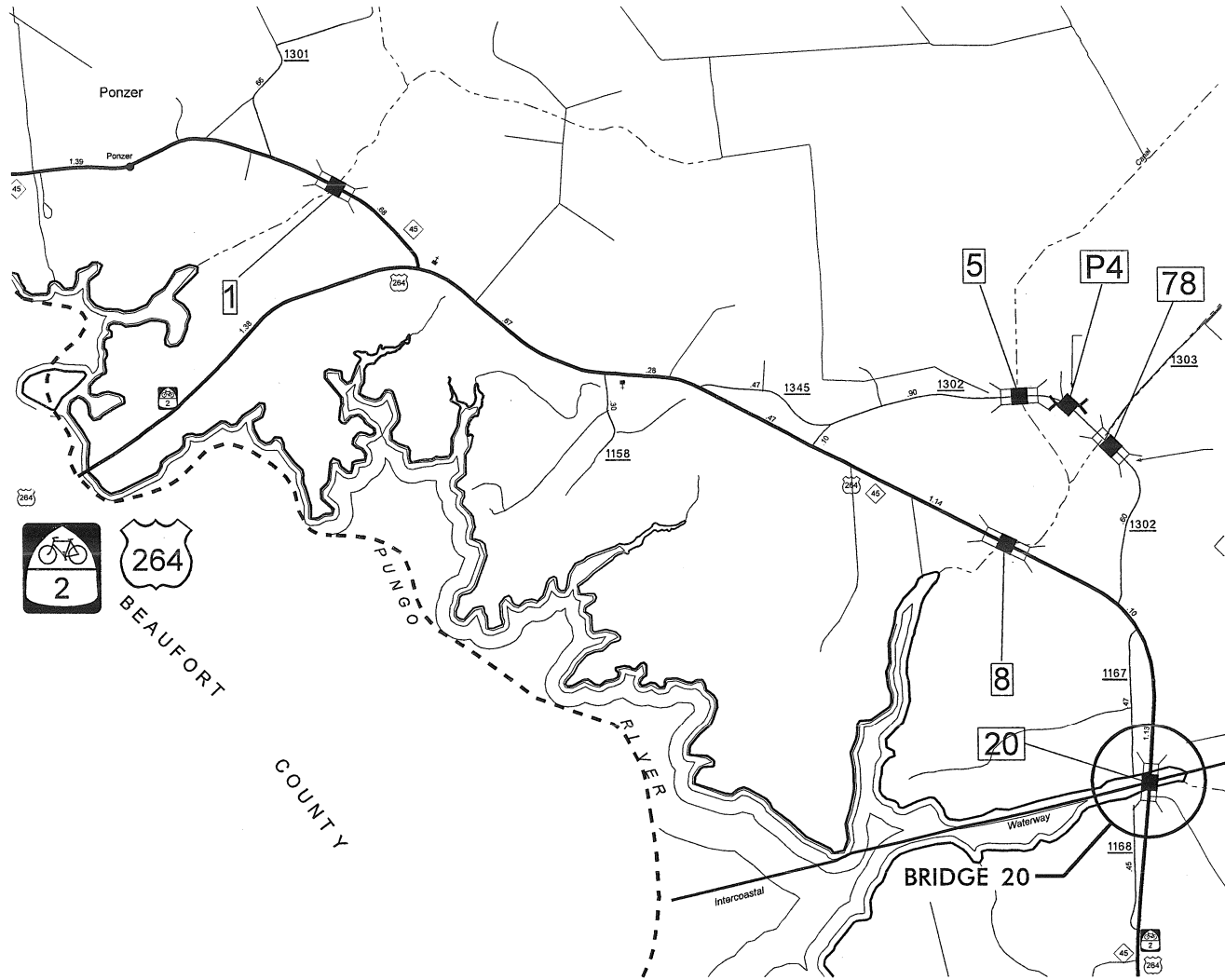
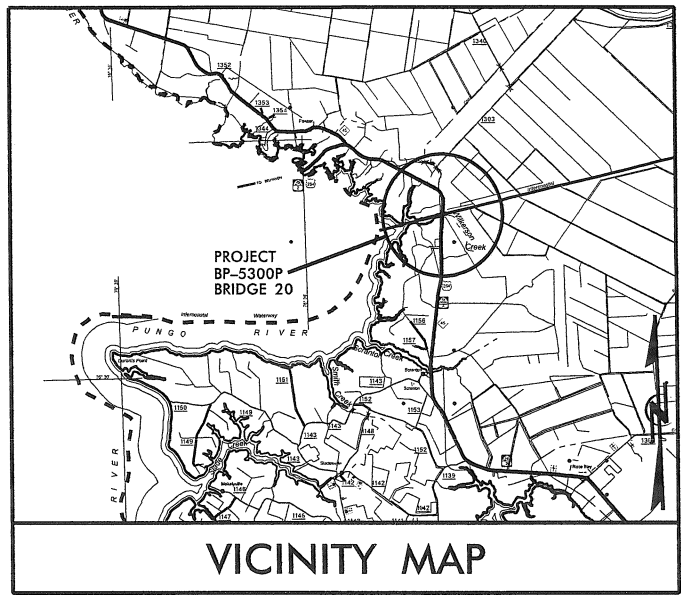


09/08/99
3/7/2011
U:\Structures\Bridge Group 20\BP5300P\Bridge 20\Drawing\BP5300P20_tsh.dgn
rwilliams

TIP PROJECT: BP-5300P
CONTRACT: DO00109



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
HYDE COUNTY

LOCATION: BRIDGE 20, US 264 OVER INTRACOASTAL WATERWAY, 0.3 MILE
EAST OF JUNCTION US 264 AND SR 1167

TYPE OF WORK: BRIDGE DECK PRESERVATION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-5300P	1	
WBS NO.	F.A. PROJ. NO.	DESCRIPTION	
45438.1.1	BRNHS-000S(658)	PE CONST.	

TABLE OF CONTENTS

DWG.	DESCRIPTION
S-1	PLAN OF BRIDGE
S-2	PLAN OF BRIDGE
S-3	PLAN OF BRIDGE
S-4	BRIDGE TYPICAL SECTION
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S-8	DECK REPAIR DETAILS
S-9	DECK REPAIR DETAILS
S-10	EXPANSION JOINT REPAIR DETAILS
S-11	END BENT JOINT SEAL DETAILS
TCP1-3	TRAFFIC CONTROL PLANS

PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT BP-5300P	=	0.000 MI.
LENGTH OF STRUCTURE T.I.P. PROJECT BP-5300P	=	0.295 MI
TOTAL LENGTH OF T.I.P. PROJECT BP-5300P	=	0.295 MI



PREPARED IN THE OFFICE OF:

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License No. F-0872

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

N.A.

LETTING DATE:

APRIL 1, 2011

JOE KELVINGTON, PE

PROJECT ENGINEER

NCDOT CONTACT:

MIKE SUMMERS

BRIDGE MANAGEMENT PROJECT MANAGER

RICK NELSON, PE
DESIGN ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



4:43:32 PM \$USER\$ 3/7/2011 20:\Drawing\BP5300P20_DeckPlan1.dgn

MILL & REPLACE
EXIST. RDWY. PAV'T
W/ ASPHALT CONC.
SURFACE COURSE
TYPE S9.5B

EXISTING
PAVED SHLDR.

TO BELHAVEN

EXIST. G.I. (TYP.)

BURIED CONDUIT APPROXIMATELY
3'-0" BELOW EXIST. GRADE

EXIST. BRIDGE APPROACH
SLAB W/ AWS

2 CONDUIT HUNG FROM
DECK SLAB CANTILEVER

MATCH LINE 1

92'-5" (SPAN A)

92'-0" (SPAN B)

92'-0" (SPAN C)

CL BRIDGE
ROADWAY

W.P. #1

W.P. #2

W.P. #3

CL OPEN EXP. JT. @
BENT 3

W.P. #4

CL OPEN EXP. JT. @
BENT 1

CL OPEN EXP. JT. @
BENT 2

FILL FACE @
END BENT 1

FIX

EXP.

EXP.

EXP.

EXP.

EXP.

EXP.

PLAIN CONC. DRAIN PAD SEE
SHT. S-11 FOR DETAILS (TYP.)

ASPHALT CONCRETE SURFACE
COURSE TYPE S9.5B

45° BEVEL
(TYP.)

5"

1/4"

SAWED JT.
OPENING

LATEX MODIFIED
CONC. OVERLAY

SAW CUT EXIST.
AWS AND CONC.

ELASTOMERIC CONCRETE

END BENT FILL FACE

EXISTING APPROACH SLAB

DETAIL "B"

△ USE 2.8125" X 2.50" UNCOMPRESSED
SEAL MATERIAL

□ 1" FORMED OPENING CENTERED
ABOUT FILL FACE

* NOMINAL DIMENSION REMOVE ALL LOOSE,
DETERIORATED MATERIAL, INCLUDING EXISTING
SEAL DEVICES AND HARDWARE TO SOUND CONCRETE.
SERVE AND RETAIN ALL EXPOSED REINFORCING
STEEL. ADJUST SAW CUT DEPTH AS REQUIRED TO
PREVENT CUTS INTO EXISTING REINFORCING STEEL.

MATCH LINE 1

92'-0" (SPAN D)

92'-0" (SPAN E)

92'-1" (SPAN F)

W.P. #4

CL OPEN EXP. JT. @
BENT 3

W.P. #5

CL OPEN EXP. JT. @
BENT 5

W.P. #6

CL OPEN EXP. JT. @
BENT 4

CL EXIST. EXP. JT. SEAL @
BENT 6

W.P. #7

EXP.

EXP.

EXP.

EXP.

EXP.

EXP.

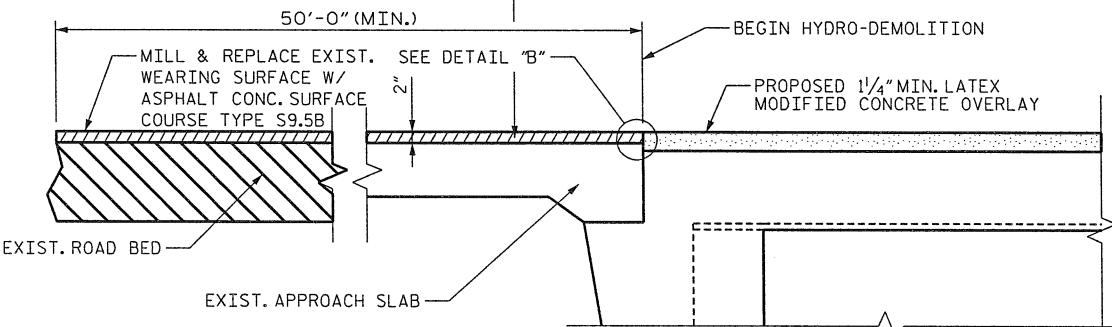
EXP.

