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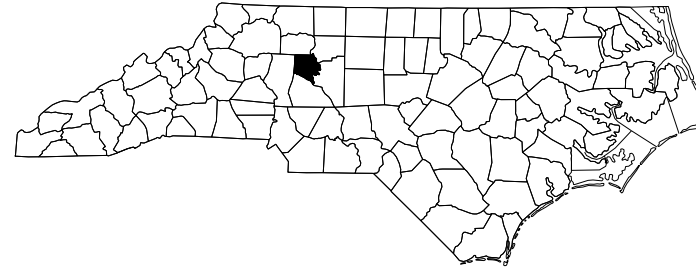
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PROJECT: I-5765

CONTRACT NO: C203929

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DAVIE COUNTY

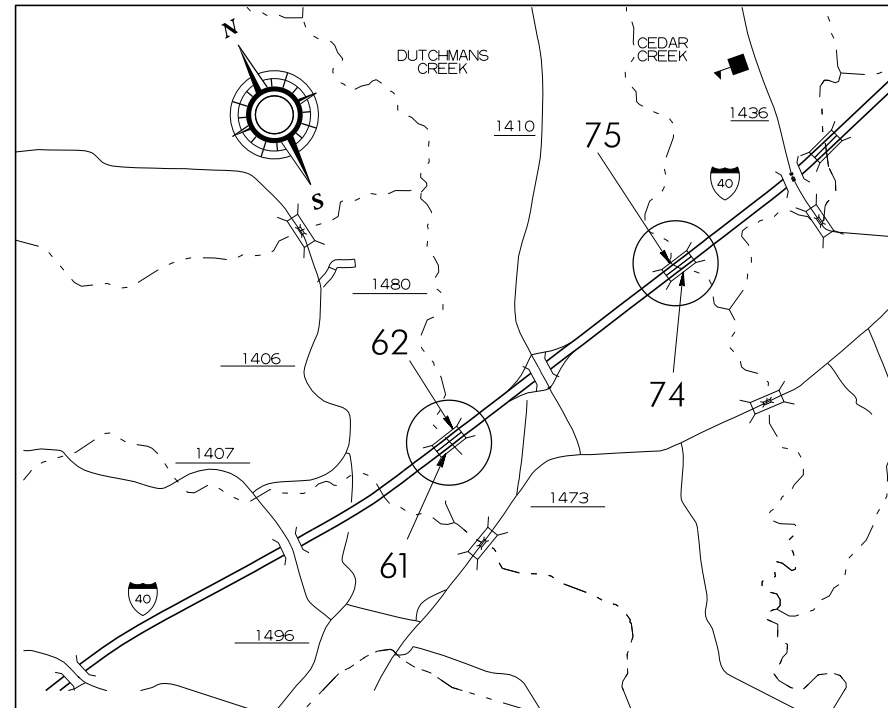


LOCATION: DAVIE COUNTY

- BRIDGE #61 ON I-40 EBL OVER DUTCHMANS CREEK**
- BRIDGE #62 ON I-40 WBL OVER DUTCHMANS CREEK**
- BRIDGE #74 ON I-40 EBL OVER CEDAR CREEK**
- BRIDGE #75 ON I-40 WBL OVER CEDAR CREEK**

TYPE OF WORK: BRIDGE PRESERVATION- HYDRO-DEMOLITION, SCARIFICATION, LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, PAINTING EXISTING BEARING PLATES, JOINT DEMOLITION, SUBSTRUCTURE REPAIRS USING SHOTCRETE AND EPOXY RESIN INJECTION.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5765	1	35
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
53008.1.1	NHPP-0040(028)	P.E.	
53008.3.1	NHPP-0040(028)	CONST.	



DESIGN DATA

DAVIE COUNTY BRIDGES

#61 - ADT 2013	=17,000
#62 - ADT 2013	=17,000
#74 - ADT 2013	=18,500
#75 - ADT 2013	=18,500

PROJECT LENGTH

DAVIE COUNTY BRIDGES

#61 -	.03 MILE
#62 -	.03 MILE
#74 -	.02 MILE
#75 -	.02 MILE

Prepared in the Office of:
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURES MANAGEMENT UNIT
1000 BIRCH RIDGE DR. RALEIGH, N.C. 27610

ERIC B. NELSON, P.E.

PROJECT ENGINEER

2012 STANDARD SPECIFICATIONS

LETTING DATE:
FEBRUARY 21, 2017

DocuSigned by:
TIMOTHY M. SHERRILL
18565
12/9/2016
TIMOTHY M. SHERRILL, P.E.
PROJECT DESIGN ENGINEER

PROJECT: I-5765

CONTRACT NO:



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DAVIE COUNTY

LOCATION: DAVIE COUNTY

- BRIDGE #61 ON I-40 EBL OVER DUTCHMANS CREEK**
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VERY EARLY STRENGTH, PAINTING EXISTING BEARING PLATES, JOINT DEMOLITION,
SUBSTRUCTURE REPAIRS USING SHOTCRETE AND EPOXY RESIN INJECTION.**

INDEX OF SHEETS

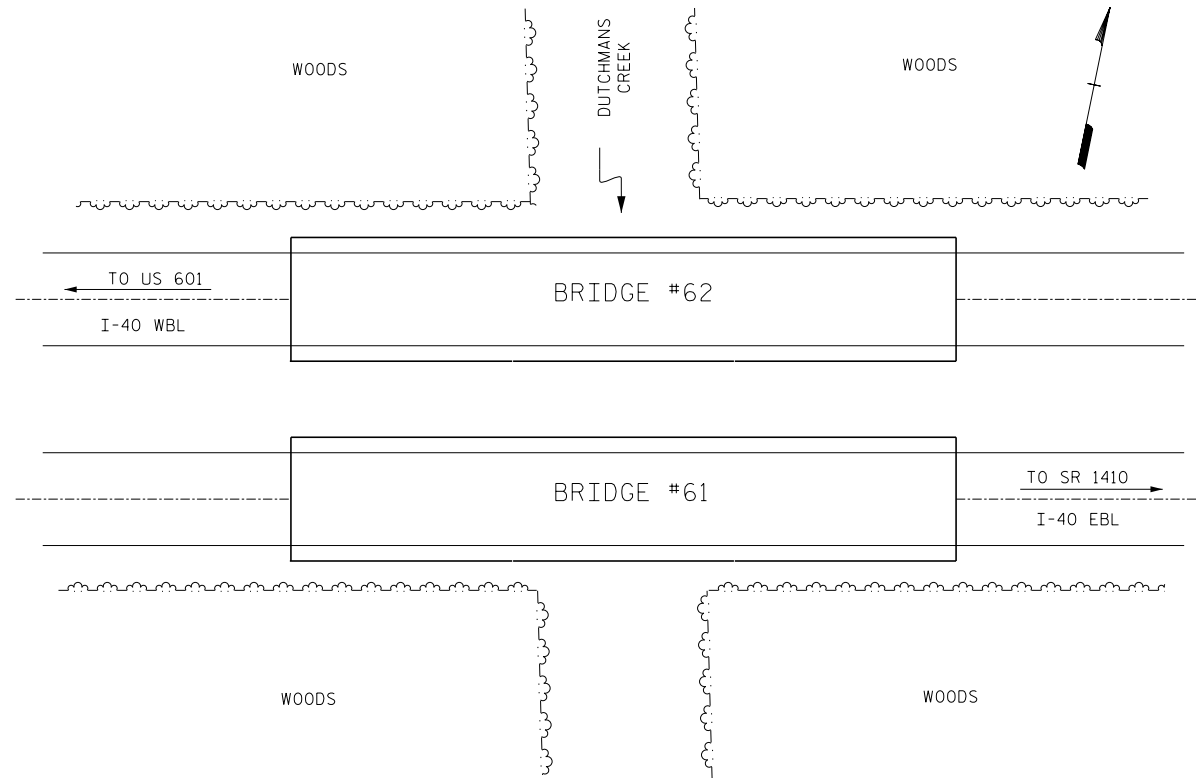
SHEET NO.

- 1*
- 1A*
- S-1 THRU S-16*
- S-17 THRU S-33*
- S-34*
- S-35*
- SN*

DESCRIPTION

- TITLE SHEET*
- INDEX OF SHEETS*
- STRUCTURAL PLANS (BRIDGES NO. 61 & 62)*
- STRUCTURAL PLANS (BRIDGES NO. 74 & 75)*
- JOINT DETAILS (BRIDGES NO. 61, 62, 74 & 75)*
- SUBSTRUCTURE REPAIR DETAILS (BRIDGES NO. 61, 62, 74 & 75)*
- STANDARD NOTES*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5765	1A	35
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
53008.1.1	NHPP-0040(028)	P.E.	
53008.3.1	NHPP-0040(028)	CONST.	



LOCATION SKETCH

NOTES

- 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.
- EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE MANAGING HYDRO-DEMOLITION WATER SPECIAL PROVISION.
- EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATION OF BRIDGE DECK.
- DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES.
- THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.
- LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.
- FOR SCARIFYING BRIDGE DECK, HYDRO-DEMOLITION OF BRIDGE DECK, CLASS II SURFACE PREPARATION, AND CLASS III SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION SPECIAL PROVISIONS.
- FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE NCDOT STANDARD DRAWINGS 1101.02 SHEETS 3, 4, 8, 9 AND 10.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR LATEX MODIFIED CONCRETE OVERLAY - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE, SEE PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.
- FOR CONCRETE FOR DECK REPAIRS, SEE SPECIAL PROVISIONS.
- FOR CLEANING AND PAINTING OF EXISTING BEARING PLATES WITH HRCSA, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

BRIDGE NO.	GROOVING BRIDGE FLOORS	POLLUTION CONTROL	*CLASS II SURFACE PREPARATION	*CLASS III SURFACE PREPARATION	** LATEX MODIFIED CONCRETE OVERLAY-VES	PLACING & FINISHING OF LATEX MODIFIED CONCRETE OVERLAY-VES	SHOTCRETE REPAIR	CLEANING AND PAINTING EXISTING BEARING PLATES W/HRCSA	EPOXY RESIN INJECTION	FOAM JOINT SEALS	PAINTING CONTAINMENT FOR BRIDGE #...	* VOLUMETRIC MIXER	* CONCRETE FOR DECK REPAIR	BRIDGE JOINT DEMOLITION	EPOXY COATING	SCARIFYING BRIDGE DECK	HYDRO-DEMOLITION OF BRIDGE DECK	ELASTOMERIC CONCRETE
	SQ. FT.	LUMP SUM	SQ.YDS.	SQ.YDS.	C.Y.	SQ.YDS.	CU. FT.	EA.	LN. FT.	LUMP SUM	LUMP SUM	LUMP SUM	CU. FT.	SQ. FT.	SQ. FT.	SQ.YDS.	SQ.YDS.	CU. FT.
61	7467	LUMP SUM	3.0	3.0	38.0	901	59.0	36	10.0	LUMP SUM	LUMP SUM	LUMP SUM	1.0	80.0	301.0	901	901	20.0
62	7467	LUMP SUM	3.0	3.0	38.0	901	12.0	36	22.0	LUMP SUM	LUMP SUM	LUMP SUM	1.0	80.0	301.0	901	901	20.0
TOTAL	14,934	LUMP SUM	6.0	6.0	76.0	1,802	71.0	72	32.0	LUMP SUM	LUMP SUM	LUMP SUM	2.0	160.0	602.0	1,802	1,802	40.0

* CLASS II AND CLASS III SURFACE PREPARATION, VOLUMETRIC MIXER AND CONCRETE FOR DECK REPAIR ARE NOT ANTICIPATED. TOKEN PAY ITEMS ARE INDICATED FOR PRICING PURPOSES. IN CASE UNANTICIPATED CLASS III SURFACE PREPARATION AREAS ARE ENCOUNTERED.

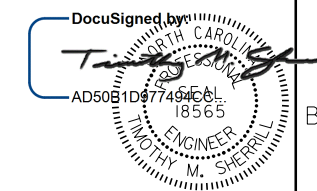
** THE QUANTITY OF LATEX MODIFIED CONCRETE OVERLAY-VES INCLUDES THE 4" OVERLAP BETWEEN OVERLAYS.

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61 & 62

SHEET 1 OF 2

I HEREBY CERTIFY THAT THIS STRUCTURE(S) WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED THEREIN.

 RESIDENT ENGINEER DATE



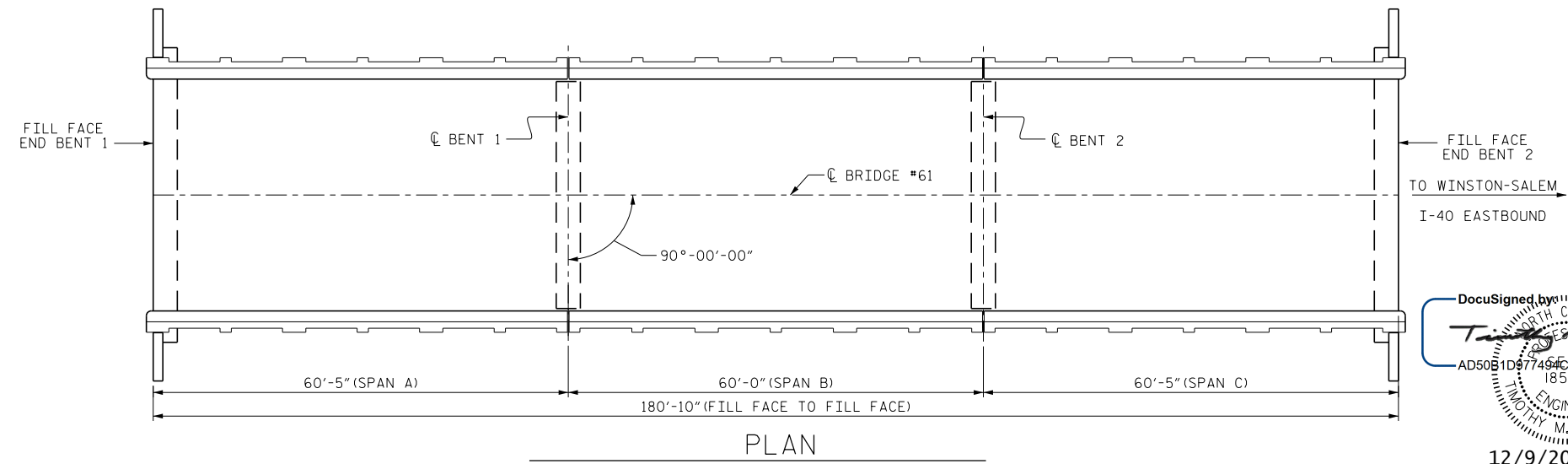
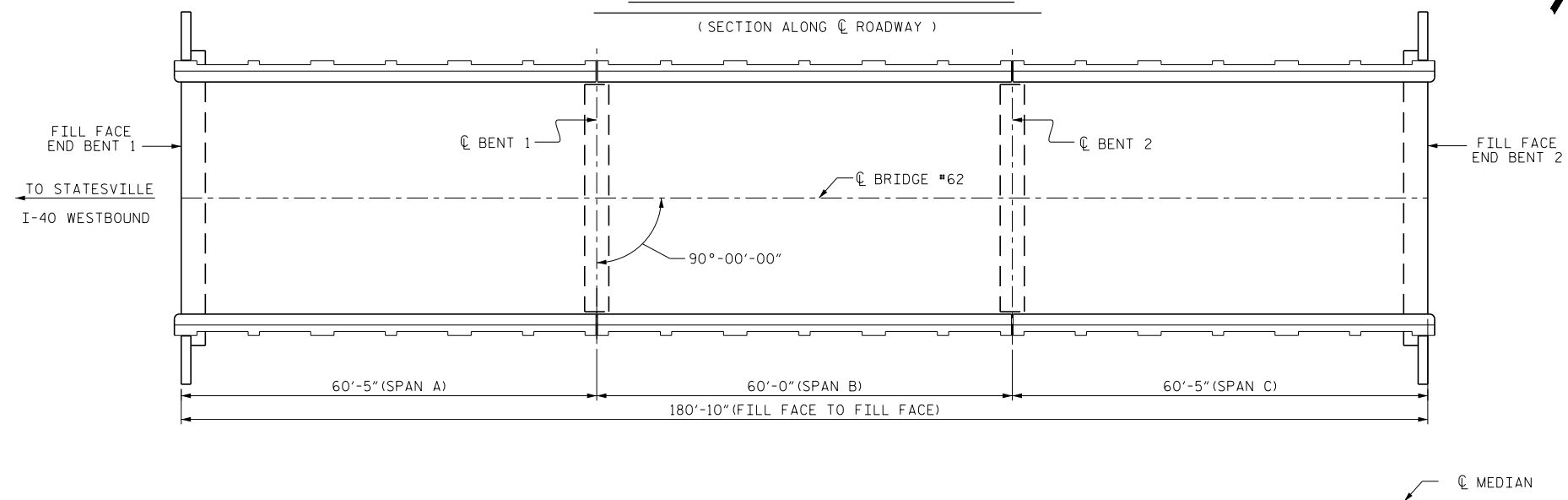
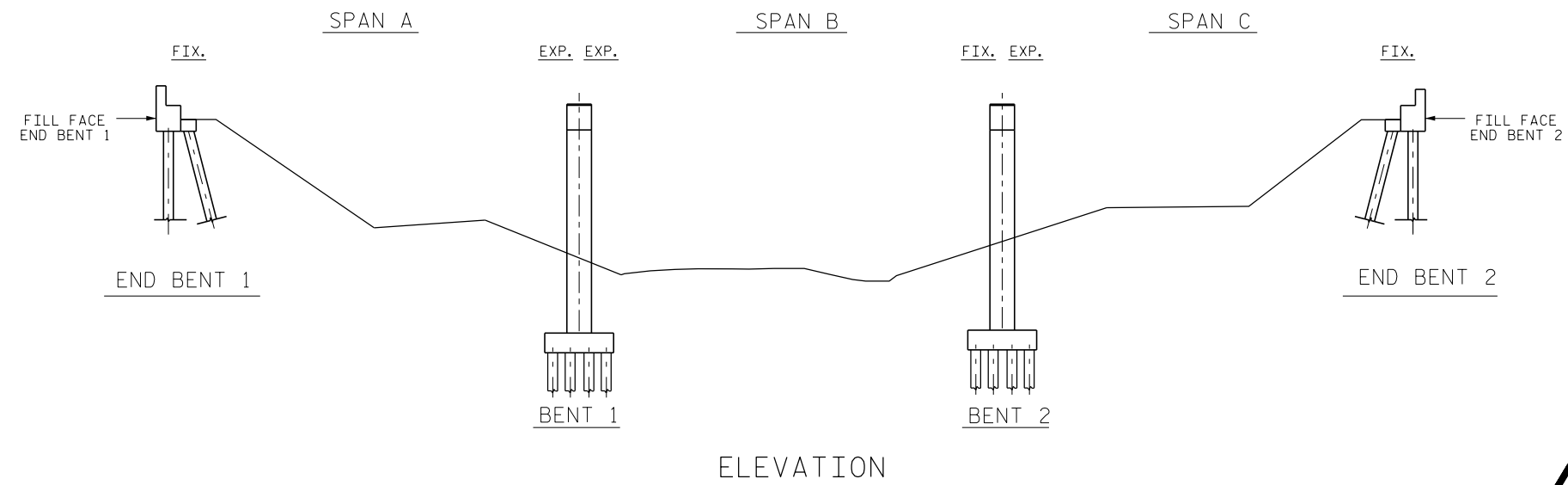
12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 BRIDGE OVER DUTCHMANS CREEK
 ON I-40 BETWEEN
 US 601 AND SR 1410

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			35



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61 & 62
 SHEET 2 OF 2

DocuSigned by
Timothy M. Shearill
 AD5081D877454C...
 ENGINEER
 TIMOTHY M. SHEARILL
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 BRIDGE OVER DUTCHMANS CREEK
 ON I-40 BETWEEN
 US 601 AND NC 1410

DRAWN BY : J.D. HAWK DATE : 10/15
 CHECKED BY : W. SMITH DATE : 1/16

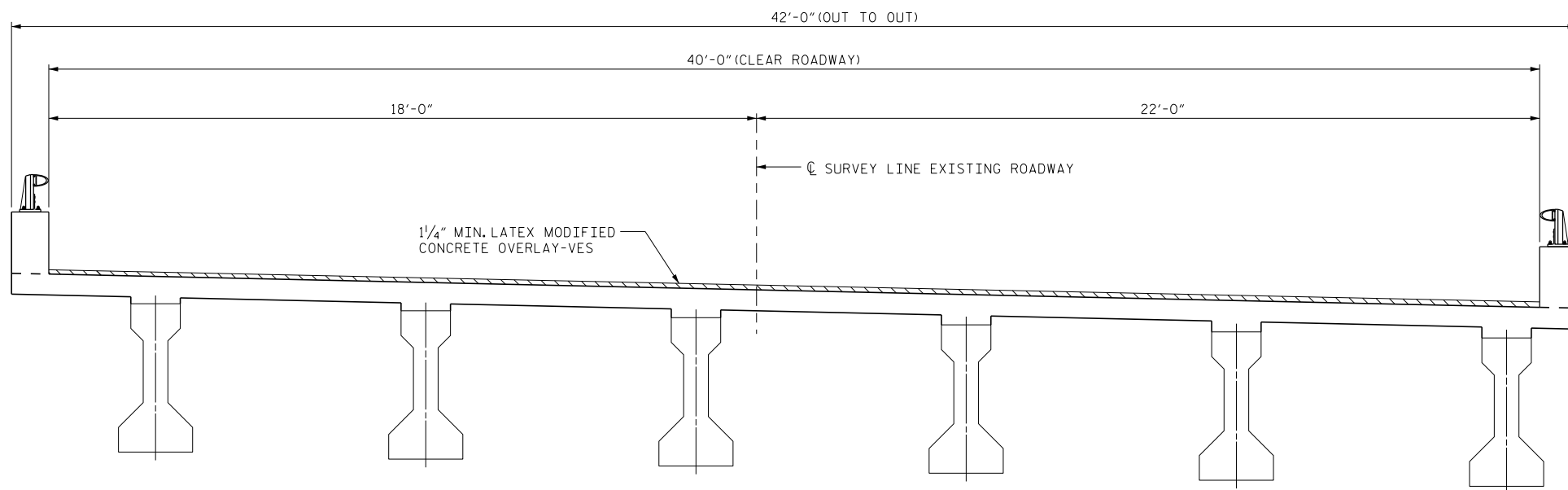
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1			3			TOTAL SHEETS
2			4			35

NOTE:

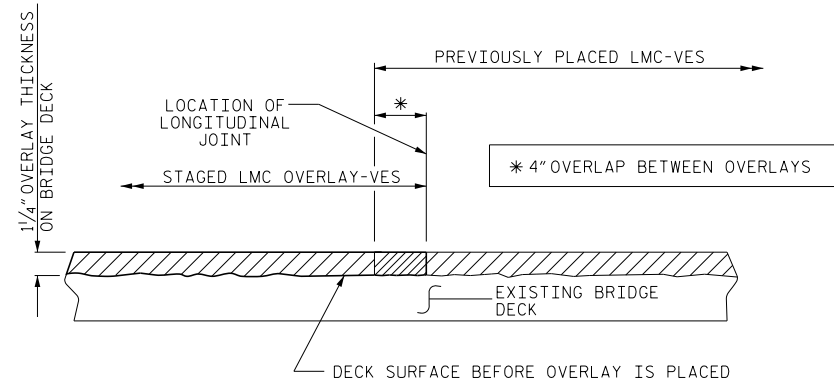
WHEN PREPARING THE SURFACE FOR LMC OVERLAY-VES ADJACENT TO A PREVIOUSLY PLACED LMC-VES STAGE, THE PREVIOUSLY PLACED LMC-VES SHALL BE REMOVED FOR A DISTANCE OF 4-INCHES FROM THE LMC-VES EDGE. THE SURFACE OF THE NEW STAGE AREA, ALONG WITH THE 4 INCH OVERLAY AREA, SHALL BE PREPARED AS PER THE OVERLAY SURFACE PREPARATION SPECIAL PROVISIONS. NEW LMC-VES SHALL BE PLACED IN THE 4-INCH OVERLAP, AS PART OF NEW LMC-VES STAGE PLACEMENT.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE NCDOT STANDARD DRAWINGS 1101.02 SHEETS 3, 4, 8, 9 AND 10.



