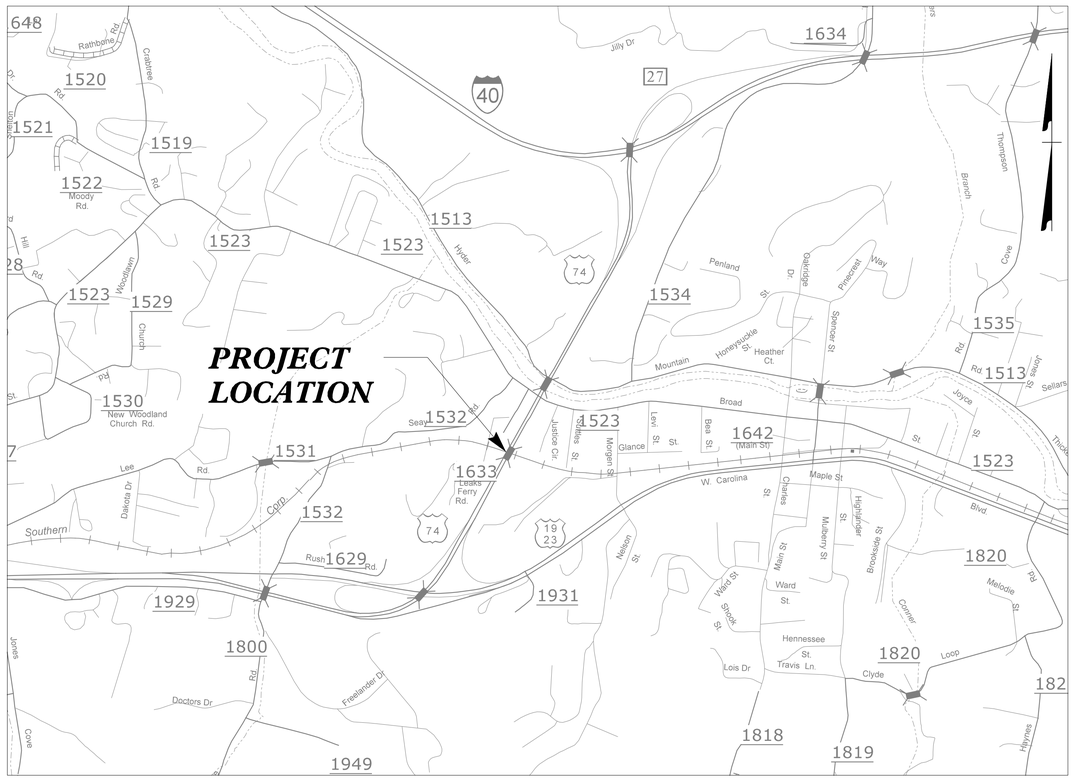
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HAYWOOD COUNTY

LOCATION: TOWN OF CLYDE – REPLACE BRIDGE 430095 ON US 74 OVER BLUE RIDGE SOUTHERN RAILROAD



VICINITY MAP

INDEX OF SHEETS

SHEET NO.
TMP-1

B-5982

TIP PROJECT:

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

PLANS PREPARED BY:

J. TOWNSEND, PE (VHB)

NCDOT CONTACTS:

DAVID S STUTTS, PE
PROJECT ENGINEER

MITCHELL BISHOP, PE
DIVISION CONSTRUCTION ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

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vhb
940 Main Campus Drive, Suite 500 Raleigh, NC 27606
NC License No. C-3705

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN C. TOWNSEND
6/13/2024

5/29/2024
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User:jTownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE 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	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXIT AND ENTRANCE RAMPS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
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
- WEDGING
- TEMPORARY PAVEMENT

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

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION
	PAINT (6")
P20	WHITE EDGELINE
P22	10 FT. WHITE SKIP
P23	3 FT.- 9 FT./SP WHITE MINISKIP
P30	YELLOW EDGELINE
	PAINT (12")
P50	WHITE GORELINE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

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TRANSPORTATION MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:

- FULL ROADWAY CLOSURES
- ROLLING ROADBLOCK
- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- ONE-LANE, TWO WAY OPERATION (FLAGGING)
- NIGHT WORK
- WEEKEND WORK
- WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
- OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES

WORK ZONE SAFETY & MOBILITY STRATEGIES:

- SEQUENTIAL LIGHTING
- PRESENCE LIGHTING
- HIGH VISIBILITY DEVICES

TRAFFIC / INCIDENT MANAGEMENT & SPEED ENFORCEMENT STRATEGIES:

- COORDINATION WITH STATE TRAFFIC OPERATIONS CENTER (STOC)
- COORDINATION WITH MEDIA
- LOCAL DETOUR ROUTES
- DEDICATED (PAID) LAW ENFORCEMENT
- COOPERATIVE LAW ENFORCEMENT (HAWKS)
- INCREASED PENALTIES FOR WORK ZONE VIOLATIONS

CONTRACTING & INNOVATIVE CONSTRUCTION STRATEGIES:

- INTERMEDIATE CONTRACT TIMES / LIQUIDATED DAMAGES

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
US 74	9:00 A.M. FRI. TO 8:00 P.M. SUN.

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

ROAD NAME
US 74

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 9:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 9:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 9:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 9:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 74	6:00 A.M. TO 10:00 P.M., SUN. THRU THU. 6:00 A.M. TO 11:00 P.M., FRI. AND SAT.

D) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS WILL NOT BE ALLOWED:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 74	9:00 A.M. FRI. TO 8:00 P.M. SUN.

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS WILL NOT BE ALLOWED:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 74	9:00 A.M. FRI. TO 8:00 P.M. SUN.

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

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.

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL MANAGEMENT STRATEGIES AND GENERAL NOTES

5/9/2024
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GENERAL NOTES (CONTINUED)

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) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

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.

COVER CONFLICTING SIGNAGE WHEN OFF-SITE DETOUR IS 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 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
US 74	PAINT	TEMPORARY RAISED
ALL OTHER ROADS	PAINT	NONE

AA) 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.

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031533 JOHN G. TOWNSEND

6/13/2024

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL MANAGEMENT STRATEGIES AND GENERAL NOTES

5/9/2024
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GENERAL NOTES (CONTINUED)

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

CC) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION. PRIOR TO SHIFTING TRAFFIC TO A NEW PATTERN, REMOVE ALL CONFLICTING MARKERS (AS DEFINED IN SECTION 1205 OF THE *2024 STANDARDS AND SPECIFICATIONS FOR ROADS AND STRUCTURES*) AND SNOWPLOWABLE MARKER CASTINGS, AND PATCH ALL CASTING HOLES. PAVEMENT MARKINGS ON ASPHALT SURFACES OF US 74, INCLUDING ALL RAMPS, CROSS OVERS, AND SLIP-LANES, SHALL BE EITHER MILLED AND FILLED OR CONCEALED BY APPLYING A UNIFORM OVERLAY. AT A MINIMUM, THE MILL AND FILL OR UNIFORM OVERLAY SHALL COVER THE ENTIRE WIDTH OF ANY SHIFTED TRAVEL LANE(S) CONTAINING THE CONFLICTING MARKINGS AND EXTEND TO CONFLICTING MARKINGS ON SHOULDERS OF THE NEW TRAFFIC PATTERN.

MISCELLANEOUS

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

EE) 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) 500 FT AND 1,000 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

FF) COORDINATE WITH THE RAILROAD TO COMPLETE BRIDGE DEMO/CONSTRUCTION AND -Y4- REALIGNMENT.

GG) CONTACT THE STOC FOR LANE AND RAMP CLOSURES.

LOCAL NOTES

1. COORDINATION AND COMMUNICATION REGARDING EMERGENCY RESPONSE PLANS DURING CONSTRUCTION WILL BE CONDUCTED WITH HAYWOOD COUNTY EMERGENCY SERVICES OFFICE (828-456-2391) AND LAKE JUNALUSKA FIRE DEPARTMENT (828-452-4404) AT LEAST ONE MONTH PRIOR TO THE START OF CONSTRUCTION.