MATCH LINE 2

PLAN OF SPANS D-F

*** EXISTING ASPHALTIC EXPANSION JOINT SEAL
TO BE REMOVED

FOR NOTES, SEE SHT. S-2



SECTION A-A

TOTAL BILL OF MATERIAL

DECK ** SCARIFICATION	CLASS I * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	CLASS III * SURFACE PREPARATION	HYDRO- DEMOLITION	CLASS A CONCRETE	LATEX MODIFIED CONCRETE- VERY EARLY STRENGTH	PLACING & FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEAL	GROOVING BRIDGE FLOORS	ASHPHALT CONC. SURF. COURSE TYPE S9.5B
sq.yds.	sq.yds.	sq.yds.	sq.yds.	sq.yds.	cu.yds.	cu.yds.	sq.yds.	LUMP SUM	sq.ft.	TON
7276.0	6786.0	54.4	0.1	6831.4	6.0	233.2	6832.0	LUMP SUM	55,870.0	47

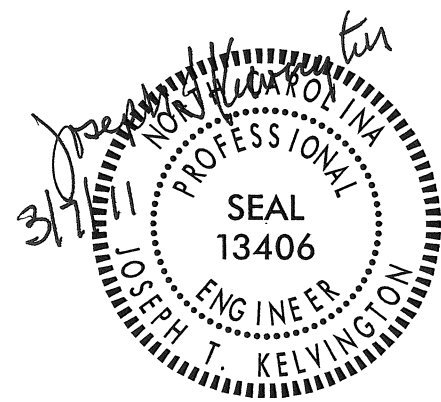
* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO
OR DURING HYDRO-DEMOLITION, SEE "TYP. BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

** INCLUDES MILLING OF ROADWAY PAVEMENT.



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CHECKED BY : J T KELVINGTON DATE : 3/11



PROJECT NO. BP-5300P

HYDE COUNTY

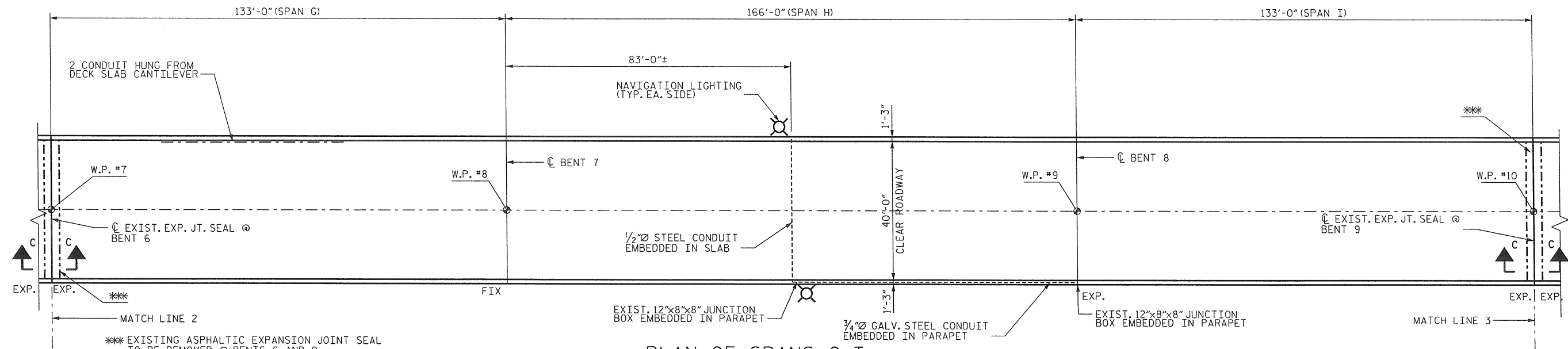
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PLAN OF BRIDGE

DECK REHAB. FOR BRIDGE NO. 20

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



PLAN OF SPANS G-I

NOTES:

DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS WITH LATEX MODIFIED CONCRETE. 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.

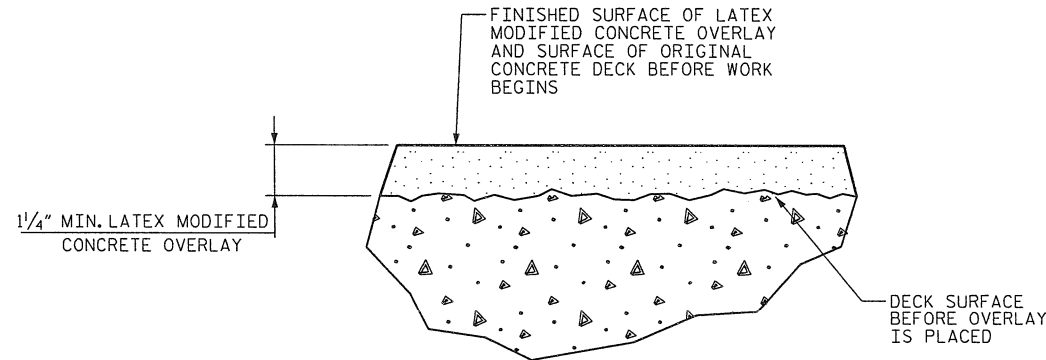
LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.

FOR LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.

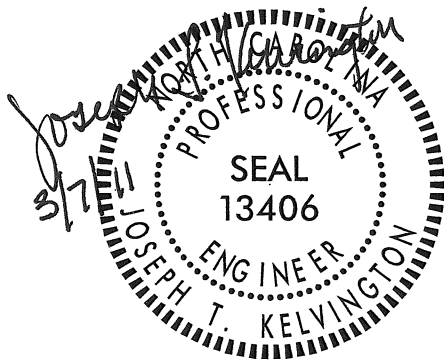
FOR SECTION C-C, SEE SHT. NO. S-10.

FOR END BENT JOINT SEAL DETAILS, SEE SHT. S-11.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

PROJECT NO. BP-5300P
HYDE COUNTY
 STATION: _____

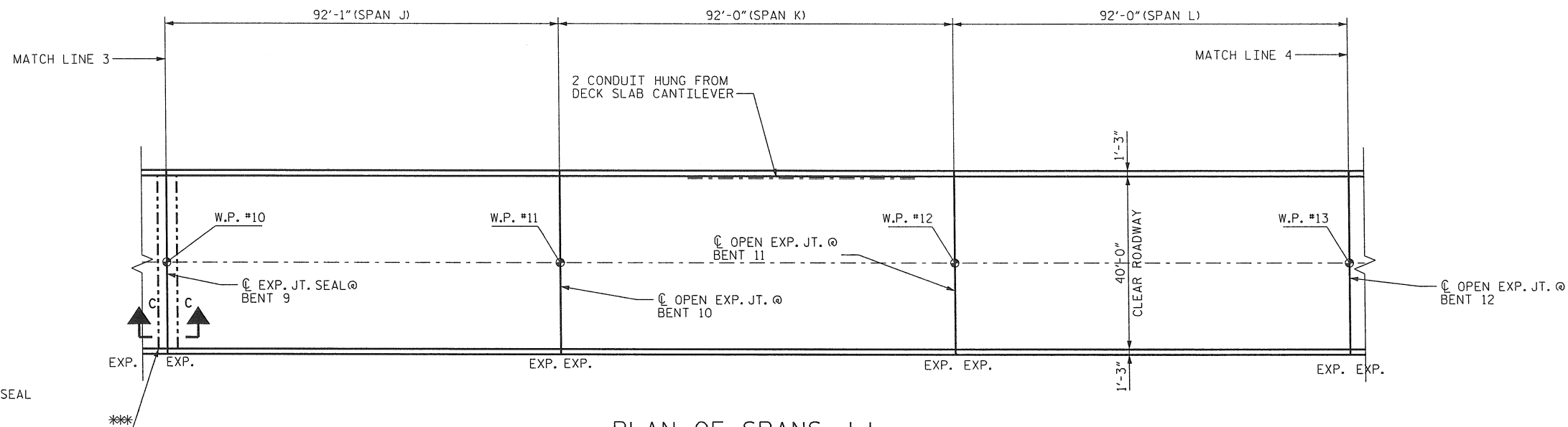


STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
PLAN OF BRIDGE					
DECK REHAB. FOR BRIDGE NO. 20					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					11

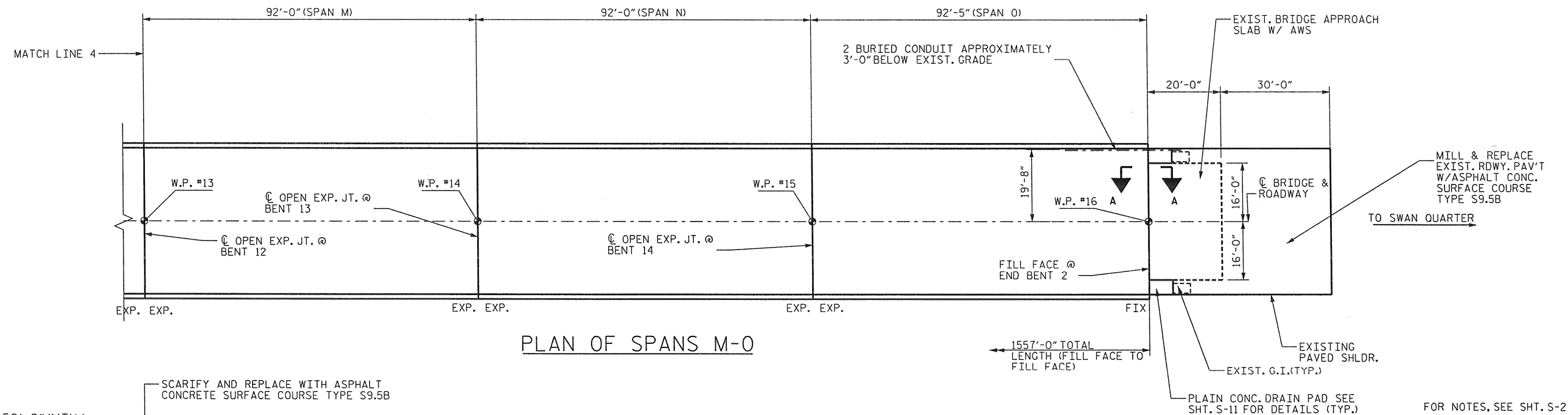


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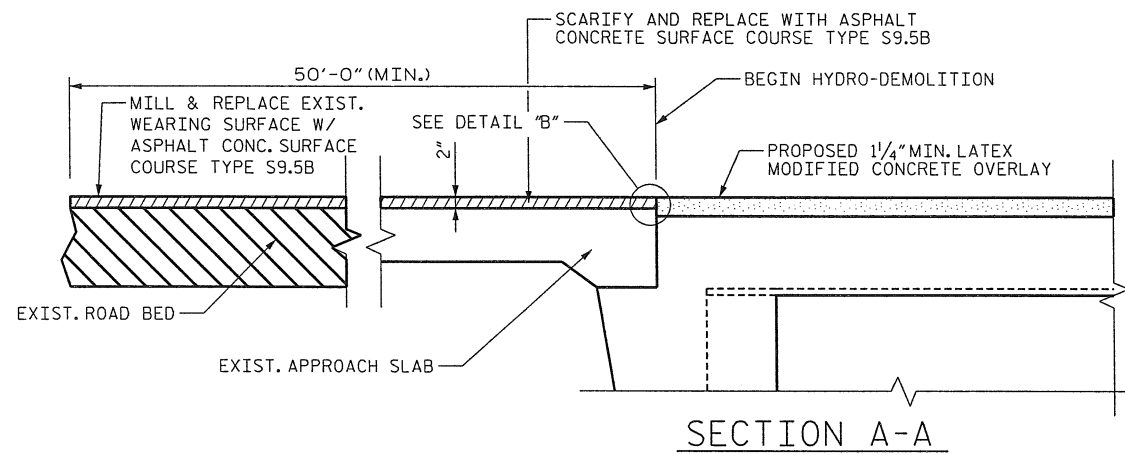
DRAWN BY: R A WILLIAMS DATE: 3/11
 CHECKED BY: J T KELVINGTON DATE: 3/11