TYPICAL SECTION

(BRIDGE 61 EASTBOUND LANES SHOWN - BRIDGE 62 WESTBOUND LANES SIMILAR BY ROTATION)

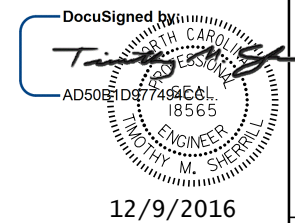


SECTION THRU DECK

STAGED LMC-VES OVERLAY JOINT

(AS NEEDED)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61 & 62

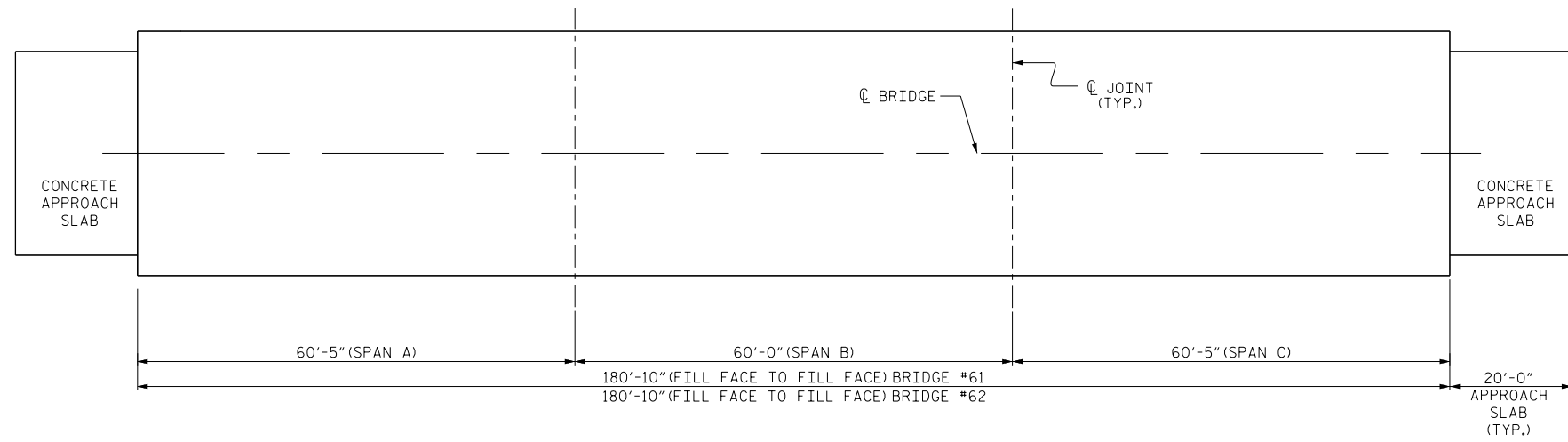


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
 TYPICAL SECTION
 & LATEX MODIFIED
 CONCRETE-VES

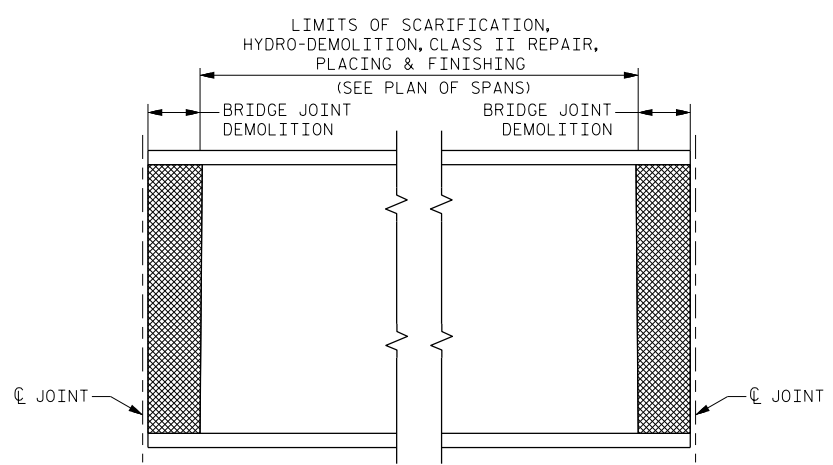
DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

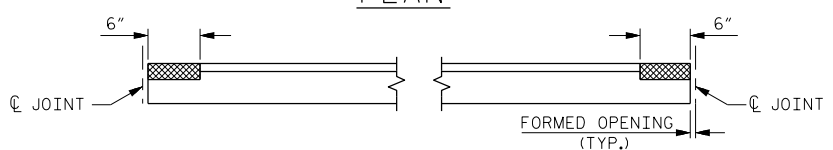
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NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
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2			4			



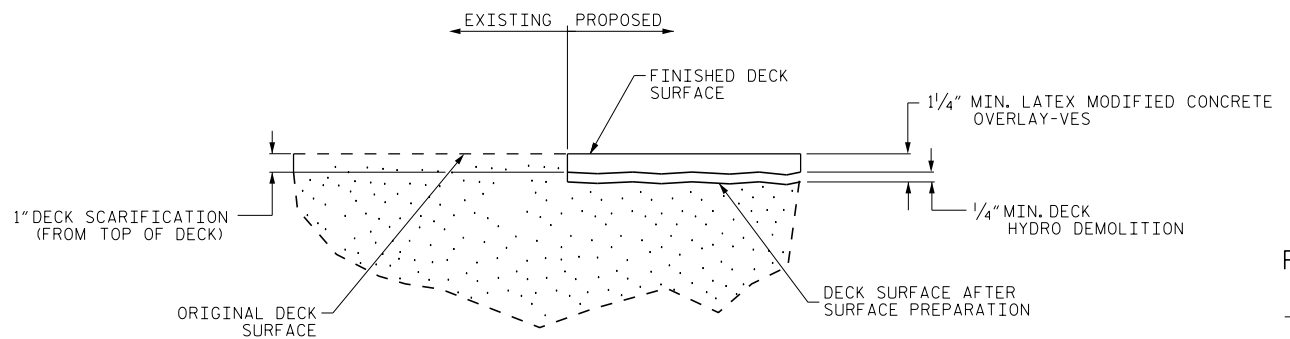
PLAN
(BRIDGE #61 SHOWN, BRIDGE #62 SIMILAR)



PLAN



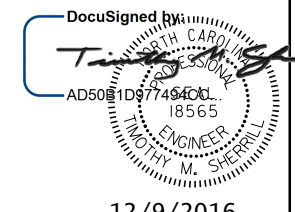
ELEVATION



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY-VES

DECK SCARIFICATION, HYDRO-DEMOLITION, AND LATEX MODIFIED CONCRETE OVERLAY-VES

PROJECT NO. I-5765
DAVIE COUNTY
BRIDGE NO. 61 & 62



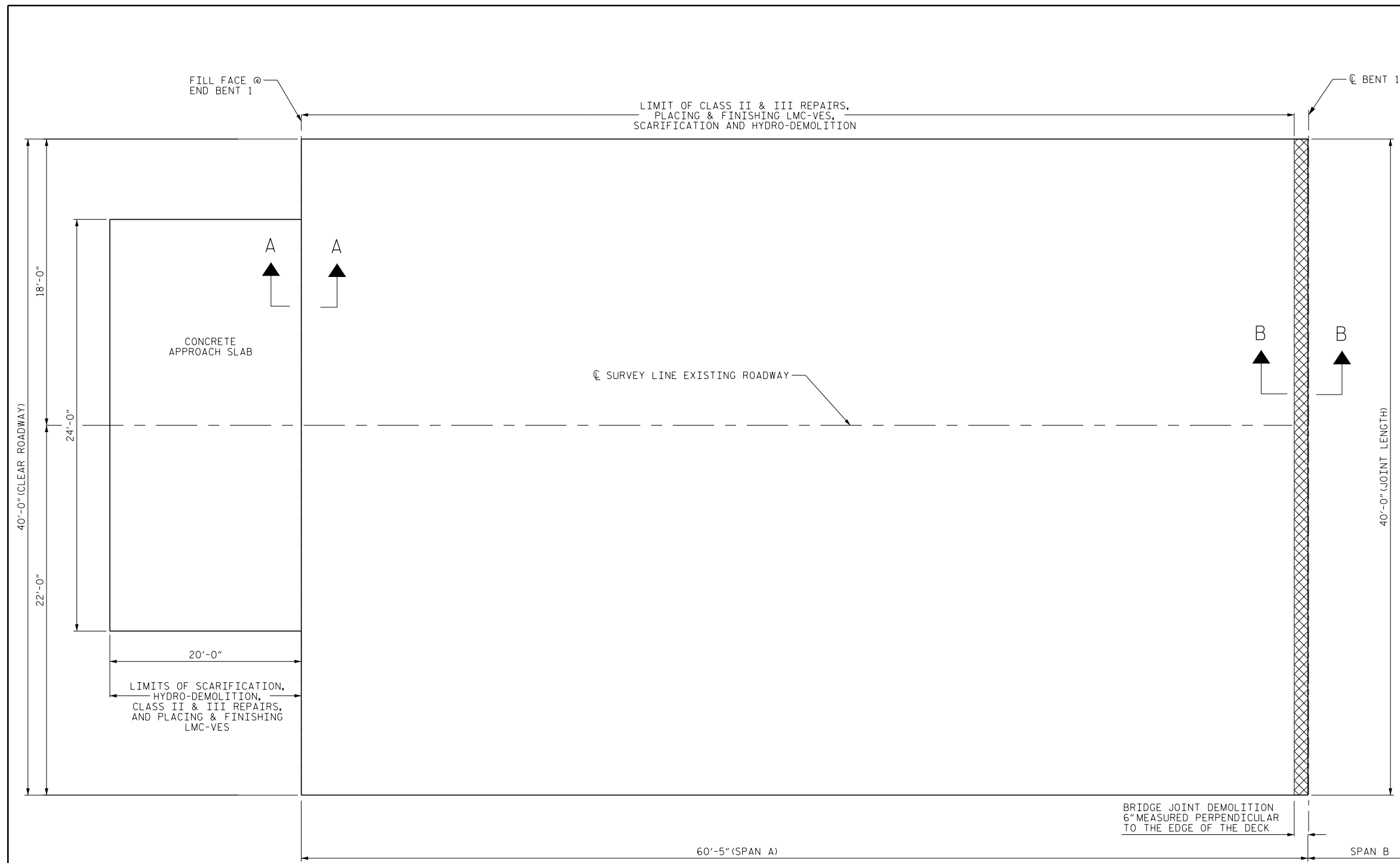
12/9/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
SURFACE PREPARATION

DRAWN BY : J.D. HAWK DATE : 11/15
CHECKED BY : W. SMITH DATE : 1/16

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED




REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS 35
2			4			



SPAN A & APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	20.0 SQ. FT.	
SCARIFYING BRIDGE DECK	266 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	266 SQ. YDS.	
SCARIFYING APPROACH SLAB	53.5 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	53.5 SQ. YDS.	


PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION

PLAN OF SPAN A
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61

DocuSigned by:

 AD5081D97494C118565
 ENGINEER
 TIMOTHY M. SERRILL
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN A & APPROACH SLAB




DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

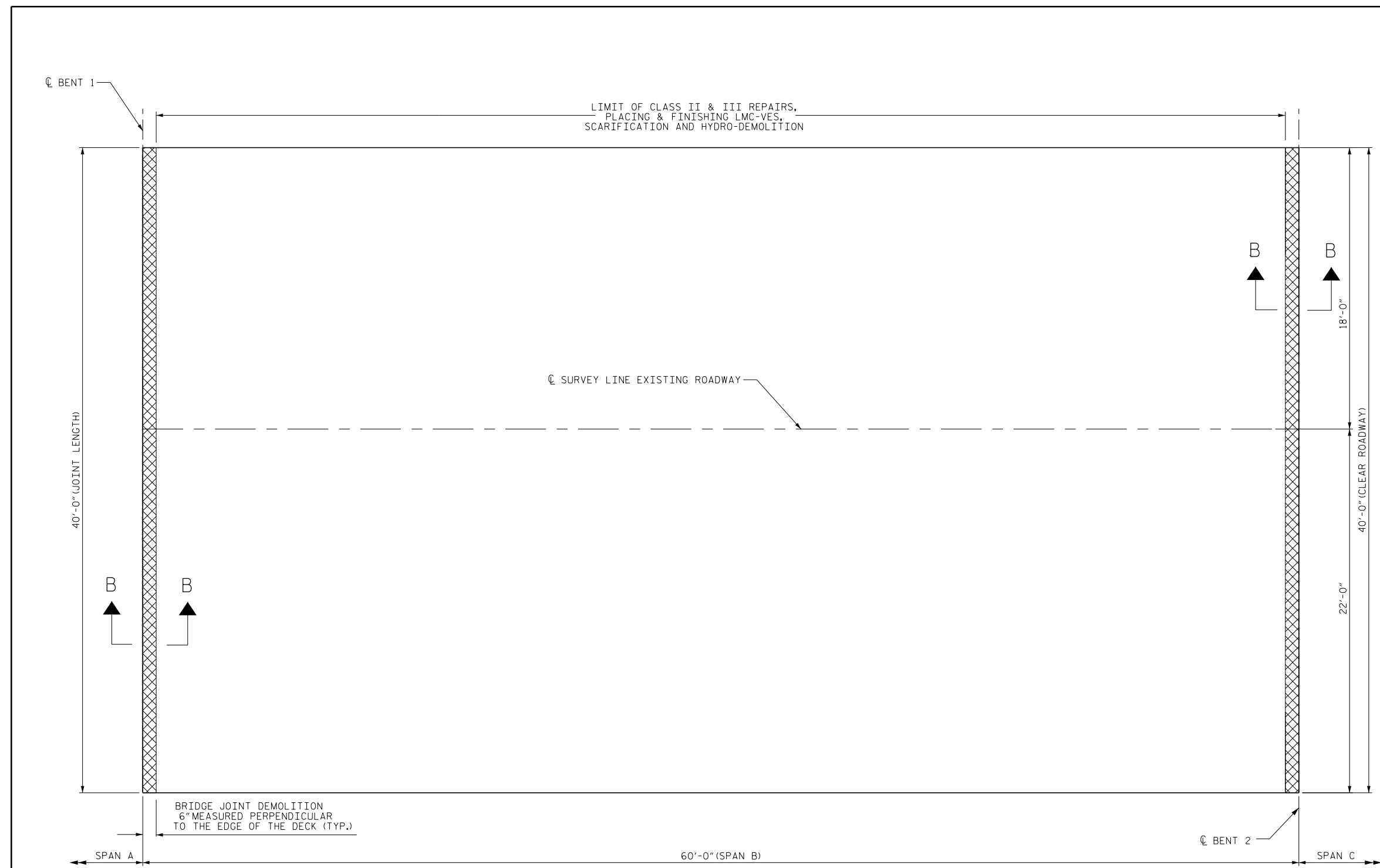
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-5
1			3			TOTAL SHEETS
2			4			35

SPAN B QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1 SQ. YDS.	
CLASS III SURFACE PREPARATION	1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	40 SQ. FT.	
SCARIFYING BRIDGE DECK	262 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	262 SQ. YDS.	

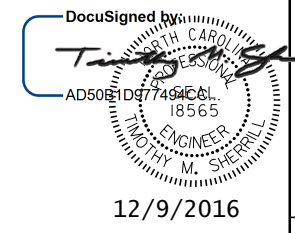
PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61
 SHEET 2 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN B

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16




REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-6
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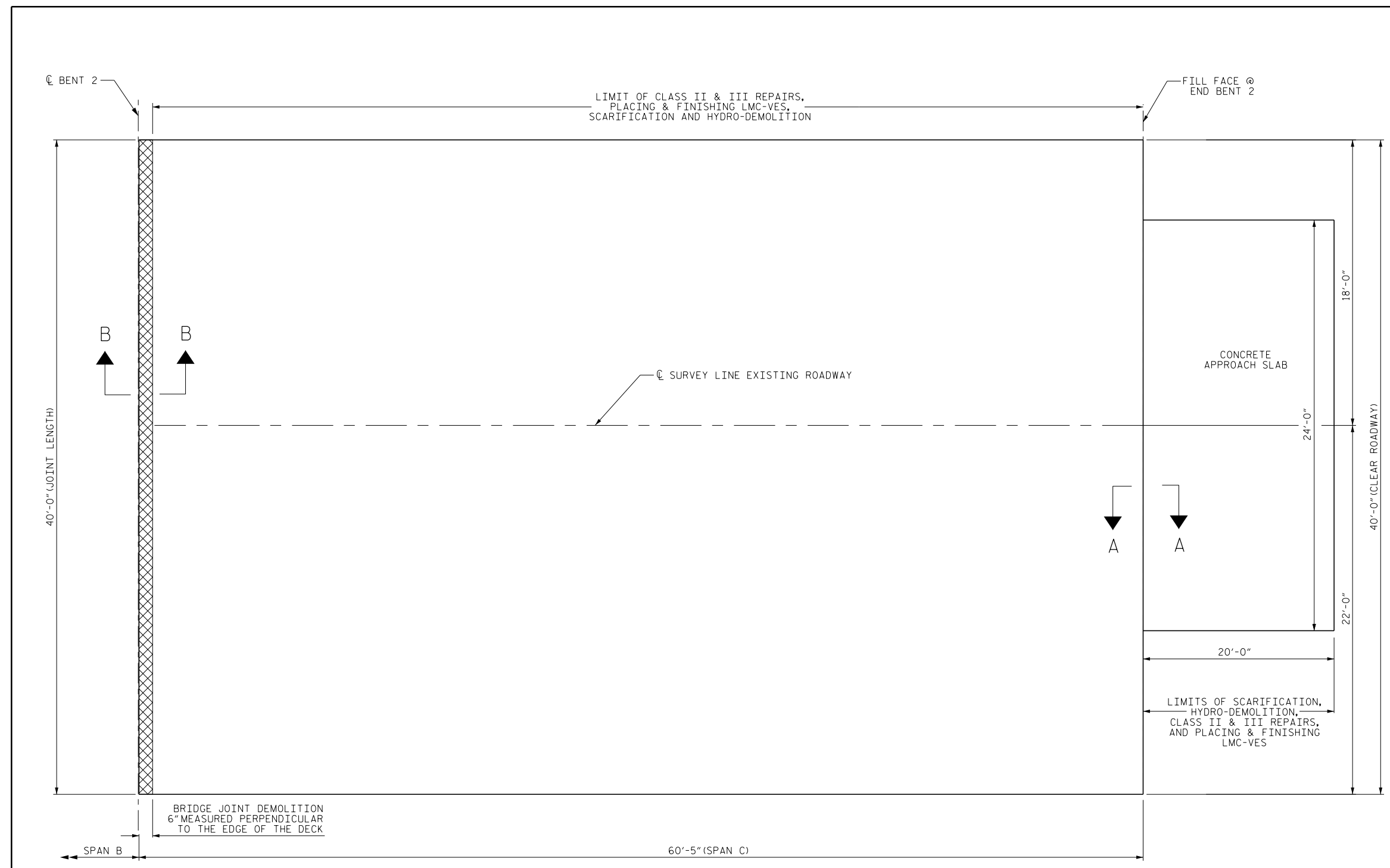
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SPAN C & APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1 SQ. YDS.	
CLASS III SURFACE PREPARATION	1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	20 SQ. FT.	
SCARIFYING BRIDGE DECK	266 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	266 SQ. YDS.	
SCARIFYING APPROACH SLAB	53.5 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	53.5 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.


CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PLAN OF SPAN C
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61
 SHEET 3 OF 3

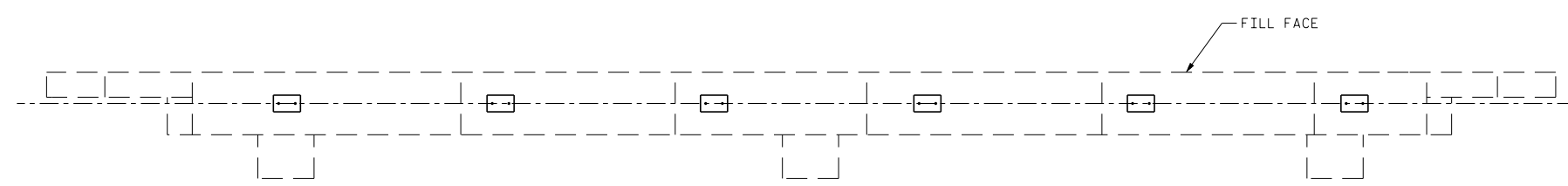
DocuSigned by:

 AD5081D877494CC...
 18565
 ENGINEER
 TIMOTHY M. SHEPPARD

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SURFACE PREPARATION
 SPAN C & APPROACH SLAB

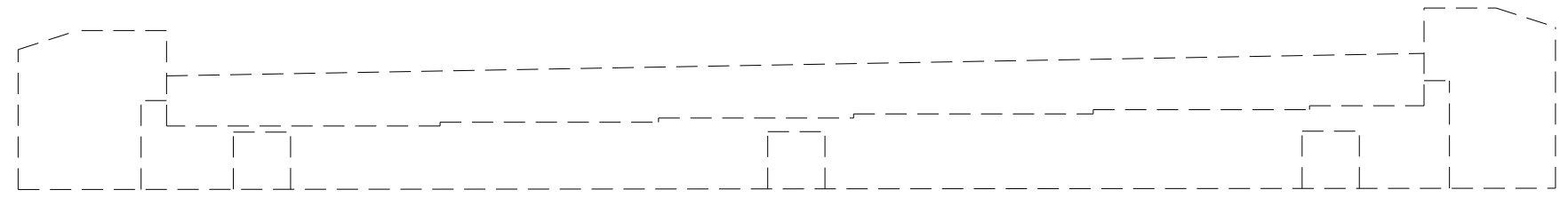
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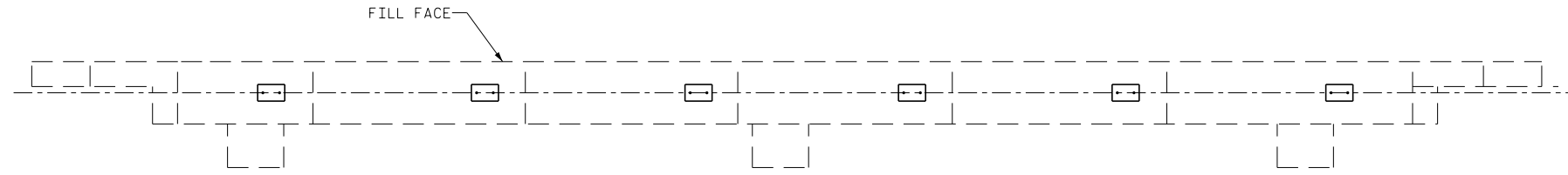
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1			3			TOTAL SHEETS
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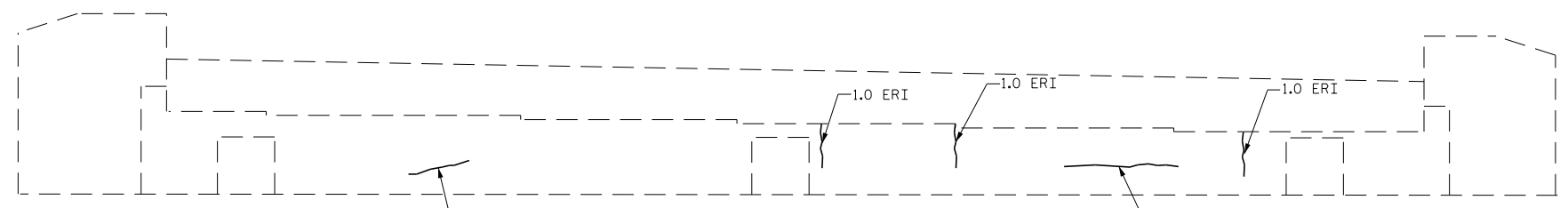
PLAN
END BENT 1



ELEVATION
END BENT 1



PLAN
END BENT 2



ELEVATION
END BENT 2

REPAIR QUANTITY TABLE

END BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			0.0	
EPOXY COATING	AREA SF			
CAP	58.5			
END BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			10.0	
EPOXY COATING	AREA SF			
CAP	58.5			

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

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

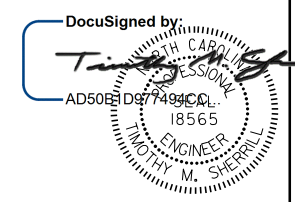
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR REPAIR DETAILS, SEE TYPICAL CAP AND COLUMN REPAIR DETAILS SHEET.

SHOTCRETE REPAIRS
 EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 61



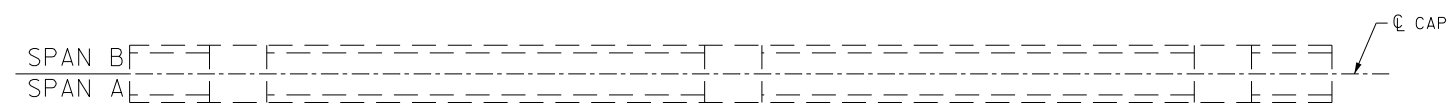
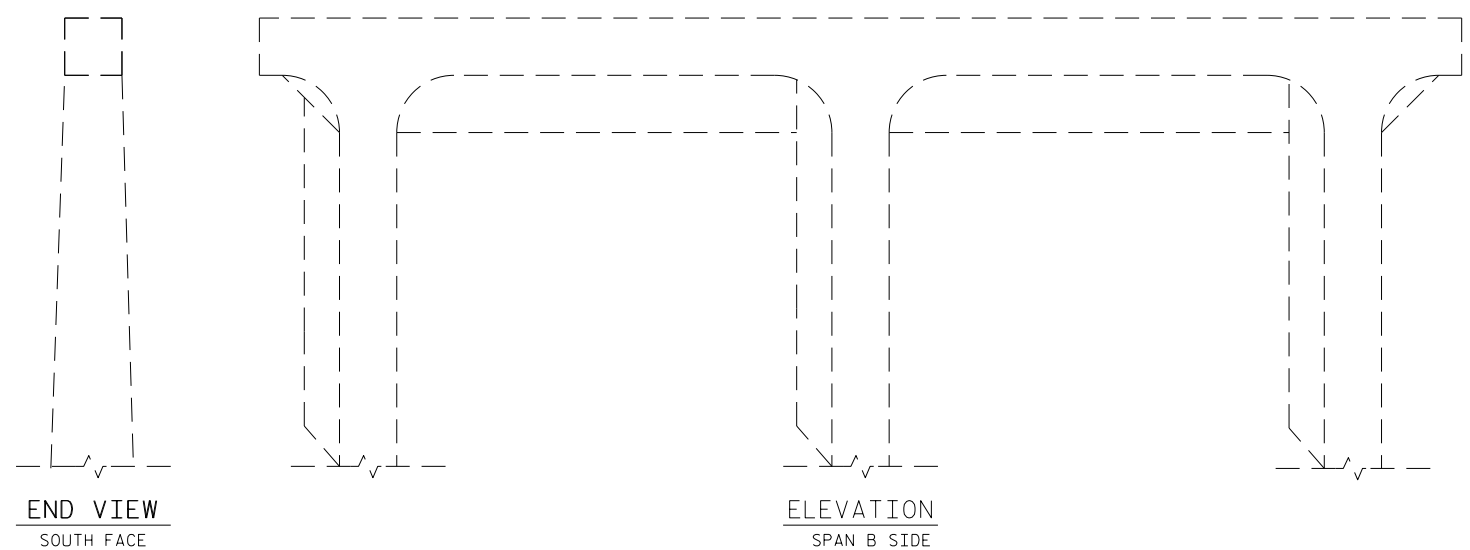
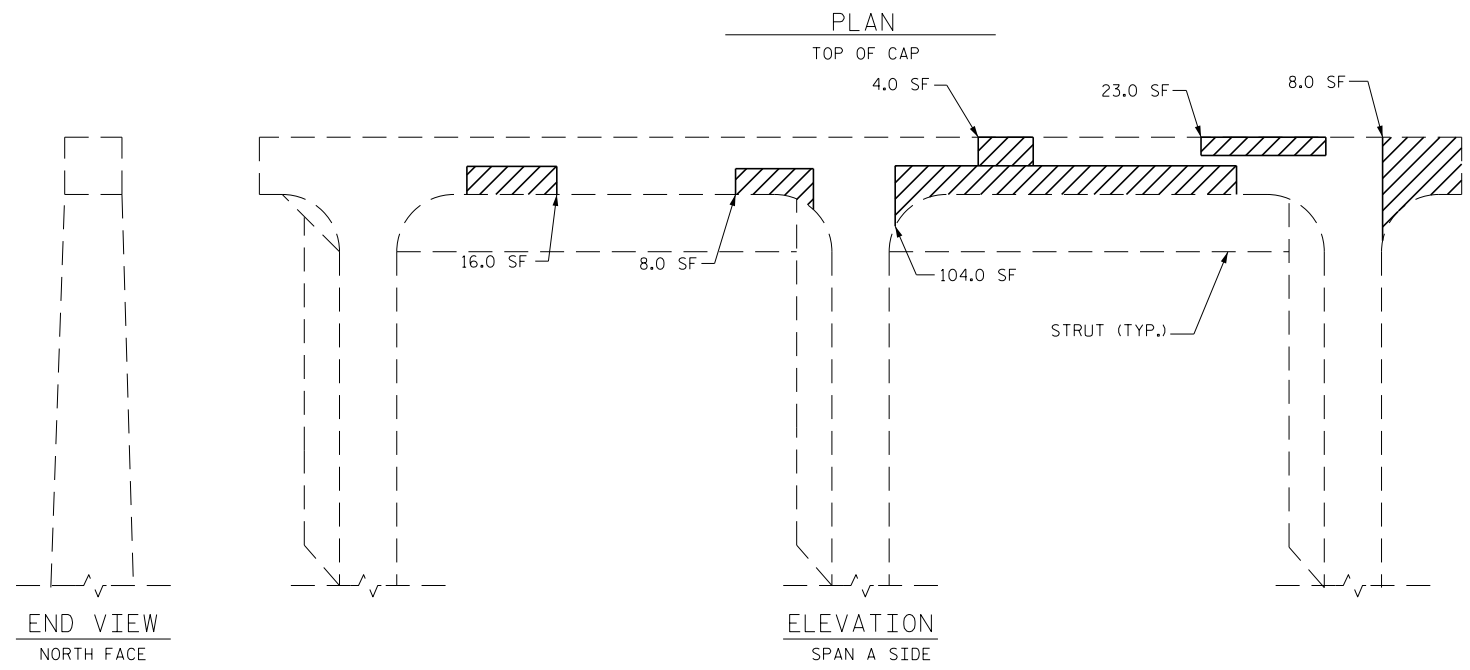
12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 1 & 2
 (EASTBOUND)

