8/26/21

PROJECT: HI-0006

CONTRACT NO: C204743

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

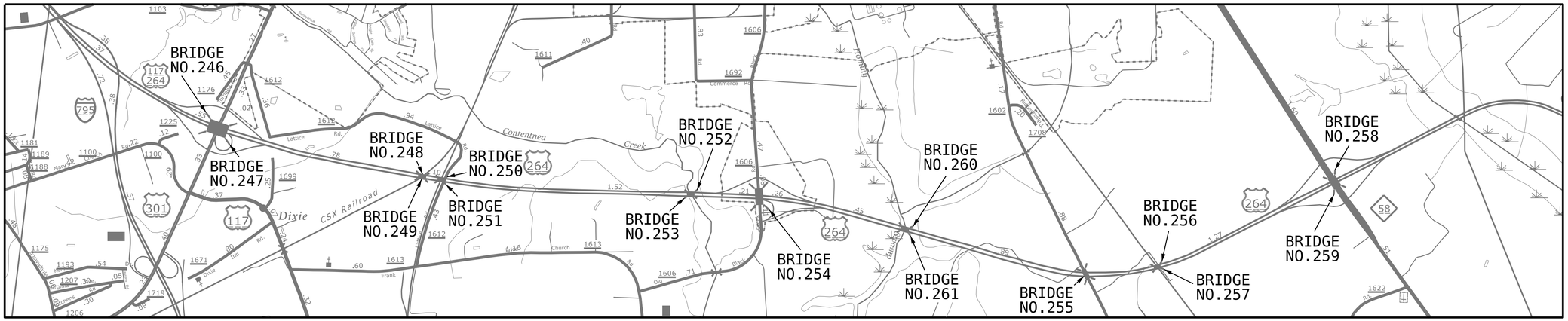
WILSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HI-0006	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49982.1.1	0264076	P.E.
49982.2.1	0264076	R.O.W.
49982.2.2	0264076	UTILITIES
49982.3.1	0264076	CONST.

LOCATION: ***BRIDGE #970246 & #970247 ON US 264 BYP OVER US 301.***
BRIDGE #970248 & #970249 ON US 264 OVER CSX.
BRIDGE #970250 & #970251 ON US 264 BYP OVER SR 1612 & CSX.
BRIDGE #970252 & #970253 ON US 264 BYP OVER CONTENTNEA CREEK.
BRIDGE #970254 ON SR 1606 OVER US 264.
BRIDGE #970255 ON SR 1602 OVER US 264.
BRIDGE #970256 & #970257 ON US 264 BYP OVER NSRR.
BRIDGE #970258 & #970259 ON NC 58 OVER US 264.
BRIDGE #970260 & #970261 ON US 264 BYP OVER HOMINY SWAMP.

TYPE OF WORK: ***BRIDGE PRESERVATION – SHOTBLASTING & SILANE DECK TREATMENT, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, AND PRESTRESSED CONCRETE GIRDER REPAIRS.***



VICINITY MAP

DESIGN DATA

BRIDGE #246 & #247 ADT (2019) = 11,750
BRIDGE #248, #249, #250, #251, #252, #260, & #261 ADT (2019) = 11,250
BRIDGE #253 ADT (2018) = 10,500
BRIDGE #254 ADT (2018) = 2,300
BRIDGE #256 ADT (2018) = 9,750
BRIDGE #257 ADT (2019) = 9,750
BRIDGE #258 ADT (2017) = 3,750
BRIDGE #259 ADT (2018) = 3,600

PROJECT LENGTH

BRIDGE # 970246 =	0.040 MILES	BRIDGE # 970254 =	0.039 MILES
BRIDGE # 970247 =	0.040 MILES	BRIDGE # 970255 =	0.045 MILES
BRIDGE # 970248 =	0.042 MILES	BRIDGE # 970256 =	0.034 MILES
BRIDGE # 970249 =	0.042 MILES	BRIDGE # 970257 =	0.035 MILES
BRIDGE # 970250 =	0.046 MILES	BRIDGE # 970258 =	0.041 MILES
BRIDGE # 970251 =	0.046 MILES	BRIDGE # 970259 =	0.040 MILES
BRIDGE # 970252 =	0.082 MILES	BRIDGE # 970260 =	0.042 MILES
BRIDGE # 970253 =	0.082 MILES	BRIDGE # 970261 =	0.043 MILES

TOTAL LENGTH TIP PROJECT HI-0006 = 6.97 MILES

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

2018 STANDARD SPECIFICATIONS

LETTING DATE:

SEPTEMBER 20, 2022

Kristy W. Alford, P.E., CPM
PROJECT ENGINEER

Aster G. Abraha, P.E.
PROJECT DESIGN ENGINEER

7/1/2022
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aabraha

PROJECT: HI-0006

CONTRACT NO: C204743

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HI-0006	1A	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49982.1.1	0264076	P.E.
49982.2.1	0264076	R.O.W.
49982.2.2	0264076	UTILITIES
49982.3.1	0264076	CONST.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILSON COUNTY

LOCATION: BRIDGE #970246 & #970247 ON US 264 BYP OVER US 301.
BRIDGE #970248 & #970249 ON US 264 OVER CSX.
BRIDGE #970250 & #970251 ON US 264 BYP OVER SR 1612 & CSX.
BRIDGE #970252 & #970253 ON US 264 BYP OVER CONTENTNEA CREEK.
BRIDGE #970254 ON SR 1606 OVER US 264.
BRIDGE #970255 ON SR 1602 OVER US 264.
BRIDGE #970256 & #970257 ON US 264 BYP OVER NSRR.
BRIDGE #970258 & #970259 ON NC 58 OVER US 264.
BRIDGE #970260 & #970261 ON US 264 BYP OVER HOMINY SWAMP.

TYPE OF WORK: BRIDGE PRESERVATION – SHOTBLASTING & SILANE DECK TREATMENT, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, AND PRESTRESSED CONCRETE GIRDER REPAIRS.

INDEX OF STRUCTURES SHEETS

7/11/2022
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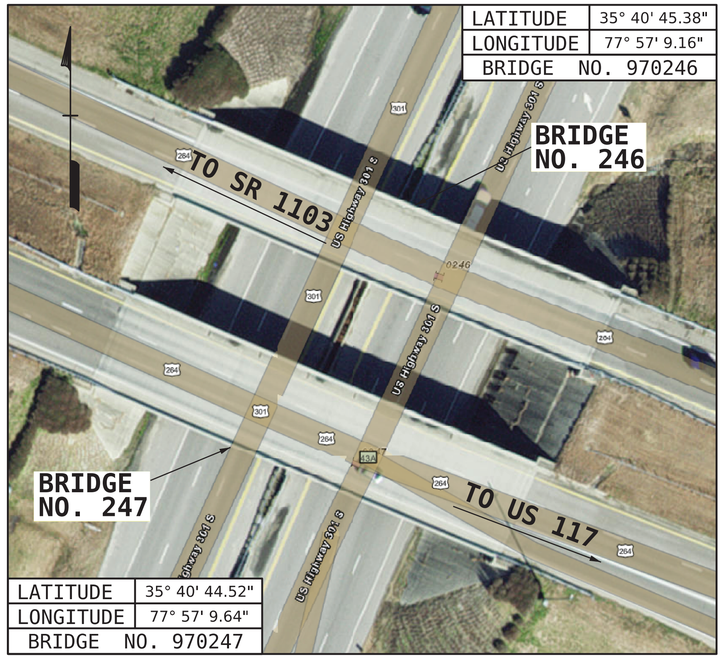
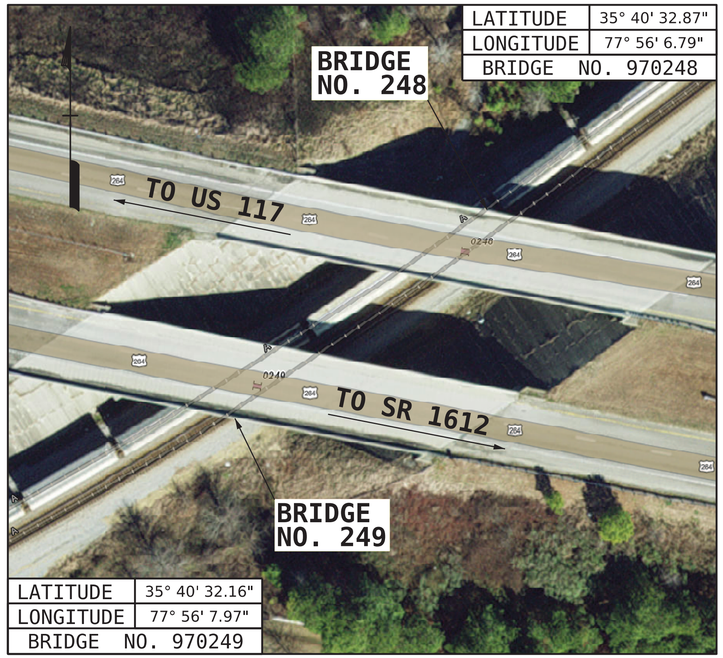
gabraha



LATITUDE	35° 40' 45.38"
LONGITUDE	77° 57' 9.16"
BRIDGE NO.	970246

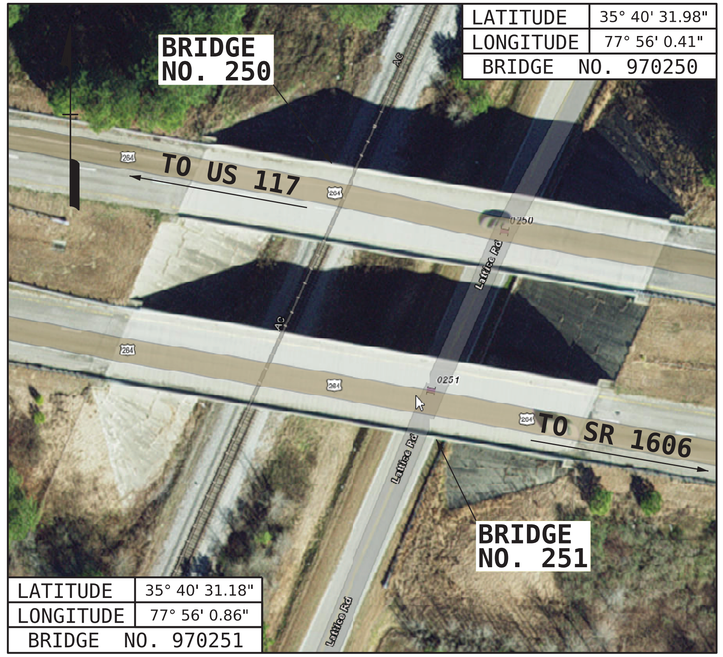
LATITUDE	35° 40' 44.52"
LONGITUDE	77° 57' 9.64"
BRIDGE NO.	970247



LATITUDE	35° 40' 32.87"
LONGITUDE	77° 56' 6.79"
BRIDGE NO.	970248

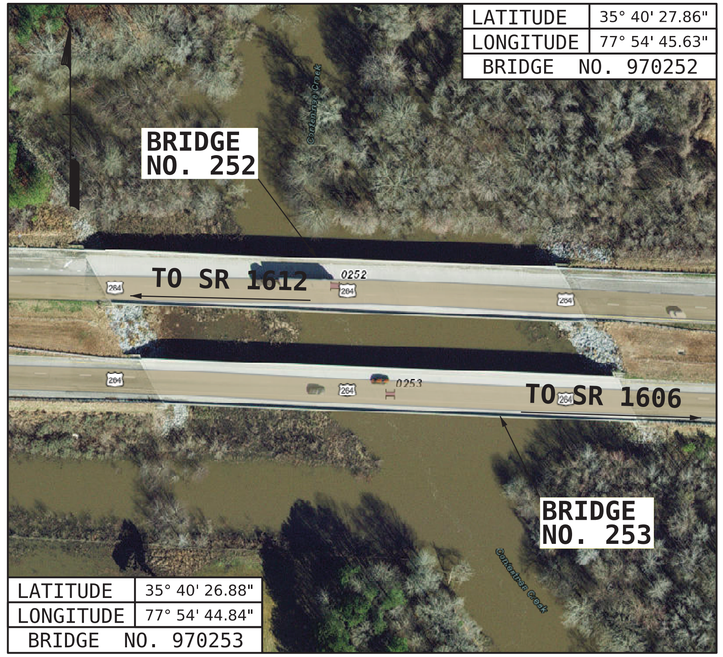
LATITUDE	35° 40' 32.16"
LONGITUDE	77° 56' 7.97"
BRIDGE NO.	970249

LATITUDE	35° 40' 26.11"
LONGITUDE	77° 54' 24.52"
BRIDGE NO.	970254



LATITUDE	35° 40' 31.98"
LONGITUDE	77° 56' 0.41"
BRIDGE NO.	970250

LATITUDE	35° 40' 31.18"
LONGITUDE	77° 56' 0.86"
BRIDGE NO.	970251



LATITUDE	35° 40' 27.86"
LONGITUDE	77° 54' 45.63"
BRIDGE NO.	970252

LATITUDE	35° 40' 26.88"
LONGITUDE	77° 54' 44.84"
BRIDGE NO.	970253

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970246, 970247, 970248, 970249, 970250, 970251, 970252, 970253, & 970254

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LOCATION SKETCHES

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.

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DDA09A4ED5104FD...
07/12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : G. AYES	DATE : 6/2022				
CHECKED BY : A. G. ABRAHA	DATE : 6/2022				
DESIGN ENGINEER OF RECORD: --	DATE : --				

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

7/12/2022
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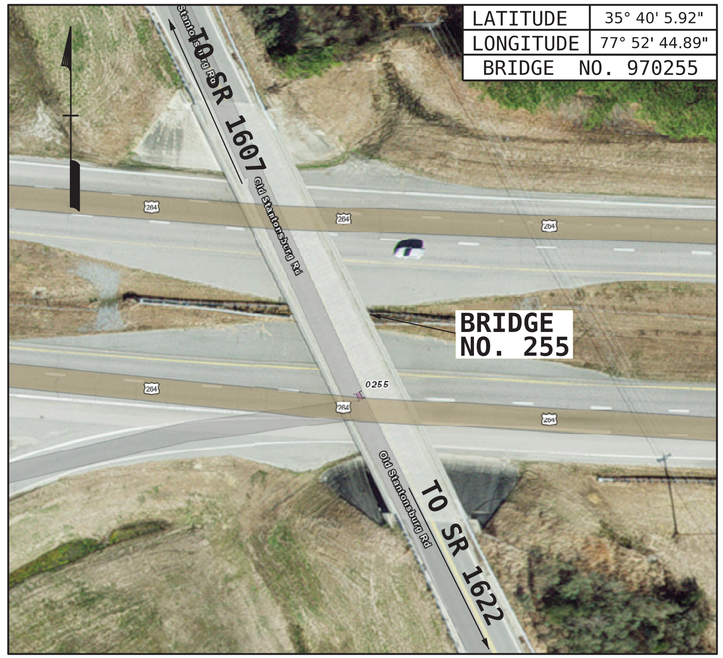
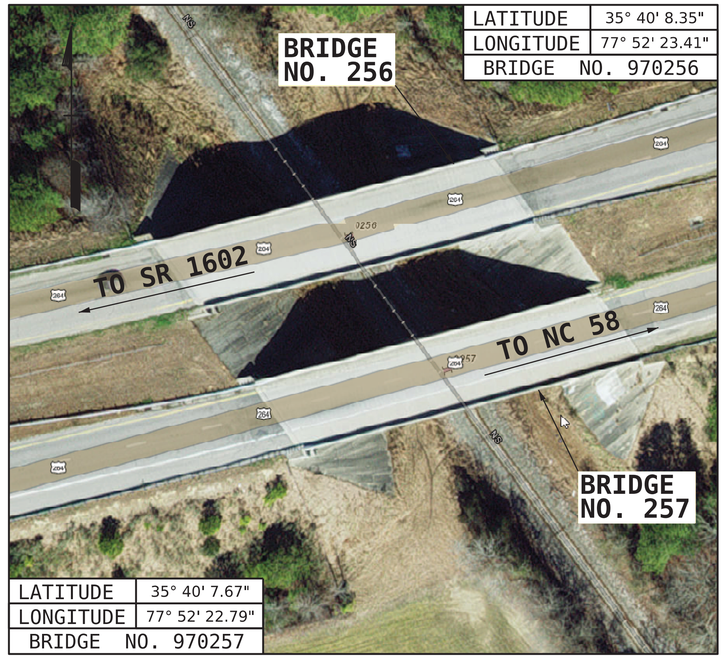
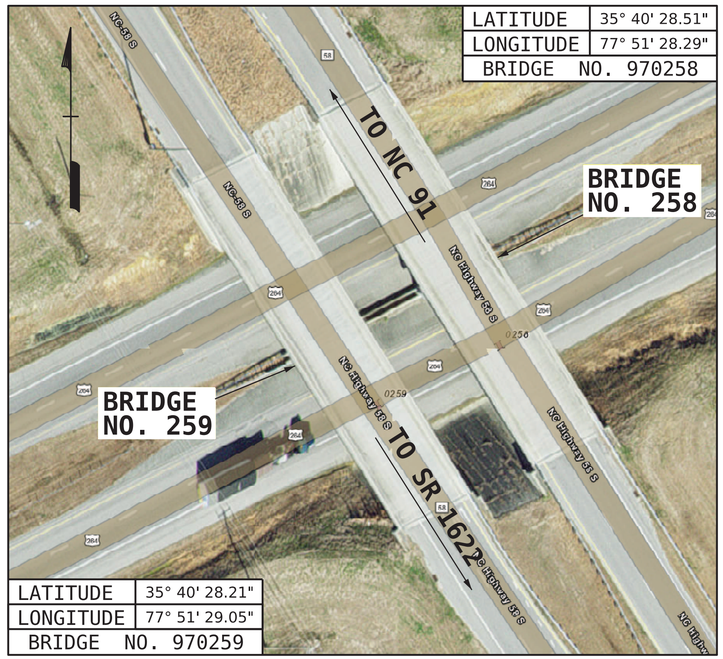


LATITUDE	35° 40' 5.92"
LONGITUDE	77° 52' 44.89"
BRIDGE NO.	970255



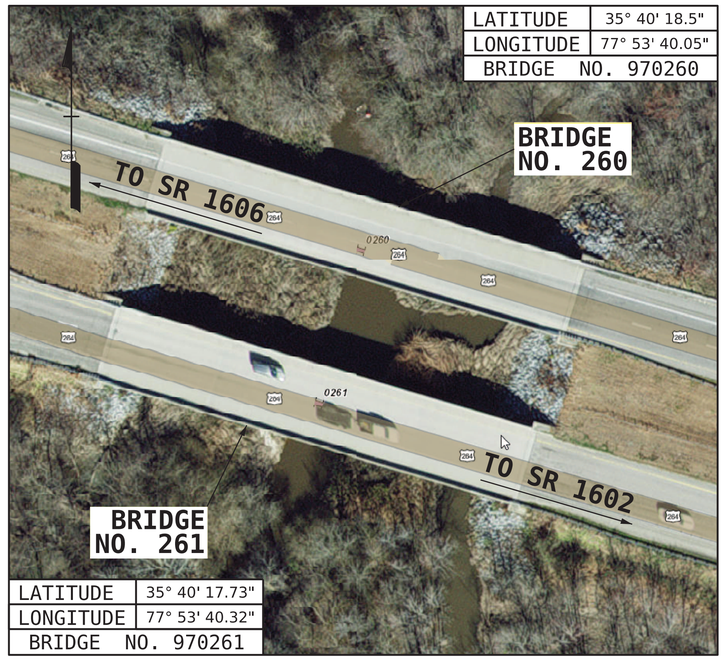
LATITUDE	35° 40' 8.35"
LONGITUDE	77° 52' 23.41"
BRIDGE NO.	970256

LATITUDE	35° 40' 7.67"
LONGITUDE	77° 52' 22.79"
BRIDGE NO.	970257



LATITUDE	35° 40' 28.51"
LONGITUDE	77° 51' 28.29"
BRIDGE NO.	970258

LATITUDE	35° 40' 28.21"
LONGITUDE	77° 51' 29.05"
BRIDGE NO.	970259



LATITUDE	35° 40' 18.5"
LONGITUDE	77° 53' 40.05"
BRIDGE NO.	970260

LATITUDE	35° 40' 17.73"
LONGITUDE	77° 53' 40.32"
BRIDGE NO.	970261

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. HI-0006

WILSON COUNTY

BRIDGE NO. 970255, 970256 970257, 970258, 970259, 970260, & 970261

SHEET 2 OF 2

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LOCATION SKETCHES

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

DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

7/12/2022
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gabraha

FA PROJECT NO. 0264076

GENERAL NOTES:

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT DUE TO THE NATURE OF PRESERVATION PROJECTS, THE EXTENT OF WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. 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.

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.

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

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

WORK ON THE BRIDGE(S) SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL BELOW, EXCEPT WHERE THE CONTRACTOR PLANS TO USE PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES TO CATCH THE MATERIAL. THE CONTRACTOR SHALL SUBMIT PLANS FOR CONSTRUCTION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT THE EXISTING STRUCTURE WHICH IS TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY PART OF THE EXISTING STRUCTURE WHICH IS TO REMAIN IN PLACE, THE DAMAGED AREA SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT NO ADDITIONAL COST TO THE DEPARTMENT.

ANY DAMAGE TO EXISTING REINFORCING STEEL, DURING CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND PERFORMED AT NO ADDITIONAL COST TO THE DEPARTMENT.

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

PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A COMPLETE SEQUENCE OF TASKS FOR EACH OPERATION AFFECTING THE BRIDGE SURFACE AND/OR TRAFFIC.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

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.

ALL PAVEMENT MARKINGS WILL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATIONS OF THE BRIDGE DECK. THE CONTRACTOR SHALL TAKE CARE THAT ANY CONSTRUCTION DEBRIS THAT COLLECTS IN THE DRAINS IS CONTAINED. DRAINS IN SHOULDERS OF ADJACENT TRAVEL LANE(S) SHALL BE KEPT FREE AND CLEAR OF DEBRIS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

FOR SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

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

FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT THE FOLLOWING ITEM(S) LISTED WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THE FOLLOWING ITEM(S) LISTED, 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 THE 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	DESCRIPTION	UNIT
1	CONCRETE REPAIRS	CU. FT.
2	SPLICING OF PRESTRESSING STRAND	EA.

TOTAL BILL OF MATERIAL

BRIDGE NO.	SHOTCRETE REPAIRS	VOLUMETRIC MIXER	POURABLE SILICONE JOINT SEALANT	ELASTOMERIC CONCRETE FOR PRESERVATION	REPAIRS TO PRESTRESSED CONCRETE GIRDER	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	CU. FT.	LUMP SUM	LN. FT.	CU. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
970246	--	LUMP SUM	74.9	12.9	--	68.6	0.0	869.6	869.6
970247	--	LUMP SUM	90.6	15.6	--	83.1	0.0	1052.7	1052.7
970248	--	LUMP SUM	104.9	18.0	--	96.2	1.0	899.8	899.8
970249	--	LUMP SUM	108.1	18.6	--	99.1	0.0	913.3	913.3
970250	--	LUMP SUM	77.2	13.3	--	70.8	0.0	993.6	993.6
970251	--	LUMP SUM	77.2	13.3	--	70.8	0.0	995.9	995.9
970252	--	LUMP SUM	104.5	18.0	--	95.8	0.0	2166.4	2166.4
970253	--	LUMP SUM	86.4	14.9	--	79.2	0.0	1790.6	1790.6
970254	4.6	LUMP SUM	95.6	16.4	0.3	87.6	0.0	1075.5	1075.5
970255	--	LUMP SUM	69.8	12.0	--	64.0	0.0	791.0	791.0
970256	--	LUMP SUM	80.9	13.9	--	74.1	0.0	741.4	741.4
970257	--	LUMP SUM	80.6	13.9	--	73.9	0.0	753.7	753.7
970258	14.7	LUMP SUM	75.2	18.8	0.3	75.1	0.0	879.8	879.8
970259	--	LUMP SUM	75.2	12.9	--	68.9	0.0	872.2	872.2
970260	--	LUMP SUM	74.8	12.9	--	68.6	0.0	923.6	923.6
970261	--	LUMP SUM	74.8	12.9	--	68.6	0.0	923.6	923.6
TOTAL	19.3	LUMP SUM	1,350.7	238.3	0.6	1,244.4	1.0	16,642.7	16,642.7

PROJECT NO. HI-0006
WILSON COUNTIES
BRIDGE NO.: 970246, 970247, 970248, 970249, 970250, 970251, 970252, 970253, 970254, 970255, 970256, 970257, 970258, 970259, 970260, & 970261

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DocuSigned by: D5A094AED5104FD...
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BILL OF MATERIAL AND GENERAL NOTES

DRAWN BY : G. AYES DATE : 06/2022
CHECKED BY : A. G. ABRAHA DATE : 06/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

7/11/2022
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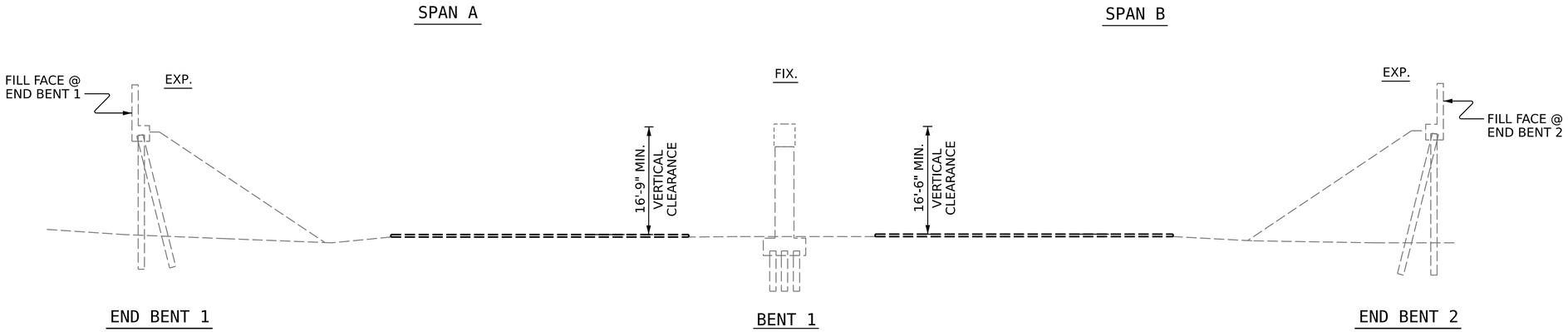


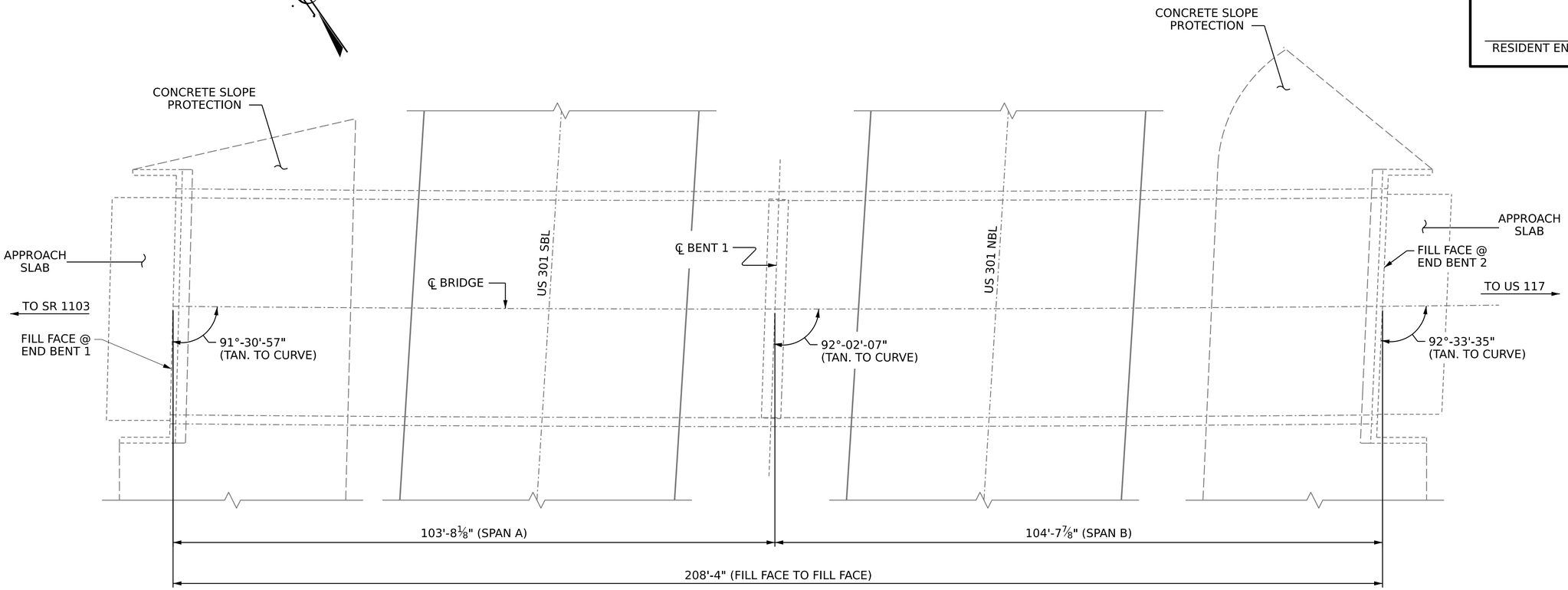
NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/25/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

SECTION ALONG ℄ BRIDGE



PLAN

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

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER ALFORD
F24583893OBF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970246

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS WESTBOUND OVER US 301 BETWEEN SR 1103 AND US 117

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

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

7/11/2022
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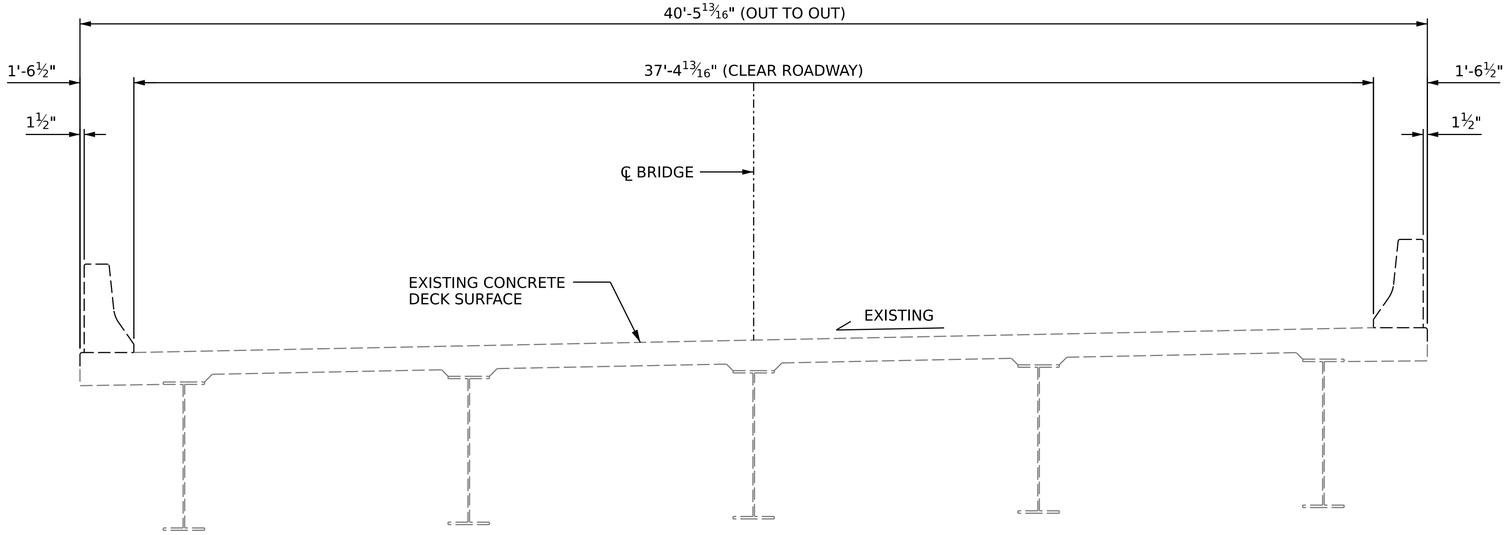
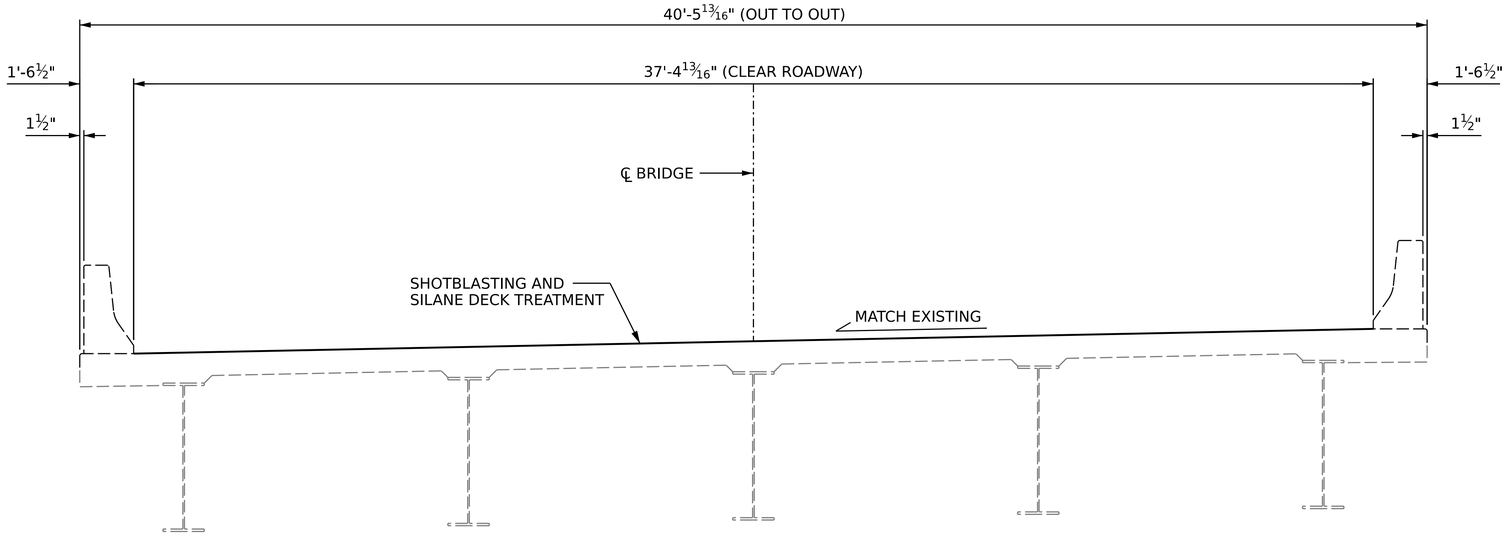
aabraha



TYPICAL SECTION
(EXISTING)

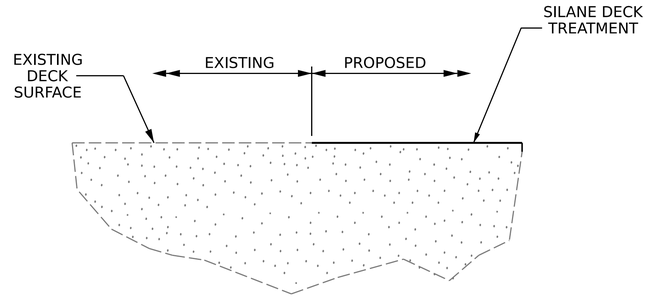


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970246

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DOA0064AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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gabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

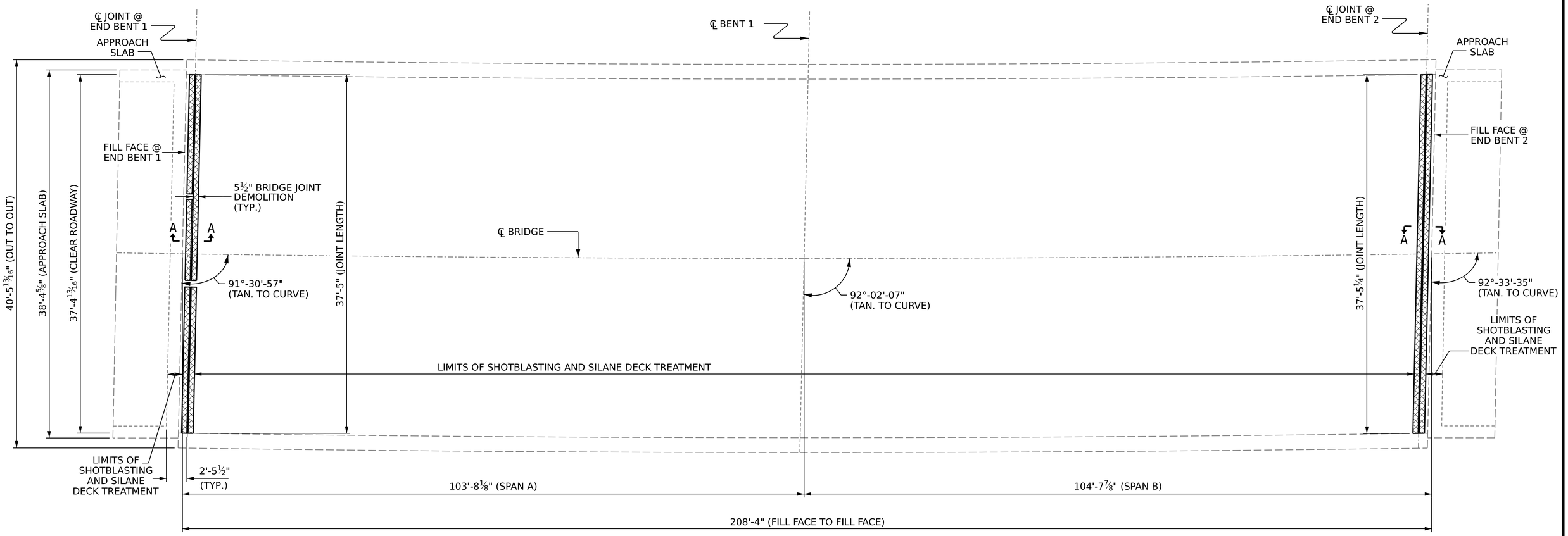
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S1-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	869.6 SY	
SILANE DECK TREATMENT	869.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.6 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970246

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DOA094AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

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

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CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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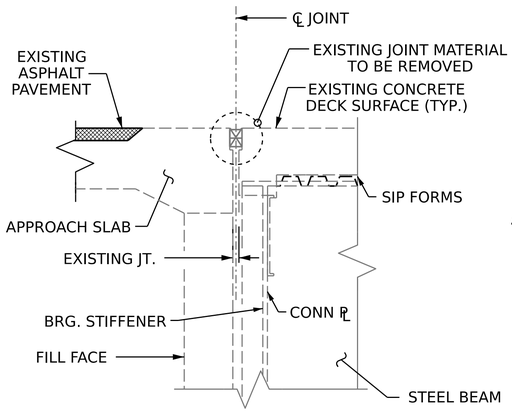
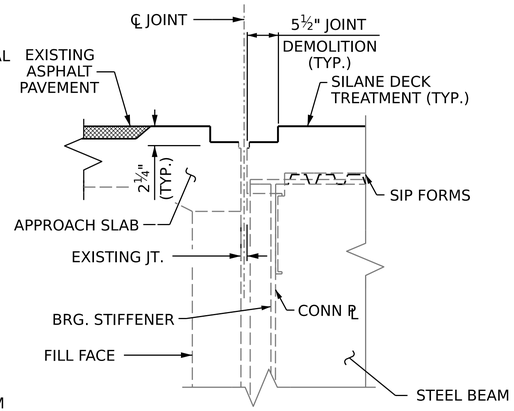
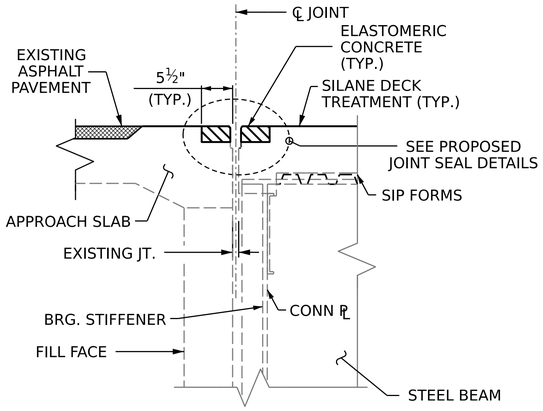
gabraha



EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

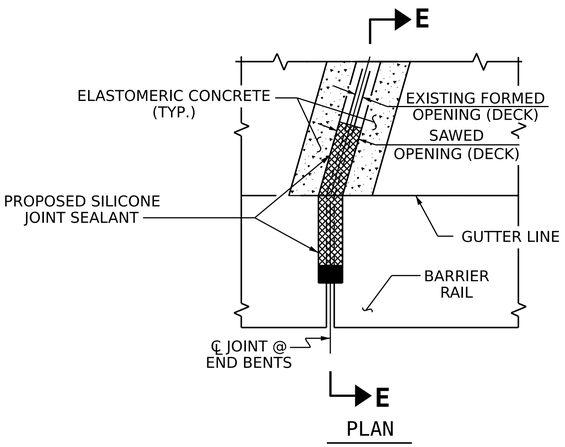
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

