

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-5179A	TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
BUNCOMBE COUNTY**

LOCATION: BRIDGES 289, 302, 303, 314, 316, 329, AND 330
ALONG US 19-23

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE 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 CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND INDEX OF SHEETS
TCP-2, 2A	GENERAL NOTES
TCP-3, 3A	PROJECT PHASING
TCP-4	AREA OVERVIEW AND VICINITY MAP
TCP-5	PHASE I - REMOVAL & REPLACEMENT OF OUTSIDE SHOULDERS
TCP-6	PHASE I - BRIDGE REHAB STAGE I DETAIL
TCP-7	PHASE II - BRIDGE REHAB STAGE II DETAIL
TCP-8	AREA 3 DETOUR PLAN
TCP-9	TYPICAL SHOULDER REPLACEMENT DETAIL & STAGED CROSS SECTIONS ON BRIDGES
TCP-10	ENTRANCE RAMP DETAIL
TCP-11	EXIT RAMP DETAIL
TCP-12	WORK ZONE ADVANCE WARNING SIGNS

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - CONE
 - DRUM SKINNY DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - PORTABLE CONCRETE BARRIER
 - CRASH CUSHION
 - CHANGEABLE MESSAGE SIGN
 - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - POLICE
 - FLAGGER
- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
 - YELLOW/YELLOW PAVEMENT MARKER
 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

TIP PROJECT: B-5179A CONTRACT NO. C202311

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APPROVED:	PLAN PREPARED BY:		Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606
DATE: April 30, 2009			
SEAL	BETSY L. WATSON, PE	TRAFFIC CONTROL ENGINEER	
	GEORGE KARAGEORGE	TRAFFIC CONTROL DESIGNER	

GENERAL NOTES

PROJECT REFERENCE NO. B-5179A	SHEET NO. TCP-2
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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 UNDESIRABLE 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 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 A.M. DECEMBER 31st TO 6 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6 P.M. THE FOLLOWING TUESDAY.
 - 3) FOR EASTER, BETWEEN THE HOURS OF 6 A.M. THURSDAY AND 6 P.M. MONDAY.
 - 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6 A.M. FRIDAY TO 6 P.M. TUESDAY.
 - 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
 - 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6 A.M. FRIDAY AND 6 P.M. TUESDAY.
 - 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6 A.M. TUESDAY TO 6 P.M. MONDAY.
 - 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- B) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

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.

H) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON US 19-23.

PAVEMENT EDGE DROP OFF REQUIREMENTS

I) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

J) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT. IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

SIGNING

K) INSTALL ADVANCE WORK ZONE 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.

L) PROVIDE PERMANENT SIGNING.

M) PROVIDE DETOUR SIGNING WITHIN AND/OR OFF THE PROJECT LIMITS.

N) COVER OR REMOVE ALL DETOUR SIGNS OUTSIDE THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.

O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

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GENERAL NOTES

PROJECT REFERENCE NO.	SHEET NO.
B-5179A	TCP-2A

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.

TRAFFIC BARRIER

Q) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) DAYS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN ONE (1) WEEK, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

R) PROTECT THE APPROACH END OF PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION AS SHOWN IN THE PLANS.

TRAFFIC CONTROL DEVICES

S) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER 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.

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

U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 1000 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

V) INSTALL FINAL PAVEMENT MARKINGS AND PAVEMENT MARKERS AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	POLYUREA	NONE

W) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	COLD APPLIED PLASTIC (TYPE IV)	NONE

X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

Y) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

Z) LAW ENFORCEMENT OFFICERS MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.

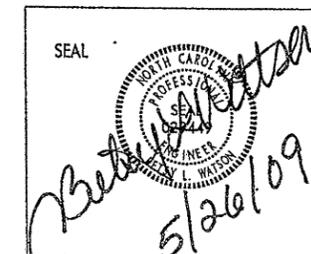
AA) ENGINEER WILL NOTIFY THE OVERSIZE/OVERWEIGHT PERMIT UNIT AT 919-733-4740 (MS. TAMMY DENNING OR MS. JOY WIGGINS) TWO WEEKS PRIOR TO TRAFFIC BEING PLACED IN A ONE-LANE TRAFFIC PATTERN AND WHEN TRAFFIC IS RESTORED TO THE EXISTING PATTERN.

BB) DO NOT ALLOW WATER AND CONCRETE SLURRY FROM HYDRO-DEMOLITION TO DRAIN ACROSS TRAVEL LANES.

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PROJECT NOTES GENERAL NOTES		REVISIONS
SCALE:	NONE	
DATE:	APR 2009	
DWG. BY:	GK	
DESIGN BY:	BLW	



**TRAFFIC CONTROL PHASING
AREA 1 & AREA 2**

PROJECT REFERENCE NO. B-5179A	SHEET NO. TCP-3
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ALL WORK IN PROJECT PHASING IS ALONG -L- (ROUTE US 19-23) UNLESS OTHERWISE STATED.
INSTALL ADVANCE WORK ZONE WARNING SIGNS FOR ENTIRE PROJECT. SEE SHEET TCP-12.

THIS PROJECT IS BROKEN UP INTO 4 AREAS AS SHOWN ON SHEET TCP-4.
DO NOT WORK ON AREAS 1 AND 3 AT THE SAME TIME.
DO NOT WORK ON AREAS 2 AND 4 AT THE SAME TIME.

AREA 1 - BRIDGE 330

PHASE I

- STEP 1: INSTALL A LONG TERM LEFT LANE CLOSURE WITH A SHIFT TAPER DIRECTING TRAFFIC BACK TO THE LEFT LANE. (SHEET TCP-5)
- STEP 2: BEHIND LANE CLOSURE, REMOVE EXISTING OUTSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9). PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES THAT CAN BE PLACED AWAY FROM TRAFFIC (SHEET TCP-6).
- STEP 3: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE UTILIZING THE FULL DEPTH OUTSIDE SHOULDER. (SHEET TCP-6)
- STEP 4: BEHIND LANE CLOSURE PLACE PORTABLE CONCRETE BARRIER AND CRASH CUSHION AS SHOWN ON SHEET TCP-6.
- STEP 5: REHABILITATE BRIDGE DECK STAGE I (RIGHT SIDE/ MEDIAN SIDE) ACCORDING TO STRUCTURE PLANS. REMOVE EXISTING INSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9).

PHASE II

- STEP 1: RESET PORTABLE CONCRETE BARRIER(PCB). DO NOT RESET TAPER SECTION OF PCB AND CRASH CUSHION AT THIS TIME. PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES IN PREPARATION FOR SHIFTING TRAFFIC. (SEE SHEET TCP-7)
- STEP 2: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND INSTALL SHIFT TAPER DIRECTING TRAFFIC TO THE LEFT (INSIDE) LANE UTILIZING THE FULL DEPTH INSIDE SHOULDER AS SHOWN ON SHEET TCP-7. IN A CONTINUOUS OPERATION UPON COMPLETION OF THE SHIFT, RESET THE REMAINING PCB TAPER AND CRASH CUSHION.
- STEP 3: REHABILITATE BRIDGE DECK STAGE II (LEFT SIDE/ OUTSIDE) ACCORDING TO STRUCTURE PLANS.

UPON COMPLETION OF ALL BRIDGE WORK, PLACE FINAL PAVEMENT MARKINGS AS MUCH AS POSSIBLE AWAY FROM TRAFFIC (OUTSIDE WHITE EDGE LINE AND 10' SKIPS). REMOVE PCB AND CRASH CUSHION.
- STEP 4: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE.
- STEP 5: BEHIND THE LANE CLOSURE PLACE REMAINING FINAL PAVEMENT MARKINGS FOR THE INSIDE LANE.
- STEP 6: REMOVE TRAFFIC CONTROL DEVICES AND OPEN TRAVELWAY TO THE FINAL TWO LANE PATTERN.

