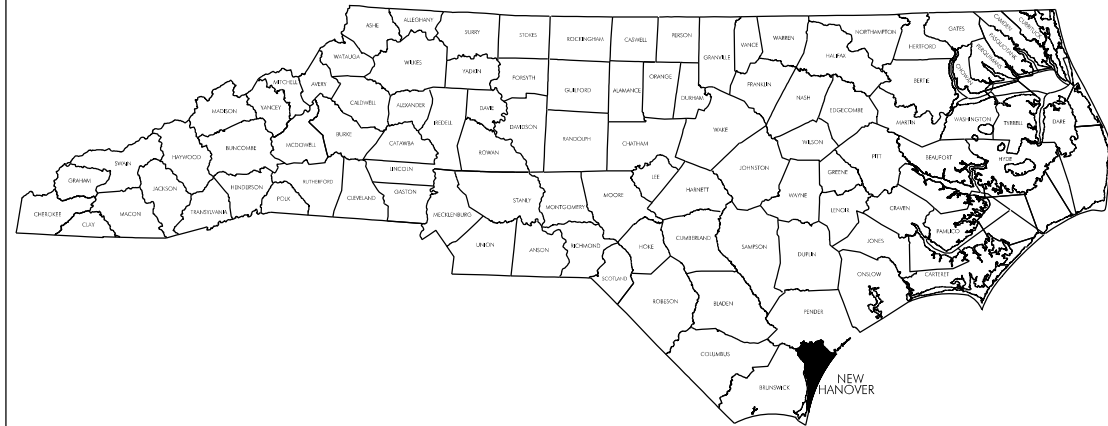
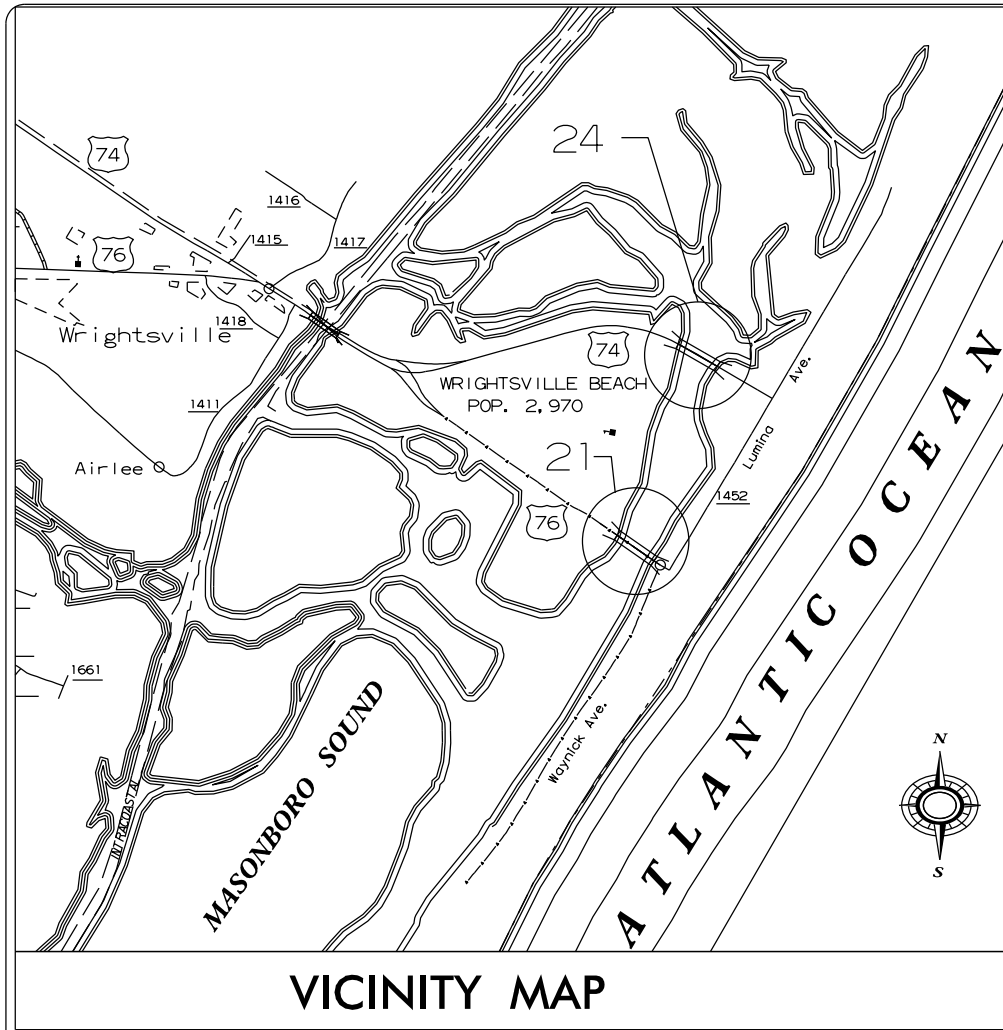


NEW HANOVER #21 & #24 WBS 17BP.3.P.2



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

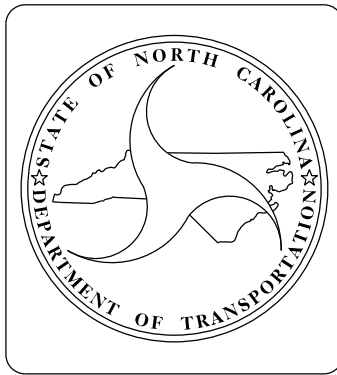
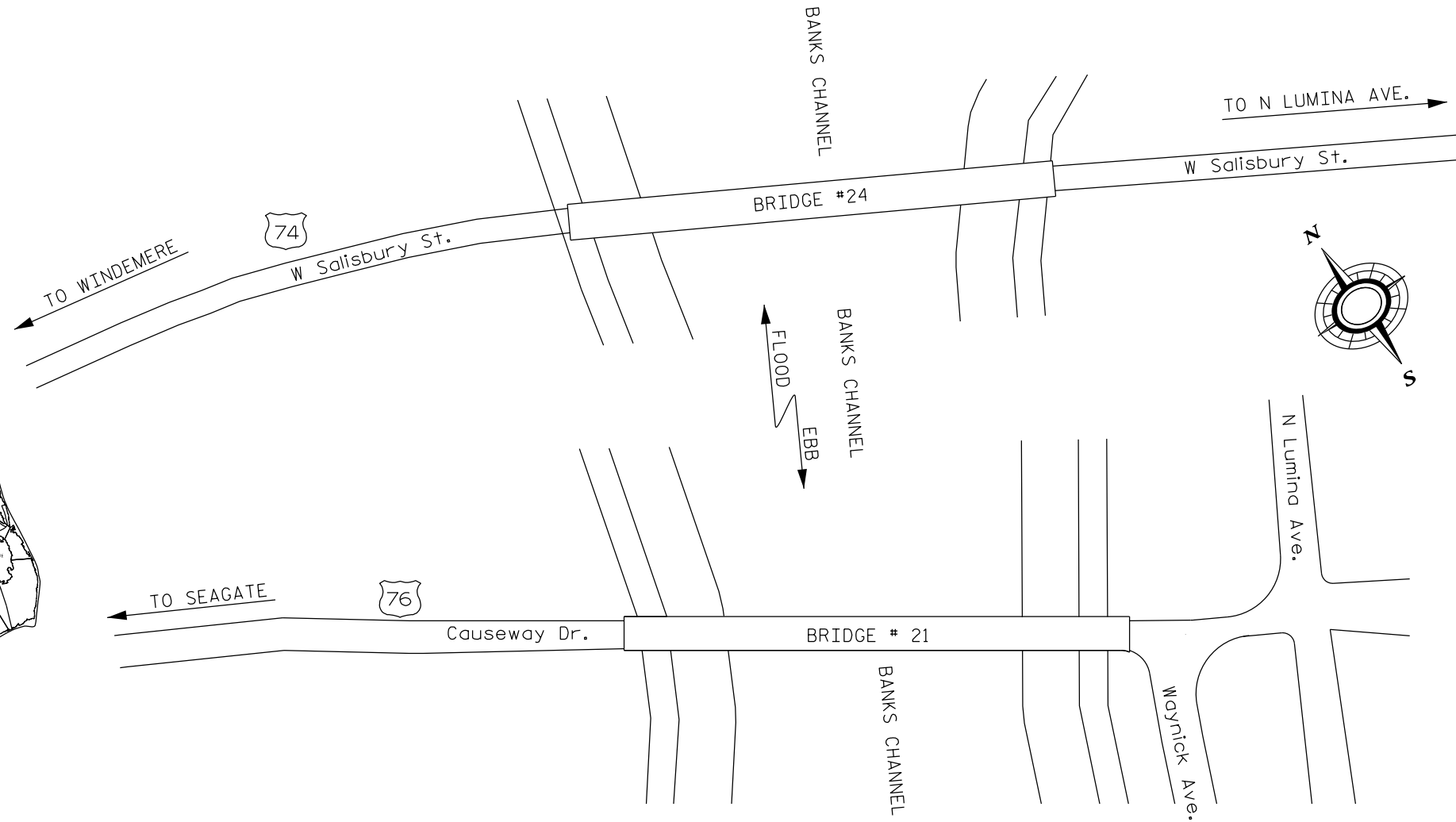
NEW HANOVER COUNTY

LOCATION: BRIDGE #21, ON US 76 OVER, BANKS CHANNEL
BRIDGE #24, ON US 74 OVER, BANKS CHANNEL

TYPE OF WORK: BRIDGE DECK REHABILITATION WITH
EPOXY OVERLAY, ON BRIDGE #21 AND
LATEX MODIFIED CONCRETE, ON
BRIDGE #24

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.3.P.2	1	21
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
17BP.3.P.2		PE	
17BP.3.P.2		CONST	

INDEX OF SHEETS	
1	TITLE SHEET
S1 - S9	STRUCTURE PLANS
TCP1 - TCP11	TRAFFIC CONTROL PLANS



DESIGN DATA

BRIDGE 21
ADT 2003 = 14000

BRIDGE 24
ADT 2007 = 13000

PROJECT LENGTH

BRIDGE #21
LENGTH STRUCTURE PROJECT = .164 MILE

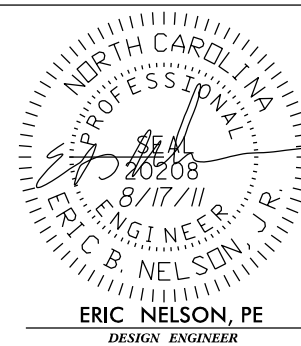
BRIDGE #24
LENGTH STRUCTURE PROJECT = .117 MILE

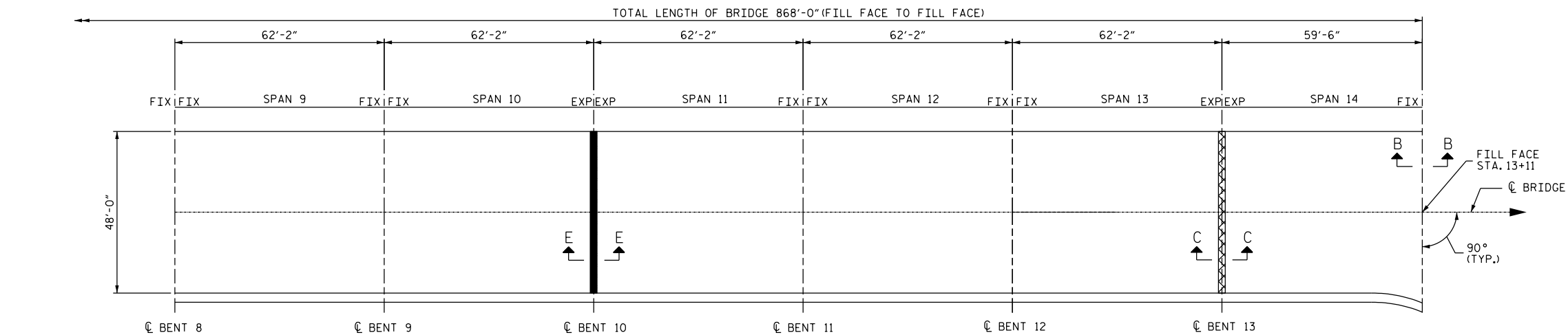
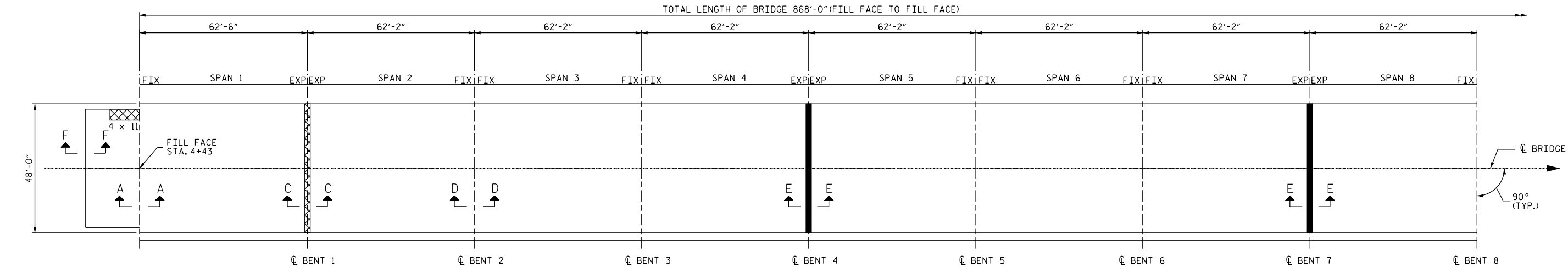
Prepared in the Office of:
DIVISION OF BRIDGE MANAGEMENT

