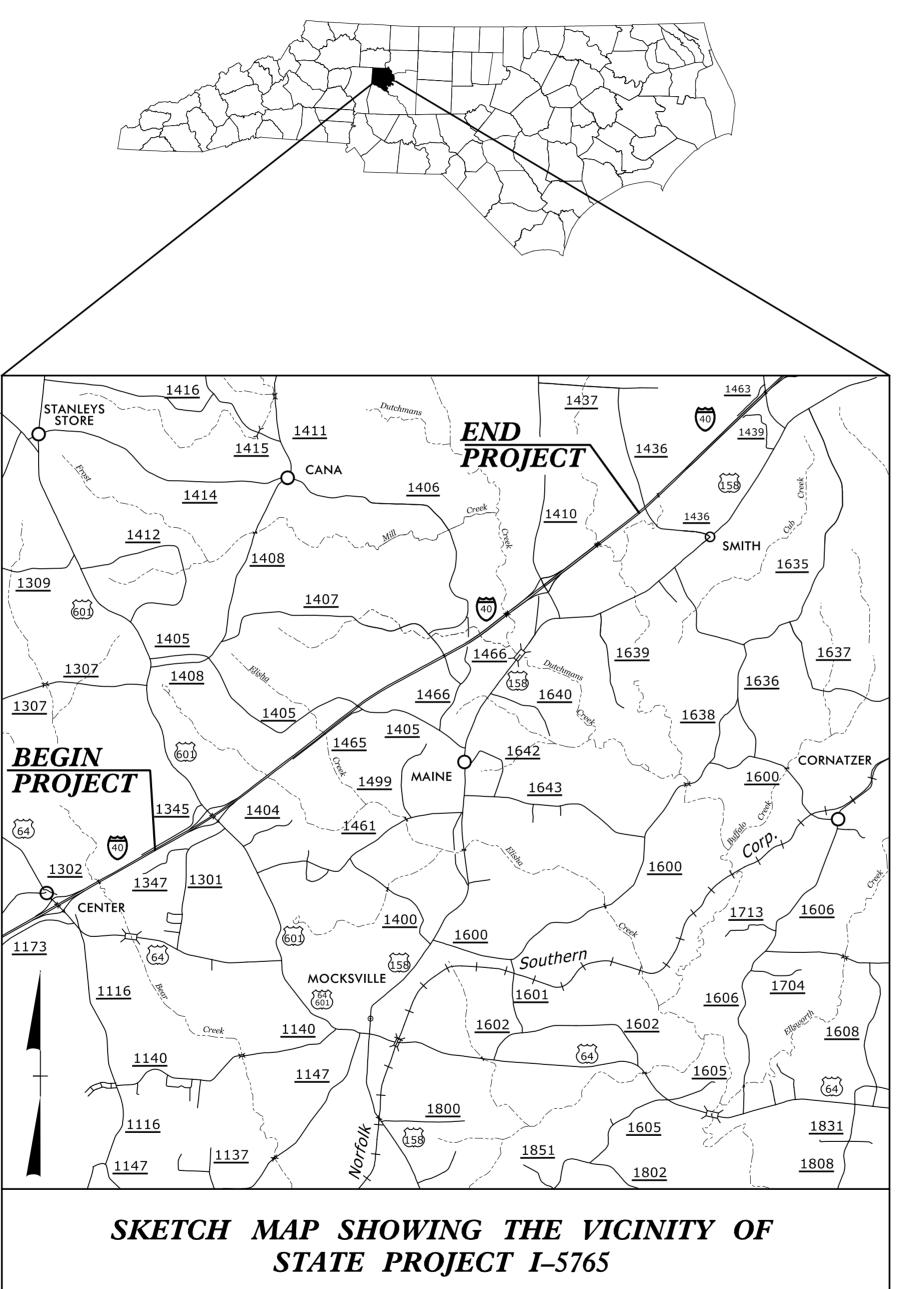
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TRANSPORTATION MANAGEMENT PLAN

DAVIE COUNTY



WORK ZONE SAFETY & MOBILITY

"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J.S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER D. BISSETTE, P.E. TRAFFIC CONTROL PROJECT ENGINEER S. COLEMAN, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

A. LYUDMIRSKAYA TRAFFIC CONTROL DESIGN ENGINEER



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> DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC License No: F-0258

APPROVED: Michael T. Rzepka *DATE*: 12/19/2016 SEAL

SHEET NO.

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 JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO. TITLE

1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1160.01	TEMPORARY CRASH CUSHION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

DIRECTION OF TRAFFIC FLOW DIRECTION OF PEDESTRIAN TRAFFIC FLOW EXIST. PVMT. NORTH ARROW

PROPOSED PVMT.

GENERAL

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

CONE

DRUM SKINNY DRUM TUBULAR MARKER

TEMPORARY CRASH CUSHION

FLASHING ARROW PANEL (TYPE C)
FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED IMPA

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

PORTABLE SIGN

STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

SIGNALS

EXISTING PROPOSED T TEMPORARY

PAVEMENT MARKINGS

——EXISTING LINES
——TEMPORARY LINES

PAVEMENT MARKERS

CRYSTAL/CRYSTAL
CRYSTAL/RED

YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

SYMBOL DESCRIPTION
PAINT (6")

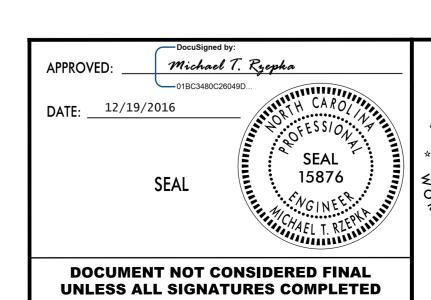
P6 WHITE EDGELINE
P7 YELLOW EDGELINE
PJ 10 FT. WHITE SKIP
PK 3FT.-9FT./SP WHITE MINISKIP

<u>PAINT (12")</u>
WHITE GORELINE

PAINT SYMBOL
MERGE ARROW

TEMPORARY RAISED MARKERS

MI CRYSTAL & RED MJ YELLOW & RED





ROADWAY STANDARD
DRAWINGS, LEGEND &
TEMPORARY PAVEMENT
MARKING SCHEDULE

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:

ROAD NAME

DAY AND TIME RESTRICTIONS

I-40 AND ALL RAMPS

12:00PM (NOON) FRIDAY TO 12:00AM (MIDNIGHT) MONDAY (EXCEPT DURING CROSSOVER USE AND SEGMENT 3 WORK)

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

ROAD NAME

I-40 AND ALL RAMPS

<u>HOLIDAY</u>

- 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 12:00 P.M. DECEMBER 30TH TO 12:00 A.M. JANUARY 3RD. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 12:00 A.M. THE FOLLOWING WEDNESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 12:00 P.M. THURSDAY AND 12:00 A.M. TUESDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 12:00 P.M. FRIDAY TO 12:00 A.M. WEDNESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 12:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 12:00 A.M. TWO DAYS AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 12:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 12:00 A.M. THE WEDNESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 12:00 P.M. FRIDAY AND 12:00 A.M. WEDNESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 12:00 P.M. TUESDAY TO 12:00 A.M. TUESDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 12:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 12:00 A.M. THE FOLLOWING WEDNESDAY AFTER THE WEEK OF CHRISTMAS.
- C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

DURATION AND OPERATION

I-40 AND ALL RAMPS MONDAY-SUNDAY 15 MINUTES/TRAFFIC SHIFTS 5:00AM

D) 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

- E) 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.
- 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.
- 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.

- H) 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.
- I) 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.
- J) PROVIDE A MINIMUM OF 2 MILES BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

K) 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.

L) 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) 1000 FT. IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- N) 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.
- PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

P) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

- Q) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- R) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 1000 FT. IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

S) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS 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 TRANSPORTATION MANAGEMENT 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 TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT 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.

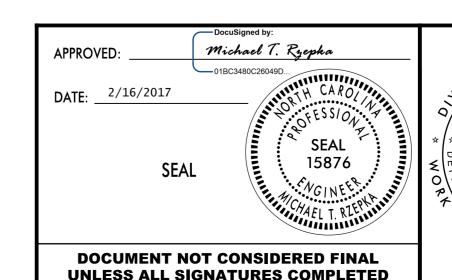
T) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

- U) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- V) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- W) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.



TRANSPORTATION OPERATIONS PLAN

GENERAL NOTES (CONT'D)

PAVEMENT MARKINGS AND MARKERS

() INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME MARKING

<u>MARKER</u>

I-40

PAINT OR TAPE

TEMPORARY RAISED

- Y) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Z) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- AA) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

BB) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

LOCAL NOTES

- 1) COORDINATE WITH THE ENGINEER, TRAFFIC MANAGEMENT CENTER (TMC) AND EMERGENCY SERVICE PERSONNEL REGARDING ALL TRAFFIC ALTERATIONS.
- 2) WHEN CONDUCTING LANE CLOSURE OPERATIONS ON I-40 EB OR WB IN PHASE I (SEGMENT 1), PHASE V (SEGMENT 2) AND PHASE XII (ALL SEGMENTS), USE VARIABLE SPEED LIMIT REDUCTION WITH \$250 PENALTY SIGNS AS SHOWN ON TMP-2H.
- 3) COORDINATE WITH THE ENGINEER TO ENSURE THAT THE OVERSIZE/OVERWEIGHT PERMIT UNIT IS AWARE OF ONGOING TRAFFIC OPERATIONS AND CLEAR ROADWAY WIDTHS THROUGHOUT CONSTRUCTION.
- 4) ADJUST EXISTING OR TEMPORARY GUARDRAIL AS REQUIRED TO MAINTAIN PROPER GUARDRAIL HEIGHT WHEN CONDUCTING ANY OPERATIONS (SUCH AS SHOULDER RECONSTRUCTION OR WEDGING ON I-40) THAT WILL RESULT IN THE PAVEMENT ELEVATION TO BE HIGHER THAN EXISTING.
- 5) DO NOT REMOVE EXISTING CABLE GUIDERAIL AT THE PROPOSED CROSSOVER LOCATIONS UNTIL READY TO CONSTRUCT PROPOSED CROSSOVERS. ONCE THE EXISTING CABLE GUIDERAIL IS REMOVED, THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE CROSSOVER CONSTRUCTION AND TEMPORARY GUARDRAIL INSTALLATION IN ORDER TO PROVIDE MEDIAN CROSSOVER PROTECTION.
- 6) WHEN INSTALLING TEMPORARY OR PERMANENT GUARDRAIL, LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW. EACH TIME I-40 TRAFFIC IS SHIFTED TO A NEW TRAFFIC PATTERN, RELAP GUARDRAIL IN THE NEW DIRECTION OF TRAFFIC FLOW.
- 7) USE REMOVABLE TAPE IN SEGMENT 1 ON I-40 BRIDGES AND IN SEGMENT 2, PHASE V, STEP3 FOR SLAB REMOVAL. WHEN USING REMOVABLE TAPE, INSTALL TEMPORARY RAISED MARKERS HALF-ON/HALF-OFF TAPE AT 20' SPACING TO HOLD TAPE IN PLACE.

MANAGEMENT STRATEGY

THE FOLLOWING LISTED STRATEGIES DERIVE FROM DETAILED DESIGN LEVEL ASSESSMENTS OF THE WORK ZONE IMPACTS CONDUCTED DURING THE DEVELOPMENTAL STAGES OF THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED MANAGEMENT STRATEGIES RELATIVE TO THIS TMP ARE AS FOLLOWS:

I-40 - SEGMENT 1

IN PHASE I, ALL WORK ON I-40 THAT REQUIRES LANE CLOSURES WILL UTILIZE A VARIABLE SPEED LIMIT REDUCTION WITH \$250 PENALTY.

- EASTBOUND TRAFFIC WILL BE MAINTAINED USING EXTENDED WEEKDAY LANE CLOSURES TO RECONSTRUCT OUTSIDE SHOULDER. RETURN I-40 EB TRAFFIC TO EXISTING PATTERN DURING WEEKENDS.
- EASTBOUND AND WESTBOUND TRAFFIC WILL BE MAINTAINED USING EXTENDED WEEKDAY LANE CLOSURES TO CONSTRUCT MEDIAN CROSSOVERS. RETURN I-40 EB & WB TRAFFIC TO EXISTING PATTERN DURING WEEKENDS.

IN PHASES II THROUGH IV, A <u>STATIONARY SPEED LIMIT REDUCTION</u> AND \$250 PENALTY WILL BE UTILIZED.

- EASTBOUND AND WESTBOUND TRAFFIC WILL BE PLACED IN A 2-LANE/2-WAY DIVIDED LONG-TERM PATTERN ON ONE SIDE OF I-40 USING MEDIAN CROSSOVERS FOR CONSTRUCTION AWAY FROM TRAFFIC OF THE OPPOSITE SIDE. CONSTRUCTION SIDE ENTRANCE AND EXIT RAMPS AT FARMINGTON RD. INTERCHANGE WILL BE CLOSED DURING CROSSOVER USE.

I-40 SEGMENT 2

IN PHASE V, ALL WORK ON I-40 THAT REQUIRES LANE CLOSURES WILL UTILIZE A VARIABLE SPEED LIMIT REDUCTION WITH \$250 PENALTY.

- WESTBOUND TRAFFIC WILL BE MAINTAINED USING EXTENDED WEEKDAY LANE CLOSURES TO REBUILD/WIDEN MEDIAN SHOULDER AND REPLACE OUTSIDE LANE CONCRETE SLABS. RETURN I-40 WESTBOUND TRAFFIC TO EXISTING PATTERN DURING WEEKENDS.
- EASTBOUND AND WESTBOUND TRAFFIC WILL BE MAINTAINED USING EXTENDED WEEKDAY LANE CLOSURES TO CONSTRUCT MEDIAN CROSSOVERS. RETURN I-40 EASTBOUND AND WESTBOUND TRAFFIC TO EXISTING PATTERN DURING WEEKENDS.

IN PHASES VI THROUGH VIII, A <u>STATIONARY SPEED LIMIT REDUCTION</u> AND \$250 PENALTY WILL BE UTILIZED.

- EASTBOUND AND WESTBOUND TRAFFIC WILL BE PLACED IN A 2-LANE/2-WAY DIVIDED LONG-TERM PATTERN ON ONE SIDE OF I-40 USING MEDIAN CROSSOVERS FOR CONSTRUCTION AWAY FROM TRAFFIC OF THE OPPOSITE SIDE.

I-40 SEGMENT 3

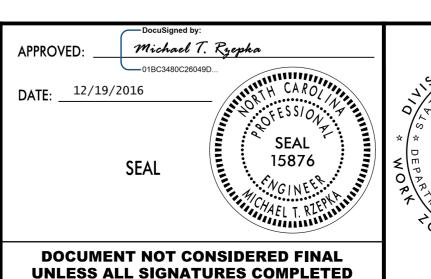
IN PHASES IX THROUGH XI, A <u>STATIONARY SPEED LIMIT REDUCTION</u> AND \$250 PENALTY WILL BE UTILIZED.

- EASTBOUND AND WESTBOUND TRAFFIC WILL BE MAINTAINED USING AN EXTENDED LANE CLOSURE (WITH SHIFTS) FOR THE ENTIRE CONSTRUCTION OF SEGMENT 3. EASTBOUND AND WESTBOUND TRAFFIC WILL BE MAINTAINED ON ITS RESPECTIVE SIDE DURING CONSTRUCTION AND ALL RAMPS AT US 601 WILL REMAIN OPEN.

I-40 ALL SEGMENTS

IN PHASE XII, ALL WORK ON I-40 THAT REQUIRES LANE CLOSURES WILL UTILIZE A VARIABLE SPEED LIMIT REDUCTION WITH \$250 PENALTY.

- EASTBOUND AND WESTBOUND TRAFFIC WILL BE MAINTAINED USING EXTENDED WEEKDAY LANE CLOSURES TO PLACE THE FINAL SURFACE LAYER, FINAL MARKINGS AND RUMBLE STRIPS. RETURN I-40 EASTBOUND AND WESTBOUND TRAFFIC TO EXISTING PATTERN DURING WEEKENDS.