DRAWN BY : J.D. HAWK DATE : 11-2015
 CHECKED BY : W. SMITH DATE : 1/16

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-8
1			3			TOTAL SHEETS
2			4			35

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REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	163.0	41.0		
CAP (HORIZONTAL, CORNER)	0	0		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		92.0		

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

NOTES:

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CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS
 ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 61

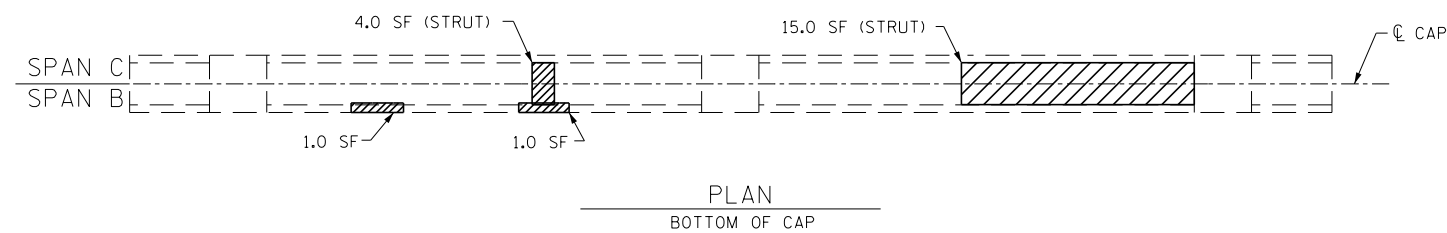
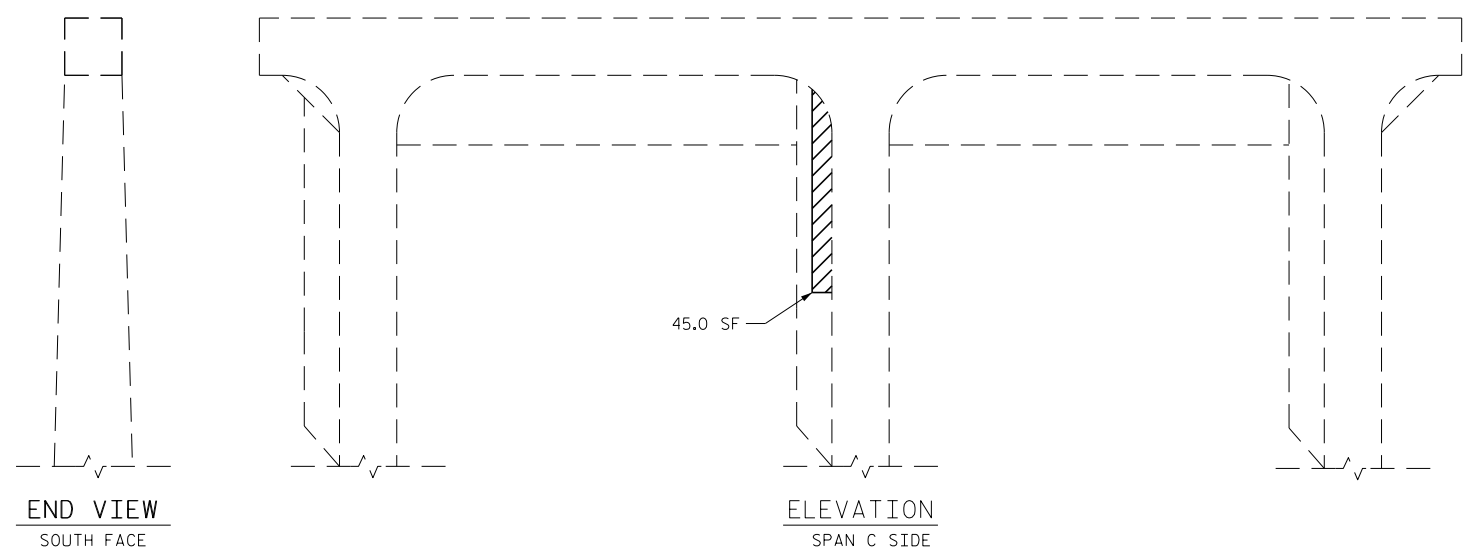
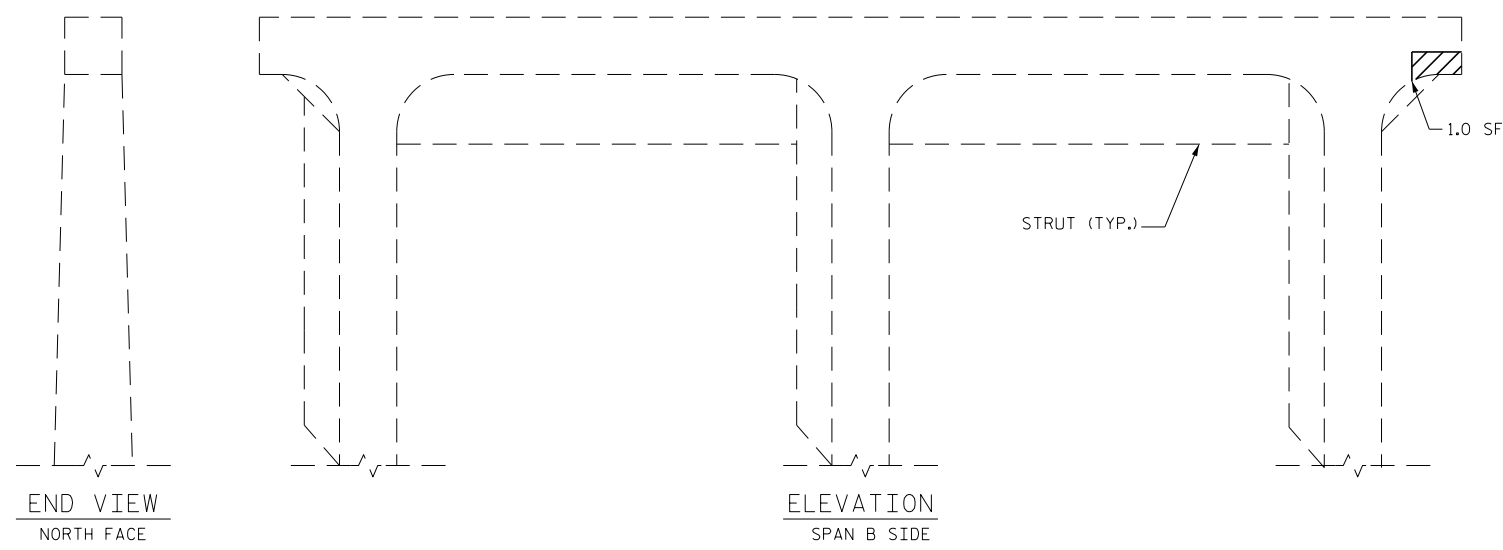
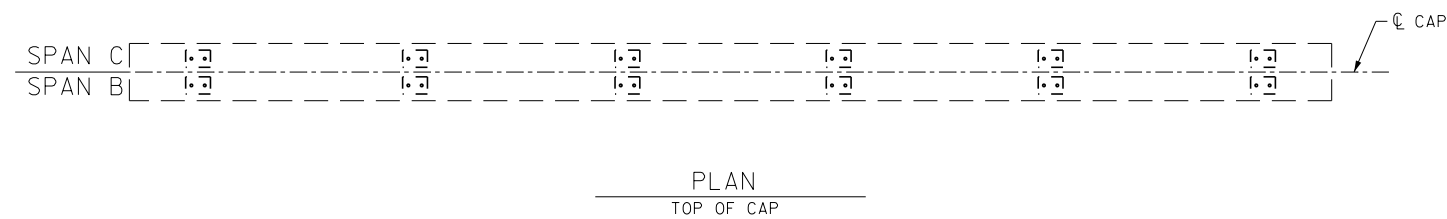
DocuSigned by:

 AD50B8D9774946C1-18565
 PROFESSIONAL ENGINEER
 TIMOTHY M. SHEERILL
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 BENT 1
 (EBL)

DRAWN BY : J.D. HAWK DATE : 11-15
 CHECKED BY : W. SMITH DATE : 1/16

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9
1			3			TOTAL SHEETS
2			4			35



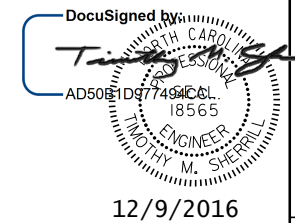
REPAIR QUANTITY TABLE				
REPAIRS BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	1.0	0.5		
CAP (HORIZONTAL, CORNER)	21.0	5.5		
COLUMN (HORIZONTAL FACE)	45.0	12.0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		92.0		

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

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 FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.
 FOR EPOXY COATING, SEE SPECIAL PROVISIONS.
 FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS
 ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 61



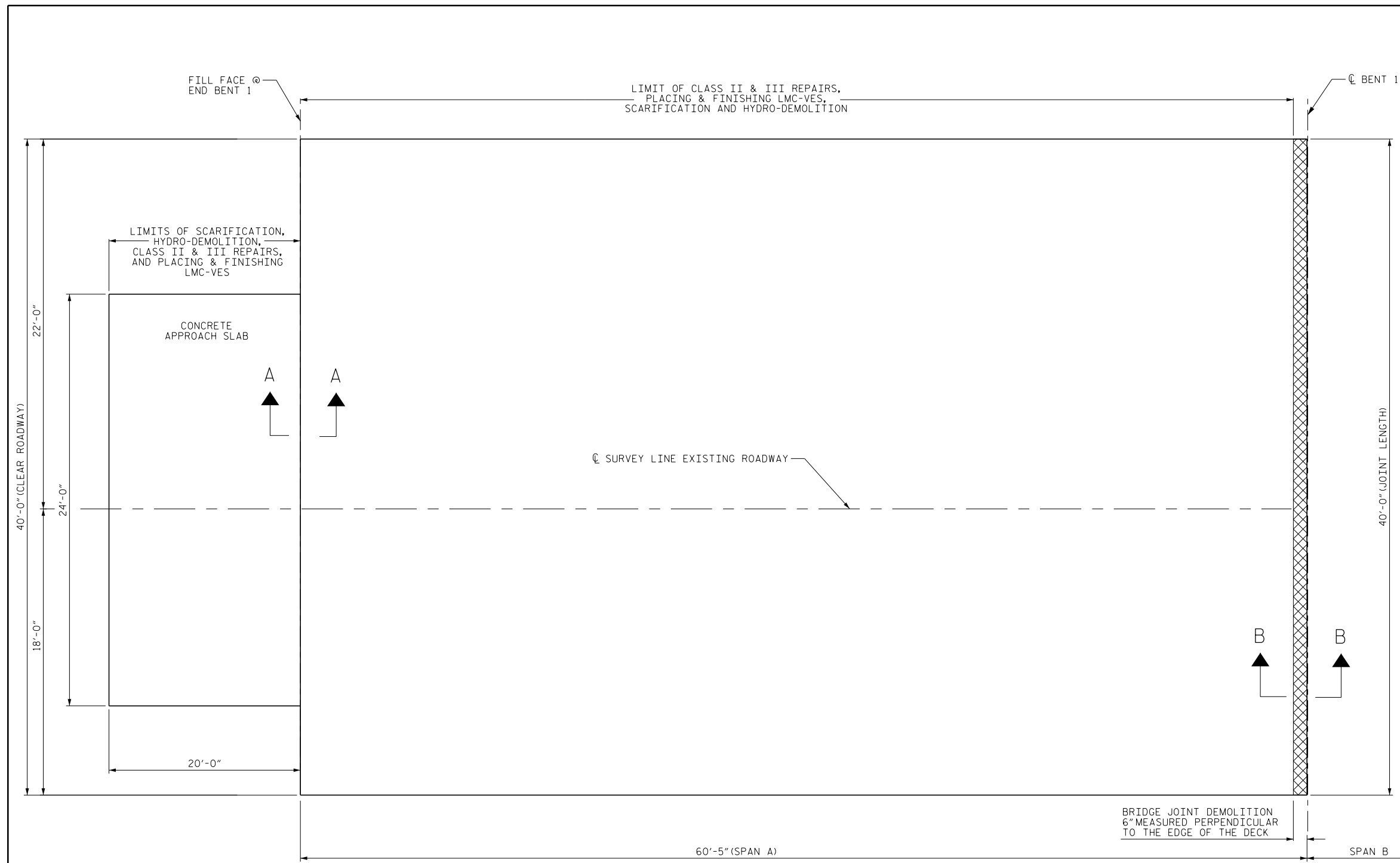
12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 BENT 2
 (EBL)**

DRAWN BY : J.D. HAWK DATE : 11-15
 CHECKED BY : W. SMITH DATE : 1/16




REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-10
1			3			TOTAL SHEETS
2			4			35



SPAN A & APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	20.0 SQ. FT.	
SCARIFYING BRIDGE DECK	266 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	266 SQ. YDS.	
SCARIFYING APPROACH SLAB	53.5 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	53.5 SQ. YDS.	


PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES. IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION

PLAN OF SPAN A
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 62
 SHEET 1 OF 3

DocuSigned by:

 AD50B D9774940C
 18565
 ENGINEER
 TIMOTHY M. SHEPPARD
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN A & APPROACH SLAB

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16




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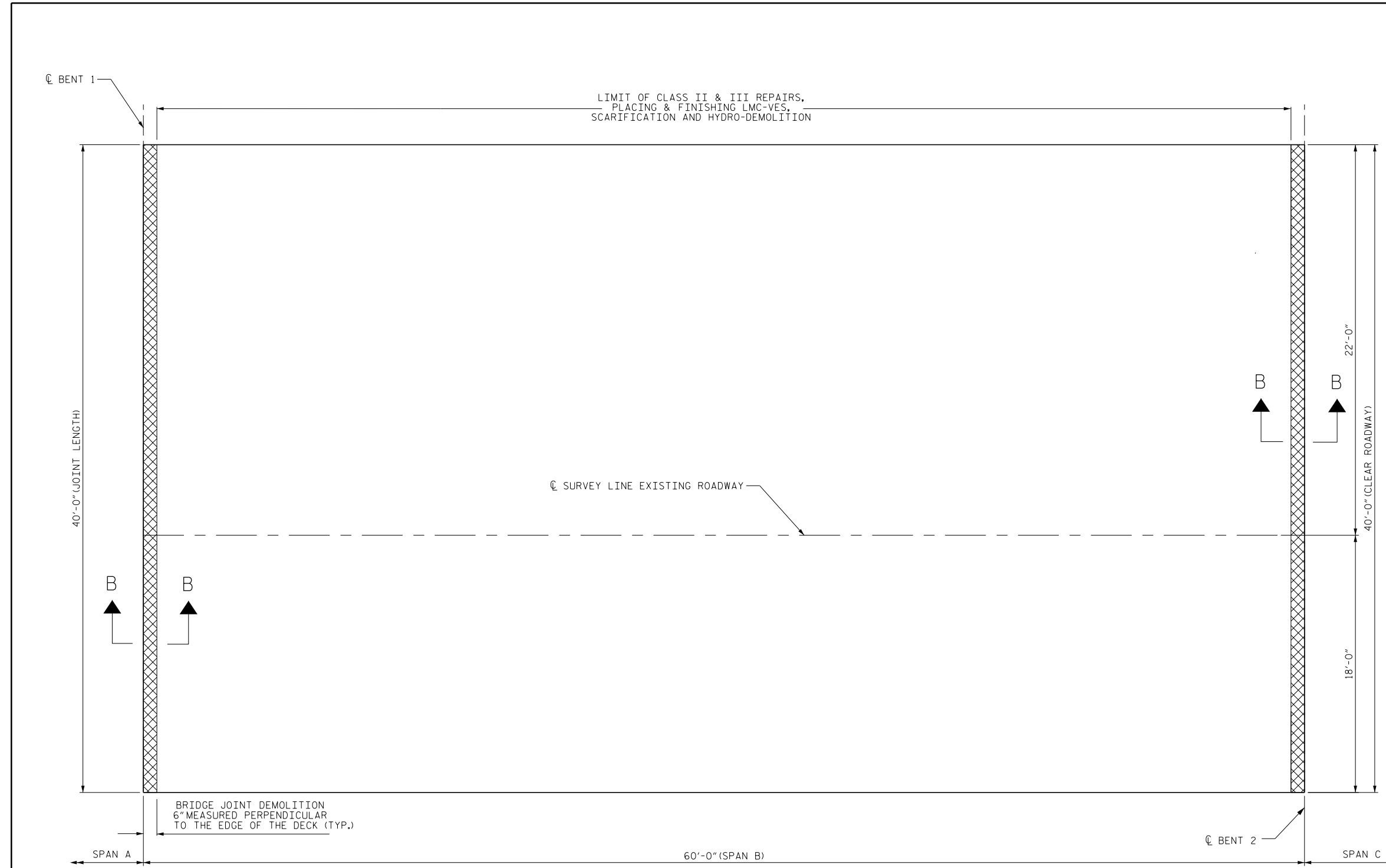
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11
1			3			TOTAL SHEETS
2			4			44

SPAN B QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1 SQ. YDS.	
CLASS III SURFACE PREPARATION	1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	40 SQ. FT.	
SCARIFYING BRIDGE DECK	262 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	262 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

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-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 62

SHEET 2 OF 3

PLAN OF SPAN B
 (FOR SECTION B-B, SEE "JOINT DETAILS" SHEET S-34)

DocuSigned by:

 AD50B1D8774940C
 18565
 ENGINEER
 TIMOTHY M. SHEPPARD

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

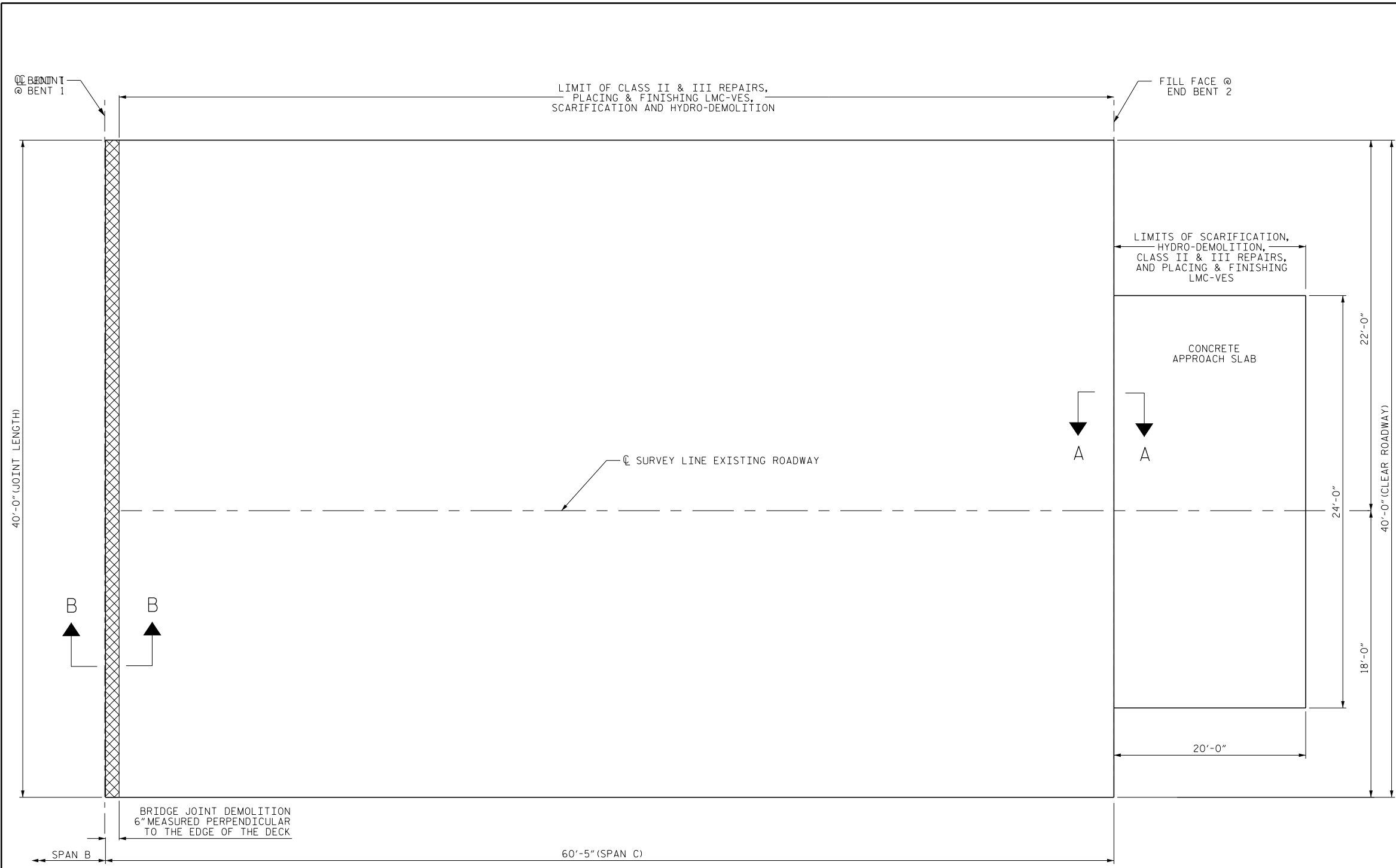
SURFACE PREPARATION
SPAN B

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

12/9/2016

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1			3			S-12 TOTAL SHEETS 35
2			4			



SPAN C & APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1 SQ. YDS.	
CLASS III SURFACE PREPARATION	1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	20 SQ. FT.	
SCARIFYING BRIDGE DECK	266 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	266 SQ. YDS.	
SCARIFYING APPROACH SLAB	53.5 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	53.5 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.


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-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION

PLAN OF SPAN C
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 62

SHEET 3 OF 3

DocuSigned by:

 AD5081D977494C...
 18565
 ENGINEER
 TIMOTHY M. SHEERRILL

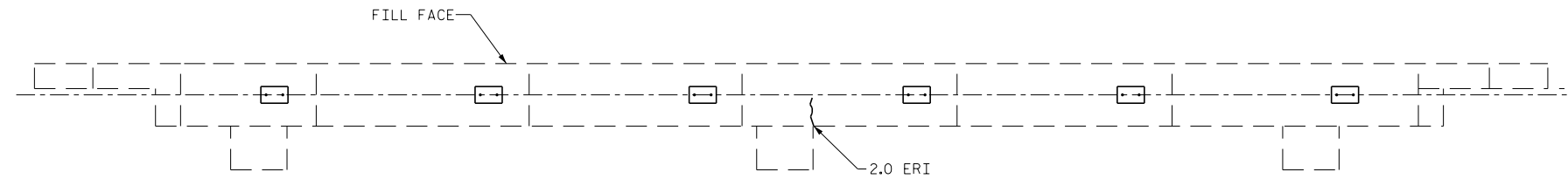
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN C

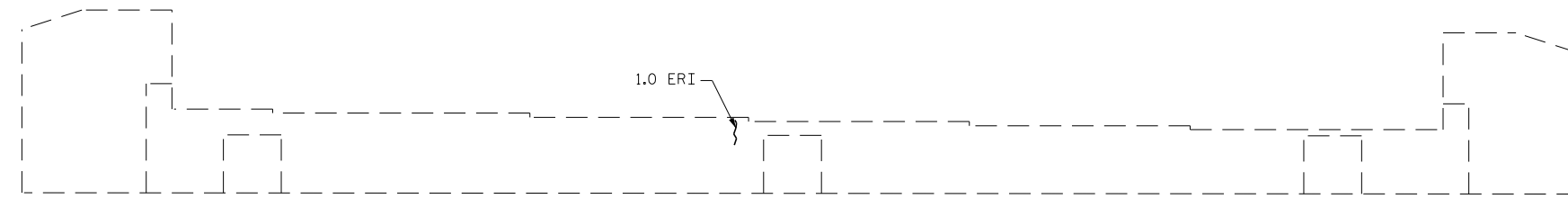
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 CHECKED BY : W. SMITH DATE : 1/16

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1			3			TOTAL SHEETS
2			4			35

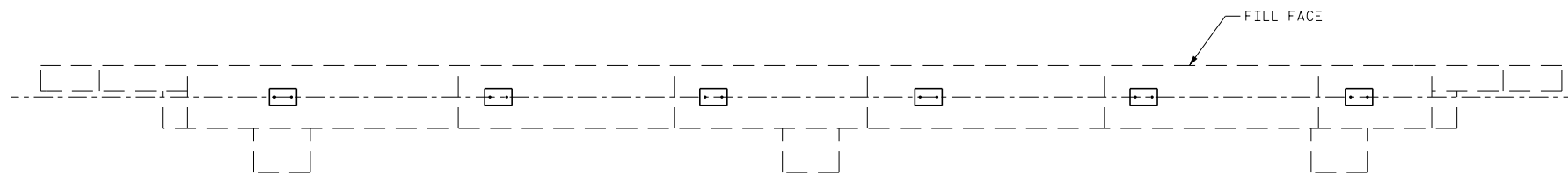
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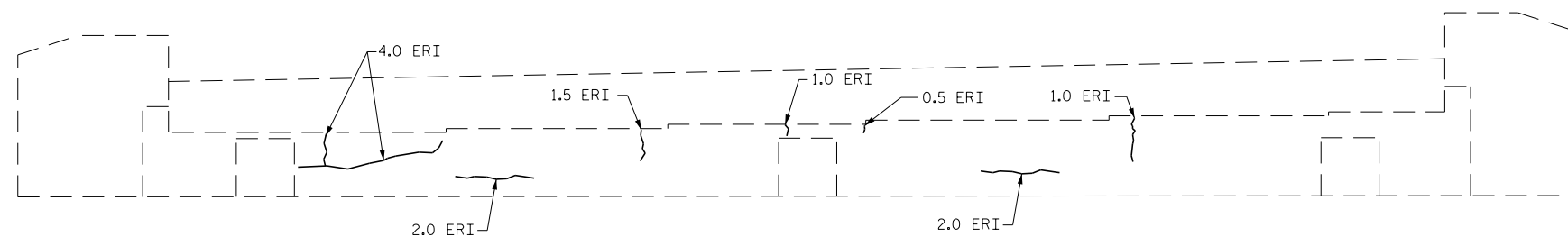
PLAN
END BENT 1



ELEVATION
END BENT 1



PLAN
END BENT 2



ELEVATION
END BENT 2

REPAIR QUANTITY TABLE

END BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			3.0	
EPOXY COATING	AREA SF			
CAP	58.5			
END BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			12.0	
EPOXY COATING	AREA SF			
CAP	58.5			

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

NOTES:

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CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

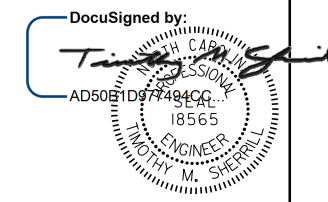
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR REPAIR DETAILS, SEE TYPICAL CAP AND COLUMN REPAIR DETAILS SHEET.