2006 STANDARD SPECIFICATIONS

LETTING DATE:
SEPTEMBER 15, 2011

DAN HOLDERMAN, PE
PROJECT ENGINEER



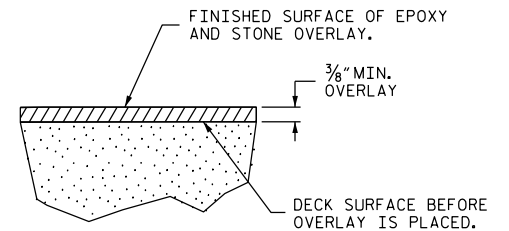


- APPROX. AREA: CLASS I REPAIR
- APPROX. AREA: CLASS II REPAIR

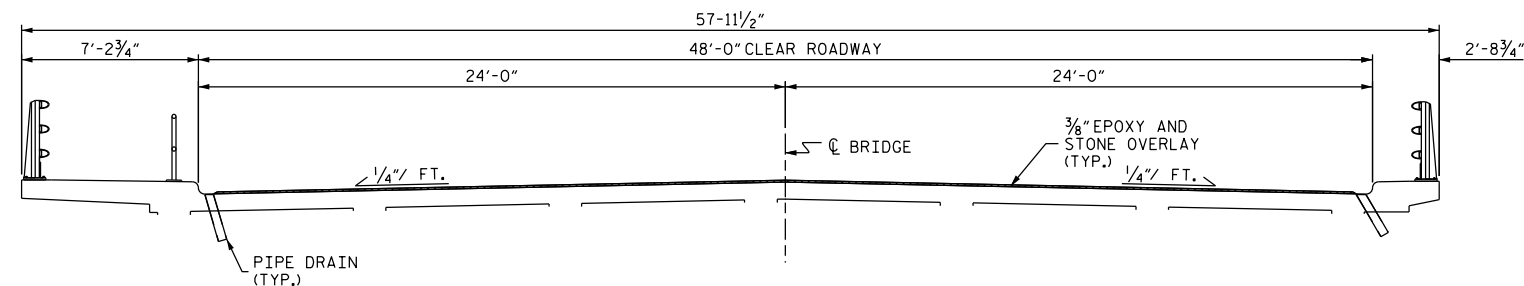
PLAN

NOTES

FOR REPAIR OF BRIDGE WITH EPOXY AND STONE OVERLAY, SEE SPECIAL PROVISIONS.
SEE SPECIAL PROVISIONS FOR CLASS II DECK REPAIRS.
THE QUANTITY FOR CLASS II DECK REPAIR IS ESTIMATED.



DETAIL FOR EPOXY AND STONE OVERLAY



TYPICAL SECTION

TOTAL BILL OF MATERIAL				
PLACEMENT OF EPOXY/STONE OVERLAY	EVAZOTE JOINT SEALS	* CLASS II CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C	DECK EXPANSION JOINT
SQ.FT.	LUMP SUM	SQ.FT.	TONS	LUMP SUM
42076	LUMP SUM	88	20	LUMP SUM

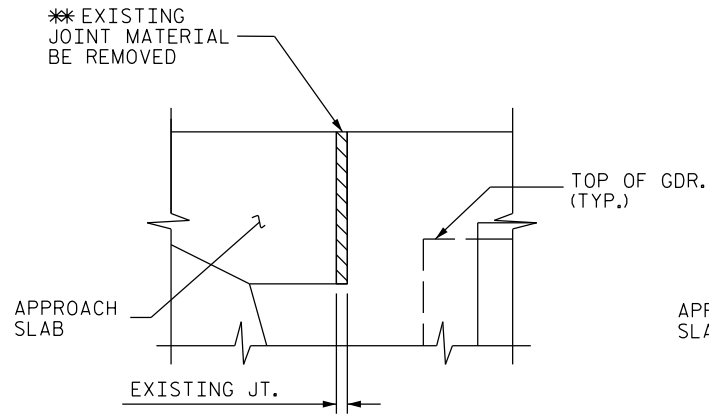
* ESTIMATED QUANTITY. SEE SPECIAL PROVISIONS.

PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 21

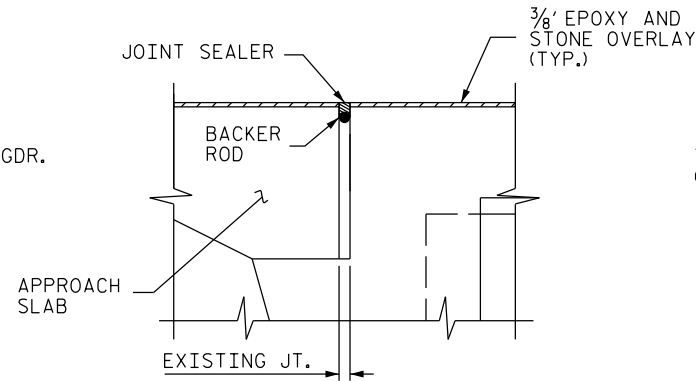
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PLAN VIEW & TYPICAL
SECTION OF BRIDGE #21,
ON US 76
OVER BANKS CHANNEL
48'-0" CL. RDWY 90° SKEW

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

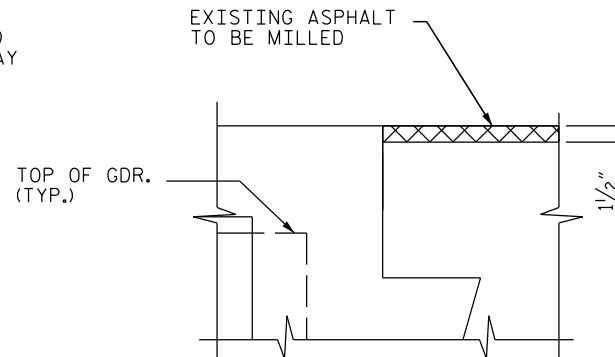
DRAWN BY: CLB DATE: 08/11
CHECKED BY: EBN DATE: 08/11



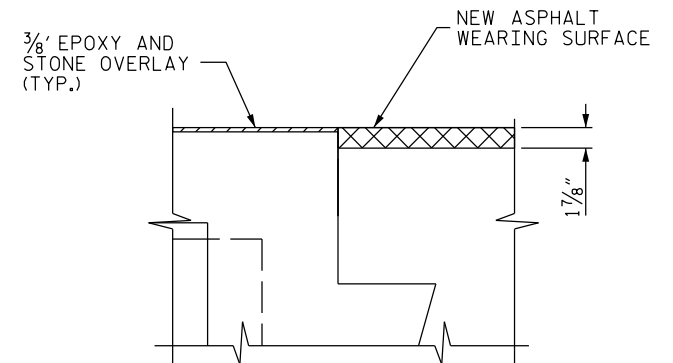
SECTION A-A
(EXISTING JOINT)



SECTION A-A
(PROPOSED JOINT)

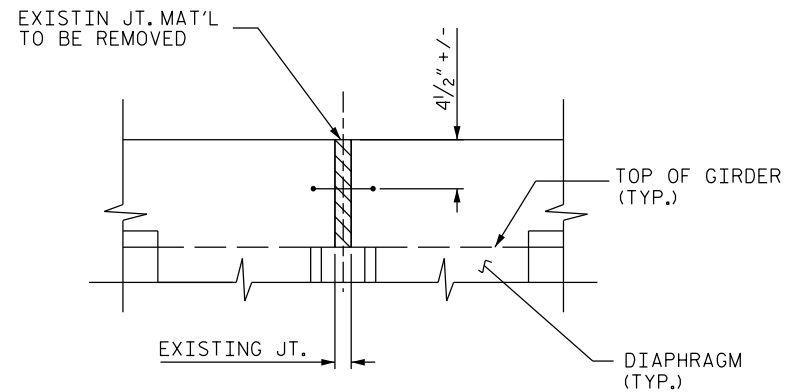


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(EXISTING JOINT)

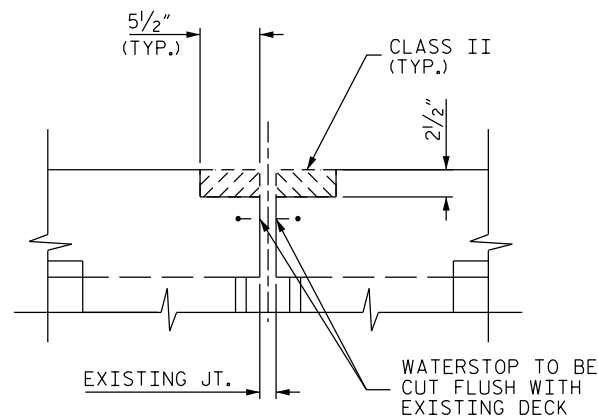


SECTION B-B
(PROPOSED JOINT)

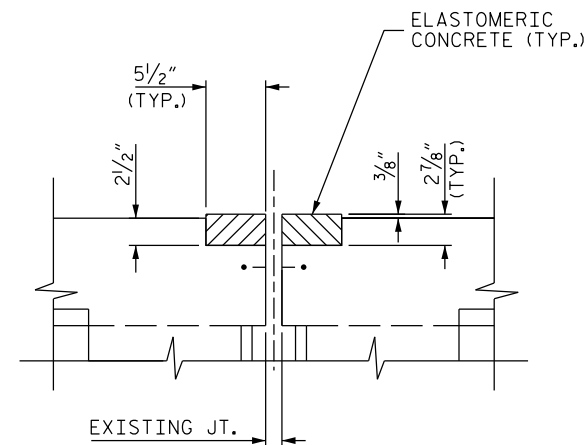
** AS DIRECTED BY THE ENGINEER.



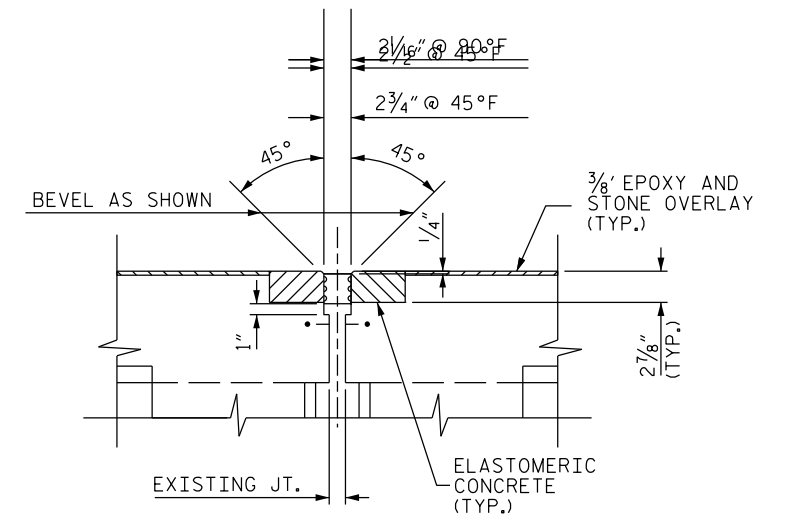
SECTION C-C
(EXISTING JOINT)



SECTION C-C
(DEMO OF JOINT)

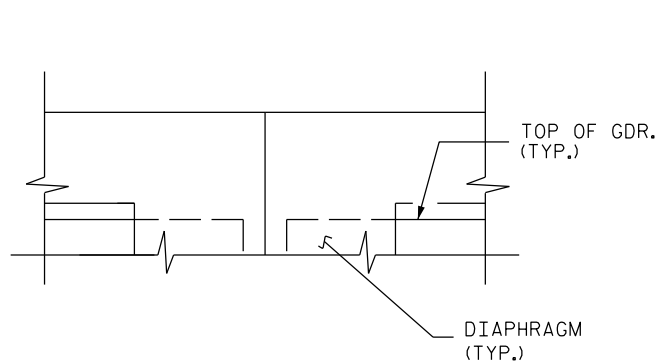


SECTION C-C
(PROPOSED JOINT
PRE-SAWED)

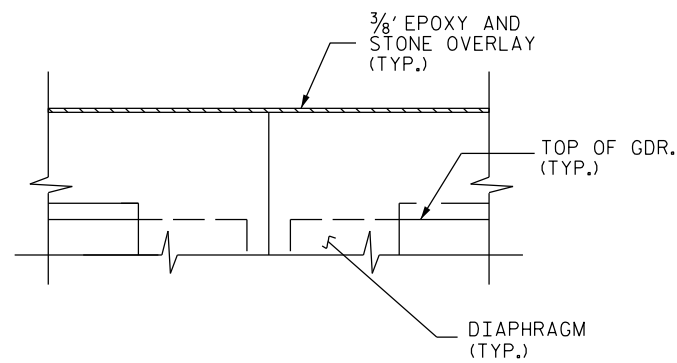


SECTION C-C
(PROPOSED JOINT)

ELASTOMERIC CONCRETE		
BENTS #1 & 13	9.2	(CU. FT.)
* TOTAL	9.2	(CU. FT.)
* BASED ON THE MINIMUM BLOCKOUT SHOWN.		



