

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BEAUFORT & PITT COUNTIES

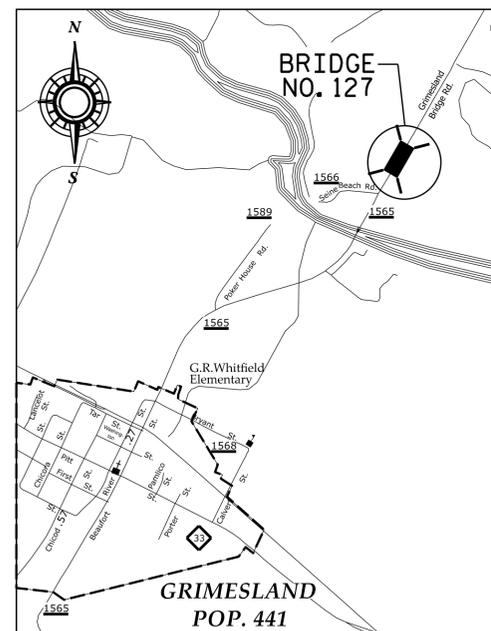
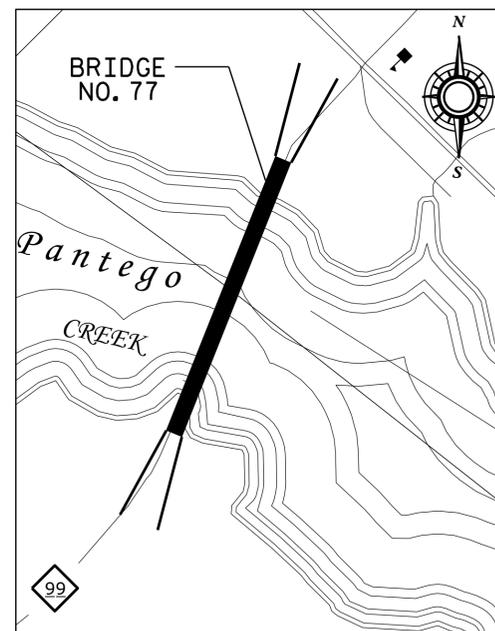
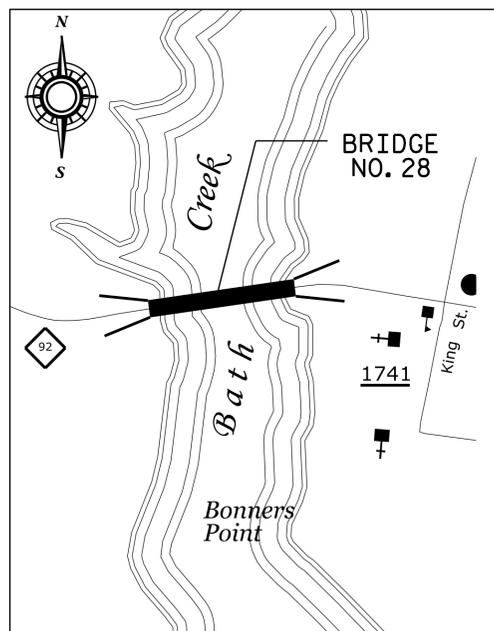
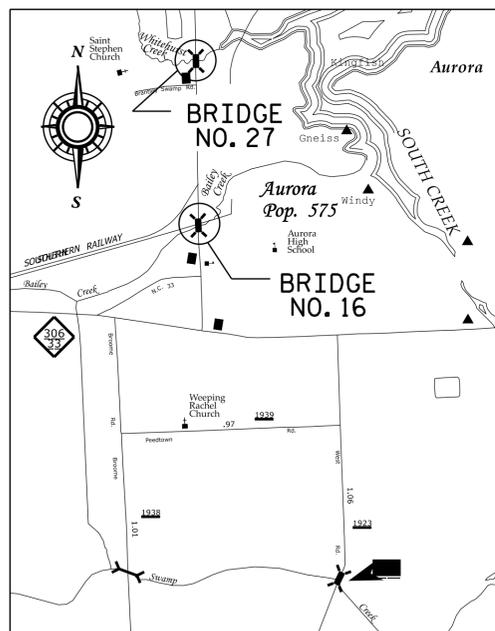
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.56	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
15BPR.56		P.E.	
15BPR.56		CONST.	



LOCATION: BEAUFORT CO.: BRIDGE #060016 ON NC 306 OVER BAILEY CREEK.
BRIDGE #060027 ON NC 306 OVER WHITEHURST CREEK.
BRIDGE #060028 ON NC 92 OVER BATH CREEK.
BRIDGE #060077 ON NC 99 OVER PANTEGO CREEK.

PITT CO.: BRIDGE #730127 ON SR 1565 OVER TAR RIVER.

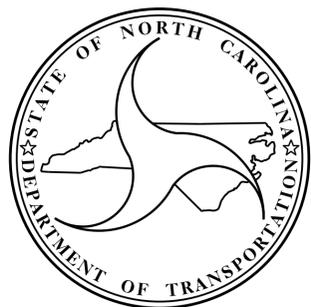
TYPE OF WORK: CONCRETE BRIDGE DECK REHABILITATION BY SCARIFICATION, SHOTBLASTING AND PLACEMENT OF POLYMER CONCRETE OVERLAY; RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS; SHOTBLASTING AND SILANE DECK TREATMENT; EPOXY OVERLAY; SUBSTRUCTURE CONCRETE REPAIRS WITH SHOTCRETE AND EPOXY RESIN INJECTION; REPLACEMENT OF STEEL BRIDGE SPAN.



VICINITY MAP

PROJECT: 15BPR.56

CONTRACT NO: C204459



DESIGN DATA

BRIDGE #16 ADT 2020	=	4,300
BRIDGE #27 ADT 2020	=	2,900
BRIDGE #28 ADT 2020	=	3,400
BRIDGE #77 ADT 2020	=	4,500
BRIDGE #127 ADT 2019	=	4,100

PROJECT LENGTH

BRIDGE #16	=	0.017 MILE
BRIDGE #27	=	0.025 MILE
BRIDGE #28	=	0.199 MILE
BRIDGE #77	=	0.635 MILE
BRIDGE #127	=	0.372 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 :

May 17, 2022

Kristy W. Alford, P.E.
PROJECT ENGINEER

P. Korey Newton, P.E.
PROJECT DESIGN ENGINEER

PROJECT: 15BPR.56

CONTRACT NO: C204459

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS



BEAUFORT & PITT COUNTIES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.56	1A	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
15BPR.56		P.E.	
15BPR.56		CONST.	

LOCATION: BEAUFORT CO.: BRIDGE #060016 ON NC 306 OVER BAILEY CREEK.
BRIDGE #060027 ON NC 306 OVER WHITEHURST CREEK.
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BRIDGE #060077 ON NC 99 OVER PANTEGO CREEK.

PITT CO.: BRIDGE #730127 ON SR 1565 OVER TAR RIVER.

INDEX OF STRUCTURES SHEETS

<u>SHEET No.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
1A	INDEX OF SHEETS
S-1 THRU S-2	LOCATION SKETCHES
S-3	TOTAL BILL OF MATERIAL
S-4	PRESTRESSED CONCRETE GIRDER REPAIR DETAILS
S-5	TYPICAL CAP AND COLUMN REPAIR DETAILS
S-6	PRESTRESSED CONCRETE PILE REPAIR DETAILS

<u>SHEET No.</u>	<u>DESCRIPTION</u>
STRUCTURE No. 060027	
S2-1	GENERAL DRAWING
S2-2	TYPICAL SECTION
S2-3	DECK SURFACE REPAIR
S2-4	JOINT REPAIR DETAILS
S2-5	END BENT REPAIR
S2-6 THRU S2-9	BENT REPAIR

<u>SHEET No.</u>	<u>DESCRIPTION</u>
STRUCTURE No. 060077	
S4-1 THRU S4-4	GENERAL DRAWING
S4-5	TYPICAL SECTION
S4-6 THRU S4-7	JOINT REPAIR DETAILS
S4-8 THRU S4-17	DECK SURFACE REPAIR

<u>SHEET No.</u>	<u>DESCRIPTION</u>
STRUCTURE No. 060016	
S1-1	GENERAL DRAWING
S1-2	TYPICAL SECTION
S1-3	DECK SURFACE REPAIR
S1-4	JOINT REPAIR DETAILS
S1-5	END BENT REPAIR
S1-6 THRU S1-8	BENT REPAIR

<u>SHEET No.</u>	<u>DESCRIPTION</u>
STRUCTURE No. 060028	
S3-1 THRU S3-5	GENERAL DRAWING
S3-6	TYPICAL SECTION
S3-7	JOINT REPAIR DETAILS
S3-8 THRU S3-12	DECK SURFACE REPAIR
S3-13 THRU S3-17	DECK UNDERSIDE REPAIR
S3-18	END BENT REPAIR
S3-19 THRU S3-66	BENT REPAIR
S3-67	APPROACH MILLING
S3-68 THRU S3-78	SPAN 25 REPLACEMENT

<u>SHEET No.</u>	<u>DESCRIPTION</u>
STRUCTURE No. 730127	
S5-1 THRU S5-5	GENERAL DRAWING
S5-6	TYPICAL SECTION
S5-7 THRU S5-8	JOINT REPAIR DETAILS
S5-9 THRU S5-13	DECK SURFACE REPAIR



Prepared in the Office of:
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1000 BIRCH RIDGE DR.
RALEIGH, N.C. 27610



LATITUDE	35° 18' 27.96"
LONGITUDE	76° 47' 57.40"
BRIDGE NO.	060016



LATITUDE	35° 19' 06.07"
LONGITUDE	76° 47' 57.15"
BRIDGE NO.	060027



LATITUDE	35° 28' 38.49"
LONGITUDE	76° 49' 02.06"
BRIDGE NO.	060028

LOCATION SKETCH

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

NOTES:

- FOR SCOPE OF WORK, 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 REMOVAL OF EXISTING STRUCTURE AT BRIDGE 060028, SEE SPECIAL PROVISIONS.
- FOR STEEL REINFORCED ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.
- FOR CLASSIC CONCRETE BRIDGE RAIL, SEE SPECIAL PROVISIONS.
- FOR WORK IN, OVER OR ADJACENT TO NAVIGABLE WATERS, SEE SPECIAL PROVISIONS.
- FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.
- FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.
- FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.
- FOR EPOXY OVERLAY SYSTEM II, SEE SPECIAL PROVISIONS.
- FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- FOR POLYMER CONCRETE BRIDGE DECK OVERLAY, SEE SPECIAL PROVISIONS.

- FOR OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE, SEE SPECIAL PROVISIONS.
- FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECURING OF VESSELS, SEE SPECIAL PROVISIONS.
- FOR ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.
- REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED IN TO REPAIR QUANTITIES TABLE.

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.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATION OF BRIDGE DECK.

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO.: 060016
060027
060028



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

LOCATION SKETCHES

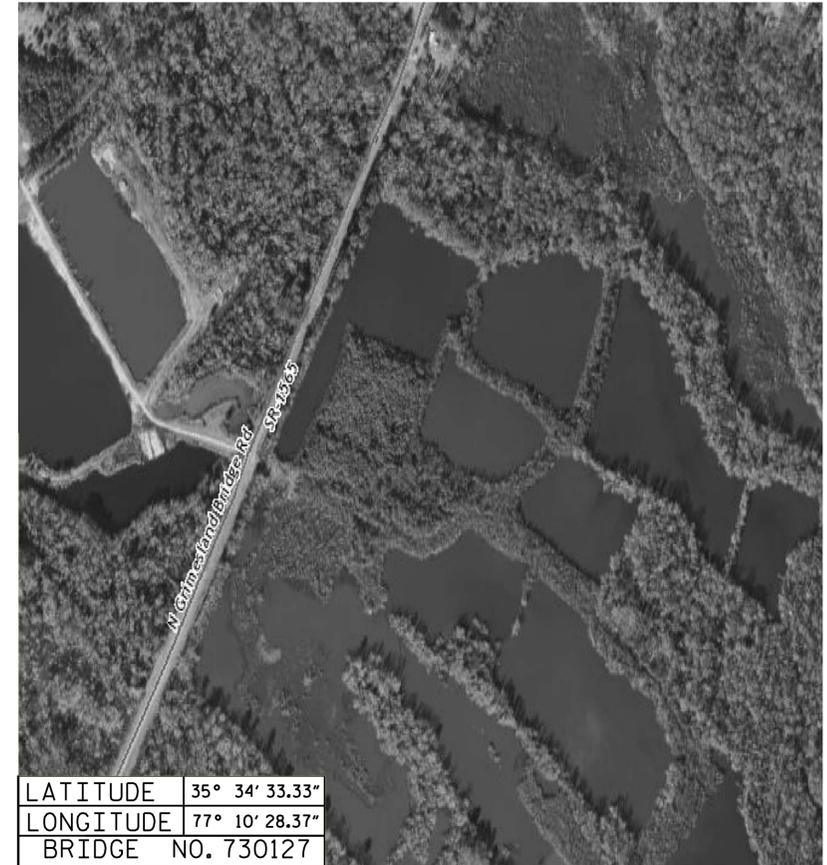
DRAWN BY : S. T. SANDOR DATE : 10/2020
 CHECKED BY : W. C. SMITH DATE : 10/2020

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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



LATITUDE	35° 32' 31.08"
LONGITUDE	76° 38' 11.88"
BRIDGE	NO. 060077



LATITUDE	35° 34' 33.33"
LONGITUDE	77° 10' 28.37"
BRIDGE	NO. 730127

LOCATION SKETCH

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

PROJECT NO. 15BPR.56
 BEAUFORT & PITT COUNTIES
 BRIDGE NO.: 060077 & 730127



Designed by
P. Korey Newton
 JPFES014318407
 02/23/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 LOCATION SKETCHES

DRAWN BY : S. T. SANDOR DATE : 10/2020
 CHECKED BY : W. C. SMITH DATE : 10/2020

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

TOTAL BILL OF MATERIAL															
BRIDGE NO.	INCIDENTAL MILLING	ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	ASBESTOS ASSESSMENT	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	APPROX. 22,518 LBS STRUCTURE STEEL	CLASSIC CONCRETE BRIDGE RAIL	CLASS II SURFACE PREPARATION	ELASTOMERIC BEARINGS	SHOTCRETE REPAIRS	EPOXY RESIN INJECTION	REMOVAL OF EXISTING STRUCTURE	FOAM JOINT SEALS FOR PRESERVATION	POURABLE SILICONE JOINT SEALANT
	SO. YD.	TON	TON	LUMP SUM	SO. FT.	SO. FT.	LUMP SUM	LIN. FT.	SO. YD.	LUMP SUM	CU. FT.	LIN. FT.	LUMP SUM	LIN. FT.	LIN. FT.
060016											3.3	4.0			48.0
060027											9.5				48.0
060028	404.4	40	5	LUMP SUM	1445	26,113.8	LUMP SUM	79.42	32.9	LUMP SUM	237.1	15.5	LUMP SUM		507.5
060077												31.0		640.0	
730127														330.0	
TOTAL	404.4	40	5	LUMP SUM	1445	26,113.8	LUMP SUM	79.42	32.9	LUMP SUM	249.9	50.5	LUMP SUM	970.0	603.5

TOTAL BILL OF MATERIAL										
BRIDGE NO.	POLYESTER POLYMER CONCRETE MATERIALS	EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	ELASTOMERIC CONCRETE FOR PRESERVATION	EPOXY OVERLAY SYSTEM II	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR POLYMER CONCRETE OVERLAY	PLACING AND FINISHING POLYMER CONCRETE OVERLAY	SCARIFYING BRIDGE DECK	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	CU. YD.	CU. YD.	CU. FT.	SO. FT.	SO. FT.	SO. YD.	SO. YD.	SO. YD.	SO. YD.	SO. YD.
060016				3520.0						
060027									577.8	577.8
060028	121.6	121.6				32.9	3,143.7	3,143.7	3,143.7	
060077			160.0		640.0				12,025.0	12,025.0
730127			82.5		330.0				6,704.0	6,704.0
TOTAL	121.6	121.6	242.5	3520.0	970.0	32.9	3,143.7	3,143.7	22,450.5	19,306.8

NOTES:

AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT ITEMS SHOWN BELOW WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THESE ITEMS, OR OTHER WORK WILL BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH WORK IN A TIMELY MANNER, AS DETERMINED IN THE FIELD. SUCH WORK SHALL BE CONSIDERED EXTRA WORK AND SHALL BE ADDRESSED AS PER ARTICLE 104-7 OF THE STANDARD SPECIFICATIONS. PROJECT SPECIAL PROVISIONS THAT OUTLINE REQUIREMENTS FOR THESE POTENTIAL ADDITIONAL WORK ITEMS HAVE BEEN PROVIDED IN PROJECT DOCUMENTS, BUT NO QUANTITIES HAVE BEEN LISTED. ACTUAL PAY ITEMS, QUANTITIES, AND COSTS WILL BE ESTABLISHED, AS REQUIRED, IF EXTRA WORK IS ENCOUNTERED.

UNANTICIPATED ITEMS:

ITEM NO.	DESCRIPTION	UNIT
1	CONCRETE DECK REPAIR FOR EPOXY OVERLAY	SO. FT.
2	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SO. FT.
3	CLASS III SURFACE PREPARATION	SO. YD.
4	CONCRETE REPAIRS	CU. FT.

PROJECT NO. 15BPR.56
 BEAUFORT & PITT COUNTIES
 BRIDGE NO.: 060016
060027
060028
060077 &
730127



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
BILL OF MATERIAL

DRAWN BY : S. T. SANDOR DATE : 09/2021
 CHECKED BY : W. C. SMITH DATE : 09/2021

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

NOTES

TYPICAL BENT CAP REPAIRS ARE SHOWN. REPAIR DETAILS SIMILAR FOR END BENT CAPS AND STRUTS.

THE METHOD USED TO DELINEATE THE AREAS OF UNSOUND CONCRETE TO BE REPAIRED SHALL NOT PERMANENTLY MARK THE CONCRETE, LEAVE ANY RESIDUE AFTER REMOVAL OR REQUIRE HARSH CHEMICALS TO REMOVE.

THE CONTRACTOR SHALL REMOVE THE DETERIORATED CONCRETE IN ACCORDANCE WITH THE GUIDELINES SET IN THESE NOTES, IN THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS.

REMOVE UNSOUND CONCRETE TO THE EXTENT NECESSARY, MINIMUM OF 1" BEHIND REBAR AND MINIMUM OF 2" CLEARANCE TO SAWCUT.

NO MORE THAN ONE-THIRD OF THE CAP OR COLUMN CROSS SECTIONAL AREA SHALL BE REMOVED AT ONE TIME. SHOULD IT BECOME NECESSARY TO REMOVE MORE THAN 30% OF A CAP OR COLUMN CROSS SECTIONAL AREA, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

SIMULTANEOUS REMOVAL OF UNSOUND CONCRETE MAY BE PERMITTED ON MORE THAN ONE FACE OF A CAP AND/OR COLUMN, IF THE AREAS OF REMOVAL ARE NOT ADJACENT TO OR DIRECTLY OPPOSITE ONE ANOTHER. IF REMOVAL EXTENDS MORE THAN 1 1/2" BEHIND THE MAIN REINFORCING BARS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

REINFORCING STEEL WHICH IS DETERMINED BY THE ENGINEER TO BE REPLACED, SHALL BE REMOVED TO A POINT WHERE IT IS SOUND. THE PATCH SHALL EXTEND A SUFFICIENT DISTANCE BEYOND THIS POINT TO DEVELOP A SPLICE LENGTH SPECIFIED IN THE TABLE ON THIS SHEET.

THE #4 "U" DOWELS ARE REQUIRED ONLY AROUND THE ANCHOR BOLTS. THE EXISTING REINFORCING STEEL IN THE PEDESTAL WALL SHALL BE CLEANED, STRAIGHTENED AND REMAIN IN PLACE.

FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE STANDARD SPECIFICATIONS.

COAT ALL REPAIR SURFACE AREAS ON THE TOP OF CAPS, INCLUDING CHAMFERS, WITH EPOXY PROTECTIVE COATING, OVERLAPPING THE REPAIR AREA BY A MINIMUM OF 3" ON ALL POSSIBLE SIDES.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

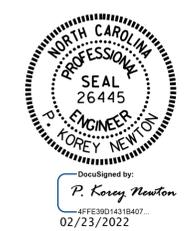
FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION (ERI), SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE PILE REPAIRS, SEE "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEET.

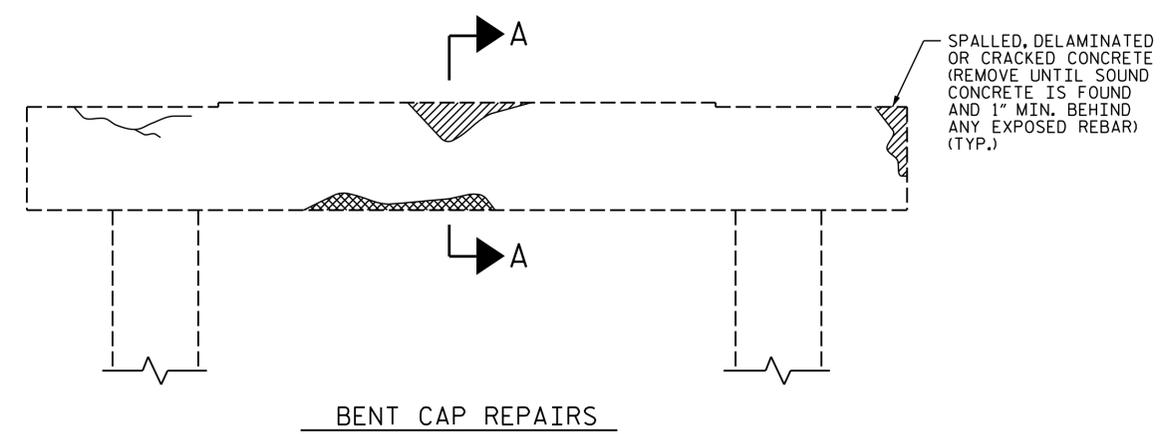
PROJ. NO. 15BPR.56
BEAUFORT/PITT COUNTY
 BRIDGE NO. 060016, 060027
060028, 060077
& 730127

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 TYPICAL CAP
 AND COLUMN
 REPAIR DETAILS

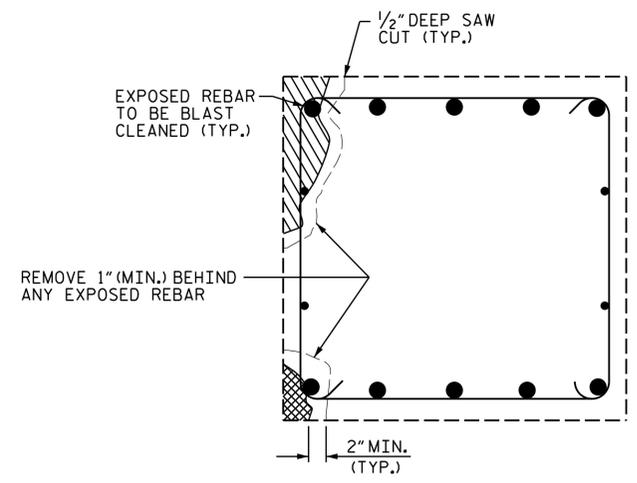


REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-4
2			4			TOTAL SHEETS 5

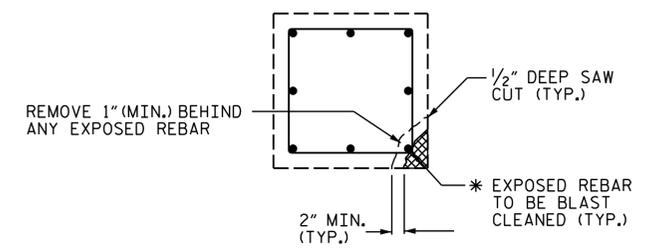
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BENT CAP REPAIRS



SECTION A-A

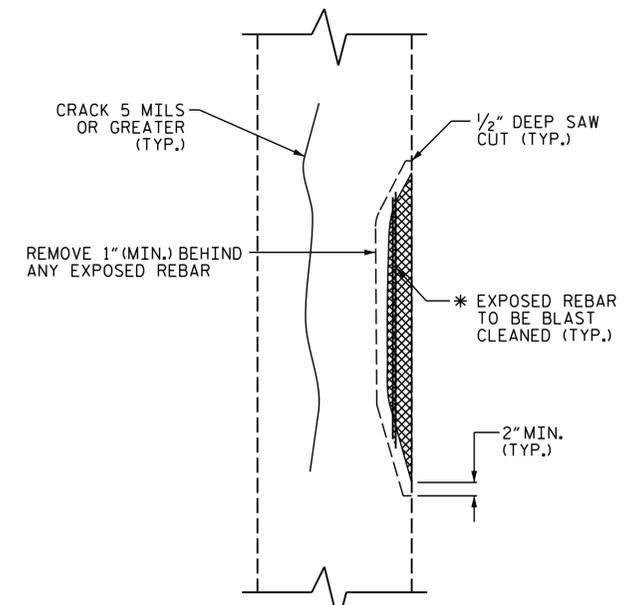


PLAN OF COLUMN

REPAIR KEY

- CONCRETE REPAIR AREA (FORM AND POUR)
- SHOTCRETE REPAIR AREA
- EPOXY RESIN INJECTION (ERI)

CAP REPAIR



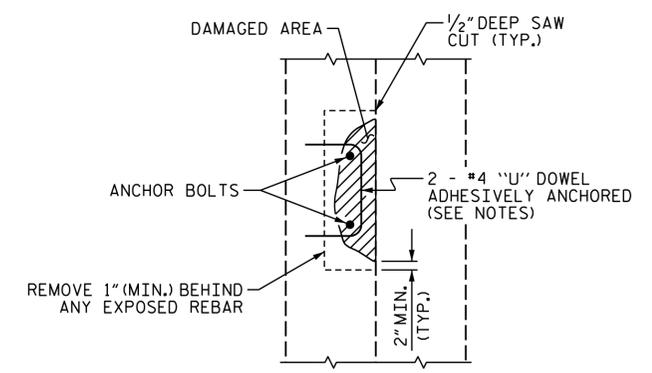
ELEVATION OF COLUMN

COLUMN REPAIR

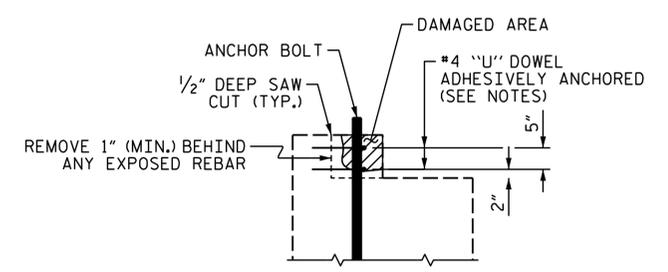
* REPAIR LENGTH SHALL NOT EXCEED 10 FEET.