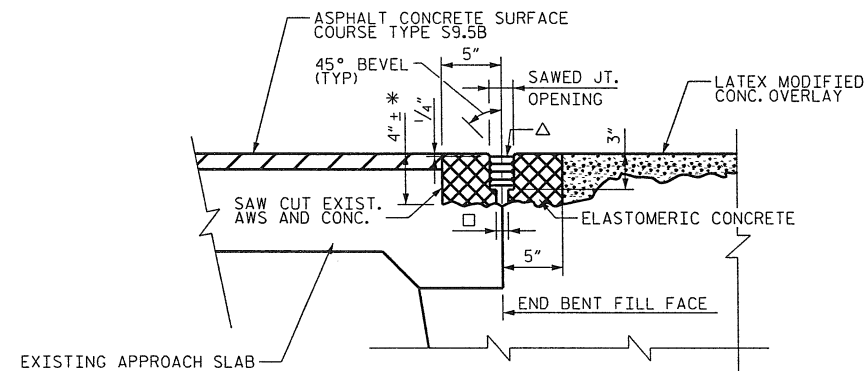
PLAN OF SPANS J-L



PLAN OF SPANS M-O



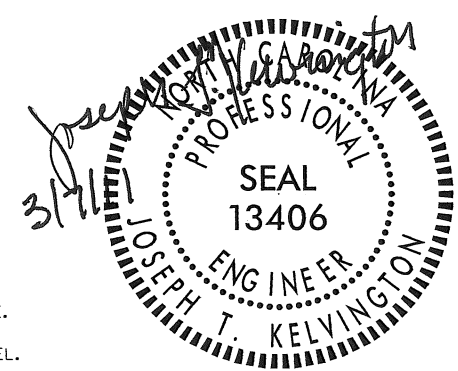
SECTION A-A



DETAIL "B"

- △ USE 2.8125" X 2.50" UNCOMPRESSED SEAL MATERIAL
- 1" FORMED OPENING CENTERED ABOUT FILL FACE
- * NOMINAL DIMENSION. REMOVE ALL LOOSE, DETERIORATED MATERIAL, INCLUDING EXISTING SEAL DEVICES AND HARDWARE TO SOUND CONCRETE. PRESERVE AND RETAIN ALL EXPOSED REINFORCING STEEL. ADJUST SAW CUT DEPTH AS REQUIRED TO PREVENT CUTS INTO EXISTING REINFORCING STEEL.

FOR ADDITIONAL END BENT SEAL DETAILS, SEE SHT. S-11.



PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____

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

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PLAN OF BRIDGE

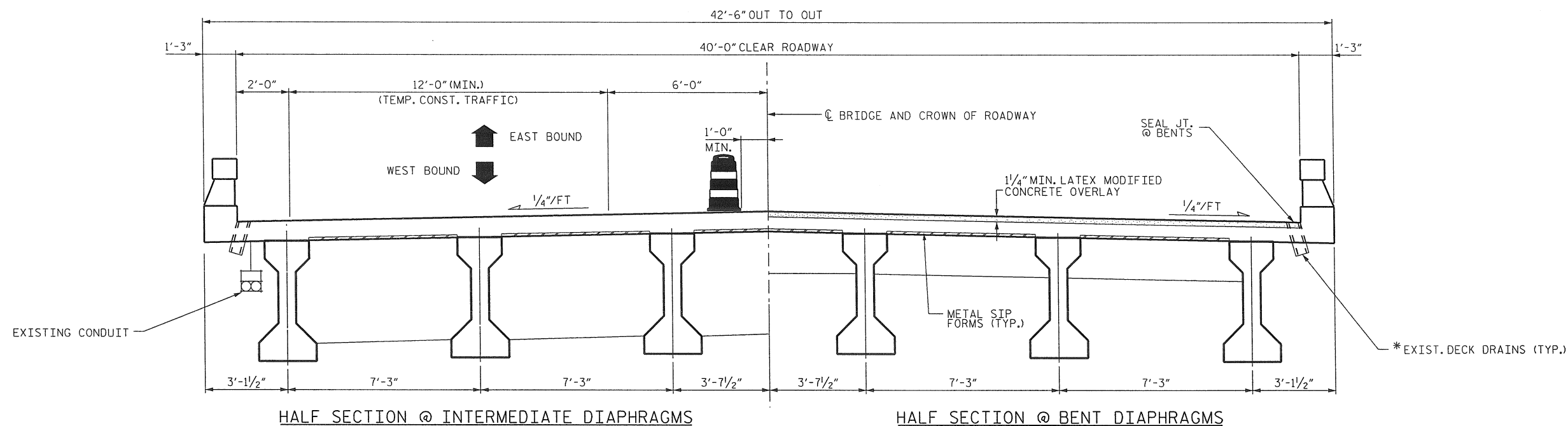
DECK REHAB. FOR BRIDGE NO. 20



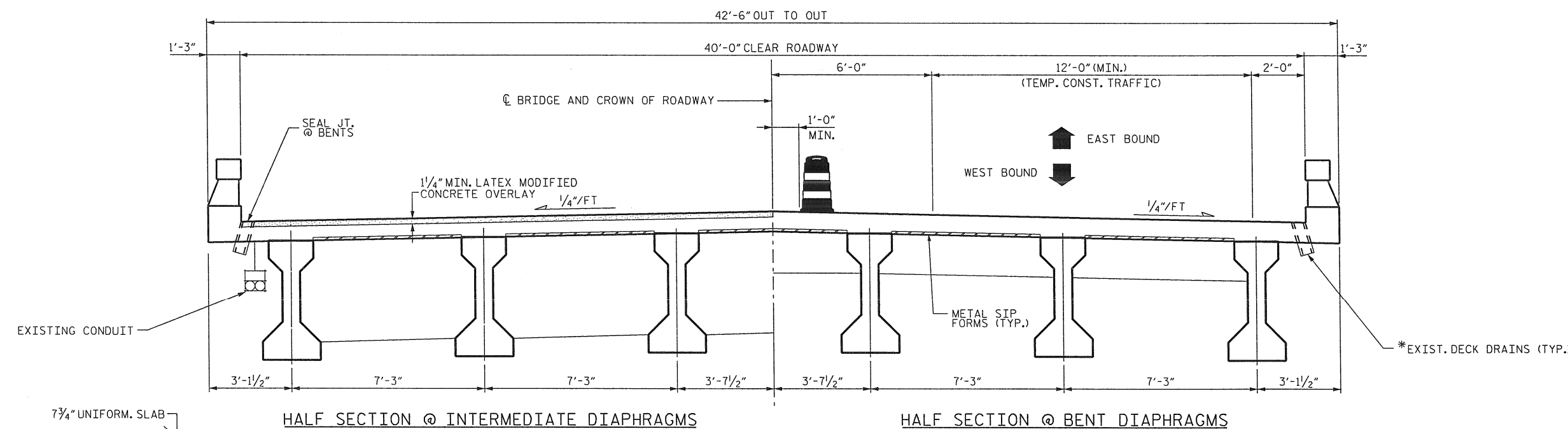
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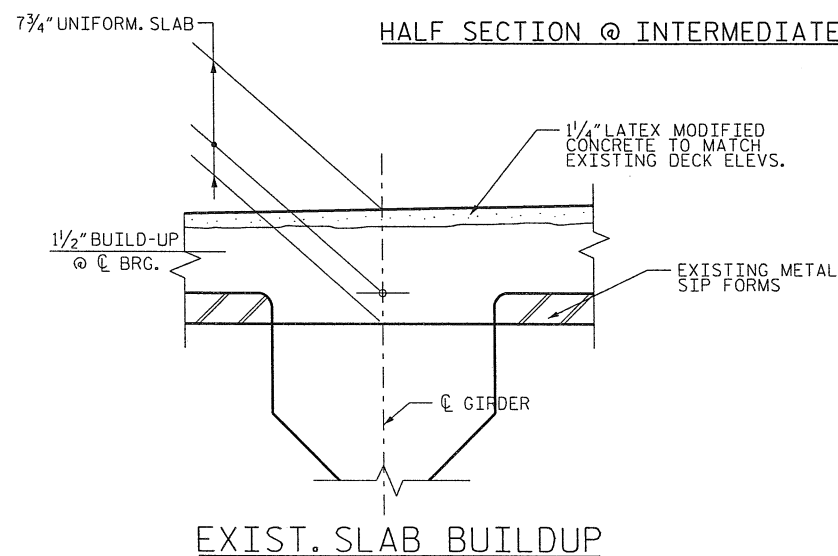
structures\bridge_group\2011\BP5300P\bridge_20\Drawing\BP5300P20_DeckPlan3.dgn 3/7/2011 4:45:12 PM \$USER\$



EBL CONSTRUCTION SPANS A-F AND SPANS J-O



WBL CONSTRUCTION SPANS A-F AND SPANS J-O



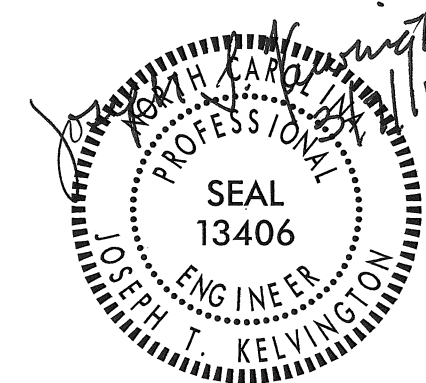
NOTES: SPANS G-I (CONTINUOUS STR. STEEL SPANS) ARE NOT SHOWN BUT ARE IDENTICAL TO THOSE SHOWN W/THE EXCEPTION OF GIRDER TYPE AND DIAPHRAGMS.

WATER AND CONCRETE SLURRY FROM HYDRO-DEMOLITION SHALL NOT BE ALLOWED TO DRAIN ACROSS TRAVEL LANES. CONTRACTOR SHALL PROVIDE A METHOD TO CONTROL THE WATER.

FOR TRAFFIC CONTROL AND CONSTRUCTION STAGING DETAILS, SEE TRAFFIC CONTROL DRAWINGS TCP1-3.

