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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

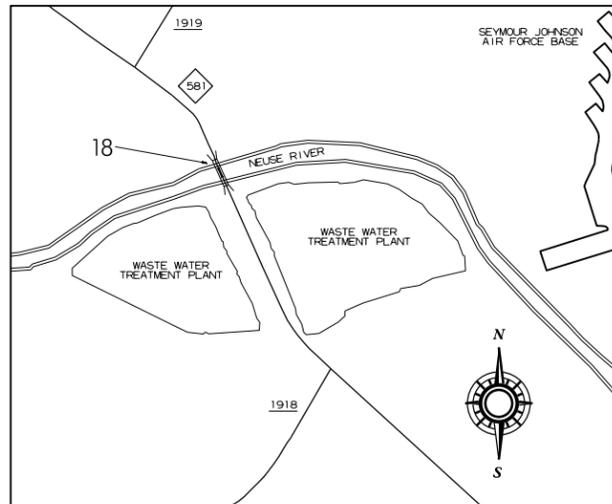
WAYNE COUNTY



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-5500HH	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50070.1.1	BRNHS-0008(747)	P.E. CONST.	

LOCATION: WAYNE COUNTY:
BRIDGE #18 ON NC581 OVER THE NEUSE RIVER

TYPE OF WORK: BRIDGE PRESERVATION WITH LATEX MODIFIED CONCRETE OVERLAY, JOINT REPLACEMENT, AND CLEANING AND PAINTING OF STRUCTURAL STEEL.



VICINITY MAP - WAYNE CO.

PROJECT: BP-5500HH

CONTRACT: DD00157



DESIGN DATA

WAYNE COUNTY
BRIDGE #18 ADT 2012 = 7000

PROJECT LENGTH

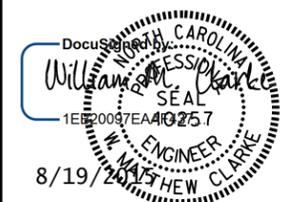
WAYNE COUNTY
BRIDGE #18 = .087 MILE

Prepared In the Office of:
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT - PRESERVATION & REPAIR GROUP
1000 BIRCH RIDGE DR. RALEIGH, N.C. 27610

TIMOTHY M. SHERRILL, P.E.
PROJECT ENGINEER

2012 STANDARD SPECIFICATIONS

LETTING DATE:
SEPTEMBER 22, 2015



W. MATTHEW CLARKE, P.E.
PROJECT DESIGN ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS



WAYNE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-5500HH	1A	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50070.1.1	BRNHS-0008(747)	P.E.	
		CONST.	

LOCATION: WAYNE COUNTY:
BRIDGE #18 ON NC581 OVER THE NEUSE RIVER

TYPE OF WORK: BRIDGE PRESERVATION WITH LATEX MODIFIED CONCRETE
OVERLAY, JOINT REPLACEMENT, AND CLEANING AND PAINTING OF
STRUCTURAL STEEL.

INDEX OF SHEETS

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S-1
S-2 THRU S-14
SN
TMP-1 THRU TMP-2

TITLE SHEET
INDEX OF SHEETS
TOTAL BILL OF MATERIAL
STRUCTURAL PLANS - WAYNE # 18
STANDARD NOTES
TRAFFIC MANAGEMENT PLANS

PROJECT: BP-5500HH

CONTRACT: DD00157

TOTAL BILL OF MATERIAL

MOBILIZATION	INCIDENTAL MILLING	ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B	ASPHALT BINDER FOR PLANT MIX	GROOVING BRIDGE FLOORS	CLASS II SURFACE PREPARATION	CLASS III SURFACE PREPARATION	LATEX MODIFIED CONCRETE OVERLAY	PLACING & FINISHING OF LATEX MODIFIED CONCRETE OVERLAY	FOAM JOINT SEALS	CLEANING & REPAINTING OF BRIDGE #18	PAINTING CONTAINMENT FOR BRIDGE #18	POLLUTION CONTROL	VOLUMETRIC MIXER	CONCRETE FOR DECK REPAIR	BRIDGE JOINT DEMOLITION	HYDRO-DEMOLITION OF BRIDGE DECK	SCARIFYING BRIDGE DECK
LUMP SUM	SO.YDS.	TON	TON	SO. FT.	SO.YDS.	SO.YDS.	CU.YDS.	SO.YDS.	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	CU.FT.	SO. FT.	SO.YDS.	SO.YDS.
LUMP SUM	312	27	2	8,750	14	2	50	1,098	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	1	180	1,098	1,098

NOTE: 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 REPAIR AREAS ARE ENCOUNTERED.

PROJECT NO. BP-5500HH
WAYNE COUNTY
BRIDGE NO. 18

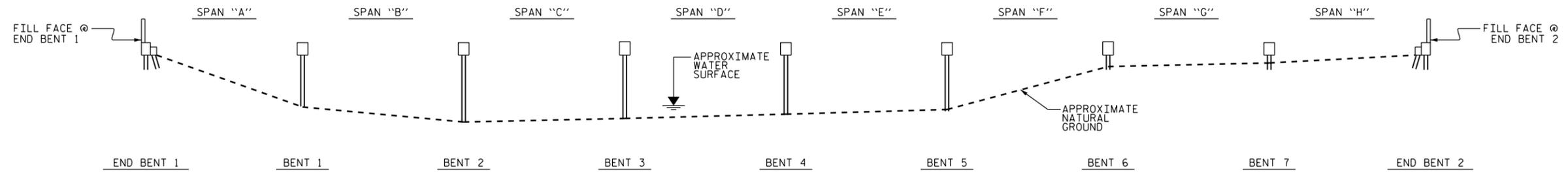
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH			
TOTAL BILL OF MATERIAL			
REVISIONS			
NO.	BY:	DATE:	NO.
1			3
2			4
SHEET NO.			S-1
TOTAL SHEETS			14

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William M. Clarke
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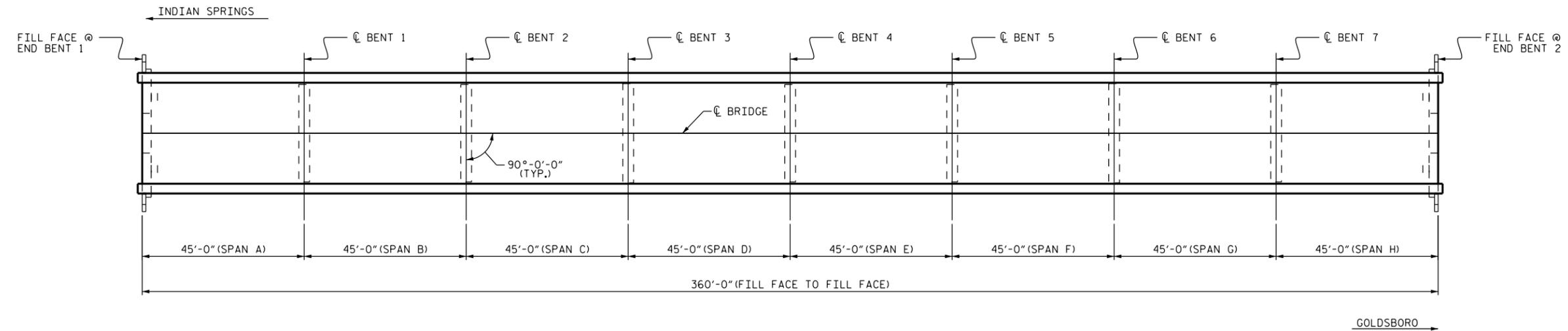
8/19/2015



DRAWN BY : M.A.LEE DATE : 6/2015
CHECKED BY : W.M.CLARKE DATE : 6/2015



SECTION ALONG CL ROADWAY



PLAN

(PILES NOT SHOWN FOR CLARITY)

SCOPE OF WORK:

- PARTIALLY REMOVE BRIDGE DECK CONCRETE, USING SCARIFICATION AND HYDRO-DEMOLITION METHODS
- OVERLAY PREPARED BRIDGE DECK WITH LATEX MODIFIED CONCRETE..
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE DECK JOINTS AND INSTALL NEW FOAM JOINT SEALS.
- MILL AND PAVE ASPHALT APPROACHES.
- GROOVE CONCRETE BRIDGE DECK
- CLEAN AND PAINT STRUCTURAL STEEL.

DRAWN BY : M.A.LEE DATE : 6/2015
 CHECKED BY : W.M.CLARKE DATE : 6/2015

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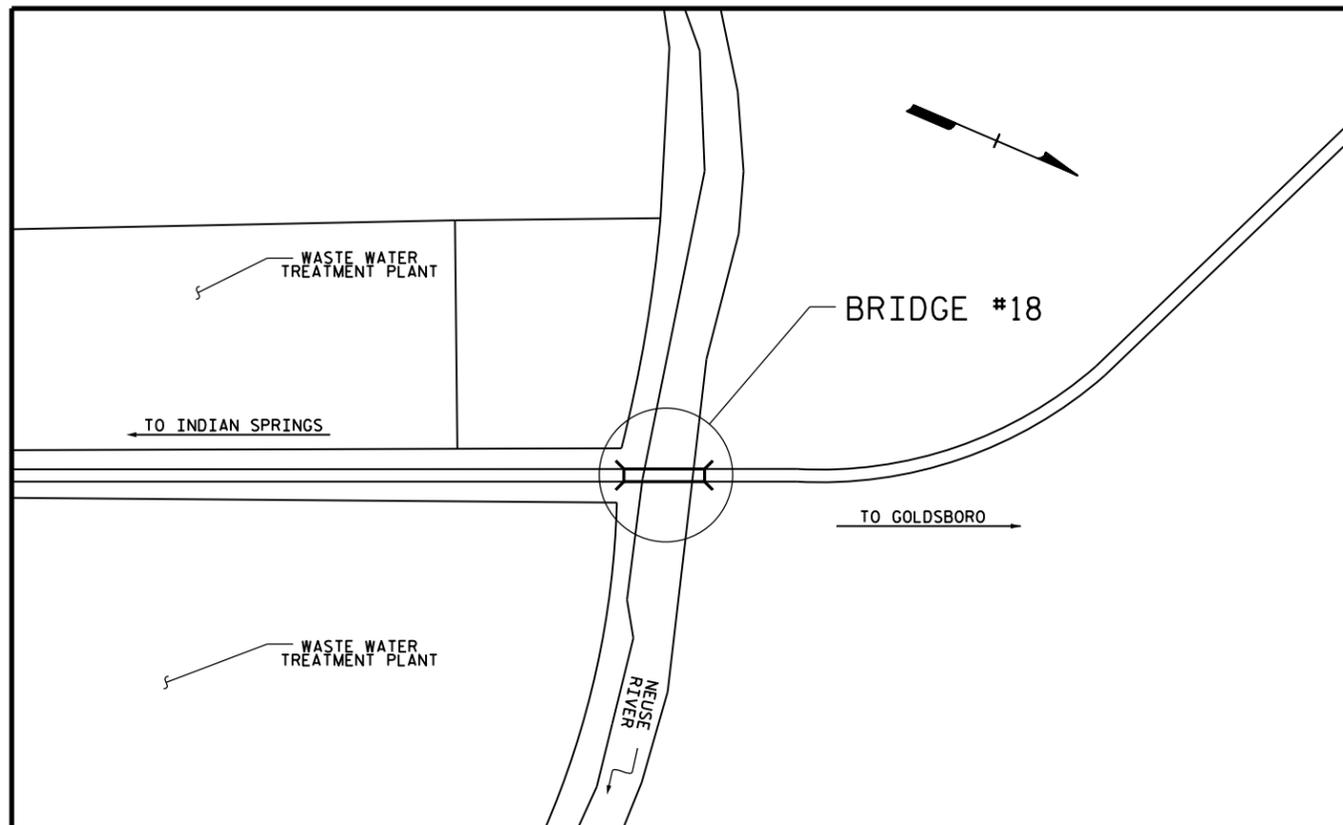
8/19/2015



PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18

SHEET 1 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING					
BRIDGE #18 ON NC 581 OVER NEUSE RIVER					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					S-2
					14



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.

