# BK-TIP# DO000059

VALDESE POP. 4,213

OR A L D W E L L

BRIDGE
#10

RUTHERFORD
1600 COLLEGE
POP. 1,195
POP. 1,195

YOUR TOWN THE PROPERTY OF THE POP. 1,195
POP. 4,213

OR A L D W E L L

RUTHERFORD
1600 COLLEGE
POP. 1,195
POP. 1,195
POP. 1,195
POP. 1,195
POP. 4,213

OR A L D W E L L

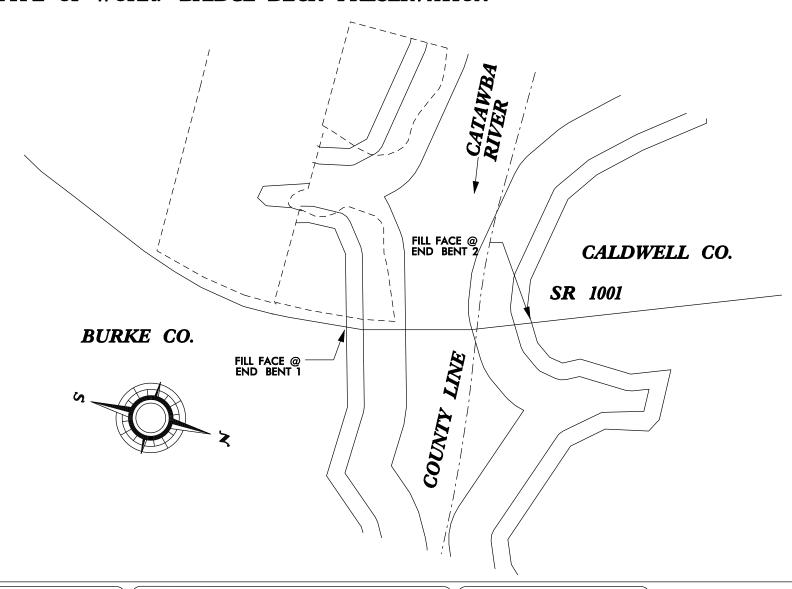
RUTHERFORD
1600 COLLEGE
POP. 1,195
POP. 1,195
POP. 1,195
POP. 1,195
POP. 4,213
POP. 1,195
POP. 1,

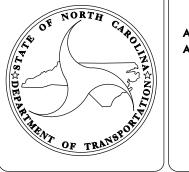
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## 

# **BURKE COUNTY**

LOCATION: BRIDGE #10 ON SR1001 ACROSS CATAWBA RIVER, 0.9 MI. N. JCT. SR 1600.
TYPE OF WORK: BRIDGE DECK PRESERVATION





DESIGN DATAADT 2005 = 9600

ADT 2025 = 19200

PROJECT LENGTH

LENGTH STRUCTURE PROJECT = .172 MILE

DIVISION OF BRIDGE MANAGEMENT

2006 STANDARD SPECIFICATIONS

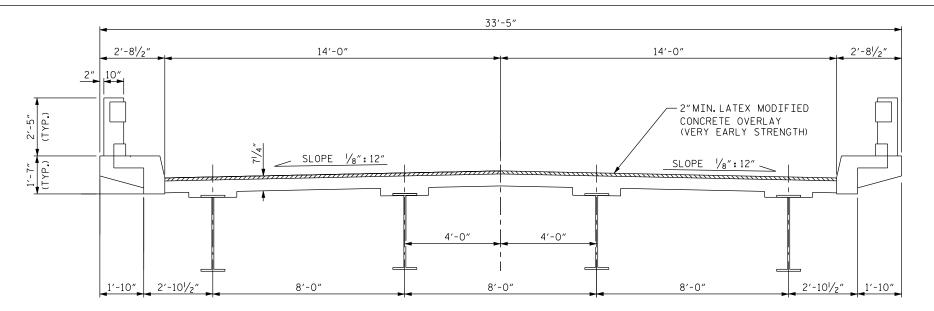
LETTING DATE:

DAN HOLDERMAN RE

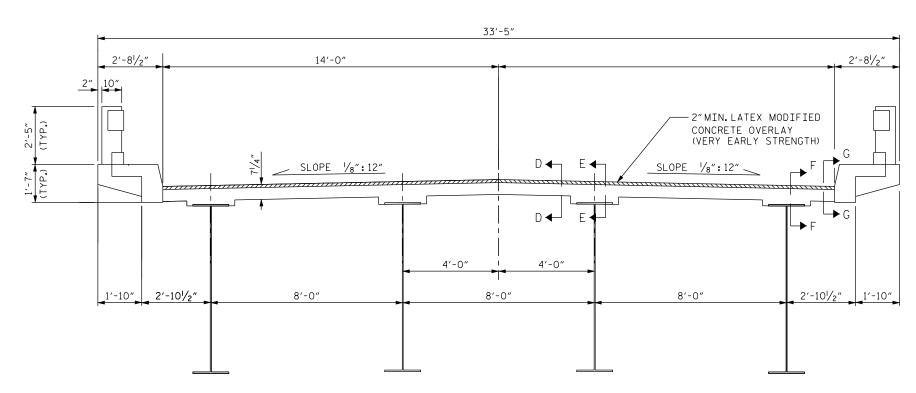
5/20/2010

DAN HOLDERMAN, PE PROJECT ENGINEER





TYPICAL SECTION -(SPANS "A", "G" & "H" 36" I-BEAM)



TYPICAL SECTION -(PLATE GIRDERS)

TOTAL BILL OF MATERIAL										
** DECK SCARIFICATION	* CLASS I SURFACE PREPARATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	* CLASS AA CONCRETE	HYDRO- DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE- VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONCRETE SURFACE COURSE TYPE SF 9.5A
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	C.Y.	SQ.YDS.	C.Y.	SQ.YDS.	LUMP SUM	SQ.FT.	TONS
3142	1953	877	0	0	2831	197	2830	LUMP SUM	23,244	17

st QUANTITY SHOWN IS FOR INFORMATION ONLY.

\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$DGN\$\$\$\$\$\$\$\$\$\$\$\$\$

# NOTES

FOR OVERLAY OF BRIDGE DECKS WITH LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

SEE SPECIAL PROVISIONS FOR SURFACE PREPARATION.

EXPANSION JOINTS SHALL BE COVERED WITH POLYETHYLENE SHEETING OR OTHER APPROVED DAMDS PRIOR TO BEGINNING CLASS I SURFACE PREPARATION. SEE SPECIAL PROVISIONS.

FOR HYDRO-DEMOLITION, 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. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF DECK. SEE DETAIL.

THE CONSTRUCTION JOINTS SHALL BE SAWED NO MORE THAN 3 HOURS AFTER THE LATEX MODIFIED OVERLAY IS CAST. THE JOINT SHALL BE CLEANED OF ALL DEBRIS BEFORE THE SEALENT IS APPLIED. THE JOINT SEALER MATERIAL SHALL CONFORM WITH REQUIREMENTS OF TYPE SL LOW MODULUS SILICON SEALER.

FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.