*TEMPORARILY SEAL EXISTING DECK DRAINS DURING HYDRO-DEMOLITION AND LATEX MODIFIED CONCRETE PLACEMENT OPERATIONS. (TYP. EA. DRAIN)

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE TYPICAL SECTION

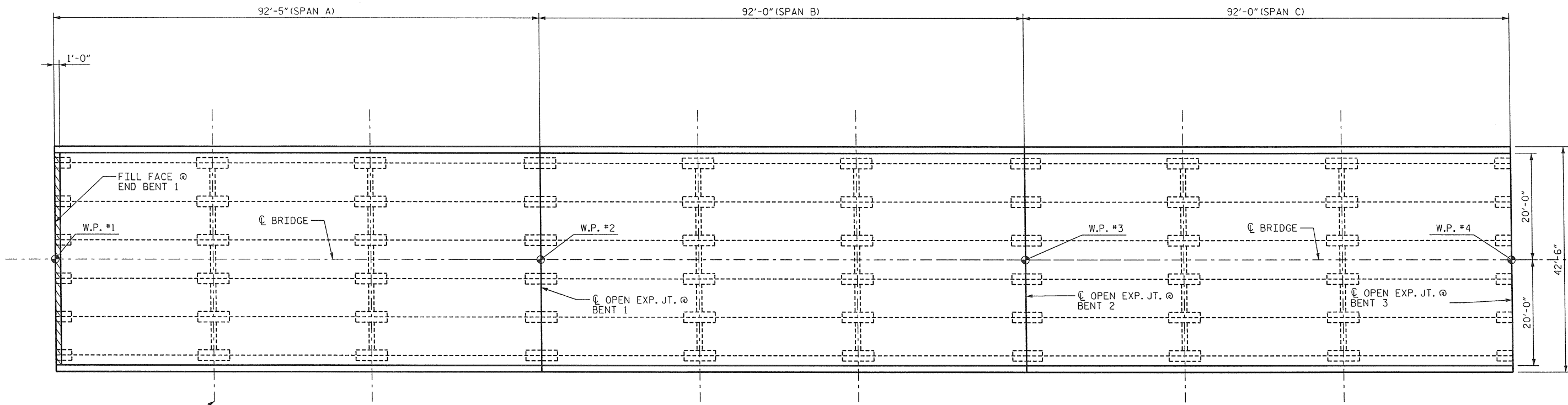
DECK REHAB. FOR BRIDGE NO. 20

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

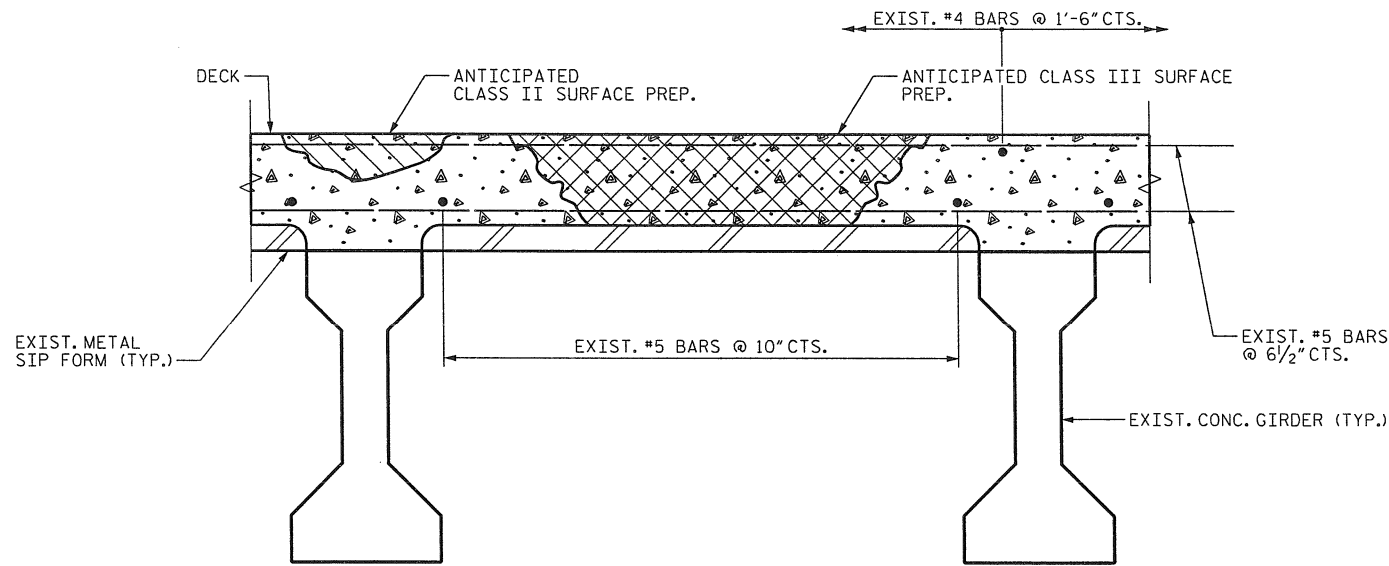


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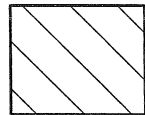
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CHECKED BY: J T KELVINGTON DATE: 3/11



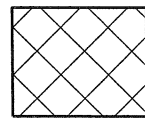
PLAN OF SPANS A,B,&C - DECK REPAIRS



TYPICAL SECTION THRU INTERIOR BAY



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

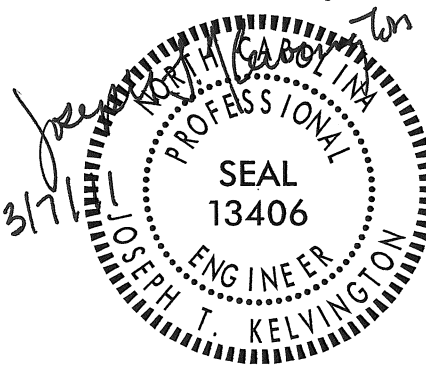
L' X W' = LENGTH OF AREA ALONG ϕ BRIDGE X
WIDTH OF AREA NORMAL TO ϕ BRIDGE

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



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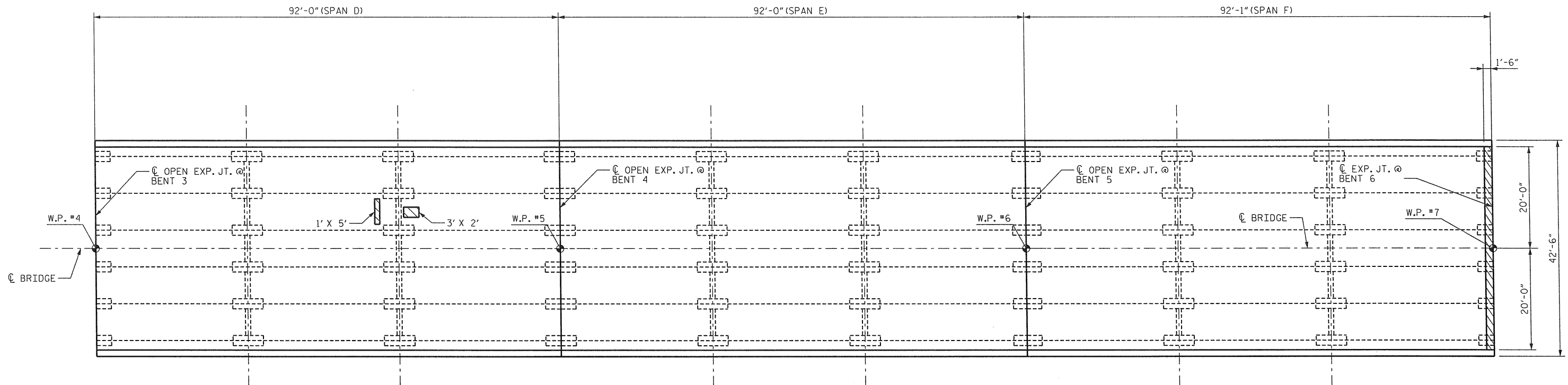


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPANS A,B,&C

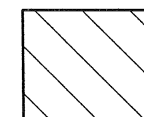
DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO. S-5
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1			3			TOTAL SHEETS 11
2			4			

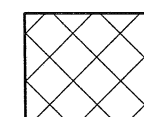


PLAN OF SPANS D,E,&F - DECK REPAIRS

NOTE:
FOR TYPICAL SECTION THRU
INTERIOR BAY, SEE SHT. NO. S-5



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

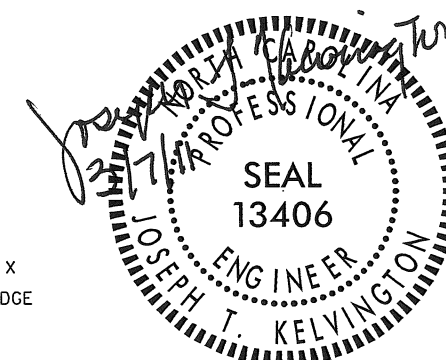
L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



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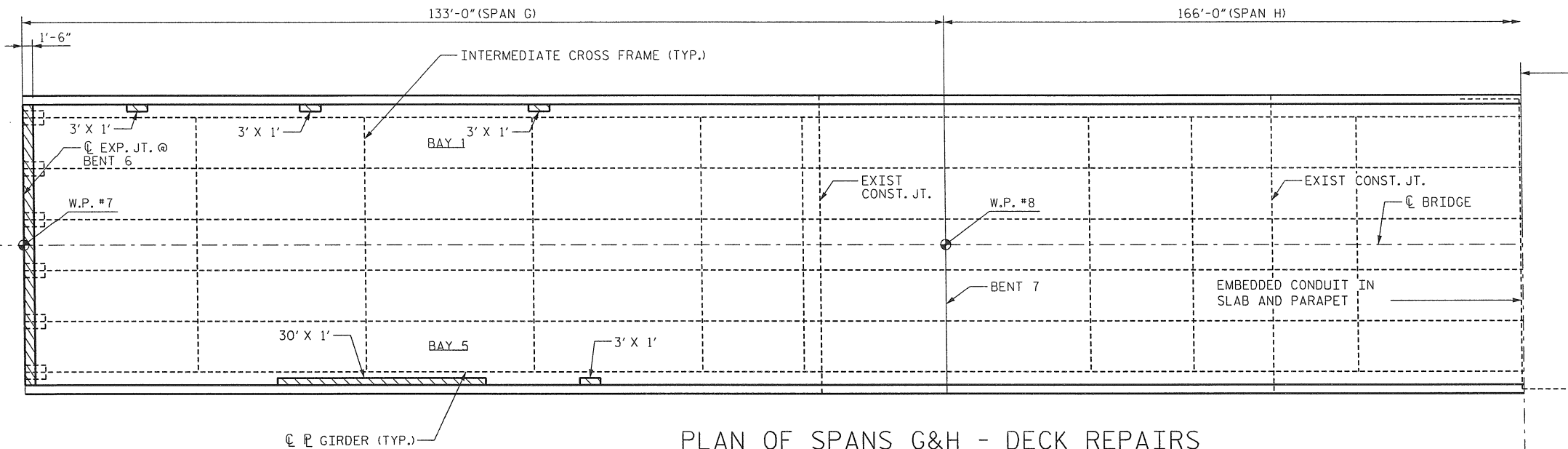


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPANS D,E,&F

DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-6
2			4			
TOTAL SHEETS						11



PLAN OF SPANS G&H - DECK REPAIRS

NOTE: LATERAL WIND BRACING IN BAYS 1&5
NOT SHOWN FOR CLARITY

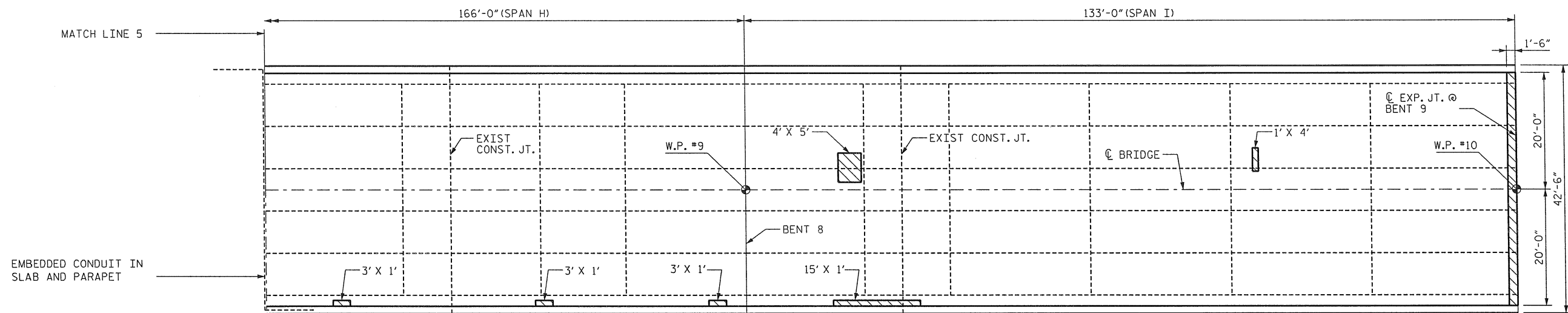
*NOTE:

