

TIP PROJECT: BP-14B



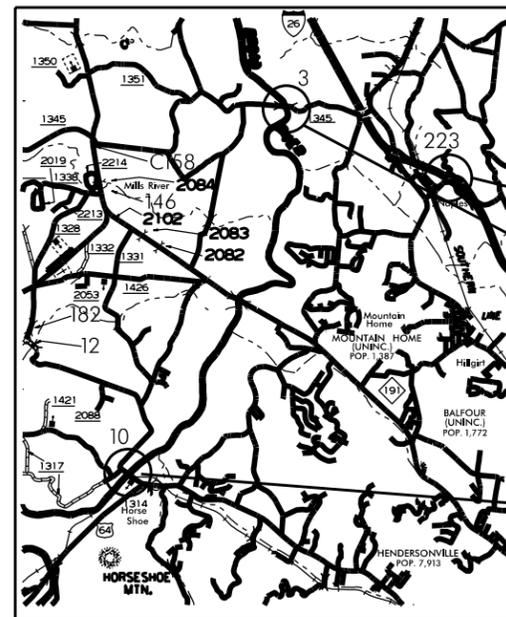
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-14B	1	15
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
14B.20454.2		P.E.	
14B.20454.6		P.E.	
14B.20454.2		CONST	
14B.20454.6		CONST	

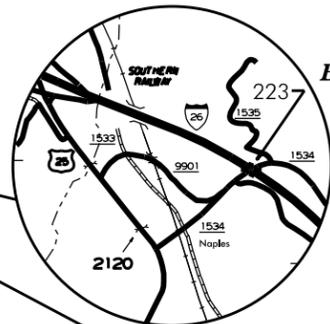
HENDERSON & HAYWOOD COUNTY

LOCATION: BRIDGE #3 ON SR 1345 OVER FRENCH BROAD RIVER IN HENDERSON COUNTY
BRIDGE #10 ON SR 1314 OVER FRENCH BROAD RIVER IN HENDERSON COUNTY
BRIDGE #223 ON SR 1534 OVER I-26 IN HENDERSON COUNTY
BRIDGE #423 ON SR 1946 OVER PIGEON RIVER IN HAYWOOD COUNTY

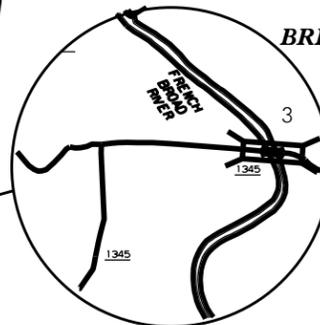
TYPE OF WORK: BRIDGE DECK PRESERVATION WITH LATEX MODIFIED CONCRETE



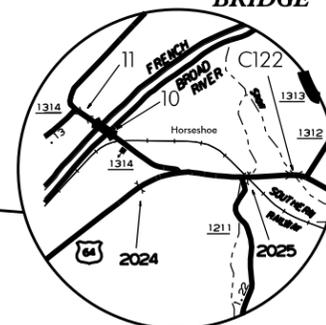
HENDERSON COUNTY



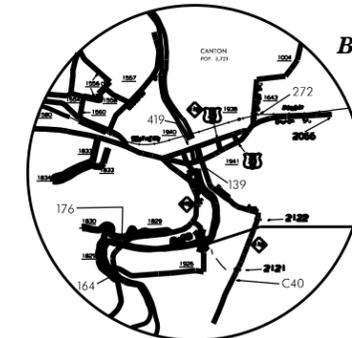
BRIDGE #223



BRIDGE #3



BRIDGE #10



BRIDGE #423

HAYWOOD COUNTY



DESIGN DATA

BRIDGE #3
 ADT 2004 = 4,500
 BRIDGE #10
 ADT 2004 = 4,000
 BRIDGE #223
 ADT 2008 = 6,400
 BRIDGE #423
 ADT 2008 = 700

PROJECT LENGTH

BRIDGE #3
 LENGTH STRUCTURE PROJECT = .066 MILE
 BRIDGE #10
 LENGTH STRUCTURE PROJECT = .053 MILE
 BRIDGE #223
 LENGTH STRUCTURE PROJECT = .060 MILE
 BRIDGE #423
 LENGTH STRUCTURE PROJECT = .057 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

ROY GIROLAMI, P.E.
 PROJECT ENGINEER

2012 STANDARD SPECIFICATIONS

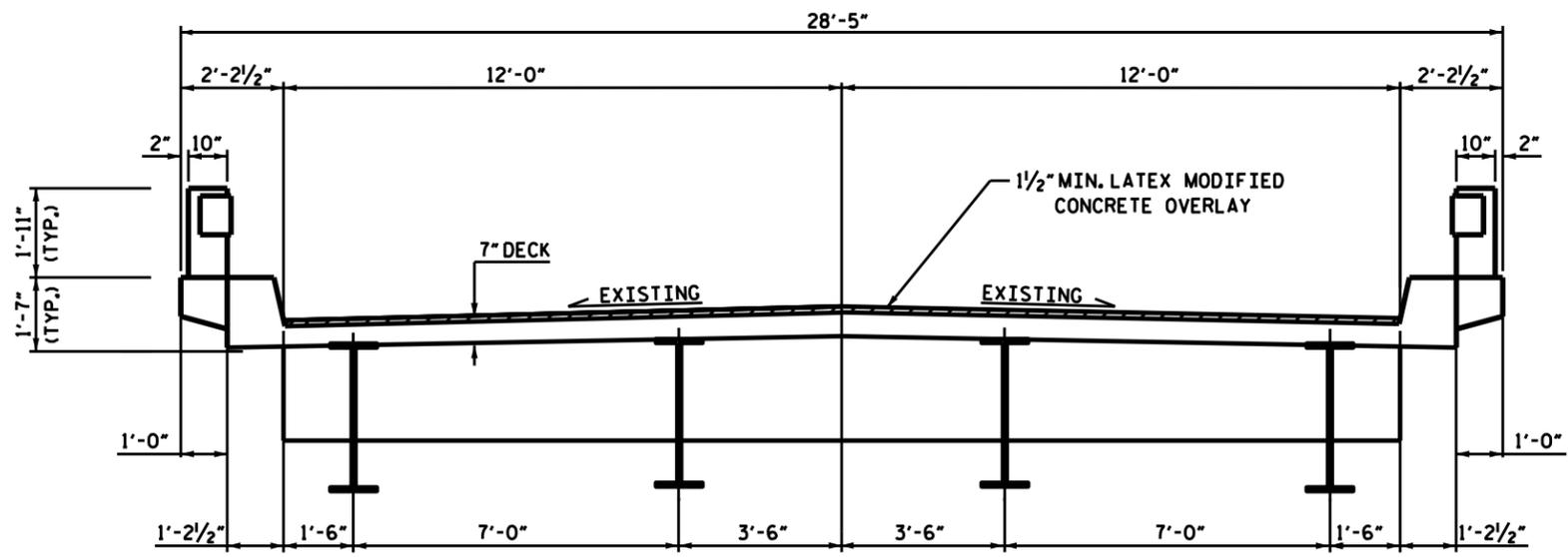
LETTING DATE:

JULY 24, 2012

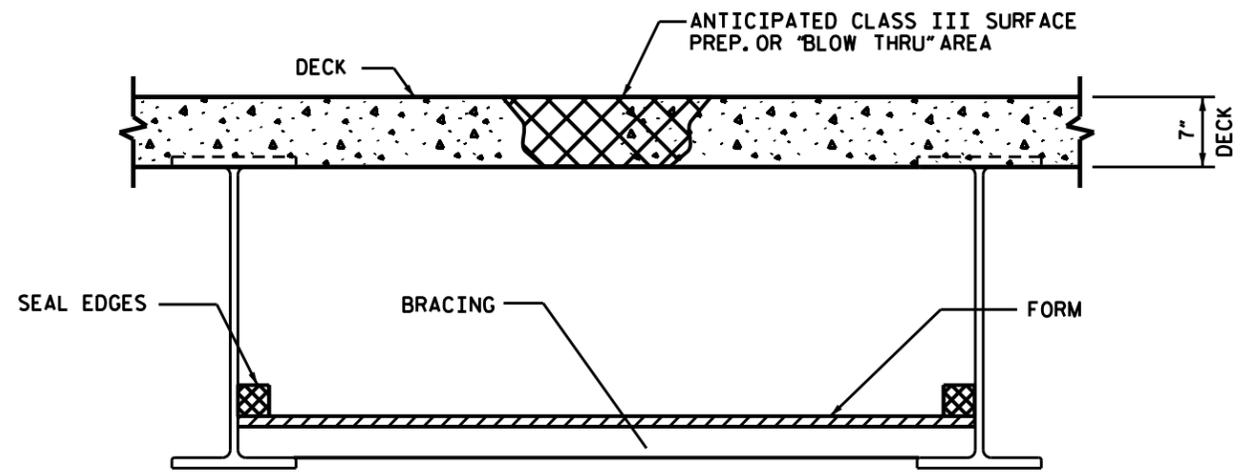
ENGINEER



THEO BEACH, P.E.
 PROJECT DESIGN ENGINEER



TYPICAL SECTION

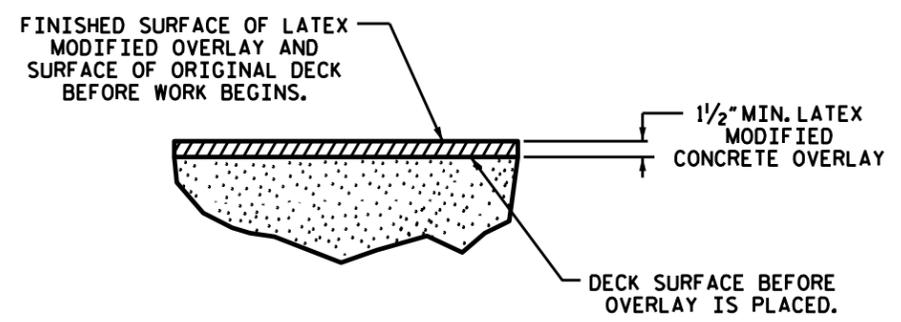


TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COST FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

NOTES

- EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECK.
- 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.
- FOR 'HYDRO-DEMOLITION OF BRIDGE DECK', SEE SPECIAL PROVISIONS.
- INCIDENTAL MILLING IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL SCARIFY AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF BRIDGE.
- FOR DEMOLITION DETAILS AT BENTS AND END BENTS SEE SHEET S-4.
- THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE 'TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK' DETAIL.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE 'MANAGING HYDRODEMOLITION WATER' 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.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

TOTAL BILL OF MATERIAL

INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE	PLACING & FINISHING LATEX MODIFIED CONCRETE	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5B
SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	LUMP SUM	SO. FT.	TON
304	667	42	0	667	34.5	667	LUMP SUM	5200	25.5

* QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 3

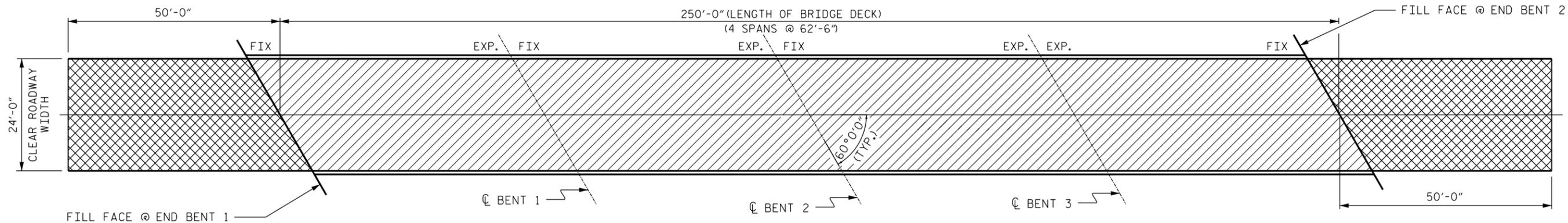


06-08-12

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 TYPICAL SECTIONS OF
 BRIDGE No. 3 ON
 SR 1345 OVER
 FRENCH BROAD RIVER

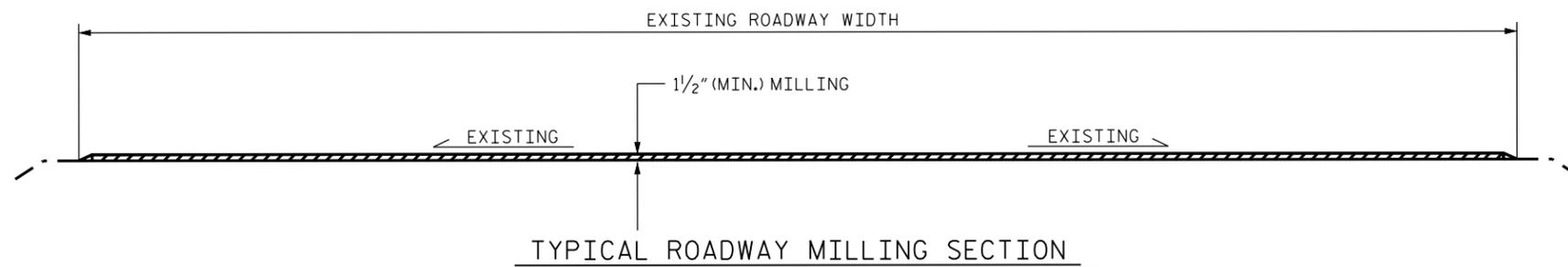
REVISIONS						NO.	TOTAL SHEETS
NO.	BY	DATE	NO.	BY	DATE		
1			2			S-1	14
2			4				

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

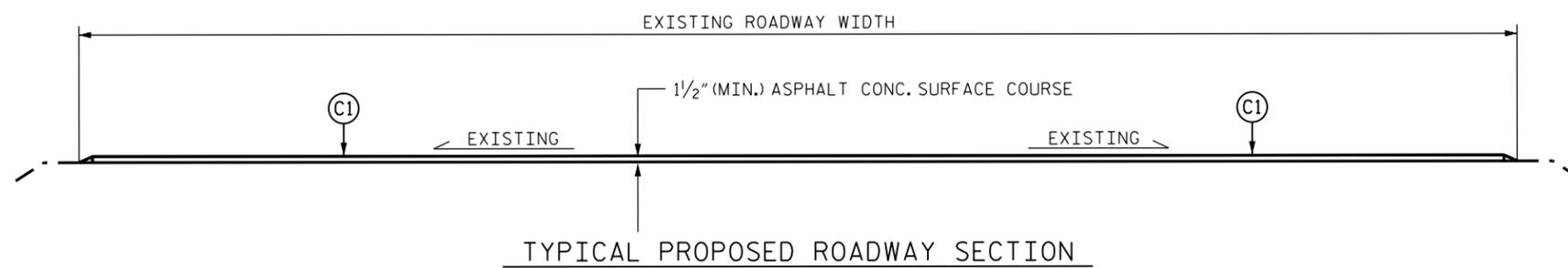


- DECK SCARIFICATION AND HYDRODEMOLITION
- INCIDENTAL MILLING OF APPROACH ROADWAY

SURFACE PREPARATION PLAN



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" DEPTH.



PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 3

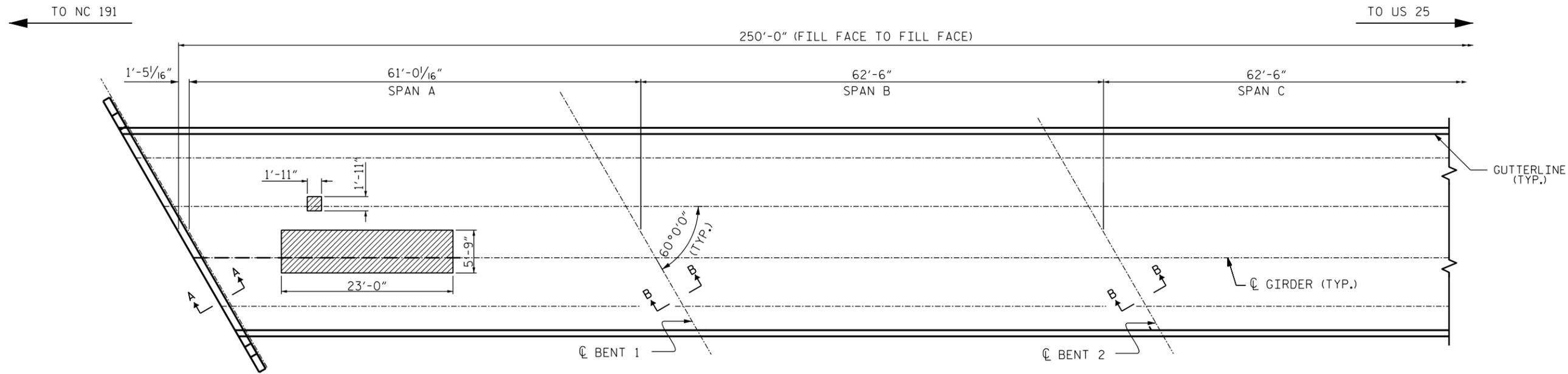


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SURFACE PREP. PLAN
 & ROADWAY
 MILLING SECTION

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

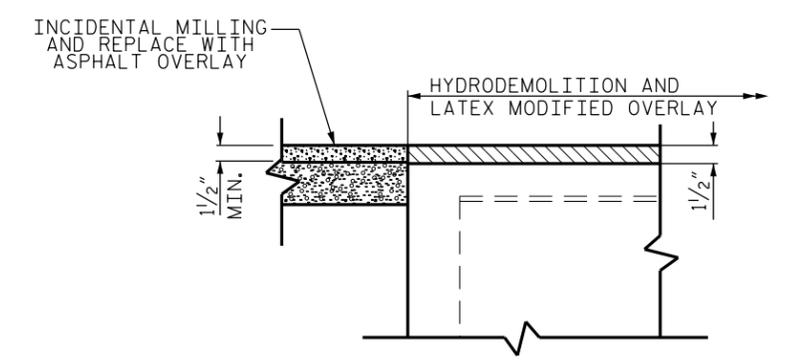
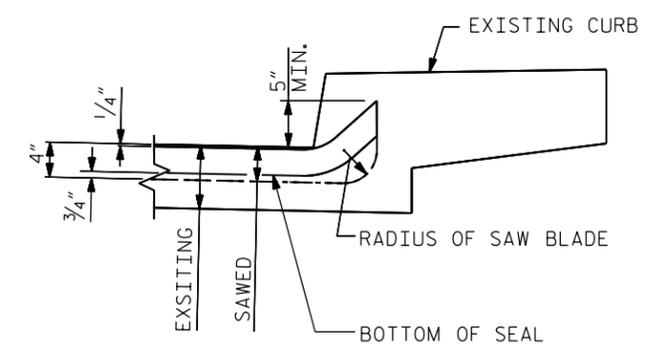
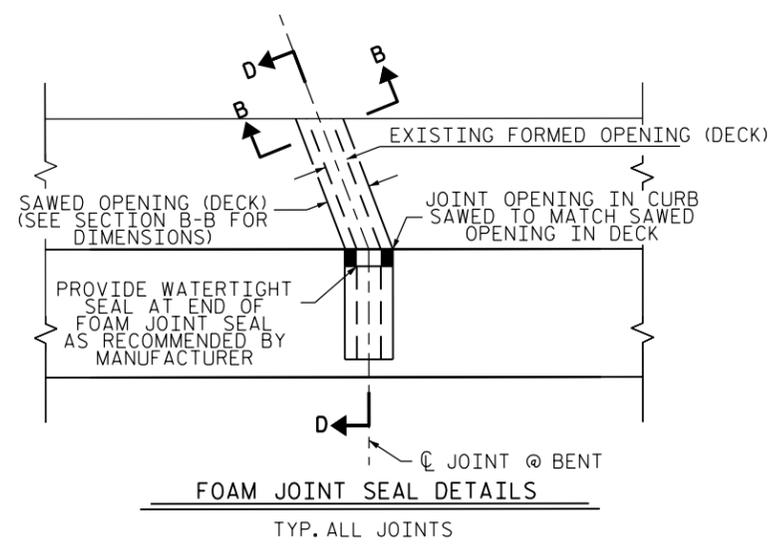
DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

06-08-12



APPROX. AREA: CLASS II REPAIR

PLAN VIEW OF BRIDGE



PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 3

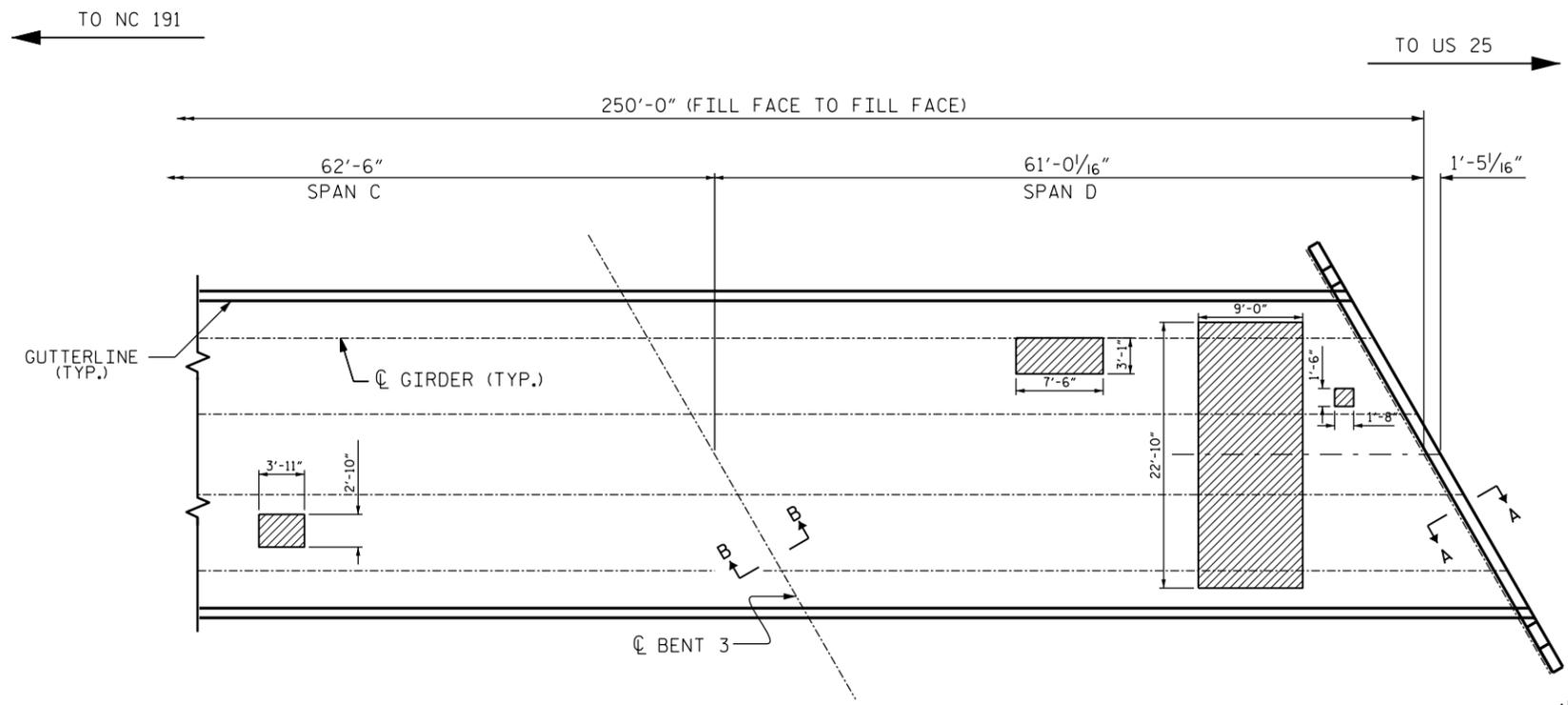


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN VIEW OF BRIDGE AND JOINT DETAILS

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

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011



PLAN VIEW OF BRIDGE

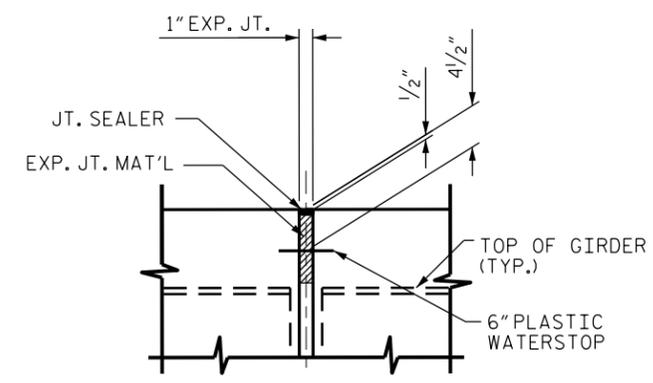
NOTES

FOR FOAM JOINT SEAL, SEE SPECIAL PROVISIONS.
 THE INSTALLED FOAM JOINT SEALS SHALL BE WATERTIGHT.
 NOMINAL UNCOMPRESSED SEAL WIDTH OF FOAM JOINT SEAL SHALL BE 2 1/2" AT BENTS.
 THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.

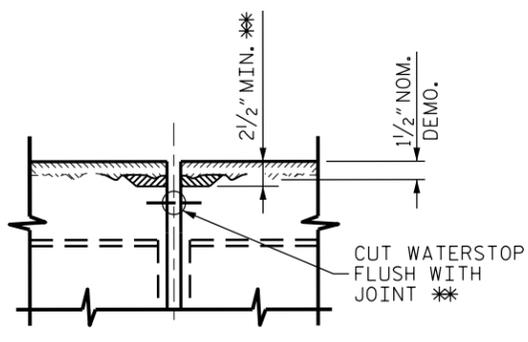
ELASTOMERIC CONCRETE	
BENT 1	4.8 CU. FT.
BENT 2	4.8 CU. FT.
BENT 3	4.8 CU. FT.
* TOTAL	14.4 CU. FT.

* BASED ON THE MINIMUM BLOCKOUT SHOWN.
 ALL QUANTITIES ARE FOR INFORMATION ONLY.

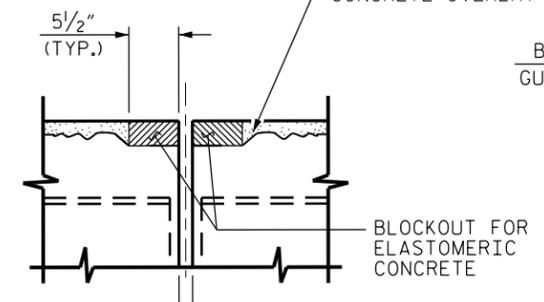
APPROX. AREA: CLASS II REPAIR



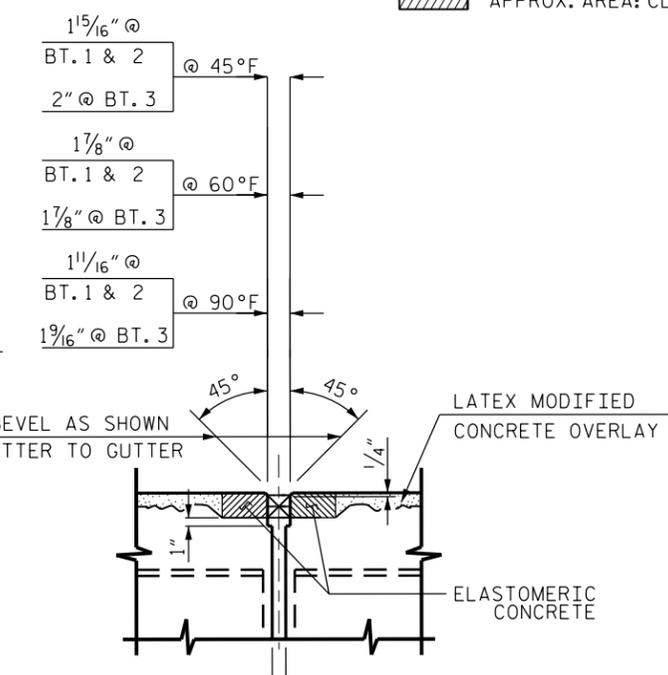
SECTION B-B
(EXISTING JOINT)



SECTION B-B
(MINIMUM EXISTING JOINT DEMOLITION)



SECTION B-B
(PROPOSED FOAM JOINT SEAL PRE-SAWED DIMENSIONS)



SECTION B-B
(PROPOSED FOAM JOINT SEAL EXPANSION)

* ALL LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED. IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, THE ENTIRE WATERSTOP SHALL BE REMOVED.

PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PLAN VIEW OF BRIDGE
 AND JOINT
 DETAILS



06-08-12

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

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

NOTES

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

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.

FOR 'HYDRO-DEMOLITION OF BRIDGE DECK', SEE SPECIAL PROVISIONS.

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

FOR DEMOLITION DETAILS AT BENTS AND END BENTS SEE SHEET S-4.

THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE 'TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK' DETAIL.