AREA 2 - BRIDGE 329

PHASE I

- STEP 1: INSTALL A LONG TERM LEFT LANE CLOSURE WITH A SHIFT TAPER DIRECTING TRAFFIC BACK TO THE LEFT LANE. (SHEET TCP-5)
- STEP 2: BEHIND LANE CLOSURE, REMOVE EXISTING OUTSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9). PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES THAT CAN BE PLACED AWAY FROM TRAFFIC (SHEET TCP-6).
- STEP 3: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE UTILIZING THE FULL DEPTH OUTSIDE SHOULDER. (SHEET TCP-6)
- STEP 4: BEHIND LANE CLOSURE PLACE PORTABLE CONCRETE BARRIER AND CRASH CUSHION AS SHOWN ON SHEET TCP-6.
- STEP 5: REHABILITATE BRIDGE DECK STAGE I (LEFT SIDE/ MEDIAN SIDE) ACCORDING TO STRUCTURE PLANS. REMOVE EXISTING INSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9).

PHASE II

- STEP 1: RESET PORTABLE CONCRETE BARRIER(PCB). DO NOT RESET TAPER SECTION OF PCB AND CRASH CUSHION AT THIS TIME. PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES IN PREPARATION FOR SHIFTING TRAFFIC. (SEE SHEET TCP-7)
- STEP 2: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND INSTALL SHIFT TAPER DIRECTING TRAFFIC TO THE LEFT (INSIDE) LANE UTILIZING THE FULL DEPTH INSIDE SHOULDER AS SHOWN ON SHEET TCP-7. IN A CONTINUOUS OPERATION UPON COMPLETION OF THE SHIFT, RESET THE REMAINING PCB TAPER AND CRASH CUSHION.
- STEP 3: REHABILITATE BRIDGE DECK STAGE II (RIGHT SIDE/ OUTSIDE) ACCORDING TO STRUCTURE PLANS.

UPON COMPLETION OF ALL BRIDGE WORK, PLACE FINAL PAVEMENT MARKINGS AS MUCH AS POSSIBLE AWAY FROM TRAFFIC (OUTSIDE WHITE EDGE LINE AND 10' SKIPS). REMOVE PCB AND CRASH CUSHION.
- STEP 4: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE.
- STEP 5: BEHIND THE LANE CLOSURE PLACE REMAINING FINAL PAVEMENT MARKINGS FOR THE INSIDE LANE.
- STEP 6: REMOVE TRAFFIC CONTROL DEVICES AND OPEN TRAVELWAY TO THE FINAL TWO LANE PATTERN.

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SEAL 	TRAFFIC CONTROL PHASING AREA 1 & AREA 2							
	SCALE: NONE DATE: APR. 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW							
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**TRAFFIC CONTROL PHASING
AREA 3 & AREA 4**

PROJECT REFERENCE NO.	SHEET NO.
B-5179A	TCP-3A

ALL WORK IN PROJECT PHASING IS ALONG -L- (ROUTE US 19-23) UNLESS OTHERWISE STATED.
INSTALL ADVANCE WORK ZONE WARNING SIGNS FOR ENTIRE PROJECT. SEE SHEET TCP-12.

THIS PROJECT IS BROKEN UP INTO 4 AREAS AS SHOWN ON SHEET TCP-4.
DO NOT WORK ON AREAS 1 AND 3 AT THE SAME TIME.
DO NOT WORK ON AREAS 2 AND 4 AT THE SAME TIME.

AREA 3 - BRIDGES 316, 302 & 289

PHASE I

- STEP 1: INSTALL OFFSITE DETOUR SIGNING FOR THE CLOSURE OF ON-LOOP FROM SR 1781 BROADWAY STREET ONTO US 19-23 SB. UPON COMPLETION OF SIGNING, CLOSE LOOP. SEE SHEET TCP-8.
- STEP 2: INSTALL A LONG TERM LEFT LANE CLOSURE WITH A SHIFT TAPER DIRECTING TRAFFIC BACK TO THE LEFT LANE. (SHEET TCP-5)
- STEP 3: BEHIND LANE CLOSURE, REMOVE EXISTING OUTSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9). PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES THAT CAN BE PLACED AWAY FROM TRAFFIC (SHEET TCP-6).
- STEP 4: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE UTILIZING THE FULL DEPTH OUTSIDE SHOULDER (SHEET TCP-6). SHIFT TRAFFIC FROM OUTSIDE SHOULDER BACK TO RIGHT LANE SOUTH OF BRIDGE 302, AND SHIFT BACK TO OUTSIDE SHOULDER IN ADVANCE OF BRIDGE 289.
- STEP 5: BEHIND LANE CLOSURE PLACE PORTABLE CONCRETE BARRIER AND CRASH CUSHION FOR BRIDGES 316 & 289 ONLY AS SHOWN ON SHEET TCP-6.
- STEP 6: REHABILITATE BRIDGE DECKS STAGE I (RIGHT SIDE/ MEDIAN SIDE) ACCORDING TO STRUCTURE PLANS. REMOVE EXISTING INSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9).

PHASE II

- STEP 1: RESET PORTABLE CONCRETE BARRIER(PCB). DO NOT RESET TAPER SECTION OF PCB AND CRASH CUSHION AT THIS TIME. PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES IN PREPARATION FOR SHIFTING TRAFFIC.(SEE SHEET TCP-7)
- STEP 2: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND INSTALL SHIFT TAPER, DIRECTING TRAFFIC TO THE LEFT (INSIDE) LANE UTILIZING THE FULL DEPTH INSIDE SHOULDER AS SHOWN ON SHEET TCP-7. IN A CONTINUOUS OPERATION UPON COMPLETION OF THE SHIFT, RESET THE REMAINING PCB TAPER AND CRASH CUSHION. SHIFT TRAFFIC FROM INSIDE SHOULDER BACK TO LEFT LANE SOUTH OF BRIDGE 302, AND BACK TO INSIDE SHOULDER IN ADVANCE OF BRIDGE 289.
- STEP 3: REHABILITATE BRIDGE DECKS STAGE II (LEFT SIDE/ OUTSIDE) ACCORDING TO STRUCTURE PLANS.

UPON COMPLETION OF ALL BRIDGE WORK, PLACE FINAL PAVEMENT MARKINGS AS MUCH AS POSSIBLE AWAY FROM TRAFFIC (OUTSIDE WHITE EDGE LINE AND 10' SKIPS). REMOVE PCB AND CRASH CUSHION.
- STEP 4: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE.
- STEP 5: BEHIND THE LANE CLOSURE PLACE REMAINING FINAL PAVEMENT MARKINGS FOR THE INSIDE LANE.
- STEP 6: REMOVE TRAFFIC CONTROL DEVICES AND OPEN TRAVELWAY TO THE FINAL TWO LANE PATTERN.
- STEP 7: REMOVE ROAD CLOSURE BARRICADES THEN REMOVE DETOUR SIGNS AND RE-OPEN ON-LOOP FROM SR 1781 BROADWAY STREET TO US 19-23 SB.