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

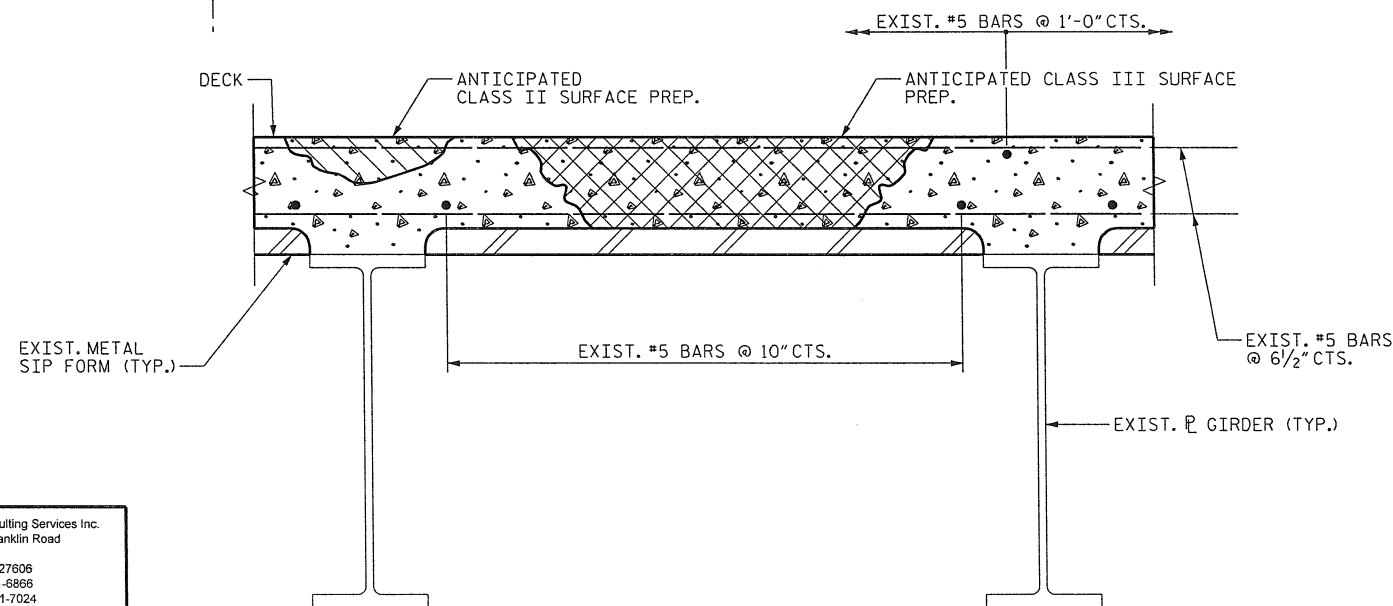
SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

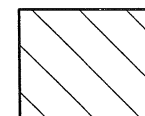
SEE HYDRO-DEMOLITION SPECIAL PROVISIONS.



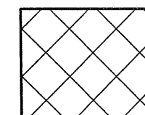
PLAN OF SPANS H&I - DECK REPAIRS



TYPICAL SECTION THRU INTERIOR BAY



CLASS II SURFACE PREPARATION



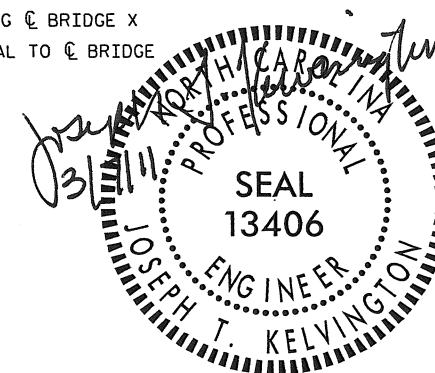
CLASS III SURFACE PREPARATION

L' X W' =
LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE

PROJECT NO. BP-5300P

HYDE COUNTY

STATION: _____



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPANS G,H&I

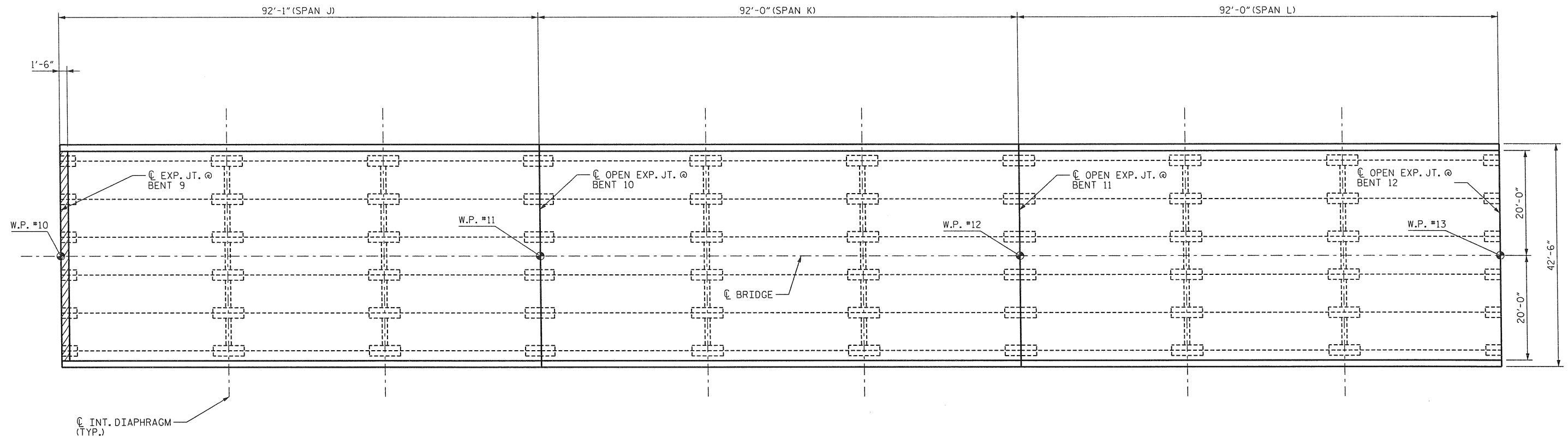
DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-7
2			4			
TOTAL SHEETS						11



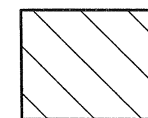
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DRAWN BY: R.A. WILLIAMS DATE: 3/11
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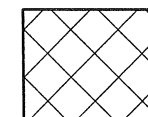


PLAN OF SPANS J,K,&L - DECK REPAIRS

NOTE:
FOR TYPICAL SECTION THRU
INTERIOR BAY, SEE SHT. NO. S-5



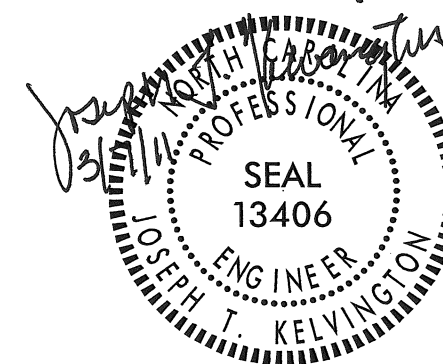
CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG C BRIDGE X
WIDTH OF AREA NORMAL TO C BRIDGE

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



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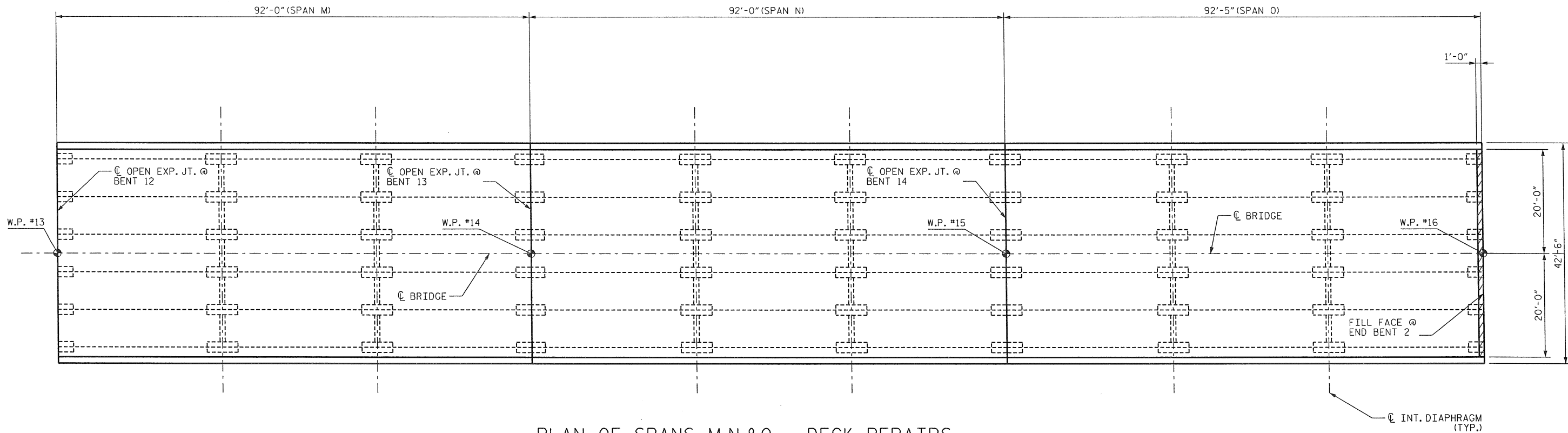
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CHECKED BY : J.T. KELVINGTON DATE : 3/11

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPANS J,K,&L

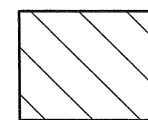
DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO. S- 8
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 11
2			4			

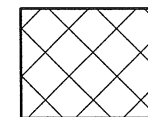


PLAN OF SPANS M,N,&O - DECK REPAIRS

NOTE:
FOR TYPICAL SECTION THRU
INTERIOR BAY, SEE SHT. NO. S-5



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

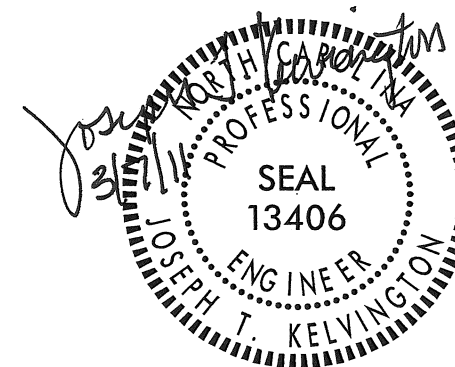
L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



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www.stantec.com
License No. F-0672