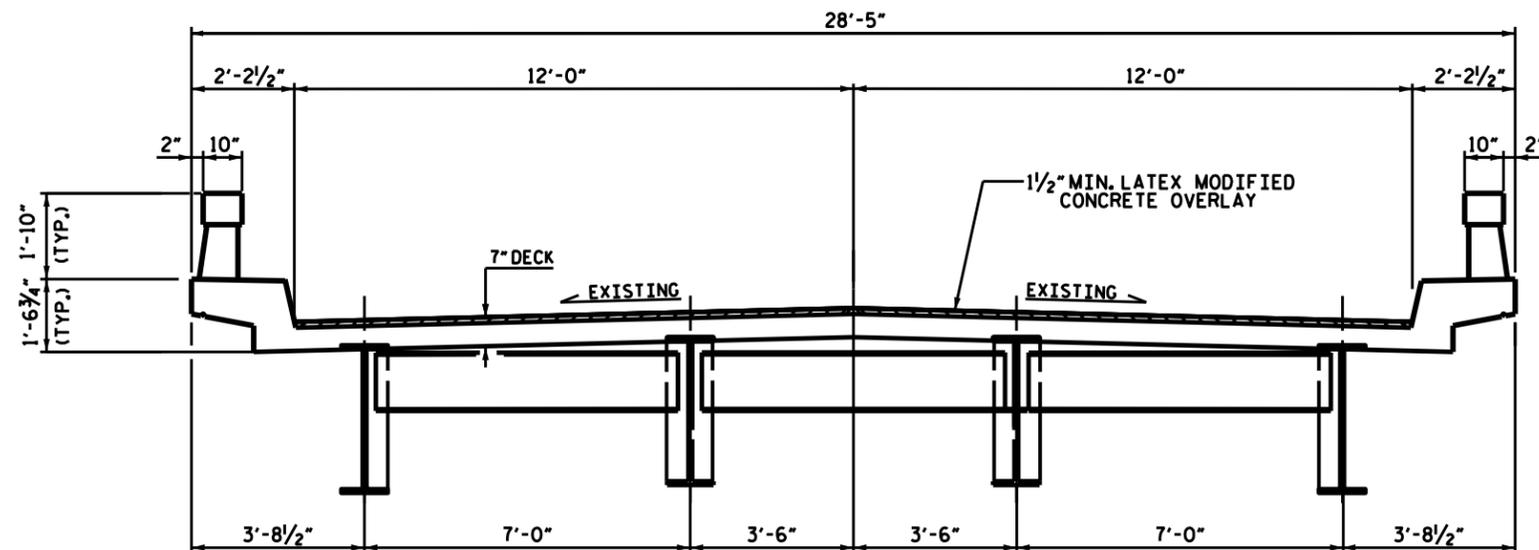
THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE 'MANAGING HYDRODEMOLITION WATER' SPECIAL PROVISION.

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

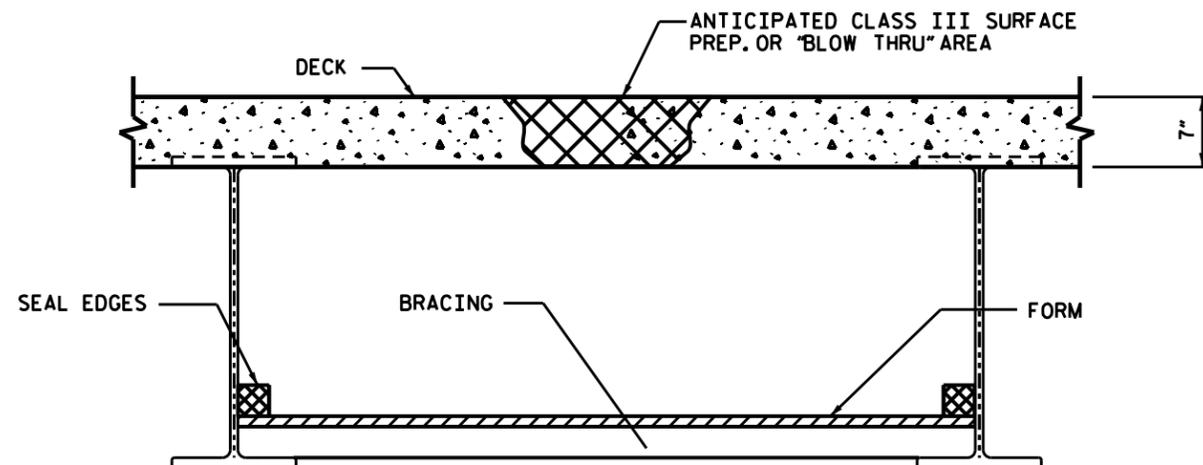
FOR 'FOAM JOINT SEALS', SEE SPECIAL PROVISIONS.

FOR 'ELASTOMERIC CONCRETE', SEE SPECIAL PROVISIONS.

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



TYPICAL SECTION



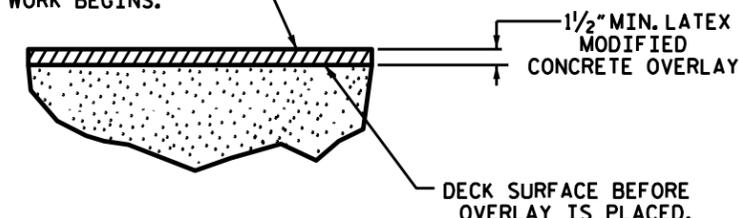
TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COST FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.

FINISHED SURFACE OF LATEX MODIFIED OVERLAY AND SURFACE OF ORIGINAL DECK BEFORE WORK BEGINS.

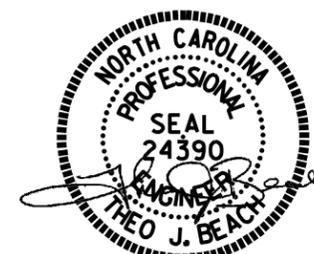


DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

TOTAL BILL OF MATERIAL									
INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE	PLACING & FINISHING LATEX MODIFIED CONCRETE	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5B
SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	LUMP SUM	SO. FT.	TON
267	480	35	0	480	25	480	LUMP SUM	3740	22.4

* QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

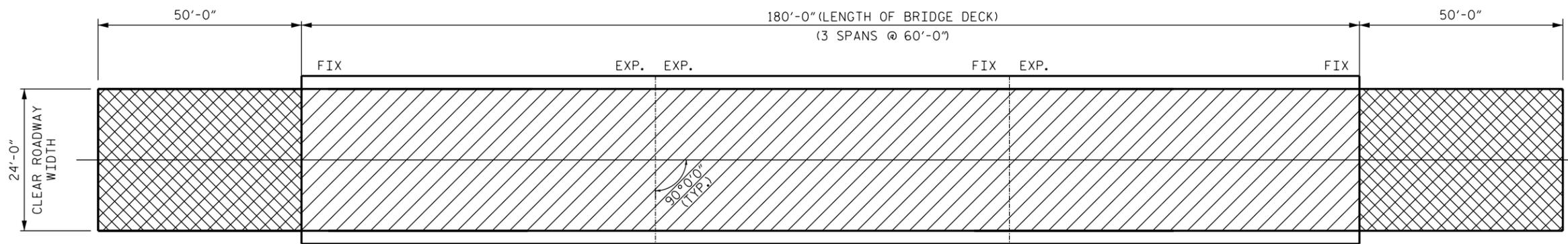
PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 10



06-08-12

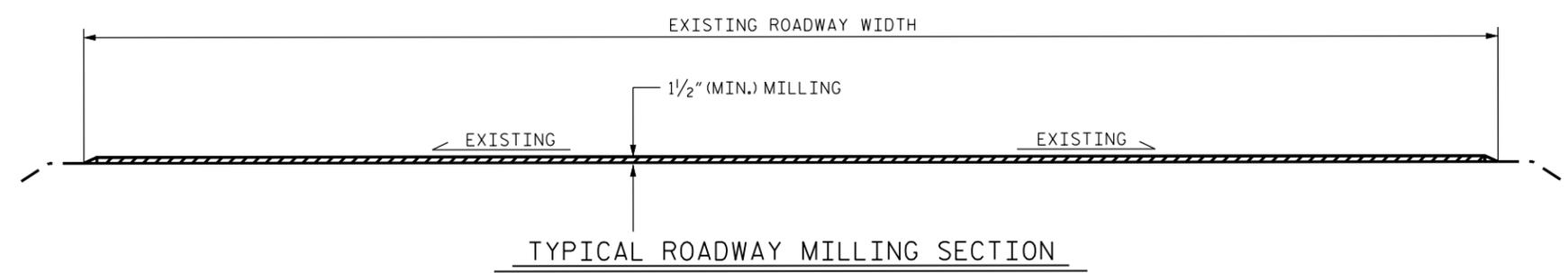
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTIONS OF BRIDGE No. 10 ON SR 1314 OVER FRENCH BROAD RIVER					
REVISIONS					SHEET NO. S-5
NO.	BY	DATE	NO.	BY	
1			2		
2			4		

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

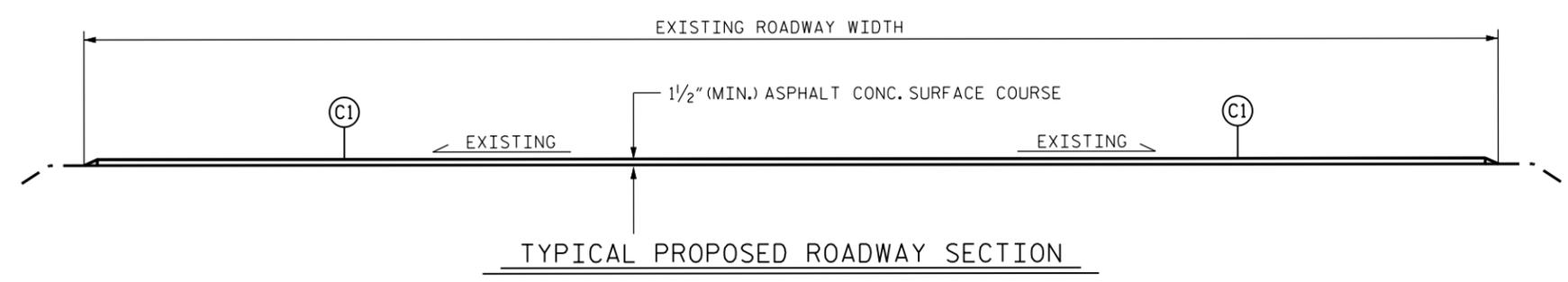


 DECK SCARIFICATION AND HYDRODEMOLITION
 INCIDENTAL MILLING OF APPROACH ROADWAY

SURFACE PREPARATION PLAN



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" DEPTH.



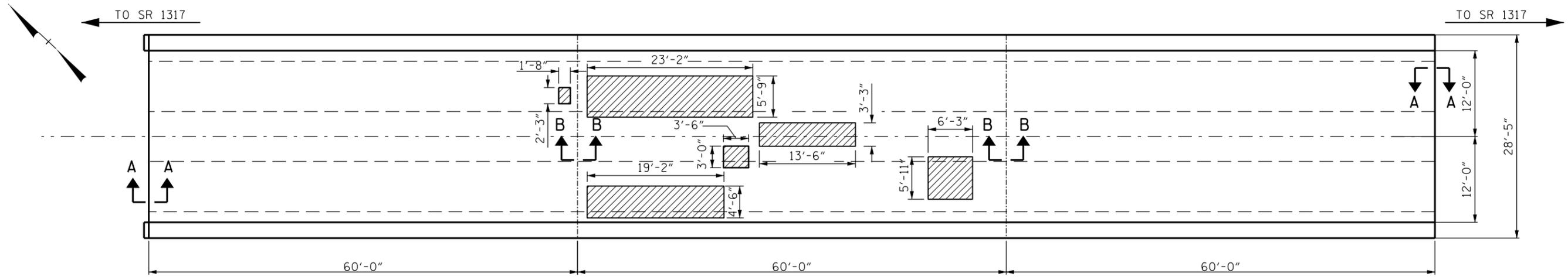
PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 10



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SURFACE PREP. PLAN
 & ROADWAY
 MILLING SECTION

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

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

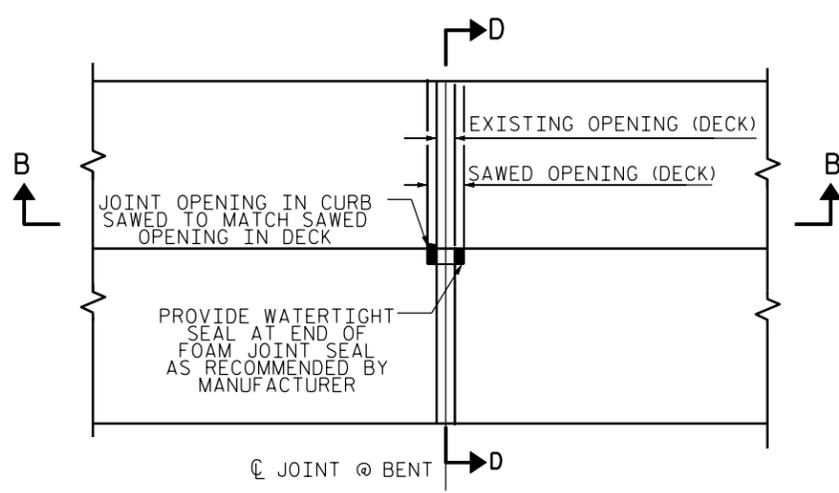


PLAN VIEW OF BRIDGE

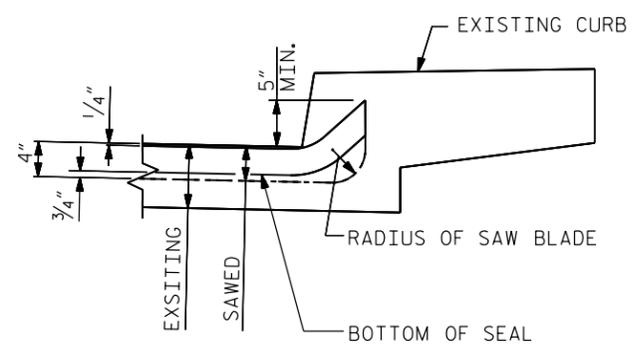
APPROX. AREA: CLASS II REPAIR

ELASTOMERIC CONCRETE	
BENT 1	4.2 CU. FT.
BENT 2	4.2 CU. FT.
* TOTAL	8.4 CU. FT.

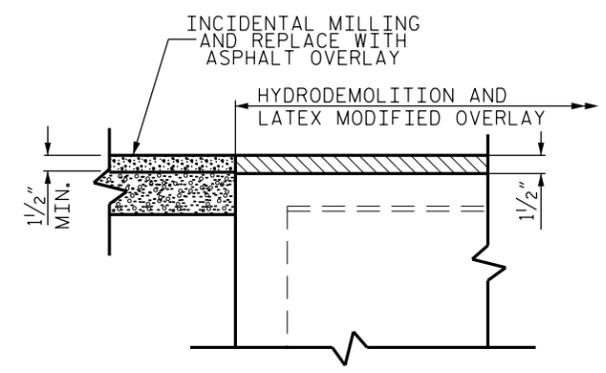
* BASED ON THE MINIMUM BLOCKOUT SHOWN.
ALL QUANTITIES ARE FOR INFORMATION ONLY.