SECTION D-D
(EXISTING JOINT)



SECTION D-D
(PROPOSED JOINT)

DRAWN BY: CLB DATE: 08/11
CHECKED BY: EBN DATE: 08/11

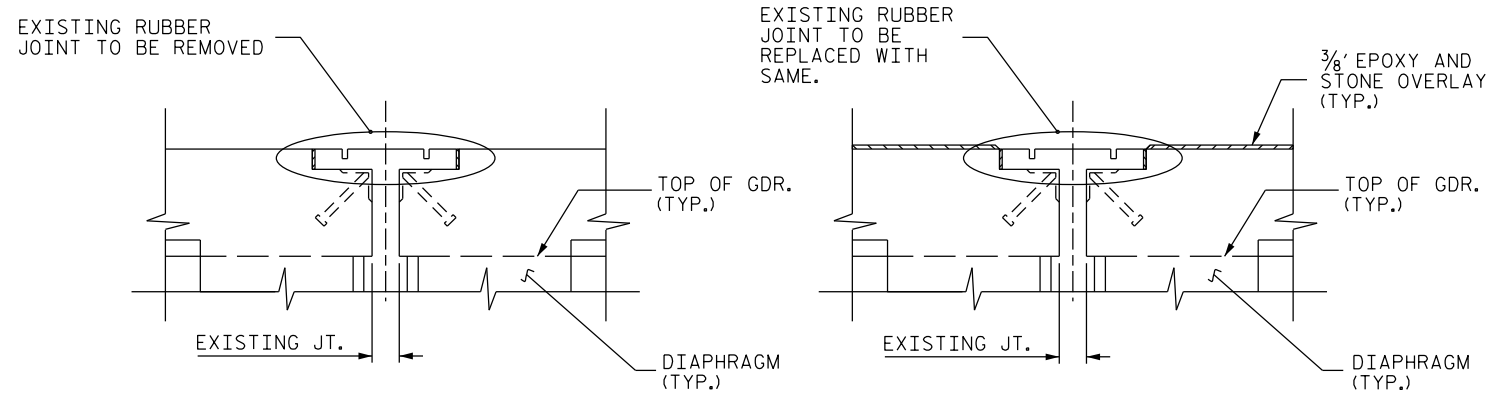
PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 21

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SECTION & JOINT DETAILS

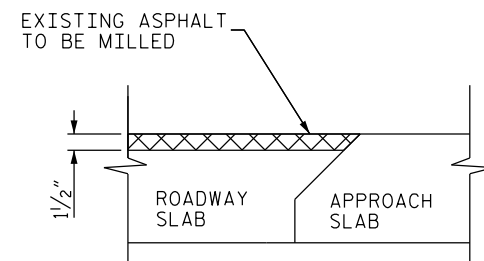
SHEET 1 OF 2

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

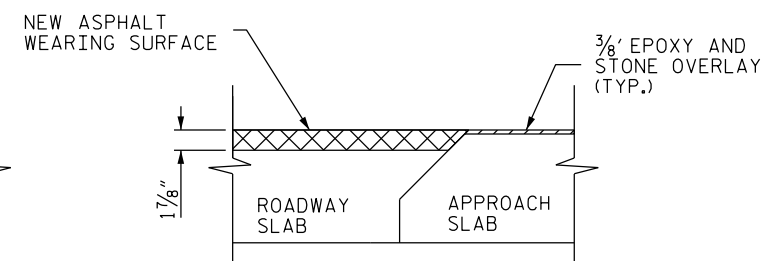


SECTION E-E
(EXISTING JOINT)

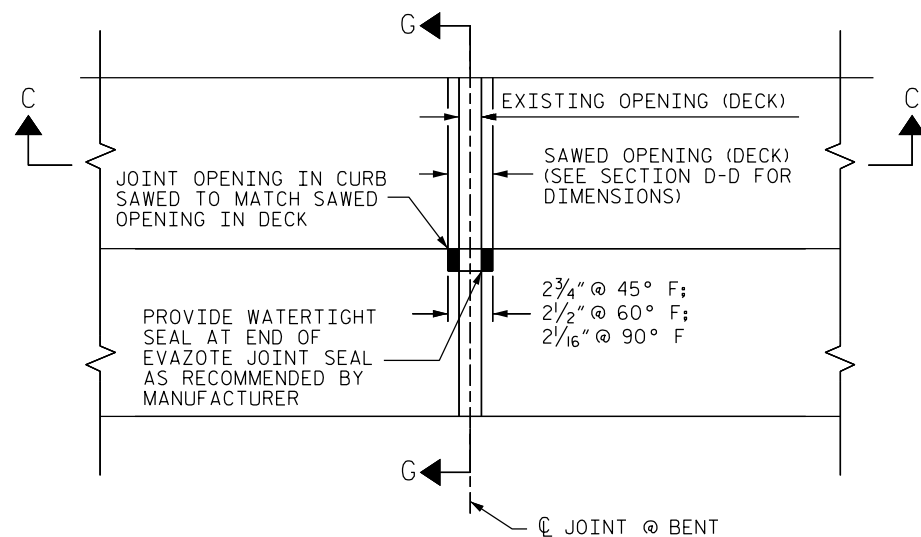
SECTION E-E
(PROPOSED JOINT)



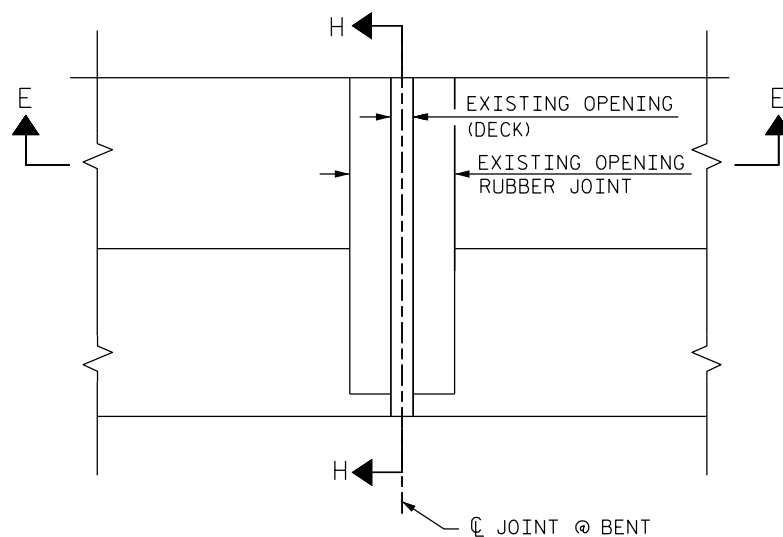
SECTION F-F
(EXISTING)



SECTION F-F
(PROPOSED)



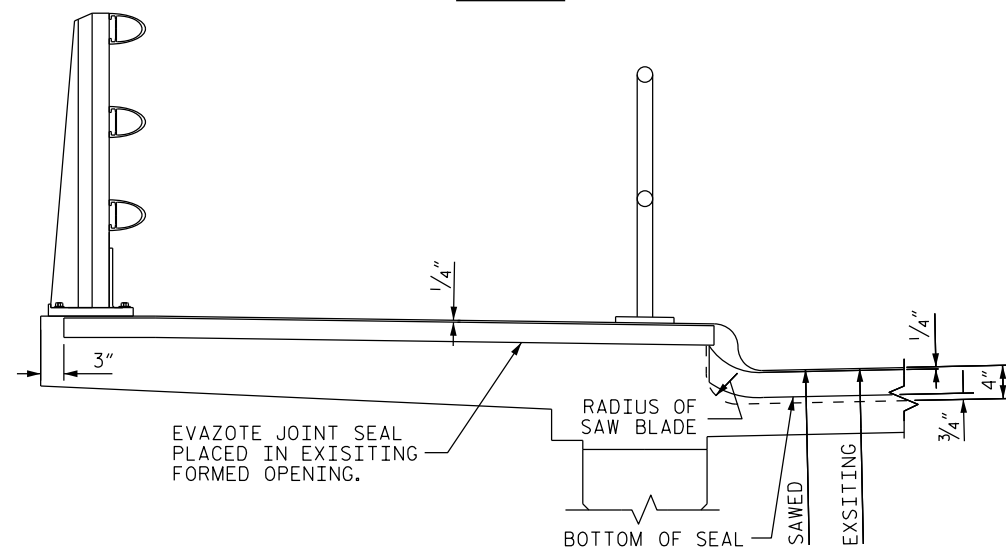
PLAN



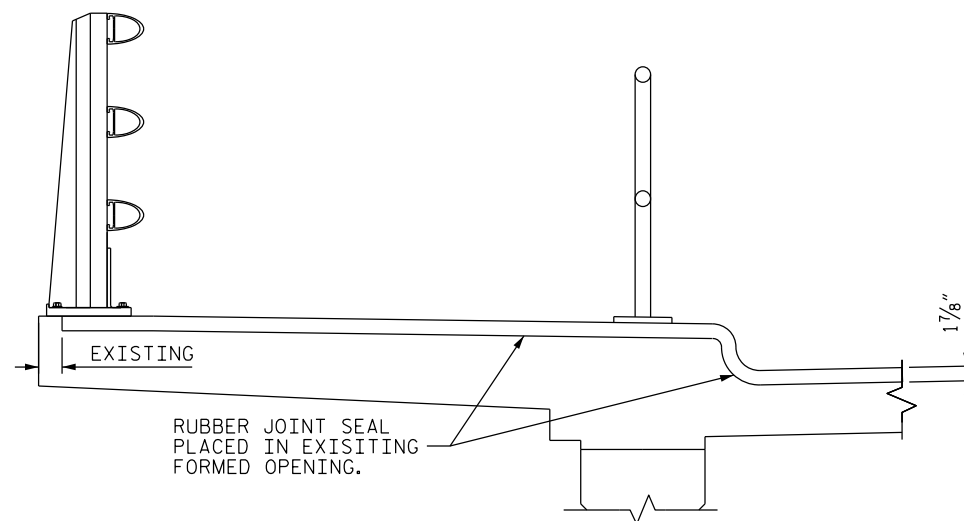
PLAN

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 3/8" AT BENTS 1 AND 13.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE EVAZOTE JOINT SEAL IN LIEU OF SAWING THE JOINT.
- NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL TO BE PLACED IN OVER HANG JOINTS SHALL BE DETERMINED BY THE ENGINEER.
- FOR REPLACEMENT OF EXISTING DECK EXPANSION JOINT, SEE SPECIAL PROVISIONS.



SECTION G-G



SECTION H-H

PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 21

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SECTION & JOINT DETAILS

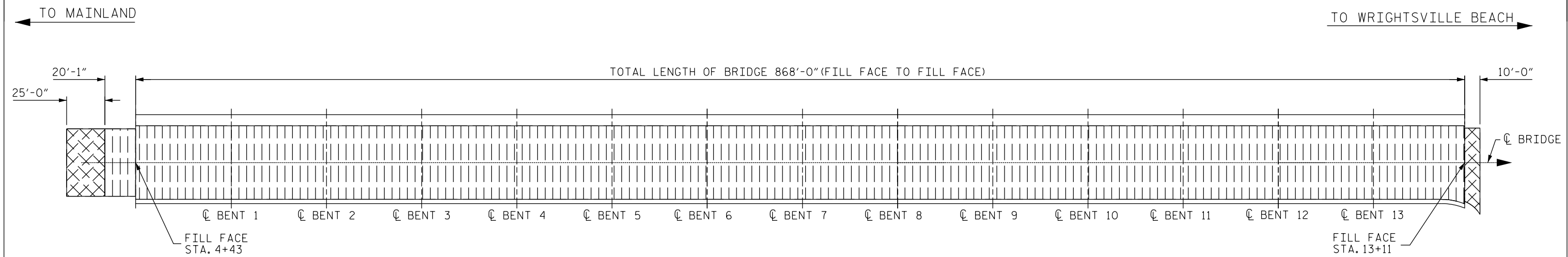
SHEET 2 OF 2

REVISIONS						SHEET NO. S-3
NO.	BY	DATE	NO.	BY	DATE	
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2			4			

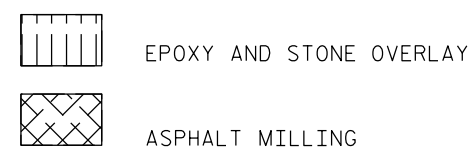
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CHECKED BY: EBN DATE: 08/11

*****USERNAME*****

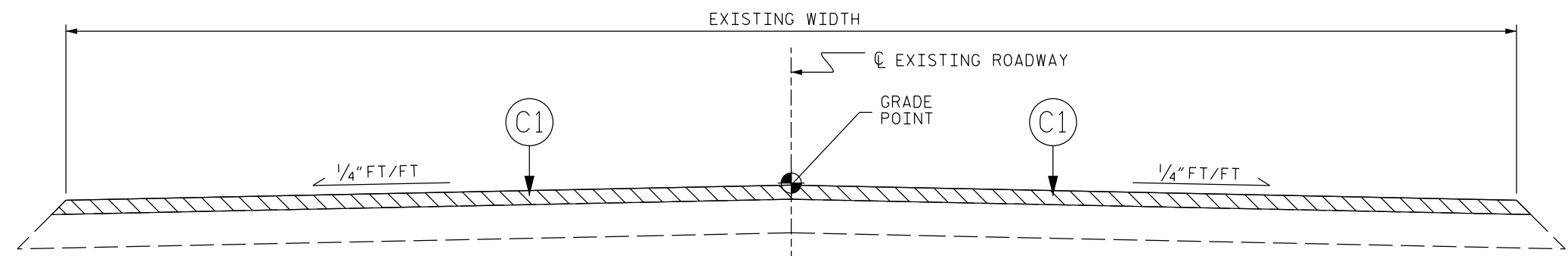
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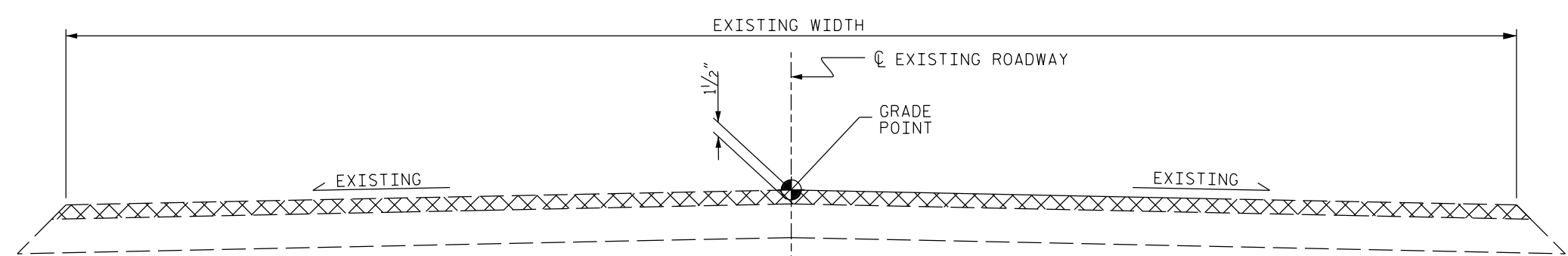
PLAN



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.



