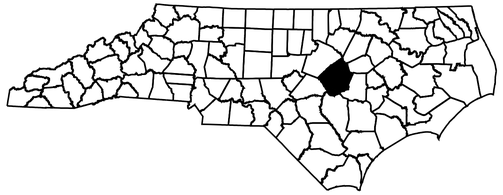
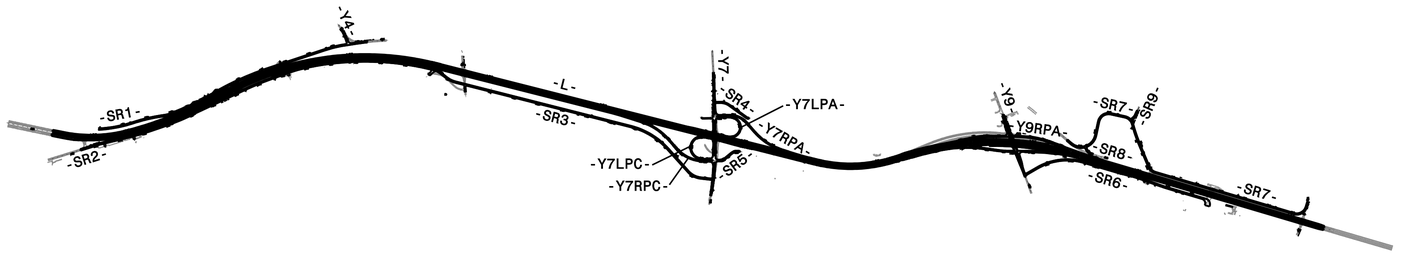
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

JOHNSTON COUNTY





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SHEET NO.
TMP-1

W-5600

TIP PROJECT:

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLANS PREPARED BY:

TIM AREY, P.E.

NCDOT CONTACTS:

STEVE KITE, P.E.
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Office of:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Arey

DATE: 5/5/2020

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-1A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 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
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
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
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
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

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- ON-GOING CONSTRUCTION
- REMOVAL

SIGNALS

EXISTING PROPOSED TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

WORK ZONE PERFORMANCE TEMPORARY PAVEMENT MARKINGS

SEE SPECIAL PROVISIONS FOR MORE INFORMATION ON WORK ZONE PERFORMANCE PAVEMENT MARKINGS

4" WORK ZONE PERFORMANCE

- P1 WHITE EDGELINE
- P2 WHITE SOLID LANE LINE
- P4 3FT.-9FT./WHITE MINI-SKIP
- P10 YELLOW EDGELINE
- P13 YELLOW DOUBLE CENTER

6" WORK ZONE PERFORMANCE

- P20 WHITE EDGELINE
- P21 WHITE SOLID LANE LINE
- P22 10' WHITE SKIP
- P23 3FT.-9FT./WHITE MINI-SKIP
- P24 2FT.-6FT./WHITE MINI-SKIP
- P30 YELLOW EDGELINE

12" WORK ZONE PERFORMANCE

- P50 WHITE GORELINE

24" WORK ZONE PERFORMANCE

- P61 WHITE STOP-BAR

WORK ZONE PERFORMANCE SYMBOLS

- P70 LEFT TURN ARROW
- P71 RIGHT TURN ARROW
- P72 STRAIGHT ARROW
- P79 MERGE ARROW

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PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: [signature] DATE: 6/3/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM ARE

ROADWAY STANDARD DRAWINGS & LEGEND

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-1B

MANAGEMENT STRATEGIES

- THE PROJECT WILL BE CONSTRUCTED USING A COMBINATION OF STAGED CONSTRUCTION AND LANE CLOSURES IN ACTIVE ROADWAY LOCATIONS.

- PORTABLE CONCRETE BARRIER WILL BE UTILIZED ALONG US-70 TO PROTECT THE WORK ZONE AND ACCESS TO DRIVEWAYS ARE TO BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE SHOWN IN THESE PLANS OR DIRECTED BY THE ENGINEER.

- WORK ZONE PERFORMANCE PAVEMENT MARKINGS SHALL BE UTILIZED FOR ALL TEMPORARY TRAFFIC PATTERN MARKINGS ON ALL ROADWAYS. SEE SPECIAL PROVISIONS FOR MORE DETAILS.

- SPEED REDUCTIONS ALONG -L- WILL BE REQUIRED DURING ACTIVE LANE CLOSURES BY UTILIZING DIGITAL SPEED LIMIT SIGNS. SEE SHEET TMP-2C AND SPECIAL PROVISIONS FOR MORE DETAILS.

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
-Y5-, -Y7-, -Y9-	MONDAY-FRIDAY 6:30AM-8:30AM, 4:00PM-6:00PM
-L- (US 70) WESTBOUND	MONDAY-FRIDAY 6:00AM-9:00AM AND FROM THE WEEK BEFORE MEMORIAL DAY THROUGH THE WEEK OF LABOR DAY, SUNDAY NOON-6:00PM
-L- (US 70) EASTBOUND	MONDAY-FRIDAY 4:00PM-7:00PM AND FROM THE WEEK BEFORE MEMORIAL DAY THROUGH THE WEEK OF LABOR DAY, FRIDAY 2:00PM-8:00PM

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

ROAD NAME
-L-, -Y5-, -Y7-, -Y9-

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 6:00AM DECEMBER 31st AND 6:00PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00PM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00AM THURSDAY AND 6:00PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND 6:00PM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00AM THE DAY BEFORE INDEPENDENCE DAY AND 6:00PM THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00PM THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND 6:00PM TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00AM TUESDAY AND 6:00PM MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

PROJECT NOTES

C) -Y9- (WILSON MILLS ROAD) MAY BE CLOSED FOR HANGING -L- LINE GIRDERS FROM MIDNIGHT TO 5:00AM. USE THE OFFSITE DETOUR ROUTE SHOWN ON SHEET TMP-2E IF -Y7- IS OPENED TO THRU TRAFFIC. USE THE OFFSITE DETOUR ROUTE SHOWN ON SHEET TMP-2F IF -Y7- IS CLOSED TO TRAFFIC.

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
-L-	MONDAY-SUNDAY 5:00AM-MIDNIGHT	30 MINUTES FOR TRAFFIC SHIFTS AND HANGING -Y7- GIRDERS

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
-Y5-, -Y7-, -Y9-	MONDAY-FRIDAY 6:30AM-8:30AM, 4:00PM-6:00PM
-L- (US 70) WESTBOUND	MONDAY-FRIDAY 6:00AM-9:00AM AND FROM THE WEEK BEFORE MEMORIAL DAY THROUGH THE WEEK OF LABOR DAY, SUNDAY NOON-6:00PM
-L- (US 70) EASTBOUND	MONDAY-FRIDAY 4:00PM-7:00PM AND FROM THE WEEK BEFORE MEMORIAL DAY THROUGH THE WEEK OF LABOR DAY, FRIDAY 2:00PM-8:00PM

F) 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 (LANE CLOSURES, WHEN REQUIRED, SHALL ADHERE TO THE 'TIME RESTRICTIONS' SECTION OF THESE GENERAL NOTES)

G) 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.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE 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.

J) 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.