GENERAL NOTES

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.

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

ROADWAY MILLING IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL MILL AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF BRIDGE.

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

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

THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUNOFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE OVERLAY SURFACE PREPARATION SPECIAL PROVISION.

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR CONCRETE FOR DECK REPAIRS, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

FOR PAINTING EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

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

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

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

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

PROJECT NO. BP-5500HH

WAYNE COUNTY

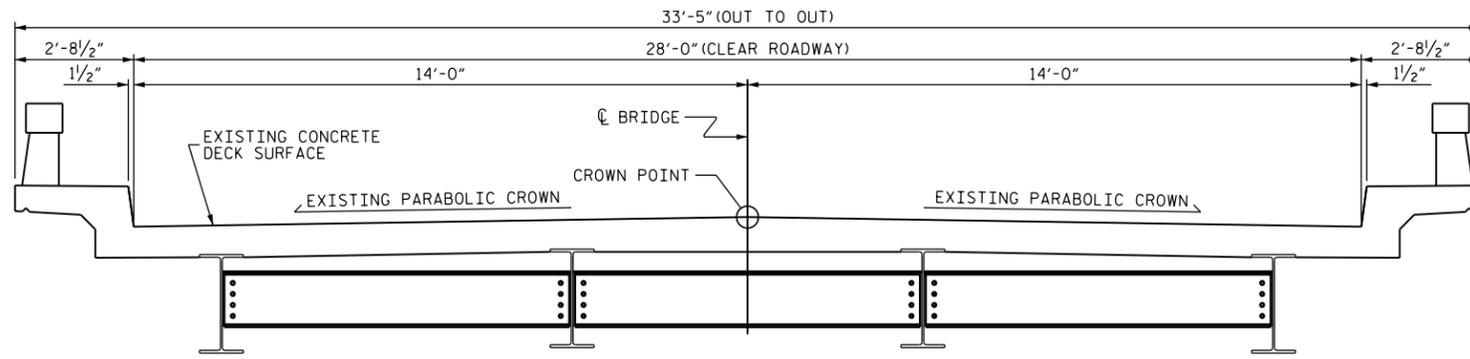
BRIDGE NO. 18

SHEET 2 OF 2

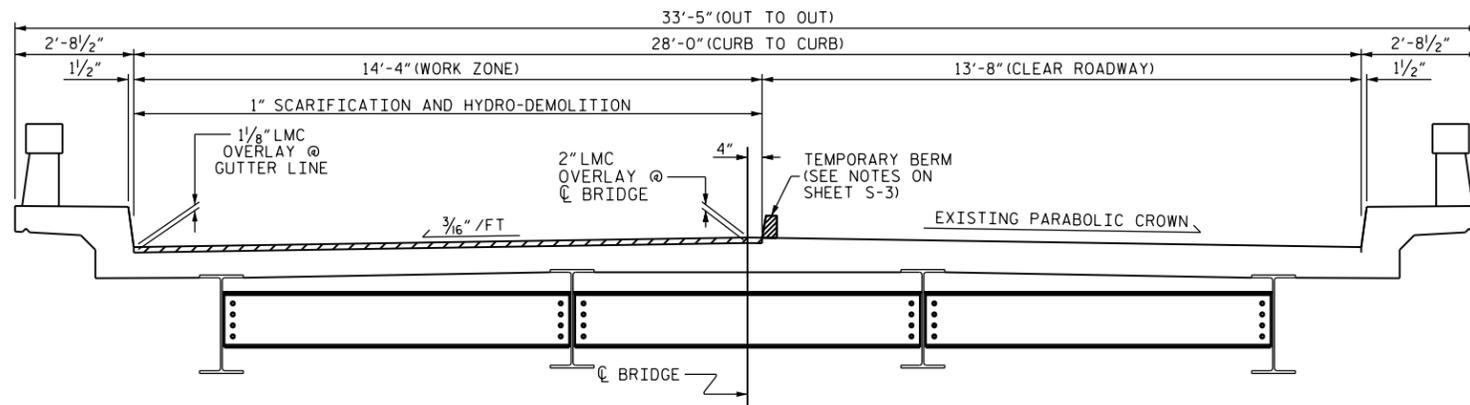
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING BRIDGE #18 ON NC 581 OVER NEUSE RIVER					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					S-3
					14

DocuSigned by:
William M. Clarke
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8/19/2015

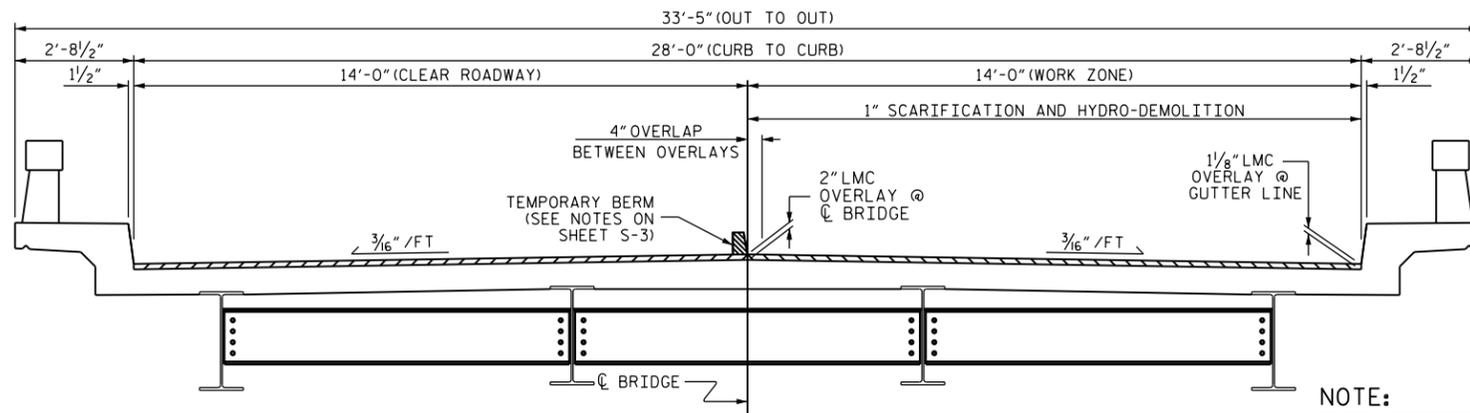
DRAWN BY : M.A. LEE DATE : 6/2015
CHECKED BY : W. M. CLARKE DATE : 6/2015



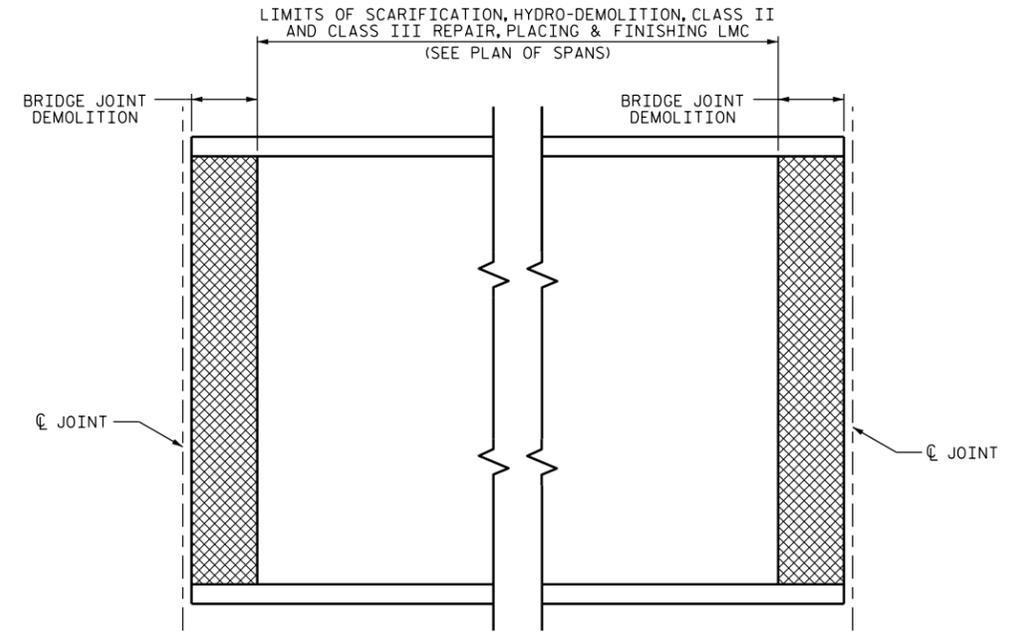
TYPICAL SECTION
(EXISTING)(LOOKING NORTH)



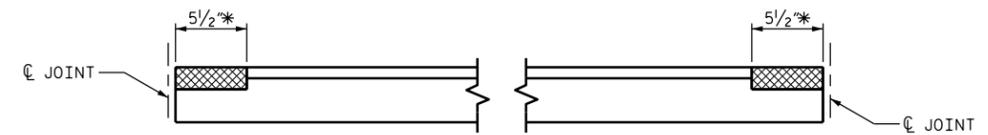
TYPICAL SECTION
(LEFT LANE WORK ZONE)(LOOKING NORTH)



TYPICAL SECTION
(RIGHT LANE WORK ZONE)(LOOKING NORTH)



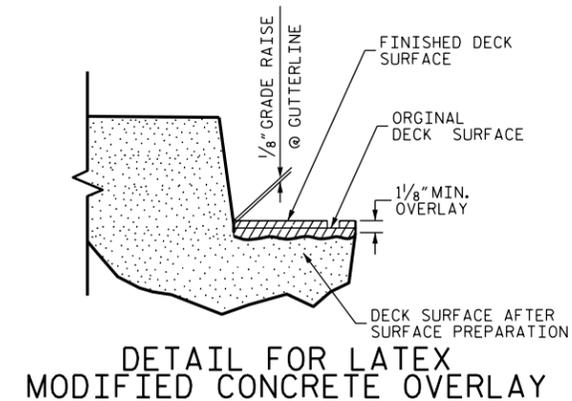
PLAN



ELEVATION

* DIMENSIONS MEASURED PERPENDICULAR TO JOINT

PAY LIMITS FOR OVERLAY BID ITEMS



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

PROJECT NO. BP-5500HH
WAYNE COUNTY
BRIDGE NO. 18

NOTE:

WHEN PREPARING THE SURFACE FOR LMC OVERLAY ADJACENT TO THE PREVIOUSLY PLACED LMC STAGE, THE PREVIOUSLY PLACED LMC SHALL BE SAW-CUT TO THE FULL DEPTH OF THE LMC AT THE CENTERLINE OF THE BRIDGE AND ALL LMC IN THE 4" OVERLAP SHALL BE REMOVED WITH HAND TOOLS PRIOR TO PLACEMENT OF LMC IN THE SECOND STAGE.

