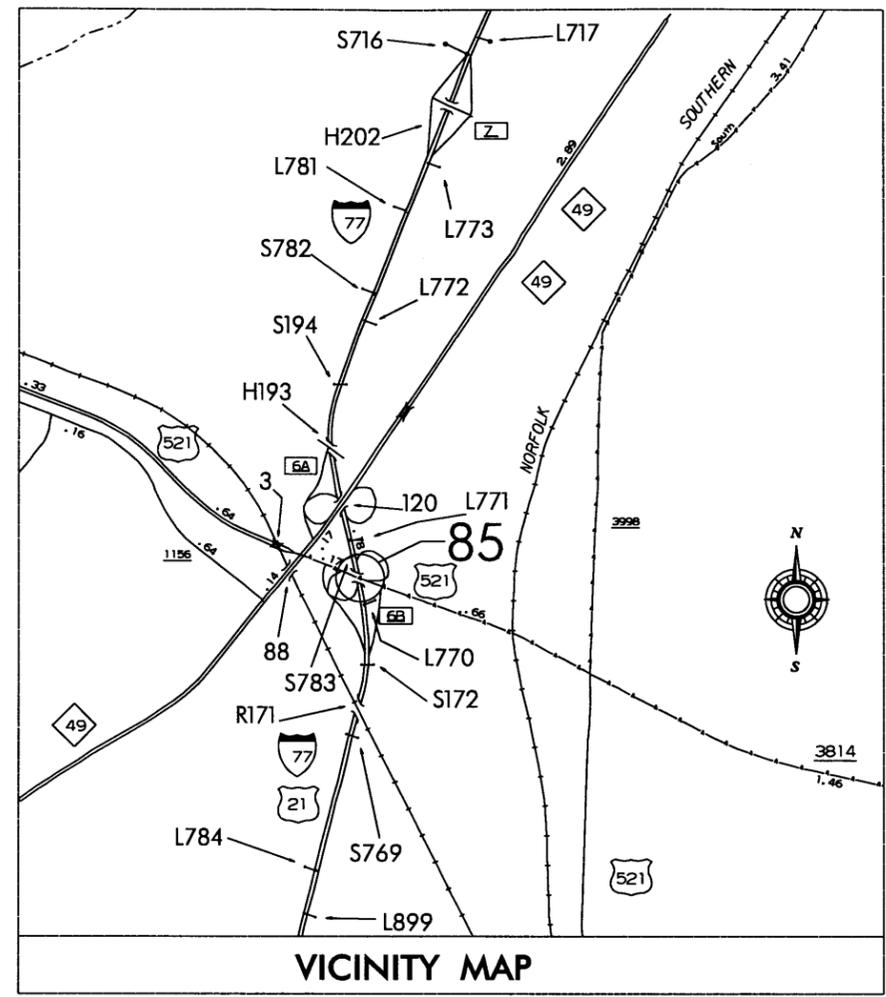


**B-4700N**

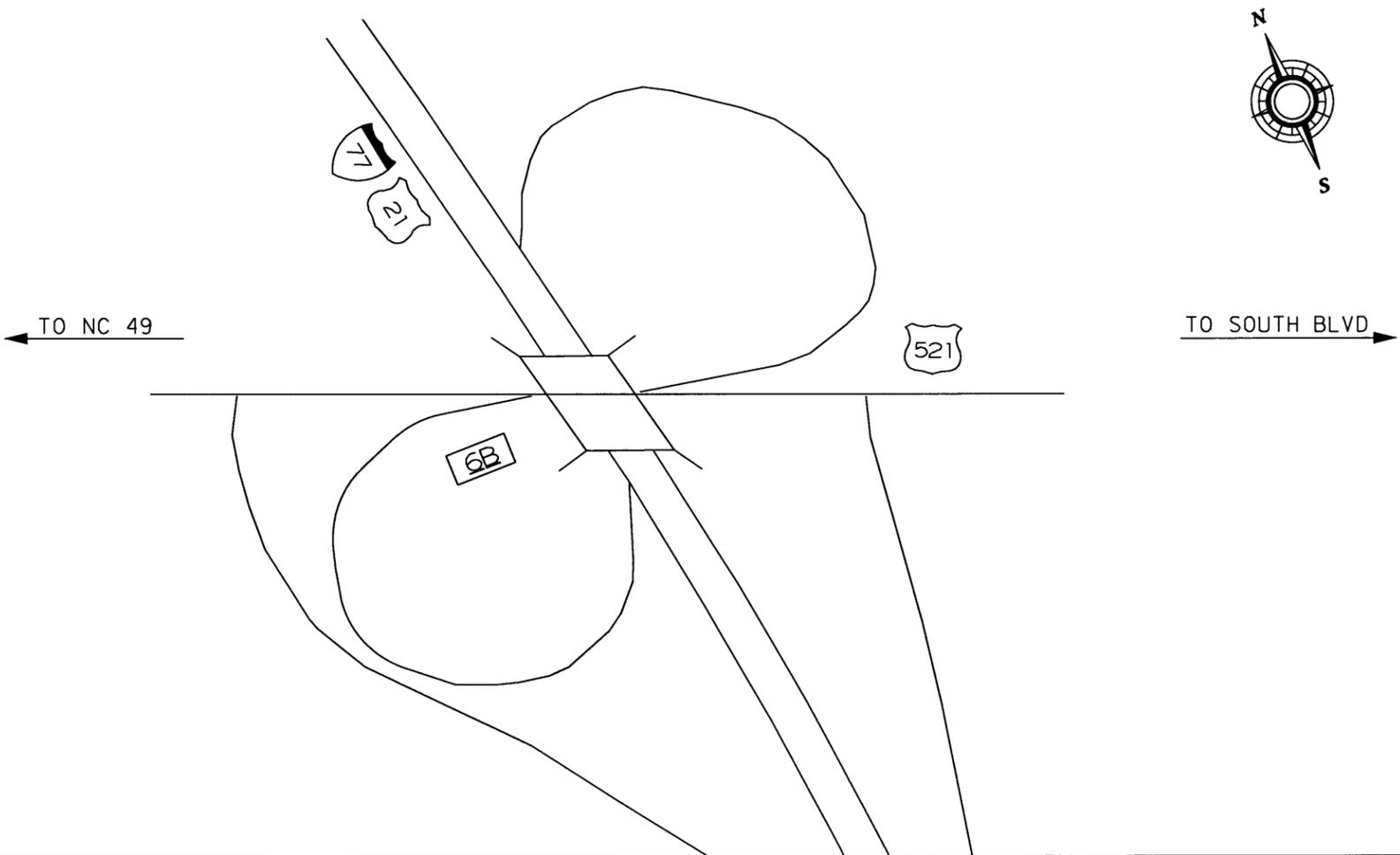
**CONTRACT #D000036**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4700N	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
36727.1.1	BRJHS-0005 (370)	PE	
36727.3.15	BRJHS-0005 (370)	CONST	



STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
**MECKLENBURG COUNTY**

**LOCATION: BRIDGE #85, ON US 521, OVER I-77**  
**TYPE OF WORK: BRIDGE DECK REHABILITATION WITH LATEX MODIFIED CONCRETE, PAVEMENT MARKING**



INDEX OF SHEETS	
1	TITLE SHEET
S1 - S5	STRUCTURE PLANS
TCP1 - TCP9	TRAFFIC CONTROL PLANS



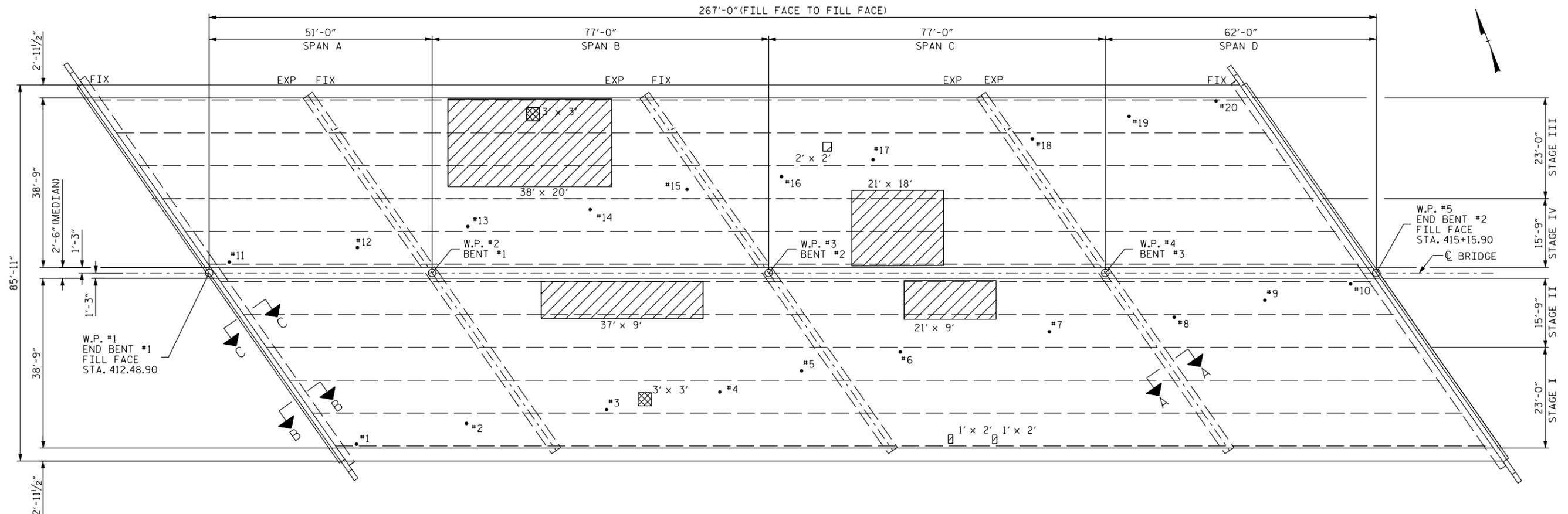
**DESIGN DATA**  
 ADT 2006 = 32500

**PROJECT LENGTH**  
 LENGTH STRUCTURE PROJECT = .051 MILE

Prepared in the Office of:  
**DIVISION OF BRIDGE MANAGEMENT**  
2006 STANDARD SPECIFICATIONS  
**LETTING DATE:**  
 APRIL 27, 2010