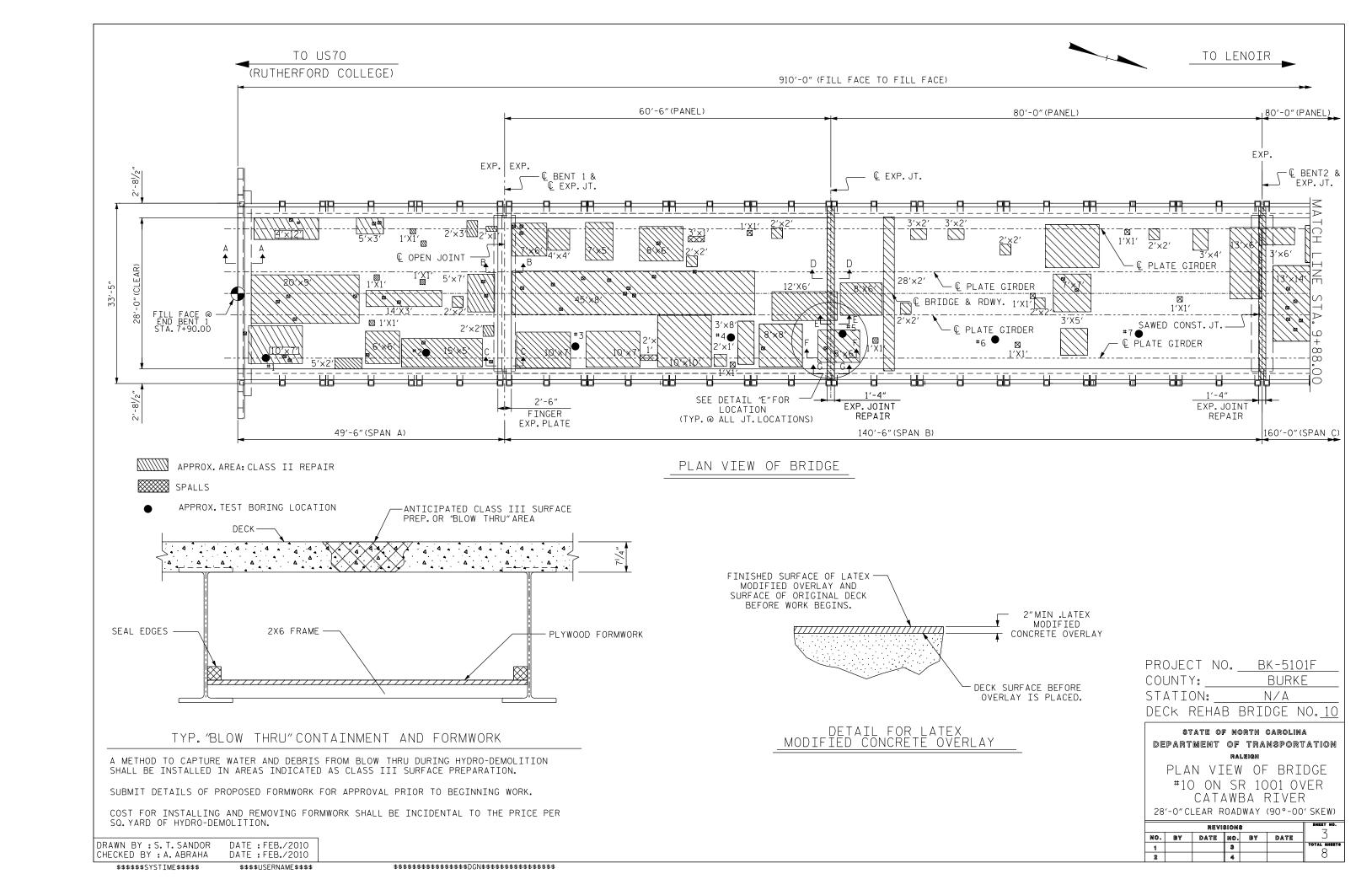
PROJECT NO. BK-5101F
COUNTY: BURKE
STATION: N/A
BRIDGE NO. 10

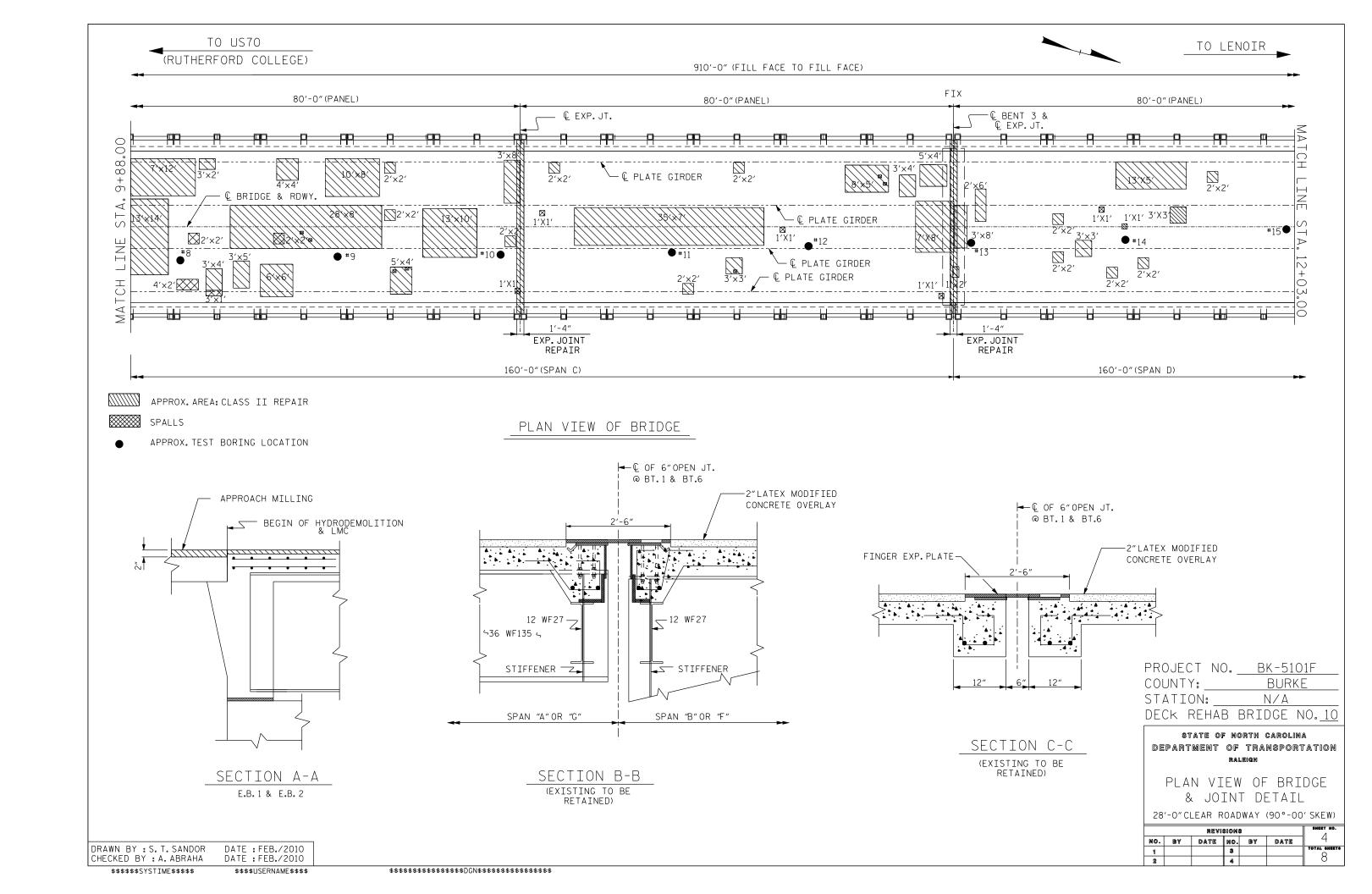
# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGN

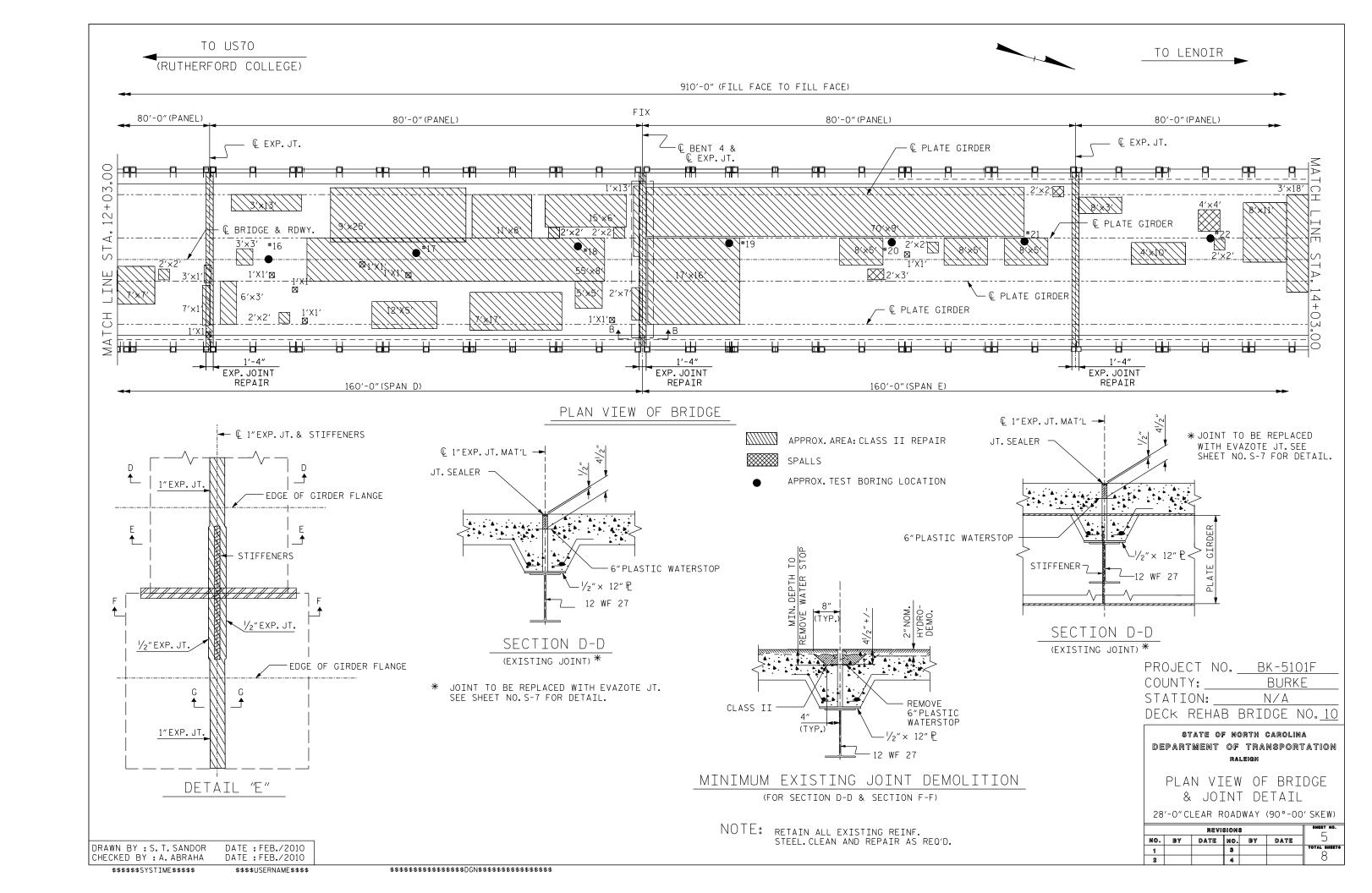
TYPICAL SECTIONS OF BRIDGE No.10 ON SR 1001 OVER CATAWBA RIVER

