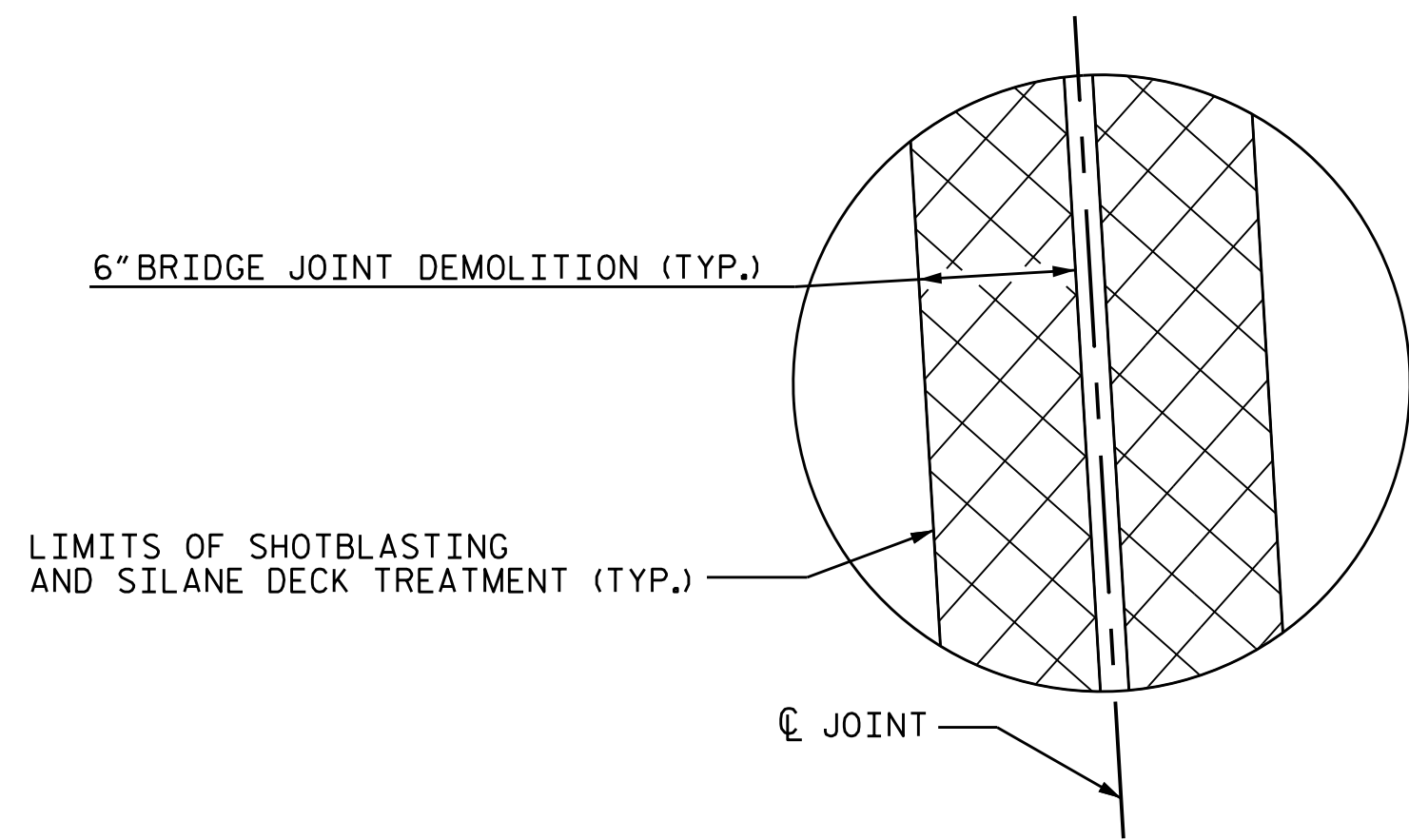
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUPERSTRUCTURE
 TYPICAL SECTION**

DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S4-3
2			4			5



DETAIL "A"

NOTES:

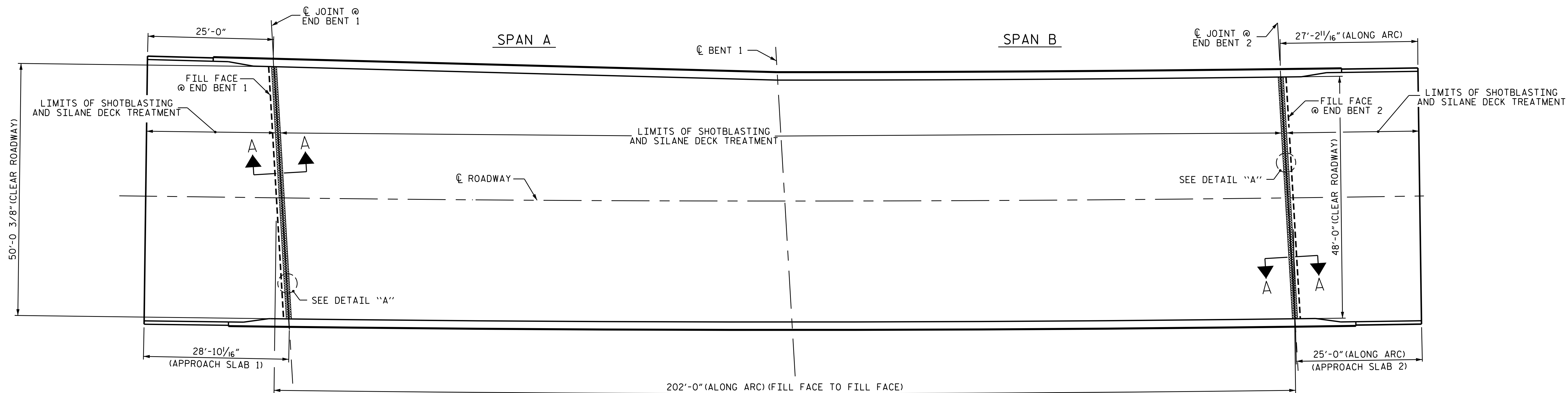
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

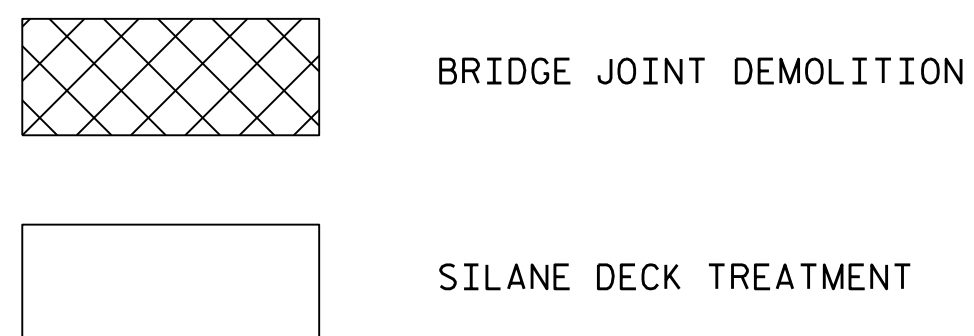
FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	289 SQ.YD.	
SILANE DECK TREATMENT	289 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	98 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3 SQ. FT.	
SHOTBLASTING BRIDGE DECK	1088 SQ.YD.	
SILANE DECK TREATMENT	1088 SQ.YD.	

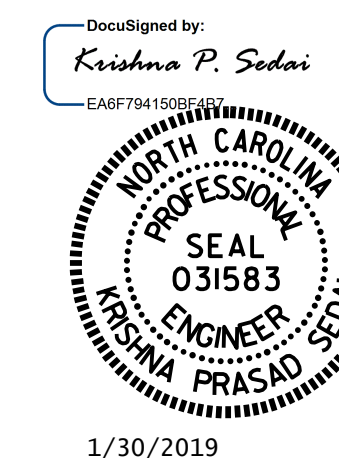
* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.



PLAN



PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790134

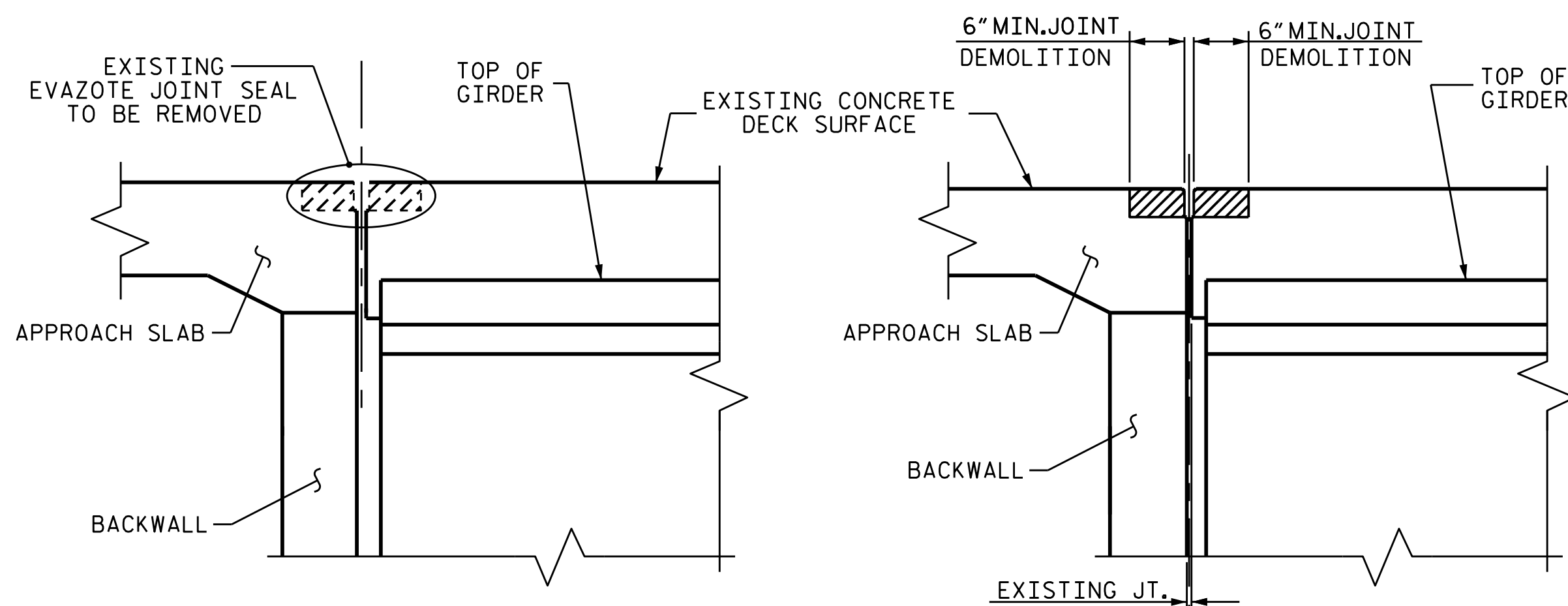


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 LIMITS OF SHOTBLASTING
 AND SILANE DECK TREATMENT

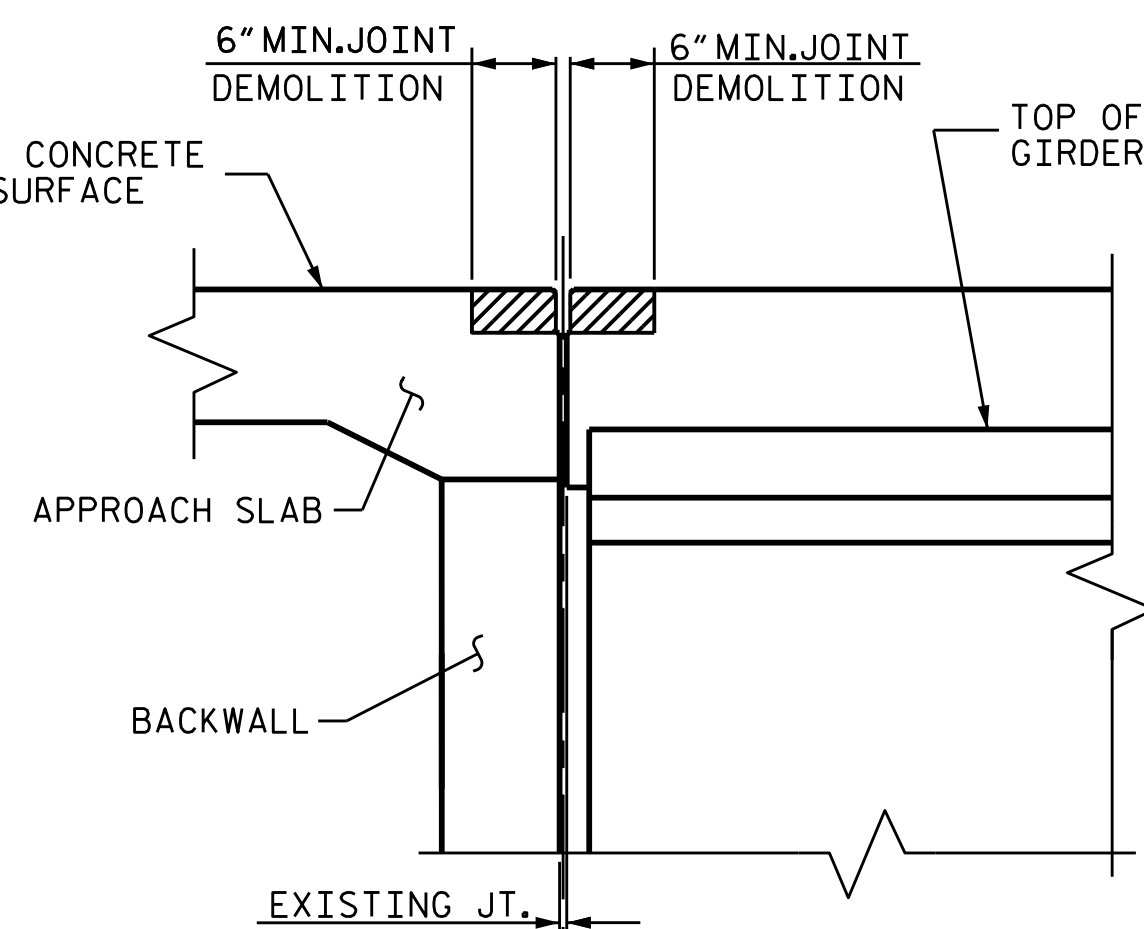
DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

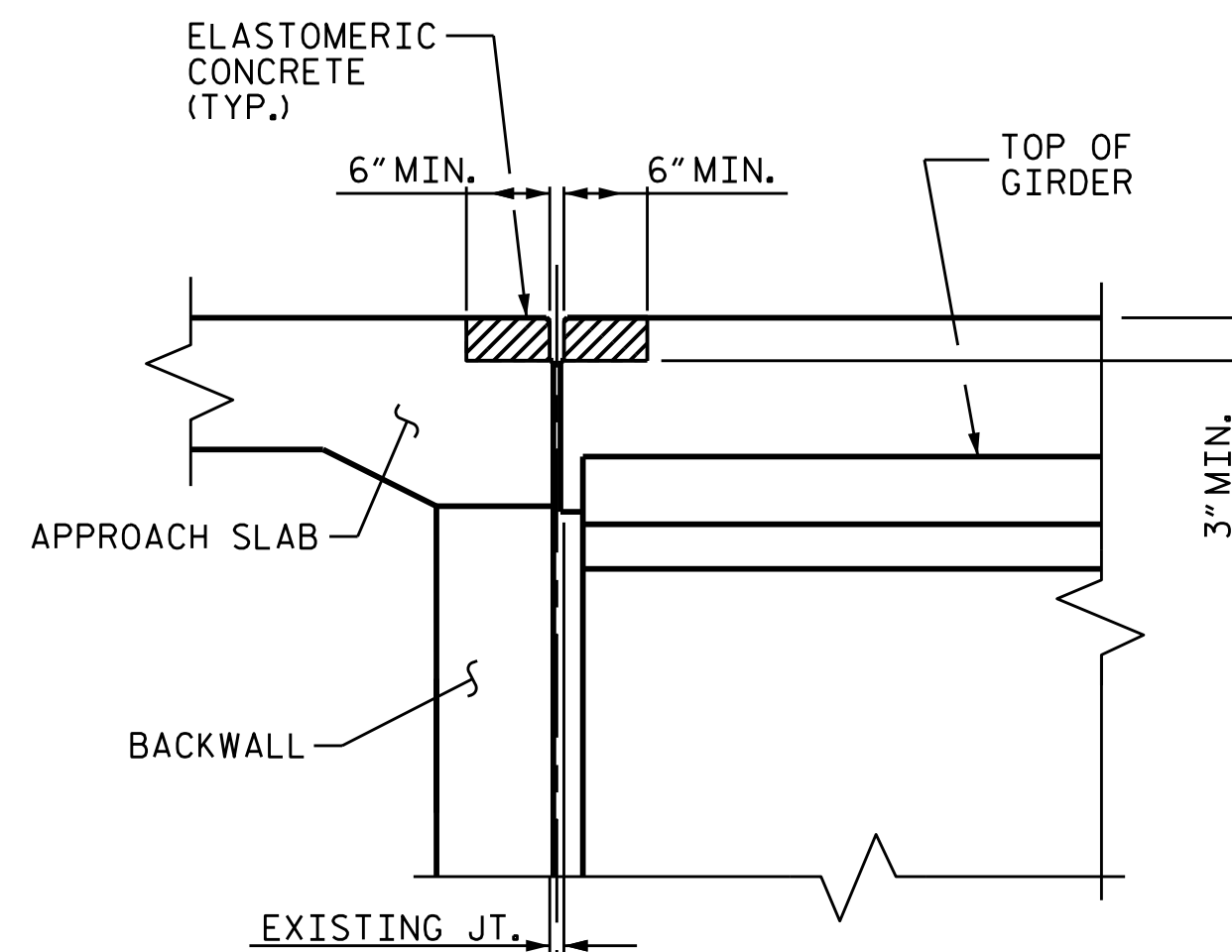
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S4-4
2			4			5