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 62

▨ SHOTCRETE REPAIRS
 ERI EPOXY RESIN INJECTION



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 1 & 2
 WBL

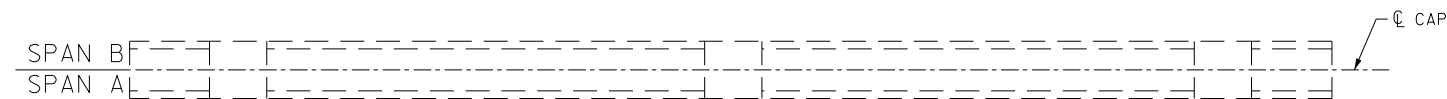
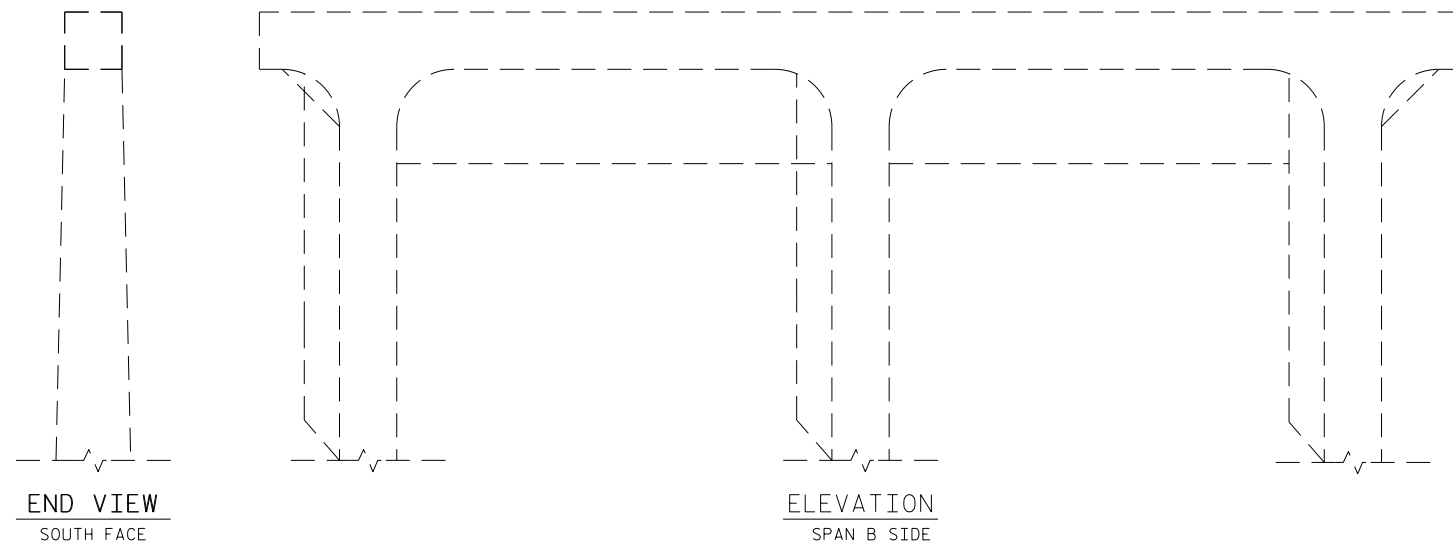
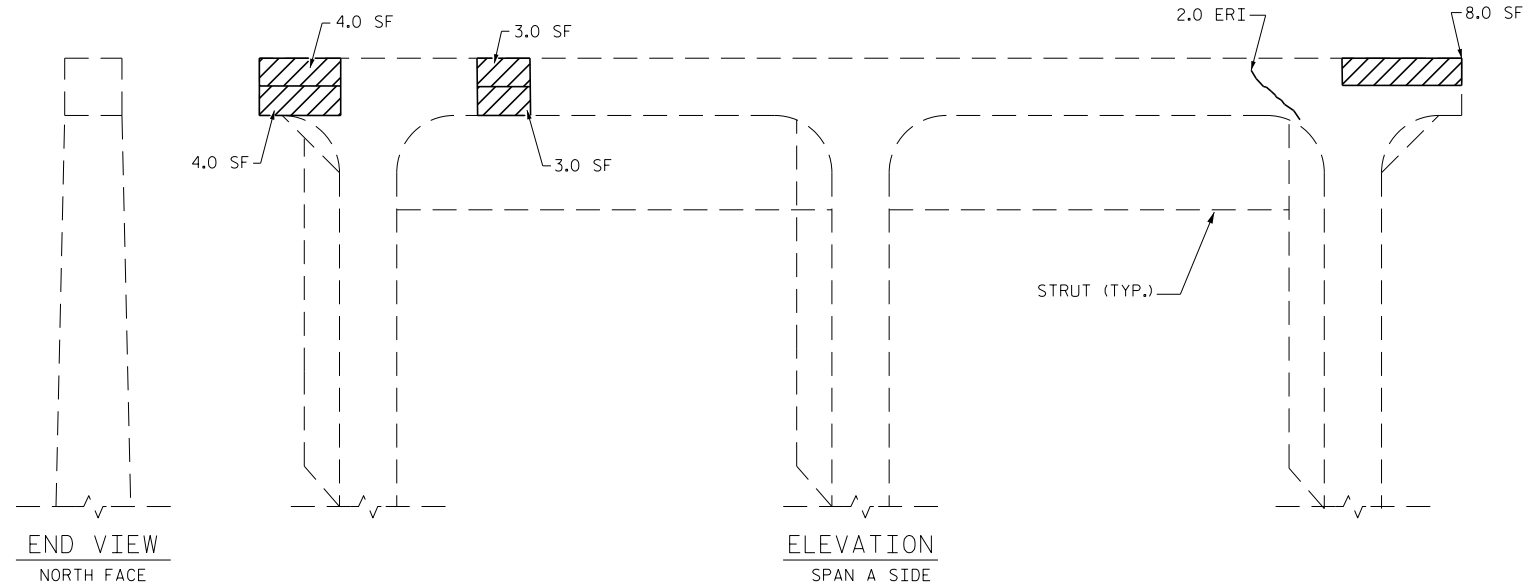
DRAWN BY : J.D. HAWK DATE : 11-2015
 CHECKED BY : W. SMITH DATE : 1/16

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1			3			35
2			4			

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PLAN
TOP OF CAP



PLAN
BOTTOM OF CAP

REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	24.0	6.0		
CAP (HORIZONTAL, CORNER)	0	0		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		2.0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		92.0		

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

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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

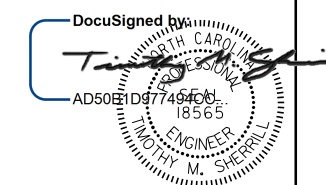
FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS

ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 62



12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 BENT 1

DRAWN BY : J.D. HAWK DATE : 11-15
 CHECKED BY : W. SMITH DATE : 1/16

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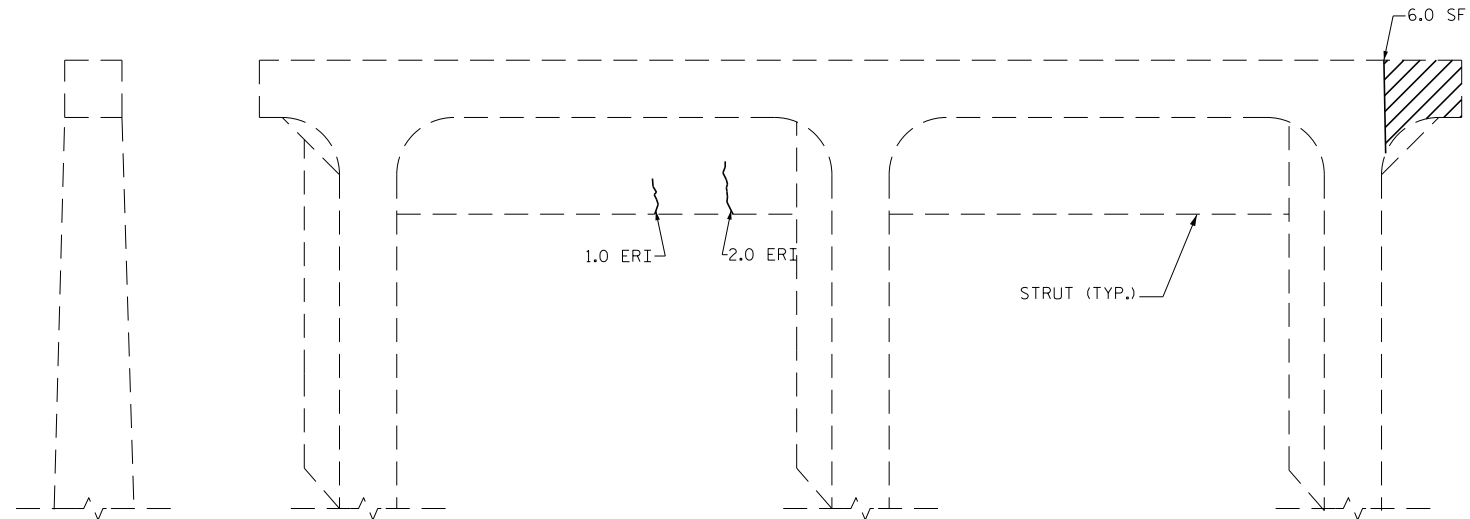
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1			3			TOTAL SHEETS
2			4			35



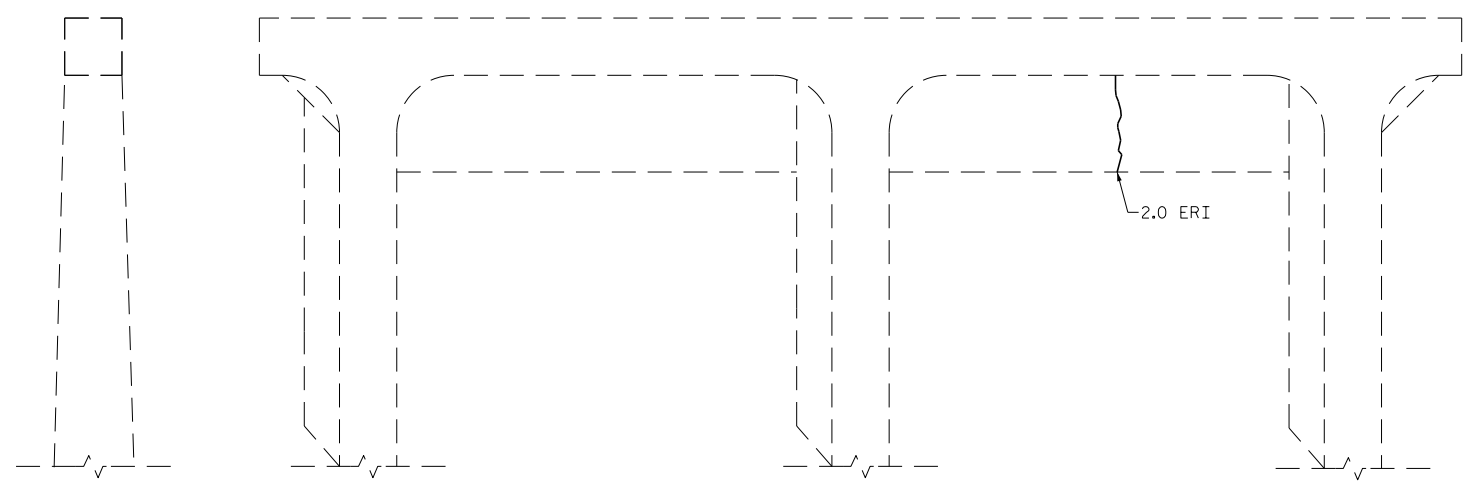
PLAN

TOP OF CAP



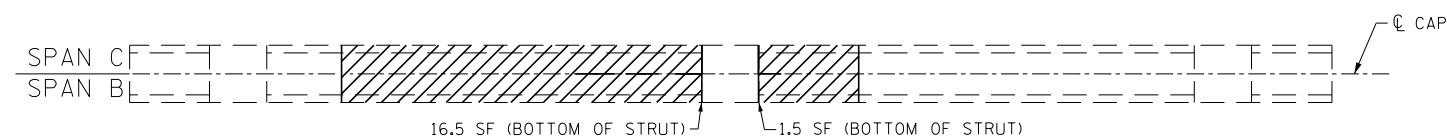
END VIEW
NORTH FACE

ELEVATION
SPAN B SIDE



END VIEW
SOUTH FACE

ELEVATION
SPAN C SIDE



PLAN

BOTTOM OF CAP

REPAIR QUANTITY TABLE

REPAIRS BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	6.0	1.5		
CAP (HORIZONTAL, CORNER)	18.0	4.5		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		5.0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		92.0		

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

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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

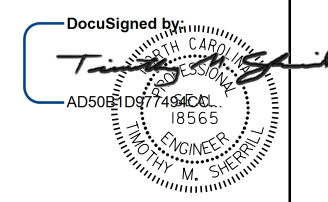
FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS

ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
BRIDGE NO.: 62



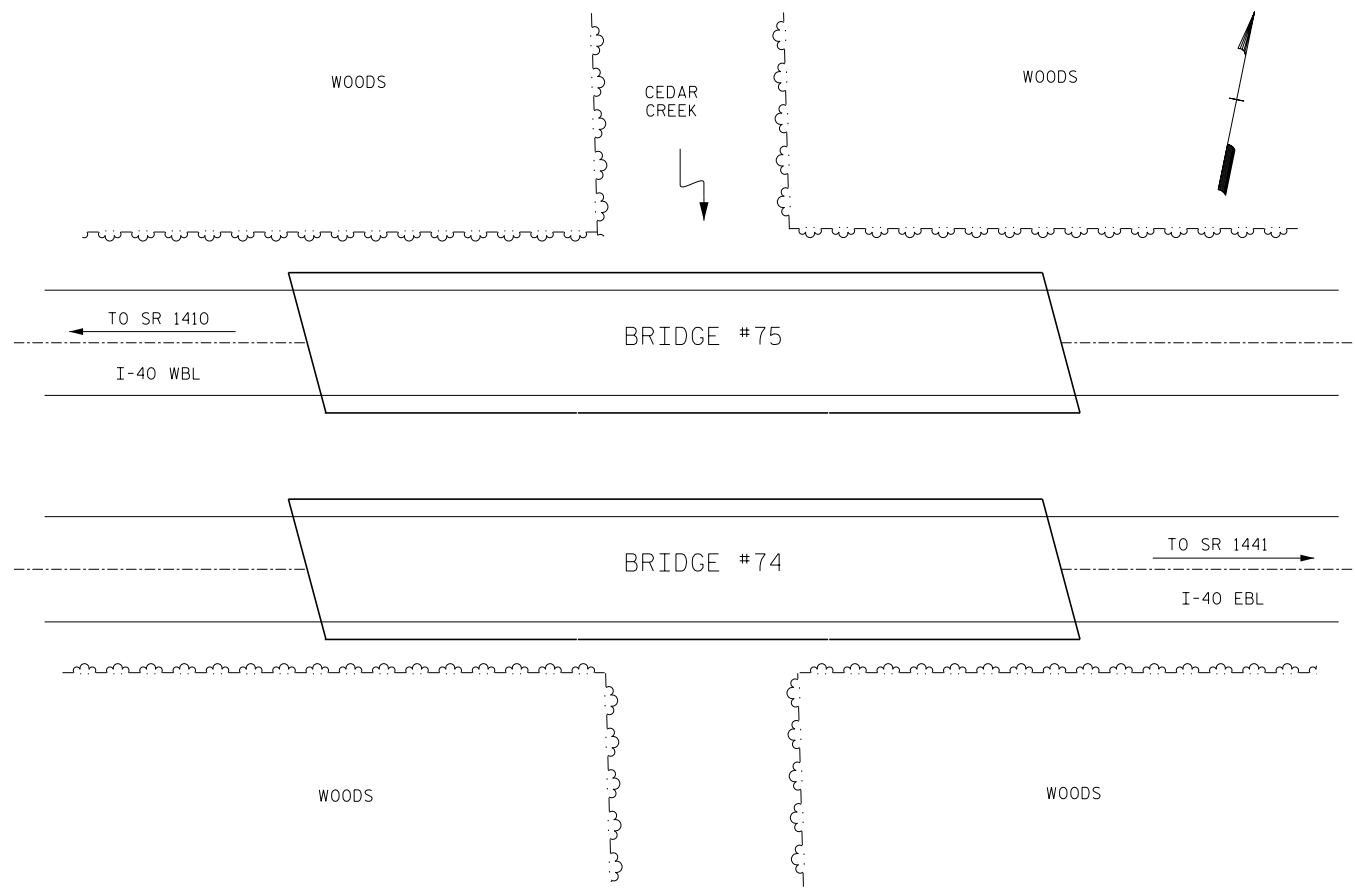
12/9/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT 2

DRAWN BY : J.D. HAWK DATE : 11-15
CHECKED BY : W. SMITH DATE : 1/16

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-16
1			3			TOTAL SHEETS
2			4			35



LOCATION SKETCH

GENERAL NOTES

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.

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

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

THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE MANAGING HYDRO-DEMOLITION WATER SPECIAL PROVISION.

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

DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES.

THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.

FOR SCARIFYING BRIDGE DECK, HYDRO-DEMOLITION OF BRIDGE DECK, CLASS II SURFACE PREPARATION, AND CLASS III SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION SPECIAL PROVISIONS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE NCDOT STANDARD DRAWINGS 1101.02 SHEETS 3, 4, 8, 9 AND 10.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR EPOXY MORTAR REPAIRS, SEE SPECIAL PROVISIONS.

FOR LATEX MODIFIED CONCRETE OVERLAY - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE, SEE PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

FOR CONCRETE FOR DECK REPAIRS, SEE SPECIAL PROVISIONS.

FOR CLEANING AND PAINTING OF EXISTING BEARING PLATES WITH HRCSA, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

BRIDGE NO.	GROOVING BRIDGE FLOORS	POLLUTION CONTROL	*CLASS II SURFACE PREPARATION	*CLASS III SURFACE PREPARATION	** LATEX MODIFIED CONCRETE OVERLAY - VES	PLACING & FINISHING OF LATEX MODIFIED CONCRETE OVERLAY - VES	SHOTCRETE REPAIR	CLEANING AND PAINTING EXISTING BEARING PLATES W/HRCSA	EPOXY RESIN INJECTION	FOAM JOINT SEALS	PAINTING CONTAINMENT FOR BRIDGE #...	* VOLUMETRIC MIXER	* CONCRETE FOR DECK REPAIR	BRIDGE JOINT DEMOLITION	EPOXY COATING	SCARIFYING BRIDGE DECK	HYDRO-DEMOLITION OF BRIDGE DECK	ELASTOMERIC CONCRETE	EPOXY MORTAR REPAIRS
	SQ. FT.	LUMP SUM	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	CU. FT.	EA.	LN. FT.	LUMP SUM	LUMP SUM	LUMP SUM	CU. FT.	SO. FT.	SO. FT.	SO.YDS.	SO.YDS.	CU. FT.	SO. FT.
74	5426	LUMP SUM	3.0	3.0	31.0	653	4.0	36	77.0	LUMP SUM	LUMP SUM	LUMP SUM	1.0	83	337	653	653	21.0	3.4
75	5426	LUMP SUM	3.0	3.0	31.0	653	9.0	36	6.0	LUMP SUM	LUMP SUM	LUMP SUM	1.0	83	337	653	653	21.0	2.6
TOTAL	10,852	LUMP SUM	6.0	6.0	62.0	1,306	13.0	72	83.0	LUMP SUM	LUMP SUM	LUMP SUM	2.0	166	674	1,306	1,306	42.0	6.0

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74 & 75

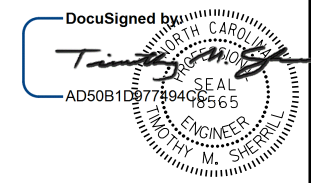
SHEET 1 OF 2

* CLASS II AND CLASS III SURFACE PREPARATION, VOLUMETRIC MIXER AND CONCRETE FOR DECK REPAIR ARE NOT ANTICIPATED. TOKEN PAY ITEMS ARE INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS III SURFACE PREPARATION AREAS ARE ENCOUNTERED.

** THE QUANTITY OF LATEX MODIFIED CONCRETE OVERLAY - VES INCLUDES THE 4" OVERLAP BETWEEN OVERLAYS.

I HEREBY CERTIFY THAT THIS STRUCTURE(S) WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED THEREIN.

RESIDENT ENGINEER _____ DATE _____

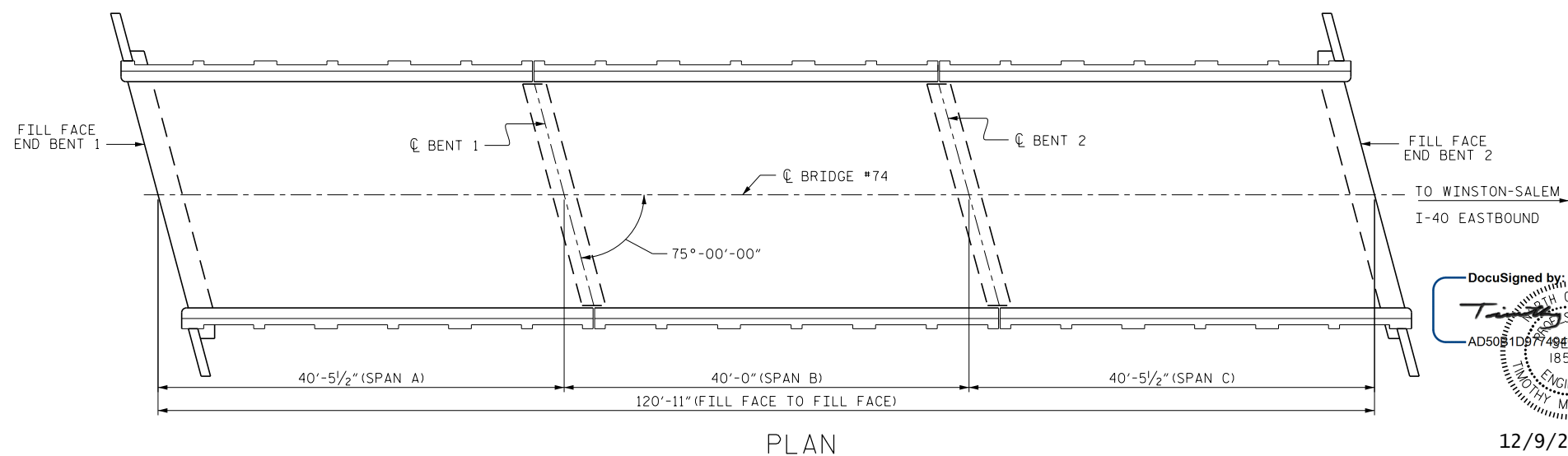
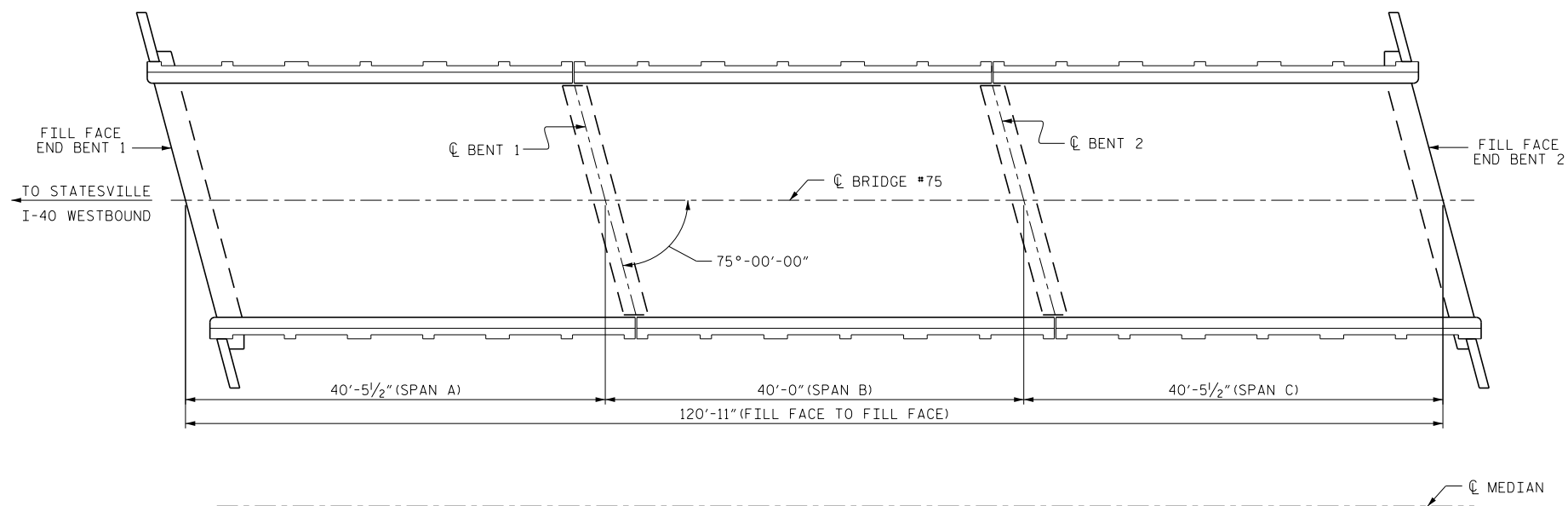
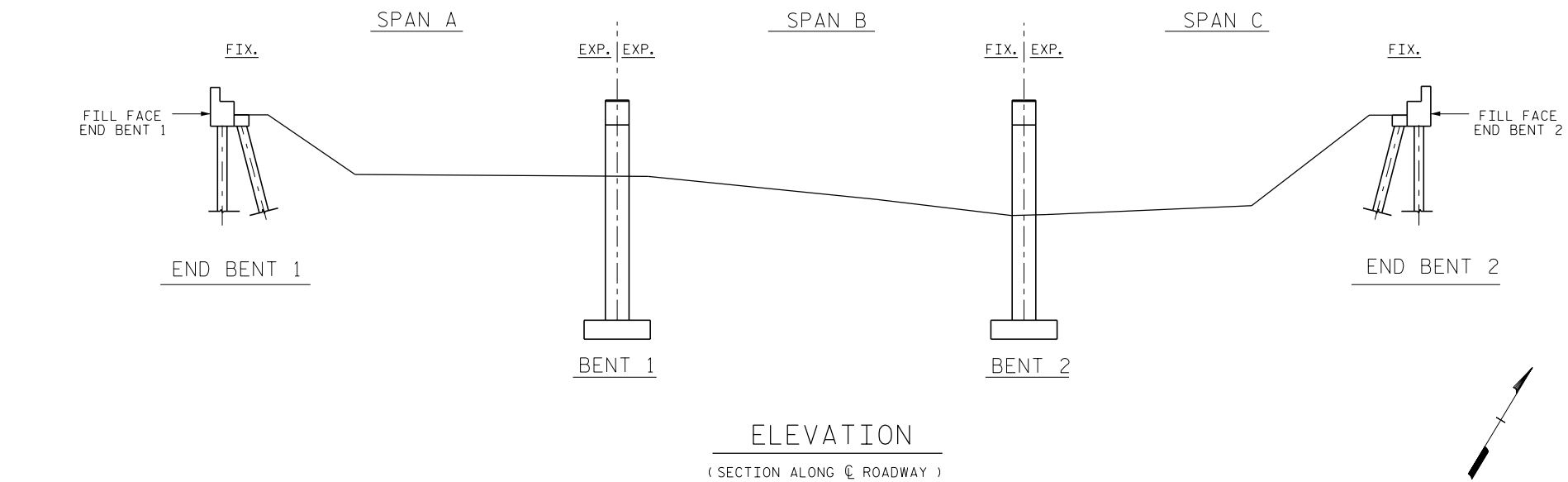