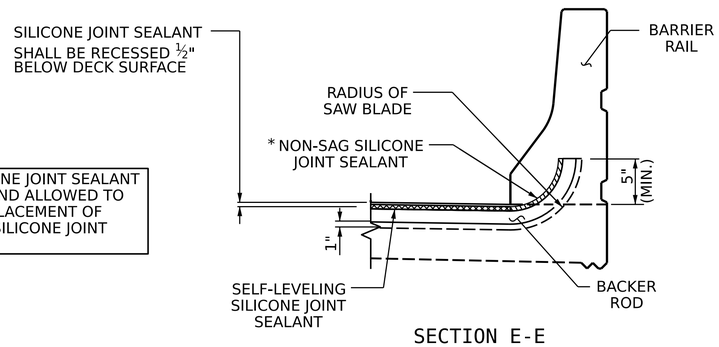
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	74.9 LF	



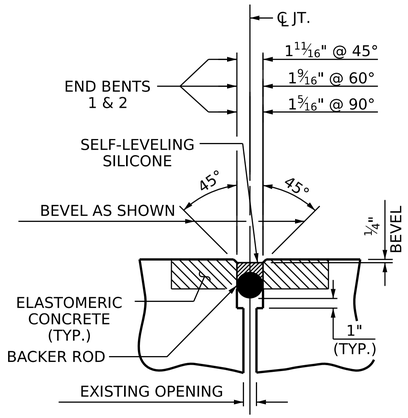
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL

(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970246

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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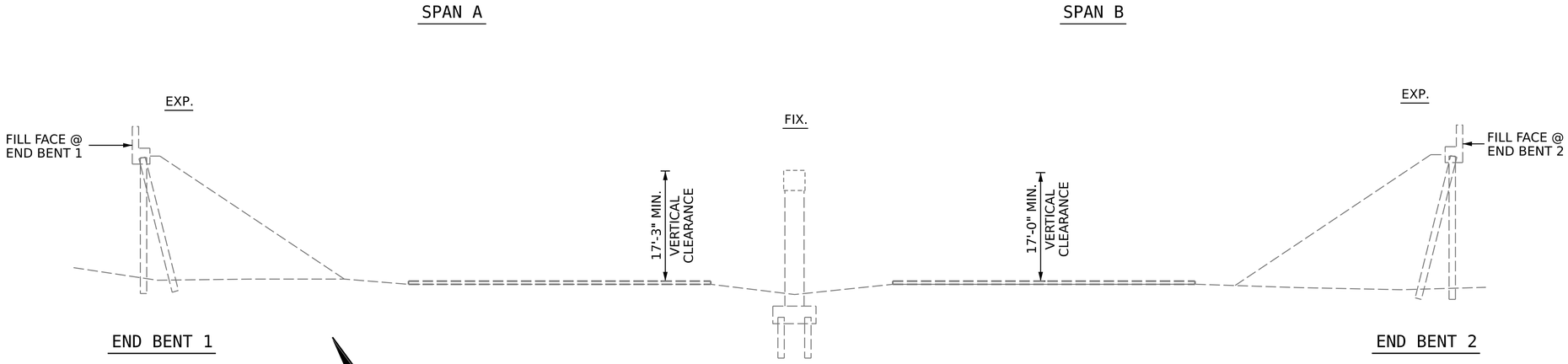
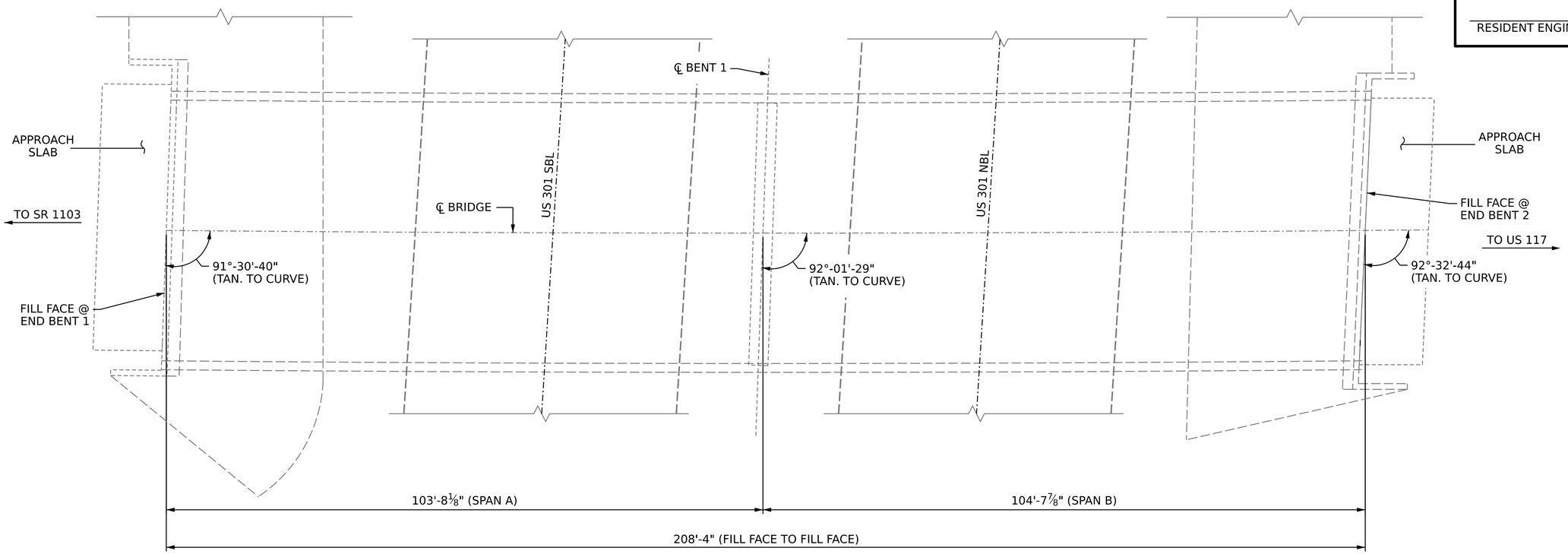
aabraha



SECTION ALONG ℄ BRIDGE



PLAN

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

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/26/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
P24583893DBF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970247

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264
BYPASS EASTBOUND OVER
US 301 BETWEEN
SR 1103 AND US 117

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

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DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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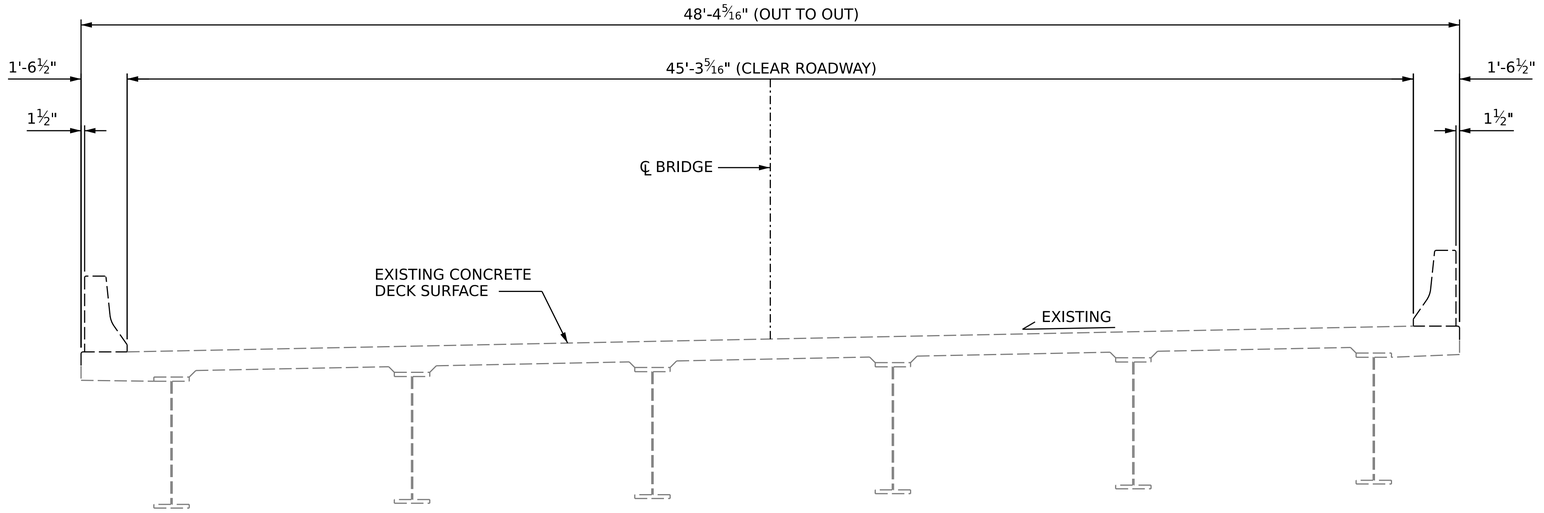
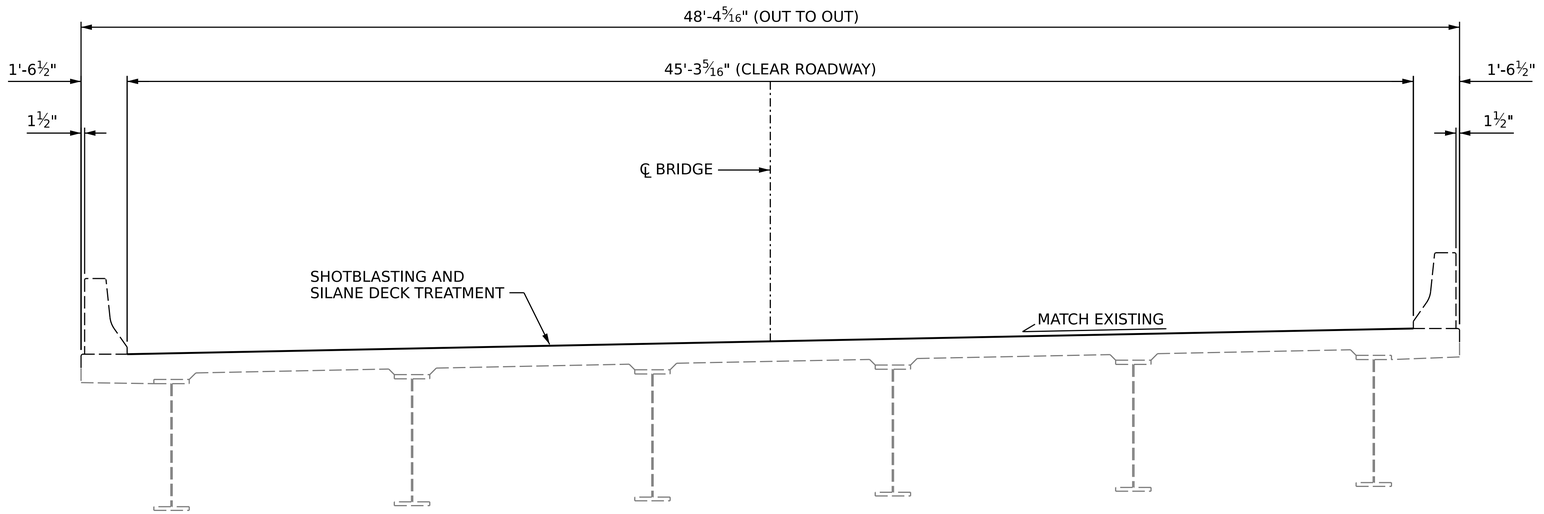
aabraha



TYPICAL SECTION

(EXISTING)



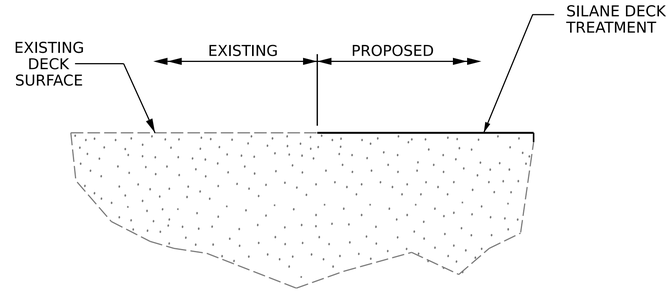
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970247

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DOA094AE05104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-2
1			3			TOTAL SHEETS
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DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
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aabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

- BRIDGE JOINT DEMOLITION

NOTES

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

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

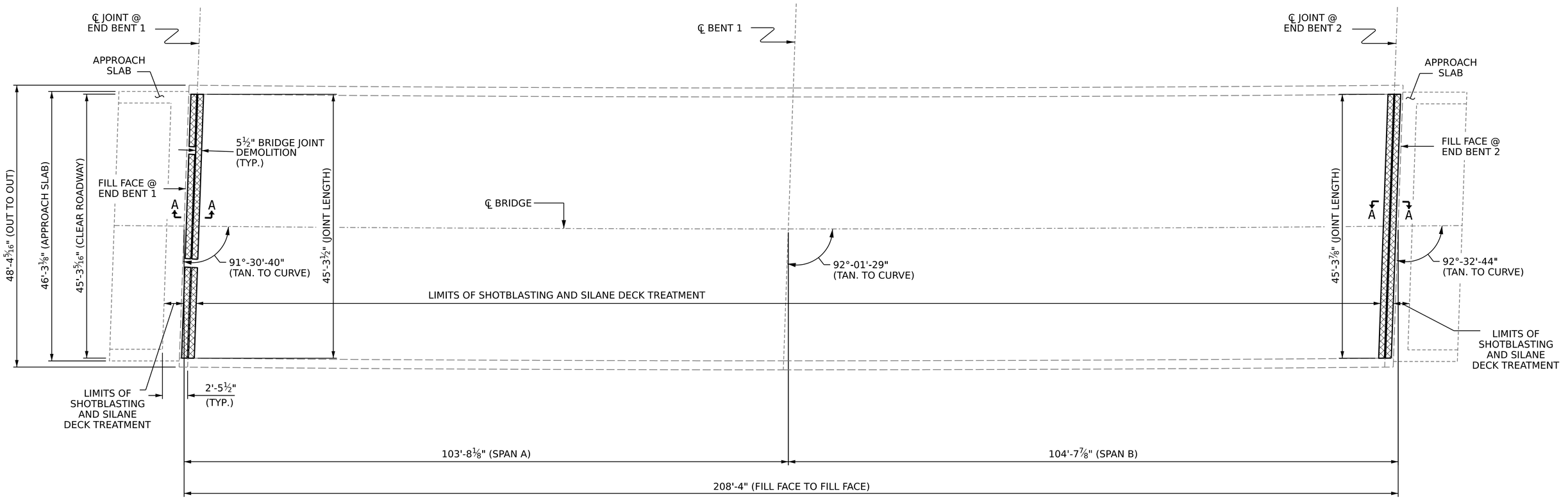
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S2-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,052.7 SY	
SILANE DECK TREATMENT	1,052.7 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	83.1 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970247

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DOA094AE0D104FD...
07/11/2022

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1			3			TOTAL SHEETS
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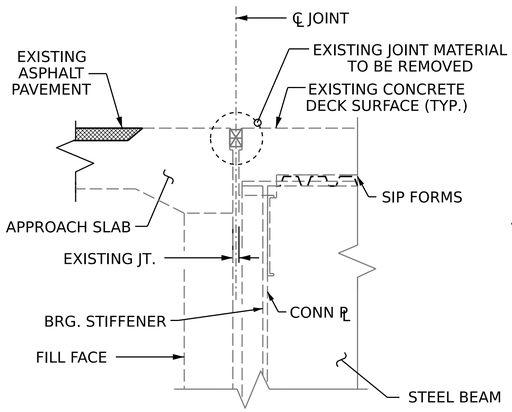
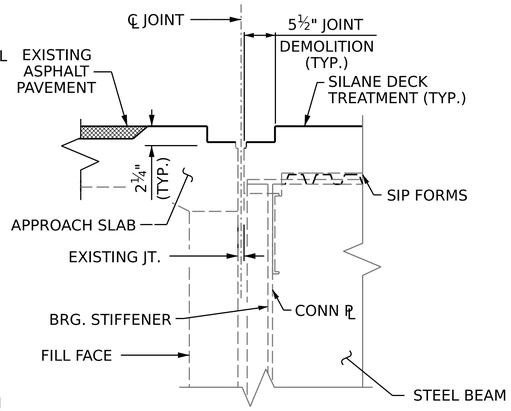
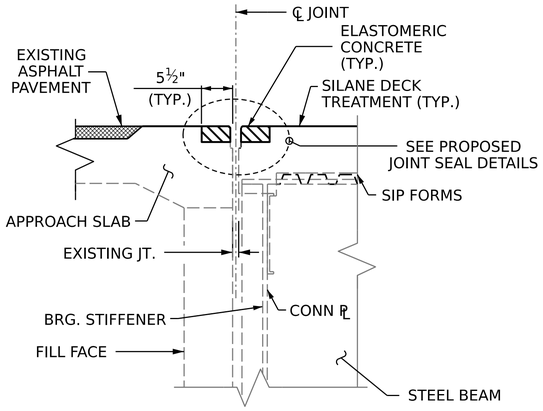


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

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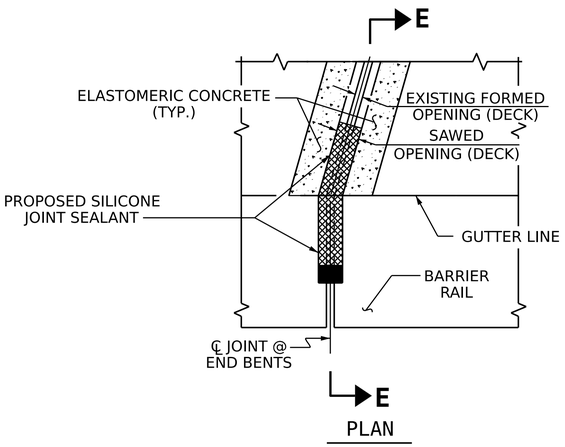
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

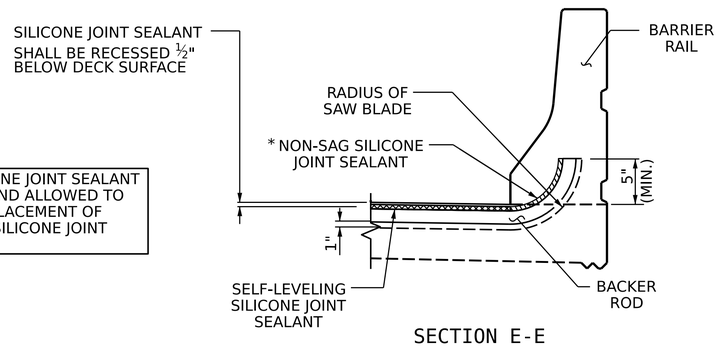
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	15.6 CF	
POURABLE SILICONE JOINT SEALANT	90.6 LF	



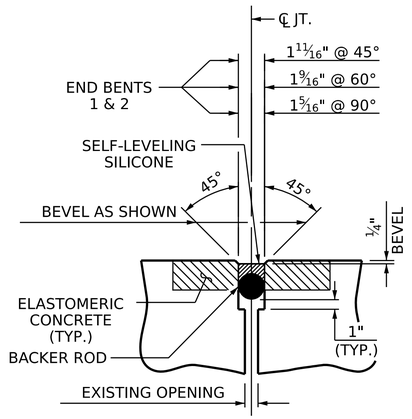
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970247

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
07/11/2022

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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1			3			TOTAL SHEETS
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7/11/2022
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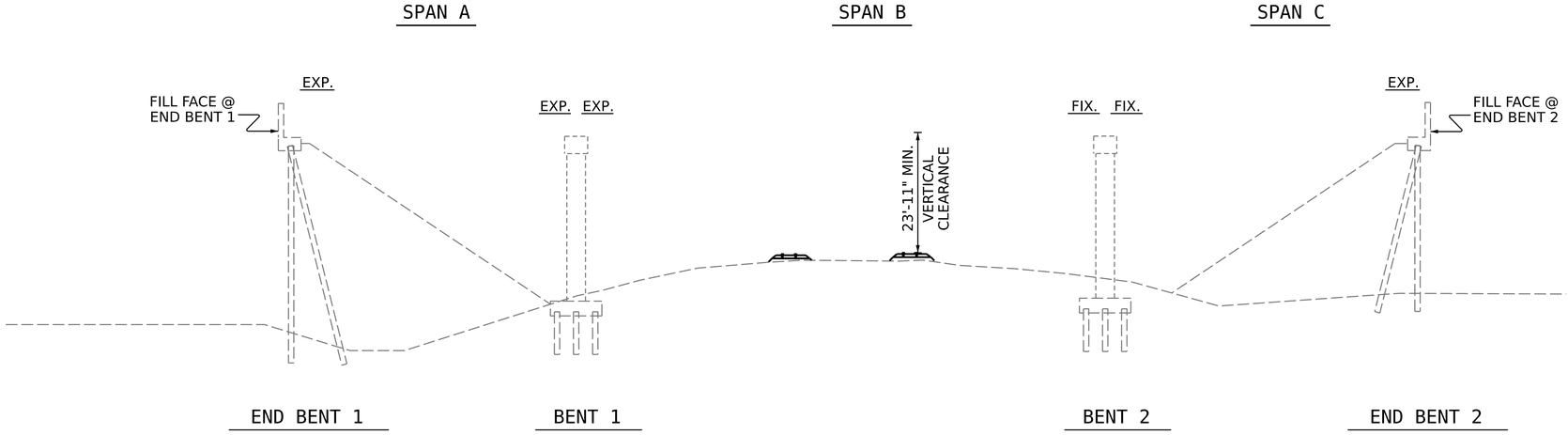
aabraha



NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/22/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

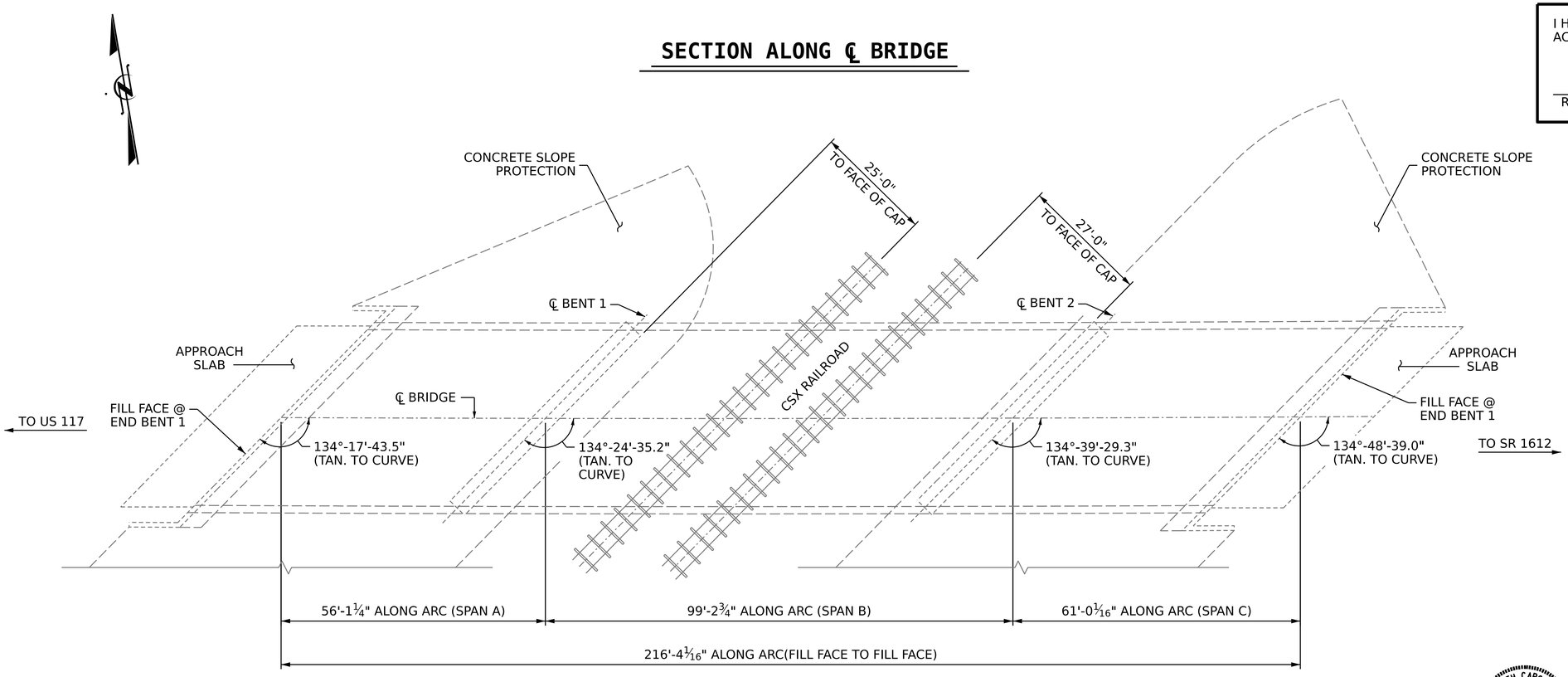
SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

SECTION ALONG ℄ BRIDGE



PLAN

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

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
F24582B030BF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER KISTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970248
MILE POST - 139.2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS WESTBOUND OVER CSX RAILROAD BETWEEN US 117 AND SR 1612

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

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

7/11/2022
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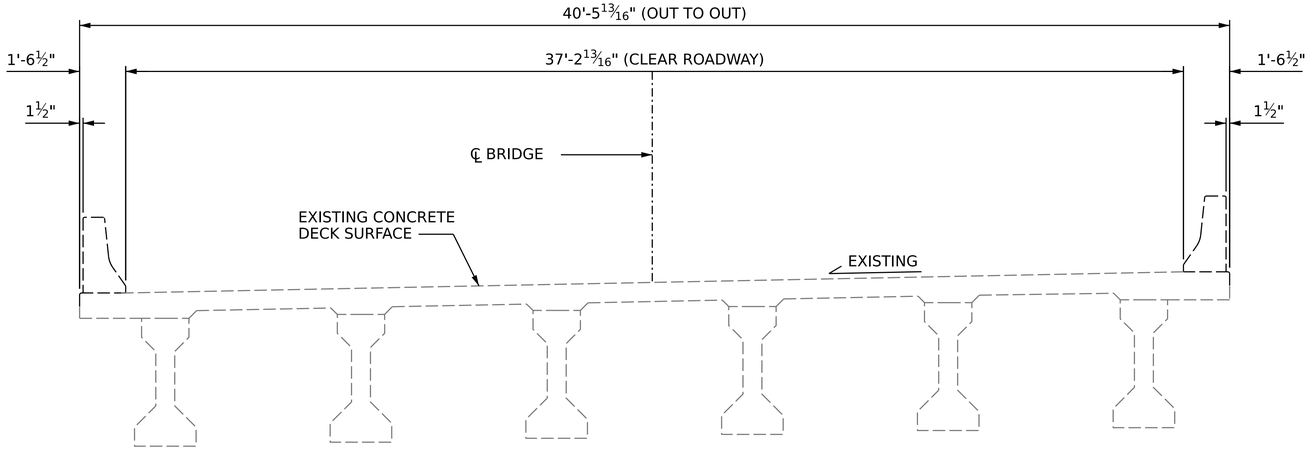
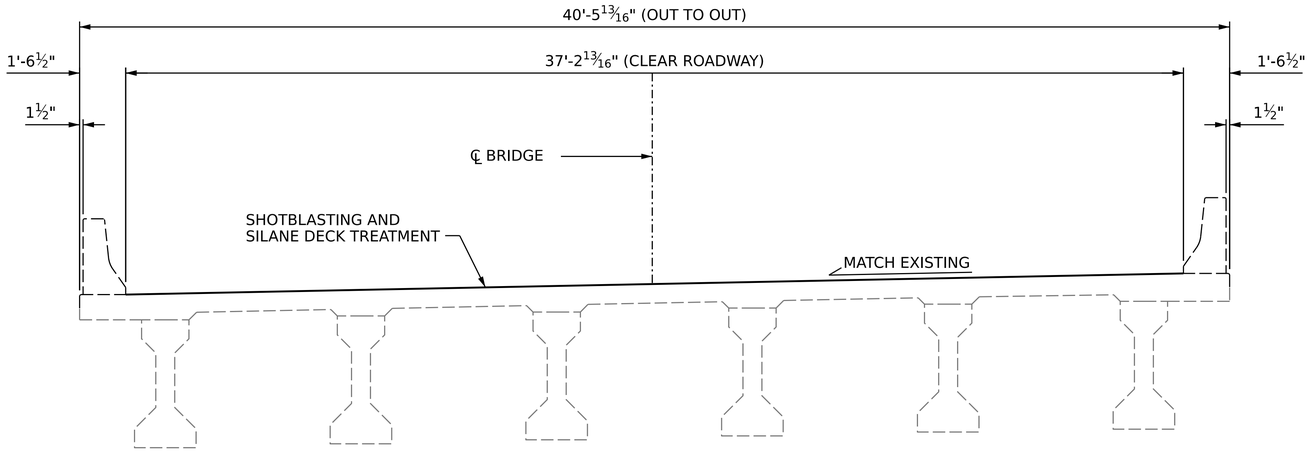
gabraha



TYPICAL SECTION

(EXISTING)



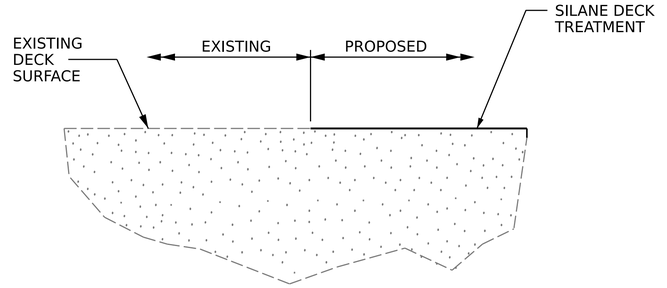
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970248

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DOA094AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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aabraha

REPAIR KEY

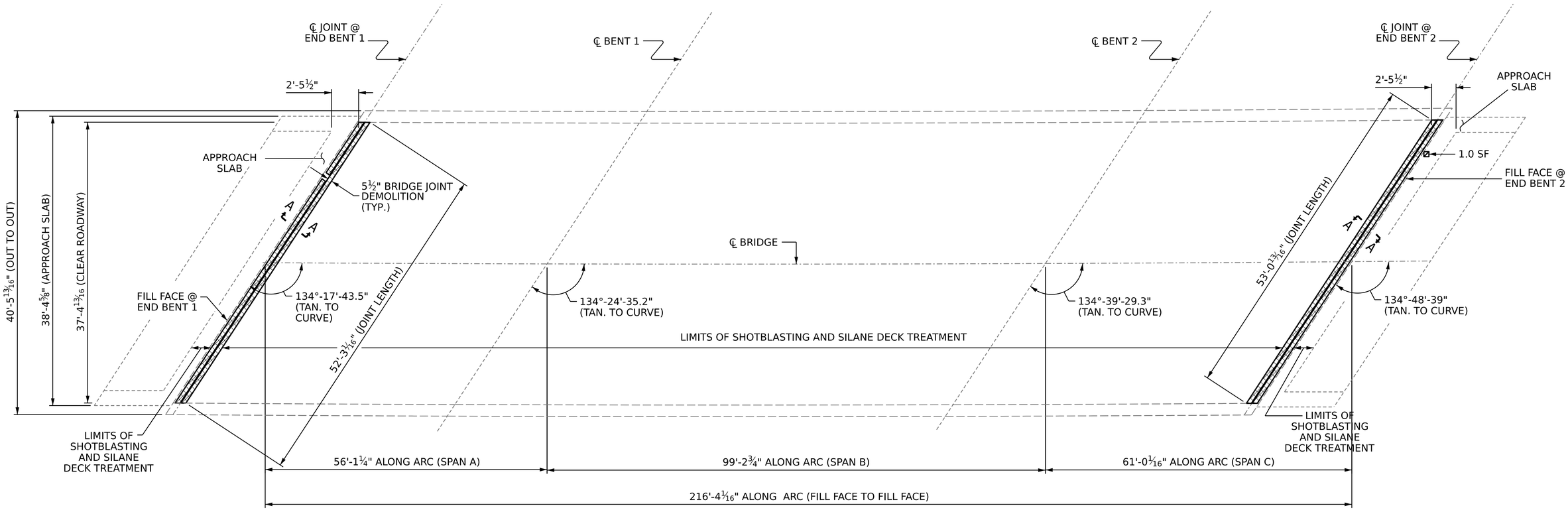
- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S3-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	899.8 SY	
SILANE DECK TREATMENT	899.8 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	1.0 SF	
BRIDGE JOINT DEMOLITION	96.2 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970248

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DDA096AAED0104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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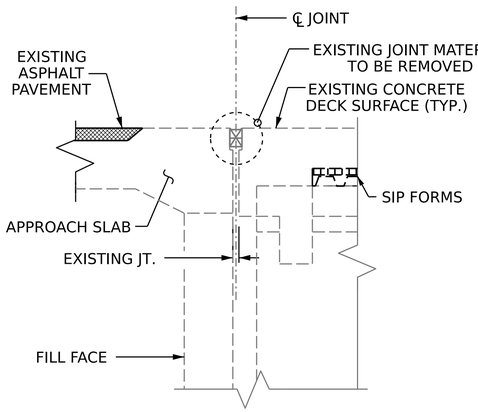
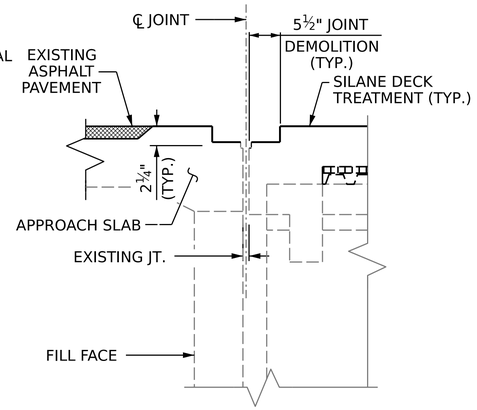
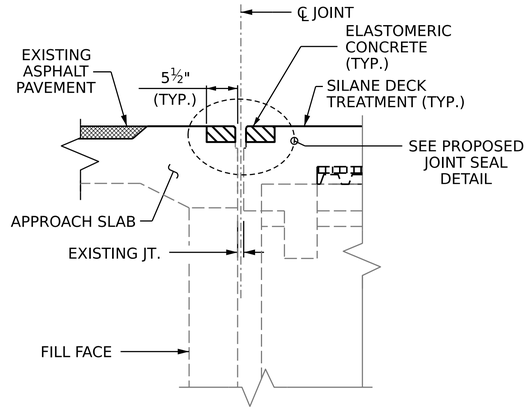


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

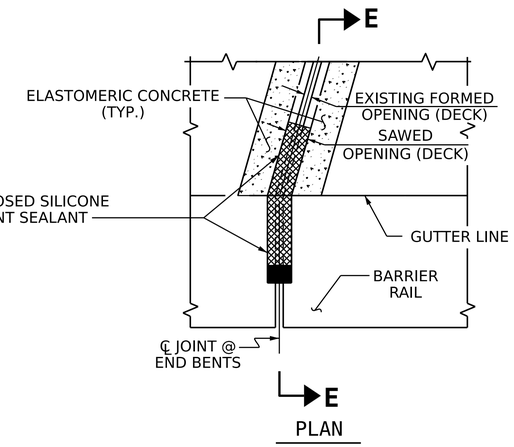
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

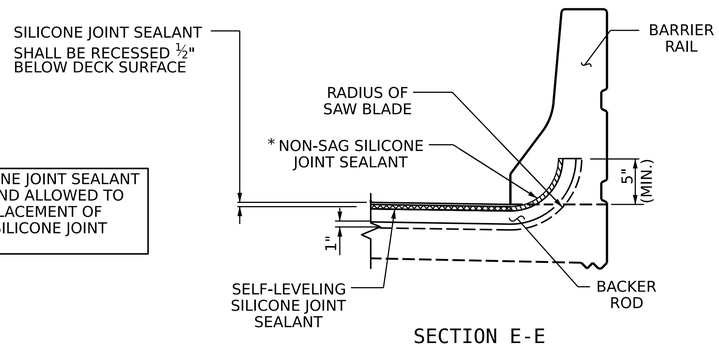
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.0 CF	
POURABLE SILICONE JOINT SEALANT	104.9 LF	



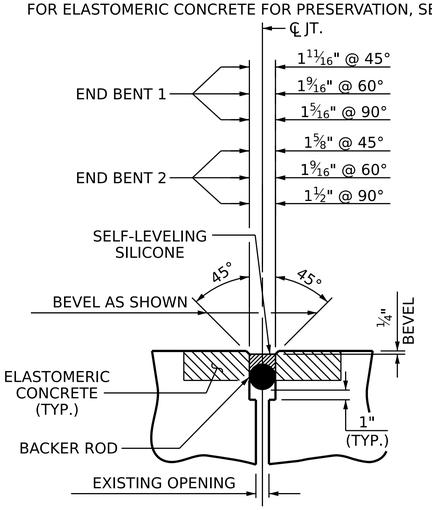
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970248

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DD4094AE05104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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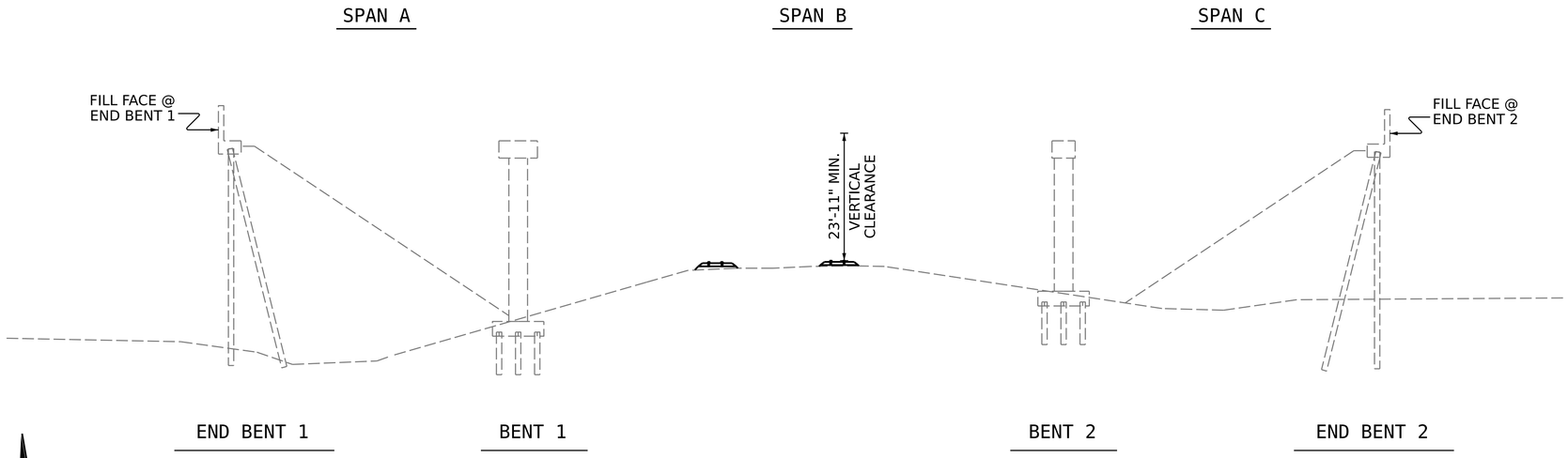
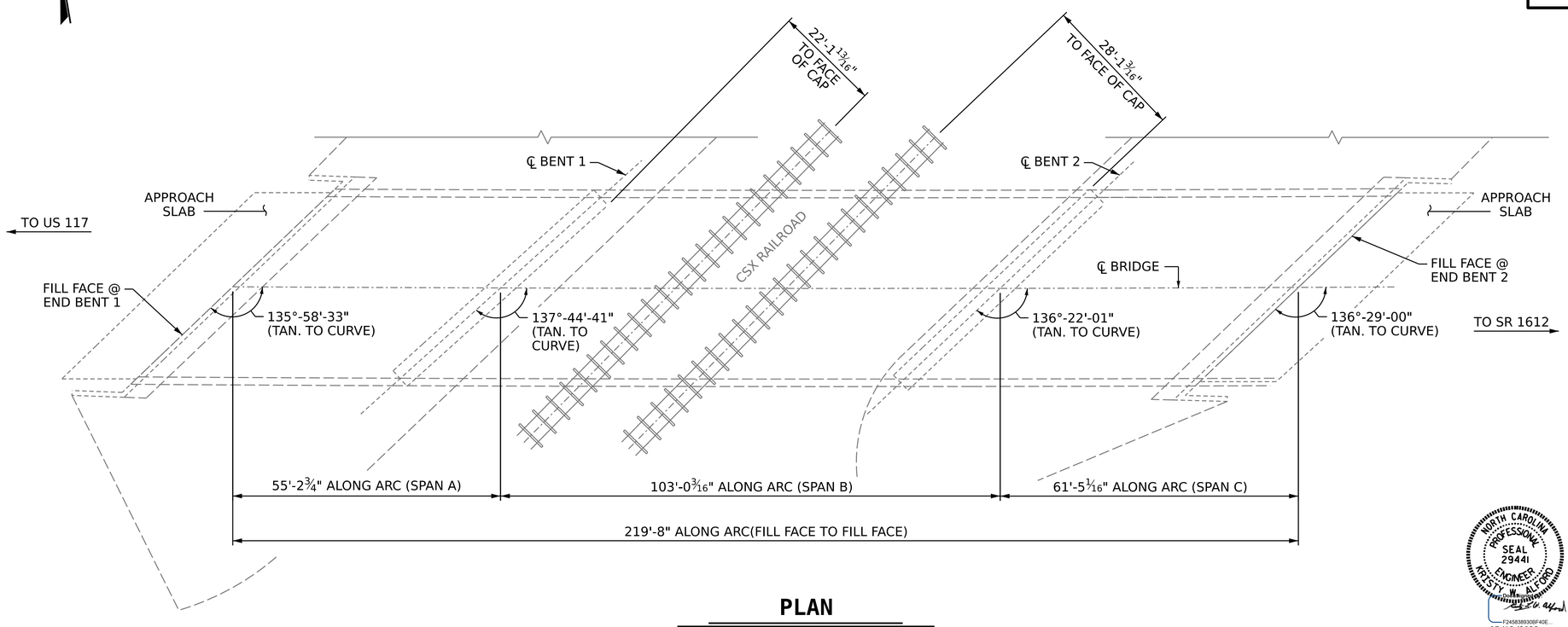