SPLICE LENGTH TABLE

BAR SIZE	MIN. SPLICE LENGTH
#4	2'-4"
#5	2'-9"
#6	4'-0"
#7	5'-3"
#8	6'-9"
#9	8'-6"
#10	10'-11"
#11	13'-4"



PLAN



ELEVATION

PEDESTAL WALL REPAIR

ASSEMBLED BY : S. T. SANDOR DATE : 09/2021
 CHECKED BY : P. K. NEWTON DATE : 01/2022
 DRAWN BY : NAP 8/18
 CHECKED BY :

NOTES

THE METHOD USED TO DELINEATE THE AREAS OF UNSOUND CONCRETE TO BE REPAIRED SHALL NOT PERMANENTLY MARK THE CONCRETE, LEAVE ANY RESIDUE AFTER REMOVAL OR REQUIRE HARSH CHEMICALS TO REMOVE.

THE CONTRACTOR SHALL REMOVE THE DETERIORATED CONCRETE IN ACCORDANCE WITH THE GUIDELINES SET IN THESE NOTES, IN THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS.

REMOVE UNSOUND CONCRETE TO THE EXTENT NECESSARY, MINIMUM OF 2" CLEARANCE TO SAWCUT.

NO MORE THAN ONE-THIRD OF THE CAP OR COLUMN CROSS SECTIONAL AREA SHALL BE REMOVED AT ONE TIME. SHOULD IT BECOME NECESSARY TO REMOVE MORE THAN 30% OF A CAP OR COLUMN CROSS SECTIONAL AREA, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

SIMULTANEOUS REMOVAL OF UNSOUND CONCRETE MAY BE PERMITTED ON MORE THAN ONE FACE OF A CAP AND/OR COLUMN, IF THE AREAS OF REMOVAL ARE NOT ADJACENT TO OR DIRECTLY OPPOSITE ONE ANOTHER. IF REMOVAL EXTENDS MORE THAN 1 1/2" BEHIND THE MAIN REINFORCING BARS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

REINFORCING STEEL WHICH IS DETERMINED BY THE ENGINEER TO BE REPLACED, SHALL BE REMOVED TO A POINT WHERE IT IS SOUND. THE REPAIR AREA SHALL EXTEND A SUFFICIENT DISTANCE BEYOND THIS POINT TO DEVELOP A SPLICE LENGTH SPECIFIED IN THE TABLE ON "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

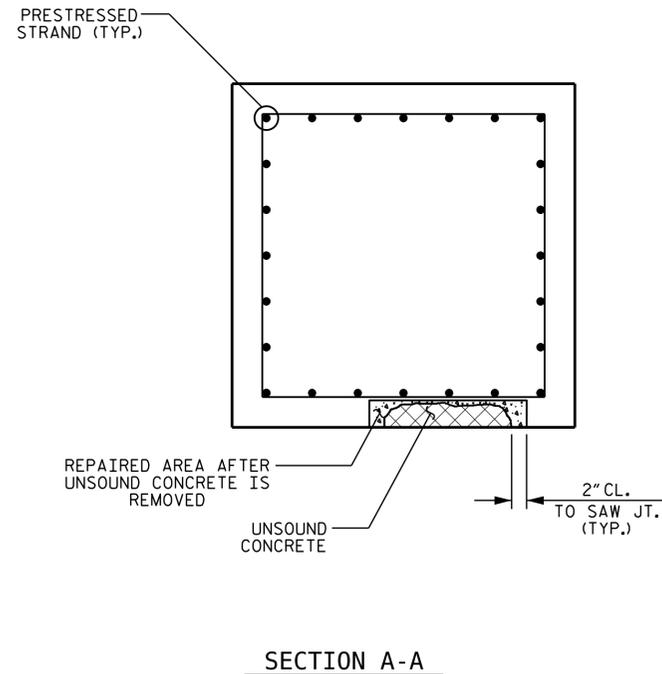
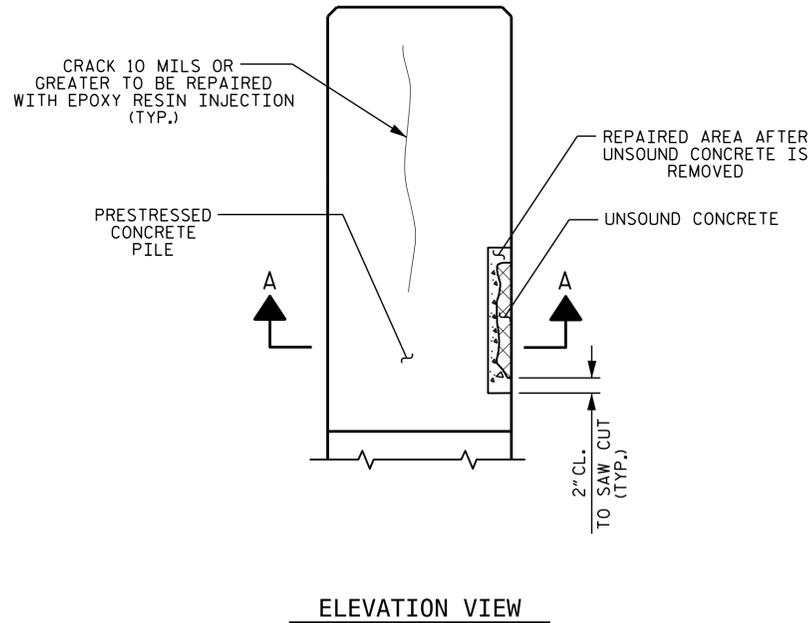
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

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

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE PILE REPAIR SEQUENCE:

1. SOUND CONCRETE TO DETERMINE EXTENTS OF REPAIR LOCATION.
2. REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL. SAW CUT AROUND REPAIR AREA TO A NOMINAL DEPTH OF 1/2".
3. REMOVE CONCRETE WITHIN SAW CUT AREA TO MINIMUM 1/2" DEPTH. IF CONCRETE IS DAMAGED BEYOND THE ORIGINAL SAW CUT, A NEW SAW CUT IS REQUIRED.
4. IF MORE THAN HALF THE CIRCUMFERENCE OF A REINFORCING BAR IS EXPOSED DURING THIS PROCESS, REMOVE ADDITIONAL CONCRETE TO 1" BEHIND THE BAR. THIS DOES NOT APPLY TO PRESTRESSED STRANDS.
5. ALL UNSOUND CONCRETE MUST BE REMOVED, HOWEVER, PRESTRESSED STRANDS SHOULD NOT BE DISTURBED UNLESS ABSOLUTELY NECESSARY. USE EXTREME CARE TO NOT DAMAGE STRANDS.
6. CLEAN ALL EXPOSED REINFORCING BARS AND PRESTRESSED STRANDS IN ACCORDANCE WITH SHOTCRETE REPAIRS SPECIAL PROVISION. FOR BARS WITH MORE THAN 10% SECTION LOSS, SPLICE AND SECURELY TIE SUPPLEMENTAL REINFORCING BARS AS NEEDED. NOTE AND PROVIDE DETAILED DOCUMENTATION, INCLUDING LOCATION AND SEVERITY, OF ALL DAMAGE TO PRESTRESSED STRANDS THAT EXCEEDS 10% SECTION LOSS. IF FIVE OR MORE STRANDS ARE DAMAGED, NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF REPAIR MATERIAL.
7. REMOVE ALL LOOSE OR WEAKENED MATERIAL THEN CLEAN THE REPAIR AREA OF DIRT, GREASE, OIL, AND FOREIGN MATTER.
8. PREPARE SURFACE AND PLACE SHOTCRETE REPAIRS IN ACCORDANCE WITH SHOTCRETE REPAIRS SPECIAL PROVISION.



PRESTRESSED CONCRETE PILE REPAIR

PROJECT NO. **15BPR.56**
BEAUFORT/PITT COUNTY
 BRIDGE NO. **060016, 060027**
060028, 060077
& 730127



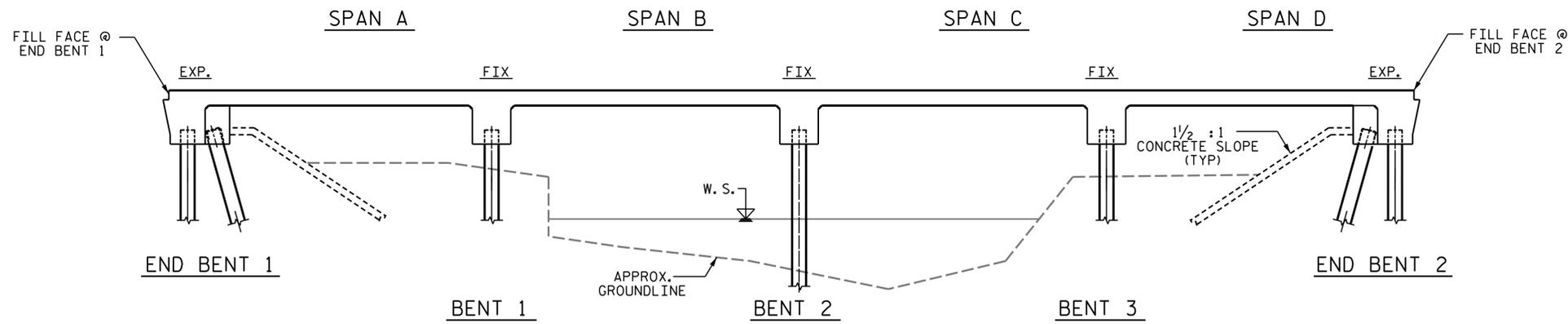
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**PRESTRESSED
 CONCRETE PILE
 REPAIR DETAILS**

DRAWN BY : S. T. SANDOR DATE : 01/2022
 CHECKED BY : W. C. SMITH DATE : 01/2022
 DESIGN ENGINEER OF RECORD : _____ DATE : _____

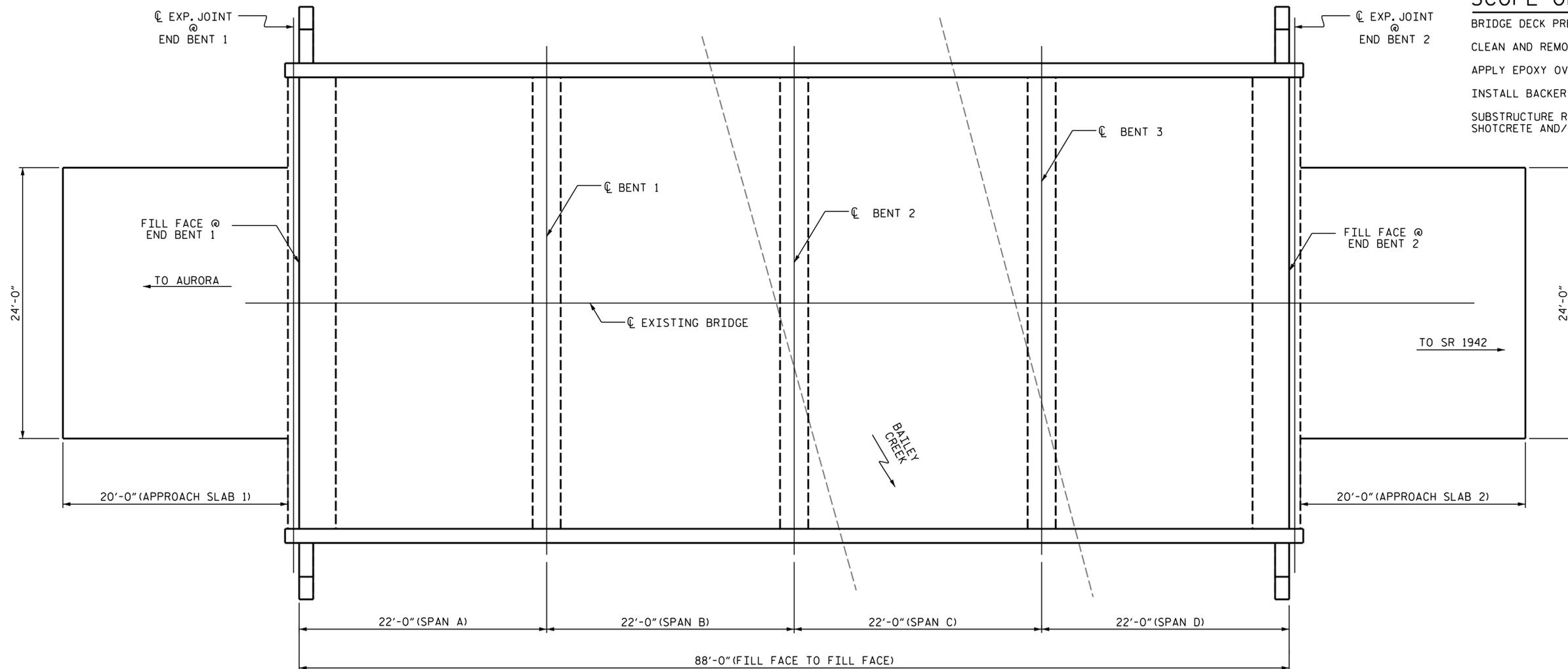
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 5



ELEVATION
(SECTION ALONG \bar{C} ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 08/11/2020. BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS. AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT ITEMS SHOWN BELOW WOULD BE REQUIRED. HOWEVER, IT MAY BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH WORK IN A TIMELY MANNER, AS DETERMINED IN THE FIELD. SUCH WORK SHALL BE CONSIDERED EXTRA WORK AND SHALL BE ADDRESSED AS PER ARTICLE 104-7 OF THE STANDARD SPECIFICATIONS. PROJECT SPECIAL PROVISIONS THAT OUTLINE REQUIREMENTS FOR THESE POTENTIAL ADDITIONAL WORK ITEMS HAVE BEEN PROVIDED IN PROJECT DOCUMENTS, BUT NO QUANTITIES HAVE BEEN LISTED. ACTUAL PAY ITEMS, QUANTITIES, AND COSTS WILL BE ESTABLISHED, AS REQUIRED, IF EXTRA WORK IS ENCOUNTERED.

UNANTICIPATED ITEMS:

ITEM NO.	DESCRIPTION	UNIT
1	CONCRETE DECK REPAIR FOR EPOXY OVERLAY.	SQ. FT.
2	CONCRETE REPAIRS	CU. FT.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CLEAN AND REMOVE EXISTING JOINT MATERIAL.
- APPLY EPOXY OVERLAY.
- INSTALL BACKER ROD AND SILICONE JOINT SEALANT.
- SUBSTRUCTURE REPAIRS USING EPOXY RESIN INJECTION, SHOTCRETE AND/OR CONCRETE REPAIRS.

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060016



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON
 SR 1940 OVER BAILEY CREEK
 BETWEEN AURORA AND SR 1942

DRAWN BY : S. T. SANDOR DATE : 09/2020
 CHECKED BY : W. C. SMITH DATE : 07/2021

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

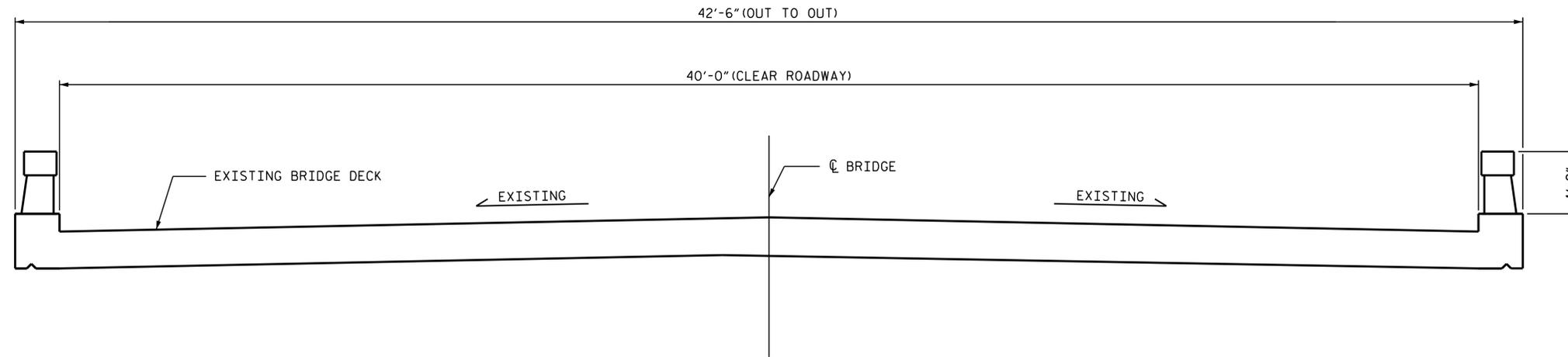
 RESIDENT ENGINEER DATE

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

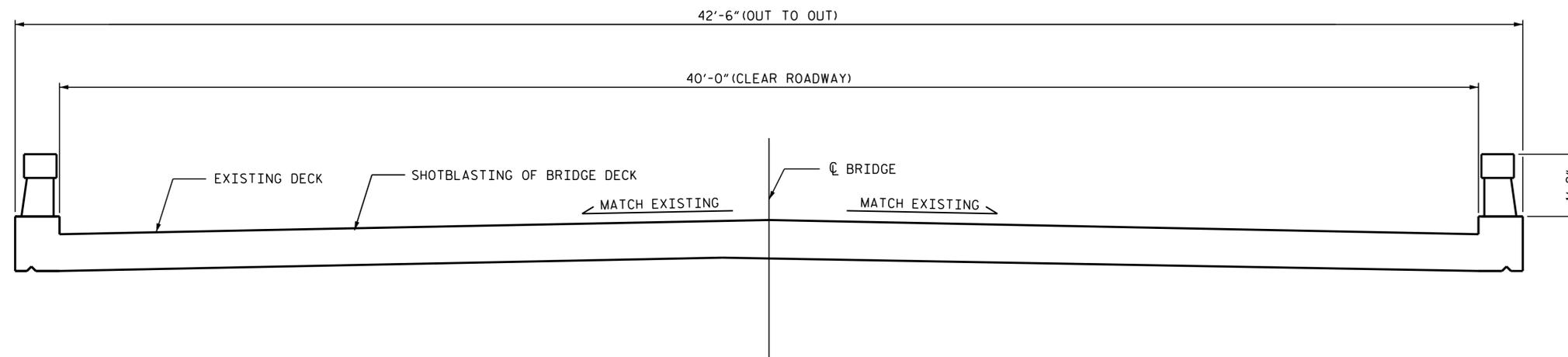
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

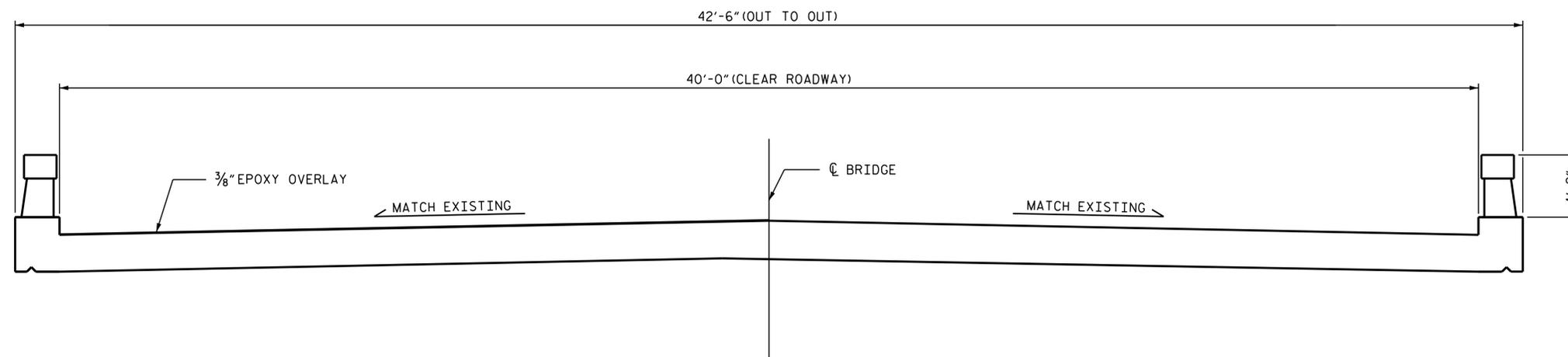
SEE TRANSPORTATION MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND EPOXY OVERLAY.



TYPICAL SECTION
(EXISTING DECK)



TYPICAL SECTION
(PROPOSED DECK PREPARATION)



TYPICAL SECTION
(PROPOSED SILANE DECK TREATMENT)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060016



DocuSigned by:
P. Corey Newton
 4FE39D1431B407...
 01/27/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 TYPICAL SECTION
 AND EPOXY OVERLAY
 DETAILS

DRAWN BY : S. T. SANDOR DATE : 10/2020
 CHECKED BY : W. C. SMITH DATE : 07/2021

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

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIRS - SPANS A THROUGH D

	ESTIMATE	ACTUAL
EPOXY OVERLAY SYSTEM II	3520.0 SQ. FT.	

NOTES

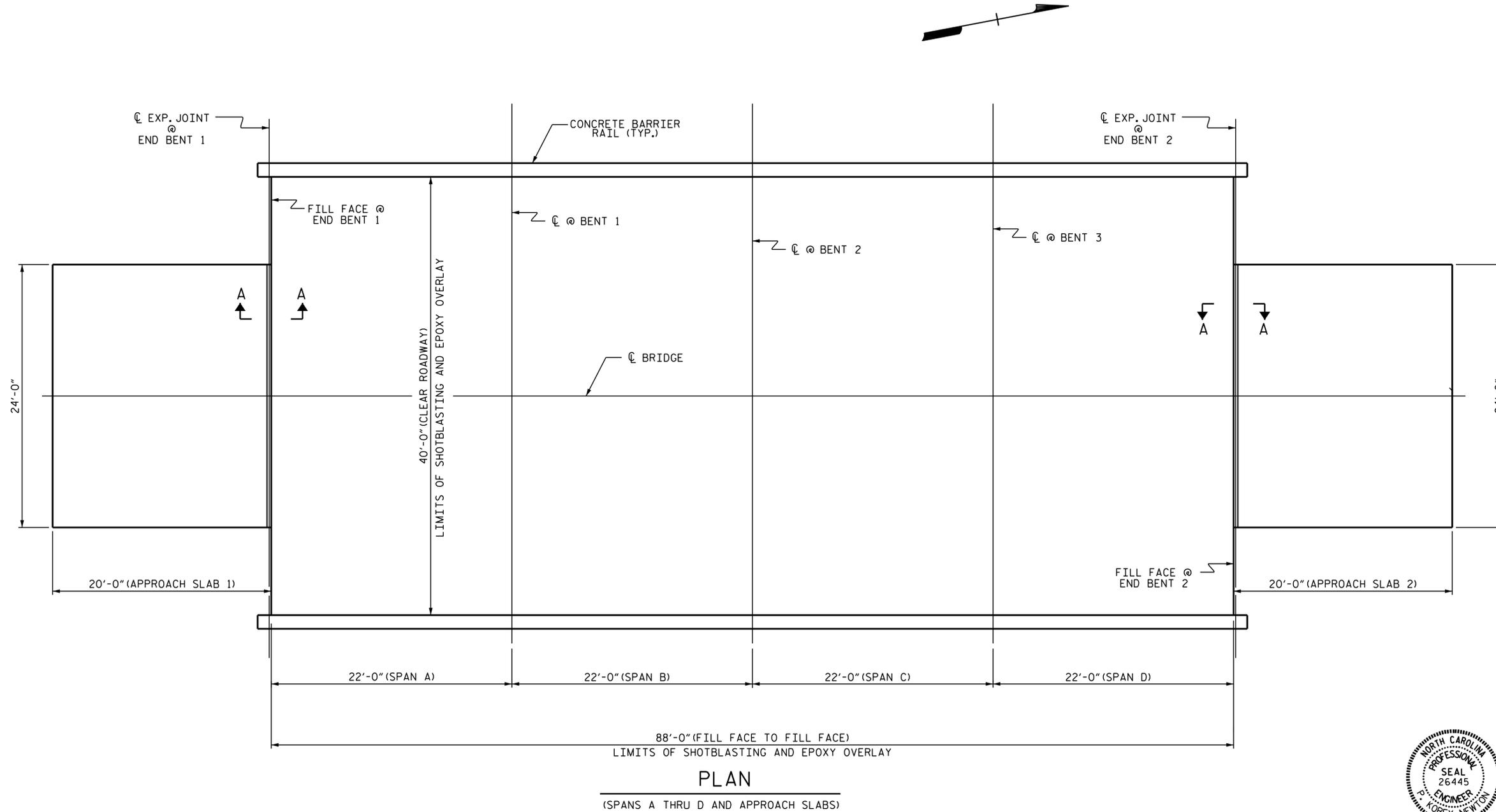
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.