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 BRIDGE OVER CEDAR CREEK
 ON I-40 BETWEEN
 SR 1410 AND SR 1441

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 11/16

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-17
1			3			TOTAL SHEETS
2			4			35



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

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74 & 75
 SHEET 2 OF 2

DocuSigned by:
Timothy M. Sherrill
 AD5081D8774940C...
 18565
 ENGINEER
 TIMOTHY M. SHERRILL

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 BRIDGE OVER CEDAR CREEK
 ON I-40 BETWEEN
 NC 1410 AND NC 1441

DRAWN BY : J.D. HAWK DATE : 10/15
 CHECKED BY : W. SMITH DATE : 1/16

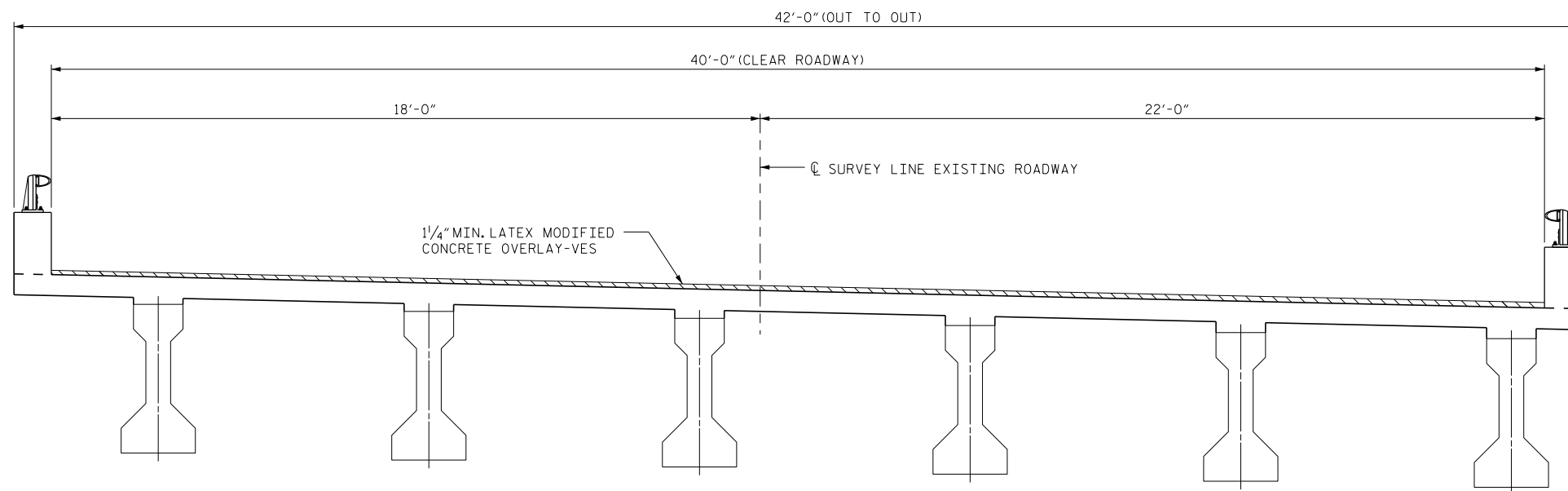
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 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			35

NOTE:

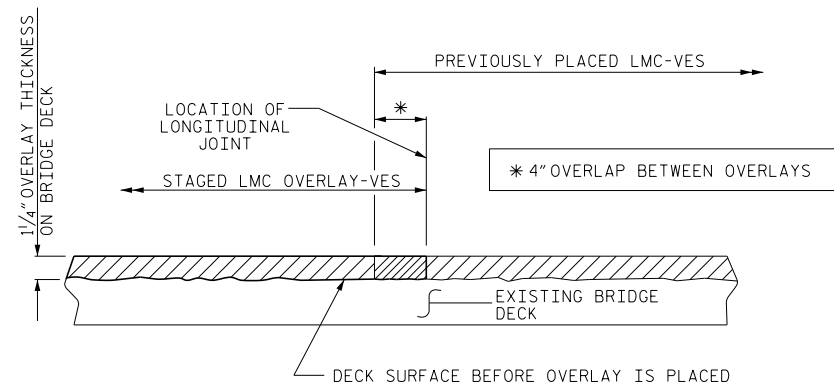
WHEN PREPARING THE SURFACE FOR LMC OVERLAY-VES ADJACENT TO A PREVIOUSLY PLACED LMC-VES STAGE, THE PREVIOUSLY PLACED LMC-VES SHALL BE REMOVED FOR A DISTANCE OF 4-INCHES FROM THE LMC-VES EDGE. THE SURFACE OF THE NEW STAGE AREA, ALONG WITH THE 4 INCH OVERLAY AREA, SHALL BE PREPARED AS PER THE OVERLAY SURFACE PREPARATION SPECIAL PROVISIONS. NEW LMC-VES SHALL BE PLACED IN THE 4-INCH OVERLAP, AS PART OF NEW LMC-VES STAGE PLACEMENT.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE NCDOT STANDARD DRAWINGS 1101.02 SHEETS 3, 4, 8, 9 AND 10.



TYPICAL SECTION

(BRIDGE 74 EASTBOUND LANES SHOWN - BRIDGE 75 WESTBOUND LANES SIMILAR BY ROTATION)

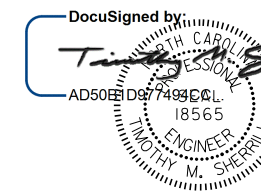


SECTION THRU DECK

STAGED LMC-VES OVERLAY JOINT

(AS NEEDED)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74 & 75



12/9/2016

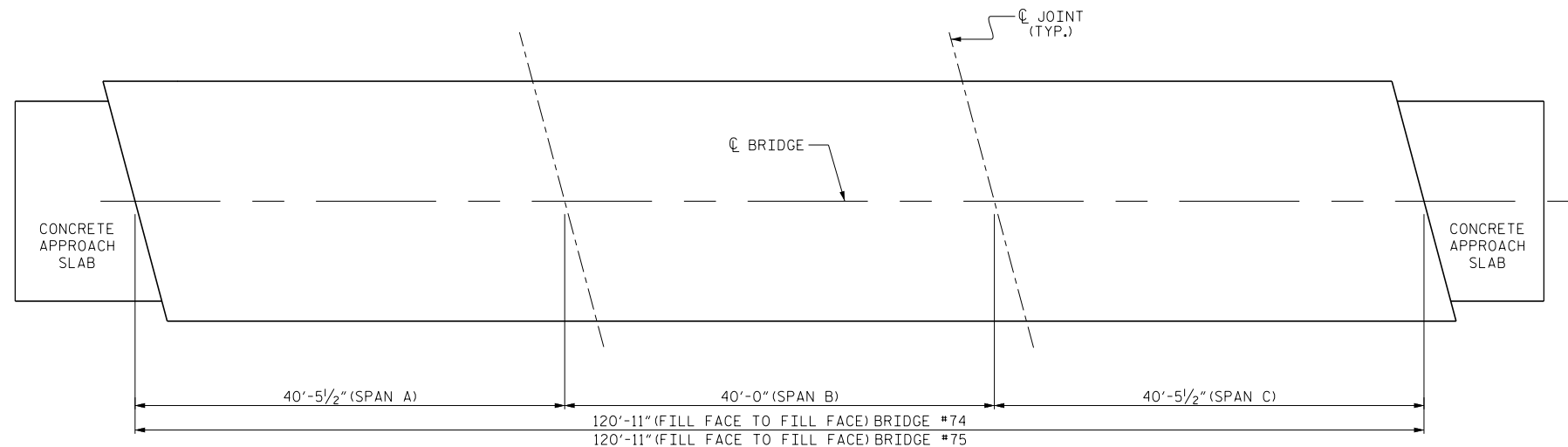
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE
 TYPICAL SECTION
 & LATEX MODIFIED
 CONCRETE-VES

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

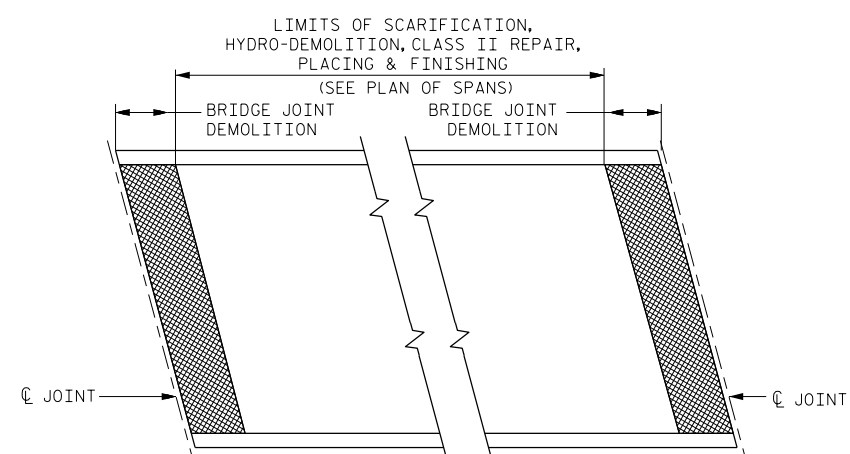
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 wsmith

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

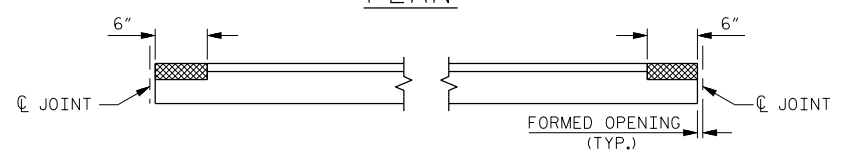
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			19
2			4			35



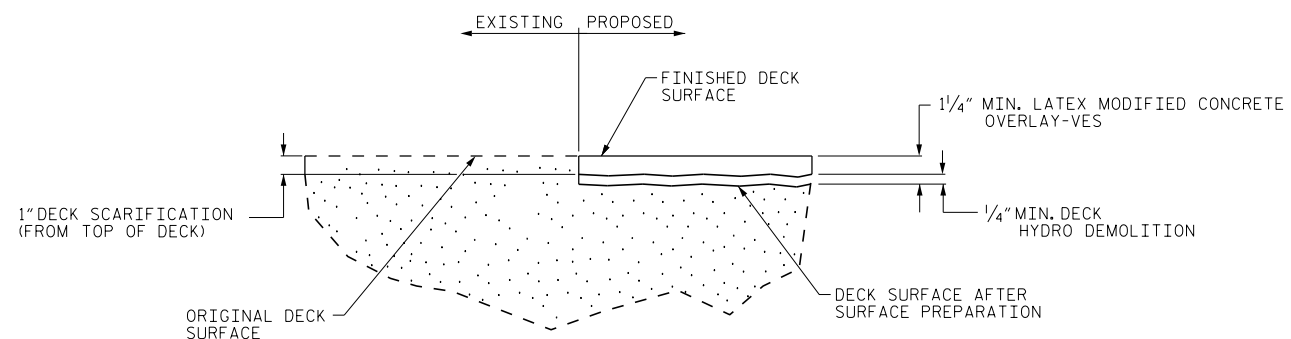
PLAN
(BRIDGE #74 SHOWN, BRIDGE #75 SIMILAR)



PLAN



ELEVATION



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY-VES

DECK SCARIFICATION, HYDRO-DEMOLITION, AND LATEX MODIFIED CONCRETE OVERLAY-VES

PROJECT NO. I-5765
DAVIE COUNTY
BRIDGE NO. 74 & 75

DocuSigned by:
Timothy M. Sheerill
AD50E1D977494CC...
18565
TIMOTHY M. SHEERILL
ENGINEER

12/9/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
SURFACE PREPARATION

DRAWN BY : J.D. HAWK DATE : 11/15
CHECKED BY : W. SMITH DATE : 1/16

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

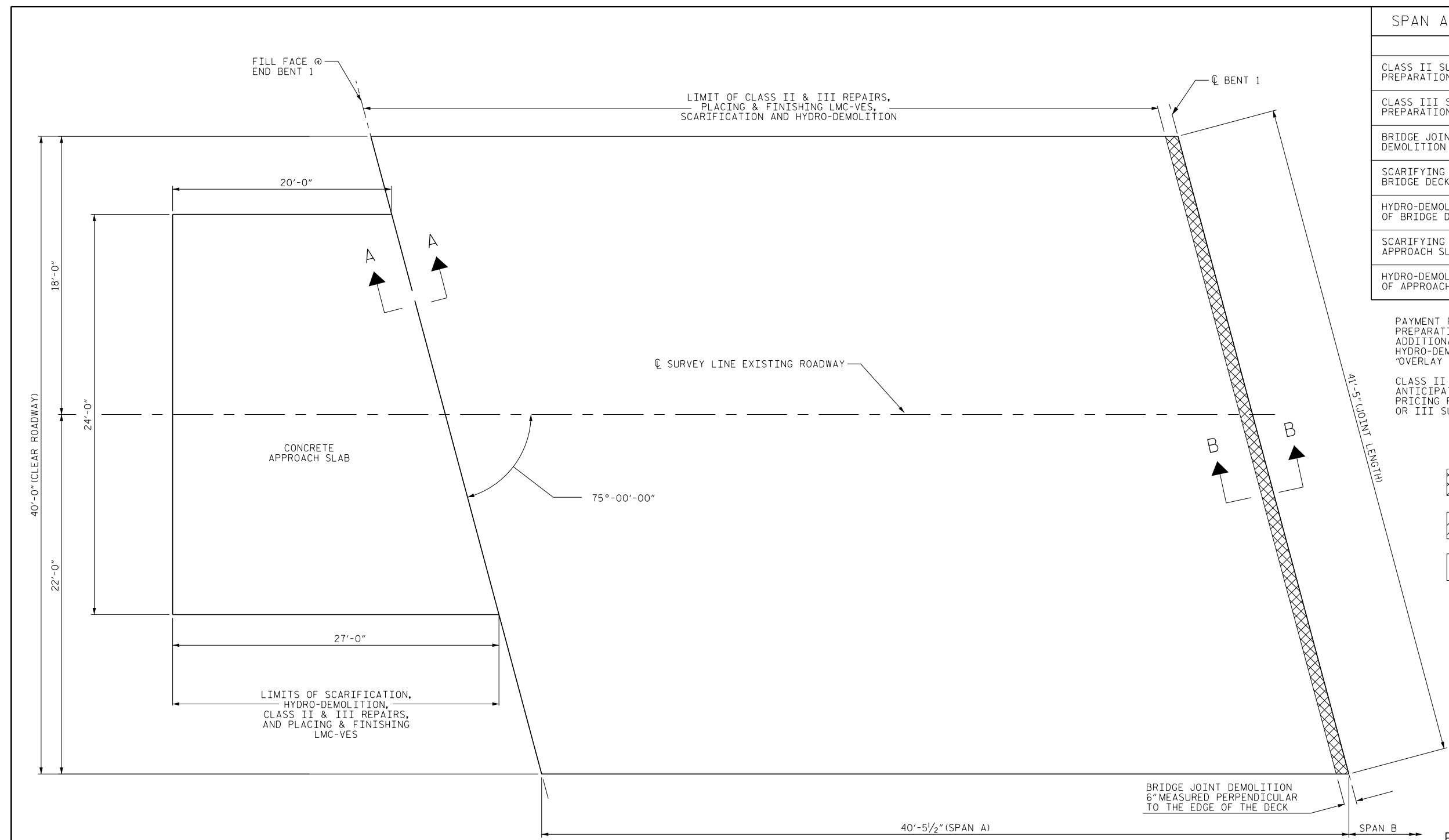
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS
2			4			35

SPAN A AND APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	21.0 SQ. FT.	
SCARIFYING BRIDGE DECK	177.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	177.0 SQ. YDS.	
SCARIFYING APPROACH SLAB	63.0 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	63.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

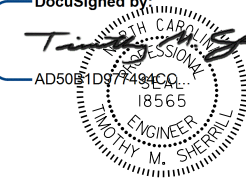
CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PLAN OF SPAN A
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74
 SHEET 1 OF 3

DocuSigned by:

 AD5081D977494C0...
 18565
 ENGINEER
 TIMOTHY M. SHERRILL
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SURFACE PREPARATION
 SPAN A AND APPROACH SLAB

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16




DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

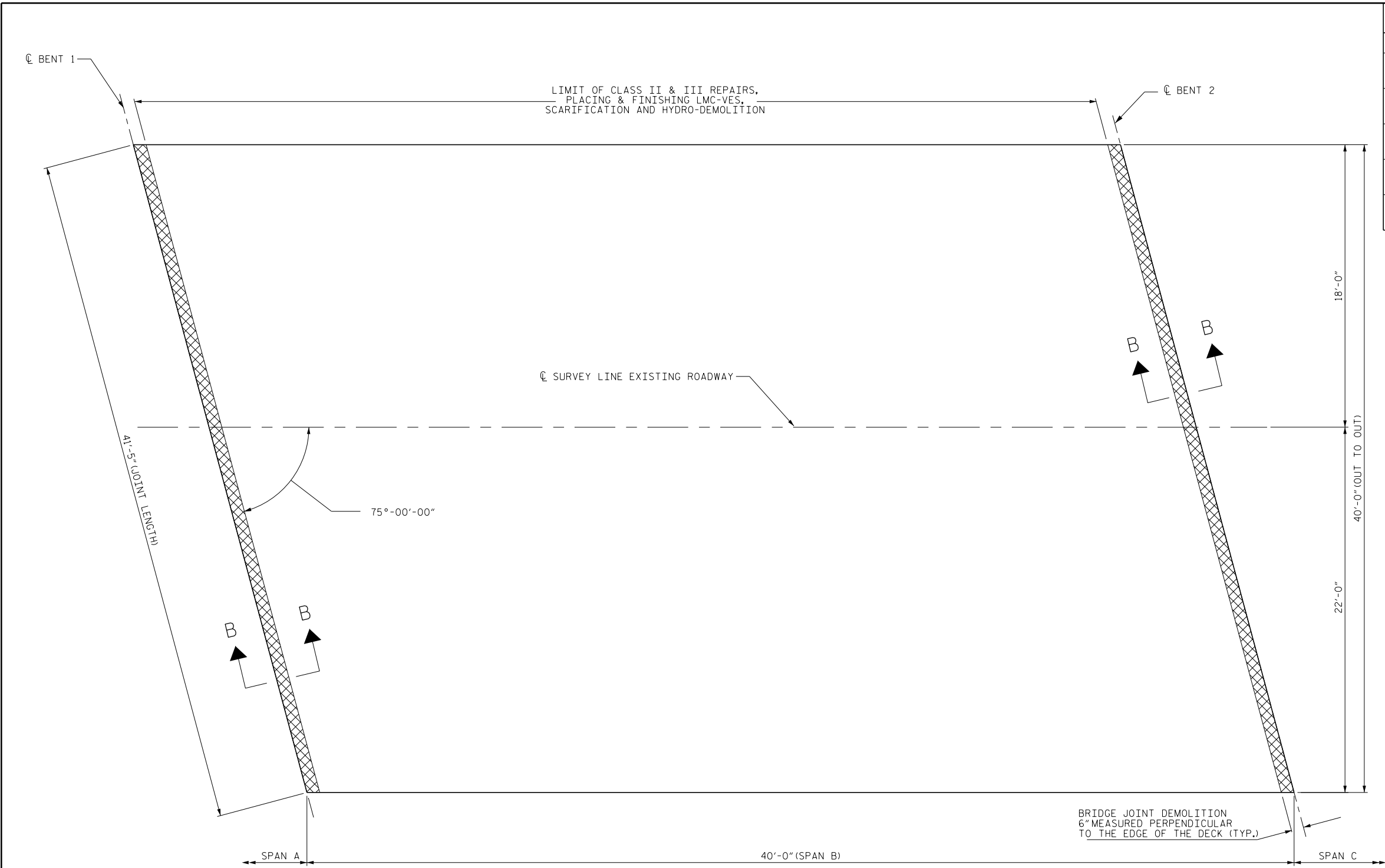
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-21 TOTAL SHEETS 35
2			4			

SPAN B QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	41.0 SQ. FT.	
SCARIFYING BRIDGE DECK	173.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	173.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



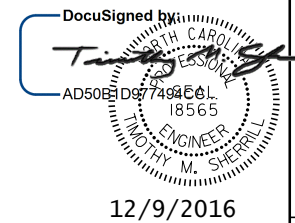
PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74

SHEET 2 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SURFACE PREPARATION
 SPAN B**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-22
1			3			TOTAL SHEETS 35
2			4			



12/9/2016




DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : ???

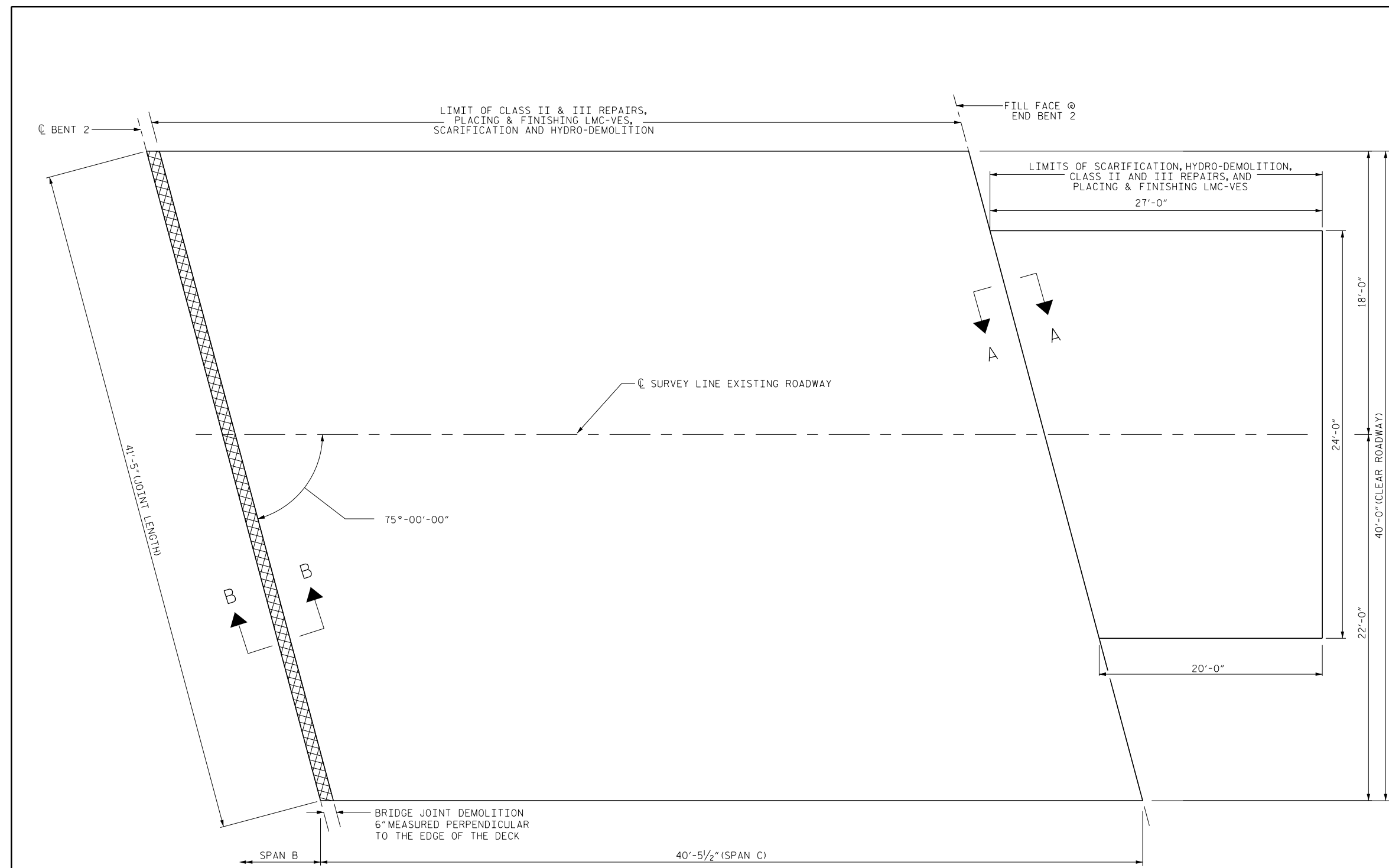
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPAN C AND APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	21.0 SQ. FT.	
SCARIFYING BRIDGE DECK	177.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	177.0 SQ. YDS.	
SCARIFYING APPROACH SLAB	63.0 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	63.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES. IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74

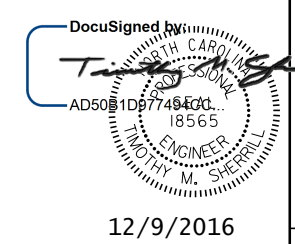
SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