SECTION ALONG ℄ BRIDGE



PLAN

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

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/22/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970249

MILE POST - 139.2

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
F2458389308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS EASTBOUND OVER CSX RAILROAD BETWEEN US 117 AND SR 1612

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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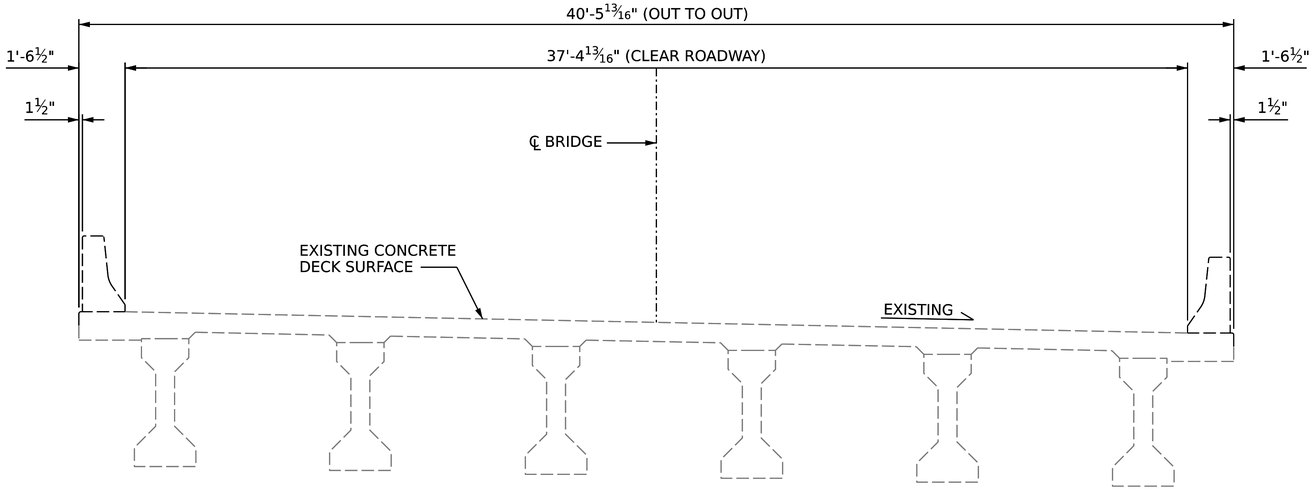
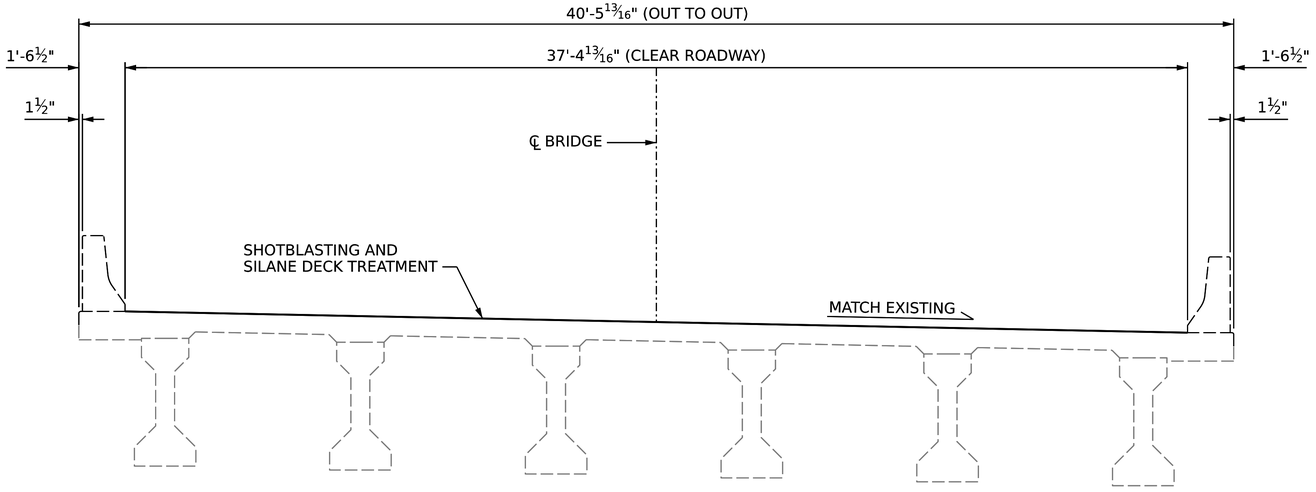


TYPICAL SECTION

(EXISTING)



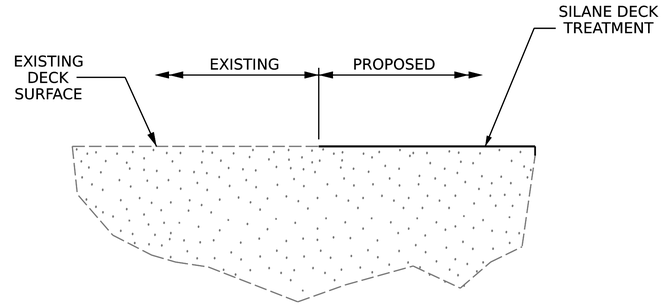
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970249

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DDA094AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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gabraha

REPAIR KEY

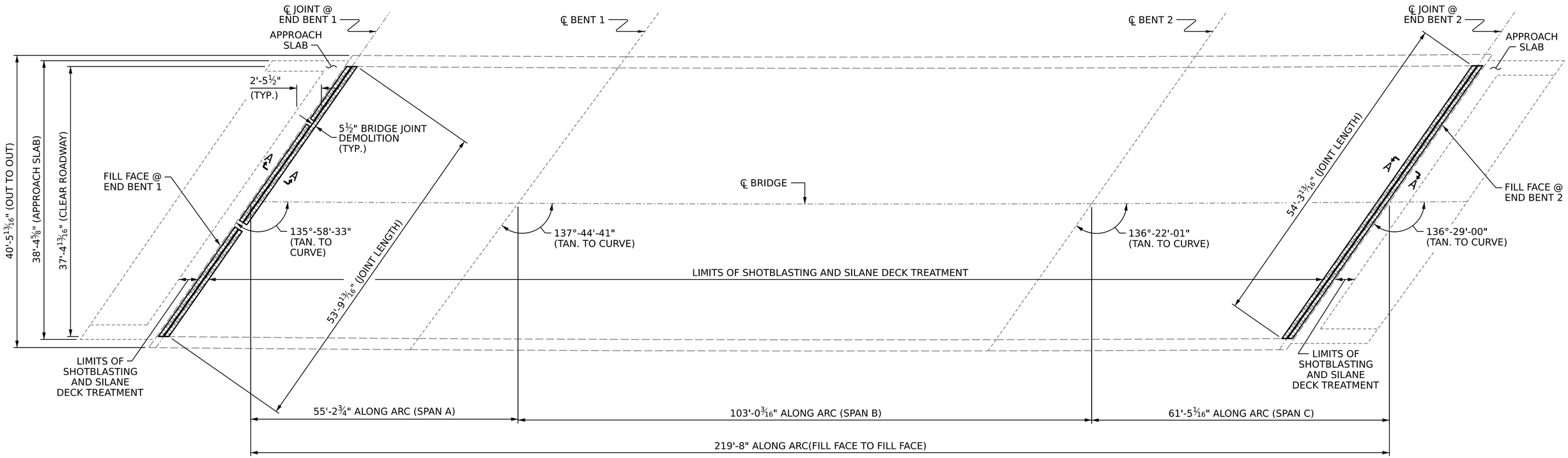
- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S4-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	913.3 SY	
SILANE DECK TREATMENT	913.3 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	99.1 SF	



PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970249

PLAN OF SPANS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DDA094AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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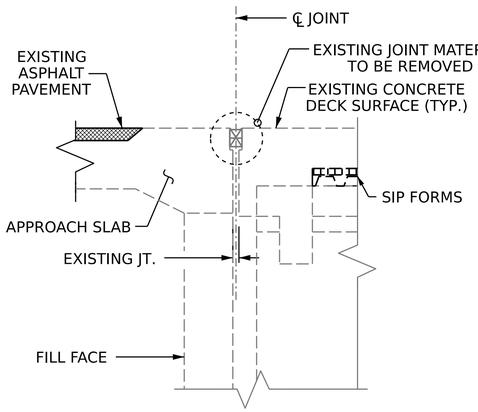
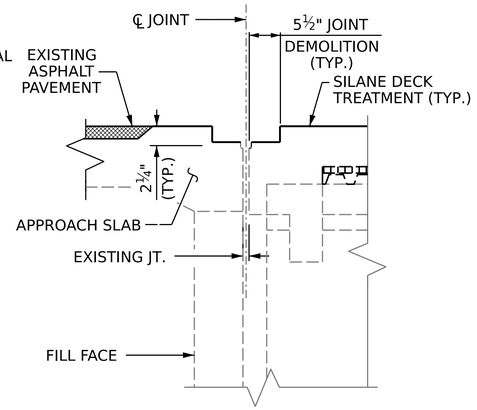
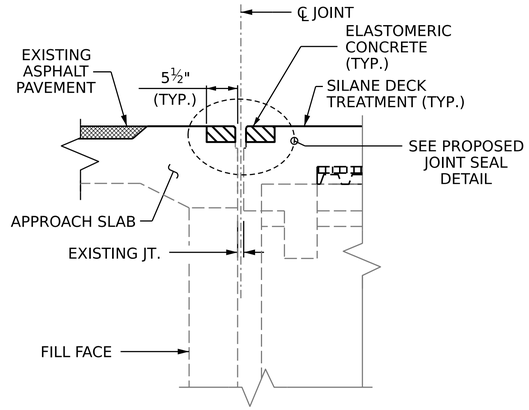


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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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.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

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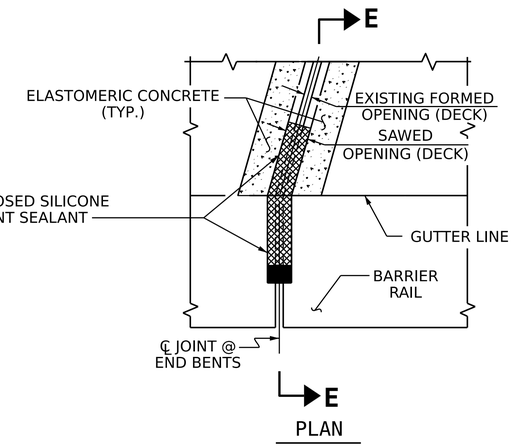
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

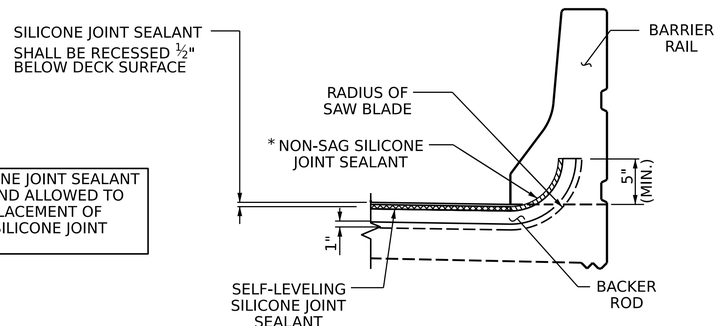
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.6 CF	
POURABLE SILICONE JOINT SEALANT	108.1 LF	



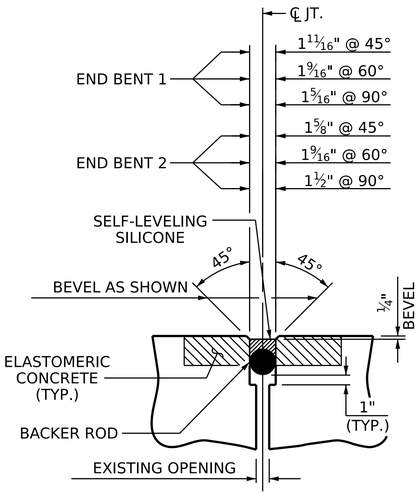
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970249

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DOA094AE05104FD...
07/11/2022

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

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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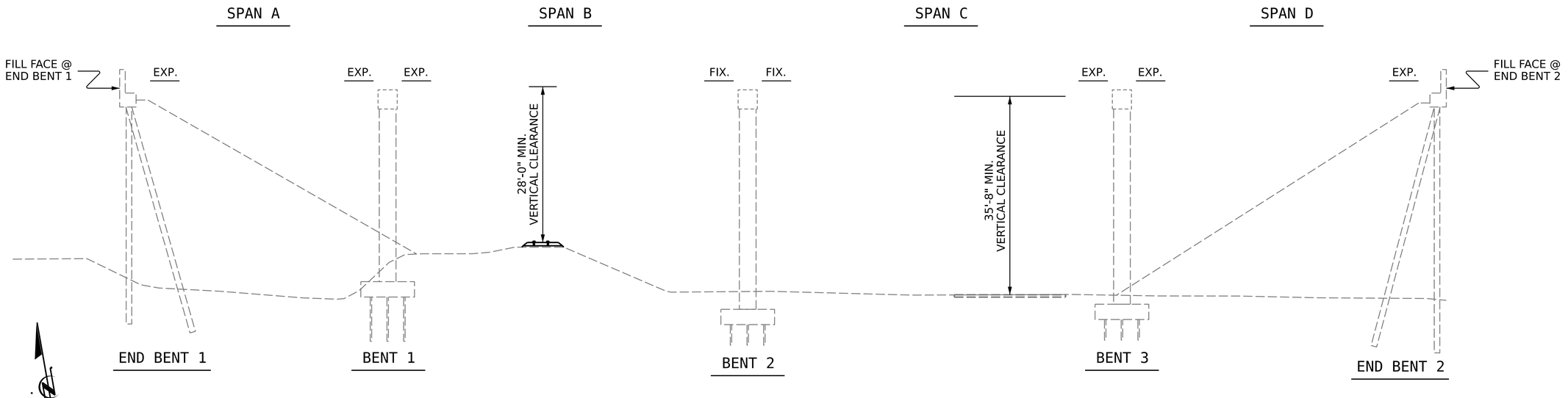
aabraha

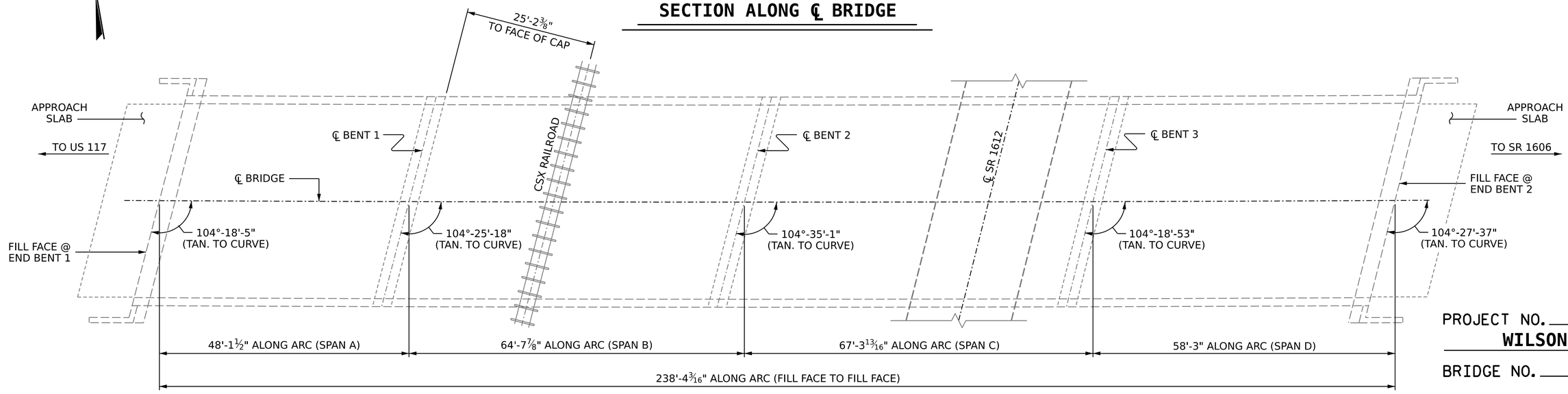
NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.

- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.



SECTION ALONG ℄ BRIDGE



SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.

- PLACE SILANE DECK TREATMENT.

- DEMOLISH EXISTING BRIDGE DECK JOINTS.

- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
F24583930BF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970250

MILE POST - 139.2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS WESTBOUND OVER CSX RAILROAD AND SR 1612 BETWEEN US 117 AND SR 1606

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

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CHECKED BY : A. G. ABRAHA DATE : 5/2022
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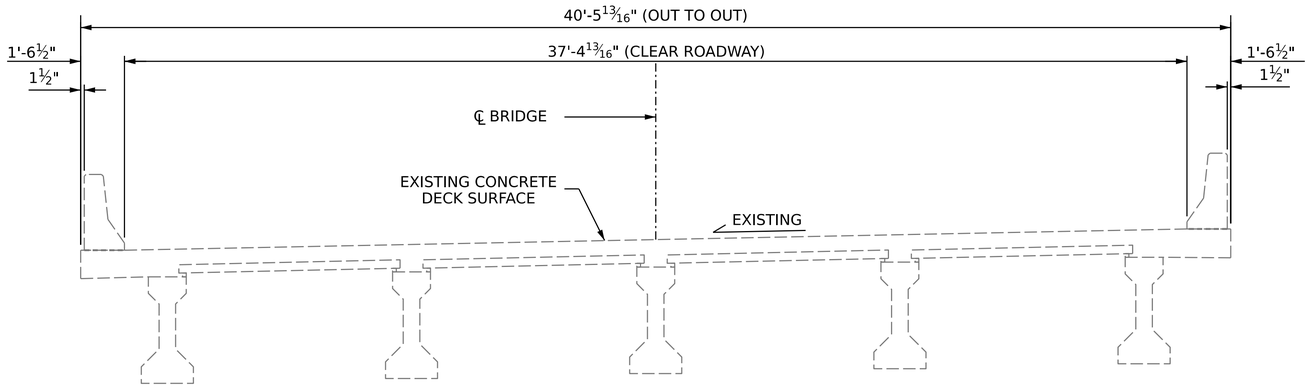
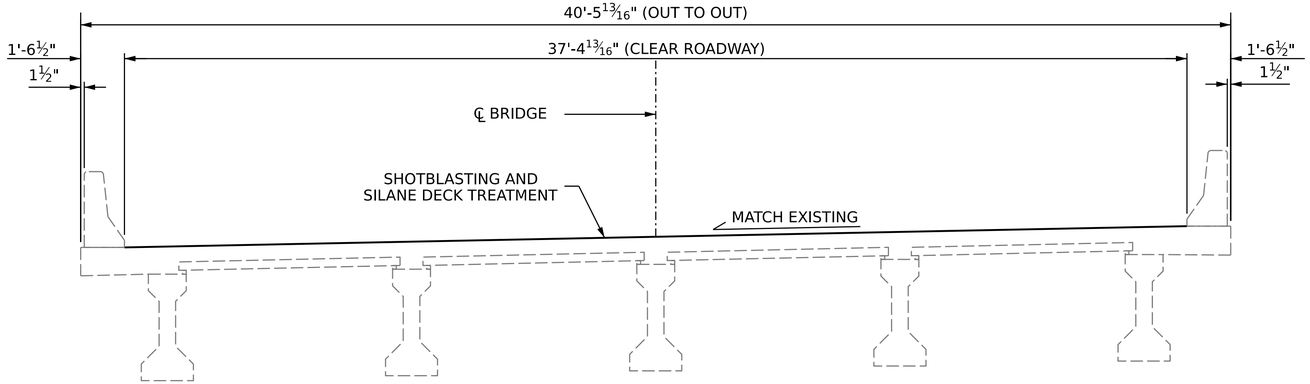
gabraha



TYPICAL SECTION

(EXISTING)



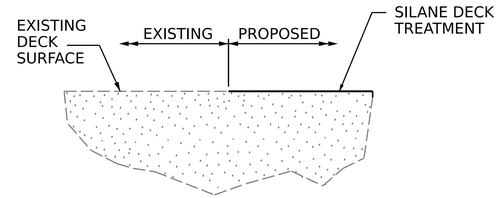
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970250

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

DRAWN BY :	G. AYES	DATE :	2/2022
CHECKED BY :	A. G. ABRAHA	DATE :	5/2022
DESIGN ENGINEER OF RECORD:	--	DATE :	--

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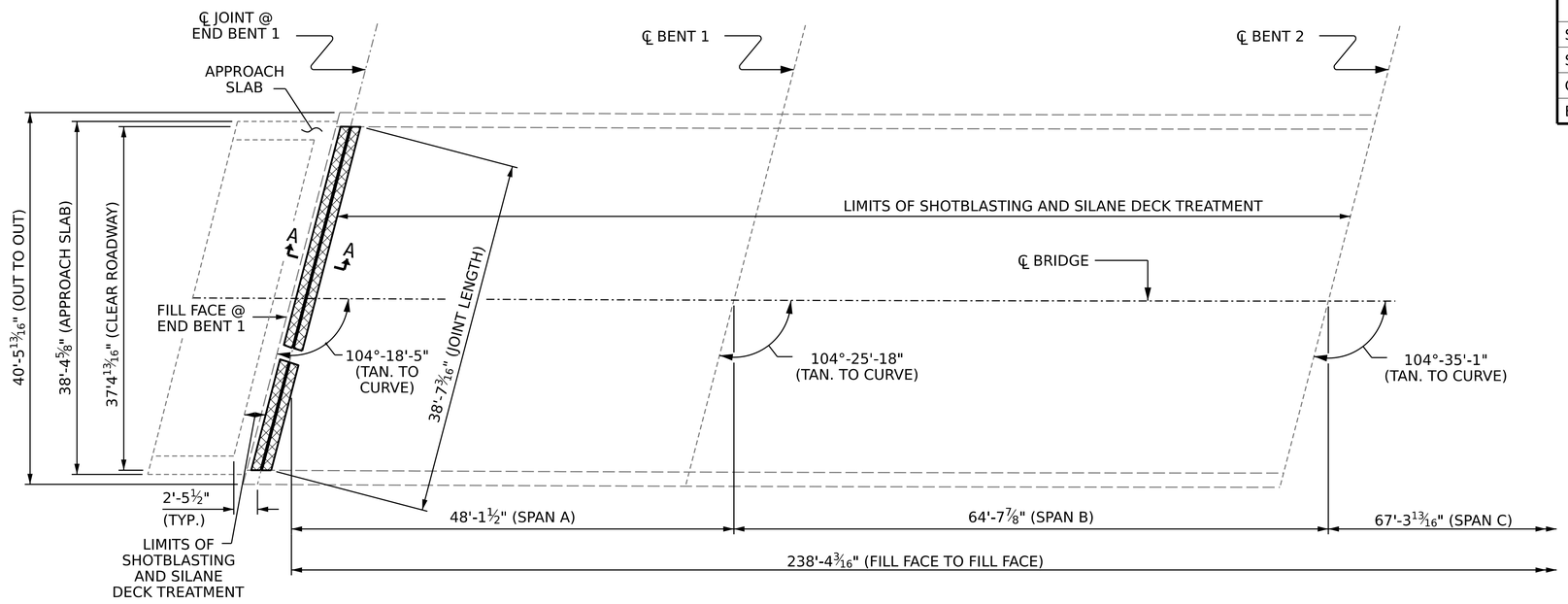
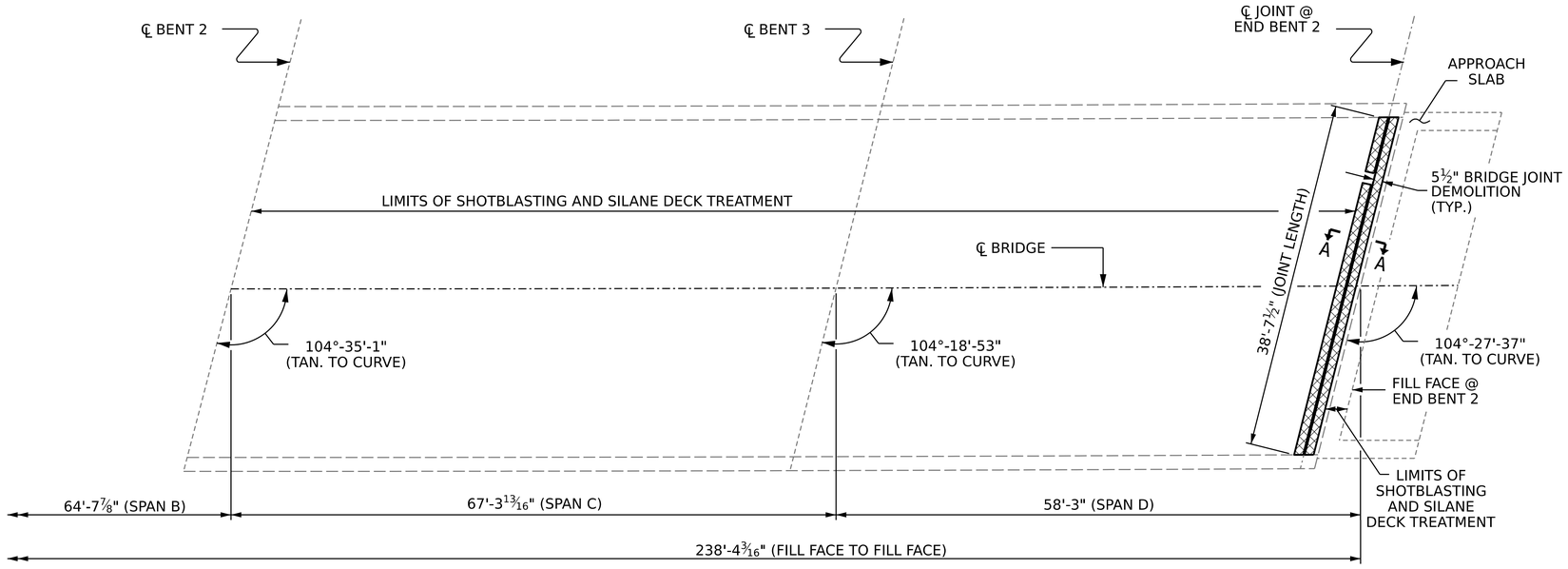


PLAN OF SPANS



PLAN OF SPANS

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	993.6 SY	
SILANE DECK TREATMENT	993.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	70.8 SF	

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S5-4.

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970250

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DDA096AAED5104FD...
07/11/2022

DRAWN BY : G. AYES DATE : 2/2022
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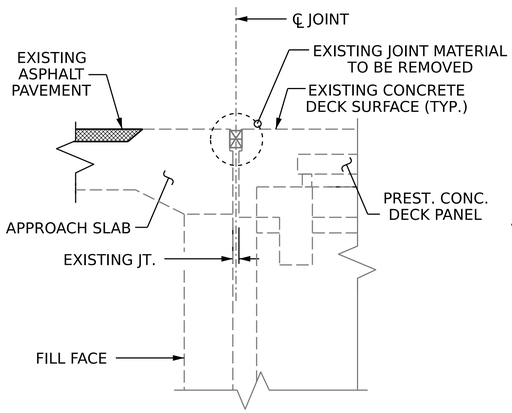
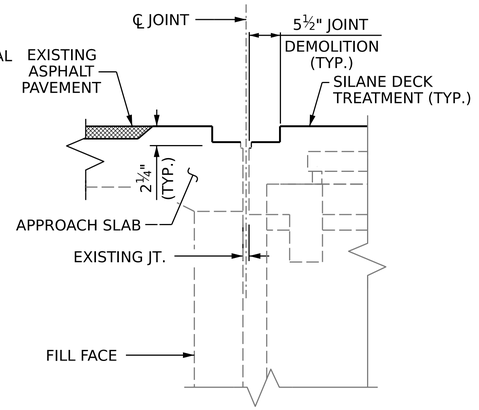
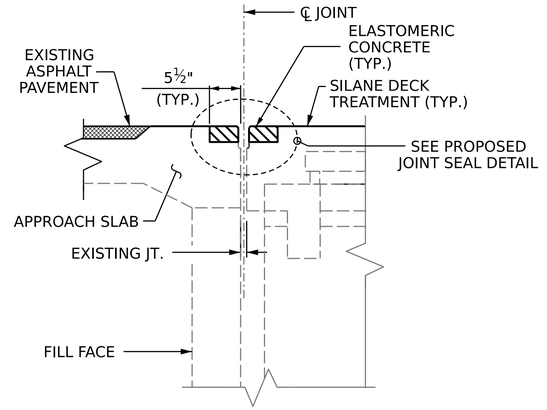


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

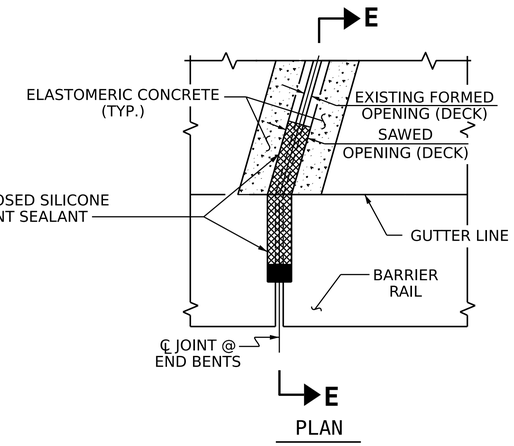
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

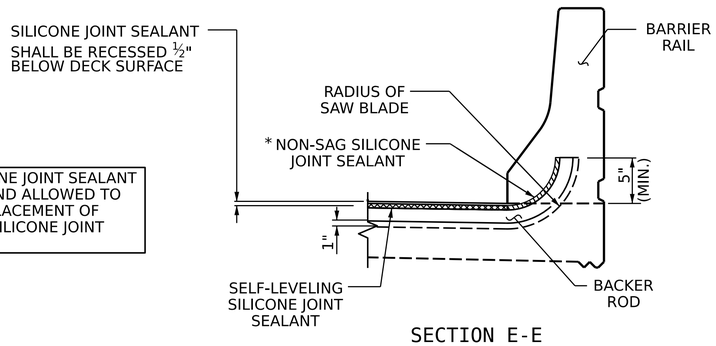
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.3 CF	
POURABLE SILICONE JOINT SEALANT	77.2 LF	



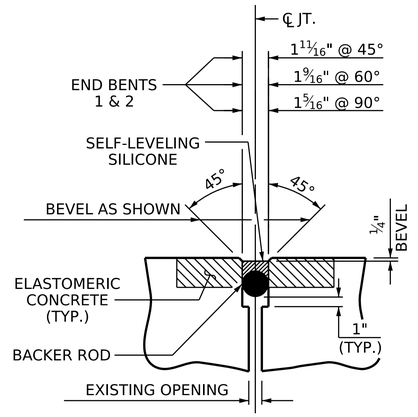
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970250

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Astr Abraha
DDA094AE0D104FD...
07/11/2022

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CHECKED BY : A. G. ABRAHA DATE : 6/2022
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NOTES

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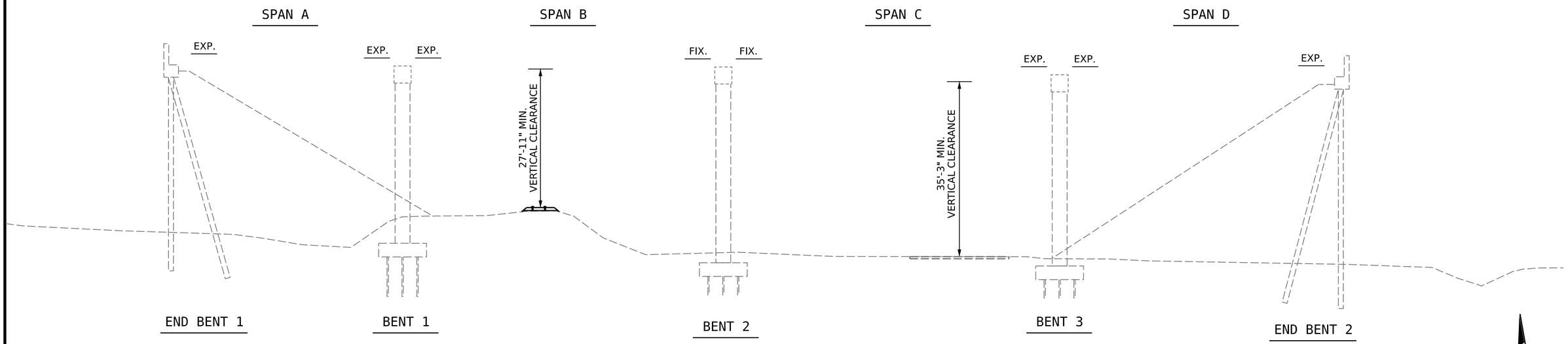
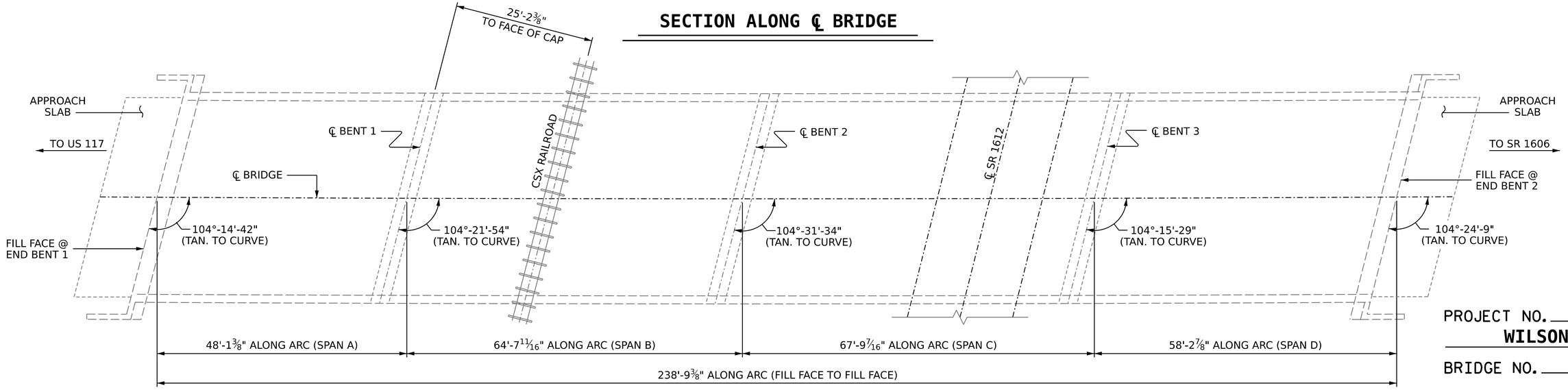


SECTION ALONG ℄ BRIDGE



SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY M. ALFORD
F24583893OBF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970251
MILE POST - 139.2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS EASTBOUND OVER CSX RAILROAD AND SR 1612 BETWEEN US 117 AND SR 1606

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

DRAWN BY : G. AYES DATE : 2/2022
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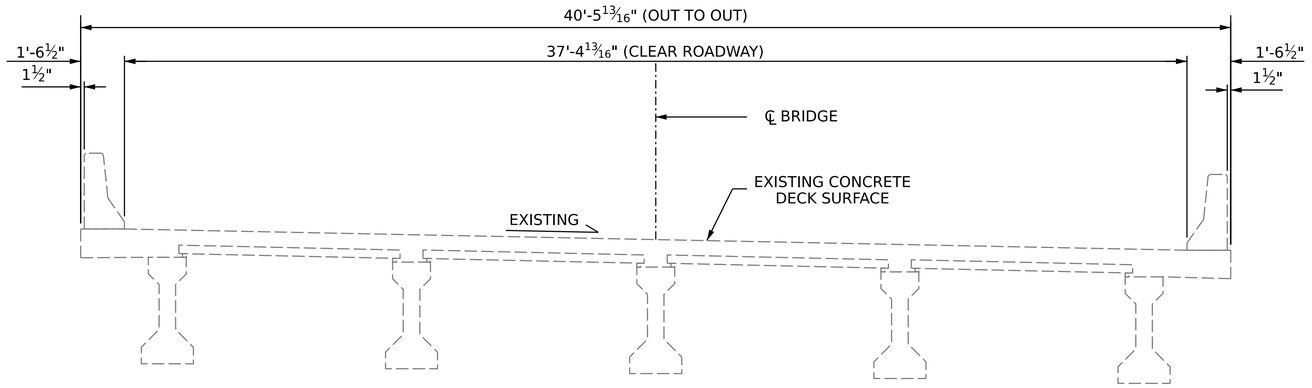
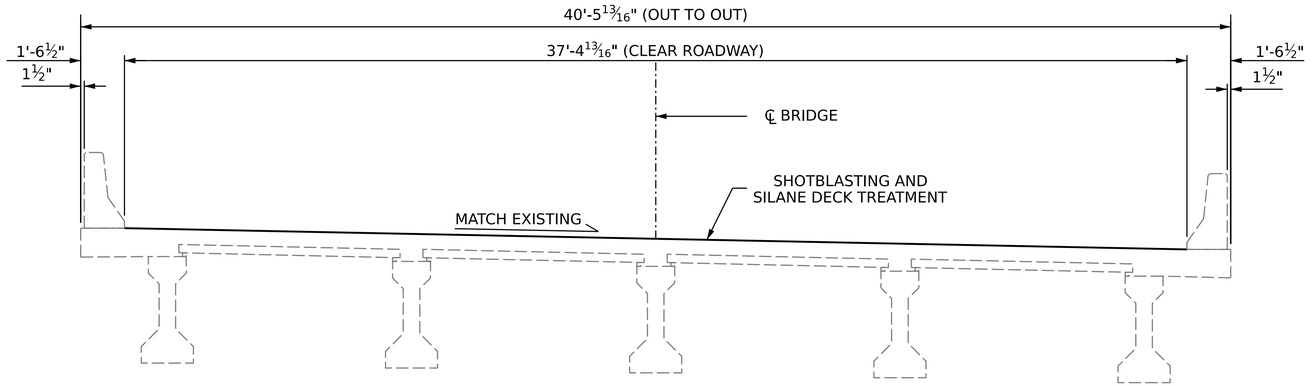


TYPICAL SECTION

(EXISTING)



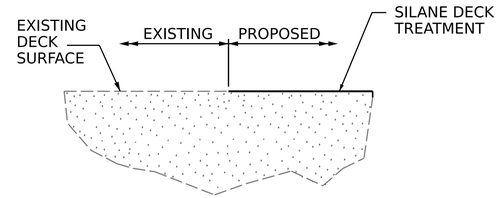
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970251

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

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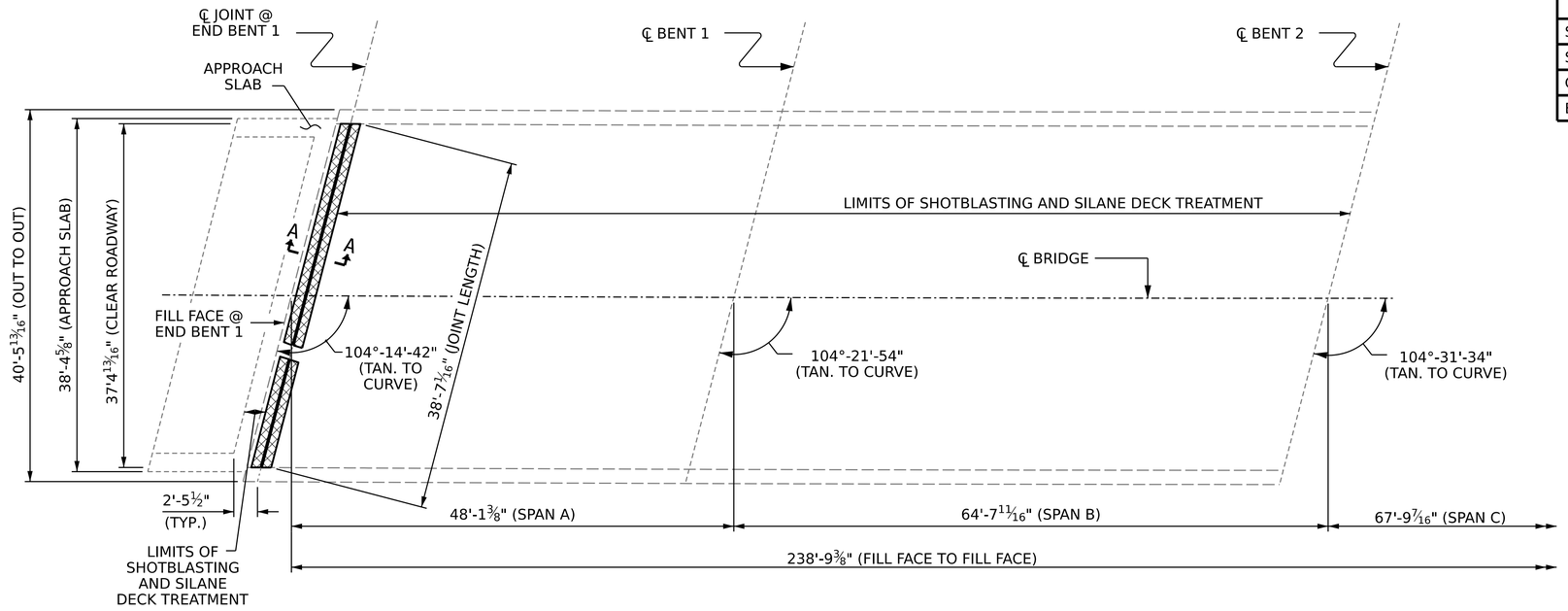
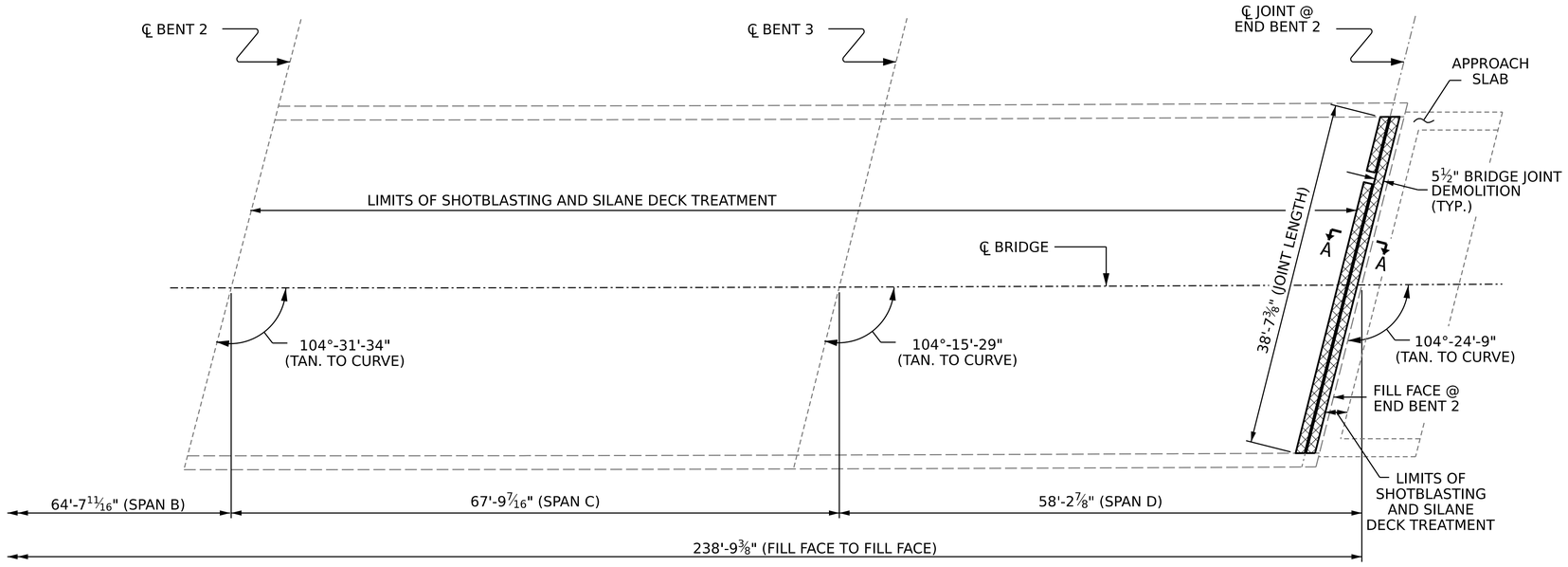


PLAN OF SPANS



PLAN OF SPANS

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	995.9 SY	
SILANE DECK TREATMENT	995.9 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	70.8 SY	

NOTES

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- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S6-4.