PLAN

(SPANS A THRU D AND APPROACH SLABS)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060016



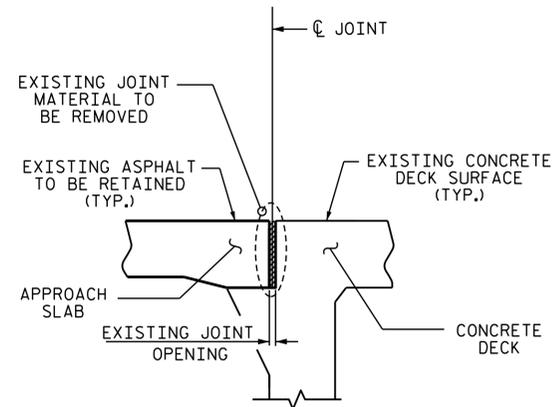
DocuSigned by:
 P. Corey Newton
 4FE39D1431B407...
 01/27/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 DECK SURFACE REPAIR

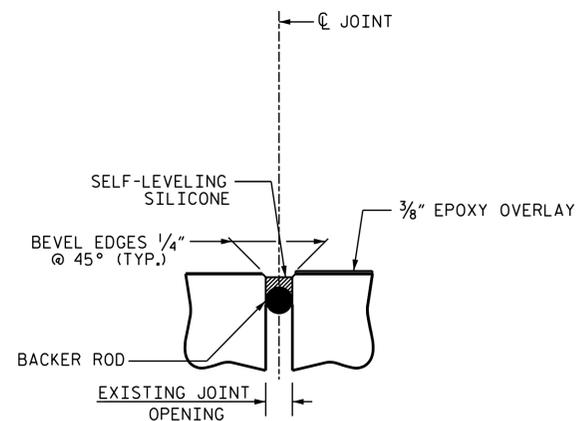
DRAWN BY : S. T. SANDOR DATE : .05/2021
 CHECKED BY : W. C. SMITH DATE : .07/2021

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 SIGNATURES COMPLETED

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



SECTION A-A
(EXISTING JOINT)



PROPOSED JOINT SEAL DETAIL

SUMMARY OF QUANTITIES		
(TYP.)	ESTIMATE	ACTUAL
POURABLE SILICONE JOINT SEALANT	48.0 L.F.	

NOTES:

CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE EPOXY OVERLAY IS COMPLETE.

DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

REMOVAL OF EXISTING JOINT MATERIAL SHALL BE CONSIDERED INCIDENTAL TO POURABLE SILICONE JOINT SEALANT.

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060016



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT REPAIR DETAILS

DRAWN BY : S. T. SANDOR DATE : 06/2021
 CHECKED BY : W. C. SMITH DATE : 07/2021

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

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

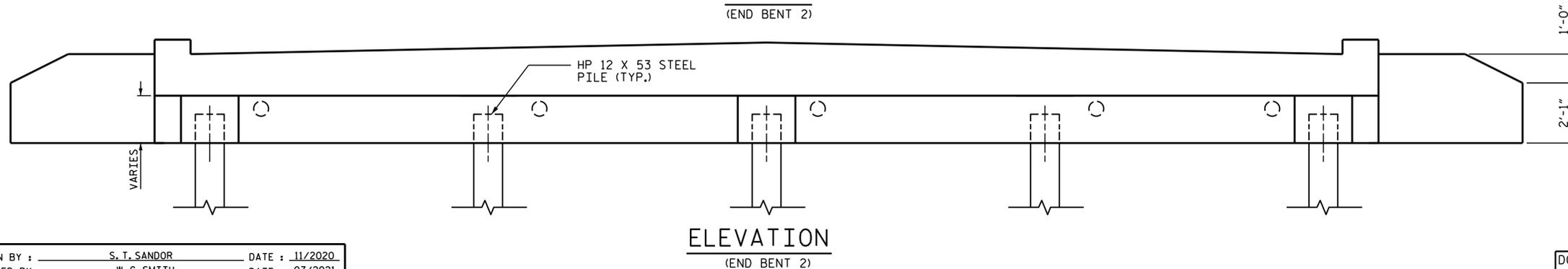
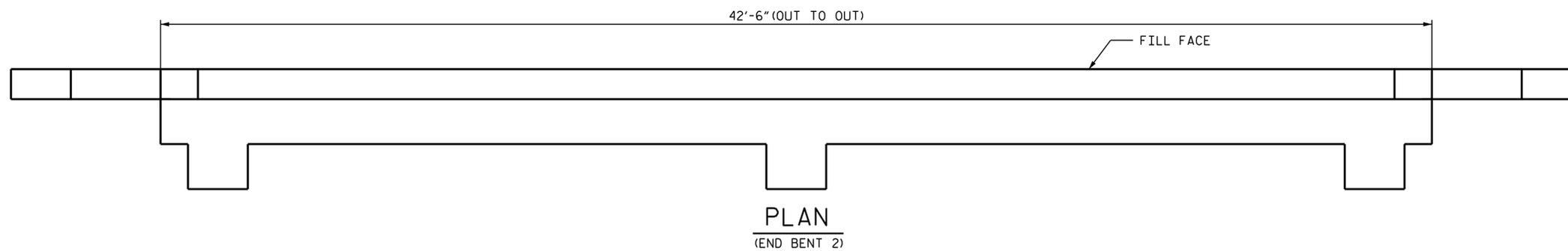
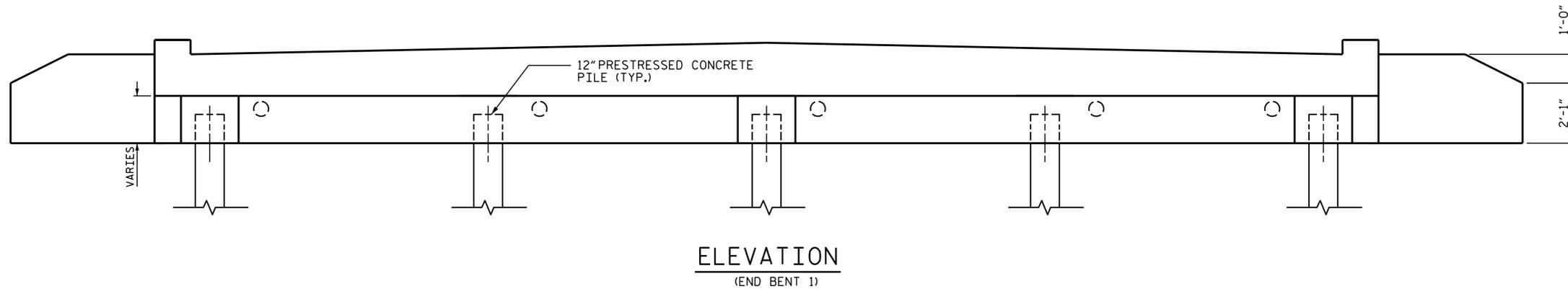
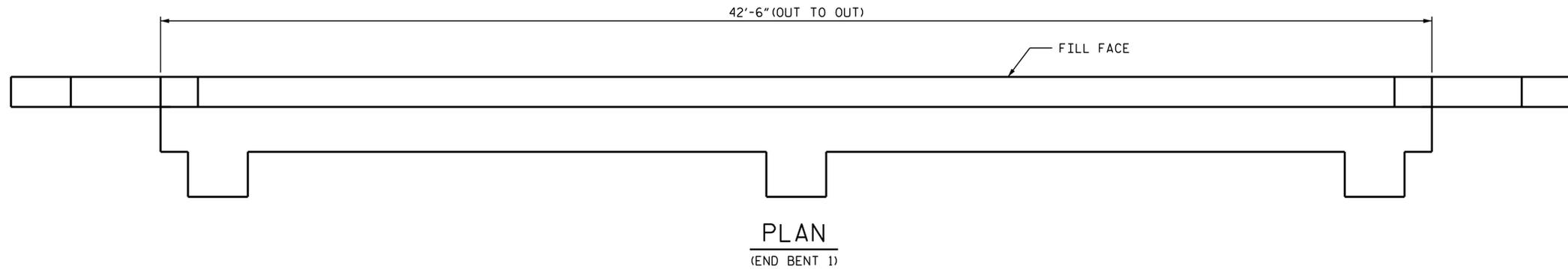
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

AS-BUILT REPAIR QUANTITY TABLE

END BENTS 1 & 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION		LIN. FT.	LIN. FT.	
CAP		0.0		
COLUMN		0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.



- SHOTCRETE REPAIR AREA
- CONCRETE REPAIR AREA
- ERI - EPOXY RESIN INJECTION

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060016



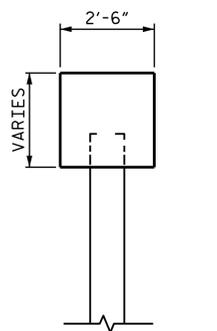
DocuSigned by:
 P. Corey Newton
 4FFE39D1431B407...
 01/27/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 END BENT REPAIR

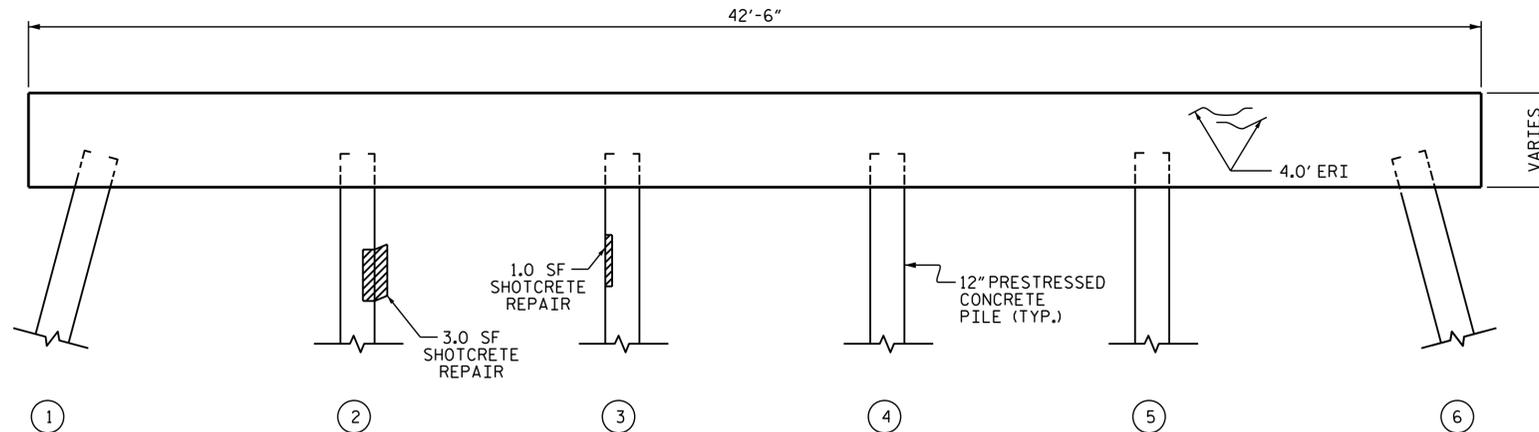
DRAWN BY : S. T. SANDOR DATE : 11/2020
 CHECKED BY : W. C. SMITH DATE : 07/2021

DOCUMENT NOT CONSIDERED
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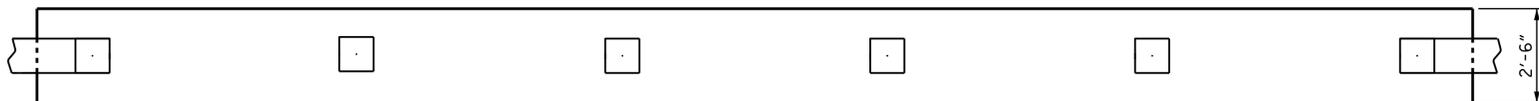
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-5
2			4			TOTAL SHEETS 8



END VIEW
(WEST SIDE)

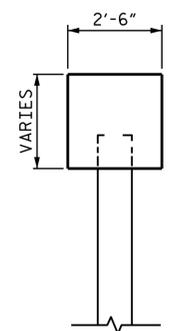


ELEVATION BENT 1
(SOUTH SIDE)
(LOOKING NORTH)

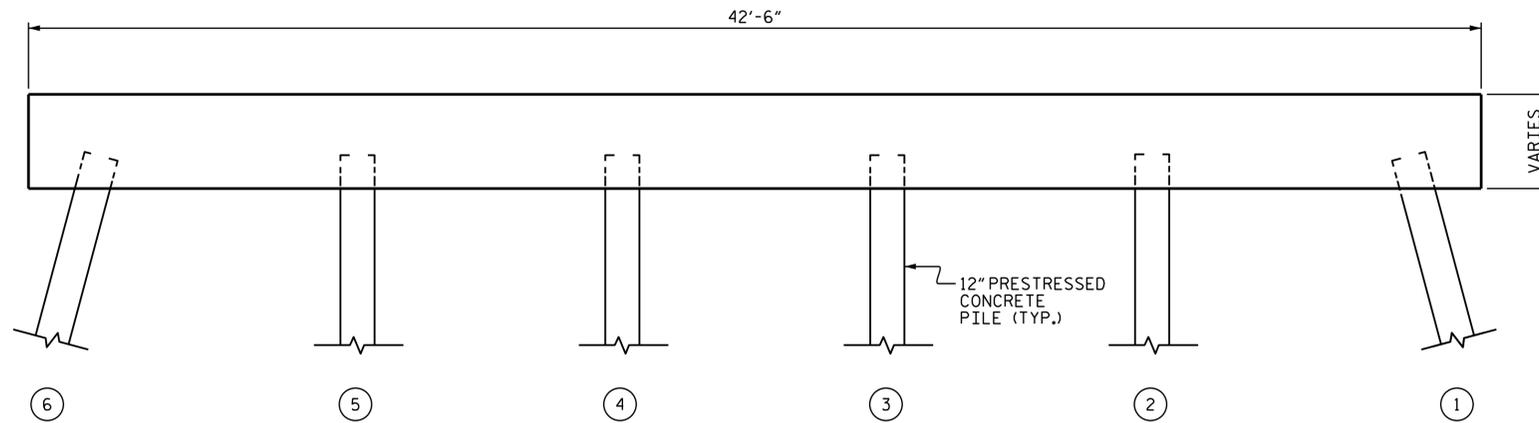


BOTTOM OF CAP

SPAN A
SPAN B



END VIEW
(EAST SIDE)



ELEVATION BENT 1
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE				
BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	4.0	2.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION		LIN. FT.	LIN. FT.	
CAP		4.0		
COLUMN		0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

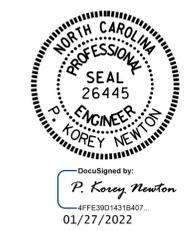
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

- SHOTCRETE REPAIR AREA
- CONCRETE REPAIR AREA
- ERI - EPOXY RESIN INJECTION
- PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT
BRIDGE NO. 060016

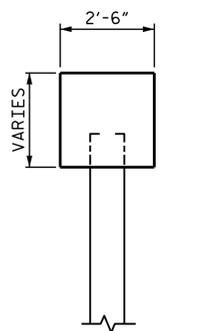


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
BENT 1 REPAIR

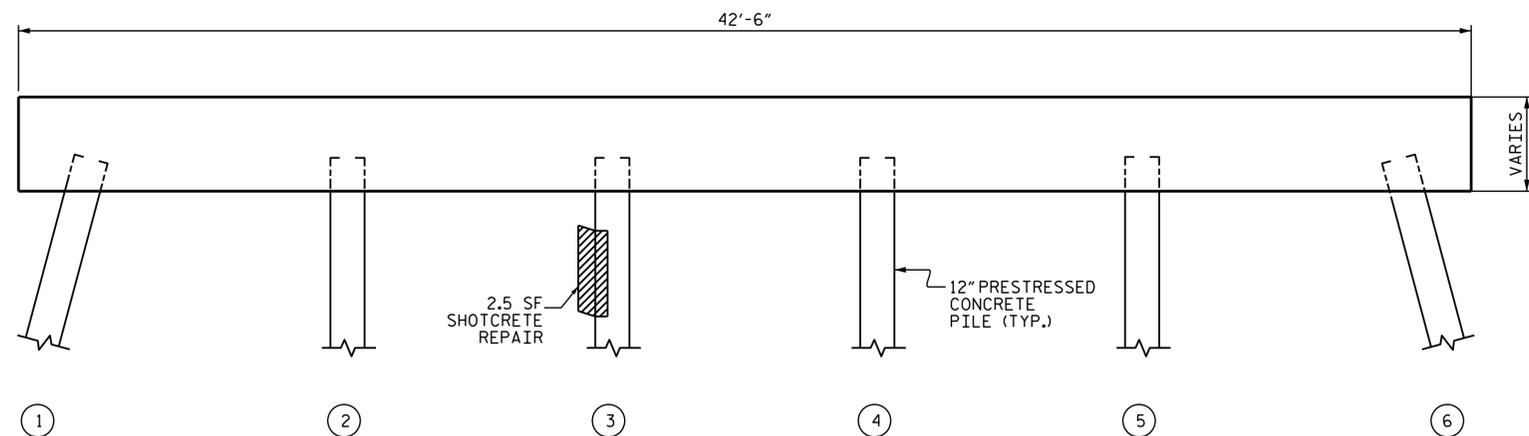
DRAWN BY : S. T. SANDOR DATE : 04/2021
CHECKED BY : W. C. SMITH DATE : 07/2021

DOCUMENT NOT CONSIDERED
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NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			8
2			4			



END VIEW
(WEST SIDE)

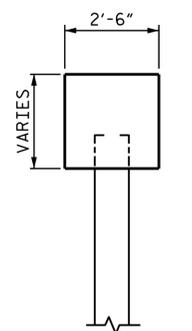


ELEVATION BENT 2
(SOUTH SIDE)
(LOOKING NORTH)

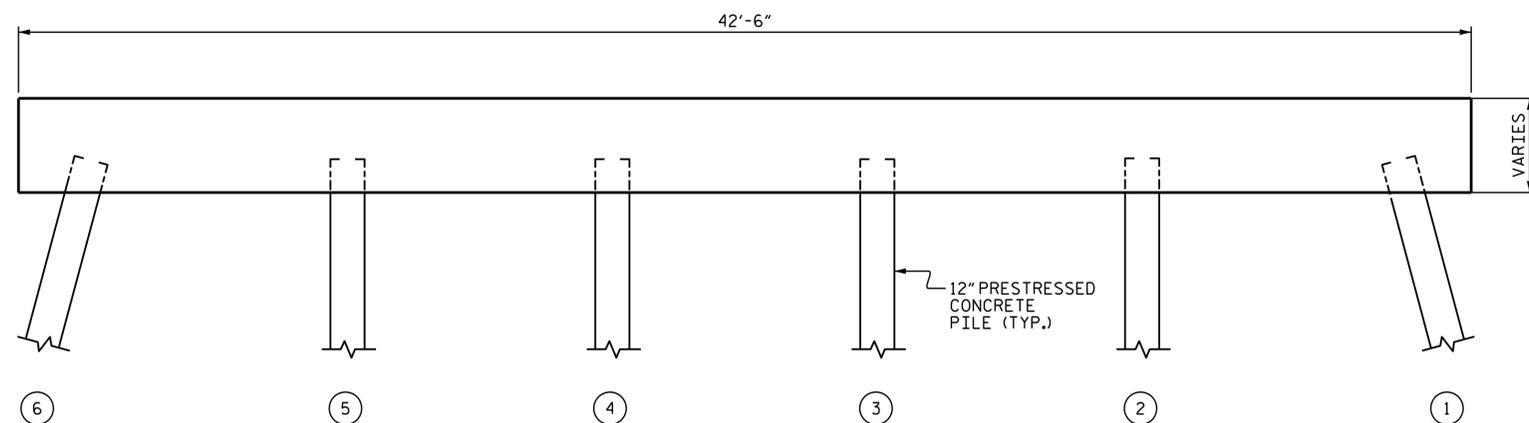


BOTTOM OF CAP

SPAN B
SPAN C



END VIEW
(EAST SIDE)



ELEVATION BENT 2
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	2.5	1.3		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION	LIN. FT.		LIN. FT.	
CAP	0.0			
COLUMN	0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEET.