APPROVED: _____

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6/20/2024

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6/20/2024
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Moody Rd. | New Woodland Church Rd. | Leaks Ferry Rd. | Main St | Hospital Dr | Doctors Dr | Summerset Dr | Sunset Ridge Rd | Leroy Georgel Dr | Spleewood Dr | Freelander Dr | Hennessee St. | Travis Ln. | Lois Dr | Clyde | Melodie St | Penland St. | Mountain | Honeysuckle St. | Heather Ct. | Spencer St | Oakridge Dr. | Pinecrest Way | Jilly Dr | Glance | Levi St. | Bea St. | Justice Cir. | Suttles St. | Morgen St. | W. Carolina | Maple St | Charles St. | Mulberry St | Highlander | Brookside St | Nelson St | Ward St. | Shook St. | Conner | Joyce St. | Sellars St. | Jones St | Thickety Rd. | Haynes | Ratcliffe | Seay | Lee | Rush | Broad St. | Medford Hill Rd. | Woodlawn | Church | Rathbone Rd. | Meadow | Crabtree | Shelton | Jones | Dakota Dr | Cove | Hyder | Thompson Branch Cove | Rd. | Blvd. | St. | Ave. | Dr. | Ln. | Cir. | Pkwy | Corp. | Southern | Norfolk | Paragon

40 27 74 74 19 23

F F F E D D 1 A B C AA

PLACE 1.5± MILES FROM SIGN D

DETOUR ROUTE

ADJUST SIGNAL TIMING AS DIRECTED BY ENGINEER FOR SIGNALS ALONG DETOUR ROUTE

SEE SHEET TMP-2A FOR DETOUR SIGNS

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DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND 6/13/2024

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
US 19/US 23 SB
RAMP TO
US 74 EB
CLOSURE

5/13/2024
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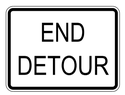
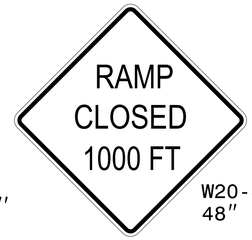
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2A



M4-8A
24″ X 18″



W20-3
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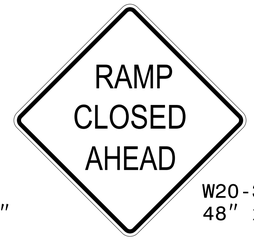


W20-3
48″ x 48″

A B C

M4-8 24″X12″ | M4-5 24″X12″ | M1-1 36″ x 36″ | M6-3 21″X15″

M4-8 24″X12″ | M3-2 24″X12″ | M1-4 36″ x 36″ | M6-3 21″X15″

D

M4-8 24″X12″ | M4-5 24″X12″ | M1-1 36″ x 36″ | M6-2 21″X15″

M4-8 24″X12″ | M3-2 24″X12″ | M1-4 36″ x 36″ | M6-2 21″X15″

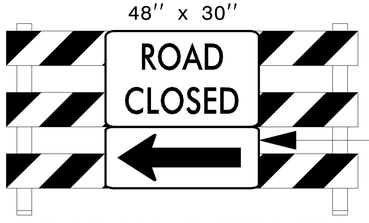
E

M4-8 24″X12″ | M4-5 24″X12″ | M1-1 36″ x 36″ | M6-1 21″X15″

M4-8 24″X12″ | M3-2 24″X12″ | M1-4 36″ x 36″ | M6-1 21″X15″

F

R11-2
48″ x 30″



W1-6L
48″ x 24″

TYPE III BARRICADE

1

BEGINNING 6 DAYS PRIOR TO ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
US 74 E ON RAMP TO CLOSE	(DAY) AT MIDNIGHT

CHANGEABLE MESSAGE SIGN

DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
US 74 E ON RAMP CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

AA

SEE SHEET TMP-2 FOR DETOUR

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031533 JOHN G. TOWNSEND

6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
US 19/US 23 SB
RAMP TO
US 74 EB
CLOSURE

5/13/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02A.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2B

AA
C
E
B
B
B
A
F
G
1

INTERSTATE 40
209
24
209
209
19 276
19
276
74
102
103
104
105
106
107
27
19 23 74
19 23

Richland Creek
Pigeon River
Lake Junaluska

ADJUST SIGNAL TIMING AS DIRECTED BY ENGINEER FOR SIGNALS ALONG DETOUR ROUTE

SEE SHEET TMP-2C FOR DETOUR SIGNS

DETOUR ROUTE

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
I-40 EB RAMP
TO
US 74 WB
CLOSURE

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02B.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2C

M4-8A
24'' X 18''

A

M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-3
21″X15″

B

M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-2
21″X15″

C

M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-1
21″X15″

D

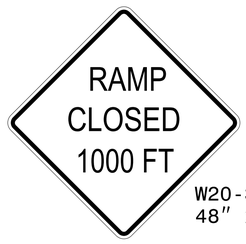
M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-1
21″X15″

E



W20-3
48″ x 48″

F

W20-3
48″ x 48″

G

BEGINNING 6 DAYS PRIOR TO ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
EXIT 27 TO CLOSE	(DAY) AT (9PM)

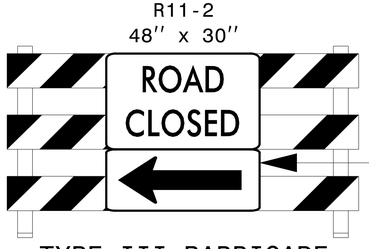
CHANGEABLE MESSAGE SIGN

DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
EXIT 27 CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

AA



R11-2
48'' x 30''

W1-6L
48″ x 24″

TYPE III BARRICADE

1

SEE SHEET TMP-2B FOR DETOUR

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND

6/13/2024

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
I-40 EB RAMP
TO
US 74 WB
CLOSURE

5/13/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02C.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2D

AA
B
C
D
E
F
G
1

209
INTERSTATE 40
24
27
74
107
19 276
19
276
19 23
19 23 74
104
103
102
105
106

Pigeon River
Richland Creek
Lake Junaluska

DETOUR ROUTE

ADJUST SIGNAL TIMING AS DIRECTED BY ENGINEER FOR SIGNALS ALONG DETOUR ROUTE

SEE SHEET TMP-2E FOR DETOUR SIGNS

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

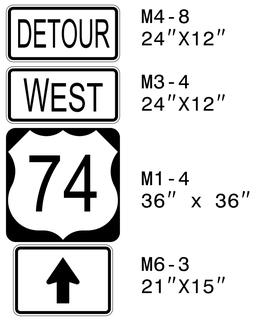
DETOUR ROUTE
US 74 WB
CLOSURE

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02D.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2E

M4-8A
24'' X 18''

A



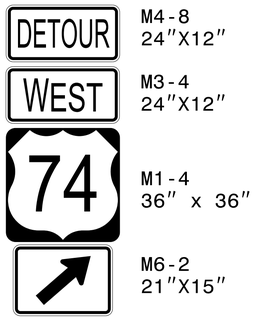
M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-3
21″X15″

B



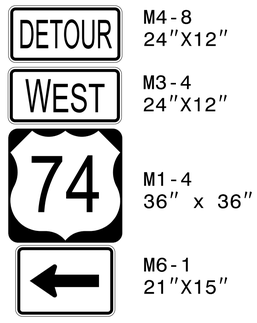
M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-2
21″X15″

C



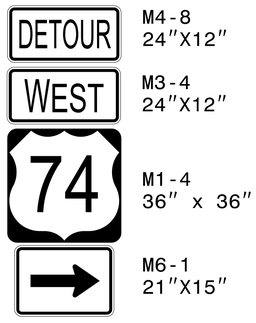
M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

M6-1
21″X15″

D



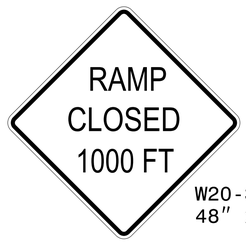
M4-8
24″X12″

M3-4
24″X12″

M1-4
36″ x 36″

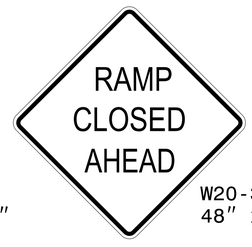
M6-1
21″X15″

E



W20-3
48″ x 48″

F



W20-3
48″ x 48″

G

BEGINNING 6 DAYS PRIOR TO ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
EXIT 27 TO CLOSE	(DAY) AT (9PM)

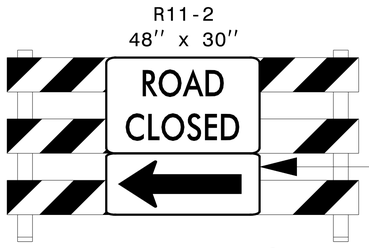
CHANGEABLE MESSAGE SIGN

DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
EXIT 27 CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

AA



R11-2
48'' x 30''

W1-6L
48″ x 24″

TYPE III BARRICADE

1

SEE SHEET TMP-2D FOR DETOUR

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
US 74 WB
CLOSURE

5/13/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02E.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2F

CLOSE US 74 EB AT EXIT 106 IN ACCORDANCE WITH RSD 1101.03, SHEET 7 OF 9.