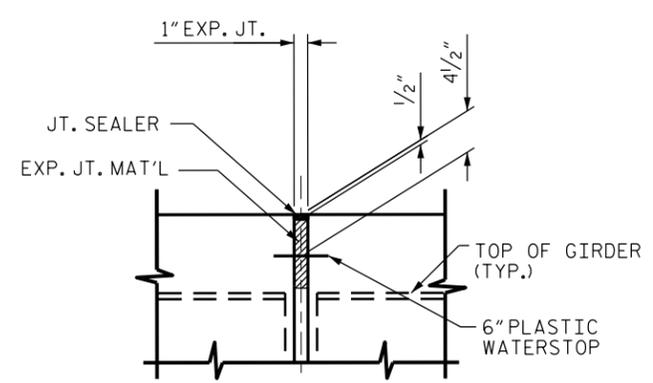
FOAM JOINT SEAL DETAILS



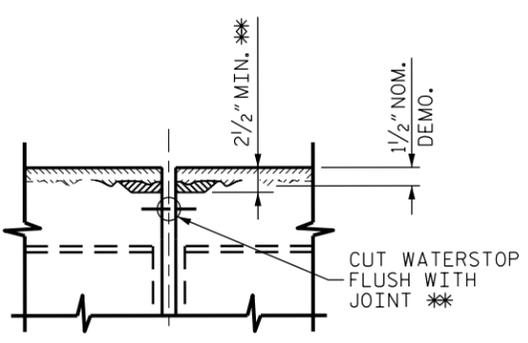
SECTION D-D



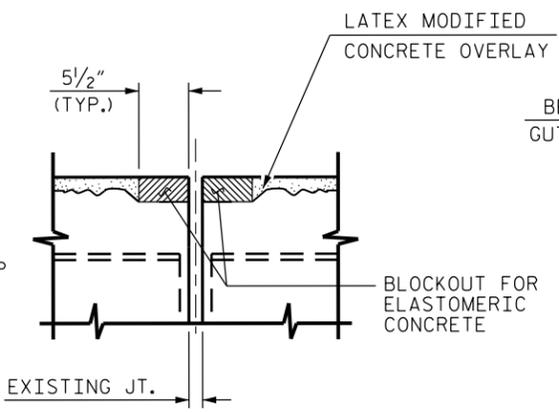
SECTION A-A



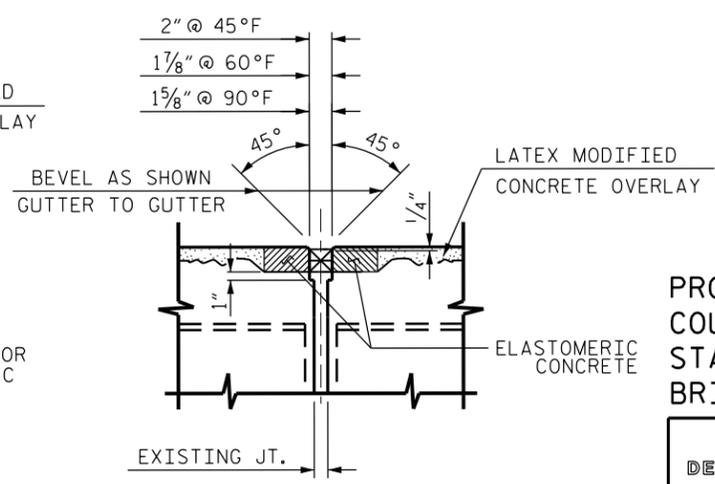
SECTION B-B (EXISTING JOINT)



SECTION B-B (MINIMUM EXISTING JOINT DEMOLITION)



SECTION B-B (PROPOSED FOAM JOINT SEAL PRE-SAWED DIMENSIONS)



SECTION B-B (PROPOSED FOAM JOINT SEAL EXPANSION)



PROJECT NO. BP-14B
 COUNTY: HENDERSON
 STATION: N/A
 BRIDGE NO. 10

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PLAN VIEW OF BRIDGE AND JOINT DETAILS

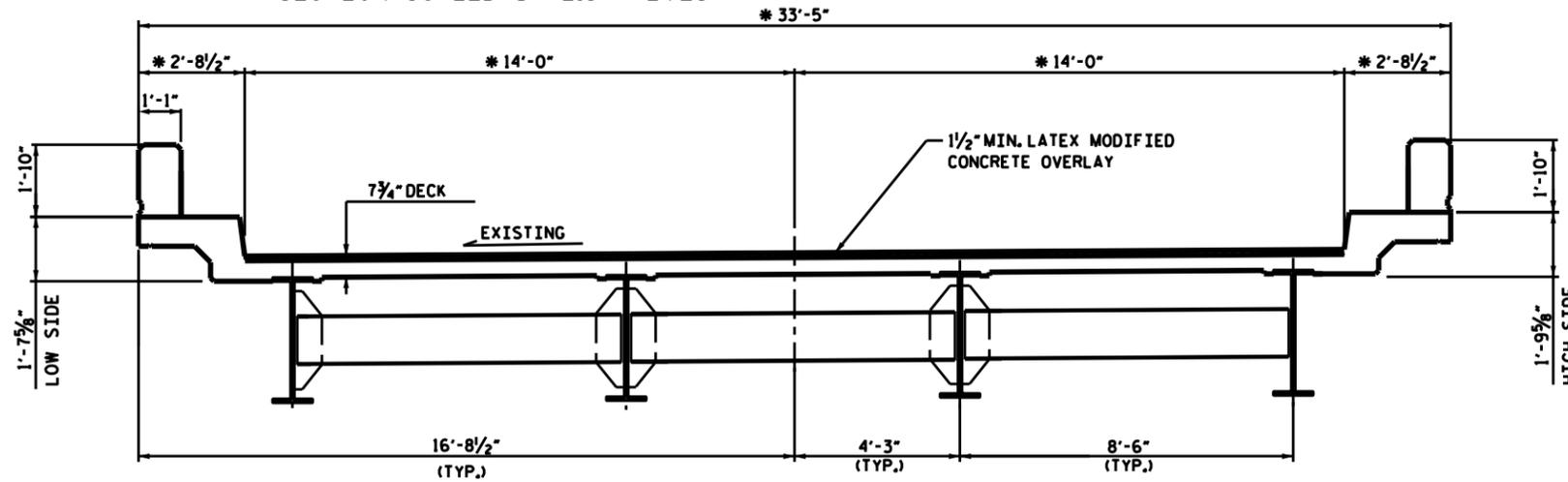
* ALL LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED. IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, THE ENTIRE WATERSTOP SHALL BE REMOVED.

FOR FOAM JOINT SEAL NOTES, SEE SHEET S-4.

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

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

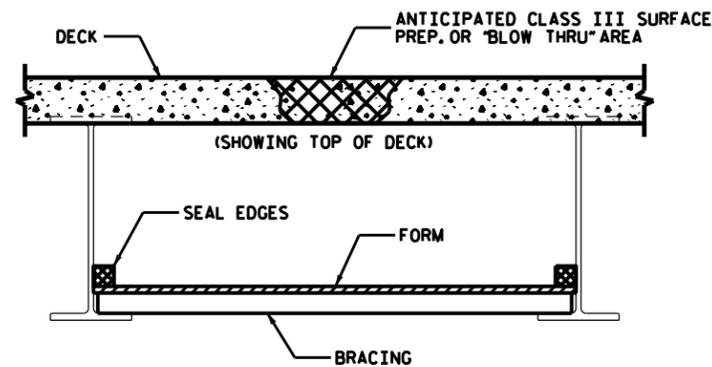
SECTION SCALED UP 2.37 TIMES



TYPICAL SECTION
* RADIAL DIMENSIONS

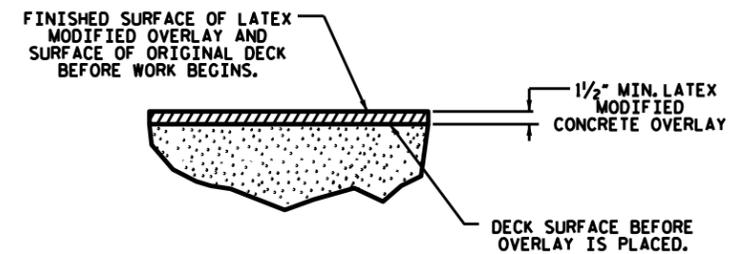
NOTES

- EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE REPAIR OF BRIDGE DECK.
- EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.
- INCIDENTAL MILLING IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL SCARIFY AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH END OF THE BRIDGE.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER. SEE "MANAGING HYDRODEMOLITION WATER" SPECIAL PROVISION.
- FOR "HYDRODEMOLITION AND DECK SCARIFICATION"; SEE SPECIAL PROVISIONS.
- FOR OVERLAY OF BRIDGE WITH "LATEX MODIFIED CONCRETE"; SEE SPECIAL PROVISIONS.
- FOR "FOAM JOINT SEALS"; SEE SPECIAL PROVISIONS.
- FOR "ELASTOMERIC CONCRETE"; SEE SPECIAL PROVISIONS.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE FOAM JOINT SEAL SHALL BE 2 1/2".
- FOR "SUBMITTAL OF WORKING DRAWINGS"; SEE SPECIAL PROVISIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.
- FOR TRAFFIC PHASING AND DETAILS, SEE TRAFFIC MANAGEMENT PLANS.



TYPICAL "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION. SUBMIT DETAILS OF PROPOSED FORM WORK FOR APPROVAL PRIOR TO BEGINNING WORK. COST FOR INSTALLING AND REMOVING FORM WORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

TOTAL BILL OF MATERIAL

INCIDENTAL MILLING	** DECK SCARIFICATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE	PLACING & FINISHING LATEX MODIFIED CONCRETE	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5B
SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	LUMP SUM	SO. FT.	TONS
216	776	105	0	776	44	776	LUMP SUM	6160	18

* QUANTITIES SHOWN FOR INFORMATION ONLY

PROJECT NO. BP-14B
HENDERSON COUNTY
 BRIDGE NO. 223

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TYPICAL SECTIONS

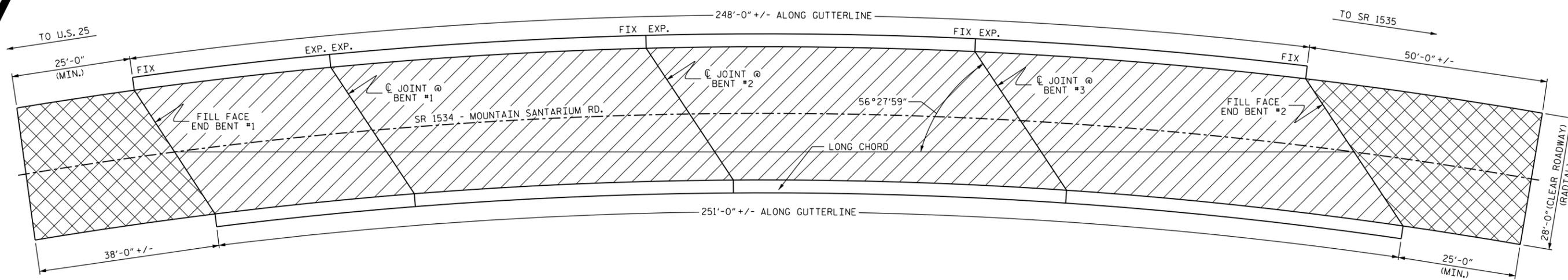
BRIDGE No. 223 ON
 SR 1534 OVERI-26



REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-8
1			3			TOTAL SHEETS 14
2			4			

DRAWN BY : R.PUTEK DATE : 06/12
 CHECKED BY : T.BEACH DATE : 06/12

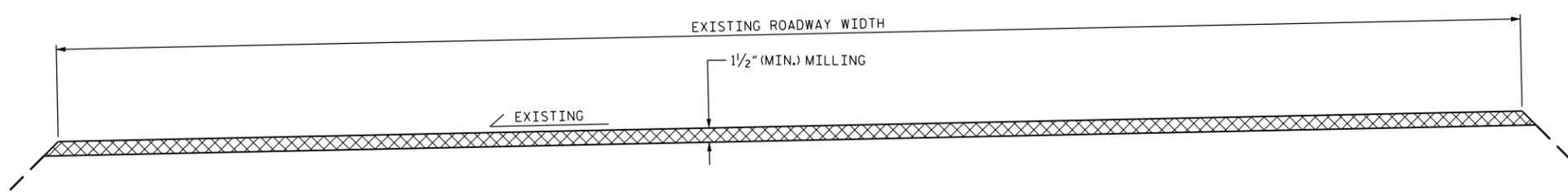
*****SYTIME*****
 *****D*****
 *****USERNAME*****



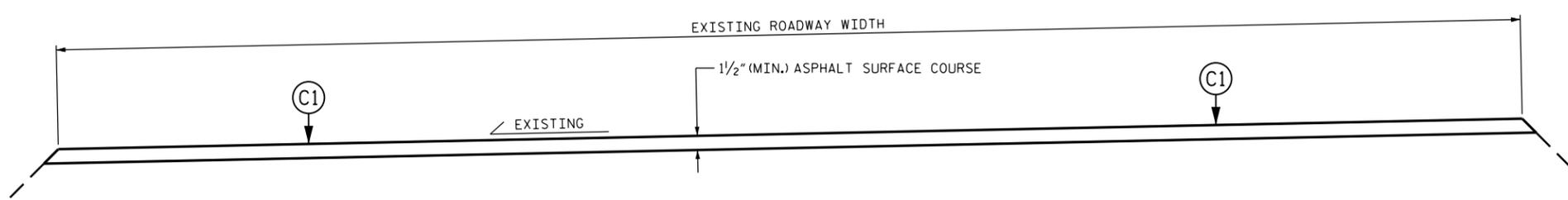
SURFACE PREPARATION PLAN

- INCIDENTAL MILLING OF APPROACH ROADWAY
- DECK SCARIFICATION AND HYDRODEMOLITION

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 1/2" IN DEPTH OR GREATER THAN 2" DEPTH.