EXISTING JOINT



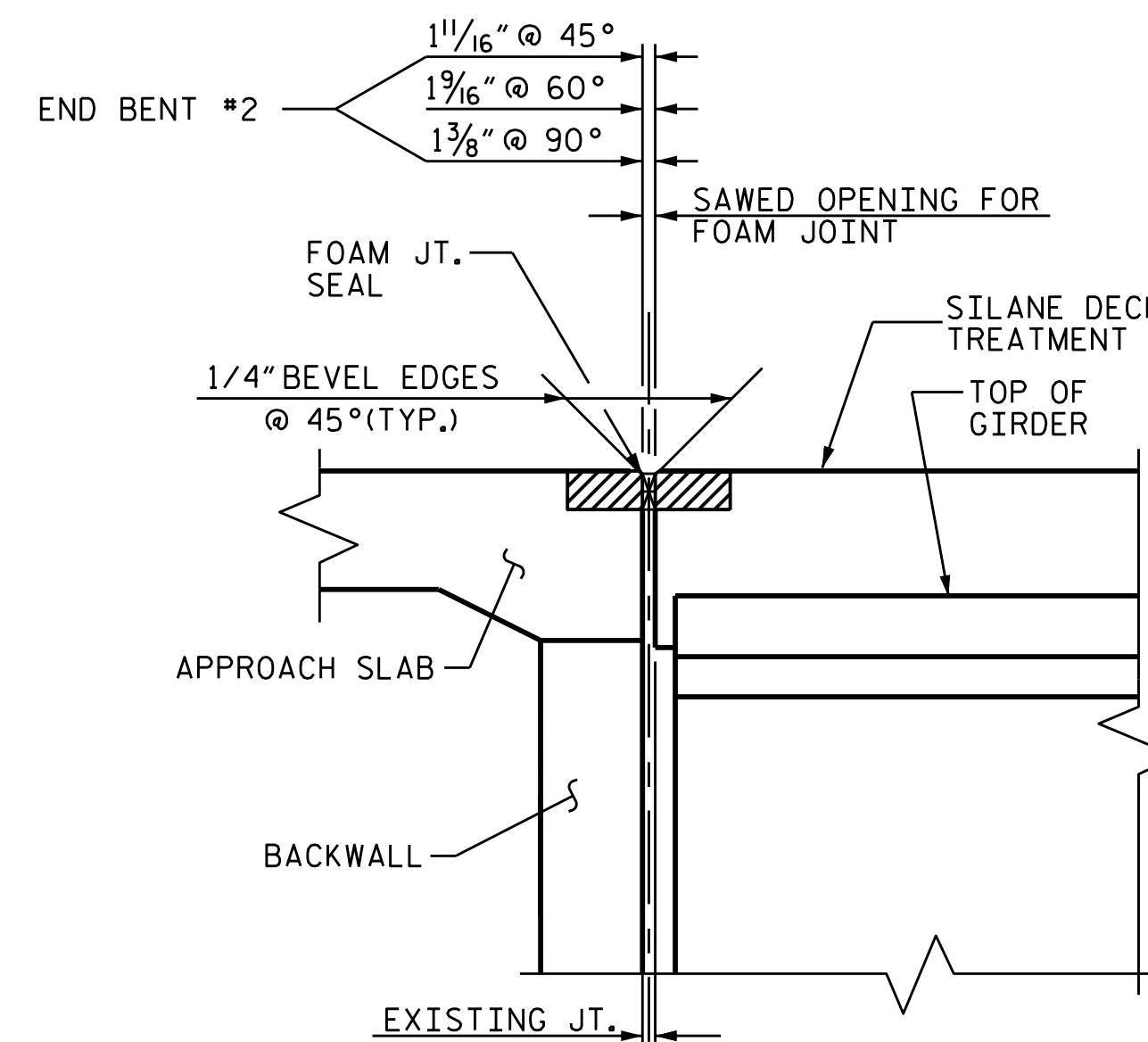
MINIMUM EXISTING JOINT DEMOLITION



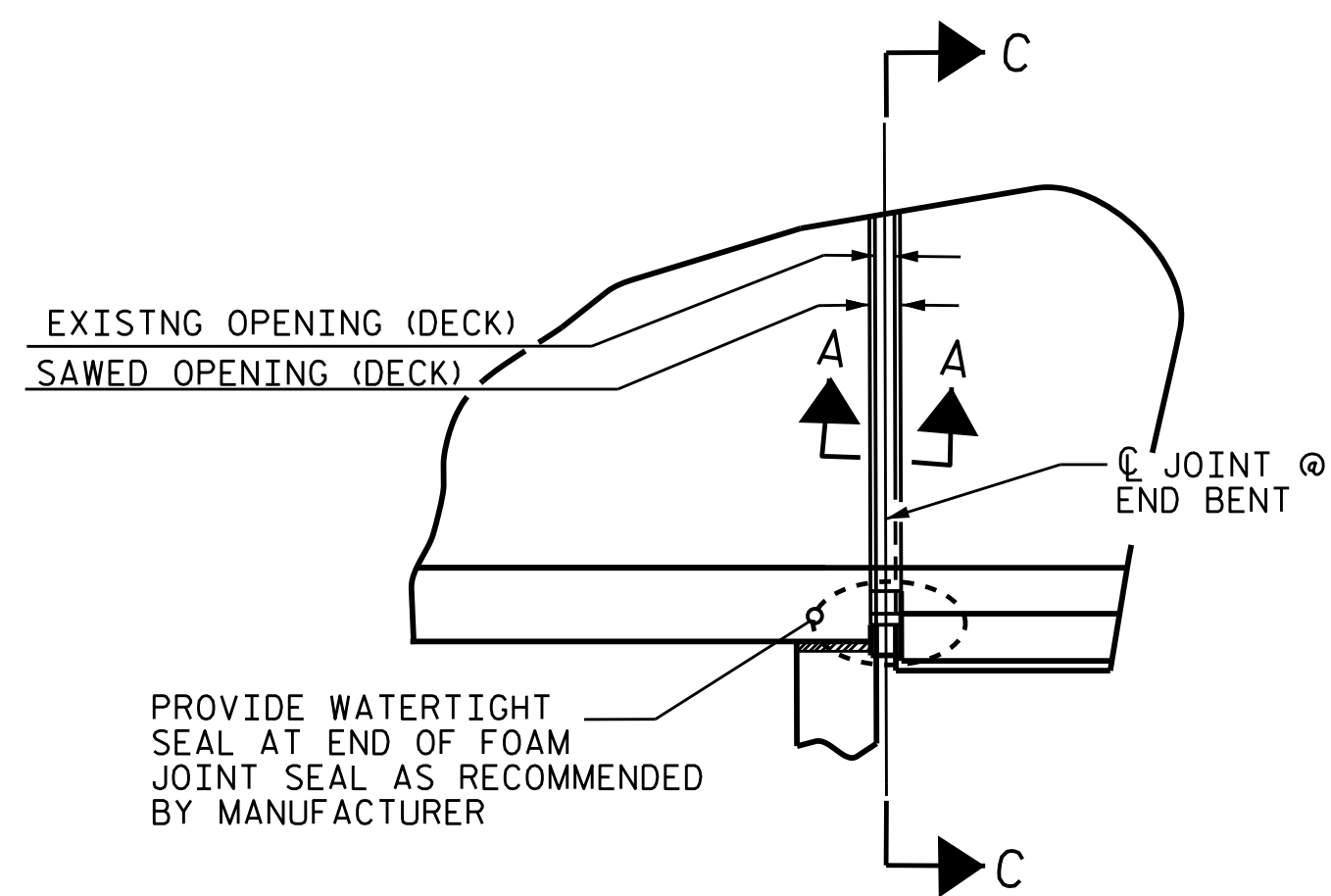
PROPOSED JOINT PRE-SAWED DIMENSIONS

JOINT SEAL INSTALLATION SEQUENCE AT END BENTS

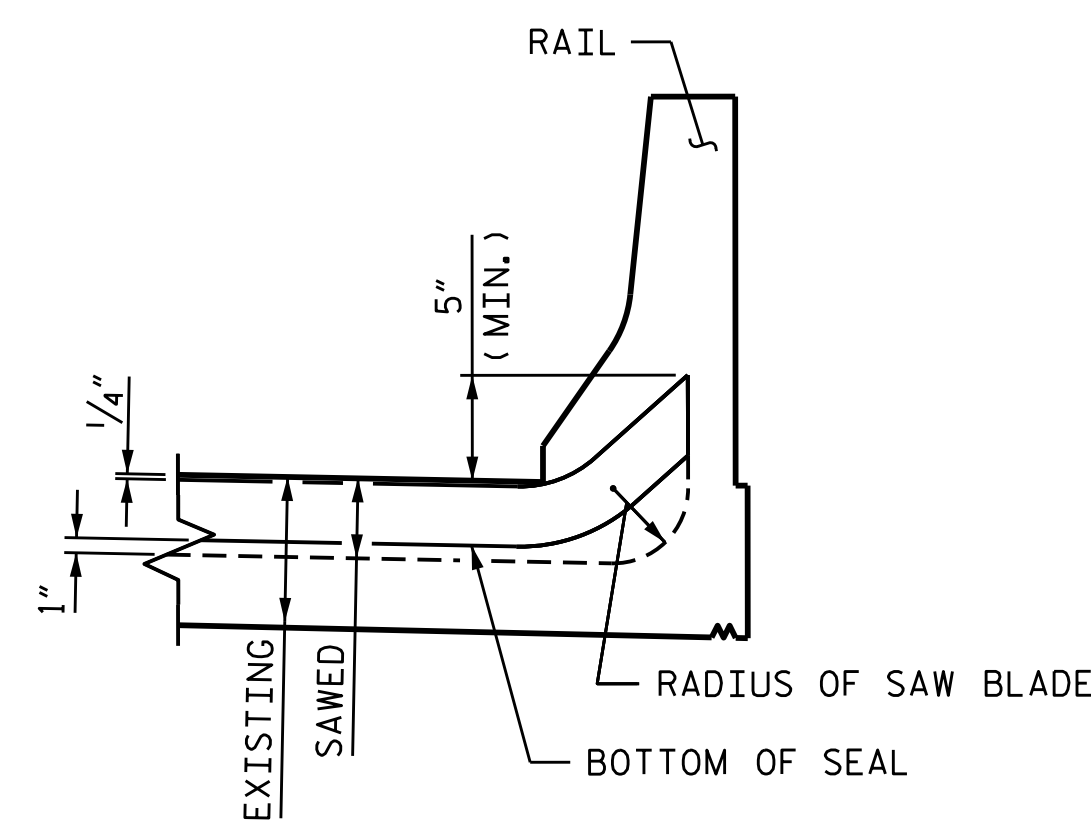
SECTION A-A



PROPOSED FOAM JOINT SEAL



PLAN (@ END BENT)



SECTION C-C

FOAM JOINT SEAL DETAILS

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

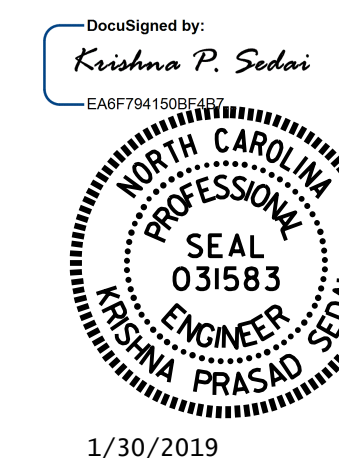
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	12.0 CU. FT.
END BENT 2	12.5 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	48 LIN. FT.
END BENT 2	50 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	* 1 SQ. FT.
END BENT 2	* 1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790134



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : C. RUIZ DATE : 04/18
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

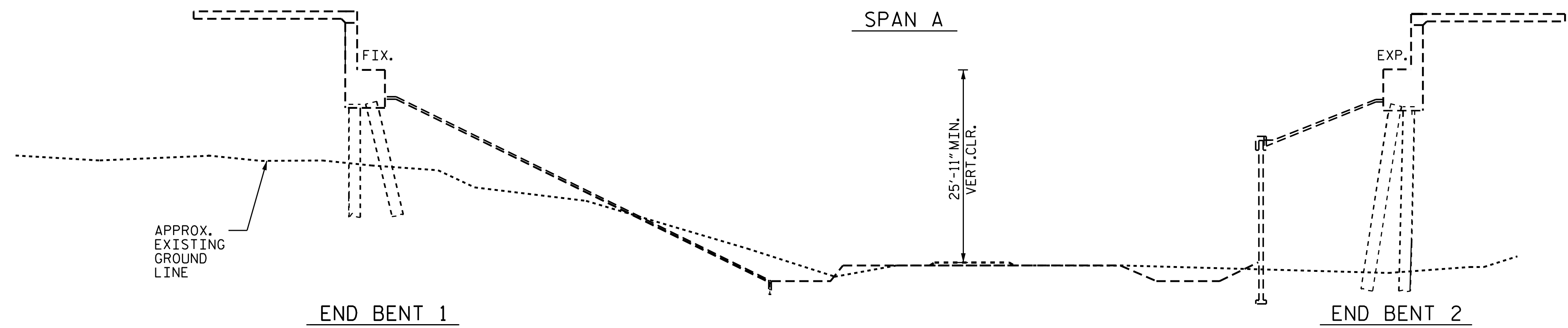
NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/11/2017.

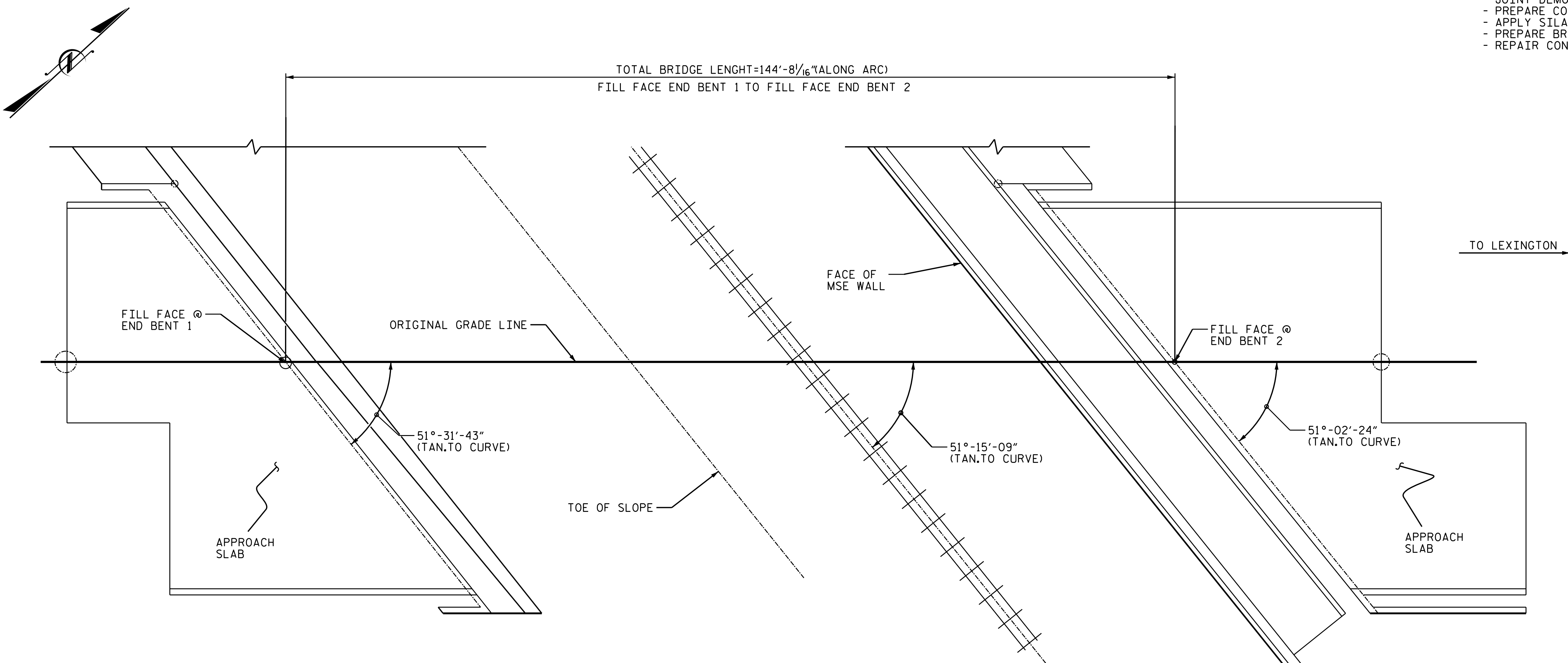
BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____



SECTION ALONG ORIGINAL GRADE LINE
(END BENTS ON SECTION AT RIGHT ANGLES TO END BENTS)



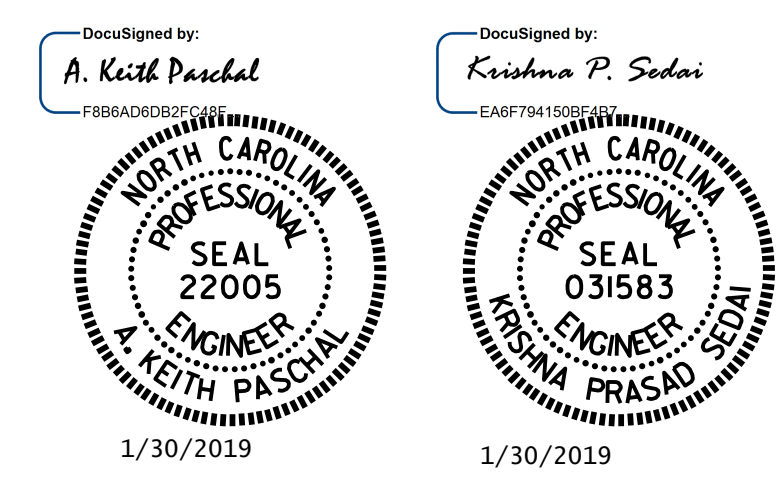
SCOPE OF WORK

- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790135

SHEET 1 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON I-85 NBL
 OVER NSRR



DRAWN BY : E.A.BAYISSA DATE : 05/2018
 CHECKED BY : FRAN.LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S5-1
2			4			5

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



LATITUDE: 35° 42' 32.71"; LONGITUDE: 80° 23' 46.44"

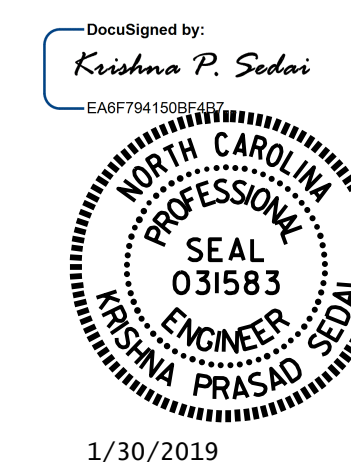
LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

TOTAL BILL OF MATERIAL						
BRIDGE NO. 135	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LN. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
TOTAL	186.0	54.0	186.0	5.0	1767.0	1767.0

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790135

SHEET 2 OF 2

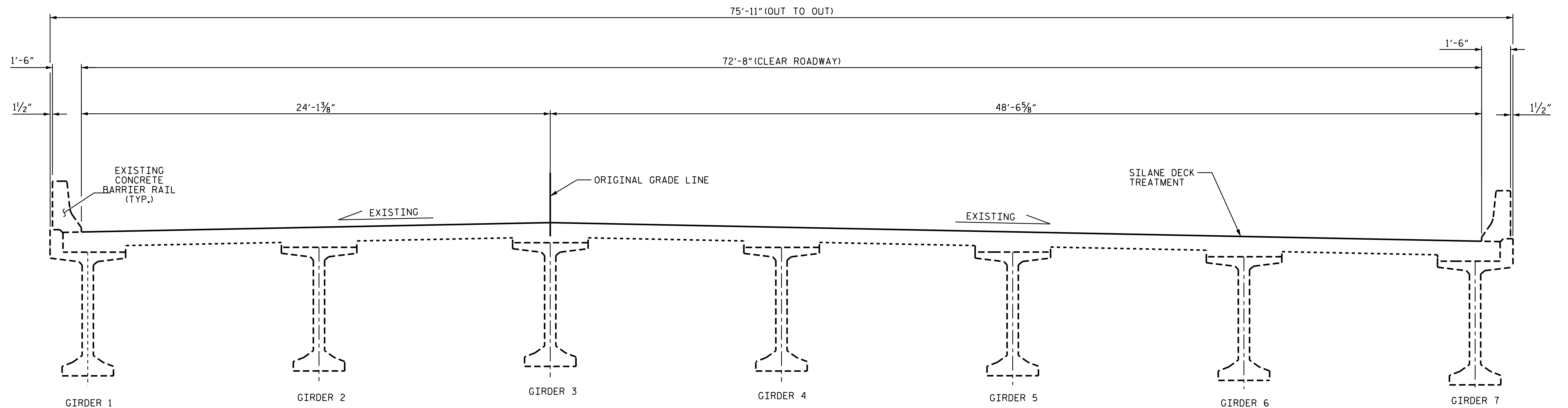


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON I-85 NBL
 OVER NSRR

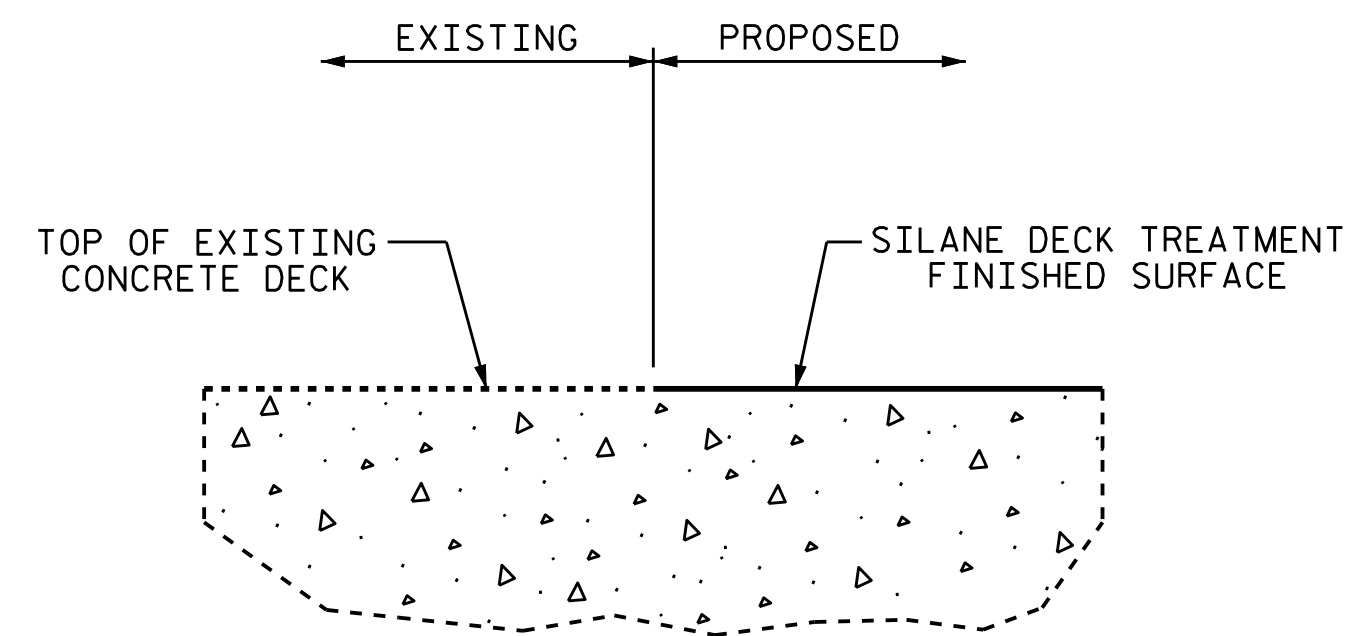
DRAWN BY : E.A.BAYISSA DATE : 05/2018
 CHECKED BY : FRAN,LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