**DAN HOLDERMAN, PE**  
 PROJECT ENGINEER



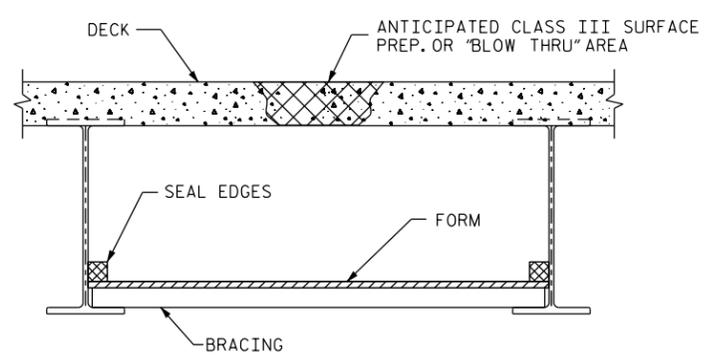


- APPROX. AREA: CLASS II REPAIR
- APPROX. AREA: CLASS III REPAIR
- APPROX. TEST BORING LOCATION

**NOTES**

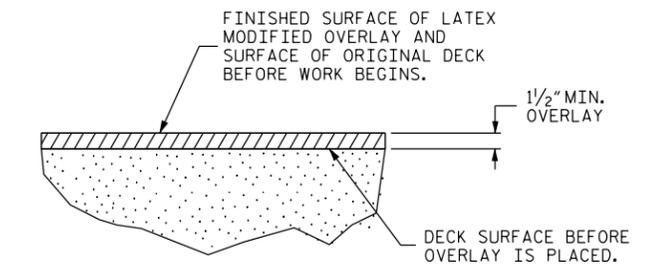
FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.  
 SEE SPECIAL PROVISIONS FOR SURFACE PREPARATION.  
 FOR HYDRO-DEMOLITION, SEE SPECIAL PROVISIONS .  
 FOR UNDER DECK CONTAINMENT SEE SPECIAL PROVISIONS.  
 THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN -OFF WATER FROM THE HYDRO- DEMOLITION PROCESS, SEE SPECIAL PROVISIONS.  
 THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE.  
 FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.  
 FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

**PLAN**



**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 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**

PROJECT NO. B-4700N  
 COUNTY: MECKLENBURG  
 STATION: N/A  
 DECK REPAIR BRIDGE NO. 85

TOTAL BILL OF MATERIAL									
* SCARIFYING BRIDGE DECK	* CLASS I SURFACE PREPARATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION	LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOOR	ASPHALT CONCRETE SURFACE COURSE TYPE SF 9.5A
SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	C.Y.	SO.YDS.	LUMP SUM	SO. FT.	TONS
2755	2081	183	2	2266	140	2266	LUMP SUM	20394	80

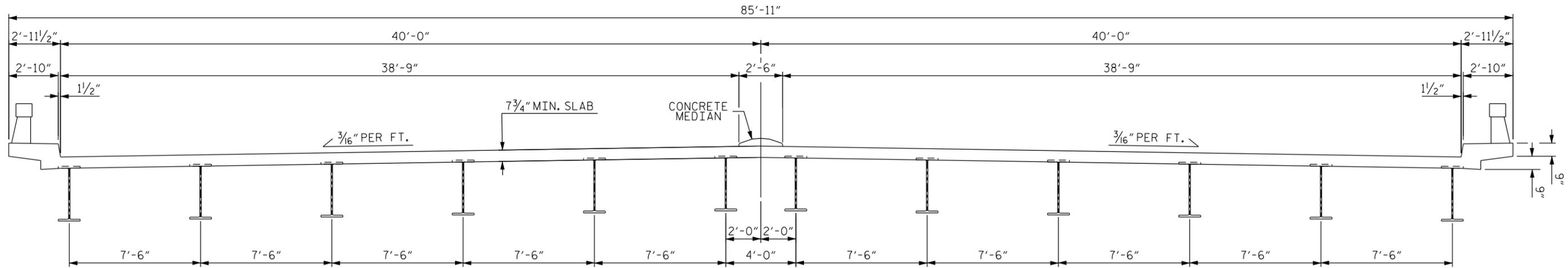
\* QUANTITY SHOWN IS FOR INFORMATION ONLY. \* INCLUDES APPROACH MILLING.

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

PLAN VIEW OF  
 BRIDGE #85 ON  
 US 521 OVER I-77

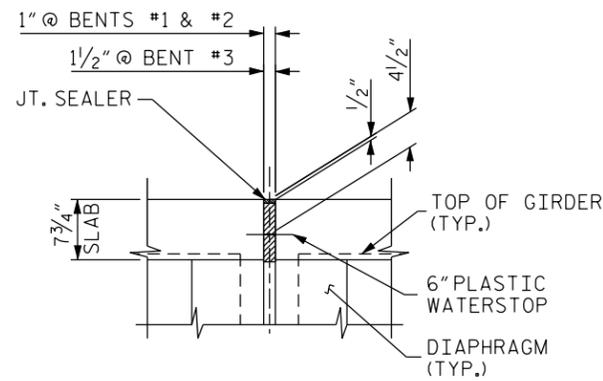
REVISIONS						SHEET NO. S-1
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS
2			4			

DRAWN BY: CLB DATE: 12/09  
 CHECKED BY: AGA DATE: 12/09

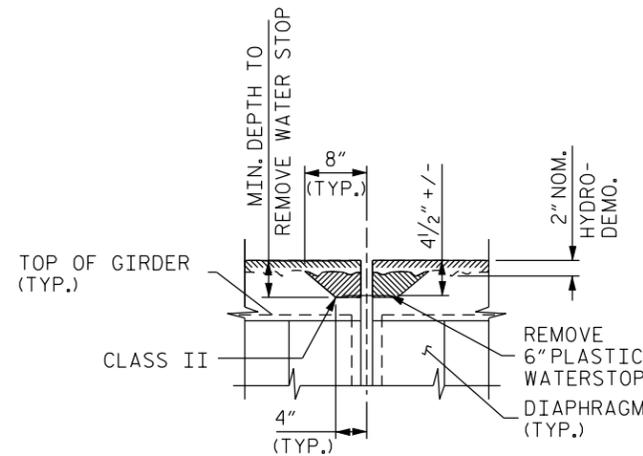


**NOTES**

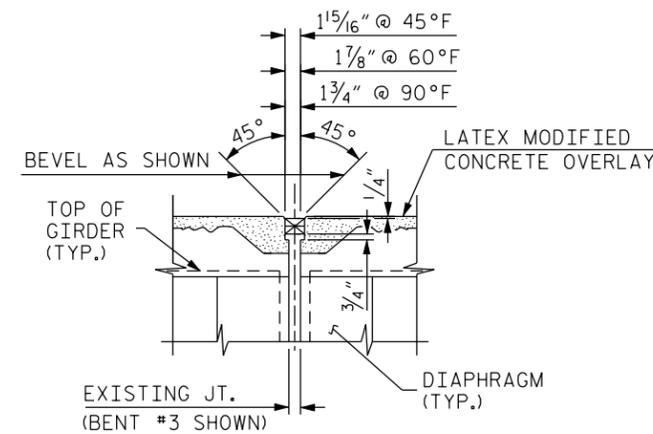
FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.  
 THE INSTALLED EVAZOTE JOINT SEALS SHALL BE WATERTIGHT.  
 NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT BENTS.  
 THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE EVAZOTE JOINT SEAL IN LIEU OF SAWING THE JOINT.