K) 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.

L) DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON -L- MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE BETWEEN THE HOURS OF 6:00AM-8:00PM (AS ALLOWED BY LANE CLOSURE RESTRICTIONS). DO NOT INSTALL MORE THAN 3 MILES OF LANE CLOSURE ON -L- MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE BETWEEN THE HOURS OF 8:00PM-6:00AM.

PAVEMENT EDGE DROP OFF REQUIREMENTS

M) 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.

N) 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 EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

O) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

P) 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.

Q) 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.

R) 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.

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

T) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

U) 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

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PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: [signature] DATE: 5/5/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION OPERATIONS PLAN

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-1C

PROJECT NOTES

GENERAL NOTES

TRAFFIC BARRIER

U) 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.

V) 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

W) 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.

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

Y) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
"ALL"	WORK ZONE PERFORMANCE	TEMPORARY RAISED
BRIDGE DECKS	COLD APPLIED PLASTIC	TEMPORARY RAISED

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

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

MISCELLANEOUS

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

DD) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 1000 FT AND 500 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

EE) DO NOT PLACE TRAFFIC ON A MILLED SURFACE.

FF) FOR TRAFFIC CONTROL PURPOSES DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND OPERATE A MINIMUM OF ONE CMS PER DIRECTION ON THE MAINLINE THAT PROVIDES GENERAL INFORMATION ABOUT THE CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS. THIS CMS SHALL BE IN ADDITION TO ANY OTHER CMS'S REQUIRED BY THE NCDOT ROADWAY STANDARD DRAWINGS.

GG) CONTRACTOR SHALL CONSTRUCT ALL PAVEMENT WIDENING SUCH THAT PONDING OF WATER WILL NOT OCCUR WITHIN AN OPEN TRAVELWAY.

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PLAN PREPARED IN THE OFFICE OF:
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ENGINEERS • CONSULTANTS

APPROVED: [signature] DATE: 5/5/2020

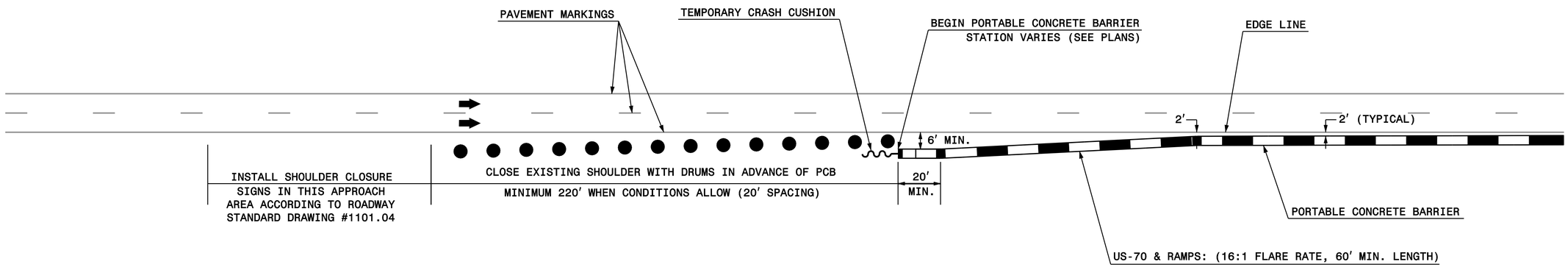
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM A REY

TRANSPORTATION OPERATIONS PLAN

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2

LEADING EDGE LAYOUT FOR PORTABLE CONCRETE BARRIER



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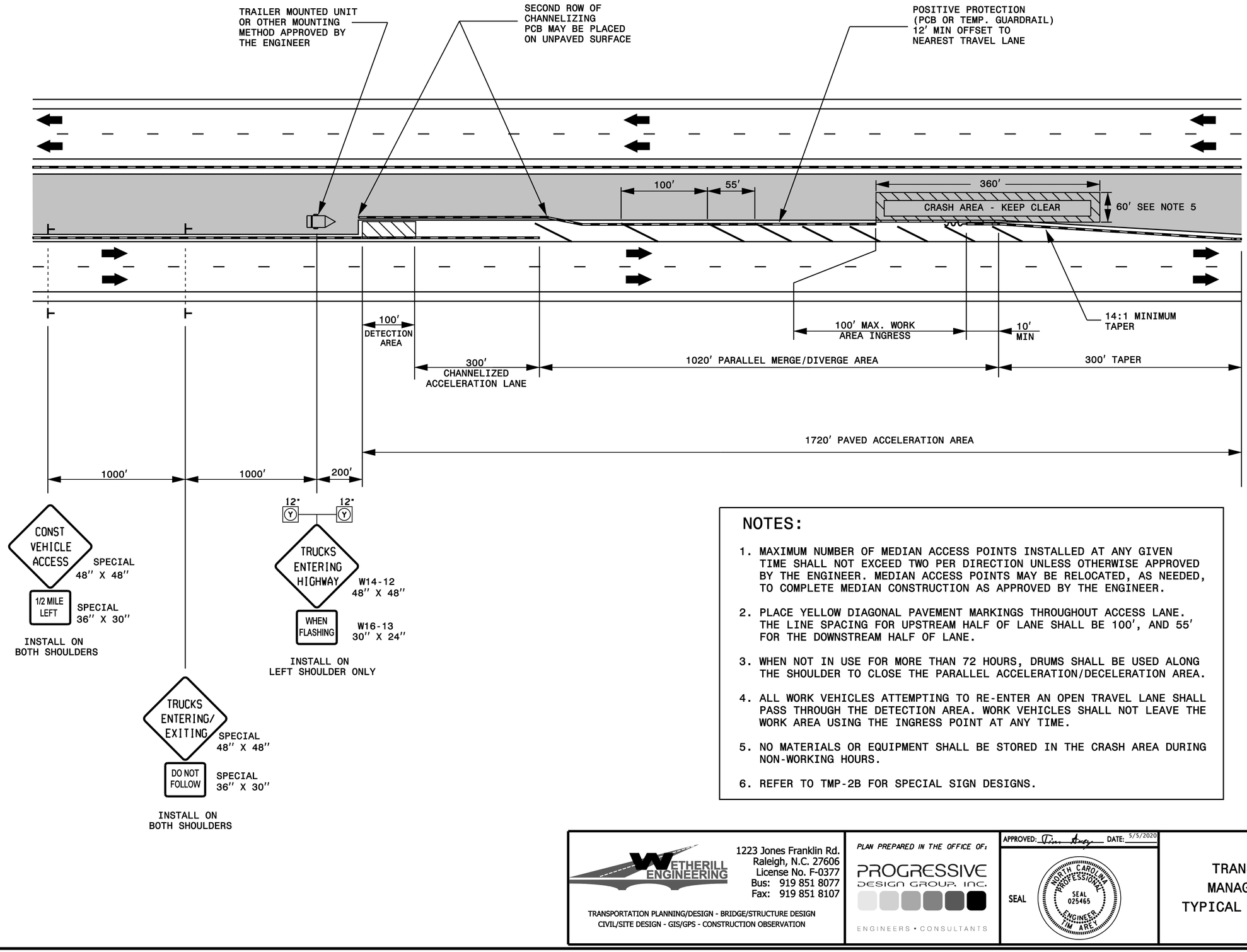
APPROVED: Tim Arey DATE: 5/5/2020