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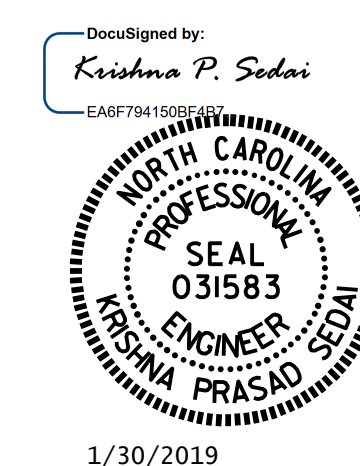


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790135

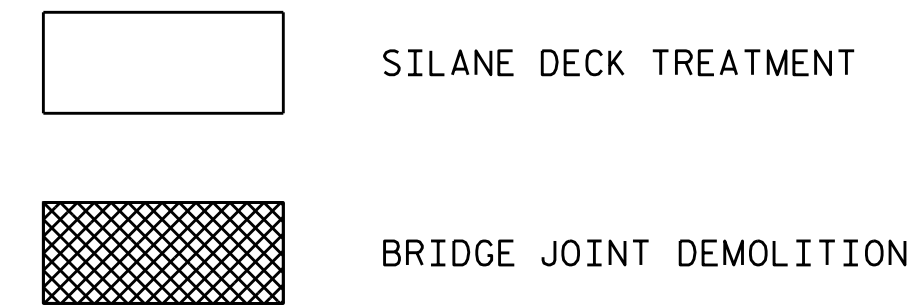
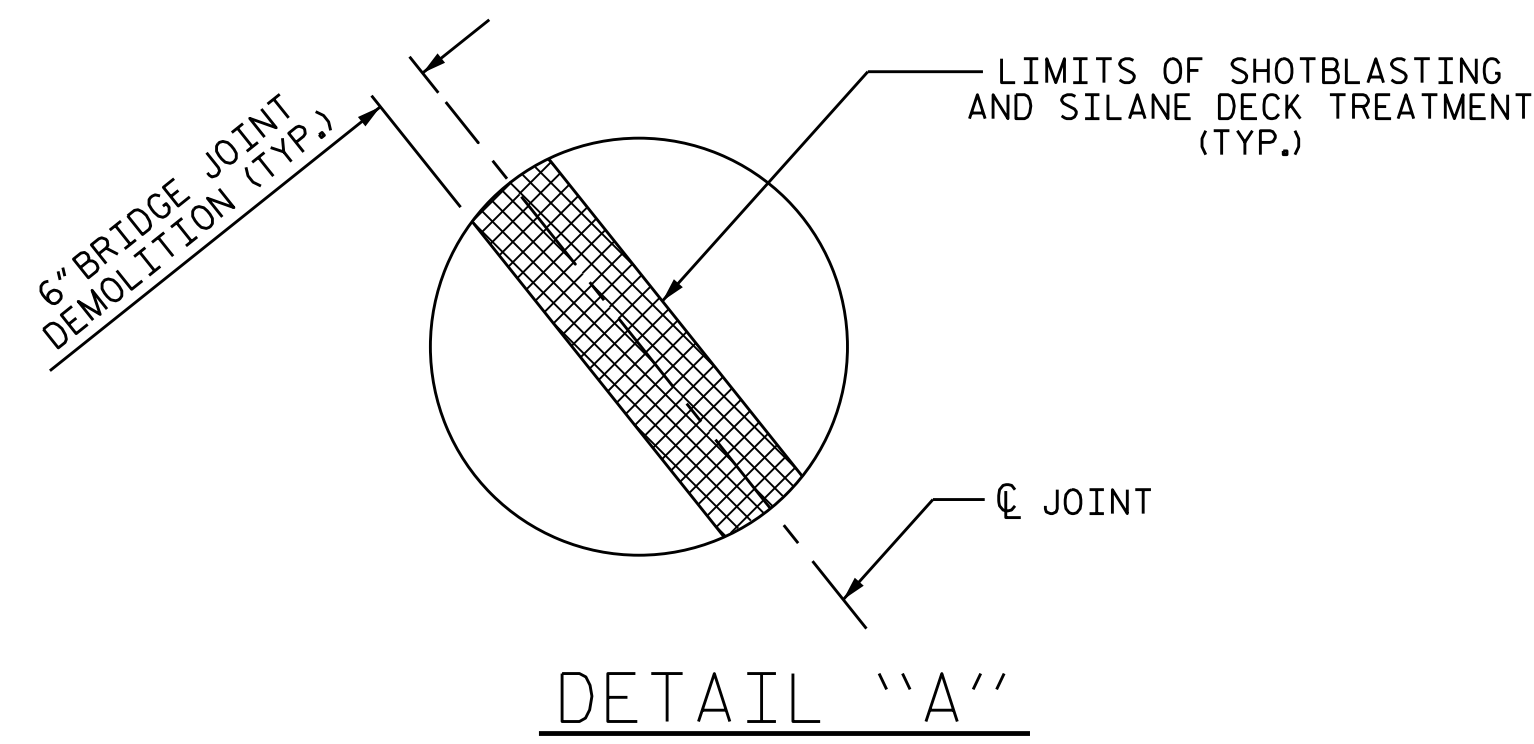


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : E. BAYISSA DATE : 05/2018
 CHECKED BY : FRAN. LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

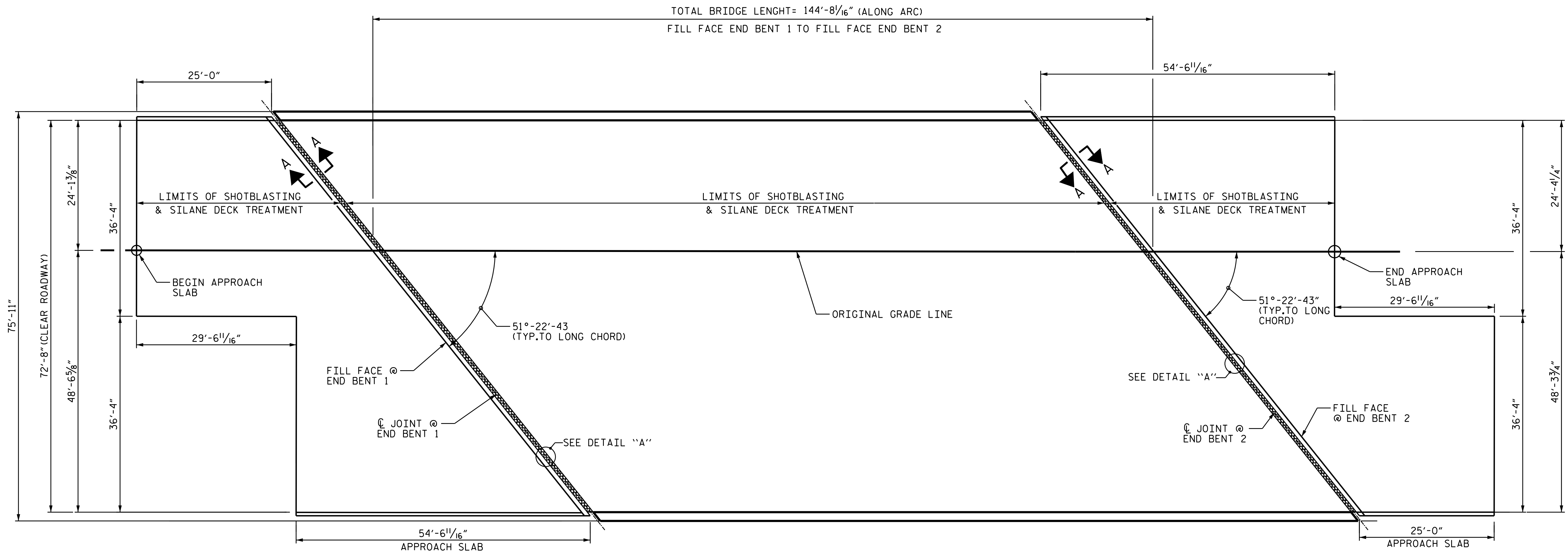
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5-3
2			4			5



NOTES:

REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.
FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

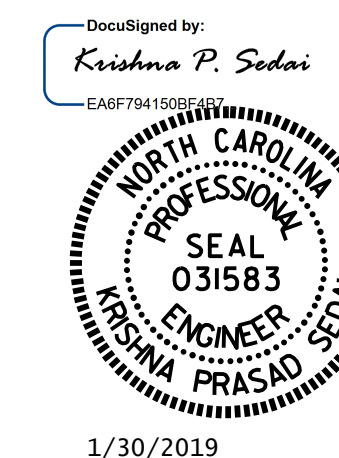


PLAN OF SPAN A

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	632.0 SQ.YD.	
SILANE DECK TREATMENT	632.0 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	186.0 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3 SQ.FT.	
SHOTBLASTING BRIDGE DECK	1135.0 SQ.YD.	
SILANE DECK TREATMENT	1135.0 SQ.YD.	

* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790135

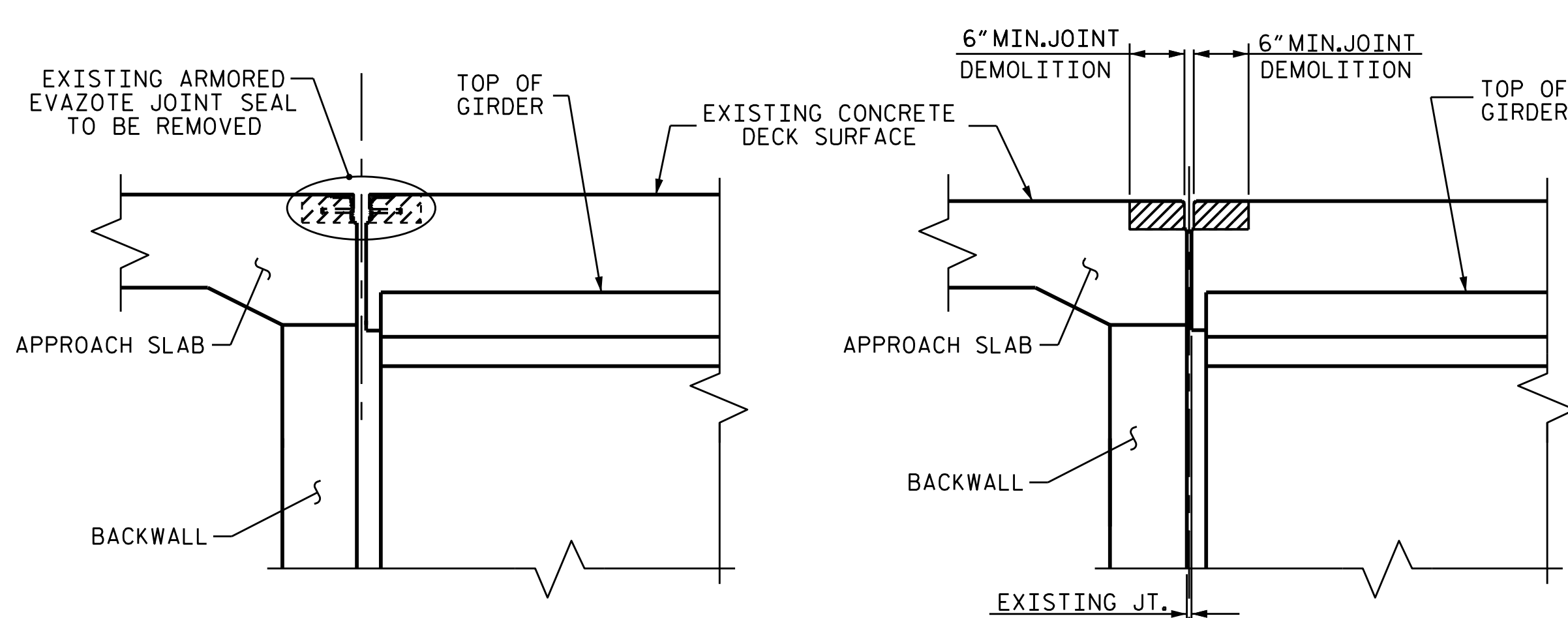


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
LIMITS OF SHOTBLASTING AND SILANE DECK TREATMENT

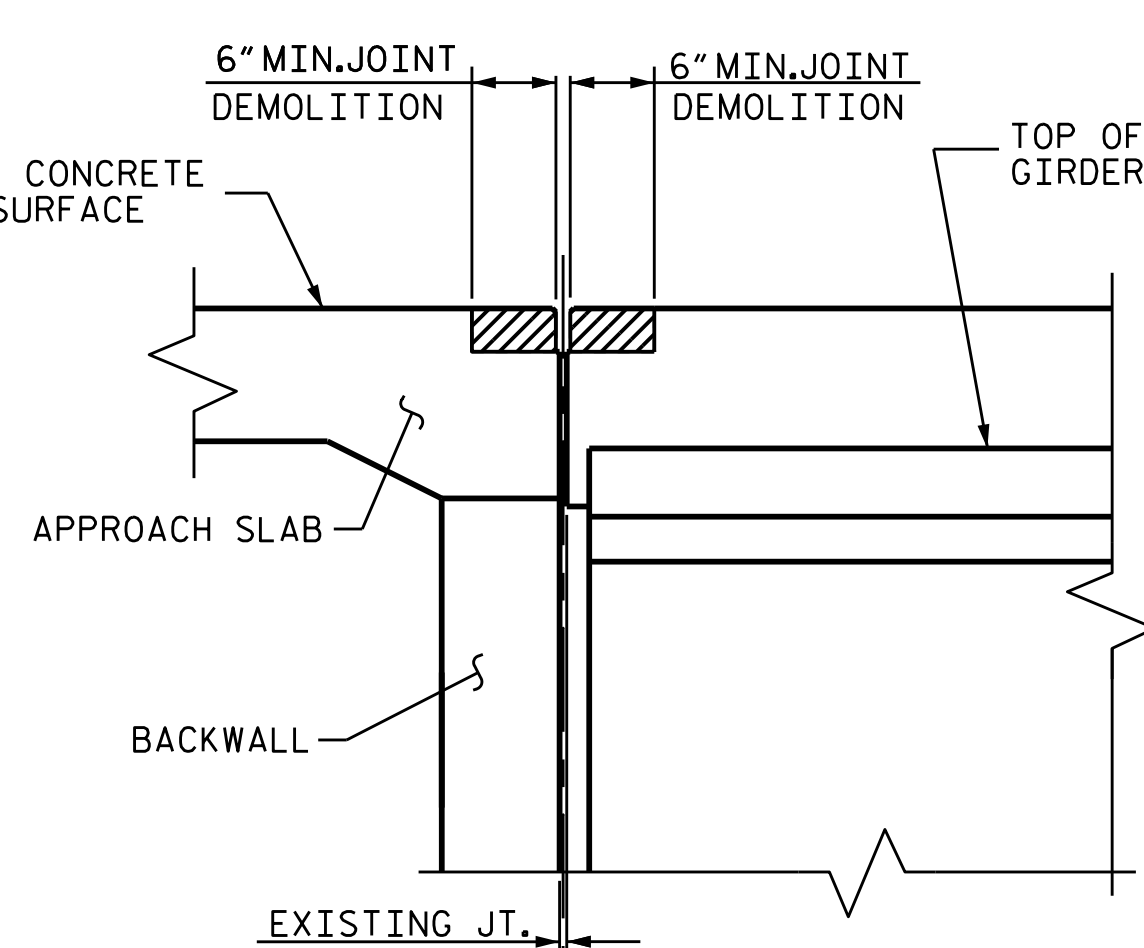
DRAWN BY: E.A.BAYISSA DATE: 05/2018
CHECKED BY: FRAN.LEA DATE: 05/2018

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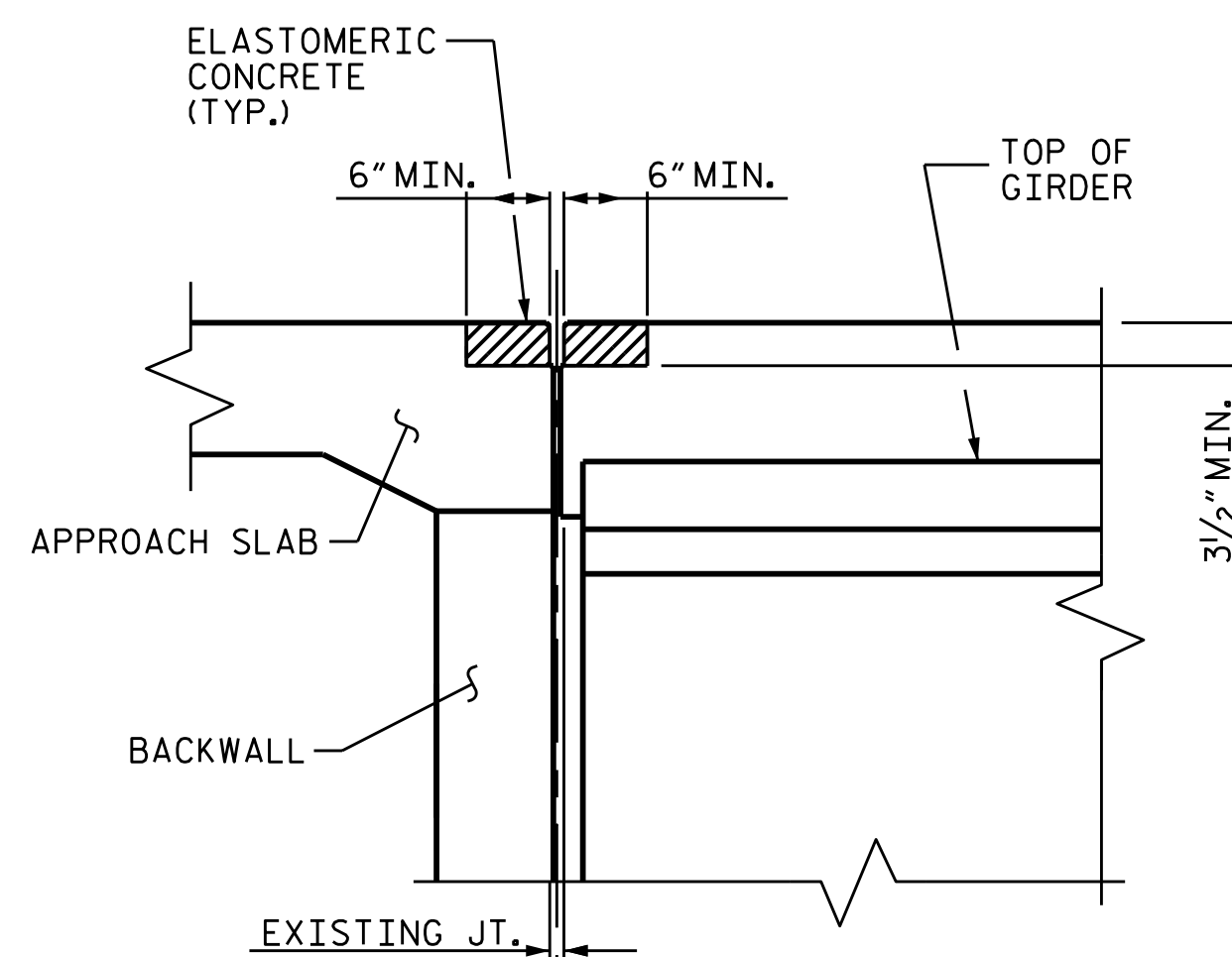
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S5-4
2			4			5



