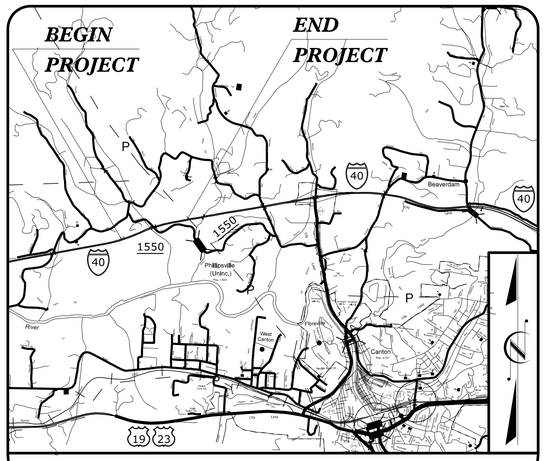
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HAYWOOD COUNTY



VICINITY MAP

LOCATION: BRIDGE 239 ON I–40 OVER SR 1550 (INCINERATOR ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURES.

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

PLANS PREPARED BY:

JONATHAN HEFNER, P.E.

D. ALLEN HAYES, E.I.

NCDOT CONTACTS:

ZACH SHULER
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

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

INDEX OF SHEETS

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DATE: 4/8/2024

SEAL

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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

SHEET NO.
TMP-01

HB-0003

TIP PROJECT:

4/5/2024
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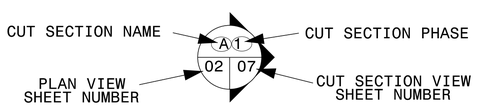
PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-01A

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
1101.06	WARNING SIGNS FOR BLASTING ZONES
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	FLAGGING DEVICES
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
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
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
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (FILL)(LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- TEMPORARY PAVEMENT
- WEDGING

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- DRUM
- TEMPORARY CRASH CUSHION

TEMPORARY SIGNING

- STATIONARY SIGN

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKING SYMBOLS

- (X) EXISTING PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION	PAY ITEM
P1	WHITE SOLID EDGE LINE	PAINT (4")
P5	2 FT. - 6 FT./SP WHITE MINISKIP	PAINT (4")
P13	YELLOW DOUBLE CENTER	PAINT (4")
Z21	WHITE SOLID EDGE LINE	WORK ZONE PERFORMANCE PAVEMENT MARKING (6")
Z22	10 FT. - 30 FT./SP WHITE SKIP	WORK ZONE PERFORMANCE PAVEMENT MARKING (6")
Z31	YELLOW SOLID LINE	WORK ZONE PERFORMANCE PAVEMENT MARKING (6")
MH	YELLOW & YELLOW	TEMPORARY RAISED MARKER
MI	CRYSTAL & RED	TEMPORARY RAISED MARKER

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

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-01B

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
1. -L- (I-40)	6:00 A.M. - 7:00 P.M. MONDAY THRU THURSDAY 6:00 A.M. - 9:00 P.M. FRIDAY 9:00 A.M. - 9:00 P.M. SATURDAY THRU SUNDAY

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

ROAD NAME

1. -L- (I-40)

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 9:00 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 9:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR LEAF SEASON, FROM OCTOBER 6TH TO NOVEMBER 7TH, BETWEEN THE HOURS OF 6:00 A.M AND 7:00 P.M.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
1. ALL -Y- LINES	7:00 A.M. - 9:00 A.M.	TRAFFIC OPERATIONS

D) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
1. I-40	6:00 A.M. - 7:00 P.M. MONDAY THRU THURSDAY 6:00 A.M. - 9:00 P.M. FRIDAY 9:00 A.M. - 9:00 P.M. SATURDAY THRU SUNDAY

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1. I-40	6:00 A.M. - 7:00 P.M. MONDAY THRU THURSDAY 6:00 A.M. - 9:00 P.M. FRIDAY 9:00 A.M. - 9:00 P.M. SATURDAY THRU SUNDAY

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.

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 MI OF LANE CLOSURE ON I-40 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE. THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROJECTS PRIOR TO SETTING UP ANY LANE CLOSURES ON I-40.

M) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON I-40.

PAVEMENT EDGE DROP OFF REQUIREMENTS

N) 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.

O) 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

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

SIGNING

Q) 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.

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

AND

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

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

AND

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

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

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

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

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-01C

GENERAL NOTES (continued)

TRAFFIC BARRIER

V) 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.

W) 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

X) 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.

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

Z) 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

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

ROAD NAME	MARKING	MARKER
1. ALL ROADS	PAINT	TEMPORARY RAISED

BB) 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.

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

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

MISCELLANEOUS

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 500 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

FF) ALL STATIONS ARE CONSIDERED +/- UNLESS OTHERWISE SHOWN ON THE PLANS.

GG) WHEN CONSTRUCTING DRAINAGE STRUCTURES ADJACENT TO TRAFFIC, INSTALL TEMPORARY STEEL PLATES, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY WORK EACH LOCATION INDEPENDENTLY OR CONCURRENTLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WORK IN A CONTINUOUS MANNER TO PERFORM THE WORK IN THE FOLLOWING SEQUENCE, STEPS '1' THRU '5'.

1: CLOSE THE APPROPRIATE TRAVEL LANE TO TRAFFIC USING ROADWAY STANDARD DRAWING NO. 1101.02.

2: CONSTRUCT PROPOSED STRUCTURE OR INSTALL PRE-CAST DRAINAGE STRUCTURE AS SHOWN IN THE CONSTRUCTION PLANS AND COVER WITH STEEL PLATES TO PROTECT STRUCTURE DURING CURING.

3: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.

4: WHEN PROPERLY CURED, CLOSE THE APPROPRIATE TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02. BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).

5: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

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
- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- ONE-LANE, TWO WAY OPERATION (FLAGGING)
- WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
- OFF-SITE DETOURS

WORK ZONE SAFETY & MOBILITY STRATEGIES:
- SEQUENTIAL LIGHTING
- WORK ZONE PERFORMANCE PAVEMENT MARKINGS

LOCAL NOTES

1) IN ORDER TO HAVE TIME TO ADEQUATELY REROUTE SCHOOL BUSES, HAYWOOD COUNTY SCHOOLS WILL BE CONTACTED AT LEAST ONE MONTH PRIOR TO ROAD CLOSURE. CONTACT PERSON IS STEPHEN SHARPE AT (828)-456-2421.

2) HAYWOOD COUNTY EMERGENCY SERVICES WILL BE CONTACTED AT LEAST ONE MONTH PRIOR TO ROAD CLOSURE TO MAKE THE NECESSARY TEMPORARY REASSIGNMENTS TO PRIMARY RESPONSE UNITS. CONTACT PERSON IS TRAVIS DONALDSON EMERGENCY SERVICES DIRECTOR AT (828)-452-4770.

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TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)

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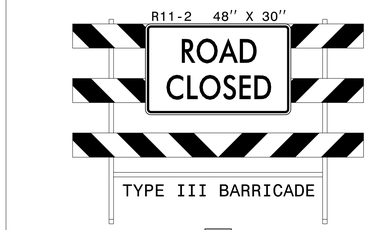

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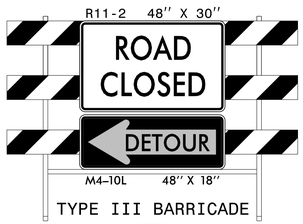

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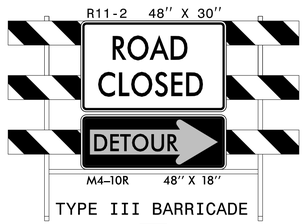

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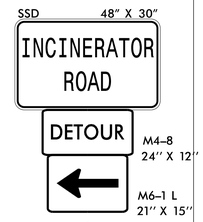

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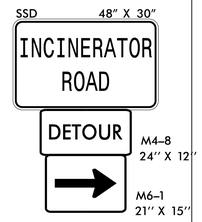

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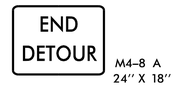