OF HIGH NORTH CAPOLIZE * NOOLZEP * N

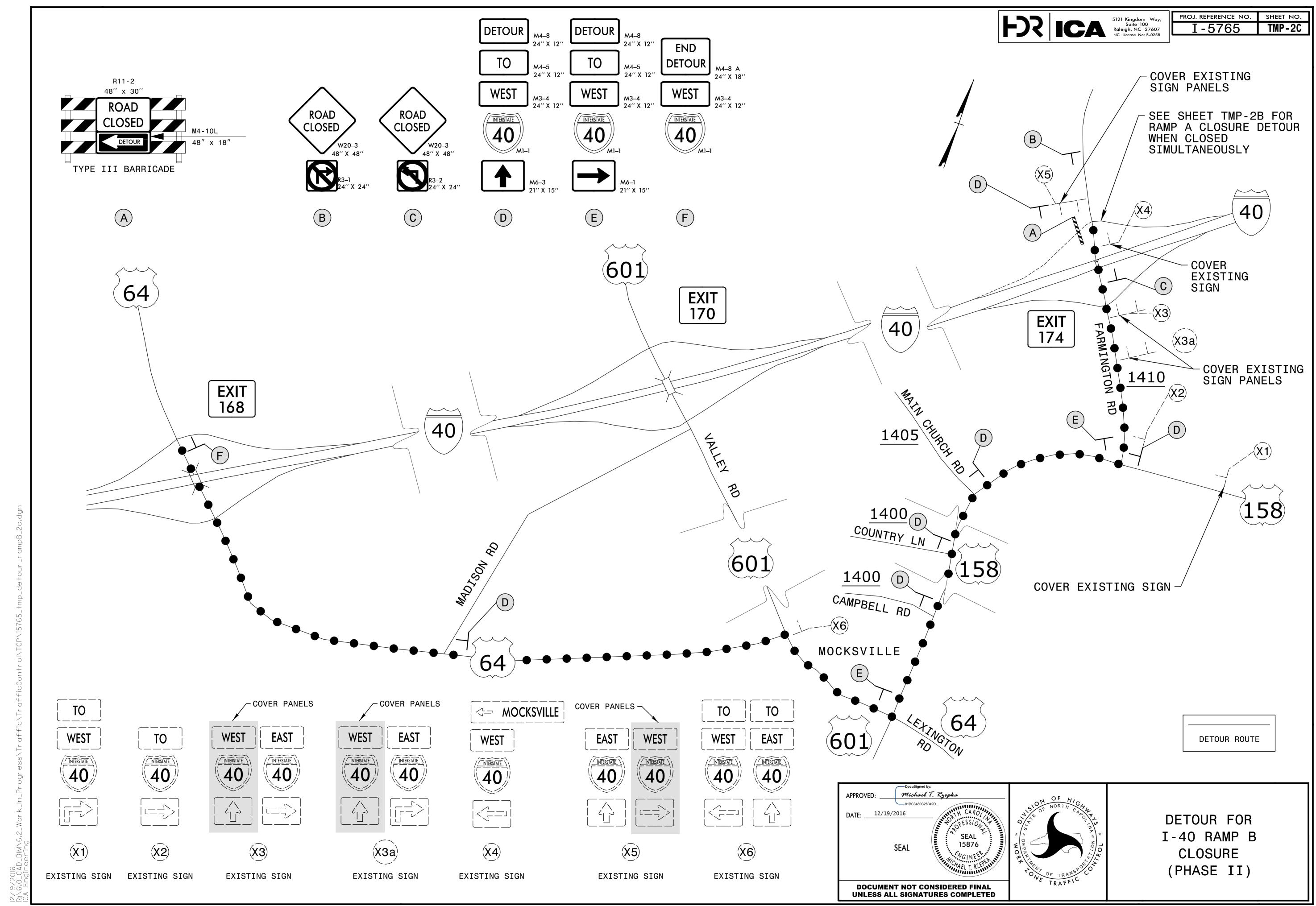
TRANSPORTATION OPERATIONS PLAN

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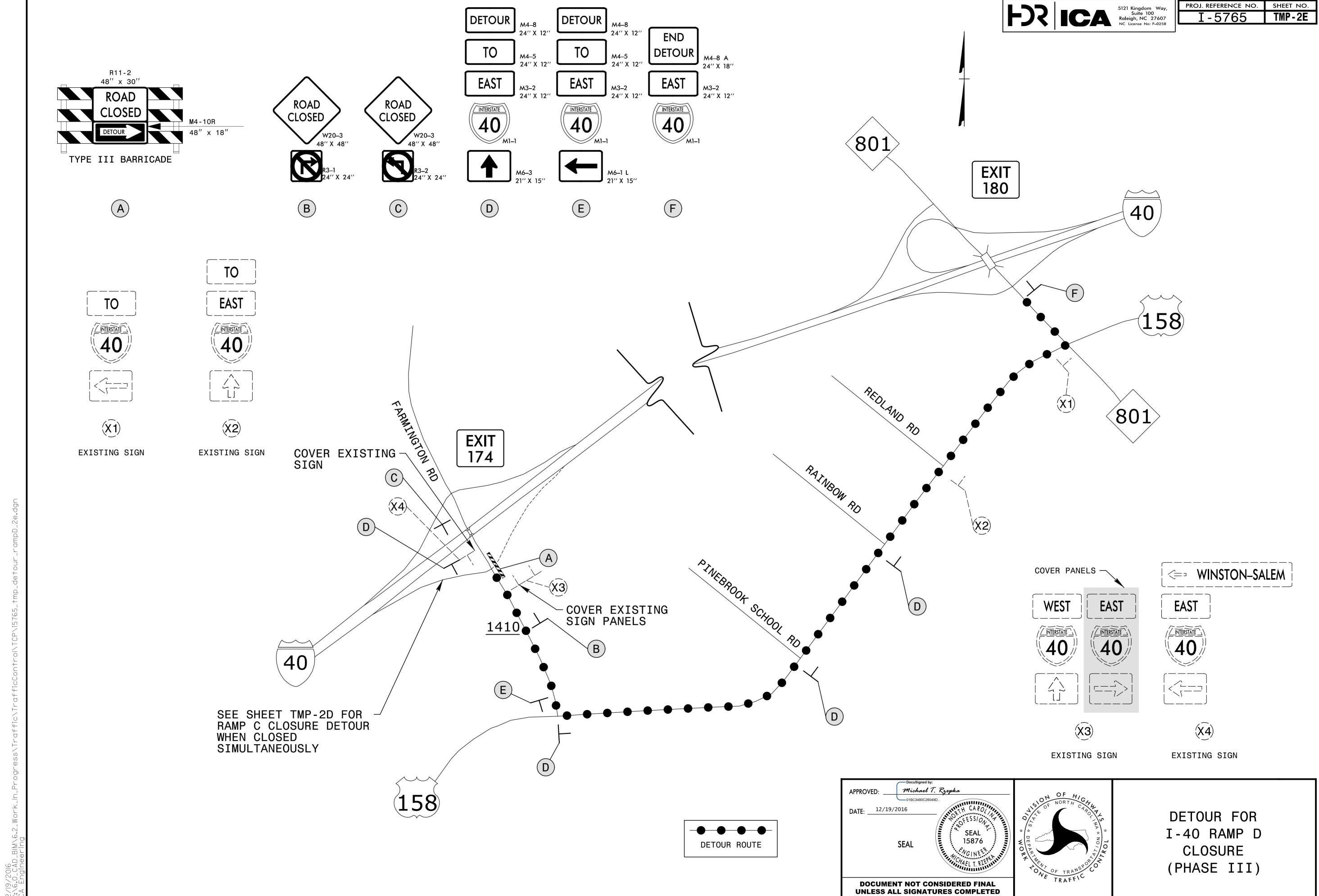
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SEGMENT 1
DETOUR FOR I-40
RAMP A CLOSURE
(PHASE II)



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

) ID BIMN6,2 Work In Progress/Traffic/TrafficControl/TCP/15765

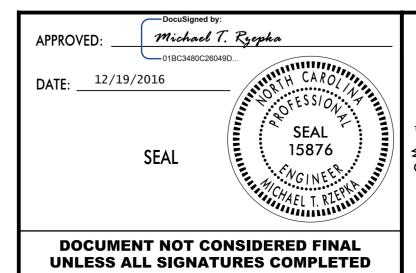




BACKG COLOR: Fluorescent Orange SIGN NUMBER: Farmington DESIGN BY: ICA CHECKED BY: DATE: Dec 19, 2016 COPY COLOR: Black TYPE: STATIONARY PROJECT ID: I-5765 DIV: 9 QUANTITY: SEE PLANS SYMBOL X Y WID HT SIGN WIDTH: 4'-0" **HEIGHT:** 2'-6" TOTAL AREA: 10.0 Sq.Ft. 4'-0" BORDER TYPE: INSET RECESS: 0.5" WIDTH: 0.75" **RADII:** 1.5" Farmington MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS: LENGTH: Road **1**6″C USE NOTES: 1,2 Legend and border shall be direct applied black non-reflective sheeting. 2.Background shall be NC GRADE B fluoresent orange retroreflective sheeting. **BORDER** 35.2" 6.4" R=1.5" TH=0.75" IN=0.5" Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

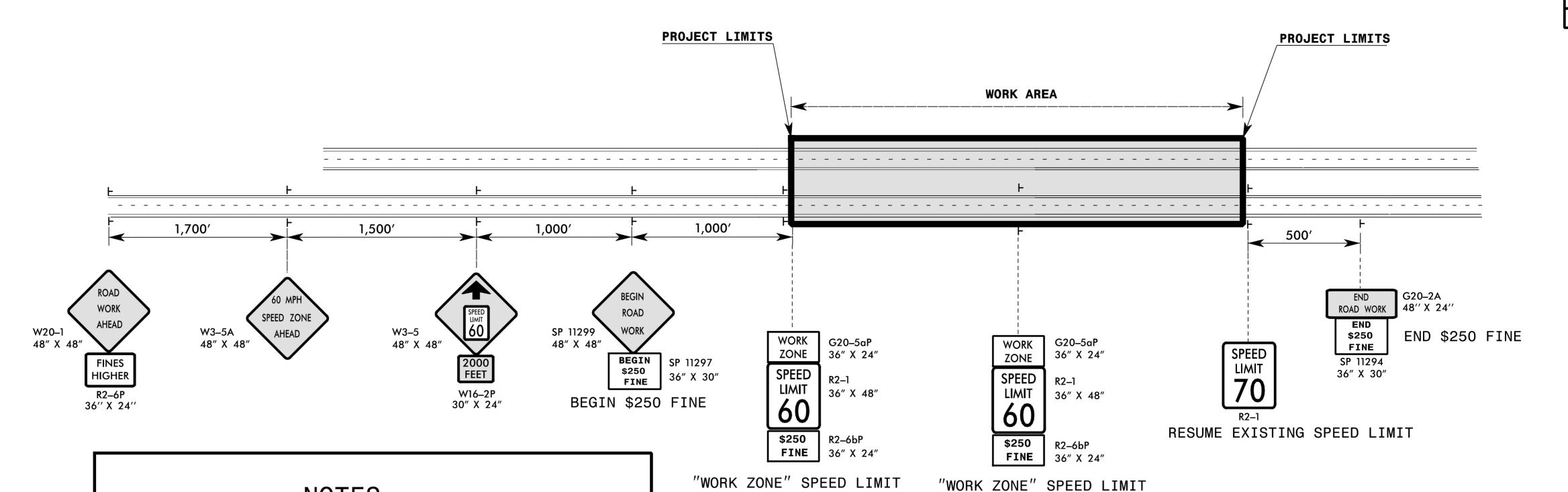
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"FARMINGTON ROAD" SIGN DESIGN

PROJ. REFERENCE NO. SHEET NO. I - 5765 TMP - 2G



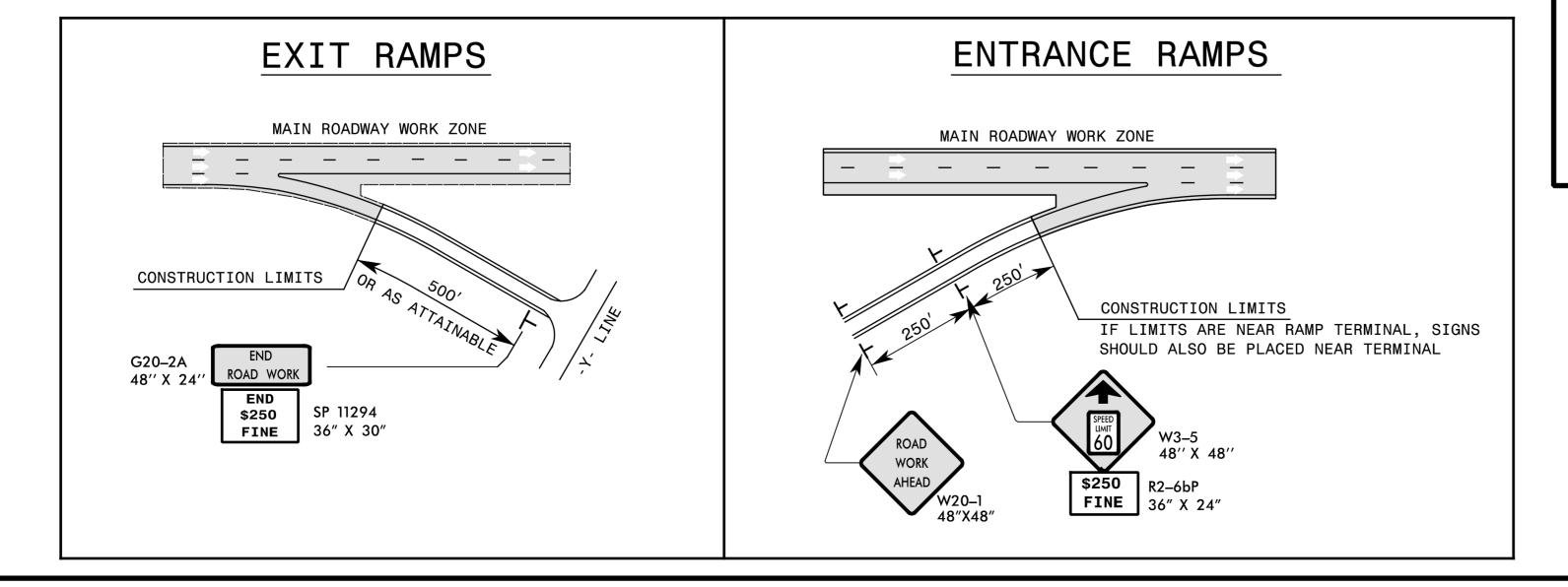
SEE NOTE #6

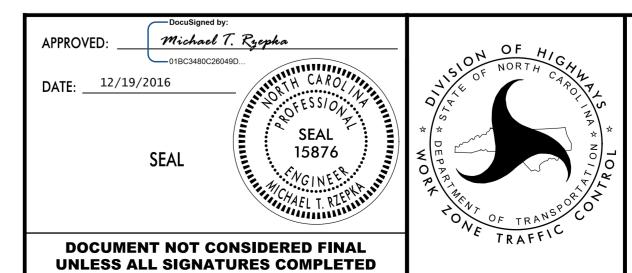
NOTES

- 1) THE WORK ZONE SPEED LIMIT WILL BE ESTABLISHED IN COLLABORATON BETWEEN THE REGIONAL TRAFFIC ENGINEER, THE DIVISION AND THE WORK ZONE TRAFFIC CONTROL SECTION. THIS DRAWING SHOWS THE TYPICAL APPLICATION OF REDUCING THE "WORK ZONE SPEED LIMIT" TO 60 MPH.
- 2) IF THE "WORK ZONE SPEED LIMIT" ONLY APPLIES TO A SPECIFIC PORTION AND NOT THE ENTIRE PROJECT, THE EXISTING SPEED LIMIT IS TO BE REESTABLISHED INSIDE THE PROJECT LIMITS. THE EXISTING SPEED LIMIT SIGNS AND THE "END \$250 FINE" SIGNS ARE TO BE INSTALLED AT THE LOCATION WHERE THE EXISTING SPEED LIMIT IS TO RESUME. (SEE GUIDELINE- D)
- 3) IF THE WORK ZONE SPEED LIMIT REDUCTION IS INSIDE THE WORK AREA, SIGNS W3-5A, W3-5, AND THE R2-1'S ALONG WITH THE SPEEDING FINE SIGNS ARE TO BE INSTALLED AT THE DISTANCE SHOWN ABOVE IN ADVANCE OF WHERE THE SPEED LIMIT IS REDUCED.
- 4) THE WORK ZONE SPEED LIMIT SIGNS ARE TO BE MOUNTED FROM 7' ABOVE EDGE OF PAVEMENT ELEVATION.
- 5) WHEN TEMPORARY LANE CLOSURES ARE INSTALLED AT THE BEGINNING OF THE PROJECT LIMITS, THE PORTABLE LANE CLOSURE SIGNS ARE TO BE ADJUSTED TO AVOID SIGN OVERLAP/CLUTTER
- 6) THE NEED AND LOCATION OF ADDITIONAL POSTED "WORK ZONE SPEED LIMIT" SIGNS WITHIN THE WORK AREA IS TO BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER.