ADJUST SIGNAL TIMING AS DIRECTED BY ENGINEER FOR SIGNALS ALONG DETOUR ROUTE

SEE SHEET TMP-2G FOR DETOUR SIGNS

DETOUR ROUTE

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031533 JOHN G. TOWNSEND 6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

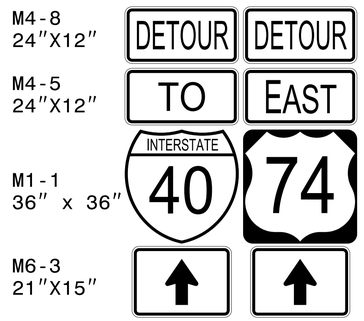
DETOUR ROUTE
US 74 EB
CLOSURE

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02F.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2G

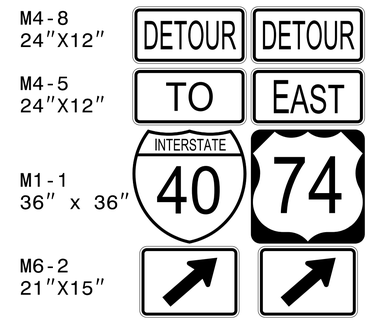
M4-8A
24" X 18"

A



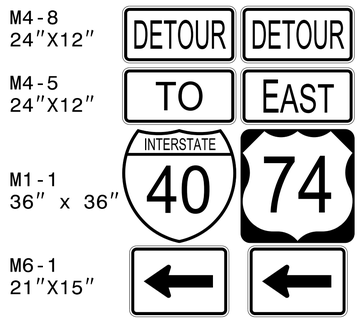
M4-8 24"X12" | M4-8 24"X12"
M4-5 24"X12" | M3-2 24"X12"
M1-1 36" x 36" | M1-4 36" x 36"
M6-3 21"X15" | M6-3 21"X15"

B



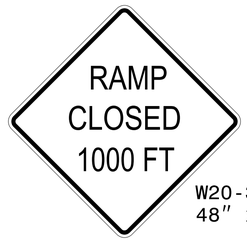
M4-8 24"X12" | M4-8 24"X12"
M4-5 24"X12" | M3-2 24"X12"
M1-1 36" x 36" | M1-4 36" x 36"
M6-2 21"X15" | M6-2 21"X15"

C



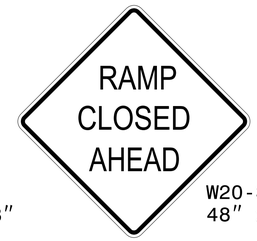
M4-8 24"X12" | M4-8 24"X12"
M4-5 24"X12" | M3-2 24"X12"
M1-1 36" x 36" | M1-4 36" x 36"
M6-1 21"X15" | M6-1 21"X15"

D



W20-3
48" x 48"

E



W20-3
48" x 48"

F

BEGINNING 6 DAYS PRIOR TO ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
US 74 E ON RAMP TO CLOSE	(DAY) AT MIDNIGHT

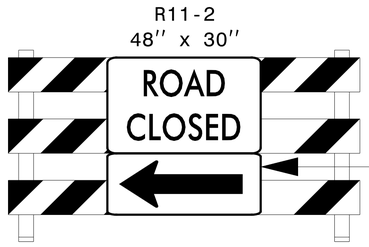
CHANGEABLE MESSAGE SIGN

DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
US 74 E ON RAMP CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

AA



R11-2
48" x 30"

W1-6L
48" x 24"

TYPE III BARRICADE

1

SEE SHEET TMP-2F FOR DETOUR

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

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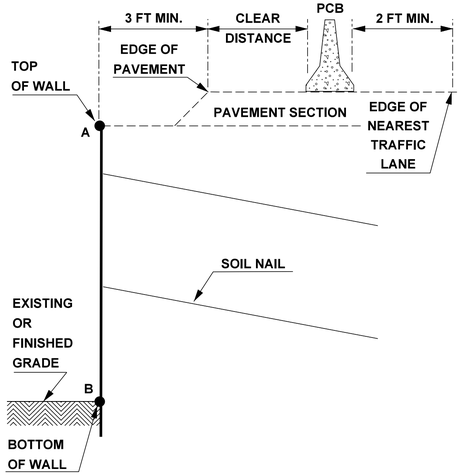
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DETOUR ROUTE
US 74 EB
CLOSURE

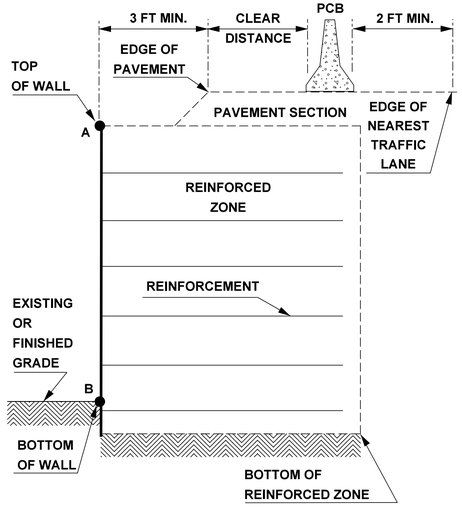
5/13/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-026.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-2H

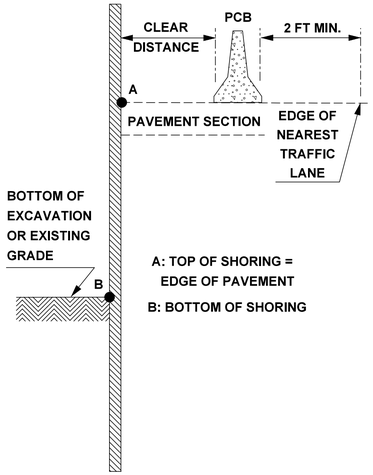
TEMPORARY SOIL NAIL WALL



TEMPORARY MSE WALL



TEMPORARY SHORING



NOTE: WALL OR SHORING HEIGHT = A-B

FIGURE A

NOTES

1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.

2- REFER TO THE "TEMPORARY SHORING" STANDARD PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).

3- PCB IS REQUIRED IF TEMPORARY SHORING/WALL IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT FOR APPLICABLE PAVEMENT DESIGN).

4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.

5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING/WALLS EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.

6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.

7- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER.

8- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THIS MINIMUM REQUIRED DISTANCE IS NOT AVAILABLE, CONTACT THE ENGINEER.

9- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
		50-56	26	26	28	32	35	38
		>56	26	27	29	32	36	38
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

* See Figure Below

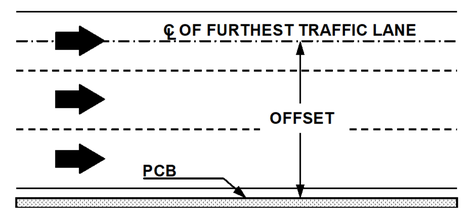


FIGURE B

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031533 JOHN G. TOWNSEND
6/13/2024

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-02H.dgn
User:jtownsend

NOTES FOR TEMPORARY SHORING NO. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 5.0' RT, TO STATION -L- STA. 19+65.00, 5.0' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 5.0' RT, TO STATION -L- STA. 19+65.00, 5.0' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 5.0' RT, TO STATION -L- STA. 19+65.00, 5.0' RT WILL NOT PENETRATE BELOW ELEVATION 2,580 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE CANTILEVER SHORING FOR TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 5.0' RT, TO STATION -L- STA. 19+65.00, 5.0' RT.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 5.0' RT, TO STATION -L- STA. 19+65.00, 5.0' RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

NOTES FOR TEMPORARY SHORING NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 5.0' RT, TO STATION -L- STA. 21+25.00, 5.0' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 5.0' RT, TO STATION -L- STA. 21+25.00, 5.0' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 5.0' RT, TO STATION -L- STA. 21+25.00, 5.0' RT WILL NOT PENETRATE BELOW ELEVATION 2,552 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE CANTILEVER SHORING FOR TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 5.0' RT, TO STATION -L- STA. 21+25.00, 5.0' RT.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 5.0' RT, TO STATION -L- STA. 21+25.00, 5.0' RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

NOTES FOR TEMPORARY SHORING NO. 3

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 20+90.00, 51.0 LT' TO STATION -L- STA. 21+23.00, 51.0 LT', FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 20+90.00, 51.0 LT' TO STATION -L- STA. 21+23.00, 51.0 LT'. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- STA. 20+90.00, 51.0 LT' TO STATION -L- STA. 21+23.00, 51.0 LT' RT WILL NOT PENETRATE BELOW ELEVATION 2,552 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE CANTILEVER SHORING FOR TEMPORARY SHORING FROM STATION -L- STA. 20+90.00, 51.0 LT' TO STATION -L- STA. 21+23.00, 51.0 LT'.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 20+90.00, 51.0 LT' TO STATION -L- STA. 21+23.00, 51.0 LT'. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

NOTES FOR TEMPORARY SHORING NO. 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 10.0' RT TO STATION -L- STA. 19+65.00, 10.0' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 10.0' RT TO STATION -L- STA. 19+65.00, 10.0' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 19+33.00, 10.0' RT TO STATION -L- STA. 19+65.00, 10.0' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

NOTES FOR TEMPORARY SHORING NO. 5

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 10.0' RT TO STATION -L- STA. 21+25.00, 10.0' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 10.0' RT TO STATION -L- STA. 21+25.00, 10.0' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 21+00.00, 10.0' RT TO STATION -L- STA. 21+25.00, 10.0' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

NOTES FOR TEMPORARY SHORING NO. 6

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L_DET_WB- STA. 18+95.11, 22.6' LT TO STATION -L_DET_WB- 22+46.6, 90.4' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (φ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 2,540 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L_DET_WB- STA. 18+95.11, 22.6' LT TO STATION -L_DET_WB- 22+46.6, 90.4' LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO DIVISION 14 ON MAY 22, 2024, AND SEALED BY A PROFESSIONAL ENGINEER, MICHAEL H. STEPHENS, LICENSE #028893.

APPROVED: ______

DATE: ______

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND

DocuSigned by: John Townsend 6B21C1C41D6F4AC...