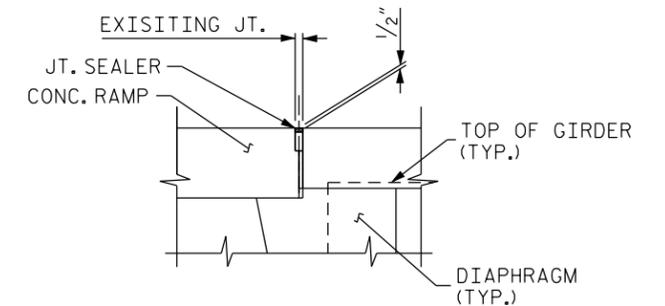
**SECTION A-A**  
(EXISTING JOINT)



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

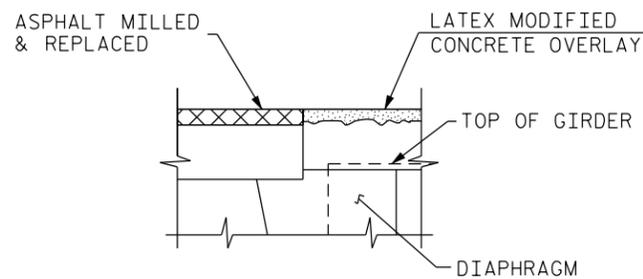


**SECTION A-A**  
(PROPOSED EVAZOTE JOINT SEAL EXPANSION)

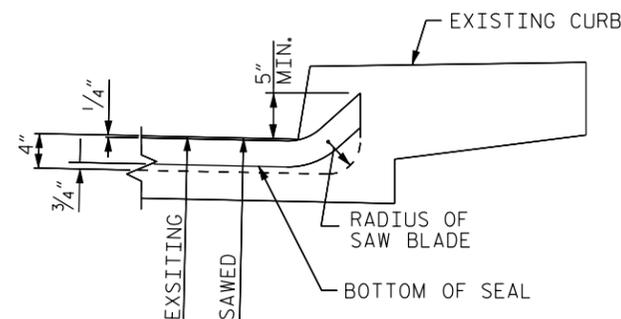


**SECTION B-B**

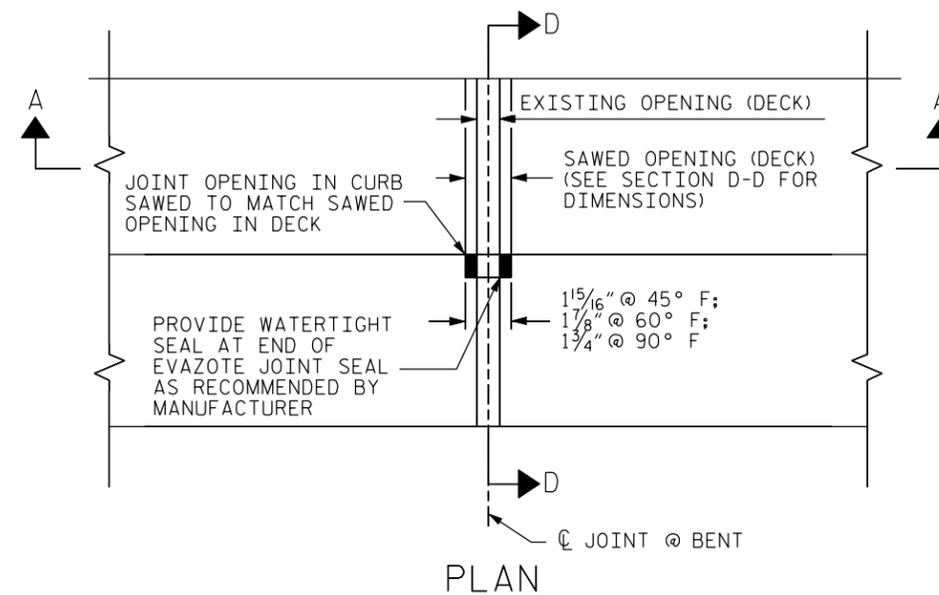
NOTE: RETAIN ALL EXISTING REINF. STEEL. CLEAN AND REPAIR AS REQ'D.



**SECTION C-C**



**SECTION D-D**



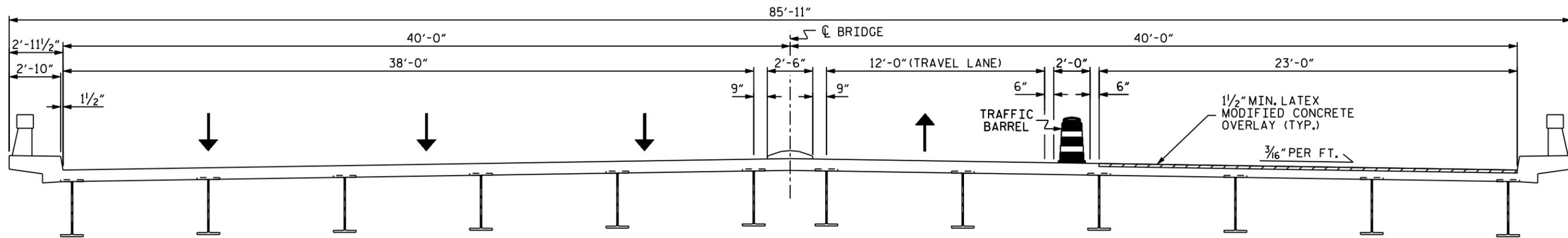
**PLAN**

PROJECT NO. B-4700N  
 COUNTY: MECKLENBURG  
 STATION: N/A  
 DECK REPAIR BRIDGE NO. 85

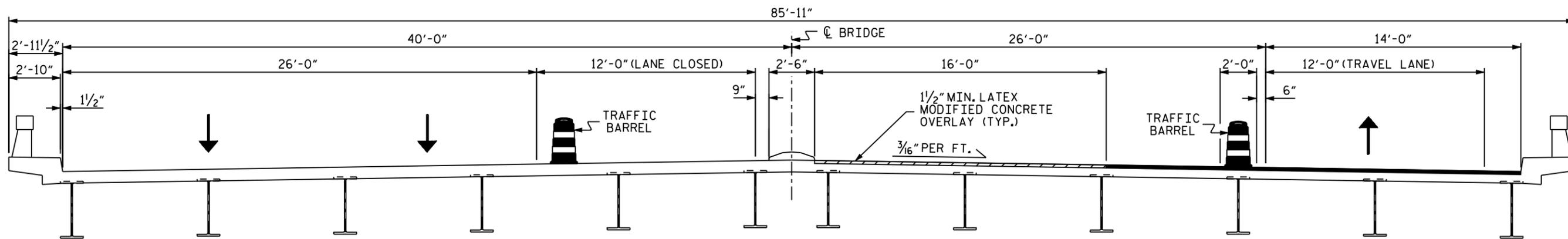
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 TYPICAL SECTION  
 &  
 JOINT DETAILS

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

DRAWN BY: CLB DATE: 12/09  
 CHECKED BY: AGA DATE: 12/09



TYPICAL SECTION  
(STAGE I)



TYPICAL SECTION  
(STAGE II)

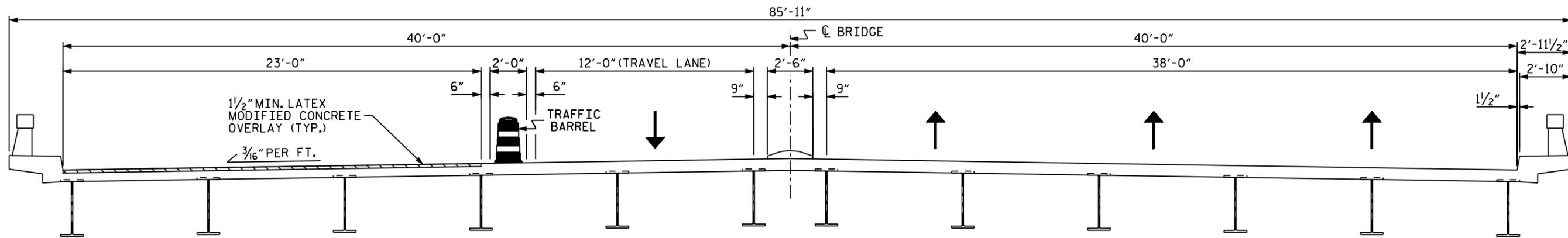
PROJECT NO. B-4700N  
 COUNTY: MECKLENBURG  
 STATION: N/A  
 DECK REPAIR BRIDGE NO. 85

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 CONSTRUCTION  
 STAGING

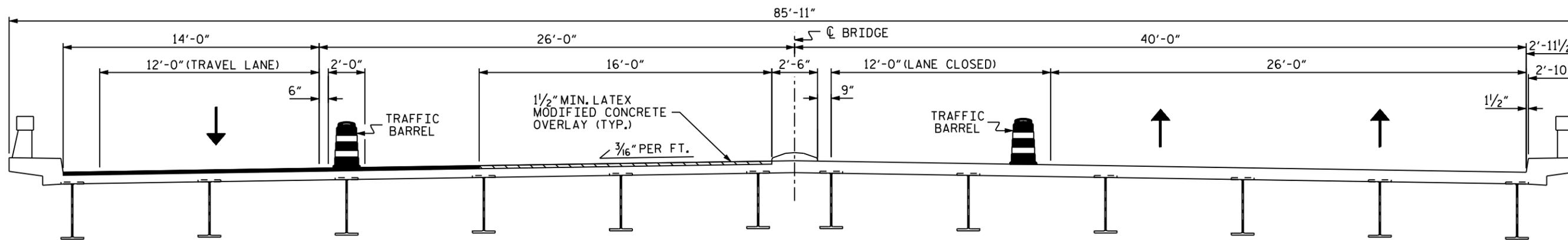
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 CHECKED BY: AGA DATE: 12/09

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

SHEET NO.  
S-3  
TOTAL SHEETS



TYPICAL SECTION  
(STAGE III)