AREA 4 - BRIDGES 303 & 314

PHASE I

- STEP 1: INSTALL A LONG TERM LEFT LANE CLOSURE WITH A SHIFT TAPER DIRECTING TRAFFIC BACK TO THE LEFT LANE. (SHEET TCP-5)
- STEP 2: BEHIND LANE CLOSURE, REMOVE EXISTING OUTSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9). PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES THAT CAN BE PLACED AWAY FROM TRAFFIC (SHEET TCP-6).
- STEP 3: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE UTILIZING THE FULL DEPTH OUTSIDE SHOULDER IMMEDIATELY NORTH OF BRIDGE 303.(SHEET TCP-6)
- STEP 4: BEHIND LANE CLOSURE PLACE PORTABLE CONCRETE BARRIER AND CRASH CUSHION FOR BRIDGE 314 ONLY AS SHOWN ON SHEET TCP-6.
- STEP 5: REHABILITATE BRIDGE DECKS STAGE I (LEFT SIDE/ MEDIAN SIDE) ACCORDING TO STRUCTURE PLANS. REMOVE EXISTING INSIDE SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT ACCORDING TO TYPICAL SHOULDER SECTION (SHEET TCP-9).

PHASE II

- STEP 1: RESET PORTABLE CONCRETE BARRIER(PCB). DO NOT RESET TAPER SECTION OF PCB AND CRASH CUSHION AT THIS TIME. PLACE TEMPORARY TAPE PAVEMENT MARKING YELLOW AND WHITE EDGELINES IN PREPARATION FOR SHIFTING TRAFFIC.(SEE SHEET TCP-7)
- STEP 2: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND INSTALL SHIFT TAPER, DIRECTING TRAFFIC TO THE LEFT (INSIDE) LANE UTILIZING THE FULL DEPTH INSIDE SHOULDER IMMEDIATELY NORTH OF BRIDGE 303 AS SHOWN ON SHEET TCP-7. IN A CONTINUOUS OPERATION UPON COMPLETION OF THE SHIFT, RESET THE REMAINING PCB TAPER AND CRASH CUSHION.
- STEP 3: REHABILITATE BRIDGE DECKS STAGE II (RIGHT SIDE/ OUTSIDE) ACCORDING TO STRUCTURE PLANS.

UPON COMPLETION OF ALL BRIDGE WORK, PLACE FINAL PAVEMENT MARKINGS AS MUCH AS POSSIBLE AWAY FROM TRAFFIC (OUTSIDE WHITE EDGE LINE AND 10' SKIPS). REMOVE PCB AND CRASH CUSHION.
- STEP 4: USING A ROLLING ROAD BLOCK OPERATION PER RSD. 1101.03 SHEET 9, STOP TRAFFIC AND REMOVE SHIFT TAPER, DIRECTING TRAFFIC TO THE RIGHT (OUTSIDE) LANE.
- STEP 5: BEHIND THE LANE CLOSURE PLACE REMAINING FINAL PAVEMENT MARKINGS FOR THE INSIDE LANE.
- STEP 6: REMOVE TRAFFIC CONTROL DEVICES AND OPEN TRAVELWAY TO THE FINAL TWO LANE PATTERN.

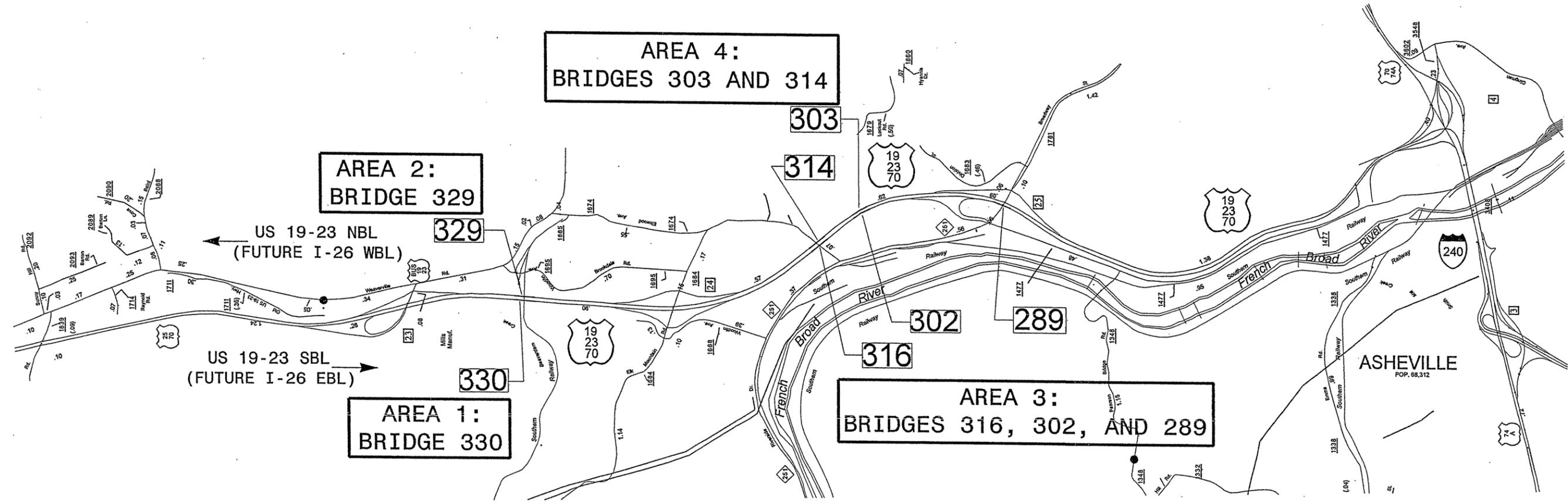
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SEAL 	TRAFFIC CONTROL PHASING AREA 3 & AREA 4							
	SCALE: NONE DATE: APR 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW							
SIGNATURE: <i>Blw</i> DATE: 4/30/09		REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>						



DO NOT WORK ON AREAS 1 AND 3 AT THE SAME TIME.
DO NOT WORK ON AREAS 2 AND 4 AT THE SAME TIME.