6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY SHORING NOTES

PHASING

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-3

NOTES:

REPLACE MARKINGS AND RETURN TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE. THIS MAY REQUIRE A COMBINATION OF INSTALLATION OF PROPOSED PIPES, TEMPORARY PIPES, STEEL PLATES, TEMPORARY MEDIAN, AND OUTSIDE DITCHES. PROVIDE WEDGING AS REQUIRED TO PROMOTE POSITIVE DRAINAGE AND SMOOTH TRANSTIONS.

PAVE PROPOSED CONSTRUCTION UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, IN ALL PHASES UNTIL STATED TO INSTALL FINAL LAYER IN PHASING.

THE TERM RSD REFERS TO ROADWAY STANDARD DRAWINGS.

PHASE I

STEP 1: USING RSD 1101.01, INSTALL ADVANCE WARNING SIGNS ON -L- (US 74) AND ALL -Y- LINES AND SIDE STREETS.

STEP 2: INSTALL AND COVER DETOUR SIGNS AS SHOWN ON SHEETS TMP-2 THRU TMP-2C.

STEP 3: CLOSE THE EASTBOUND US 74 ON RAMP FROM US 19/23 AND THE WESTBOUND US 74 RAMP ON RAMP FROM I-40 EASTBOUND AND UNCOVER DETOUR SIGNS PLACED IN STEP 2.

STEP 4: USING RSD 1101.02 (SHEET 4 OF 19), CLOSE THE OUTSIDE WESTBOUND TRAVEL LANE ON -L- (US 74) AND INSTALL UNANCHORED PORTABLE CONCRETE BARRIER WITH DRAINAGE SLOTS AND CRASH CUSHIONS ON THE LEFT SIDE OF -L- (US 74) AS SHOWN ON SHEETS TMP-4 AND TMP-5.

STEP 5: AWAY FROM TRAFFIC AND BEHIND PORTABLE CONCRETE BARRIER, CONSTRUCT THE WESTBOUND TEMPORARY DETOUR (-L_DET_WB-) UP TO THE EXISTING ROADWAY AND THE DETOUR BRIDGE.

PHASE II

STEP 1: INSTALL AND COVER DETOUR SIGNS AS SHOWN ON SHEETS TMP-2D THRU TMP-2G.

COMPLETE STEPS 2, 3 AND 4 OF THIS PHASE USING A COMBINATION OF SINGLE LANE CLOSURES AND DIRECTIONAL ROAD CLOSURES AS NECESSARY. UNCOVER THE RELEVANT DETOUR SIGNS WHEN A DIRECTIONAL ROAD CLOSURE IS USED AND RECOVER THEM WHEN IT IS NOT IN USE.

STEP 2: USING RSD 1101.02 (SHEET 4 OF 19), CLOSE THE OUTSIDE WESTBOUND TRAVEL LANE ON -L- (US 74) AND REMOVE THE PORTABLE CONCRETE BARRIER AND CRASH CUSHIONS. CONTINUE CONSTRUCTION OF THE DETOUR ROADWAY TO TIE INTO THE EXISTING PAVEMENT AND PROVIDE SUFFICIENT WIDTH TO ACCOMMODATE ONE 11’ WESTBOUND TRAVEL LANE ON THE OUTSIDE OF -L_DET_WB-.

STEP 3: MAINTAINING ONE WESTBOUND TRAVEL LANE ON -L- (US 74), SHIFT THE WESTBOUND TRAVEL LANE TO THE OUTSIDE OF -L- (US 74) AND ONTO THE OUTSIDE OF -L_DET_WB-. USING RSD 1101.02 (SHEET 4 OF 19), ALSO CLOSE THE INSIDE EASTBOUND TRAVEL ON -L- (US 74) TO COMPLETE CONSTRUCTION OF -L_DET_WB- AND INSTALL ANCHORED PORTABLE CONCRETE BARRIER WITH DRAINAGE SLOTS AND CRASH CUSHIONS.

STEP 4: USING RSD 1101.02 (SHEET 4 OF 14) AS NEEDED, REMOVE ANY CONFLICTING MARKINGS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SIGNAGE, AND SHIFT TRAFFIC INTO NEW PATTERN AS SHOWN ON SHEETS TMP-6 AND TMP-7.

STEP 5: AWAY FROM TRAFFIC AND BEHIND PORTABLE CONCRETE BARRIER, BEGIN CONSTRUCTION OF THE EASTBOUND DETOUR.

PHASE III

COMPLETE STEPS 1, 2, AND 3 OF THIS PHASE USING A COMBINATION OF SINGLE LANE CLOSURES AND DIRECTIONAL ROAD CLOSURES AS NECESSARY. UNCOVER THE RELEVANT DETOUR SIGNS WHEN A DIRECTIONAL ROAD CLOSURE IS USED AND RECOVER THEM WHEN IT IS NOT IN USE.

STEP 1: USING RSD 1101.02 (SHEET 4 OF 19), CLOSE THE INSIDE TRAVEL LANES IN BOTH DIRECTIONS ON -L- (US 74) AND CONTINUE CONSTRUCTION OF THE EASTBOUND DETOUR TO PROVIDE SUFFICIENT WIDTH TO ACCOMMODATE ONE 11’ WESTBOUND TRAVEL LANE ON THE INSIDE OF -L_DET_EB- AND INSTALL ANCHORED PORTABLE CONCRETE BARRIER WITH DRAINAGE SLOTS AND CRASH CUSHIONS.

STEP 2: MAINTAINING ONE EASTBOUND TRAVEL LANE ON -L- (US 74), SHIFT THE EASTBOUND TRAVEL LANE TO THE INSIDE OF -L- (US 74) AND ONTO THE INSIDE OF -L_DET_EB-. COMPLETE CONSTRUCTION OF -L_DET_EB- AND INSTALL ANCHORED PORTABLE CONCRETE BARRIER WITH DRAINAGE SLOTS AND CRASH CUSHIONS.

STEP 3: USING RSD 1101.02 (SHEET 4 OF 19) AS NEEDED, REMOVE ANY CONFLICTING MARKINGS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SIGNAGE, SHIFT TRAFFIC INTO NEW PATTERN AS SHOWN ON SHEETS TMP-8 AND TMP-9.

STEP 4: AWAY FROM TRAFFIC AND BEHIND PORTABLE CONCRETE BARRIER, REMOVE THE RIGHT SIDE OF THE EXISTING STRUCTURE AND CONSTRUCT THE RIGHT SIDE OF THE PROPOSED STRUCTURE AND BEGIN CONSTRUCTION OF THE RIGHT SIDE OF -L- (US 74).

USING RSD 1101.02 (SHEET 1 OF 19), MAINTAIN ONE-LANE, TWO WAY OPERATIONS AND CONSTRUCT -Y4- (NORTHWOOD DR).

PHASE IV

COMPLETE STEPS 1, 2, AND 3 OF THIS PHASE USING A COMBINATION OF SINGLE LANE CLOSURES AND DIRECTIONAL ROAD CLOSURES AS NECESSARY. UNCOVER THE RELEVANT DETOUR SIGNS WHEN A DIRECTIONAL ROAD CLOSURE IS USED AND RECOVER THEM WHEN IT IS NOT IN USE.

STEP 1: USING RSD 1101.02 (SHEET 4 OF 19), CLOSE THE OUTSIDE EASTBOUND TRAVEL LANE ON -L- (US 74) AND REMOVE THE PORTABLE CONCRETE BARRIER AND CRASH CUSHIONS. COMPLETE CONSTRUCTION OF THE OUTSIDE RIGHT SIDE OF -L- (US 74) AND PROVIDE SUFFICIENT WIDTH TO ACCOMMODATE ONE 11’ EASTBOUND TRAVEL LANE ON THE OUTSIDE OF -L- (US 74).

STEP 2: MAINTAINING ONE EASTBOUND TRAVEL LANE ON -L- (US 74), SHIFT THE EASTBOUND TRAVEL LANE TO THE OUTSIDE OF -L- (US 74). USING RSD 1101.02 (SHEET 4 OF 19), ALSO CLOSE THE INSIDE WESTBOUND TRAVEL ON -L- (US 74) TO COMPLETE CONSTRUCTION OF THE RIGHT SIDE OF -L- (US 74) AND THE MEDIAN BARRIER.

STEP 3: USING RSD 1101.02 (SHEET 4 OF 14) AS NEEDED, REMOVE ANY CONFLICTING MARKINGS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SIGNAGE, AND SHIFT TRAFFIC INTO NEW PATTERN AS SHOWN ON SHEETS TMP-10 AND TMP-11.

STEP 6: AWAY FROM TRAFFIC AND BEHIND PORTABLE CONCRETE BARRIER, CONSTRUCT THE LEFT SIDE OF THE PROPOSED STRUCTURE AND BEGIN CONSTRUCTION OF THE LEFT SIDE OF -L- (US 74).

PHASE V

COMPLETE STEPS 1, 2, AND 3 OF THIS PHASE USING A COMBINATION OF SINGLE LANE CLOSURES AND DIRECTIONAL ROAD CLOSURES AS NECESSARY. UNCOVER THE RELEVANT DETOUR SIGNS WHEN A DIRECTIONAL ROAD CLOSURE IS USED AND RECOVER THEM WHEN IT IS NOT IN USE.