EXISTING JOINT

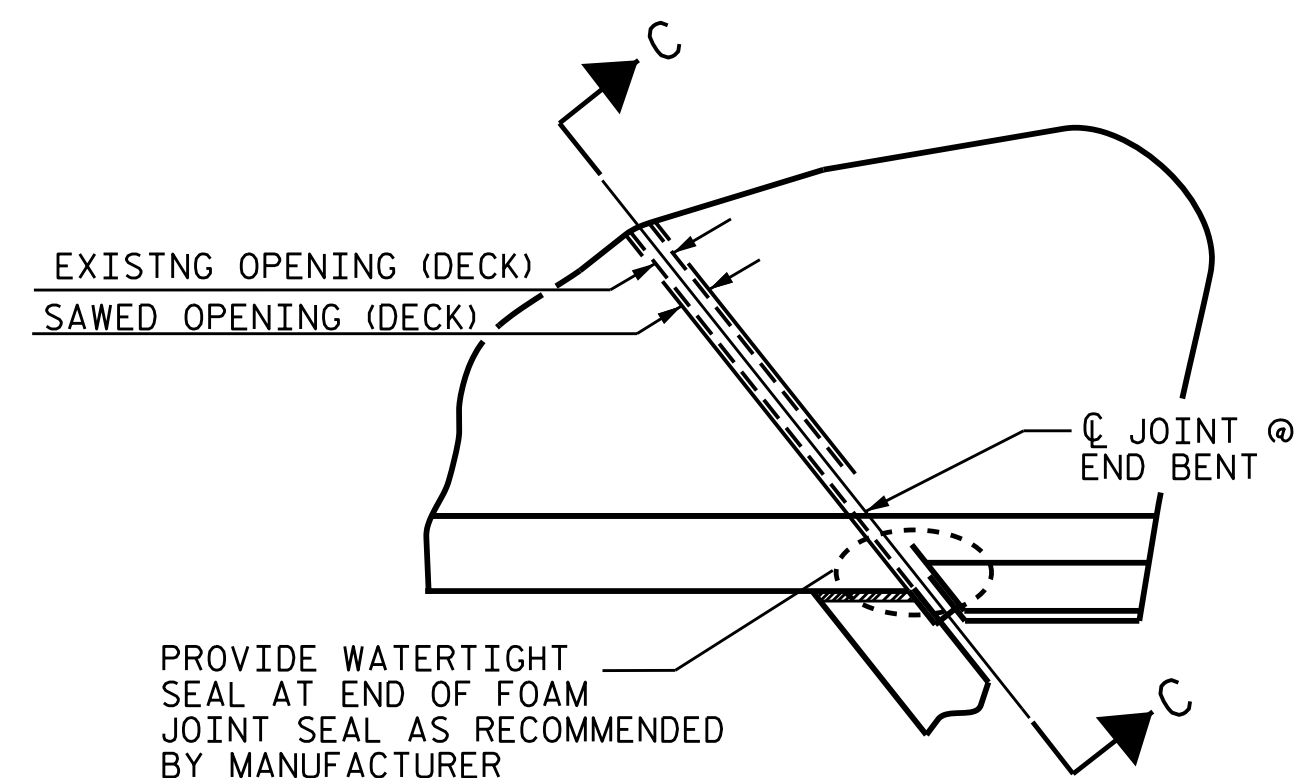


MINIMUM EXISTING JOINT DEMOLITION

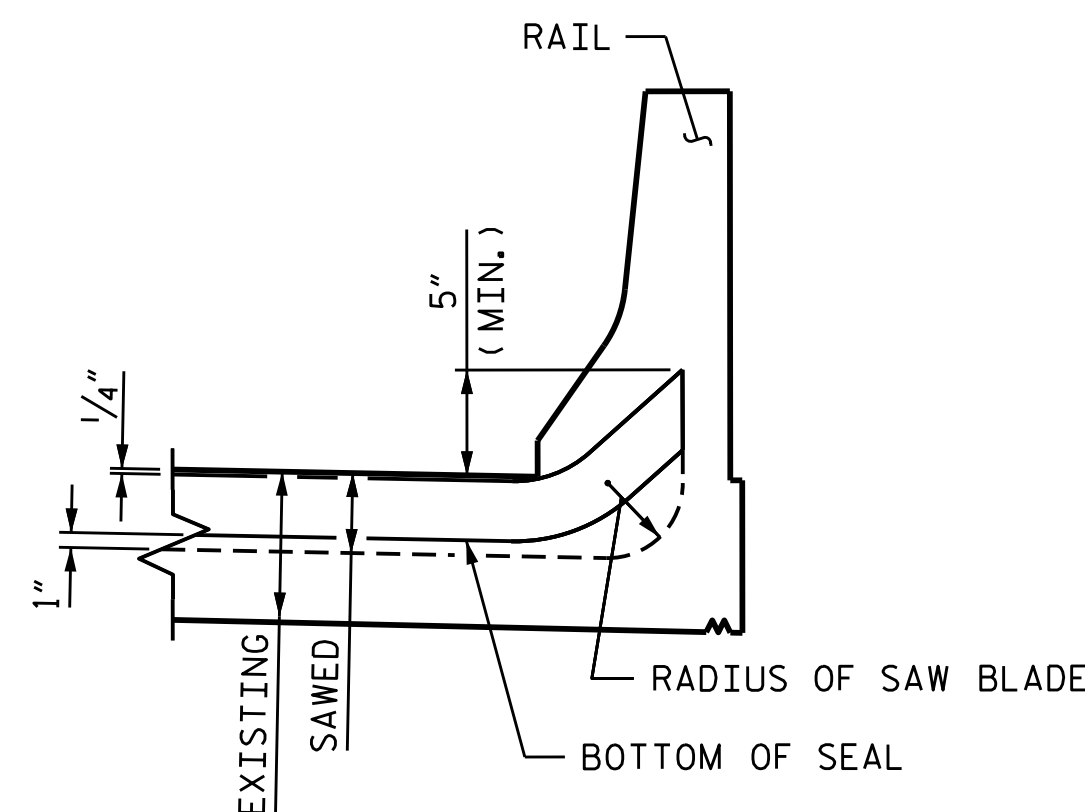


PROPOSED JOINT PRE-SAWED DIMENSIONS

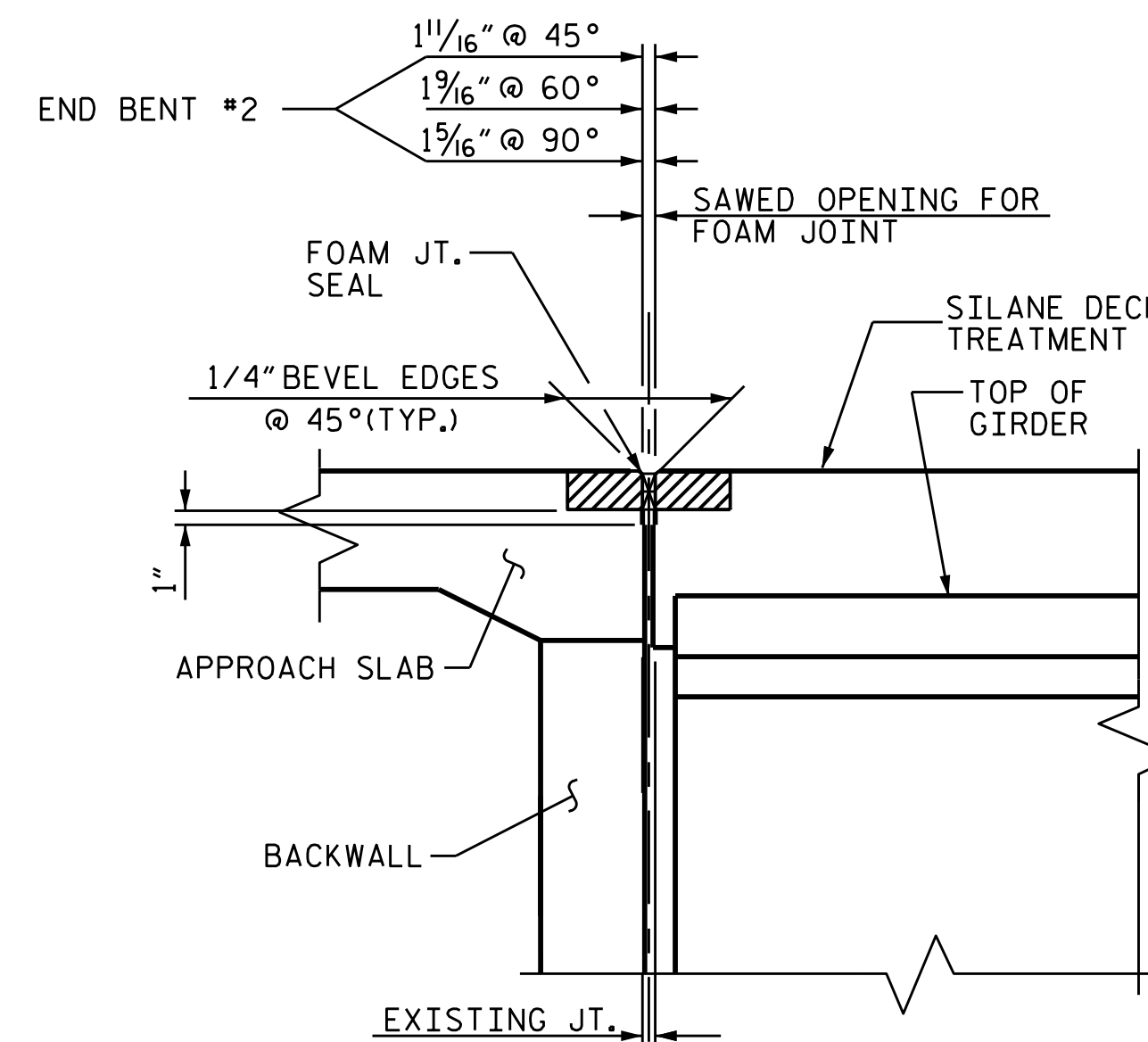
JOINT SEAL INSTALLATION SEQUENCE AT END BENTS
SECTION A-A



PLAN
(@ END BENT)



SECTION C-C



PROPOSED FOAM JOINT SEAL

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

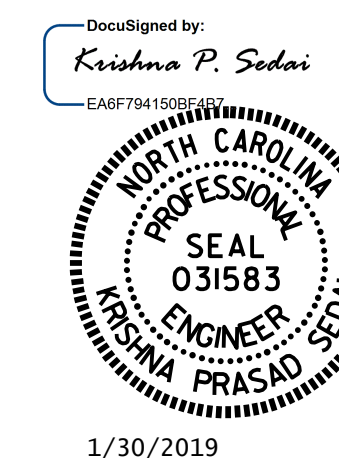
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	27.0 CU. FT.
END BENT 2	27.0 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	93 LIN. FT.
END BENT 2	93 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	* 1 SQ. FT.
END BENT 2	* 1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790135



1/30/2019

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : E. A. BAYISSA DATE : 05/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPAN A

NOTES

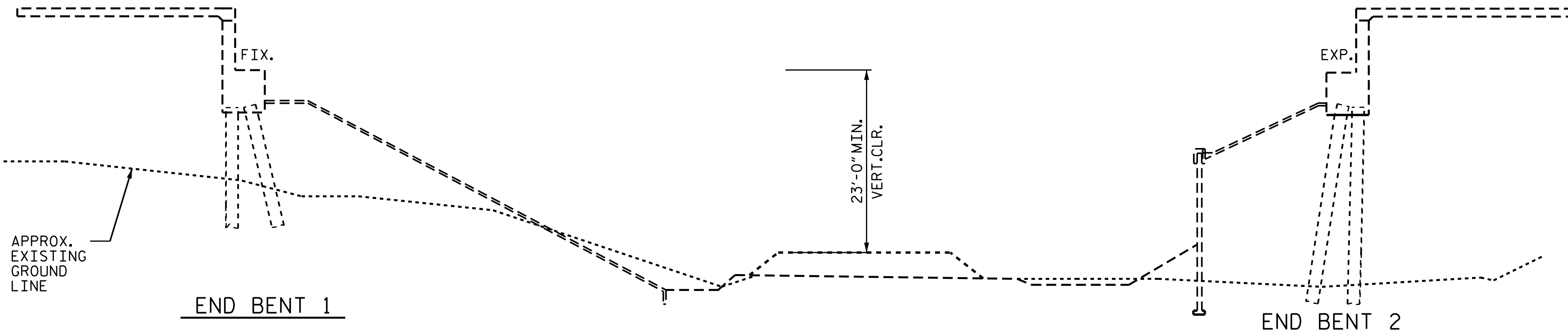
PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/11/2017.

BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER

DATE

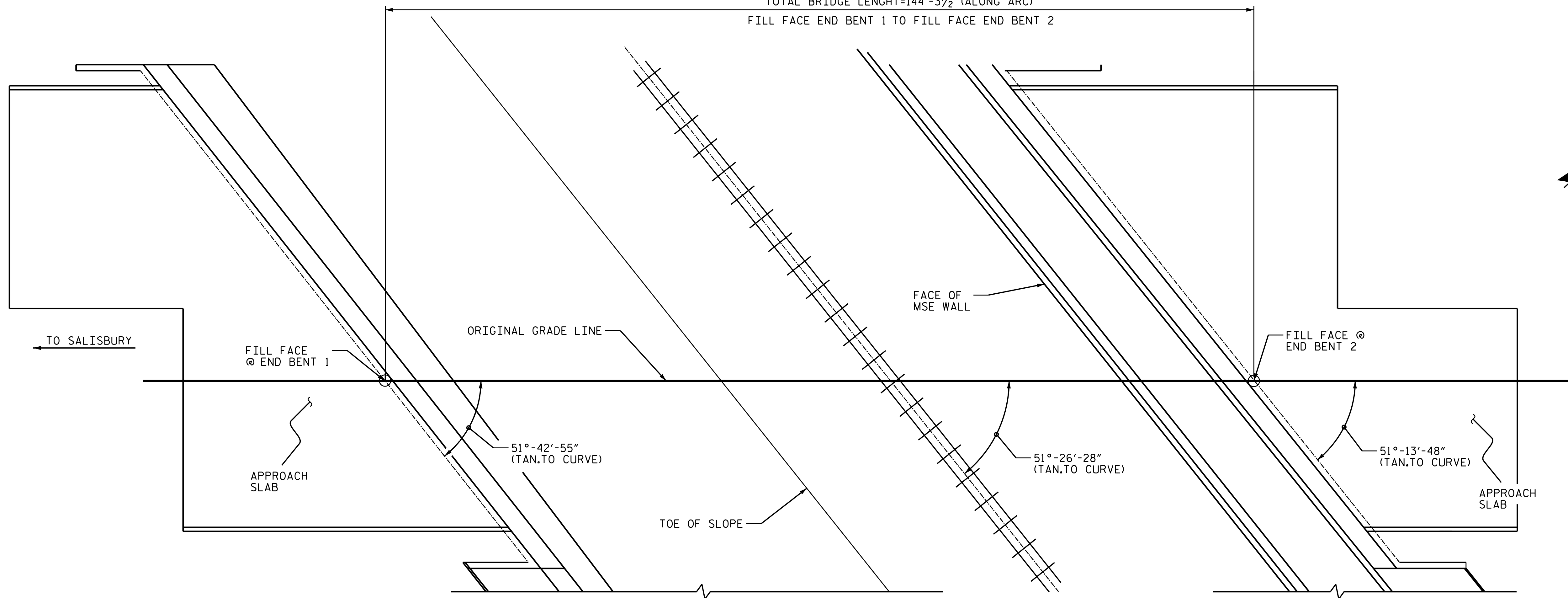


SECTION ALONG ORIGINAL GRADE LINE

SCOPE OF WORK

- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS.