THE WORK STAGING ON THIS PLAN SHEET INDICATES THAT THE LEFT LANE LMC WORK IS PERFORMED FIRST, FOLLOWED BY THE RIGHT LANE LMC WORK. THE CONTRACTOR MAY ELECT TO SEQUENCE THE WORK DIFFERENTLY, BUT THE DIMENSIONS OF THE WORK ZONE AND CLEAR ROADWAY AREAS SHALL MATCH THAT INDICATED ON THIS PLAN SHEET, RESPECTIVE TO THE LANE WHERE THE LMC WORK IS BEING PERFORMED.

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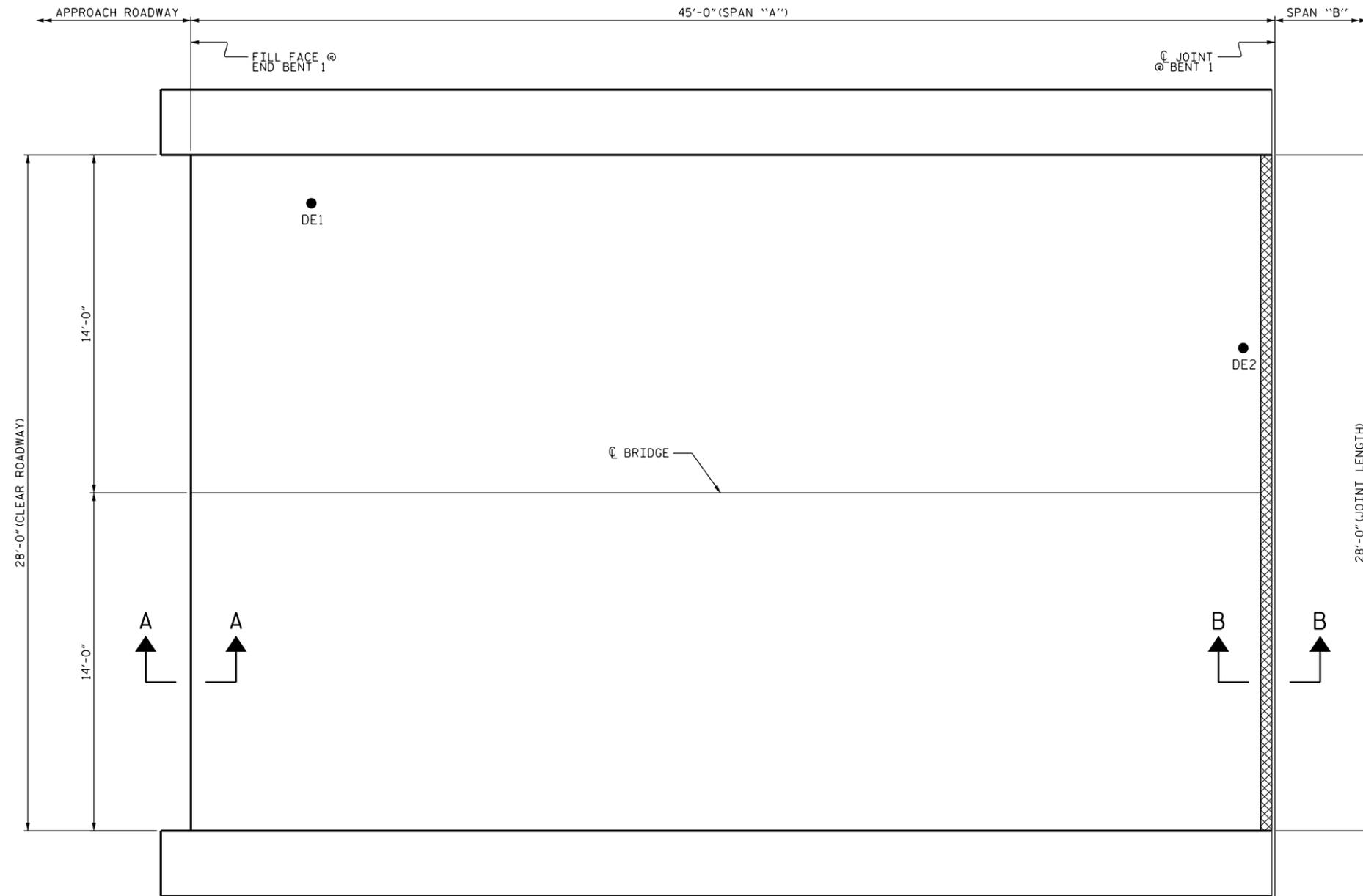
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTION AND SURFACE PREPARATION DETAILS					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					S-4
					TOTAL SHEETS 14

DRAWN BY : M.A.LEE DATE : 6/2015
CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "A"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	138.37 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	138.37 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	12.83 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



-  - SCARIFYING BRIDGE DECK
-  - APPROX. AREA CLASS II SURFACE PREPARATION
-  - BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES		
TEST LOCATION	#1	#2
CONCRETE STRENGTH	3,500 PSI	4,400 PSI

NO REPAIRS NOTED DURING INSPECTION BY STRUCTURES MANAGEMENT UNIT. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER HYDRODEMOLITION FOR POTENTIAL CLASS II REPAIRS.

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18

SHEET 1 OF 8

PLAN OF SPAN "A"
 (SEE SHEET NO. S-13 FOR SECTIONS A-A AND B-B)

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8/19/2015



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SURFACE PREPARATION
 SPAN "A"**

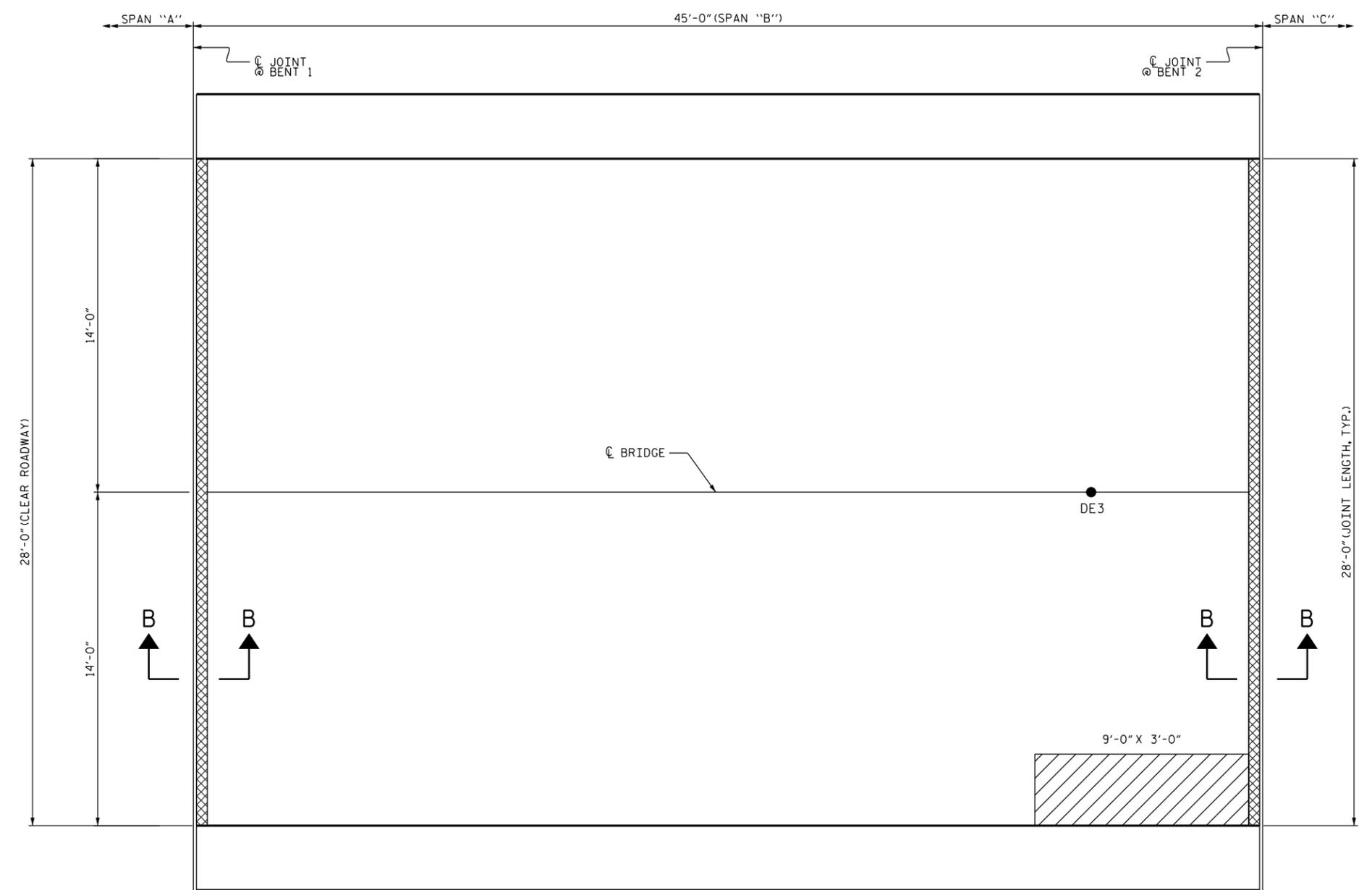
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NO.	BY:	DATE:	NO.	BY:	DATE:	S-5	
1			3			TOTAL SHEETS	14
2			4				

DRAWN BY : M.A.LEE DATE : 6/2015
 CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "B"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	3 SY	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



-  - SCARIFYING BRIDGE DECK
-  - APPROX. AREA CLASS II SURFACE PREPARATION
-  - BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#3
CONCRETE STRENGTH	3,400 PSI

PLAN OF SPAN "B"
(SEE SHEET NO. S-13 FOR SECTION B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
BRIDGE NO. 18
SHEET 2 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "B"