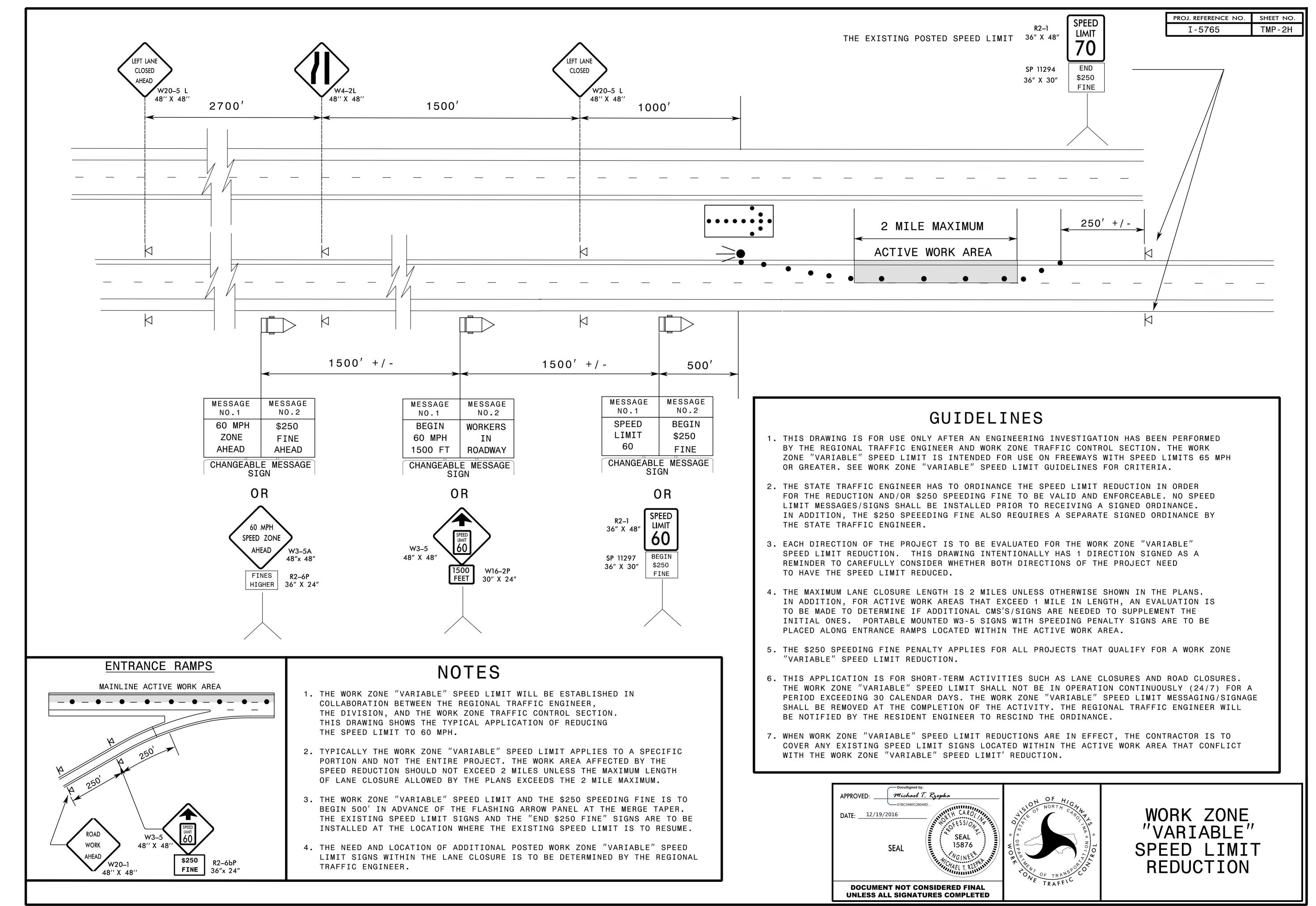
GUIDELINES

- A) THIS DRAWING IS FOR USE ONLY AFTER AN ENGINEERING INVESTIGATION AND CRITERIA REVIEW HAS BEEN PERFORMED BY THE REGIONAL TRAFFIC ENGINEER AND THE WORK ZONE TRAFFIC CONTROL SECTION. THE WORK ZONE SPEED LIMIT REDUCTION IS INTENDED FOR USE ON FREEWAYS WITH SPEED LIMITS 65 MPH OR GREATER. SEE WORK ZONE SPEED LIMIT GUIDELINES FOR CRITERIA.
- B) THE STATE TRAFFIC ENGINEER HAS TO ORDINANCE THE SPEED LIMIT REDUCTION IN ORDER FOR THE REDUCTION TO BE VALID AND ENFORCEABLE. NO SPEED LIMIT SIGNS SHALL BE INSTALLED PRIOR TO RECEIVING A SIGNED ORDINANCE. IN ADDITION, THE \$250 SPEEDING FINE ALSO REQUIRES A SEPARATE SIGNED ORDINANCE BY THE STATE TRAFFIC ENGINEER.
- C) EACH DIRECTION OF THE PROJECT IS TO BE EVALUATED FOR THE "WORK ZONE" SPEED LIMIT REDUCTION. THIS DRAWING INTENTIONALLY HAS 1 DIRECTION SIGNED AS A REMINDER TO CAREFULLY CONSIDER WHETHER BOTH DIRECTIONS OF THE PROJECT NEED TO HAVE THE SPEED LIMIT REDUCED.
- D) FOR PROJECTS THAT EXCEED 2 MILES IN LENGTH, AN EVALUATION IS TO BE MADE TO DETERMINE IF THE "WORK ZONE" SPEED LIMIT REDUCTION APPLIES TO THE ENTIRE PROJECT LENGTH OR IF ONLY A PORTION OF THE PROJECT LENGTH. THE "WORK ZONE" SPEED LIMIT REDUCTION MAY TERMINATE BEFORE THE END OF THE PROJECT LIMITS. THE DRAWING IS TO BE MODIFIED AS NEEDED TO REFLECT THESE CONDITIONS.
- E) THE \$250 SPEEDING FINE APPLIES FOR ALL PROJECTS THAT QUALIFY FOR A "WORK ZONE" SPEED LIMIT REDUCTION.
- F) ALL "WORK ZONE" SPEED LIMIT REDUCTION SIGNAGE SHALL BE REMOVED WHEN THE CONDITION/S THAT WARRANTED THE REDUCTION AND FINE IS REMOVED. THE REGIONAL TRAFFIC ENGINEER WILL BE NOTIFIED BY THE RESIDENT ENGINEER AT THIS TIME TO RESCIND THE ORDINANCES AND RETURN THE EXISTING POSTED SPEED LIMIT. THIS SHOULD TAKE PLACE BEFORE THE PROJECT IS 100% COMPLETE AND ACCEPTED FOR MAINTENANCE.





"WORK ZONE"
SPEED LIMIT REDUCTION



NOTES: - PROJECT IS DIVIDED INTO THREE SEGMENTS. WORK MAY BE PERFORMED SIMULTANEOUSLY IN MULTIPLE SEGMENTS. (SEE SHEET TMP-4 OVERVIEW)
- 'RSD' REFERS TO NCDOT ROADWAY STANDARD DRAWINGS

SEGMENT 1 WORK OCCUPIES PHASE I THROUGH PHASE IV (SEE SHEET TMP-5 OVERVIEW AND

- UNLESS OTHERWISE NOTED, ALL TEMPORARY PAVEMENT MARKINGS WILL BE PAINT.

PHASE I (WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION) (SEE LOCAL NOTE 2)

COMPLETE THE WORK REQUIRED IN PHASE I, STEP 1 THROUGH PHASE IV, STEP 3 BY AUGUST 15, 2017.

STEP 1

LOCAL NOTE 1)

INSTALL ADVANCED WORK ZONE WARNING SIGNS ON I-40 AND ALL RAMPS AT FARMINGTON ROAD INTERCHANGE ACCORDING TO RSD 1101.01 (SHEET 1 OF 3). PLACE ADDITIONAL CHANGEABLE MESSAGE SIGNS (CMS) ON I-40 IN ADVANCE OF THE WORK ZONE SIGNS, AS DIRECTED BY THE ENGINEER (SEE LOCAL NOTE 3).

NOTE: PHASE I, STEP 2 AND PHASE I, STEP 3 MAY BE PERFORMED IN ANY ORDER. EXTENDED WEEKDAY LANE CLOSURES MAY BEGIN MONDAY 12:00AM (MIDNIGHT) AND TRAFFIC MUST BE RETURNED TO FOUR-LANE/TWO-WAY PATTERN BY FRIDAY 12:00PM (NOON) (SEE SHEET TMP-2H FOR "VARIABLE" SPEED LIMIT REDUCTION SIGN ARRANGEMENT).

NOTE: RETURN I-40 EASTBOUND TRAFFIC TO TWO-LANE PATTERN BY 12:00 PM (NOON) EACH FRIDAY. REPEAT UNTIL PHASE I, STEP 2 IS COMPLETE (SEE SHEET TMP-6, DETAIL 3).

STEP 2

USING RSD 1101.02 (SHEET 4 OF 15), PLACE I-40 EASTBOUND TRAFFIC IN THE EXISTING MEDIAN LANE AND CLOSE OUTSIDE LANE.

BEHIND LANE CLOSURE, RECONSTRUCT I-40 EASTBOUND OUTSIDE SHOULDER FROM -L2- STA 153+40± TO STA 251+40± (SEE SHEET TMP-6, DETAIL 1). SEE SHEET TMP-7, DETAIL 9 FOR ADDITIONAL WIDTH FULL DEPTH PAVED SHOULDER ALONG RAMP D (SEE LOCAL NOTE 4).

BACKFILL OUTSIDE SHOULDER BY THE END OF EACH DAILY WORK PERIOD (SEE GENERAL NOTES 'K' & 'L').

NOTE: RETURN I-40 TRAFFIC TO FOUR-LANE/TWO-WAY PATTERN BY 12:00 PM (NOON) EACH FRIDAY. REPEAT UNTIL PHASE I, STEP 3 IS COMPLETE.

STEP 3

USING RSD 1101.02 (SHEET 4 OF 15), PLACE I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE EXISTING OUTSIDE LANES AND CLOSE MEDIAN LANES.

BEHIND LANE CLOSURES, CONSTRUCT MEDIAN CROSSOVERS –XOVER-C-, -XOVER-D-, -XOVER-E- & -XOVER-F- (SEE SHEET TMP-6, DETAIL 2 AND ROADWAY PLANS FOR LOCATIONS) (SEE LOCAL NOTE 5).

STEP 4

INSTALL AND COVER DETOUR SIGNS FOR PHASE II TRAFFIC PATTERN (SEE SHEETS TMP-2B, 2C & 2F).

NOTE: PERFORM PHASE II, STEP 1 THROUGH PHASE IV, STEP 2 USING SPEED LIMIT REDUCTION SIGN ARRANGEMENT ON SHEET TMP-2G.

PHASE II (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), COMPLETE THE FOLLOWING IN A CONTINUOUS MANNER TO PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY (DIVIDED BY PCB) PATTERN IN THE EASTBOUND LANES (SEE SHEETS TMP-6, DETAIL 4 & TMP-7, DETAIL 9 AND LOCAL NOTES 6 & 7):

- REMOVE CONFLICTING EDGELINE AND PLACE TEMPORARY EDGELINES AND SHIFT
- EASTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON OUTSIDE SHOULDER.
 INSTALL PORTABLE CONCRETE BARRIER (PCB). RELAP EXISTING GUARDRAIL IN THE MEDIAN FOR WESTBOUND TRAFFIC.
- PLACE TEMPORARY EDGELINES ON CROSSOVERS -XOVER-C- AND -XOVER-F-
- USING RSD 1101.03 (SHEET 4 OF 9), SHIFT WESTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON CROSSOVERS AND IN EXISTING EASTBOUND MEDIAN LANE. CLOSE WESTBOUND LANES.
- CLOSE WESTBOUND EXIT AND ENTRANCE RAMPS AT FARMINGTON ROAD INTERCHANGE. UNCOVER DETOUR SIGNS, INSTALLED IN PHASE I, STEP 4, AND DETOUR RAMP TRAFFIC USING OFFSITE DETOURS (SEE SHEETS TMP-2B & 2C).

STEP 2

AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING FOR I-40 WESTBOUND LANES FROM –L2-STA 153+40± TO STA 251+40± (SEE ROADWAY AND STRUCTURE PLANS) (SEE SHEET TMP-6, DETAIL 4 AND LOCAL NOTES 4, 6 & 7):

- RECONSTRUCT OUTSIDE SHOULDER (STA 153+40± TO STA 251+40±)
- CONSTRUCT 10' PAVED MEDIAN SHOULDER. SEE SHEET TMP-7, DETAIL 8 FOR ADDITIONAL WIDTH FULL DEPTH PAVED SHOULDER ALONG RAMP B.
- REPLACE CONCRETE SLABS
- REHABILITATE BRIDGES #62 AND #75
- RESURFACE PAVEMENT UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE
- REPLACE/INSTALL GUARDRAIL. TEMPORARILY LAP MEDIAN GUARDRAIL FOR EASTBOUND TRAFFIC IN PHASE III.
- PLACE TEMPORARY PAVEMENT MARKINGS FOR PHASE III TWO-LANE/TWO-WAY DIVIDED TRAFFIC PATTERN

STEP

INSTALL AND COVER DETOUR SIGNS FOR PHASE III TRAFFIC PATTERN (SEE SHEETS TMP-2D, 2E & 2F).

PHASE III (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

USING RSD 1101.02 (SHEET 4 OF 15), MAINTAIN I-40 TRAFFIC IN SINGLE LANE PATTERNS IN EACH DIRECTION AND COMPLETE THE FOLLOWING IN A CONTINUOUS MANNER (SEE SHEETS TMP-6, DETAIL 5 & TMP-7, DETAIL 8):

- SHIFT I-40 WESTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON WESTBOUND OUTSIDE SHOULDER AND TIE TEMPORARY MARKINGS TO EXISTING. COVER/REMOVE DETOUR SIGNS, INSTALLED IN PHASE I, STEP 4, AND REOPEN WESTBOUND ENTRANCE AND EXIT RAMPS AT FARMINGTON ROAD INTERCHANGE.
- RESET PCB FROM EASTBOUND I-40 SIDE TO WESTBOUND I-40 SIDE.
- PLACE TEMPORARY EDGELINES ON CROSSOVERS –XOVER-D- AND –XOVER-E-
- USING RSD 1101.03 (SHEET 4 OF 9), SHIFT EASTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON CROSSOVERS AND IN EXISTING WESTBOUND MEDIAN LANE. CLOSE EASTBOUND LANES.
- CLOSE EASTBOUND EXIT AND ENTRANCE RAMPS AT FARMINGTON ROAD INTERCHANGE. UNCOVER DETOUR SIGNS, INSTALLED IN PHASE II, STEP 3, AND DETOUR RAMP TRAFFIC USING OFFSITE DETOURS (SEE SHEETS TMP-2D & 2E).

STEP 2

AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING FOR I-40 EASTBOUND LANES FROM –L2-STA 153+40± TO STA 251+40± (SEE ROADWAY AND STRUCTURE PLANS) (SEE SHEET TMP-6, DETAIL 3 AND SEE LOCAL NOTES 4, 6 & 7):

- CONSTRUCT 10' PAVED MEDIAN SHOULDER
- REPLACE CONCRETE SLABS
- REHABILITATE BRIDGES #61 AND #74
- REPLACE/INSTALL GUARDRAIL
- RESURFACE PAVEMENT UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE.
- PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS FOR PHASE IV TRAFFIC PATTERN.