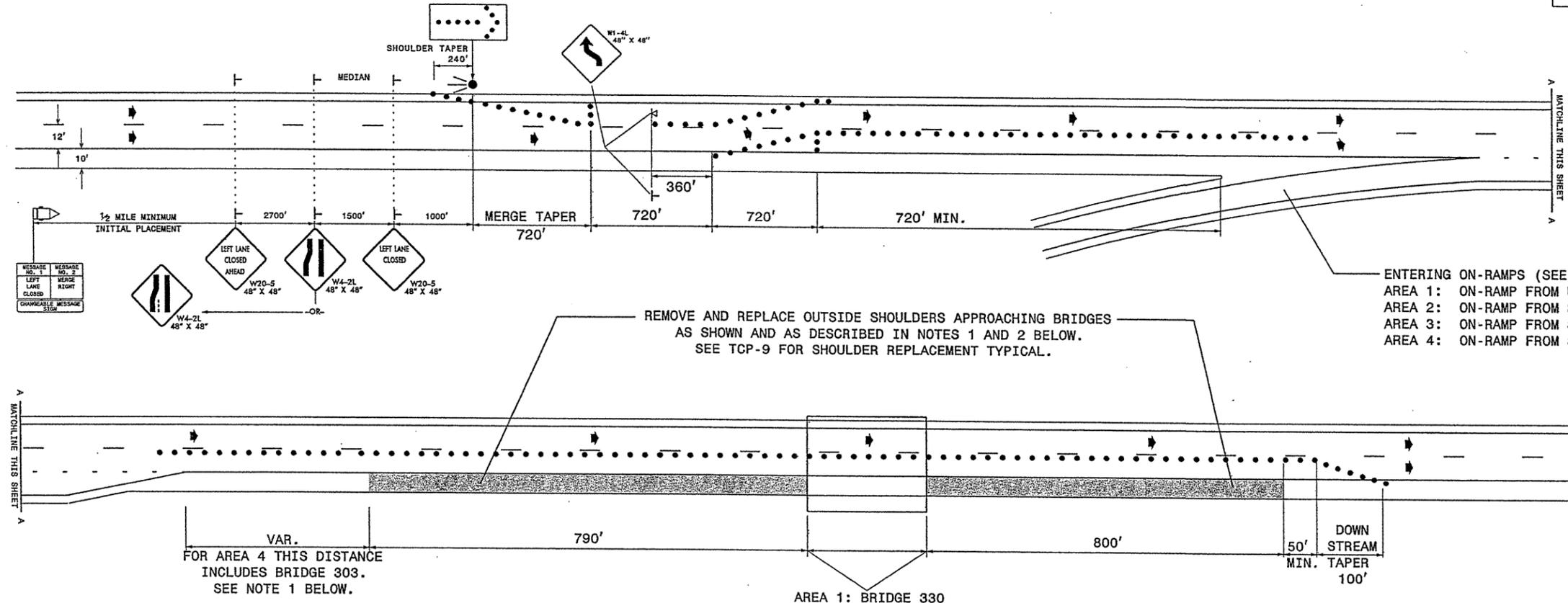


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SEAL <i>Stacy L. Watson</i> 4/30/09 SIGNATURE	PROJECT VICINITY MAP AND OVERVIEW OF AREAS		 REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>								
DATE: APR 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW	SCALE: NONE	CADD FILE: \TCP\B-5179A_tcp_psh04.dgn									



ENTERING ON-RAMPS (SEE NOTE 3 BELOW):
 AREA 1: ON-RAMP FROM US 19-23 BUS
 AREA 2: ON-RAMP FROM SR 1684 ELK MOUNTAIN RD
 AREA 3: ON-RAMP FROM SR 1684 ELK MOUNTAIN RD
 AREA 4: ON-RAMP FROM SR 1781 BROADWAY STREET

VAR.
 FOR AREA 4 THIS DISTANCE
 INCLUDES BRIDGE 303.
 SEE NOTE 1 BELOW.

AREA 1: BRIDGE 330
 AREA 2: BRIDGE 329
 AREA 3: BRIDGES 316, 302 & 289; SEE NOTE 2 BELOW
 AREA 4: BRIDGE 314

NOTES

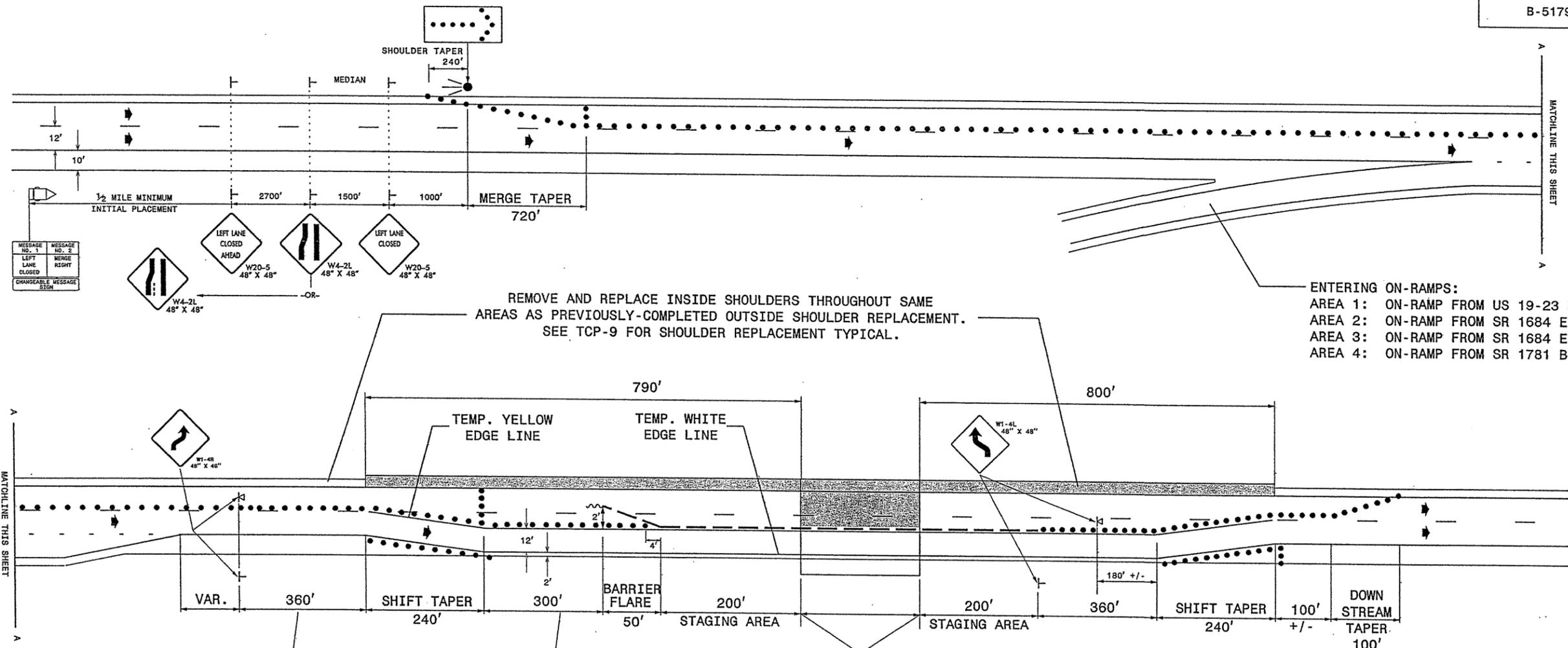
- 1- FOR AREA 4, BRIDGE 303 IS INCLUDED IN LENGTH OF RIGHT LANE CLOSURE BEFORE SHOULDER REPLACEMENT BEGINS. SHOULDER REPLACEMENT WILL TAKE PLACE BETWEEN BRIDGE 303 AND BRIDGE 314 AS SHOWN.
- 2- FOR AREA 3, REPLACE ENTIRE OUTSIDE SHOULDER BETWEEN BRIDGES 316 AND 302; 800' OF SHOULDER SOUTH OF BRIDGE 302; AND 790' OF SHOULDER NORTH OF BRIDGE 289.
- 3- REFER TO SHEET TCP-10 FOR TREATMENT OF RIGHT LANE CLOSURE THROUGH ENTRANCE RAMPS (AREAS 1, 2, 3, AND 4).
- 4- REFER TO SHEET TCP-11 FOR TREATMENT OF RIGHT LANE CLOSURES THROUGH EXIT RAMPS (AREAS 2 AND 3).
- 5- PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (SEE STD. 1101.11 SHEET 2)
- 6- INITIAL SETUP OF THE SHIFT TAPER AND SUBSEQUENT REPOSITIONING OF DEVICES DURING LANE CLOSURE SWITCHES TO BE PERFORMED BY A ROLLING ROADBLOCK OPERATION. SEE RSD 1101.02 SHEET 9.
- 7- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 8- 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.
- 9- PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC, MOVE CMS APPROXIMATELY 1/2 MILE IN CONJUNCTION WITH ANTICIPATED BACKUP.

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SEAL		PHASE 1 DETAIL REMOVAL AND REPLACEMENT OF OUTSIDE SHOULDERS						
		SIGNATURE: <i>Betsy L. Watson</i> DATE: 4/30/09	SCALE: NONE DATE: APR 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW	REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>				



ENTERING ON-RAMPS:
 AREA 1: ON-RAMP FROM US 19-23 BUS
 AREA 2: ON-RAMP FROM SR 1684 ELK MOUNTAIN RD
 AREA 3: ON-RAMP FROM SR 1684 ELK MOUNTAIN RD
 AREA 4: ON-RAMP FROM SR 1781 BROADWAY STREET

REMOVE AND REPLACE INSIDE SHOULDERS THROUGHOUT SAME AREAS AS PREVIOUSLY-COMPLETED OUTSIDE SHOULDER REPLACEMENT. SEE TCP-9 FOR SHOULDER REPLACEMENT TYPICAL.