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION MANAGEMENT PLAN
PCB TYPICAL

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2A



NOTES:

1. MAXIMUM NUMBER OF MEDIAN ACCESS POINTS INSTALLED AT ANY GIVEN TIME SHALL NOT EXCEED TWO PER DIRECTION UNLESS OTHERWISE APPROVED BY THE ENGINEER. MEDIAN ACCESS POINTS MAY BE RELOCATED, AS NEEDED, TO COMPLETE MEDIAN CONSTRUCTION AS APPROVED BY THE ENGINEER.
2. PLACE YELLOW DIAGONAL PAVEMENT MARKINGS THROUGHOUT ACCESS LANE. THE LINE SPACING FOR UPSTREAM HALF OF LANE SHALL BE 100′, AND 55′ FOR THE DOWNSTREAM HALF OF LANE.
3. WHEN NOT IN USE FOR MORE THAN 72 HOURS, DRUMS SHALL BE USED ALONG THE SHOULDER TO CLOSE THE PARALLEL ACCELERATION/DECELERATION AREA.
4. ALL WORK VEHICLES ATTEMPTING TO RE-ENTER AN OPEN TRAVEL LANE SHALL PASS THROUGH THE DETECTION AREA. WORK VEHICLES SHALL NOT LEAVE THE WORK AREA USING THE INGRESS POINT AT ANY TIME.
5. NO MATERIALS OR EQUIPMENT SHALL BE STORED IN THE CRASH AREA DURING NON-WORKING HOURS.
6. REFER TO TMP-2B FOR SPECIAL SIGN DESIGNS.

WETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Arey DATE: 5/5/2020

SEAL

TRANSPORTATION MANAGEMENT PLAN TYPICAL MEDIAN ACCESS

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2B

SIGN NUMBER: WZTC
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 5'-6"
HEIGHT: 5'-6"
TOTAL AREA: 30.3 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0"
WIDTH: 0"
RADII: 0"

NO. Z BARS: 2
LENGTH: 58.0

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

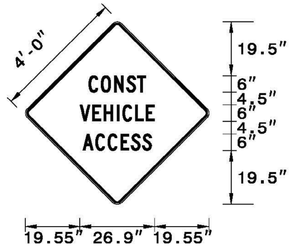
SYMBOL	X	Y	WID	HT

NAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: J.Navarrete
PROJECT ID: I5922
CHECKED BY:
LOCATION:
Mar 14, 2018
DIV:WZTC

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		C	O	N	S	T																						C 2000
	22.7	4.4	4.7	4.4	3.0	3.1	22.7																					20.5
		V	E	H	I	C	L	E																				C 2000
	19.6	4.6	4.1	4.7	2	4.6	3.9	3.1	19.6																			26.9
		A	C	C	E	S	S																					C 2000
	20.6	4.6	4.4	4.6	3.8	4.1	3.4	20.6																				24.8

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: WZTC
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 3'-0"
HEIGHT: 2'-6"
TOTAL AREA: 7.5 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.47"
WIDTH: 0.63"
RADII: 1.5"

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

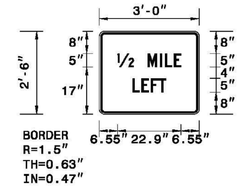
SYMBOL	X	Y	WID	HT

NAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: J.Navarrete
PROJECT ID: I5922
CHECKED BY:
LOCATION:
Mar 14, 2018
DIV:WZTC

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		1/2		M	I	L	E																					C 2000
	6.6	5.9	5	4.4	1.8	3.3	2.6	6.6																				22.9
		L	E	F	T																							C 2000
	12	3.3	3.4	2.8	2.6	12																						12.1

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: WZTC
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 5'-6"
HEIGHT: 5'-6"
TOTAL AREA: 30.3 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0"
WIDTH: 0"
RADII: 0"

NO. Z BARS: 2
LENGTH: 58.0

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

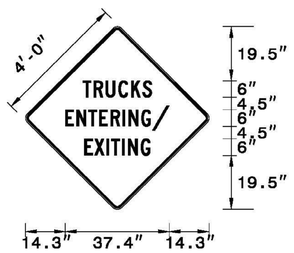
SYMBOL	X	Y	WID	HT

NAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: J.Navarrete
PROJECT ID: I5922
CHECKED BY:
LOCATION:
Mar 14, 2018
DIV: DIV

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		T	R	U	C	K	S																					C 2000
	20.6	3.9	4.4	4.6	4.6	4.1	3.4	20.6																				24.8
		E	N	T	E	R	I	N	G	/																		C 2000
	14.3	4.1	4.2	3.9	4.1	4.4	2.2	4.6	3.9	6.1	14.3																	37.4
		E	X	I	T	I	N	G																				C 2000
	21.2	3.6	4.4	1.7	3.9	2.2	4.6	3.4	21.2																			23.6

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: WZTC
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 3'-0"
HEIGHT: 2'-6"
TOTAL AREA: 7.5 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.47"
WIDTH: 0.63"
RADII: 1.5"

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

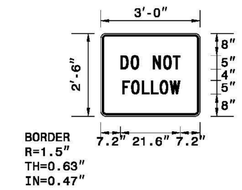
SYMBOL	X	Y	WID	HT

NAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: J.Navarrete
PROJECT ID: I5922
CHECKED BY:
LOCATION:
Mar 14, 2018
DIV:WZTC

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		D	O		N	O	T																					C 2000
	7.2	3.7	3	5	3.8	3.6	2.6	7.2																				21.6
		F	O	L	L	O	W																					C 2000
	7.9	3.1	3.9	3.3	3.2	3.6	3.8	7.2																				20.9