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970251

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DDA096AAE05104FD...
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2			4			4

DRAWN BY : G. AYES DATE : 2/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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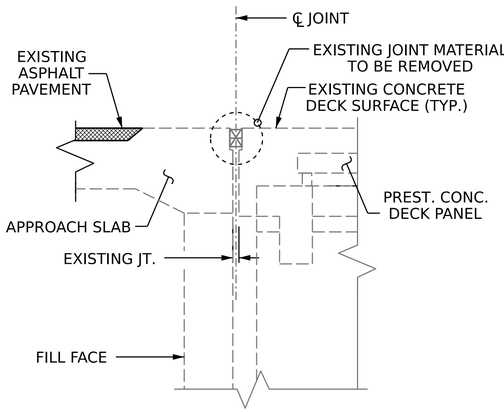
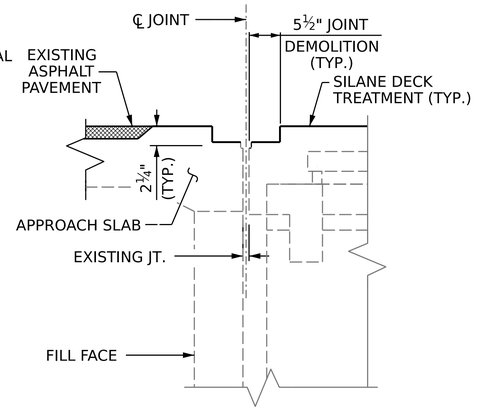
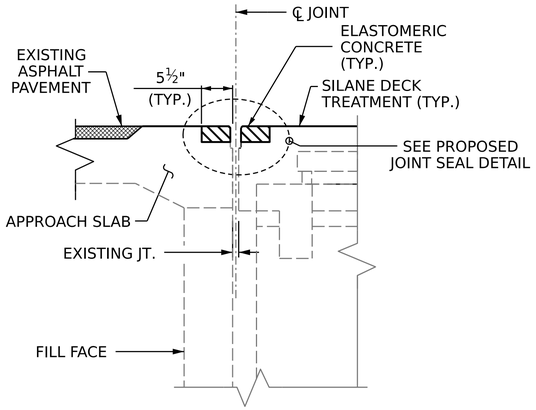


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

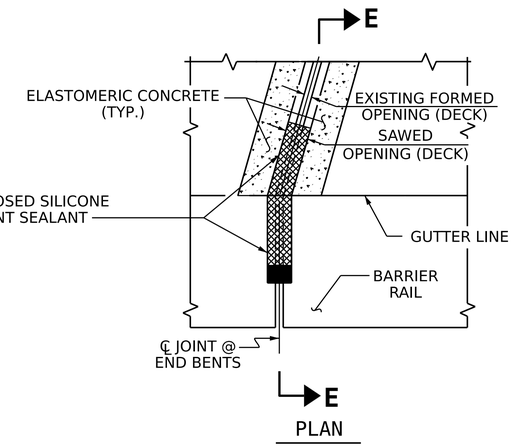
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

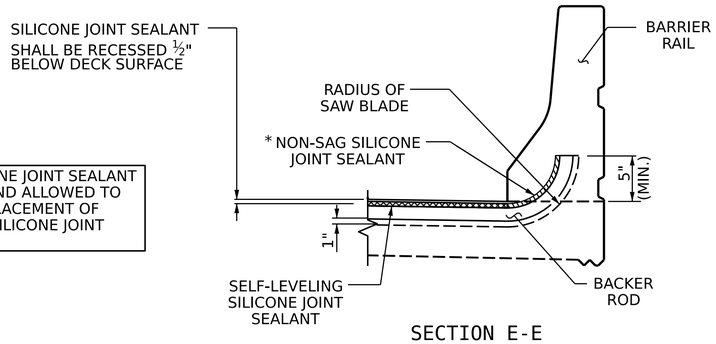
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.3 CF	
POURABLE SILICONE JOINT SEALANT	77.2 LF	



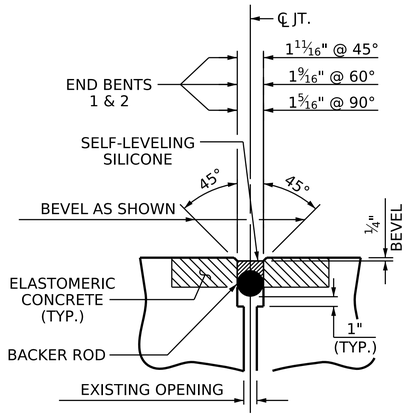
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970251

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Astr Abraha
DDA09AAE0D104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			4

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CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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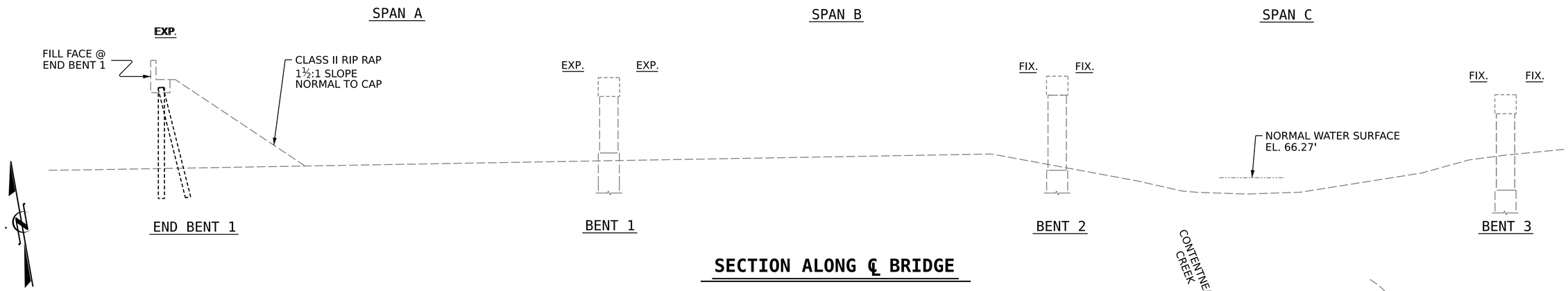
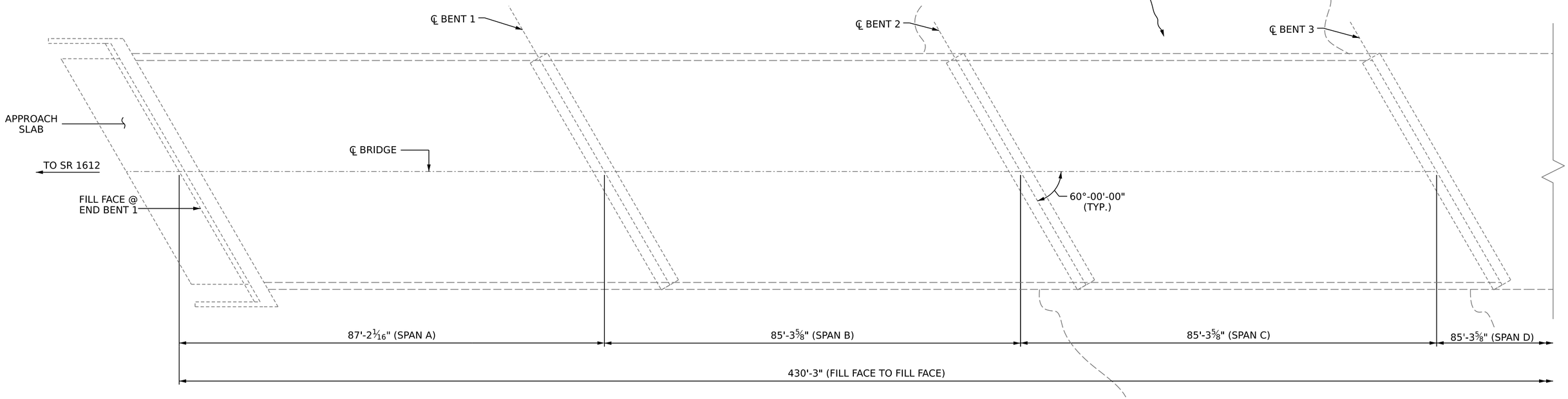


SECTION ALONG ℄ BRIDGE



NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.

- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.

- PLACE SILANE DECK TREATMENT.

- DEMOLISH EXISTING BRIDGE DECK JOINTS.

- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY M. ALFORD
F2458389308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970252

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON US 264
BYPASS WESTBOUND OVER
CONTENTEA CREEK BETWEEN
SR 1606 AND SR 1612

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

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DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

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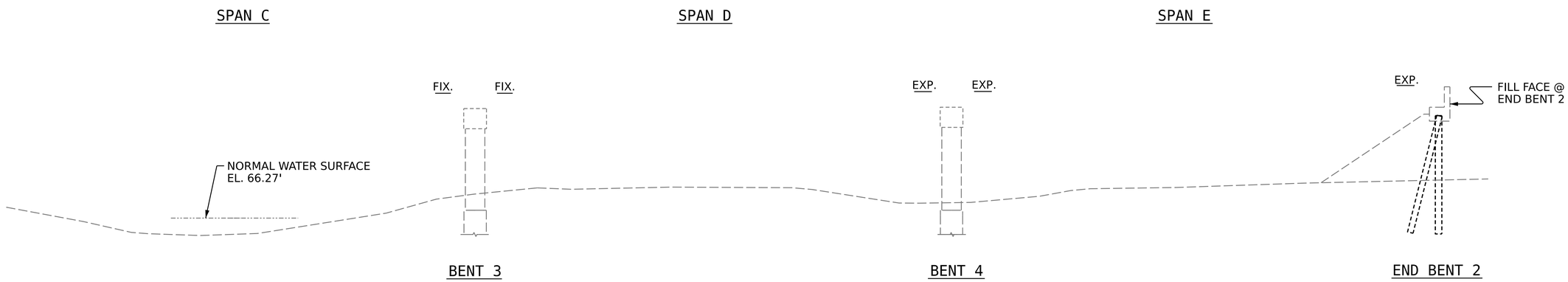
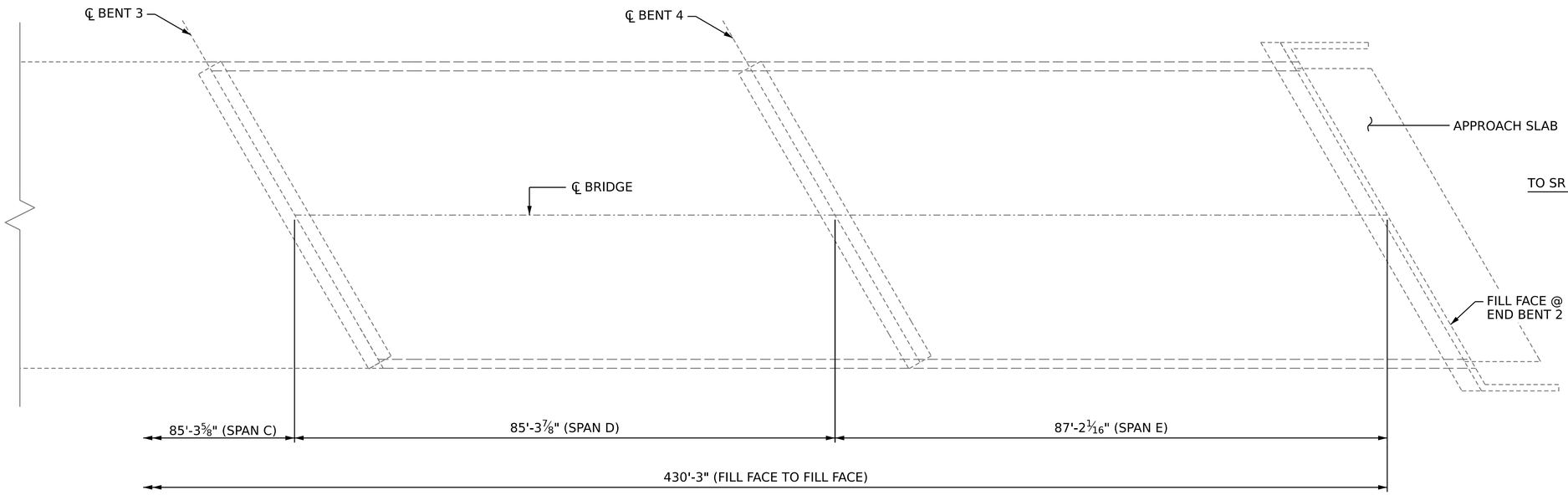


SECTION ALONG ℄ BRIDGE



NOTES

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- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970252
SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON US 264
BYPASS WESTBOUND OVER
CONTENTEA CREEK BETWEEN
SR 1606 AND SR 1612

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ISTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S7-2
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2			4			5

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CHECKED BY : A. G. ABRAHA DATE : 6/2022
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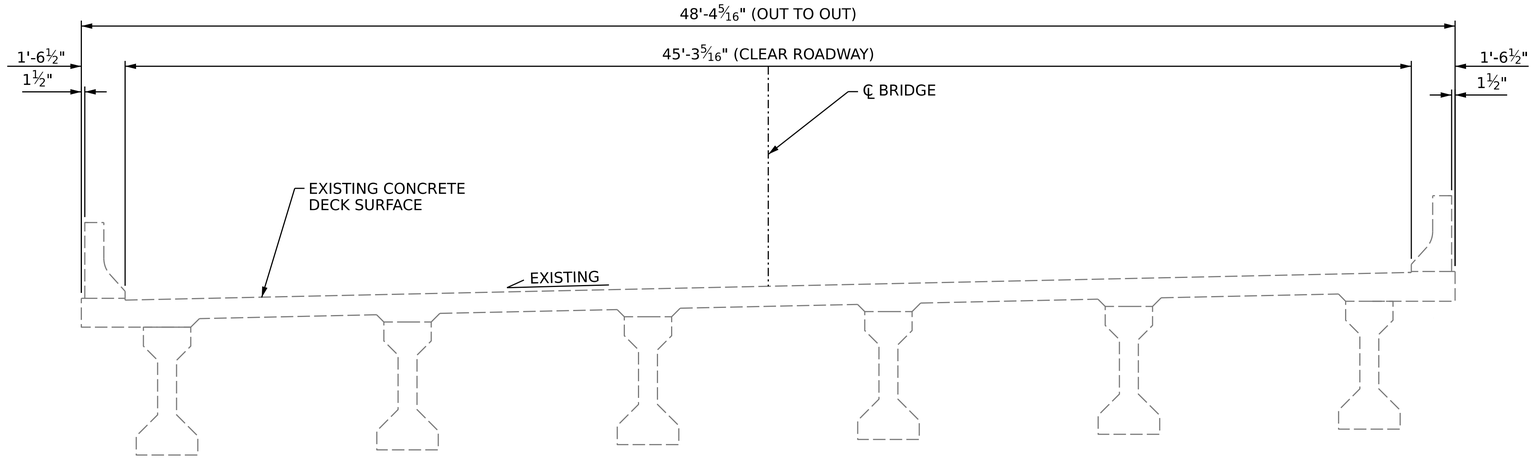
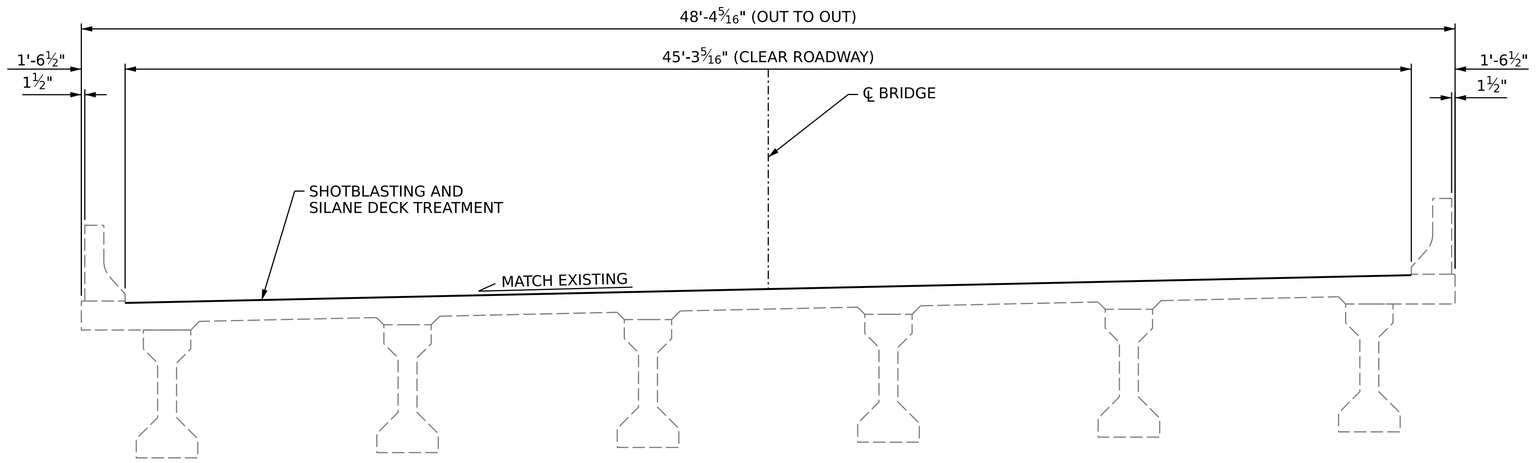


TYPICAL SECTION
(EXISTING)

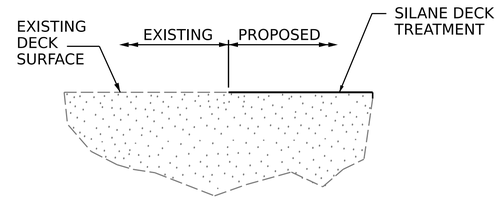


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970252

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

2D3D9A4F1D5154FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S7-3
1			3			TOTAL SHEETS
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7/11/2022
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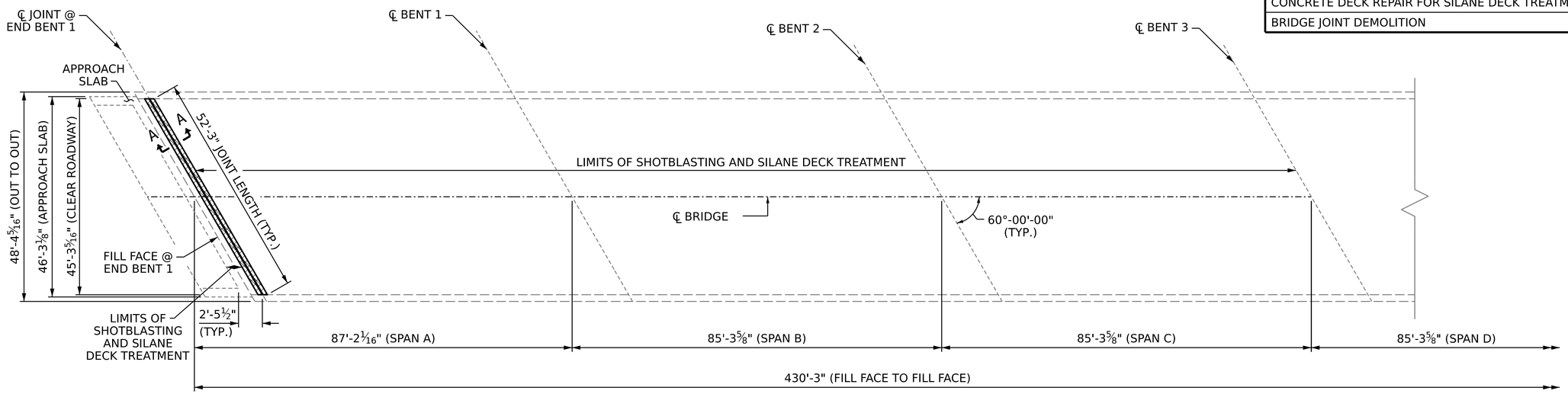
SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

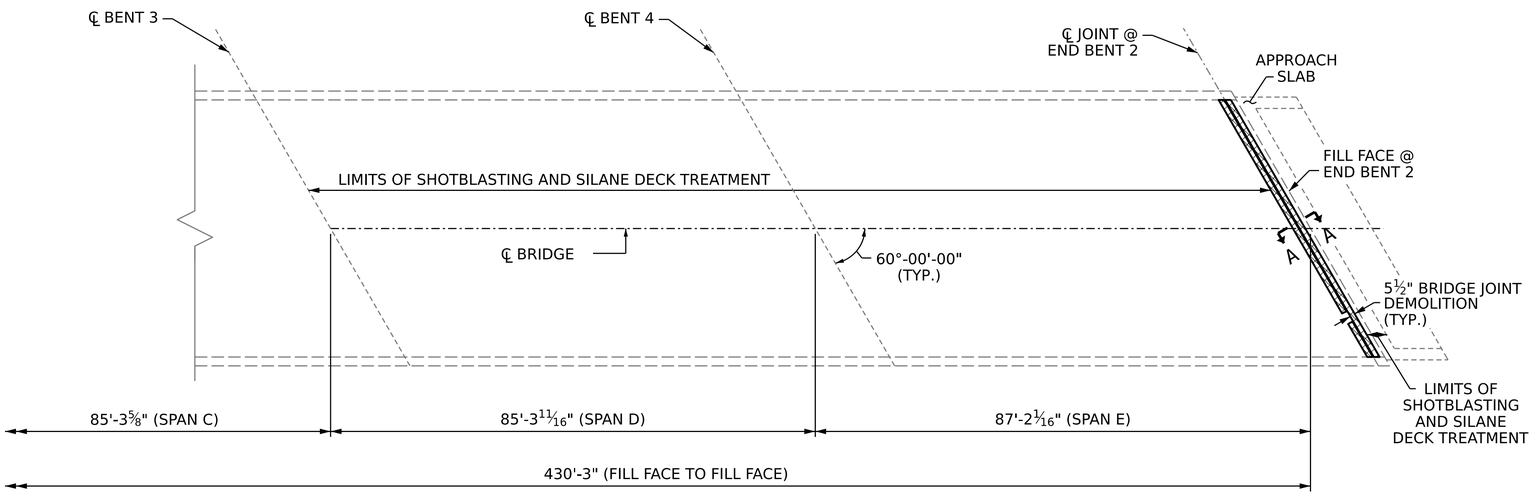
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	2,166.4 SY	
SILANE DECK TREATMENT	2,166.4 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	95.8 SY	



REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

PLAN OF SPANS



PLAN OF SPANS

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S7-5.

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970252

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DOA094AED5104FD...
07/11/2022

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
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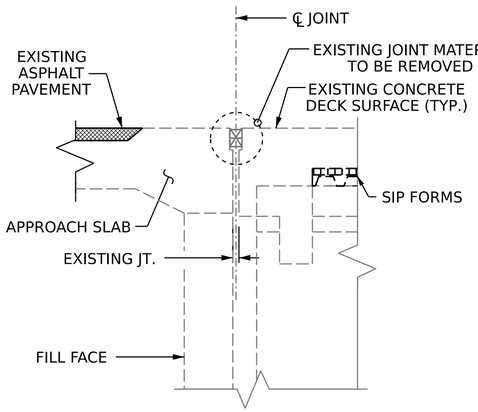
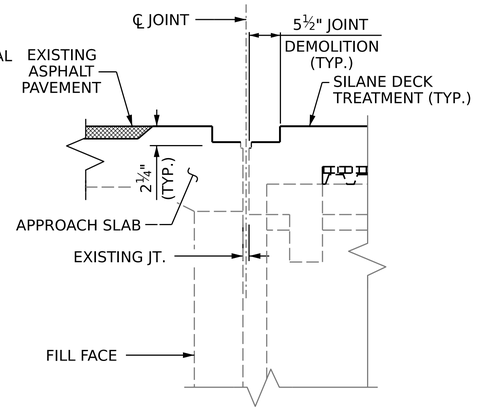
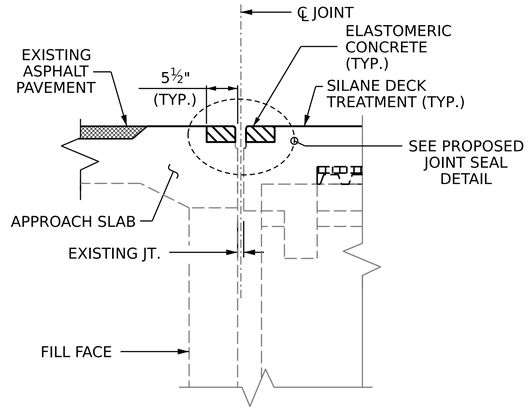


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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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.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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

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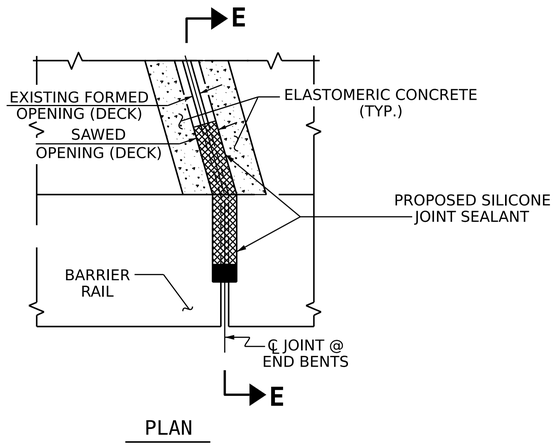
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

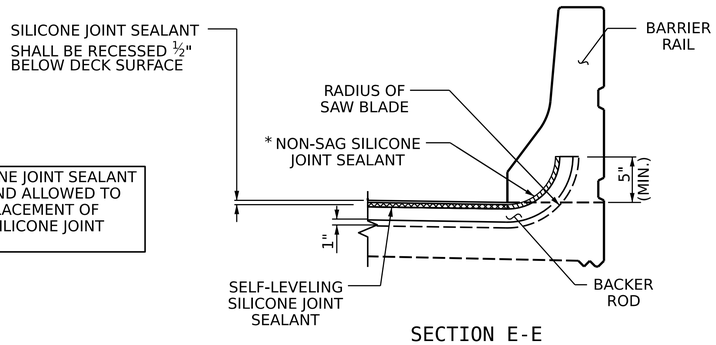
SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.0 CF	
POURABLE SILICONE JOINT SEALANT	104.5 LF	



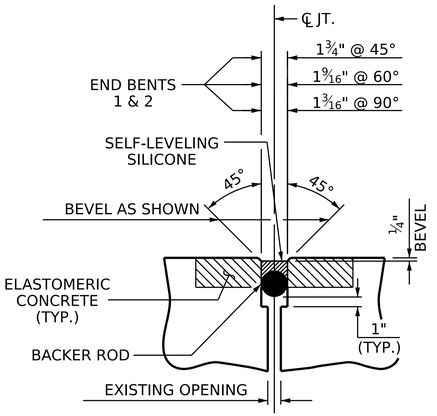
PLAN

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



SECTION E-E

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970252

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Astr Abraha
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
07/11/2022

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1			3			TOTAL SHEETS
2			4			5

DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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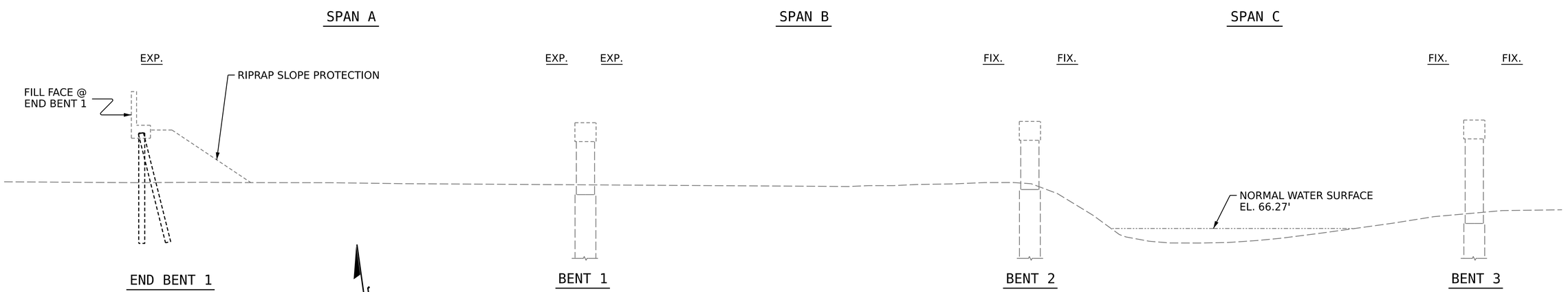
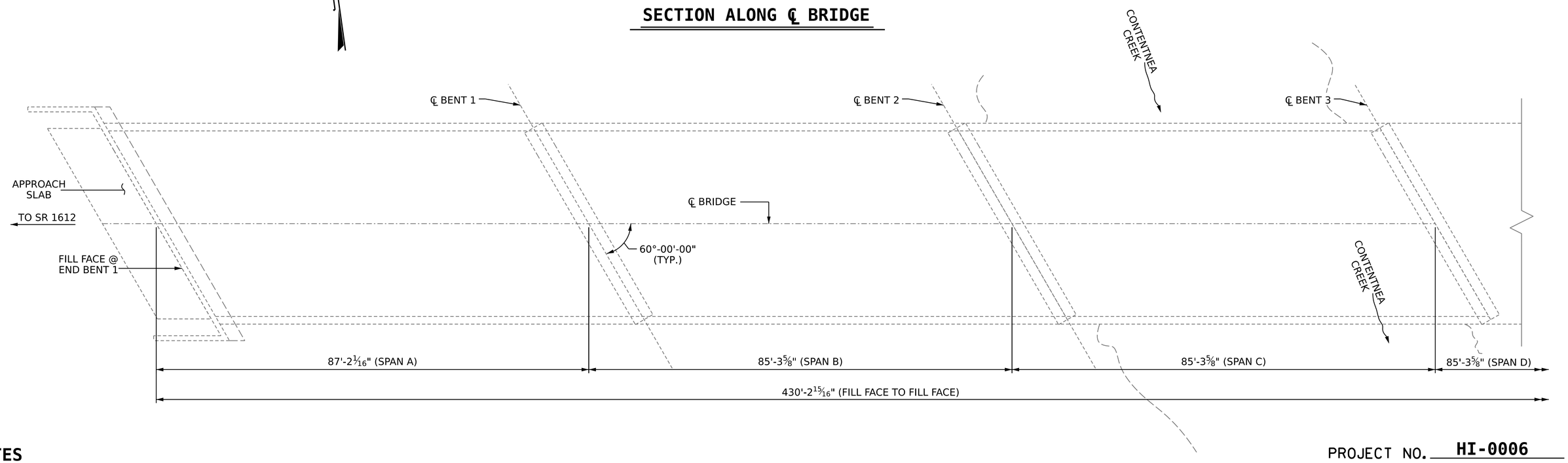


SECTION ALONG ℄ BRIDGE



NOTES

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- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.

- PLACE SILANE DECK TREATMENT.

- DEMOLISH EXISTING BRIDGE DECK JOINTS.

- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KESTER W. ALFORD
F24583B930BF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER KESTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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gabraha

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PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970253

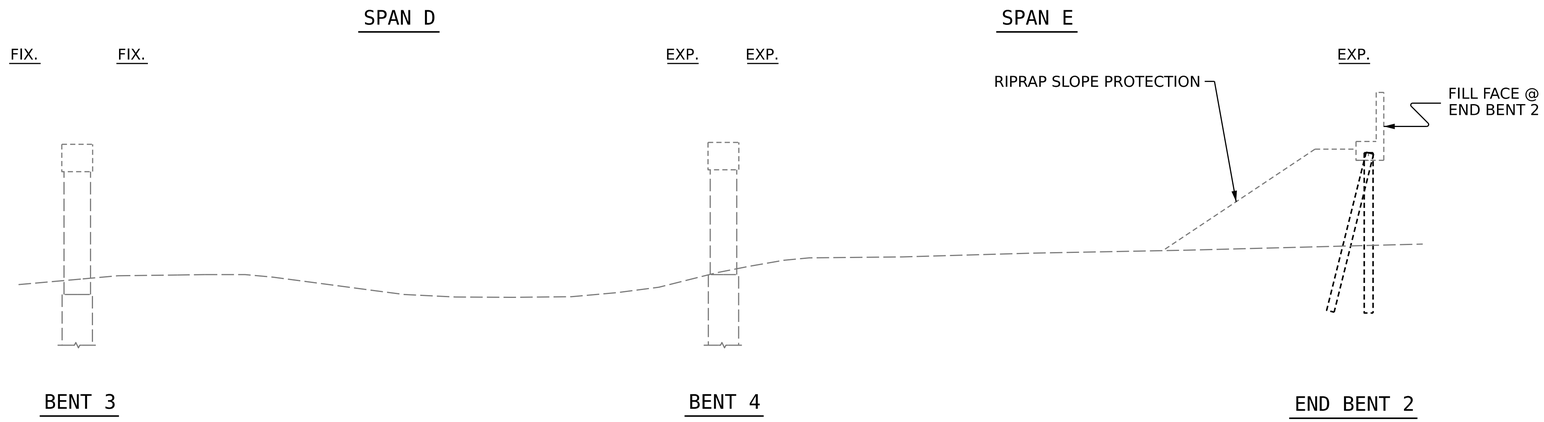
SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON US 264
BYPASS EASTBOUND OVER
CONTENTNEA CREEK BETWEEN
SR 1606 AND SR 1612

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-1
1			3			TOTAL SHEETS
2			4			5



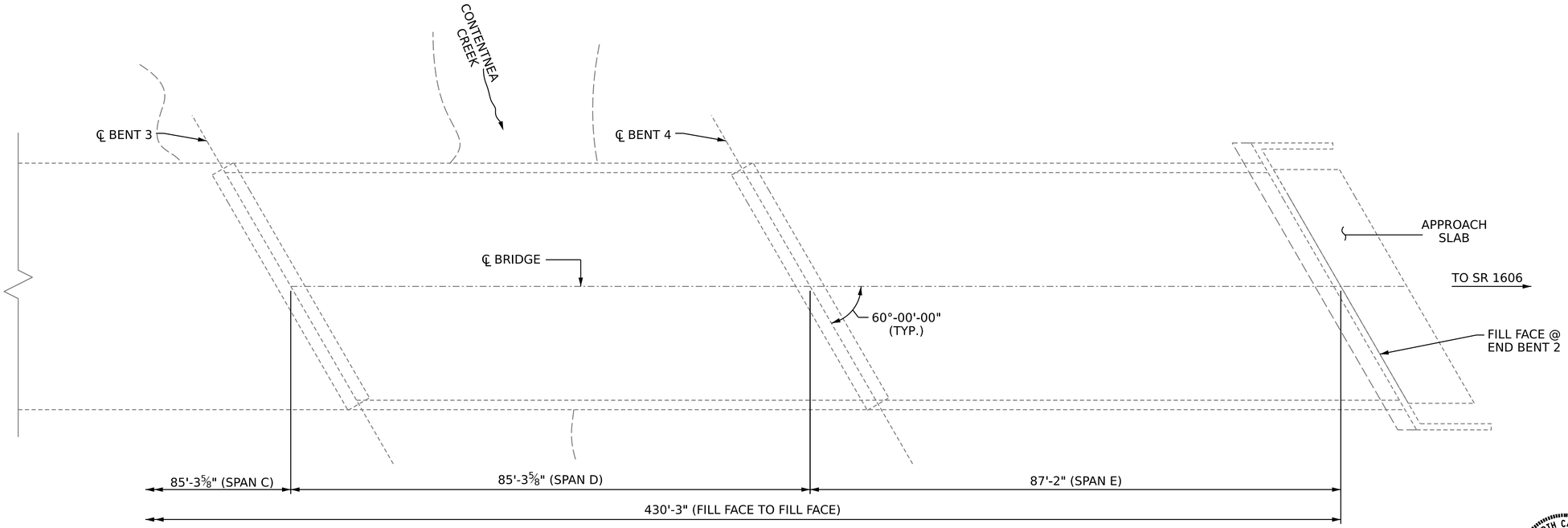
SECTION ALONG ℄ BRIDGE

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
ASTER Abraha
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970253
SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON US 264
BYPASS EASTBOUND OVER
CONTENTEA CREEK BETWEEN
SR 1606 AND SR 1612

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-2
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
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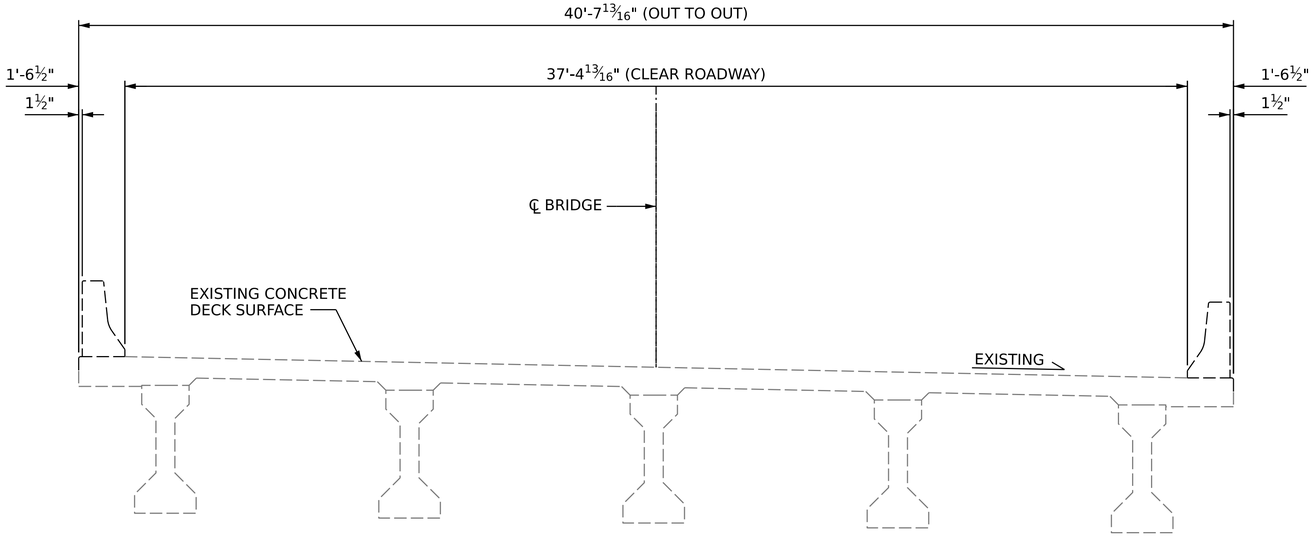
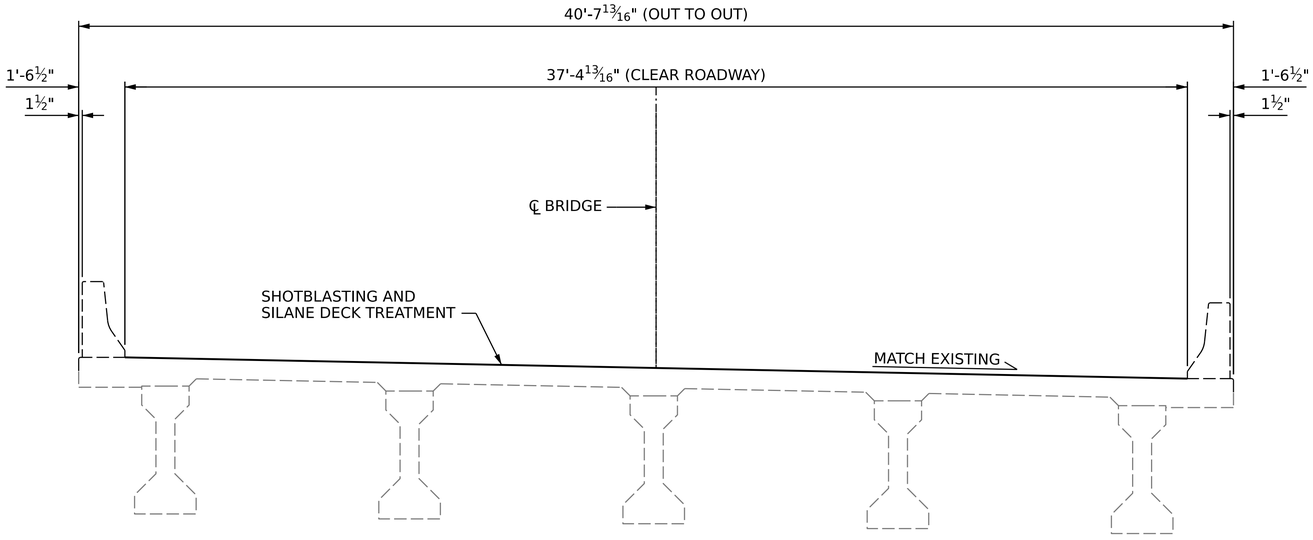