FOR AREA 4 THIS DISTANCE INCLUDES BRIDGE 303. SEE NOTE 1 BELOW.

FOR AREA 4 THIS DISTANCE MAY BE SLIGHTLY LESS THAN 300' DUE TO SPACE CONSTRAINTS.

AREA 1: BRIDGE 330
 AREA 2: BRIDGE 329
 AREA 3: BRIDGES 316, 302 & 289; SEE NOTE 2 BELOW
 AREA 4: BRIDGE 314

NOTES

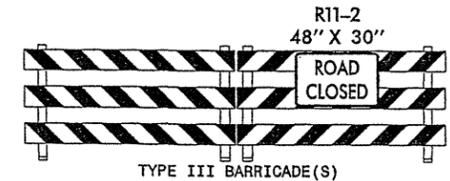
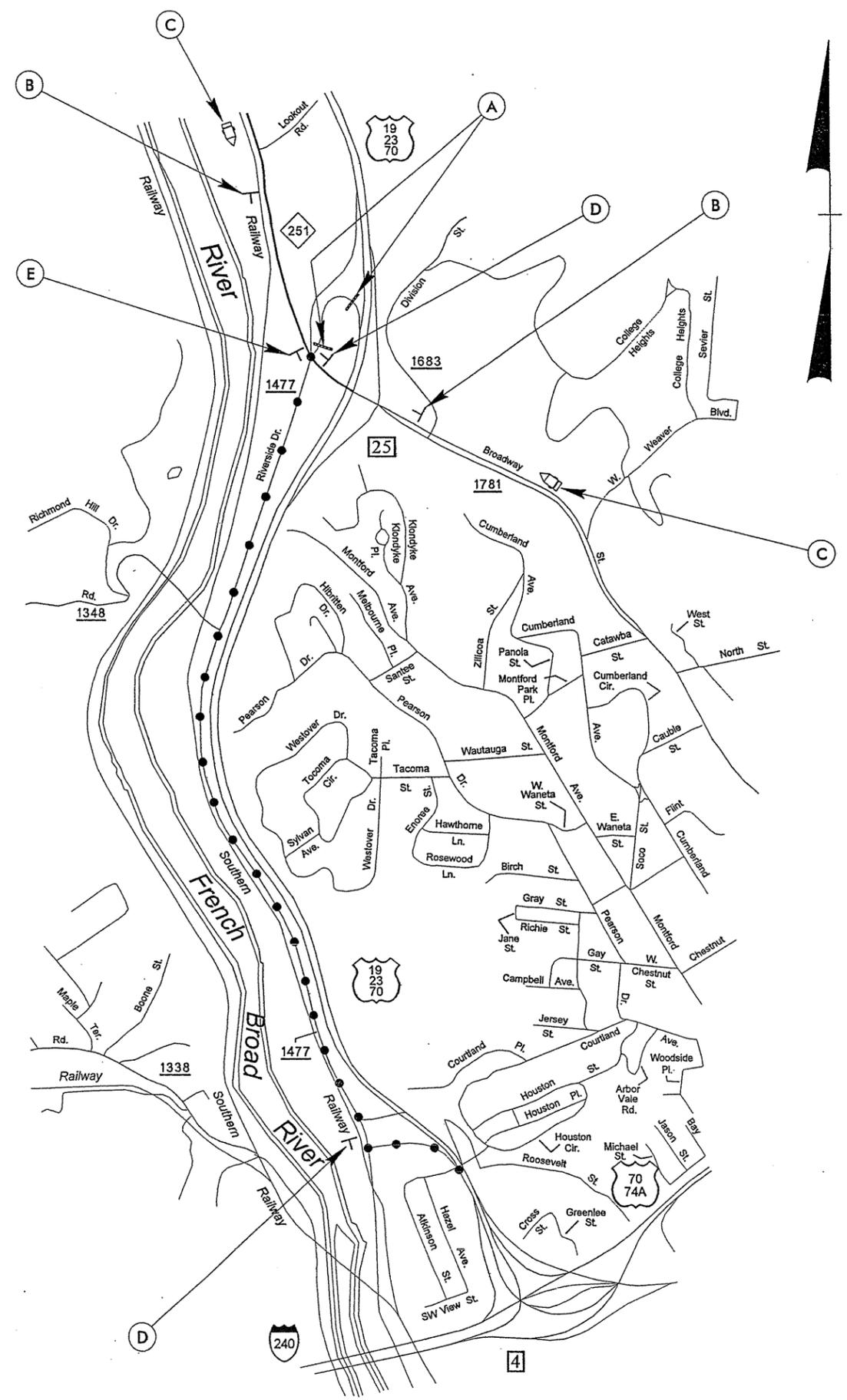
- 1- FOR AREA 4, BRIDGE 303 IS INCLUDED IN LENGTH OF LEFT LANE CLOSURE BEFORE SHIFT TO OUTSIDE SHOULDER BEGINS. SHIFT TO OUTSIDE SHOULDER WILL BEGIN IMMEDIATELY NORTH OF BRIDGE 303.
- 2- FOR AREA 3, DISCONTINUE PORTABLE CONCRETE BARRIER 200' SOUTH OF BRIDGE 316. MAINTAIN TRAFFIC ON OUTSIDE SHOULDER WITH DRUMS ACROSS BRIDGE 302. SOUTH OF BRIDGE 302, SHIFT TRAFFIC FROM OUTSIDE SHOULDER BACK TO RIGHT LANE (8' SHIFT; 240' TAPER REQUIRED; USE SIGN W1-4L 360' IN ADVANCE OF SHIFT). SHIFT TRAFFIC FROM RIGHT LANE BACK TO OUTSIDE SHOULDER NORTH OF BRIDGE 289 AND BEGIN BARRIER 250' NORTH OF BRIDGE (USE DETAIL ABOVE FOR SHIFT TAPERS AND PLACEMENT OF SIGNS AND BARRIER).
- 3- PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (SEE STD. 1101.11 SHEET 2)
- 4- INITIAL SETUP OF THE SHIFT TAPER AND SUBSEQUENT REPOSITIONING OF DEVICES DURING LANE CLOSURE SWITCHES TO BE PERFORMED BY A ROLLING ROADBLOCK OPERATION. SEE RSD 1101.02 SHEET 9.
- 5- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 6- 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.
- 7- PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC, MOVE CMS APPROXIMATELY 1/2 MILE IN CONJUNCTION WITH ANTICIPATED BACKUP.