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-6	
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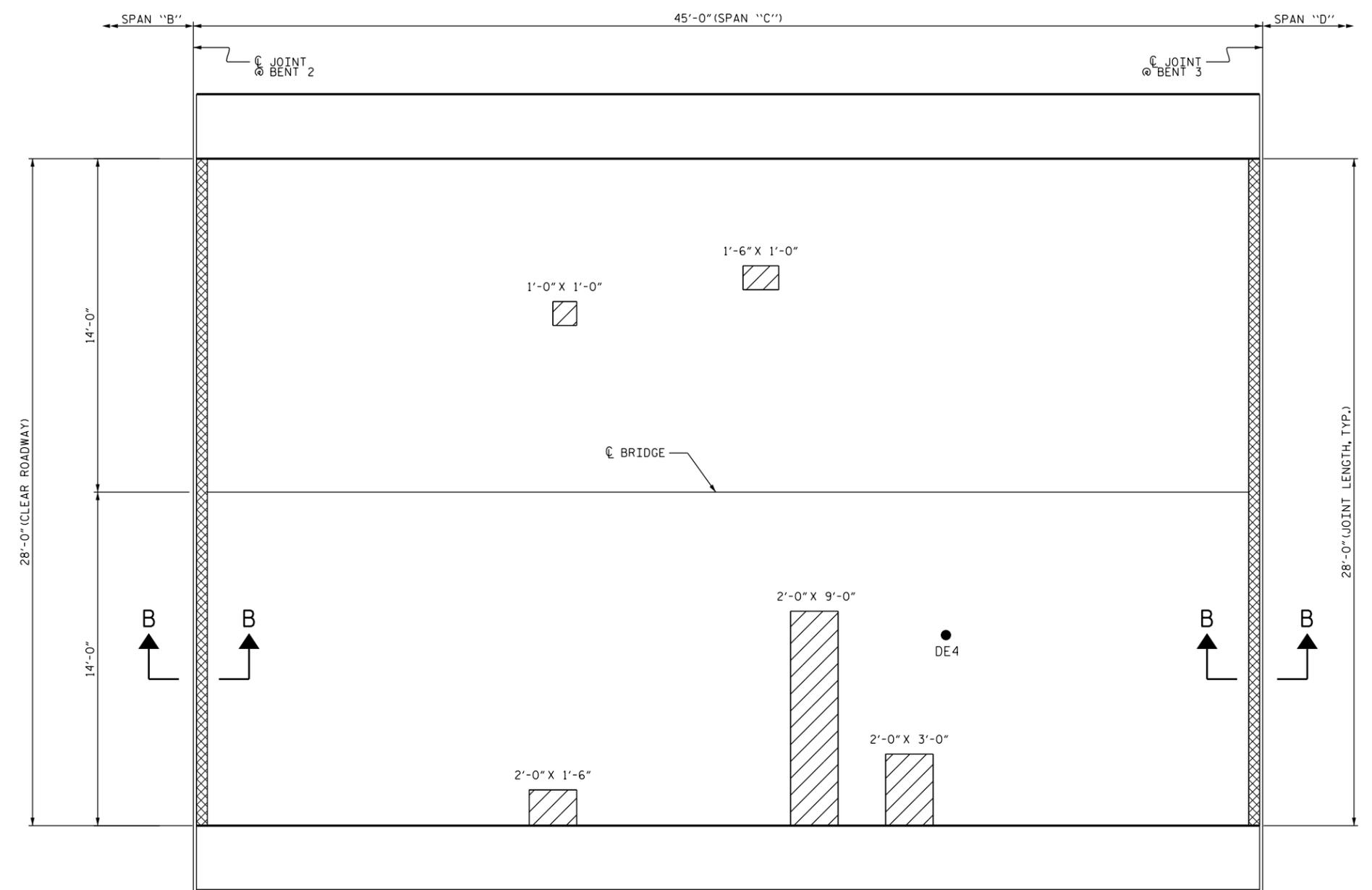


DRAWN BY : M.A.LEE DATE : 6/2015
CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "C"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	3.28 SY	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



- SCARIFYING BRIDGE DECK
- APPROX. AREA CLASS II SURFACE PREPARATION
- BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#4
CONCRETE STRENGTH	3,100 PSI

PLAN OF SPAN "C"
(SEE SHEET NO. S-13 FOR SECTION B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18
 SHEET 3 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "C"

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-7	
1			3			TOTAL SHEETS	
2			4			14	

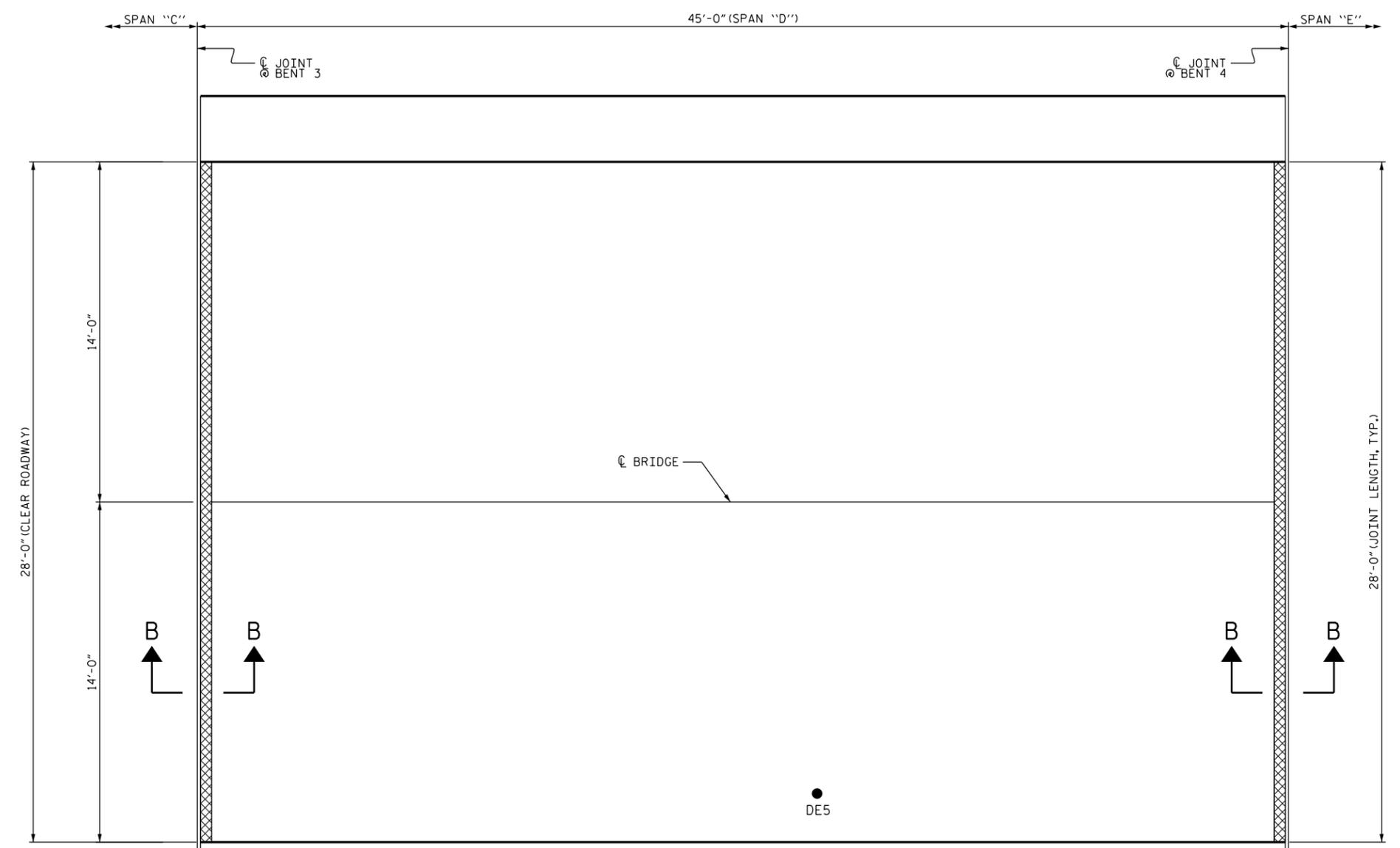
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 CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "D"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



-  - SCARIFYING BRIDGE DECK
-  - APPROX. AREA CLASS II SURFACE PREPARATION
-  - BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#5
CONCRETE STRENGTH	3,800 PSI

NO REPAIRS NOTED DURING INSPECTION BY STRUCTURES MANAGEMENT UNIT. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER HYDRODEMOLITION FOR POTENTIAL CLASS II REPAIRS.

PLAN OF SPAN "D"
(SEE SHEET NO. S-13 FOR SECTION B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
BRIDGE NO. 18
SHEET 4 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "D"

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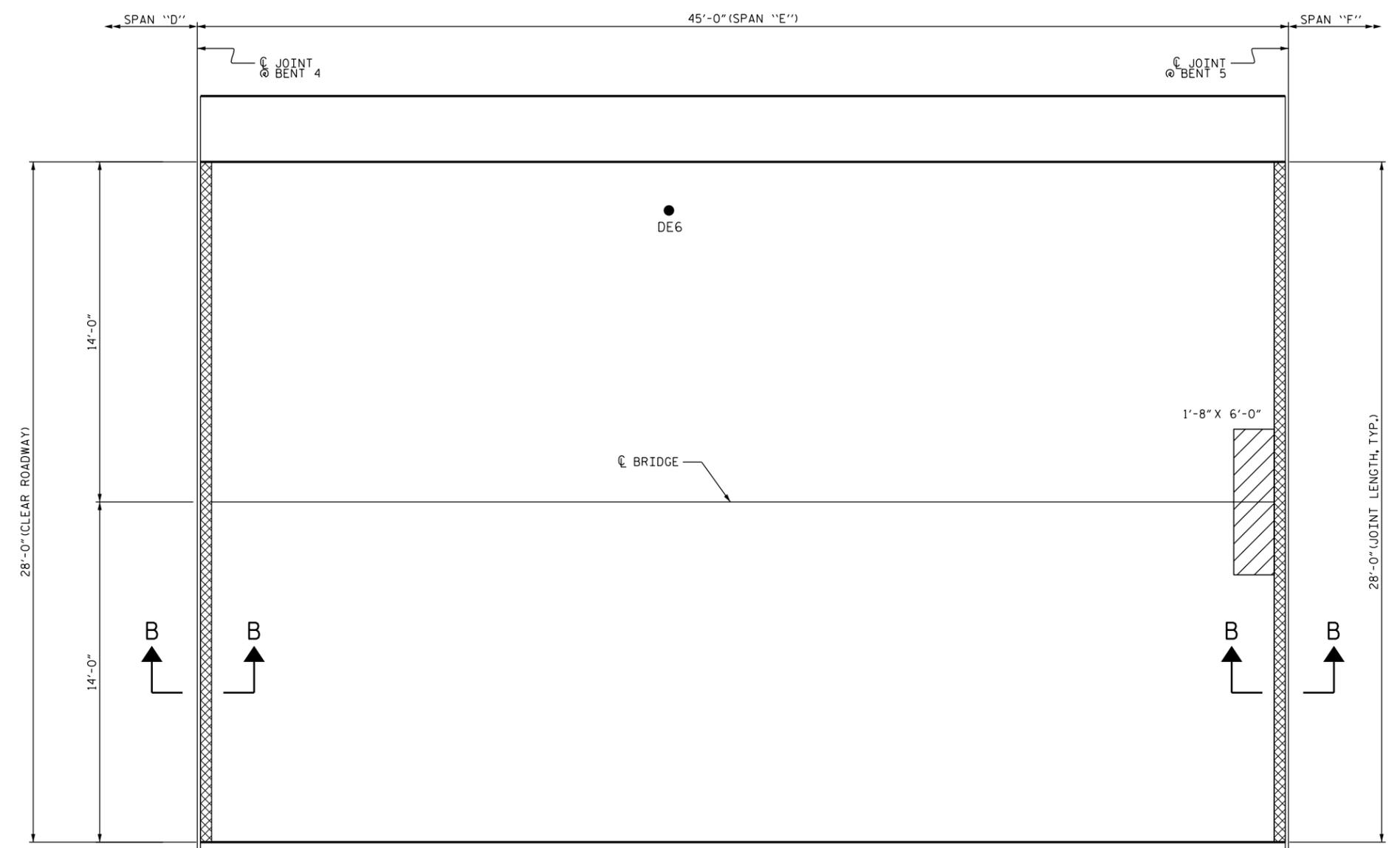