TYPICAL ROADWAY SECTION



TYPICAL ROADWAY MILLING SECTION
(MILL TO 1 1/2" DEPTH)

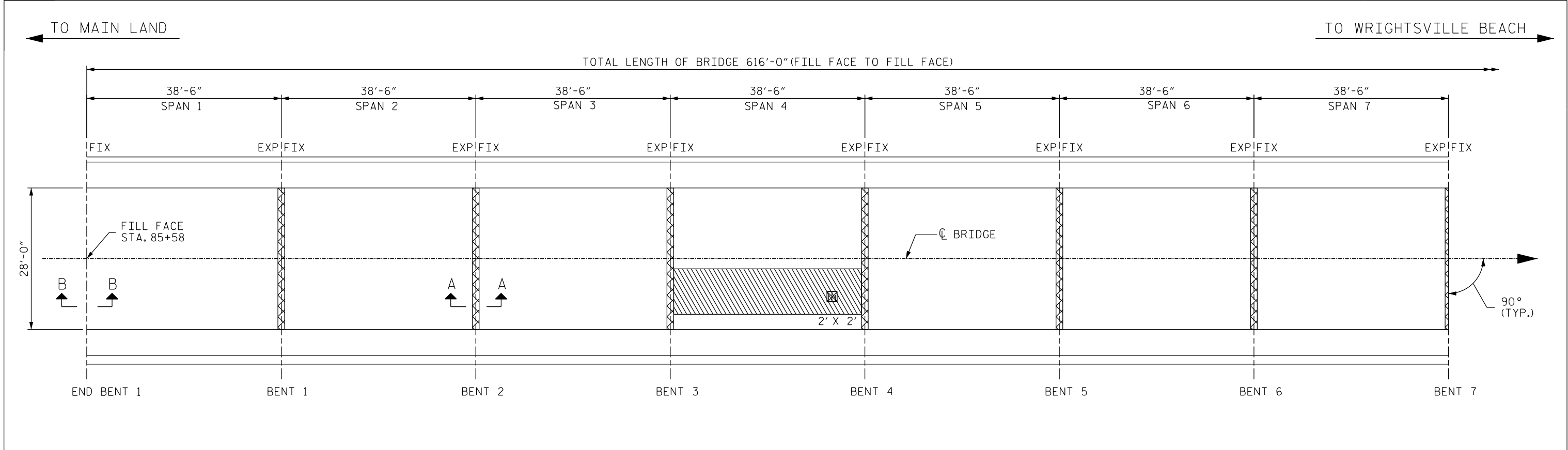
PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 21

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

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

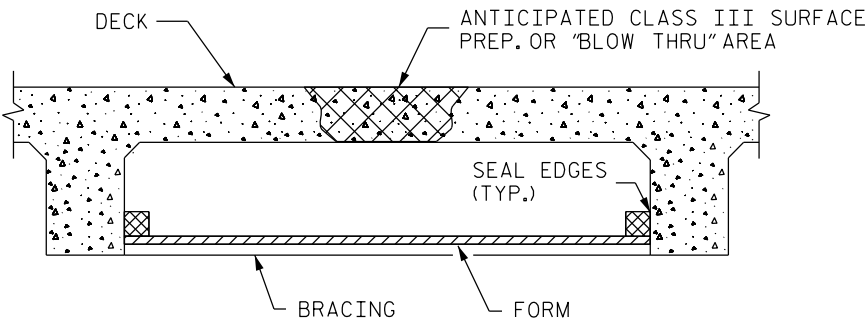
DRAWN BY: CLB DATE: 08/11
CHECKED BY: EBN DATE: 08/11

NOT TO SCALE



- APPROX. AREA: POSSIBLE CLASS I REPAIR DUE TO LOW REBAR COVERAGE
- APPROX. AREA: CLASS II REPAIR

PLAN

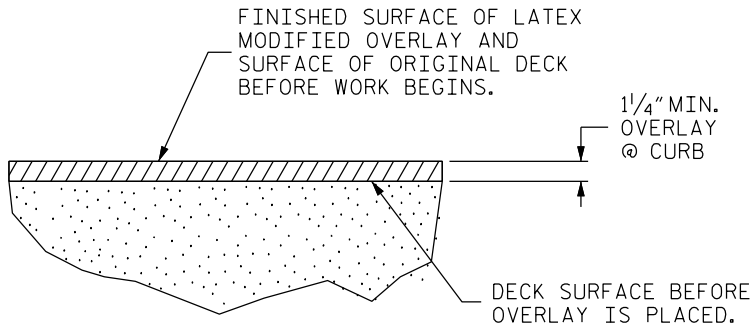


TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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

NOTES

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE, 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.

FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL									
** SCARIFYING BRIDGE DECK	* CLASS I SURFACE PREPARATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE OVERLAY	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	C.Y.	SQ.YDS.	LUMP SUM	SQ. FT.	TONS
2539	186	43	0	1916	93	1874	LUMP SUM	17248	86

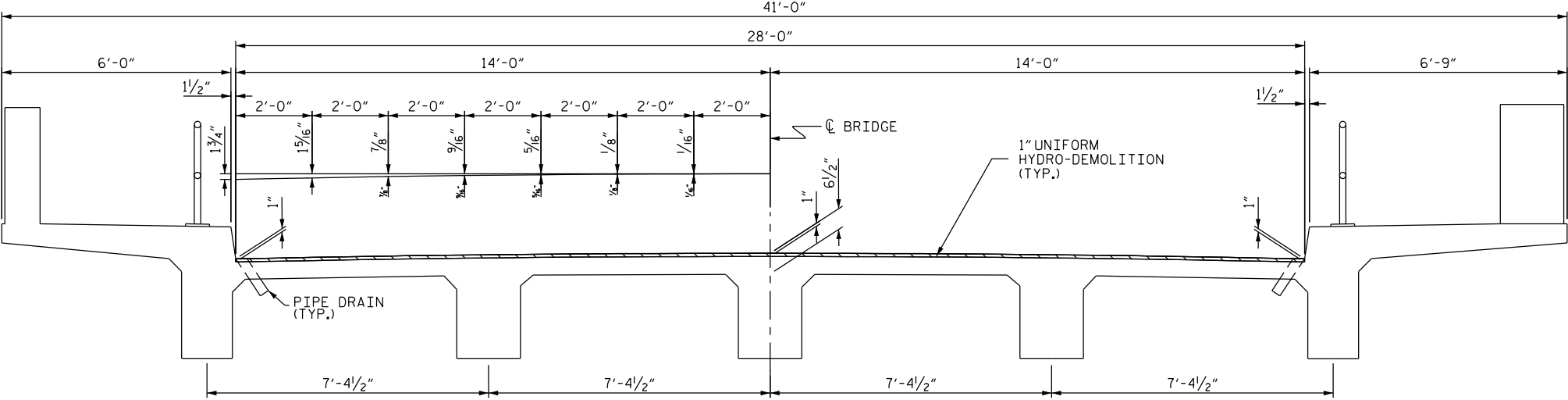
* QUANTITY SHOWN IS FOR INFORMATION ONLY. ** INCLUDES APPROACH MILLING.

PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 24

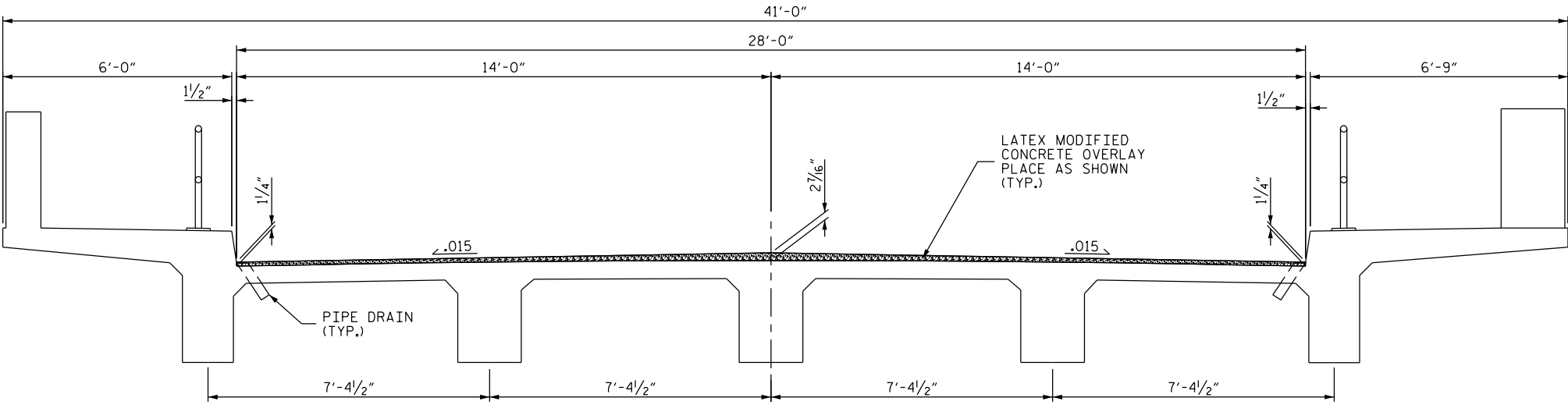
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PLAN VIEW OF BRIDGE
#24, ON US 74
OVER BANKS CHANNEL
28'-0" CL. RDWY 90° SKEW

REVISIONS						SHEET NO. S-5
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 9
2			4			

DRAWN BY: CLB DATE: 08/11
CHECKED BY: EBN DATE: 08/11



TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(PROPOSED)

PROJECT NO. 17BP.3.P.2
COUNTY: NEW HANOVER
DECK REPAIR BRIDGE NO. 24

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION

28'-0" CL. RDWY 90° SKEW

DRAWN BY: CLB DATE: 08/11
CHECKED BY: EBN DATE: 08/11

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-7
1			3			TOTAL SHEETS
2			4			9

NOTES

FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.

THE INSTALLED EVAZOTE JOINT SEALS SHALL BE WATERTIGHT.

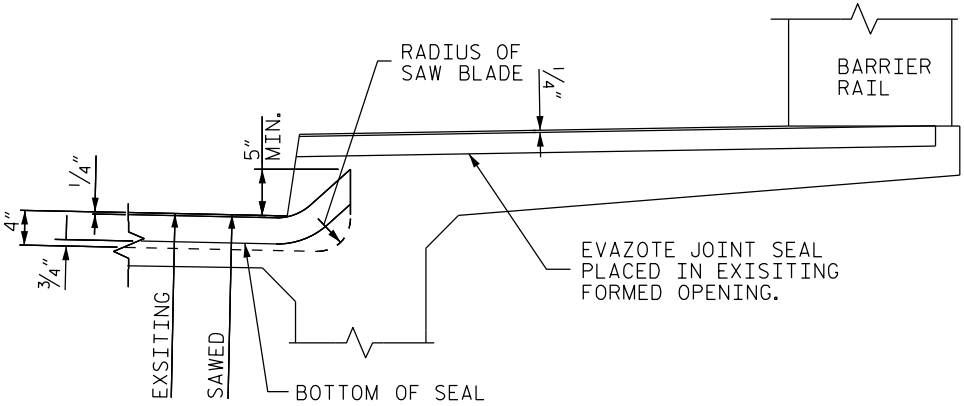
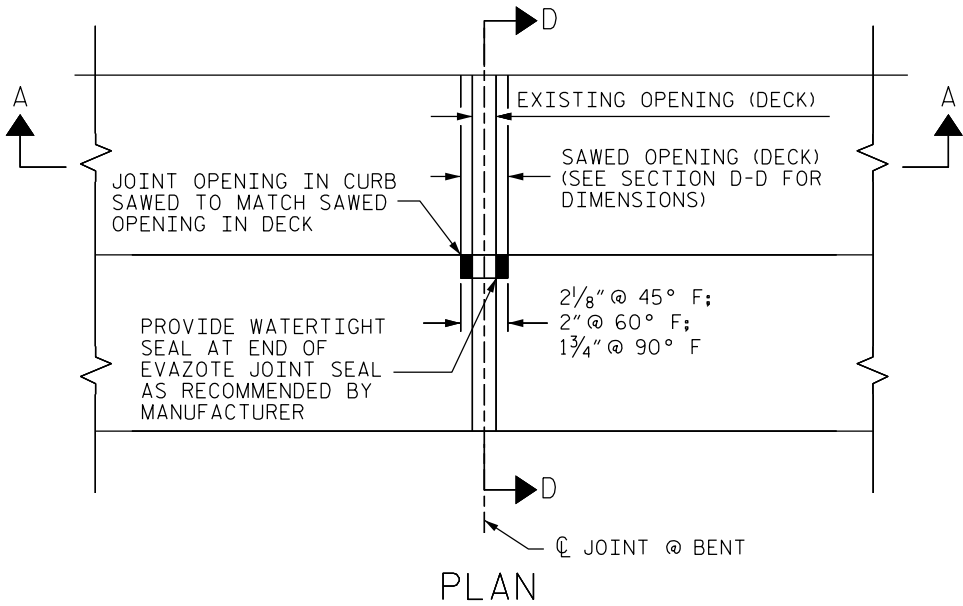
NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT THE BENTS.

NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL FOR THE SIDEWALKS SHALL BE DETERMINED BY THE ENGINEER.

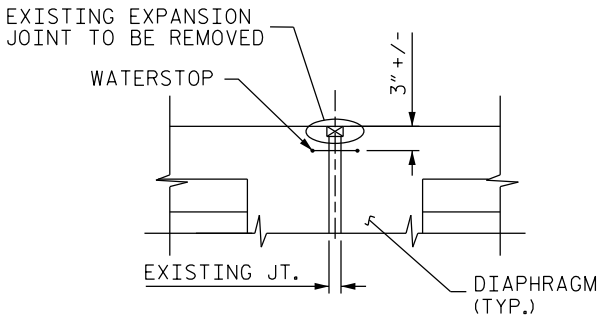
THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE EVAZOTE JOINT SEAL IN LIEU OF SAWING THE JOINT.