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SEAL <i>Patsy L. Miller</i> 4/30/09 SIGNATURE	PHASE I BRIDGE REHAB STAGE I DETAIL							
	SCALE: NONE DATE: APR 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS				
REVISIONS								

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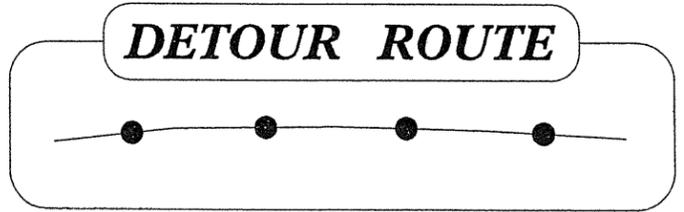
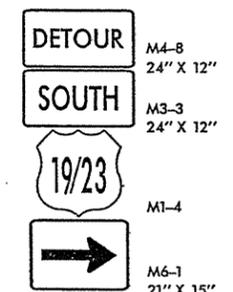
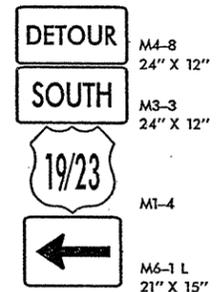


NO ACCESS TO
US 19/23 SOUTH
FOLLOW DETOUR

PROVIDED BY DIV 13
78" X 60"

MESSAGE NO. 1	MESSAGE NO. 2
19/23 S ON-RAMP CLOSED	USE DETOUR

CHANGEABLE MESSAGE SIGN



4/29/2009
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SEAL

Betty J. Dutton
4/30/09

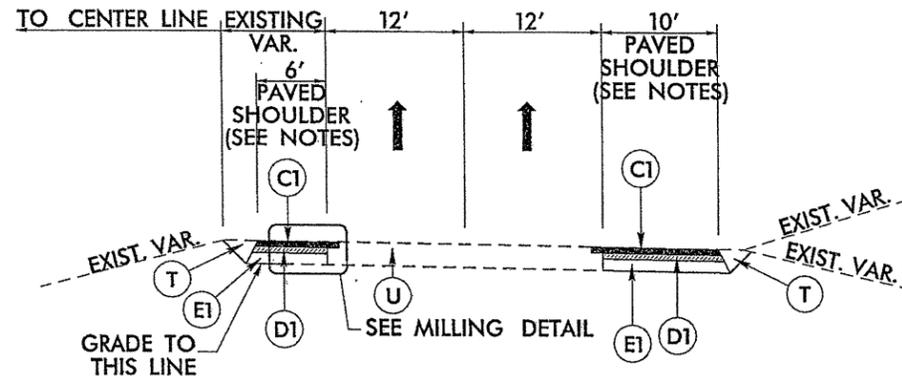
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AREA 3 DETOUR PLAN	
SCALE: NONE	REVISIONS
DATE: APR 2009	
DWG. BY: GK	
DESIGN BY: BLW	
REVIEWED BY: BLW	

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. 5.5" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING 1.5"

NOTE:

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

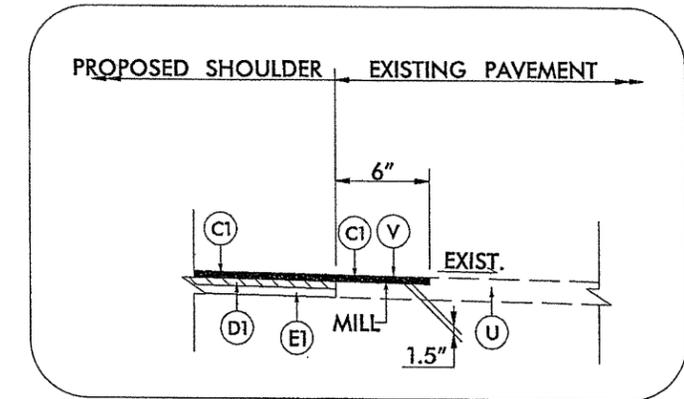


1. NOTES:

REMOVE AND REPLACE EXISTING PAVED SHOULDER AS SHOWN.

IF EXISTING SHOULDER BERM GUTTER OR GUARDRAIL IS PRESENT WITHIN PAVED SHOULDER LIMITS NOTIFY ENGINEER IMMEDIATELY FOR INSTALLATION INSTRUCTIONS.

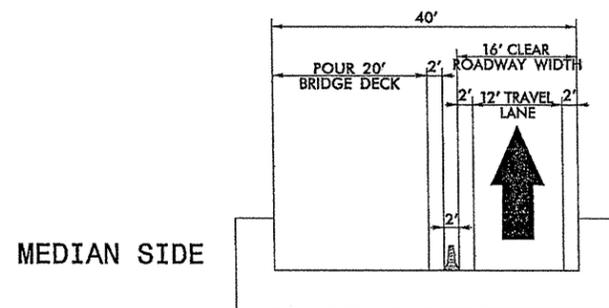
NEW SHOULDER SHALL MATCH ADJACENT EXISTING PAVEMENT SLOPES.



MILLING DETAIL

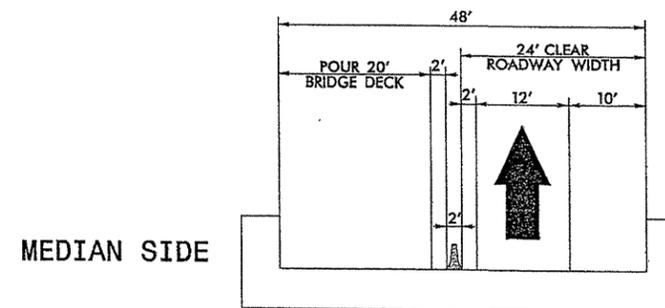
USE IN CONJUNCTION WITH TYPICAL SECTIONS WHEN TYING PROPOSED PAVEMENT TO EXIST. PAVEMENT

TYPICAL SECTION FOR SHOULDER REMOVAL AND REPLACEMENT



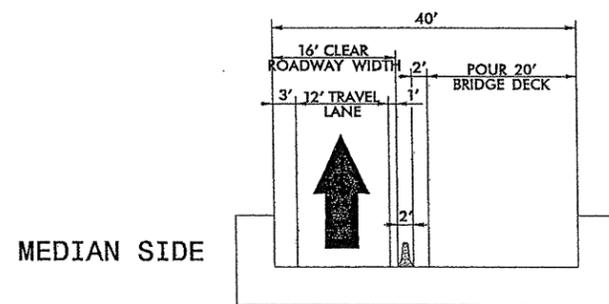
MEDIAN SIDE

BRIDGES 302, 303, 314, 316, 329
STAGE I CONSTRUCTION



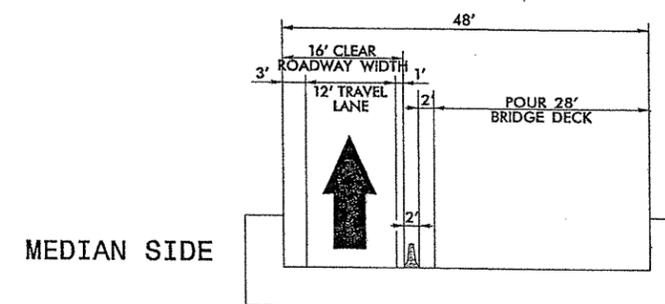
MEDIAN SIDE

BRIDGES 289, 330
STAGE I CONSTRUCTION



MEDIAN SIDE

BRIDGES 302, 303, 314, 316, 329
STAGE II CONSTRUCTION



MEDIAN SIDE

BRIDGES 289, 330
STAGE II CONSTRUCTION

NOTES

- SEE SHEETS TCP-5 AND TCP-6 FOR LOCATIONS OF SHOULDER REMOVAL AND REPLACEMENT FOR EACH AREA.
- SEE ALSO STRUCTURE PLANS. NOTE THAT SECTIONS ON STRUCTURE PLANS FACE UPSTATION WHEREAS SECTIONS SHOWN IN THIS TRAFFIC CONTROL PLAN FACE IN THE DOWNSTREAM TRAFFIC DIRECTION.