<u>PHASE IV</u> (WORK ZONE SPEED LIMIT REDUCTION)

NOTE: PHASE IV, STEP 1 AND STEP 2 WORK MAY BE COMBINED WHERE POSSIBLE.

STEP 1

USING RSD 1101.02 (SHEET 4 OF 15), COMPLETE THE FOLLOWING FOR I-40 EASTBOUND TRAFFIC (SEE SHEET TMP-6, DETAIL 6):

- SHIFT I-40 EASTBOUND TRAFFIC TO EASTBOUND LANES AND TIE TEMPORARY MARKINGS TO EXISTING LANE MARKINGS
- OPEN I-40 EASTBOUND LANES TO EXISTING PATTERN
- COVER/REMOVE DETOUR SIGNS, INSTALLED IN PHASE II, STEP 3, AND REOPEN EASTBOUND ENTRANCE AND EXIT RAMPS AT FARMINGTON ROAD INTERCHANGE

STEP 2

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), COMPLETE THE FOLLOWING FOR I-40 WESTBOUND TRAFFIC (SEE SHEET TMP-6, DETAILS 6 THRU 9 AND LOCAL NOTE 6):

- RELAP MEDIAN GUARDRAIL AND REMOVE PCB
- REMOVE CONFLICTING PAVEMENT MARKINGS AND PLACE TEMPORARY MARKINGS AND MARKERS IN EXISTING PATTERN IN WESTBOUND LANES
- SHIFT WESTBOUND TRAFFIC TO EXISTING PATTERN.

NOTE: PERFORM PHASE IV, STEP 3 WORK DURING EXTENDED WEEKDAY LANE CLOSURES BEGINNING MONDAY 12:00AM (MIDNIGHT). TRAFFIC MUST BE RETURNED TO FOUR-LANE/TWO-WAY PATTERN BY FRIDAY 12:00PM (NOON) (SEE SHEET TMP-6, DETAIL 9) (SEE SHEET TMP-2H FOR "VARIABLE" SPEED LIMIT REDUCTION SIGN ARRANGEMENT).

STEP 3

USING RSD 1101.02 (SHEET 4 OF 15), REMOVE CROSSOVERS –XOVER-E- & -XOVER-F-. INSTALL/RESET MEDIAN CABLE GUIDERAIL AT CROSSOVER LOCATIONS.

DETOUR

APPROVED:

Michael T. Ruepha

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DATE:

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UNLESS ALL SIGNATURES COMPLETED

PHASING

REDUCTION SIGN ARRANGEMENT ON SHEET TMP-2G.

PROJ. REFERENCE NO. SHEET NO. -5765 TMP-3A

PHASE VIII (WORK ZONE SPEED LIMIT REDUCTION)

NOTE: PHASE VIII, STEP 1 AND STEP 2 WORK MAY BE COMBINED WHERE POSSIBLE.

STEP 1

USING RSD 1101.02 (SHEET 4 OF 15), COMPLETE THE FOLLOWING FOR I-40 WESTBOUND TRAFFIC IN A CONTINUOUS MANNER (SEE SHEET TMP-9, DETAIL 8):

- SHIFT I-40 WESTBOUND TRAFFIC TO WESTBOUND LANES AND TIE TEMPORARY MARKINGS TO EXISTING LANE MARKINGS
- OPEN I-40 WESTBOUND LANES TO EXISTING PATTERN

STEP 2

USING RSD 1101.02 (SHEET 4 OF 15), COMPLETE THE FOLLOWING FOR I-40 EASTBOUND TRAFFIC IN A CONTINUOUS MANNER (SEE SHEET TMP-9, DETAILS 8 THRU 11):

- REMOVE PCB AND REPLACE WITH DRUMS
- REMOVE CONFLICTING PAVEMENT MARKINGS AND PLACE TEMPORARY MARKINGS AND MARKERS IN EXISTING PATTERN IN EASTBOUND LANES
- REMOVE DRUMS AND SHIFT EASTBOUND TRAFFIC TO EXISTING PATTERN.

NOTE: PERFORM PHASE VIII, STEP 3 WORK DURING EXTENDED WEEKDAY LANE CLOSURES BEGINNING MONDAY 12:00AM (MIDNIGHT). TRAFFIC MUST BE RETURNED TO FOUR-LANE/TWO-WAY PATTERN BY FRIDAY 12:00PM (NOON) (SEE SHEET TMP-9, DETAIL 11) (SEE SHEET TMP-2H FOR "VARIABLE" SPEED LIMIT REDUCTION SIGN ARRANGEMENT).

STEP 3

USING RSD 1101.02 (SHEET 4 OF 15), REMOVE CROSSOVERS –XOVER-A-, -XOVER-B-, -XOVER-C-& -XOVER-D-. INSTALL/RESET MEDIAN CABLE GUIDERAIL AT CROSSOVER LOCATIONS.

SEGMENT 2 WORK OCCUPIES PHASE V THROUGH PHASE VIII (SEE SHEET TMP-8 OVERVIEW AND NOTE: PERFORM PHASE VI, STEP 1 THROUGH PHASE VIII, STEP 2 USING SPEED LIMIT LOCAL NOTE 1)

> PHASE V (WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION) (SEE LOCAL NOTE 2)

STEP 1

INSTALL ADVANCED WORK ZONE WARNING SIGNS ON I-40 ACCORDING TO RSD 1101.01 (SHEET 1 OF 3). PLACE ADDITIONAL CHANGEABLE MESSAGE SIGNS (CMS) ON I-40 IN ADVANCE OF THE WORK ZONE SIGNS, AS DIRECTED BY THE ENGINEER (SEE LOCAL NOTE 3).

NOTE: PERFORM PHASE V, STEPS 2 THRU PHASE V, STEP 4 WORK DURING EXTENDED WEEKDAY LANE CLOSURES BEGINNING MONDAY 12:00AM (MIDNIGHT). TRAFFIC MUST BE RETURNED TO FOUR-LANE/TWO-WAY PATTERN BY FRIDAY 12:00PM (NOON)) (SEE SHEET TMP-2H FOR "VARIABLE" SPEED LIMIT REDUCTION SIGN ARRANGEMENT).

NOTE: RETURN I-40 WESTBOUND TRAFFIC TO TWO-LANE PATTERN BY 12:00 PM (NOON) EACH FRIDAY. REPEAT UNTIL PHASE V, STEP 2 IS COMPLETE (SEE SHEET TMP-9, DETAIL 2).

STEP 2

USING RSD 1101.02 (SHEET 4 OF 15), PLACE I-40 WESTBOUND TRAFFIC IN THE EXISTING OUTSIDE LANE AND CLOSE MEDIAN LANE.

BEHIND LANE CLOSURE, CONSTRUCT I-40 WESTBOUND 10' WIDE PAVED MEDIAN SHOULDER FROM -L2- STA 19+10± TO -L2- STA 153+40± (SEE SHEET TMP-9, DETAIL 1).

BACKFILL MEDIAN SHOULDER BY THE END OF EACH DAILY WORK PERIOD (SEE GENERAL NOTES 'K' & 'L').

STEP 3

USING RSD 1101.02 (SHEET 4 OF 15), PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE WESTBOUND OUTSIDE LANE IN THE FOLLOWING SEQUENCE (REFER TO SHEETS TMP-9, DETAIL 3 & TMP-10, DETAIL 10):

- A. REMOVE CONFLICTING YELLOW EDGELINE AND PLACE 6" REMOVABLE TAPE PAVEMENT MARKINGS (SEE LOCAL NOTE 7).
- B. SHIFT TRAFFIC INTO A ONE-LANE, ONE-WAY PATTERN.
- C. INSTALL PCB.
- D. REMOVE AND REPLACE CONCRETE PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS IN SEGMENT 2.
- E. REMOVE PCB AND REMOVABLE TAPE, PLACE 6" PAINT YELLOW EDGELINE AND RETURN WESTBOUND TRAFFIC TO THE EXISTING TWO-LANE PATTERN BY 12:00 PM (NOON) EACH FRIDAY.
- F. REPEAT PHASE V, STEPS 3A THROUGH 3E UNTIL ALL OF THE CONCRETE PAVEMENT REMOVAL AND REPLACEMENT WORK IS COMPLETED FOR SEGMENT 2 IN WESTBOUND OUTSIDE LANE (SEE SHEET TMP-9, DETAIL 4).

STEP 4

USING RSD 1101.02 (SHEET 4 OF 15), CONSTRUCT MEDIAN CROSSOVERS –XOVER-A- AND -XOVER-B- (SEE SHEET TMP-9, DETAIL 5 AND ROADWAY PLANS) (SEE LOCAL NOTE 5).

PHASE VI (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

USING RSD 1101.02 (SHEET 4 OF 15), COMPLETE THE FOLLOWING IN A CONTINUOUS MANNER TO PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY (DIVIDED BY PCB) PATTERN IN THE WESTBOUND LANES (SEE SHEET TMP-9, DETAIL 6):

- CLOSE WESTBOUND MEDIAN LANE.
- INSTALL PCB ALONG WESTBOUND IN THE MEDIAN LANE.
- REMOVE CONFLICTING YELLOW EDGELINE IN WESTBOUND MEDIAN LANE AND PLACE TEMPORARY PAVEMENT MARKINGS IN MEDIAN LANE/MEDIAN SHOULDER AND CROSSOVERS –XOVER-B- AND –XOVER-C-.
- USING RSD 1101.03 (SHEET 4 OF 9), SHIFT EASTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON CROSSOVERS AND IN EXISTING WESTBOUND MEDIAN LANE/MEDIAN SHOULDER. CLOSE EASTBOUND LANES.

STEP 2

AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING FOR I-40 EASTBOUND LANES FROM -L2-STA 19+10± TO STA 153+40± (SEE ROADWAY PLANS) (SEE SHEET TMP-9, DETAIL 6 AND LOCAL NOTE 4):

- RECONSTRUCT OUTSIDE SHOULDER
- CONSTRUCT 10' PAVED MEDIAN SHOULDER
- REPLACE CONCRETE SLABS
- RESURFACE PAVEMENT UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE
- REPLACE/INSTALL GUARDRAIL.
- PLACE TEMPORARY PAVEMENT MARKINGS FOR PHASE VII TWO-LANE/TWO-WAY DIVIDED TRAFFIC PATTERN

PHASE VII (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

USING RSD 1101.02 (SHEET 4 OF 15), MAINTAIN I-40 TRAFFIC IN SINGLE LANE PATTERNS IN EACH DIRECTION AND COMPLETE THE FOLLOWING IN A CONTINUOUS MANNER (SEE SHEET TMP-9, DETAIL 7):

- SHIFT I-40 EASTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON EASTBOUND OUTSIDE SHOULDER AND TIE TEMPORARY MARKINGS TO EXISTING.
- RESET PCB FROM WESTBOUND I-40 SIDE TO EASTBOUND I-40 SIDE
- PLACE TEMPORARY EDGELINES ON CROSSOVERS -XOVER-A- AND -XOVER-D-
- USING RSD 1101.03 (SHEET 4 OF 9), SHIFT WESTBOUND TRAFFIC TO TEMPORARY ONE-LANE PATTERN ON CROSSOVERS AND IN EXISTING EASTBOUND MEDIAN LANE. CLOSE WESTBOUND LANES.

STEP 2

AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING FOR I-40 WESTBOUND LANES FROM -L2-STA 19+10± TO STA 153+40± (SEE ROADWAY AND STRUCTURE PLANS) (SEE SHEET TMP-9, DETAIL 7 AND LOCAL NOTE 4):

- RECONSTRUCT OUTSIDE SHOULDER
- REPLACE CONCRETE SLABS (MEDIAN LANE)
- RESURFACE PAVEMENT UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE
- COURSE
- REPLACE/INSTALL GUARDRAIL
- PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS FOR PHASE VIII TRAFFIC PATTERN.

Michael T. Rzepka APPROVED: DATE: ___12/19/2016 **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

PHASING

PROJ. REFERENCE NO. SHEET NO. -5765 TMP-3B

SEGMENT 3 WORK OCCUPIES PHASE IX THROUGH PHASE XI (SEE SHEET TMP-11 OVERVIEW AND STEP 2 LOCAL NOTE 1)

NOTE: UPON BEGINNING PHASE IX, STEP 2, TRAFFIC WILL REMAIN IN A SINGLE LANE PATTERN IN EACH DIRECTION UNTIL CONSTRUCTION IS COMPLETE ON ITS RESPECTIVE SIDE IN PHASE XI. MAINTAIN ACCESSES TO/FROM RAMPS AT THE US 601 INTERCHANGE AT ALL TIMES. USE SPEED LIMIT REDUCTION SIGN ARRANGEMENT ON SHEET TMP-2G.

PHASE IX (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

INSTALL ADVANCED WORK ZONE WARNING SIGNS ON I-40 AND ALL RAMPS AT US 601 INTERCHANGE ACCORDING TO RSD 1101.01 (SHEET 1 OF 3). PLACE ADDITIONAL CHANGEABLE MESSAGE SIGNS (CMS) ON I-40 IN ADVANCE OF THE WORK ZONE SIGNS, AS DIRECTED BY THE ENGINEER (SEE LOCAL NOTE 3).

STEP 2

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), PLACE I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE EXISTING OUTSIDE LANES AND CLOSE MEDIAN LANES.

BEHIND LANE CLOSURES, WIDEN I-40 EASTBOUND AND WESTBOUND MEDIAN SHOULDERS FROM -L1- STA 859+50± TO -L2- STA 19+10± (SEE SHEET TMP-12, DETAIL 1).

BACKFILL MEDIAN SHOULDERS BY THE END OF EACH DAILY WORK PERIOD (SEE GENERAL NOTES 'K' & 'L').

WORK IN A CONTINUOUS MANNER UNTIL ALL OF THE MEDIAN SHOULDER WORK IN A DIRECTION IS COMPLETED FOR SEGMENT 3 IN PHASE IX, STEP 2

STEP 3

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), REMOVE EXISTING YELLOW EDGELINES, PLACE TEMPORARY YELLOW AND WHITE EDGELINES AND SHIFT I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE MEDIAN LANES/MEDIAN SHOULDERS AND CLOSE OUTSIDE LANES (REFER TO SHEETS TMP-12, DETAIL 2; TMP-13, DETAIL 8; TMP-14, DETAILS 10 & 12).

BEHIND LANE CLOSURES, RECONSTRUCT I-40 EASTBOUND AND WESTBOUND OUTSIDE SHOULDERS FROM -L1- STA 859+50± TO -L2- STA 19+10± (SEE SHEETS TMP-12, DETAIL 2; TMP-13, DETAIL 8; TMP-14, DETAIL 10). REFER TO SHEET TMP-15, DETAILS 14 & 15 FOR ADDITIONAL WIDTH FULL DEPTH PAVED SHOULDERS (SEE LOCAL NOTE 4).

BACKFILL OUTSIDE SHOULDERS BY THE END OF EACH DAILY WORK PERIOD (SEE GENERAL NOTES 'K' & 'L').

WORK IN A CONTINUOUS MANNER UNTIL ALL OF THE OUTSIDE SHOULDER WORK IN A DIRECTION IS COMPLETED FOR SEGMENT 3 IN PHASE IX, STEP 3.

NOTE: WORK IN PHASE X, STEP 1 WORK MAY BE PERFORMED CONCURRENT WITH THE WORK IN PHASE IX, STEP 3.

PHASE X (WORK ZONE SPEED LIMIT REDUCTION)

STEP 1

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE EASTBOUND AND WESTBOUND OUTSIDE LANES IN THE FOLLOWING SEQUENCE (REFER TO SHEETS TMP-12, DETAIL 2A; TMP-13, DETAIL 8; TMP-14, DETAIL 10):

- A. MAINTAIN TRAFFIC IN A ONE-LANE, ONE-WAY PATTERN IN THE MEDIAN LANES/MEDIAN SHOULDERS IN EACH DIRECTION.
- B. INSTALL PCB.
- C. REMOVE AND REPLACE CONCRETE PAVEMENT IN THE OUTSIDE LANES AS SHOWN IN THE CONSTRUCTION PLANS IN SEGMENT 3.
- D. REMOVE AND RESET PCB FOR NEXT WORK AREA, AS DIRECTED BY THE ENGINEER.
- E. REPEAT PHASE X, STEPS 1A THROUGH 1D UNTIL ALL OF THE CONCRETE PAVEMENT REMOVAL AND REPLACEMENT WORK IS COMPLETED FOR SEGMENT 3 IN EASTBOUND AND WESTBOUND OUTSIDE LANES.