SHOTCRETE REPAIR AREA

CONCRETE REPAIR AREA

ERI - EPOXY RESIN INJECTION

PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT
BRIDGE NO. 060016

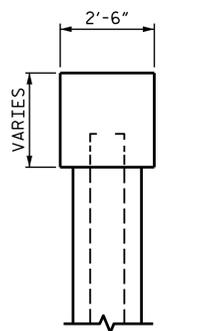


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
BENT 2 REPAIR

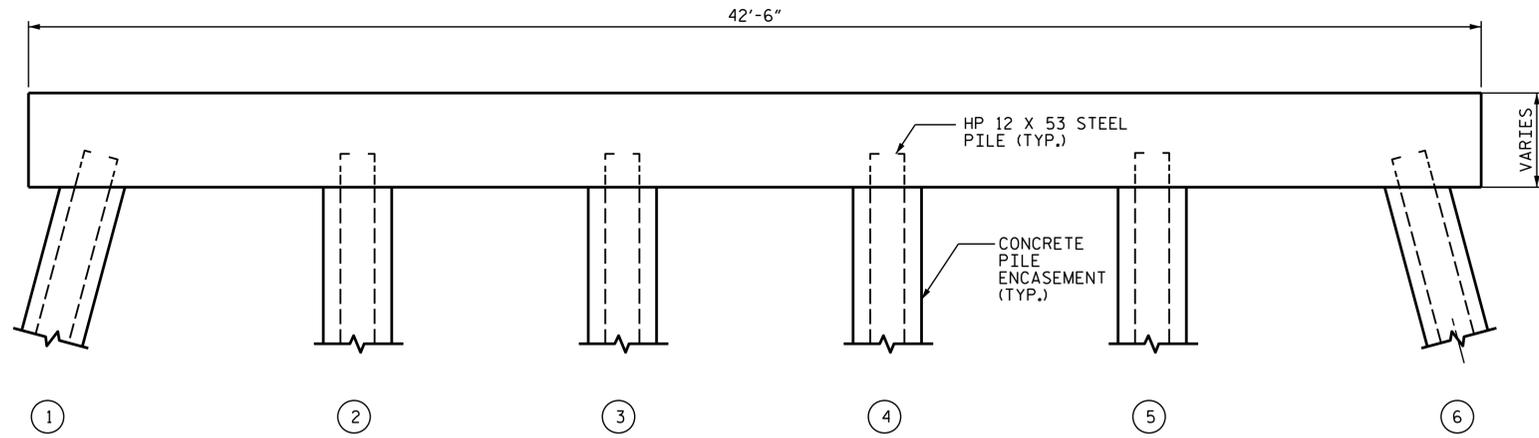
DRAWN BY : S. T. SANDOR DATE : 04/2021
CHECKED BY : W. C. SMITH DATE : 07/2021

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

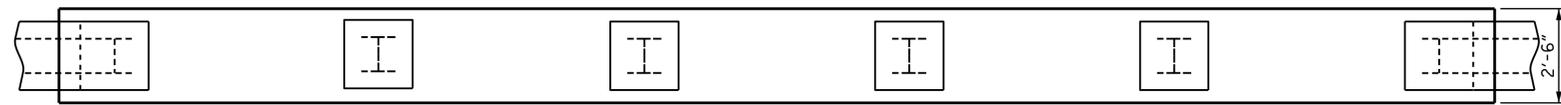
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NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
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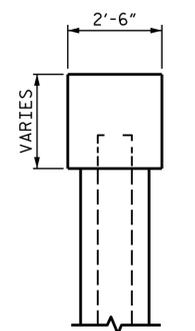
END VIEW
(WEST SIDE)



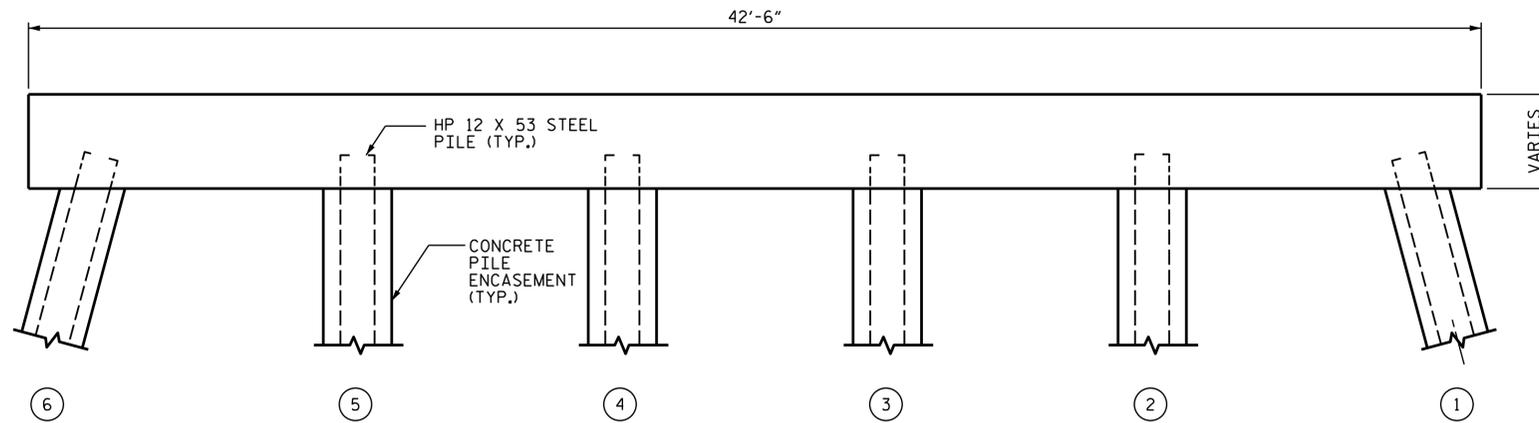
ELEVATION BENT 3
(SOUTH SIDE)
(LOOKING NORTH)



BOTTOM OF CAP



END VIEW
(EAST SIDE)



ELEVATION BENT 3
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 3	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION	LIN. FT.		LIN. FT.	
CAP	0.0			
COLUMN	0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

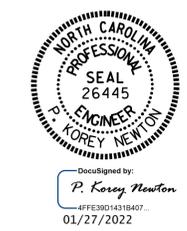
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEET.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  ERI - EPOXY RESIN INJECTION
-  PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT
STATION: 060016

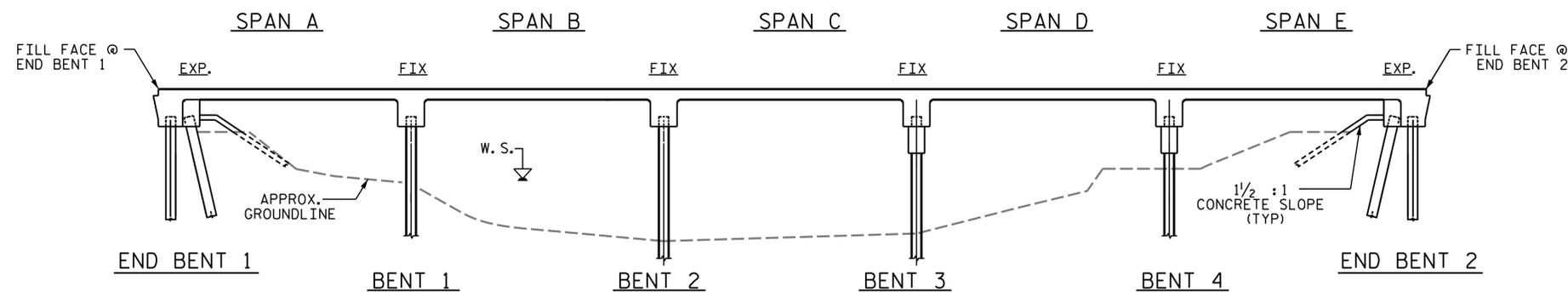


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
BENT 3 REPAIR

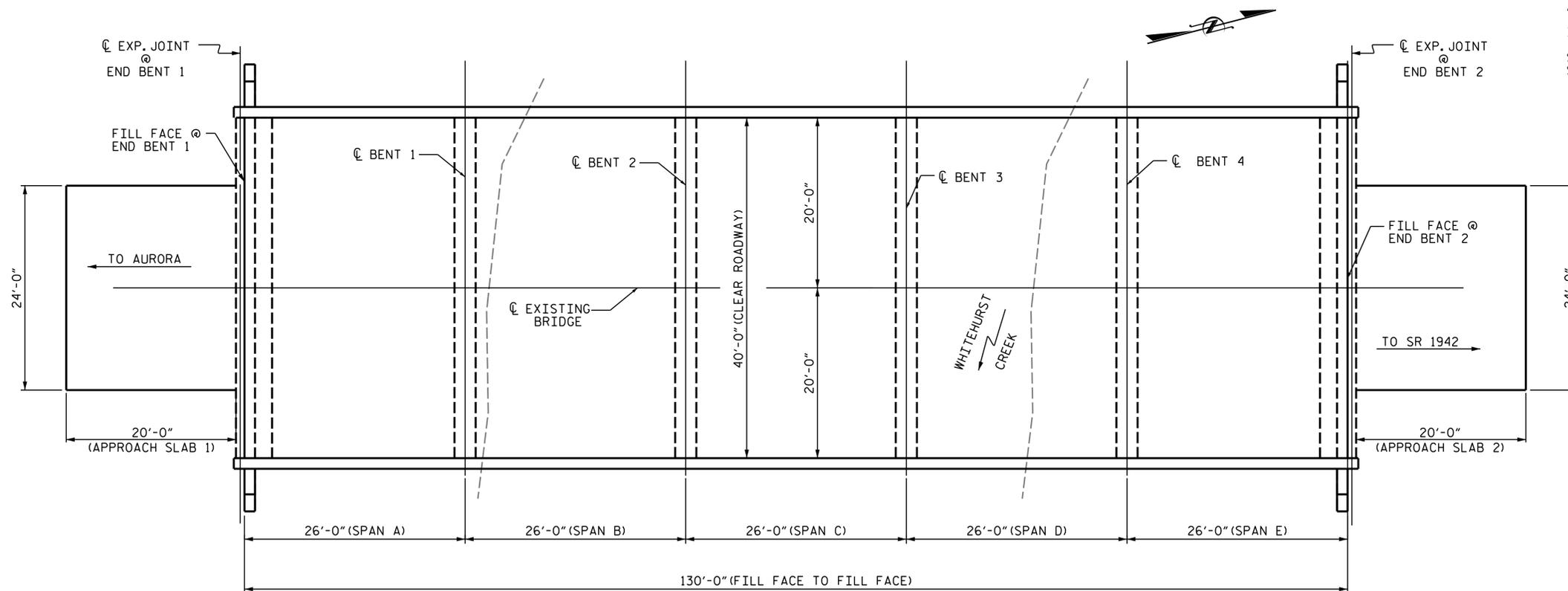
DRAWN BY : S. T. SANDOR DATE : 04/2021
CHECKED BY : W. C. SMITH DATE : 06/2021

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

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



ELEVATION
(SECTION ALONG ϕ ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 08/06/2020.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT ITEMS SHOWN BELOW WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THESE ITEMS, OR OTHER WORK WILL BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH WORK IN A TIMELY MANNER, AS DETERMINED IN THE FIELD. SUCH WORK SHALL BE CONSIDERED EXTRA WORK AND SHALL BE ADDRESSED AS PER ARTICLE 104-7 OF THE STANDARD SPECIFICATIONS. ADDITIONAL WORK ITEMS HAVE BEEN PROVIDED IN PROJECT DOCUMENTS, BUT NO QUANTITIES HAVE BEEN LISTED. ACTUAL PAY ITEMS, QUANTITIES, AND COSTS WILL BE ESTABLISHED, AS REQUIRED, IF EXTRA WORK IS ENCOUNTERED.

UNANTICIPATED ITEMS:

ITEM NO.	DESCRIPTION	UNIT
1	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SO. FT.
2	CONCRETE REPAIRS	CU. FT.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CLEAN AND REMOVE EXISTING JOINT MATERIAL.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- INSTALL BACKER ROD AND SILICONE JOINT SEALANT.
- SUBSTRUCTURE REPAIRS USING EPOXY RESIN INJECTION, SHOTCRETE AND/OR CONCRETE REPAIRS.

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



DocuSigned by:
P. Corey Newton
 4FFE39D14318407...
 01/28/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON NC 306
 OVER WHITEHURST CREEK
 BETWEEN
 AURORA AND SR 1942

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

RESIDENT ENGINEER _____ DATE _____

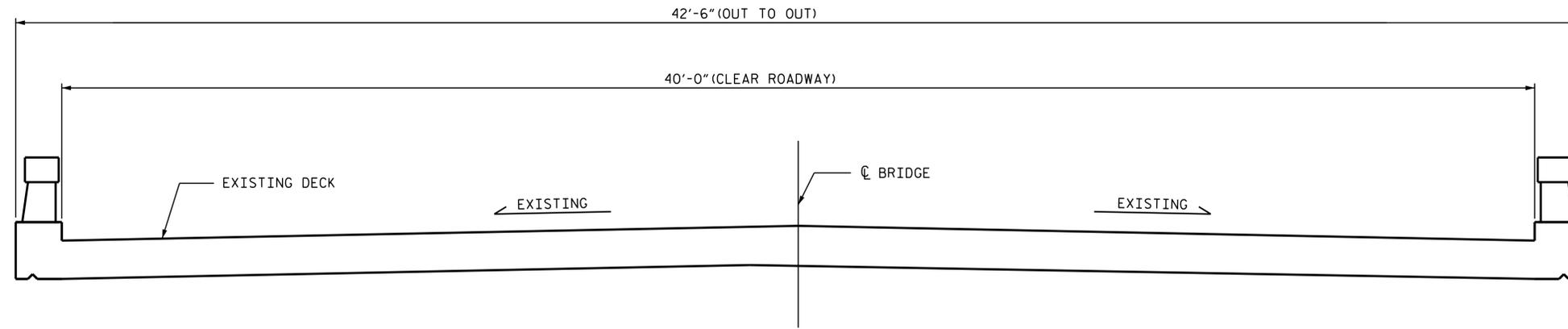
DRAWN BY : S. T. SANDOR DATE : .04/2021
 CHECKED BY : W. C. SMITH DATE : .07/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

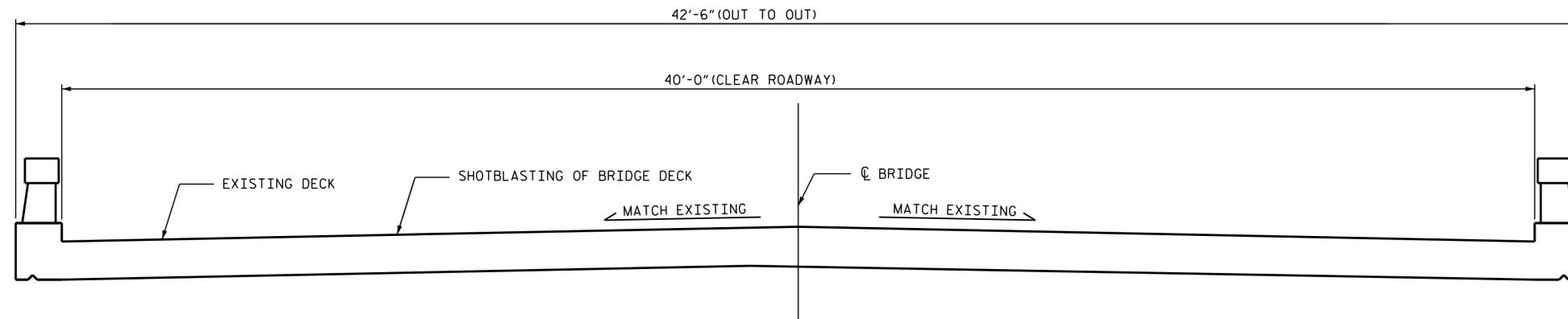
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-1
1			3			TOTAL SHEETS
2			4			9

NOTES

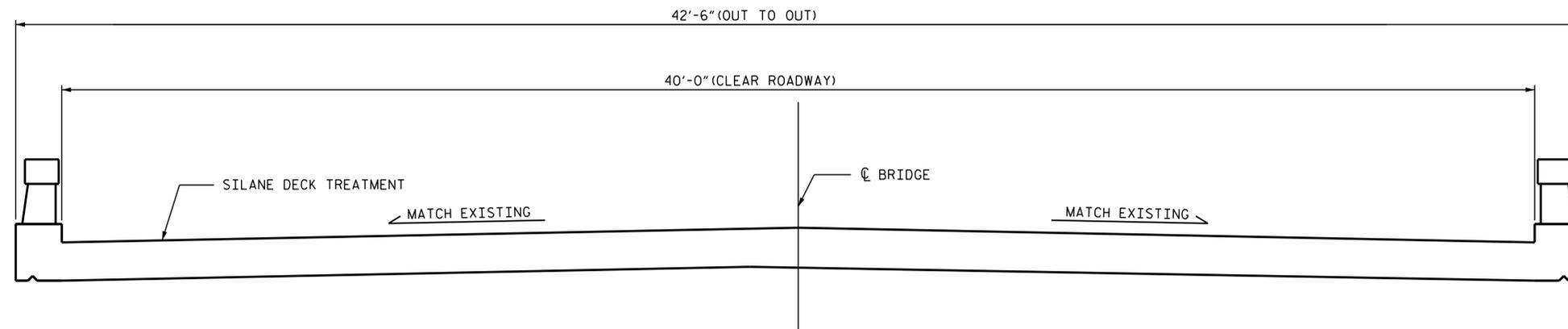
SEE TRANSPORTATION MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.



TYPICAL SECTION
(EXISTING DECK)



TYPICAL SECTION
(PROPOSED DECK PREPARATION)



TYPICAL SECTION
(PROPOSED SILANE DECK TREATMENT)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
BRIDGE NO. 060027



DocuSigned by:
P. Corey Newton
4FF83D14318407...
01/28/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
TYPICAL SECTION
AND
SILANE DECK TREATMENT

DRAWN BY : S. T. SANDOR DATE : .06/2021
CHECKED BY : W. C. SMITH DATE : .07/2021

DOCUMENT NOT CONSIDERED
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SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-2
2			4			TOTAL SHEETS 9

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIRS - SPANS A THRU E

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	577.8 SQ. YDS.	
SILANE DECK TREATMENT	577.8 SQ. YDS.	

NOTES

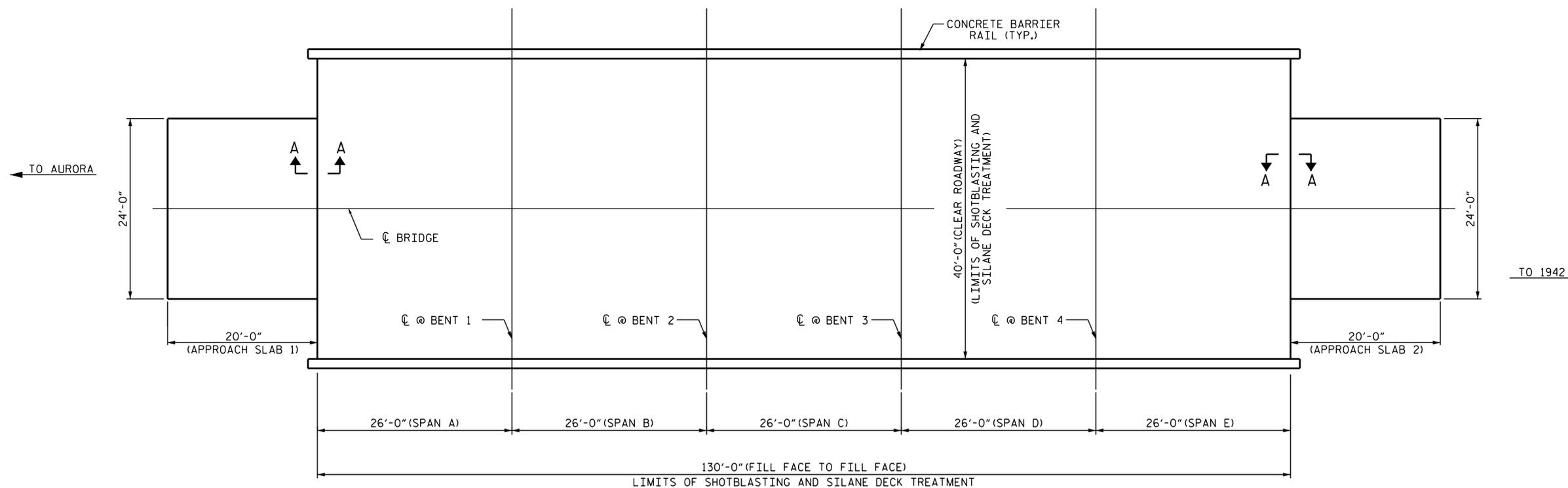
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

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

FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

NO REPAIRS ARE PROPOSED FOR THE APPROACH SLABS.



PLAN
(SPANS A THRU E AND APPROACH SLABS)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



DocuSigned by:
P. Corey Newton
 4FF83014318407...
 01/28/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
DECK SURFACE REPAIR

DRAWN BY : S. T. SANDOR DATE : 05/2021
 CHECKED BY : W. C. SMITH DATE : 07/2021

DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-3
2			4			TOTAL SHEETS 9

NOTES:

CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

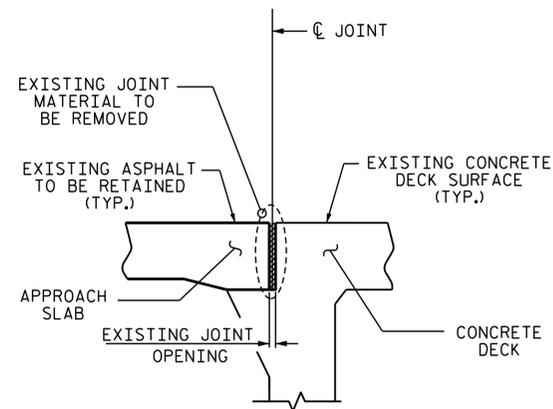
SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

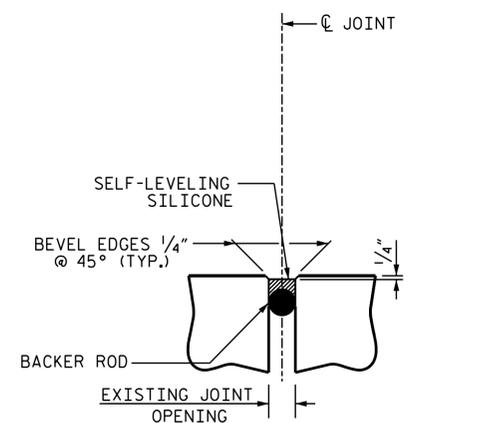
FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.

DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

REMOVAL OF EXISTING JOINT MATERIAL SHALL BE CONSIDERED INCIDENTAL TO POURABLE SILICONE JOINT SEALANT.



SECTION A-A
(EXISTING JOINT)



PROPOSED JOINT SEAL DETAIL

SUMMARY OF QUANTITIES		
(TYP.)	ESTIMATE	ACTUAL
POURABLE SILICONE JOINT SEALANT	48.0 L.F.	

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
JOINT REPAIR DETAILS

DRAWN BY : S. T. SANDOR DATE : 06/2021
 CHECKED BY : W. C. SMITH DATE : 07/2021

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-4
1			3			TOTAL SHEETS
2			4			9

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIRS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

AS-BUILT REPAIR QUANTITY TABLE

END BENTS 1 & 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION		LIN. FT.		LIN. FT.
CAP		0.0		
COLUMN		0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  ERI - EPOXY RESIN INJECTION



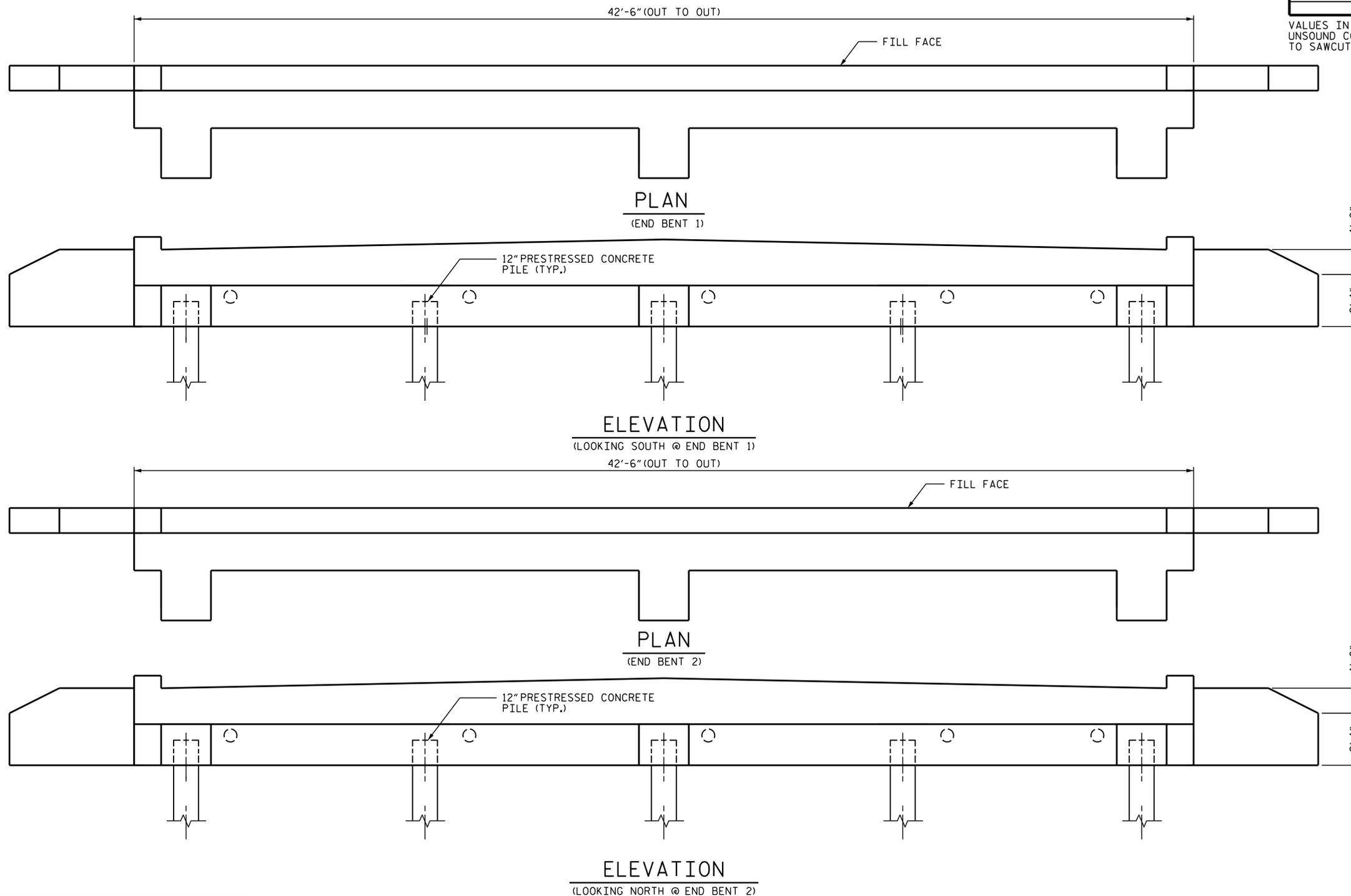
DocuSigned by:
P. Corey Newton
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01/28/2022

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027

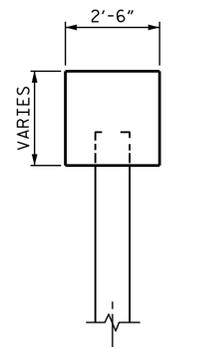
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUBSTRUCTURE
END BENTS REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-5
2			4			TOTAL SHEETS 9