ELASTOMERIC CONCRETE

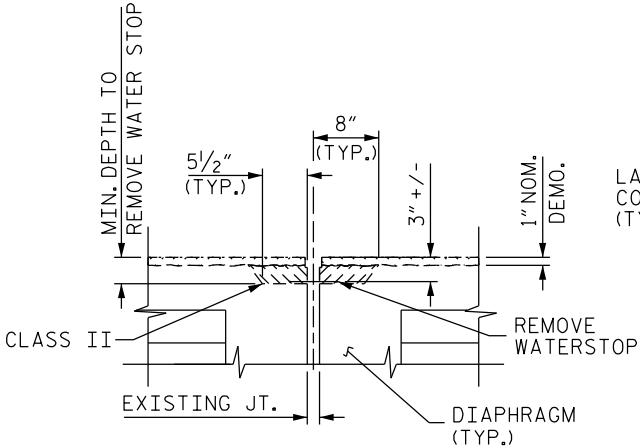
BENTS	57.0 (CU. FT.)
* TOTAL	
57.0 (CU. FT.)	
* BASED ON THE MINIMUM BLOCKOUT SHOWN.	



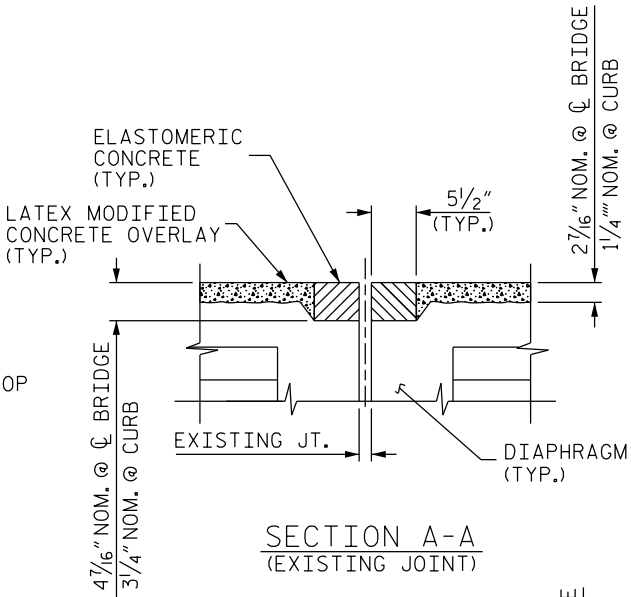
SECTION D-D



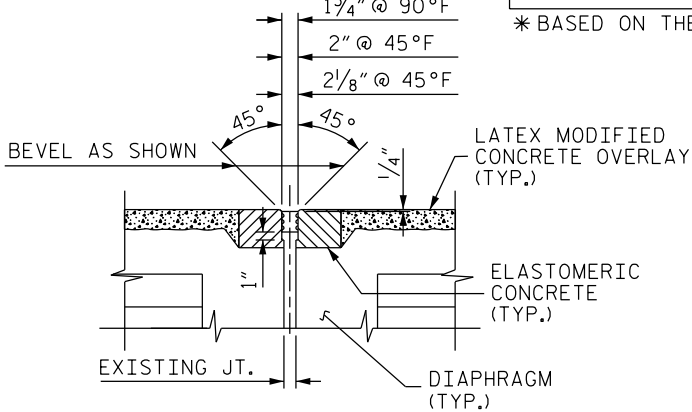
SECTION A-A
(EXISTING JOINT)



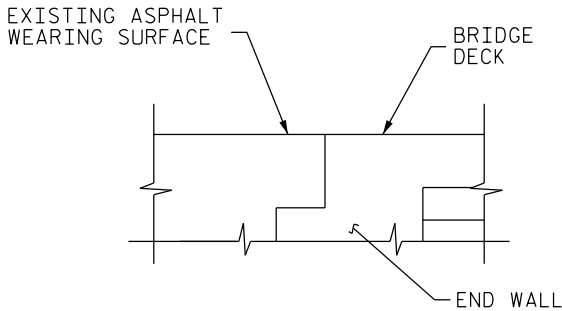
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(EXISTING JOINT)



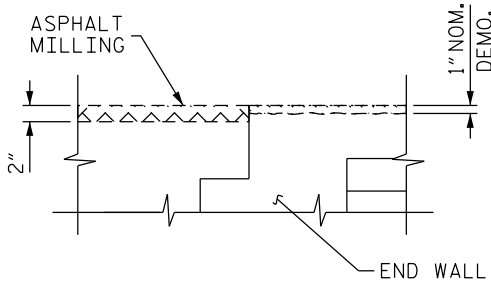
SECTION A-A
(EXISTING JOINT)



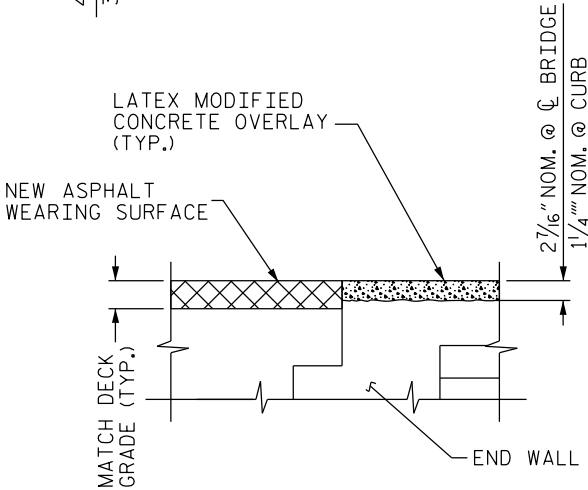
SECTION A-A
(EXISTING JOINT)



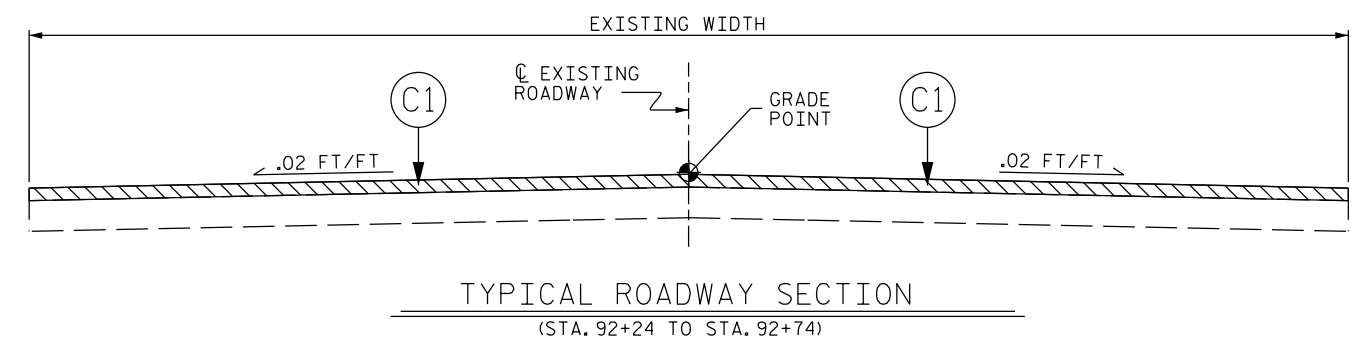
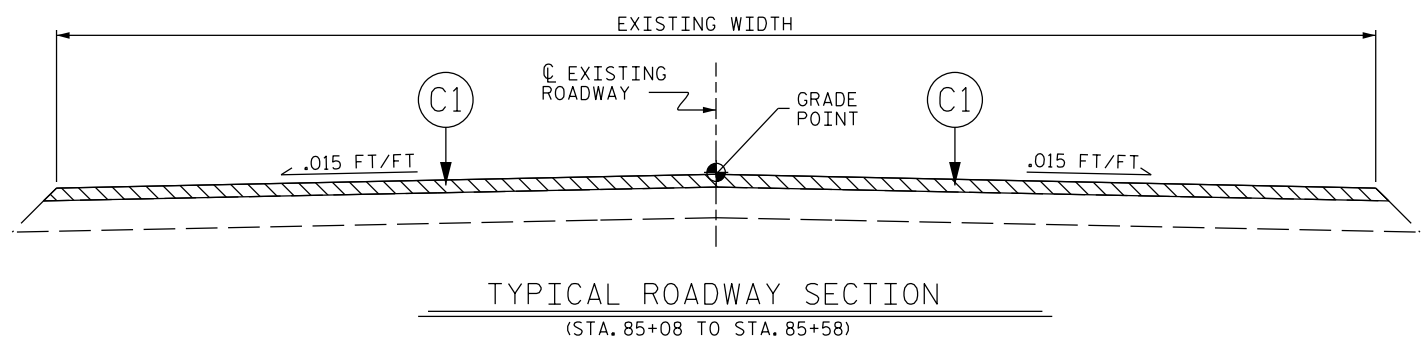
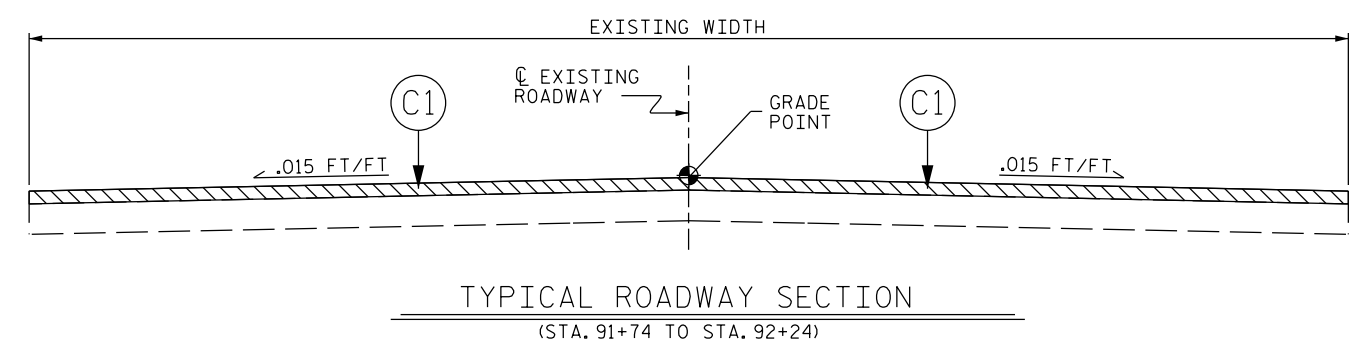
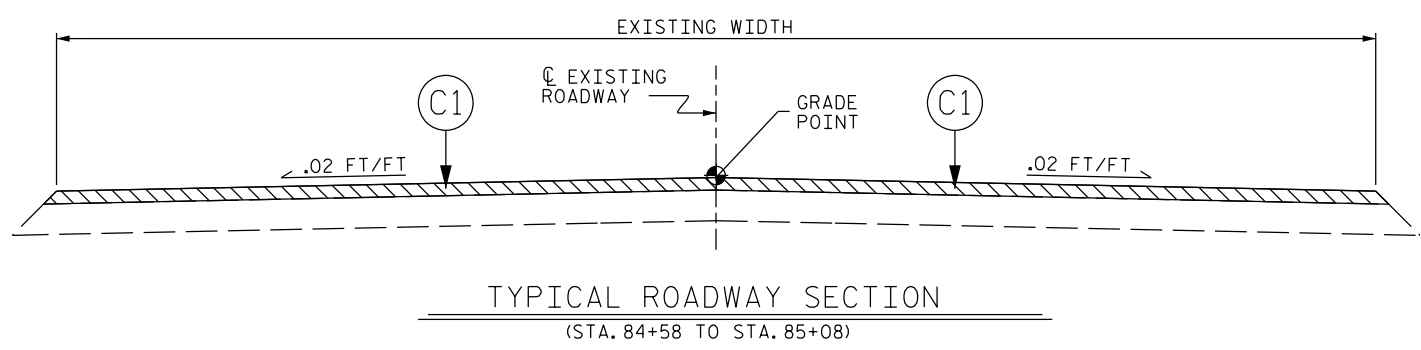
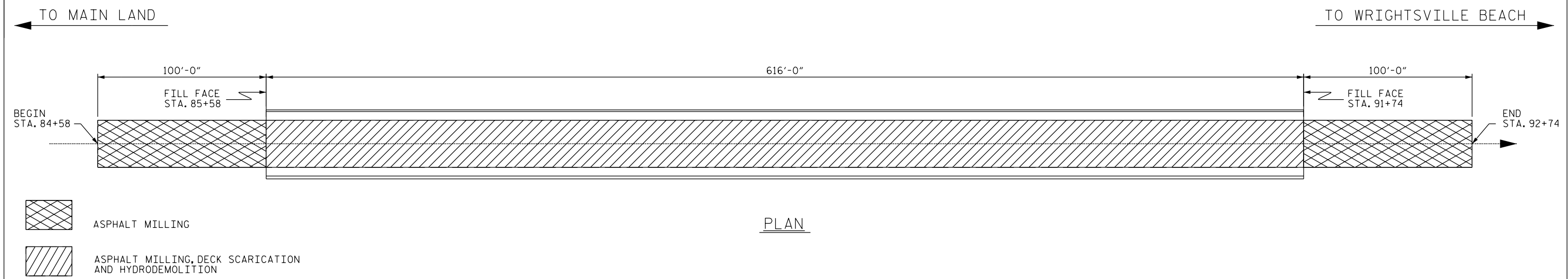
SECTION B-B
(EXISTING JOINT)