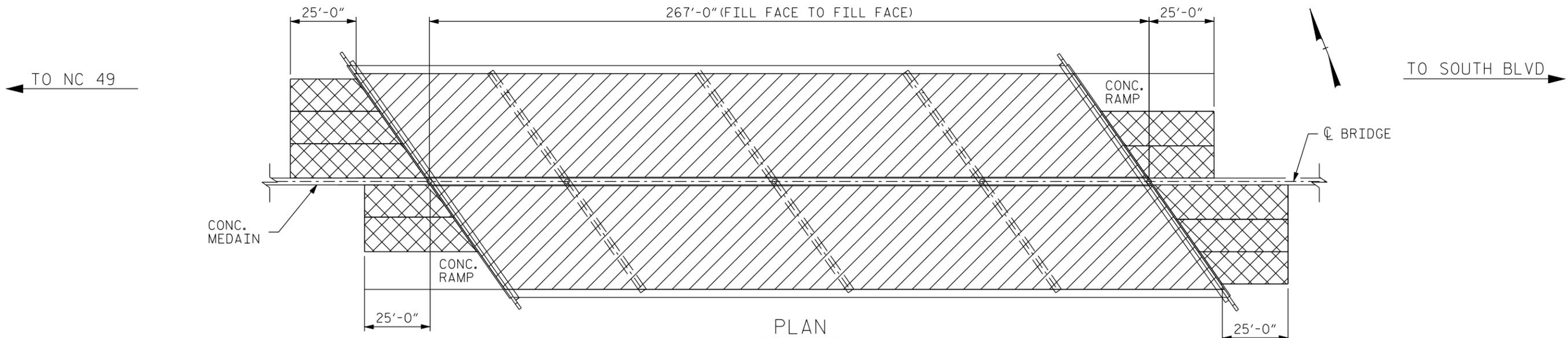
TYPICAL SECTION  
(STAGE IV)

PROJECT NO. B-4700N  
 COUNTY: MECKLENBURG  
 STATION: N/A  
 DECK REPAIR BRIDGE NO. 85

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 CONSTRUCTION  
 STAGING

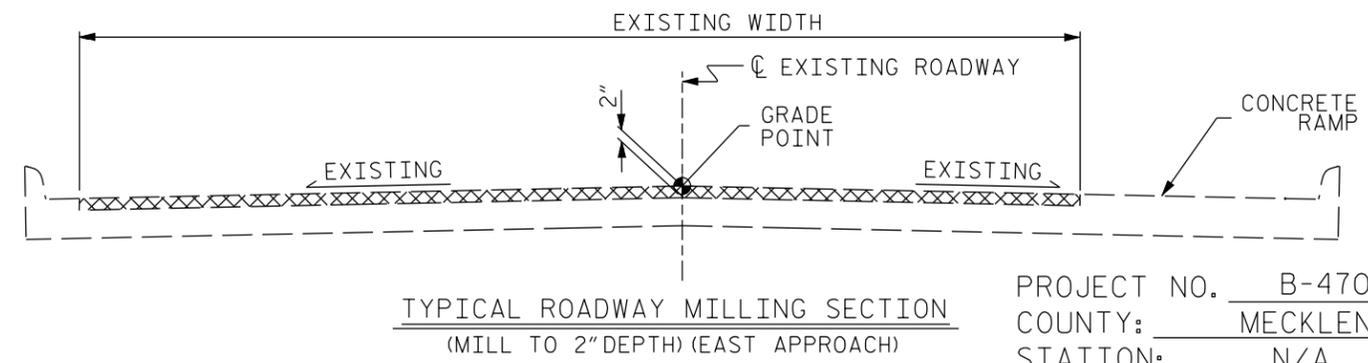
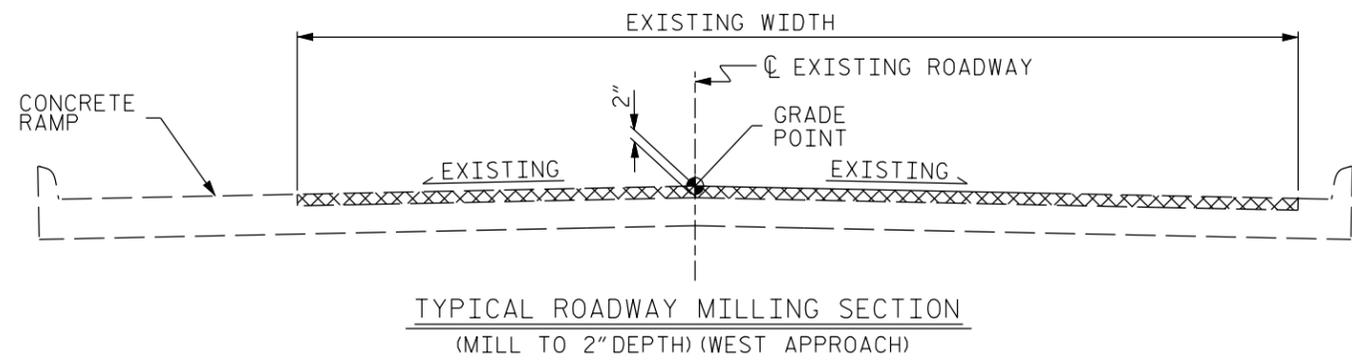
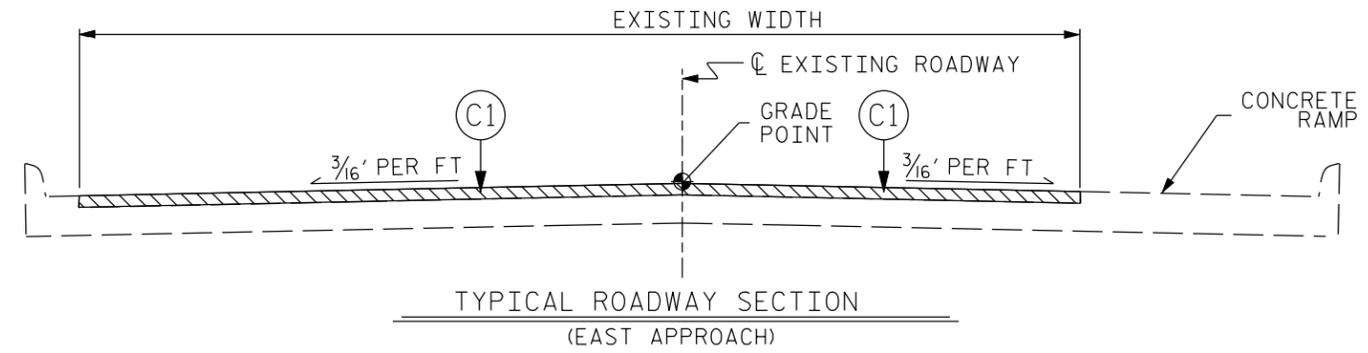
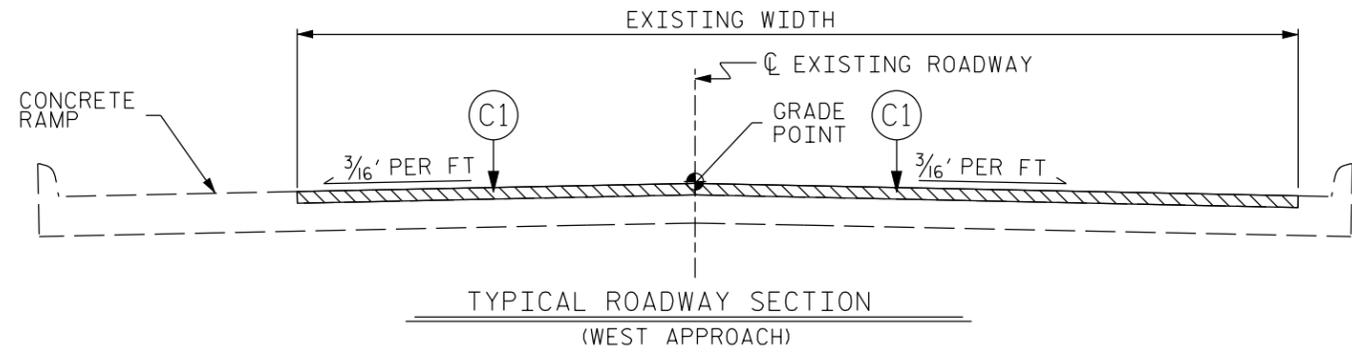
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 CHECKED BY: AGA DATE: 12/09

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



-  DECK SCARICATION AND HYDRODEMOLITION
-  APPROACH MILLING

C1 PROPOSED VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF 9.5A AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1" IN DEPTH OR GREATER THAN 1 1/2" IN DEPTH.



PROJECT NO. B-4700N  
 COUNTY: MECKLENBURG  
 STATION: N/A  
 DECK REHAB BRIDGE NO. 85

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 ROADWAY TYPICAL  
 SECTION AND MILLING  
 DETAILS

DRAWN BY: CLB DATE: 12/09  
 CHECKED BY: AGA DATE: 12/09

NOT TO SCALE

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

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**PLAN FOR PROPOSED  
TRAFFIC CONTROL**

**MECKLENBURG COUNTY**

LOCATION: BRIDGE #85 ON WOODLAWN RD. OVER I-77

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE PRESERVATION

**LEGEND**

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- WORK AREA

TRAFFIC CONTROL DEVICES

- TYPE III BARRICADE
- CONE
- DRUM SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- PORTABLE CONCRETE BARRIER
- TEMPORARY CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

**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 JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1145.01	BARRICADES
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS

**INDEX OF SHEETS**

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND INDEX OF SHEETS
TCP-2	GENERAL NOTES
TCP-3	TRAFFIC CONTROL PHASING
TCP-4	PHASE I-TRAFFIC CONTROL FOR STAGE I BRIDGE WORK
TCP-5	PHASE II-TRAFFIC CONTROL FOR STAGE II BRIDGE WORK
TCP-6	PHASE III-TRAFFIC CONTROL FOR STAGE III BRIDGE WORK
TCP-7	PHASE IV-TRAFFIC CONTROL FOR STAGE IV BRIDGE WORK
TCP-8	I-77 SB-EXIT 6A CLOSURE & DETOUR ROUTE
TCP-9	I-77 NB-EXIT 6B CLOSURE & DETOUR ROUTE

WBS 36727.3.15

TIP PROJECT: B-4700N

I:\5\2010\06\TrafficControl\B-4700N Bridge 85\TCP\B-4700N\_tcp\_border\TITLE.dgn

APPROVED: DATE: Jan 18, 2010 	PLAN PREPARED BY:  Betsy L. Watson, PE George Karageorge	Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.5866 Fax. 919.851.7024 www.stantec.com
	TRAFFIC CONTROL ENGINEER TRAFFIC CONTROL DESIGNER	

# GENERAL NOTES

PROJECT REFERENCE NO. B-4700N	SHEET NO. TCP-2
----------------------------------	--------------------

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.