TOTAL BRIDGE LENGTH=144'-3 1/2" (ALONG ARC)
FILL FACE END BENT 1 TO FILL FACE END BENT 2



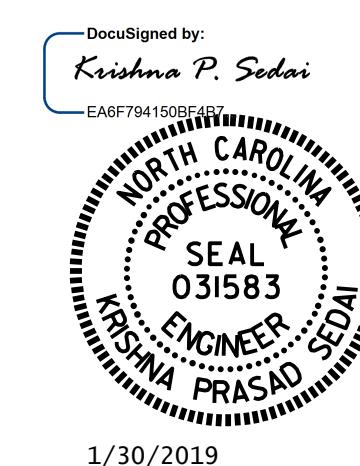
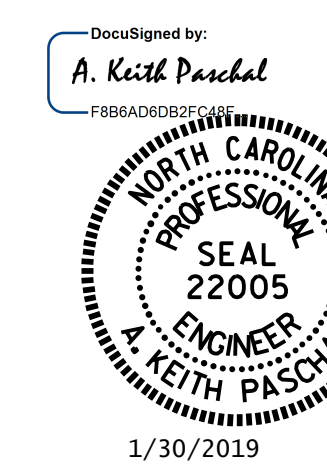
PLAN

PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790136

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON I-85 SBL
OVER NSRR



DRAWN BY : E.A.BAYISSA DATE : 05/2018
CHECKED BY : FRAN.LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			56-1
2			4			5

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



LATITUDE: 35° 42' 32.48"; LONGITUDE: 80° 23' 47.39"

LOCATION SKETCH

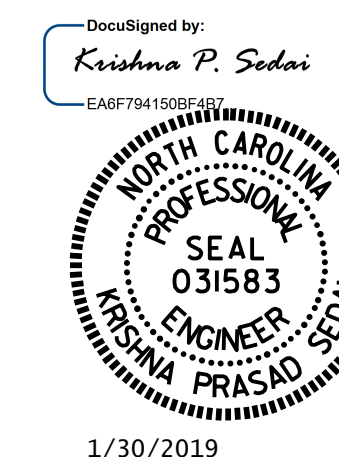
INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

TOTAL BILL OF MATERIAL

BRIDGE NO. 136	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
TOTAL	186.0	54.0	186.0	5.0	1764.0	1764.0

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790136

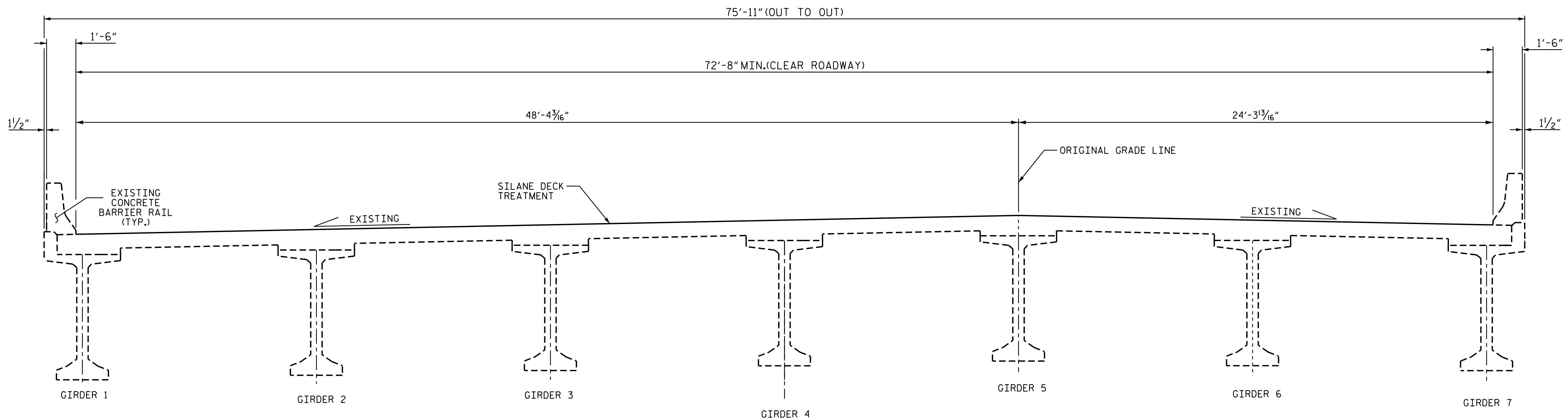
SHEET 2 OF 2



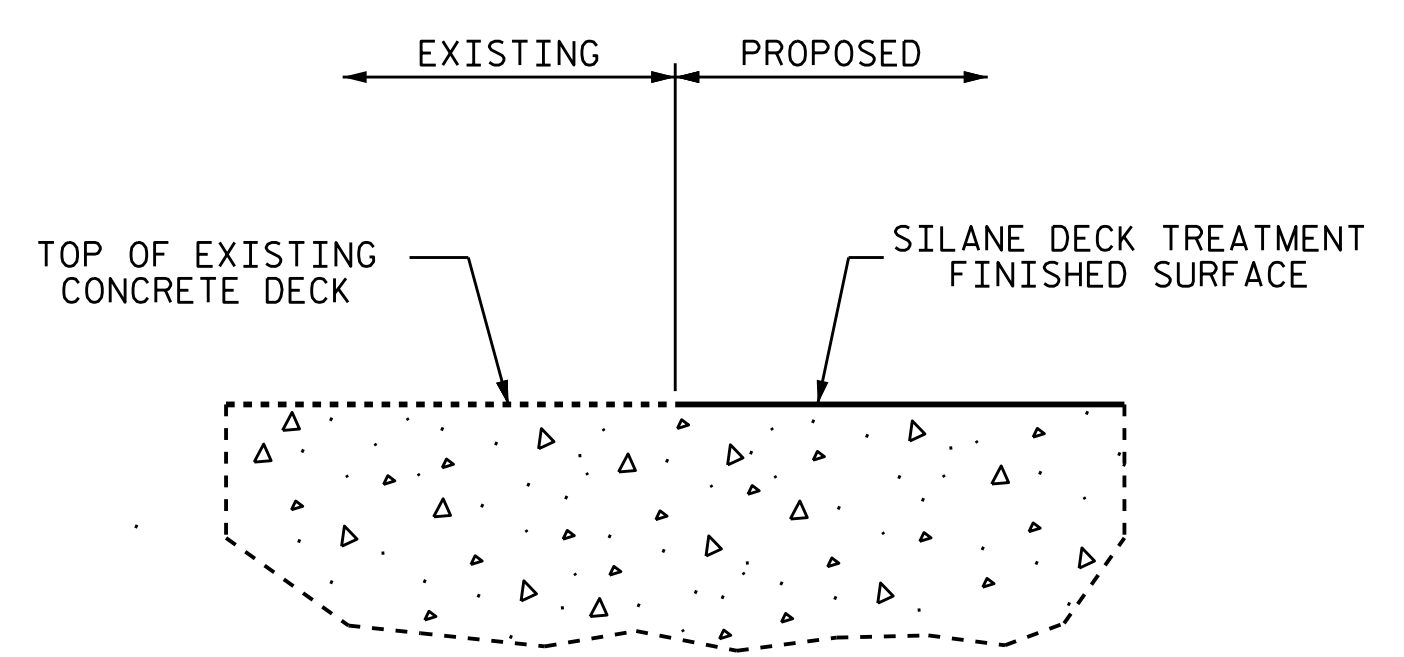
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON I-85 SBL
 OVER NSRR

DRAWN BY : E.A.BAYISSA DATE : 05/2018
 CHECKED BY : FRAN.LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S6-2
2			4			TOTAL SHEETS 5

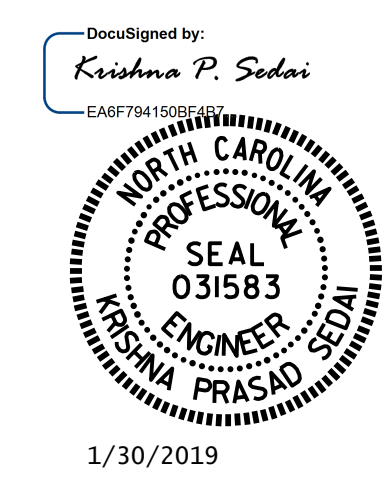


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790136

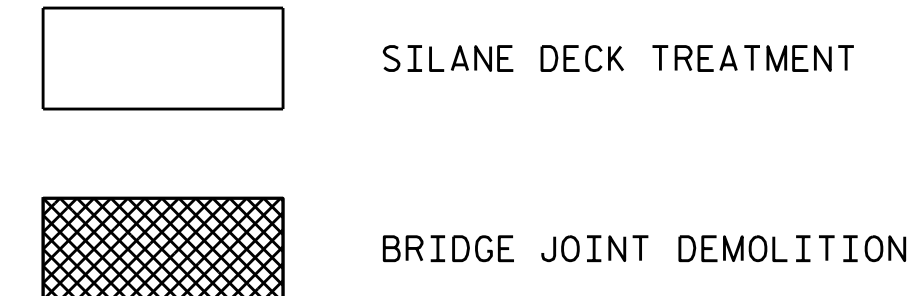


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : E.BAYISSA DATE : 05/2018
 CHECKED BY : FRAN.LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

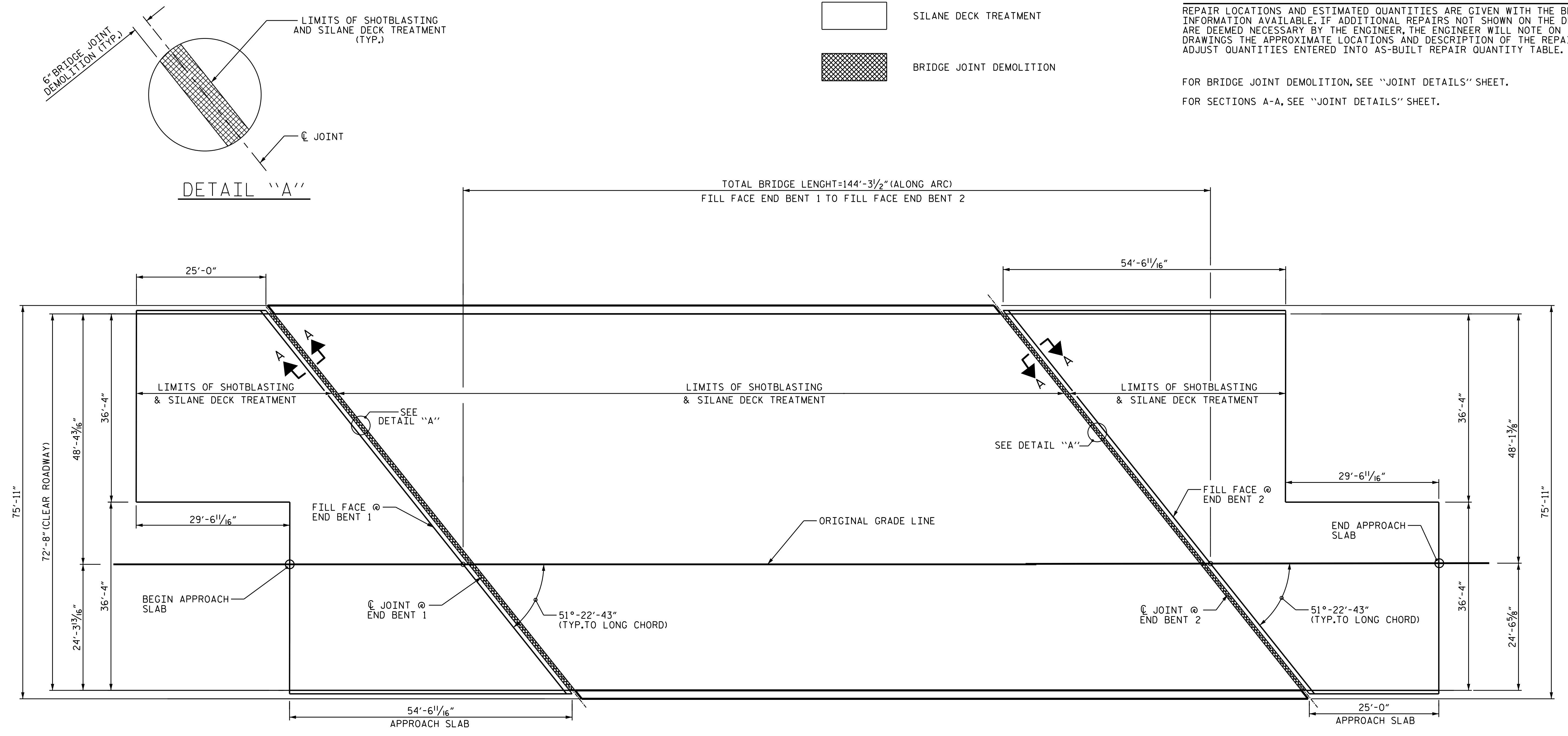
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



NOTES:

REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.
FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

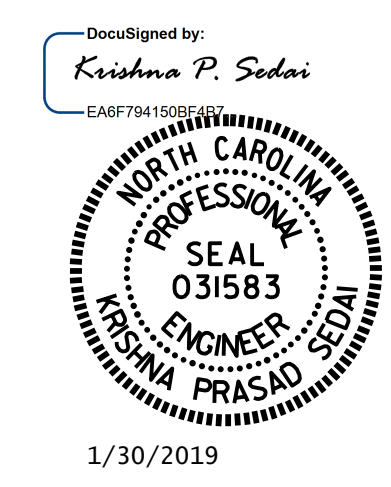


PLAN OF SPAN A

PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790136

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	632.0 SQ.YD.	
SILANE DECK TREATMENT	632.0 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	186.0 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3.0 SQ.FT.	
SHOTBLASTING BRIDGE DECK	1132.0 SQ.YD.	
SILANE DECK TREATMENT	1132.0 SQ.YD.	

* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

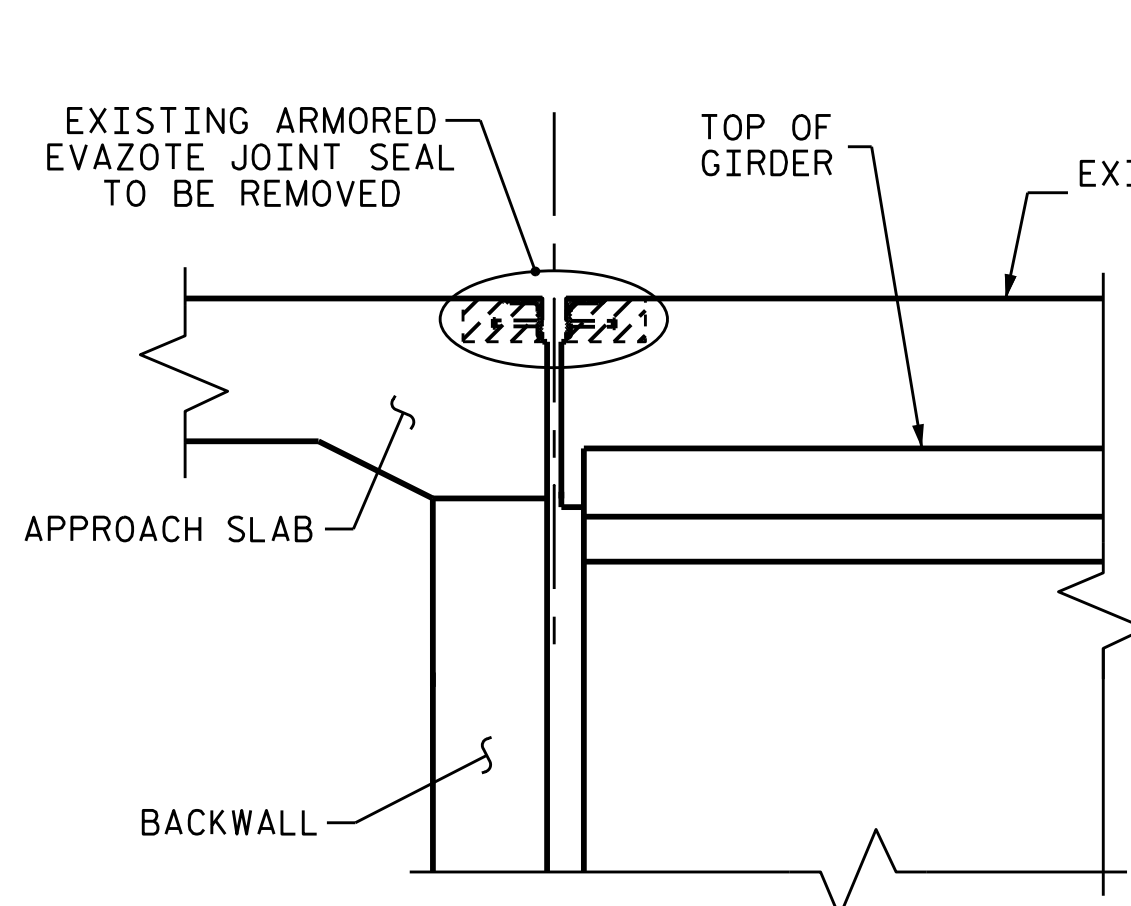


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
LIMITS OF SHOTBLASTING AND SILANE DECK TREATMENT

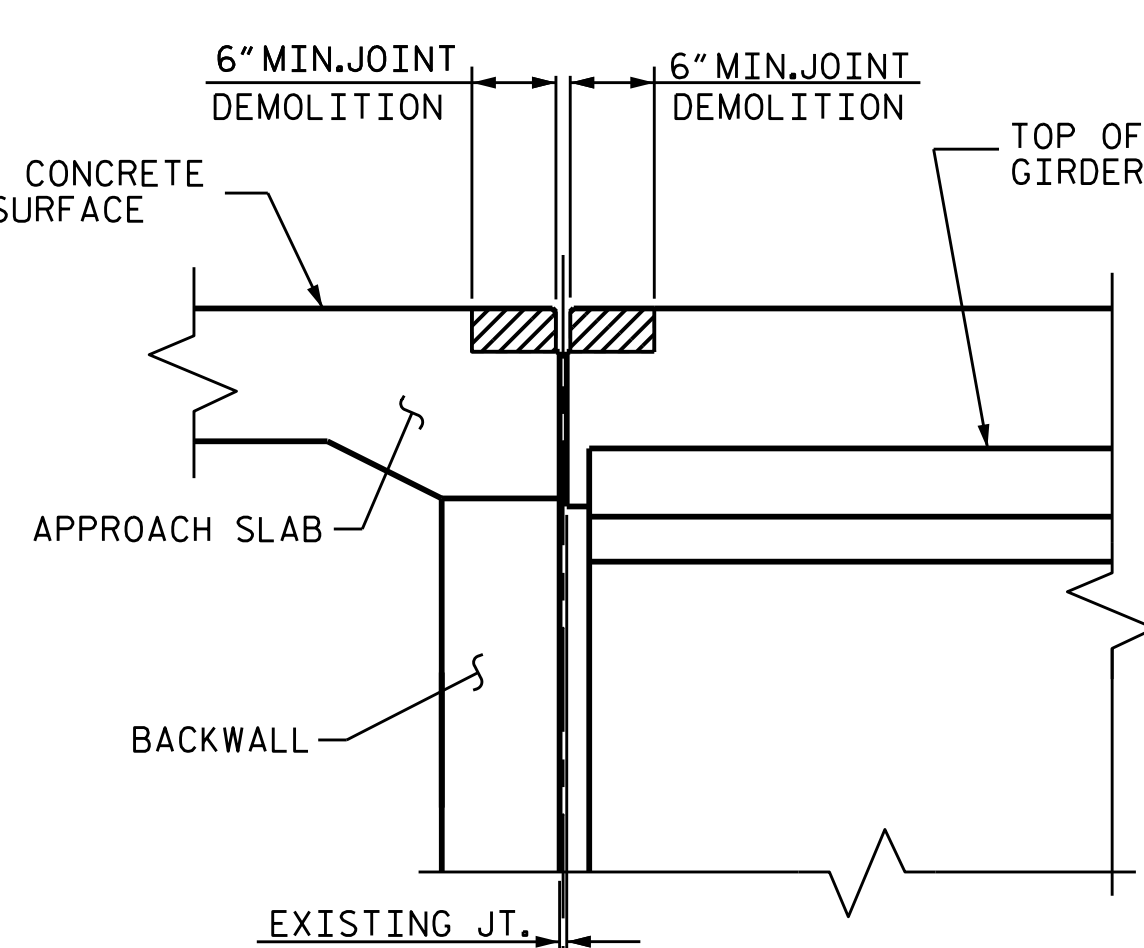
DRAWN BY: E.A.BAYISSA DATE: 05/2018
CHECKED BY: FRAN.LEA DATE: 05/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

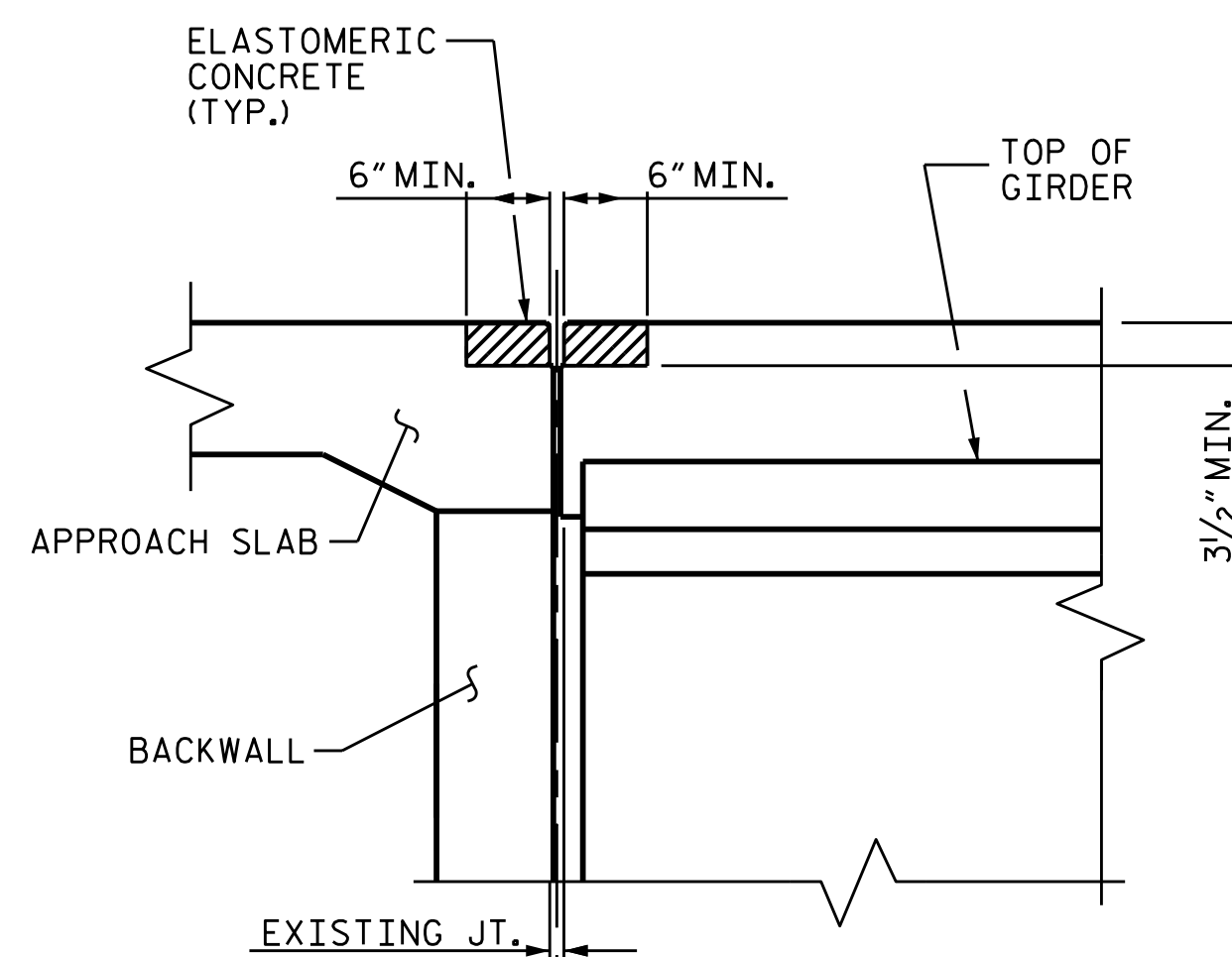
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			56-4
2			4			5