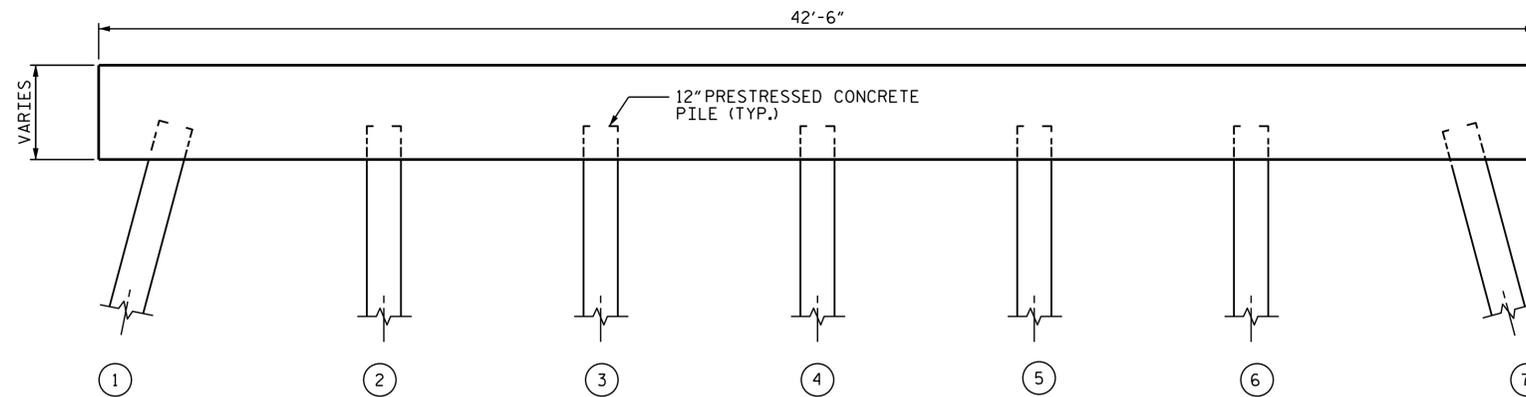
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



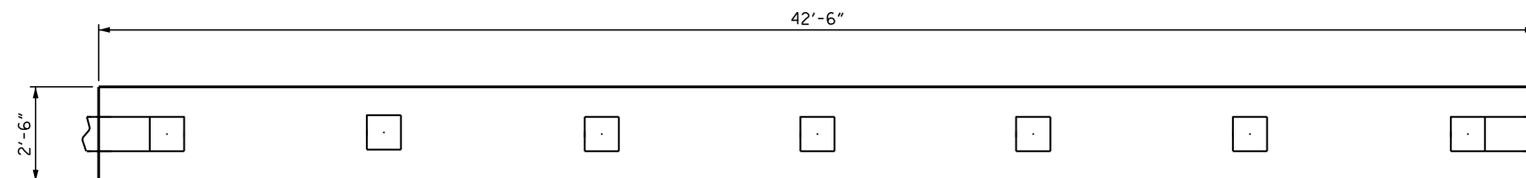
DRAWN BY : S. T. SANDOR DATE : 06/2021
 CHECKED BY : W. C. SMITH DATE : 07/2021



END VIEW
(WEST SIDE)

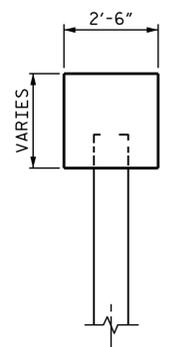


ELEVATION BENT 1
(SOUTH SIDE)
(LOOKING NORTH)

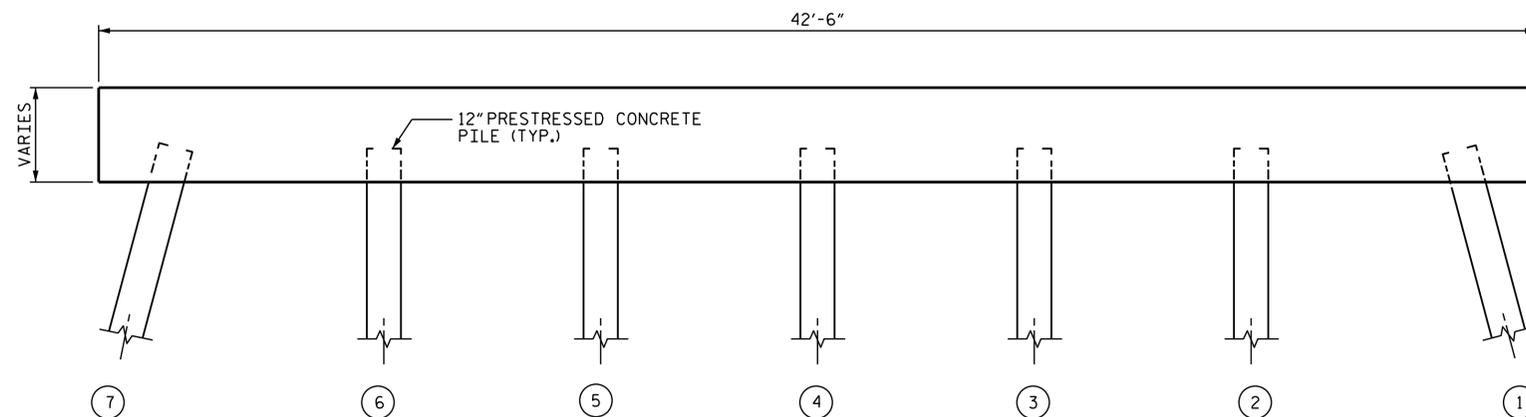


BOTTOM OF CAP

SPAN A
SPAN B



END VIEW
(EAST SIDE)



ELEVATION BENT 1
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION	LIN. FT.		LIN. FT.	
CAP	0.0			
COLUMN	0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIRS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

- SHOTCRETE REPAIR AREA
- CONCRETE REPAIR AREA
- ERI - EPOXY RESIN INJECTION
- PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



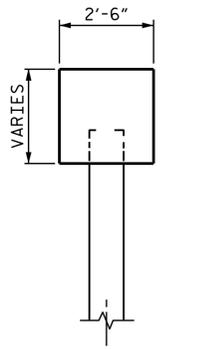
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
BENT 1 REPAIR

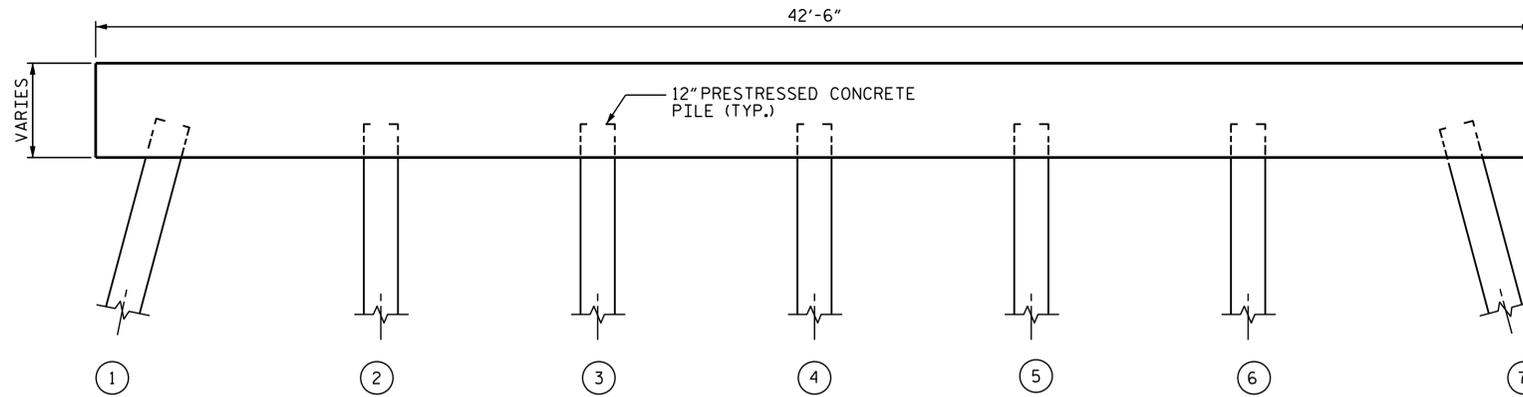
DRAWN BY : S. T. SANDOR DATE : .04/2021
 CHECKED BY : W. C. SMITH DATE : .07/2021

NO.	REVISIONS			SHEET NO.
	BY:	DATE:	NO.	
1			3	S2-6
2			4	TOTAL SHEETS 9

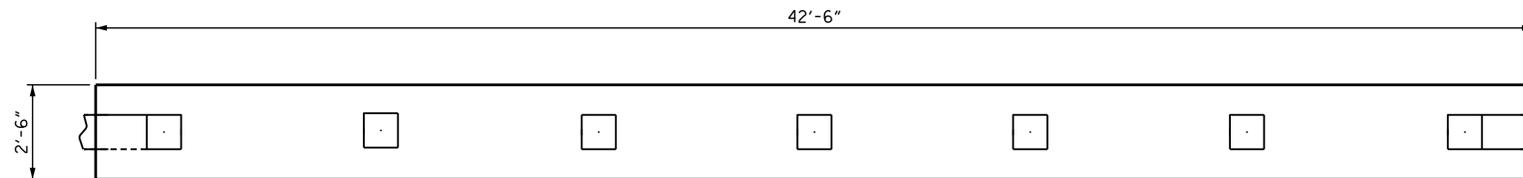
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



END VIEW
(WEST SIDE)

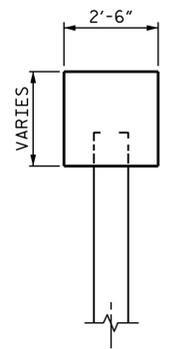


ELEVATION BENT 2
(SOUTH SIDE)
(LOOKING NORTH)

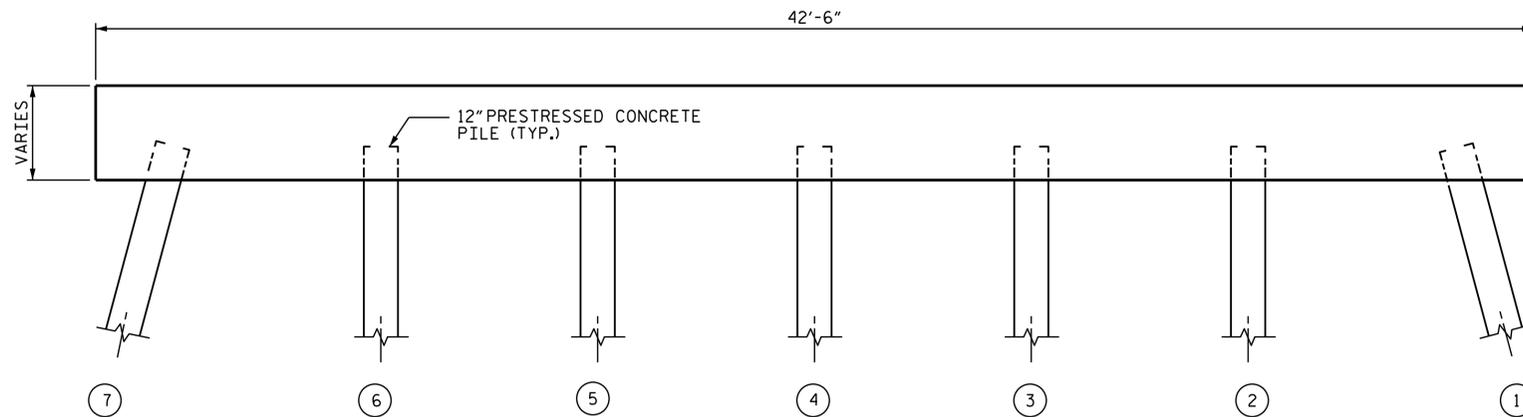


BOTTOM OF CAP

SPAN B
SPAN C



END VIEW
(EAST SIDE)



ELEVATION BENT 2
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION		LIN. FT.		LIN. FT.
CAP		0.0		
COLUMN		0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIRS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  ERI - EPOXY RESIN INJECTION
-  PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



DocuSigned by:
P. Corey Newton
4FF83014318407...
01/28/2022

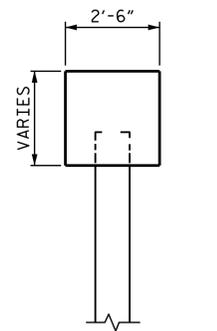
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 BENT 2 REPAIR

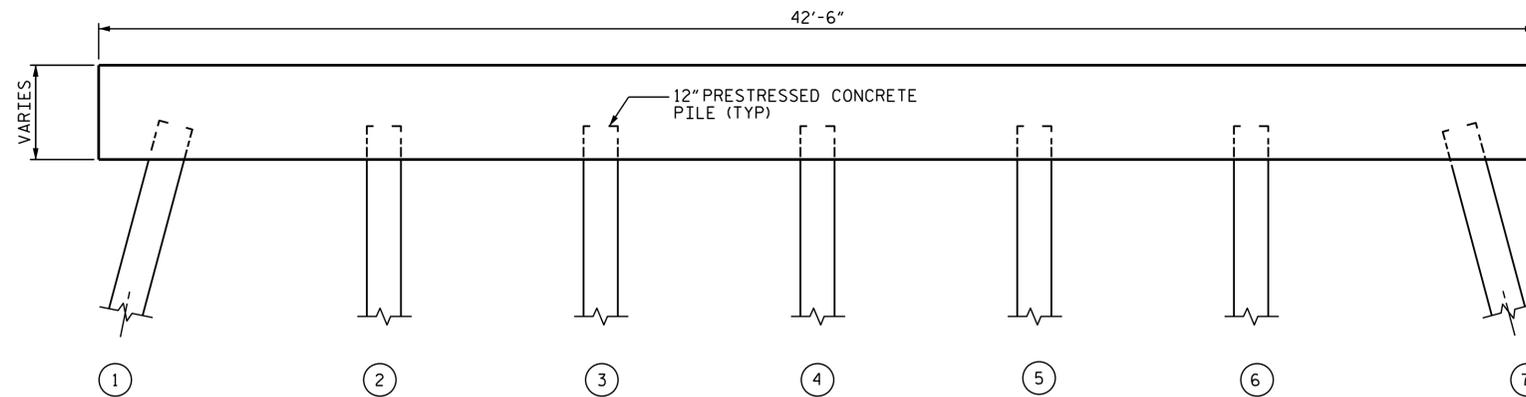
DRAWN BY : S. T. SANDOR DATE : .04/2021
 CHECKED BY : W. C. SMITH DATE : .07/2021

DOCUMENT NOT CONSIDERED
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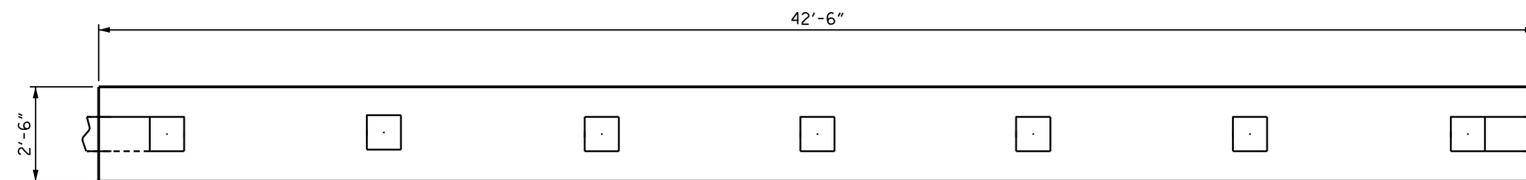
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-7
2			4			TOTAL SHEETS 9



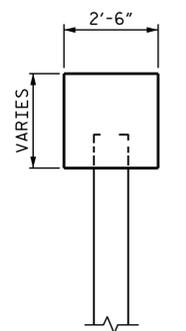
END VIEW
(WEST SIDE)



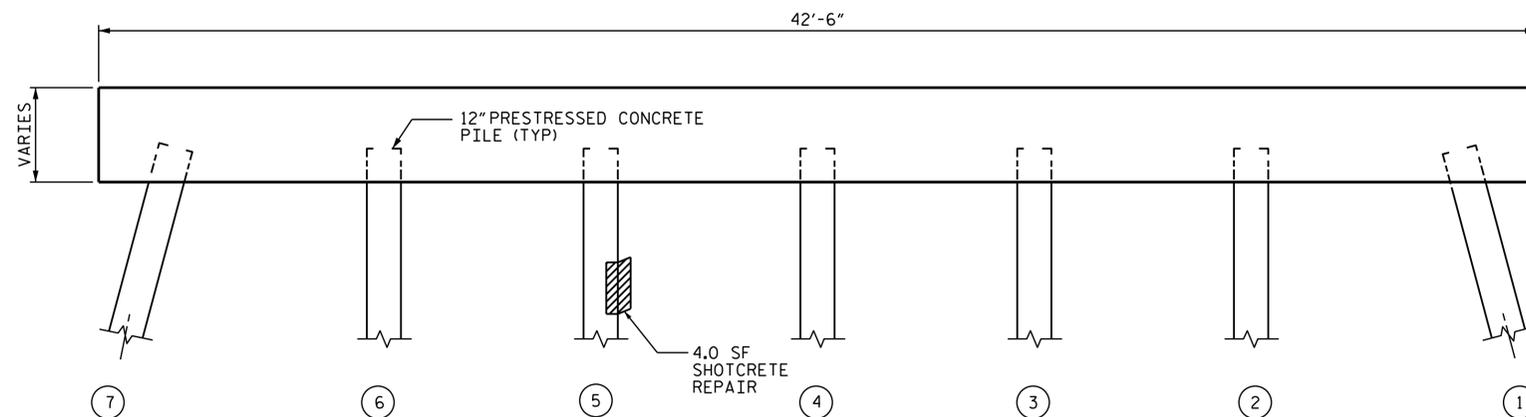
ELEVATION BENT 3
(SOUTH SIDE)
(LOOKING NORTH)



BOTTOM OF CAP



END VIEW
(EAST SIDE)



ELEVATION BENT 3
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 3	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	4.0	2.0		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION	LIN. FT.		LIN. FT.	
CAP	0.0			
COLUMN	0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIRS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  ERI - EPOXY RESIN INJECTION
-  PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
BRIDGE NO. 060027

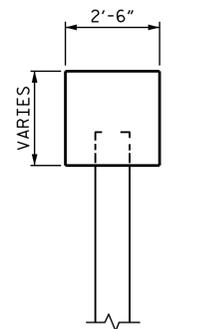


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUBSTRUCTURE
BENT 3 REPAIR

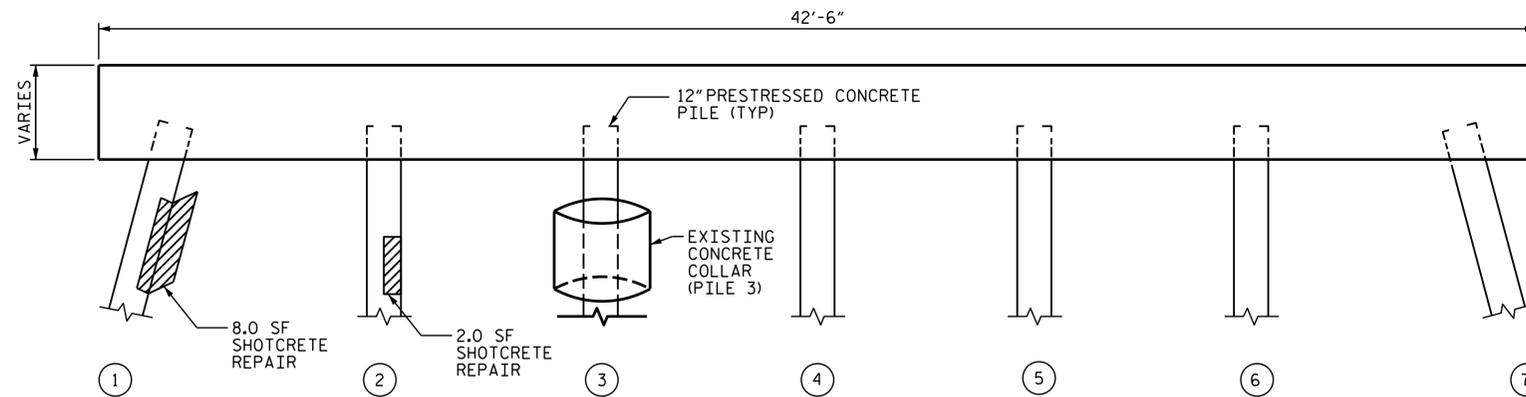
DRAWN BY : S. T. SANDOR DATE : .04/2021
CHECKED BY : W. C. SMITH DATE : .07/2021

NO.	REVISIONS			SHEET NO.
	BY:	DATE:	NO.	
1			3	S2-8
2			4	TOTAL SHEETS 9

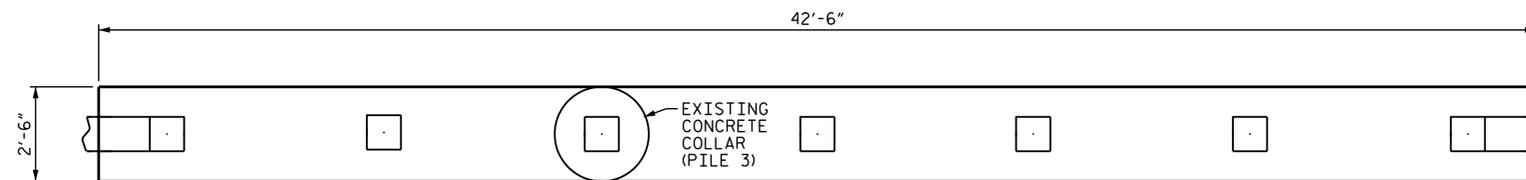
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END VIEW
(WEST SIDE)

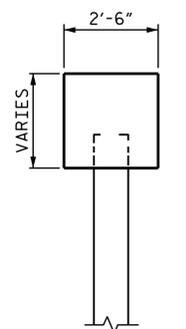


ELEVATION BENT 4
(SOUTH SIDE)
(LOOKING NORTH)

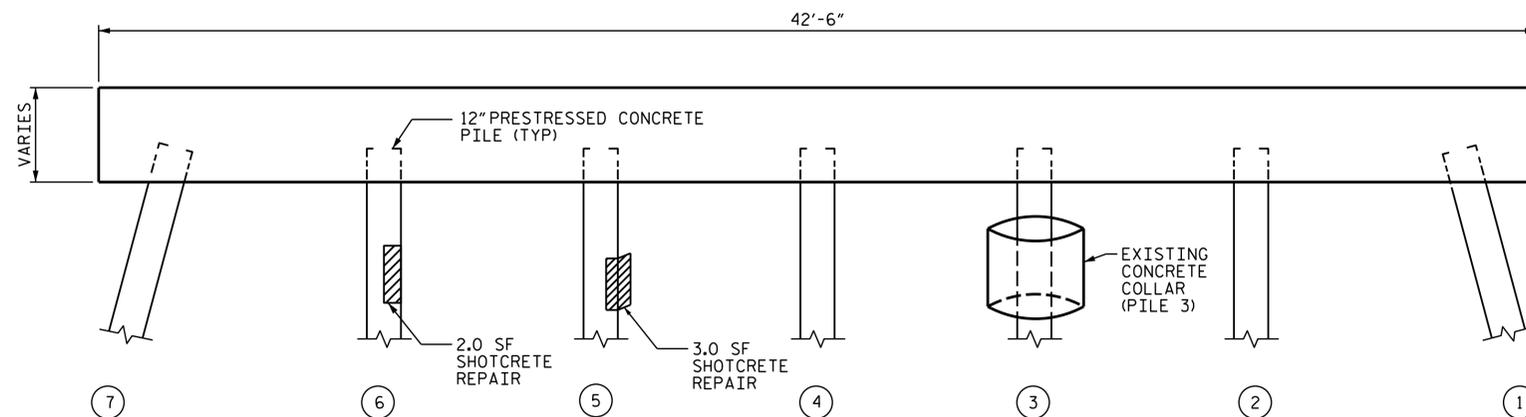


BOTTOM OF CAP

SPAN D
SPAN E



END VIEW
(EAST SIDE)



ELEVATION BENT 4
(NORTH SIDE)
(LOOKING SOUTH)

AS-BUILT REPAIR QUANTITY TABLE

BENT 4	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	15.0	7.5		
CONCRETE REPAIRS	AREA SO. FT.	VOLUME CU. FT.	AREA SO. FT.	VOLUME CU. FT.
CAP	0.0	0.0		
COLUMN	0.0	0.0		
EPOXY RESIN INJECTION	LIN. FT.		LIN. FT.	
CAP	0.0			
COLUMN	0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MINIMUM OF 1" BEHIND REBAR AND MINIMUM 2" CLEARANCE TO SAWCUT. SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

NOTES

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR CAP AND COLUMN REPAIRS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" AND "PRESTRESSED CONCRETE PILE REPAIR DETAILS" SHEETS.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  ERI - EPOXY RESIN INJECTION
-  PILE NUMBER