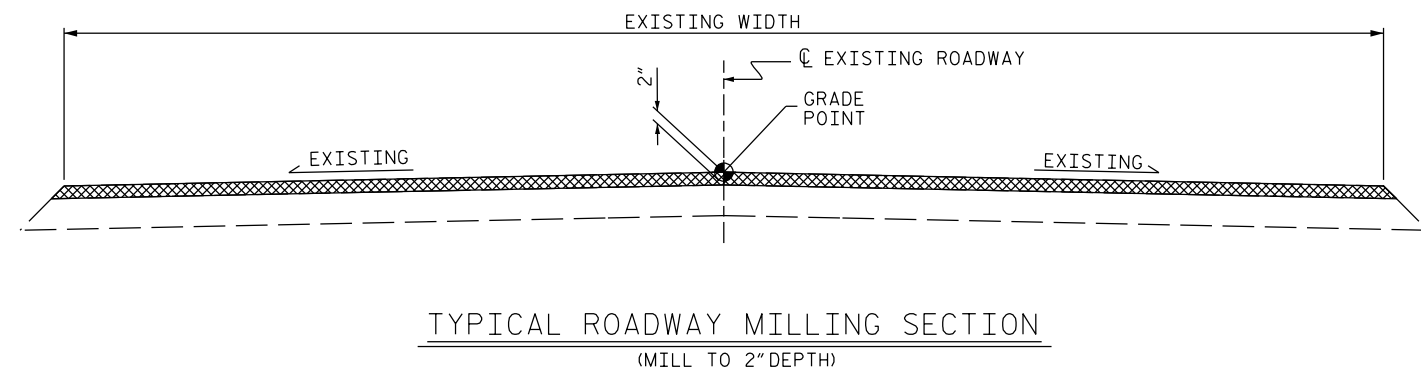
SECTION B-B
(EXISTING JOINT)



SECTION B-B
(EXISTING JOINT)



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. 17BP.3.P.2

COUNTY: NEW HANOVER

DECK REPAIR BRIDGE NO. 24

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
ROADWAY TYPICAL SECTION AND MILLING DETAILS					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
SHEET NO. S-9					TOTAL SHEETS 9

DRAWN BY: CLB DATE: 08/11

CHECKED BY: EBN DATE: 08/11

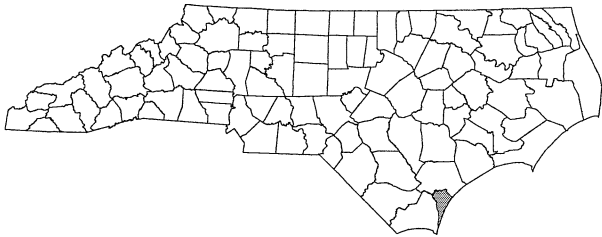
NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

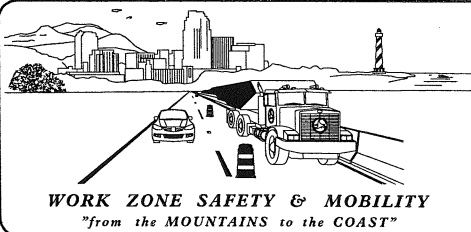
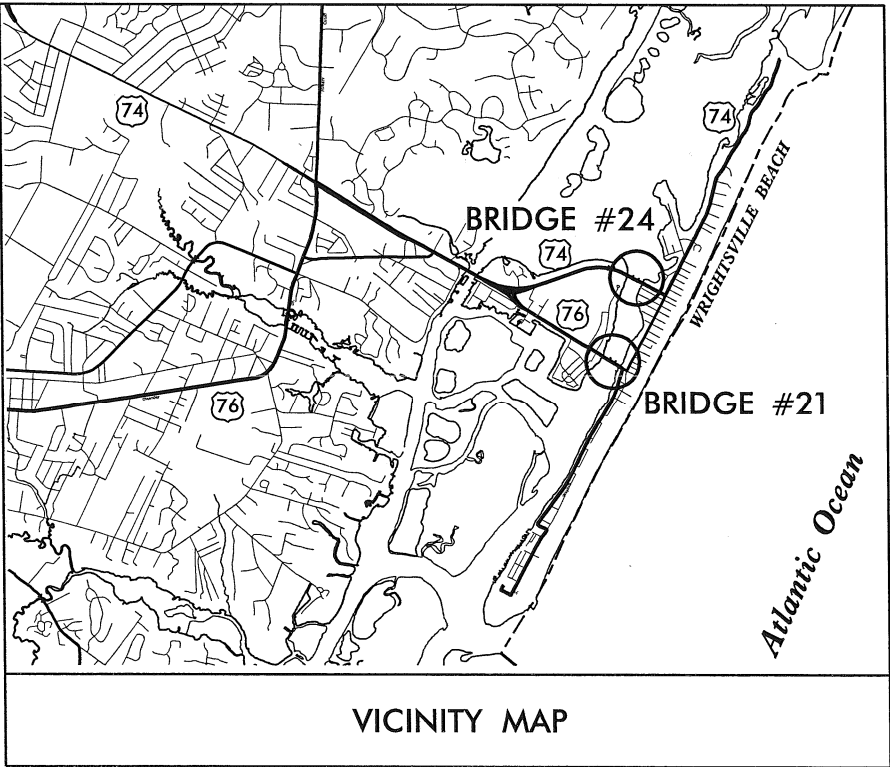
TRANSPORTATION MANAGEMENT PLAN

NEW HANOVER COUNTY

DIVISION 3



BRIDGE #21 – US 76 OVER BANKS CHANNEL
BRIDGE #24 – US 74 OVER BANKS CHANNEL



PLAN PREPARED FOR NCDOT BRIDGE MANAGEMENT UNIT
RALEIGH, NC



PLAN PREPARED BY:
Stantec Consulting Services Inc.
Suite 300, 801 Jones Franklin Road
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: *[Signature]*
DATE: August 12, 2011

SEAL



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, INDEX, TRAFFIC MANAGEMENT STRATEGY
TMP-1A	LIST OF ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-2	GENERAL NOTES
TMP-3	TRAFFIC CONTROL PHASING
TMP-4,4A	BRIDGE #24 US 74 ROAD CLOSURE
TMP-5	BRIDGE #24 US 74 DETOUR ROUTE SIGNING
TMP-6	BRIDGE #21 US 76 EAST RIGHT LANE CLOSURE
TMP-7	BRIDGE #21 US 76 WEST RIGHT LANE CLOSURE
TMP-8	BRIDGE #21 US 76 EAST/US 76 WEST LEFT LANE CLOSURES
TMP-9	BRIDGE #21 US 76 WEST WAYNICK BLVD. LEFT LANE CLOSURE
TMP-10	BRIDGE #21 CLOSURE OF US 76 WEST LANES WITH 1-LANE, 2-WAY TRAFFIC ON US 76 EAST.
TMP-11	BRIDGE #21 CLOSURE OF US 76 EAST LANES WITH 1-LANE, 2-WAY TRAFFIC ON US 76 WEST.

TRAFFIC MANAGEMENT STRATEGY

US 76 BRIDGE #21 DECK PRESERVATION TO BE PERFORMED UNDER TIME RESTRICTED LANE CLOSURES.

US 74 BRIDGE #24 DECK PRESERVATION TO BE PERFORMED UNDER ROAD CLOSURE WITH AN INTERMEDIATE CONTRACT TIME.

WBS 17BP.3.P.2

SHEET NO.
TMP-1

8/12/2011
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gkarageorge

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- WORK AREA
- PAVEMENT REMOVAL
- NORTH ARROW

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- FLASHING ARROW PANEL (TYPE C)
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- CHANGEABLE MESSAGE SIGN (CMS)
- PORTABLE CONCRETE BARRIER (PCB)
- TEMPORARY CRASH CUSHION

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

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)
- ONLY PAVEMENT MARKING ALPHANUMERIC CHARACTERS

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PROJ. REFERENCE NO.	SHEET NO.
17BP.3.P.2	TMP-1A

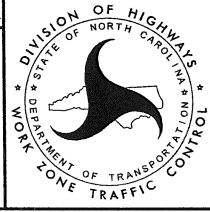
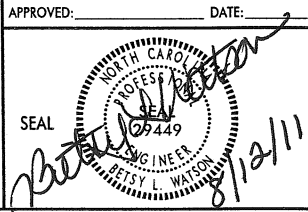
ROADWAY STANDARD DRAWINGS

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
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU-LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS



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LEGEND
ROADWAY STANDARD DRAWINGS

8/12/2011
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gkorogor

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 UNDESIRE

LANE CLOSURE TIME RESTRICTIONS

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

US 74 AND US 76 DAY AND TIME RESTRICTIONS FOR SINGLE LANE CLOSURES

6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY
4:00 P.M.-6:00 P.M. MONDAY THRU FRIDAY

US 76 DAY AND TIME RESTRICTIONS FOR MULTIPLE LANE CLOSURES AS SHOWN ON SHEETS TMP 10-11

5:00 A.M.-11:30 P.M. MONDAY THRU SUNDAY (EVERYDAY)

HOLIDAY & HOLIDAY WEEKEND LANE CLOSURE TIME RESTRICTIONS

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

ROAD NAME
ALL ROADS

- 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 6:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 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 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

SPECIAL EVENT LANE CLOSURE TIME RESTRICTIONS

- C) DO NOT CLOSE OR NARROW TRAVEL LANES DURING THE FOLLOWING SPECIAL EVENTS, FROM 4 HOURS BEFORE TO 4 HOURS AFTER THE EVENT AS DIRECTED BY THE ENGINEER:
- 1) SATURDAY OCTOBER 1, 2011 LOOP WALK FOR NEUROFIBROMATOSIS
 - 2) SATURDAY OCTOBER 29, 2011 BEACH 2 BATTLESHIP
 - 3) SATURDAY NOVEMBER 5, 2011 EASTER SEALS/UCP LOOP WALK
 - 4) SATURDAY NOVEMBER 12 HOLIDAY FLOTILLA 5K FUN RUN
 - 5) THURSDAY NOVEMBER 24, 2011 TURKEY TROT
 - 6) SATURDAY DECEMBER 17, 2011 JINGLE BELL 5K RUN

GENERAL NOTES

LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) 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.
- E) INSTALL ALL LANE CLOSURES ACCORDING TO THE PLANS, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
- F) 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.
- G) 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.
- H) 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.
- I) 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.
- J) 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.
- K) UNLESS OTHERWISE SHOWN IN THE PLANS, PLACE ARROW PANELS ON THE ROADWAY SHOULDER. IF SHOULDERS DO NOT EXIST, PLACE ARROW PANELS WITHIN THE MERGE TAPER BEHIND THE CHANNELIZING DEVICES OF THE LANE CLOSURE. IF NEEDED, EXTEND LANE CLOSURES TO PROVIDE STOPPING SIGHT DISTANCE TO THE ARROW PANEL (REFER TO ROADWAY STANDARD DRAWING 1101.11 SHEET 2).
- L) PLACE LANE CLOSURE DRUMS IN TAPERS AT A MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT (MPH). ALONG BUFFER SPACES AND WORK AREAS SPACE DRUMS AT A MAXIMUM SPACING EQUAL IN FEET TO TWICE THE POSTED SPEED LIMIT (MPH). IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION. CHANNELIZING DEVICES SHOULD BE Laterally OFFSET 3 FT INSIDE THE CLOSED LANE AS ROOM PERMITS.

ROAD CLOSURES


- M) 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.
- N) 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. ALL OFFSITE DETOUR ROUTES MUST BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTING.
- O) 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.
- P) 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

- Q) RECORD ALL LOCATIONS AND TYPES OF EXISTING PAVEMENT MARKINGS AS THEY WILL BE REPLACED IN THE SAME LOCATION ON THE NEW SURFACE. IN ADDITION, ON US 76 EASTBOUND AT BRIDGE #21 ADD 2 SETS OF "ONLY" CHARACTERS TO THE RIGHT TURN LANE DROP.
- R) UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:
- | ROAD NAME | MARKING | PAVEMENT MARKER |
|--------------|---------------------|------------------|
| US 74, US 76 | POLYUREA/COLD APPL. | PERMANENT RAISED |
- S) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.


MISCELLANEOUS

- T) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.
- U) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- V) MAINTAIN DRIVEWAY ACCESS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- W) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.




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APPROVED: _____ DATE: _____



8/12/11



GENERAL NOTES

TRAFFIC CONTROL PHASING

US 74 BRIDGE #24

INTERMEDIATE CONTRACT TIME

PERFORM THE WORK FOR BRIDGE #24 BETWEEN OCTOBER 2, 2011 AND OCTOBER 27, 2011.

STEP 1:

IMPLEMENT A DETOUR AND ROAD CLOSURE FOR US 74 AT BRIDGE #24 AS SHOWN ON SHEETS TMP-4, 4A, 5.

STEP 2:

WITH US 74 CLOSED TO TRAFFIC PERFORM ALL BRIDGE DECK OPERATIONS. PRIOR TO OPENING THE ROADWAY TO TRAFFIC, PLACE FINAL PAVEMENT MARKINGS OR PAINT UNTIL FINAL MARKINGS ARE PLACED.

STEP 3:

UPON COMPLETION OF BRIDGE WORK REMOVE THE ROAD CLOSURE AND DETOUR SIGNS AND OPEN US 74 TO TRAFFIC.

US 76 BRIDGE #21

PERFORM BRIDGE #21 DECK OPERATIONS USING LANE CLOSURES AS FOLLOWS:

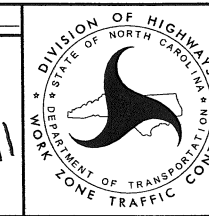
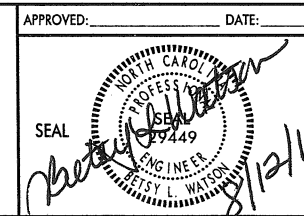
FOR SINGLE RIGHT OR LEFT LANE CLOSURES REFER TO SHEETS TMP 6-9.

FOR RIGHT LANE CLOSURES IN COMBINATION WITH FLAGGERS WHERE TRAFFIC IS PLACED IN A ONE-LANE, TWO-WAY PATTERN ON EACH SIDE OF US 76 REFER TO SHEETS TMP 10-11. USE THIS METHOD ONLY IF APPROVED BY THE ENGINEER.