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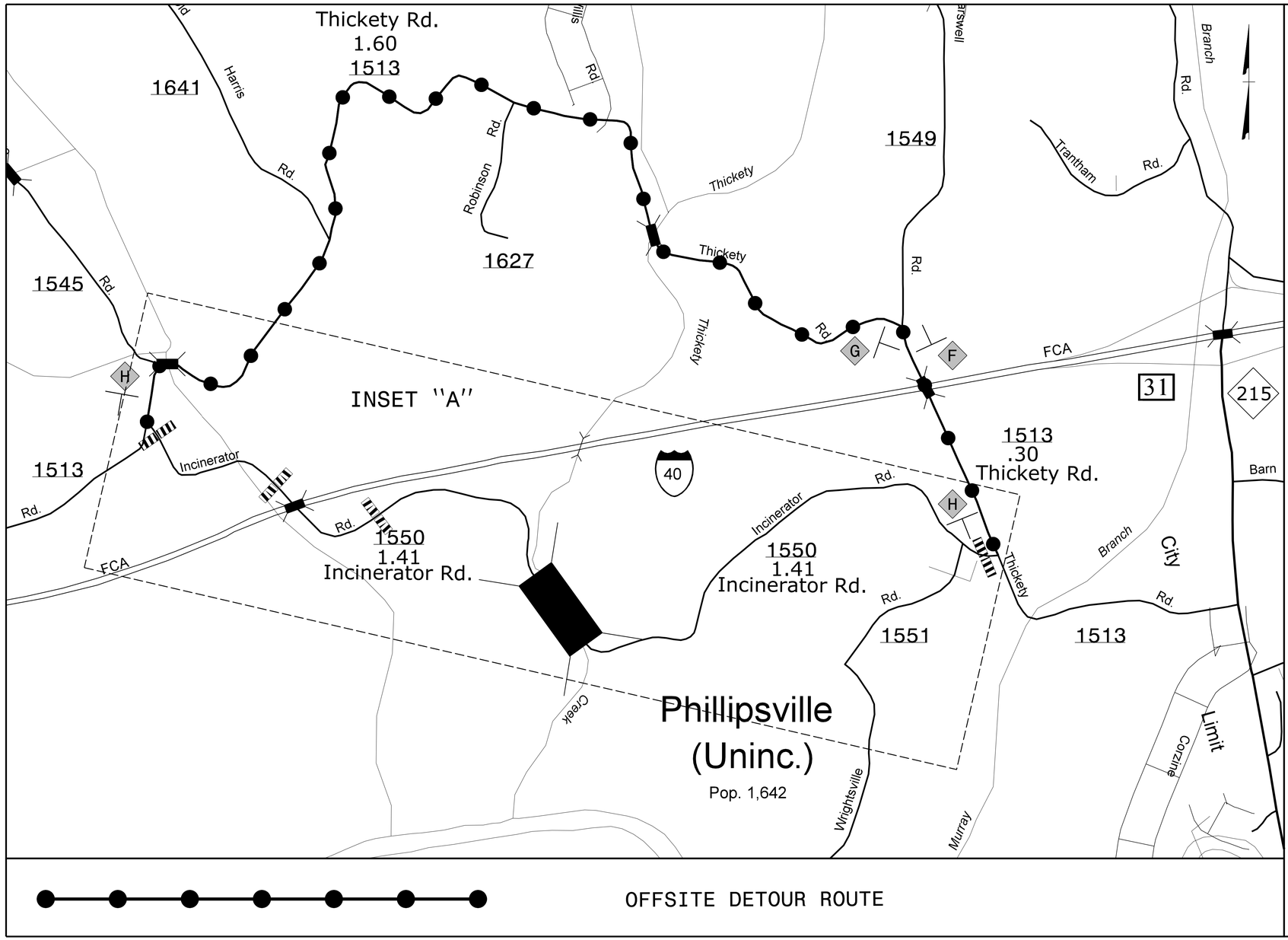
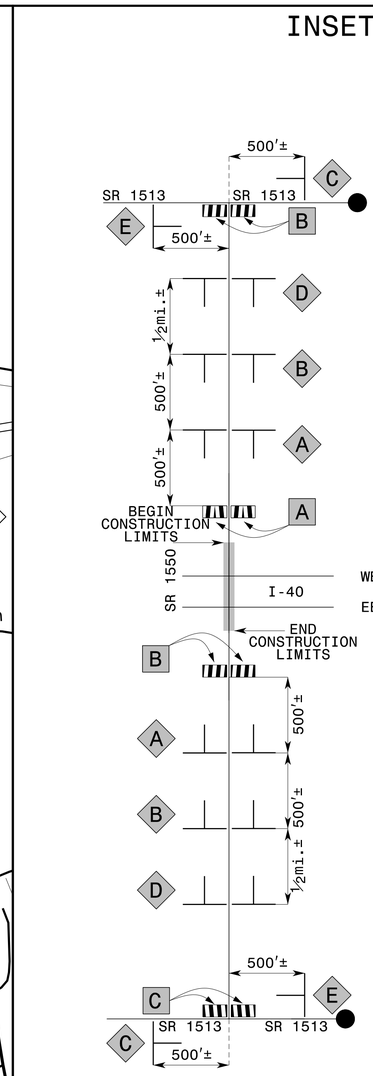
SIGN AND DEVICE LEGEND

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02





OFFSITE DETOUR ROUTE

NOTES:
1) REFER TO SHEET TMP-01D FOR SIGN AND DEVICE LEGEND.
2) FOR INSET "A", REFER TO ROADWAY STANDARD DRAWINGS 1101.03, SHEETS 1 & 2 OF 9 FOR APPLICABLE NOTES.

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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: DocuSigned by: Lawrence H. Green 480870889BD488...
DATE: 4/8/2024
NORTH CAROLINA PROFESSIONAL SEAL 028137 ENGINEER LAWRENCE H. GREEN
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OFFSITE DETOUR

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02A

SIGN NUMBER: name
TYPE: D
QUANTITY: 1

SIGN WIDTH: 4′-0″
HEIGHT: 2′-6″
TOTAL AREA: 10.0 Sq.Ft.

BORDER TYPE: FLUSH
RECESS: 0.38″
WIDTH: 0.63″
RADII: 1.5″

NO. Z BARS:
LENGTH:

BACKG COLOR: Orange
COPY COLOR: Black

SYMBOL	X	Y	WID	HT

MAT′L: 0.125″ (3.2 mm) ALUMINUM

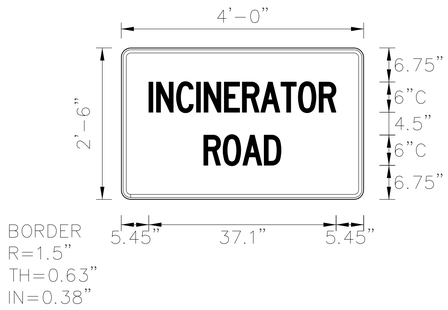
USE NOTES:

1. Legend and border(except those that are colored black) shall be direct applied Grade A sheeting.
2. Background shall be Grade A, B, or C reflective sheeting.
3. Shields; A, B, and C type arrows shall be on 0.032″ (0.8mm) aluminum with Grade A reflective sheeting and demountable.
4. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Arrow shall be on 0.032″ aluminum, black non-reflective sheeting an demountable. Yellow panel is:

DESIGN BY: DAH
PROJECT ID: HB-0002

CHECKED BY: WEI
LOCATION: OFFSITE DETOUR

Jul 11, 2023
DIV:14



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

																																Series/Size Text Length
	I	N	C	I	N	E	R	A	T	O	R																						C 2000
	5.5	7	10.9	14.9	16.4	20.4	24	27.6	31.6	35	39.2																						37.1
	R	O	A	D																													C 2000
	16.3	20.1	24	28.3																													15.3

FILENAME: HB-0003_REF_BSSD

NORTH CAROLINA D.O.T. SIGN DETAIL

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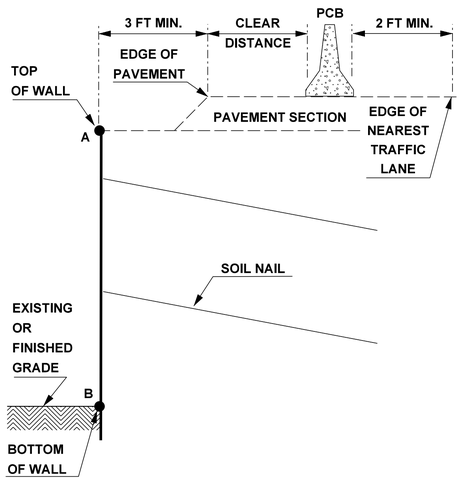
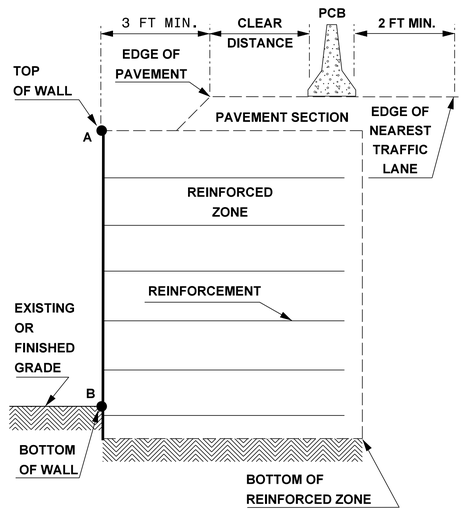
SPECIAL SIGN DESIGN

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02B

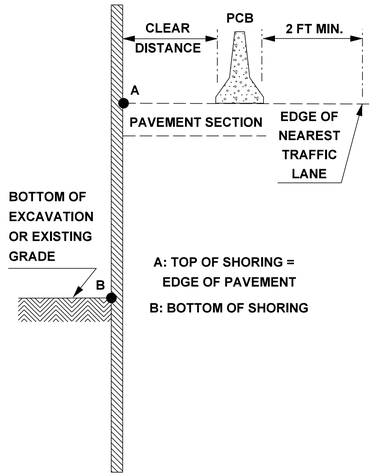
TEMPORARY SOIL NAIL WALL



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

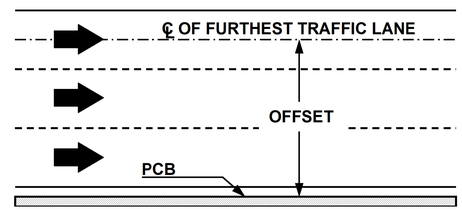


FIGURE B

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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

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02C

SHORING LOCATIONS

NOS. (1) TO (4)

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

TEMPORARY SHORING IS REQUIRED FOR THE MAINTENANCE OF TRAFFIC FROM STATION 189+00 +/- -L-, 12.3′ LT, TO STATION 190+50 +/- -L-, 7.0′ LT.