TYPICAL SECTION
(EXISTING)

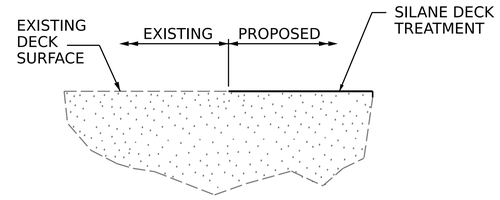


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970253

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
2DA09A4ED0104FD...
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-3
1			3			TOTAL SHEETS
2			4			5

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DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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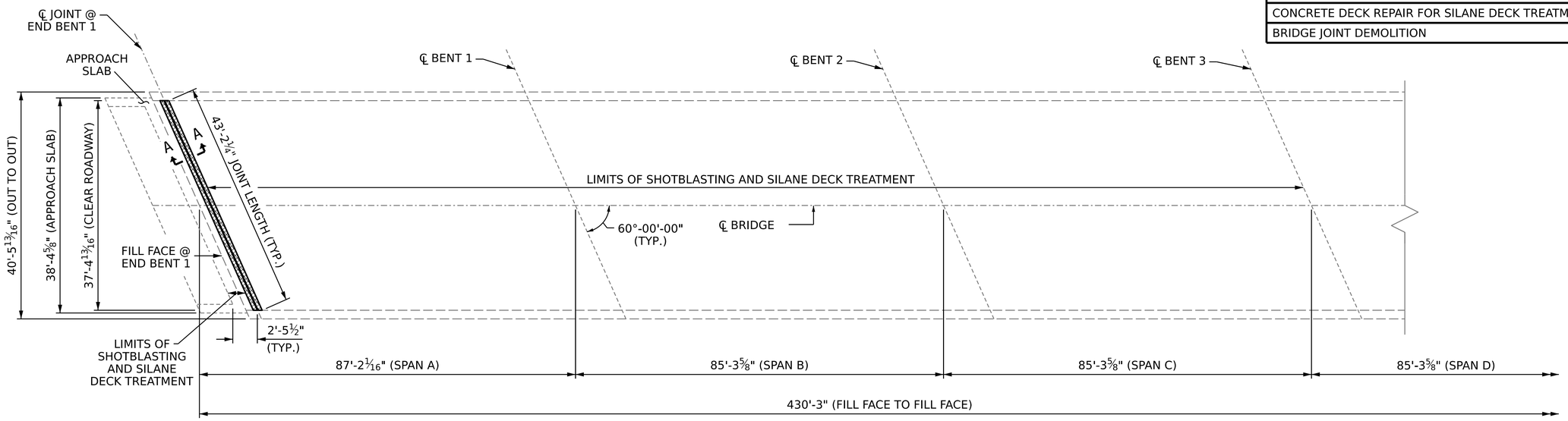
gabraha

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

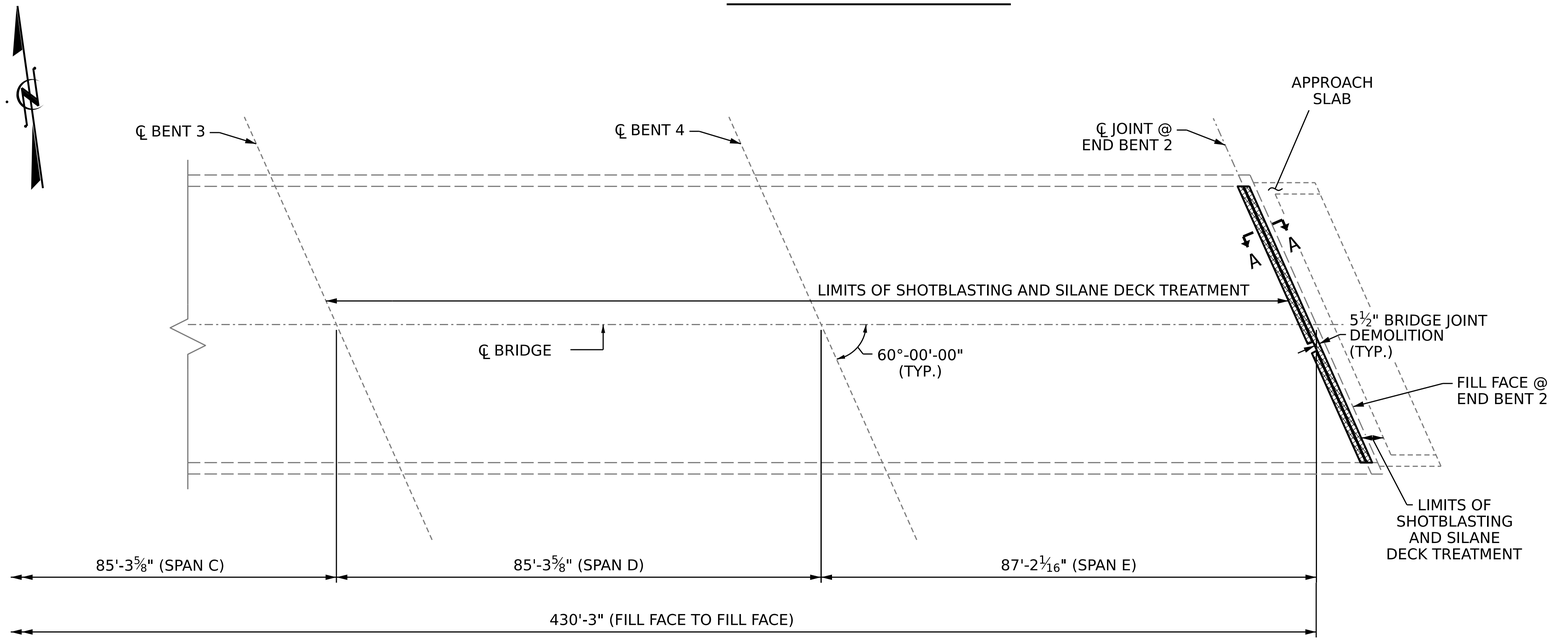
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,790.6 SY	
SILANE DECK TREATMENT	1,790.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	79.2 SY	



PLAN OF SPANS

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION



PLAN OF SPANS

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S8-5.

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970253

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DDA096AAE05104FD...
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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1			3			TOTAL SHEETS
2			4			5

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

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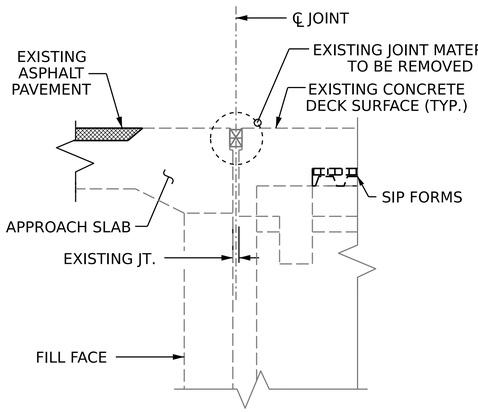
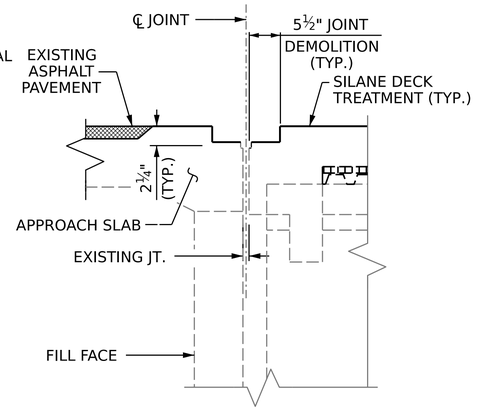
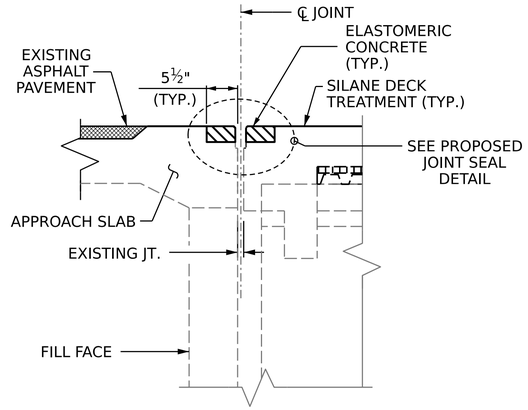


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

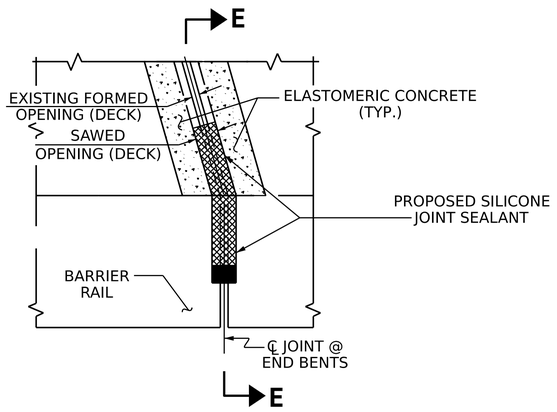
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

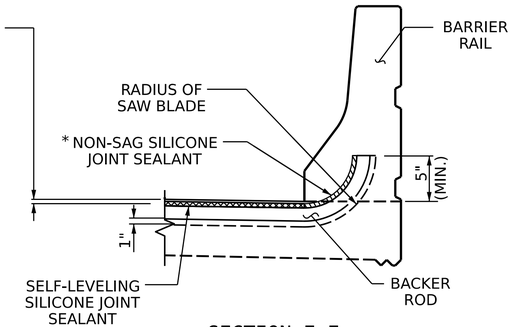
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	14.9 CF	
POURABLE SILICONE JOINT SEALANT	86.4 LF	



PLAN

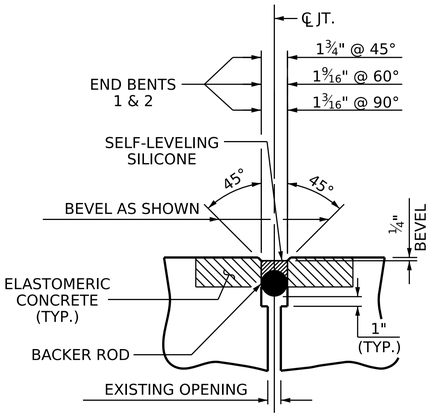
SILICONE JOINT SEALANT SHALL BE RECESSED ½" BELOW DECK SURFACE

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



SECTION E-E

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970253

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DD4094AE05104FD...
07/11/2022

DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-5
1			3			TOTAL SHEETS
2			4			5

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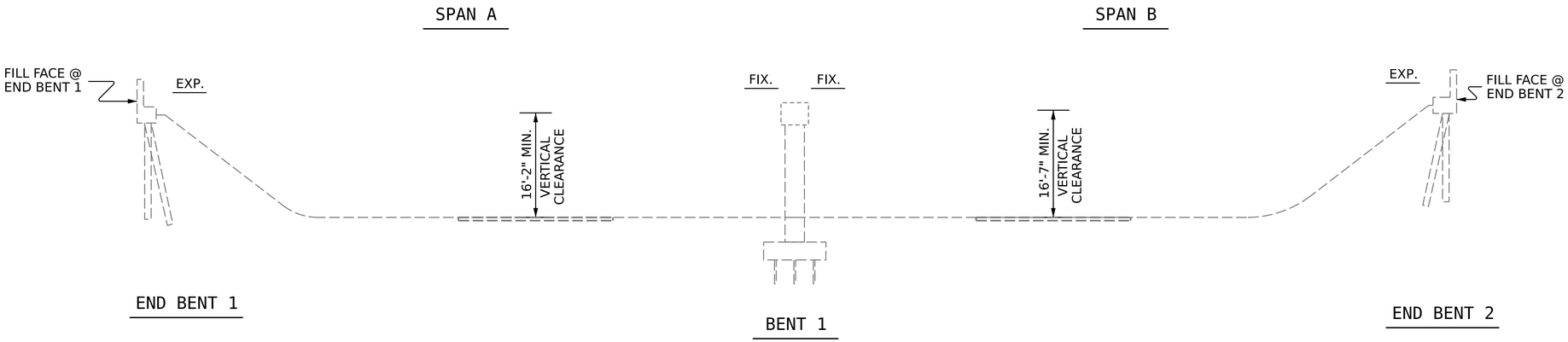
NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

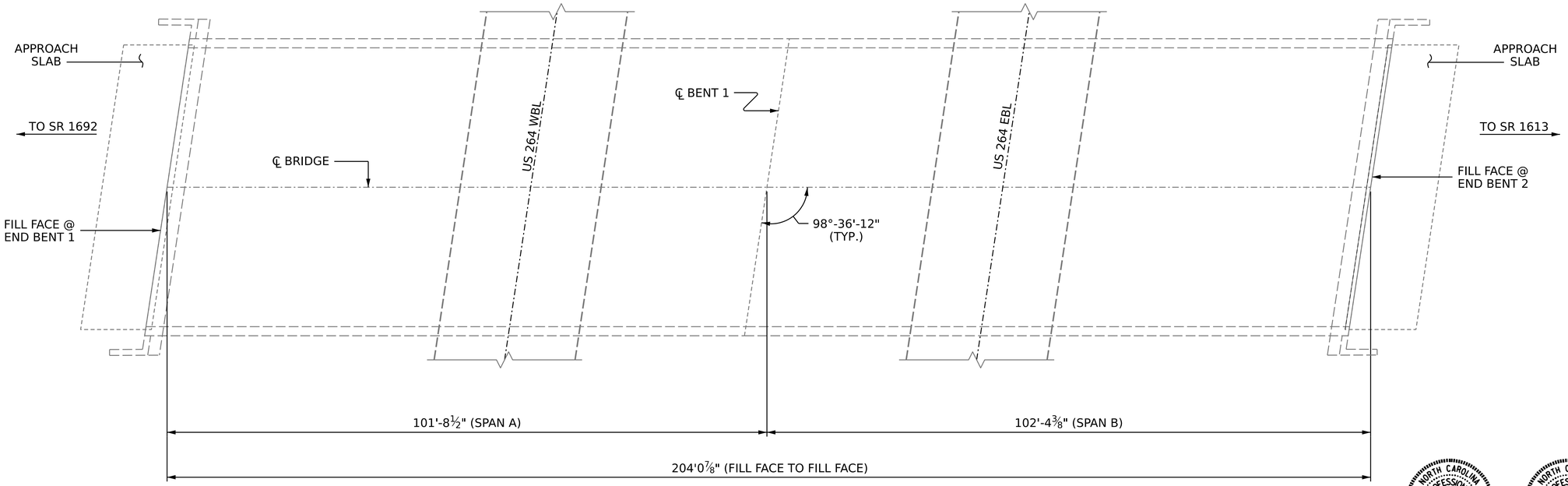
- PREPARE BRIDGE DECK SURFACE BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE AREAS FOR SHOTCRETE REPAIRS.
- PERFORM SHOTCRETE REPAIRS.



SECTION ALONG ℄ BRIDGE

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

RESIDENT ENGINEER DATE



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER ALFORD
F2458389308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ABRAHA
DDA094AED5104FD...
07/12/2022

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970254

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SR 1606 OVER US 264 BYPASS BETWEEN SR 1692 AND SR 1613

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-1
1			3			TOTAL SHEETS
2			4			6

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
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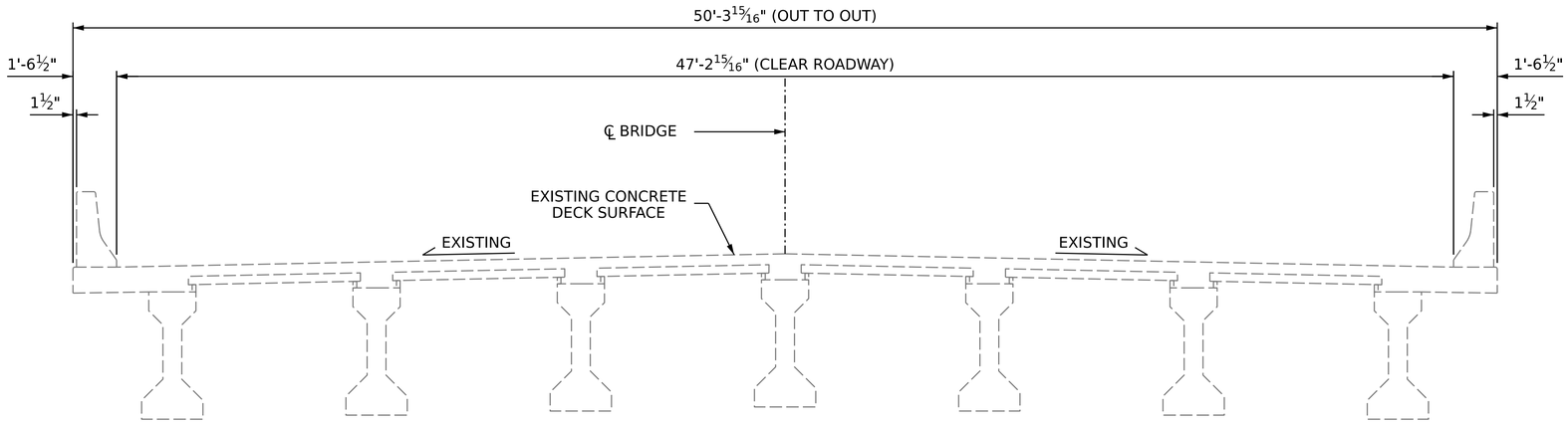
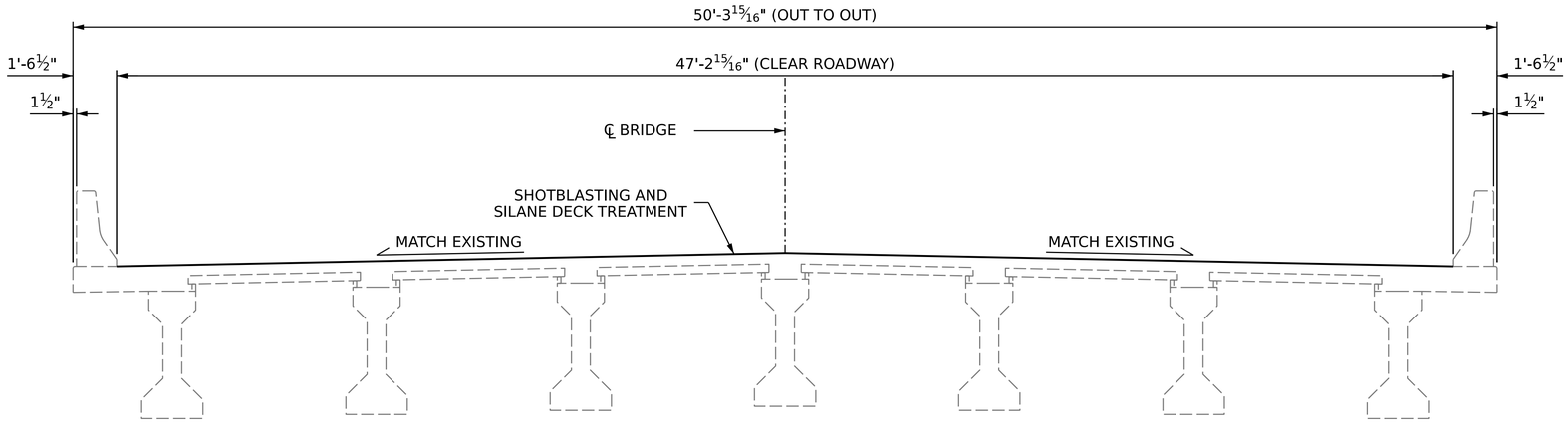


TYPICAL SECTION
(EXISTING)

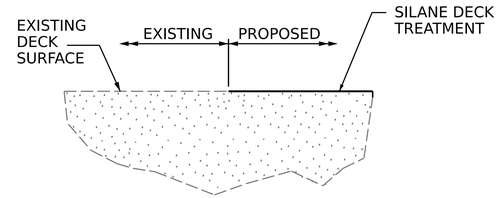


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970254

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-2
1			3			TOTAL SHEETS
2			4			6

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DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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aabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

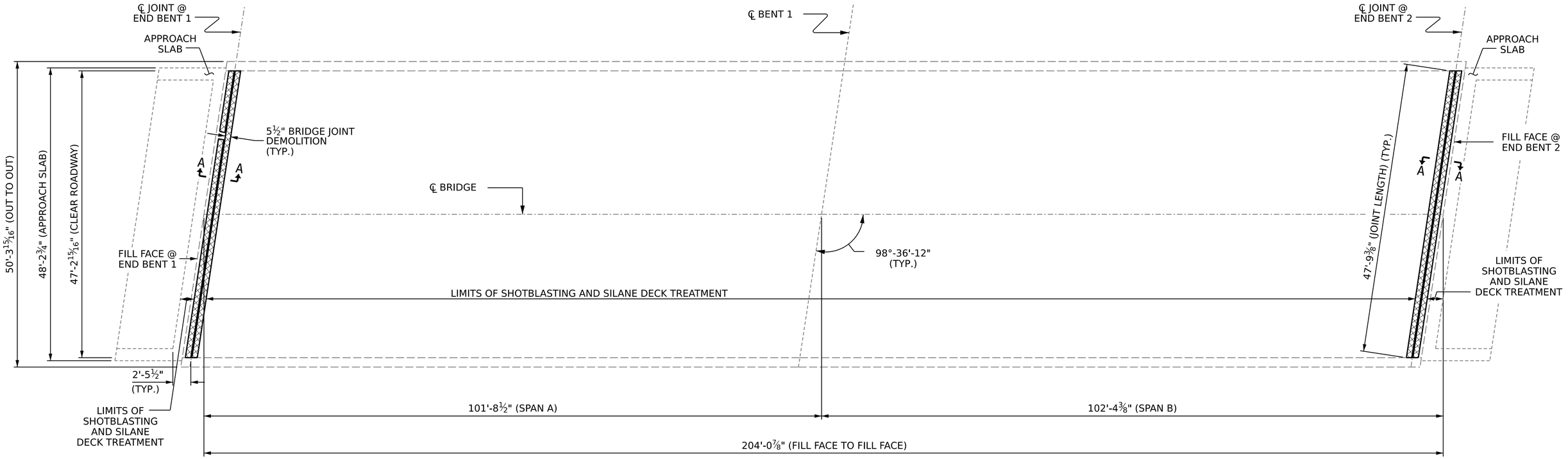
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S9-6.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,075.5 SY	
SILANE DECK TREATMENT	1,075.5 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	87.6 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970254

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-3
1			3			TOTAL SHEETS
2			4			6

DRAWN BY : G. AYES DATE : 5/2022
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REPAIR KEY

DIAPHRAGM REPAIR

PRESTRESSED CONCRETE GIRDER REPAIR

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.

CONTRACTOR SHALL SAWCUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED. CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT WILL NOT DAMAGE EXISTING REINFORCING STEEL.

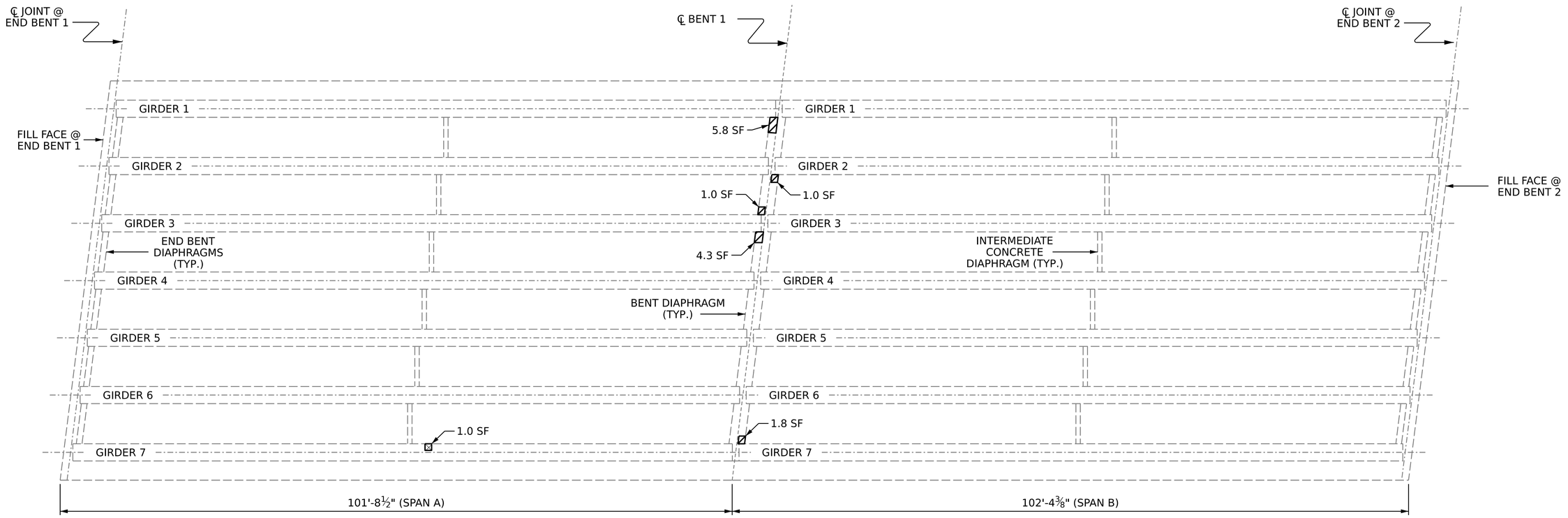
FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET S9-5.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0.0	0.0		
BENT DIAPHRAGMS	13.9	4.6		
GIRDER REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
PC GIRDERS	1.0	0.3		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970254

PLAN OF SPANS - UNDERSIDE REPAIRS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-4
1			3			TOTAL SHEETS
2			4			6

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

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7/11/2022
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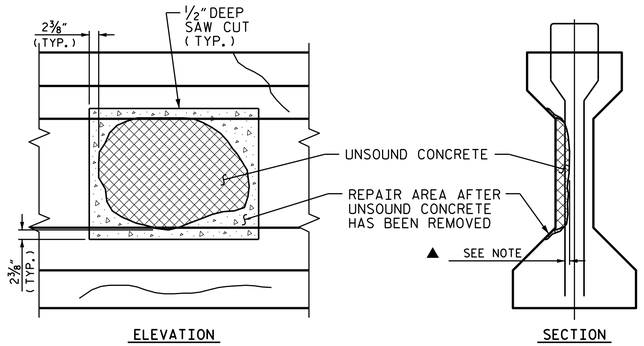
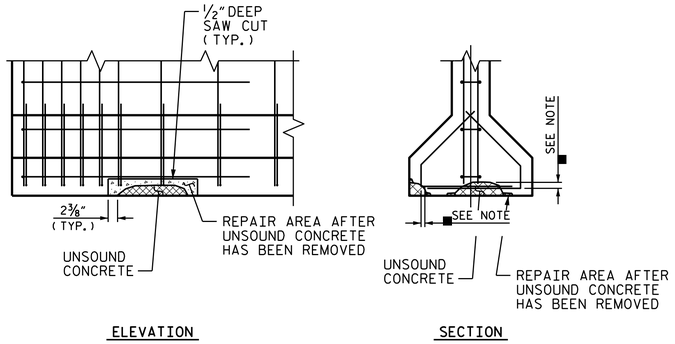
aabraha

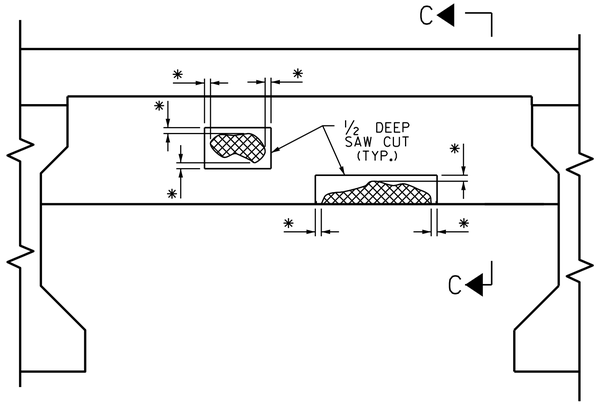


GIRDER WEB REPAIR



GIRDER FLANGE REPAIR

PRESTRESSED GIRDER REPAIR

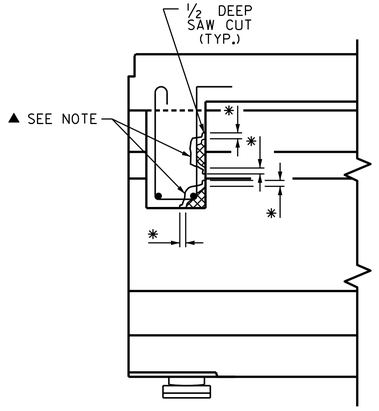


TYPICAL SECTION

* ½" DEEP SAW CUT SHALL BE PLACED 2" INTO SOUND CONCRETE.

REPAIR KEY:

UNSOUND CONCRETE TO BE REPAIRED



SECTION C-C

NOTES:

PREPACKAGED MATERIAL IS REQUIRED.

CONSULT WITH THE ENGINEER TO DETERMINE PRELOADING REQUIREMENTS WHEN REPAIR IS WITHIN THE CENTER REGION OF THE BEAM (0.25L TO 0.75L).

FOR REPAIRS OVER TRAFFIC AND SHALLOW REPAIRS THAT DO NOT ENGAGE REINFORCEMENT, ANCHOR PATCH MATERIAL USING ¼"GALVANIZED BOLTS, EPOXY ANCHORED WITH 2"EMBEDMENT. PLACE BOLTS IN A 6"GRID. USE A LATEX OR EPOXY PATCH MATERIAL FOR IMPROVED BOND. USE EXTREME CARE TO NOT DAMAGE STRANDS.

FOR PRESTRESSED CONCRETE GIRDER REPAIRS, SEE SPECIAL PROVISIONS.

PRESTRESSED GIRDER 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 MINIMUM DEPTH OF ½".
3. REMOVE CONCRETE WITHIN SAW CUT AREA TO MINIMUM ½"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 THE REPAIRS TO PRESTRESSED CONCRETE GIRDERS 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 APPROVED REPAIR MATERIAL ACCORDING TO PRESTRESSED CONCRETE GIRDER REPAIRS SPECIAL PROVISION. MAXIMUM AGGREGATE SIZE FOR REPAIR MATERIAL SHALL NOT EXCEED ⅔ THE MINIMUM REPAIR DEPTH.

BENT DIAPHRAGM REPAIR DETAIL

(EXAMPLE DETAILS ONLY. ACTUAL REBAR SIZE & LOCATION MAY VARY)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970254

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER AGTER G. ABRAHA

Agter Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-5
1			3			TOTAL SHEETS
2			4			6

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ASSEMBLED BY :	G. AYES	DATE :	5/2022
CHECKED BY :	A. G. ABRAHA	DATE :	5/2022
DRAWN BY :	NAP 08/18		
CHECKED BY :			

7/11/2022
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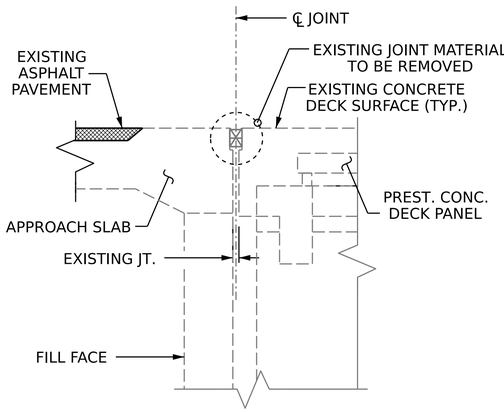
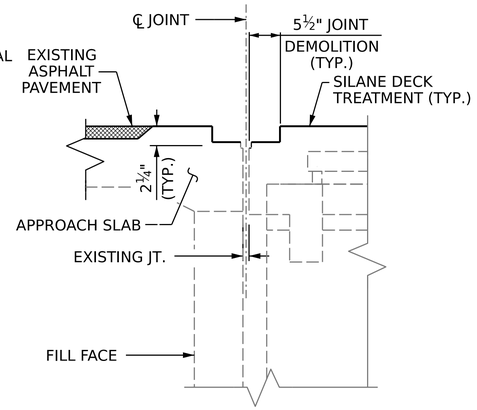
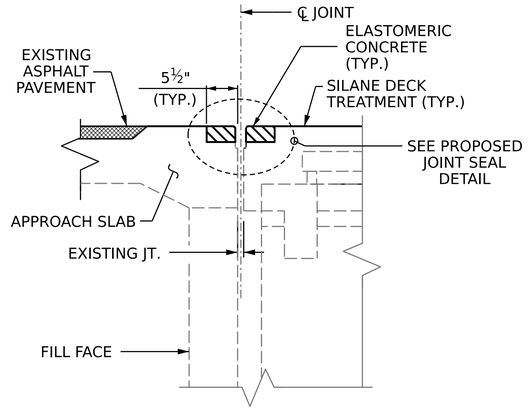
aabraha



EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

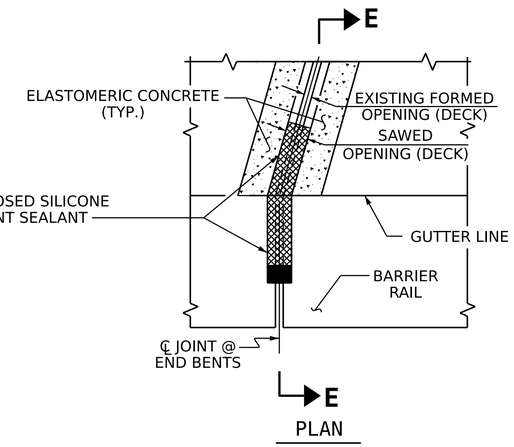
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

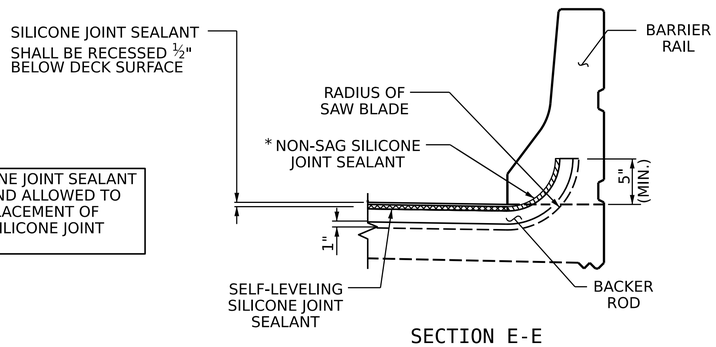
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	16.4 CF	
POURABLE SILICONE JOINT SEALANT	95.6 LF	



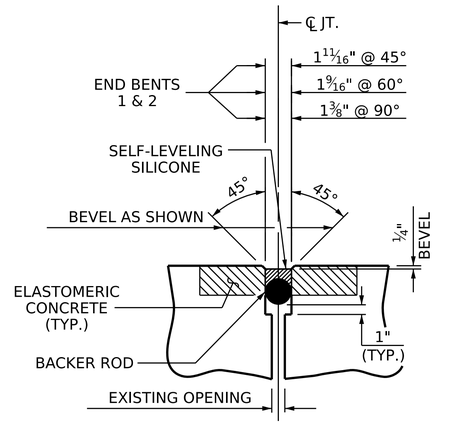
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970254

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DD4094AE05104FD...
07/11/2022

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NO.	BY:	DATE:	NO.	BY:	DATE:	S9-6
1			3			TOTAL SHEETS
2			4			6

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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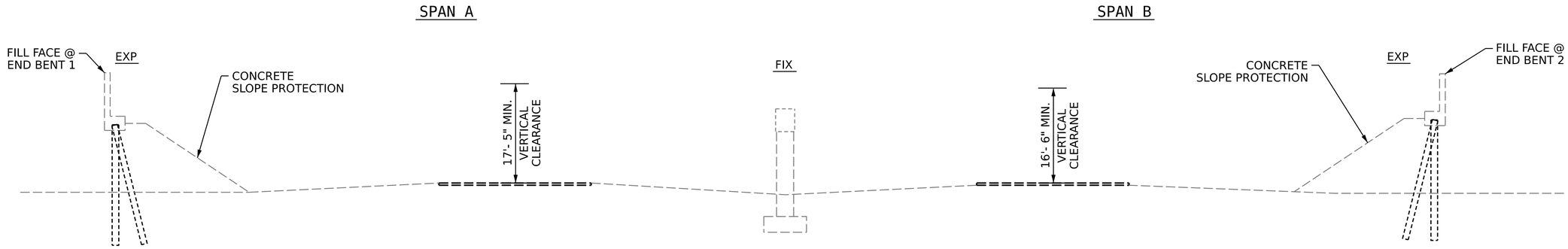
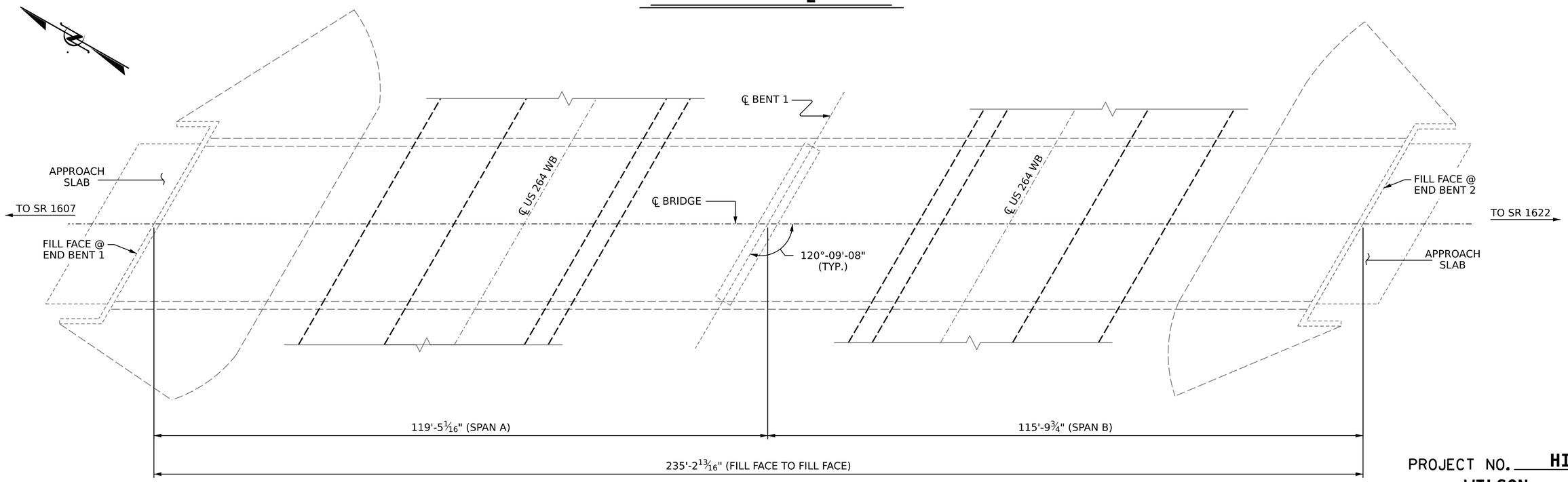


SECTION ALONG ℄ BRIDGE



PLAN

(COLUMNS & FOOTINGS NOT SHOWN IN PLAN VIEW FOR CLARITY)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970255

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 01/11/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY L. ALFORD
F2458389308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SR 1602
OVER US 264 BYPASS BETWEEN
SR 1607 AND SR 1622

DRAWN BY : Z. HOWARD / G. AYES	DATE : 4/2022				
CHECKED BY : A. G. ABRAHA	DATE : 6/2022				
DESIGN ENGINEER OF RECORD:	DATE :				

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S10-1
1			3			TOTAL SHEETS
2			4			4