NORTH CAROLINA D.O.T. SIGN DETAIL

WETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

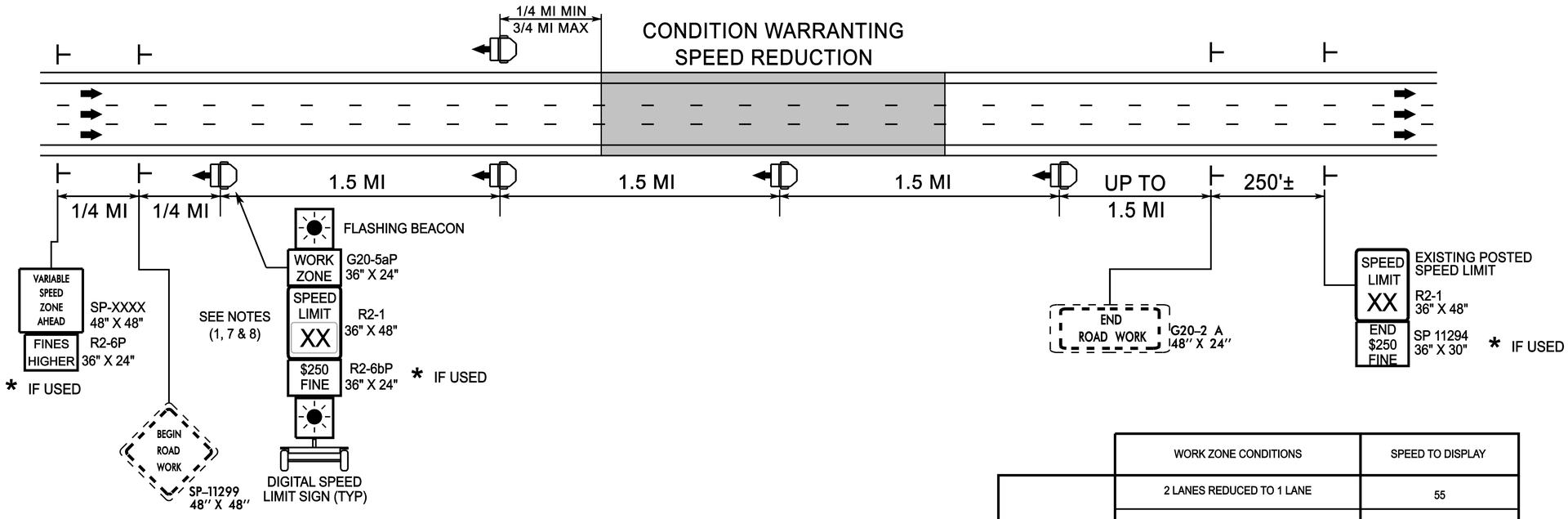
PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Ahrey DATE: 5/5/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AHREY

TRANSPORTATION MANAGEMENT PLAN TYPICAL MEDIAN ACCESS SIGN DESIGNS

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2C



	WORK ZONE CONDITIONS	SPEED TO DISPLAY
LANE CLOSURES	2 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 1 LANE	55
	4 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 3 LANES	65
CONTINUOUS BARRIER (LENGTH OF BARRIER GREATER THAN 1 MILE)	1 OPEN LANE WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	55
	1 OPEN LANE WITH CONTINUOUS BARRIER ON 1 SHOULDER	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON 1 SHOULDER	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON BOTH SHOULDERS	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON 1 SHOULDER	EXISTING
	UNEVEN LANES	60

* SEE NOTE 6

NOTES

1. WITHIN ¼ TO ¾ MILE UPSTREAM OF CONDITION WARRANTING A SPEED REDUCTION, PLACE A DIGITAL SPEED LIMIT SIGN ON BOTH THE INSIDE AND OUTSIDE SHOULDERS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER. AT ALL OTHER LOCATIONS DOWNSTREAM, PLACE A SINGLE DIGITAL SPEED LIMIT SIGN ON THE OUTSIDE SHOULDER.

   IF SIGNS ARE NOT HIGHLY VISIBLE TO ALL MOTORISTS, SUPPLEMENTAL DIGITAL SPEED LIMIT SIGNS ARE PERMITTED TO BE INSTALLED ON THE MEDIAN SHOULDER.
2. THE DIGITAL SPEED LIMIT SIGNS TAKE PRECEDENCE OVER EXISTING SPEED LIMIT SIGNS AND REMAIN UPRIGHT AND VISIBLE AT ALL TIMES. ALL EXISTING SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF THE PROJECT.
3. THE DIGITAL SPEED LIMITS SIGNS WILL BE INSTALLED (TRAILER MOUNTED OR STATIONARY MOUNTED) IN ADVANCE AND SPACED APPROXIMATELY 1.5 MILES THROUGHOUT THE ACTIVE WORK AREA, UNLESS DIRECTED OTHERWISE.
4. NCDOT HAS SOLE AUTHORITY OF THE SPEED LIMITS DISPLAYED ON THE DIGITAL SPEED LIMIT SIGNS.
5. THE WORK ZONE VARIABLE SPEED LIMIT AND THE $250 SPEEDING PENALTY ARE SEPARATE ORDINANCES THAT MUST BE SIGNED BY THE STATE TRAFFIC ENGINEER TO BE VALID AND ENFORCEABLE. WITHOUT A SIGNED ORDINANCE, THE SPEED LIMIT ON A FACILITY SHALL REMAIN UNCHANGED.
6. THE SPEED DISPLAYED SHALL BE THE LOWER OF THE EXISTING SPEED LIMIT OR THE SPEED IN THE WORK ZONE CONDITION CHART.
7. THE SPEED LIMIT SHALL ONLY BE REDUCED IN AREAS MEETING WORK ZONE CONDITION WARRANTS. THE EXISTING SPEED LIMIT SHALL BE DISPLAYED ON ALL OTHER DIGITAL SPEED LIMIT SIGNS.
8. THE BEACONS ON THE DIGITAL SPEED LIMIT SIGNS SHALL ONLY FLASH DURING TIMES THE SPEED IS REDUCED, AND REMAIN OFF AT ALL OTHER TIMES.

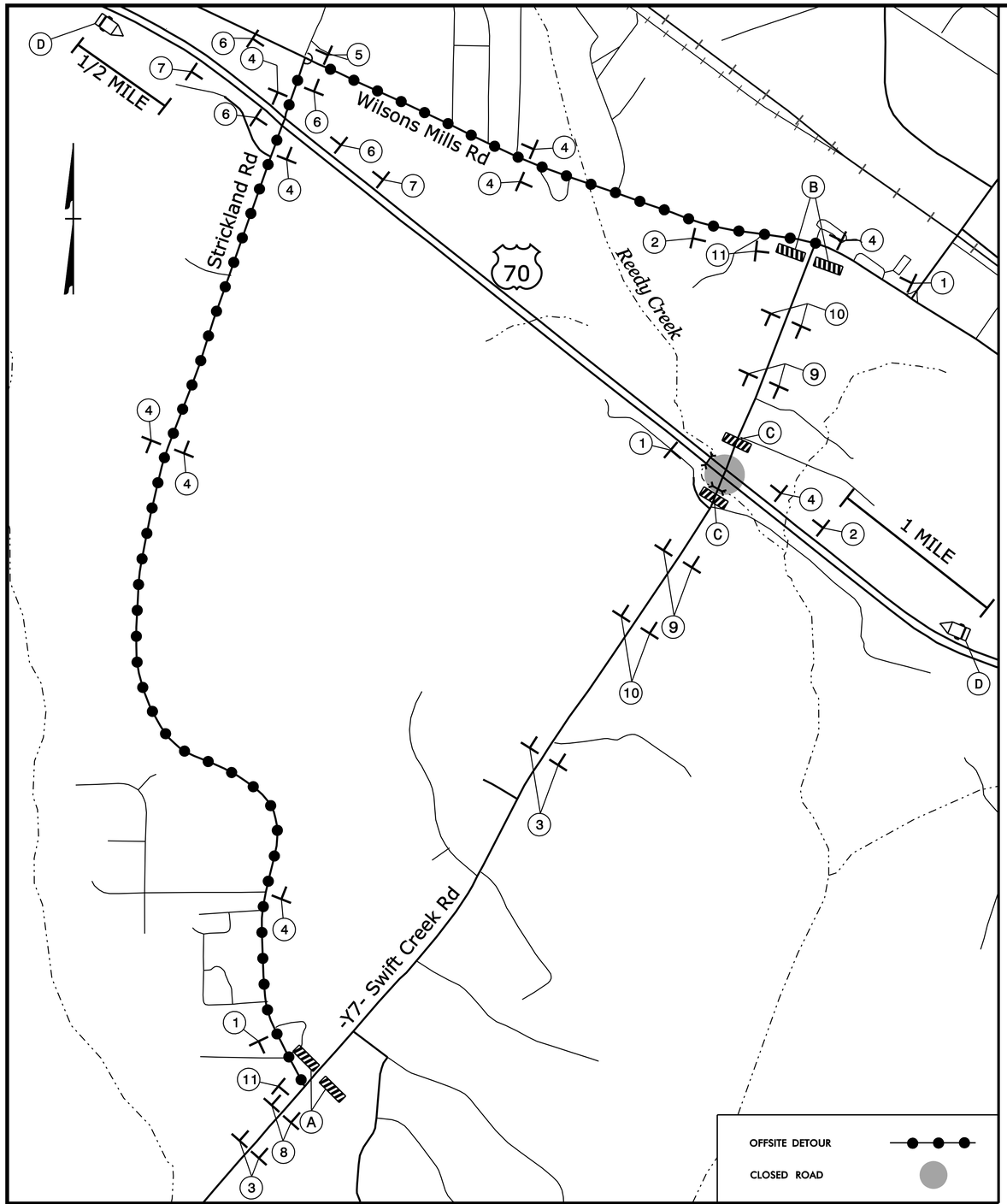
PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: [signature] DATE: 5/5/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION MANAGEMENT PLAN WORK ZONE VARIABLE SPEED LIMIT REDUCTION