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

TEMPORARY SHORING SHALL BE CONSTRUCTED AFTER THE SURCHARGE IS REMOVED AND THE CULVERT IS IN PLACE.

TEMPORARY SHORING SHALL BE EXTENDED TO THE TOP OF FOOTING ELEVATION OF THE CULVERT.

DESIGN TEMPORARY SHORING FROM STATION 189+00 +/- -L-, 12.3′ LT, TO STATION 190+50 +/- -L-, 7.0′ LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ)= 120 LB/CF
- FRICTION ANGLE (ϕ)= 28 DEGREES
- COHESION (C) = 0 LB/SF
- GROUNDWATER ELEVATION = 2628 FT

SHORING LOCATION NO. (5)

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

TEMPORARY SHORING IS REQUIRED TO SUPPORT THE EXISTING BRIDGE FOOTING FOR THE CULVERT CONSTRUCTION FROM STATION 189+80 +/- -L-, 22.1′ LT, TO STATION 190+10 +/- -L-, 22.1′ LT.

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 189+80 +/- -L-, 22.1′ LT, TO STATION 190+10 +/- -L-, 22.1′ LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ)= 120 LB/CF
- FRICTION ANGLE (ϕ)= 28 DEGREES
- COHESION (C) = 0 LB/SF
- GROUNDWATER ELEVATION = 2628 FT

TEMPORARY SHORING FROM STATION 189+80 +/- -L-, 22.1′ LT, TO STATION 190+10 +/- -L-, 22.1′ LT SHALL BE DESIGNED BY A PROFESSIONAL DESIGNER USING THE SOIL PARAMETERS PROVIDED. SUBMIT SHORING DESIGN FOR REVIEW.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 189+80 +/- -L-, 22.1′ LT, TO STATION 190+10 +/- -L-, 22.1′ LT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

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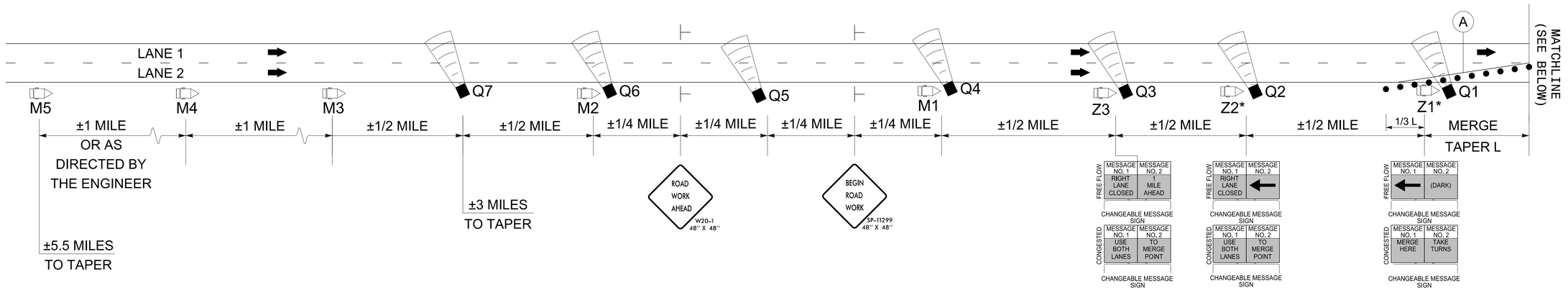
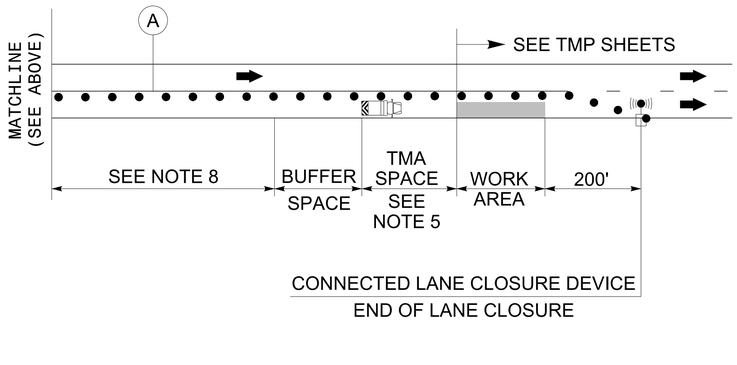
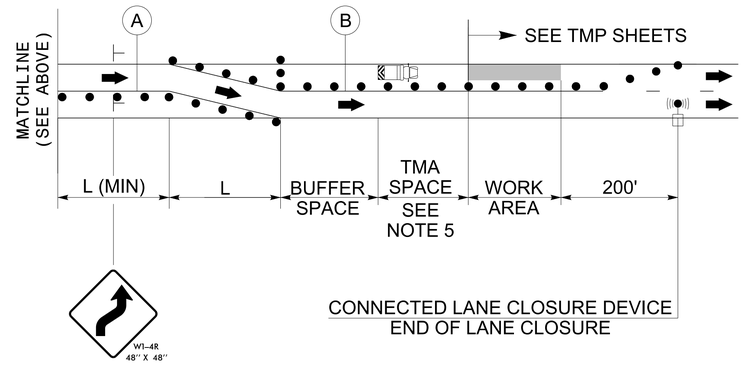
TEMPORARY SHORING DATA

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-02D





RIGHT LANE WORK AREA



LEFT LANE WORK AREA
*(IF APPLICABLE)

GENERAL NOTES

1- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE WORK AREA AT THE MAXIMUM SPACING EQUAL TO 2 TIMES THE POSTED SPEED LIMIT.

2- REFER TO RSD. 1101.11, SHEETS 1 & 2, FOR "L" DISTANCE AND BUFFER SPACE.

3- REFER TO RSD. 1101.02, SHEETS 9 & 10, FOR TREATMENT OF LANE CLOSURES THRU INTERCHANGES.

4- INSTALL LANE CLOSURES WITH THE FLOW OF TRAFFIC, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE FLOW OF TRAFFIC, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.

5. POSITION THE TMAS TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER AND CONTINUOUSLY ADVANCE TMAS AS WORK PROGRESSES. USE TMAS AS REQUIRED TO SHIELD WORKERS FROM ERRANT VEHICLES AND TRAFFIC FROM POTENTIAL HAZARDS IN THE WORK AREA.

6. REMOVE OR COVER EXISTING ADVANCED WARNING SIGNS PREVIOUSLY INSTALLED USING RSD 1101.01, SHEET 2 OF 3.

7. IN THE EVENT OF A SYSTEM MALFUNCTION, IMMEDIATELY INSTALL WORK ZONE SIGNS ACCORDING TO RSD 1101.02, SHEET 4. SIGNAGE SHOULD REMAIN IN PLACE UNTIL SYSTEM OPERATION IS FULLY RESTORED.

8. IF A LEFT LANE WORK AREA WILL BE NEEDED AT ANY TIME DURING THE PROJECT, USE 2L. IF NO LEFT LANE WORK AREA IS NEEDED, OMIT THIS SPACE.

9. REMOVE ANY CONFLICTING PAVEMENT MARKINGS & MARKERS.

LEGEND

- A — 6" WHITE EDGELINE
- B — 6" YELLOW EDGELINE
- SPEED SENSOR Q#(1-7)
- PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
  - M#(1-5) = MAINLINE
  - Z#(1-3) = ZIPPER MERGE
  - *Z1 & Z2 SHALL BE FULL MATRIX
- CONNECTED LANE CLOSURE DEVICE
- DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- STATIONARY SIGN

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DYNAMIC ZIPPER MERGE SYSTEM LAYOUT

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-03

NOTE: ANY WORK THAT REQUIRES A DROP OFF WITHIN OR NEXT TO THE EDGE OF PAVEMENT MORE THAN 2″ AND NOT PROTECTED BY PORTABLE CONCRETE BARRIER SHALL BE SAFED UP TO AN ACCEPTABLE ELEVATION BY THE END OF THE WORK PERIOD. REFER TO GENERAL NOTE 'N' ON SHEET TMP-01B.

PHASE I

STEP 1) USING ROADWAY STANDARD DRAWING (RSD) 1101.01, INSTALL ALL ADVANCE WORK ZONE SIGNING.

STEP 2) USING RSD 1101.02, INSTALL FULL DEPTH SHOULDER RECONSTRUCTION ON I-40 OUTSIDE SHOULDERS. ANY WORK THAT HAS A DROP OFF NEXT TO THE EDGE OF PAVEMENT MORE THAN 2″ SHALL BE SAFED UP TO AN ACCEPTABLE ELEVATION BY THE END OF THE WORK PERIOD. REFER TO GENERAL NOTE 'N' ON SHEET TMP-01B. [TMP-04 THRU 07]

AWAY FROM TRAFFIC, CONSTRUCT THE TEMPORARY DRIVEWAY AND TIE TO EXISTING -DR1-. [TMP-05 & 06]

STEP 3) USING RSD 1101.02, INSTALL PCB ALONG OUTSIDE SHOULDER OF -L- EB. CLOSE -Y1- WITH TYPE III BARRICADES AND DETOUR TRAFFIC OFF-SITE. THEN COMPLETE THE FOLLOWING [TMP-04 THRU 07]:
- CONSTRUCT -L- EB AS SHOWN UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE
- CONSTRUCT -L- EB UP TO THE EXISTING EDGE AND ELEVATION
- CONSTRUCT CULVERT EXTENSION AT STA. 188+00 +/- -L-
- CONSTRUCT FIRST STAGE OF TRAFFIC CULVERT AND TEMPORARY SHORING
- CONSTRUCT -Y1- FROM STAGE 1 CULVERT JOINT TO THE END CONSTRUCTION LIMITS UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE AND -DR1- (MAINTAIN ACCESS TO -DR1-)
- CONSTRUCT AS MUCH DRAINAGE AS POSSIBLE. (SEE GENERAL NOTES FOR STEEL PLATING)

STEP 4) BEHIND BARRIER, INSTALL THE PHASE II TEMPORARY PAVEMENT MARKINGS, MARKERS, AND PORTABLE CONCRETE BARRIER AS MUCH AS POSSIBLE [TMP-09 & 10].