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE EASTBOUND AND WESTBOUND MEDIAN LANES IN THE FOLLOWING SEQUENCE (REFER TO SHEETS TMP-12, DETAIL 3; TMP-13, DETAIL 9; TMP-14, DETAILS 11 & 13).

- A. MAINTAINING TRAFFIC IN THE TEMPORARY ONE-LANE PATTERN IN PHASE X, STEP 1, REMOVE CONFLICTING WHITE EDGELINES AND PLACE PAVEMENT MARKINGS.
- B. SHIFT TRAFFIC INTO A ONE-LANE, ONE-WAY PATTERN ON THE OUTSIDE LANE/OUTSIDE SHOULDER (REFER TO SHEET TMP-15, DETAILS 14 & 15 FOR ON-RAMP TIES)
- C. INSTALL PCB.
- D. REMOVE AND REPLACE CONCRETE PAVEMENT IN THE MEDIAN LANES AS SHOWN IN THE ROADWAY PLANS FOR SEGMENT 3.
- E. REMOVE AND RESET PCB FOR NEXT WORK AREA, AS DIRECTED BY THE ENGINEER.
- F. REPEAT PHASE X, STEPS 2C THROUGH 2E UNTIL ALL OF THE CONCRETE PAVEMENT REMOVAL AND REPLACEMENT WORK IS COMPLETED FOR SEGMENT 3 IN EASTBOUND AND WESTBOUND MEDIAN LANES.

PHASE XI (WORK ZONE SPEED LIMIT REDUCTION)

<u>STEP 1</u>

USING RSD 1101.02 (SHEET 4 OF 15), MAINTAIN I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE ONE-LANE PATTERNS FROM PHASE X, STEP 2.

BEHIND DRUMS AND USING RSD 1101.02 (SHEETS 9 & 10 OF 15), PAVE MEDIAN LANE AND SHOULDER UP THROUGH THE FIRST LAYER OF SURFACE COURSE, INCLUDING PROPOSED/TEMPORARY TIE-INS TO EXISTING PAVEMENT, AS SHOWN IN THE ROADWAY PLANS. CONSTRUCT TEMPORARY ASPHALT RAMP-DOWNS FROM THE PROPOSED SURFACE COURSE TO THE EXISTING PAVEMENT TO ALLOW ACCESS TO ENTRANCE AND EXIT RAMPS AT US 601 (REFER TO SHEET TMP-12, DETAIL 4).

FOR PAVING THE MEDIAN LANE AND SHOULDER TIE FROM -L1- STA 865+00± TO STA 868+00±, REPLACE DRUMS WITH PCB (REFER TO SHEET TMP-13, DETAIL 9).

PLACE TEMPORARY PAVEMENT MARKINGS ON MEDIAN LANE/SHOULDER FOR TEMPORARY PATTERN IN PHASE XI, STEP 2.

STEP 2

USING RSD 1101.02 (SHEETS 4 OF 15), SHIFT I-40 EASTBOUND AND WESTBOUND TRAFFIC TO ONE-LANE PATTERNS IN THE MEDIAN LANE/SHOULDER (SEE SHEET TMP-12, DETAIL 5).

BEHIND DRUMS AND USING RSD 1101.02 (SHEETS 9 & 10 OF 15), PAVE OUTSIDE LANE AND SHOULDER UP THROUGH THE FIRST LAYER OF SURFACE COURSE, INCLUDING PROPOSED/TEMPORARY TIE-INS TO EXISTING PAVEMENT, AS SHOWN IN THE ROADWAY PLANS. REPLACE/INSTALL GUARDRAIL ALONG OUTSIDE SHOULDER. MAINTAIN ACCESS TO RAMPS AT ALL TIMES (REFER TO SHEET TMP-12, DETAIL 5 AND LOCAL NOTE 4).

FOR PAVING THE OUTSIDE LANE AND SHOULDER TIE FROM -L1- STA 865+00± TO STA 868+00±, REPLACE DRUMS WITH PCB (REFER TO SHEET TMP-13, DETAIL 8).

PLACE TEMPORARY PAVEMENT MARKINGS IN PROPOSED OUTSIDE LANE FOR TEMPORARY PATTERN IN PHASE XI, STEP 3.

STEP 3

MAINTAINING TRAFFIC IN ON-LANE PATTERNS AND USING RSD 1101.02 (SHEETS 4 OF 15), REMOVE REMAINING PCB AND SHIFT I-40 EASTBOUND AND WESTBOUND TRAFFIC TO THE OUTSIDE LANE IN EACH DIRECTION (REFER TO SHEET TMP-12, DETAIL 6).

REMOVE CONFLICTING EDGELINE MARKINGS AND PLACE TEMPORARY YELLOW EDGELINE ALONG MEDIAN LANES.

STEP 4

OPEN EASTBOUND AND WESTBOUND TO EXISTING FOUR-LANE/2-WAY PATTERN (REFER TO SHEET TMP-12, DETAIL 7).

PHASE XII (WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION) (SEE LOCAL NOTE 2)

NOTE: PERFORM PHASE XII, STEP 1 WORK DURING EXTENDED WEEKDAY LANE CLOSURES BEGINNING MONDAY 12:00AM (MIDNIGHT). TRAFFIC MUST BE RETURNED TO FOUR-LANE/TWO-WAY PATTERN BY FRIDAY 12:00PM (NOON).

STEP 1

USING RSD 1101.02 (SHEETS 4, 9 & 10 OF 15), COMPLETE THE FOLLOWING IN SEGMENTS 1, 2 & 3:

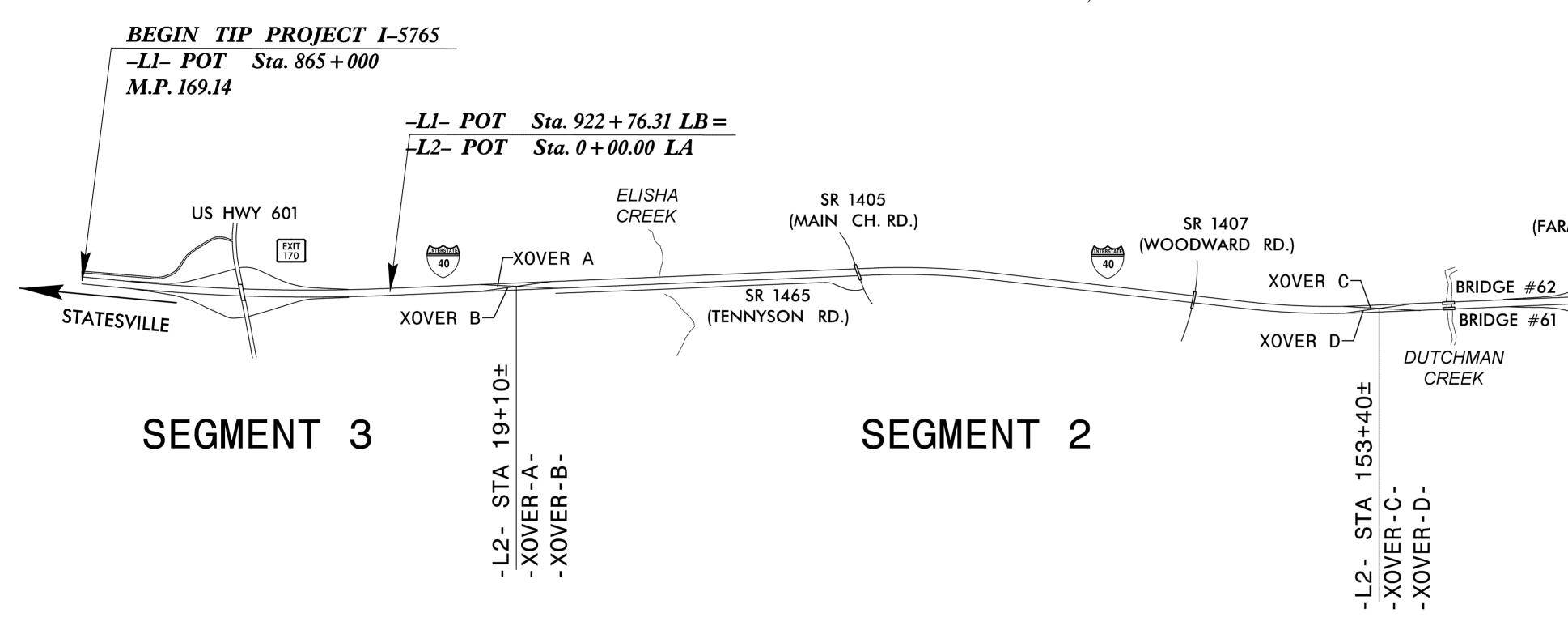
- PAVE FINAL LAYER OF SURFACE COURSE
- PLACE FINAL PAVEMENT MARKINGS AND FINAL MARKERS
- MILL RUMBLE STRIPS INTO MEDIAN AND OUTSIDE SHOULDERS

STEP 2

REMOVE ALL TRAFFIC CONTROL DEVICES WITHIN THE PROJECT LIMITS.

Michael T. Rzepka DATE: ___12/19/2016 **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

PHASING



END TIP PROJECT I-5765

-L2- POC Sta. 251 + 40

M.P. 175.00

INTERSTATE 40

CEDAR CREEK

1436

SEGMENT 1

BRIDGE #75

BRIDGE #74

SR 1410

(FARMINGTON RD.)

-L2- STA 265+80±-X0VER-E--X0VER-F-

WINSTON-SALEM

LXOVER E

XOVER F

DATE:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

OF HIGH CARD TRANSPOLO

TRAFFIC

PROJECT OVERVIEW

PHASE I ("VARIABLE" SPEED LIMIT REDUCTION)

COMPLETE THE WORK REQUIRED IN PHASE I, STEP 1 THROUGH PHASE IV, STEP 3 BY **AUGUST 15, 2017.**

STEP 1

INSTALL ADVANCED WORK ZONE WARNING SIGNS.

STEP 2

RECONSTRUCT I-40 EASTBOUND OUTSIDE SHOULDER FROM -L2- STA 153+40± TO STA 251+40±.

STEP 3

CONSTRUCT MEDIAN CROSSOVERS –XOVER-C-, -XOVER-D-, -XOVER-E- & -XOVER-F-.

STEP 4

INSTALL DETOUR SIGNS FOR PHASE II RAMP CLOSURES.

PHASE II (SPEED LIMIT REDUCTION)

STEP 1

PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY DIVIDED PATTERN IN THE EASTBOUND LANES. REMOVE CROSSOVERS –XOVER-E- & -XOVER-F-. CLOSE WESTBOUND EXIT AND ENTRANCE RAMPS AT FARMINGTON ROAD INTERCHANGE AND DETOUR RAMP TRAFFIC.

STEP 2

CONSTRUCT/RECONSTRUCT I-40 WESTBOUND LANES AND REHABILITATE BRIDGES #62 & #75 (REFER TO ROADWAY AND STRUCTURE PLANS).

STEP 3

INSTALL DETOUR SIGNS FOR PHASE III RAMP CLOSURES.

PHASE III (SPEED LIMIT REDUCTION)

STEP 1

PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY DIVIDED PATTERN IN THE WESTBOUND LANES. REOPEN WESTBOUND EXIT AND ENTRANCE RAMPS AT FARMINGTON ROAD INTERCHANGE. CLOSE EASTBOUND EXIT AND ENTRANCE RAMPS AT FARMINGTON ROAD INTERCHANGE AND DETOUR RAMP TRAFFIC.

STEP 2

CONSTRUCT/RECONSTRUCT I-40 EASTBOUND LANES AND REHABILITATE BRIDGES #61 & #74 (REFER TO ROADWAY AND STRUCTURE PLANS).

> PHASE IV (SPEED LIMIT REDUCTION)

STEP 1

OPEN I-40 EASTBOUND LANES TO EXISTING PATTERN. REOPEN EASTBOUND ENTRANCE AND EXIT RAMPS AT FARMINGTON ROAD INTERCHANGE.

STEP 2

OPEN WESTBOUND TRAFFIC TO EXISTING PATTERN.

STEP 3 ("VARIABLE" SPEED LIMIT REDUCTION)

PHASE XII (ALL SEGMENTS) ("VARIABLE" SPEED LIMIT REDUCTION)

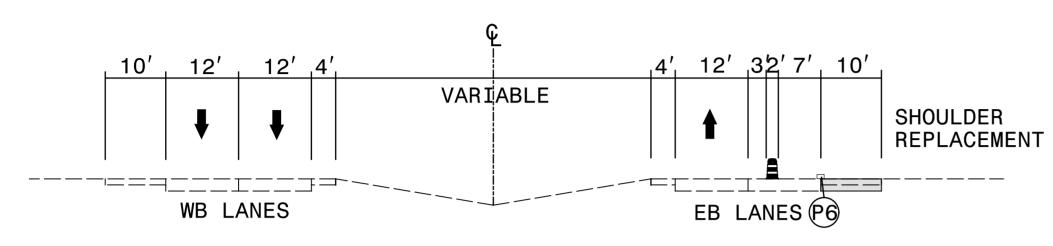
STEP 1

COMPLETE THE FOLLOWING IN SEGMENTS 1, 2 & 3:

- PAVE FINAL LAYER OF SURFACE COURSE
- PLACE FINAL PAVEMENT MARKINGS AND FINAL MARKERS
- MILL RUMBLE STRIPS INTO MEDIAN AND OUTSIDE **SHOULDERS**

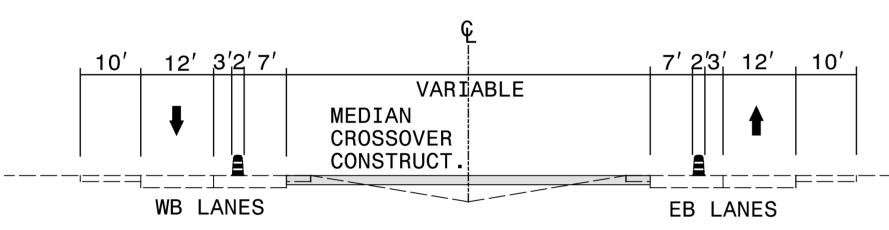
Michael T. Rzepka SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEGMENT 1 OVERVIEW



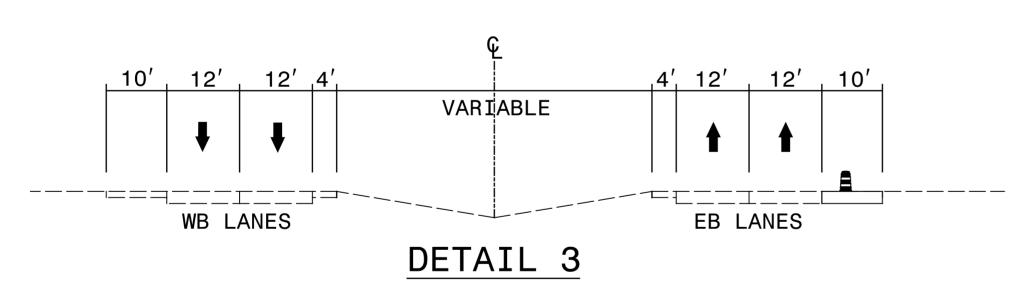
DETAIL 1

CONSTRUCT 10' FULL DEPTH SHOULDER PAVEMENT (EASTBOUND) (CONSTRUCT MONDAY 12:00 AM TO FRIDAY 12:00 PM)