### LANE CLOSURE TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	6:00 A.M. MONDAY THRU 8:00 P.M. FRIDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME  
ALL ROADS

HOLIDAY

- 1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 8:00 P.M. DECEMBER 31st TO 6:00 A.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 A.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 8:00 P.M. FRIDAY AND 6:00 A.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 8:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY THAT IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; BETWEEN THE HOURS OF 8:00 P.M. FRIDAY AND 6:00 A.M. MONDAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 8:00 P.M. FRIDAY AND 6:00 A.M. MONDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 8:00 P.M. FRIDAY TO 6:00 A.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 8:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	6:00 A.M. MONDAY THRU 8:00 P.M. FRIDAY

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) 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.
- E) 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 USING ROADWAY STANDARD DRAWING NO. 1101.02 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 USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- F) 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.
- G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- I) INSTALL WORK ZONE ADVANCE 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.
- J) PROVIDE CHANGEABLE MESSAGE SIGNS, PORTABLE SIGNS AND DEVICES REQUIRED FOR OFFSITE DETOURS AND CLOSURE OF EXIT RAMPS AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- K) REMOVE ALL PORTABLE SIGNS AND DEVICES AND TURN OFF CHANGEABLE MESSAGE SIGNS WHEN OFFSITE DETOURS AND EXIT CLOSURES ARE NOT IN OPERATION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC CONTROL DEVICES

- M) 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 WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- N) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

- O) UPON COMPLETION OF EACH STAGE OF BRIDGE WORK REPLACE ALL PAVEMENT MARKINGS WITH PAINT BEFORE RE-OPENING LANES TO TRAFFIC.
- UPON COMPLETION OF ALL BRIDGE WORK OPERATIONS INSTALL THERMOPLASTIC PAVEMENT MARKINGS USING LANE CLOSURES PER STD. 1101.02, SHEET 3 OF 9.

### MISCELLANEOUS

- P) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- Q) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE; FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- R) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE INCLUDING THE FOLLOWING AREAS OF CONCERN:
  - A. LANE CLOSURE RESTRICTIONS.
  - B. DETOURS OFFSITE AND ONSITE.
  - C. AREAS OF CONSTRICTED HORIZONTAL CLEARANCES (NARROW LANES OR LANES BORDERED ALONG THE OUTSIDE WITH EITHER PCB OR GUARDRAIL).

I:\87010\B-4700N\Bridg\Sheets\B-4700N\TCP\psh\_02.dgn

 <b>Stantec</b> Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27608 Tel. 919.851.8868 Fax. 919.851.7024 www.stantec.com	SEAL  SIGNATURE: <i>Gregory L. Watson</i> DATE: 1/18/10	<h2 style="margin: 0;">GENERAL NOTES</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">SCALE: NONE</td> <td style="width: 50%; text-align: center;">REVISIONS</td> </tr> <tr> <td>DATE: JAN. 2010</td> <td></td> </tr> <tr> <td>DWG. BY: GK</td> <td></td> </tr> <tr> <td>DESIGN BY: GK</td> <td></td> </tr> <tr> <td>REVIEWED BY: BLW</td> <td></td> </tr> </table>	SCALE: NONE	REVISIONS	DATE: JAN. 2010		DWG. BY: GK		DESIGN BY: GK		REVIEWED BY: BLW	
SCALE: NONE	REVISIONS											
DATE: JAN. 2010												
DWG. BY: GK												
DESIGN BY: GK												
REVIEWED BY: BLW												

## TRAFFIC CONTROL PHASING

### PHASE I - STAGE I BRIDGE WORK

#### PERFORM STEPS 1 THROUGH 6 IN A CONTINUOUS OPERATION

- STEP 1:**  
IMPLEMENT I-77 SB-EXIT 6A DETOUR AS SHOWN ON SHEET TCP-8.
- STEP 2:**  
CLOSE EXIT 6A FROM I-77 SB AS SHOWN ON SHEET TCP-4.
- STEP 3:**  
INSTALL LANE CLOSURE ON WOODLAWN RD. AS SHOWN ON SHEET TCP-4.
- STEP 4:**  
PERFORM STAGE I WORK FOR BRIDGE #85.
- STEP 5:**  
REMOVE LANE CLOSURE FROM WOODLAWN RD. AND OPEN TO EXISTING TRAFFIC PATTERN.
- STEP 6:**  
REMOVE TRAFFIC CONTROL DEVICES AND OPEN EXIT 6A TO TRAFFIC. UPON OPENING OF EXIT 6A TURN OFF MESSAGE SIGNS FOR DETOUR.

### PHASE II - STAGE II BRIDGE WORK

#### PERFORM STEPS 1 THROUGH 6 IN A CONTINUOUS OPERATION

- STEP 1:**  
IMPLEMENT I-77 SB-EXIT 6A DETOUR AS SHOWN ON SHEET TCP-8.
- STEP 2:**  
CLOSE EXIT 6A FROM I-77 SB AS SHOWN ON SHEET TCP-5.
- STEP 3:**  
INSTALL LANE CLOSURES FOR BOTH DIRECTIONS OF WOODLAWN RD. AS SHOWN ON SHEET TCP-5.
- STEP 4:**  
PERFORM STAGE II WORK FOR BRIDGE #85.
- STEP 5:**  
REMOVE LANE CLOSURE FROM WOODLAWN RD. AND OPEN TO EXISTING TRAFFIC PATTERN.
- STEP 6:**  
REMOVE TRAFFIC CONTROL DEVICES AND OPEN EXIT 6A TO TRAFFIC. UPON OPENING OF EXIT 6A TURN OFF MESSAGE SIGNS FOR DETOUR.

### PHASE III - STAGE III BRIDGE WORK

#### PERFORM STEPS 1 THROUGH 6 IN A CONTINUOUS OPERATION

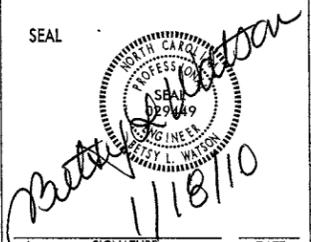
- STEP 1:**  
IMPLEMENT I-77 NB-EXIT 6B DETOUR AS SHOWN ON SHEET TCP-9.
- STEP 2:**  
CLOSE EXIT 6B FROM I-77 NB AS SHOWN ON SHEET TCP-6.
- STEP 3:**  
INSTALL LANE CLOSURE ON WOODLAWN RD. AS SHOWN ON SHEET TCP-6.
- STEP 4:**  
PERFORM STAGE III WORK FOR BRIDGE #85.
- STEP 5:**  
REMOVE LANE CLOSURE FROM WOODLAWN RD. AND OPEN TO EXISTING TRAFFIC PATTERN.
- STEP 6:**  
REMOVE TRAFFIC CONTROL DEVICES AND OPEN EXIT 6B TO TRAFFIC. UPON OPENING OF EXIT 6B TURN OFF MESSAGE SIGNS FOR DETOUR.