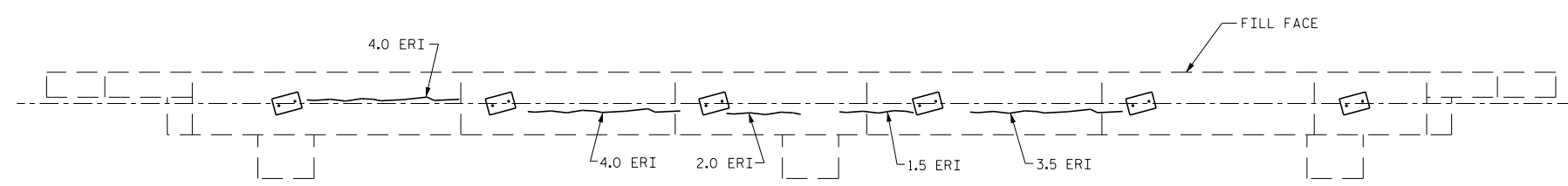
SURFACE PREPARATION
 SPAN C AND APPROACH SLAB

12/9/2016

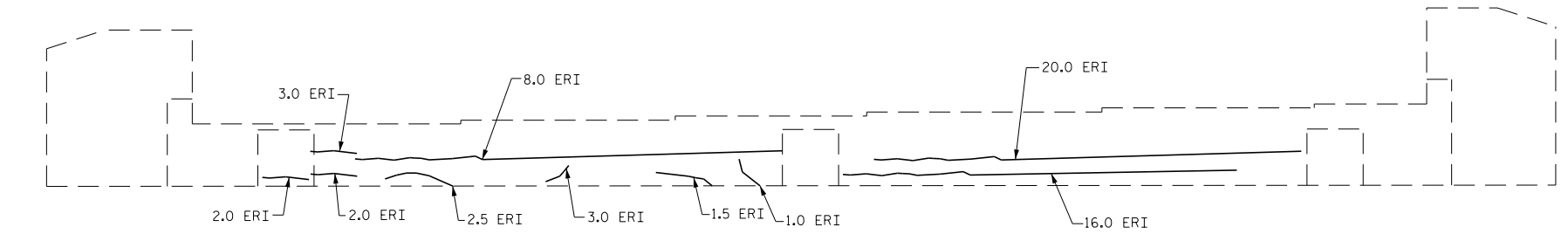
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1			3			TOTAL SHEETS
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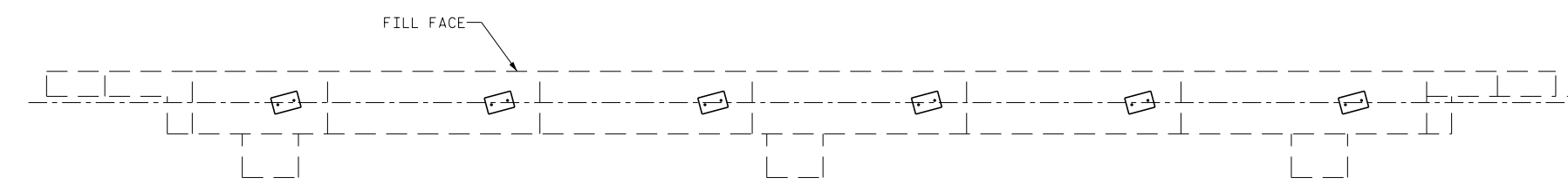
DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16



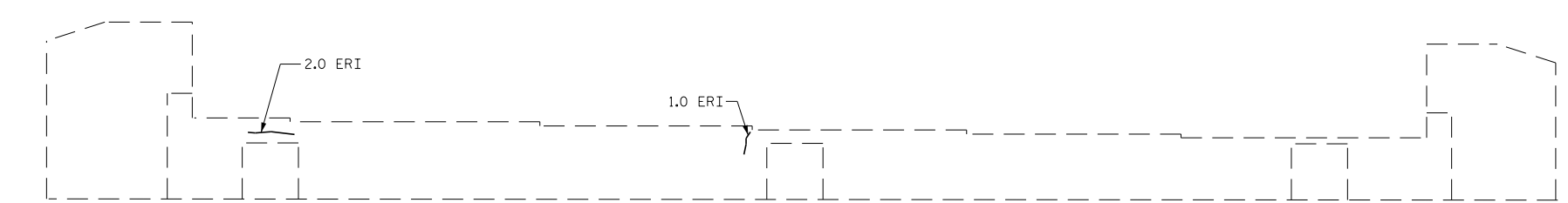
PLAN
END BENT 1



ELEVATION
END BENT 1



PLAN
END BENT 2



ELEVATION
END BENT 2

▨ SHOTCRETE REPAIRS
ERI EPOXY RESIN INJECTION

REPAIR QUANTITY TABLE

END BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			74.0	
EPOXY COATING	AREA SF			
CAP	62.5			
END BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			3.0	
EPOXY COATING	AREA SF			
CAP	62.5			

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

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

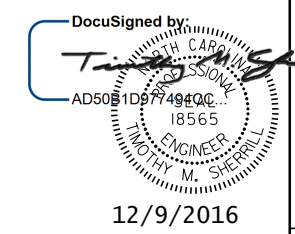
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR REPAIR DETAILS, SEE TYPICAL CAP AND COLUMN REPAIR DETAILS SHEET.

PROJECT NO. I-5765
DAVIE COUNTY
BRIDGE NO.: 74



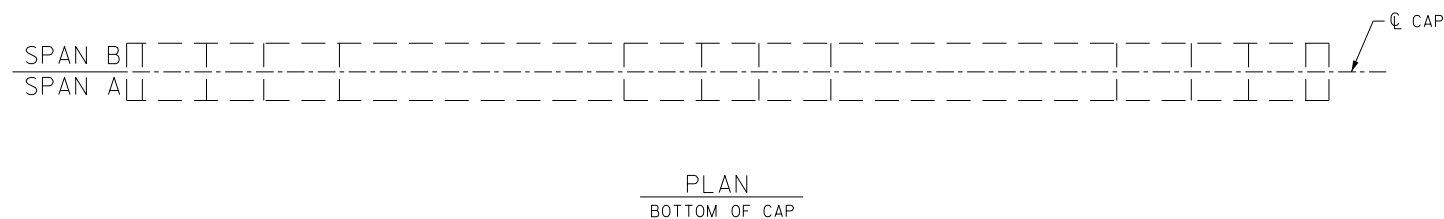
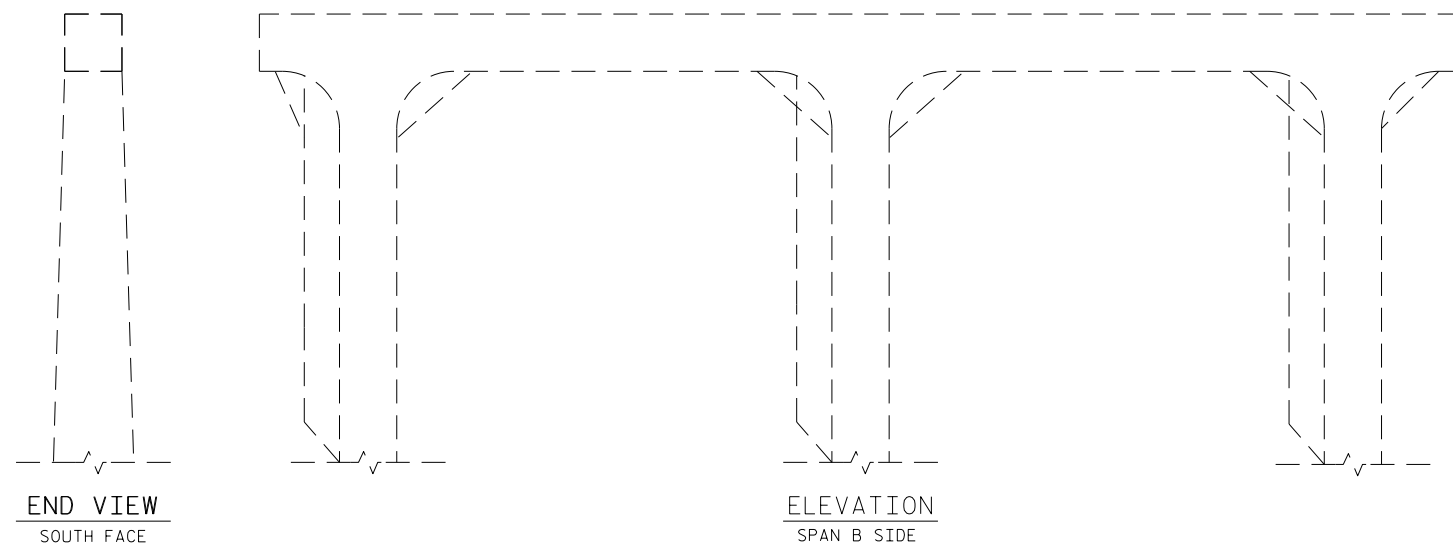
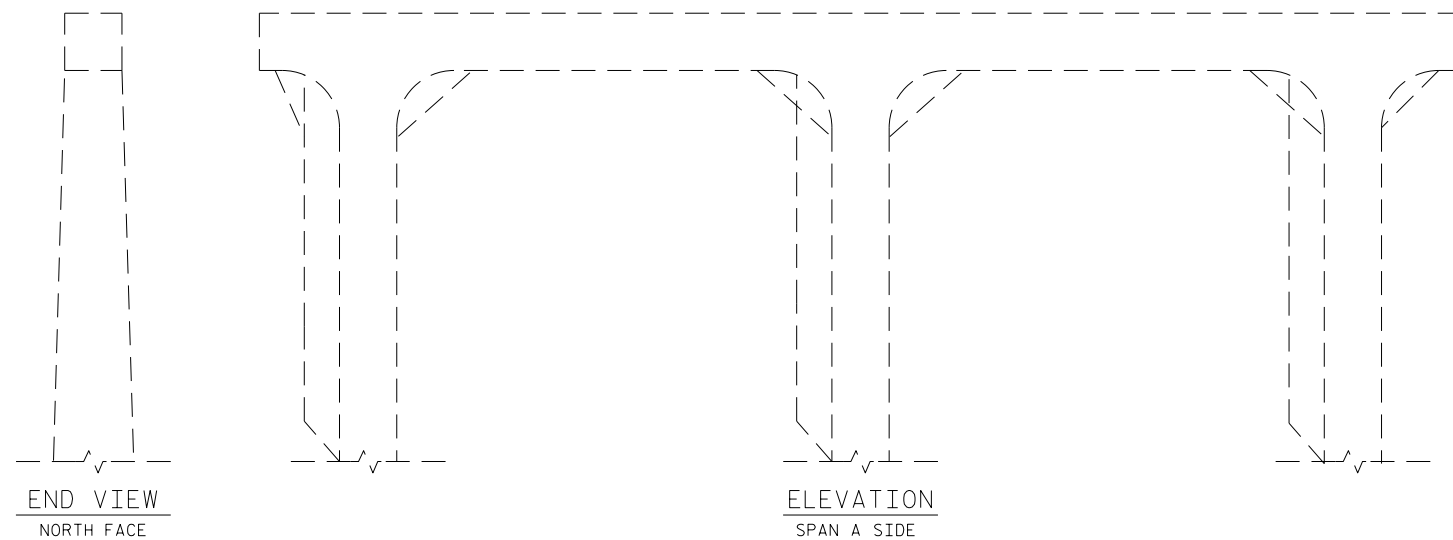
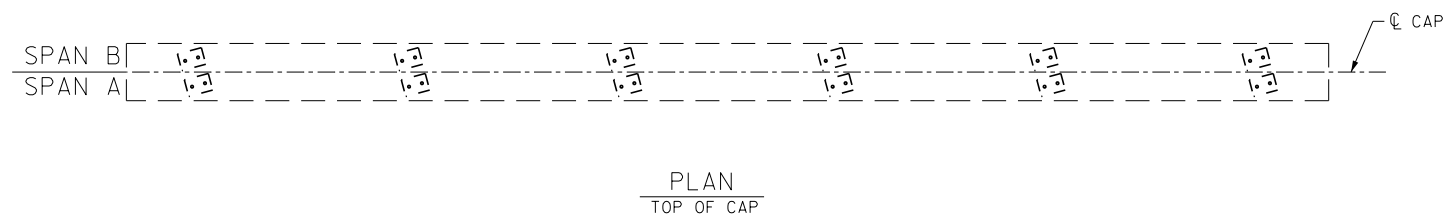
12/9/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 1 & 2
EBL

DRAWN BY : J.D. HAWK DATE : 11-2015
CHECKED BY : W. SMITH DATE : 1/16

NO.	BY:	DATE:	REVISIONS		SHEET NO.
			NO.	DATE:	
1			3		S-24 TOTAL SHEETS 35
2			4		



REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0	0		
CAP (HORIZONTAL, CORNER)	0	0		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		106.0		

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

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

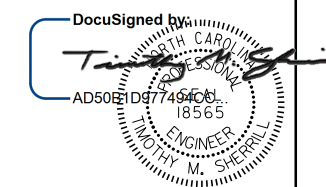
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS

ERI - EPOXY RESIN INJECTION

NO REPAIRS NOTED DURING INSPECTION BY STRUCTURES MANAGEMENT UNIT. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE BENT PRIOR TO BEGINNING WORK.

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 74



12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

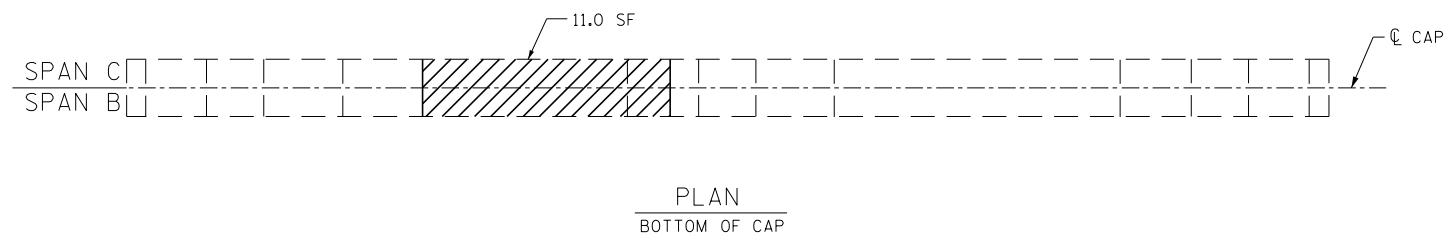
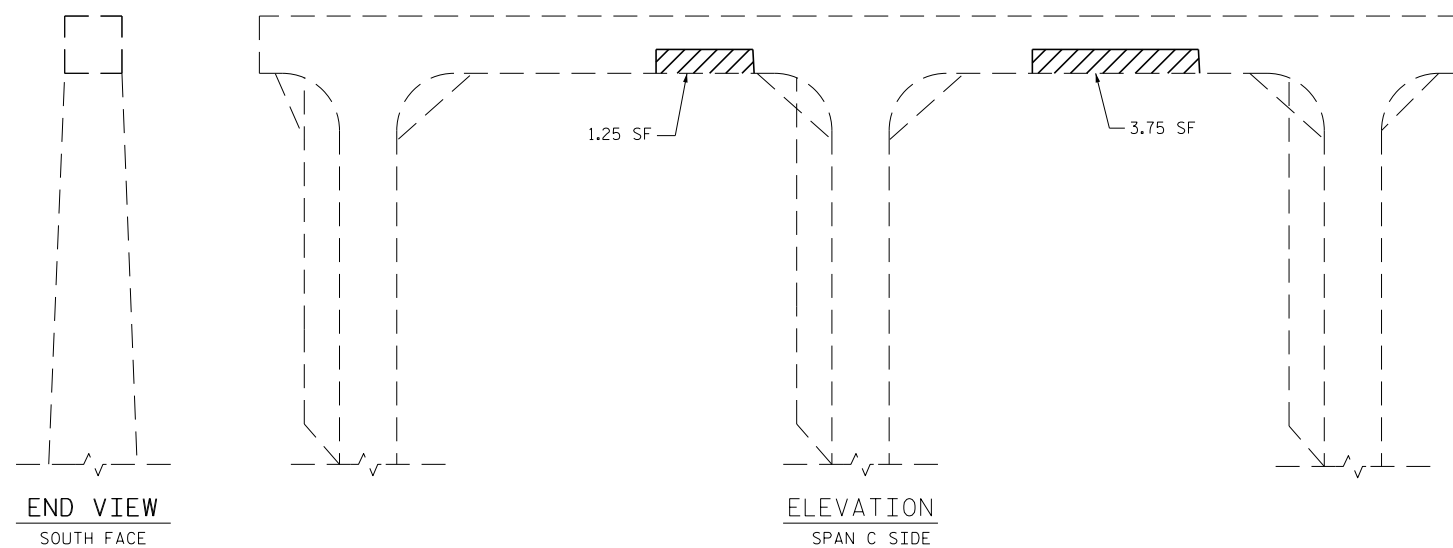
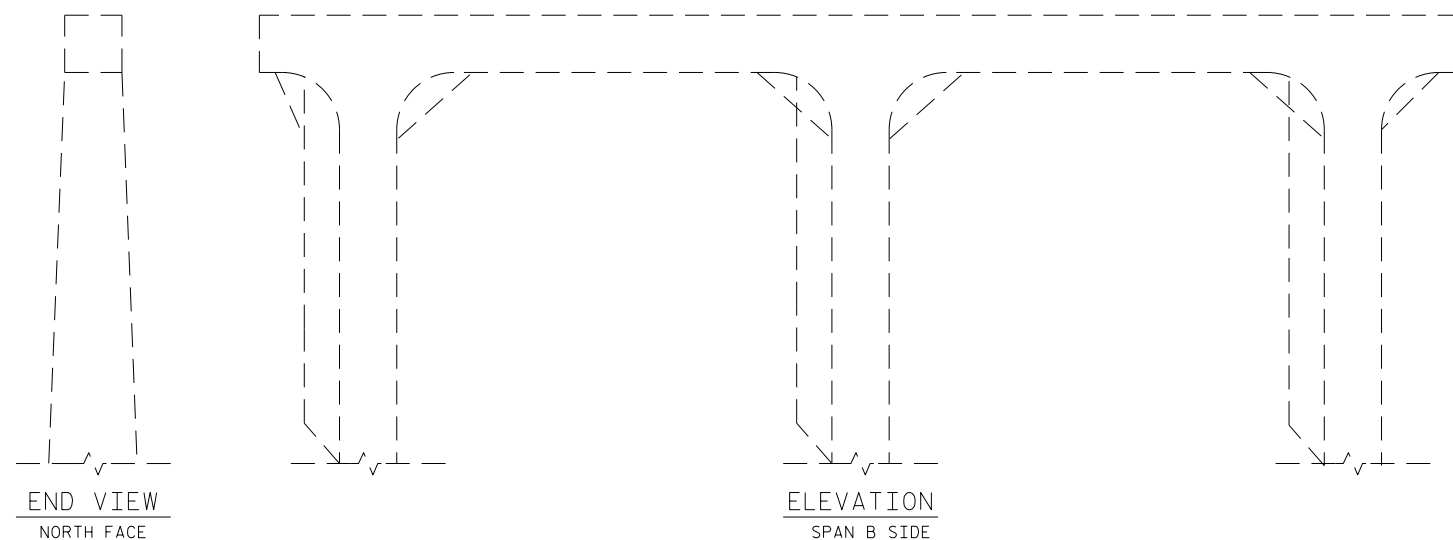
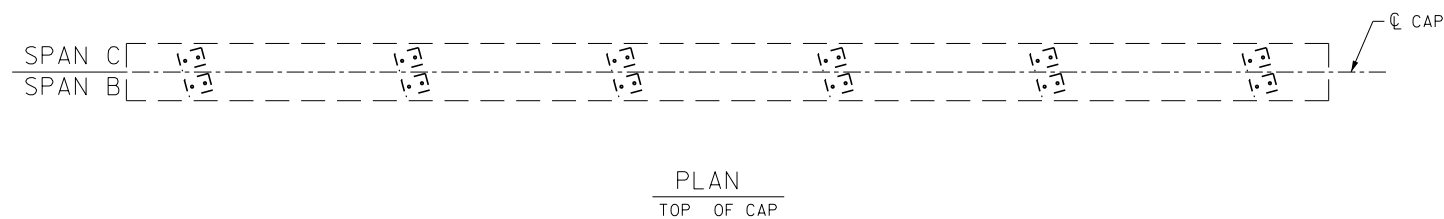
SUBSTRUCTURE
 BENT 1
 (EBL)

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S-25
2			4			TOTAL SHEETS 35

DRAWN BY : J.D. HAWK DATE : 11-15
 CHECKED BY : W. SMITH DATE : 1/16

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REPAIR QUANTITY TABLE

REPAIRS BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	5.0	1.25		
CAP (HORIZONTAL, CORNER)	11.0	2.75		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION		LN. FT		LN. FT
CAP		0		
COLUMN		0		
EPOXY COATING		SO. FT		SO. FT
TOP OF CAP		106.0		

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

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

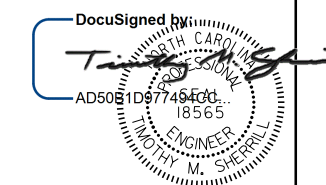
FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

- SHOTCRETE REPAIRS

ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 74



12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 BENT 2
 (EBL)

DRAWN BY : J.D. HAWK DATE : 11-15
 CHECKED BY : W. SMITH DATE : 1/16

09-DEC-2016 10:05
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 wsmith




REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-26
1			3			TOTAL SHEETS
2			4			35

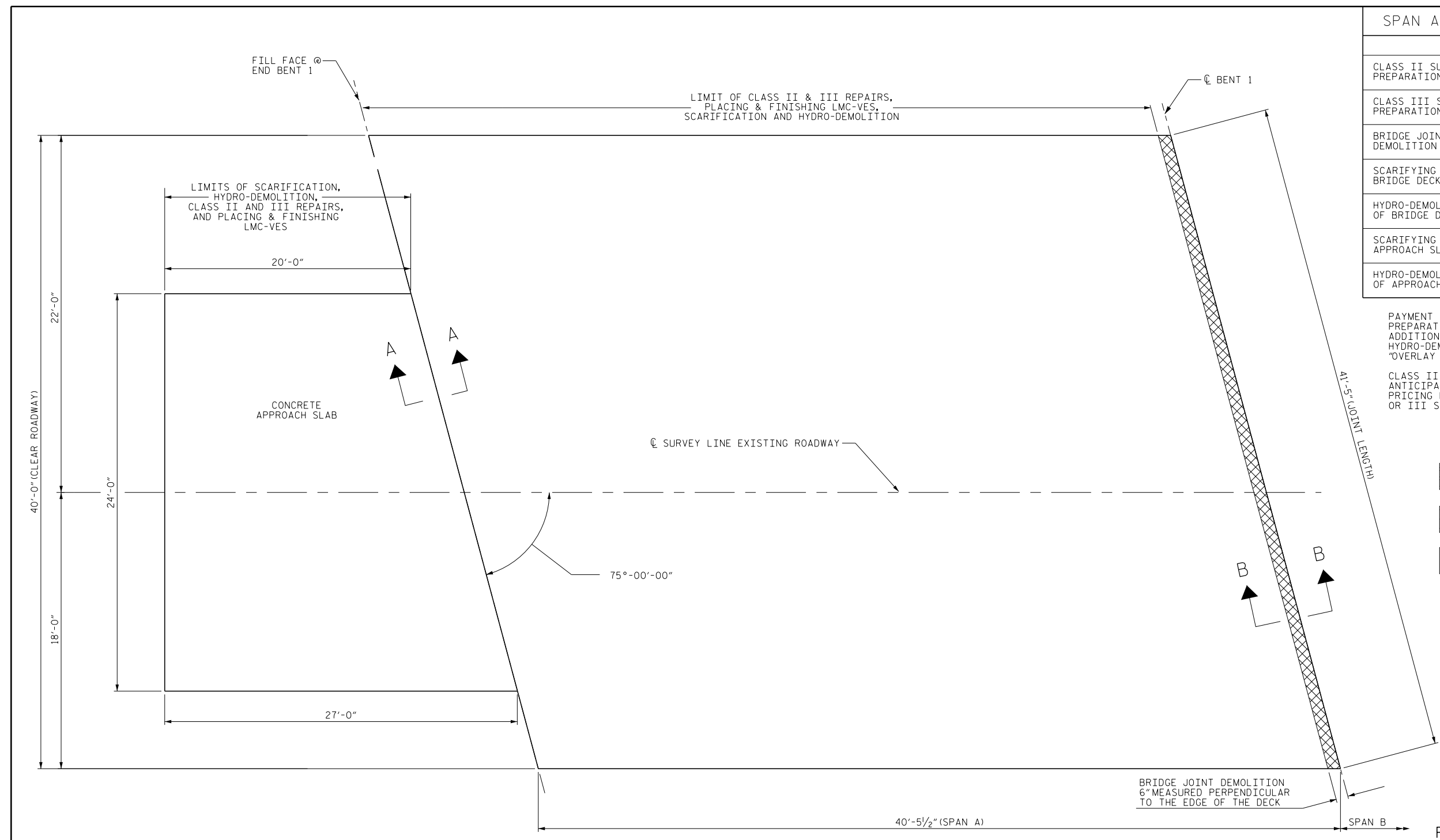
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPAN A AND APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	21.0 SQ. FT.	
SCARIFYING BRIDGE DECK	177.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	177.0 SQ. YDS.	
SCARIFYING APPROACH SLAB	63.0 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	63.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.