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2D



1 ROAD CLOSED AHEAD W20-3 48″ X 48″
NEXT LEFT SP-4L 48″ X 12″

2 ROAD CLOSED AHEAD W20-3 48″ X 48″
NEXT RIGHT SP-4R 48″ X 12″

3 ROAD CLOSED AHEAD W20-3 48″ X 48″

4 SWIFT CREEK RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-3 21″ X 15″

5 SWIFT CREEK RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-1 L 21″ X 15″

6 SWIFT CREEK RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-1 R 21″ X 15″

7 SWIFT CREEK RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M5-1 R 21″ X 15″

8 DETOUR AHEAD W20-2 48″ X 48″

9 ROAD CLOSED 500 FT W20-3 48″ X 48″

10 ROAD CLOSED 1000 FT W20-3 48″ X 48″

11 END DETOUR M4-8 A 24″ X 18″

SIGN NUMBER: name
TYPE: STANDARD
QUANTITY: SEE PLANS
SIGN WIDTH: 3′-0″
HEIGHT: 1′-6″
TOTAL AREA: 4.5 Sq.Ft.
BORDER TYPE: INSET
RECESS: 0.47″
WIDTH: 0.63″
RADII: 1.5″
NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

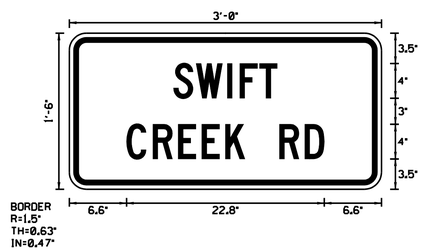
SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluoresent orange retroreflective sheeting.

DESIGN BY: none
PROJECT ID: ID
CHECKED BY:
DIV: DIV
DATE: Jun 07, 2019



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

																													Series/Size Text Length
	S	W	I	F	T																								C 2000
	12	14.6	18.2	19.7	21.9																								12
	C	R	E	E	K				R	D																			C 2000
	6.6	9.6	12.6	15.3	18	20.2	24.2	27.2																					22.8

FILENAME: Looper Rd OSD

NORTH CAROLINA D.O.T. SIGN DETAIL

A R11-4 60″ X 30″
ROAD CLOSED TO THRU TRAFFIC
DETOUR
M4-10L 48″ x 18″
TYPE III BARRICADE

B R11-4 60″ X 30″
ROAD CLOSED TO THRU TRAFFIC
DETOUR
M4-10R 48″ x 18″
TYPE III BARRICADE

C R11-2 48″ X 30″
ROAD CLOSED
TYPE III BARRICADE(S)

D

MESSAGE NO. 1	MESSAGE NO. 2
SWIFT CREEK RD CLOSED	FOLLOW DETOUR ROUTE

CHANGEABLE MESSAGE SIGN

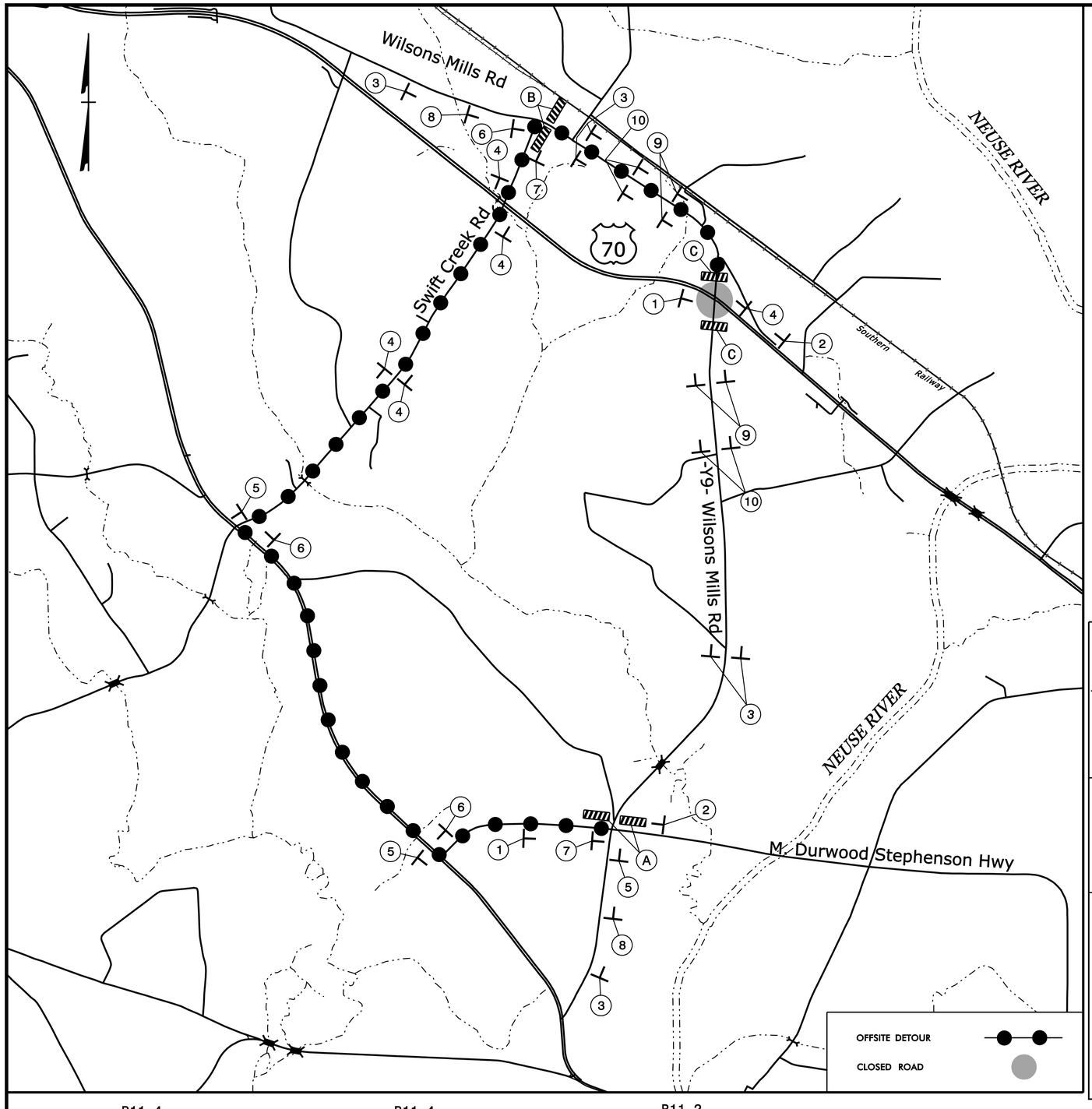
PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Arey DATE: 5/5/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION MANAGEMENT PLAN -Y7- SWIFT CREEK RD OFFSITE DETOUR ROUTE