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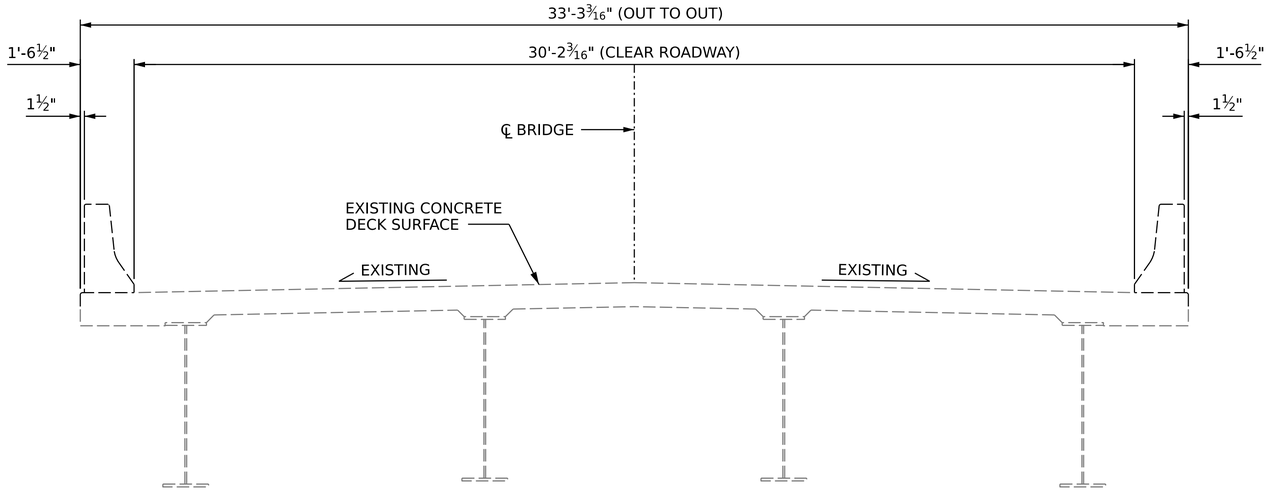
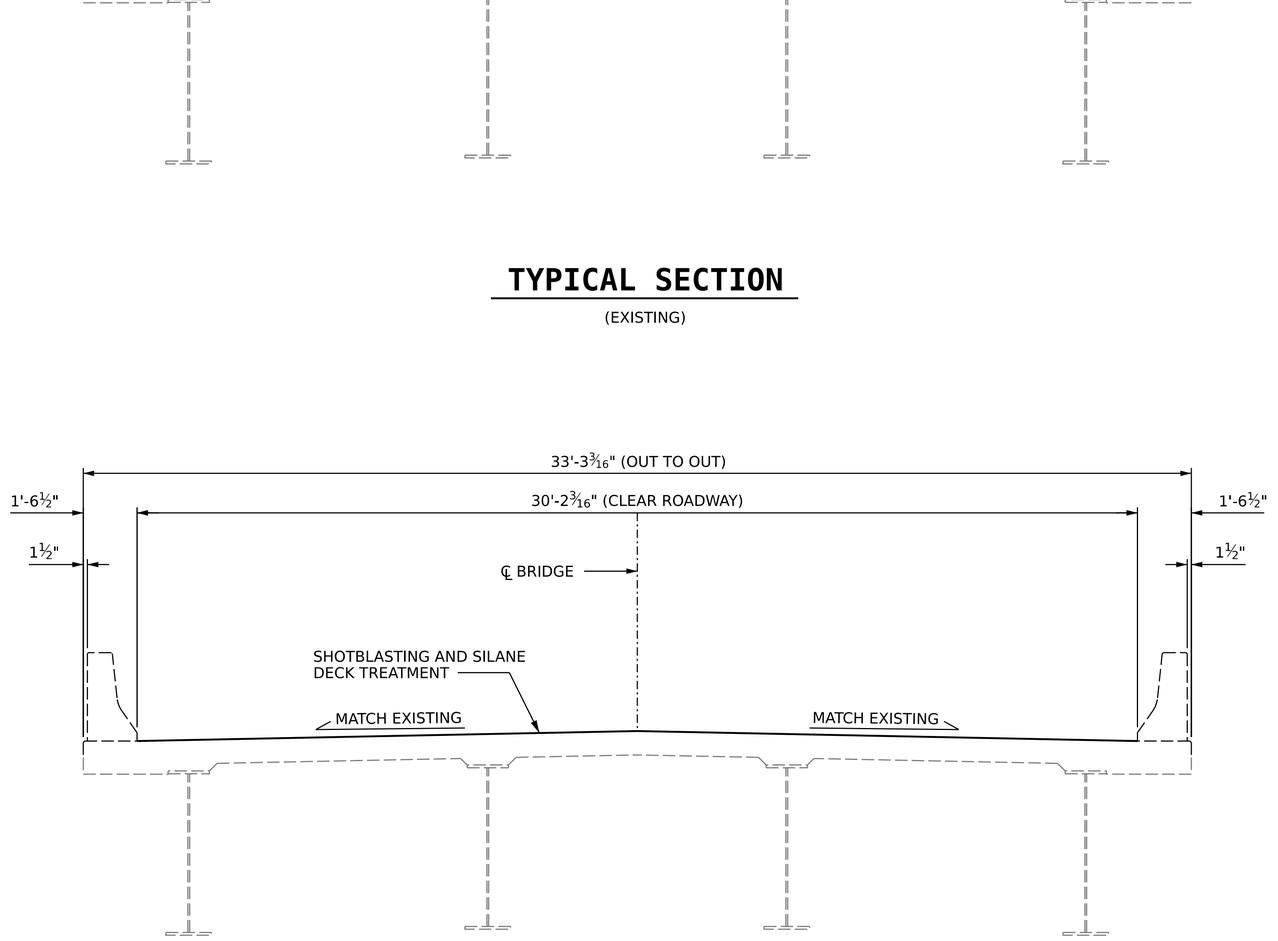


TYPICAL SECTION

(EXISTING)



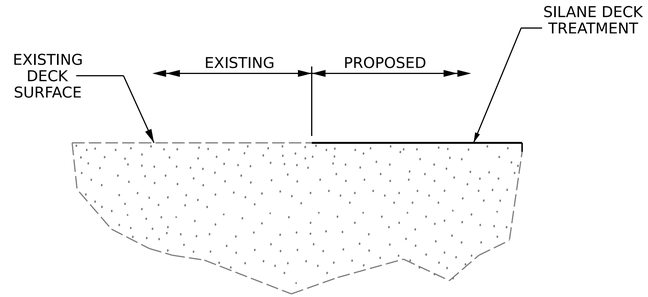
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970255

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S10-2
1			3			TOTAL SHEETS
2			4			4

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CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

7/11/2022
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gabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

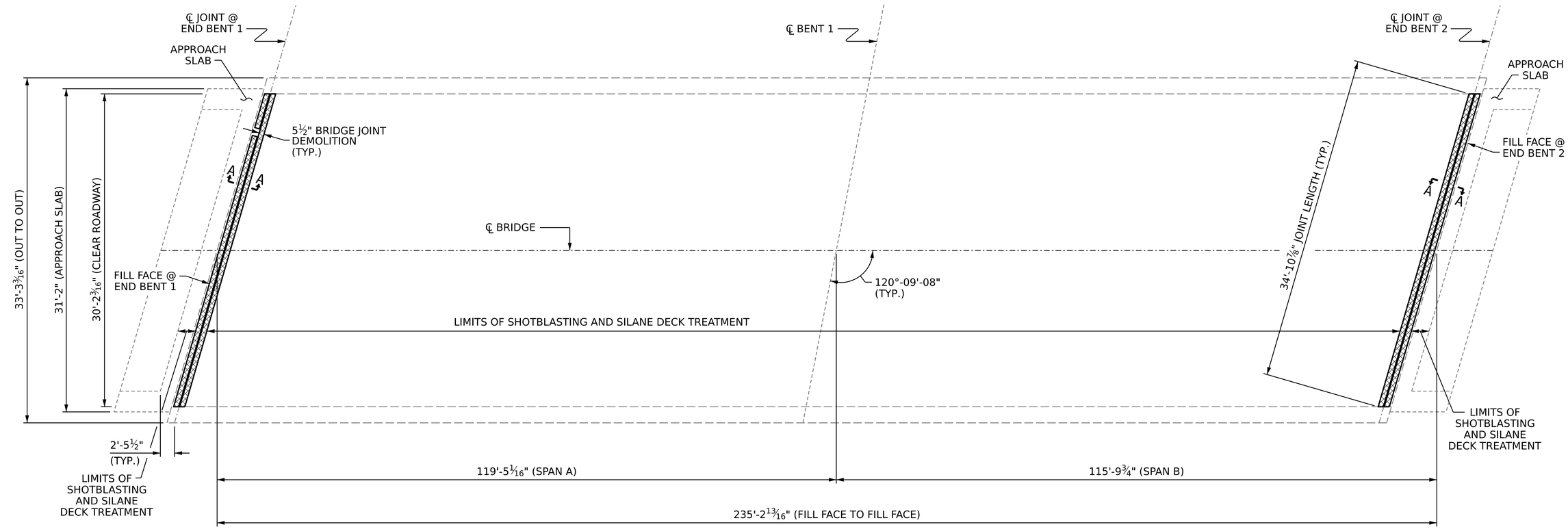
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S10-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	791.0 SY	
SILANE DECK TREATMENT	791.0 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	64.0 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970255

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

REVISIONS						SHEET NO.
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CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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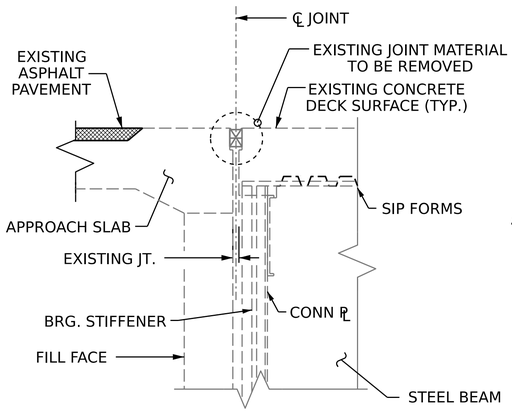
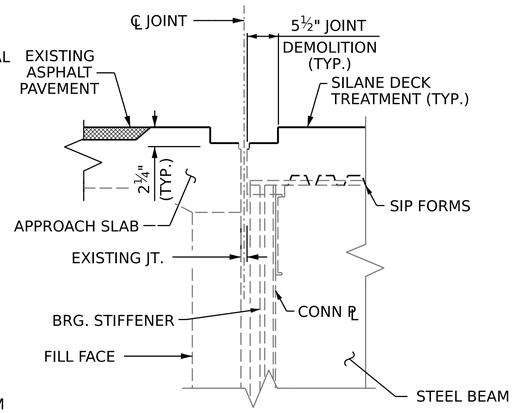
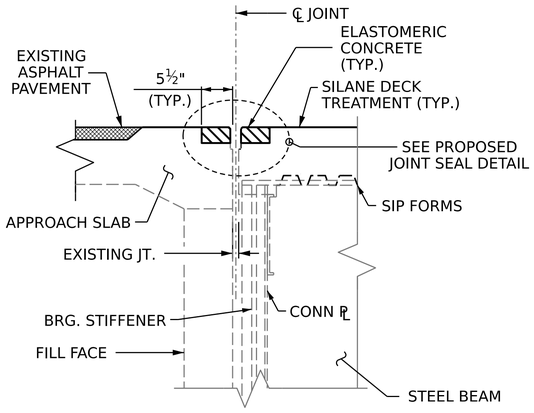


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

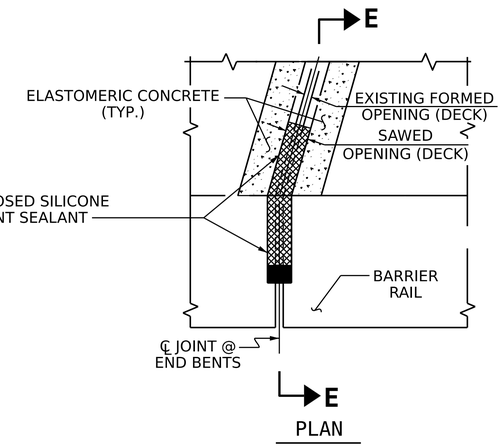
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

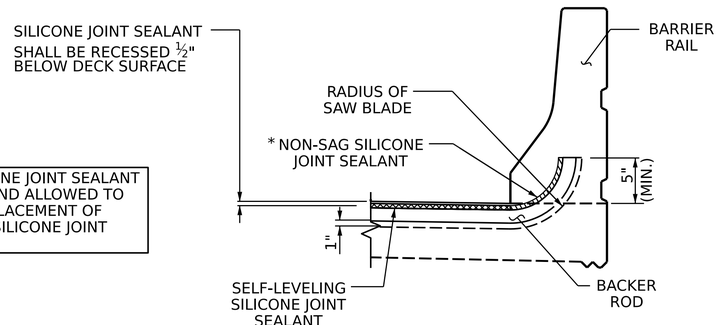
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.0 CF	
POURABLE SILICONE JOINT SEALANT	69.8 LF	



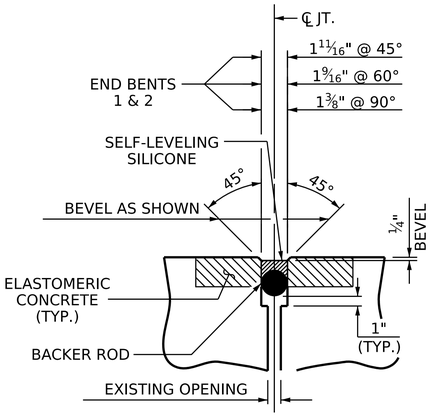
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970255

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
07/11/2022

REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			4

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DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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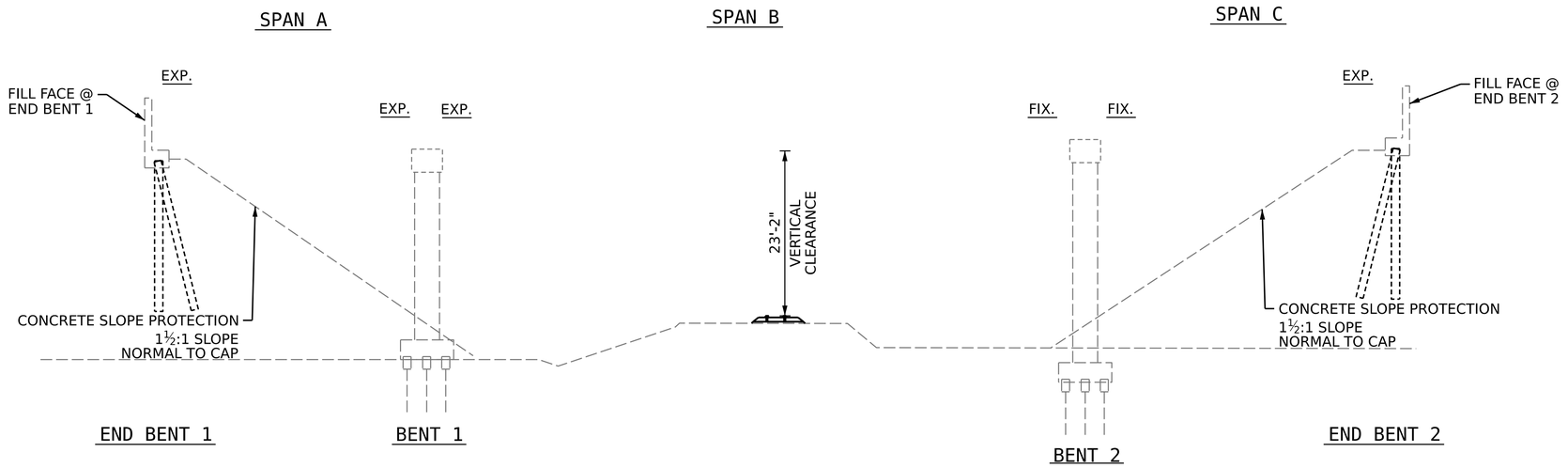
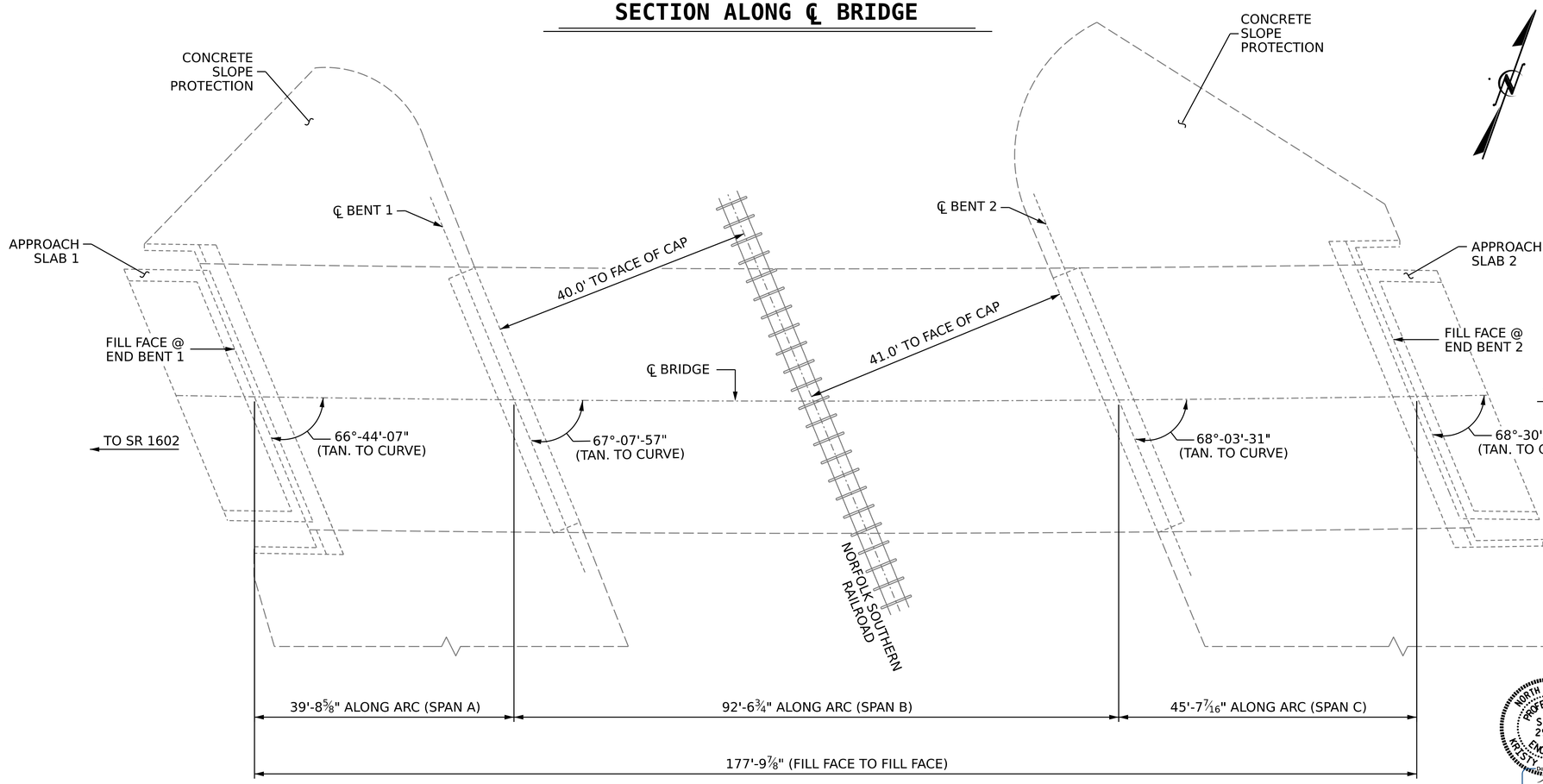
aabraha



SECTION ALONG ℄ BRIDGE



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 12/20/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE, INSTALL BACKER ROD, AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970256

MILE POST - 178.59

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
F2458369308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE OVER NORFOLK SOUTHERN RAILROAD ON US 264 BYPASS WESTBOUND BETWEEN SR 1602 AND NC 58

DRAWN BY : J. BALDWIN DATE : 5/2022
CHECKED BY : A. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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REVISIONS						SHEET NO.
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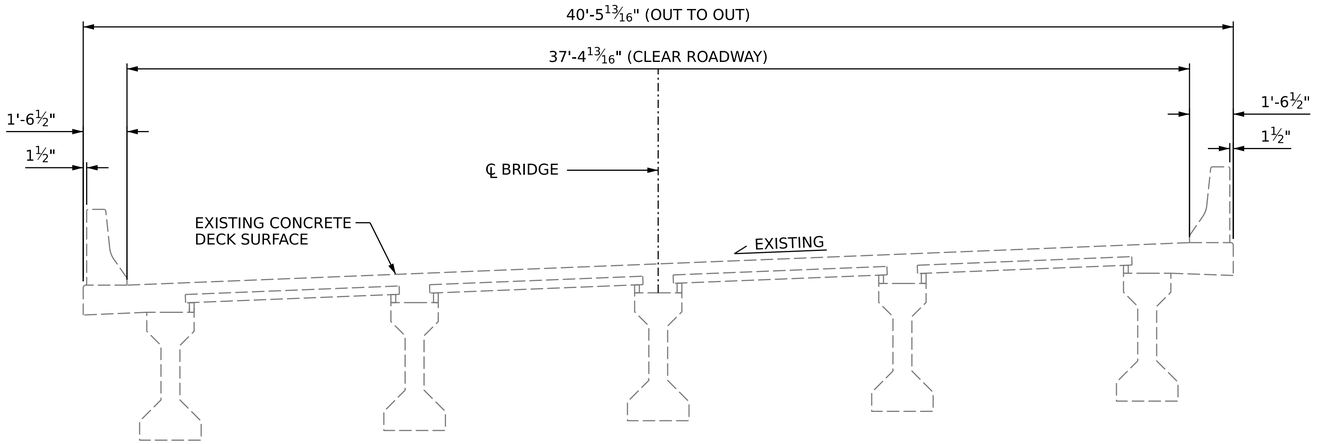
1			3			TOTAL SHEETS
2			4			4

NOTES

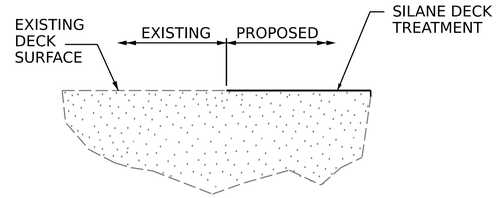
SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.

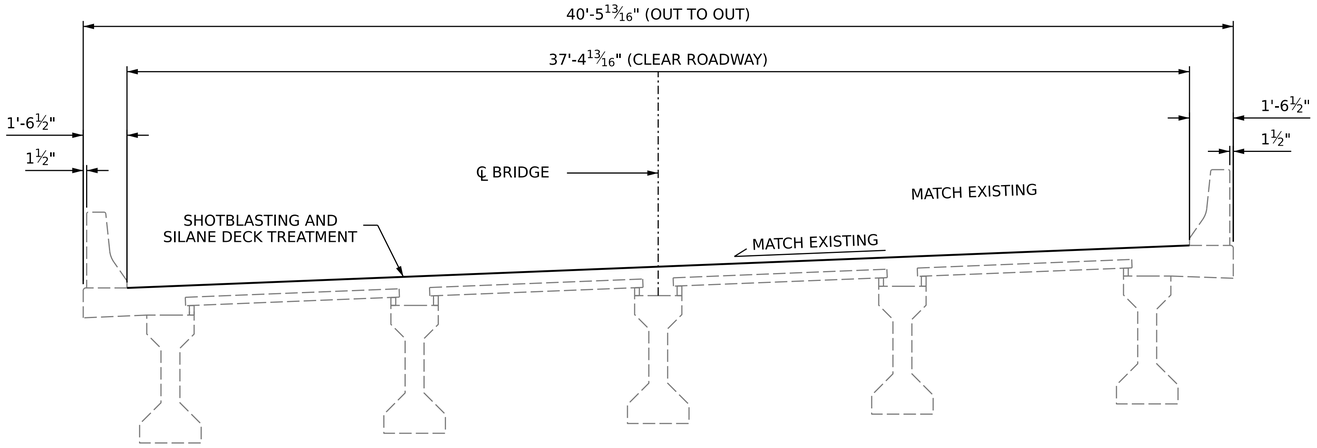


TYPICAL SECTION

(EXISTING)



SILANE DECK TREATMENT DETAIL



TYPICAL SECTION

(PROPOSED)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970256

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

DOA0064AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S11-2
1			3			TOTAL SHEETS
2			4			4

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CHECKED BY : A. ABRAHA DATE : 06/2022
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7/11/2022
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REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

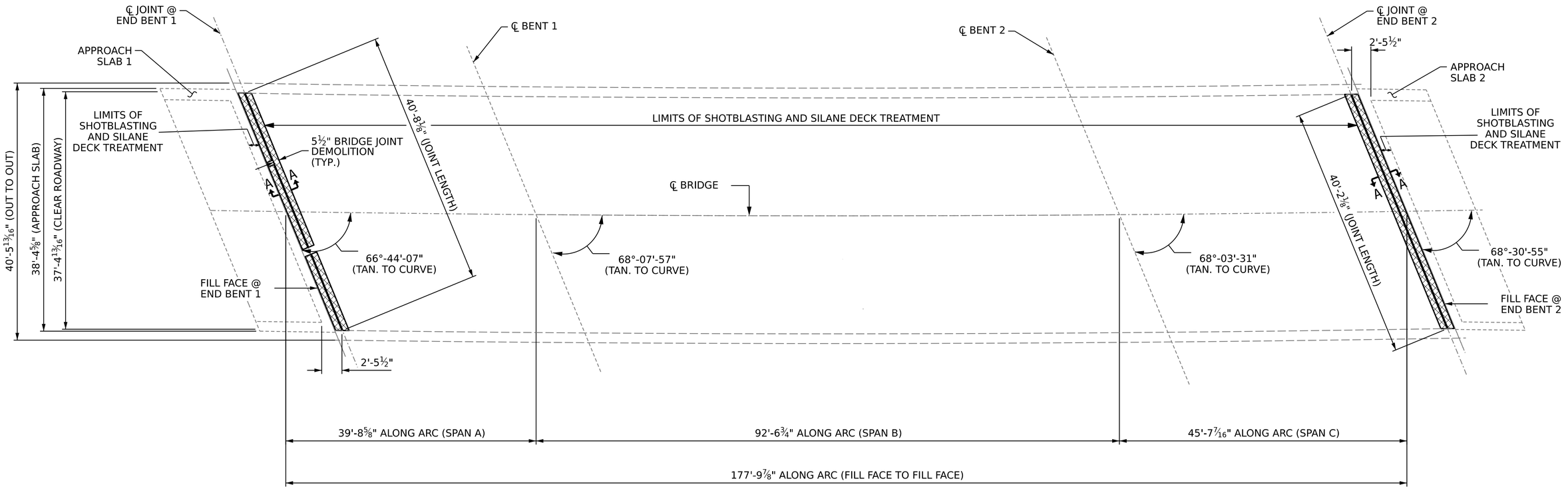
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S11-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	741.4 SY	
SILANE DECK TREATMENT	741.4 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	74.1 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970256

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DDA096AAE05104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S11-3
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DRAWN BY : J. BALDWIN DATE : 6/2022
CHECKED BY : A. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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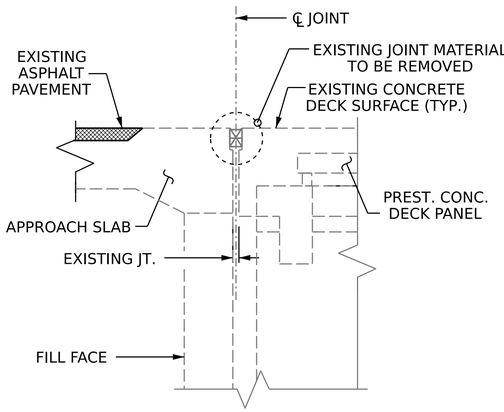
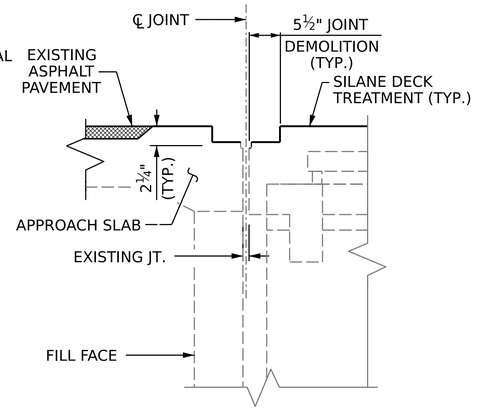
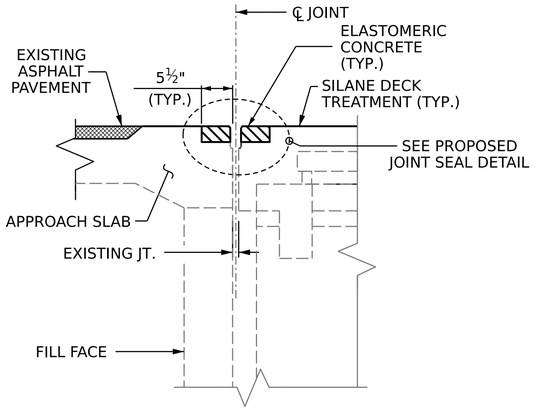


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

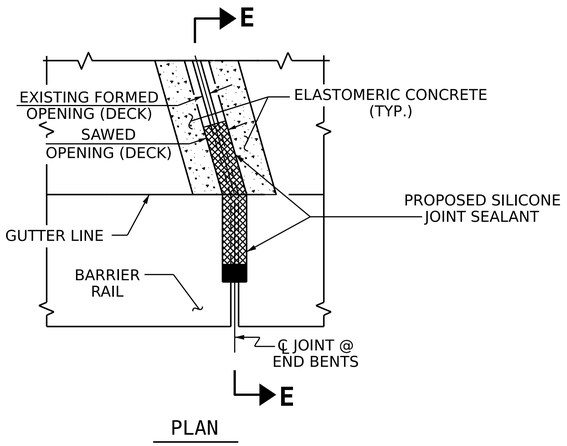
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

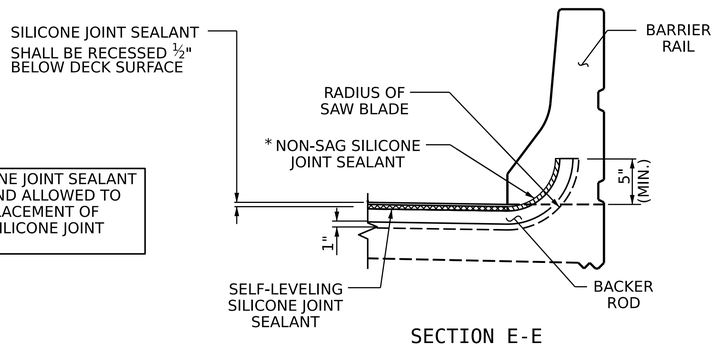
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.9 CF	
POURABLE SILICONE JOINT SEALANT	80.9 LF	



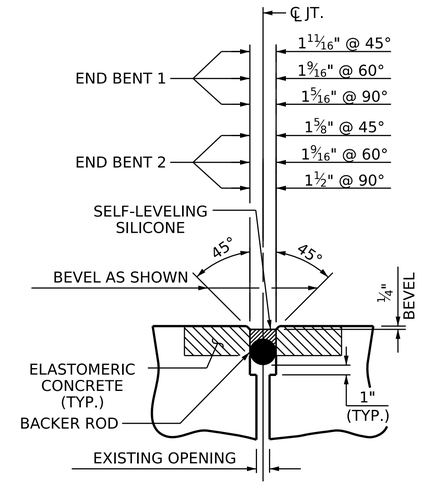
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970256

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
07/11/2022

DRAWN BY : J. BALDWIN DATE : 5/2022
CHECKED BY : A. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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1			3			TOTAL SHEETS
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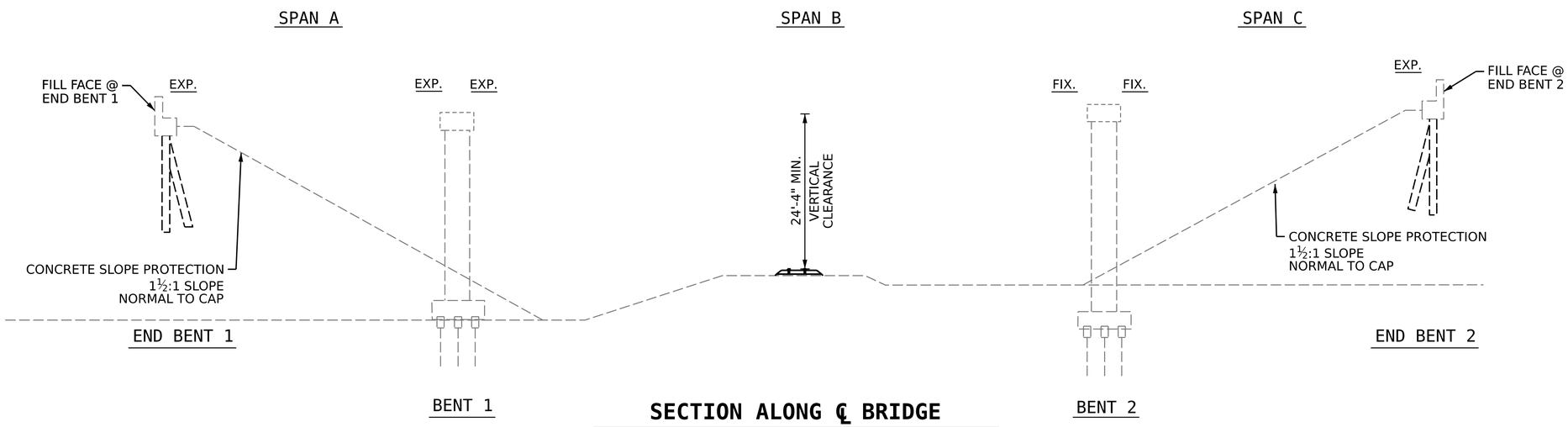
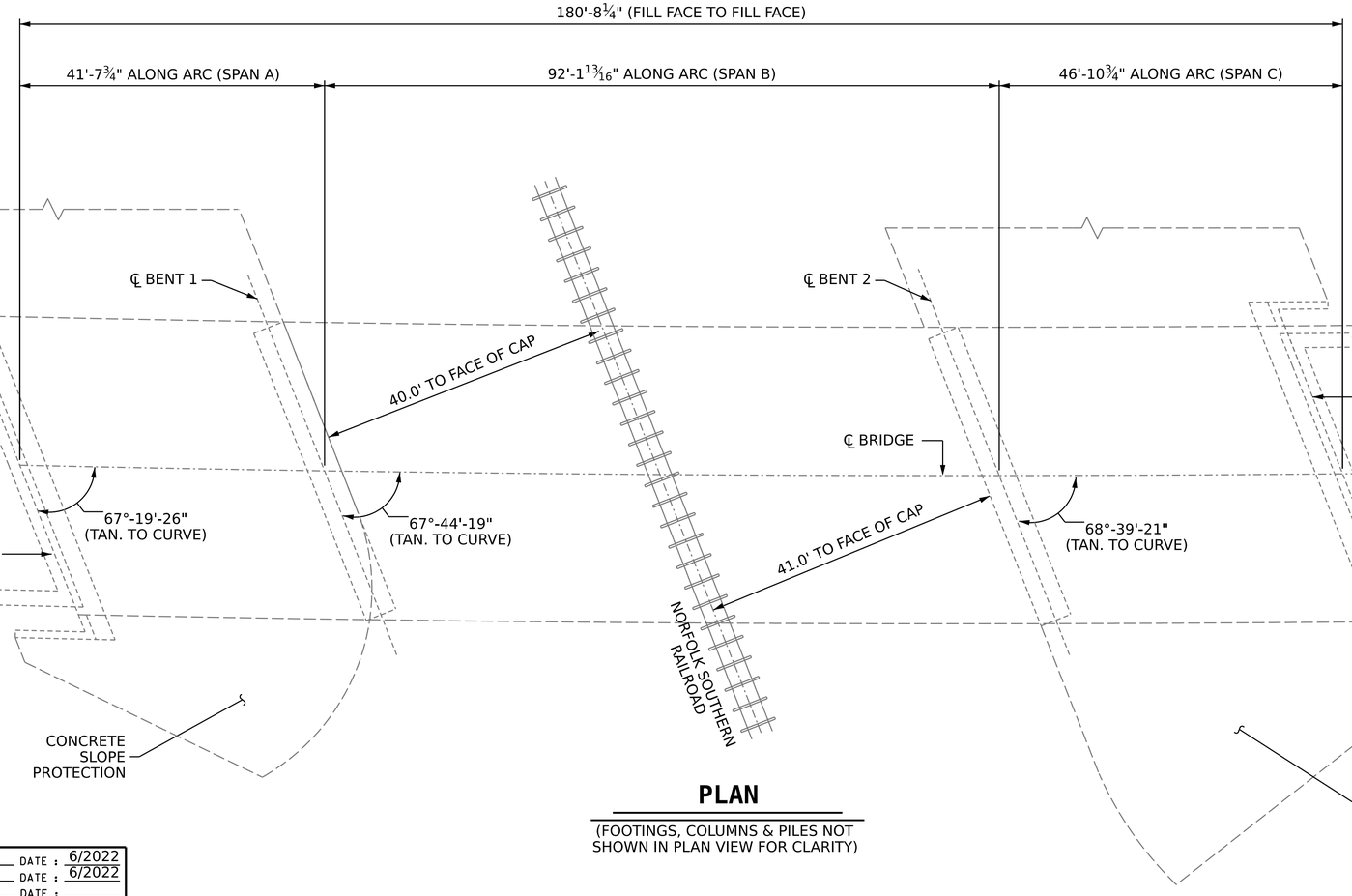


SECTION ALONG ℄ BRIDGE



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 12/20/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE, INSTALL BACKER ROD, AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

PROJECT NO. HI-0006

WILSON COUNTY

STATION: 970257

MILE POST - 178.58

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE OVER NORFOLK SOUTHERN RAILROAD ON US 264 BYPASS EASTBOUND BETWEEN SR 1602 AND NC 58

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY ALFORD
F2458389308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER ABRAHA
DDA094AED5104FD...
07/12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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1			3			TOTAL SHEETS
2			4			4

DRAWN BY : J. BALDWIN DATE : 6/2022
CHECKED BY : A. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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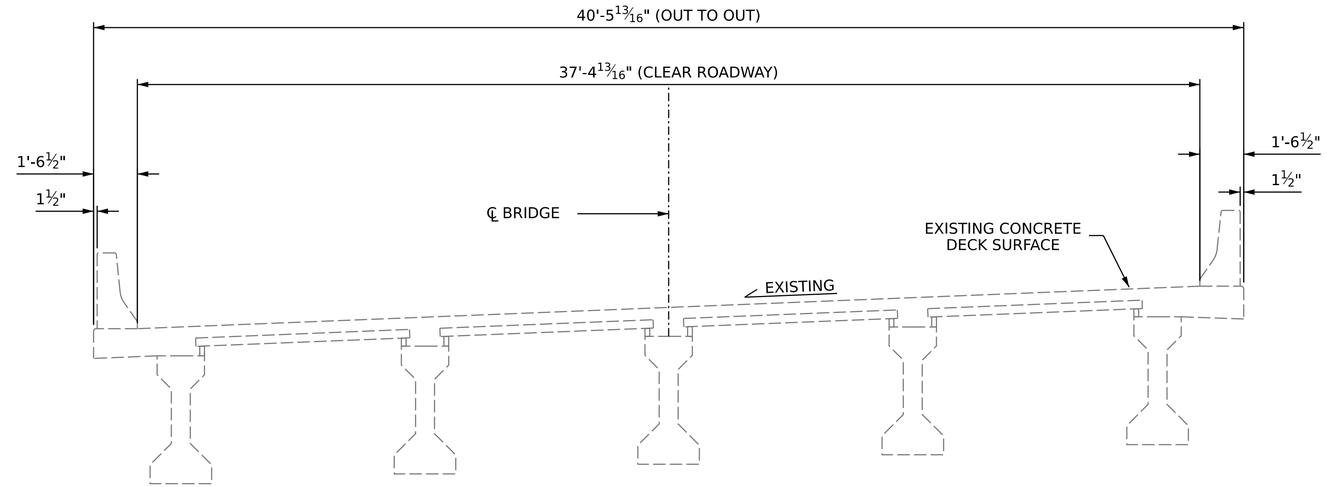
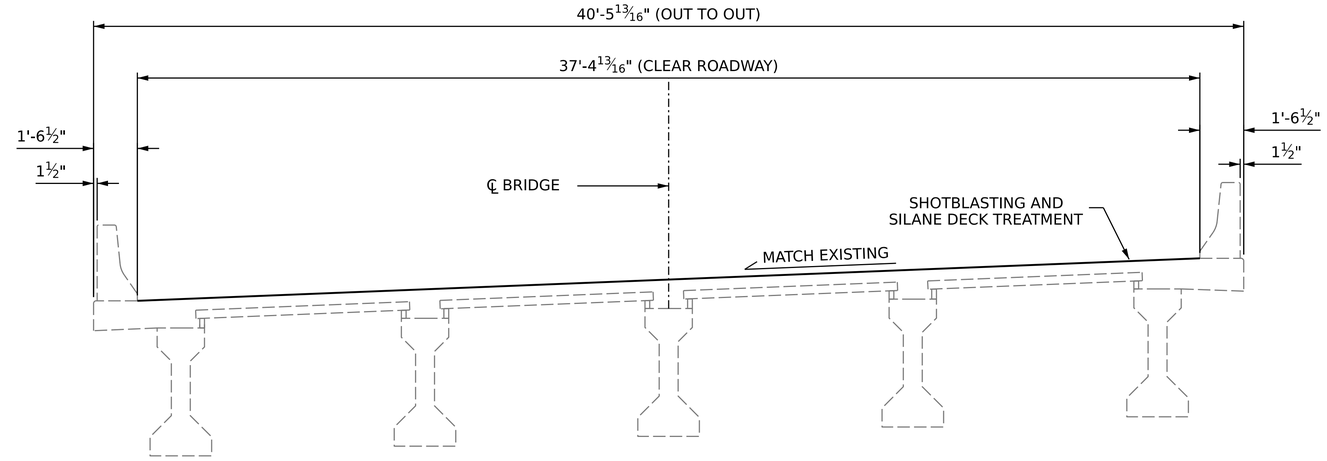


TYPICAL SECTION

(EXISTING)



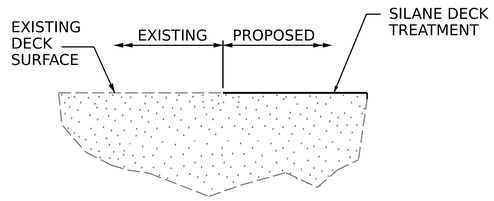
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. **HI-0006**

WILSON COUNTY

BRIDGE NO. **970257**

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S12-2
1			3			TOTAL SHEETS
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7/11/2022
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gabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

- BRIDGE JOINT DEMOLITION

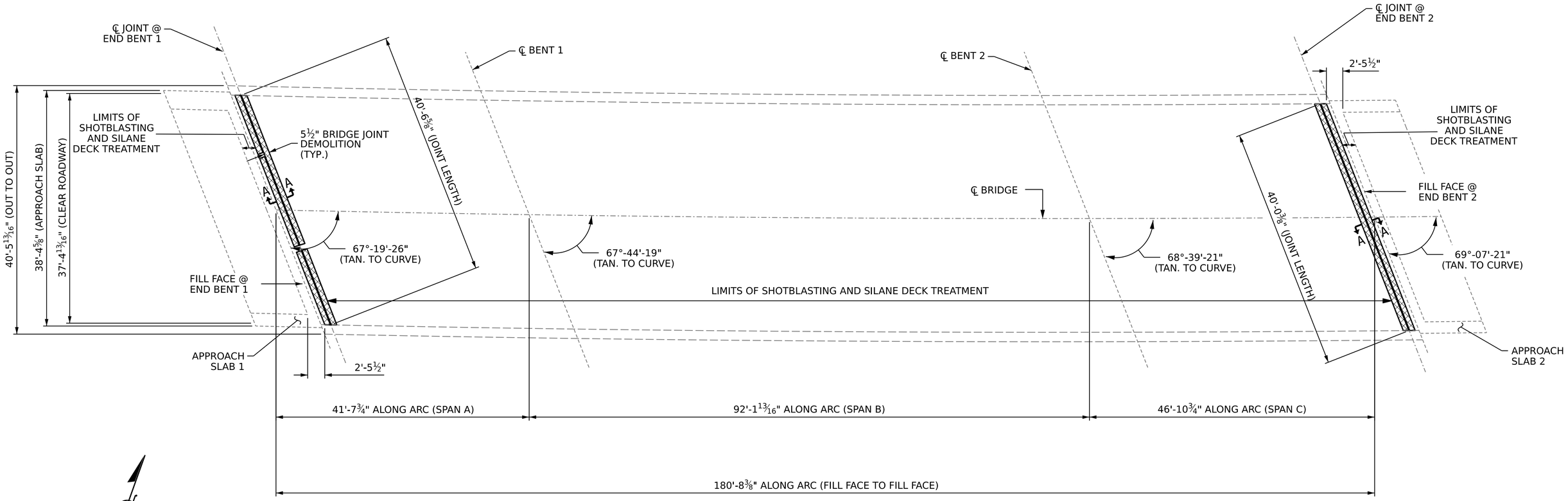
NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S12-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	753.7 SY	
SILANE DECK TREATMENT	753.7 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	73.9 SF	

FOR SECTION A-A, SEE SHEET S11-3.