PHASE II

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE II, STEP 1 FROM MONDAY 7:00 P.M TO THURSDAY 6:00 A.M. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 1) USING LANE CLOSURES AND THE DYNAMIC ZIPPER MERGE SYSTEM, COMPLETE THE FOLLOWING [TMP-08 THRU 11]:
- WEDGE -L- EB AT TIE-IN'S, INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS AND MARKERS, AND SHIFT TRAFFIC ONTO THE PHASE II TEMPORARY ALIGNMENT
- INSTALL PCB ALONG THE MEDIAN SHOULDER OF THE PHASE II TEMPORARY ALIGNMENT

STEP 2) USING LANE CLOSURES ON -L- WB AND WORKING IN A CONTINUOUS MANNER, COMPLETE THE FOLLOWING [TMP-08 & 09]:
- REMOVE EXISTING MEDIAN WALL FROM STA. 181+30 -L- TO STA. 182+59 -L-
- REPAIR ANY DAMAGE TO THE ROADWAY CAUSED BY THE REMOVAL OF THE WALL WITH ASPHALT
- INSTALL PORTABLE CONCRETE BARRIER FROM STA. 181+30 -L- TO STA. 183+00 -L- AND CONTINUE TO INSTALL AS MUCH OF THE REMAINING BARRIER RUN AS POSSIBLE BY THE END OF THE WORK PERIOD. CONTINUE TO USE DAILY LANE CLOSURES TO INSTALL THE REMAINING RUN OF BARRIER UNTIL ALL BARRIER HAS BEEN INSTALLED TO STA. 174+51 -L-.

STEP 3) USING LANE CLOSURES ON -L- WB AND WORKING IN A CONTINUOUS MANNER, COMPLETE THE FOLLOWING [TMP-10]:
- REMOVE EXISTING MEDIAN WALL FROM STA. 203+25 -L- TO STA. 204+50 -L-
- REPAIR ANY DAMAGE TO THE ROADWAY CAUSED BY THE REMOVAL OF THE WALL WITH ASPHALT
- INSTALL PORTABLE CONCRETE BARRIER FROM STA. 203+25 -L- TO STA. 205+00 -L- AND CONTINUE TO INSTALL AS MUCH OF THE REMAINING BARRIER RUN AS POSSIBLE BY THE END OF THE WORK PERIOD. CONTINUE TO USE DAILY LANE CLOSURES TO INSTALL THE REMAINING RUN OF BARRIER UNTIL ALL BARRIER HAS BEEN INSTALLED TO STA. 196+00 -L-.

STEP 4) BEHIND BARRIER AND AWAY FROM TRAFFIC COMPLETE THE FOLLOWING [TMP-08 THRU 11]:
- REMOVE ANY REMAINING EXISTING MEDIAN WALL WITHIN PROJECT LIMITS AS NEEDED
- CONSTRUCT THE PHASE III TEMPORARY ALIGNMENT AS MUCH AS POSSIBLE USING TEMPORARY PAVEMENT
- INSTALL TEMPORARY PAVEMENT MARKINGS AS MUCH AS POSSIBLE
- INSTALL PCB ALONG THE OUTER SHOULDER OF THE -L- WB TEMPORARY ALIGNMENT AS MUCH AS POSSIBLE
- CONSTRUCT AS MUCH DRAINAGE AS POSSIBLE. (SEE GENERAL NOTES FOR STEEL PLATING)

PHASE III

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE III, STEP 1 MONDAY 7:00 P.M TO THURSDAY 6:00 A.M. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 1) USING LANE CLOSURES AND THE DYNAMIC ZIPPER MERGE SYSTEM, COMPLETE IN THE FOLLOWING ORDER [TMP-12 THRU 14]:
- REMOVE AS MUCH OF THE -L- WB MEDIAN PCB AS NEEDED AND INSTALL PHASE III MEDIAN PCB (INCLUDING TEMPORARY GLARE SCREEN)
- WEDGE -L- WB TEMPORARY ALIGNMENT AT TIE-INS, INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS, MARKERS, AND SHIFT TRAFFIC ONTO PHASE III TEMPORARY ALIGNMENT
- INSTALL REMAINING PCB ALONG THE OUTER SHOULDER OF THE -L- WB TEMPORARY ALIGNMENT

STEP 2) BEHIND BARRIER COMPLETE THE FOLLOWING [TMP-12 THRU 15]:
- CONSTRUCT I-40 WB AS MUCH AS POSSIBLE UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE AS SHOWN, INCLUDING TEMPORARY PAVEMENT MARKINGS, AND MARKERS
- CONSTRUCT I-40 WB AS MUCH AS POSSIBLE UP TO THE EXISTING EDGE AND ELEVATION AS SHOWN
- CONSTRUCT STAGE II TRAFFIC CULVERT
- INSTALL PCB ALONG THE -L- WB MEDIAN IN THE PHASE IV TEMPORARY ALIGNMENT AS MUCH AS POSSIBLE
- CONSTRUCT AS MUCH DRAINAGE AS POSSIBLE. (SEE GENERAL NOTES FOR STEEL PLATING)

AWAY FROM TRAFFIC, CONSTRUCT -Y1- FROM THE BEGIN CONSTRUCTION LIMITS TO THE STAGE II CULVERT JOINT UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE. [TMP-13 & 14]:

PHASE IV

THE CONTRACTOR SHALL WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK IN PHASE IV, STEP 1 MONDAY 7:00 P.M TO THURSDAY 6:00 A.M. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 1) USING LANE CLOSURES AND THE DYNAMIC ZIPPER MERGE SYSTEM COMPLETE THE FOLLOWING [TMP-16 THRU 19]:
- REMOVE PCB ALONG THE -L- WB OUTER SHOULDER AS MUCH AS POSSIBLE
- WEDGE -L- WB AT TIE-INS AS SHOWN, INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS, MARKERS, AND SHIFT TRAFFIC ONTO -L- WB PHASE IV TEMPORARY ALIGNMENT
- INSTALL THE REMAINING PCB ALONG THE MEDIAN OF THE -L- WB PHASE IV TEMPORARY ALIGNMENT (REMOVE TEMPORARY GLARE SCREEN)

STEP 2) BEHIND BARRIER, CONSTRUCT THE MEDIAN SHOULDERS OF -L-, INCLUDING THE MEDIAN BARRIER WALL. CONSTRUCT REMAINING DRAINAGE. [TMP-16 THRU 19]:

AWAY FROM TRAFFIC, INSTALL THE REMAINING TEMPORARY PAVEMENT MARKINGS ON -Y1- AND OPEN TO TRAFFIC. REMOVE DETOUR SIGNING. [TMP-17 & 18]:

PHASE V

STEP 1) USING RSD 1101.02 ON -L- AND ONE DIRECTION AT A TIME, COMPLETE THE FOLLOWING [FINAL PAVEMENT MARKING PLAN]:
- REMOVE ALL PCB
- INSTALL THE FINAL LIFT OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND MARKERS
- SHIFT TRAFFIC ONTO THE FINAL ALIGNMENT PATTERN

USING RSD 1101.02 ON -Y1-, INSTALL THE FINAL LIFT OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND MARKERS, AND RETURN TRAFFIC TO THE FINAL PATTERN. [FINAL PAVEMENT MARKING PLAN]

STEP 2) REMOVE ANY REMAINING TRANSPORTATION MANAGEMENT DEVICES AND SIGNING INSTALLED DURING CONSTRUCTION.