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2E



1 ROAD CLOSED AHEAD W20-3 48″ X 48″
NEXT LEFT SP-4L 48″ X 12″

2 ROAD CLOSED AHEAD W20-3 48″ X 48″
NEXT RIGHT SP-4R 48″ X 12″

3 ROAD CLOSED AHEAD W20-3 48″ X 48″

4 WILSONS MILLS RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-3 21″ X 15″

5 WILSONS MILLS RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-1 L 21″ X 15″

6 WILSONS MILLS RD 36″ X 18″
DETOUR M4-8 24″ X 12″
M6-1 R 21″ X 15″

7 END DETOUR M4-8 A 24″ X 18″

8 DETOUR AHEAD W20-2 48″ X 48″

9 ROAD CLOSED 500 FT W20-3 48″ X 48″

10 ROAD CLOSED 1000 FT W20-3 48″ X 48″

SIGN NUMBER: name
TYPE: STATIONARY
QUANTITY: SEE PLANS
SIGN WIDTH: 3′-0″
HEIGHT: 1′-6″
TOTAL AREA: 4.5 Sq.Ft.
BORDER TYPE: INSET
RECESS: 0.47″
WIDTH: 0.63″
RADII: 1.5″
NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluoresent orange retroreflective sheeting.

DESIGN BY: none
PROJECT ID: ID
CHECKED BY:
DIV: DIV
DATE: Jun 07, 2019

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

	W	I	L	S	O	N	S																				Series/Size Text Length
	8.7	12.3	13.7	16.1	19	22.1	25.1																				C 2000 18.6
	M	I	L	L	S		R	O																			
	7.3	10.8	12.3	14.9	17.3	19.5	23.5	26.4																			C 2000 21.4

NORTH CAROLINA D.O.T. SIGN DETAIL

A R11-4 60″ X 30″ ROAD CLOSED TO THRU TRAFFIC DETOUR M4-10L 48″ x 18″
TYPE III BARRICADE

B R11-4 60″ X 30″ ROAD CLOSED TO THRU TRAFFIC DETOUR M4-10R 48″ x 18″
TYPE III BARRICADE

C R11-2 48″ X 30″ ROAD CLOSED
TYPE III BARRICADE(S)

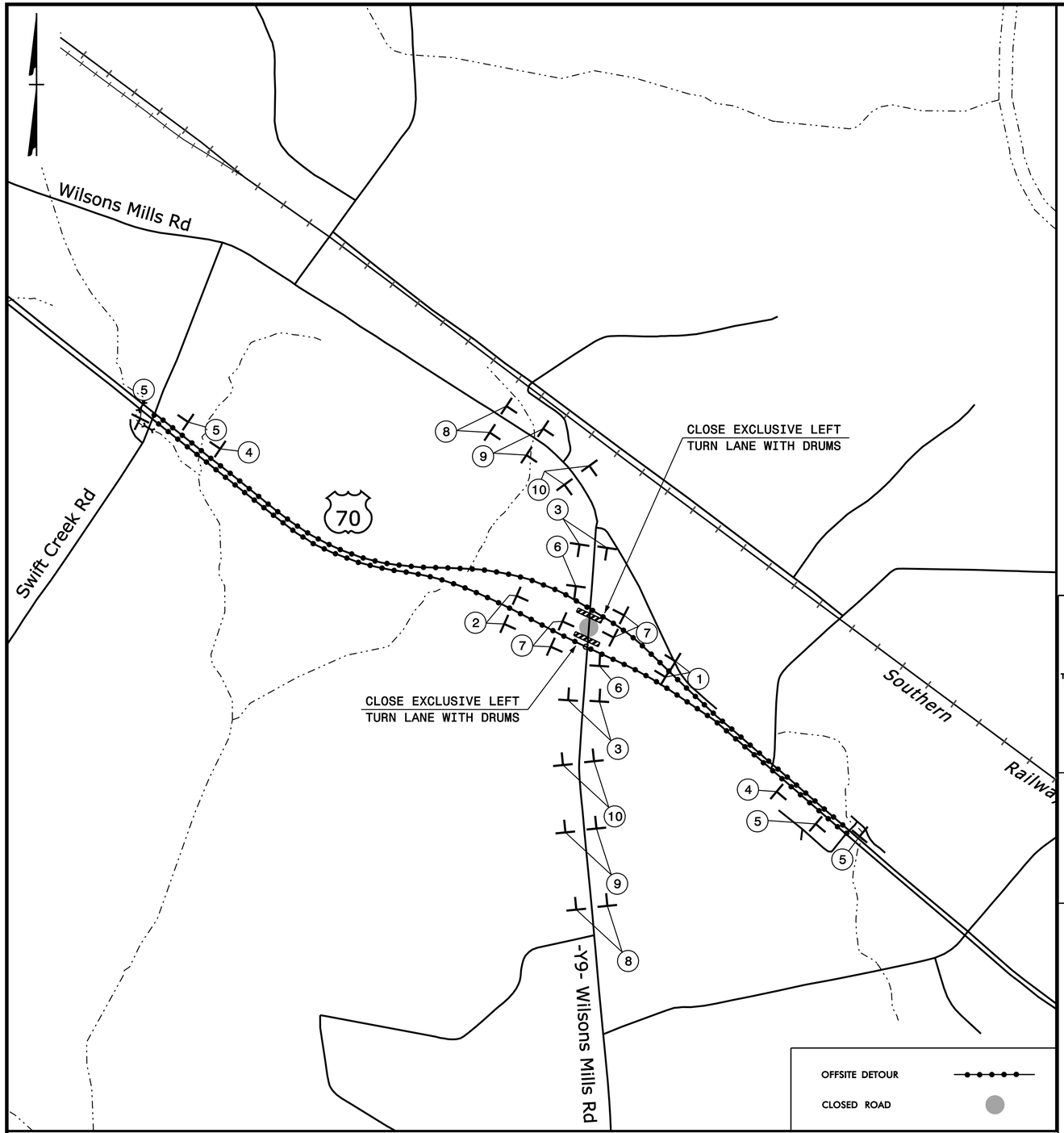
PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Arey DATE: 5/5/2020