TYPICAL ROADWAY MILLING SECTION



TYPICAL PROPOSED ROADWAY SECTION

PROJECT NO. BP-14B
HENDERSON COUNTY
 BEIDGE NO.: 223

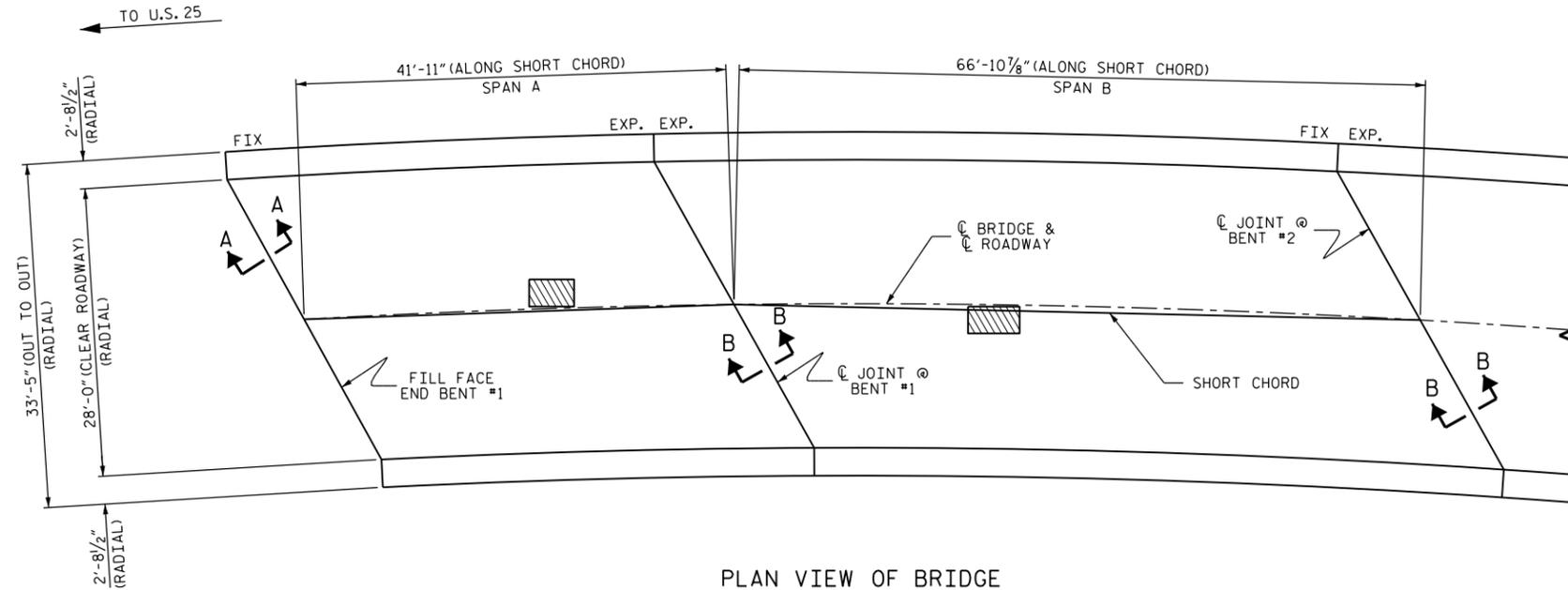


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SURFACE PREPARATION
 PLAN & ROADWAY
 MILLING SECTION**

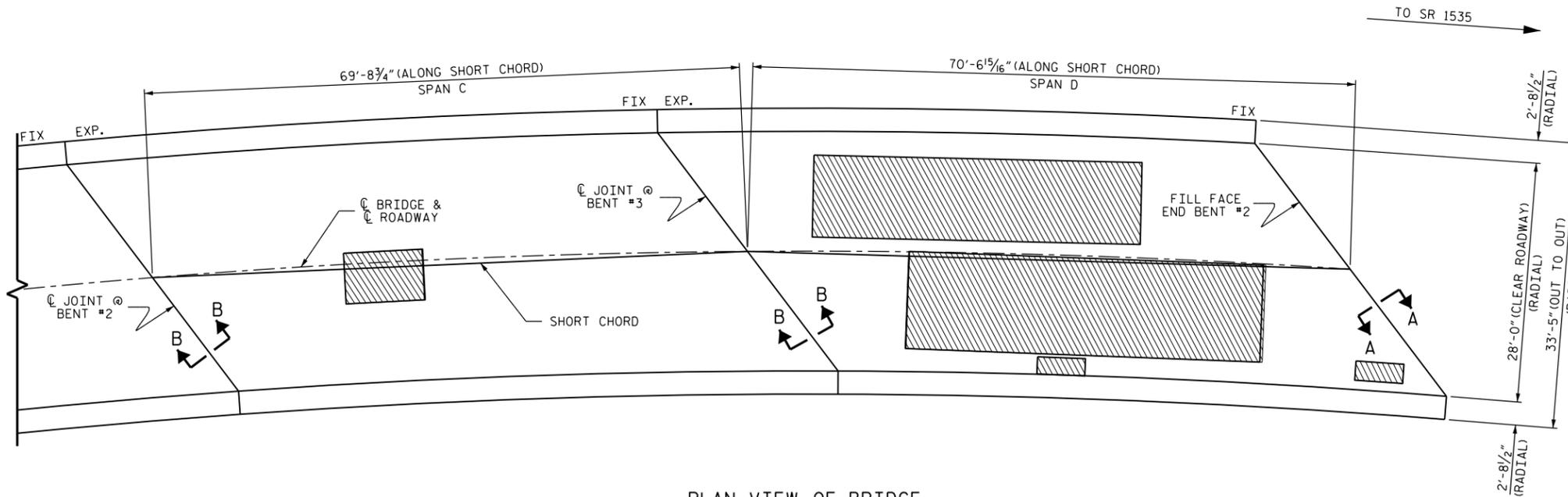
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9
1			3			TOTAL SHEETS
2			4			14

DRAWN BY : R.PUTEK DATE : 06/12
 CHECKED BY : T.BEACH DATE : 06/12



PLAN VIEW OF BRIDGE
SHOWING SPANS A & B

APPROXIMATE AREA: CLASS II REPAIR



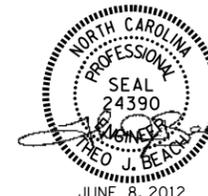
PLAN VIEW OF BRIDGE
SHOWING SPANS C & D

PROJECT NO. BP-14B
HENDERSON COUNTY
 BRIDGE NO.: 223

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN VIEW OF BRIDGE

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

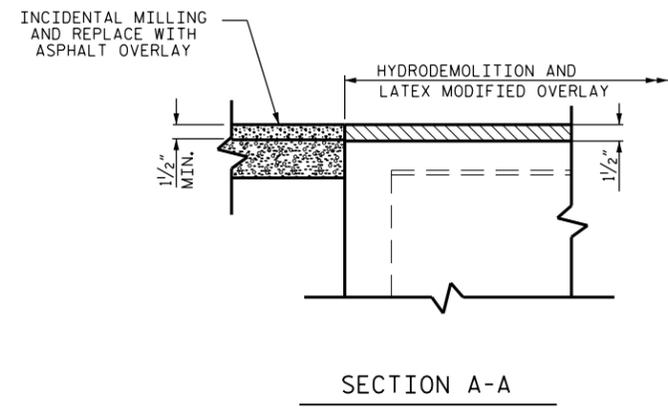
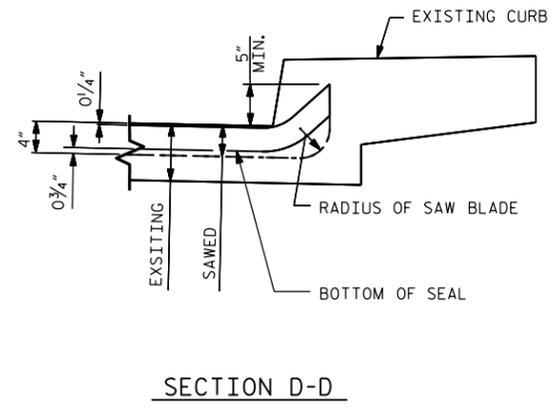
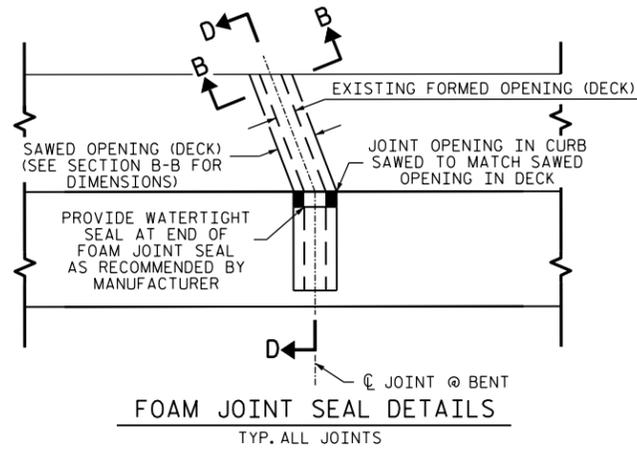


DRAWN BY : R.PUTEK DATE : 06/12
 CHECKED BY : T.BEACH DATE : 06/12

JUNE 8, 2012

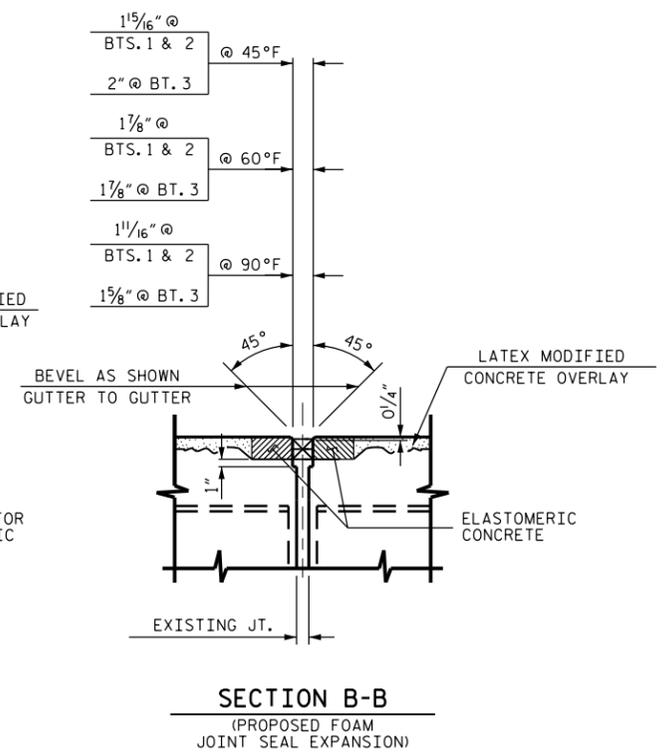
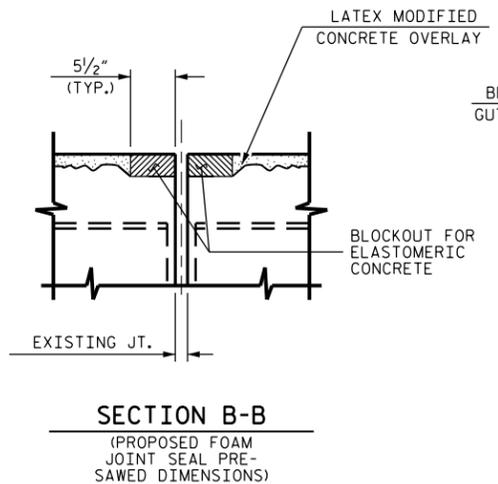
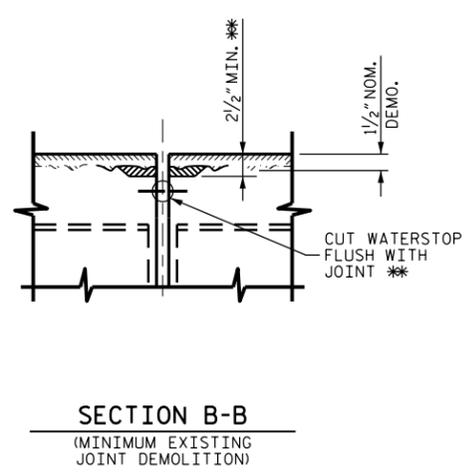
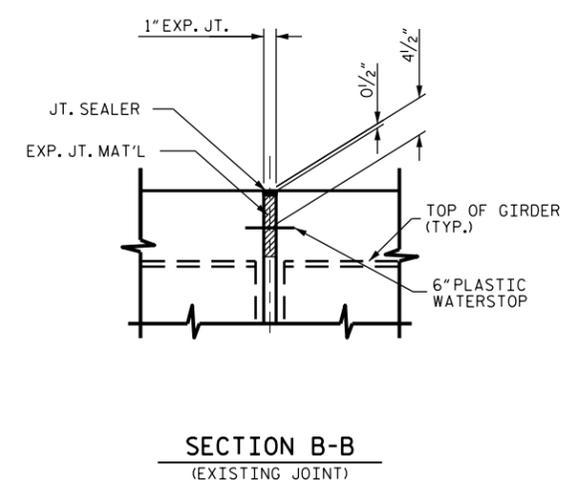
NOTES

FOR FOAM JOINT SEAL, SEE SPECIAL PROVISIONS.
 THE INSTALLED FOAM JOINT SEALS SHALL BE WATERTIGHT.
 NOMINAL UNCOMPRESSED SEAL WIDTH OF FOAM JOINT SEAL SHALL BE 2 1/2" AT BENTS.
 THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE FOAM JOINT SEAL IN LIEU OF SAWING THE JOINT.



ELASTOMERIC CONCRETE	
BENT 1	6.1 CU. FT.
BENT 2	6.4 CU. FT.
BENT 3	6.7 CU. FT.
* TOTAL	19.2 CU. FT.

* BASED ON THE MINIMUM BLOCKOUT SHOWN.
 ALL QUANTITIES ARE FOR INFORMATION ONLY.



** ALL LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED. IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, THE ENTIRE WATERSTOP SHALL BE REMOVED.

PROJECT NO. BP-14B
HENDERSON COUNTY
 BRIDGE NO.: 223

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT DETAILS



DRAWN BY : R.PUTEK DATE : 06/12
 CHECKED BY : T.BEACH DATE : 06/12

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

NOTES

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

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.

FOR "HYDRO-DEMOLITION OF BRIDGE DECK", SEE SPECIAL PROVISIONS.

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

FOR DEMOLITION DETAILS AT BENTS AND END BENTS SEE SHEET S-4.

THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

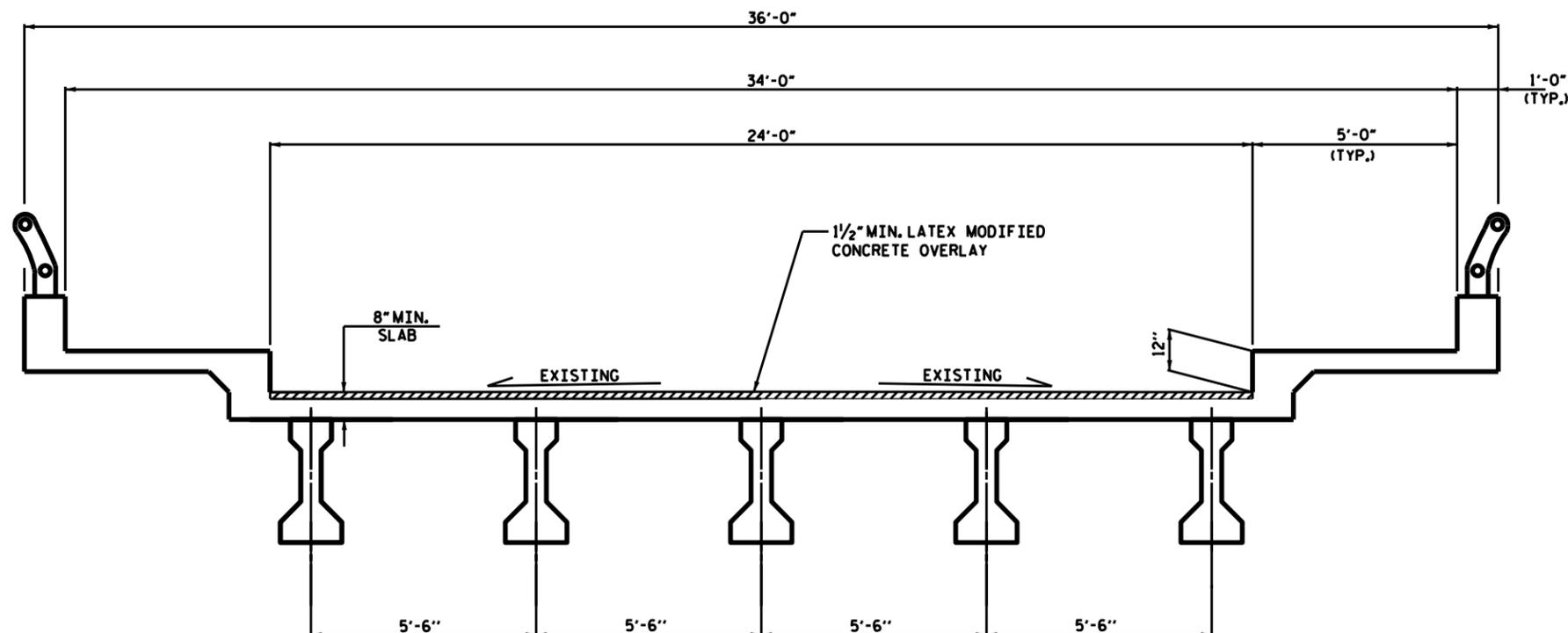
THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE "MANAGING HYDRODEMOLITION WATER" SPECIAL PROVISION.

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

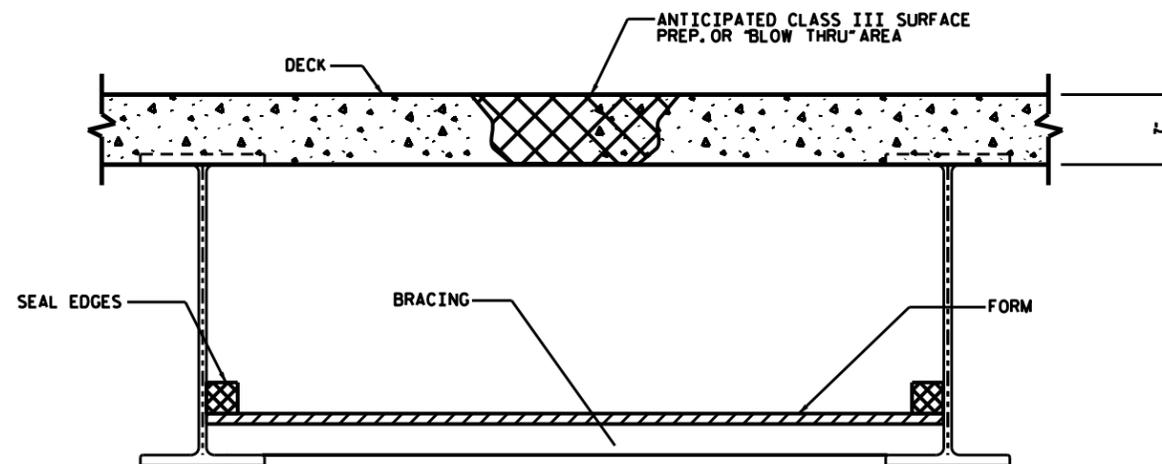
FOR "FOAM JOINT SEALS", SEE SPECIAL PROVISIONS.

FOR "ELASTOMERIC CONCRETE", SEE SPECIAL PROVISIONS.

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

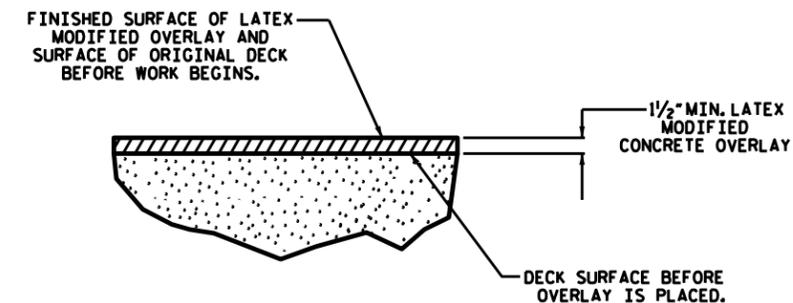


TYPICAL SECTION



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION. SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK. COST FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

TOTAL BILL OF MATERIAL

INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE	PLACING & FINISHING LATEX MODIFIED CONCRETE	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5B
SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	LUMP SUM	SO. FT.	TON
280	533	0	0	533	22	533	LUMP SUM	4137	23.5

* QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

PROJECT NO. BP-14B
 COUNTY: HAYWOOD
 STATION: N/A
 BRIDGE NO. 423

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TYPICAL SECTIONS OF
 BRIDGE No. 423 ON
 SR 1946 OVER
 PIGEON RIVER



06-08-12

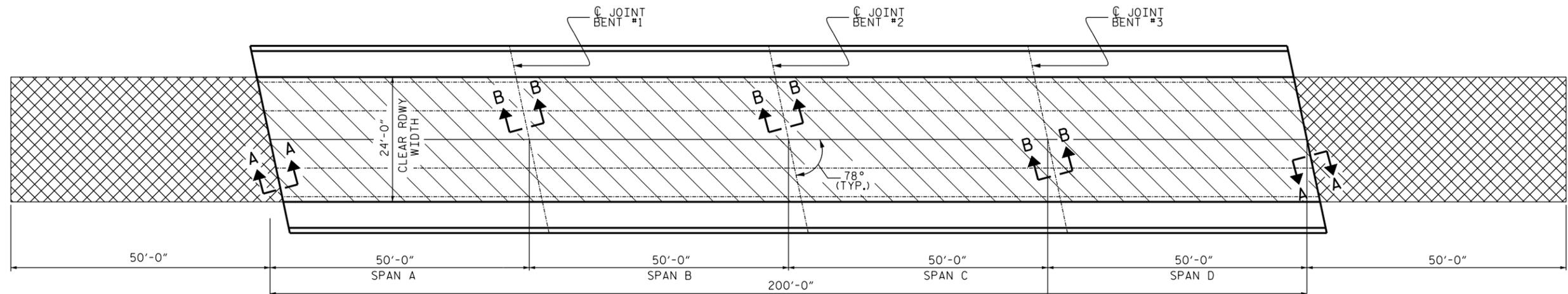
REVISIONS						SHEET NO. S-12
NO.	BY	DATE	NO.	BY	DATE	
1			2			TOTAL SHEETS 14
2			4			

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

*****SYSTEM*****

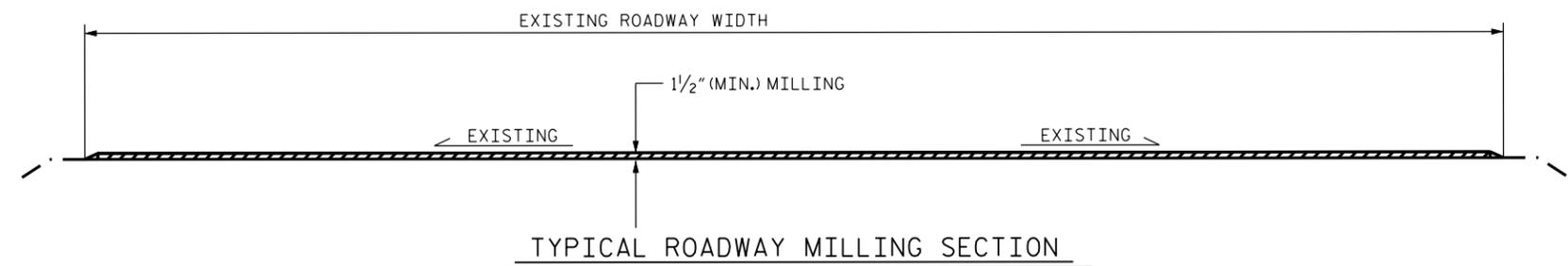
*****USERNAME*****

*****DGN*****

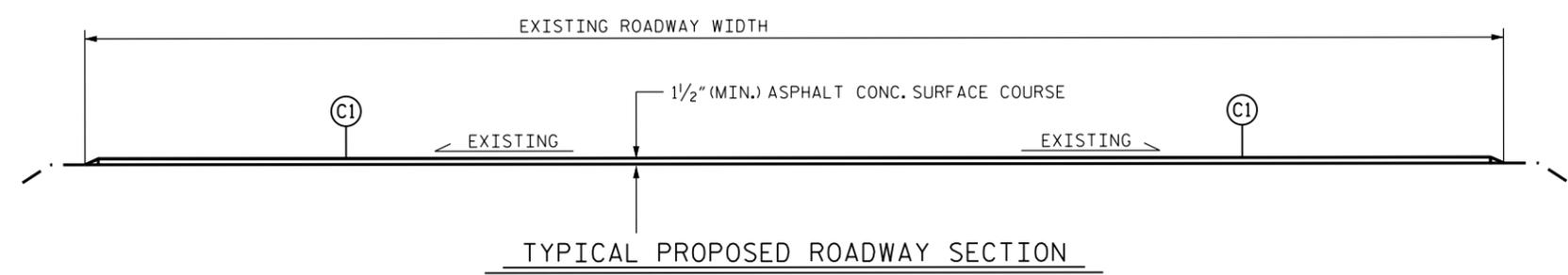


SURFACE PREPARATION PLAN

- DECK SCARIFICATION AND HYDRODEMOLITION
- INCIDENTAL MILLING OF APPROACH ROADWAY



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" DEPTH.



PROJECT NO. BP-14B
 COUNTY: HAYWOOD
 STATION: N/A
 BRIDGE NO. 423

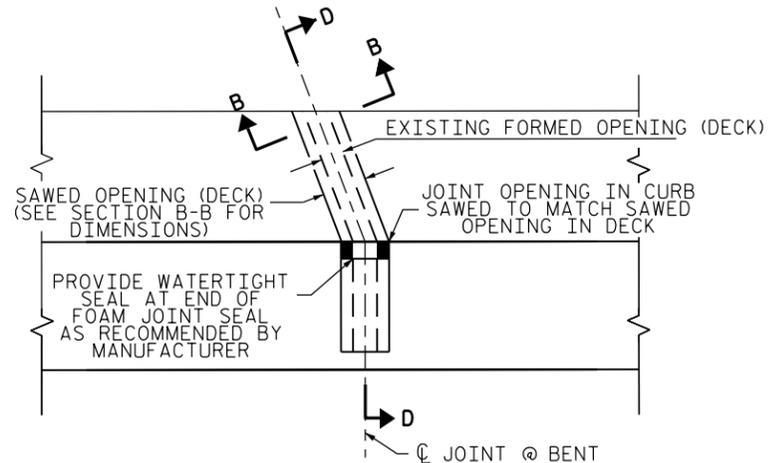


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

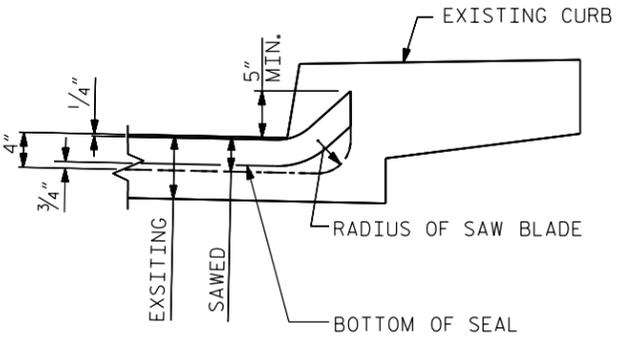
SURFACE PREP. PLAN
 & ROADWAY
 MILLING SECTION

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

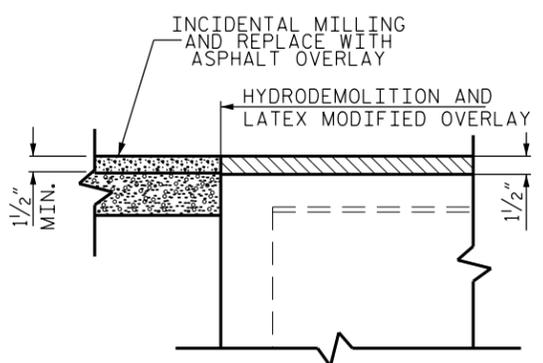
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS
1			3			S-13
2			4			14



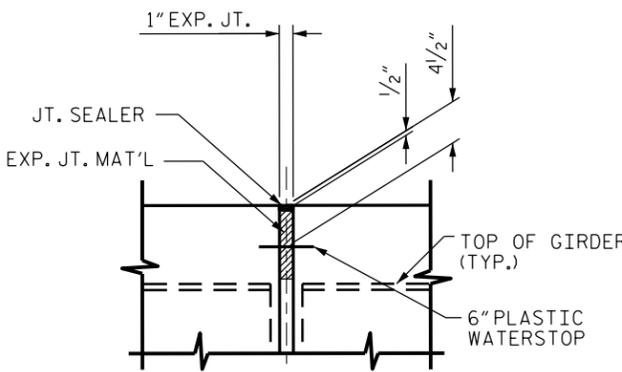
JOINT SEAL DETAILS



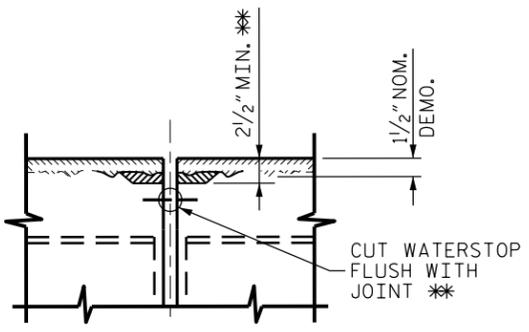
SECTION D-D



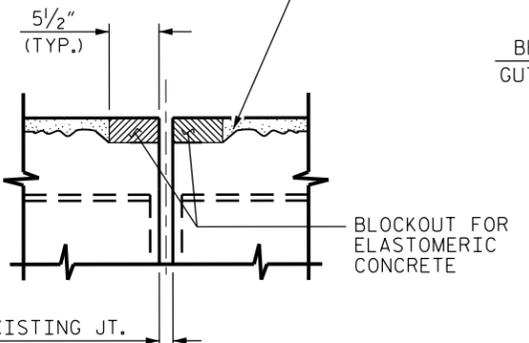
SECTION A-A



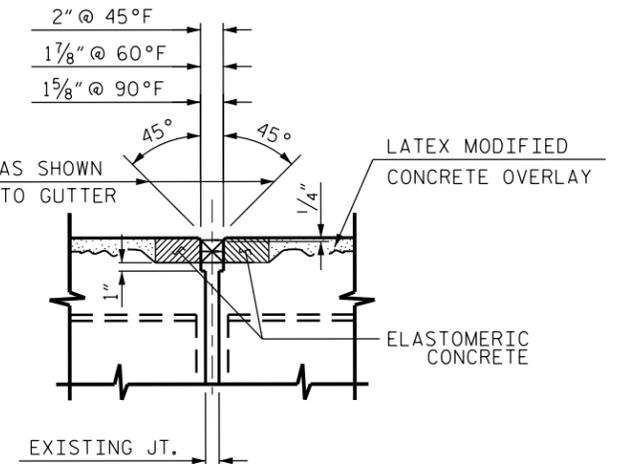
**SECTION B-B
(EXISTING JOINT)**



**SECTION B-B
(MINIMUM EXISTING JOINT DEMOLITION)**



**SECTION B-B
(PROPOSED FOAM JOINT SEAL PRE-SAWED DIMENSIONS)**



**SECTION B-B
(PROPOSED FOAM JOINT SEAL EXPANSION)**

** ALL LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED. IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, THE ENTIRE WATERSTOP SHALL BE REMOVED.