EXISTING JOINT



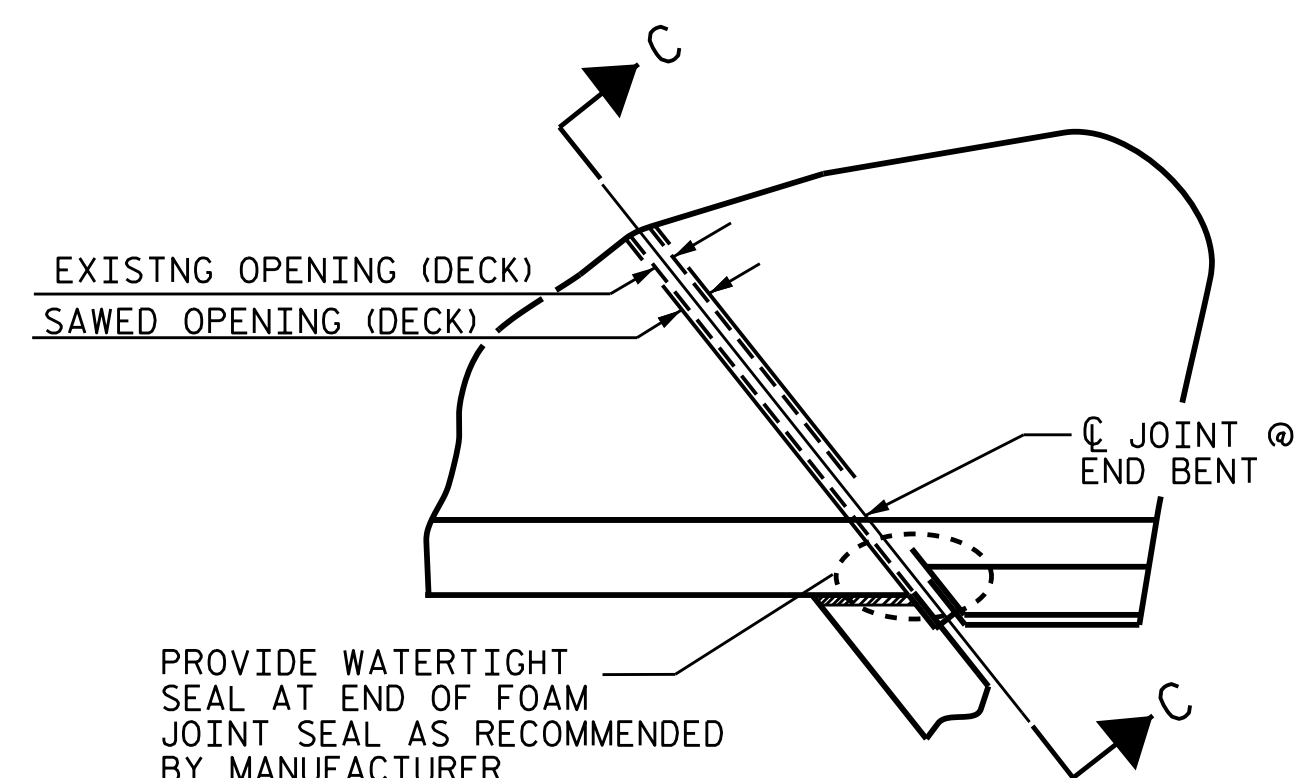
MINIMUM EXISTING JOINT DEMOLITION



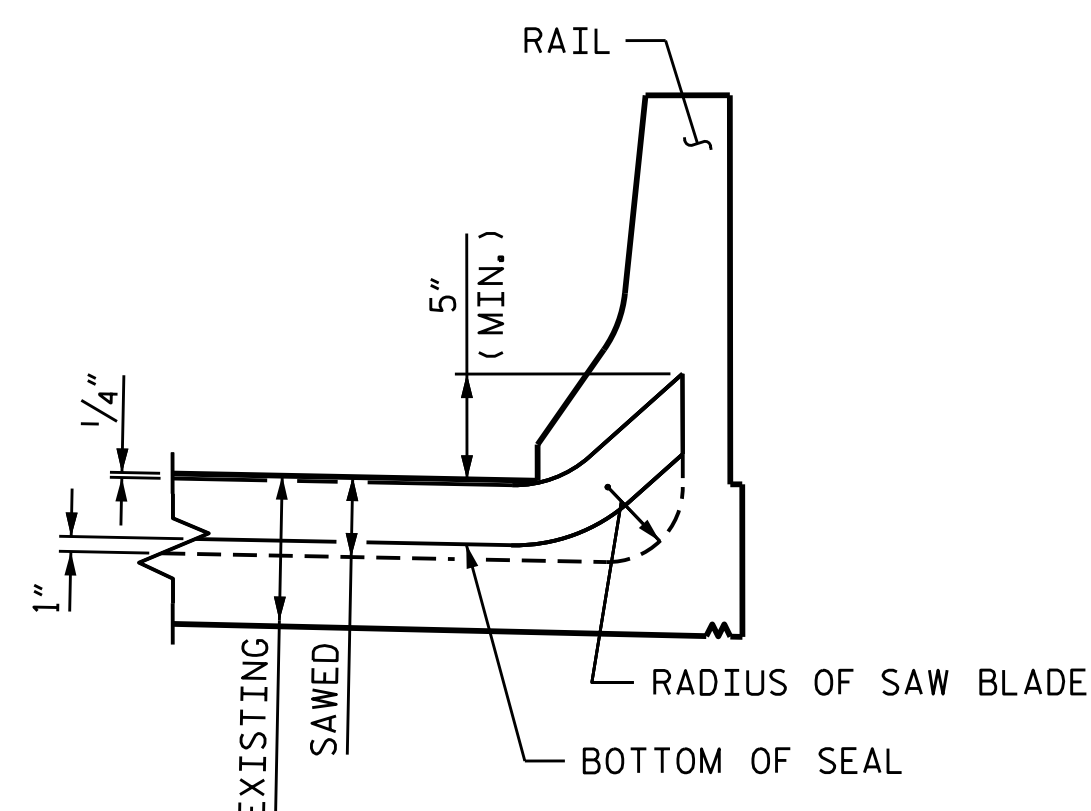
PROPOSED JOINT PRE-SAWED DIMENSIONS

JOINT SEAL INSTALLATION SEQUENCE AT END BENTS

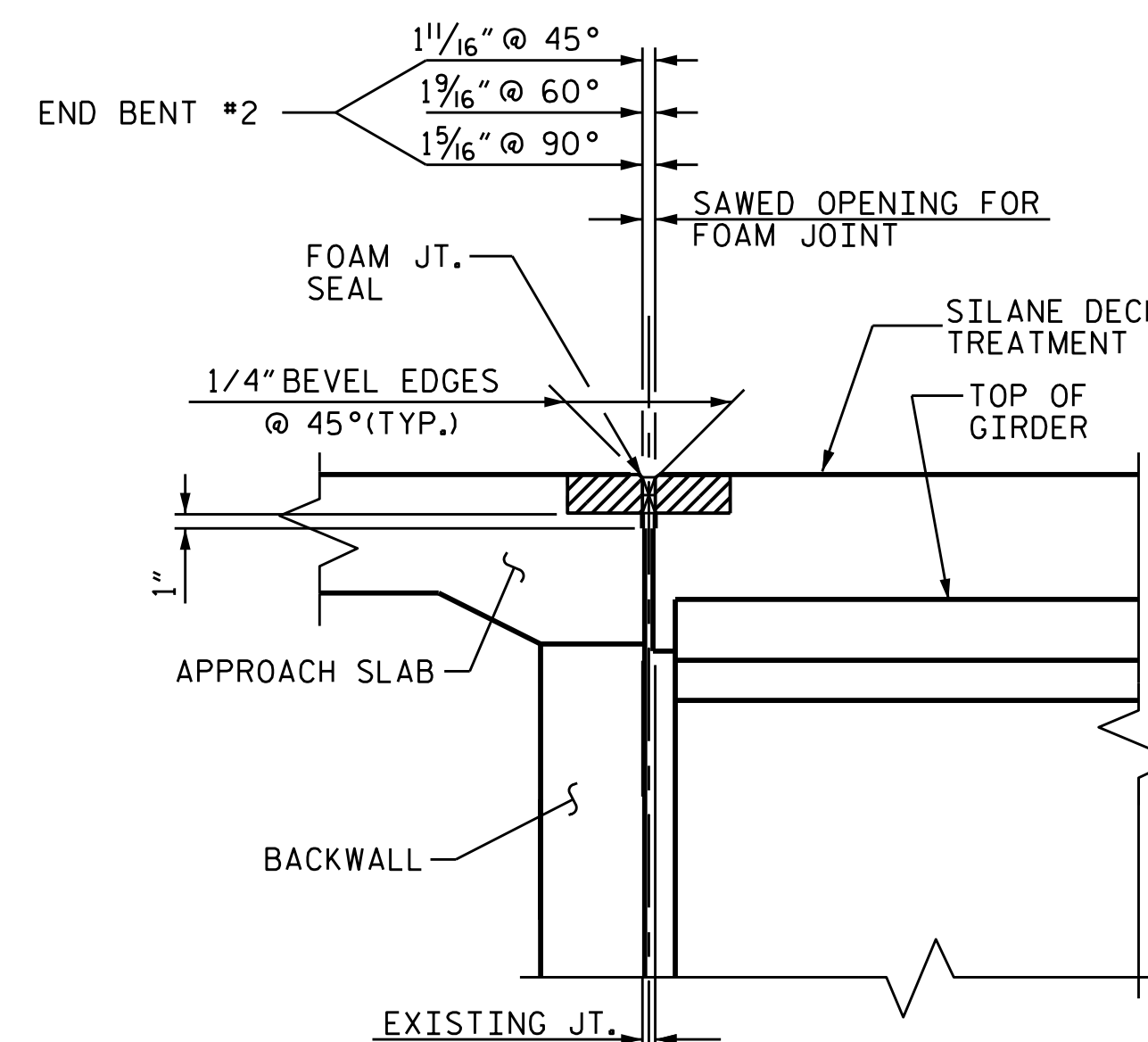
SECTION A-A



PLAN (@ END BENT)



SECTION C-C



PROPOSED FOAM JOINT SEAL

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4" NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

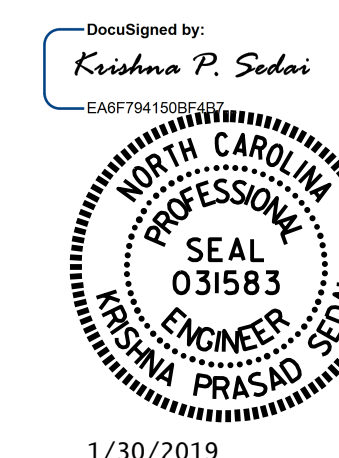
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	27.0 CU. FT.
END BENT 2	27.0 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	93 LIN. FT.
END BENT 2	93 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	* 1 SQ. FT.
END BENT 2	* 1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790136



1/30/2019

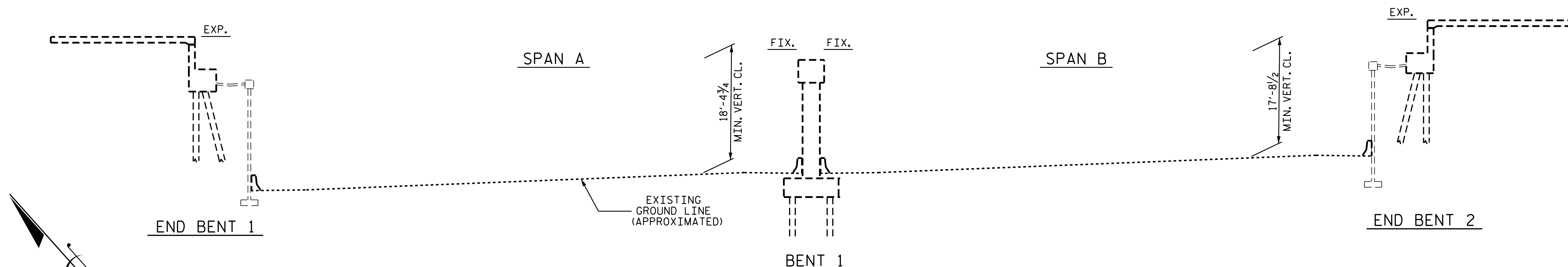
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : E. A. BAYISSA DATE : 05/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

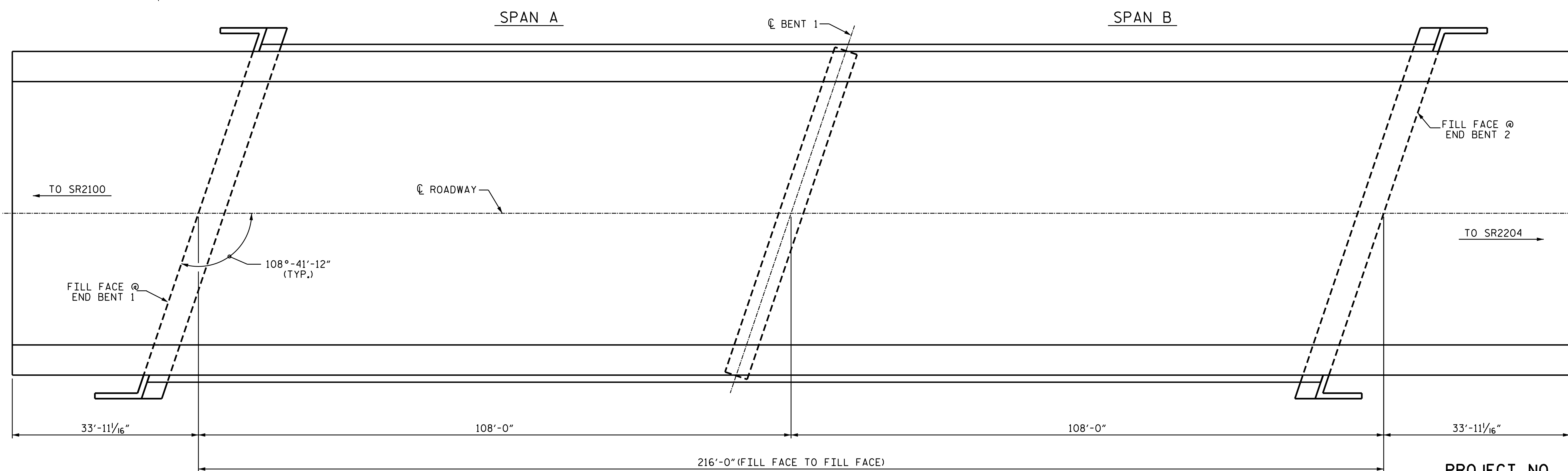
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



SECTION ALONG C ROADWAY

NOTES

PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND ROUTINE INSPECTION REPORT DATED 07/18/2018.
BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.



PLAN

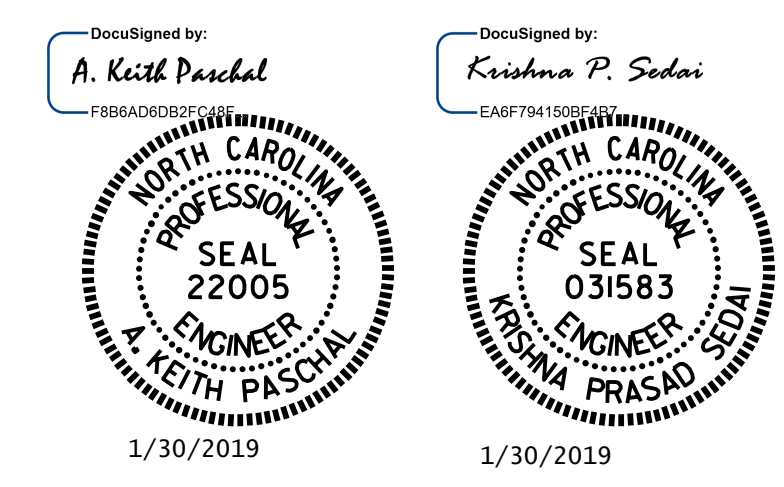
PROJECT NO. I-5858
ROWAN COUNTY
BRIDGE NO. 790419

SHEET 1 OF 2

SCOPE OF WORK

- JOINT DEMOLITION OF EXISTING JOINTS.
- PREPARE BRIDGE JOINTS AND INSTALL JOINT SEALS.
- REPAIR CONCRETE DECK AREAS.
- PREPARE CONCRETE DECK SURFACE BY SHOTBLASTING.
- APPLY SILANE DECK TREATMENT.