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SUMMARY OF QUANTITIES FOR SPAN "E"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	1.11 SY	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



- SCARIFYING BRIDGE DECK
- APPROX. AREA CLASS II SURFACE PREPARATION
- BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#6
CONCRETE STRENGTH	2,900 PSI

PLAN OF SPAN "E"
(SEE SHEET NO. S-13 FOR SECTION B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18
 SHEET 5 OF 8

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SURFACE PREPARATION
 SPAN "E"**

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9	
1			3			TOTAL SHEETS	14
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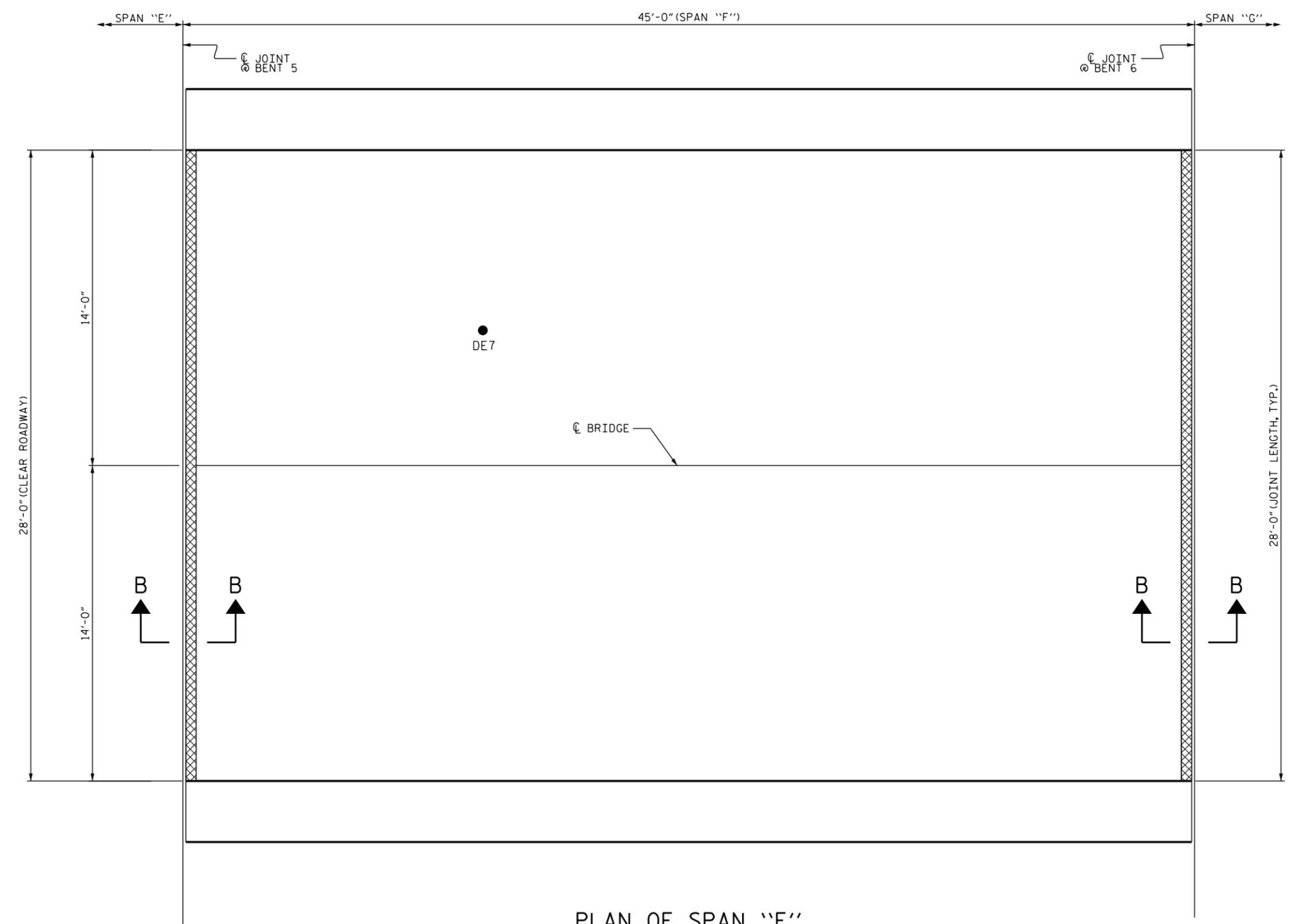
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 8/19/2015

DRAWN BY : M.A.LEE DATE : 6/2015
 CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "F"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



-  - SCARIFYING BRIDGE DECK
-  - APPROX. AREA CLASS II SURFACE PREPARATION
-  - BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#7
CONCRETE STRENGTH	3,000 PSI

NO REPAIRS NOTED DURING INSPECTION BY STRUCTURES MANAGEMENT UNIT. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER HYDRODEMOLITION FOR POTENTIAL CLASS II REPAIRS.

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18

SHEET 6 OF 8

PLAN OF SPAN "F"
 (SEE SHEET NO. S-13 FOR SECTION B-B)

DocuSigned by:
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 1EB20097EAAF437...
 8/19/2015



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SURFACE PREPARATION
 SPAN "F"**

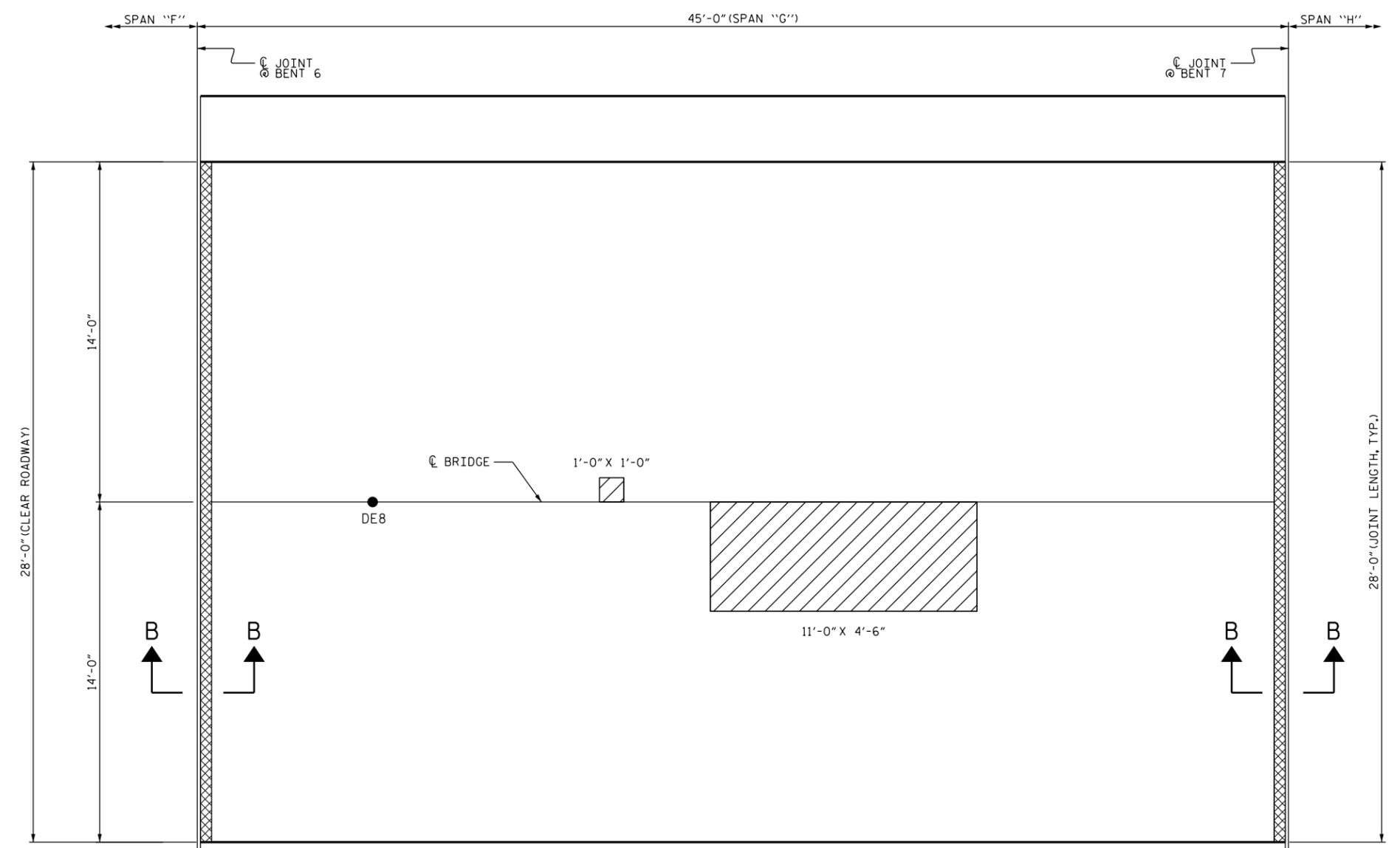
REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-10	
1			3			TOTAL SHEETS	
2			4			14	

DRAWN BY : M.A.LEE DATE : 6/2015
 CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "G"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	136.74 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	136.74 SY	
CLASS II SURFACE PREPARATION	5.61 SY	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	25.66 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



- SCARIFYING BRIDGE DECK
- APPROX. AREA CLASS II SURFACE PREPARATION
- BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES	
TEST LOCATION	#8
CONCRETE STRENGTH	3,400 PSI

PLAN OF SPAN "G"
(SEE SHEET NO. S-13 FOR SECTION B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18
 SHEET 7 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "G"

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11	
1			3			TOTAL SHEETS	
2			4			14	