FOR FOAM JOINT SEAL NOTES, SEE SHEET S-4.

ELASTOMERIC CONCRETE	
BENT 1	4.7 CU. FT.
BENT 2	4.7 CU. FT.
BENT 3	4.7 CU. FT.
* TOTAL	14.1 CU. FT.

* BASED ON THE MINIMUM BLOCKOUT SHOWN. ALL QUANTITIES ARE FOR INFORMATION ONLY.

PROJECT NO. BP-14B
 COUNTY: HAYWOOD
 STATION: N/A
 BRIDGE NO. 423

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN VIEW OF BRIDGE
 AND JOINT
 DETAILS



06-08-12

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

DRAWN BY : S. T. SANDOR DATE : MAY/2011
 CHECKED BY : R. WEISZ DATE : JUNE/2011

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

**HENDERSON-HAYWOOD COUNTIES
DIVISION 14**



BRIDGE DECK PRESERVATION

HENDERSON CO. - BRIDGE #3, #10, #223

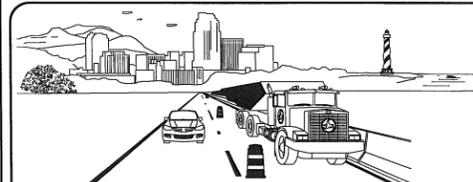
HAYWOOD CO. - BRIDGE #423

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, INDEX, TRAFFIC MANAGEMENT STRATEGY
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-2	GENERAL NOTES
TMP-3	PHASING
TMP-4	HENDERSON CO. BRIDGE #3 ROAD CLOSURE
TMP-5	HENDERSON CO. BRIDGE #10 ROAD CLOSURE
TMP-6	HAYWOOD CO. BRIDGE #423 ROAD CLOSURE

TRAFFIC MANAGEMENT STRATEGY

PROPOSED BRIDGE WORK WILL BE PERFORMED USING ROAD CLOSURES WITH OFFSITE DETOURS, OR FLAGGER CONTROLLED LANE CLOSURES. REFER TO SHEET TMP-3 FOR TRAFFIC CONTROL PHASING.



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLAN PREPARED FOR NCDOT STRUCTURES MANAGEMENT UNIT
RALEIGH, NC



PLAN PREPARED BY:
Stantec Consulting Services Inc.
801 Jones Franklin Road-Suite 300
Raleigh, NC 27606
Tel. 919.851.6866
Fax. 919.851.7024
www.stantec.com

BETSY L. WATSON, P.E.

TRAFFIC ENGINEER

GEORGE KARAGEORGE

TRANSPORTATION DESIGNER

APPROVED: *Betsy L. Watson*
DATE: 4/29/12

SEAL

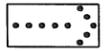


4/23/2012 D:\Traffic\TrafficControl\B-4160\TCP\Plan Sheets\B4160_TC_TMP_01_TITLE.dgn Paulien

SHEET NO.
TMP-1

BP-14B WBS 14B.20454.2 AND 14B.20454.6

LEGEND

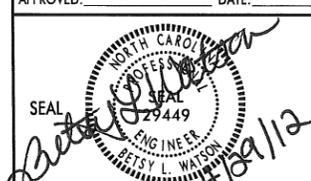
-  DIRECTION OF TRAFFIC FLOW
 -  DIRECTION OF PEDESTRIAN TRAFFIC FLOW
 -  WORK AREA
 -  PAVEMENT REMOVAL
 -  NORTH ARROW
 -  TYPE III BARRICADE
 -  CONE
 -  DRUM
 -  SKINNY DRUM
 -  TUBULAR MARKER
 -  CHANGEABLE MESSAGE SIGN (CMS)
 -  FLAGGER
 -  AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)
 -  FLASHING ARROW BOARD (TYPE C)
 -  LAW ENFORCEMENT
 -  TRUCK MOUNTED ATTENUATOR (TMA)
 -  PORTABLE CONCRETE BARRIER (PCB)
 -  TEMPORARY CRASH CUSHION
 -  TEMPORARY SHORING
 -  WORK ZONE SIGN-PORTABLE
 -  WORK ZONE SIGN-STATIONARY
 -  WORK ZONE SIGN-STATIONARY OR PORTABLE
- SIGNALS**
-  EXISTING
 -  PROPOSED
 -  TEMPORARY
- PAVEMENT MARKINGS**
-  EXISTING PAVEMENT MARKING (GRAY)
 -  SKIP LINES
 -  MINI-SKIP LINES
 -  SOLID LINES
- PAVEMENT MARKING SYMBOLS**
-  PAVEMENT MARKING SYMBOLS
 -  EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)
 -  PAVEMENT MARKING ALPHANUMERIC CHARACTERS
- PAVEMENT MARKERS**
-  CRYSTAL / CRYSTAL
 -  CRYSTAL / RED
 -  YELLOW / YELLOW

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
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE

4/23/2012 U:\Traffic\TrafficControl\B-4160\TCP\Plan Sheets\B4160_TC_TMP_01A_RDWYSTDSLEGEND.dgn

 Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	APPROVED: _____ DATE: _____ 		LEGEND & ROADWAY STANDARD DRAWINGS
---	--	---	---

GENERAL NOTES

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

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.

LANE CLOSURE TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-26	6:00 A.M.-9:00 A.M. MONDAY THRU THURSDAY 4:00 P.M.-7:00 P.M. MONDAY THRU THURSDAY 6:00 A.M. FRIDAY-7:00 P.M. SUNDAY (NO WEEKEND CLOSURES)

HOLIDAY & HOLIDAY WEEKEND LANE CLOSURE TIME RESTRICTIONS

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND HOLIDAY WEEKENDS AS FOLLOWS:

- | ROAD NAME |
|-----------|
| I-26 |
- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
 - FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
 - FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
 - FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
 - FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
 - FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
 - FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
 - FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- LANE CLOSURES ARE REQUIRED WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN ANY PORTION OF A TRAVEL LANE. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
 - INSTALL ALL LANE CLOSURES ACCORDING TO THE PLANS, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
 - 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.
 - INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
 - WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
 - WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
 - WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- ### ROAD CLOSURES
- NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.
 - PROVIDE SIGNING AND DEVICES FOR ROAD CLOSURES ACCORDING TO THE TRAFFIC MANAGEMENT PLAN. COVER OR REMOVE ALL SIGNS AND DEVICES FOR ROAD CLOSURES WHEN NOT IN EFFECT.
 - PROVIDE OFFSITE DETOUR ROUTE SIGNING AS SHOWN IN THE TRAFFIC MANAGEMENT PLAN. COVER OR REMOVE OFFSITE DETOUR SIGNING WHEN THE DETOUR IS NOT IN OPERATION.
 - ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
 - WHEN CLOSING A ROADWAY OR DRIVEWAY PLACE TYPE III BARRICADES COMPLETELY ACROSS THE ROADWAY OR FROM CURB TO CURB. ATTACH BARRICADE MOUNTED "ROAD CLOSED" SIGN R11-2 AT ALL CLOSURE LOCATIONS. IF LOCAL TRAFFIC IS TO BE MAINTAINED STAGGER THE BARRICADES TO ALLOW ACCESS.
 - INSTALL SIGNS BEFORE BARRICADES WHEN CLOSING A ROADWAY TO TRAFFIC. REMOVE BARRICADES BEFORE SIGNS WHEN OPENING A ROADWAY TO TRAFFIC. INSTALL/REMOVE ROAD CLOSURE SIGNS AND BARRICADES IN A CONTINUOUS OPERATION AND WITHIN THE SAME CALENDAR DAY.

PAVEMENT MARKINGS AND MARKERS

P) UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

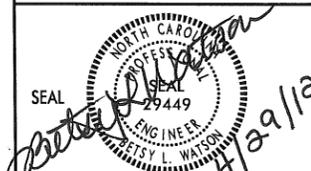
ROAD NAME	MARKING	PAVEMENT MARKER
SR-1345	PAINT	SNOWPLOWABLE
SR-1314	PAINT	SNOWPLOWABLE
SR-1946	PAINT	SNOWPLOWABLE
SR-1534	PAINT	SNOWPLOWABLE

- TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

- ALL DIMENSIONS AND STATIONS IN THE TRAFFIC MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- MAINTAIN DRIVEWAY ACCESS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- CHANGEABLE MESSAGE SIGN MESSAGES SHOWN ARE EXAMPLES. OTHER MESSAGES MAY BE USED AS CONDITIONS WARRANT. ALL MESSAGES AND LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO INCORPORATING.

4/23/2012 D:\Traffic\TrafficControl\B-4160\TCP\Plan Sheets\B4160_TC_TMP_02_GENERALNOTESMASTER.dgn

 <p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	<p>APPROVED: _____ DATE: _____</p> <div style="text-align: center;">  </div>		<h2 style="font-size: 2em;">GENERAL NOTES</h2>
--	---	---	--

PHASING

HENDERSON CO. BRIDGE #3

CLOSE SR 1345 (BUTLER BRIDGE RD) AND DETOUR TRAFFIC AS SHOWN ON SHEET TMP-4.

HAYWOOD CO. BRIDGE #423

CLOSE SR 1946 (PIGEON ST.) AND DETOUR TRAFFIC AS SHOWN ON SHEET TMP-6.

HENDERSON CO. BRIDGE #10

CLOSE SR 1314 (BANNER FARM RD) AND DETOUR TRAFFIC AS SHOWN ON SHEET TMP-5.

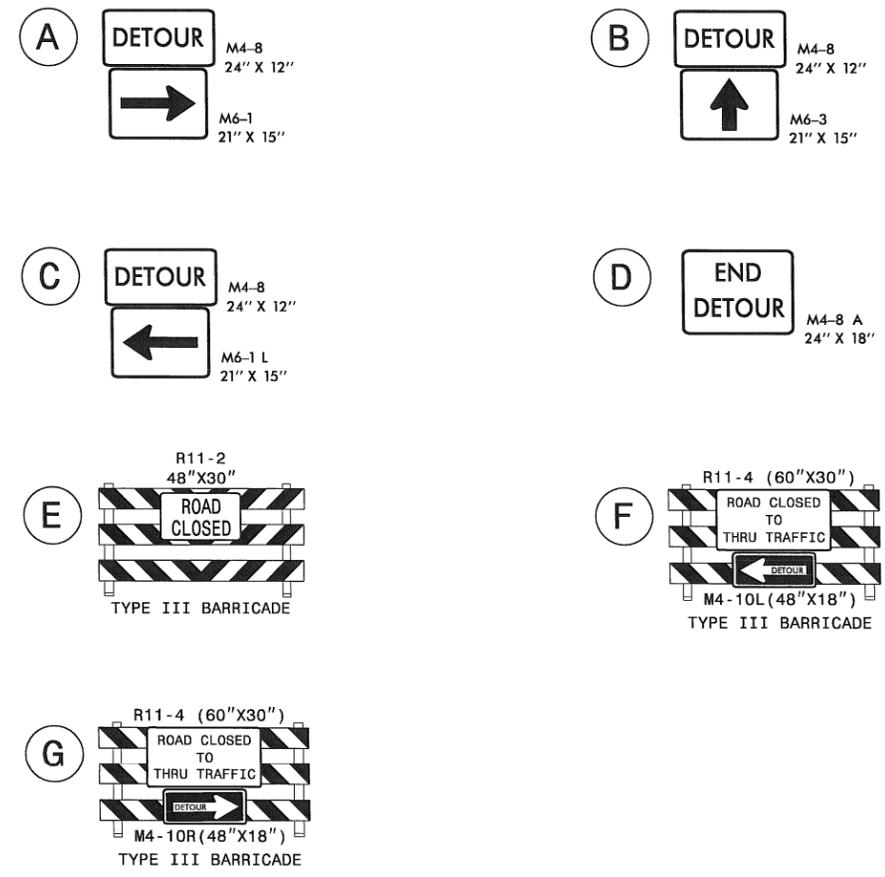
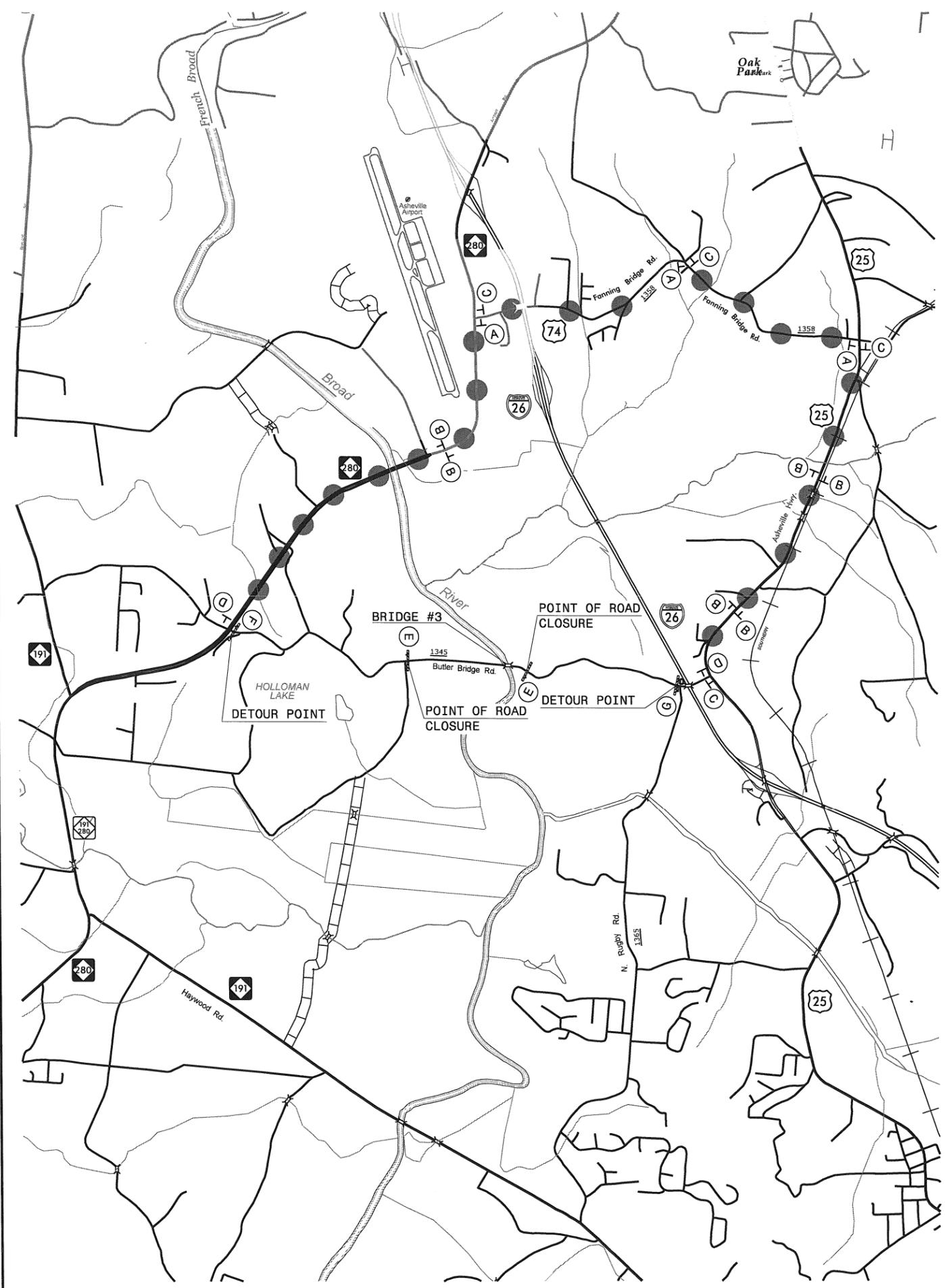
HENDERSON CO. BRIDGE #223