-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 75

SHEET 1 OF 3

PLAN OF SPAN A
 (FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

DocuSigned by

 AD5081D977484C18565
 ENGINEER
 TIMOTHY M. SHERRILL
 12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN A AND APPROACH SLAB
 (WBL)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-27
1			3			TOTAL SHEETS
2			4			35




DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

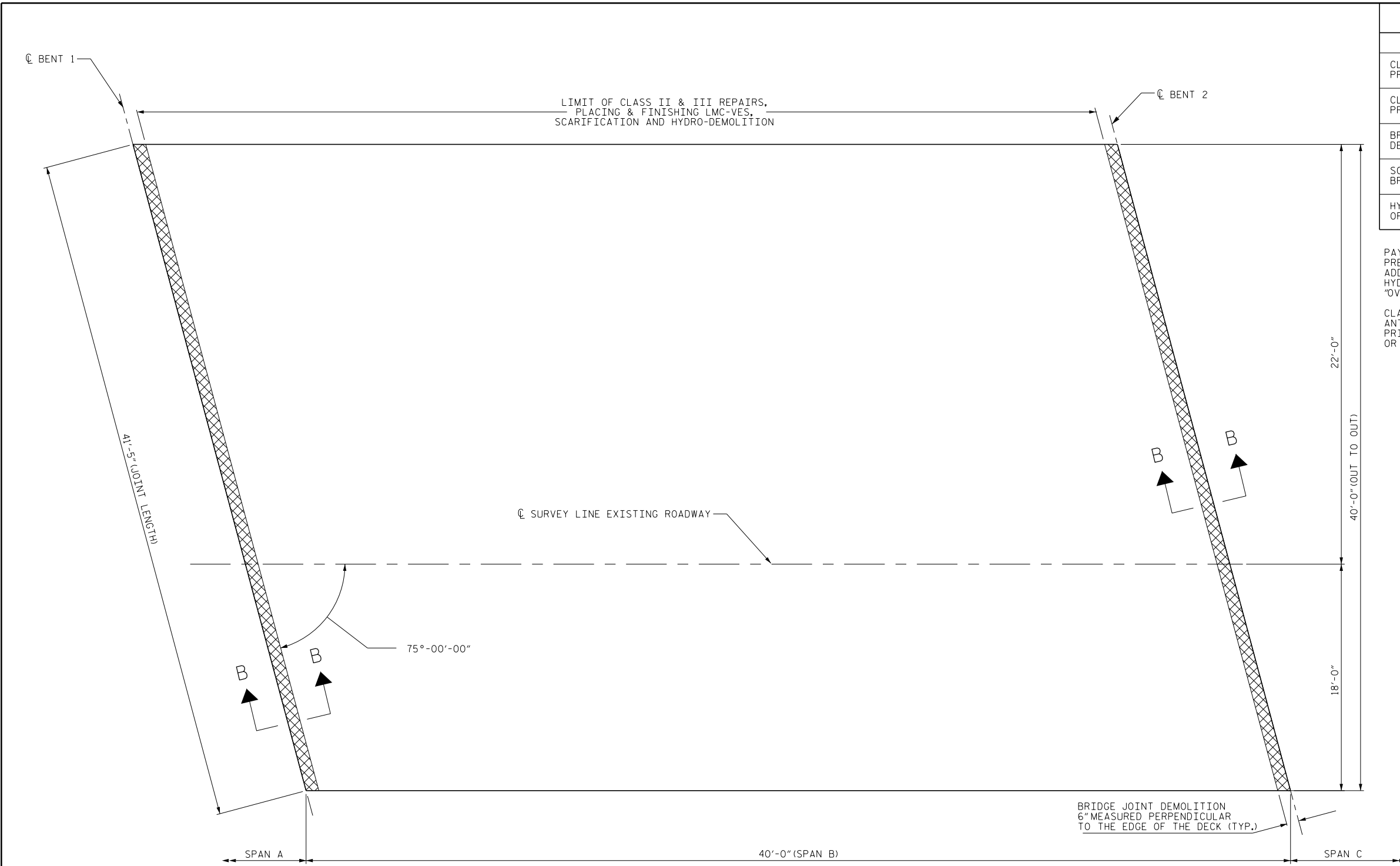
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPAN B QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	41.0 SQ. FT.	
SCARIFYING BRIDGE DECK	173.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	173.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.

CLASS II OR III SURFACE PREPARATION IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CLASS II OR III SURFACE PREPARATION ARE ENCOUNTERED.

-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 75

SHEET 2 OF 3


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN B
 (WBL)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			35
2			4			

AD50B1D974986CL 18565
 ENGINEER
 TIMOTHY M. SHERILL

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

DocuSigned by:

 AD50B1D974986CL 18565
 ENGINEER
 TIMOTHY M. SHERILL




12/9/2016

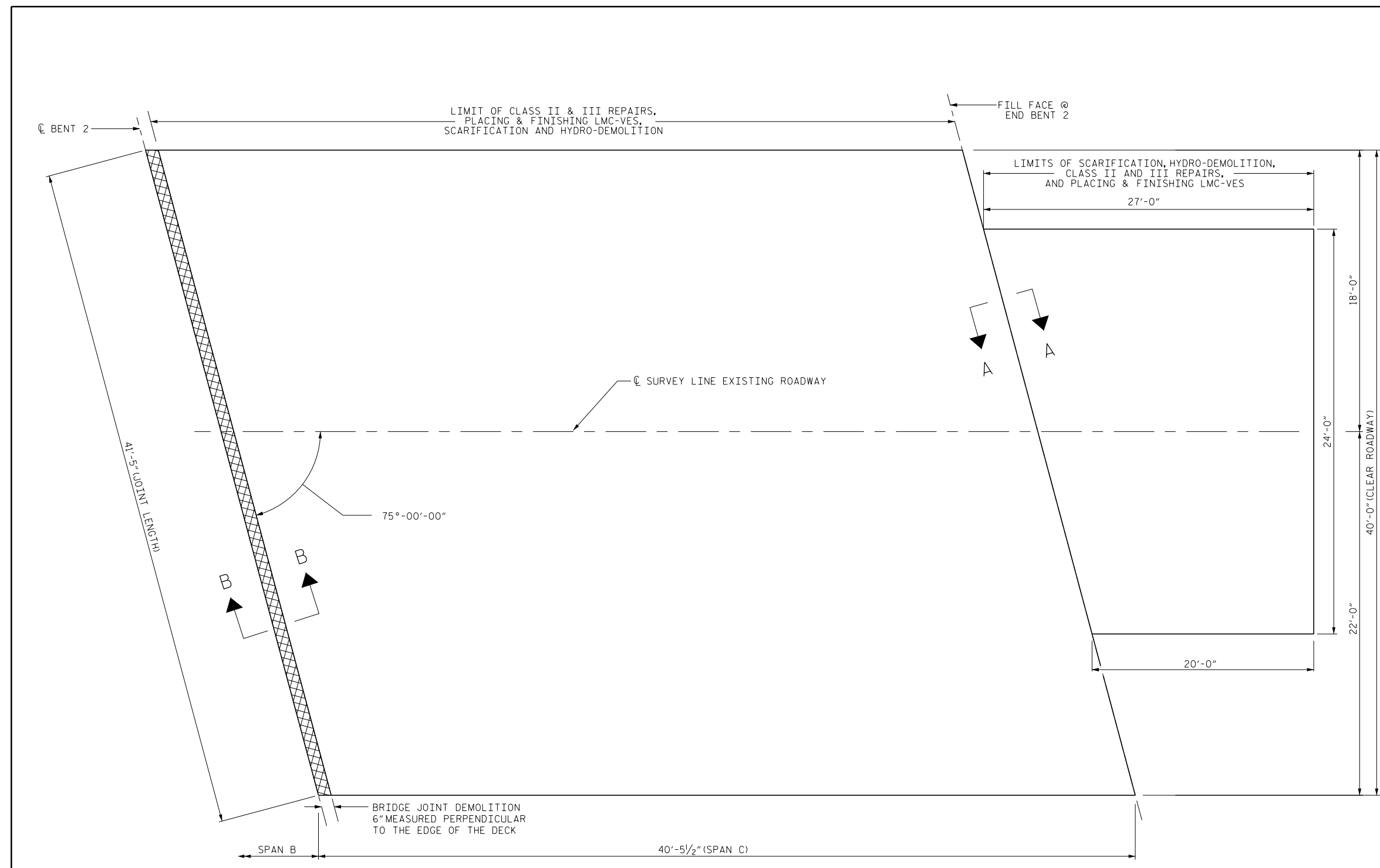
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPAN C AND APPR. SLAB QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	1.0 SQ. YDS.	
CLASS III SURFACE PREPARATION	1.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	21.0 SQ. FT.	
SCARIFYING BRIDGE DECK	177.0 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	177.0 SQ. YDS.	
SCARIFYING APPROACH SLAB	63.0 SQ. YDS.	
HYDRO-DEMOLITION OF APPROACH SLAB	63.0 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISIONS.


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-  - BRIDGE JOINT DEMOLITION
-  - CLASS II & III SURFACE PREPARATION
-  - SCARIFICATION & HYDRO-DEMOLITION



PLAN OF SPAN C
(FOR SECTIONS A-A & B-B, SEE "JOINT DETAILS" SHEET S-34)

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 75
 SHEET 3 OF 3

DocuSigned by

 AD5081D97748ECC-18565
 ENGINEER
 TIMOTHY M. SHERRILL
 12/9/2016

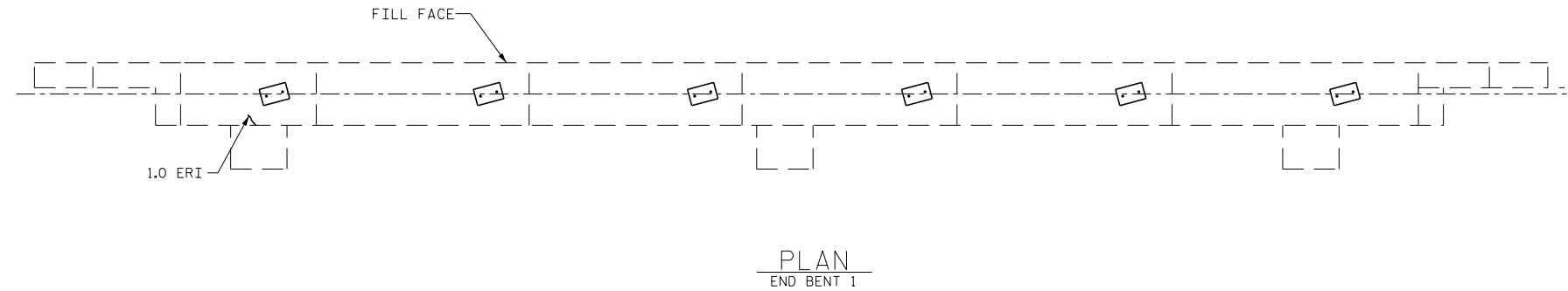
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SURFACE PREPARATION
 SPAN C AND APPROACH SLAB
 (WBL)

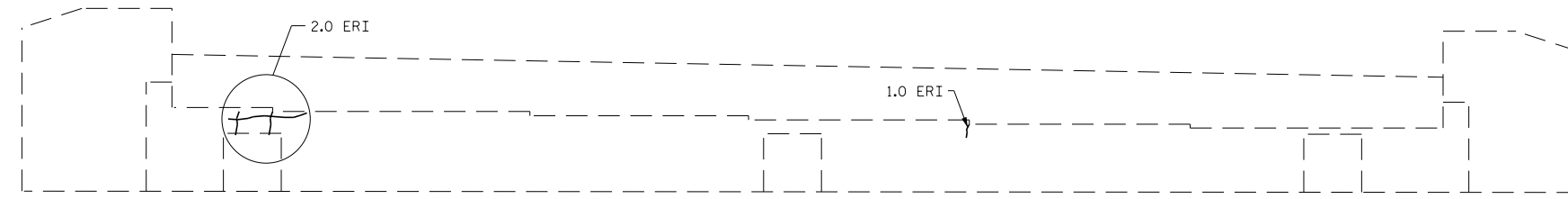
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NO.	BY:	DATE:	NO.	BY:	DATE:	S-29
1			3			TOTAL SHEETS
2			4			35

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 CHECKED BY : W. SMITH DATE : 1/16

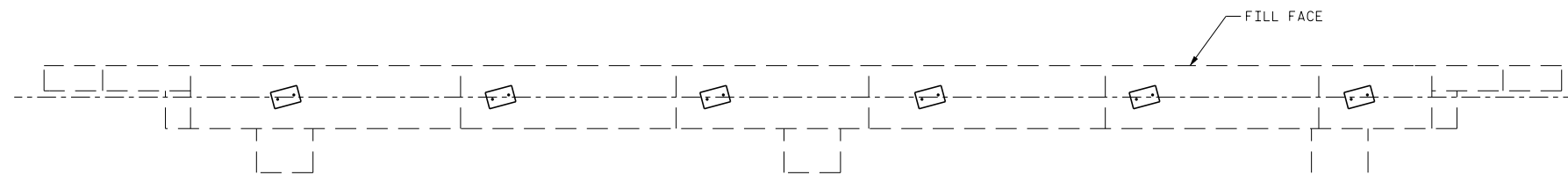
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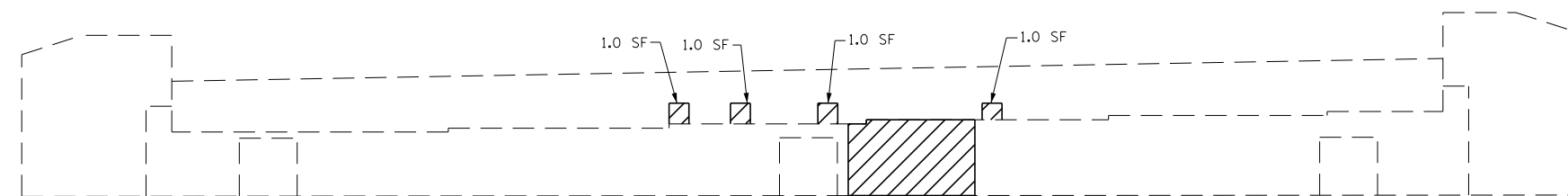
PLAN
END BENT 1




ELEVATION
END BENT 1



PLAN
END BENT 2



ELEVATION
END BENT 2

 SHOTCRETE REPAIRS
 ERI EPOXY RESIN INJECTION

REPAIR QUANTITY TABLE

END BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			4.0	
EPOXY COATING	AREA SF			
CAP	62.5			
END BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	7.0	2.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
EPOXY RESIN INJECTION			LN. FT	LN. FT
CAP			0.0	
EPOXY COATING	AREA SF			
CAP	62.5			

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

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

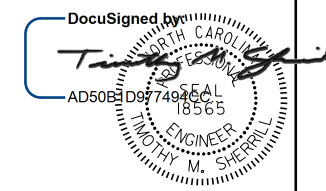
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR REPAIR DETAILS, SEE TYPICAL CAP AND COLUMN REPAIR DETAILS SHEET.

PROJECT NO. I-5765
 DAVIE COUNTY
 BRIDGE NO.: 75



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 1 & 2
 (WBL)

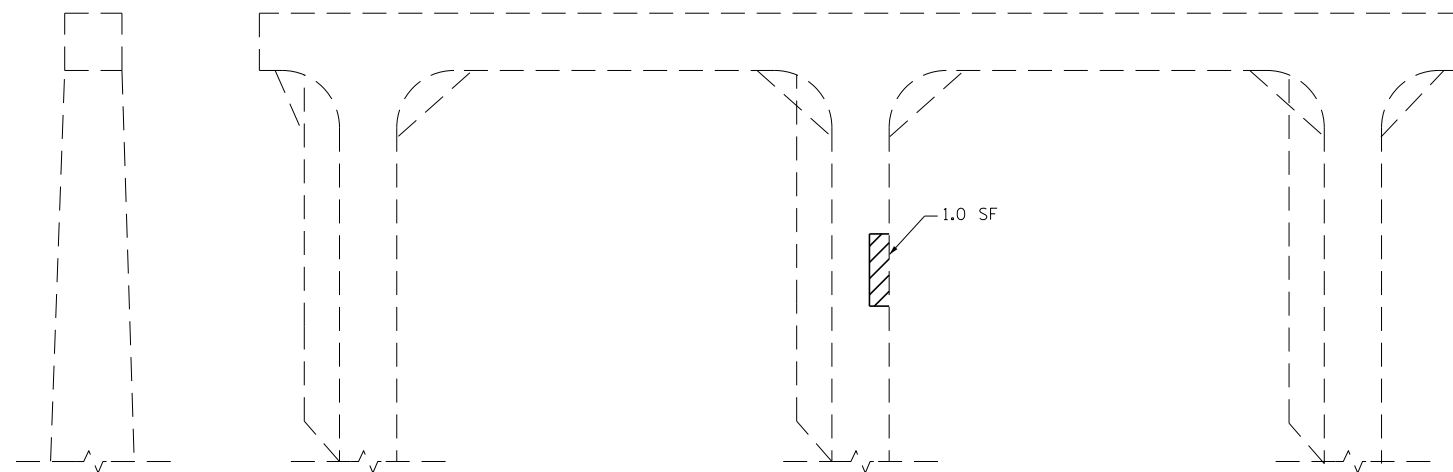
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 CHECKED BY : W. SMITH DATE : 1/16

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-30
1			3			TOTAL SHEETS
2			4			35

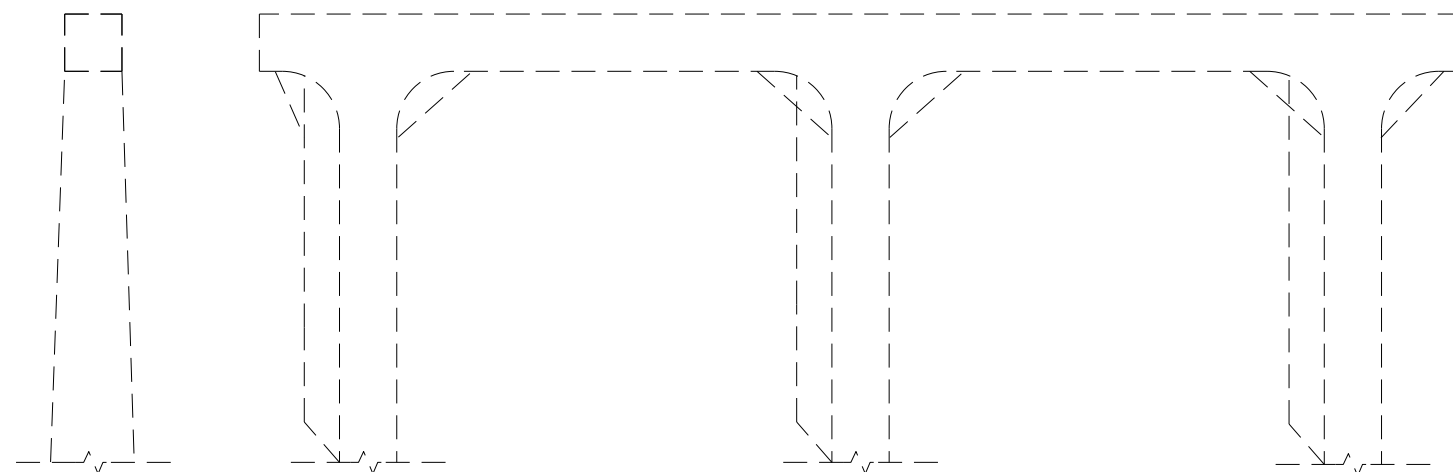


PLAN
TOP OF CAP



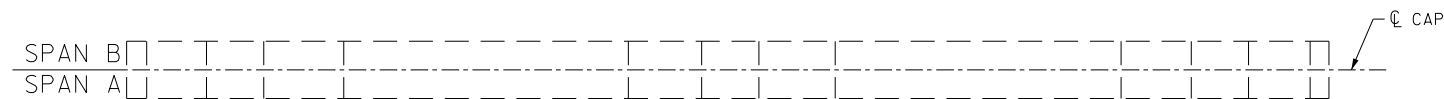
END VIEW
NORTH FACE

ELEVATION
SPAN A SIDE



END VIEW
SOUTH FACE

ELEVATION
SPAN B SIDE



PLAN
BOTTOM OF CAP

REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0	0		
CAP (HORIZONTAL, CORNER)	0	0		
COLUMN (HORIZONTAL FACE)	1.0	0.5		
EPOXY RESIN INJECTION	LN. FT		LN. FT	
CAP	0			
COLUMN	0			
EPOXY COATING	SQ. FT		SQ. FT	
TOP OF CAP	106.0			

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

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CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

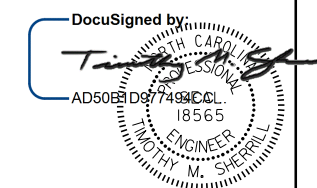
FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

- SHOTCRETE REPAIRS

ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
BRIDGE NO.: 75



12/9/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

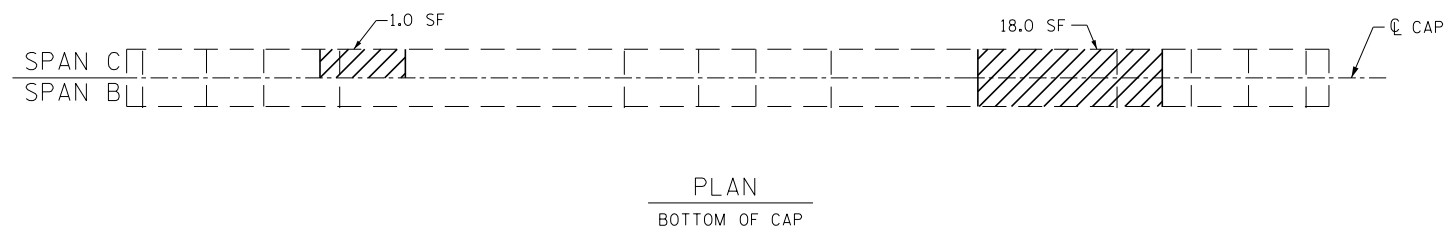
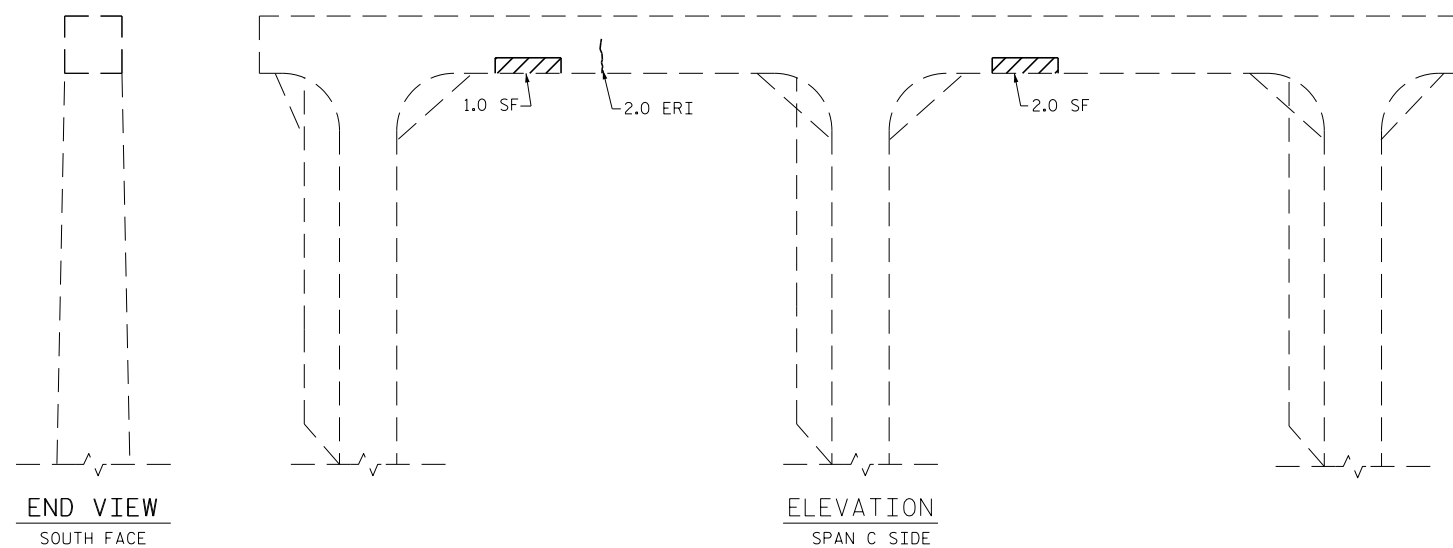
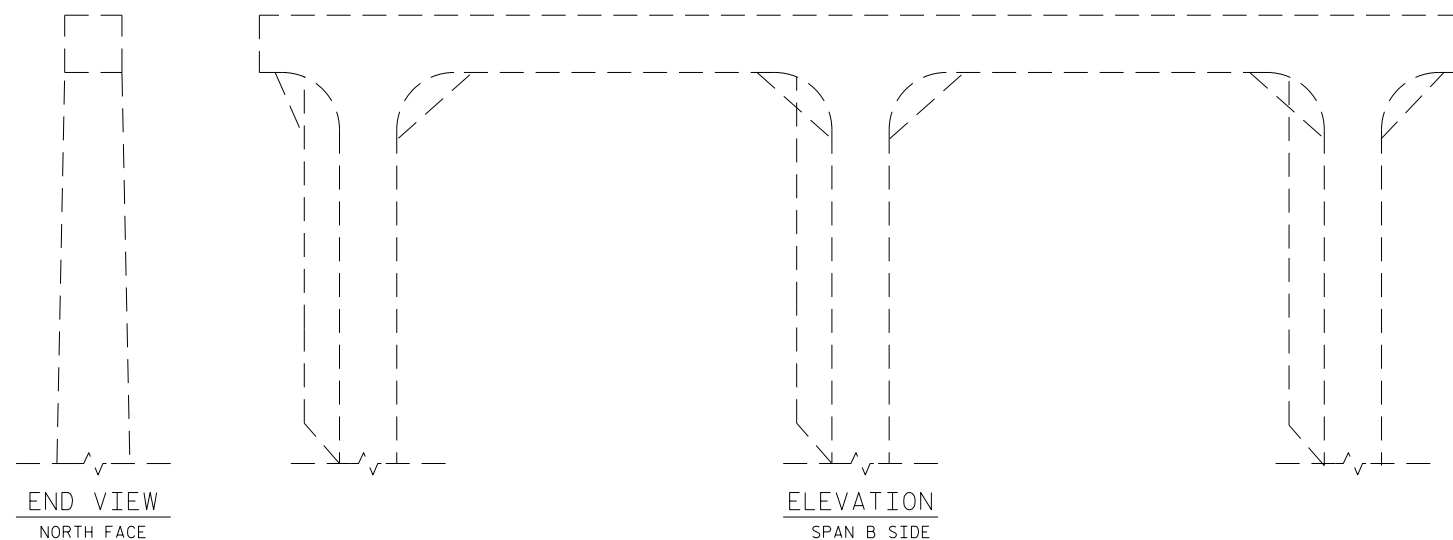
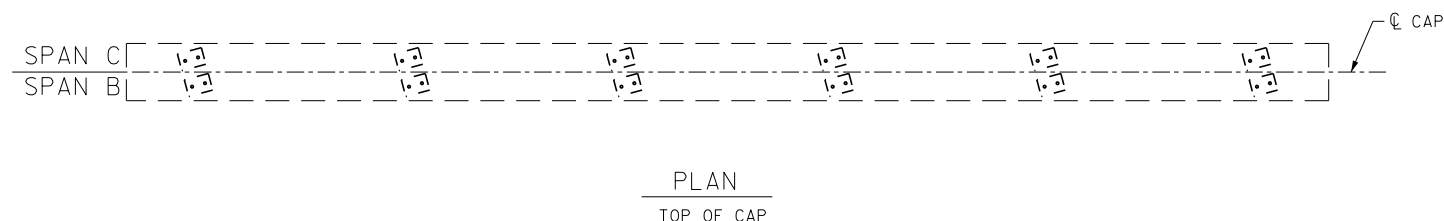
BENT 1
(WBL)

REVISIONS SHEET NO.