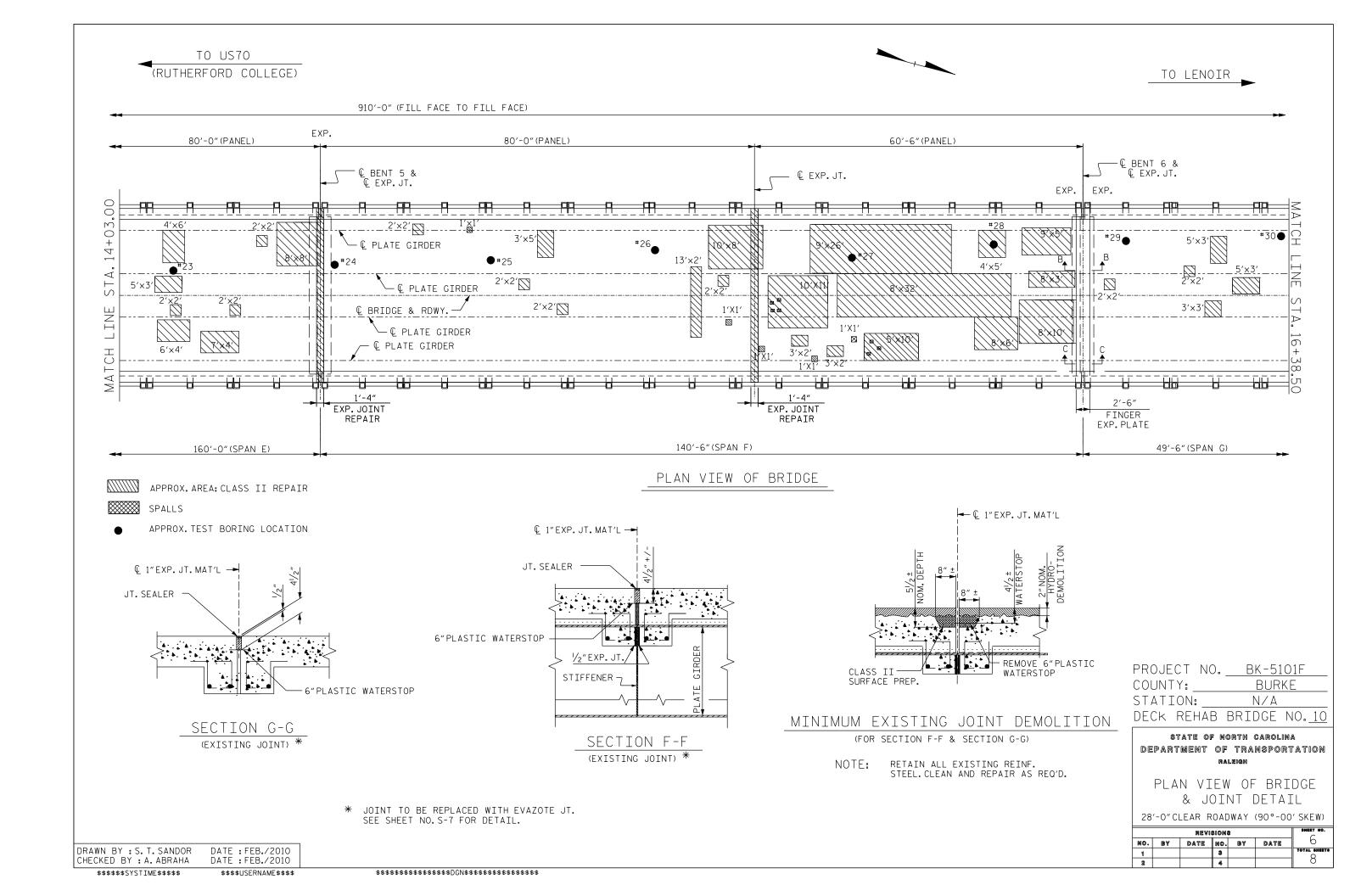
		SHEET NO.				
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS
2			46			8