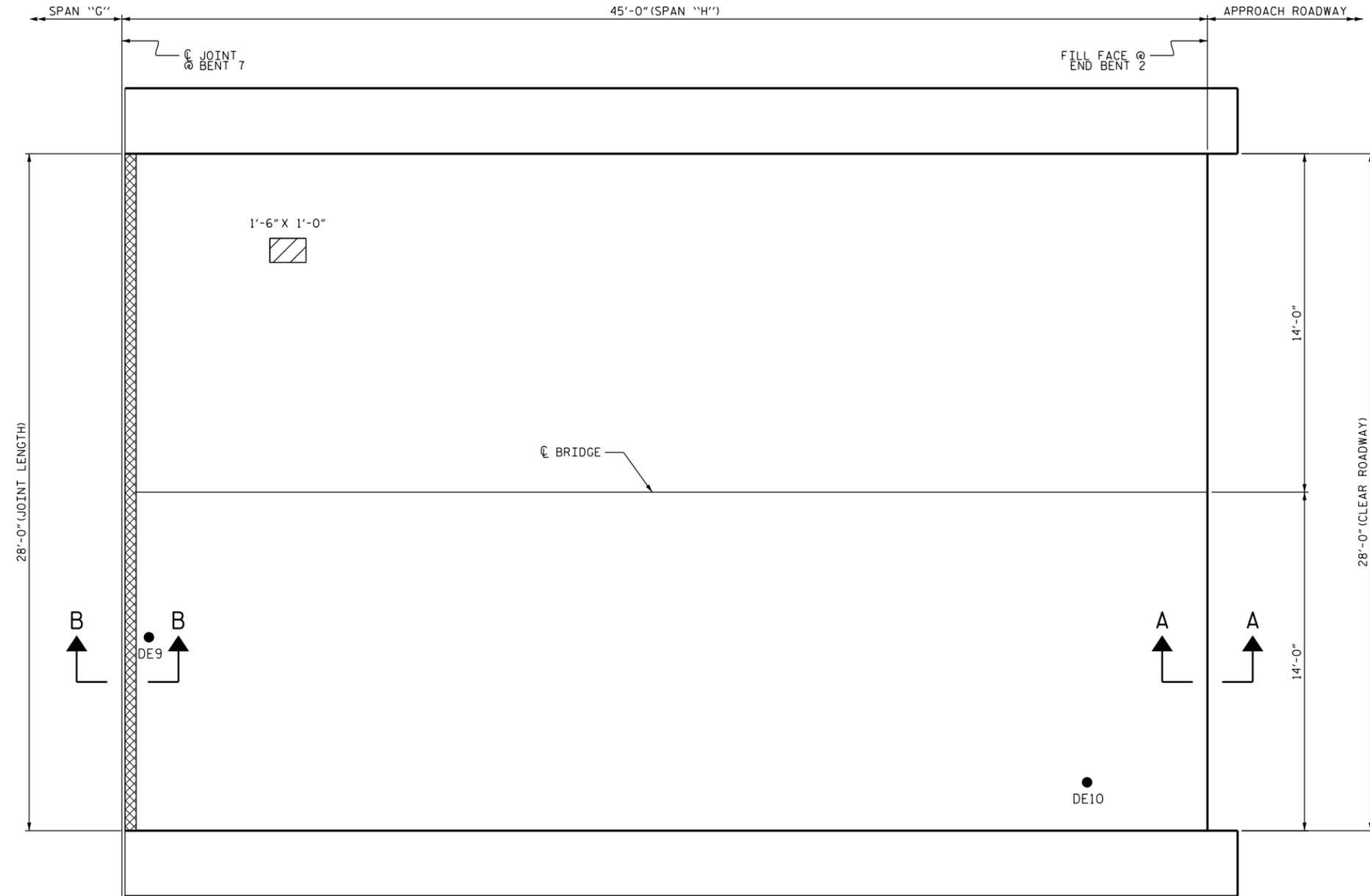
DocuSigned by:
William M. Clarke
 1EB20097EAAF437...
 8/19/2015

DRAWN BY : M.A.LEE DATE : 6/2015
 CHECKED BY : W.M.CLARKE DATE : 6/2015

SUMMARY OF QUANTITIES FOR SPAN "H"		
	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	138.37 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	138.37 SY	
CLASS II SURFACE PREPARATION	0.17 SY	
CLASS III SURFACE PREPARATION	0.25	
BRIDGE JOINT DEMOLITION	12.83 SF	

PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED UPON SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE "OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

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



-  - SCARIFYING BRIDGE DECK
-  - APPROX. AREA CLASS II SURFACE PREPARATION
-  - BRIDGE JOINT DEMOLITION

BRIDGE DECK EVALUATION SAMPLES		
TEST LOCATION	#9	#10
CONCRETE STRENGTH	4,800 PSI	3,400 PSI

PLAN OF SPAN "H"
(SEE SHEET NO. S-13 FOR SECTIONS A-A AND B-B)

PROJECT NO. BP-5500HH
WAYNE COUNTY
BRIDGE NO. 18

SHEET 8 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "H"

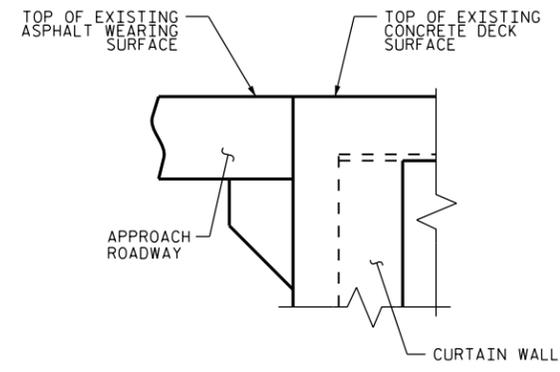
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			14
2			4			

DocuSigned by:
William M. Clarke
1EB20097EAAF437...
8/19/2015

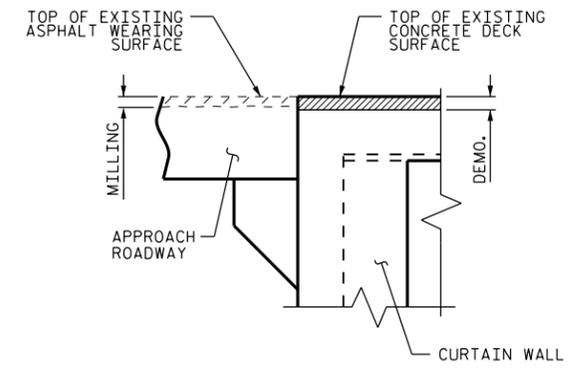


DRAWN BY : M.A.LEE DATE : 6/2015
CHECKED BY : W.M.CLARKE DATE : 6/2015

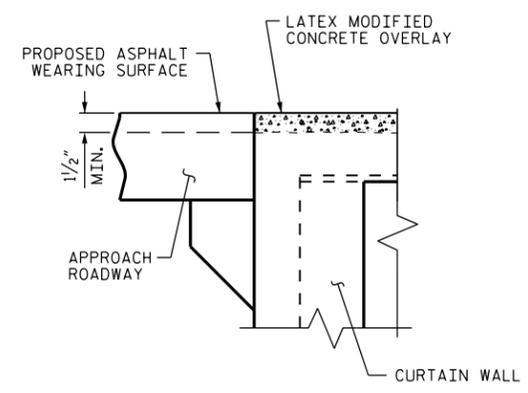
NOTES:
 FOR FOAM JOINT SEALS SEE SPECIAL PROVISIONS.
 THE INSTALLED FOAM JOINT SEAL SHALL BE WATER TIGHT.
 NOMINAL UNCOMPRESSED SEAL WIDTH OF FOAM JOINT SEAL SHALL BE 2".
 THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.



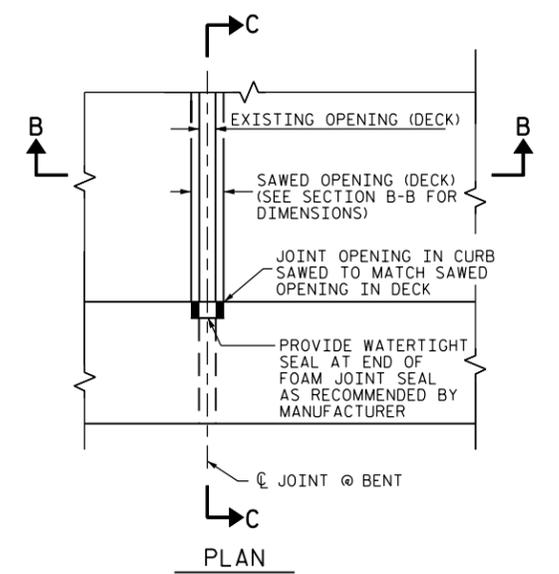
EXISTING



MINIMUM EXISTING JOINT DEMOLITION

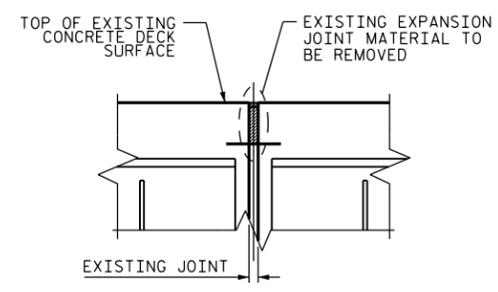


PROPOSED

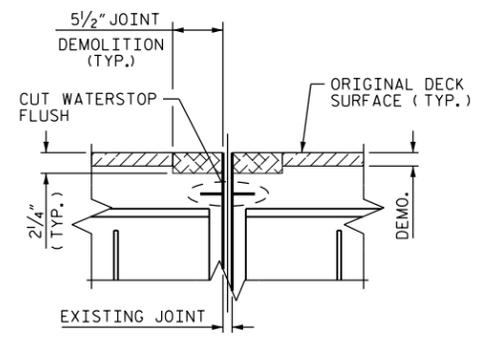


PLAN

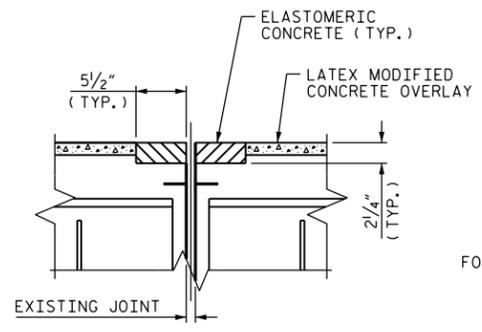
SECTION A-A



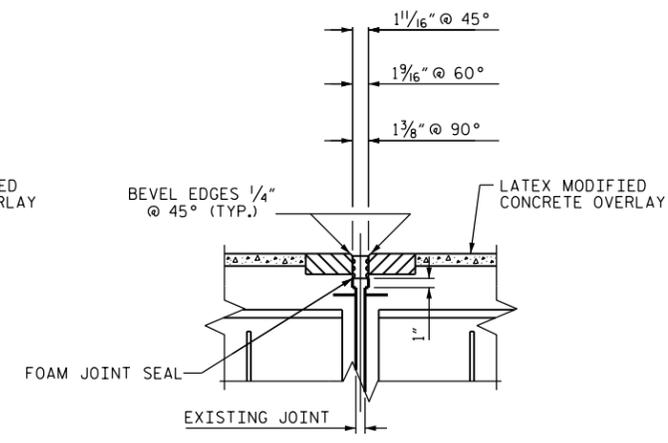
EXISTING JOINT



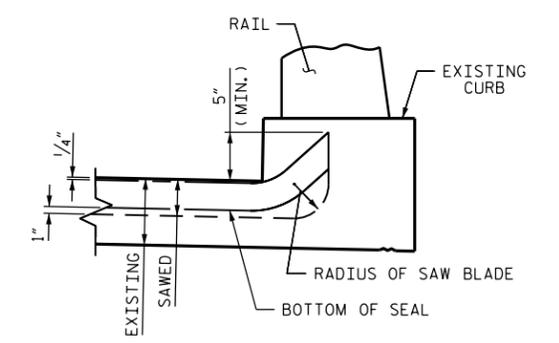
MINIMUM EXISTING JOINT DEMOLITION



PROPOSED JOINT PRE-SAWED DIMENSIONS



PROPOSED FOAM JOINT SEAL



SECTION C-C

JOINT SEAL DETAILS AT BENT

SECTION B-B

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

REMOVAL 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 OR REPAIR CONCRETE.