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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

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DATE: 5/30/2024

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PHASING

5/30/2024
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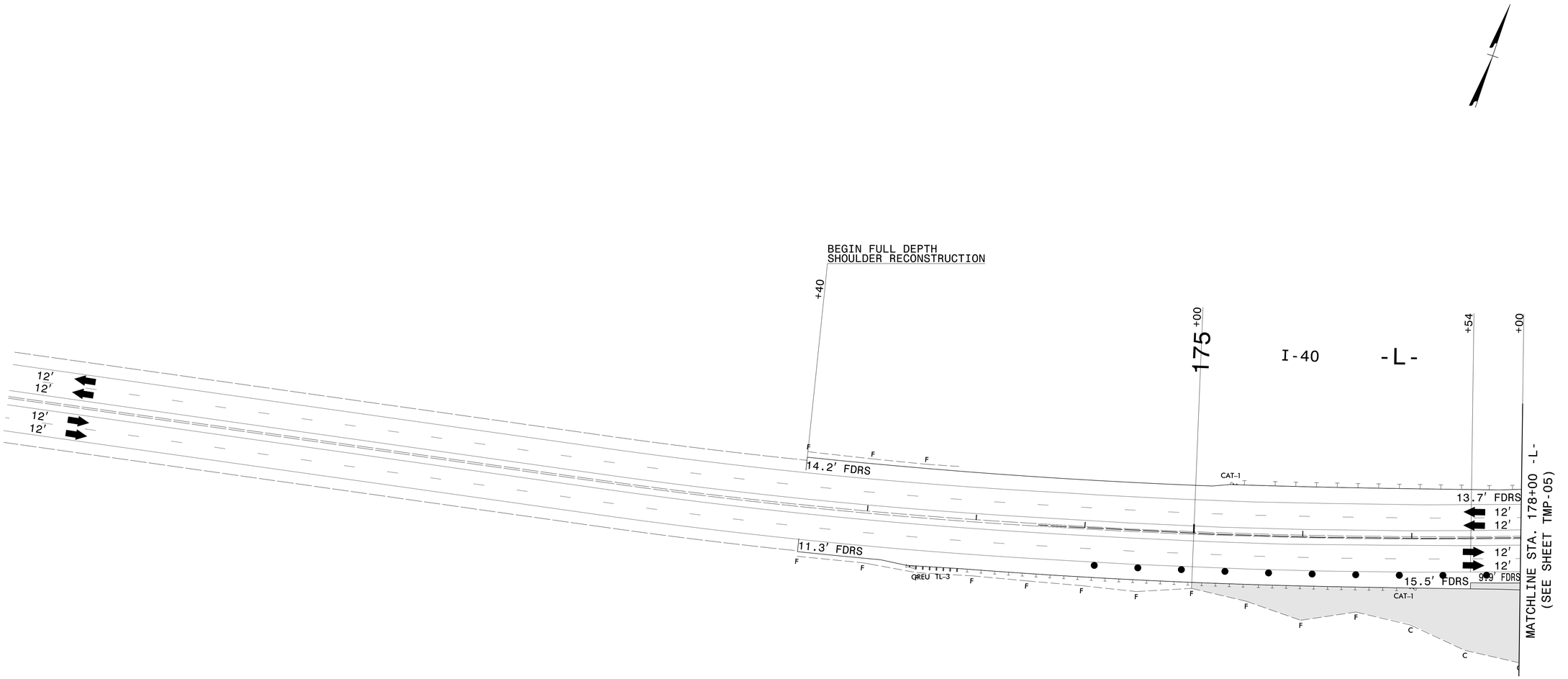
PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-04



NOTES:
1) PEOT = PROPOSED EDGE OF TRAVEL
PTOC = PROPOSED TOP OF CROWN
FDRS = FULL DEPTH RECONSTRUCTED SHOULDER

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PHASE I DETAIL

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HB-0003	TMP-05

1 QUANTITY = 362.2 SF

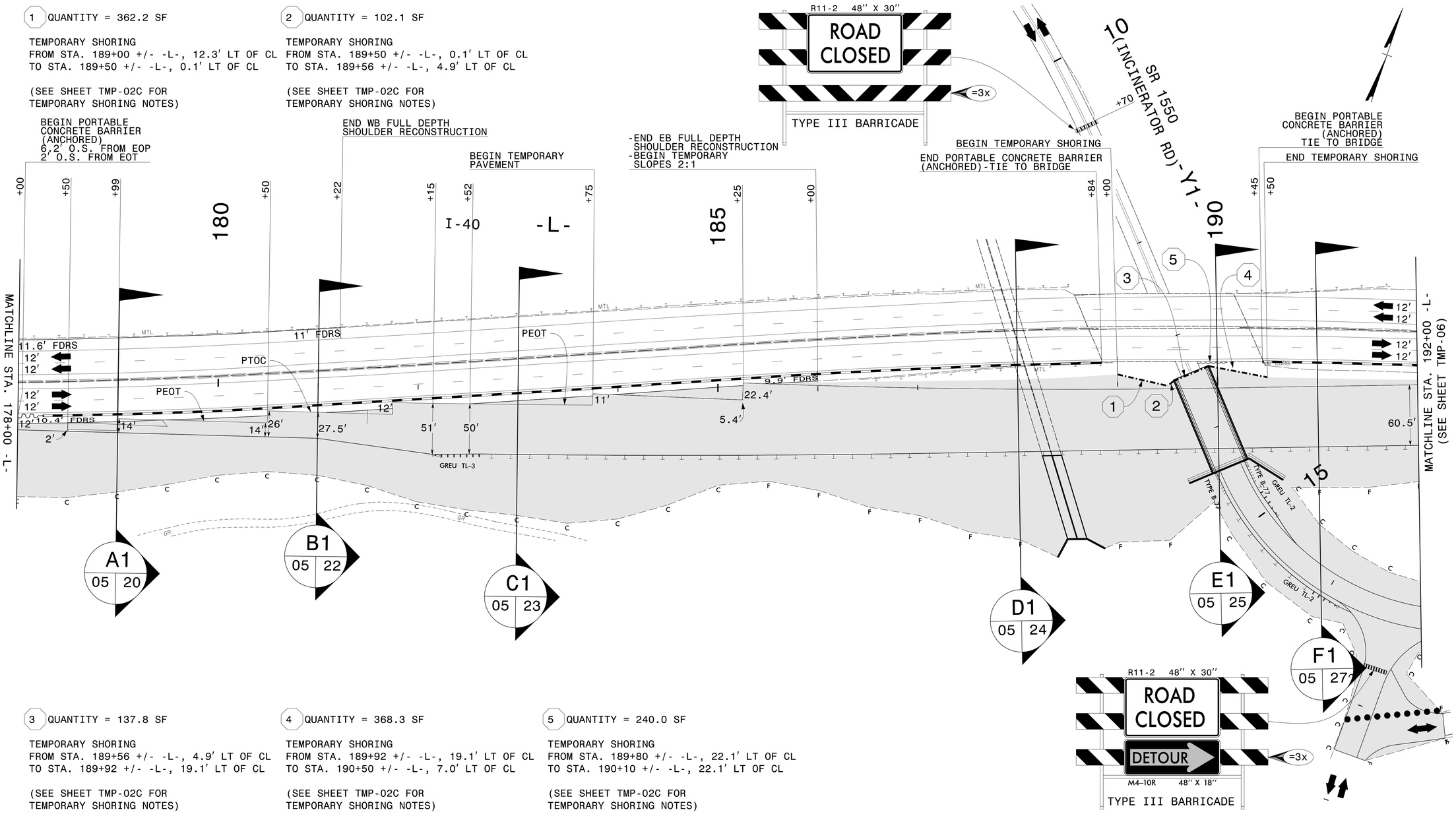
TEMPORARY SHORING
FROM STA. 189+00 +/- -L-, 12.3′ LT OF CL
TO STA. 189+50 +/- -L-, 0.1′ LT OF CL

(SEE SHEET TMP-02C FOR
TEMPORARY SHORING NOTES)

2 QUANTITY = 102.1 SF

TEMPORARY SHORING
FROM STA. 189+50 +/- -L-, 0.1′ LT OF CL
TO STA. 189+56 +/- -L-, 4.9′ LT OF CL

(SEE SHEET TMP-02C FOR
TEMPORARY SHORING NOTES)



3 QUANTITY = 137.8 SF

TEMPORARY SHORING
FROM STA. 189+56 +/- -L-, 4.9′ LT OF CL
TO STA. 189+92 +/- -L-, 19.1′ LT OF CL

(SEE SHEET TMP-02C FOR
TEMPORARY SHORING NOTES)

4 QUANTITY = 368.3 SF

TEMPORARY SHORING
FROM STA. 189+92 +/- -L-, 19.1′ LT OF CL
TO STA. 190+50 +/- -L-, 7.0′ LT OF CL

(SEE SHEET TMP-02C FOR
TEMPORARY SHORING NOTES)

5 QUANTITY = 240.0 SF

TEMPORARY SHORING
FROM STA. 189+80 +/- -L-, 22.1′ LT OF CL
TO STA. 190+10 +/- -L-, 22.1′ LT OF CL

(SEE SHEET TMP-02C FOR
TEMPORARY SHORING NOTES)