STEP 1: USING RSD 1101.02 (SHEET 4 OF 19), CLOSE THE INSIDE TRAVEL LANES IN BOTH DIRECTIONS ON -L- (US 74), REMOVE THE PORTABLE CONCRETE BARRIER AND CRASH CUSHIONS AND COMPLETE CONSTRUCTION OF THE INSIDE LEFT SIDE OF -L- (US 74) AND PROVIDE SUFFICIENT WIDTH TO ACCOMMODATE ONE 11’ EASTBOUND TRAVEL LANE ON THE INSIDE OF -L- (US 74).

STEP 2: MAINTAINING ONE WESTBOUND TRAVEL LANE ON -L- (US 74), SHIFT THE WESTBOUND TRAVEL LANE TO THE INSIDE OF -L- (US 74) AND CONTINUE CONSTRUCTION OF THE LEFT SIDE OF -L- (US 74).

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND 6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASING

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-03.dgn
User:jtownsend

PHASING (CONTINUED)

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-3A

STEP 3: USING RSD 1101.02 (SHEET 4 OF 19) AS NEEDED, REMOVE ANY CONFLICTING MARKINGS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SIGNAGE IN ACCORDANCE WITH THE FINAL PAVEMENT MARKING PLANS AND FINAL SIGNING PLANS, INSTALL UNANCHORED PORTABLE CONCRETE BARRIER WITH DRAINAGE SLOTS AND CRASH CUSHIONS ON THE LEFT SIDE OF -L- (US 74) AS SHOWN ON SHEETS TMP-12 AND TMP-13, SHIFT TRAFFIC INTO FINAL PATTERN, OPEN THE EASTBOUND US 74 ON RAMP FROM US 19/23 AND THE WESTBOUND US 74 RAMP ON RAMP FROM I-40 EASTBOUND AND REMOVE DETOUR SIGNS.

STEP 4: AWAY FROM TRAFFIC AND BEHIND PORTABLE CONCRETE BARRIER, COMPLETE CONSTRUCTION OF THE LEFT SIDE OF -L- (US 74) AND REMOVE THE REMAINDER OF THE WESTBOUND DETOUR (-L_DET_WB-) AND THE DETOUR BRIDGE.

STEP 5: USING RSD 1101.02 (SHEET 4 OF 19) AS NECESSARY, INSTALL FINAL PAVEMENT LAYER AND FINAL PAVEMENT MARKINGS AND MARKERS, AND REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND

6/13/2024

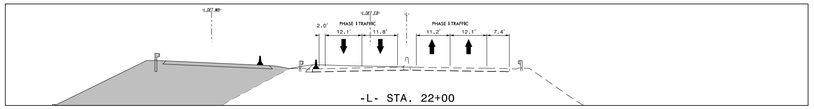
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

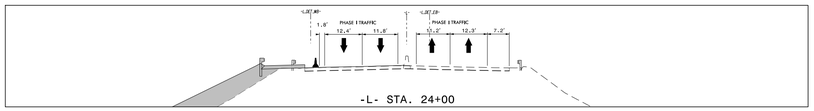
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASING

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-03.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-4





#6 QUANTITY = 6,900 SF

TEMPORARY SHORING
FROM -L_DET_WB- STA. 18+95.11, 22.6'
TO -L_DET_WB- STA. 22+46.6, 90.4'

(SEE SHEET TMP-2I FOR TEMPORARY SHORING NOTES AND SEE ROADWAY PLANS FOR ADDITIONAL DETAIL)

TEMPORARY UNANCHORED
PCB W/ DRAINAGE SLOTS

BEGIN PCB
+00

END PCB
+25

-L_DET_WB-

TYPE B-77

TYPE B-77

-Y4- SR 1633 (NORTHWOOD DR)

#6

CAT-1

US 74 WB

US 74 EB

-L- US 74

BLUE RIDGE SOUTHERN RAILROAD

BEGIN PCB
+00

TEMPORARY UNANCHORED
PCB W/ DRAINAGE SLOTS

MATCHLINE -L- STA. 21+50.00
SEE TMP-5

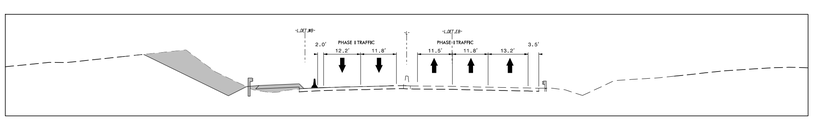
CLOSE AND DETOUR RAMP. SEE SHEETS TMP-2 AND TMP-2A FOR DETOUR.

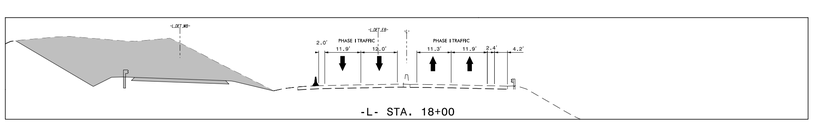
-L-
15+00

-L-
18+00

-L-
22+00

-L-
24+00





APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN C. TOWNSEND

6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

5/22/2024
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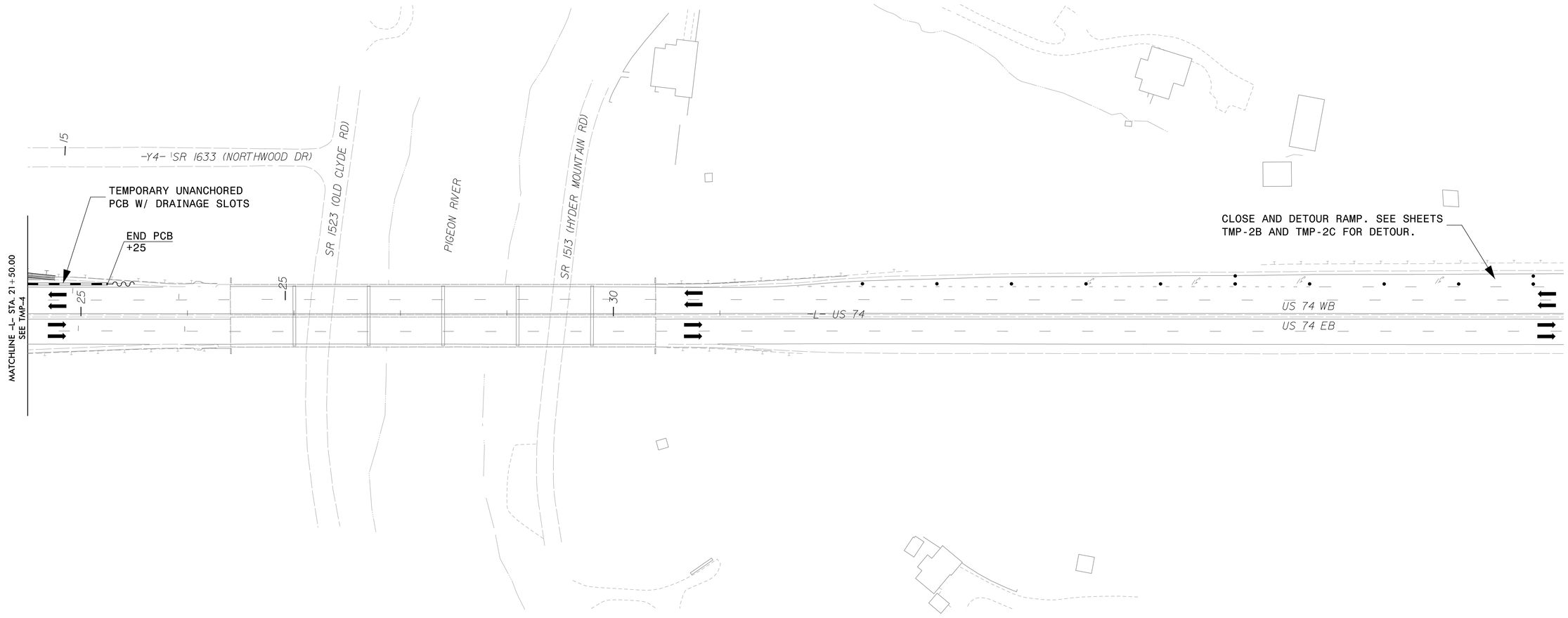
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-5



APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

5/9/2024
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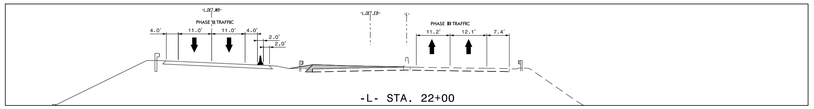
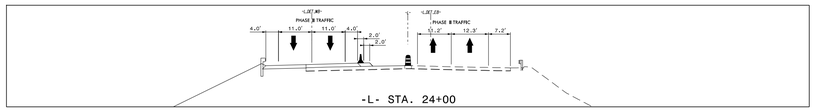
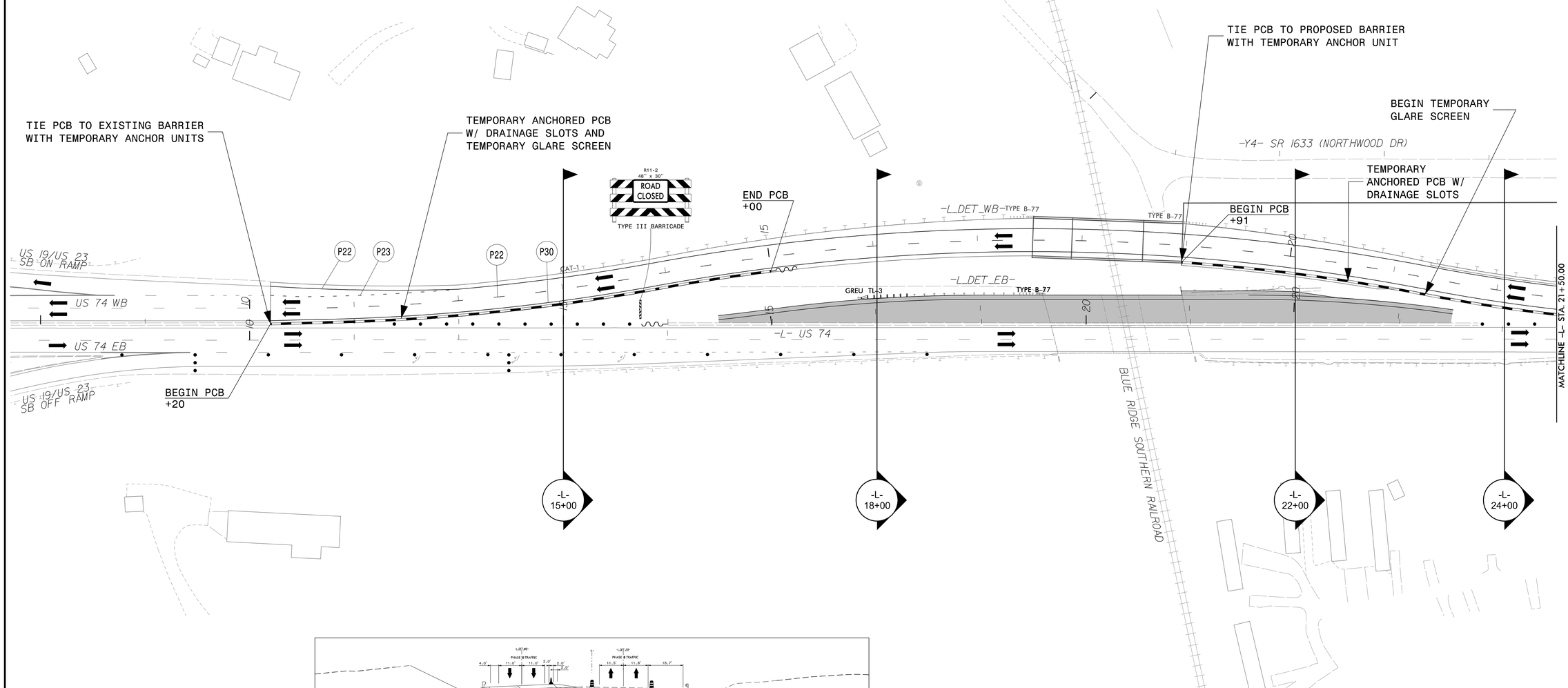
PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-6







APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

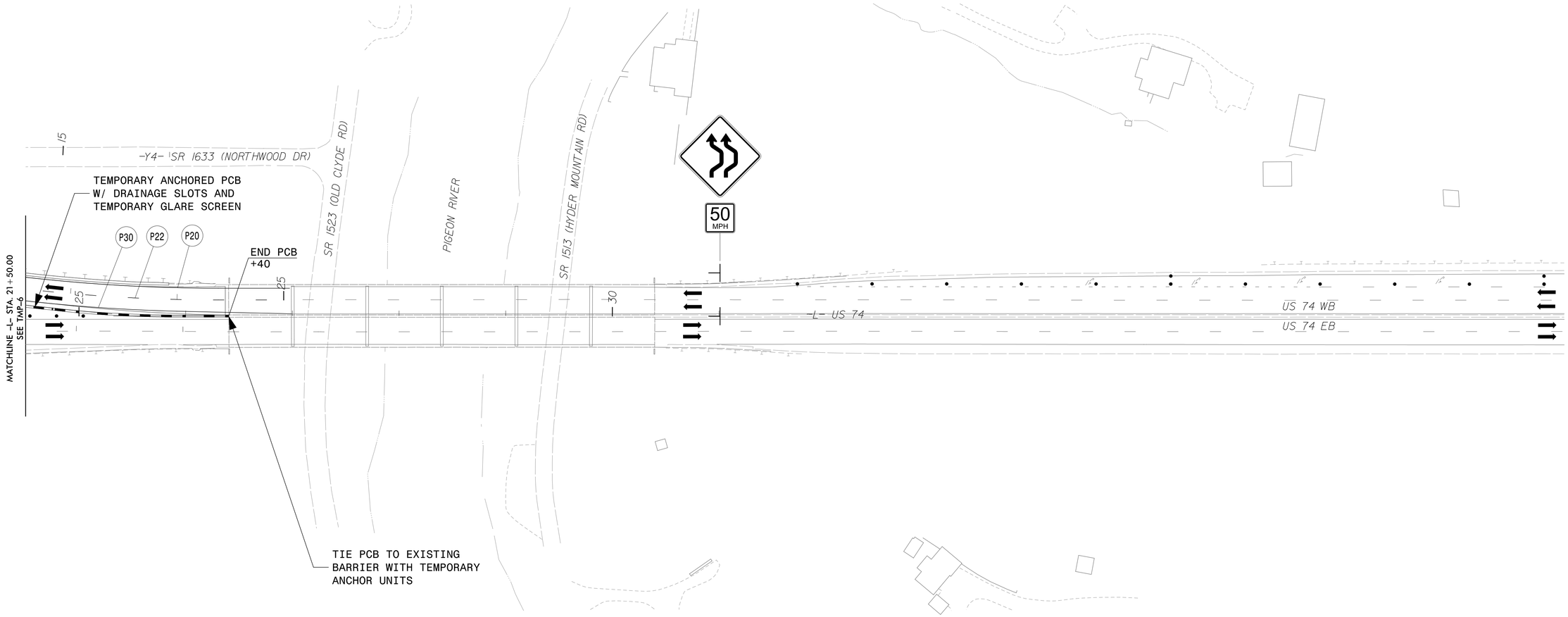
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-06.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-7



APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND

6/13/2024

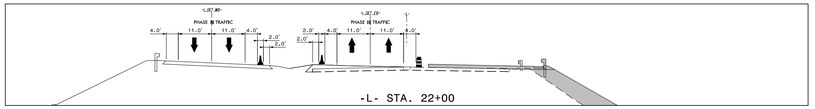
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

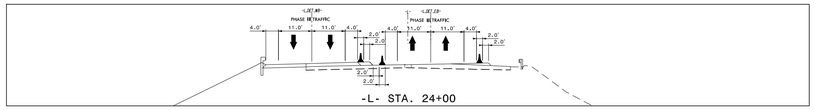
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

5/9/2024
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-07.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-8





#1 QUANTITY = 210 SF

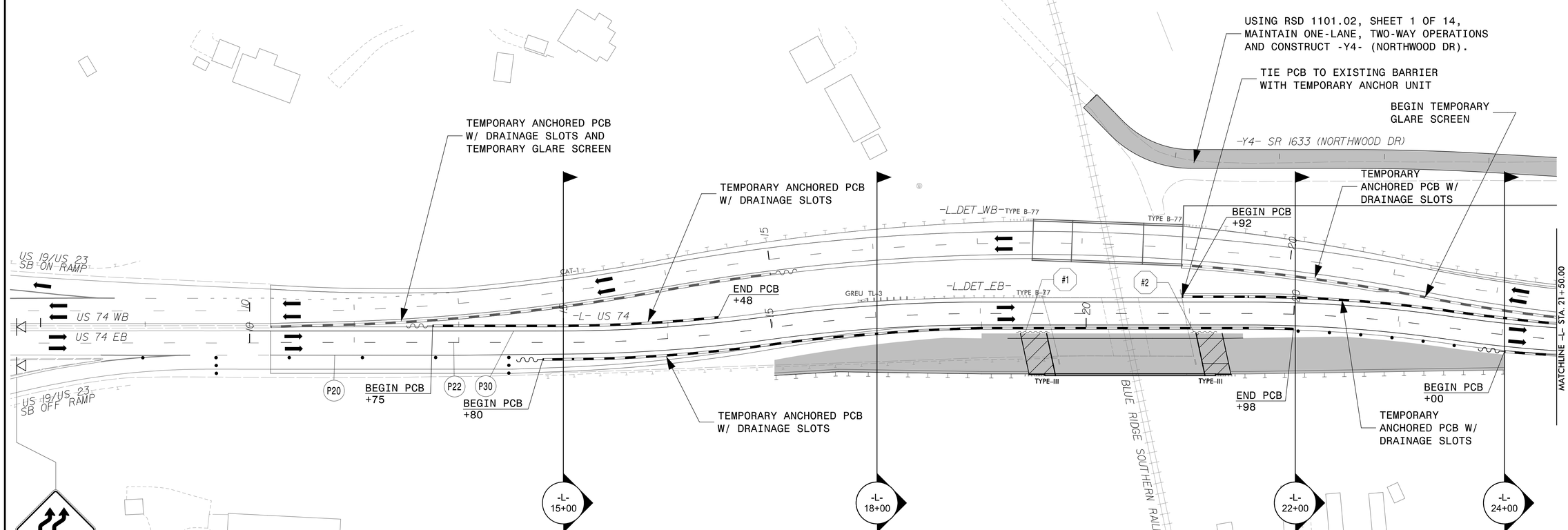
TEMPORARY SHORING
FROM -L- STA. 19+33.00, 5.00'
TO -L- STA. 19+65.00, 5.00'