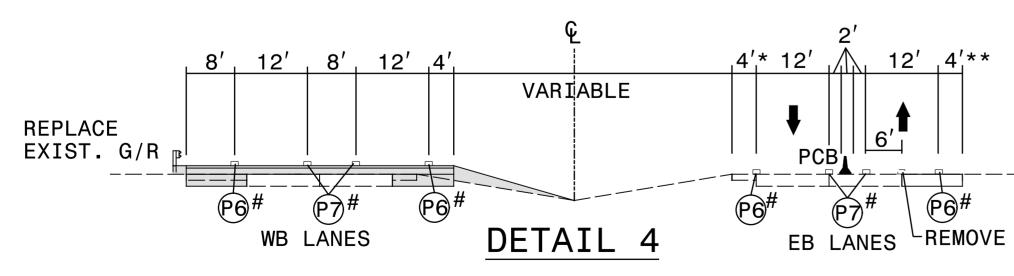


DETAIL 2

CONSTRUCT MEDIAN CROSSOVERS -XOVER-C-, -XOVER-D-, -XOVER-E- & -XOVER-F-(CONSTRUCT MONDAY 12:00 AM TO FRIDAY 12:00 PM)



WEEKEND PATTERN



USE REMOVABLE TAPE WITH TEMPORARY RAISED MARKERS INSTALLED HALF-ON/HALF-OFF TAPE ON BRIDGES

SHIFT WB TRAFFIC TO EB MEDIAN LANE VIA SINGLE LANE CROSSOVER FOR CONTINUOUS 2L/2W DIVIDED PATTERN (COMPLETE ALL CONSTRUCTION TASKS ON WB LANES EXCEPT FOR FINAL LAYER OF SURFACE COURSE, FINAL MARKINGS & RUMBLE STRIPS)

> * 6' TO BRIDGE RAIL ON BRIDGES #61 & #74

** 4' TO BRIDGE RAIL ON BRIDGES #61 & #74

10', 12', 12', 10', VARIABLE REPLACE π EXIST. G/R WB LANES (P7)# (PJ)# * 4' TO BRIDGE RAIL

> SHIFT ALL TRAFFIC TO WB LANES (EB TRAFFIC VIA SINGLE LANE CROSSOVER) FOR CONTINUOUS 2L/2W DIVIDED PATTERN (COMPLETE ALL CONSTRUCTION TASKS ON EB LANES EXCEPT FOR

DETAIL 5

ON BRIDGES #62 & #75

WITH 🖺)

FINAL LAYER OF SURFACE COURSE, FINAL MARKINGS & RUMBLE STRIPS)

EB LANES

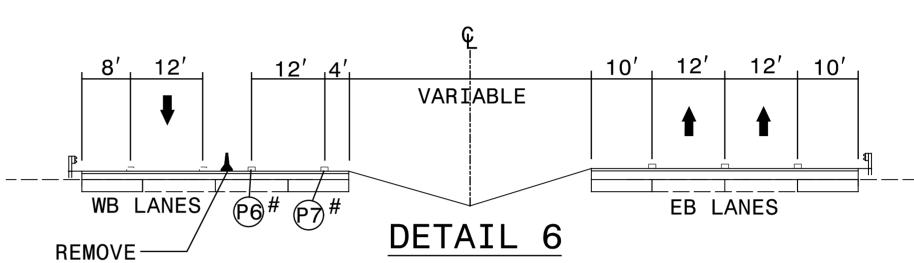
USE REMOVABLE TAPE WITH TEMPORARY RAISED MARKERS INSTALLED HALF-ON/HALF-OFF TAPE ON BRIDGES

PROJ. REFERENCE NO.

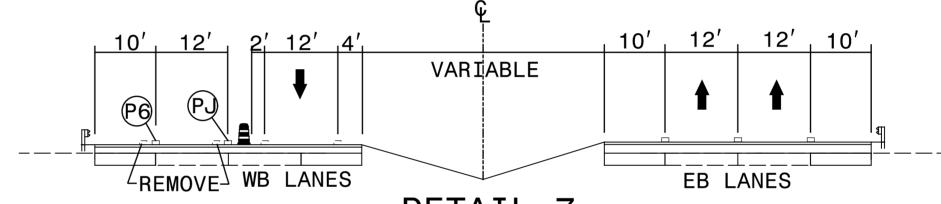
- 5765

SHEET NO.

TMP-6

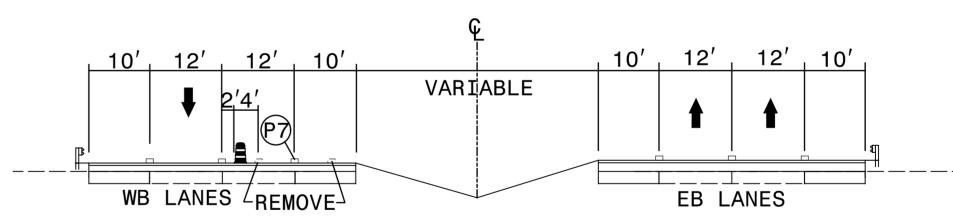


(REPLACE PCB SHIFT EB TRAFFIC TO EB LANES AND PLACE 1X MARKINGS OVER EXISTING MARKINGS FROM EB PATTERN IN DETAIL 5



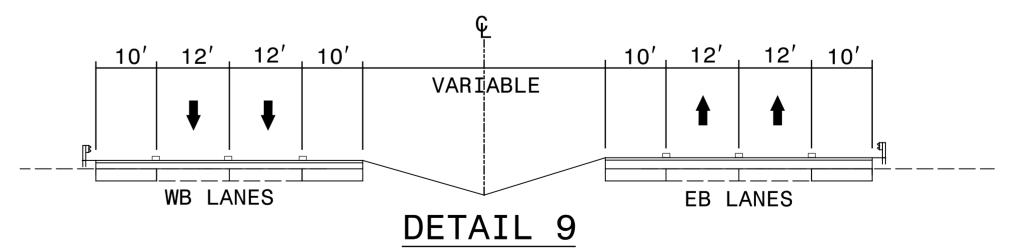
DETAIL 7

SHIFT WB TRAFFIC TO MEDIAN AND PLACE MARKINGS ON WB OUTSIDE LANE



DETAIL 8

SHIFT WB TRAFFIC TO OUTSIDE LANE AND PLACE MARKINGS ON WB MEDIAN LANE



EXISTING PATTERN

Michael T. Rzepka APPROVED: DATE: _____12/19/2016 SEAL DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED**

SEGMENT 1 **TYPICALS** DocuSign Envelope ID: 80BC743E-F9C2-4A22-9B9A-430B11F5C432

90 100 INTERSTATE DUTCHMAN 120 STATESVILLE 130 –-XOVER-B-SR 1465 TENNYSON RD. BRIDGE #62 -XOVER-A-BRIDGE #61 -XOVER-C-ELISHA -L2- STA 19+10± SEGMENT 2 BEGIN LIMIT WINSTON-SALEM CREEK -L2- STA 153+40± SEGMENT 2 END LIMIT

PHASE V ("VARIABLE" SPEED LIMIT REDUCTION)

PHASE VII (SPEED LIMIT REDUCTION)

PHASE XII (ALL SEGMENTS) ("VARIABLE" SPEED LIMIT REDUCTION)

<u>STEP 1</u>

INSTALL ADVANCED WORK ZONE WARNING SIGNS.

STEP 1

STRUCTURE PLANS.

PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY DIVIDED PATTERN IN THE EASTBOUND LANES.

STEP 1

COMPLETE THE FOLLOWING IN SEGMENTS 1, 2 & 3:

STEP 2

CONSTRUCT I-40 WESTBOUND 10' WIDE PAVED MEDIAN SHOULDER FROM -L2- STA 19+10± TO –

STEP 2 CONSTRUCT/RECONSTRUCT I-40 WESTBOUND LANES ACCORDING TO ROADWAY AND - PAVE FINAL LAYER OF SURFACE COURSE

PLACE FINAL PAVEMENT MARKINGS AND FINAL MARKERS - MILL RUMBLE STRIPS INTO MEDIAN AND OUTSIDE

STEP 3

PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE WESTBOUND OUTSIDE LANE.

PHASE VIII (SPEED LIMIT REDUCTION)

STEP 4

CONSTRUCT MEDIAN CROSSOVERS –XOVER-A- AND -XOVER-B-.

STEP 1

OPEN I-40 WESTBOUND LANES TO EXISTING PATTERN.

STEP 2

OPEN EASTBOUND TRAFFIC TO EXISTING PATTERN.

STEP 1

PLACE I-40 TRAFFIC IN A TWO-LANE/TWO-WAY DIVIDED PATTERN IN THE WESTBOUND LANES.

PHASE VI (SPEED LIMIT REDUCTION)

STEP 3 ("VARIABLE" SPEED LIMIT REDUCTION)

REMOVE CROSSOVERS –XOVER-A-, -XOVER-B-, -XOVER-C- & –XOVER-D-.

STEP 2

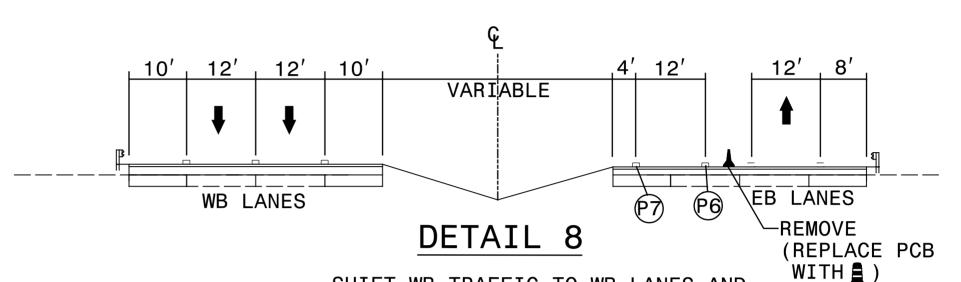
CONSTRUCT/RECONSTRUCT I-40 EASTBOUND LANES ACCORDING TO ROADWAY AND STRUCTURE PLANS.

APPROVED: DATE: <u>12/1</u>9/2016 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

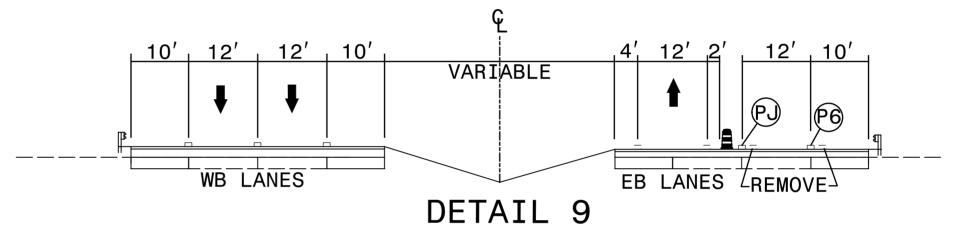
SEGMENT 2 OVERVIEW

SHIFT ALL TRAFFIC TO EB LANES (WB TRAFFIC VIA SINGLE LANE CROSSOVER)
FOR CONTINUOUS 2L/2W DIVIDED PATTERN
(COMPLETE REMAINING CONSTRUCTION TASKS ON WB LANES EXCEPT FOR
FINAL LAYER OF SURFACE COURSE, FINAL MARKINGS & RUMBLE STRIPS)

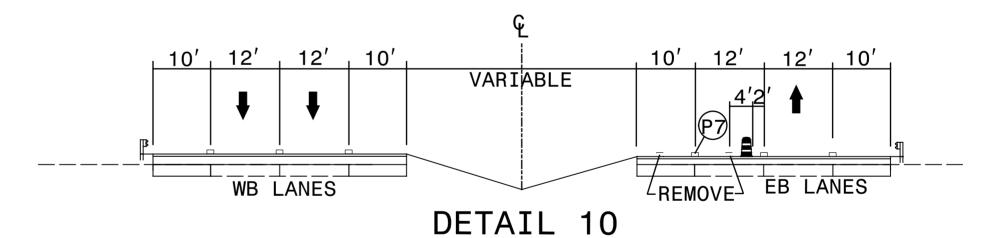
DETAIL 7



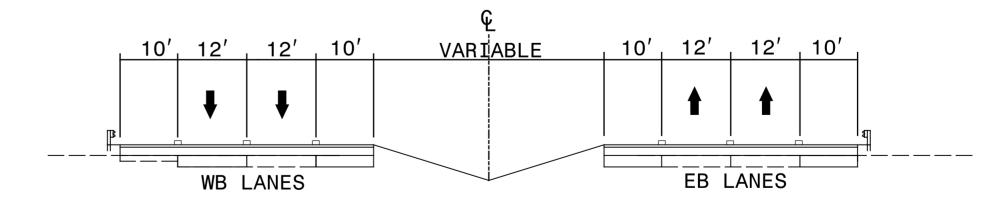
SHIFT WB TRAFFIC TO WB LANES AND PLACE 1X MARKINGS OVER EXISTING MARKINGS FROM WB PATTERN IN DETAIL 7



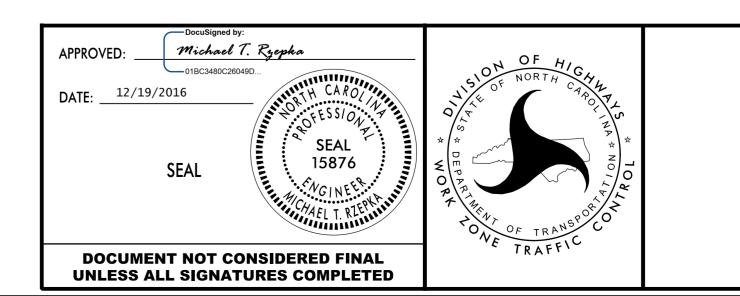
SHIFT EB TRAFFIC TO MEDIAN AND PLACE MARKINGS ON EB OUTSIDE LANE



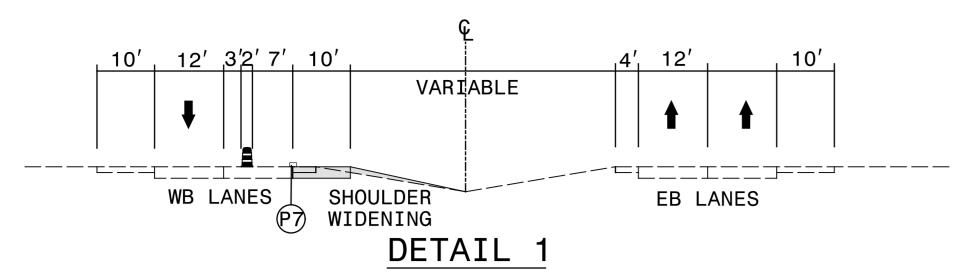
SHIFT EB TRAFFIC TO OUTSIDE LANE AND PLACE MARKINGS ON EB MEDIAN LANE



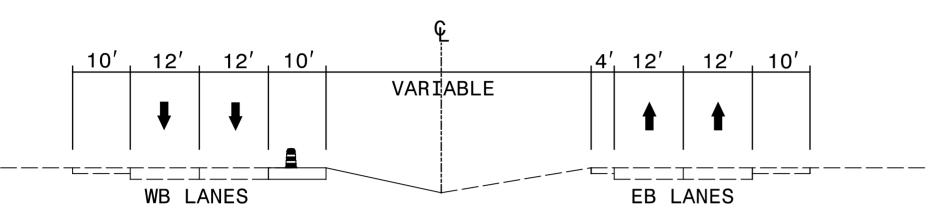
DETAIL 11
EXISTING PATTERN



SEGMENT 2 TYPICALS

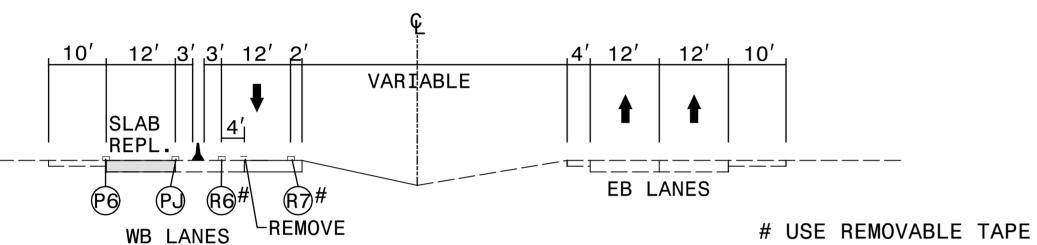


CONSTRUCT 10' FULL DEPTH SHOULDER PAVEMENT (WESTBOUND) (CONSTRUCT MONDAY 12:00 AM TO FRIDAY 12:00 PM)