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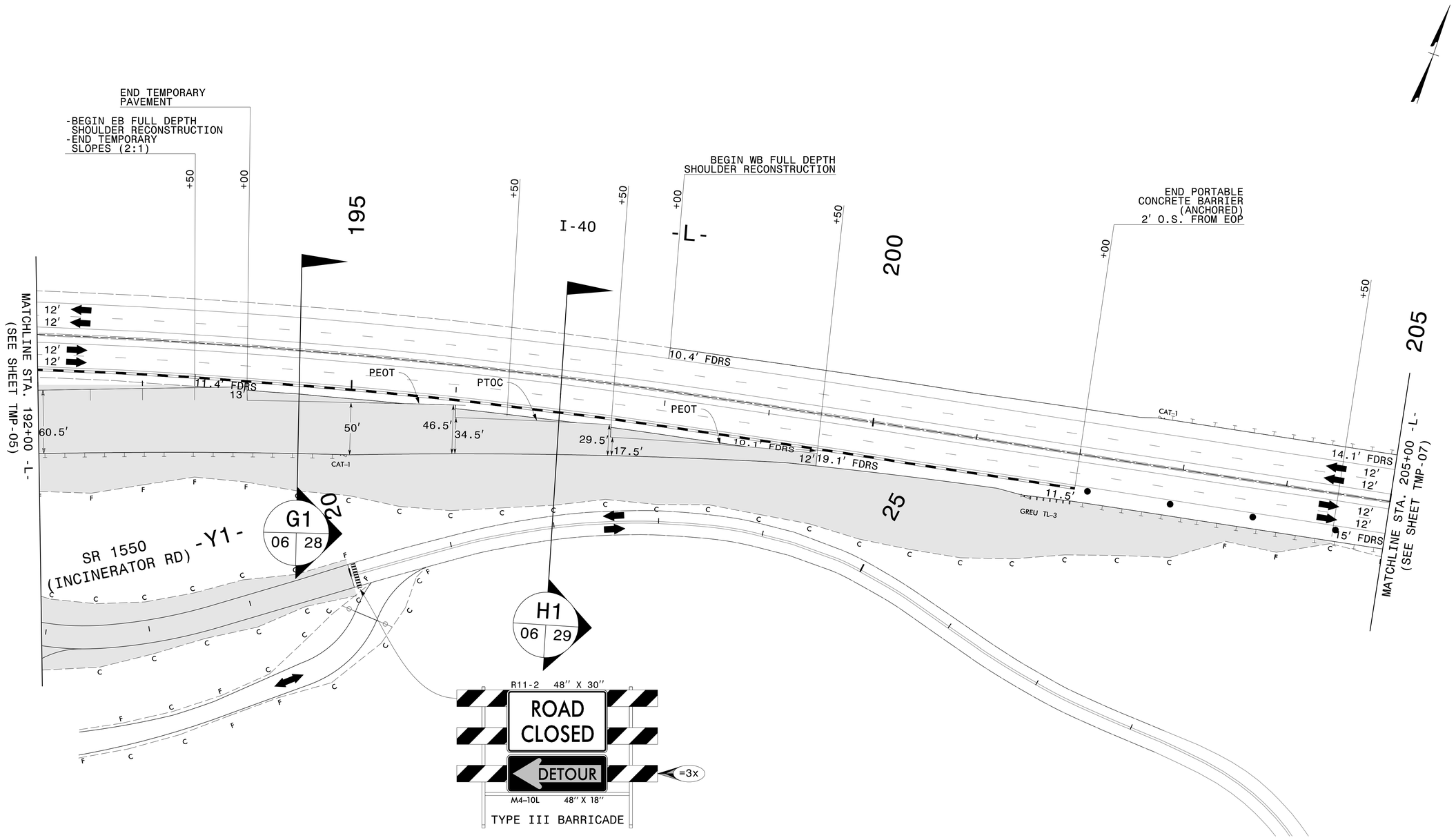
PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-06



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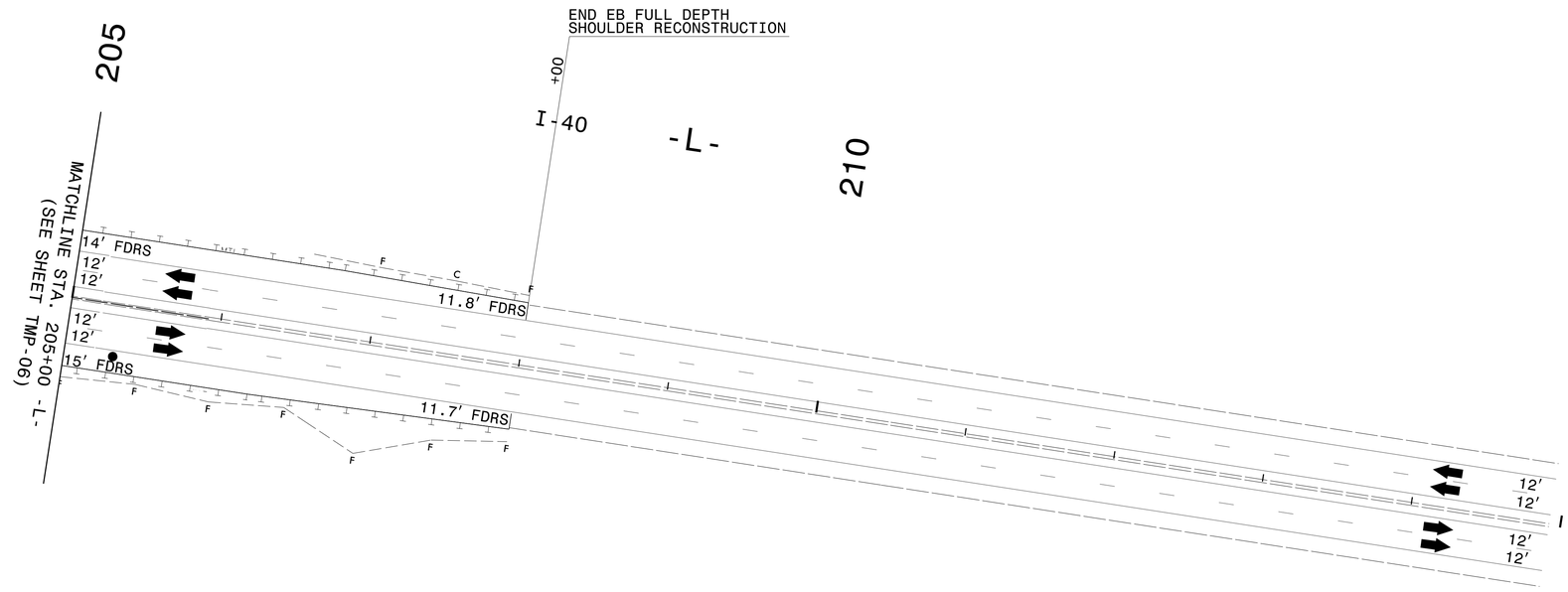
PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-07



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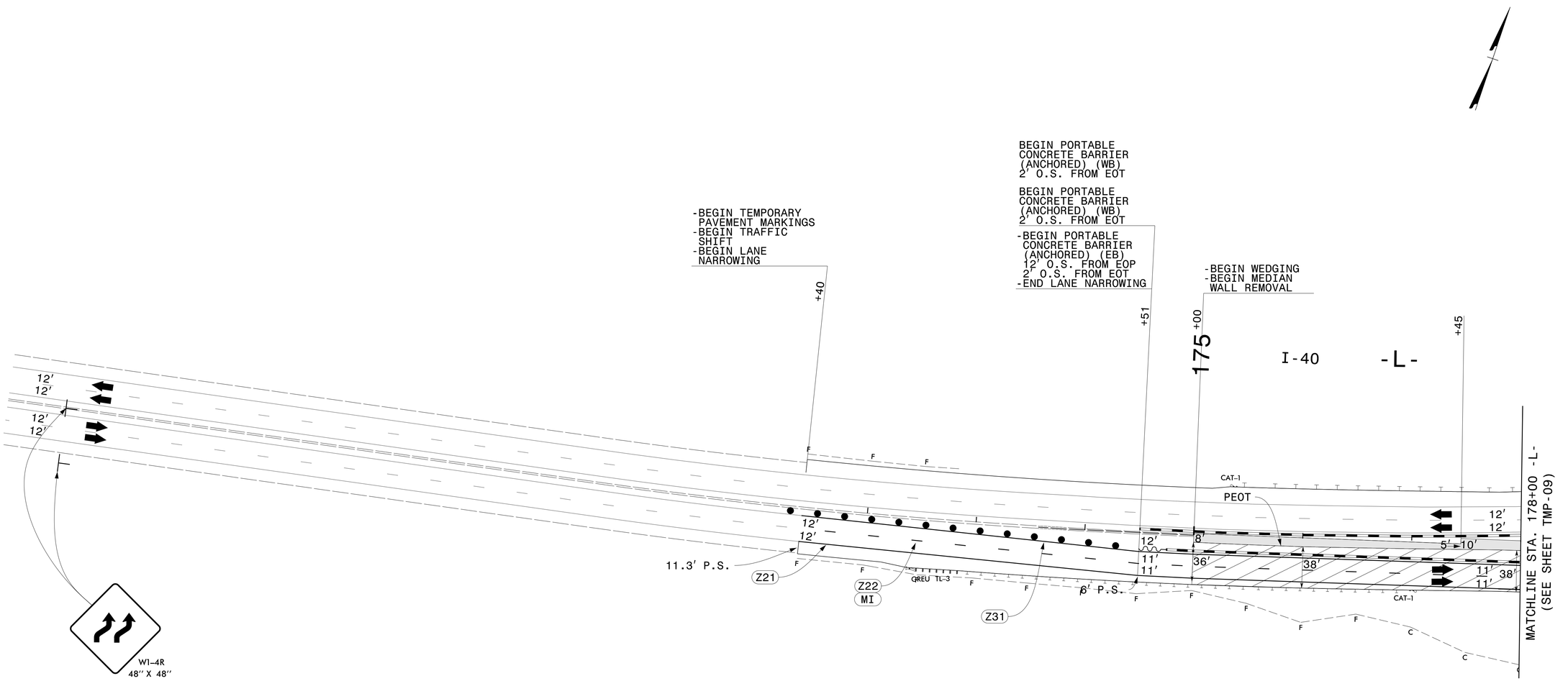
PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-08