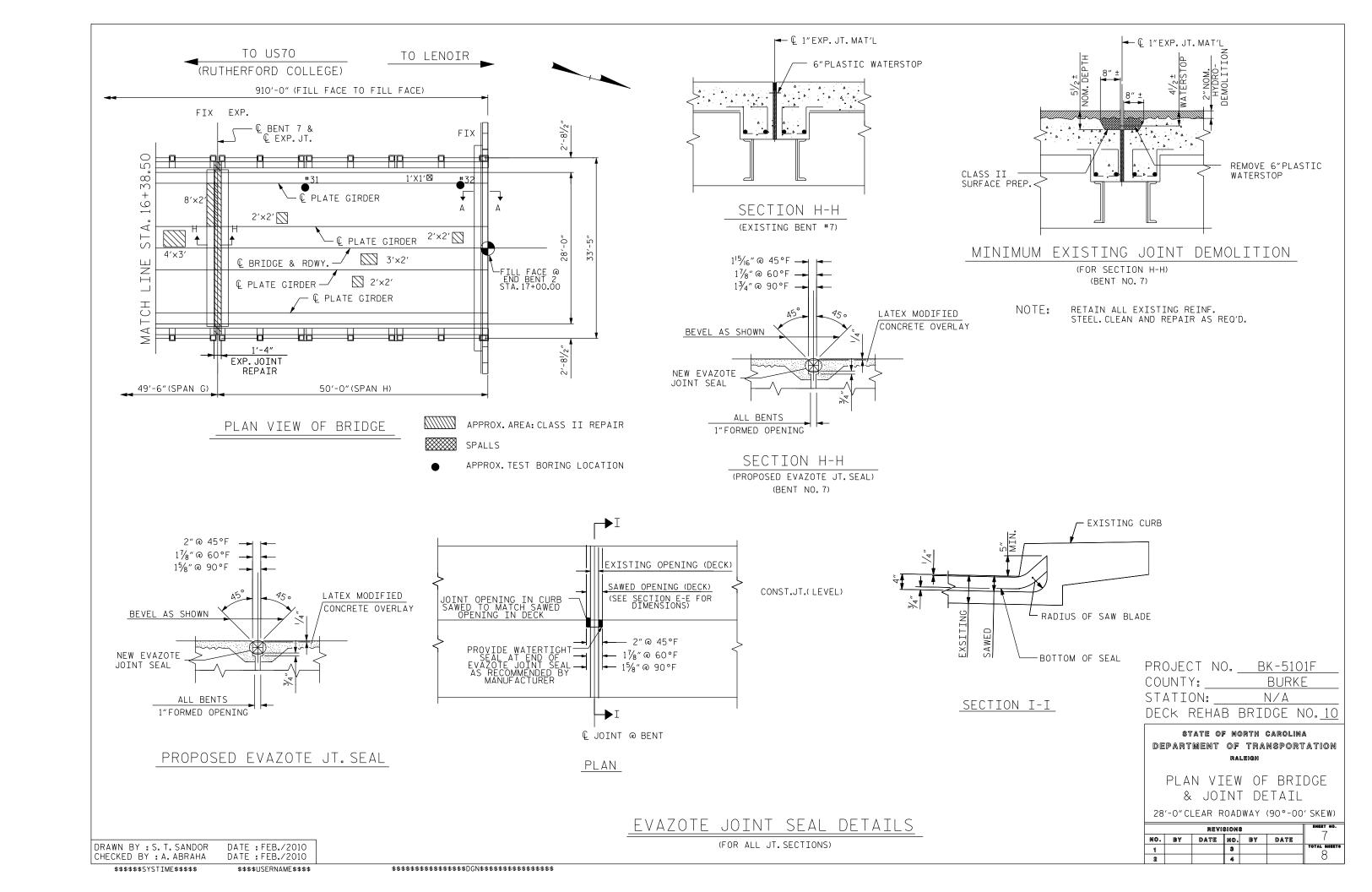
<sup>\*\*</sup> INCLUDES APPROACH MILLING.