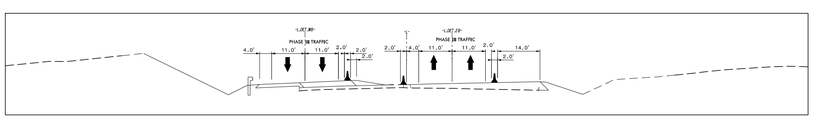
(SEE SHEET TMP-2I FOR TEMPORARY SHORING NOTES)

#2 QUANTITY = 160 SF

TEMPORARY SHORING
FROM -L- STA. 21+00.00, 5.00'
TO -L- STA. 21+25.00, 5.00'

(SEE SHEET TMP-2I FOR TEMPORARY SHORING NOTES)





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DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 031533 ENGINEER JOHN G. TOWNSEND
6/13/2024

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TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

5/9/2024
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User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-9

USING RSD 1101.02, SHEET 1 OF 14,
MAINTAIN ONE-LANE, TWO-WAY OPERATIONS
AND CONSTRUCT -Y4- (NORTHWOOD DR).

-Y4- SR 1633 (NORTHWOOD DR)

TEMPORARY ANCHORED PCB
W/ DRAINAGE SLOTS AND
TEMPORARY GLARE SCREEN

END PCB
+32

MATCHLINE -L- STA. 21+50.00
SEE TMP-8

P20

P22

P30

END PCB
+97

TEMPORARY ANCHORED PCB
W/ DRAINAGE SLOTS

TEMPORARY ANCHORED PCB
W/ DRAINAGE SLOTS

SR 1523 (OLD CLYDE RD)

PIGEON RIVER

SR 1513 (HYDER MOUNTAIN RD)

50
MPH

-L- US 74

US 74 WB

US 74 EB

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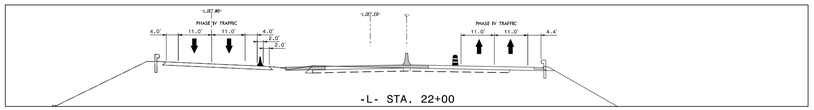
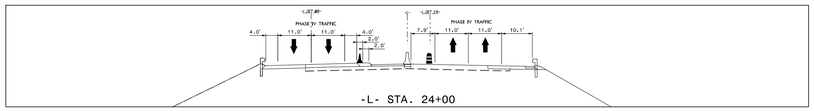
R:\Traffic\TrafficControl\TCP\B5982_tmp_TMP-09.dgn
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-10



-L- STA. 22+00



-L- STA. 24+00

#3 QUANTITY = 240 SF

TEMPORARY SHORING
FROM -L- STA. 20+90.00, 51.00'
TO -L- STA. 21+23.00, 51.00'

(SEE SHEET TMP-2I FOR
TEMPORARY SHORING NOTES)

#4 QUANTITY = 210 SF

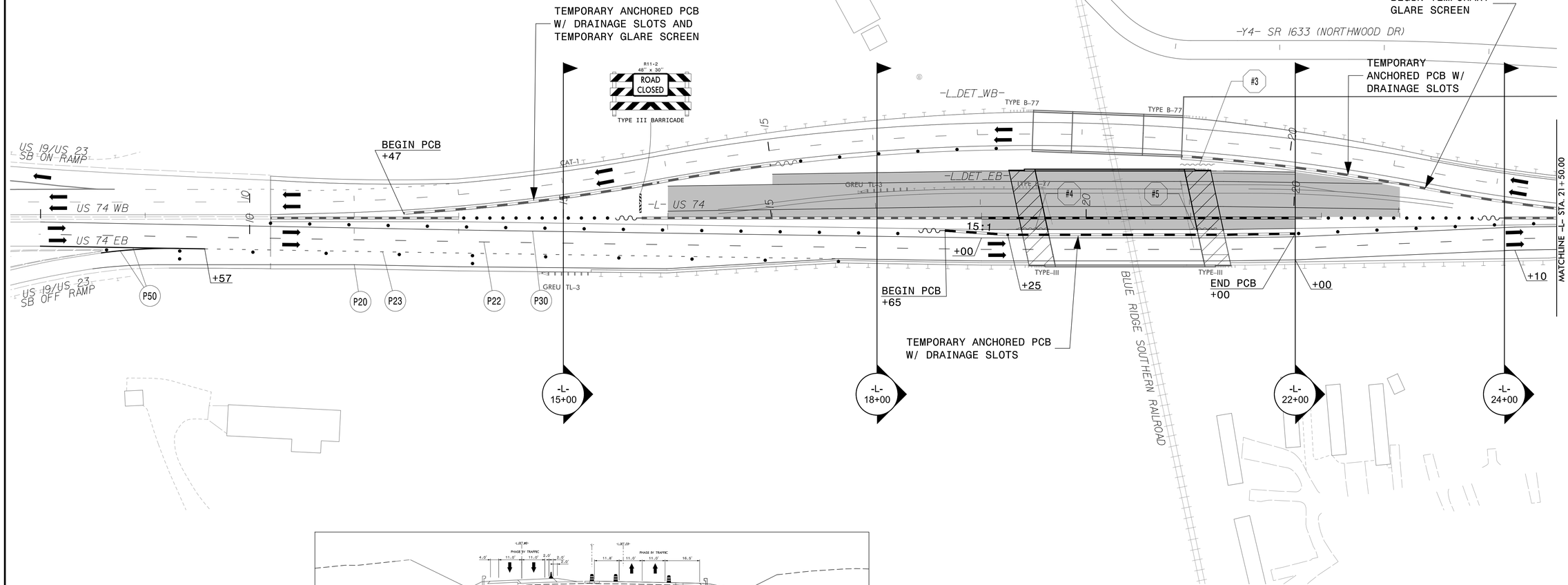
TEMPORARY SHORING
FROM -L- STA. 19+33.00, 10.00'
TO -L- STA. 19+65.00, 10.00'

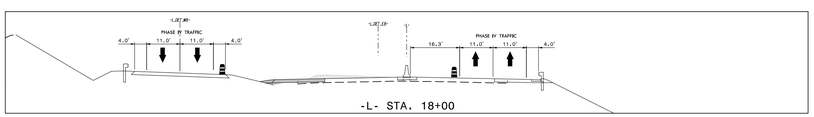
(SEE SHEET TMP-2I FOR
TEMPORARY SHORING NOTES)

#5 QUANTITY = 160 SF

TEMPORARY SHORING
FROM -L- STA. 21+00.00, 10.00'
TO -L- STA. 21+25.00, 10.00'

(SEE SHEET TMP-2I FOR
TEMPORARY SHORING NOTES)





-L- STA. 18+00

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TEMPORARY TRAFFIC CONTROL PHASE IV DETAIL

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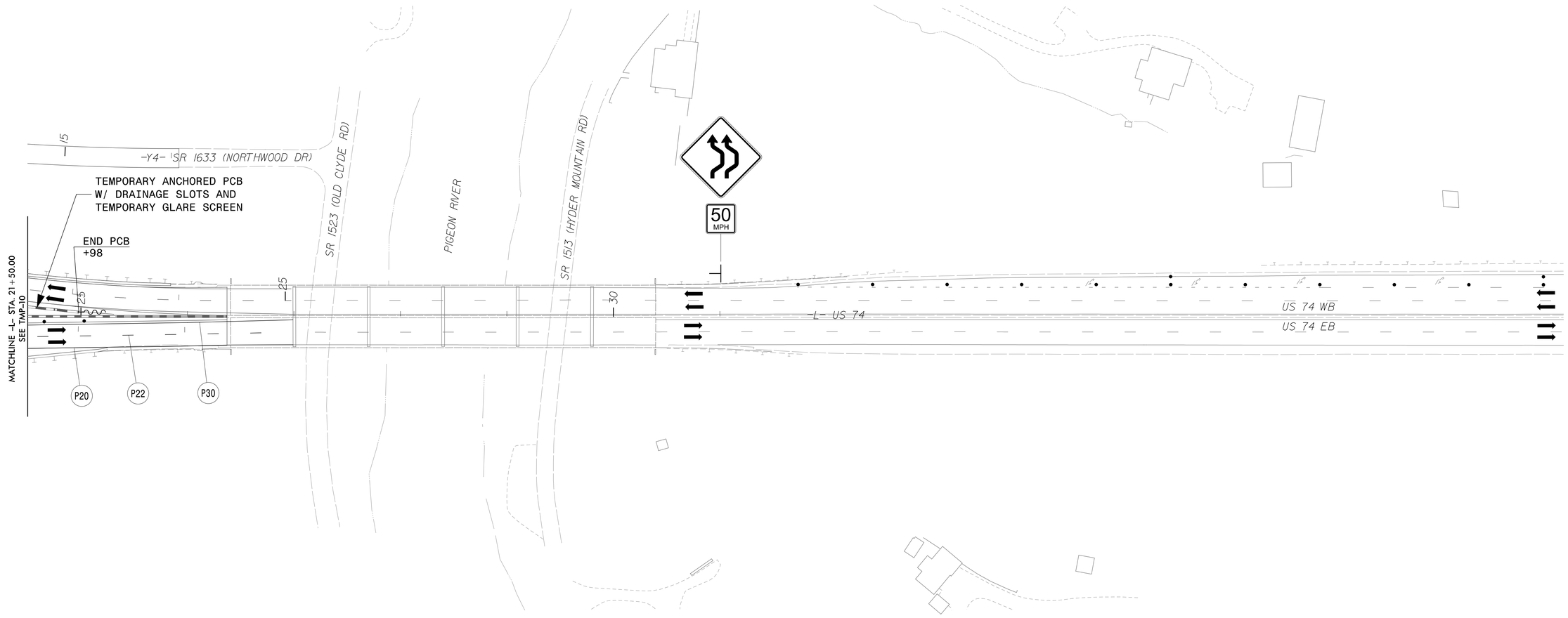
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-11