DRAWN BY : R.A. WILLIAMS DATE : 3/11
CHECKED BY : J.T. KELVINGTON DATE : 3/11



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPANS M,N,&O

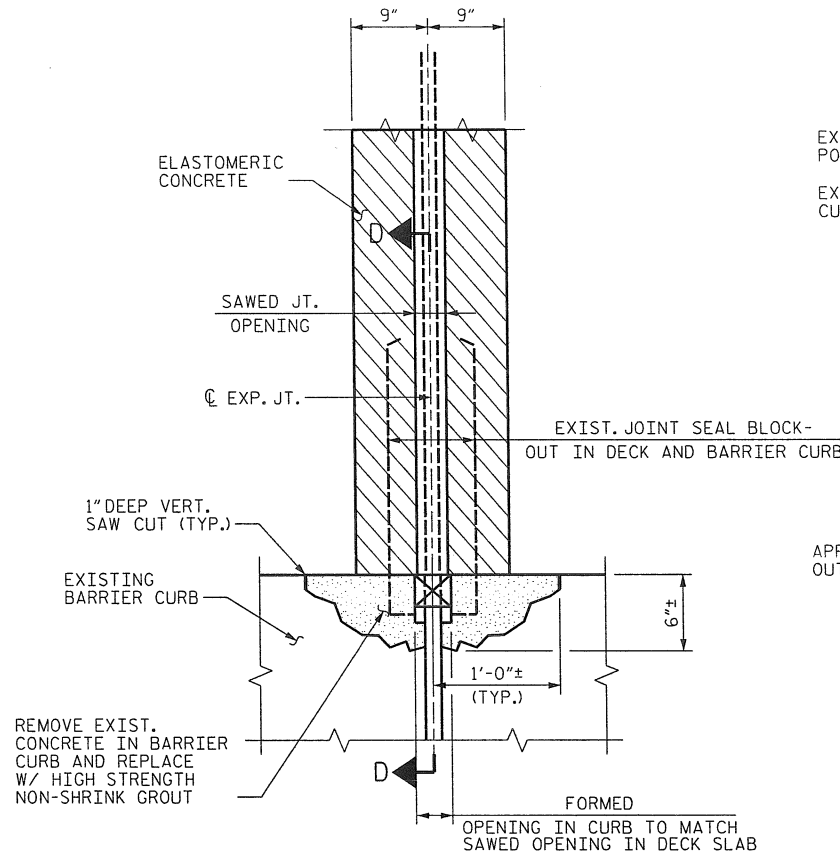
DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S- 9
2			4			
TOTAL SHEETS						11

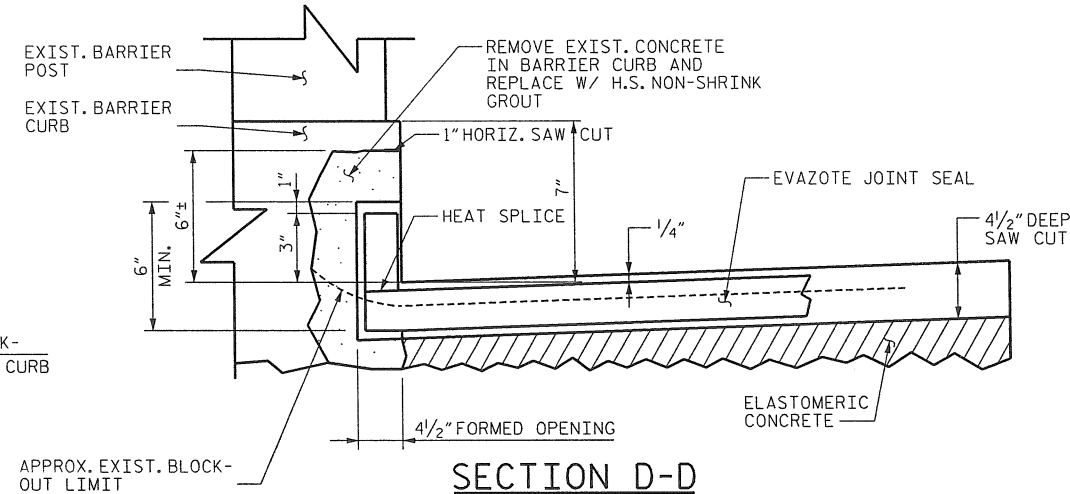
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\\S:\Structures\Bridges Group 2010\BP5300P\Bridges 2010\BP5300P20.Det2.dgn 3/7/2011 4:54:2 PM \$USER\$



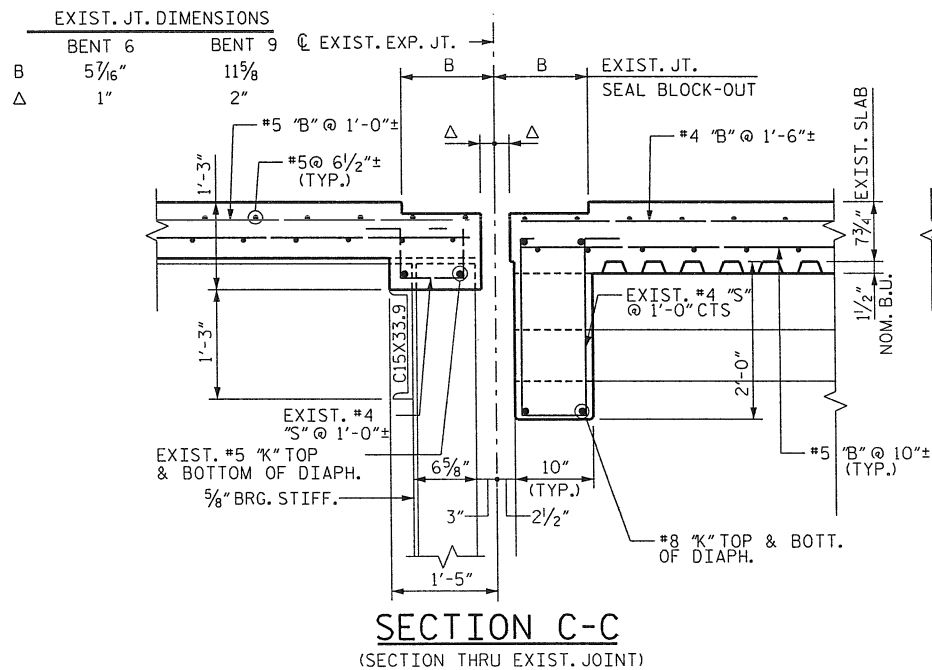
PARTIAL PLAN @ JOINT
FOR SEAL @ BENT 6 AND BENT 9



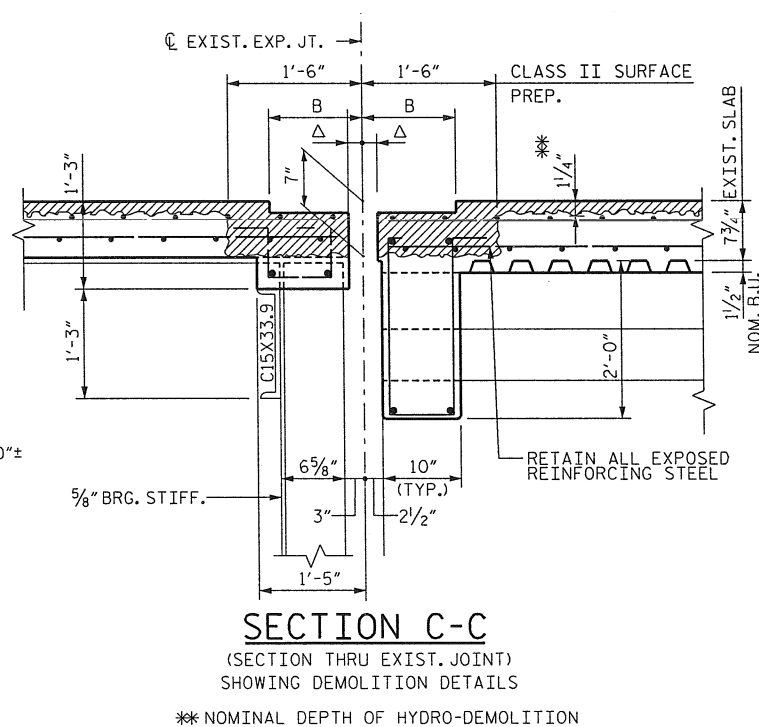
CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.
FOR HIGH STRENGTH GROUT, SEE SPECIAL PROVISIONS.
HIGH STRENGTH GROUT SHALL BE APPROVED BY THE ENGINEER.

HYDE CO. BRIDGE 470020 EXPANSION JOINT SEAL DATA - EXISTING ASPHALTIC EXPANSION JOINTS										
JOINT SEAL CONSTRUCTION DIMENSIONS							EVAZOTE SEAL **			ELASTOMERIC CONCRETE
BENT NO.	FORMED JOINT WIDTHS			SAWED JOINT WIDTHS			SIZE	WIDTH (IN.)	DEPTH (IN.)	VOLUME (C.F.)
	J ₃₀ (IN.)	J ₆₀ (IN.)	J ₉₀ (IN.)	W ₃₀ (IN.)	W ₆₀ (IN.)	W ₉₀ (IN.)				
6	2 13/16	2 1/16	1 7/8	3 5/16	2 9/16	2 3/8	E3.75	3 3/4	3	31.1
9	2 13/16	2 1/16	1 7/8	3 5/16	2 9/16	2 3/8	E3.75	3 3/4	3	31.1
TOTAL ELASTOMERIC CONCRETE										62.2 C.F.
TOTAL ELASTOMERIC CONCRETE										2.3 C.Y.

** NOMINAL UNCOMPRESSED SEAL DIMENSIONS

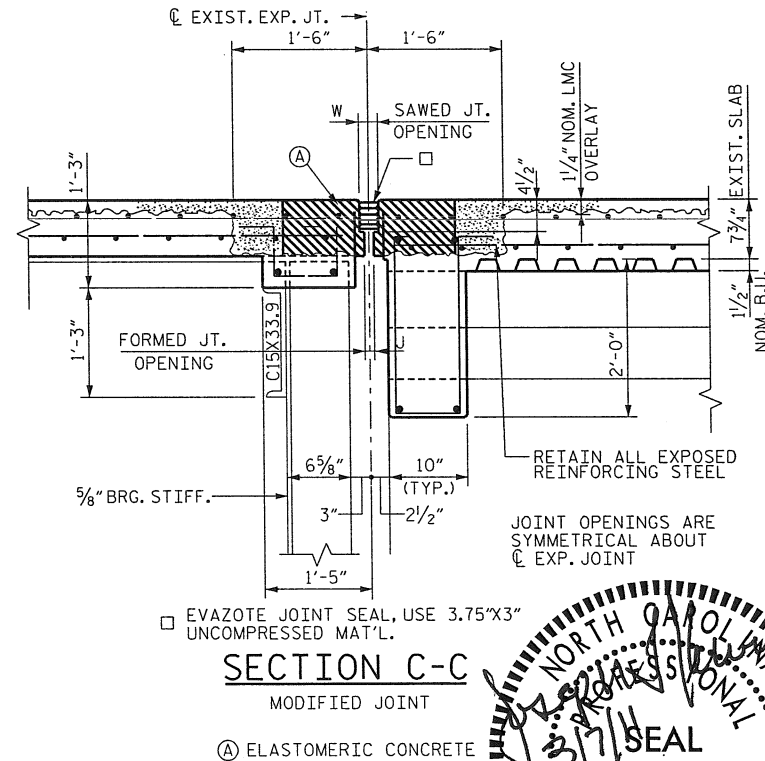


SECTION C-C
(SECTION THRU EXIST. JOINT)