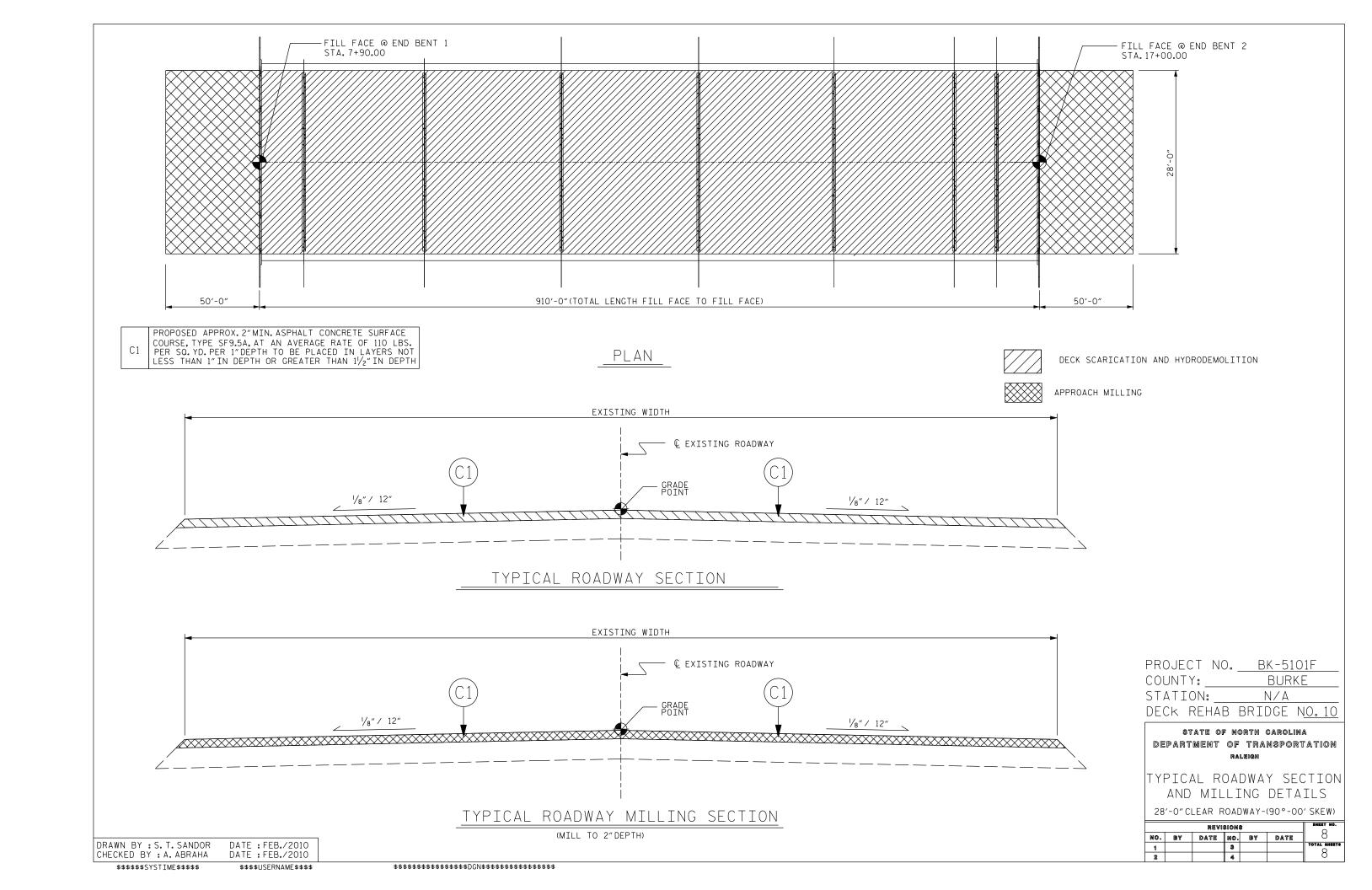












# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# PLAN FOR PROPOSED TRAFFIC CONTROL