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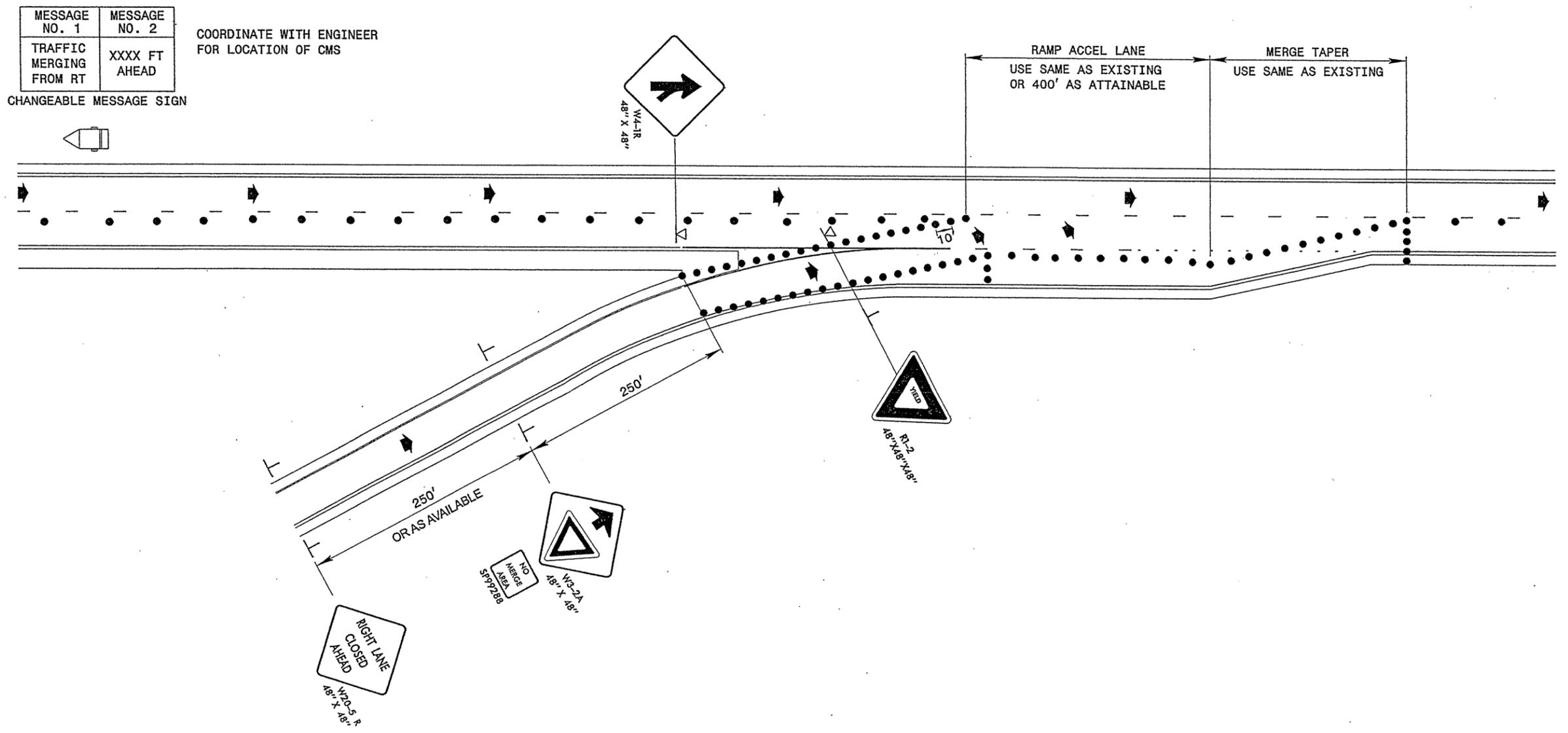
SEAL
Professional Engineer
North Carolina
May 5, 2009

TYPICAL SHOULDER REPLACEMENT DETAIL
AND STAGED CROSS SECTIONS ON BRIDGES

SCALE:	NONE
DATE:	APR 2009
DWG. BY:	GK
DESIGN BY:	BLW



REVISIONS



MESSAGE NO. 1	MESSAGE NO. 2
TRAFFIC MERGING FROM RT	XXXX FT AHEAD

CHANGEABLE MESSAGE SIGN

COORDINATE WITH ENGINEER FOR LOCATION OF CMS

NOTES

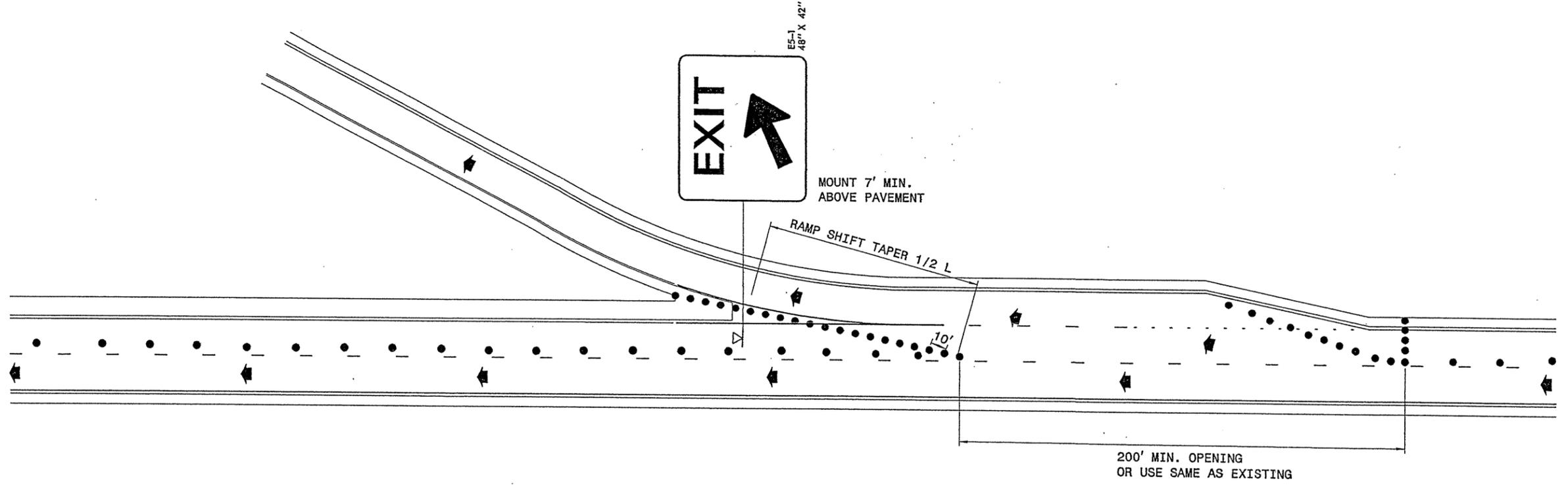
- 1) USE THIS DETAIL FOR ALL 4 AREAS DURING PHASE I CONSTRUCTION OF OUTSIDE SHOULDERS AND PHASE II STAGE II BRIDGE DECK REHABILITATION.



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SEAL <i>Patsy L. Walker</i> 4/30/09 SIGNATURE	ENTRANCE RAMP DETAIL TYPICAL		<table border="1"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS								
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SCALE:	NONE											
DATE:	APR 2009											
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DESIGN BY:	BLW											
REVIEWED BY:	BLW											

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 4/29/2009
 recullen



NOTES

- 1) USE THIS DETAIL FOR AREA 2 & AREA 3 DURING PHASE I CONSTRUCTION OF OUTSIDE SHOULDERS AND PHASE II STAGE II BRIDGE DECK REHABILITATION. FOR AREA 2 USE ONLY IF BOTH THROUGH LANES CANNOT BE RE-OPENED IN ADVANCE OF OFF-RAMP FOR US 19-23 BUS.