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970257

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DOA2064AE0104FD...
07/11/2022

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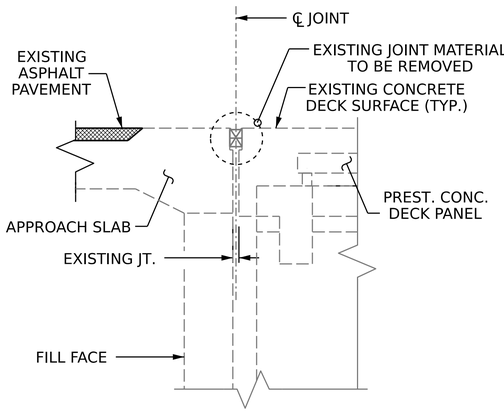
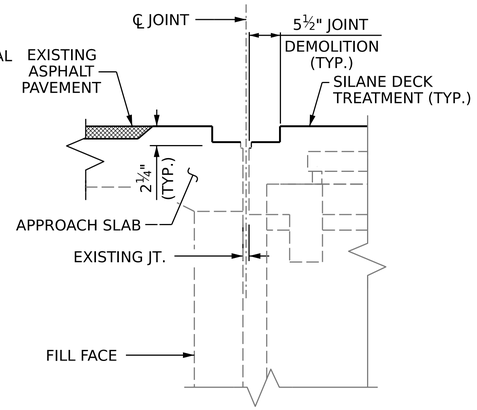
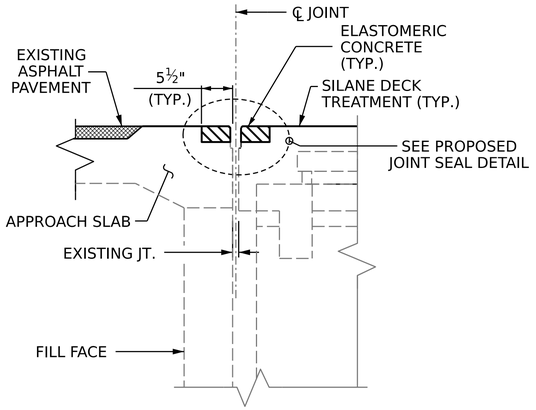


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

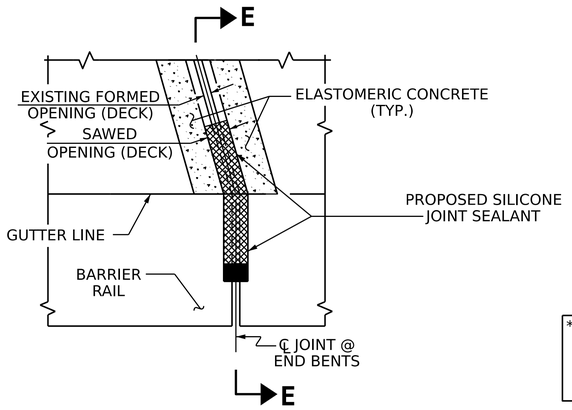
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

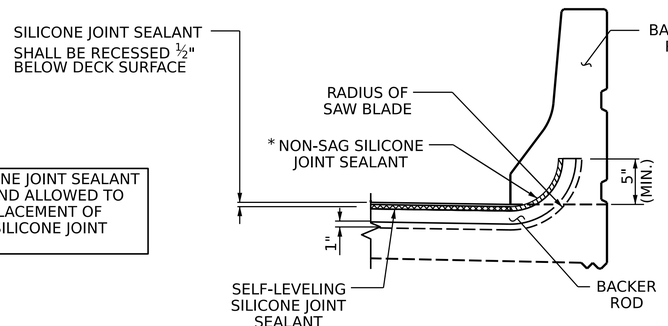
SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.9 CF	
POURABLE SILICONE JOINT SEALANT	80.6 LF	

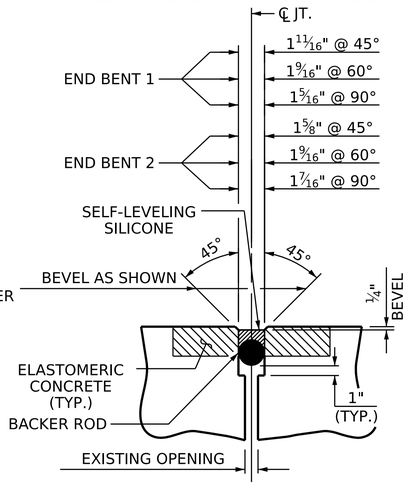


PLAN

* 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
(WITH SAWED DIMENSIONS)

JOINT DETAIL AT BARRIER RAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970257

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
07/11/2022

DRAWN BY : J. BALDWIN DATE : 5/2022
CHECKED BY : A. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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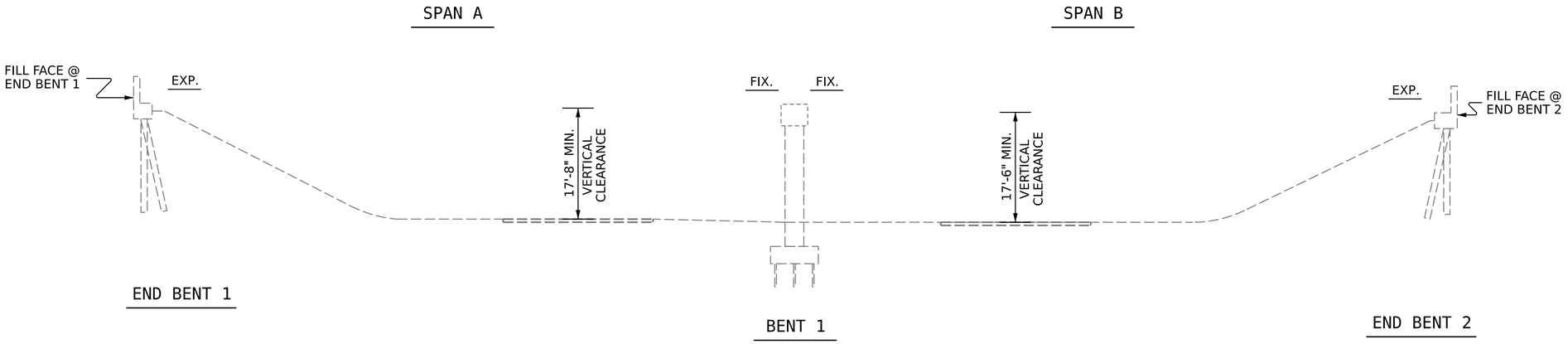
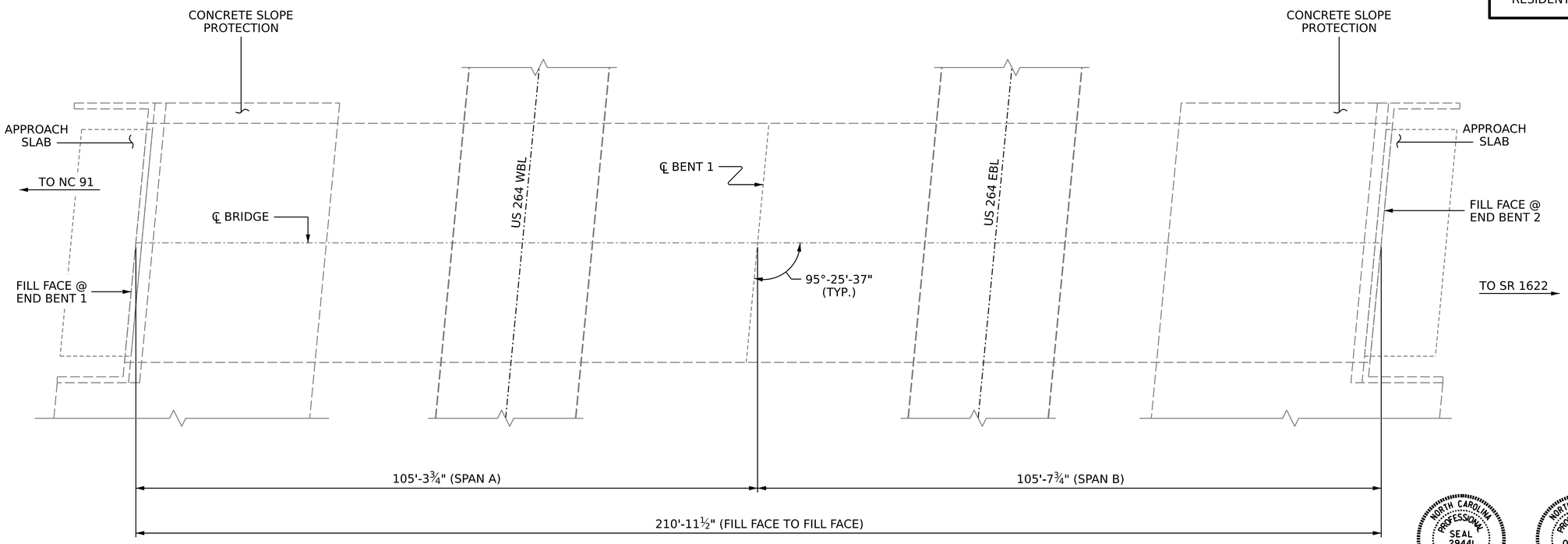


SECTION ALONG ℄ BRIDGE



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK SURFACE BY SHPTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE AREAS FOR SHOTCRETE REPAIRS.
- PERFORM SHOTCRETE REPAIRS.

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

RESIDENT ENGINEER DATE

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970258

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KEITH W. ALFORD
F34583B030BF40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED5104FD...
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON NC 58 NORTHBOUND OVER US 264 BYPASS BETWEEN SR 1622 AND NC 91

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1			3			TOTAL SHEETS
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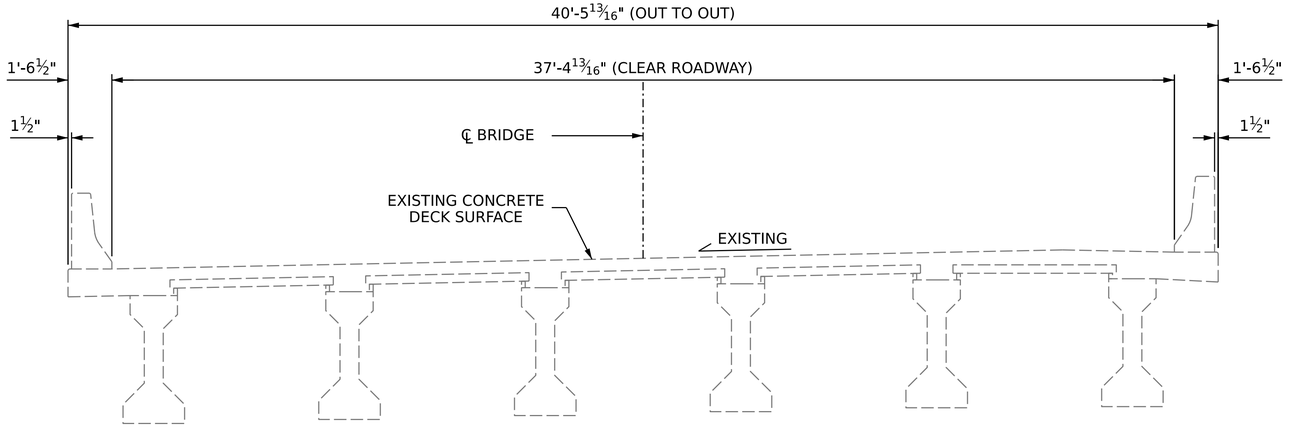
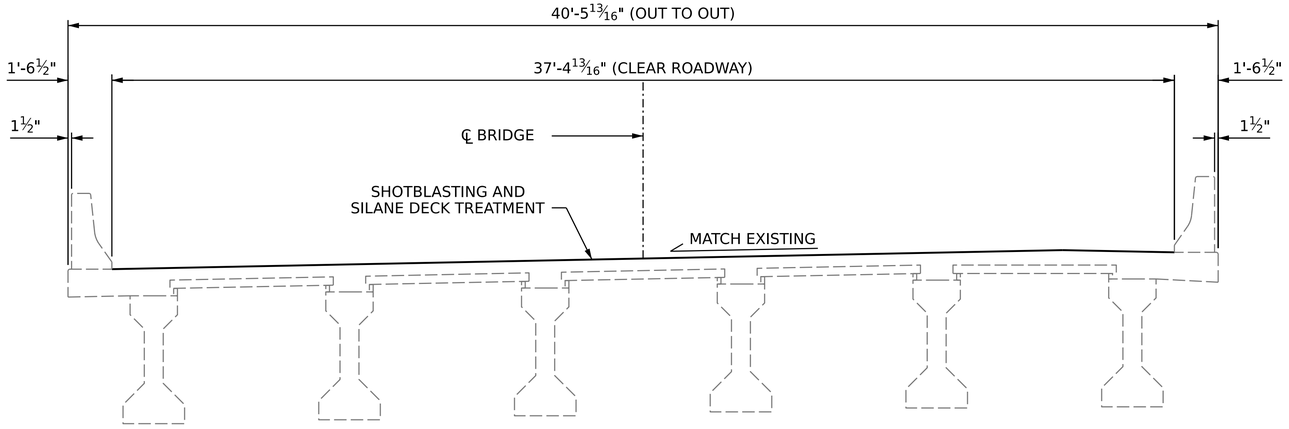


TYPICAL SECTION
(EXISTING)

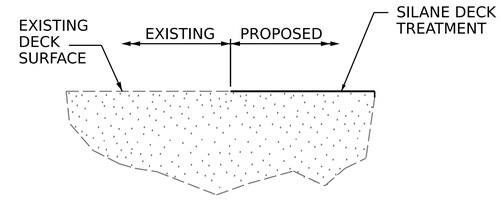


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970258

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
2DA09A6E05104FD...
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

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DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

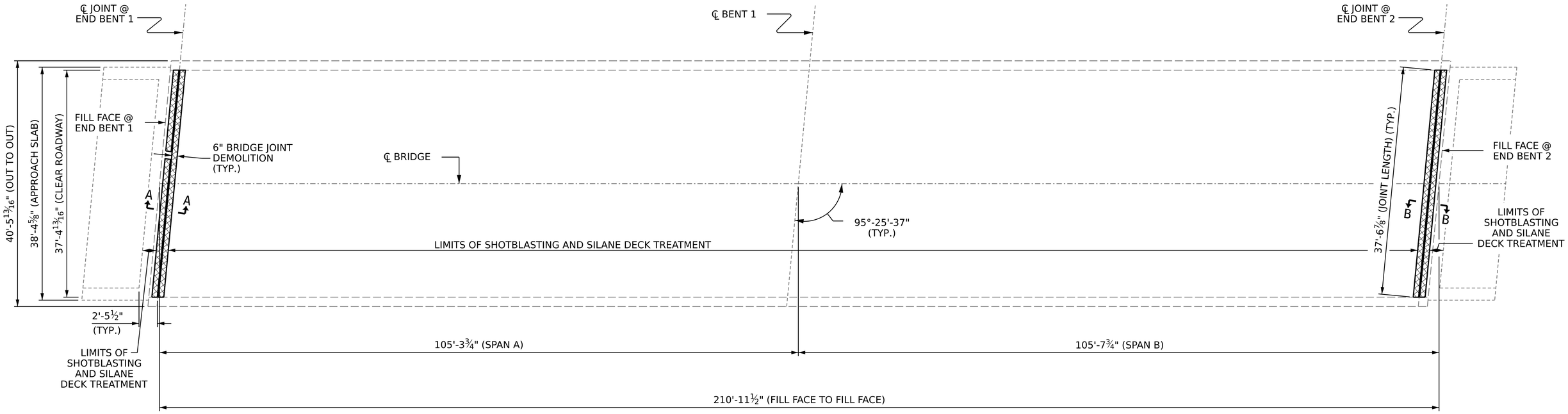
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A AND B-B, SEE JOINT REPAIR DETAILS SHEET S13-6.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	879.8 SY	
SILANE DECK TREATMENT	879.8 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	75.1 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970258

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

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REPAIR KEY

DIAPHRAGM REPAIR

PRESTRESSED CONCRETE GIRDER REPAIR

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.

CONTRACTOR SHALL SAWCUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED. CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT WILL NOT DAMAGE EXISTING REINFORCING STEEL.

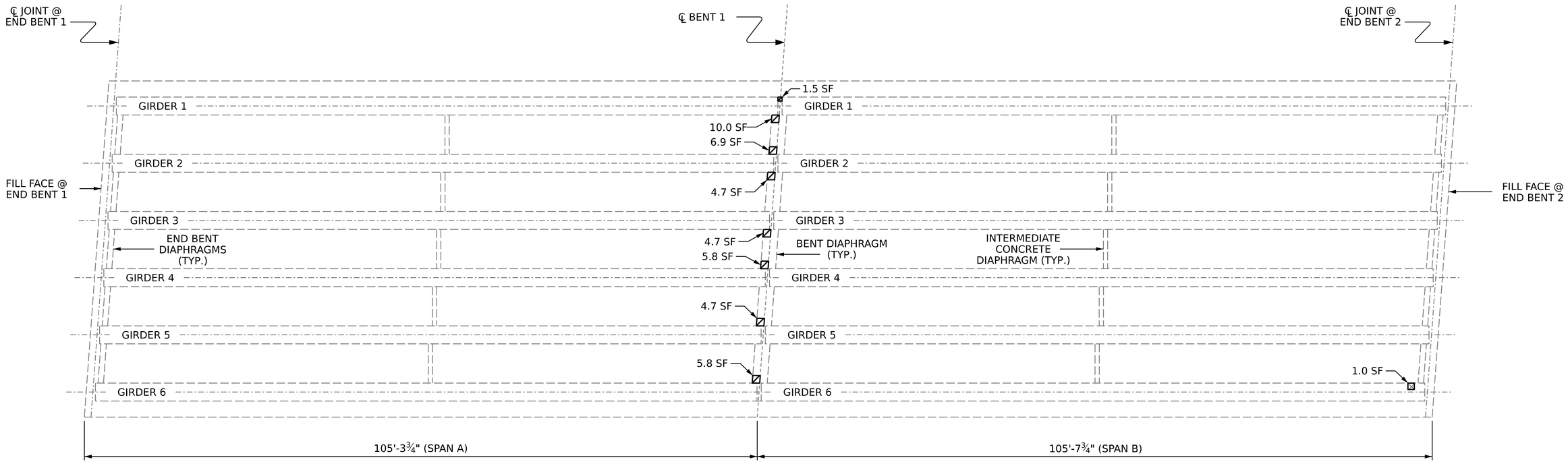
FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET S13-5.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0.0	0.0		
BENT DIAPHRAGMS	44.1	14.7		
GIRDER REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
PC GIRDERS	1.0	0.3		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



PLAN OF SPANS - UNDERSIDE REPAIRS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970258

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

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07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS

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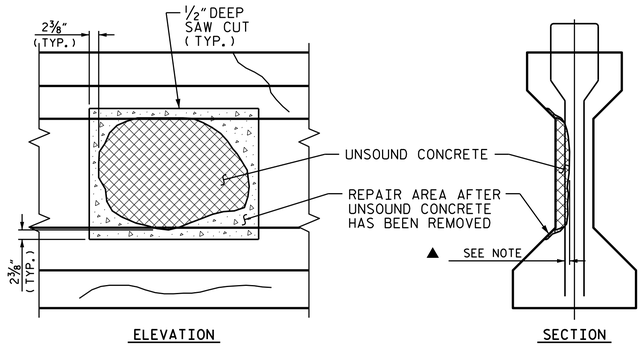
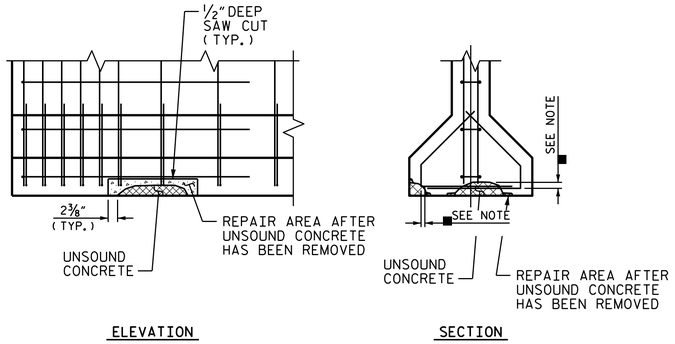
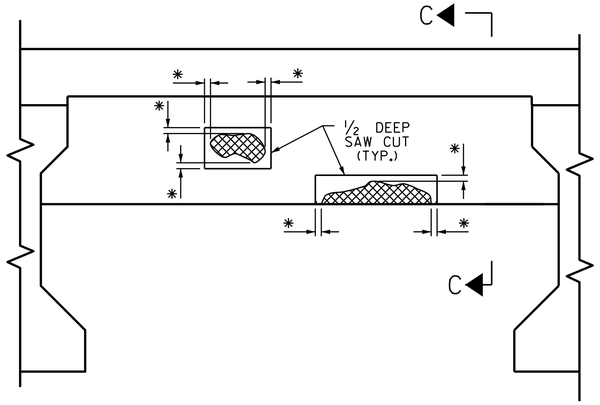


GIRDER WEB REPAIR



GIRDER FLANGE REPAIR

PRESTRESSED GIRDER REPAIR

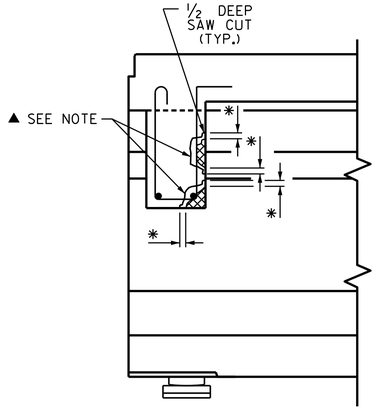


TYPICAL SECTION

* ½" DEEP SAW CUT SHALL BE PLACED 2" INTO SOUND CONCRETE.

REPAIR KEY:

UNSOUND CONCRETE TO BE REPAIRED



SECTION C-C

NOTES:

PREPACKAGED MATERIAL IS REQUIRED.

CONSULT WITH THE ENGINEER TO DETERMINE PRELOADING REQUIREMENTS WHEN REPAIR IS WITHIN THE CENTER REGION OF THE BEAM (0.25L TO 0.75L).

FOR REPAIRS OVER TRAFFIC AND SHALLOW REPAIRS THAT DO NOT ENGAGE REINFORCEMENT, ANCHOR PATCH MATERIAL USING ¼"GALVANIZED BOLTS, EPOXY ANCHORED WITH 2"EMBEDMENT. PLACE BOLTS IN A 6"GRID. USE A LATEX OR EPOXY PATCH MATERIAL FOR IMPROVED BOND. USE EXTREME CARE TO NOT DAMAGE STRANDS.

FOR PRESTRESSED CONCRETE GIRDER REPAIRS, SEE SPECIAL PROVISIONS.

PRESTRESSED GIRDER 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 MINIMUM DEPTH OF ½".
3. REMOVE CONCRETE WITHIN SAW CUT AREA TO MINIMUM ½"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 THE REPAIRS TO PRESTRESSED CONCRETE GIRDERS 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 APPROVED REPAIR MATERIAL ACCORDING TO PRESTRESSED CONCRETE GIRDER REPAIRS SPECIAL PROVISION. MAXIMUM AGGREGATE SIZE FOR REPAIR MATERIAL SHALL NOT EXCEED ⅔ THE MINIMUM REPAIR DEPTH.

BENT DIAPHRAGM REPAIR DETAIL

(EXAMPLE DETAILS ONLY. ACTUAL REBAR SIZE & LOCATION MAY VARY)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970258

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER AZTER G. ABRAHA

Azter Abraha

DDA094AED5104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS

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CHECKED BY :	A. G. ABRAHA	DATE :	5/2022
DRAWN BY : NAP 08/18			
CHECKED BY :			

7/11/2022
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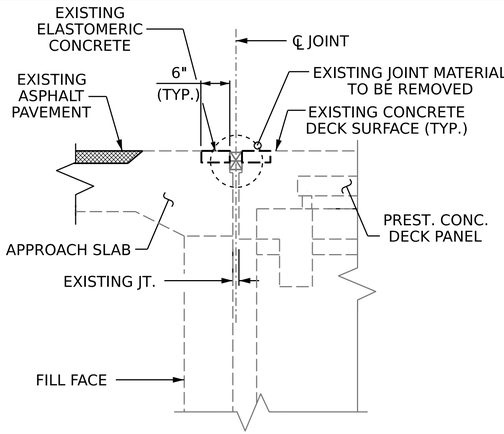
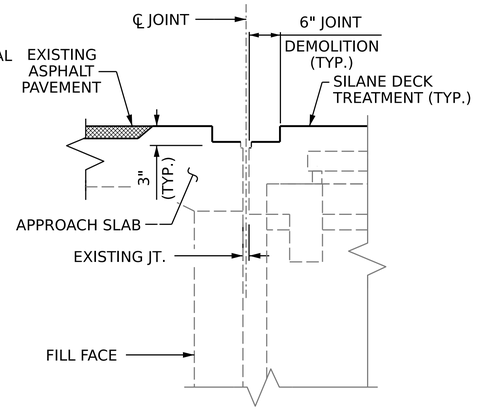
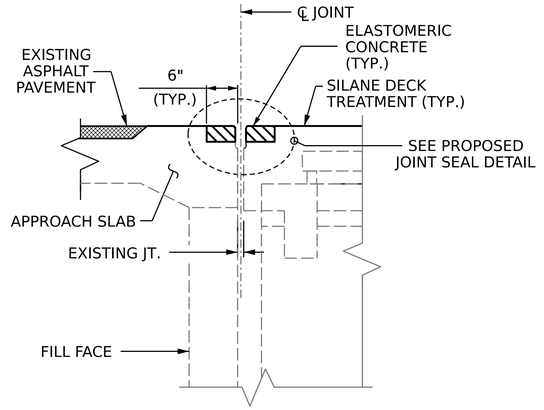


EXISTING JOINT



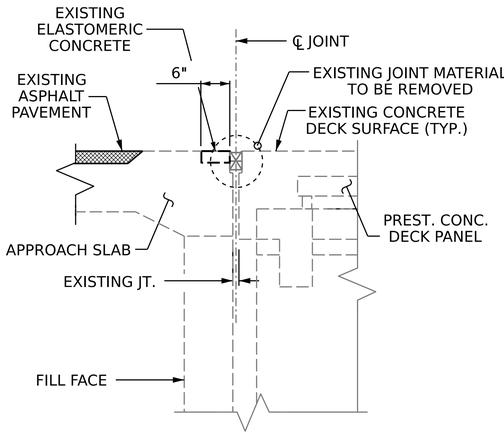
MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A



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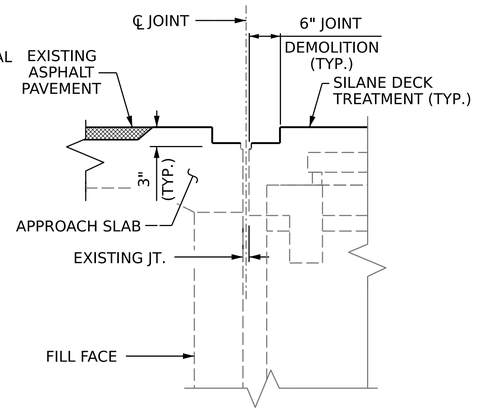
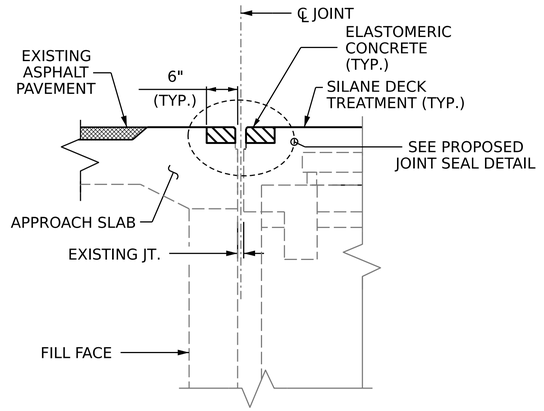


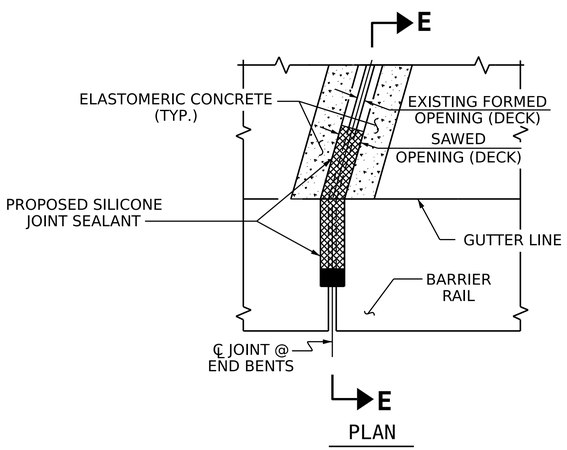
MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

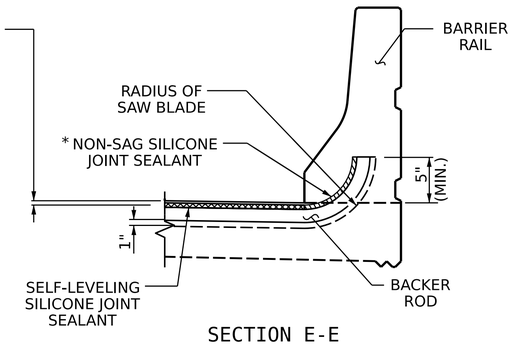
SECTION B-B



PLAN

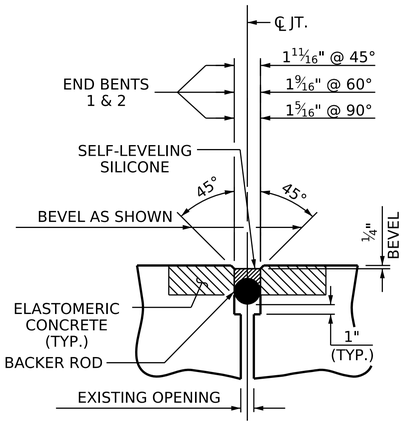
SILICONE JOINT SEALANT SHALL BE RECESSED ½" BELOW DECK SURFACE

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



SECTION E-E

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.8 CF	
POURABLE SILICONE JOINT SEALANT	75.2 LF	

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970258

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DOA094AE0S104FD...
07/11/2022

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
S:\DPGI\Division4\HI-0006\Plans\970258\413_011_HI-0006_SMU_JT_S01_S13-6_970258.dgn
aabraha

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

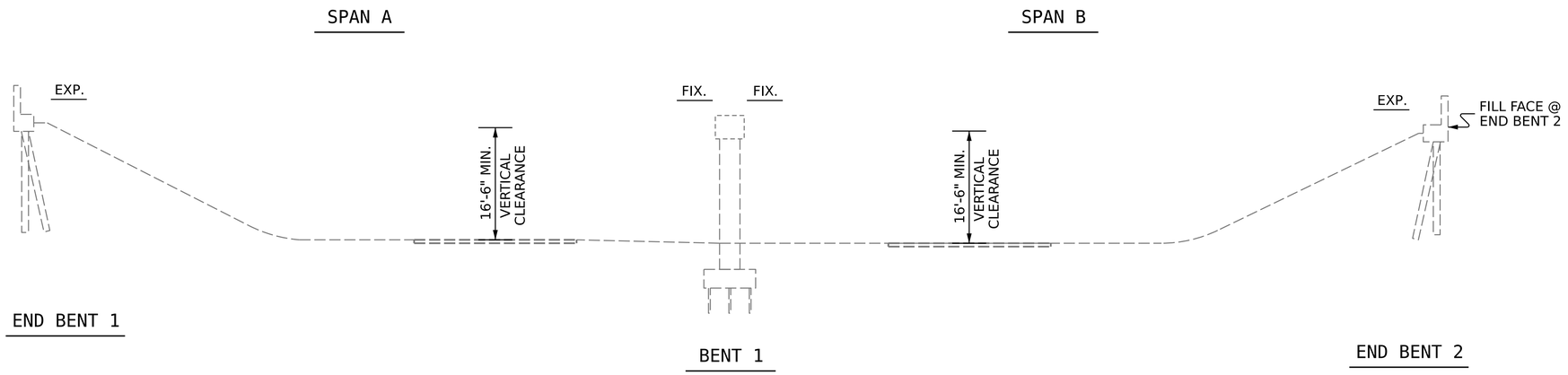
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S13-6
1			3			TOTAL SHEETS
2			4			6

NOTES

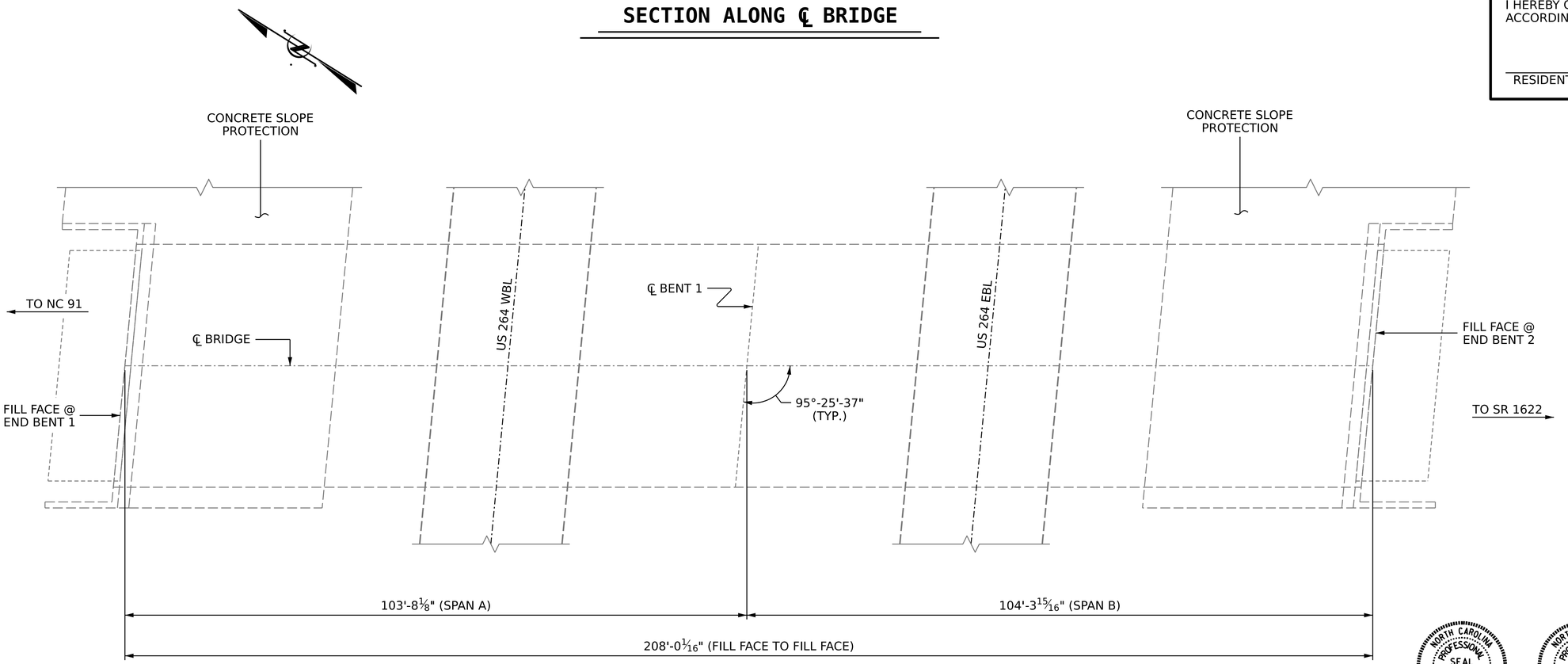
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 05/10/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK SURFACE BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- DEMOLISH EXISTING BRIDGE JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.