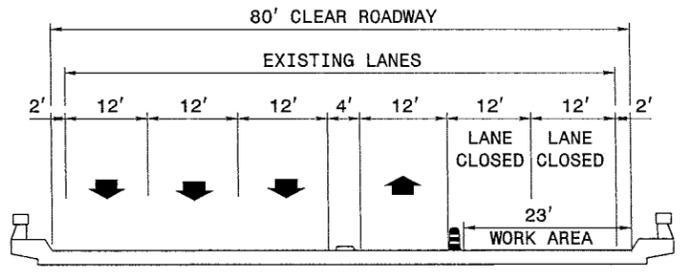
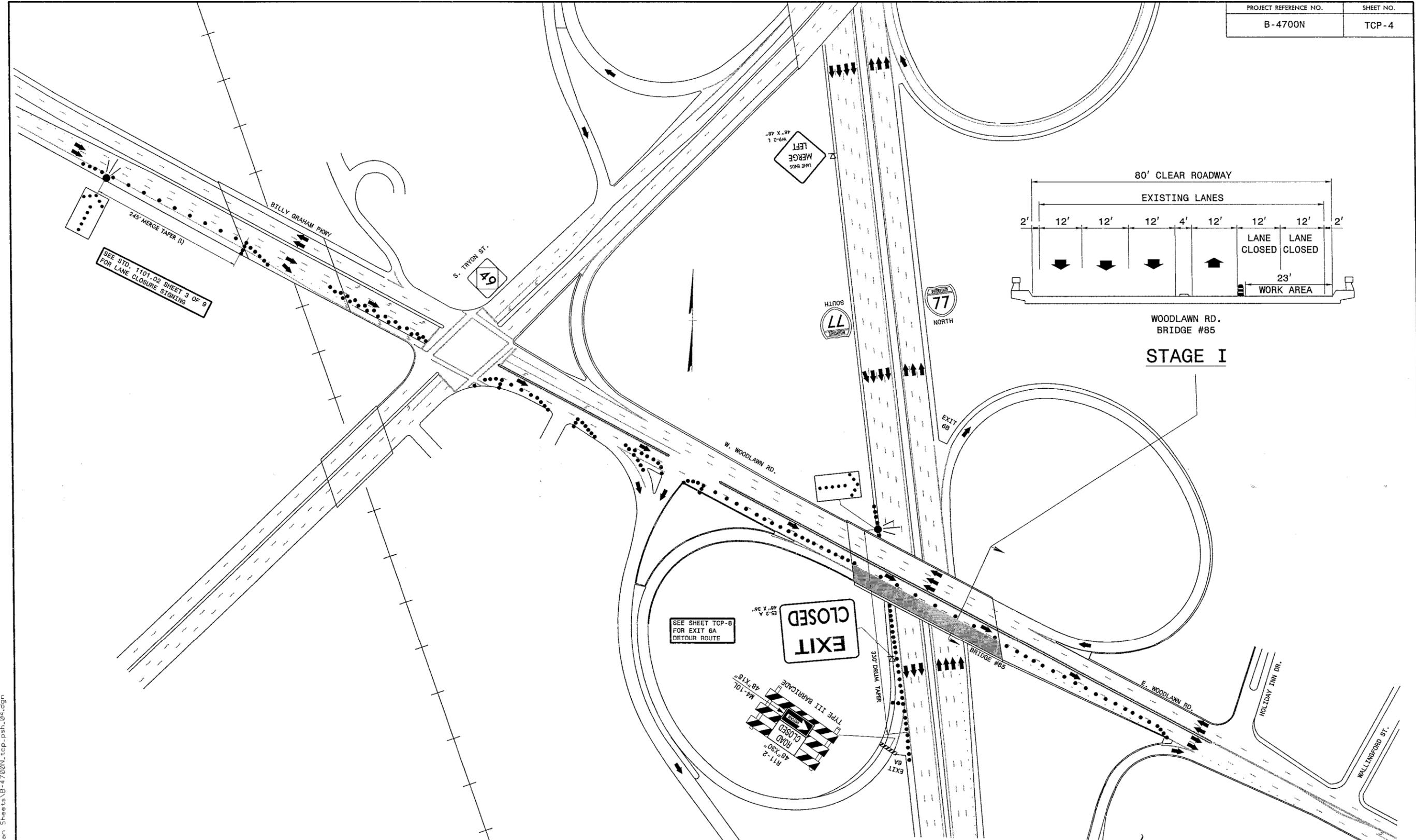
### PHASE IV - STAGE IV BRIDGE WORK

#### PERFORM STEPS 1 THROUGH 6 IN A CONTINUOUS OPERATION

- STEP 1:**  
IMPLEMENT I-77 NB-EXIT 6B DETOUR AS SHOWN ON SHEET TCP-9.
- STEP 2:**  
CLOSE EXIT 6B FROM I-77 NB AS SHOWN ON SHEET TCP-7.
- STEP 3:**  
INSTALL LANE CLOSURES FOR BOTH DIRECTIONS OF WOODLAWN RD. AS SHOWN ON SHEET TCP-7.
- STEP 4:**  
PERFORM STAGE IV WORK FOR BRIDGE #85.
- STEP 5:**  
REMOVE LANE CLOSURE FROM WOODLAWN RD. AND OPEN TO EXISTING TRAFFIC PATTERN.
- STEP 6:**  
REMOVE TRAFFIC CONTROL DEVICES AND OPEN EXIT 6B TO TRAFFIC. UPON OPENING OF EXIT 6B TURN OFF MESSAGE SIGNS FOR DETOUR.

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 <b>Stantec</b> <small>Stantec Consulting Services Inc.          Suite 300, 801 Jones Franklin Road          Raleigh, NC          27606          Tel. 919.851.6866          Fax. 919.851.7024          www.stantec.com</small>	SEAL	 <i>Patsy L. Watson</i> 1/18/10	<b>TRAFFIC CONTROL PHASING          BRIDGE #85          MECKLENBURG COUNTY</b>		
	SCALE: NONE DATE: JAN. 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">REVISIONS</th> </tr> <tr> <td style="height: 20px;"> </td> </tr> <tr> <td style="height: 20px;"> </td> </tr> <tr> <td style="height: 20px;"> </td> </tr> </table>	REVISIONS		
REVISIONS					



WOODLAWN RD.  
 BRIDGE #85  
**STAGE I**

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 gfraga@stg.com

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*Beth Watson*  
 1/18/10

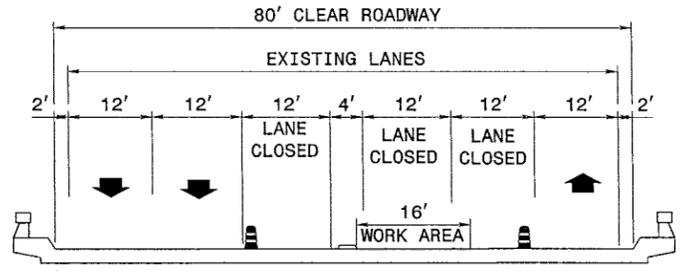
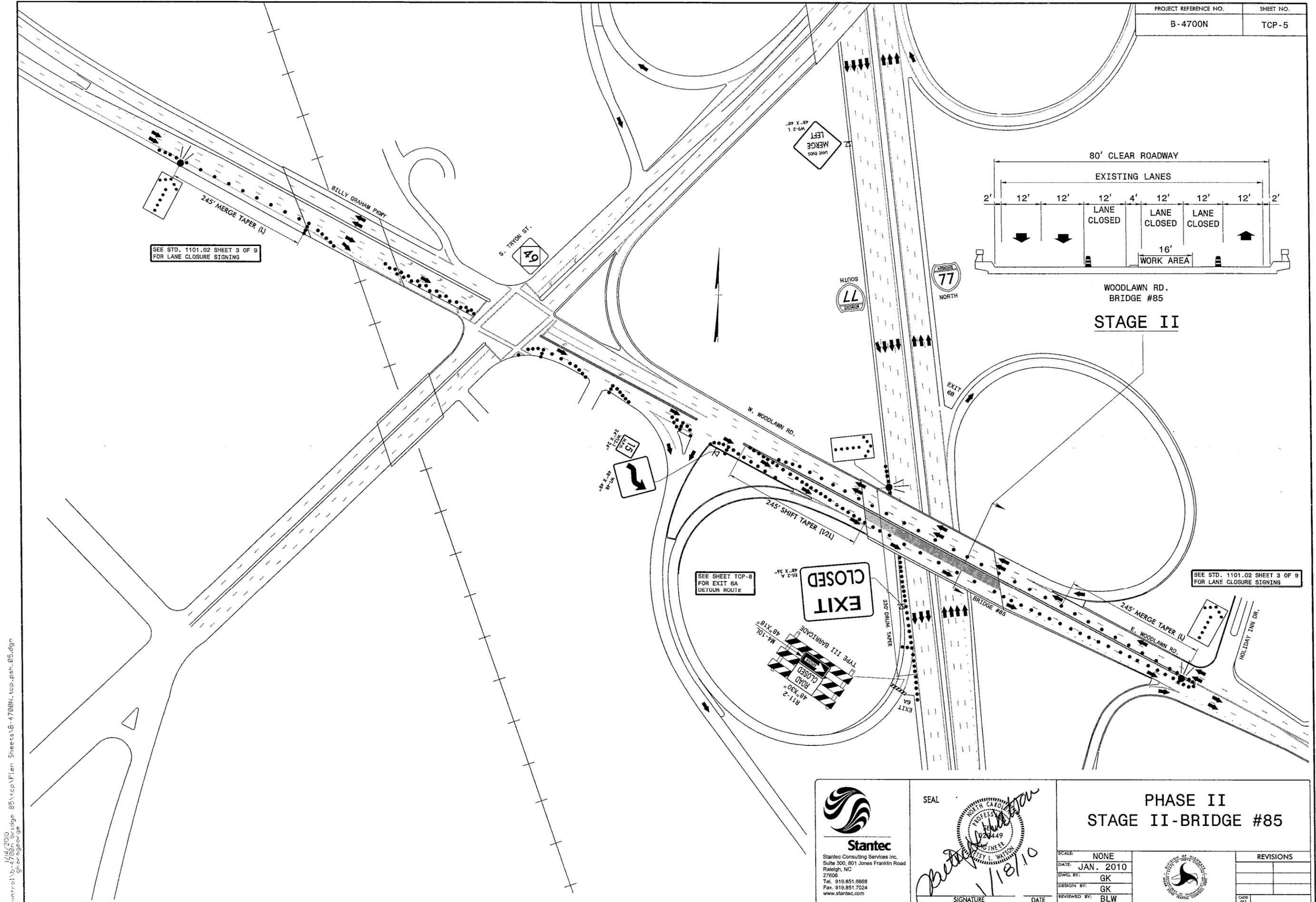
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**PHASE I**  
**STAGE I-BRIDGE #85**

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REVIEWED BY:	BLW

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WOODLAWN RD. BRIDGE #85  
STAGE II