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.
RESIDENT ENGINEER _____ DATE _____

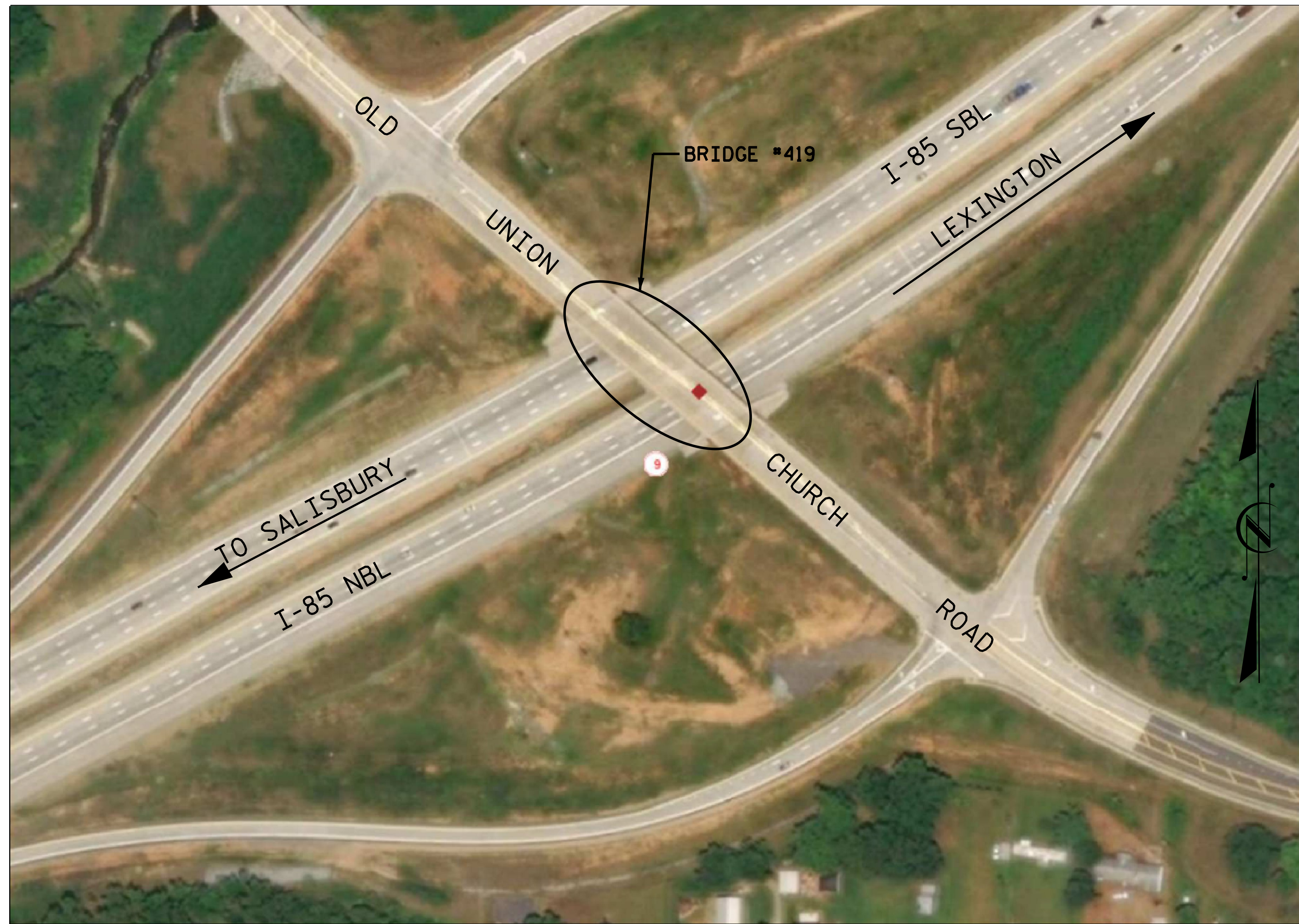


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
SR1915 (OLD UNION CHURCH RD.)
OVER I-85/US52

DRAWN BY : C. RUIZ DATE : 3/2018
CHECKED BY : FRANCESCA LEA DATE : 05/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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



LATITUDE:35°40'42.32"; LONGITUDE:80°24'49.21"

LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

NOTES

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IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THAT SHOWN IN THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

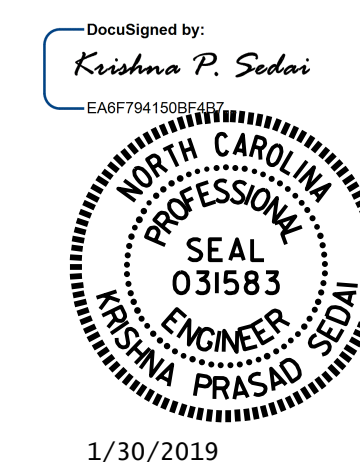
FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

BRIDGE NO. 419	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SO. FT.	SO. FT.	SO. YD.	SO. YD.
TOTAL	125	37	125	5	1846	1846

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790419

SHEET 2 OF 2



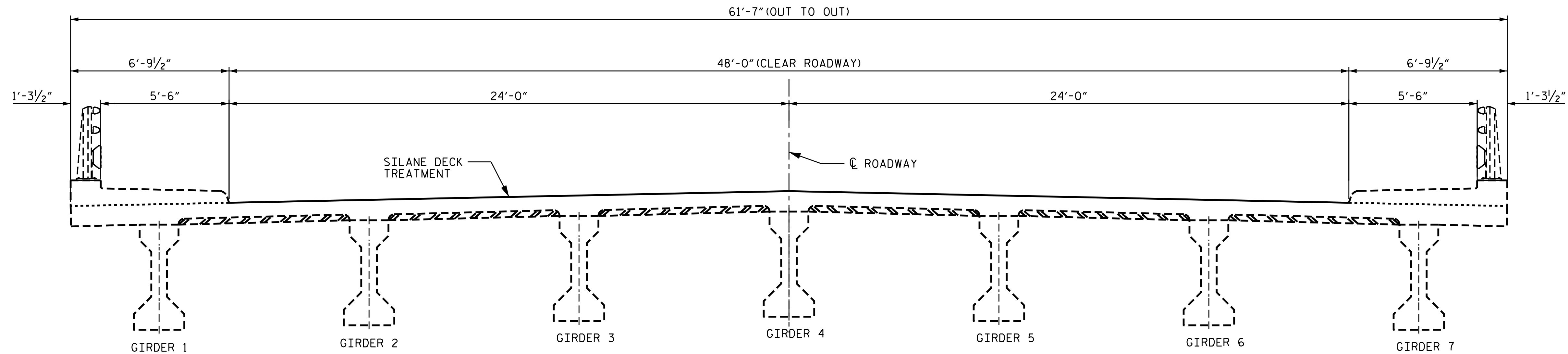
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE ON SR1915
 (OLD UNION CHORCH RD.)
 OVER I-85/US52

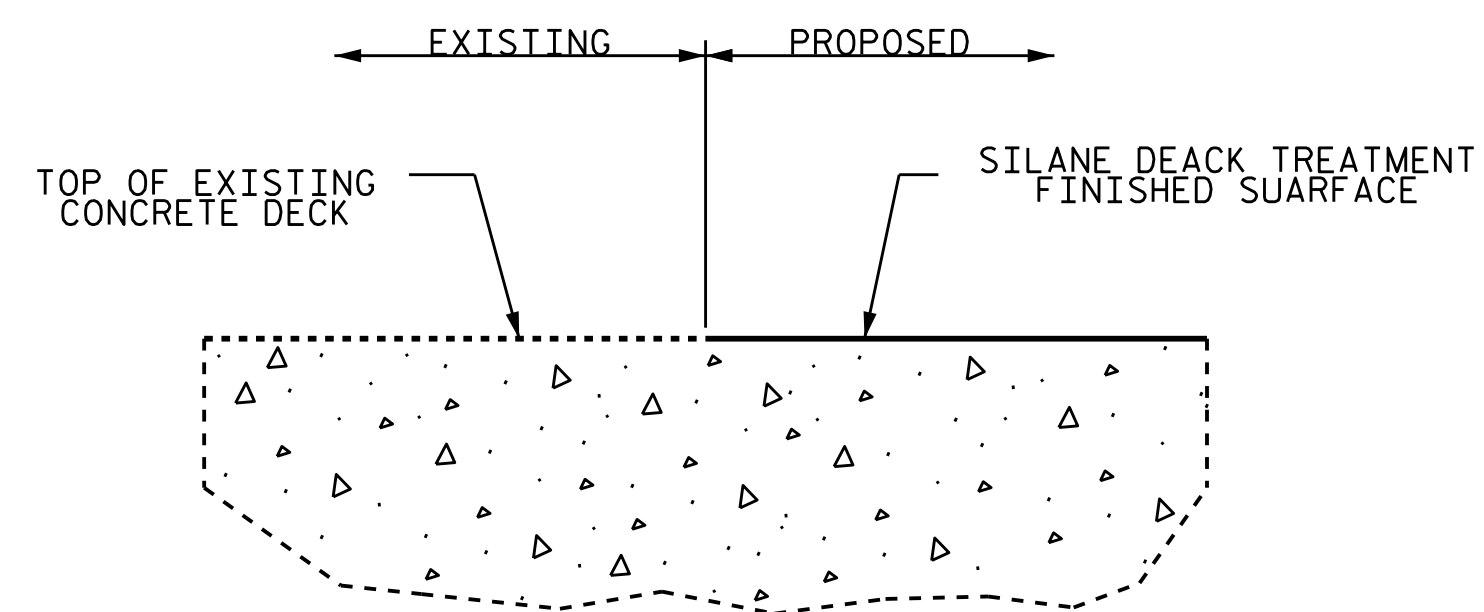
DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 05/2018

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S7-2
2			4			5

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

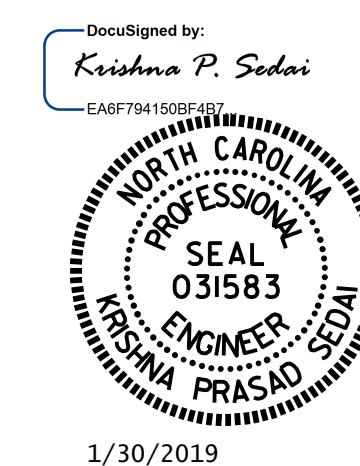


TYPICAL SECTION



DETAIL OF SILANE DECK TREATMENT

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790419

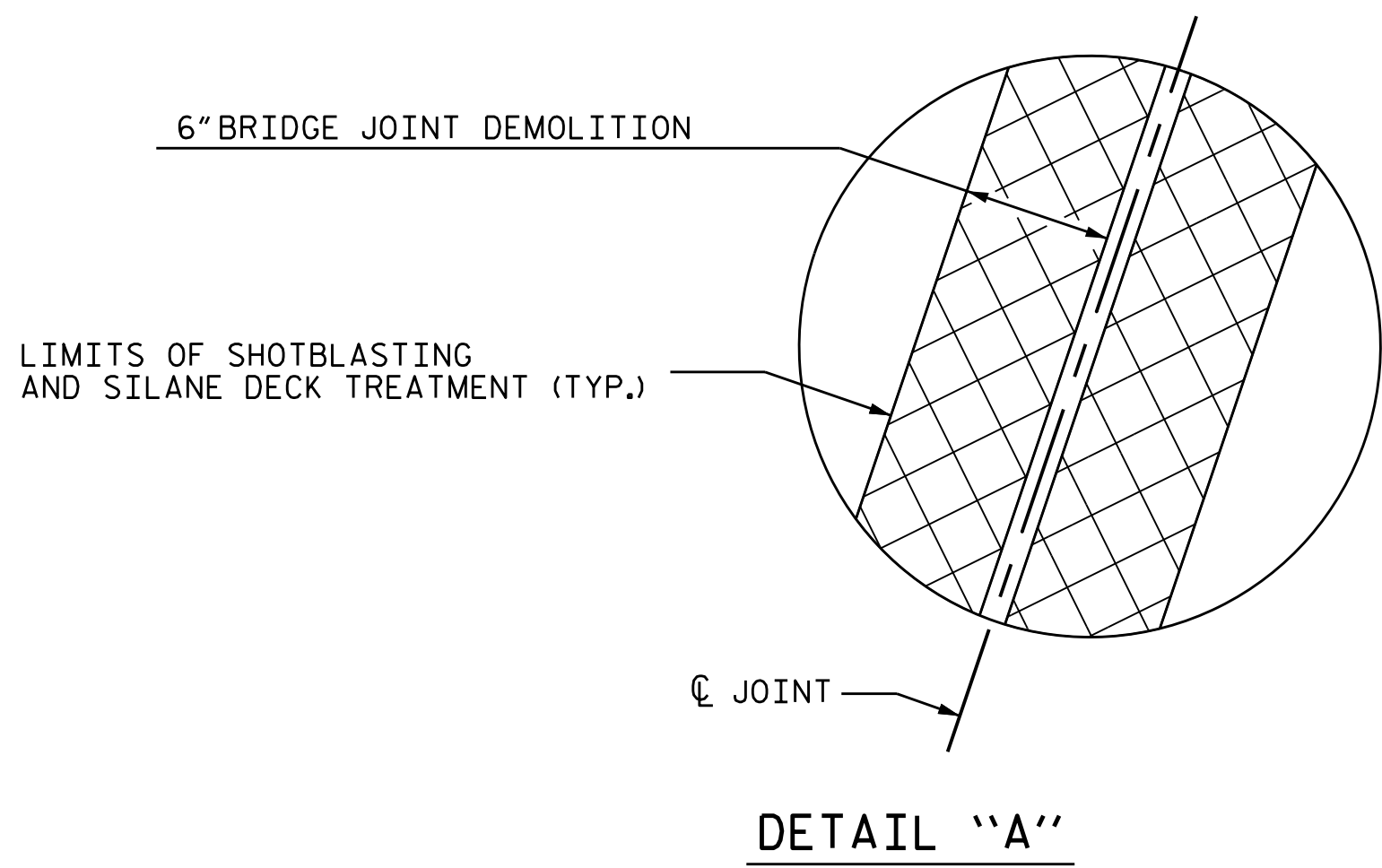


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION

DRAWN BY : C. RUIZ DATE : 3/18
 CHECKED BY : FRANCESCA LEA DATE : 5/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S7-3
2			4			5



NOTES:

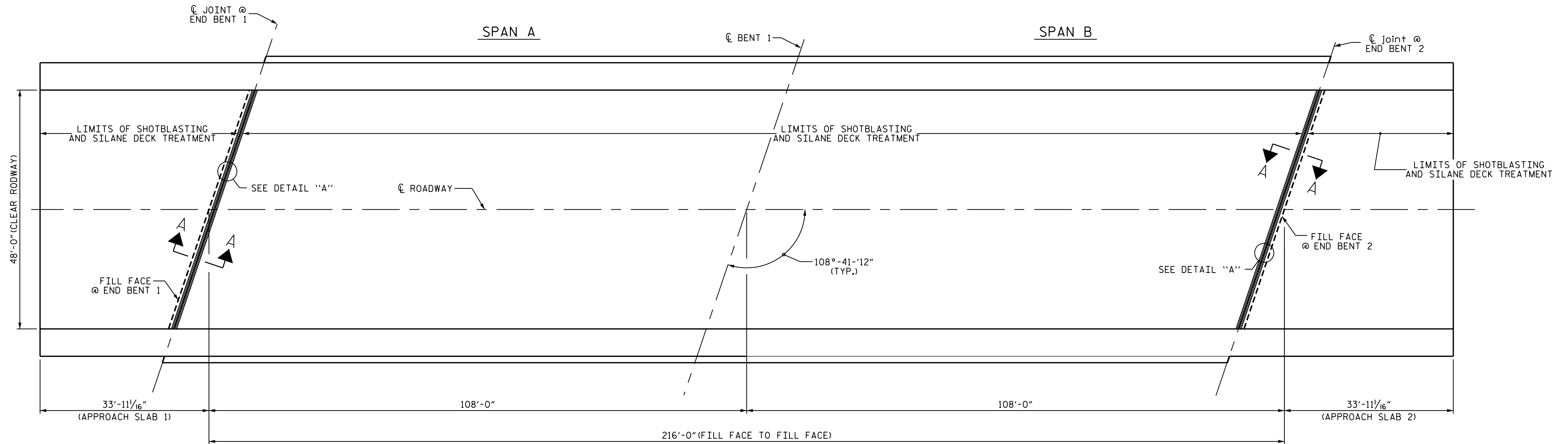
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST QUANTITIES ENTERED INTO AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

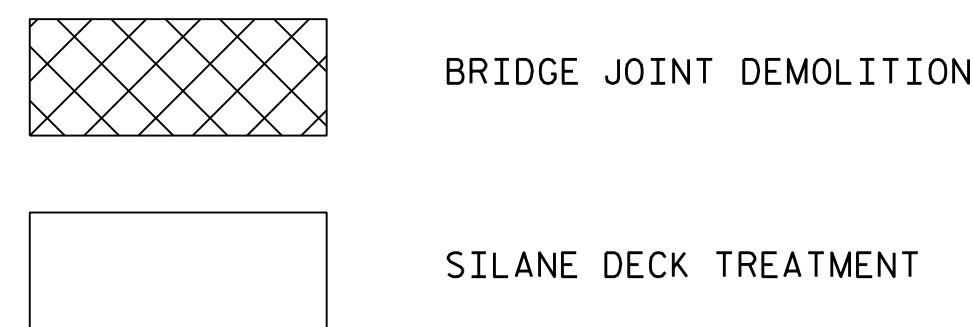
FOR SECTIONS A-A, SEE "JOINT DETAILS" SHEET.

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	452 SQ.YD.	
SILANE DECK TREATMENT	452 SQ.YD.	
BRIDGE DECK QUANTITIES		
	ESTIMATE	ACTUAL
BRIDGE JOINT DEMOLITION	102 SQ.FT.	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	* 3 SQ. FT.	
SHOTBLASTING BRIDGE DECK	1394 SQ.YD.	
SILANE DECK TREATMENT	1394 SQ.YD.	

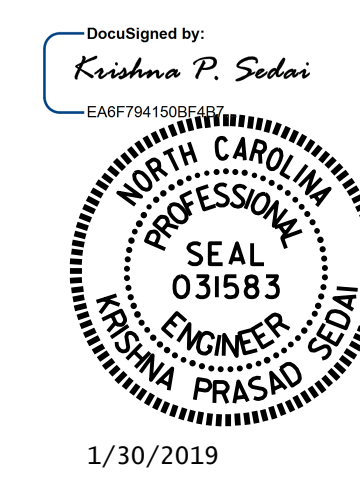
* CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT IS NOT ANTICIPATED. TOKEN PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.