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION MANAGEMENT PLAN
-Y9- WILSONS MILLS RD OFFSITE DETOUR ROUTE

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-2F



1. ROAD CLOSED AHEAD — W20-3, 48″ X 48″
   NEXT LEFT — SP-4L, 48″ X 12″
2. ROAD CLOSED AHEAD — W20-3, 48″ X 48″
   NEXT RIGHT — SP-4R, 48″ X 12″
3. W3-1A, 48″ X 48″
4. WILSONS MILLS RD — 36″ X 18″
   DETOUR — M4-8, 24″ X 12″
   M5-1 L, 21″ X 15″
5. WILSONS MILLS RD — 36″ X 18″
   DETOUR — M4-8, 24″ X 12″
   M6-1 L, 21″ X 15″
6. WILSONS MILLS RD — 36″ X 18″
   DETOUR — M4-8, 24″ X 12″
   M6-1 R, 21″ X 15″
7. WILSONS MILLS RD — 36″ X 18″
   DETOUR — M4-8, 24″ X 12″
   M6-3, 21″ X 15″
8. ROAD CLOSED AHEAD — W20-3, 48″ X 48″
9. DETOUR AHEAD — W20-2, 48″ X 48″
10. ROAD CLOSED 1000 FT — W20-3, 48″ X 48″
11. END DETOUR — M4-8 A, 24″ X 18″

SIGN NUMBER: name
TYPE: STATIONARY
QUANTITY: SEE PLANS
SIGN WIDTH: 3′-0″
HEIGHT: 1′-6″
TOTAL AREA: 4.5 Sq.Ft.
BORDER TYPE: INSET
RECESS: 0.47″
WIDTH: 0.63″
RADII: 1.5″
NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

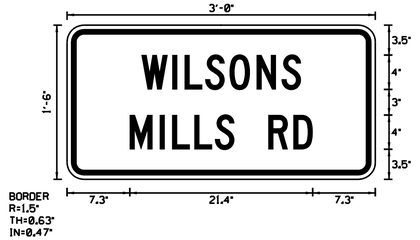
SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluoresent orange retroreflective sheeting.

DESIGN BY: none
PROJECT ID: ID
CHECKED BY:
DIV: DIV
DATE: Jun 07, 2019



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

									Series/Size Text Length
W	I	L	S	O	N	S			C 2000
8.7	12.3	13.7	16.1	19	22.1	25.1			18.6
M	I	L	L	S		R	D		C 2000
7.3	10.8	12.3	14.9	17.3	19.5	23.5	26.4		21.4

NORTH CAROLINA D.O.T. SIGN DETAIL

A. R11-4, 60″ X 30″ — ROAD CLOSED TO THRU TRAFFIC / DETOUR — M4-10L, 48″ x 18″
TYPE III BARRICADE

B. R11-4, 60″ X 30″ — ROAD CLOSED TO THRU TRAFFIC / DETOUR — M4-10R, 48″ x 18″
TYPE III BARRICADE

C. R11-2, 48″ X 30″ — ROAD CLOSED
TYPE III BARRICADE(S)

PLAN PREPARED IN THE OFFICE OF:
PROGRESSIVE DESIGN GROUP, INC.
ENGINEERS • CONSULTANTS

APPROVED: Tim Arey DATE: 5/5/2020
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025465 ENGINEER TIM AREY

TRANSPORTATION MANAGEMENT PLAN
-Y9- WILSONS MILLS RD ALT. OFFSITE DETOUR ROUTE

PHASING

PROJ. REFERENCE NO.	SHEET NO.
W-5600	TMP-3

THIS PROJECT IS BROKEN DOWN INTO THREE SEPARATE CONSTRUCTION AREAS AS DEFINED ON SHEET TMP-4. THIS ALLOWS FOR THE WORK DESCRIBED WITHIN EACH INDIVIDUAL AREA TO BE COMPLETED ON DIFFERENT TIME LINES.

PHASE I

ALL AREAS - PHASE I

INSTALL ADVANCE WORK ZONE WARNING SIGNS PRIOR TO BEGINNING WORK IN ANY AREA WITHIN THE PROJECT LIMITS ACCORDING TO ROADWAY STANDARD DRAWING NO. 1101.01. SEE GENERAL NOTE 'P' ON SHEET TMP-1B.

AREA 1 - PHASE I

STEP 1: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, CONSTRUCT THE -L- TEMPORARY PAVEMENT WIDENING IN THE -L- MEDIAN IN THE LOCATIONS SHOWN ON SHEETS TMP-6 THRU TMP-11.

USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, MILL THE TOP 2.5" OFF OF -L- IN ALL PROPOSED -L- WEDGING LOCATIONS AS SHOWN IN THE ROADWAY DESIGN PLANS AND THEN WEDGE UP EXISTING -L- TO THE PROPOSED ELEVATION IN THESE SAME LOCATIONS. REPLACE ANY EXISTING PAVEMENT MARKINGS BY THE END OF THE CONSTRUCTION PERIOD.

USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, BEGIN CONSTRUCTION ON ALL OTHER ROADWAYS IN THE LOCATIONS SHOWN ON SHEETS TMP-6 THRU TMP-11.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -L- IN THE PATTERNS SHOWN ON SHEETS TMP-6 THRU TMP-11 AND PLACE -L- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-6 THRU TMP-11. INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG THE OUTSIDE SHOULDER OF -L- IN THE LOCATIONS SHOWN ON SHEETS TMP-6 THRU TMP-11 AND BEGIN CONSTRUCTION ON THE PROPOSED -L- OUTSIDE WIDENING IN THE LOCATIONS SHOWN ON SHEETS TMP-6 THRU TMP-11.

AREA 2 - PHASE I

STEP 1: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, CONSTRUCT THE -L- TEMPORARY PAVEMENT WIDENING IN THE -L- MEDIAN IN THE LOCATIONS SHOWN ON SHEETS TMP-13 THRU TMP-16. WEDGE UP EXISTING -L- TO THE PROPOSED ELEVATION IN THE LOCATIONS SHOWN IN THE ROADWAY DESIGN PLAN. REPLACE ANY EXISTING PAVEMENT MARKINGS BY THE END OF THE CONSTRUCTION PERIOD. MILL OFF THE EXISTING OGFC ALONG -L- IN THE PROPOSED WEDGING LOCATIONS PRIOR TO BEGINNING THE WEDGING OPERATION.

BEGIN TEMPORARY TRAFFIC SIGNAL WORK AT THE -L-/-Y9- INTERSECTION FOR THE TRAFFIC PATTERN SHOWN ON SHEET TMP-14.

USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, BEGIN CONSTRUCTION ON ALL OTHER ROADWAYS, EXCEPT -Y9-, IN THE LOCATIONS SHOWN ON SHEETS TMP-13 THRU TMP-16. ADD TEMPORARY PAVEMENT WIDENING TO PROPOSED -Y9RPA-, -Y9RPC- AND -Y9RPD- IN THE LOCATIONS SHOWN ON SHEETS TMP-14 AND TMP-15 WHEN CONSTRUCTING THESE ROADWAYS.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -L- IN THE PATTERNS SHOWN ON SHEETS TMP-13 THRU TMP-16, ACTIVATE THE TEMPORARY TRAFFIC SIGNAL AT THE -L-/-Y9- INTERSECTION AND PLACE -L- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-13 THRU TMP-16. INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG THE OUTSIDE SHOULDER OF -L- IN THE LOCATIONS SHOWN ON SHEETS TMP-13 THRU TMP-16 AND BEGIN CONSTRUCTION ON THE PROPOSED -L- OUTSIDE WIDENING IN THE LOCATIONS SHOWN ON SHEETS TMP-13 THRU TMP-16.

USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG -Y9- IN THE LOCATIONS SHOWN ON SHEET TMP-14 AND BEGIN CONSTRUCTION ON THE PROPOSED -L- BRIDGES OVER -Y9- AND PROPOSED -Y9- WIDENING IN THE LOCATIONS SHOWN ON SHEET TMP-14.

AREA 3 - PHASE I

STEP 1: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, CONSTRUCT THE -L- TEMPORARY PAVEMENT WIDENING IN THE -L- MEDIAN IN THE LOCATIONS SHOWN ON SHEETS TMP-18 AND TMP-19. WEDGE UP EXISTING -L- TO THE PROPOSED ELEVATION IN THE LOCATIONS SHOWN IN THE ROADWAY DESIGN PLAN. REPLACE ANY EXISTING PAVEMENT MARKINGS BY THE END OF THE CONSTRUCTION PERIOD. BEGIN TEMPORARY TRAFFIC SIGNAL WORK FOR THE -L-/-Y7- TRAFFIC PATTERN SHOWN ON SHEET TMP-18.

USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, BEGIN CONSTRUCTION ON ALL OTHER ROADWAYS IN THE LOCATIONS SHOWN ON SHEETS TMP-14 AND TMP-15.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -L- IN THE PATTERNS SHOWN ON SHEETS TMP-18 AND TMP-19 AND PLACE -L- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-18 AND TMP-19. INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG THE OUTSIDE SHOULDER OF -L- IN THE LOCATIONS SHOWN ON SHEETS TMP-18 AND TMP-19 AND BEGIN CONSTRUCTION ON THE PROPOSED -L- OUTSIDE WIDENING IN THE LOCATIONS SHOWN ON SHEETS TMP-18 AND TMP-19.

PHASE II

AREA 1 - PHASE II

STEP 1: COMPLETE CONSTRUCTION ON ALL ROADWAYS UP THROUGH ONE LAYER OF SURFACE COURSE REQUIRED TO IMPLEMENT THE TRAFFIC PATTERN SHOWN ON SHEETS TMP-21 THRU TMP-25.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -SR1-, -SR2-, -SR3- AND -Y4- IN THE PATTERNS SHOWN ON SHEETS TMP-21 THRU TMP-25 AND TMP-31 AND PLACE -SR1-, -SR2-, -SR3- AND -Y4- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-21 THRU TMP-25 AND TMP-31.

STEP 3: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -L- IN THE PATTERNS SHOWN ON SHEETS TMP-21 THRU TMP-25 AND PLACE -L- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-21 THRU TMP-25. INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG THE INSIDE SHOULDER OF -L- IN THE LOCATIONS SHOWN ON SHEETS TMP-21 THRU TMP-25 AND BEGIN CONSTRUCTION ON THE PROPOSED -L- INSIDE WIDENING IN THE LOCATIONS SHOWN ON SHEETS TMP-21 THRU TMP-25.

AREA 2 - PHASE II

STEP 1: COMPLETE CONSTRUCTION ON ALL ROADWAYS UP THROUGH ONE LAYER OF SURFACE COURSE REQUIRED TO IMPLEMENT THE TRAFFIC PATTERN SHOWN ON SHEETS TMP-27 THRU TMP-30.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -SR5-, -SR6-, -SR7-, -SR8- AND -SR9- IN THE PATTERNS SHOWN ON SHEETS TMP-27 THRU TMP-30 AND PLACE -SR5-, -SR6-, -SR7-, -SR8- AND -SR9- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-27 THRU TMP-30.

STEP 3: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 AND 3 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -L-, -Y9-, -Y9RPA-, -Y9RPC- AND -Y9RPD- IN THE PATTERNS SHOWN ON SHEETS TMP-27 THRU TMP-30, ACTIVATE THE TEMPORARY TRAFFIC SIGNALS AT THE -Y9-/-Y9RPA- INTERSECTION AND THE -Y9-/-Y9RPC- INTERSECTION AND PLACE -L-, -Y9-, -Y9RPA-, -Y9RPC- AND -Y9RPD- TRAFFIC INTO THE PATTERNS SHOWN ON SHEETS TMP-27 THRU TMP-30. INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS ALONG THE INSIDE SHOULDER OF -L-, -Y9-, -Y9RPA-, -Y9RPC- AND -Y9RPD- IN THE LOCATIONS SHOWN ON SHEETS TMP-27 THRU TMP-30 AND BEGIN CONSTRUCTION ON PROPOSED -L- INSIDE WIDENING, -Y9- AND -Y9RPB- IN THE LOCATIONS SHOWN ON SHEETS TMP-27 THRU TMP-30. INSTALL AND ACTIVATE THE OFFSITE DETOUR DEVICES FOR -Y9- WHEN HANGING GIRDERS OVER -Y9-. USE THE OFFSITE DETOUR ROUTE SHOWN ON SHEET TMP-2E IF -Y7- IS OPENED TO THRU TRAFFIC AT THE TIME THE -L- GIRDERS WILL BE INSTALLED. USE THE OFFSITE DETOUR ROUTE SHOWN ON SHEET TMP-2F IF -Y7- IS CLOSED TO TRAFFIC AT THE TIME THE -L- GIRDERS WILL BE INSTALLED.

AREA 3 - PHASE II

STEP 1: COMPLETE CONSTRUCTION ON -SR4- AND -SR5- UP THROUGH ONE LAYER OF SURFACE COURSE REQUIRED TO IMPLEMENT THE TRAFFIC PATTERN SHOWN ON SHEET TMP-31.

COMPLETE CONSTRUCTION ON THE -Y7RPA- AND -Y7RPC- TIE INS TO -L- UP THROUGH ONE LAYER OF SURFACE COURSE.

STEP 2: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 14, INSTALL WORK ZONE PERFORMANCE PAVEMENT MARKINGS AND TEMPORARY MARKERS ON -SR4- IN THE PATTERN SHOWN ON SHEET TMP-31 AND PLACE -SR4- TRAFFIC INTO THE PATTERN SHOWN ON SHEET TMP-31.

INSTALL A TEMPORARY TRAFFIC SIGNAL AT THE -L-/-Y5- INTERSECTION AND COVER THE SIGNAL HEADS. INSTALL AND COVER OFFSITE DETOUR TRAFFIC CONTROL DEVICES FOR THE CLOSURE OF -Y7- AS SHOWN ON SHEET TMP-2D.

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