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060027



DocuSigned by:
P. Corey Newton
4FFE39D14318407
01/28/2022

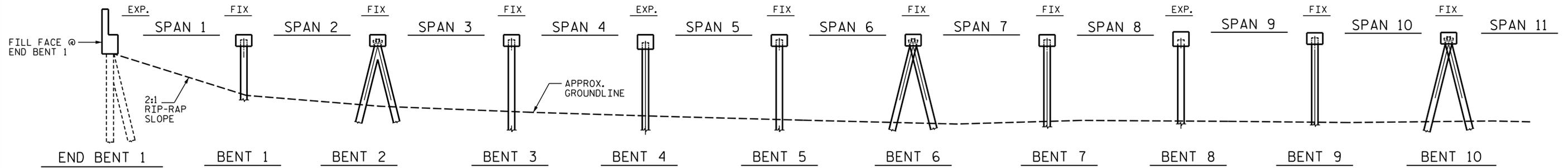
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
BENT 4 REPAIR

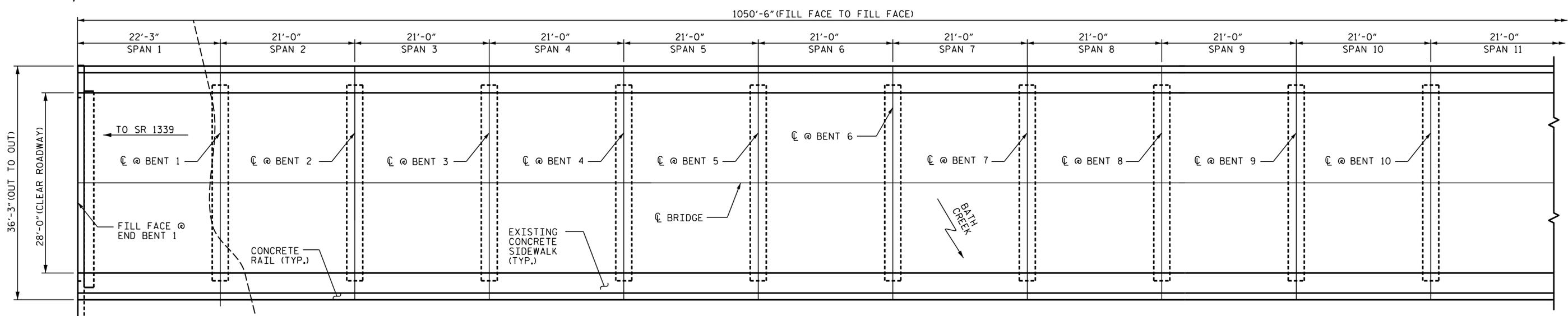
DRAWN BY : S. T. SANDOR DATE : .04/2021
 CHECKED BY : W. C. SMITH DATE : .06/2021

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	BY:	DATE:	NO.	
1			3	S2-9
2			4	TOTAL SHEETS 9

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ELEVATION
(SECTION ALONG CL ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

SCOPE OF WORK

- REMOVE AND REPLACE EXISTING SPAN 25 WITH PROPOSED STEEL GIRDERS AND REINFORCED CONCRETE DECK.
- EPOXY RESIN INJECTION OF CONCRETE CRACKS.
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE SHOTCRETE AND CONCRETE REPAIR AREAS.
- PERFORM SHOTCRETE AND CONCRETE REPAIRS IN PREPARED AREAS.
- PARTIALLY REMOVE BRIDGE DECK CONCRETE BY SCARIFICATION AND SHOTBLASTING METHODS.
- PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS.
- OVERLAY PREPARED BRIDGE DECK WITH POLYMER CONCRETE OVERLAY (PC).
- GROOVE POLYMER CONCRETE BRIDGE DECK.
- REMOVE EXISTING JOINT MATERIAL AND INSTALL SILICONE JOINT SEALS.
- MILL AND REPAVE ASPHALT APPROACH ROADWAYS.

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/05/2020.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT ITEMS SHOWN BELOW WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THESE ITEMS, OR OTHER WORK WILL BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH WORK IN A TIMELY MANNER, AS DETERMINED IN THE FIELD. SUCH WORK SHALL BE CONSIDERED EXTRA WORK AND SHALL BE ADDRESSED AS PER ARTICLE 104-7 OF THE STANDARD SPECIFICATIONS. PROJECT SPECIAL PROVISIONS THAT OUTLINE REQUIREMENTS FOR THESE POTENTIAL ADDITIONAL WORK ITEMS HAVE BEEN PROVIDED IN PROJECT DOCUMENTS, BUT NO QUANTITIES HAVE BEEN LISTED. ACTUAL PAY ITEMS, QUANTITIES, AND COSTS WILL BE ESTABLISHED, AS REQUIRED, IF EXTRA WORK IS ENCOUNTERED.

UNANTICIPATED ITEMS:

ITEM NO.	DESCRIPTION	UNIT
1	CLASS III SURFACE PREPARATION	SO. YD.

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

RESIDENT ENGINEER _____ DATE _____

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 1 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

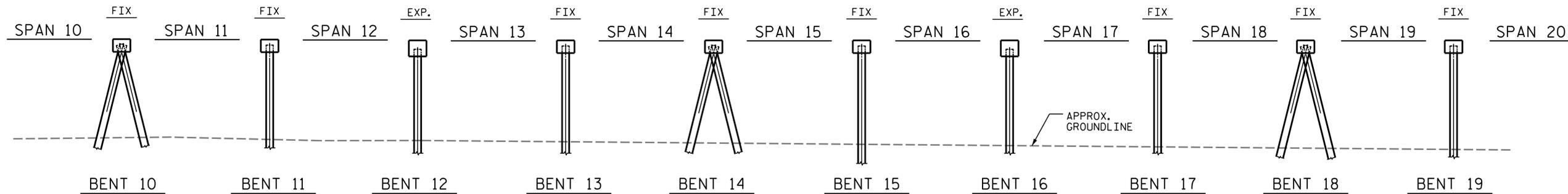
GENERAL DRAWING

FOR BRIDGE ON NC 92
 OVER BATH CREEK
 BETWEEN
 SR 1339 AND SR 1741

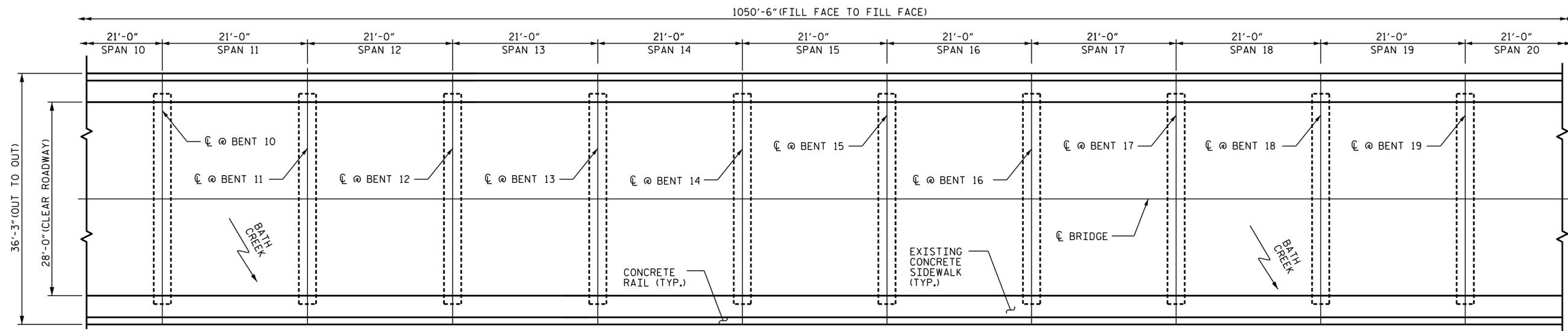
DRAWN BY : S. T. SANDOR DATE : 08/2021
 CHECKED BY : W. C. SMITH DATE : 08/2021

DOCUMENT NOT CONSIDERED
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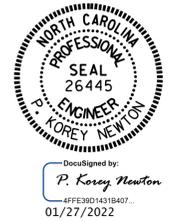
ELEVATION
(SECTION ALONG CL ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 2 OF 5

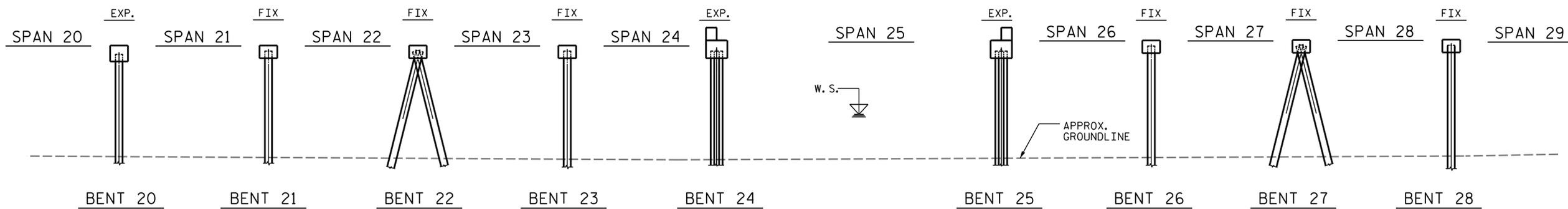


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON NC 92
 OVER BATH CREEK
 BETWEEN
 SR 1339 AND SR 1741

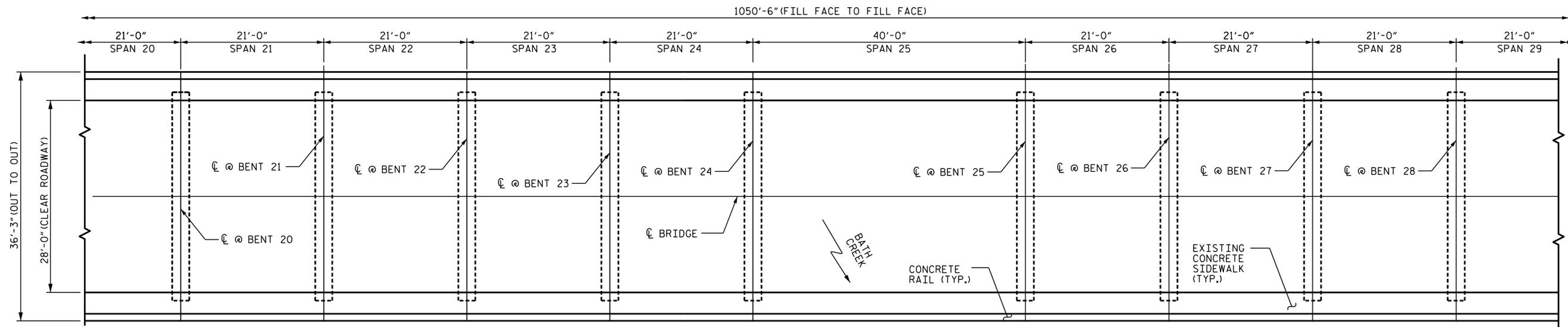
DRAWN BY : S. T. SANDOR DATE : 08/2021
 CHECKED BY : W. C. SMITH DATE : 08/2021

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1			3			S3-02
2			4			TOTAL SHEETS 78



ELEVATION
(SECTION ALONG ϕ ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 3 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

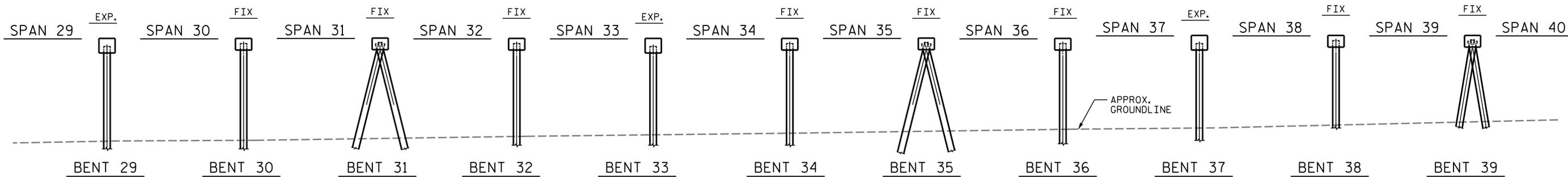
GENERAL DRAWING

FOR BRIDGE ON NC 92
 OVER BATH CREEK
 BETWEEN
 SR 1339 AND SR 1741

DRAWN BY : S. T. SANDOR DATE : 08/2021
 CHECKED BY : W. C. SMITH DATE : 08/2021

DOCUMENT NOT CONSIDERED
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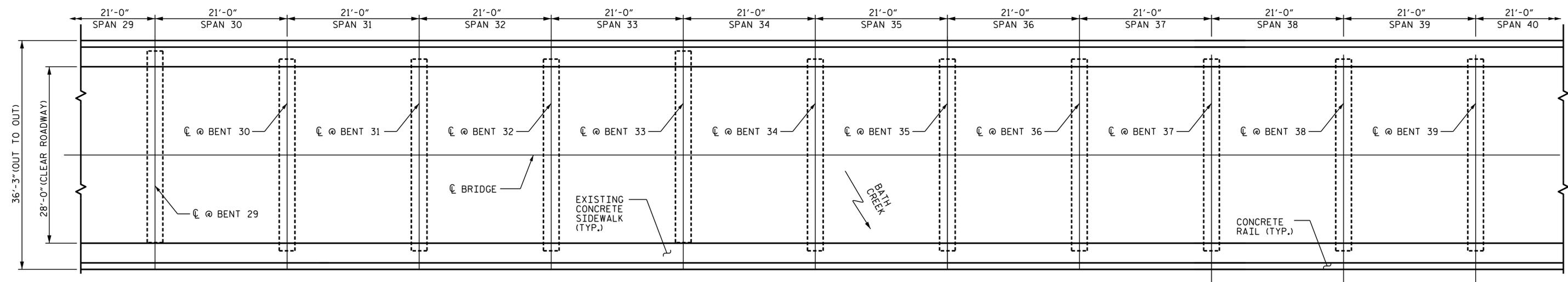
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S3-03
2			4			TOTAL SHEETS 78



ELEVATION
(SECTION ALONG \varnothing ROADWAY)



1050'-6" (FILL FACE TO FILL FACE)



PLAN
(PILES NOT SHOWN FOR CLARITY)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 4 OF 5

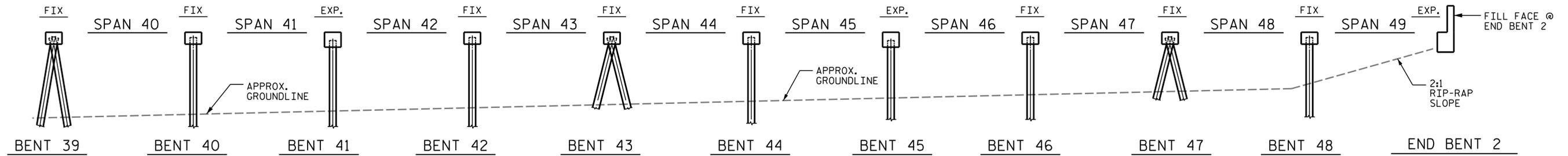


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON NC 92
 OVER BATH CREEK
 BETWEEN
 SR 1339 AND SR 1741

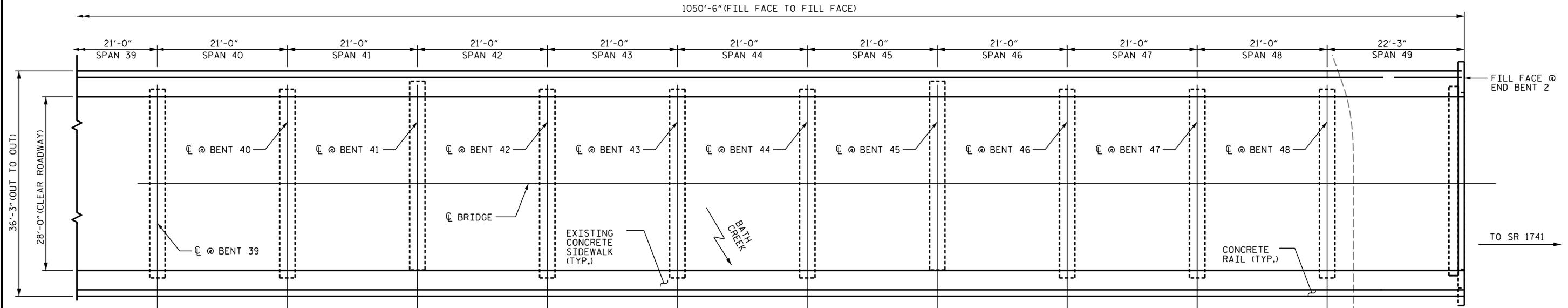
DRAWN BY : S. T. SANDOR DATE : 08/2021
 CHECKED BY : W. C. SMITH DATE : 08/2021

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2			4			TOTAL SHEETS 78



ELEVATION
(SECTION ALONG CL ROADWAY)



PLAN
(PILES NOT SHOWN FOR CLARITY)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 5 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

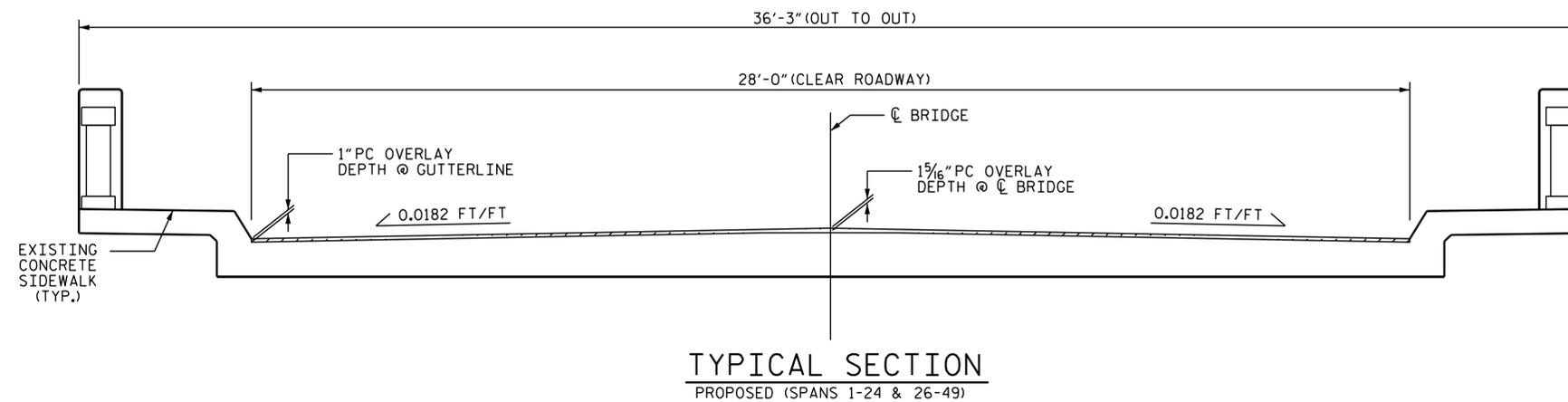
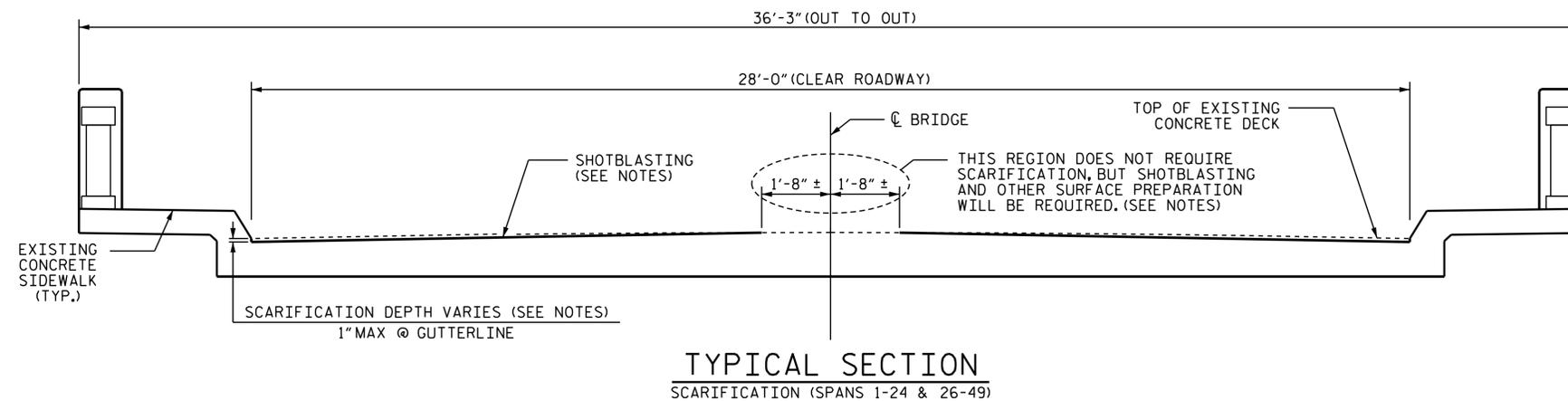
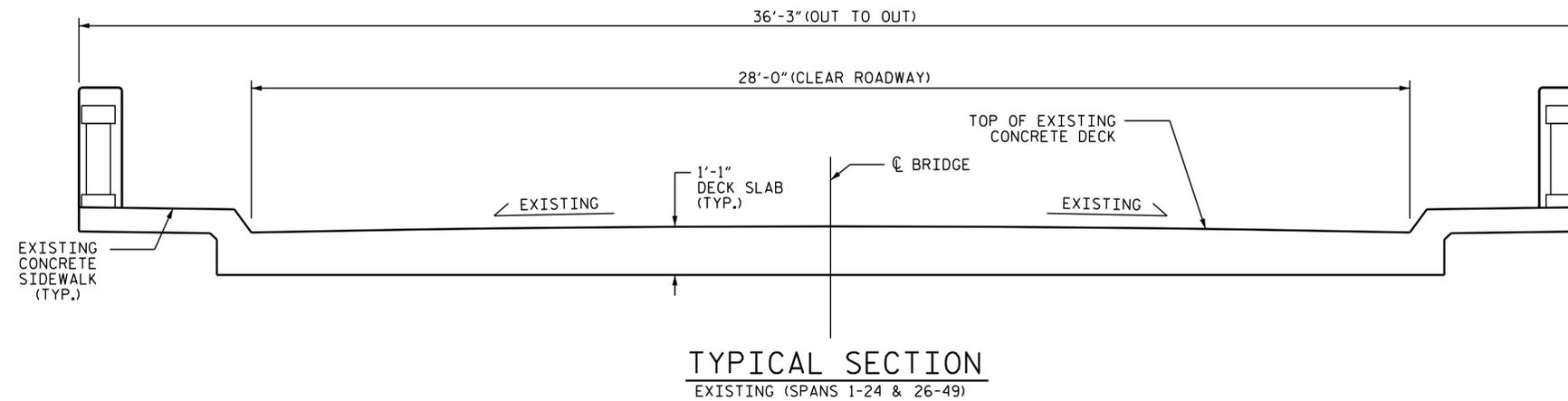
GENERAL DRAWING

FOR BRIDGE ON NC 92
 OVER BATH CREEK
 BETWEEN
 SR 1339 AND SR 1741

DRAWN BY : S. T. SANDOR DATE : 08/2021
 CHECKED BY : W. C. SMITH DATE : 08/2021

DOCUMENT NOT CONSIDERED
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NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 78



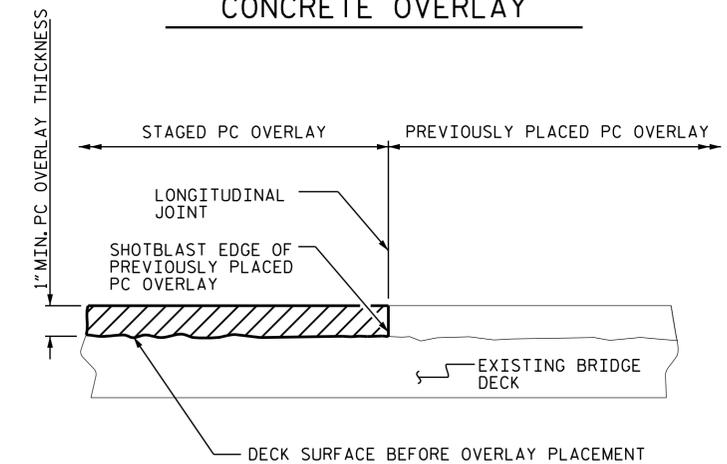
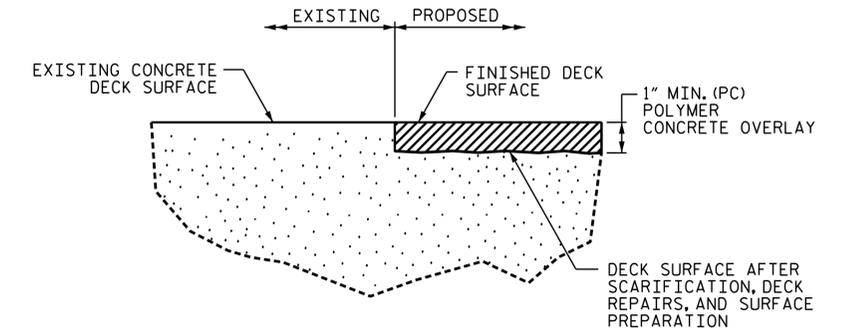
NOTES

SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND POLYMER CONCRETE PLACEMENT.