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

PHASE II DETAIL

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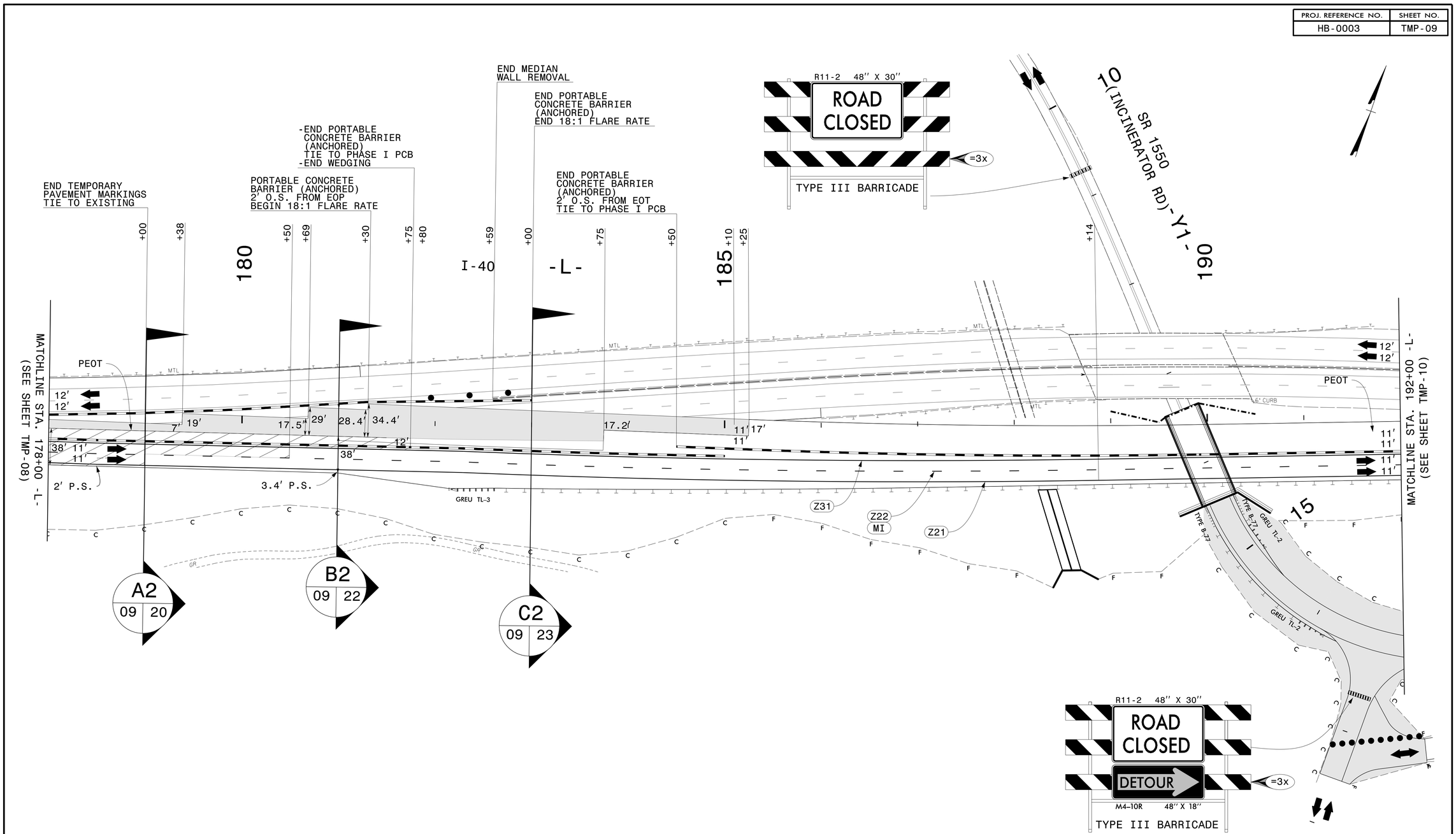

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PHASE II DETAIL

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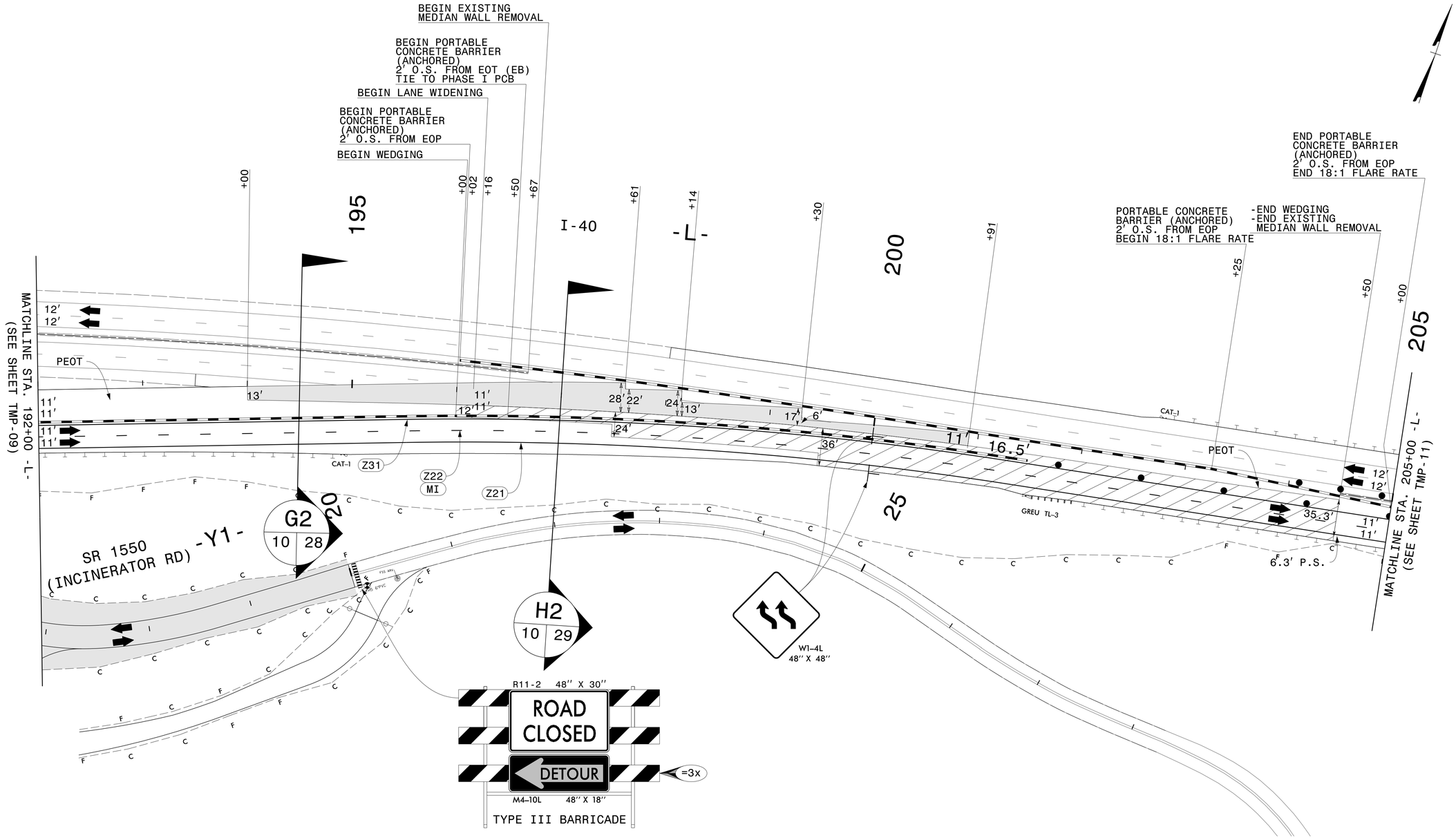
HB-0003	TMP-10



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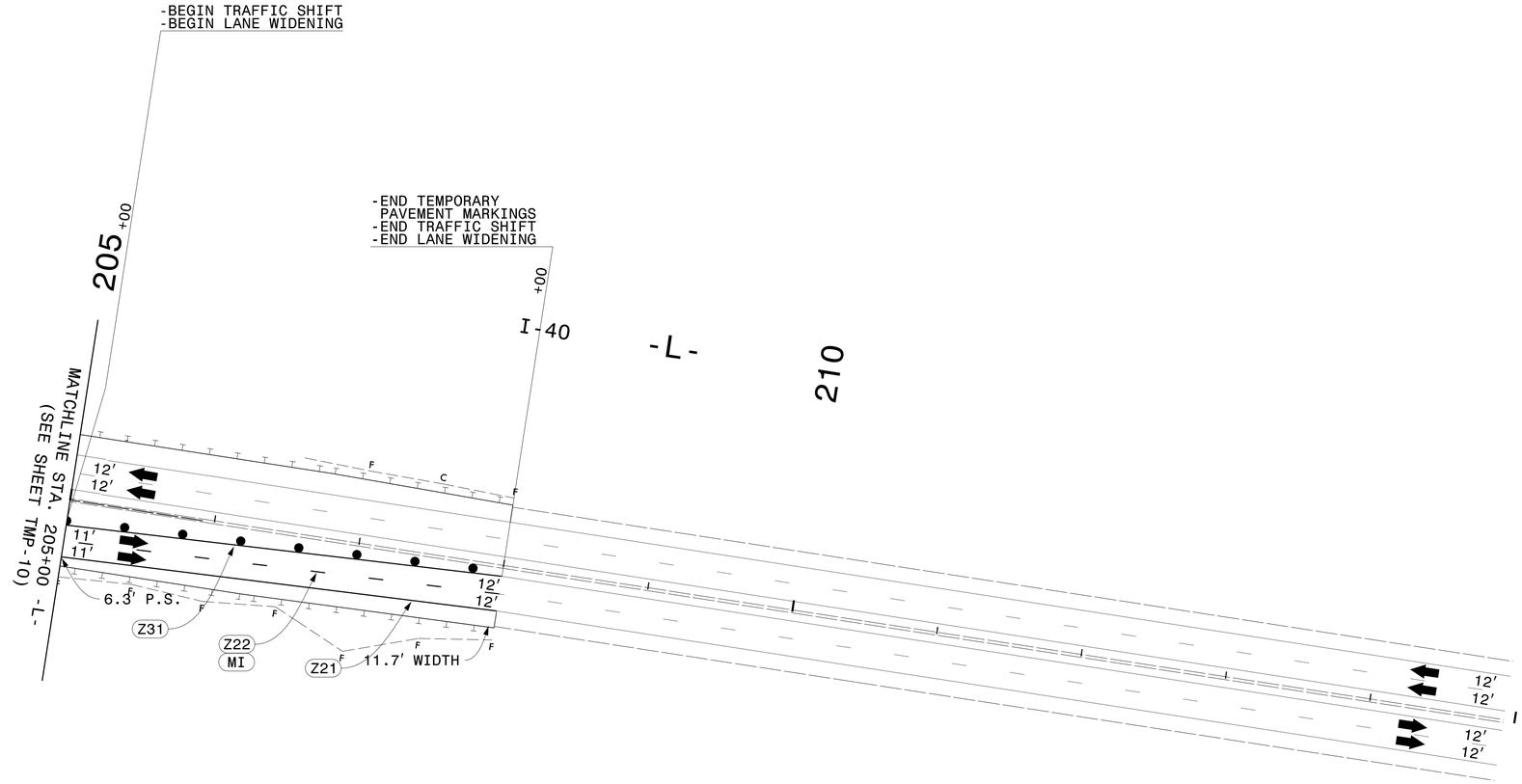
PHASE II DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-11