SEE STD. 1101.02 SHEET 3 OF 9 FOR LANE CLOSURE SIGNING

SEE SHEET TCP-B FOR EXIT 6A DETOUR ROUTE

SEE STD. 1101.02 SHEET 3 OF 9 FOR LANE CLOSURE SIGNING

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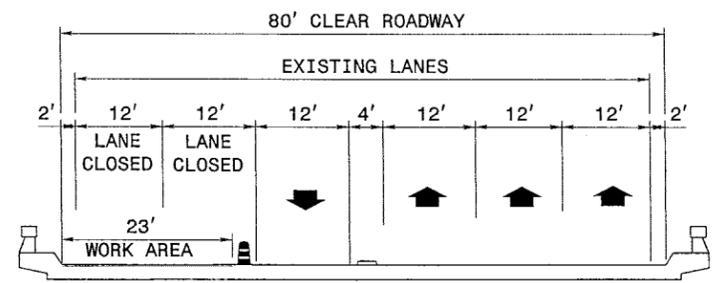
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 1/18/10  
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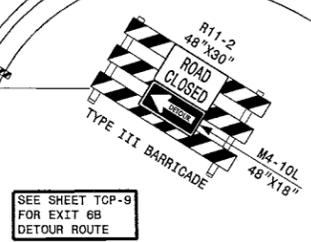
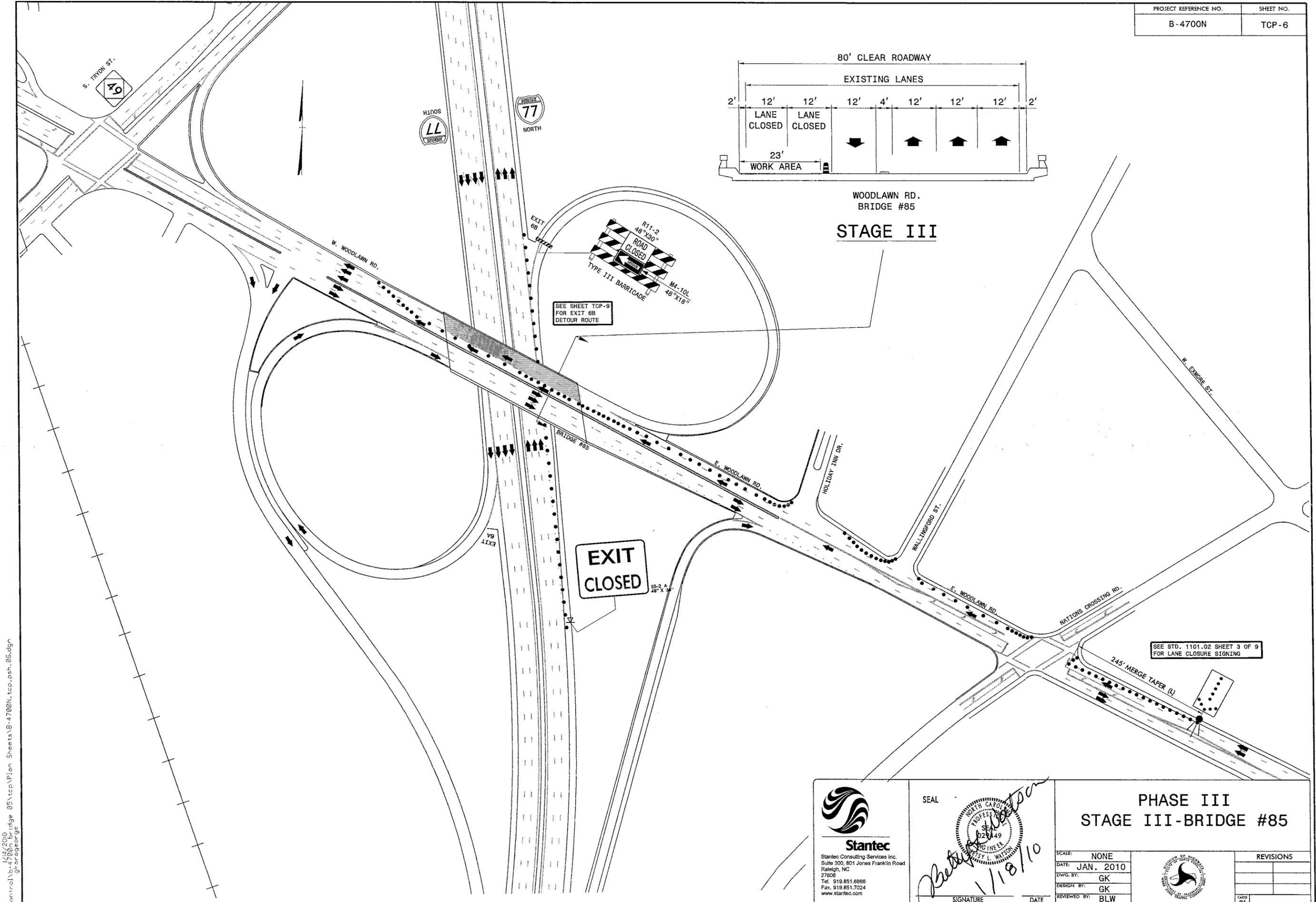
PHASE II  
 STAGE II-BRIDGE #85

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DATE:	JAN. 2010
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DESIGN BY:	GK
REVIEWED BY:	BLW

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WOODLAWN RD.  
BRIDGE #85  
**STAGE III**



SEE SHEET TOP-9  
FOR EXIT 6B  
DETOUR ROUTE

**EXIT  
CLOSED**

SEE STD. 1101.02 SHEET 3 OF 9  
FOR LANE CLOSURE SIGNING

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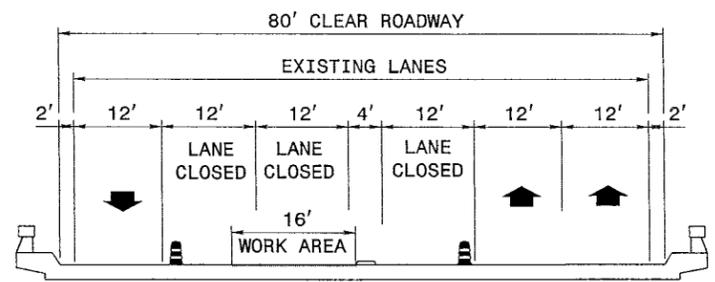
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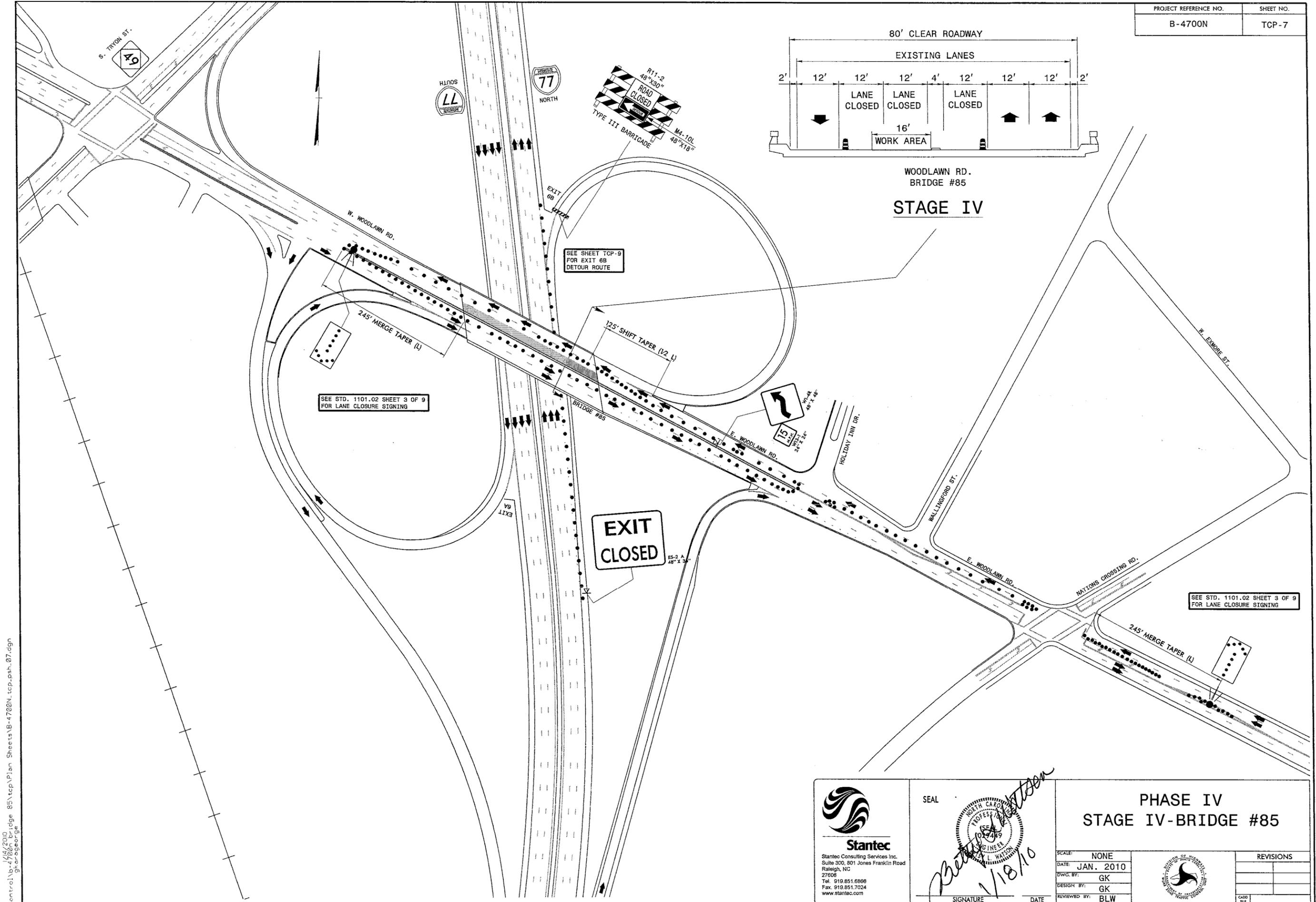
*Patsy L. Watson*  
 1/18/10  
 SIGNATURE      DATE