THE EXISTING TOP OF SLAB DOES NOT FOLLOW A STRAIGHT SLOPE FROM GUTTERLINE TO CL OF BRIDGE AND WILL REQUIRE ADJUSTMENT OF THE SCARIFICATION AND PC OVERLAY DEPTH ACCORDINGLY.

THE DEPTH OF THE REQUIRED SCARIFICATION WILL VARY FROM A MAXIMUM OF 1" AT THE GUTTERLINE AND DIMINISH TO ZERO WHERE THE PROPOSED SLOPE IS 1" ABOVE THE EXISTING TOP OF SLAB (ESTIMATED AT 1'-8" FROM CL BRIDGE).

THE CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A PLAN FOR SCARIFICATION, SURFACE PREPARATION, AND PC OVERLAY PLACEMENT AND FINISHING TO ATTAIN THE FINAL SURFACE SLOPE AS INDICATED.



PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

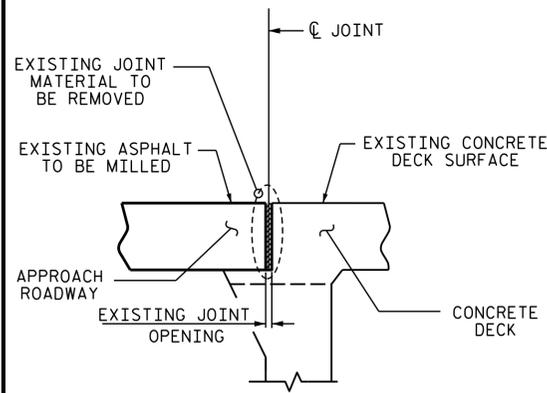


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
 TYPICAL SECTION
 AND
 POLYMER CONCRETE
 OVERLAY DETAILS

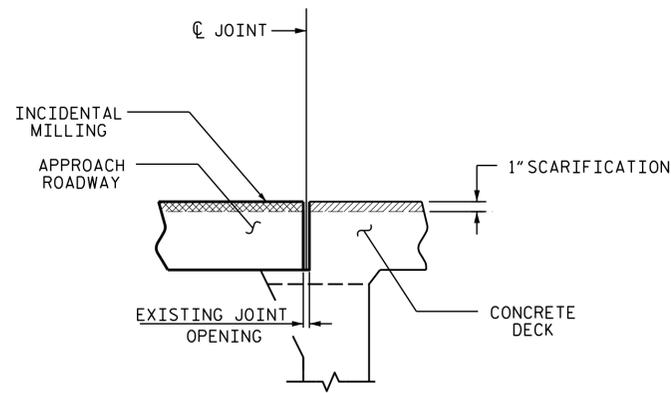
DRAWN BY : S. T. SANDOR/A. Y. GODFREY DATE : .06/2021
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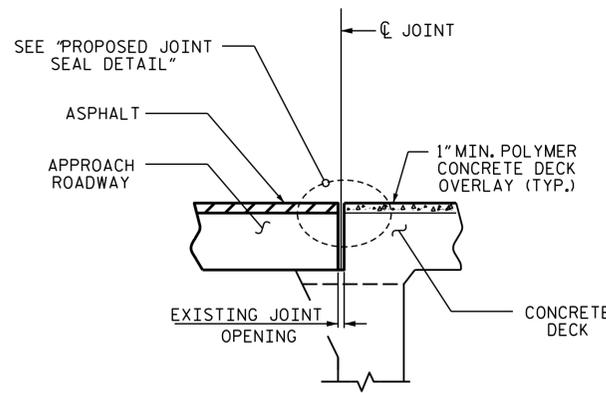
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2			4			TOTAL SHEETS 78



EXISTING JOINT

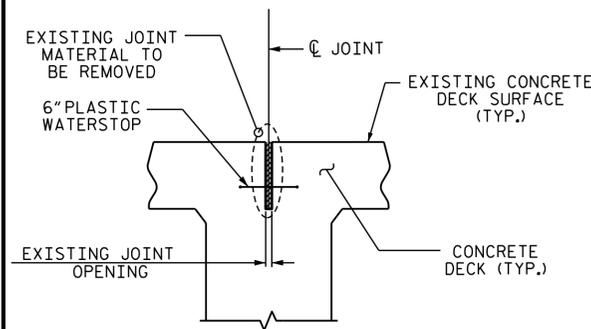


EXISTING JOINT AFTER DECK SCARIFICATION

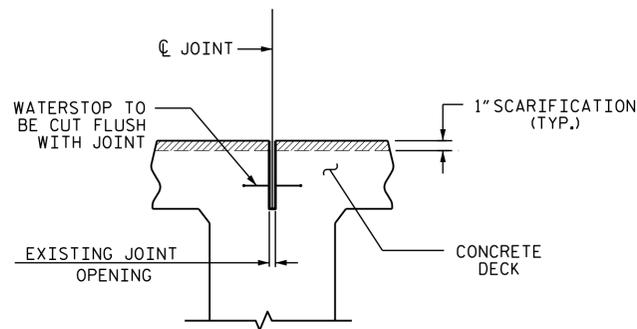


PROPOSED JOINT

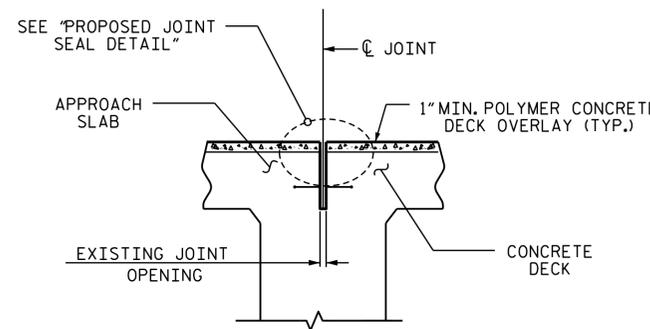
JOINT INSTALLATION SEQUENCE AT END BENTS (SECTION A-A)



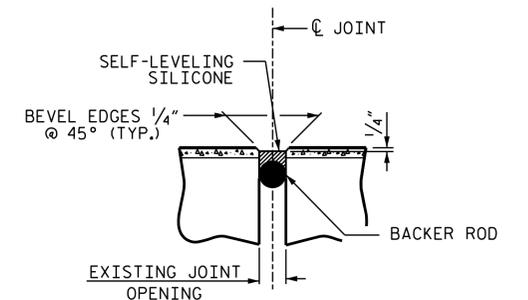
EXISTING JOINT



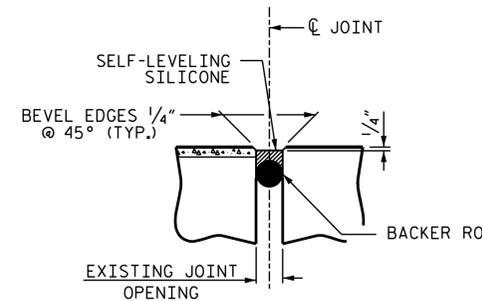
EXISTING JOINT AFTER DECK SCARIFICATION



PROPOSED JOINT



PROPOSED JOINT SEAL DETAIL (AT BENTS #4, #8, #12, #16, #20, #29, #33, #37, #41, & #45)

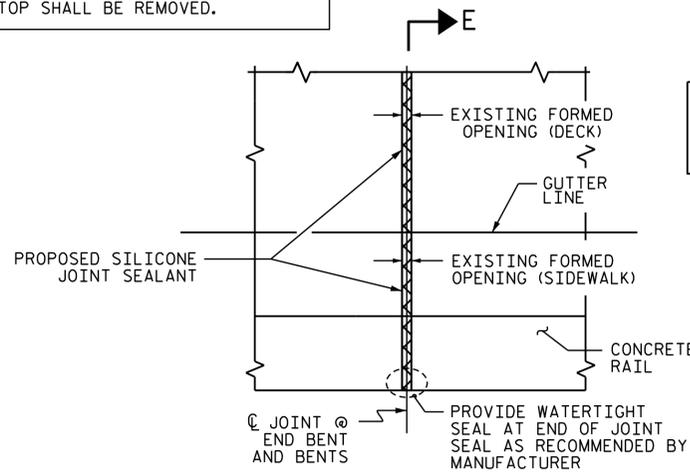


PROPOSED JOINT SEAL DETAIL (AT BENTS #24, & #25)

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
POURABLE SILICONE JOINT SEALANT	507.5 L.F.	

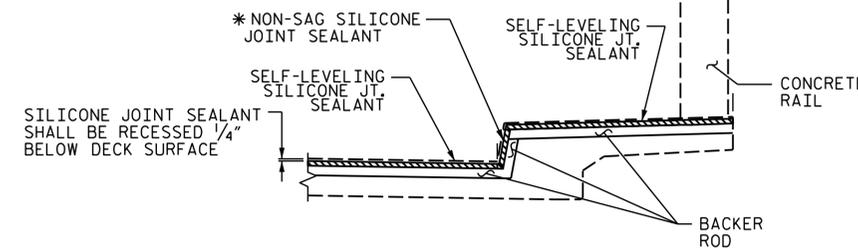
JOINT INSTALLATION SEQUENCE AT BENTS (SECTION B-B)

IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, OR IF UNSOUND CONCRETE IS REMOVED WITHIN 2" OF THE WATERSTOP, THE ENTIRE CONCRETE DEPTH TO THE WATERSTOP SHALL BE REMOVED.

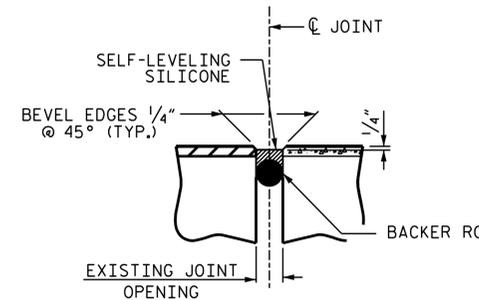


PLAN

*NON-SAG SILICONE JOINT SEALANT TO BE PLACED AND ALLOWED TO SET, PRIOR TO PLACEMENT OF SELF-LEVELING SILICONE JOINT SEALANT.



SECTION E-E



PROPOSED JOINT SEAL DETAIL (AT END BENT #1 AND END BENT #2)

PROJECT NO. 15BPR.56
 BEAUFORT COUNTY
 BRIDGE NO. 060028



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 JOINT REPAIR DETAILS

REVISIONS						SHEET NO.
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2			4			TOTAL SHEETS 78

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DRAWN BY : S. T. SANDOR/A. Y. GODFREY DATE : 06/2021
 CHECKED BY : W. C. SMITH/ P. K. NEWTON DATE : 06/2021

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIR SPANS 1 THRU 10

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR PC OVERLAY	21.5 SQ. YDS.	
CLASS II SURFACE PREPARATION	21.5 SQ. YDS.	
POLYESTER POLYMER CONCRETE MATERIALS	25.1 CU. YDS.	
EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	25.1 CU. YDS.	
PLACING AND FINISHING PC OVERLAY	657.2 SQ. YDS.	
SCARIFYING BRIDGE DECK	657.2 SQ. YDS.	
SHOTBLASTING BRIDGE DECK	657.2 SQ. YDS.	
GROOVING BRIDGE FLOORS	5,252.1 SQ. FT.	

NOTES

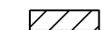
DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR FOR PC OVERLAY AFTER REMOVAL OF UNSOUND CONCRETE (MIN. 2" CLEAR TO SAWCUT). SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

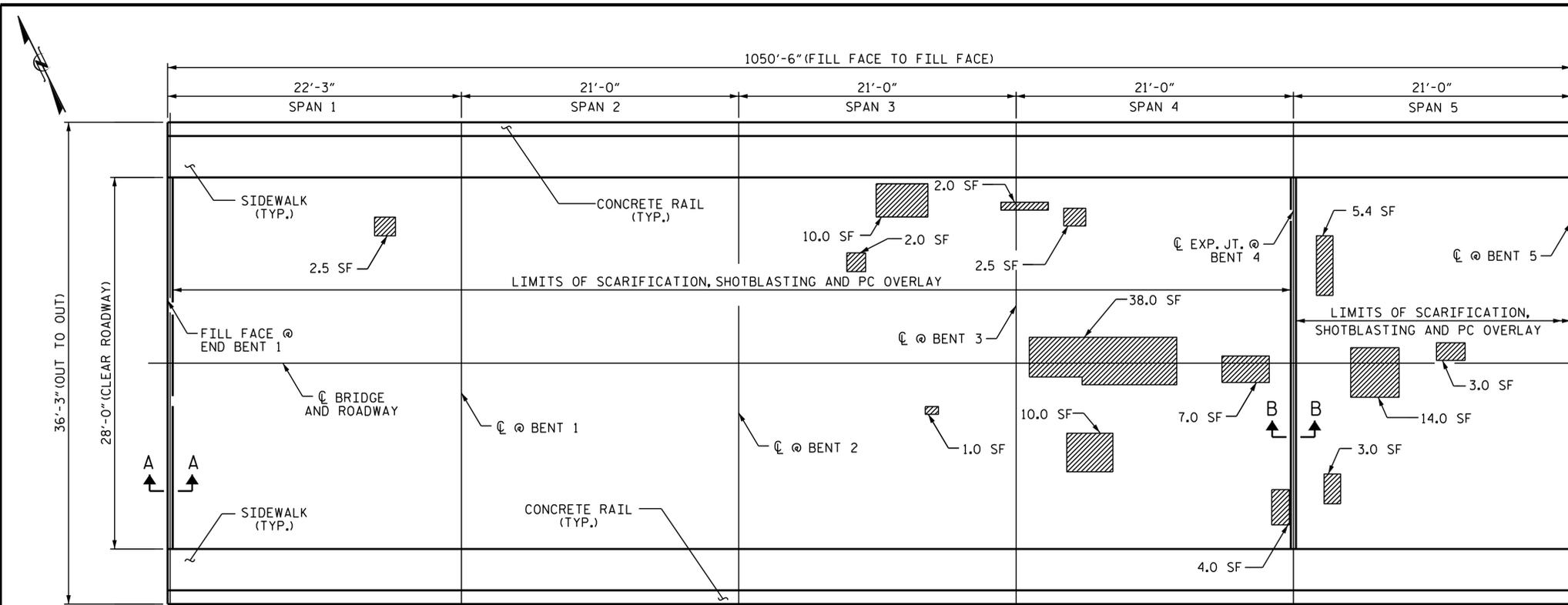
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR SECTIONS A-A AND B-B SEE "JOINT DETAILS" SHEET.

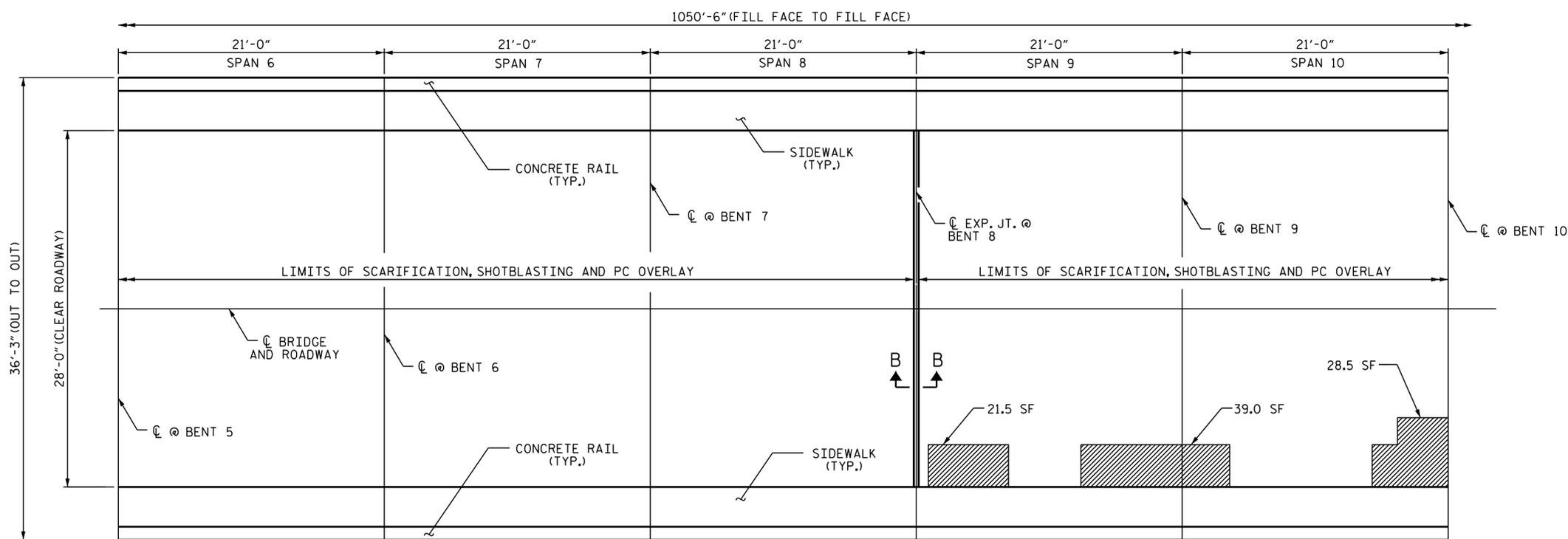
FOR SCARIFYING BRIDGE DECK, SHOTBLASTING BRIDGE DECK AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

FOR CONCRETE DECK REPAIR FOR PC OVERLAY, PC MATERIALS, AND PLACING AND FINISHING PC OVERLAY SEE POLYMER CONCRETE BRIDGE DECK OVERLAY SPECIAL PROVISION.

-  SCARIFYING AND SHOTBLASTING OF BRIDGE DECK FOR PC OVERLAY
-  APPROX. CLASS II SURFACE PREPARATION
-  SHOTCRETE RAIL REPAIR



PLAN
(SPANS 1 THRU 5)



PLAN
(SPANS 6 THRU 10)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 1 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

DECK SURFACE REPAIR

DRAWN BY : S. J. SANDOR/A. Y. GODFREY DATE : 03/2021
 CHECKED BY : W. C. SMITH DATE : 06/2021

DOCUMENT NOT CONSIDERED
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S3-08
2			4			TOTAL SHEETS 78

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIR SPANS 11 THRU 20

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR PC OVERLAY	11.1 SQ. YDS.	
CLASS II SURFACE PREPARATION	11.1 SQ. YDS.	
POLYESTER POLYMER CONCRETE MATERIALS	25.5 CU. YDS.	
EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	25.5 CU. YDS.	
PLACING AND FINISHING PC OVERLAY	653.3 SQ. YDS.	
SCARIFYING BRIDGE DECK	653.3 SQ. YDS.	
SHOTBLASTING BRIDGE DECK	653.3 SQ. YDS.	
GROOVING BRIDGE FLOORS	5,218.8 SQ. FT.	

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR FOR PC OVERLAY AFTER REMOVAL OF UNSOUND CONCRETE (MIN. 2" CLEAR TO SAWCUT). SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

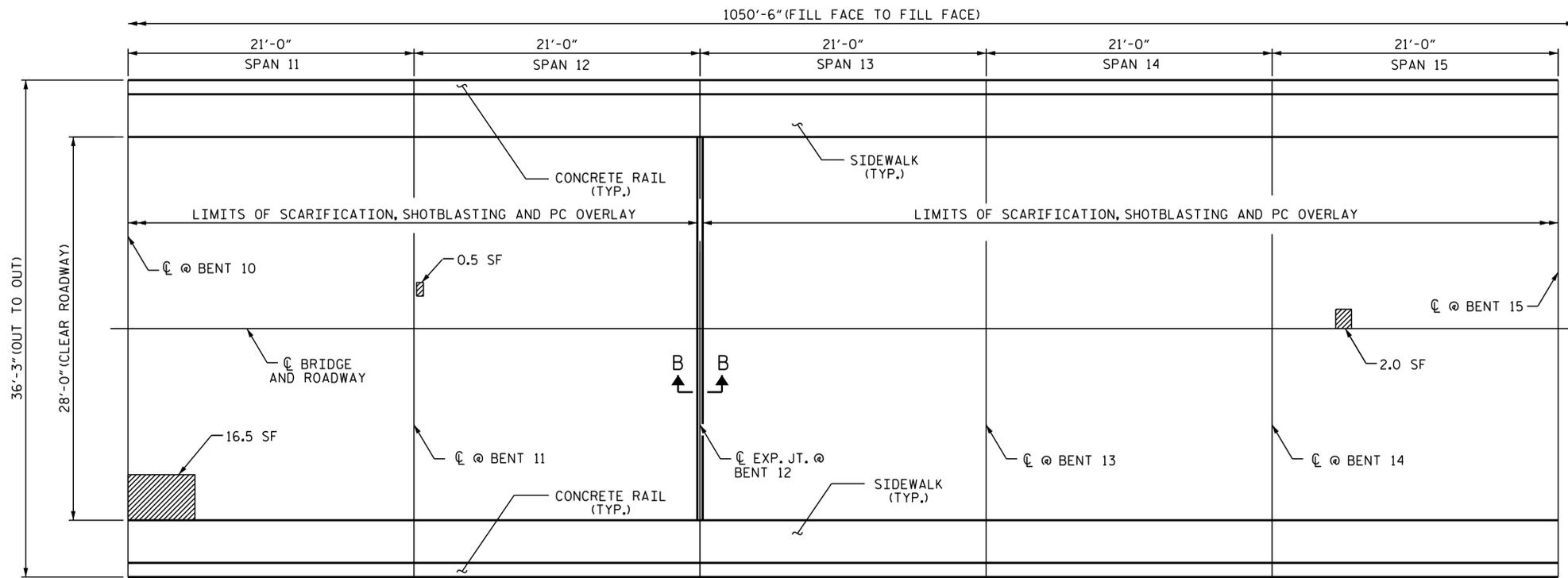
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR SECTION B-B SEE "JOINT DETAILS" SHEET.

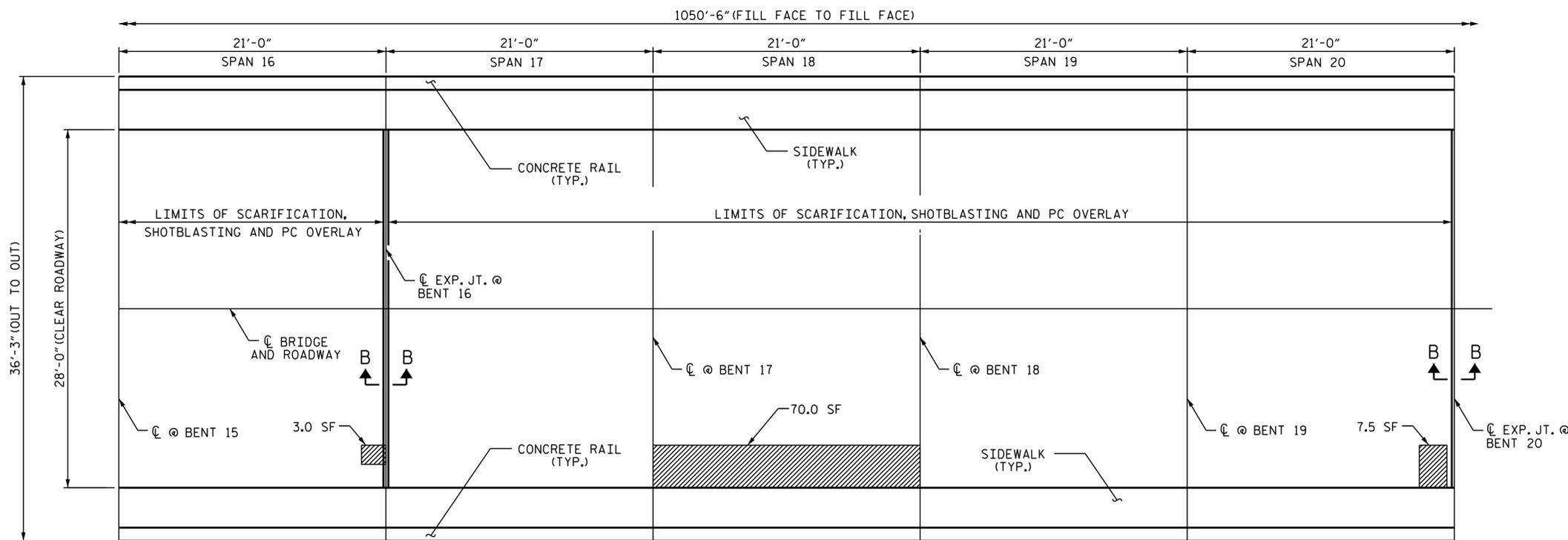
FOR SCARIFYING BRIDGE DECK, SHOTBLASTING BRIDGE DECK AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

FOR CONCRETE DECK REPAIR FOR PC OVERLAY, PC MATERIALS, AND PLACING AND FINISHING PC OVERLAY SEE POLYMER CONCRETE BRIDGE DECK OVERLAY SPECIAL PROVISION.