# **BURKE COUNTY**

LOCATION: BRIDGE NO. 10 SR 1001 MALCOLM BLVD. OVER LAKE RHODHISS-CATAWBA RIVER TYPE OF WORK: TRAFFIC CONTROL FOR DECK PRESERVATION

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

TITLE

TEMPORARY LANE CLOSURES

TEMPORARY ROAD CLOSURES

TEMPORARY SHOULDER CLOSURES

STATIONARY WORK ZONE SIGNS

PORTABLE WORK ZONE SIGNS

DRUMS

CONES

BARRICADES FLAGGING DEVICES

SKINNY DRUMS

TRAFFIC CONTROL DESIGN TABLES

PAVEMENT MARKINGS - LINE TYPES & OFFSETS

PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS

CONSIDERED A PART OF THESE PLANS:

STD. NO.

1101.02

1101.03

1101.04

1101.11

1110.01 1110.02

1130.01

1135.01

1145.01

1150.01 1180.01

1205.01

1205.02

# INDEX OF SHEETS

#### SHEET NO. TITLE LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, TCP-1 LEGEND, AND INDEX OF SHEETS TCP-2 GENERAL NOTES TRAFFIC CONTROL PHASING-ROAD CLOSURE TCP-3 TCP-4 OFFSITE DETOUR ROUTE

# LEGEND

## **GENERAL**

DIRECTION OF TRAFFIC FLOW

STATE PROJECT REFERENCE NO.

BK-5101F

SHEET NO.

TCP-1

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

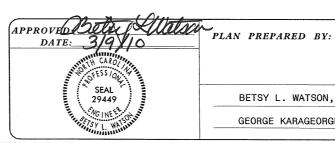
CHANGEABLE MESSAGE SIGN

TEMPORARY CRASH CUSHION

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

LAW ENFORCEMENT

FLAGGER





Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672

BETSY L. WATSON, PE

GEORGE KARAGEORGE

TRAFFIC CONTROL ENGINEER

TRAFFIC CONTROL DESIGNER

# GENERAL NOTES

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

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

TIME RESTRICTIONS

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

SR 1001

DAY AND TIME RESTRICTIONS

6:00 A.M.-9:00 A.M. MONDAY THROUGH THURSDAY AND 3:00 P.M.-7:00 P.M. MONDAY THROUGH THURSDAY AND

6:00 A.M. FRIDAY THROUGH 7:00 P.M. SUNDAY

B) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME SR 1001

DAY AND TIME RESTRICTIONS

6:00 A.M.-7:00 P.M. MONDAY THRU THURSDAY (DAILY) 6:00 A.M. FRIDAY THRU 7:00 P.M. THE FOLLOWING SUNDAY

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

ROAD NAME SR 1001

**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 7:00 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 7:00 P.M. THURSDAY AND 6:00 A.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY AND 6:00 A.M. THESDAY
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 P.M. TUESDAY TO 6:00 A.M. MONDAY.
- 8) FOR CHRISTMAS. BETWEEN THE HOURS OF 7:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) 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.
- E) 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.
- F) 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

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.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

#### TRAFFIC PATTERN ALTERATIONS

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

## STGNTNG

- I) FURNISH AND INSTALL SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD AS SHOWN IN THE TRAFFIC CONTROL PLAN.
- J) FURNISH AND INSTALL SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE.
- K) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- L) OFFSITE DETOUR SIGNS ARE NOT REQUIRED TO BE COVERED ON A DAILY BASIS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC CONTROL DEVICES

N) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED. OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

#### PAVEMENT MARKINGS AND MARKERS

- O) REPLACE OBLITERATED EXISTING MARKINGS WITH PAINT MARKINGS BEFORE OPENING LANES TO TRAFFIC.
- P) UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS INSTALL FINAL PAVEMENT MARKINGS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME SR 1001

MARKING **POLYUREA**  MARKER

PROJECT REFERENCE NO.

BK-5101F

SHEET NO.

TCP-2

NONE

#### MISCELLANEOUS

- Q) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- R) SUBMIT TO THE ENGINEER A WORK AREA QUICK CLEARANCE PLAN TO ALLOW ACCESS FOR EMERGENCY VEHICLES. CONDUCT ALL CONSTRUCTION OPERATIONS IN SUCH A MANNER AS TO ALLOW EMERGENCY VEHICLE PASSAGE THROUGH BRIDGE AT ALL TIMES.

DATE: MAR. 2010 REVIEWED BY: SIGNATURE DATE

**GENERAL NOTES** 

NONE

GK GK

BLW

REVISIONS

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