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NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			35
2			4			

DRAWN BY : J.D. HAWK DATE : 11-15
CHECKED BY : W. SMITH DATE : 1/16



REPAIR QUANTITY TABLE				
REPAIRS BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	3.0	1.0		
CAP (HORIZONTAL, CORNER)	19.0	5.5		
COLUMN (HORIZONTAL FACE)	0	0		
EPOXY RESIN INJECTION	LN. FT		LN. FT	
CAP	2.0			
COLUMN	0			
EPOXY COATING	SQ. FT		SQ. FT	
TOP OF CAP	106.0			

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

NOTES:
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 CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.
 FOR REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.
 FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.
 FOR EPOXY COATING, SEE SPECIAL PROVISIONS.
 FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

▨ - SHOTCRETE REPAIRS
 ERI - EPOXY RESIN INJECTION

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO.: 75

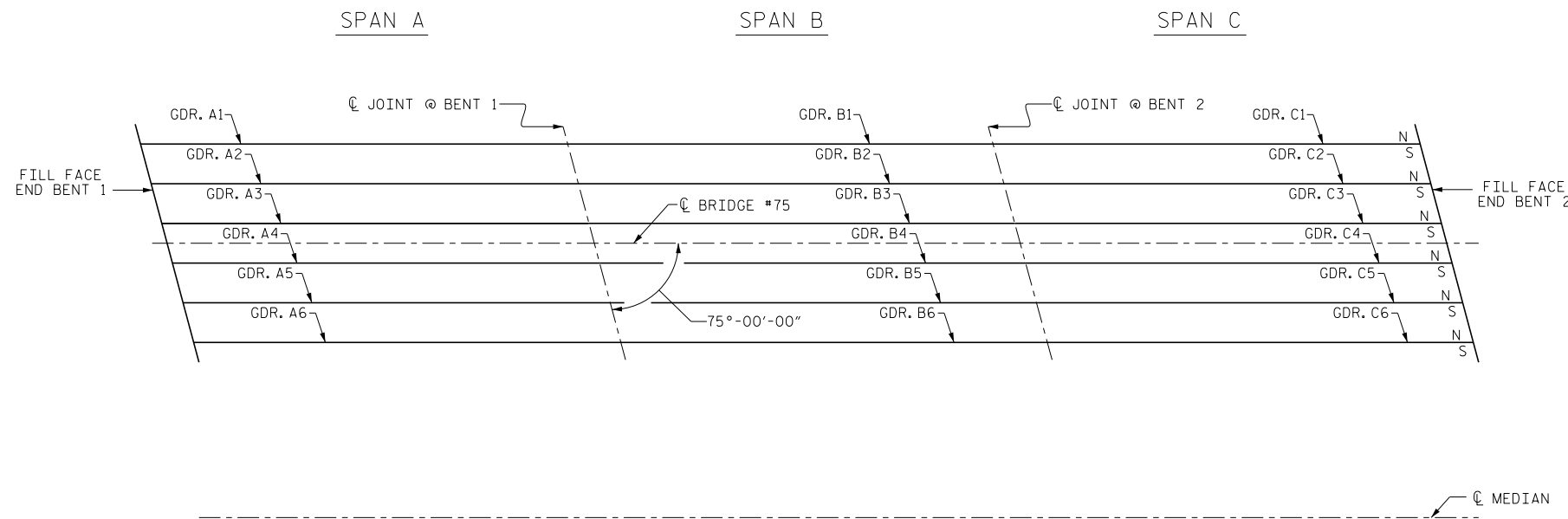
DocuSigned by:
 Timothy M. Sheppard
 AD50E1D977494CC
 PROFESSIONAL ENGINEER
 18565
 TIMOTHY M. SHEPPARD

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 BENT 2
 (WBL)

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

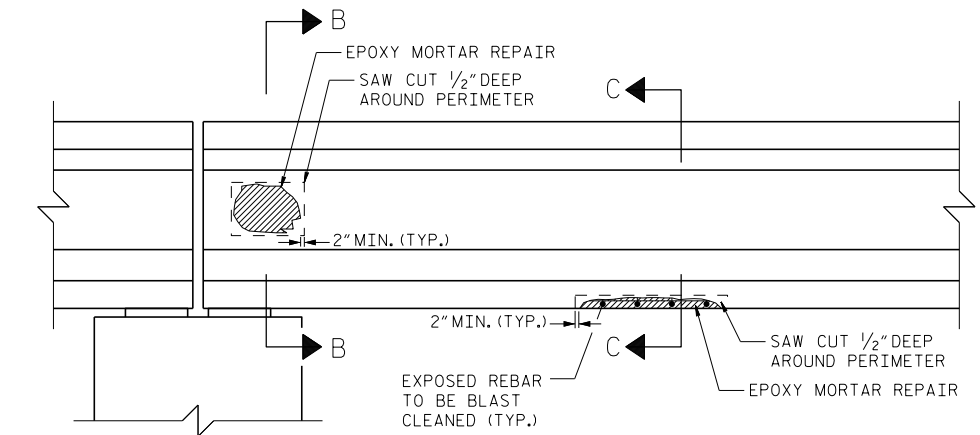
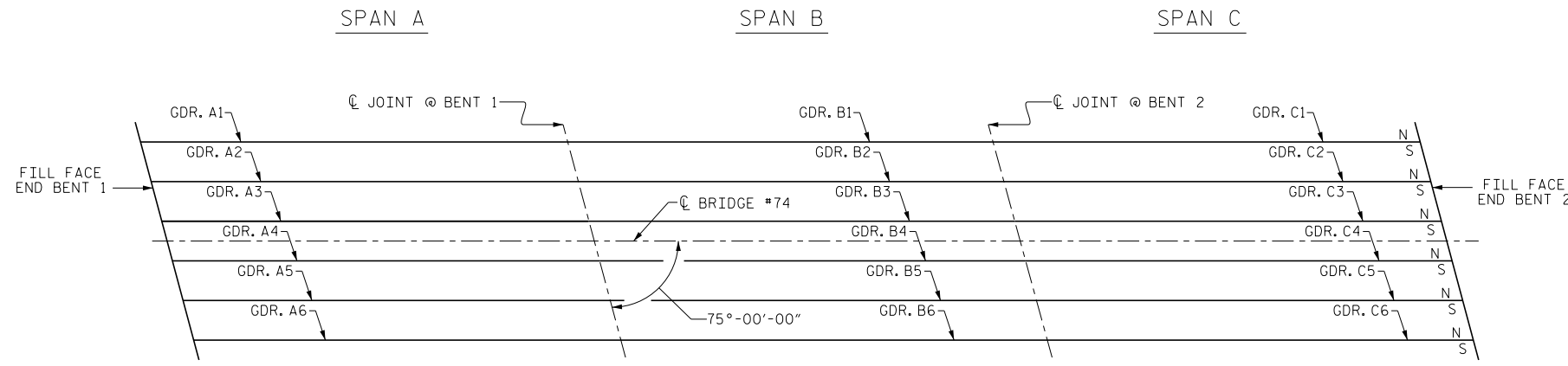
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-32
1			3			TOTAL SHEETS
2			4			35

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:

- CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF 1/2" BUT REINFORCING STEEL AND PRESTRESSED TENDONS SHALL NOT BE DAMAGED.
- CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL OR PRESTRESSED TENDONS.
- CONTRACTOR SHALL SAW CUT THE REPAIR AREAS SO THAT THE CORNERS ARE SQUARE AS INDICATED ON THE DETAILS.
- FOR EPOXY MORTAR REPAIRS, SEE SPECIAL PROVISIONS.
- FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.



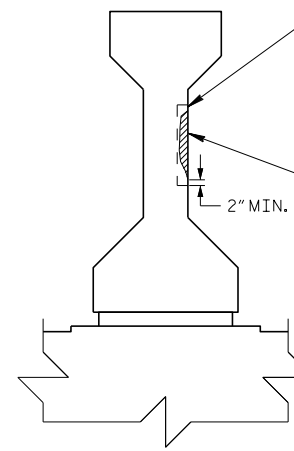
PLAN

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

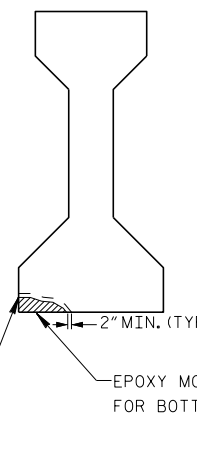
CONCRETE GIRDER REPAIR DETAIL

BRIDGE #75			
GIRDER	LOCATION	SIZE	COMMENT
GIRDER A1 (SPAN A)	12' FROM BENT 1	18" x 7"	BOTTOM FLANGE
GIRDER A4 (SPAN A)	@ BENT 1	12" x 7"	WEB-NORTH SIDE
GIRDER B2 (SPAN B)	@ BENT 2	7" x 7"	WEB-SOUTH SIDE
GIRDER C4 (SPAN C)	@ BENT 2	7" x 7"	WEB-NORTH SIDE
GIRDER C4 (SPAN C)	@ BENT 2	12" x 7"	WEB-SOUTH SIDE
GIRDER C5 (SPAN C)	@ BENT 2	12" x 8"	WEB-NORTH SIDE

BRIDGE #74			
GIRDER	LOCATION	SIZE	COMMENT
GIRDER A2 (SPAN A)	@ BENT 1	12" x 7"	WEB-SOUTH SIDE
GIRDER A3 (SPAN A)	@ BENT 1	7" x 7"	WEB-SOUTH SIDE
GIRDER A5 (SPAN A)	@ BENT 1	12" x 7"	WEB-NORTH SIDE
GIRDER C5 (SPAN C)	@ BENT 2	12" x 7"	WEB-NORTH SIDE
GIRDER B4 (SPAN B)	@ BENT 2	12" x 7"	WEB-SOUTH SIDE



SECTION B-B



SECTION C-C

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 74 & 75

DocuSigned by:

 12/9/2016

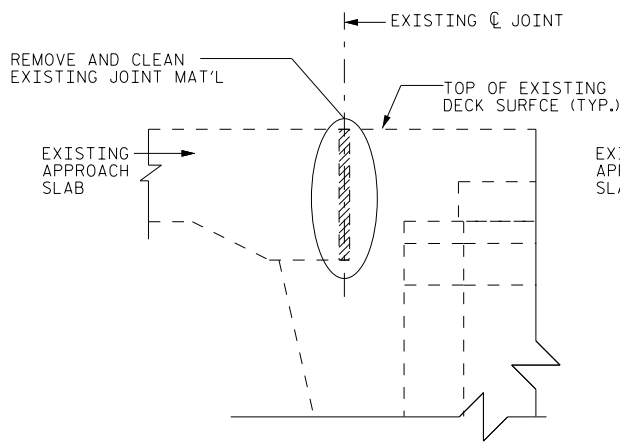
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GIRDER LAYOUT

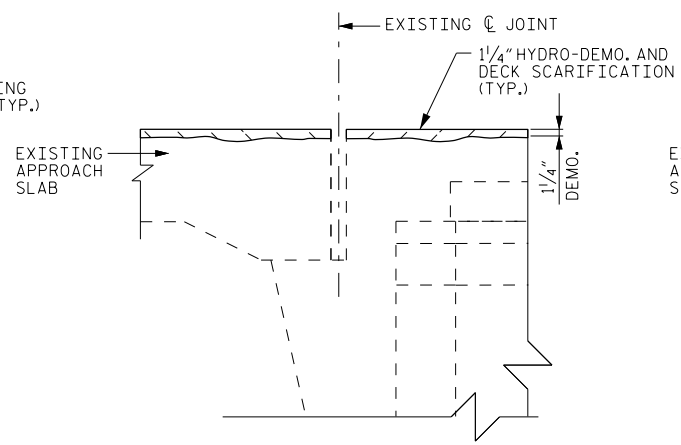
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-33
1			3			TOTAL SHEETS 35
2			4			

DRAWN BY : J.D. HAWK DATE : 2/16
 CHECKED BY : W. SMITH DATE : 2/16

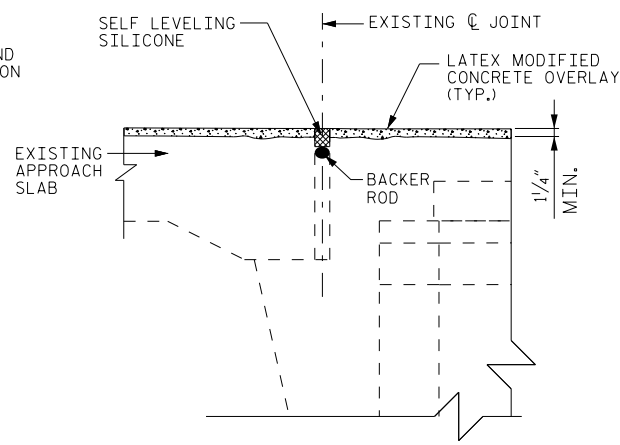
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EXISTING JOINT

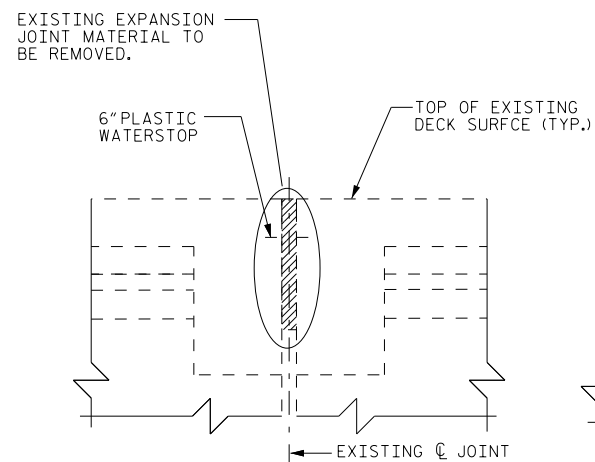


MINIMUM EXISTING JOINT DEMOLITION

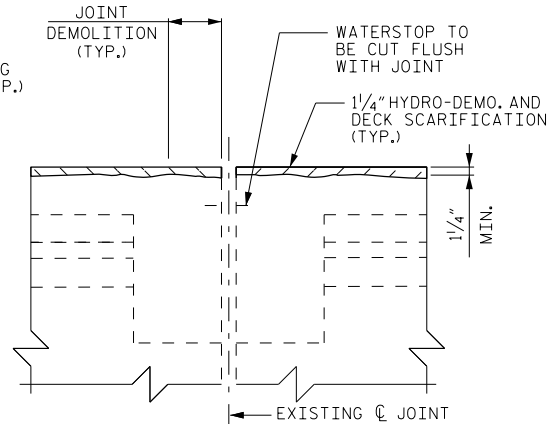


PROPOSED JOINT

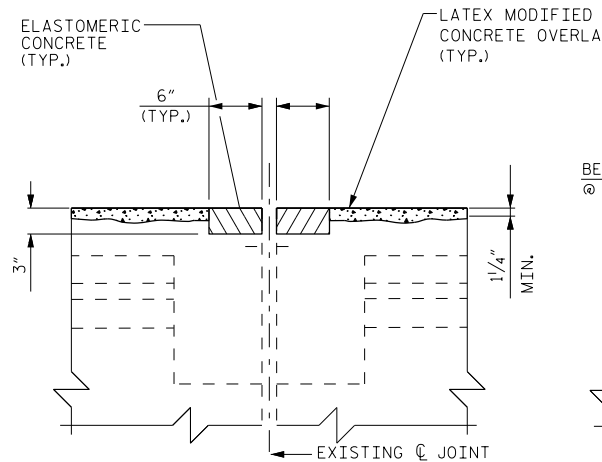
JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A



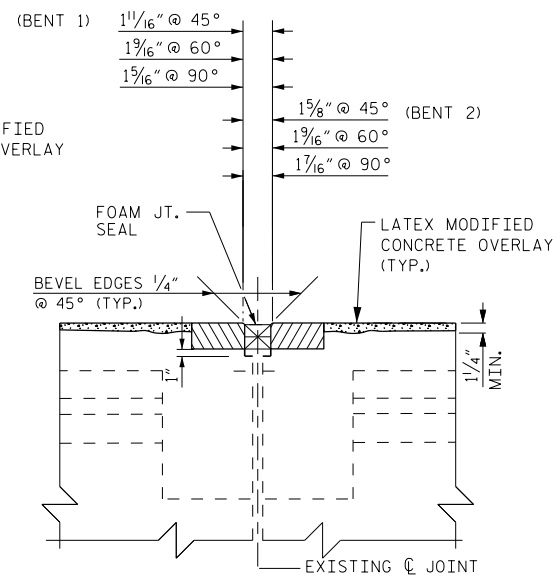
EXISTING JOINT



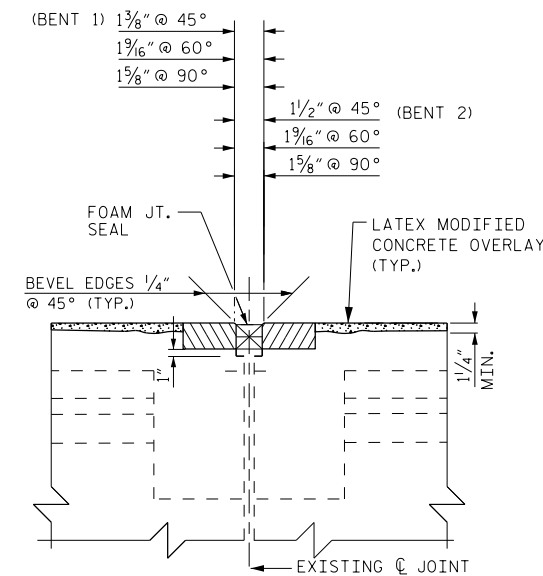
MINIMUM EXISTING JOINT DEMOLITION



PROPOSED JOINT PRE-SAWED DIMENSIONS

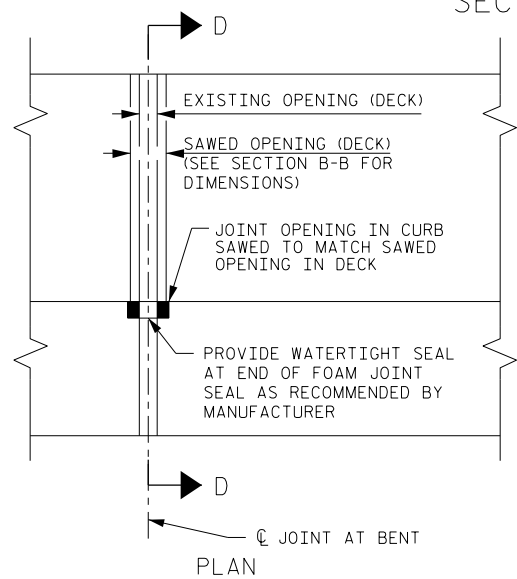


PROPOSED FOAM JOINT SEAL EXPANSION
(BRIDGES 61 & 62)

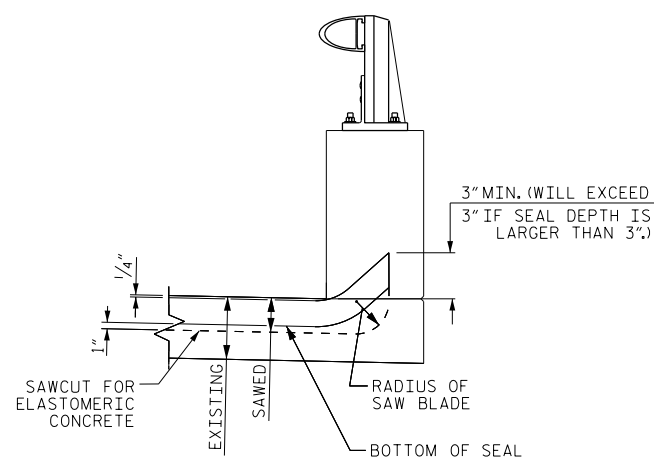


PROPOSED FOAM JOINT SEAL EXPANSION
(BRIDGES 74 & 75)

JOINT INSTALLATION SEQUENCE AT BENTS
SECTION B-B



JOINT DETAIL AT BARRIER RAIL

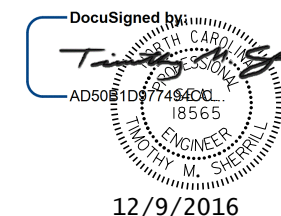


SECTION D-D

NOTES:
 CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL.
 IF THE EMBEDDED PORTION OF THE EXISTING WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE OR IF UNSOUND CONCRETE IS REMOVED TO WITHIN 2" OF THE WATERSTOP, THE ENTIRE WATERSTOP SHALL BE REMOVED.
 HYDRO-DEMOLITION OR EXCAVATION OF CONCRETE AT THE EXISTING JOINT SHALL RESULT IN THE BOTTOM OF THE EXCAVATION BEING REASONABLY FLAT AND LEVEL, TO PROVIDE SUFFICIENT SUBSTRATE FOR PLACEMENT AND SUPPORT OF ELASTOMERIC CONCRETE.
 FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.
 FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.
 RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
 THE WIDTH OF THE UNCOMPRESSED FOAM JOINT MATERIAL SHALL BE 2".

DRAWN BY : J.D. HAWK DATE : 11/15
 CHECKED BY : W. SMITH DATE : 1/16

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 wscsmith



12/9/2016

PROJECT NO. I-5765
 DAVIE COUNTY
 BRIDGE NO.: 61, 62, 74 & 75

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 JOINT DETAILS

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-34
1			3			TOTAL SHEETS
2			4			35

NOTE

CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

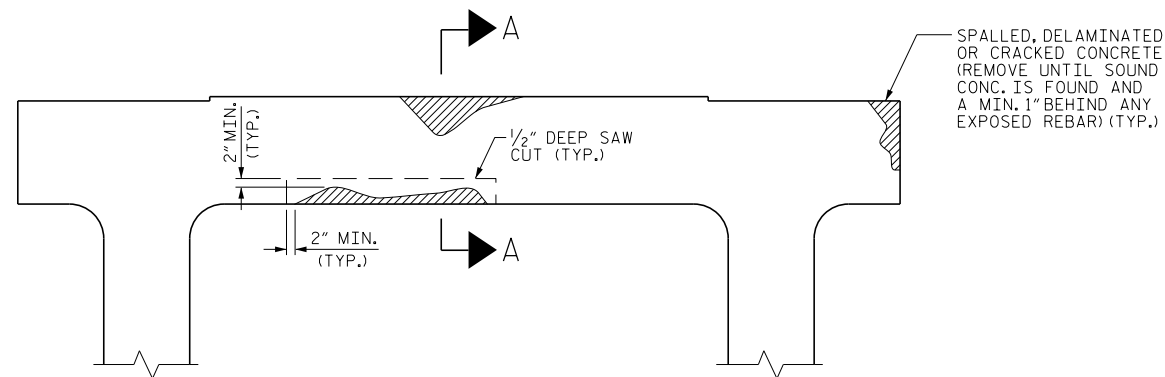
CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

CONTRACTOR SHALL SAW CUT THE REPAIR AREAS SO THAT THE CORNERS ARE SQUARE AS INDICATED ON THE DETAILS.

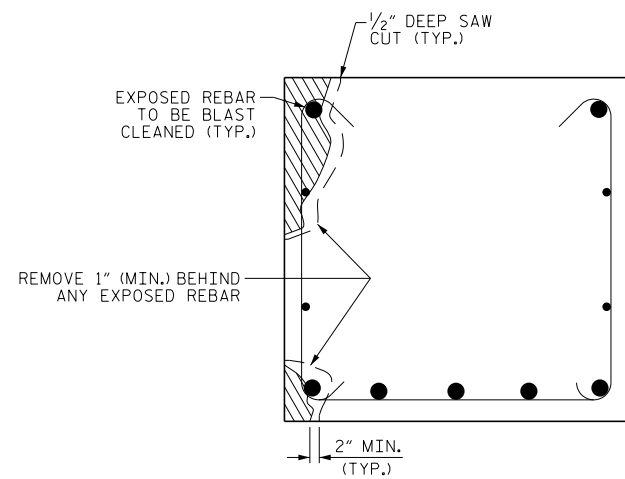
CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

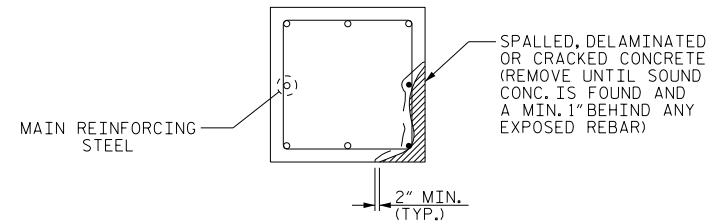


BENT CAP REPAIRS

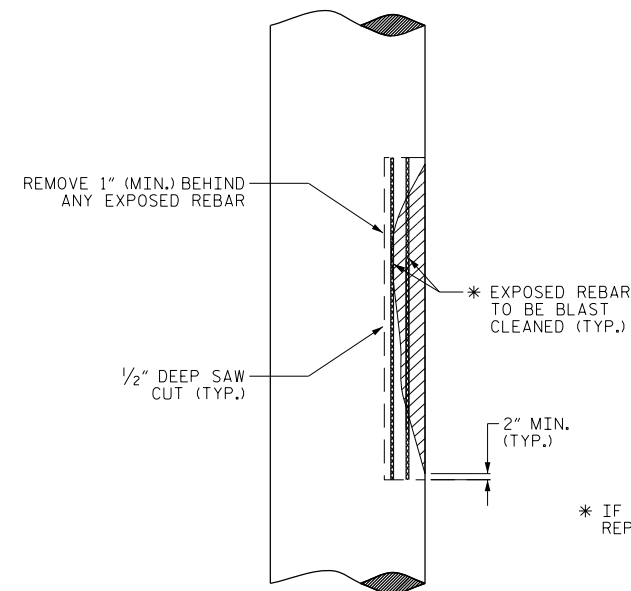


SECTION THRU CAP
(EXAMPLE ONLY, ACTUAL REBAR SIZES & LOCATIONS MAY VARY)

CAP REPAIR



PLAN OF COLUMN

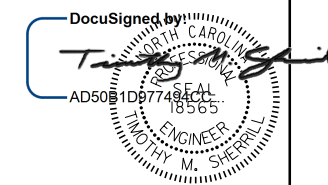


ELEVATION OF CAP

COLUMN REPAIR

* IF CONFINEMENT STEEL IS NOT PRESENT, THEN REPAIR LENGTH SHALL NOT EXCEED 10 FEET.

PROJECT NO. I-5765
DAVIE COUNTY
 BRIDGE NO. 61, 62, 74 & 75



12/9/2016

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 TYPICAL CAP AND COLUMN
 REPAIR DETAILS

DRAWN BY : J.D. HAWK DATE : 10/15
 CHECKED BY : W. SMITH DATE : 1/16

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			35
2			4			35

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 2012 "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 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" 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 1/4" 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 7/8" Ø SHEAR STUDS FOR THE 3/4" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4" Ø STUDS BASED ON THE RATIO OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" 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. FINIS 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