-  SCARIFYING AND SHOTBLASTING OF BRIDGE DECK FOR PC OVERLAY
-  APPROX. CLASS II SURFACE PREPARATION
-  SHOTCRETE REPAIR



PLAN
(SPANS 11 THRU 15)



PLAN
(SPANS 16 THRU 20)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 2 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

DECK SURFACE REPAIR

DRAWN BY : S. J. SANDOR/A. Y. GODFREY DATE : 03/2021
 CHECKED BY : W. C. SMITH DATE : 06/2021

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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1			3			S3-09
2			4			TOTAL SHEETS 78

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIR SPANS 21 THRU 29

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR PC OVERLAY	0.0 SQ. YDS.	
CLASS II SURFACE PREPARATION	0.0 SQ. YDS.	
POLYESTER POLYMER CONCRETE MATERIALS	20.4 CU. YDS.	
EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	20.4 CU. YDS.	
PLACING AND FINISHING PC OVERLAY	522.7 SQ. YDS.	
SCARIFYING BRIDGE DECK	522.7 SQ. YDS.	
SHOTBLASTING BRIDGE DECK	522.7 SQ. YDS.	
GROOVING BRIDGE FLOORS	4,175.0 SQ. FT.	

RAIL REPAIRS	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
RAIL	0.5	0.3		

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR FOR PC OVERLAY AFTER REMOVAL OF UNSOUND CONCRETE (MIN. 2" CLEAR TO SAWCUT). SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON 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 ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR SECTIONS B-B SEE "JOINT DETAILS" SHEET.

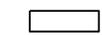
FOR SCARIFYING BRIDGE DECK, SHOTBLASTING BRIDGE DECK AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

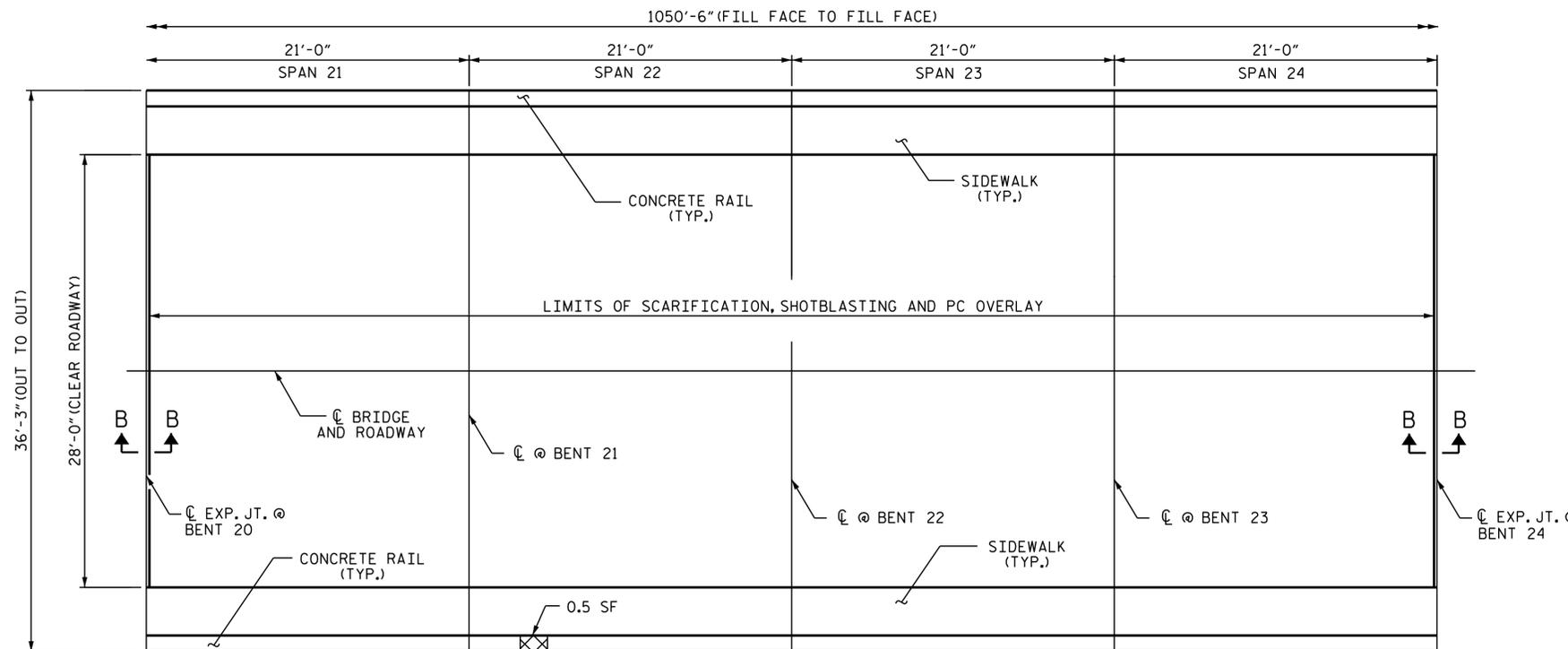
FOR CONCRETE DECK REPAIR FOR PC OVERLAY, PC MATERIALS, AND PLACING AND FINISHING PC OVERLAY SEE POLYMER CONCRETE BRIDGE DECK OVERLAY SPECIAL PROVISION.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

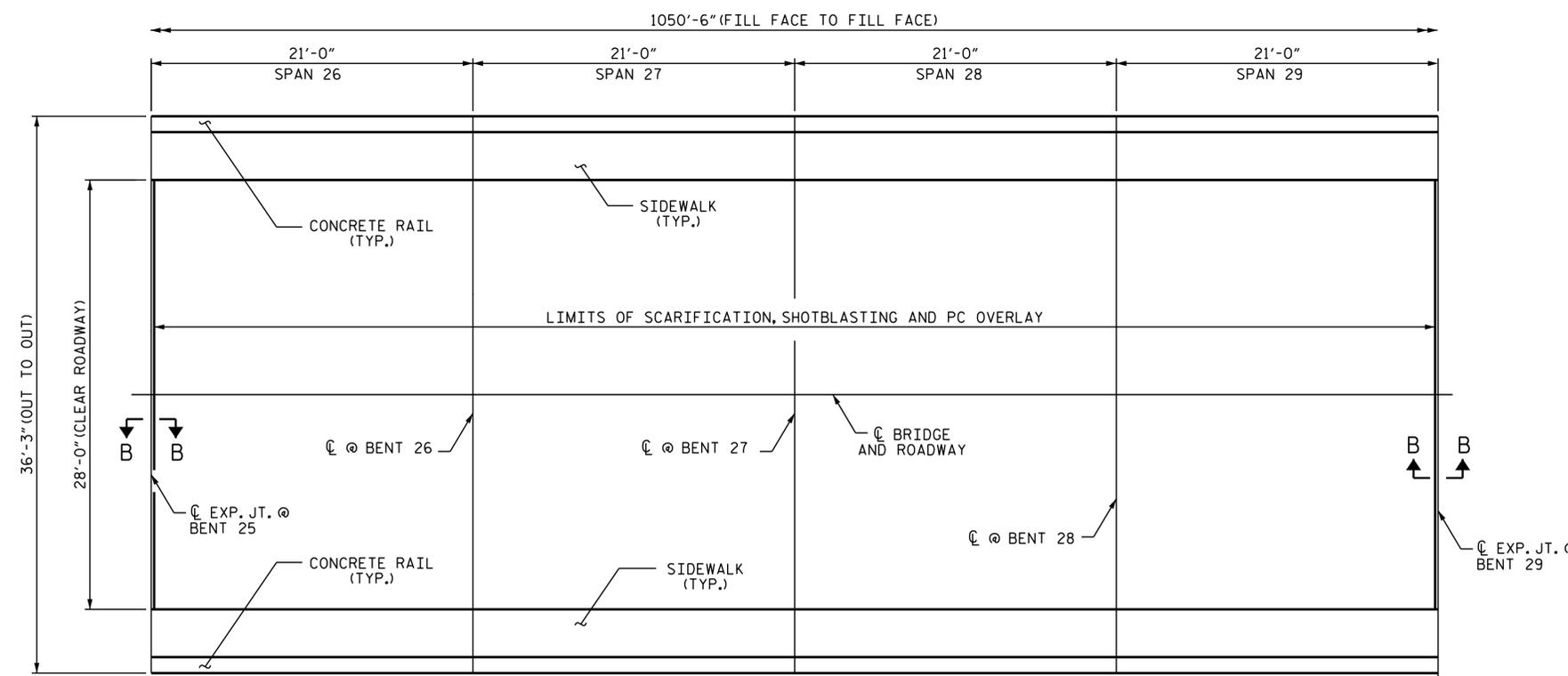
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

-  SCARIFYING AND SHOTBLASTING OF BRIDGE DECK FOR PC OVERLAY
-  APPROX. CLASS II SURFACE PREPARATION
-  SHOTCRETE REPAIR



PLAN
(SPANS 21 THRU 24)



PLAN
(SPANS 26 THRU 29)

DRAWN BY : S. J. SANDOR/A. Y. GODFREY DATE : 03/2021
 CHECKED BY : W. C. SMITH DATE : 06/2021

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 3 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

DECK SURFACE REPAIR

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AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIR SPANS 30 THRU 39

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR PC OVERLAY	0.0 SQ. YDS.	
CLASS II SURFACE PREPARATION	0.0 SQ. YDS.	
POLYESTER POLYMER CONCRETE MATERIALS	25.5 CU. YDS.	
EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	25.5 CU. YDS.	
PLACING AND FINISHING PC OVERLAY	653.3 SQ. YDS.	
SCARIFYING BRIDGE DECK	653.3 SQ. YDS.	
SHOTBLASTING BRIDGE DECK	653.3 SQ. YDS.	
GROOVING BRIDGE FLOORS	5,218.8 SQ. FT.	

NOTES

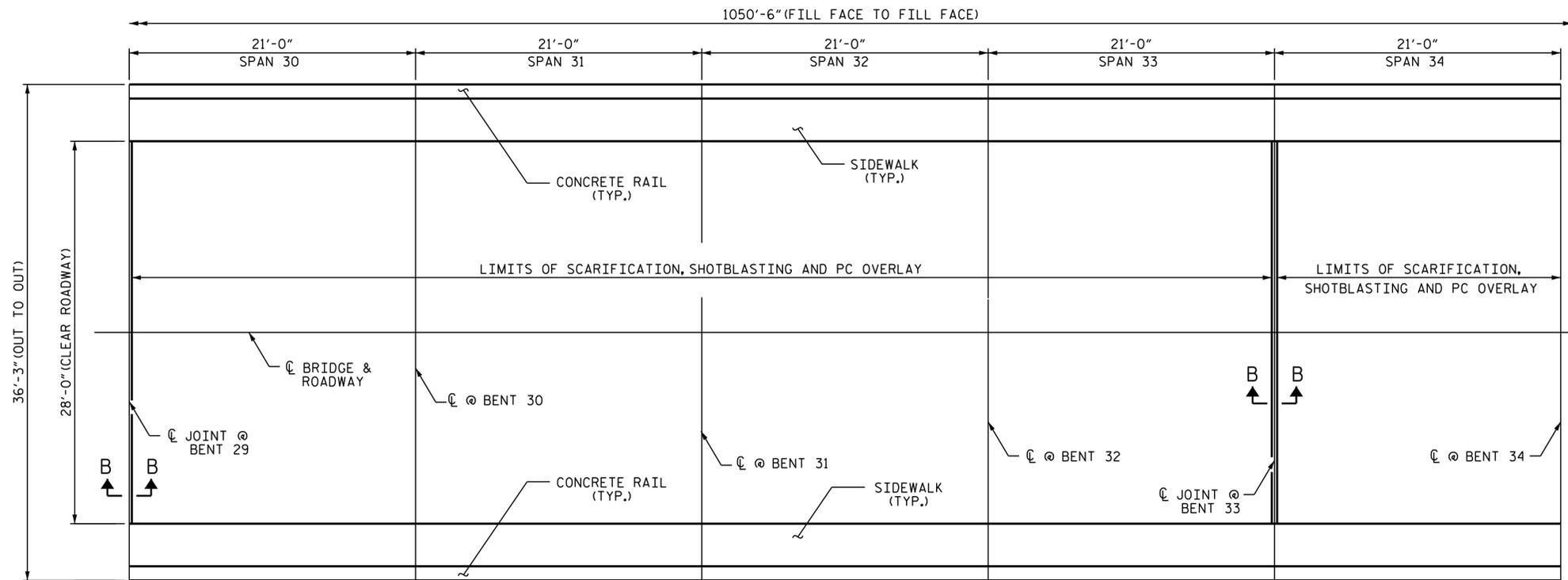
DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR FOR PC OVERLAY AFTER REMOVAL OF UNSOUND CONCRETE (MIN. 2" CLEAR TO SAWCUT). SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON 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 ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR SECTION B-B SEE "JOINT DETAILS" SHEET.

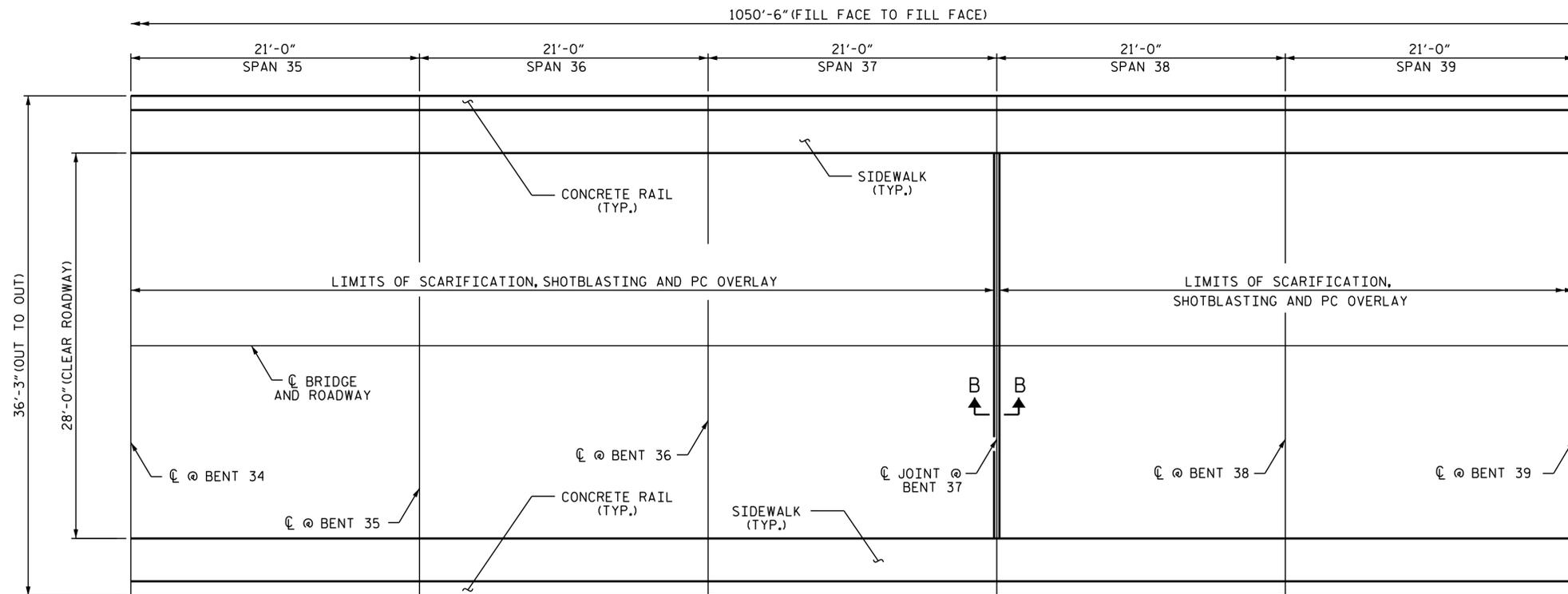
FOR SCARIFYING BRIDGE DECK, SHOTBLASTING BRIDGE DECK AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

FOR CONCRETE DECK REPAIR FOR PC OVERLAY, PC MATERIALS, AND PLACING AND FINISHING PC OVERLAY SEE POLYMER CONCRETE BRIDGE DECK OVERLAY SPECIAL PROVISION.



PLAN
(SPANS 30 THRU 34)

-  SCARIFYING AND SHOTBLASTING OF BRIDGE DECK FOR PC OVERLAY
-  APPROX. CLASS II SURFACE PREPARATION
-  SHOTCRETE REPAIR



PLAN
(SPANS 35 THRU 39)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
 BRIDGE NO. 060028

SHEET 4 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

DECK SURFACE REPAIR

DRAWN BY : S. T. SANDOR/A. Y. GODFREY DATE : 03/2021
 CHECKED BY : W. C. SMITH DATE : 06/2021

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2			4			TOTAL SHEETS 78

AS-BUILT REPAIR QUANTITY TABLE

DECK SURFACE REPAIR SPANS 40 THRU 49

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR PC OVERLAY	0.3 SQ. YDS.	
CLASS II SURFACE PREPARATION	0.3 SQ. YDS.	
POLYESTER POLYMER CONCRETE MATERIALS	25.1 CU. YDS.	
EPOXY POLYMER CONCRETE MATERIALS (ALTERNATE)	25.1 CU. YDS.	
PLACING AND FINISHING PC OVERLAY	657.2 SQ. YDS.	
SCARIFYING BRIDGE DECK	657.2 SQ. YDS.	
SHOTBLASTING BRIDGE DECK	657.2 SQ. YDS.	
GROOVING BRIDGE FLOORS	5,252.1 SQ. FT.	

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR FOR PC OVERLAY AFTER REMOVAL OF UNSOUND CONCRETE (MIN. 2" CLEAR TO SAWCUT). SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

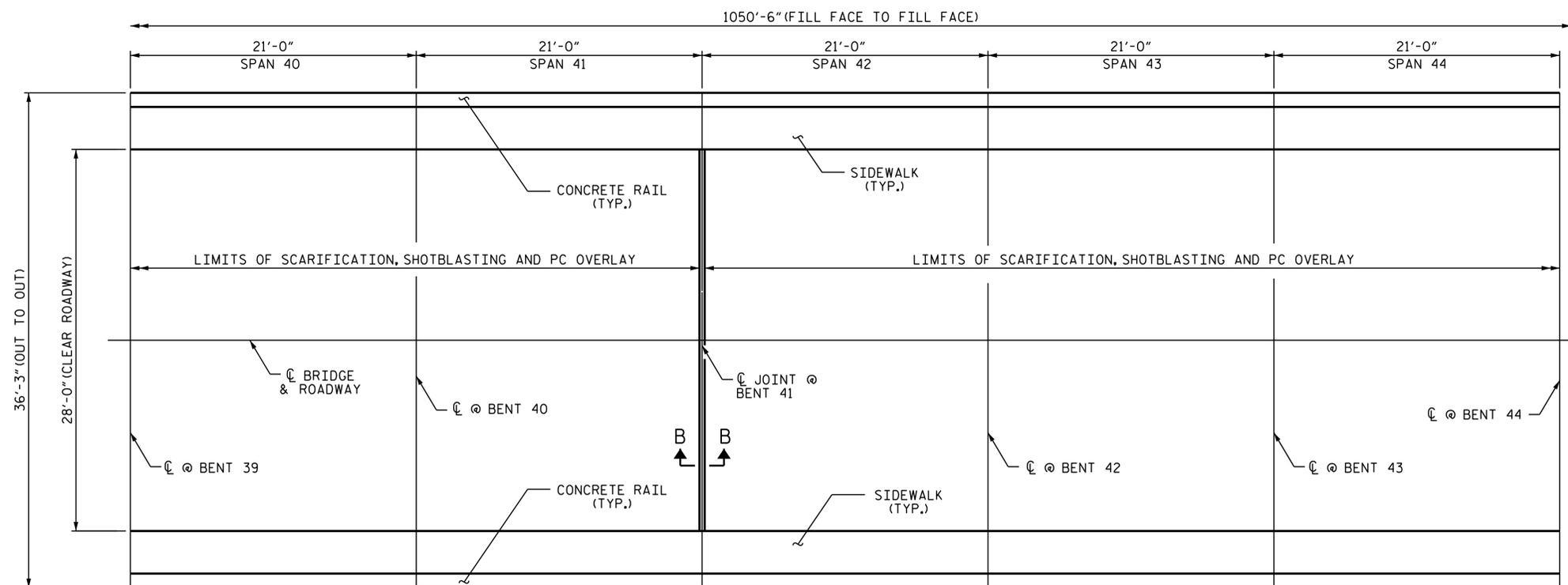
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR SECTIONS A-A AND B-B SEE "JOINT DETAILS" SHEET.

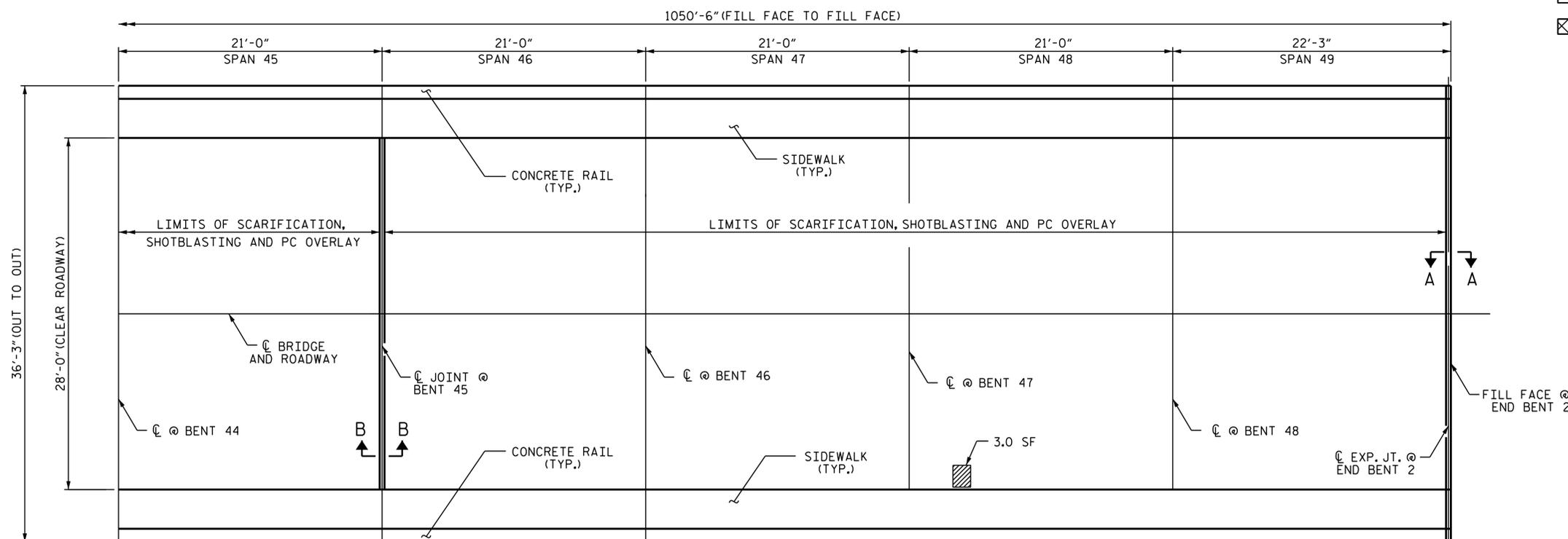
FOR SCARIFYING BRIDGE DECK, SHOTBLASTING BRIDGE DECK AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION FOR POLYMER CONCRETE SPECIAL PROVISION.

FOR CONCRETE DECK REPAIR FOR PC OVERLAY, PC MATERIALS, AND PLACING AND FINISHING PC OVERLAY SEE POLYMER CONCRETE BRIDGE DECK OVERLAY SPECIAL PROVISION.

-  SCARIFYING AND SHOTBLASTING OF BRIDGE DECK FOR PC OVERLAY
-  APPROX. CLASS II SURFACE PREPARATION
-  SHOTCRETE REPAIR



PLAN
(SPANS 40 THRU 44)



PLAN
(SPANS 45 THRU 49)

PROJECT NO. 15BPR.56
BEAUFORT COUNTY
BRIDGE NO. 060028

SHEET 5 OF 5



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
DECK SURFACE REPAIR

DRAWN BY : S. J. SANDOR/A. Y. GODFREY DATE : .03/2021
CHECKED BY : W. C. SMITH DATE : .06/2021

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2			4			TOTAL SHEETS 78