DETAIL 2

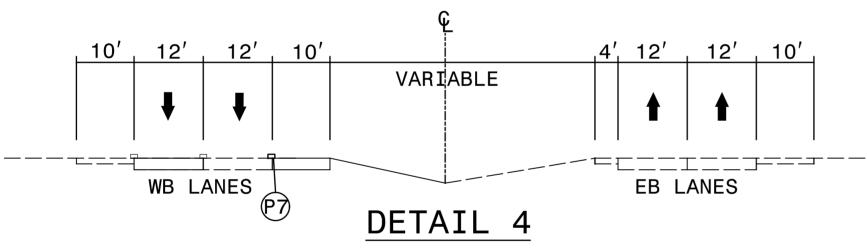
WEEKEND PATTERN



DETAIL 3

REPLACE SLABS OUTSIDE LANE (WESTBOUND)
(CONSTRUCT MONDAY 12:00 AM TO FRIDAY 12:00 PM)

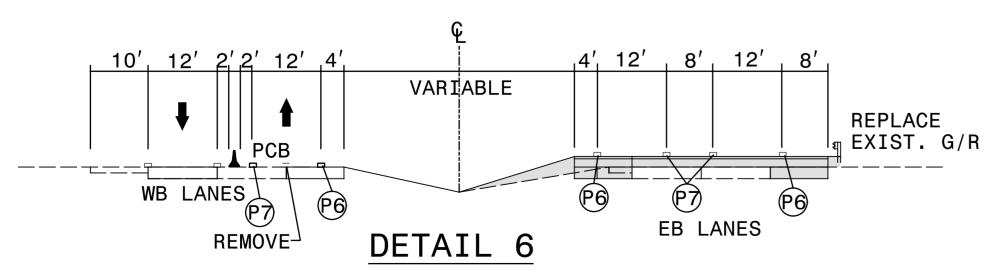
WITH TEMPORARY RAISED MARKERS INSTALLED HALF-ON/HALF-OFF TAPE



WEEKEND PATTERN 10' 12' 3'2' 7' VARIABLE MEDIAN CROSSOVER CONSTRUCT. WB LANES WB LANES WEEKEND PATTERN 7' 2'3' 12' 10' VARIABLE B LANES

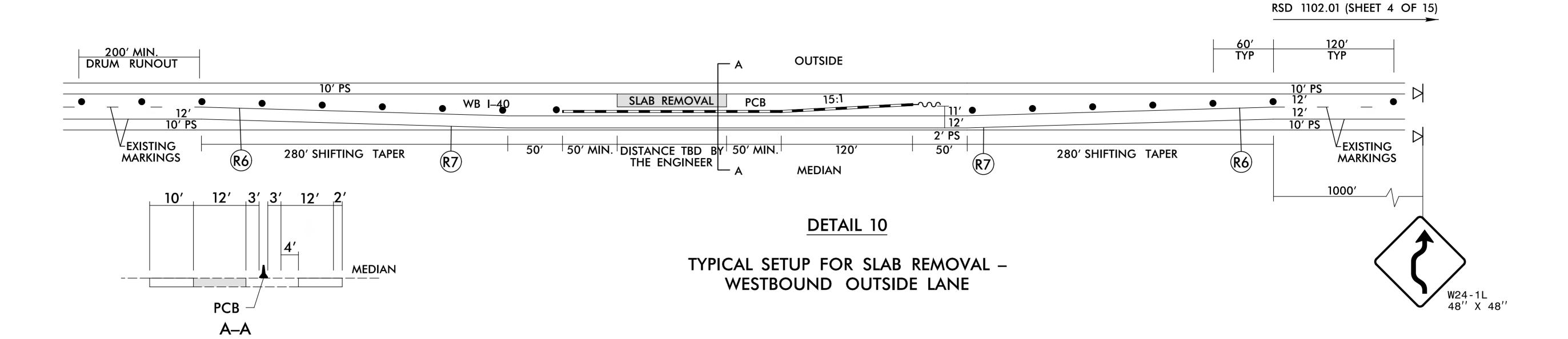
DETAIL 5

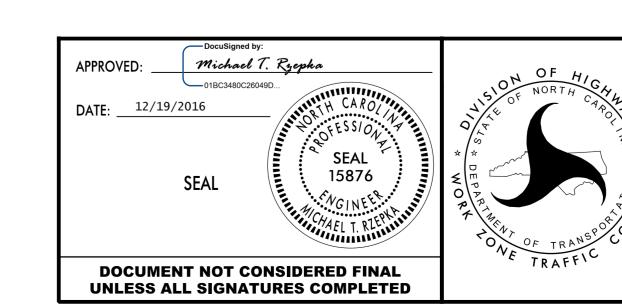
CONSTRUCT MEDIAN CROSSOVERS -XOVER-A- & -XOVER-B-(CONSTRUCT MONDAY 12:00 AM TO FRIDAY 12:00 PM)



SHIFT ALL TRAFFIC TO WB LANES (EB TRAFFIC VIA SINGLE LANE CROSSOVER)
FOR CONTINUOUS 2L/2W DIVIDED PATTERN
(COMPLETE ALL CONSTRUCTION TASKS ON EB LANES EXCEPT FOR
FINAL LAYER OF SURFACE COURSE, FINAL MARKINGS & RUMBLE STRIPS)

SEGMENT 2





SEGMENT 2 SLAB REMOVAL DETAIL

STEP 1

INSTALL ADVANCED WORK ZONE WARNING SIGNS.

STEP 2

PLACE I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE EXISTING OUTSIDE LANES AND CLOSE MEDIAN LANES.

WIDEN I-40 EASTBOUND AND WESTBOUND MEDIAN SHOULDERS FROM -L1- STA 859+50 \pm TO -L2- STA 19+10 \pm .

STEP 3

PLACE I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE EXISTING MEDIAN LANES AND CLOSE OUTSIDE LANES.

RECONSTRUCT I-40 EASTBOUND AND WESTBOUND OUTSIDE SHOULDERS FROM -L1- STA 859+50 \pm TO –L2- STA 19+10 \pm .

PHASE X (SPEED LIMIT REDUCTION)

STEP 1

PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE EASTBOUND AND WESTBOUND OUTSIDE LANES.

STEP 2

PERFORM CONCRETE PAVEMENT REMOVAL AND REPLACEMENT IN THE EASTBOUND AND WESTBOUND MEDIAN LANES.

STEP 1

MAINTAIN I-40 EASTBOUND AND WESTBOUND TRAFFIC IN THE ONE-LANE PATTERNS FROM PHASE X, STEP 2.

PAVE MEDIAN LANE AND SHOULDER UP THROUGH THE FIRST LAYER OF SURFACE COURSE.

STEP 2

SHIFT I-40 EASTBOUND AND WESTBOUND TRAFFIC TO ONE-LANE PATTERNS IN THE MEDIAN LANE/SHOULDER.

PAVE OUTSIDE LANE AND SHOULDER UP THROUGH THE FIRST LAYER OF SURFACE COURSE.

STEP 3

SHIFT I-40 EASTBOUND AND WESTBOUND TRAFFIC TO THE OUTSIDE LANE IN EACH DIRECTION.

PLACE TEMPORARY YELLOW EDGELINE ALONG MEDIAN LANES.

STEP 4

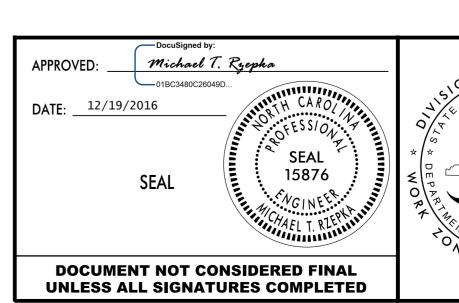
OPEN EASTBOUND AND WESTBOUND TO EXISTING FOUR-LANE/2-WAY PATTERN.

STEP 1

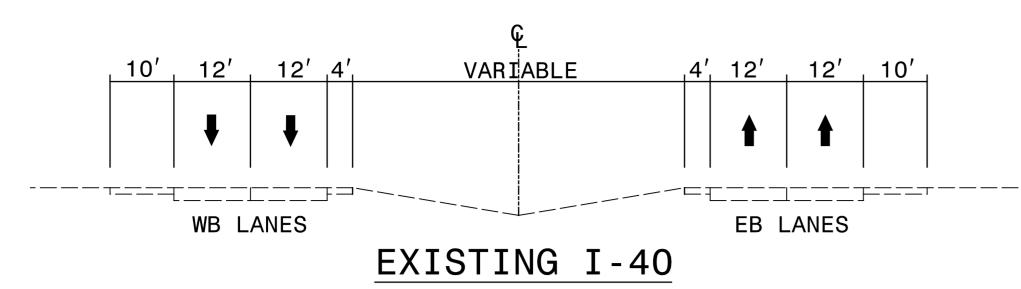
COMPLETE THE FOLLOWING IN SEGMENTS 1, 2 & 3:

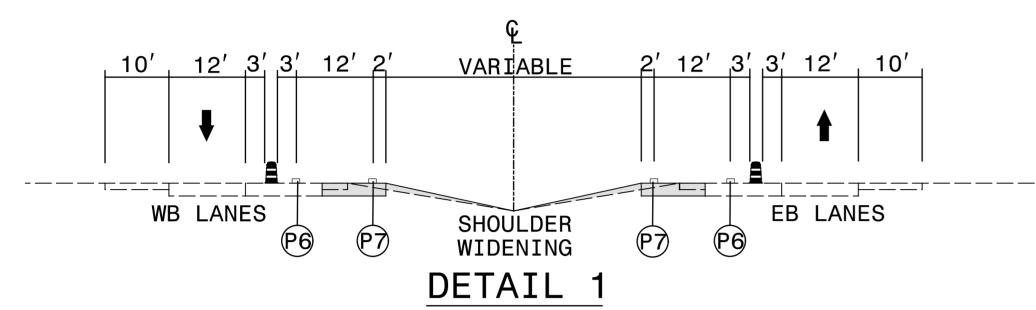
- PAVE FINAL LAYER OF SURFACE COURSE
- PLACE FINAL PAVEMENT MARKINGS AND FINAL MARKERS

MILL RUMBLE STRIPS INTO MEDIAN AND OUTSIDE SHOULDERS

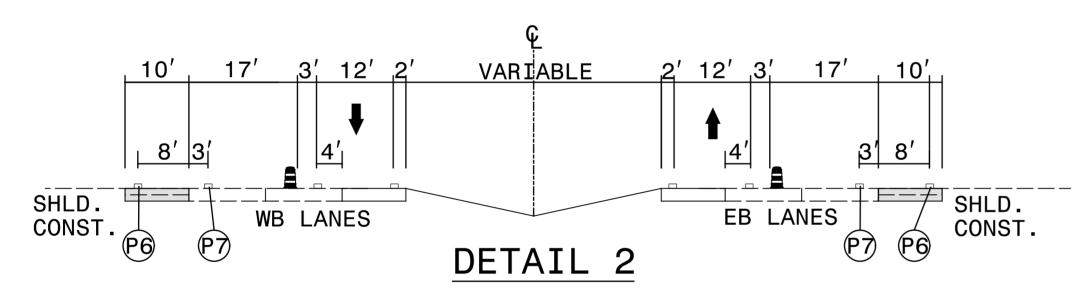


SEGMENT 3 OVERVIEW

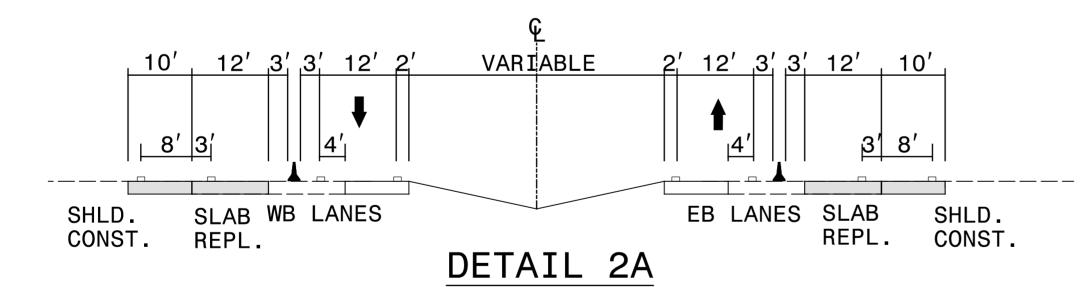




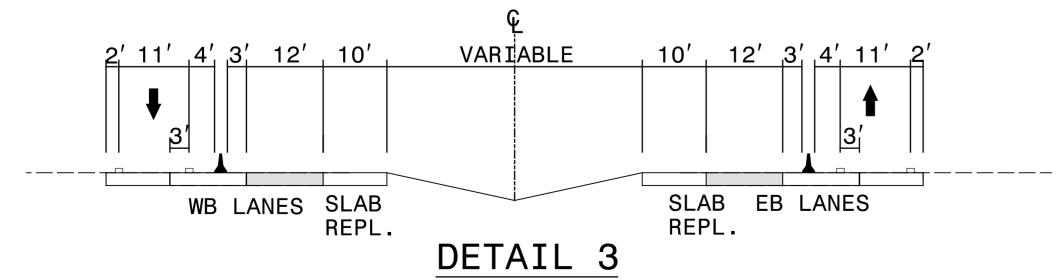
CONSTRUCT 10' FULL DEPTH MEDIAN SHOULDER PAVEMENT



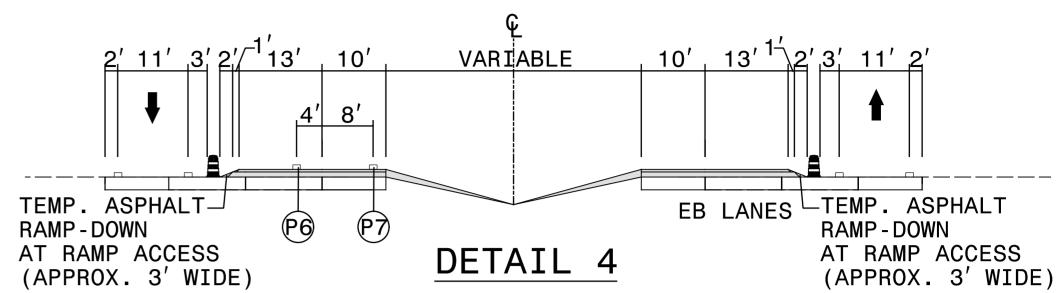
CONSTRUCT 10' FULL DEPTH OUTSIDE SHOULDER PAVEMENT



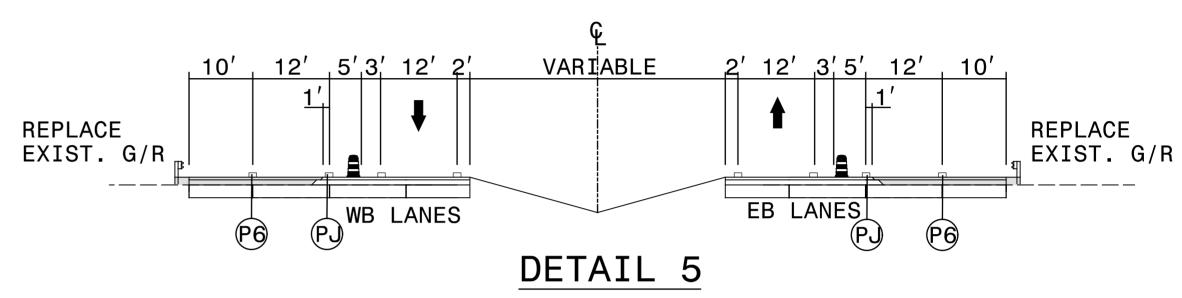
SLAB REPLACEMENT IN OUTSIDE LANES (CONCURRENT WITH OUTSIDE SHOULDER CONST.)