USE FLAGGER CONTROLLED LANE CLOSURES WHEN WORKING ON THE BRIDGE ACCORDING TO ROADWAY STD. DRAWING 1101.02 SHEET 1.

DURING HYDRO-DEMOLITION OPERATIONS USE LANE CLOSURES ON I-26 UNDER THE BRIDGE, ACCORDING TO ROADWAY STD. DRAWING 1101.02 SHEET 3.

4/23/2012
D:\TrafficControl\B-4160\TCP\Plan Sheets\B-4160_TC_TMP_03_PHASING.dgn
rcullen

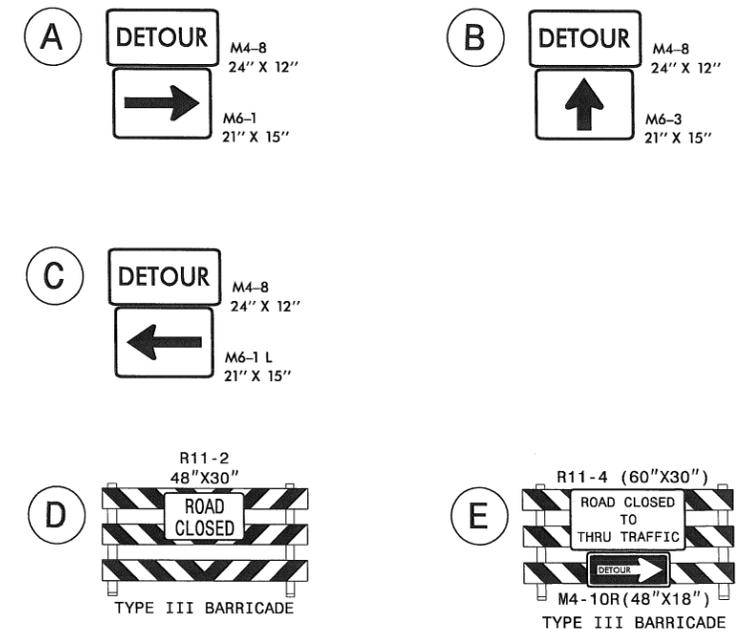
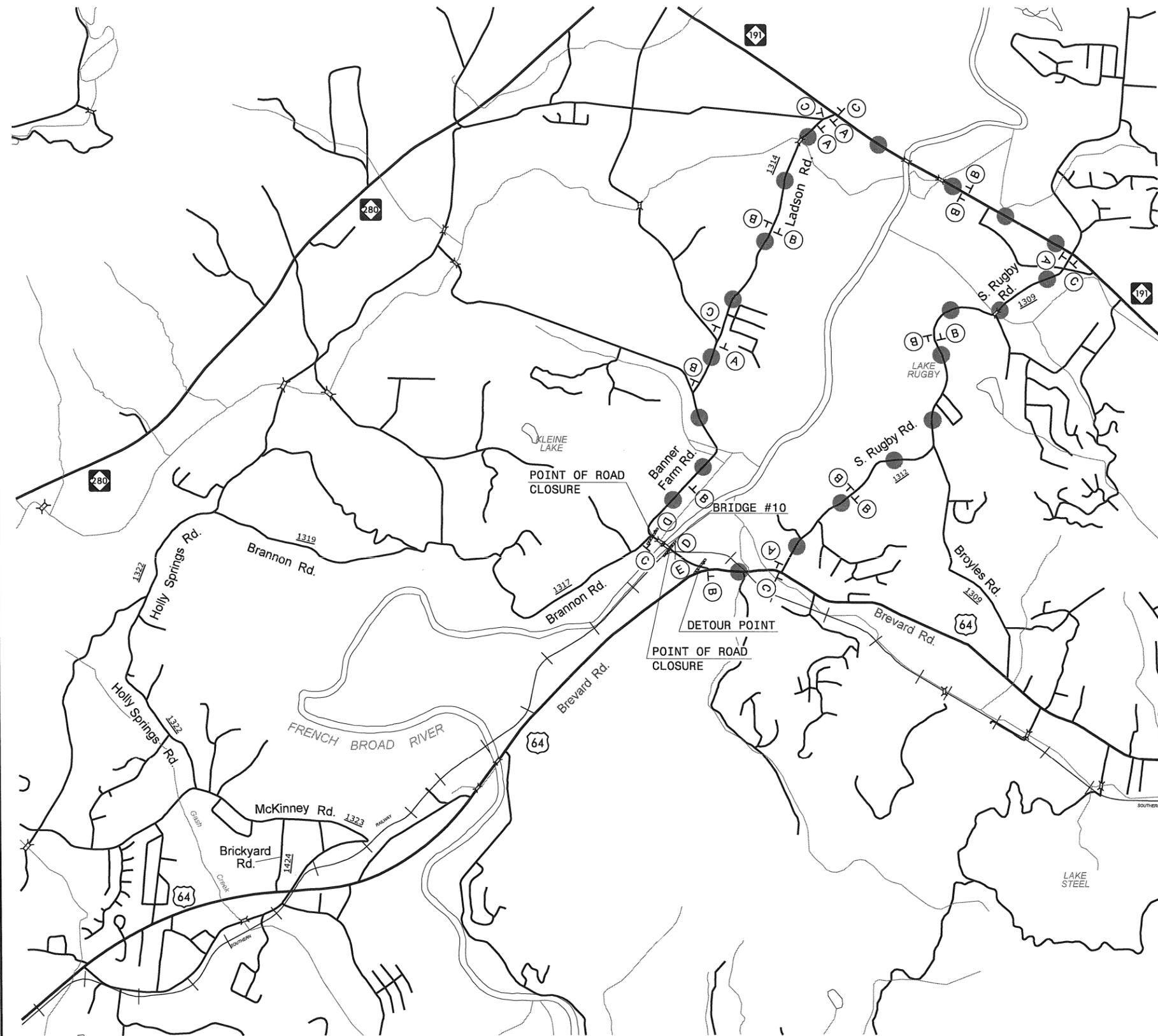
 Stantec	Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8886 Fax. (919) 851-7024 www.stantec.com License No. F-0672	APPROVED: _____ DATE: _____  <i>Betsy L. Watson</i> 4/29/12		PHASING
---	--	---	---	---------



NOTE: APPLY ROADWAY STANDARD DRAWING 1101.03 SHEET 1 FOR TEMPORARY ROAD CLOSURE BEYOND A DETOUR POINT

4/23/2012
 C:\Users\jcollin\Documents\TrafficControl\B-4160\TCP\Plan Sheets\B4160_TC_TMP_04.dgn
 collin

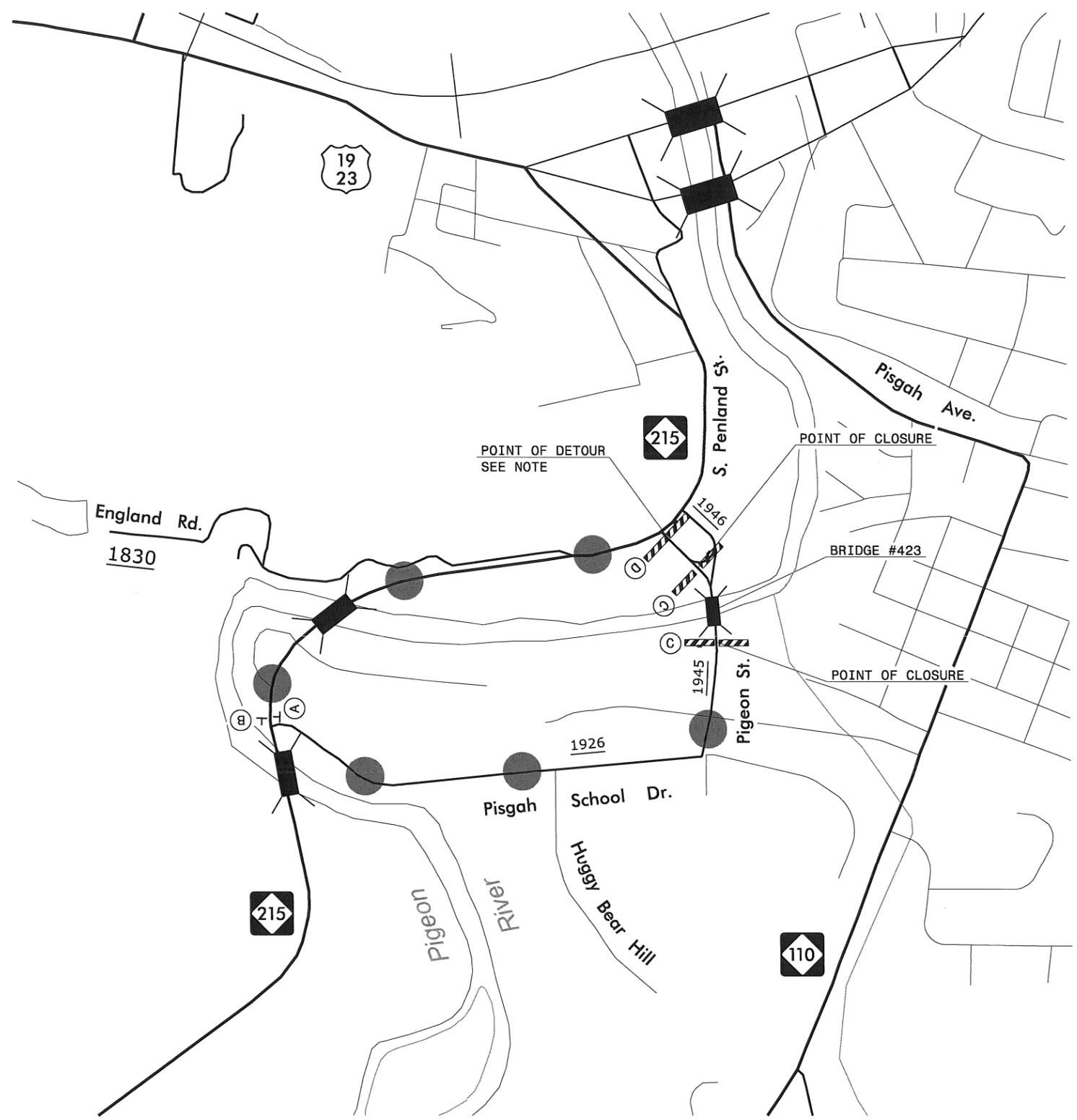
<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27608 Tel. (919) 851-8866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	APPROVED: _____ DATE: _____ 		HENDERSON CO. BRIDGE #3 ROAD CLOSURE
	SEAL: _____		



NOTE: APPLY ROADWAY STANDARD DRAWING 1101.03 SHEET 1 FOR TEMPORARY ROAD CLOSURE BEYOND A DETOUR POINT

4/23/2012
D:\TrafficControl\B-4160\TCPlan Sheets\B4160_TC_TMP_05.dgn
rcoulter

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	APPROVED: _____ DATE: _____ 		HENDERSON CO. BRIDGE #10 ROAD CLOSURE



- A**

DETOUR M4-8 24" X 12"

→ M6-1 21" X 15"
- B**

DETOUR M4-8 24" X 12"

← M6-1 L 21" X 15"
- C**

R11-2 48" X 30"

ROAD CLOSED

TYPE III BARRICADE
- D**

R11-4 (60" X 30")

ROAD CLOSED TO THRU TRAFFIC

← **DETOUR**

M4-10L (48" X 18")

TYPE III BARRICADE

NOTE: APPLY ROADWAY STANDARD DRAWING 1101.03 SHEET 1 FOR TEMPORARY ROAD CLOSURE BEYOND A DETOUR POINT

4/23/2012
 D:\data\TrafficControl\B-4160\TCP\Plan Sheets\B4160_TC_TMP_06.dgn
 P:\enr

<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6966 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	APPROVED: _____ DATE: _____ 		<p>HAYWOOD CO. BRIDGE #423 ROAD CLOSURE</p>
	<p>SEAL</p> <p><i>Betsy L. Watson</i> 4/29/12</p>		