8/12/2011
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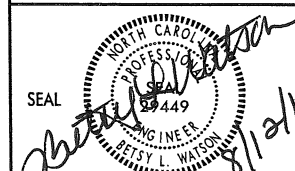

TRAFFIC CONTROL PHASING



MATCH LINE NEXT SHEET

DURING PERIODS OF CONSTRUCTION INACTIVITY KEEP
SIDEWALKS CLEAR OF CONSTRUCTION EQUIPMENT AND
DEBRIS.

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 Stantec	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	APPROVED: _____ DATE: _____  Patsy L. Watson 11/2/11		BRIDGE #24 US 74 ROAD CLOSURE

(A)

MESSAGE NO. 1	MESSAGE NO. 2
US 74 CLOSED AHEAD	US 74 DETOUR KEEP RT
CHANGEABLE MESSAGE SIGN	

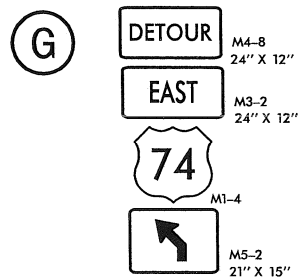
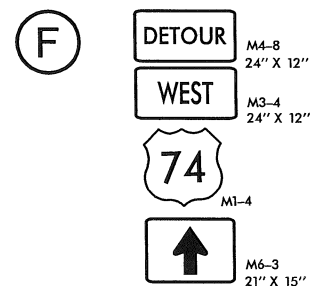
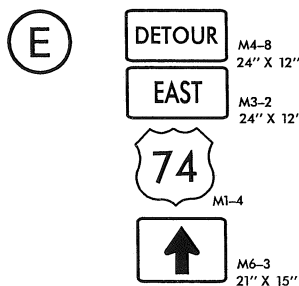
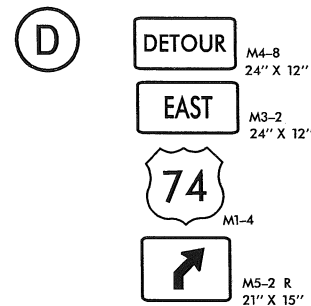
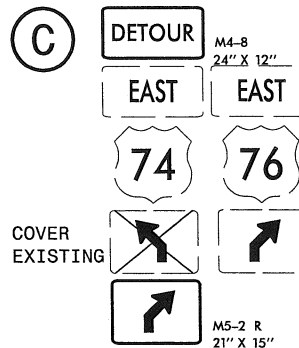


(H)

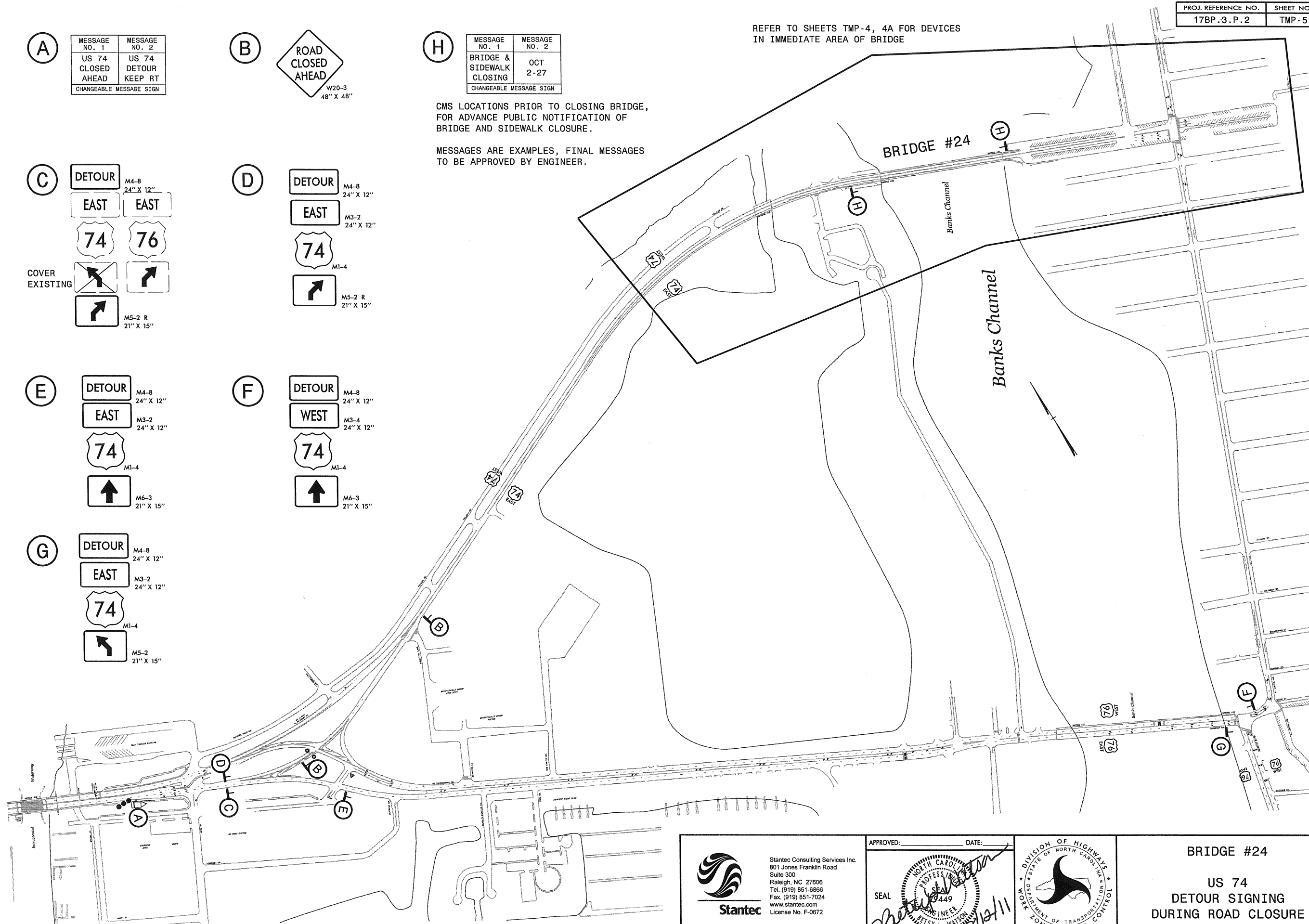
MESSAGE NO. 1	MESSAGE NO. 2
BRIDGE & SIDEWALK CLOSING	OCT 2-27
CHANGEABLE MESSAGE SIGN	

CMS LOCATIONS PRIOR TO CLOSING BRIDGE,
FOR ADVANCE PUBLIC NOTIFICATION OF
BRIDGE AND SIDEWALK CLOSURE.

MESSAGES ARE EXAMPLES, FINAL MESSAGES
TO BE APPROVED BY ENGINEER.



REFER TO SHEETS TMP-4, 4A FOR DEVICES
IN IMMEDIATE AREA OF BRIDGE



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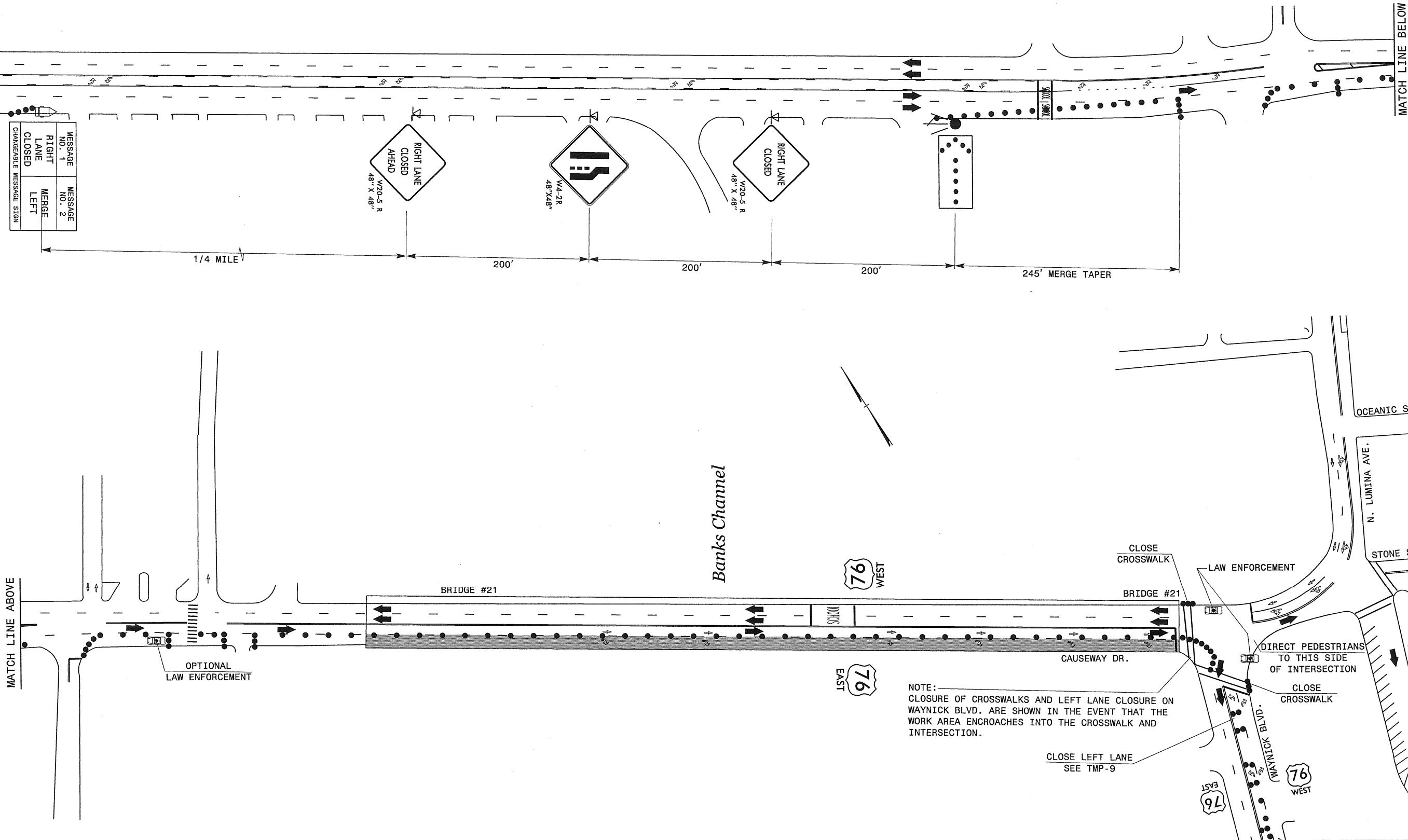
APPROVED: _____ DATE: _____

SEAL

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

BRIDGE #24

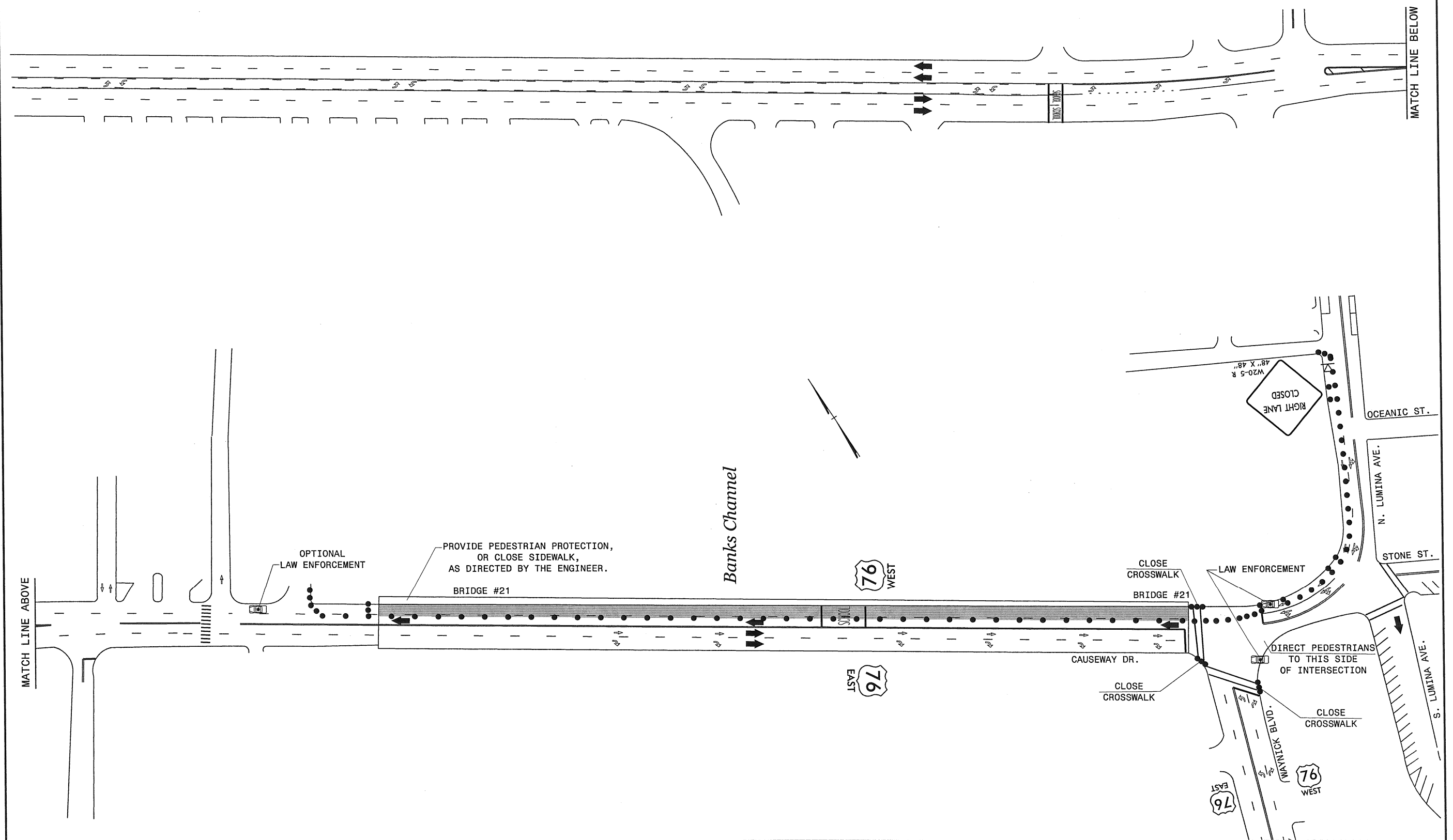
US 74
DETOUR SIGNING
DURING ROAD CLOSURE