PLAN



PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790419

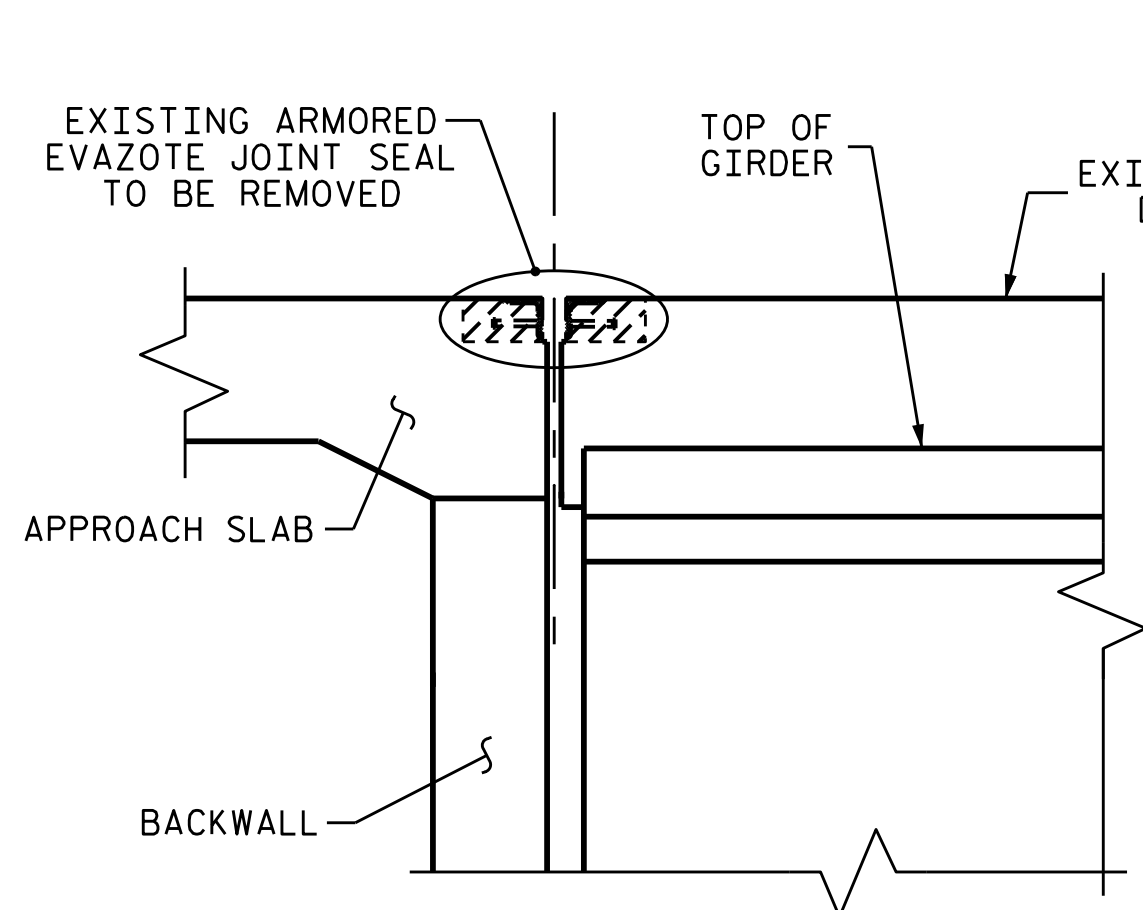


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**LIMITS OF SHOTBLASTING
 AND SILANE DECK TREATMENT**

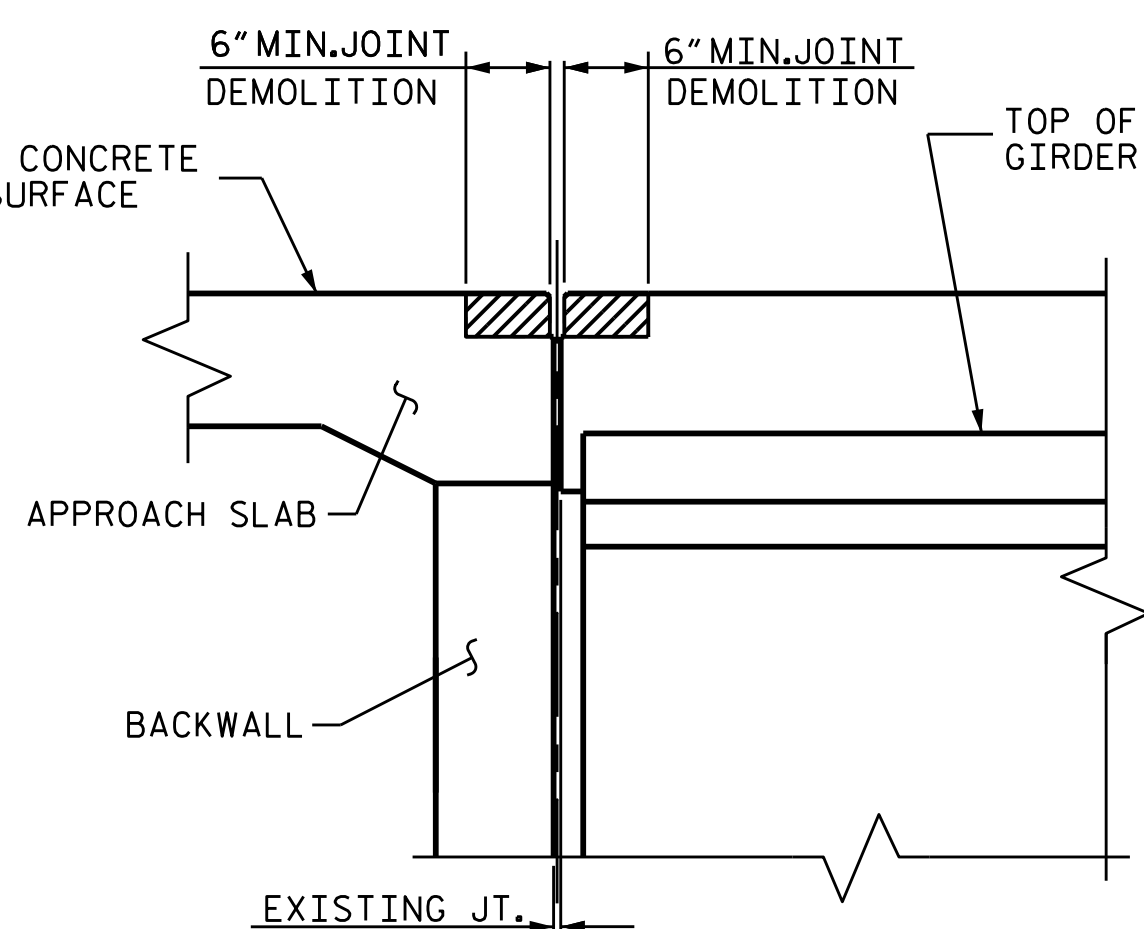
DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 5/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

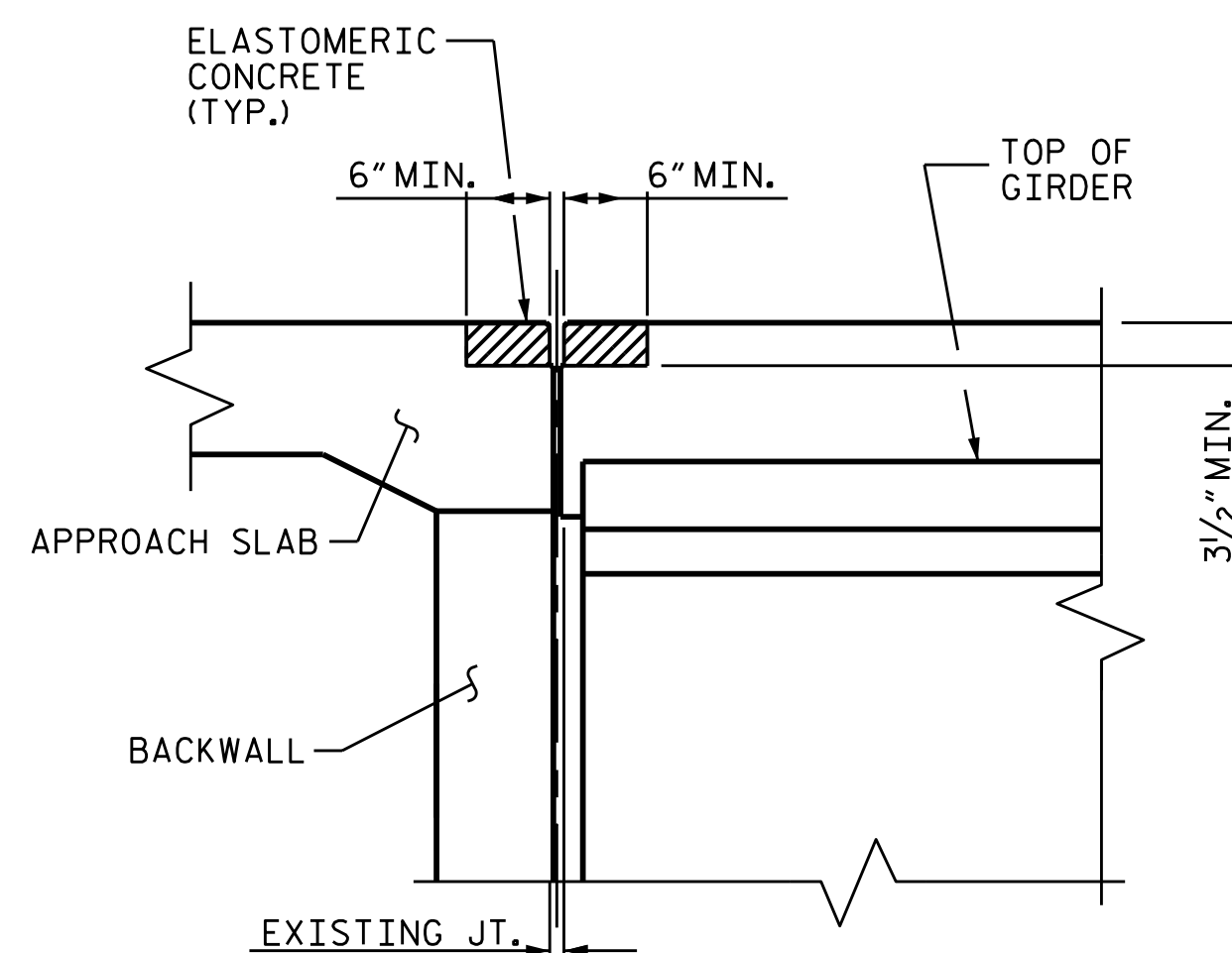
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			



EXISTING JOINT



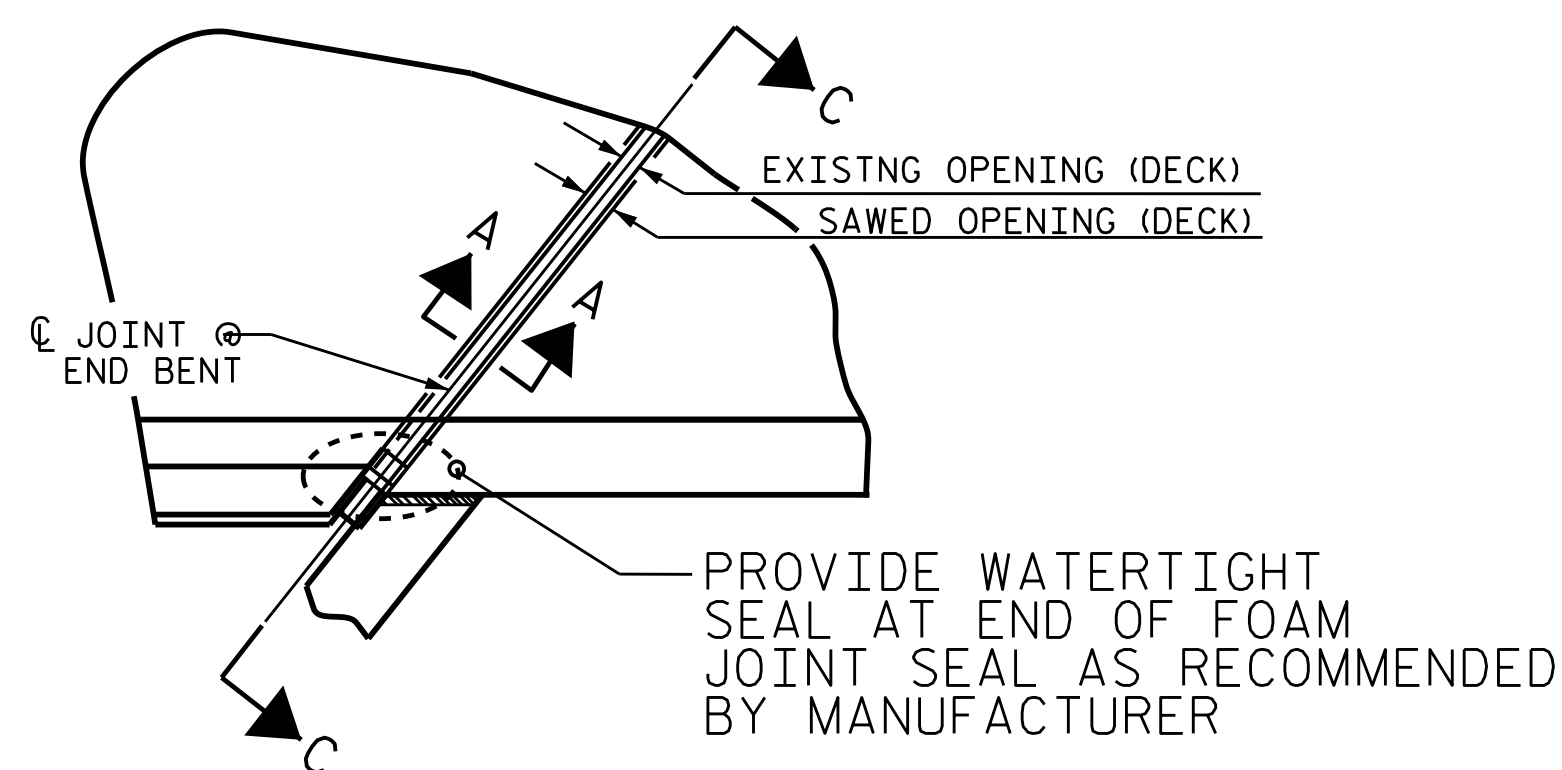
MINIMUM EXISTING JOINT DEMOLITION



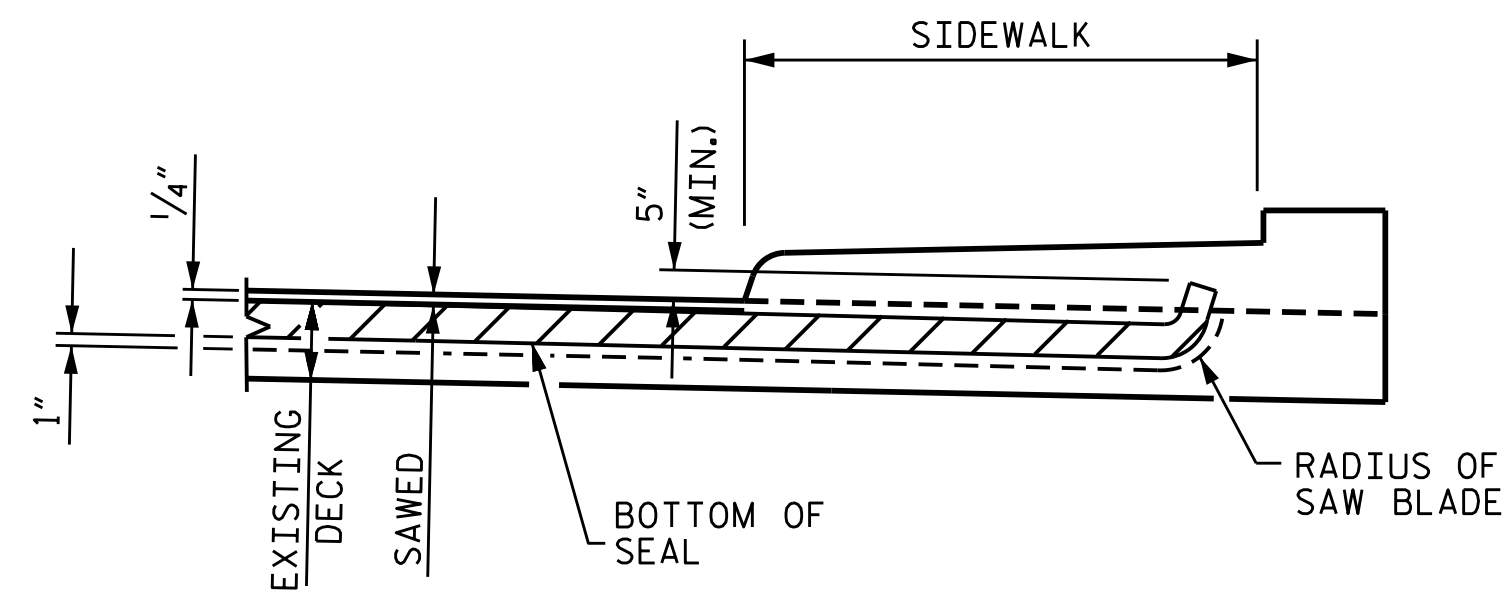
PROPOSED JOINT PRE-SAWED DIMENSIONS

JOINT SEAL INSTALLATION SEQUENCE AT END BENTS

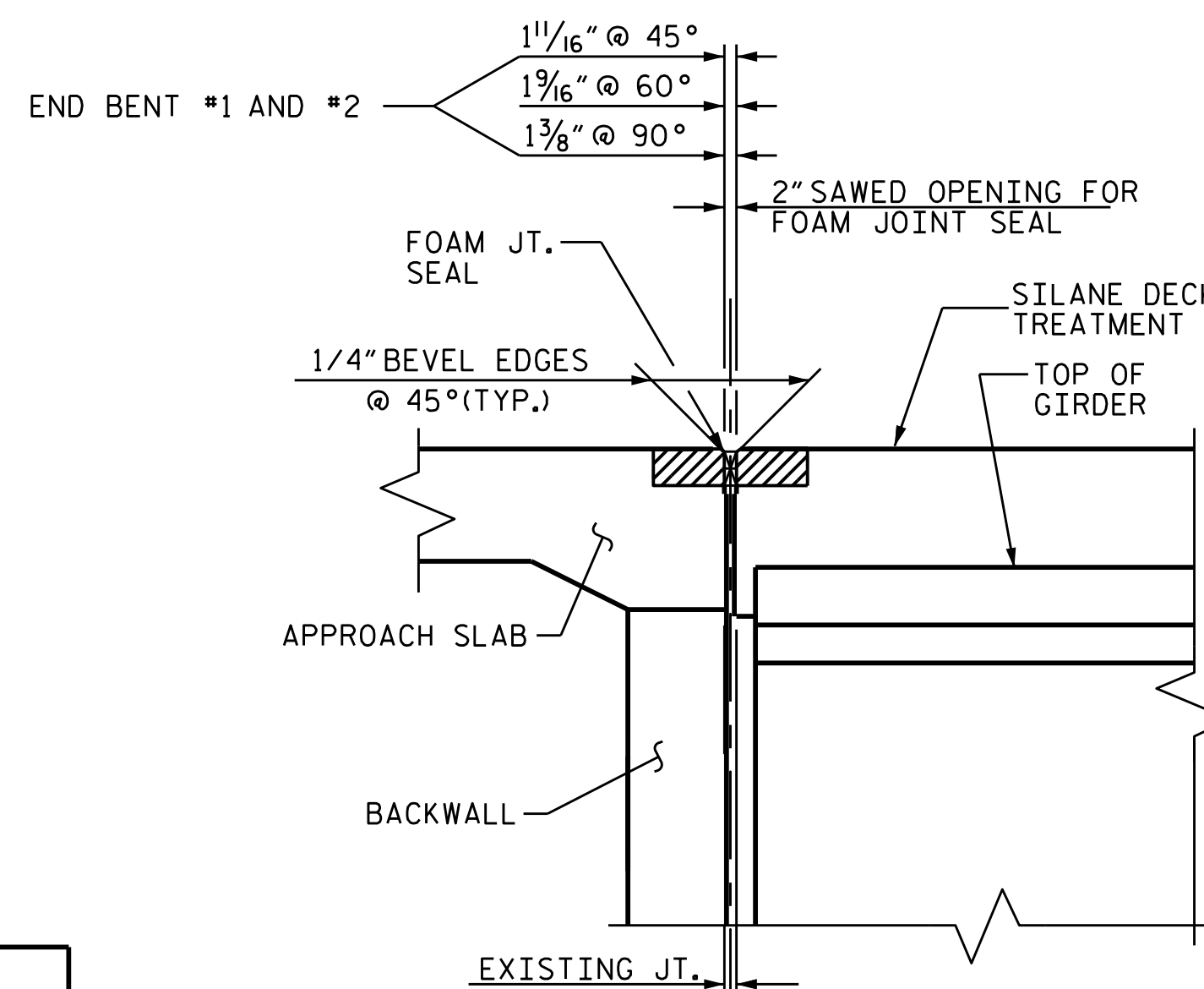
SECTION A-A



PLAN (@ END BENT)



SECTION C-C



PROPOSED FOAM JOINT SEAL

NOTES:

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4\"/>

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED, AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

THE INSTALLED FOAM JOINTS FOR PRESERVATION SHALL BE WATERTIGHT.

QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

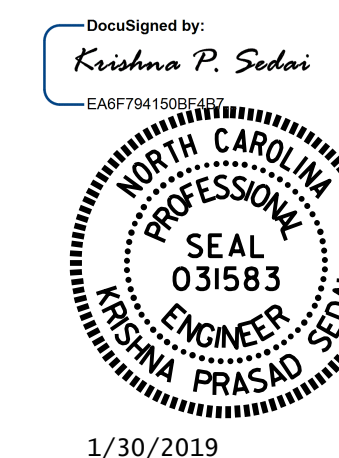
FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

ELASTOMERIC CONCRETE FOR PRESERVATION	
END BENT 1	18.5 CU. FT.
END BENT 2	18.5 CU. FT.
FOAM JOINT SEALS FOR PRESERVATION	
END BENT 1	62.5 LIN. FT.
END BENT 2	62.5 LIN. FT.
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	
END BENT 1	* 1 SQ. FT.
END BENT 2	* 1 SQ. FT.

* CONCRETE FOR JOINT REPAIR IS NOT ANTICIPATED. "CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT" PAY ITEM IS INDICATED FOR PRICING PURPOSE IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. I-5858
ROWAN COUNTY
 BRIDGE NO. 790419



1/30/2019

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT DETAILS

DRAWN BY : C. RUIZ DATE : 3/2018
 CHECKED BY : FRANCESCA LEA DATE : 5/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5
2			4			