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18

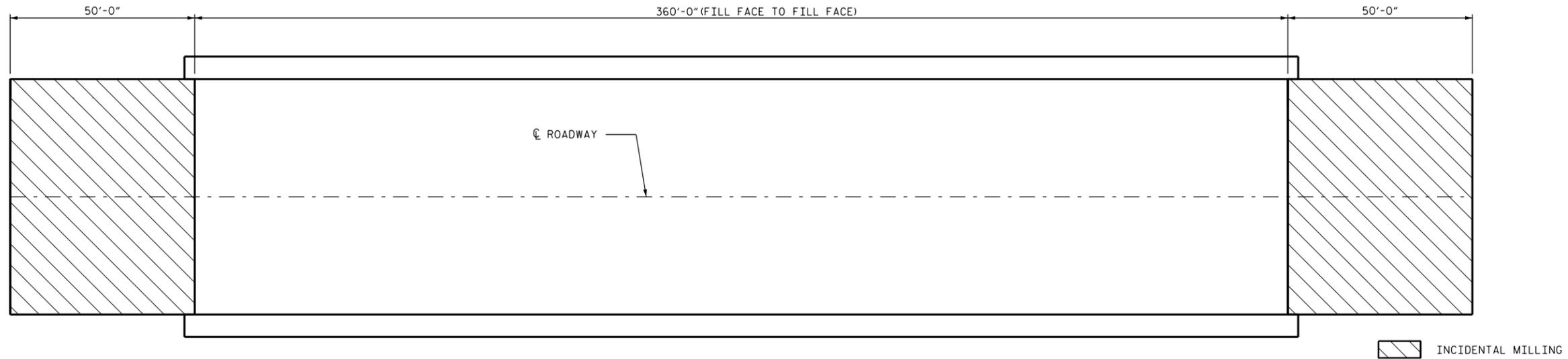
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
JOINT DETAILS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO.					S-13
TOTAL SHEETS					14

DocuSigned by:
William M. Clarke
 1EB20097EAAF437...
 8/19/2015

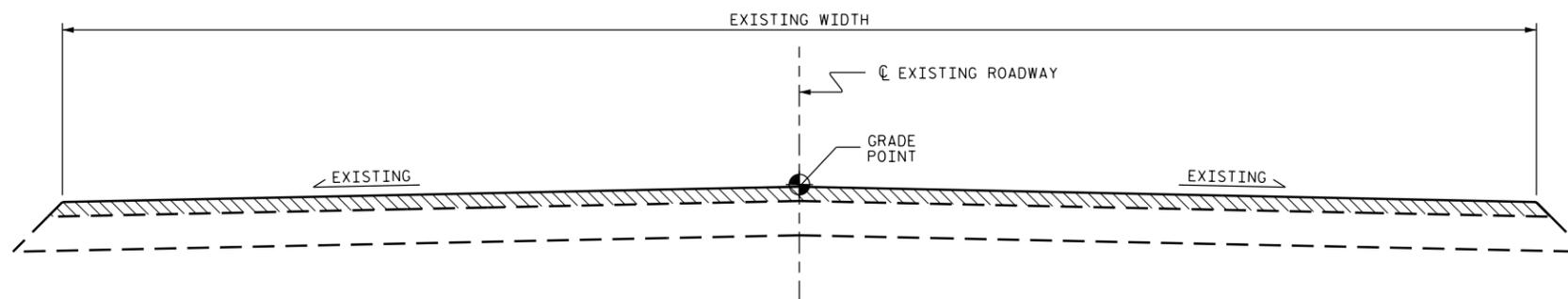
DRAWN BY: M.A.LEE DATE: 6/2015
 CHECKED BY: W.M. CLARKE DATE: 6/2015

NOTES:

INCIDENTAL MILLING - EXISTING APPROACH ASPHALT PAVING TO BE MILLED AS NECESSARY TO ATTAIN MINIMUM 1/2" DEPTH OF NEW ASPHALT PAVING. PROVIDE NEW ASPHALT PAVING THICKNESS TO CREATE A SMOOTH TRANSITION BETWEEN THE ROADWAY AND THE BRIDGE DECK. NEW ASPHALT PAVING THICKNESS MAY EXCEED 1/2" DUE TO SETTLEMENT OF THE EXISTING APPROACH ASPHALT PAVING.



PLAN

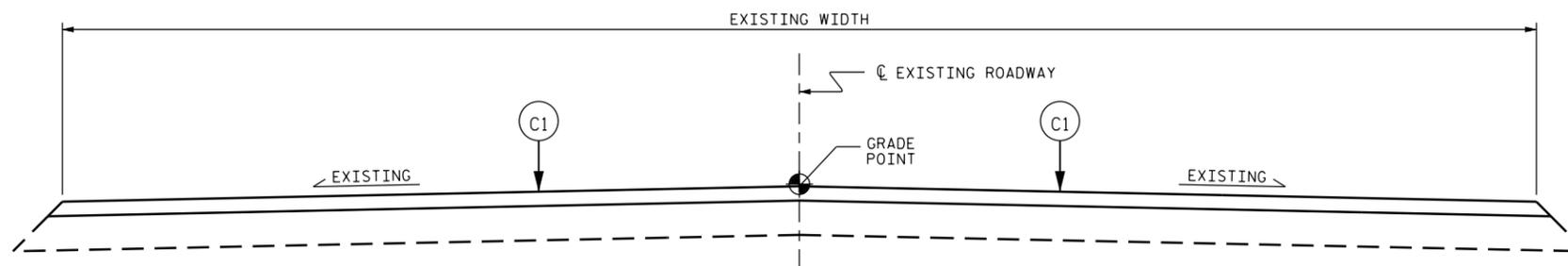


TYPICAL ROADWAY MILLING SECTION

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
INCIDENTAL MILLING	312 SQ. YDS.	
ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B	27 TONS	

C1	PROPOSED VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1/2" IN DEPTH OR GREATER THAN 2" IN DEPTH.
----	--

PROJECT NO. BP-5500HH
WAYNE COUNTY
 BRIDGE NO. 18



TYPICAL PROPOSED ROADWAY SECTION

DocuSigned by:
William M. Clarke
 1EB20097EAAF437...



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**APPROACH MILLING
 AND TYPICAL ROADWAY
 SECTIONS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-14
2			4			TOTAL SHEETS 14

DRAWN BY : M.A. LEE DATE : 6/2015
 CHECKED BY : W. M. CLARKE DATE : 6/2015

8/19/2015

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

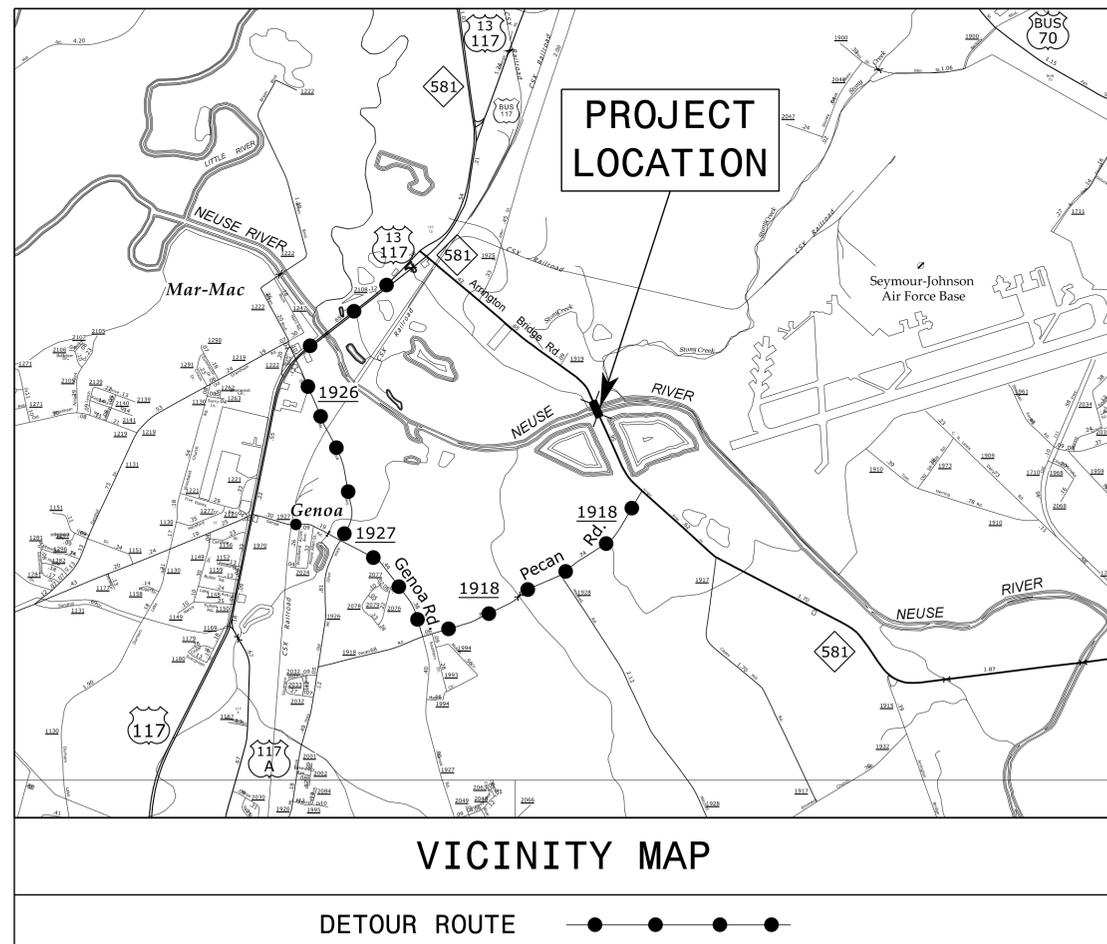
JANUARY, 1990

STD. NO. SN

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

WAYNE COUNTY



INDEX OF SHEETS

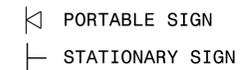
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	TRANSPORTATION OPERATIONS PLAN: GENERAL NOTES AND PHASING
TMP-2	NC 581 ROAD CLOSURE AND DETOUR