SECTION C-C
(SECTION THRU EXIST. JOINT)
SHOWING DEMOLITION DETAILS

** NOMINAL DEPTH OF HYDRO-DEMOLITION



SECTION C-C
MODIFIED JOINT

(A) ELASTOMERIC CONCRETE

PROJECT NO. BP-5300P
HYDE COUNTY
STATION: _____



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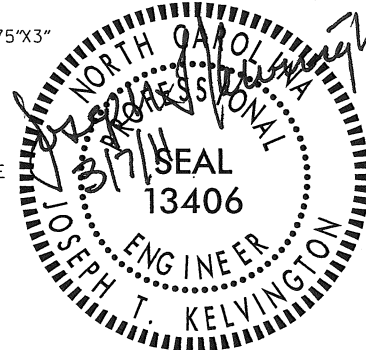
DRAWN BY: R.A. WILLIAMS DATE: 3/11
CHECKED BY: J.T. KELVINGTON DATE: 3/11

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

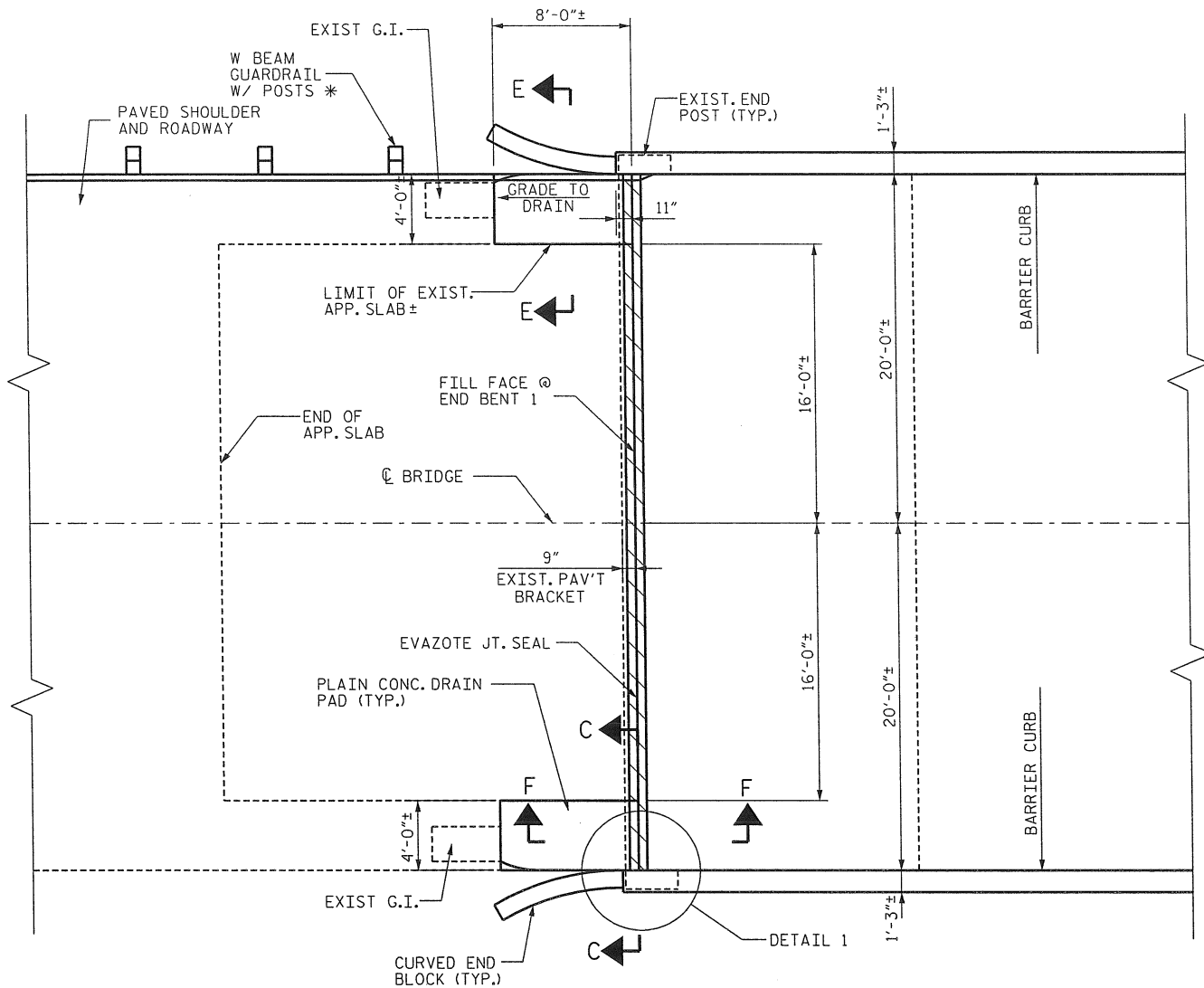
EXPANSION JOINT DETAILS

DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO. 5-10
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 11
2			4			

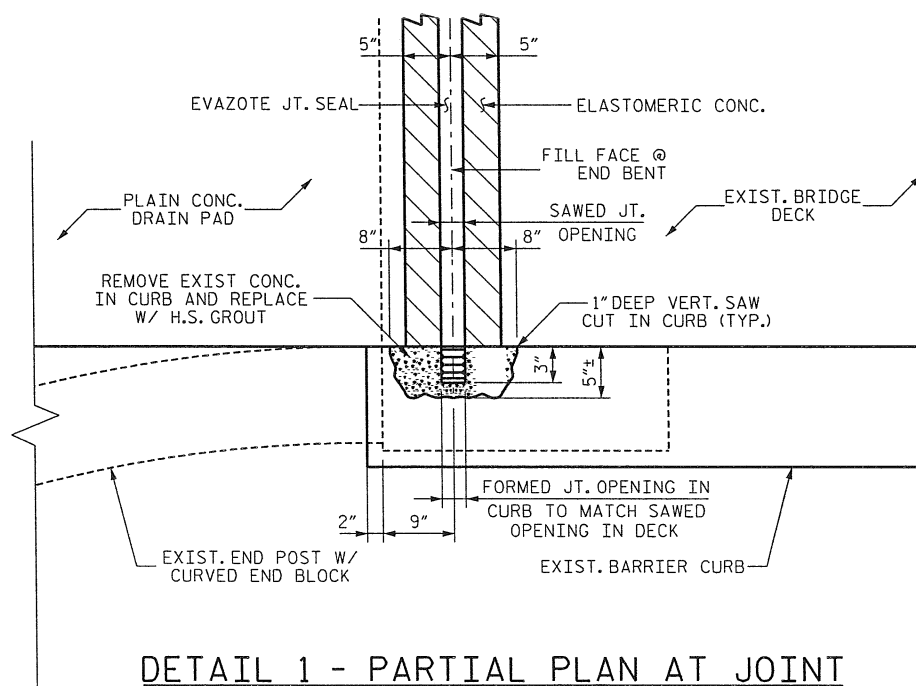


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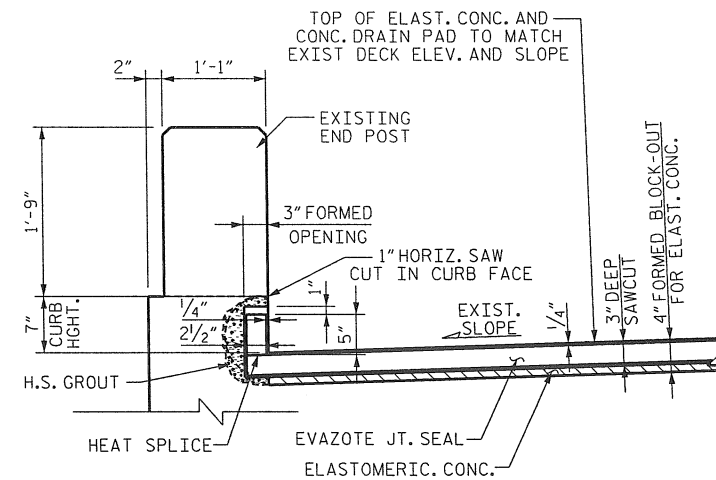


*DISMANTLE AND REPLACE EXIST. GUARDRAIL AND GUARDRAIL POSTS AS REQ'D. TO CONSTRUCT DRAIN PAD AND JOINT SEALS. (TYP. EA. SIDE)

END BENT DETAIL



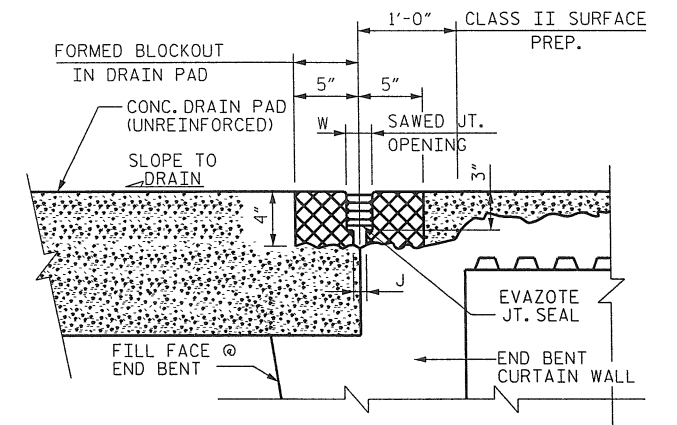
DETAIL 1 - PARTIAL PLAN AT JOINT



SECTION C-C

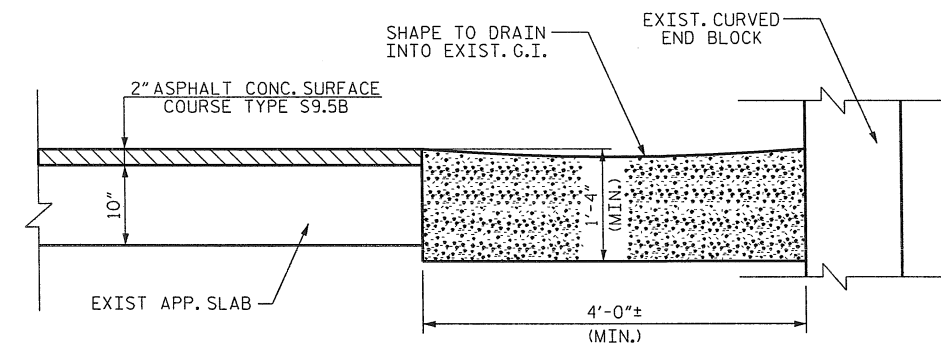
CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.

FOR HIGH STRENGTH GROUT, SEE SPECIAL PROVISIONS. HIGH STRENGTH GROUT SHALL BE APPROVED BY THE ENGINEER.



SECTION F-F

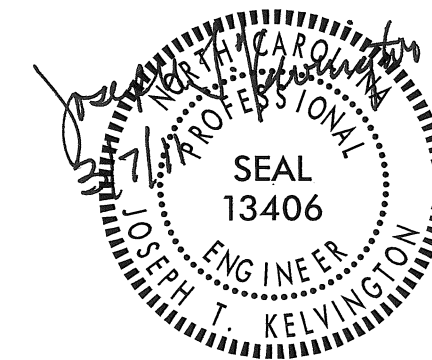
FOR ADDITIONAL JOINT SEAL INFORMATION, SEE SHT. S-3.