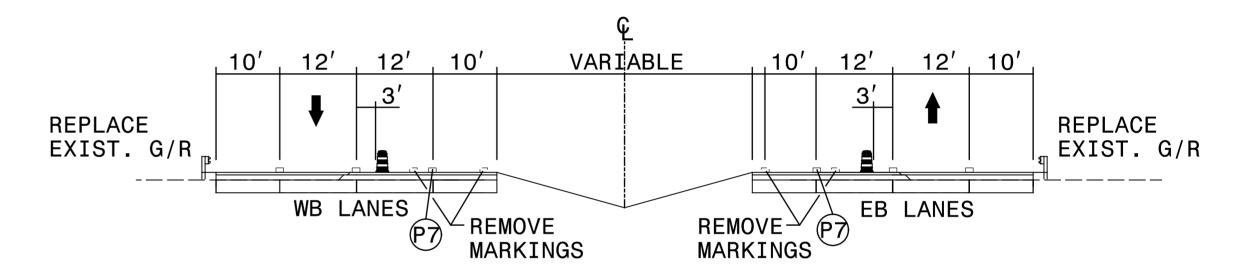
SLAB REPLACEMENT IN MEDIAN LANES



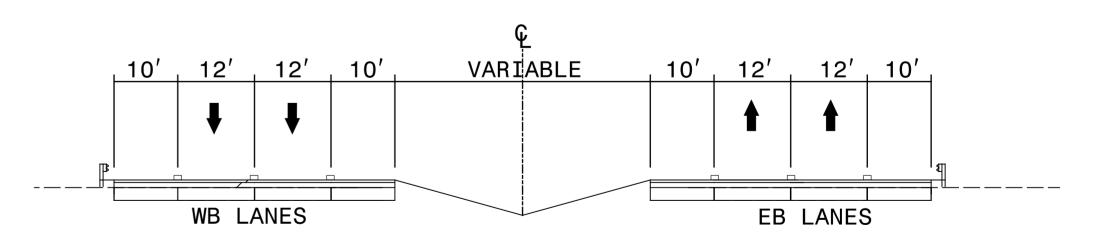
INSIDE LANE/SHOULDER RESURFACING (4.5")
THROUGH FIRST LAYER OF SURFACE COURSE



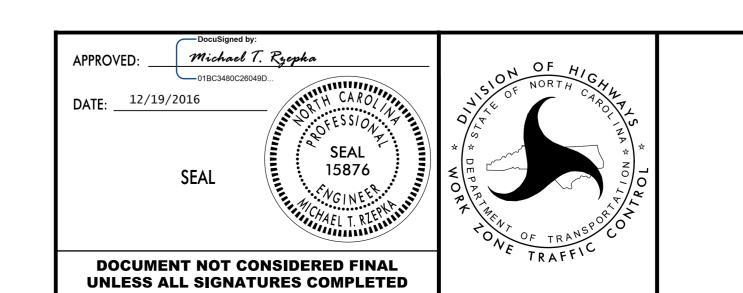
OUTSIDE LANE/SHOULDER RESURFACING (4.5")
THROUGH FIRST LAYER OF SURFACE COURSE



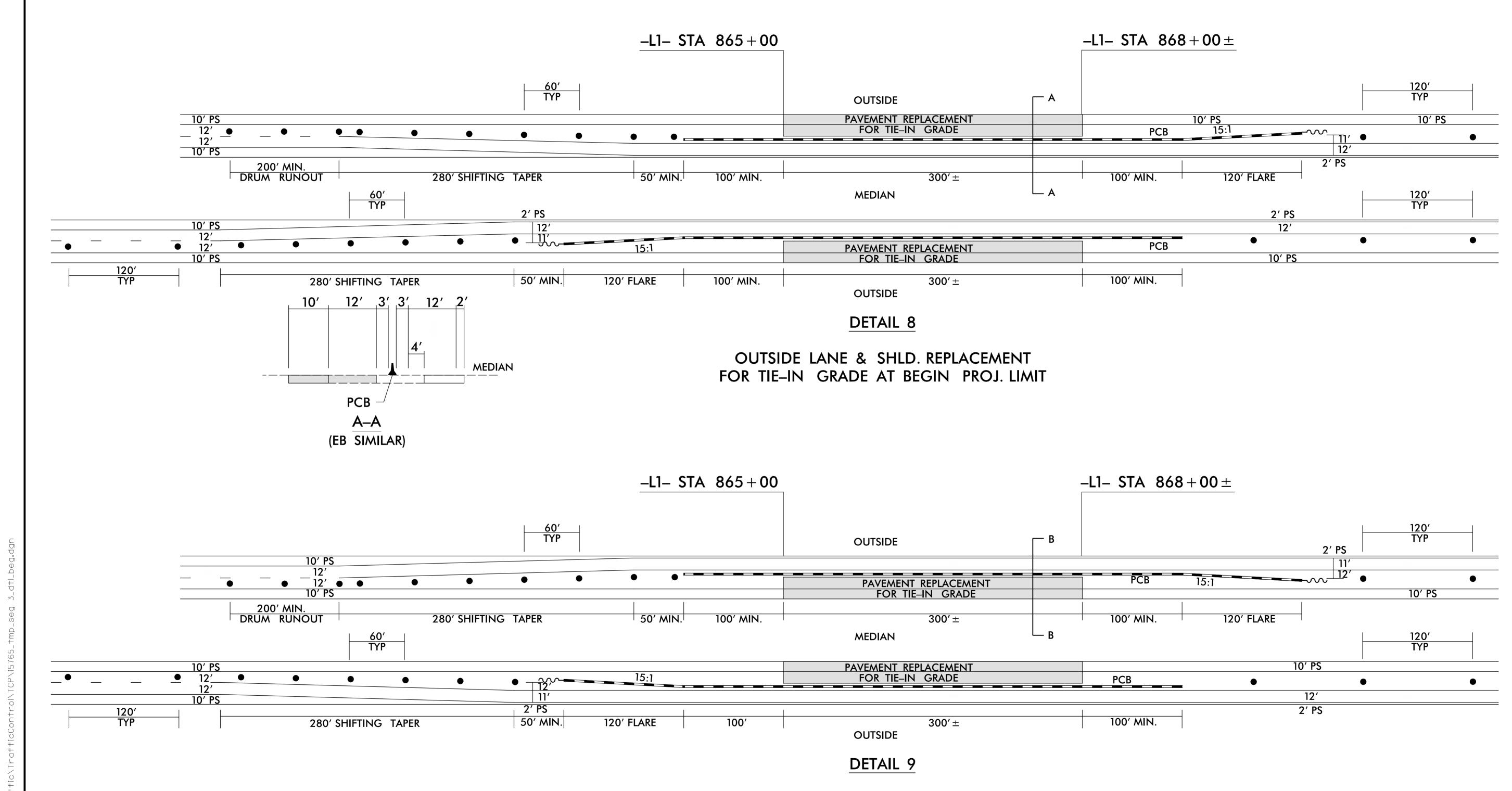
DETAIL 6
SHIFT TRAFFIC TO COMLETE PLACEMENT
OF TEMPORARY MARKINGS



DETAIL 7
EXISTING PATTERN



SEGMENT 3 TYPICALS



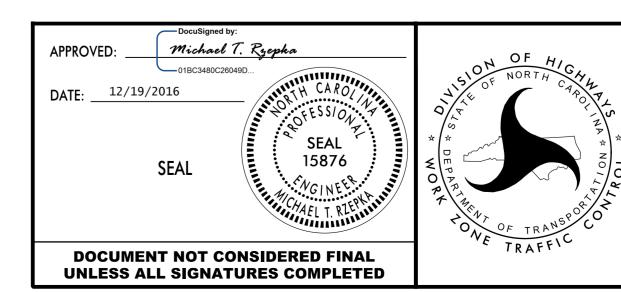
2' 11' 4' 3' 12' 10'

3'

PCB

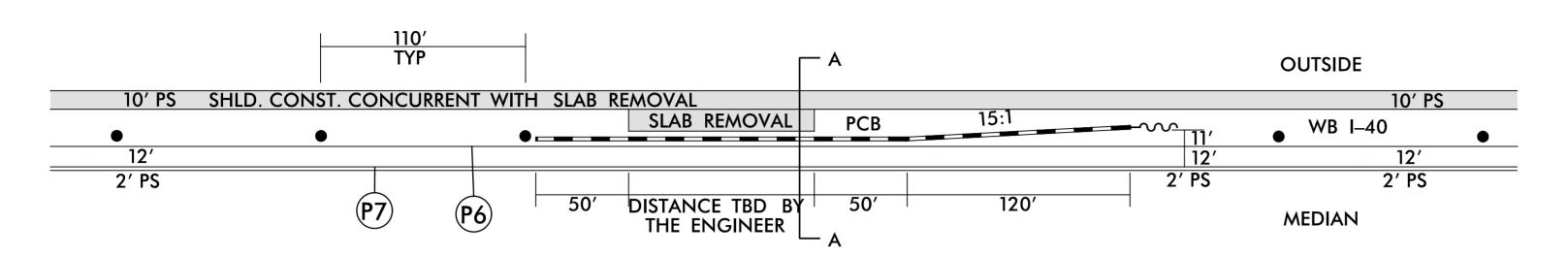
B-B
(EB SIMILAR)

INSIDE LANE & SHLD. REPLACEMENT FOR TIE-IN GRADE AT BEGIN PROJ. LIMIT



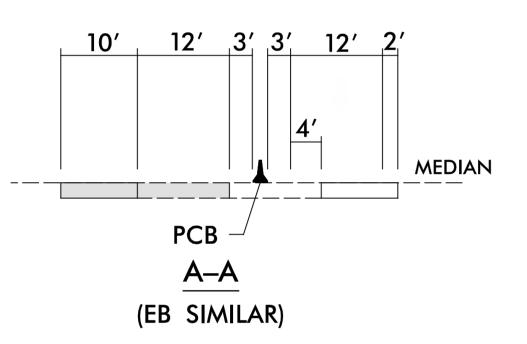
SEGMENT 3
BEGIN PROJECT LIMIT
DETAIL

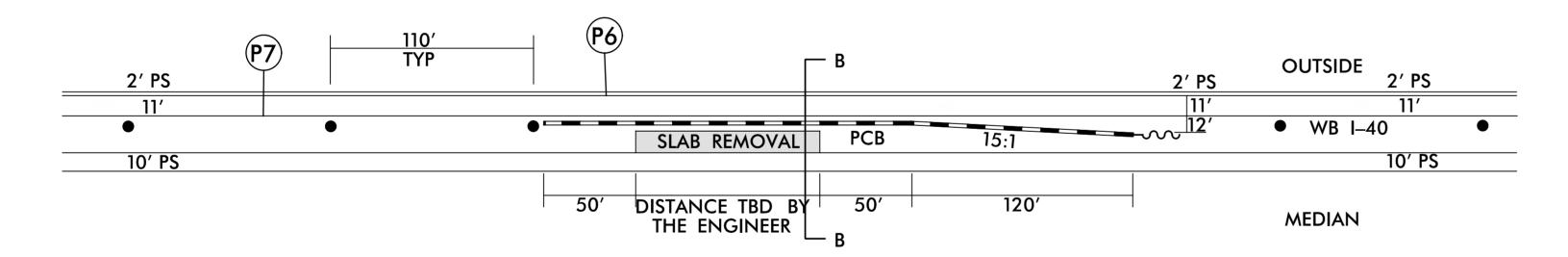
RSD 1102.01 (SHEET 4 OF 15)



DETAIL 10

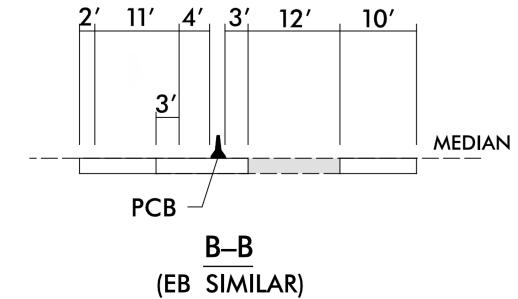
TYPICAL SETUP FOR SLAB REMOVAL – OUTSIDE LANE (EB SIMILAR)

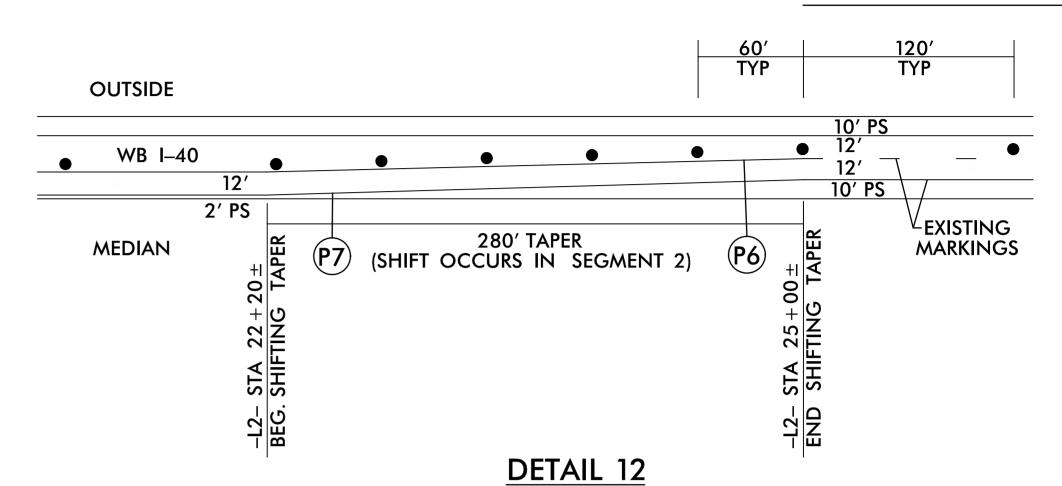




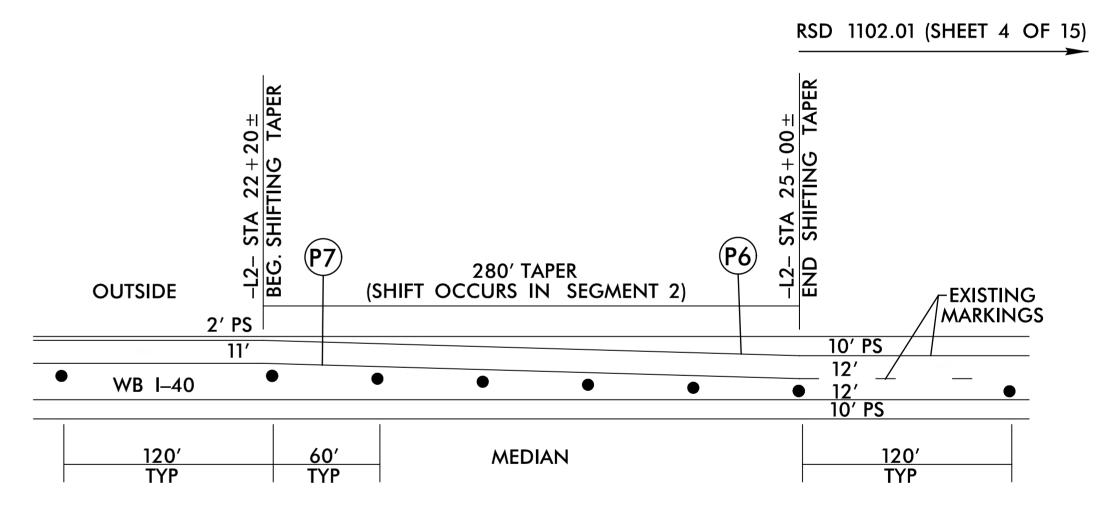
DETAIL 11

TYPICAL SETUP FOR SLAB REMOVAL – INSIDE LANE (EB SIMILAR)



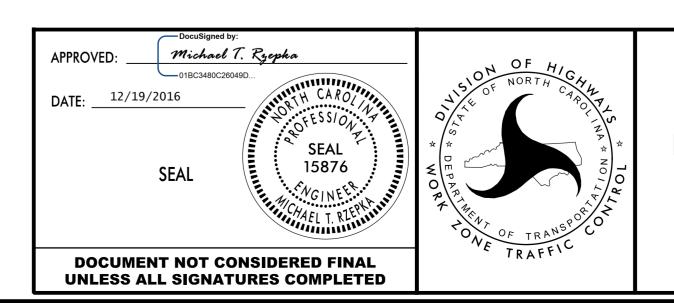


LONG_TERM SHIFT TO MEDIAN SHOULDER FOR OUTSIDE LANE /SHLD. WORK IN SEGMENT 3 (EB SIMILAR)



DETAIL 13

LONG-TERM SHIFT TO OUTSIDE SHOULDER FOR MEDIAN LANE /SHLD. WORK IN SEGMENT 3 (EB SIMILAR)



SEGMENT 3 LONG TERM LANE SHIFT AND SLAB REMOVAL DETAIL