LEGEND

TRAFFIC CONTROL DEVICES



TEMPORARY SIGNING

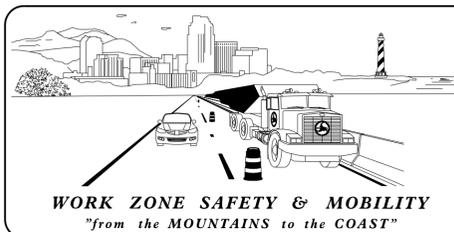


ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

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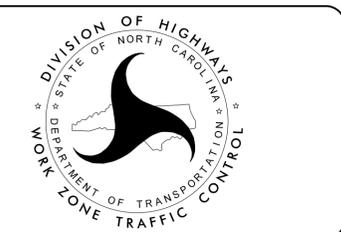
N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. — STATE TRAFFIC MANAGEMENT ENGINEER

STEVE KITE, P.E. — TRAFFIC CONTROL PROJECT ENGINEER

DON PARKER — TRAFFIC CONTROL PROJECT DESIGN ENGINEER

SPENCER JENNINGS — TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: *Steve Kite*
DATE: 8/19/2015

SEAL

SHEET NO. TMP-1
BP-5500HH
TIP PROJECT:

MANAGEMENT STRATEGIES

REPAIRS AND OVERLAY ON BRIDGE NO. 18 - ARRINGTON BRIDGE ROAD, WILL BE COMPLETED USING NIGHTLY ROAD CLOSURES AND MAINTAINING LOCAL (CASE FARMS AND THE WATER TREATMENT PLANT) TRAFFIC IN ONE LANE USING FLAGGERS DURING THE DAY.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
NC 581	MONDAY THRU SUNDAY 6:00AM - 7:00 PM

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

TRAFFIC PATTERN ALTERATIONS

- D) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- E) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- F) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- G) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- H) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- I) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- J) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PHASING

NOTES:

- 1) COMPLETE THE HYDRODEMOLITION AND LATEX MODIFIED CONCRETE (LMC) OVERLAY ON ONE LANE OF NC 581 ON BRIDGE NO. 18 BEFORE STARTING THE OTHER LANE. KEEP LANE CLOSED UNTIL LMC OVERLAY IS COMPLETE.
- 2) FLAGGER REFERS TO ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15.

STEP 1

- INSTALL ADVANCED WORK ZONE WARNING SIGNS ON NC 581 (ARRINGTON BRIDGE ROAD) AS REQUIRED IN THE PROJECT NOTES.
- INSTALL AND COVER DETOUR SIGNS AS SHOWN ON TMP-2.

STEP 2

- USING NIGHTLY ROAD CLOSURES, COMPLETE HYDRODEMOLITION AND LMC OVERLAY OF A SINGLE LANE. AT THE END OF WORK PERIOD, OPEN THE OPPOSING LANE TO 1 LANE. 2 WAY LOCAL TRAFFIC USING FLAGGERS.

STEP 3

- REPEAT STEP 2 TO COMPLETE HYDRODEMOLITION AND LMC OVERLAY OF THE SECOND LANE

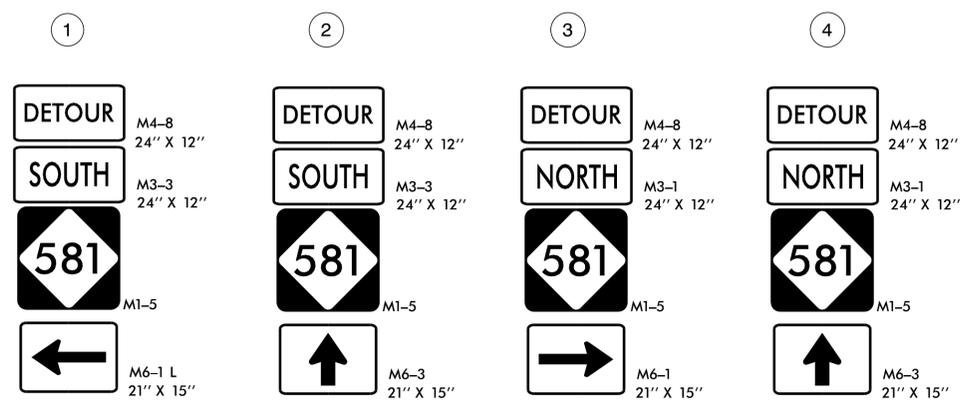
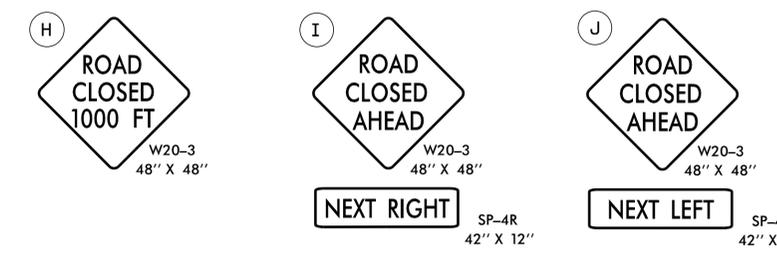
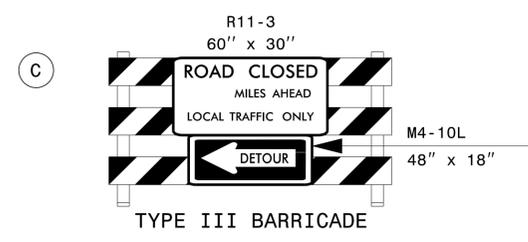
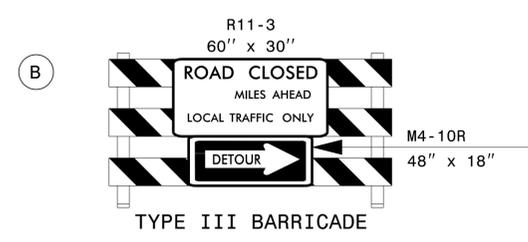
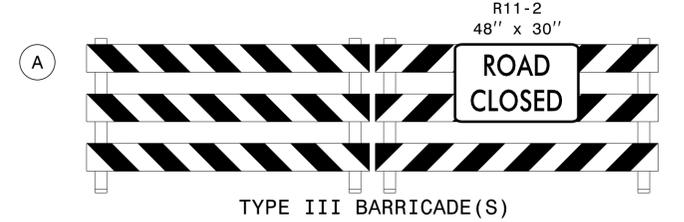
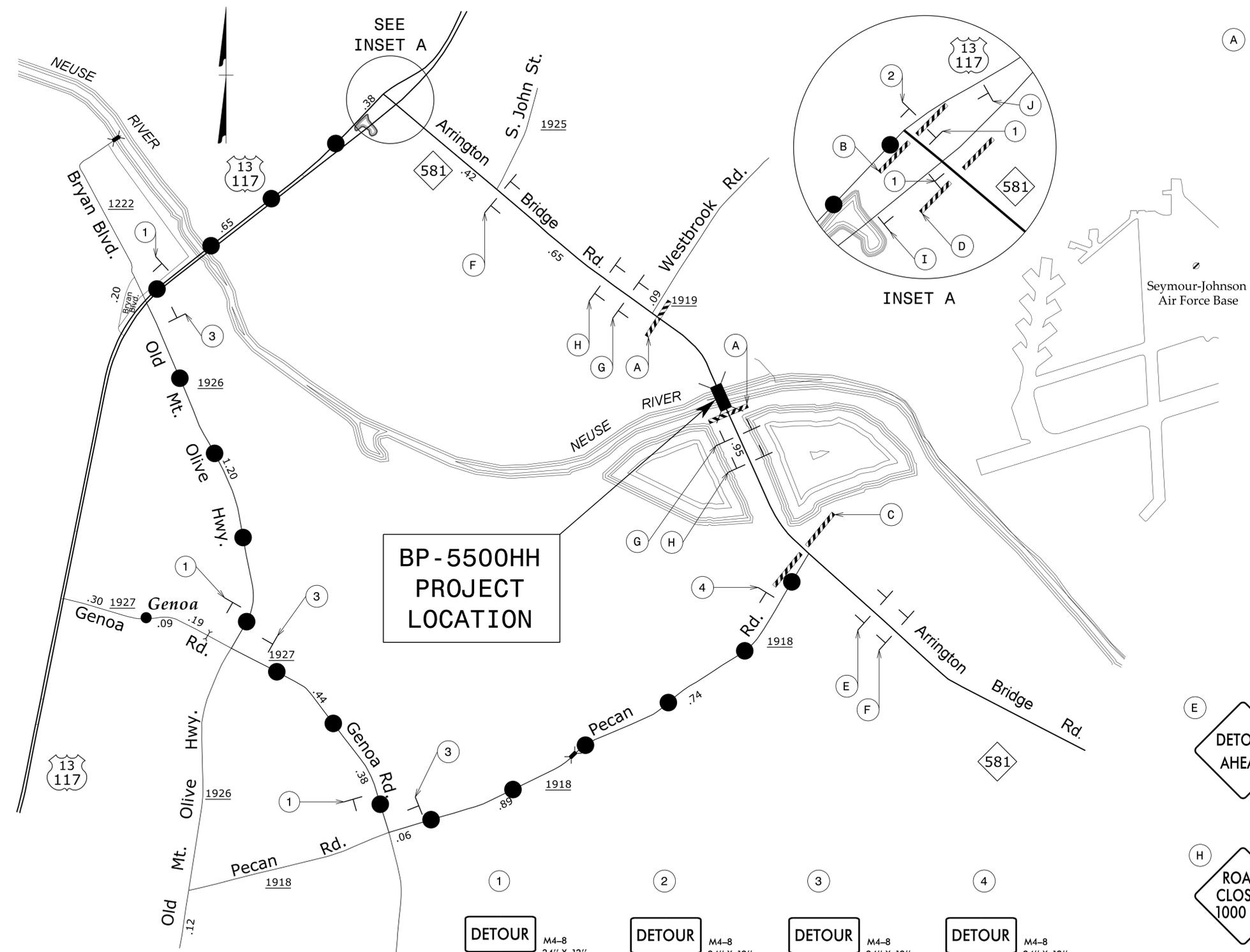
STEP 4

- USING FLAGGERS PLACE FINAL PAVEMENT MARKINGS IN THE EXISTING PATTERN AND OPEN ROAD TO TRAFFIC IN EXISTING 2-LANE, 2 WAY PATTERN.

STEP 5

- REMOVE ALL TRAFFIC CONTROL DEVICES.

APPROVED: <i>Steve Kite</i> <small>E27C581E10FC42</small> DATE: 8/19/2015 SEAL			<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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APPROVED: <i>Steve Kite</i> DATE: 8/19/2015 		<p>NC 581 ROAD CLOSURE AND DETOUR</p>
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8/12/2015
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 User: sbjennings