SECTION E-E

HYDE CO. BRIDGE 470020 EXPANSION JOINT SEAL DATA - END BENTS									
JOINT SEAL CONSTRUCTION DIMENSIONS									
END BENT NO.	EXIST. JT. OPENING	FORMED JT. OPENING	SAWED JOINT WIDTHS			EVAZOTE SEAL **			ELASTOMERIC CONCRETE
	Δ (IN.)	J (IN.)	W ₄₅ (IN.)	W ₆₀ (IN.)	W ₉₀ (IN.)	SIZE	WIDTH	DEPTH	VOLUME (C.F.)
							(IN.)	(IN.)	
1	1 5/8	1	2 5/8	2 1/2	2 3/8	E 2.8125	2 13/16	2 1/2	10
2	1 3/4	1	2 5/8	2 1/2	2 3/8	E 2.8125	2 13/16	2 1/2	10
TOTAL ELASTOMERIC CONCRETE									20.0 C.F.
TOTAL ELASTOMERIC CONCRETE									0.7 C.Y.
** NOMINAL UNCOMPRESSED SEAL DIMENSIONS									
DRAIN PAD: CLASS "A" CONCRETE									6.0 C.Y.

PROJECT NO. BP-5300P
HYDE COUNTY
STATION:



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENT JOINT SEAL
DETAILS

DECK REHAB. FOR BRIDGE NO. 20

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-11
2			4			TOTAL SHEETS 11



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DRAWN BY: R.A. WILLIAMS DATE: 3/11
CHECKED BY: J.T. KELVINGTON DATE: 3/11

3/7/2011
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gkarageorge

PROJECT: BP-5300P

WBS 45438.1.1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
TRAFFIC CONTROL

HYDE COUNTY

LOCATION: BRIDGE NO. 20.

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE REHABILITATION

STATE PROJECT REFERENCE NO.

BP-5300P

SHEET NO.

TCP-1

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)
☼ LAW ENFORCEMENT
⚡ FLAGGER

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARD DRAWINGS 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:

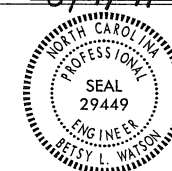
STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1150.01	FLAGGING DEVICES
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, & INDEX OF SHEETS
TCP-2	GENERAL NOTES & TRAFFIC CONTROL PHASING
TCP-3	FLAGGER OPERATION LANE CLOSURES

APPROVED: *Betsy L. Watson*
DATE: 3/7/11

PLAN PREPARED BY:



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BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER

GEORGE KARAGEORGE

TRAFFIC CONTROL DESIGNER

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 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 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.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5) 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.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8) 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

- B) 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.
- C) INSTALL ALL LANE CLOSURES ACCORDING TO THE TRAFFIC CONTROL PLAN, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
- 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) 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.
- F) 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.
- G) 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.

PAVEMENT MARKINGS AND MARKERS

- H) UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS REPLACE THE EXISTING PAVEMENT MARKINGS IN THE SAME CONFIGURATION USING POLYUREA AND PERMANENT RAISED MARKERS.
- I) BEFORE LANE CLOSURES ARE REMOVED AND TRAFFIC IS RESTORED BACK TO THE EXISTING TWO-LANE/TWO-WAY PATTERN, REPLACE ANY EXISTING PAVEMENT MARKINGS THAT WERE OBLITERATED BY CONSTRUCTION OPERATIONS, AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS

- J) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- J) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- K) MAINTAIN DRIVEWAY ACCESS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- L) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

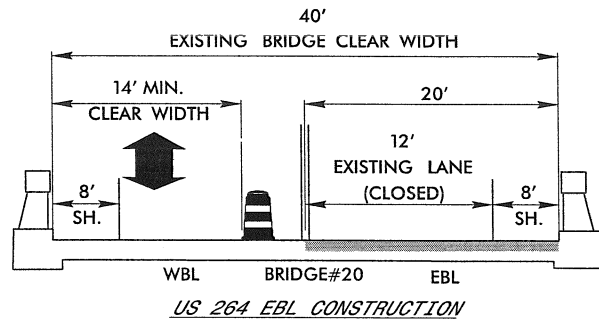
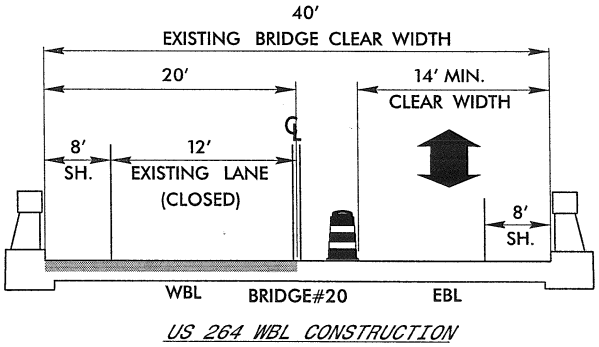
TRAFFIC CONTROL PHASING

PERFORM BRIDGE REHABILITATION OPERATIONS ON US 264 IN HALF SECTIONS USING FLAGGING OPERATION LANE CLOSURES AS SHOWN ON SHEET TCP-4 AND IN THE TYPICAL SECTIONS BELOW.

DURING EACH WORK PERIOD, PURSUE ONLY THE AMOUNT OF WORK THAT CAN BE COMPLETED AND THE DECK BROUGHT TO FINAL ELEVATION BEFORE RE-OPENING LANES TO TRAFFIC.

AT THE END OF EACH DAY'S OPERATIONS MOVE EQUIPMENT TO A STAGING AREA AT LEAST 40 FEET AWAY FROM ANY TRAVEL LANE AND REMOVE LANE CLOSURES AND DEVICES AS DIRECTED BY THE ENGINEER.

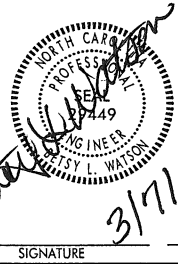
TYPICAL SECTIONS



3/7/2011
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gkarageorge



SEAL



SIGNATURE

DATE

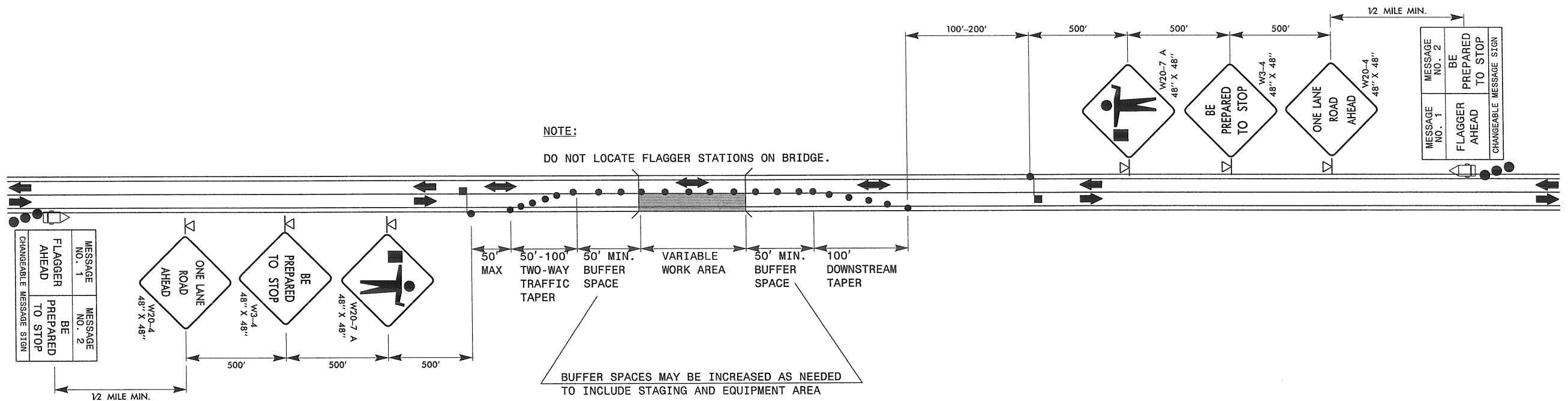
GENERAL NOTES
TRAFFIC CONTROL PHASING

SCALE: NONE
DATE: JAN. 2011
DWG. BY: GK
DESIGN BY: GK
REVIEWED BY: BLW



REVISIONS	

CADD FILE



NOTES

1. 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.
3. PLACE DRUMS THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
4. DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE TWO-WAY TRAFFIC TAPER TO THE END OF THE LANE CLOSURE.
5. LOCATE FLAGGER STATIONS SUCH THAT APPROACHING TRAFFIC WILL HAVE SUFFICIENT DISTANCE TO STOP AT THE INTENDED STOPPING POINT. IF NEEDED, EXTEND THE LANE CLOSURE SUCH THAT THE FLAGGER STATION IS POSITIONED BEFORE A HORIZONTAL OR CREST VERTICAL CURVE WHERE ADEQUATE STOPPING SIGHT DISTANCE TO THE FLAGGER IS PROVIDED. (REFER TO MINIMUM STOPPING SIGHT DISTANCE TABLE ON ROADWAY STD. DWG. 1101.11, SHEET 2)
6. DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
7. FLAGGERS SHALL NOT STAND IN A LANE USED BY MOVING TRAFFIC. FLAGGERS SHALL STAND ON THE SHOULDER, WITHIN A CLOSED LANE, OR IN A LANE ONLY ONCE TRAFFIC IS STOPPED. DO NOT LOCATE FLAGGER STATIONS ON THE BRIDGE.
8. USE THE PILOT CAR METHOD UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A VISIBLE LOCATION ON THE REAR OF THE PILOT VEHICLE.
9. ADVISE RESIDENTS AND BUSINESSES WITHIN OR NEAR THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING LANE CLOSURE OPERATIONS.
- 10.CHANGEABLE MESSAGE SIGN WORD MESSAGES AND LOCATIONS ARE TO BE APPROVED BY THE ENGINEER. ADDITIONAL MESSAGES MAY BE REQUIRED SUCH AS FOR PUBLIC INFORMATION OR DURING SPECIAL EVENTS.
- 11.USE FLAGGERS TO CONTROL VEHICLES AT INTERSECTIONS OR RAILROAD GRADE CROSSINGS AFFECTED BY THE LANE CLOSURE. USE FLAGGER SIGN W20-7A IN ADVANCE OF ALL FLAGGER STATIONS. WHEN AN INTERSECTION IS SIGNALIZED HAVE AUTHORIZED PERSONNEL PLACE THE SIGNAL IN FLASH MODE WHEN DIRECTED BY THE ENGINEER.
- 12.FLAGGER STATIONS SHALL BE ILLUMINATED AT NIGHT.

NOTE:

DURING PERIODS WHEN LANE CLOSURES ARE NOT IN EFFECT USE THE CHANGEABLE MESSAGE SIGNS TO INFORM THE PUBLIC OF UPCOMING TRAFFIC CONDITIONS. SOME EXAMPLE MESSAGES ARE SHOWN BELOW. ALL MESSAGES ARE TO BE APPROVED BY THE ENGINEER.

MESSAGE NO. 1	MESSAGE NO. 2
LANE CLOSURES TUESDAY	PLAN FOR DELAYS
CHANGEABLE MESSAGE SIGN	

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SEAL

3/7/11

SIGNATURE

DATE

TYPICAL
FLAGGER OPERATION
LANE CLOSURE

SCALE: NONE

DATE: JAN. 2011

DWG. BY: GK

DESIGN BY: GK

REVIEWED BY: BLW

REVISIONS

CADD FILE