**PHASE III  
STAGE III-BRIDGE #85**

SCALE: NONE		REVISIONS
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REVIEWED BY: BLW		



WOODLAWN RD.  
BRIDGE #85  
**STAGE IV**



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 ghera@geog

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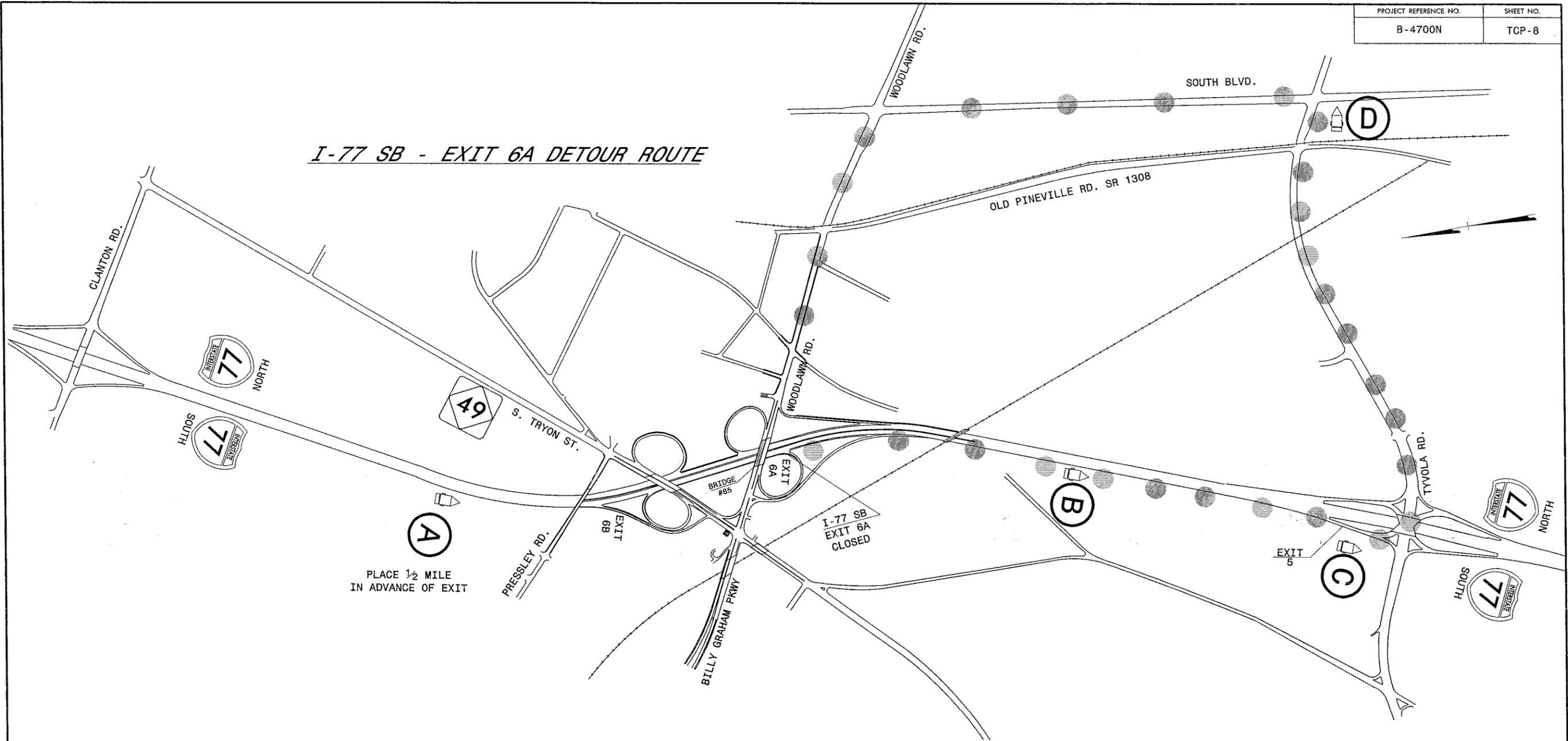
*Matthew J. Watson*  
 1/18/10

SIGNATURE DATE

**PHASE IV  
STAGE IV-BRIDGE #85**

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REVISIONS													
DATE:	JAN. 2010												
DWG. BY:	GK												
DESIGN BY:	GK												
REVIEWED BY:	BLW												

***I-77 SB - EXIT 6A DETOUR ROUTE***



PLACE 1/2 MILE  
IN ADVANCE OF EXIT

I-77 SB  
EXIT 6A  
CLOSED

**(A)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN EXIT 6A CLOSED	USE EXIT 5

CHANGEABLE MESSAGE SIGN

**(B)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	USE NEXT EXIT

CHANGEABLE MESSAGE SIGN

**(C)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	LEFT AT LIGHT

CHANGEABLE MESSAGE SIGN

**(D)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	LEFT ON SOUTH BLVD

CHANGEABLE MESSAGE SIGN

- DETOUR ROUTE**
- I-77 SB
  - EXIT 5 ONTO TYVOLA RD.
  - LEFT ONTO TYVOLA RD.
  - LEFT ON SOUTH BLVD. TO WOODLAWN RD.

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 gfrar@george

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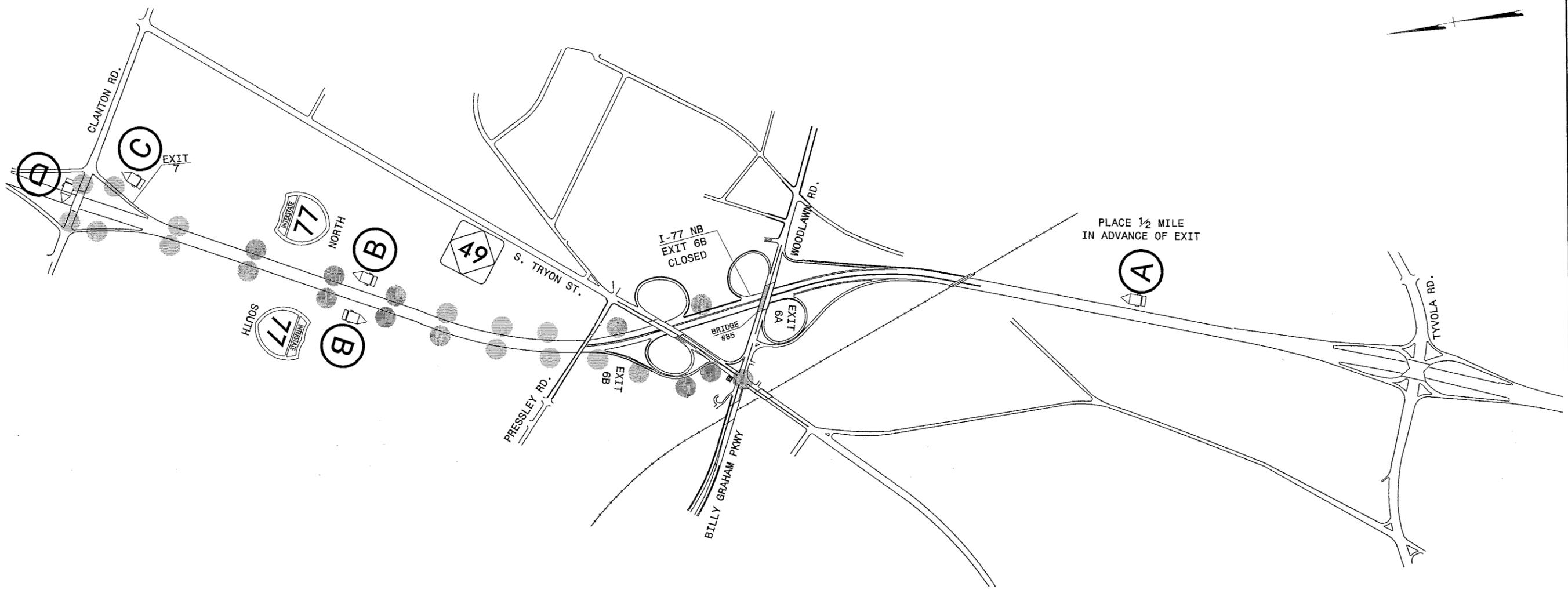
**I-77 SB - EXIT 6A  
EXIT CLOSURE & DETOUR ROUTE**

SCALE	NONE
DATE	JAN. 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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### I-77 NB-EXIT 6B DETOUR ROUTE



**(A)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN EXIT 6B CLOSED	USE EXIT 7

CHANGEABLE MESSAGE SIGN

**(B)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	USE NEXT EXIT

CHANGEABLE MESSAGE SIGN

**(C)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	LEFT AT LIGHT

CHANGEABLE MESSAGE SIGN

**(D)**

MESSAGE NO. 1	MESSAGE NO. 2
WOODLAWN ROAD DETOUR	LEFT ON I-77 SOUTH

CHANGEABLE MESSAGE SIGN

**DETOUR ROUTE**  
 -I-77 NB  
 -CLANTON RD. EXIT 7  
 -LEFT ONTO CLANTON RD.  
 -LEFT ONTO I-77SB RAMP  
 -EXIT 6B TRYON ST.  
 -RIGHT ON TRYON ST. TO WOODLAWN.

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 ghera@georgie

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*Blaine Watson*  
 1/18/10

SIGNATURE      DATE

**I-77 NB - EXIT 6B  
EXIT CLOSURE & DETOUR ROUTE**

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DATE:	JAN. 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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