SECTION ALONG ℄ BRIDGE



PLAN

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY ALFORD — F2458389308F40E... — 07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER ABRAHA — DDA094AED5104FD... — 07/12/2022

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970259

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON NC 58 SOUTHBOUND OVER US 264 BYPASS BETWEEN SR 1622 AND NC 91

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-1
1			3			TOTAL SHEETS
2			4			4

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

7/11/2022
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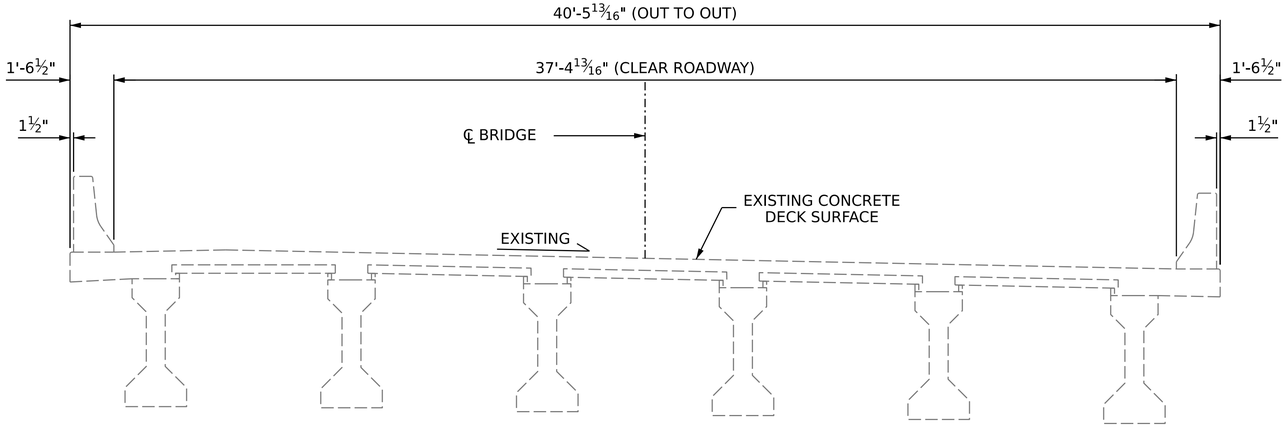
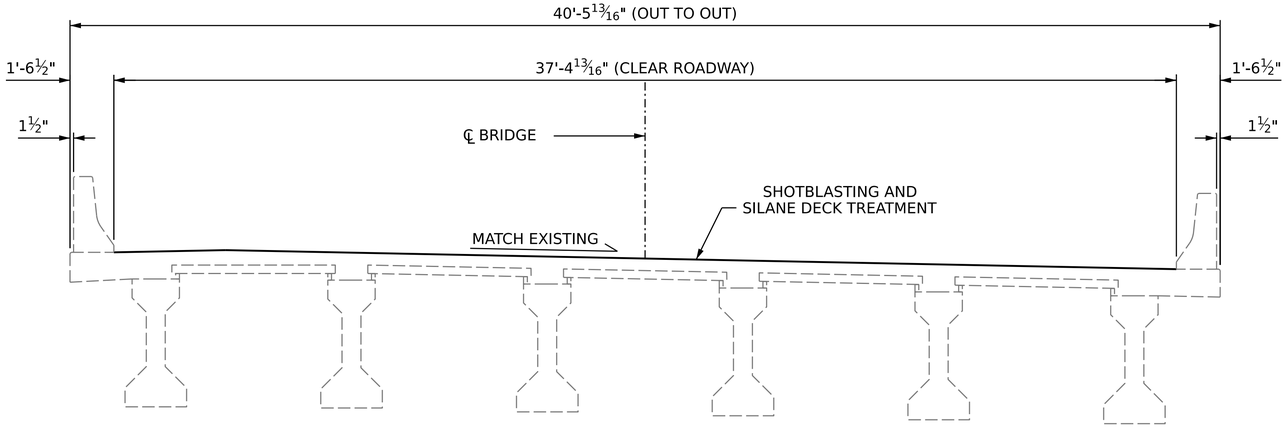
gabraha



TYPICAL SECTION
(EXISTING)

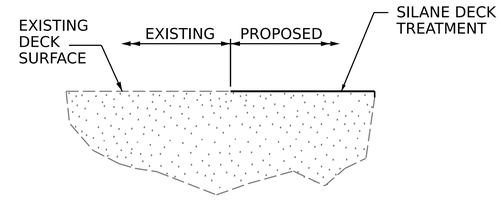


TYPICAL SECTION
(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970259

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
2DA09A4AD5D104FD...
07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-2
1			3			TOTAL SHEETS
2			4			4

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DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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gabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

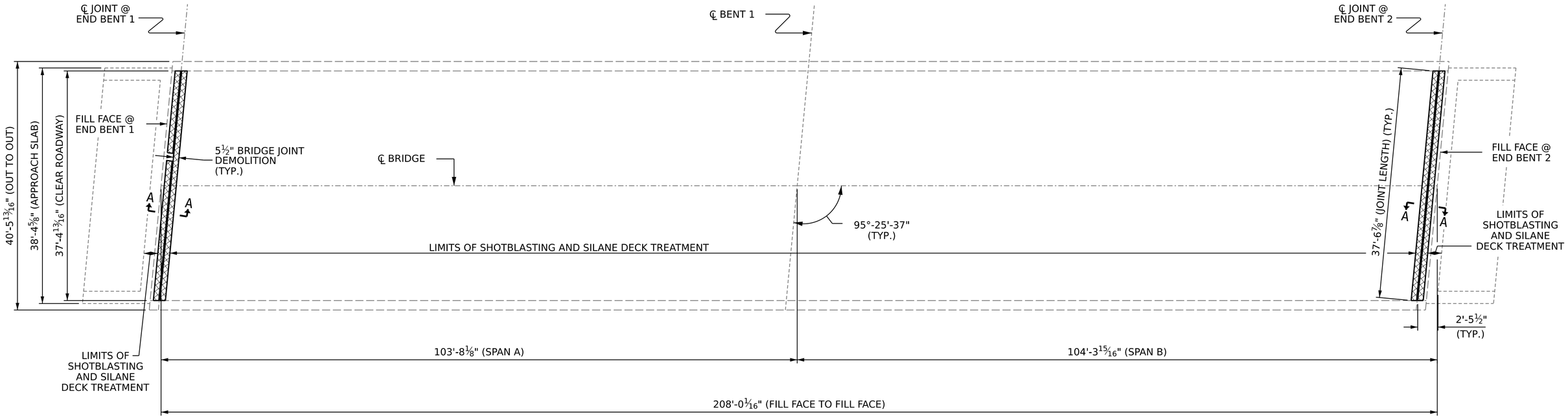
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S14-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	872.2 SY	
SILANE DECK TREATMENT	872.2 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.9 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970259

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DDA094AED0104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-3
1			3			TOTAL SHEETS
2			4			4

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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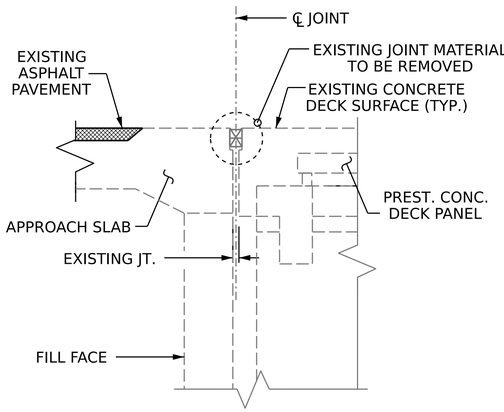
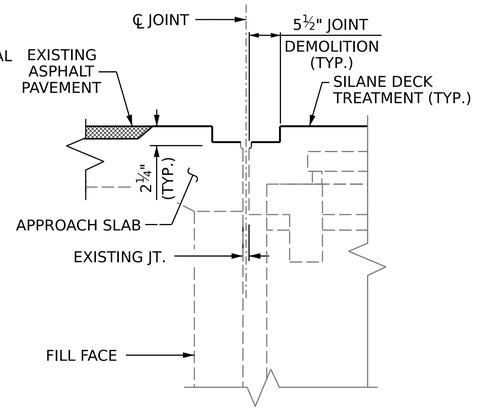
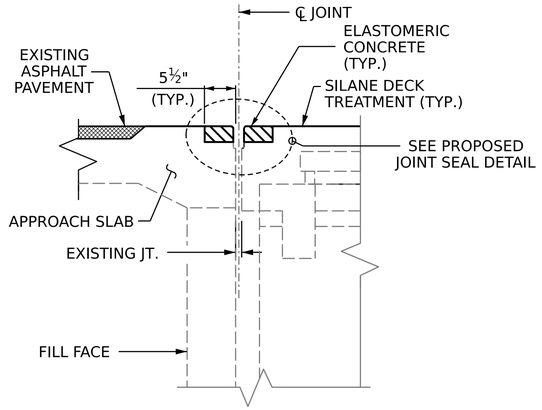


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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.

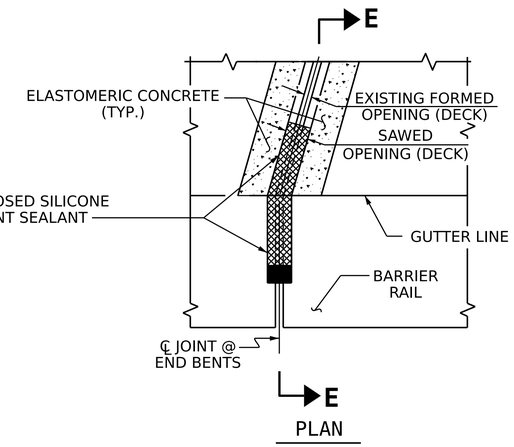
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

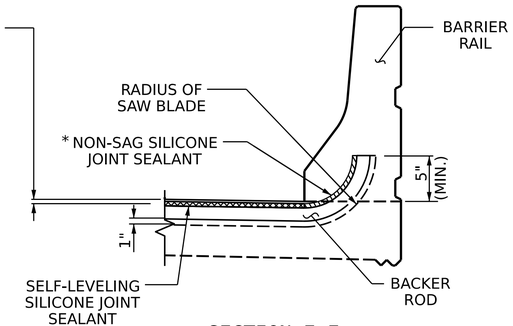
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	75.2 LF	



PLAN

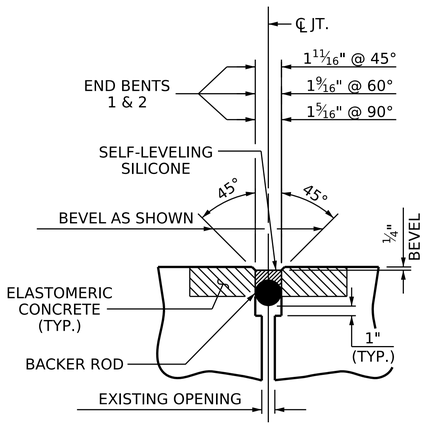
SILICONE JOINT SEALANT SHALL BE RECESSED ½" BELOW DECK SURFACE

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



SECTION E-E

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970259

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DOA094AE05104FD...
07/11/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-4
1			3			TOTAL SHEETS
2			4			4

DRAWN BY : G. AYES DATE : 5/2022
CHECKED BY : A. G. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

7/11/2022
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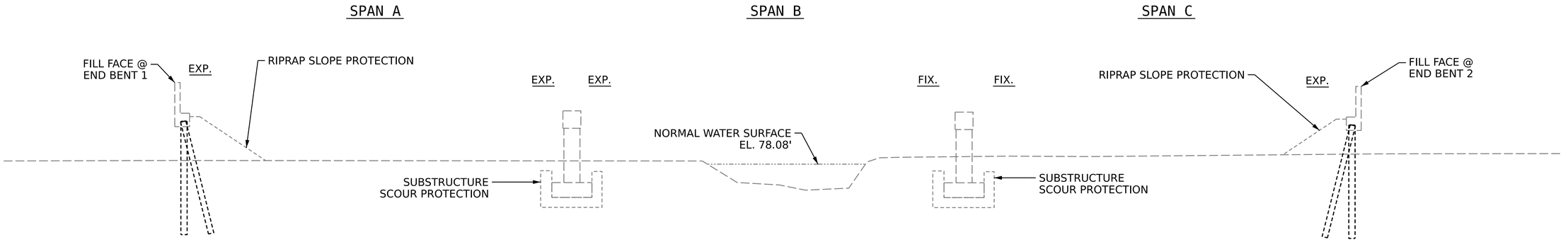
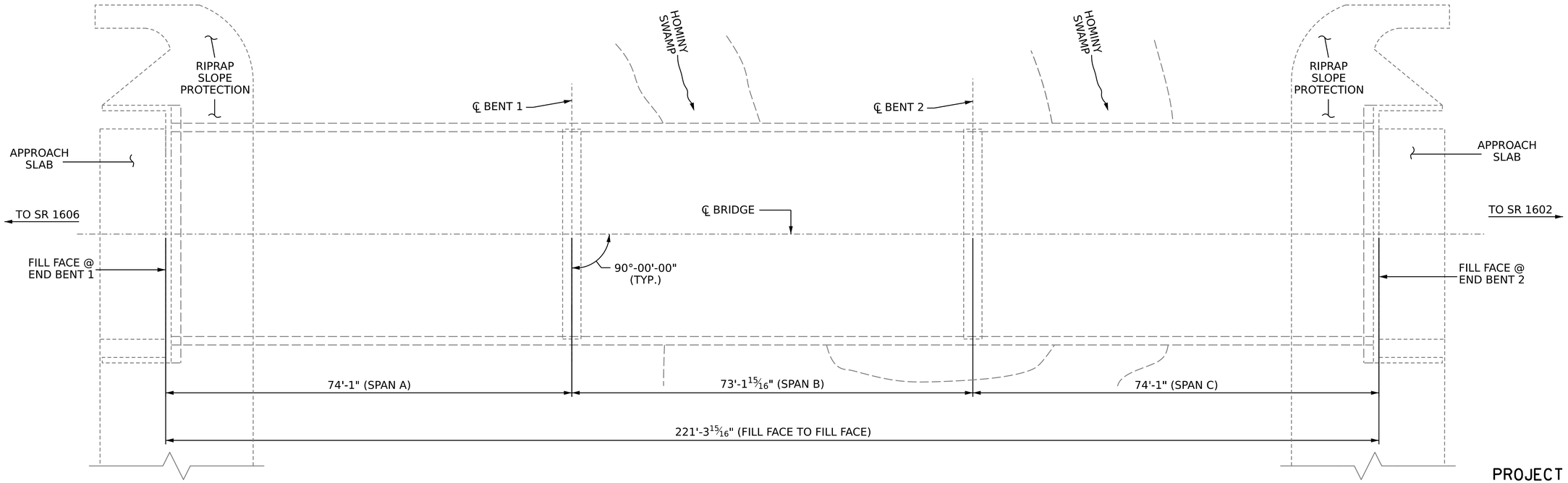
aabraha



SECTION ALONG ℄ BRIDGE



PLAN

(COLUMNS & FOOTINGS NOT SHOWN IN PLAN VIEW FOR CLARITY)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970260

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/22/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER A. G. ABRAHA
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS WESTBOUND OVER HOMINY SWAMP BETWEEN SR 1606 AND SR 1602

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-1
1			3			TOTAL SHEETS
2			4			4

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

7/11/2022
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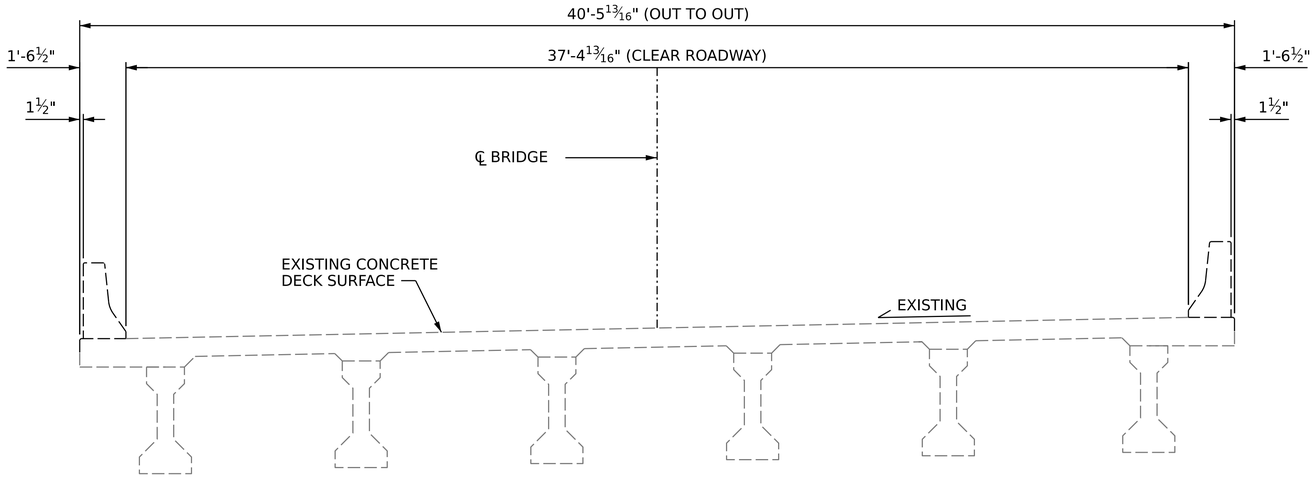
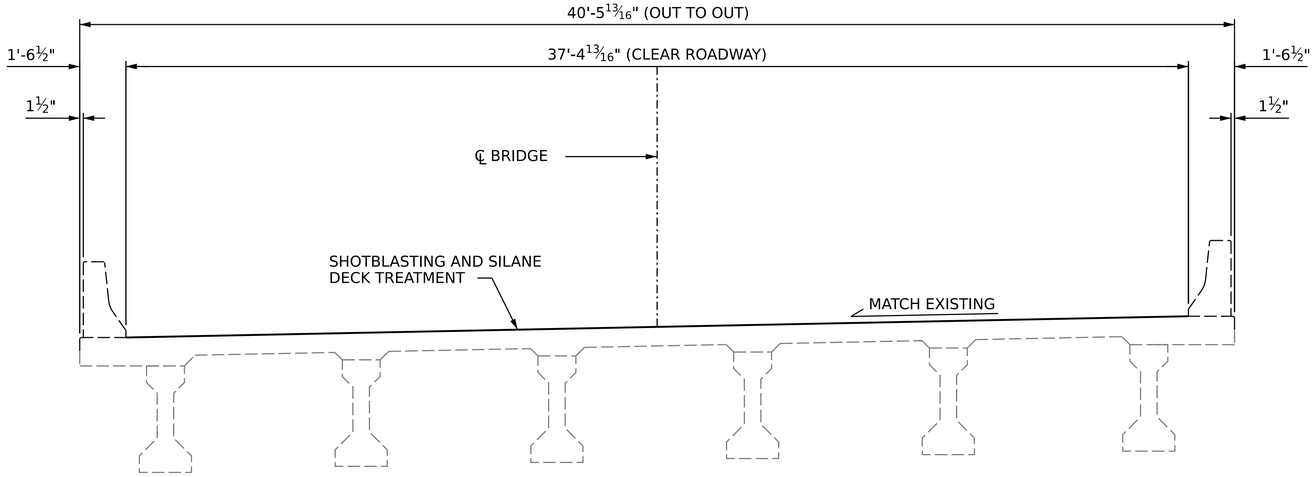
gabraha



TYPICAL SECTION

(EXISTING)



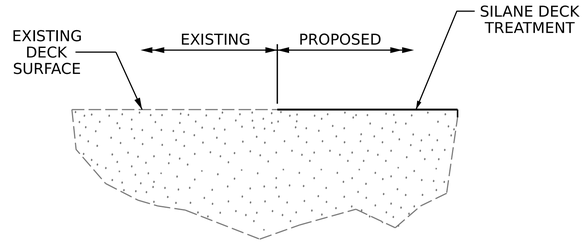
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970260

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

2DA2064AE7D104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-2
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: DATE :

7/11/2022
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gabraha

REPAIR KEY

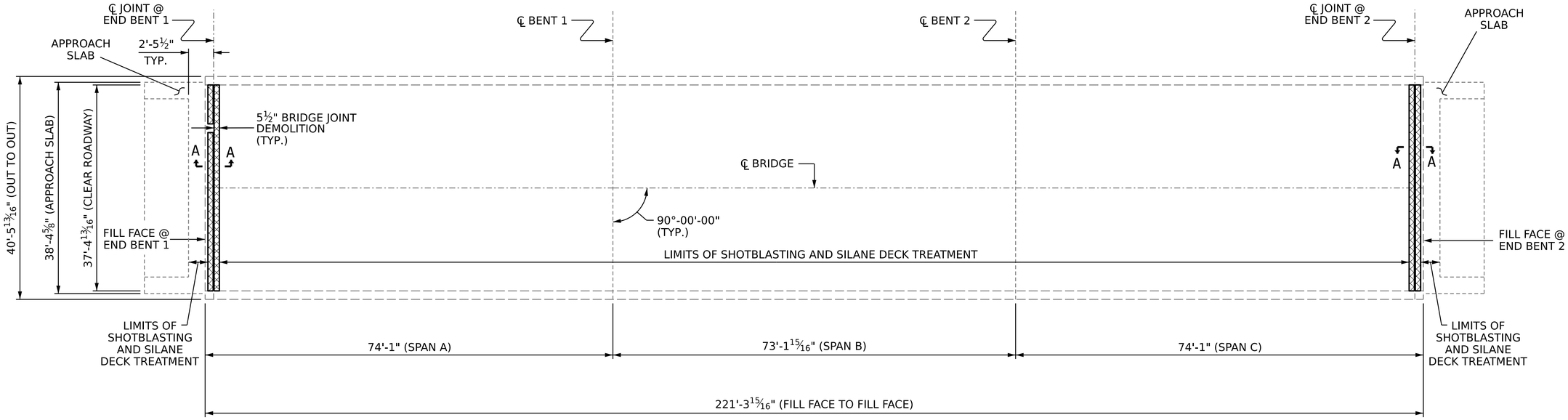
- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S15-4.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	923.6 SY	
SILANE DECK TREATMENT	923.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.6 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970260

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

7DDA09AA07D104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-3
1			3			TOTAL SHEETS
2			4			4

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CHECKED BY : A. G. ABRAHA DATE : 6/2022
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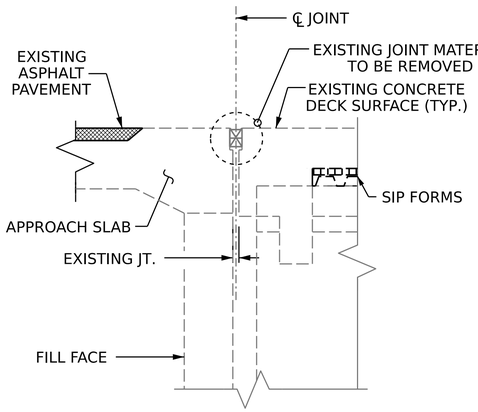
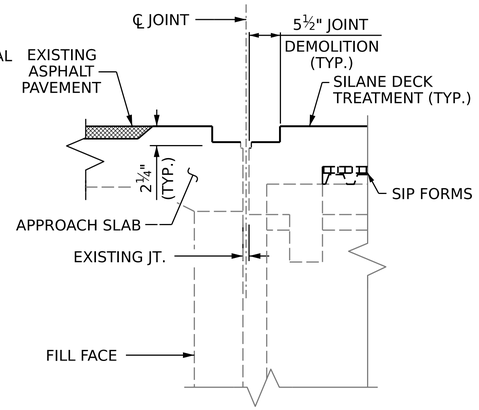
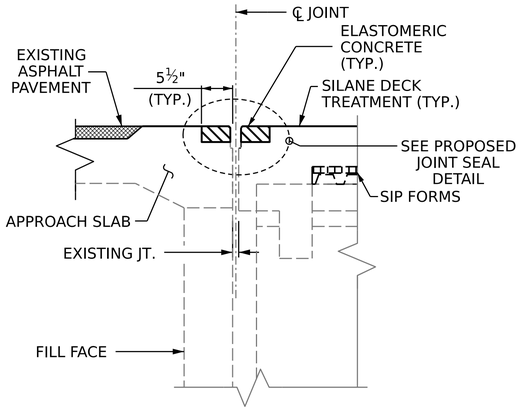


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

NOTES

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

THE 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 ¼" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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

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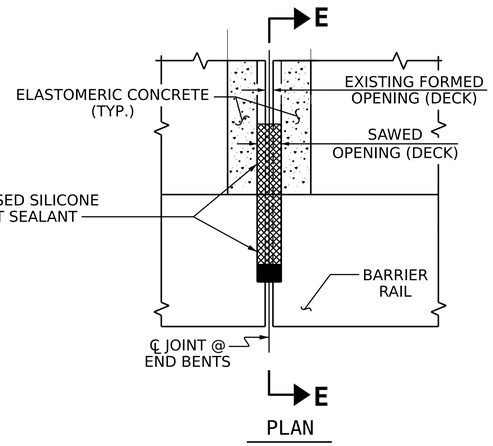
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

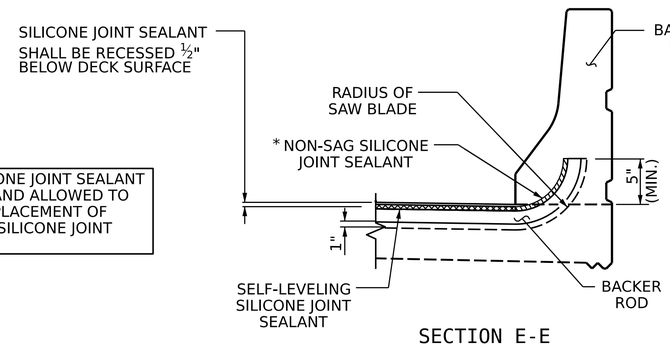
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

SUMMARY OF QUANTITIES

	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	74.8 LF	



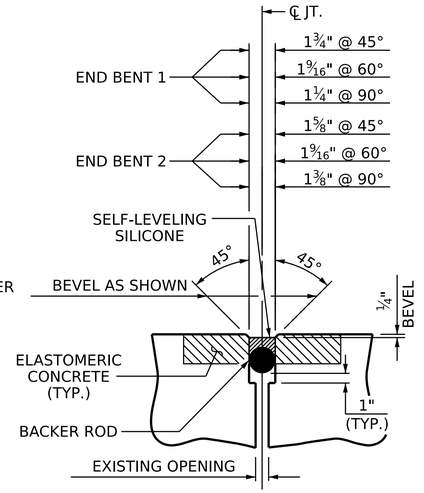
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970260

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DD4094AE05104FD...
07/11/2022

DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

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2			4			4

7/11/2022
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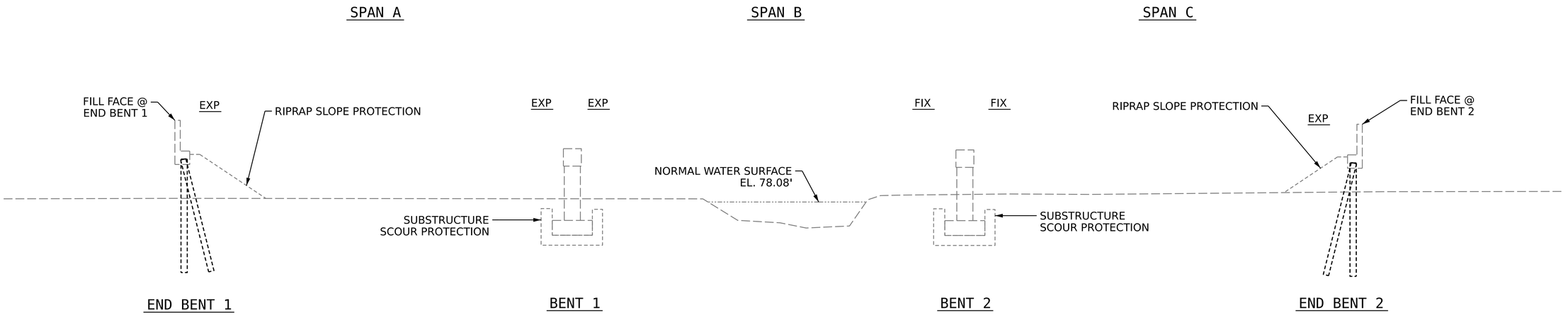
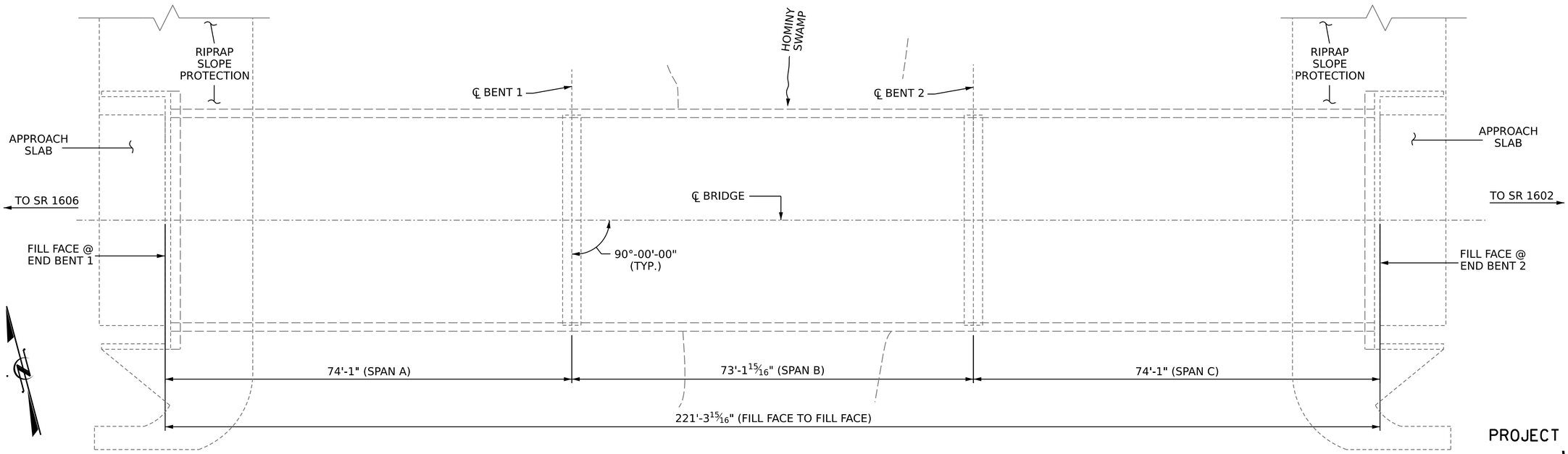
aabraha



SECTION ALONG ℄ BRIDGE



PLAN

(COLUMNS & FOOTINGS NOT SHOWN IN PLAN VIEW FOR CLARITY)

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970261

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 03/22/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER DATE

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD
F2458369308F40E...
07/12/2022

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
DDA094AED55104FD...
07/12/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS EASTBOUND OVER HOMINY SWAMP BETWEEN SR 1606 AND SR 1602

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S16-1
1			3			TOTAL SHEETS
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DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
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7/11/2022
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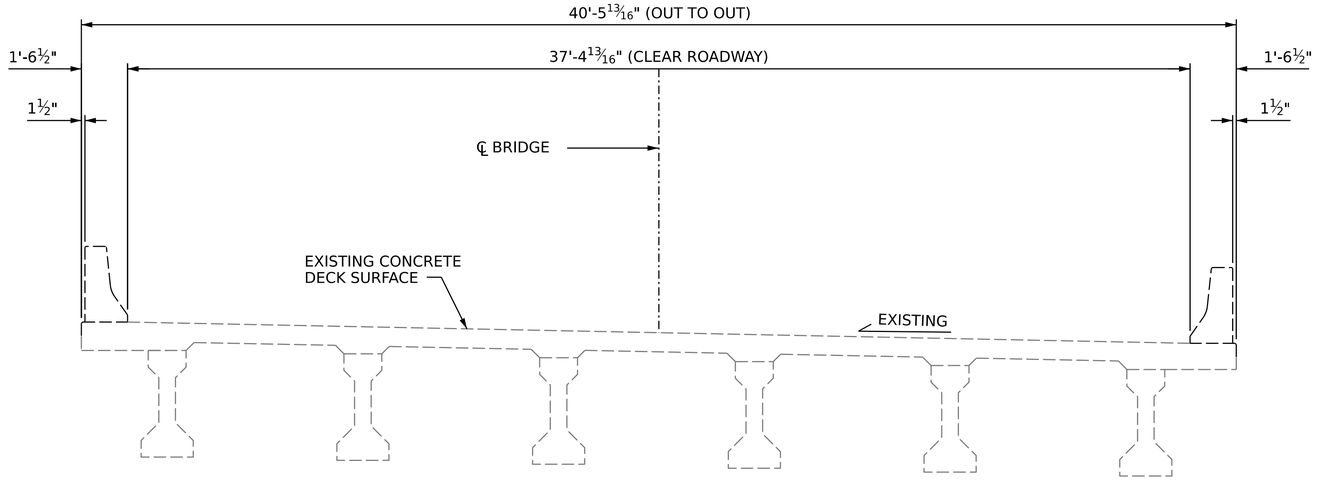
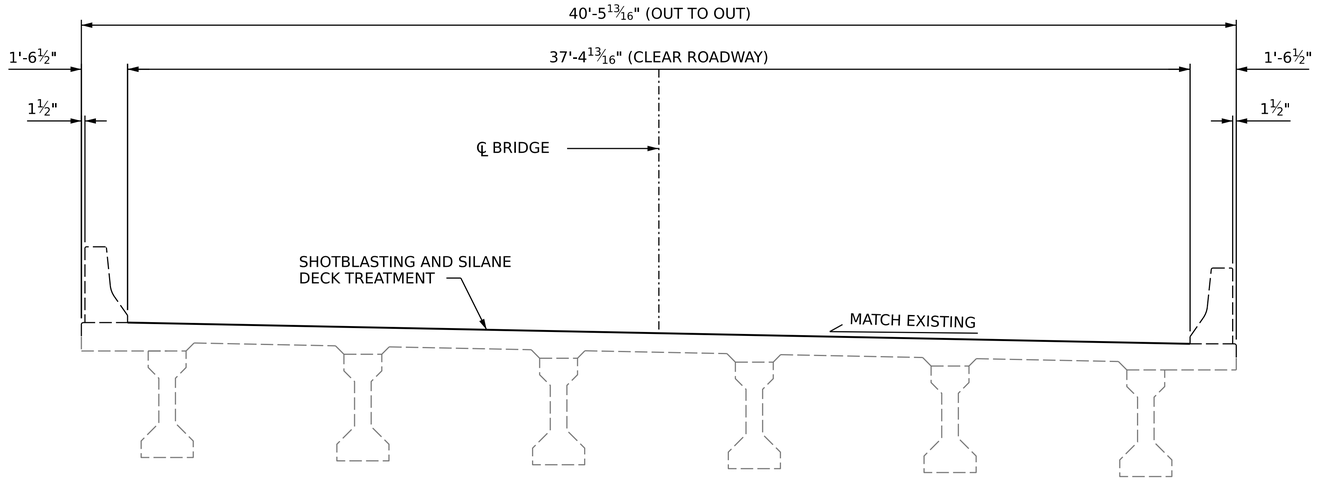


TYPICAL SECTION

(EXISTING)



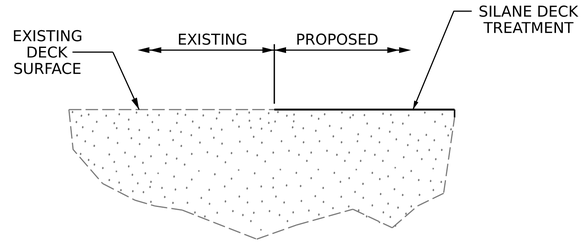
TYPICAL SECTION

(PROPOSED)

NOTES

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

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970261

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha

2DA2064AE7D104FD...

07/11/2022

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
AND SILANE DECK
TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S16-2
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gabraha

REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
- BRIDGE JOINT DEMOLITION

NOTES

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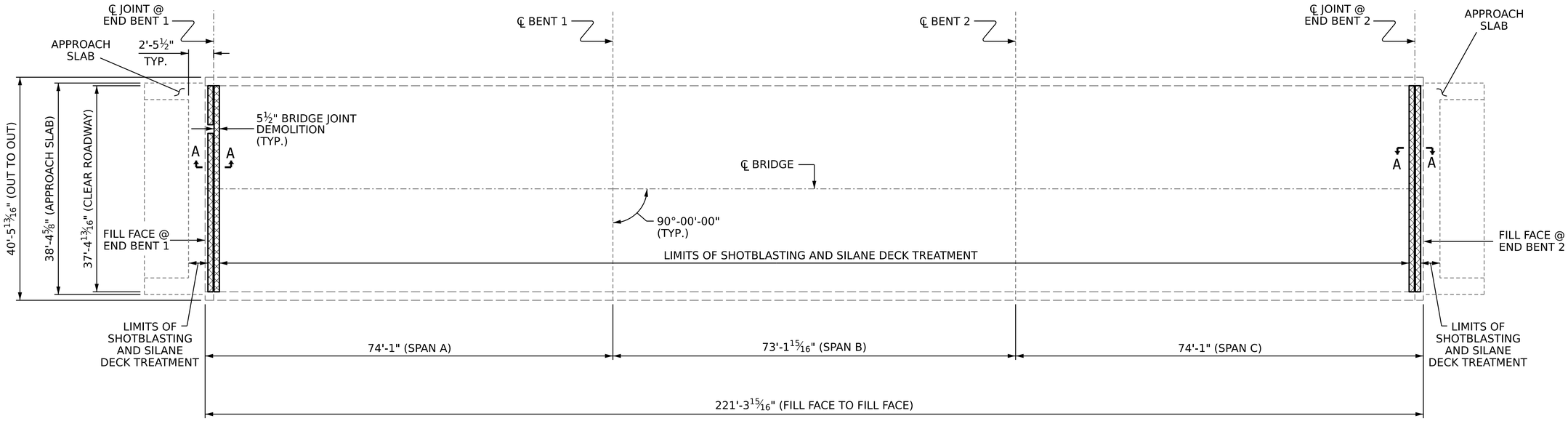
SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	923.6 SY	
SILANE DECK TREATMENT	923.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.6 SF	



PLAN OF SPANS

PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO. 970261

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SILANE DECK TREATMENT

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
07/11/2022

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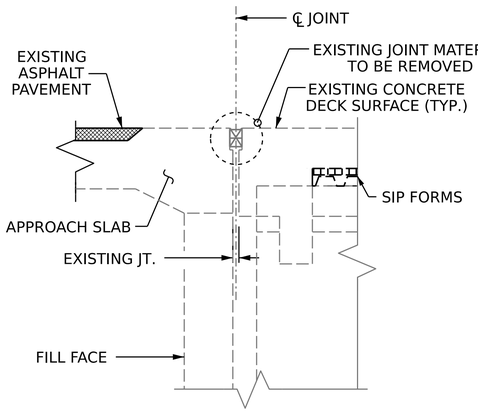
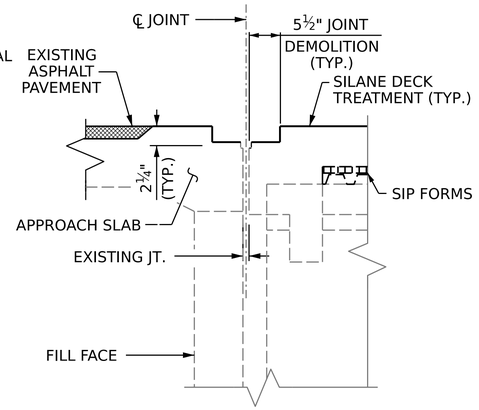
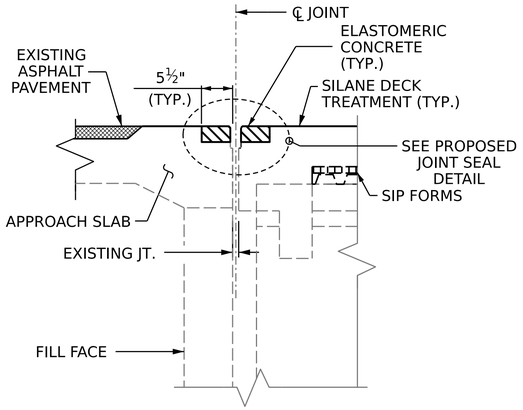


EXISTING JOINT



MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

SECTION A-A

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SUMMARY OF QUANTITIES

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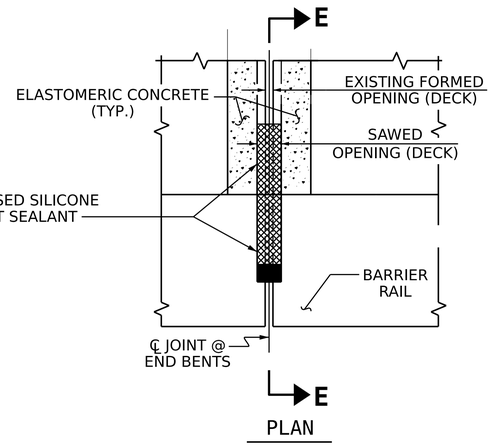
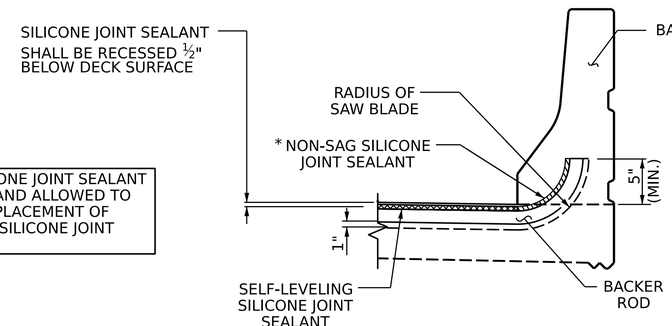


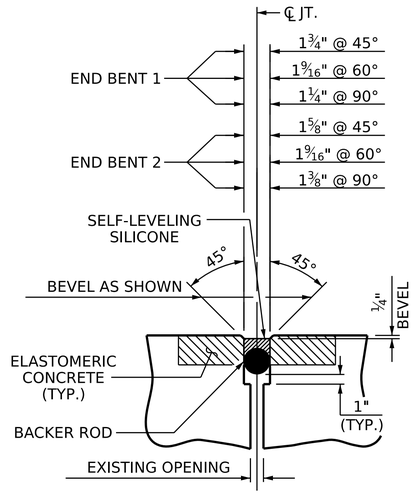
PLAN



SECTION E-E

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

JOINT DETAIL AT BARRIER RAIL



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970261

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA
Aster Abraha
DD4094AE05104FD...
07/11/2022

DRAWN BY : G. AYES DATE : 6/2022
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7/11/2022
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aabraha

STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2018 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED ¾" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1½" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A ¼" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A ¼" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE ⅞" Ø SHEAR STUDS FOR THE ¾" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - ⅞" Ø STUDS FOR 4 - ¾" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF ⅞" Ø STUDS ALONG THE BEAM AS SHOWN FOR ¾" Ø STUDS BASED ON THE RATIO OF 3 - ⅞" Ø STUDS FOR 4 - ¾" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

JANUARY, 1990

STD. NO. SN

REV. 6-16-95 EEM (/) RGW
REV. 8-16-99 RWW (/) LES
REV. 5-7-03 RWW (/) JTE
REV. 5-1-06 TLA (/) GM
REV. 10-1-11 MAA (/) GM
REV. 12-17 MAA (/) THC

7/11/2022
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