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5/9/2024
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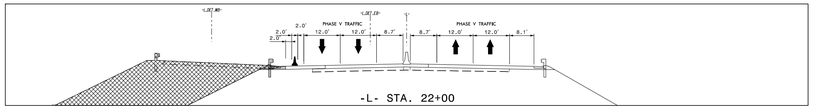
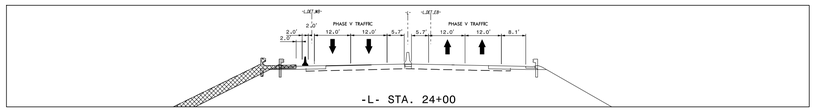
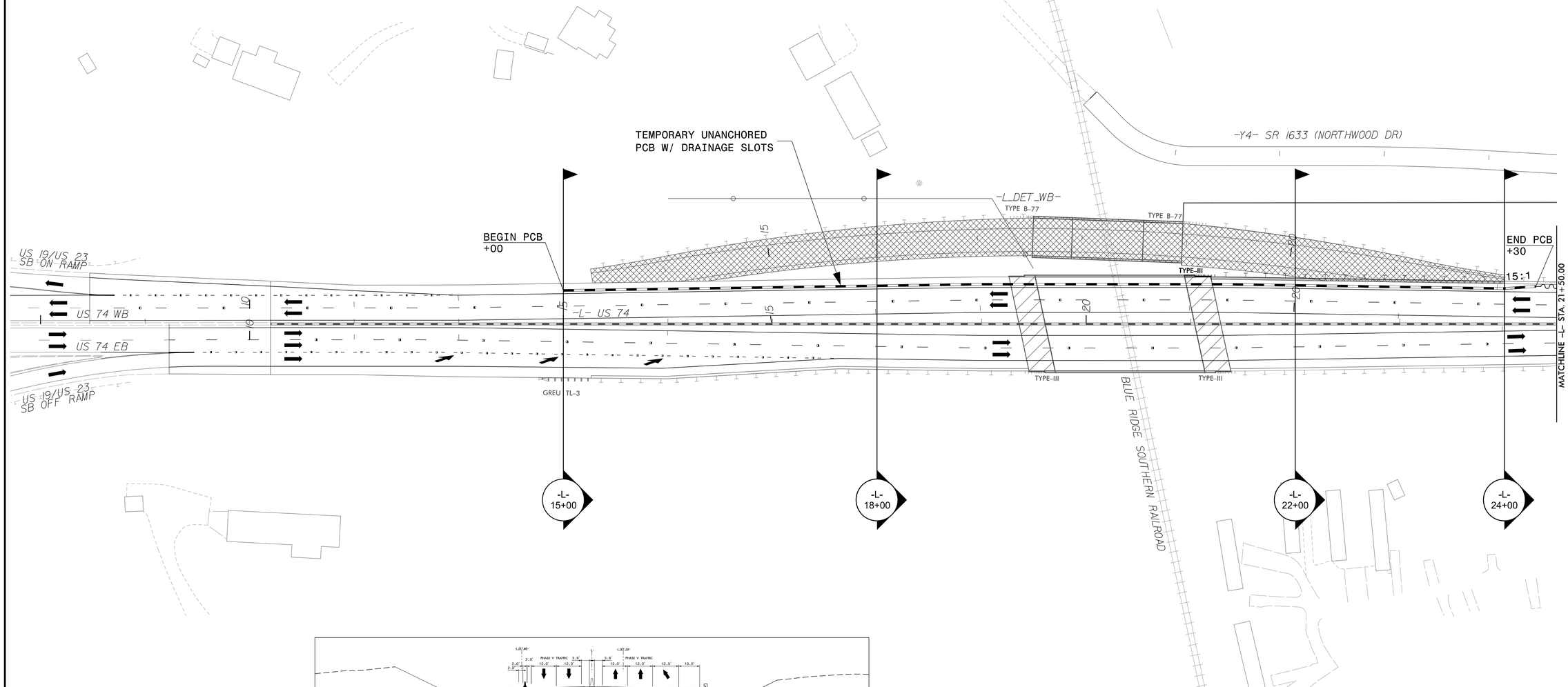
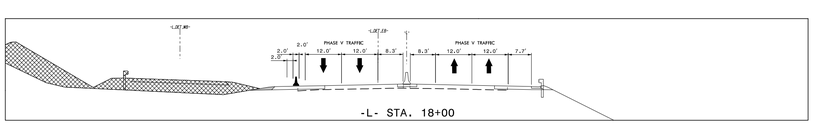
User:jtownsend

PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-12









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6/12/2024
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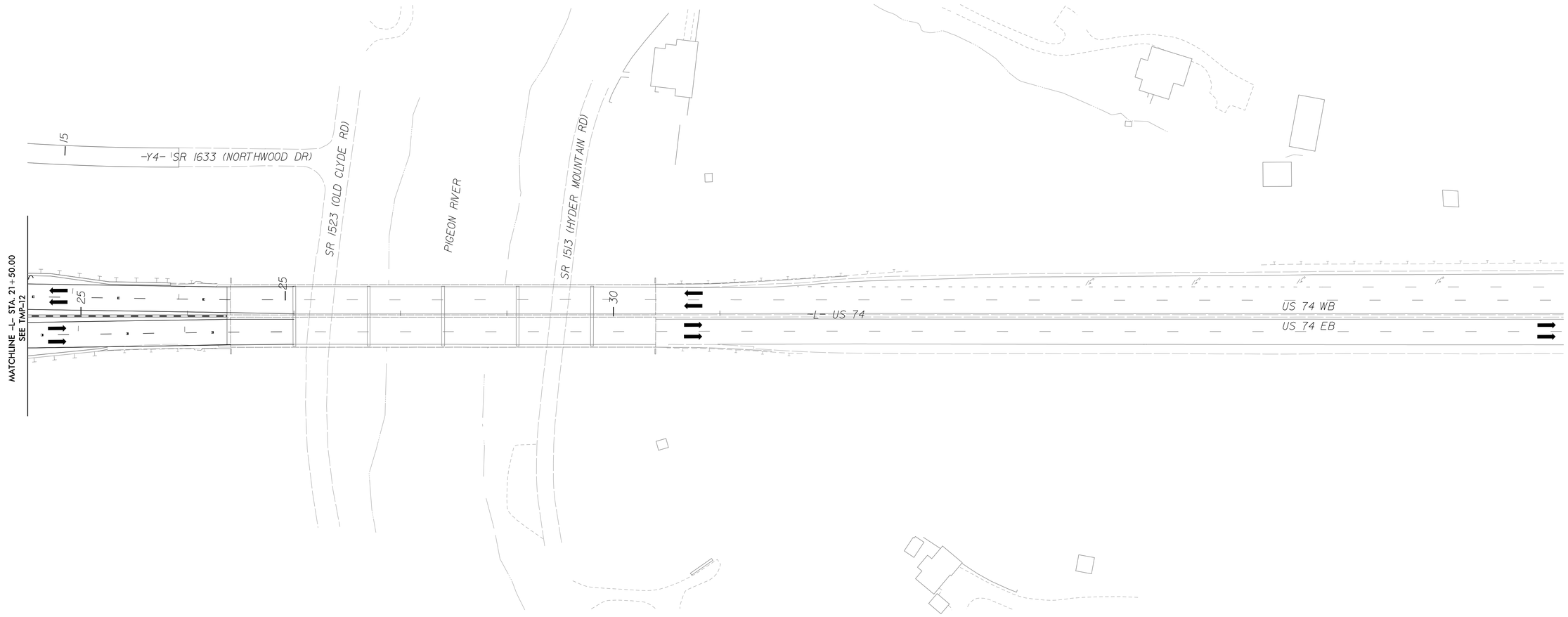
PROJ. REFERENCE NO.	SHEET NO.
B-5982	TMP-13



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TEMPORARY TRAFFIC CONTROL PHASE V DETAIL

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