8/12/2011
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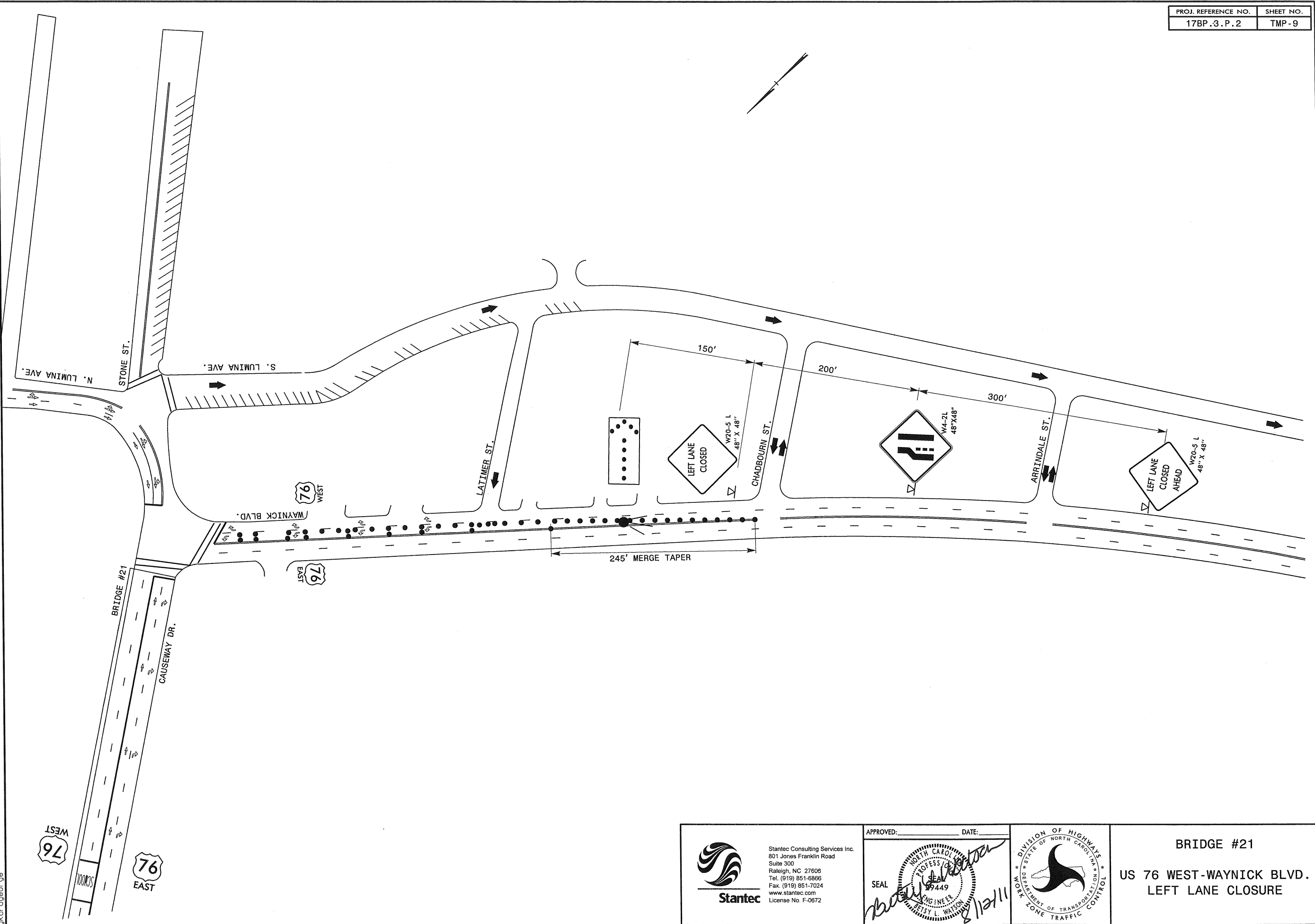
<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</p>	APPROVED: _____ DATE: _____ 		BRIDGE #21 US 76 EAST-CAUSEWAY DR. RIGHT LANE CLOSURE
	SEAL Patsy L. Watson 8/12/11		

8/12/2011
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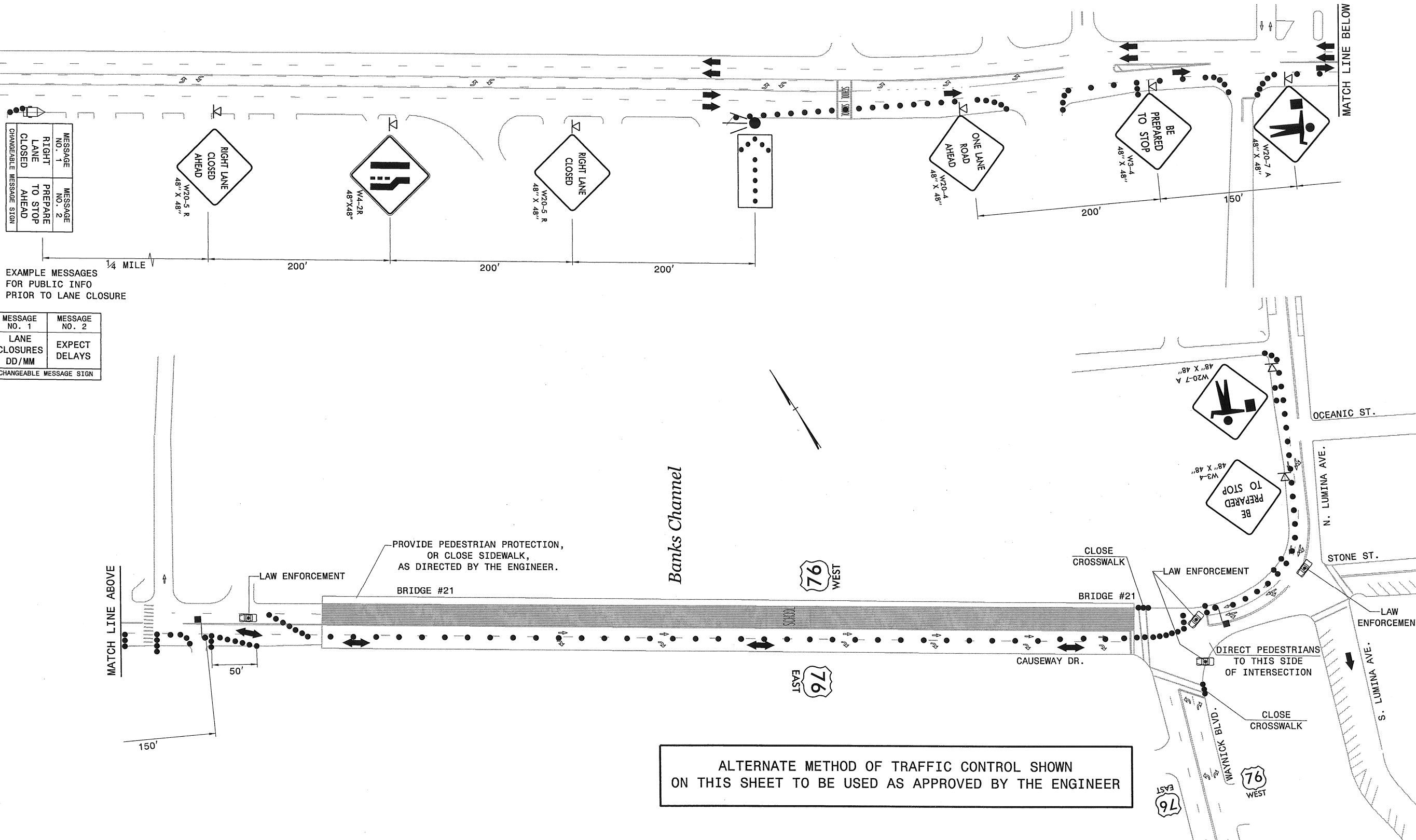


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	<p>SEAL</p> <p><i>Patsy L. Watson</i> 8/12/11</p>		

8/12/2011
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MESSAGE NO. 1	MESSAGE NO. 2
RIGHT LANE CLOSED AHEAD	PREPARE TO STOP
W20-5 R	W20-5 L
48" X 48"	48" X 48"

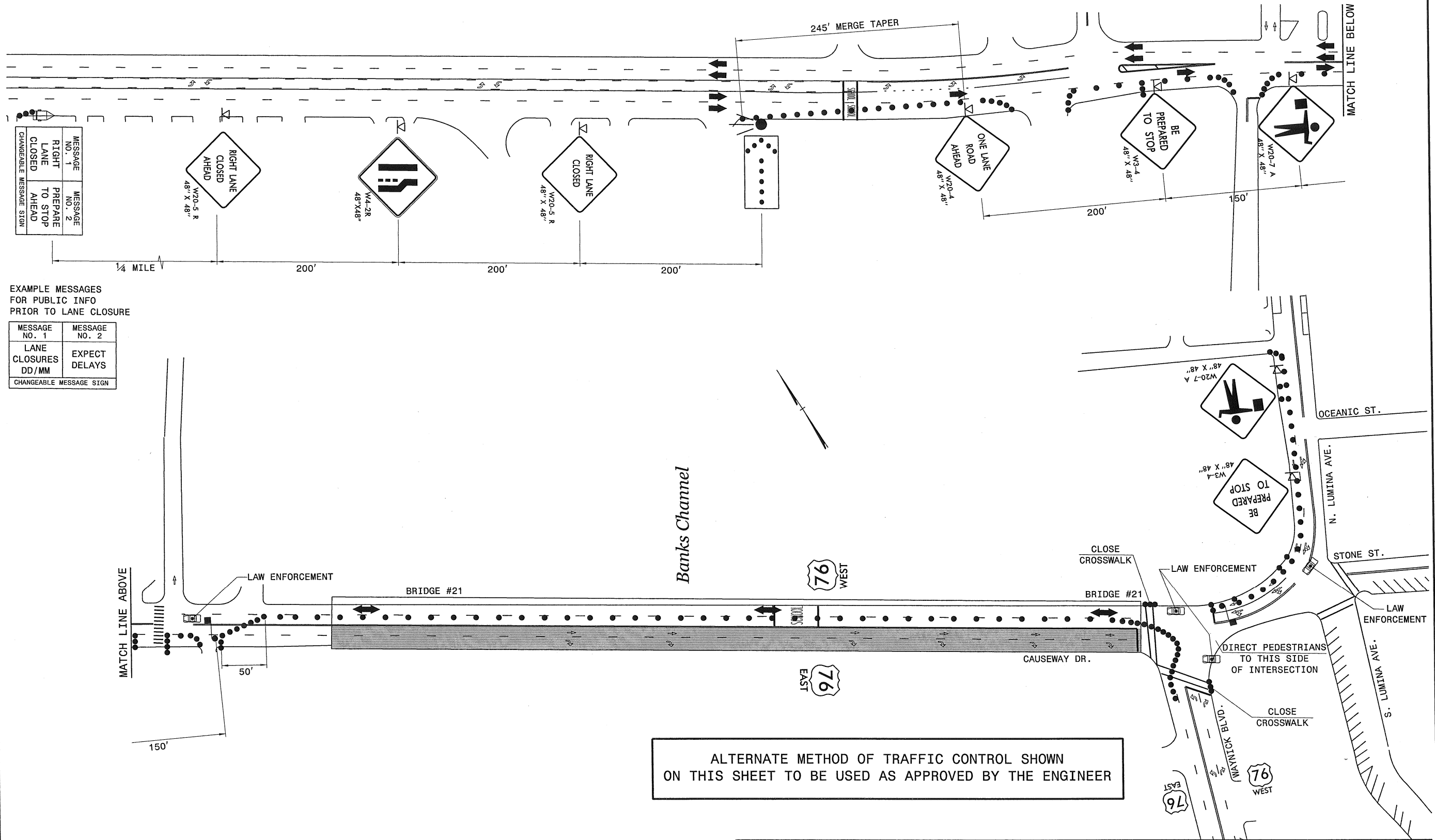
EXAMPLE MESSAGES FOR PUBLIC INFO PRIOR TO LANE CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
LANE CLOSURES DD/MM	EXPECT DELAYS
CHANGEABLE MESSAGE SIGN	

ALTERNATE METHOD OF TRAFFIC CONTROL SHOWN ON THIS SHEET TO BE USED AS APPROVED BY THE ENGINEER

8/15/2011
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EXAMPLE MESSAGES
FOR PUBLIC INFO
PRIOR TO LANE CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
LANE CLOSURES DD/MM	EXPECT DELAYS
CHANGEABLE MESSAGE SIGN	

MESSAGE NO. 1	MESSAGE NO. 2
RIGHT LANE CLOSED AHEAD	PREPARE TO STOP
CHANGEABLE MESSAGE SIGN	

ALTERNATE METHOD OF TRAFFIC CONTROL SHOWN
ON THIS SHEET TO BE USED AS APPROVED BY THE ENGINEER

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APPROVED: _____ DATE: _____

SEAL

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

**BRIDGE #21
ALTERNATE METHOD
CLOSURE OF US 76 EAST
CAUSEWAY DRIVE
1-LANE, 2-WAY TRAFFIC
ON US 74 WEST**

8/15/2011
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