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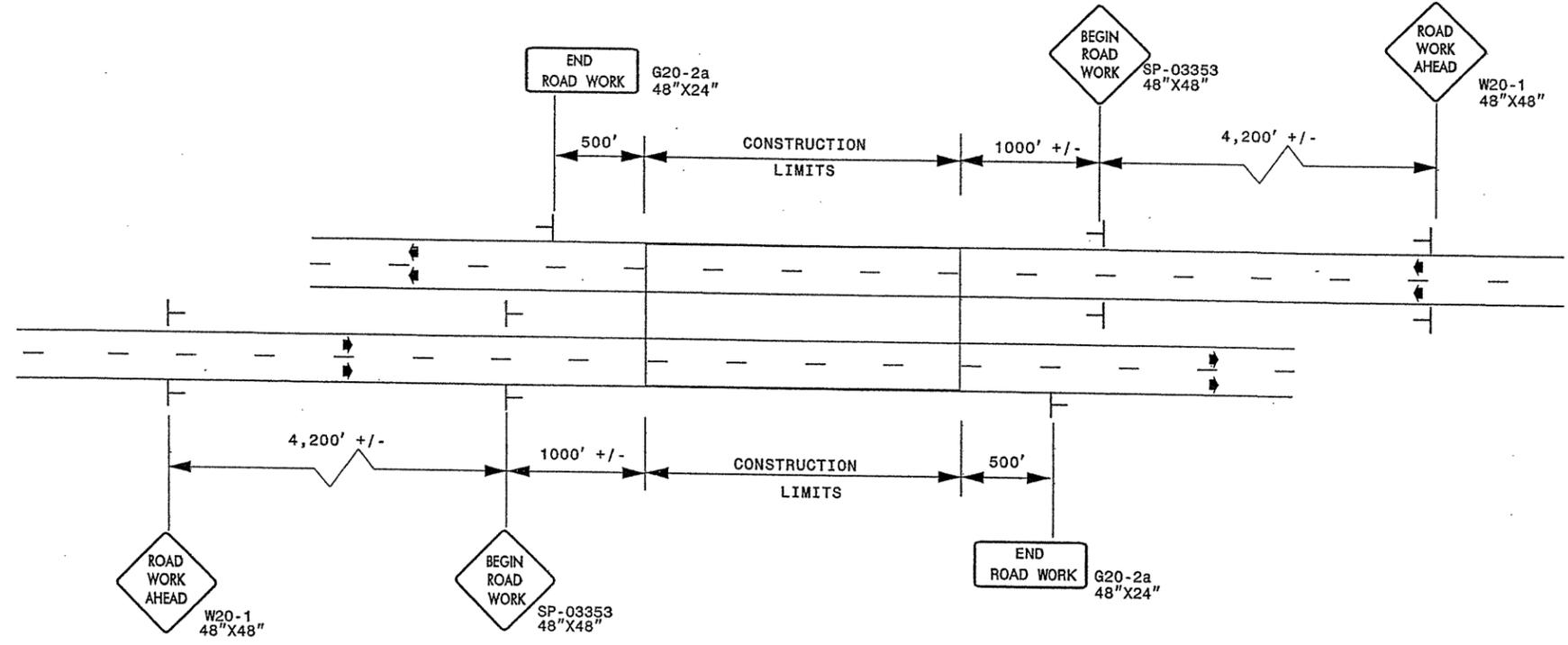
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SEAL 	<p align="center">EXIT RAMP DETAIL TYPICAL</p>		REVISIONS	
			SCALE: NONE	DATE: APR 2009
<p align="center"><i>Betsy L. Watson</i> 4/13/09</p>	DESIGN BY: GK			
	REVIEWED BY: BLW			
SIGNATURE	DATE			

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

PROJ. REFERENCE NO.	SHEET NO.
B-5179A	TCP-12

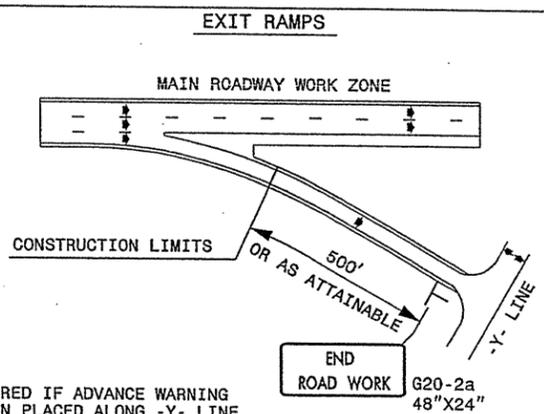
DETAIL A



LEGEND	
	STATIONARY SIGN
→	DIRECTION OF TRAFFIC FLOW

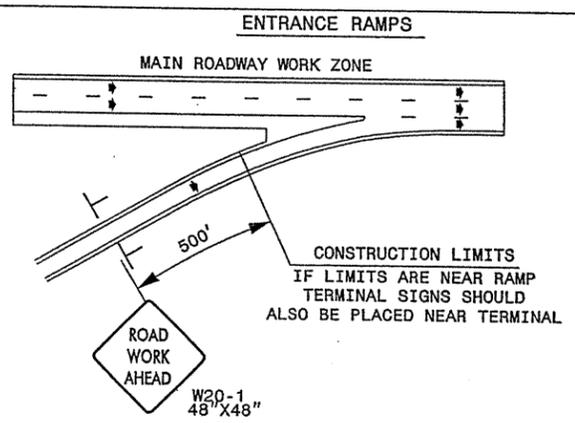
* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

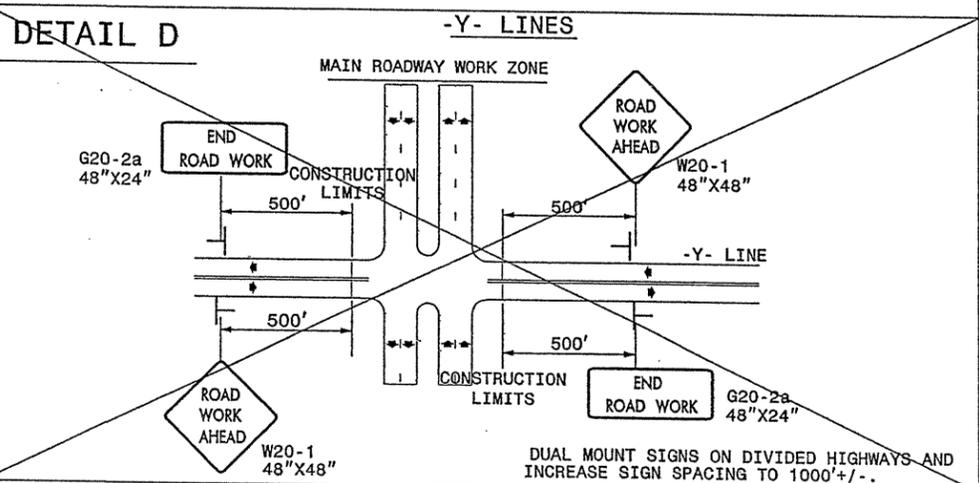


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



DETAIL D



GENERAL NOTES

- SET UP ONE STATIONARY WORK ZONE FOR ENTIRE PROJECT ENCOMPASSING ALL SEVEN BRIDGES. FOR US 19-23 EBL, CONSTRUCTION LIMITS BEGIN AT START OF LANE CLOSURE TAPER FOR BRIDGE 330 AND EXTEND TO END OF DOWNSTREAM TAPER FOR BRIDGE 289. FOR US 19-23 WBL, CONSTRUCTION LIMITS BEGIN AT START OF LANE CLOSURE TAPER FOR BRIDGE 303 AND EXTEND TO END OF DOWNSTREAM TAPER FOR BRIDGE 329.
- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE; FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.



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APPROVED: _____	DATE: _____	ADVANCED WORK ZONE WARNING SIGNS	
	SCALE: NONE		REVISIONS
	DATE: APR 2009		
	DWG. BY: BLW		
	DESIGN BY: BLW		
REVIEWED BY: BLW			

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