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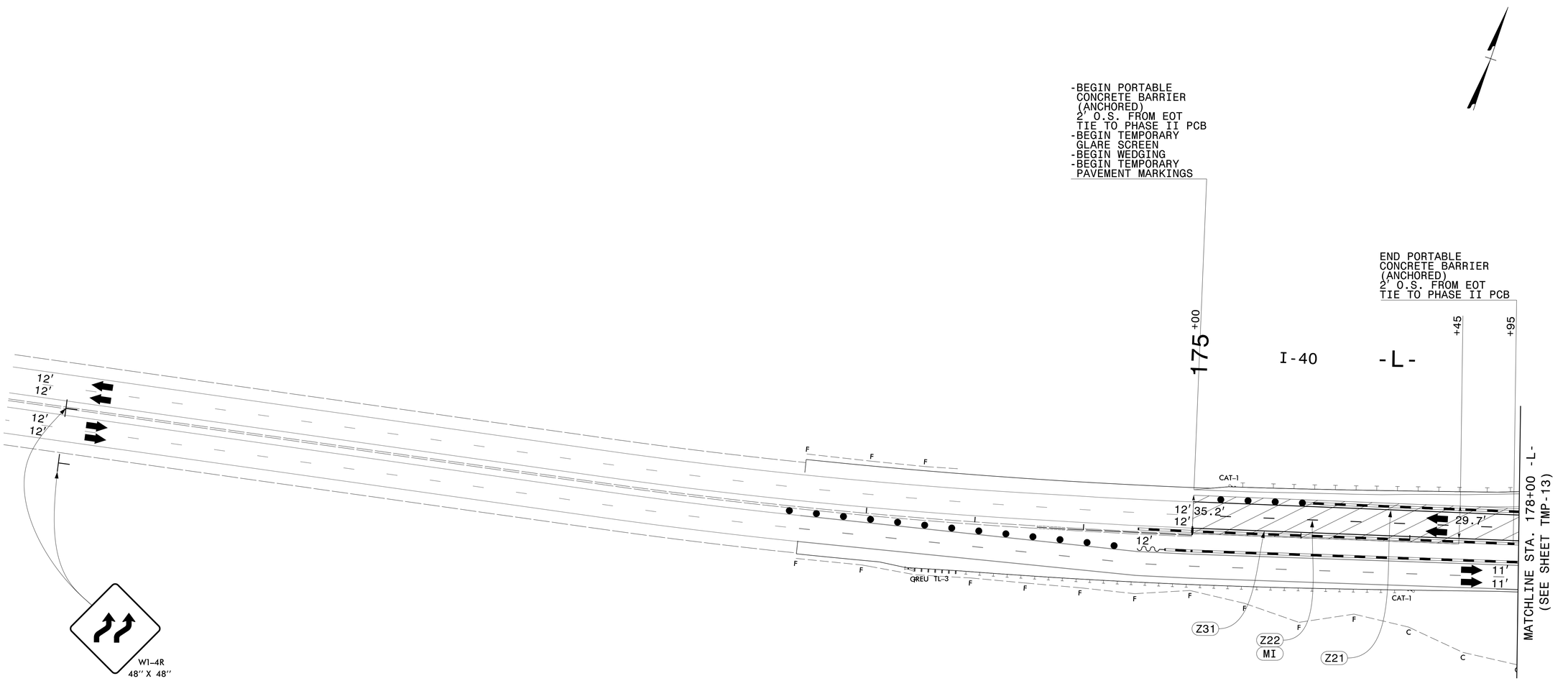
PHASE II DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-12



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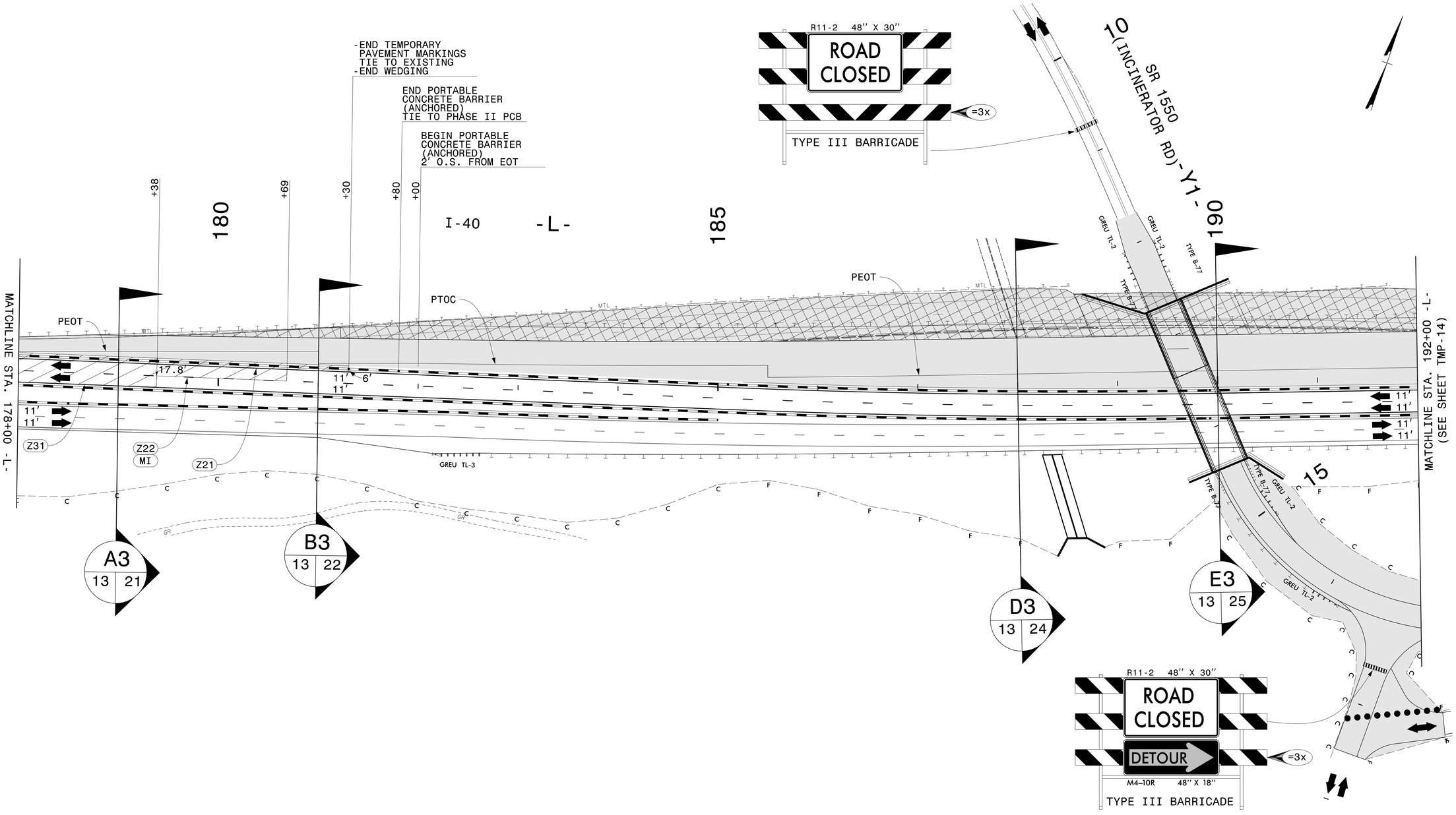
PHASE III DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-13



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PHASE III DETAIL

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PROJ. REFERENCE NO.	SHEET NO.
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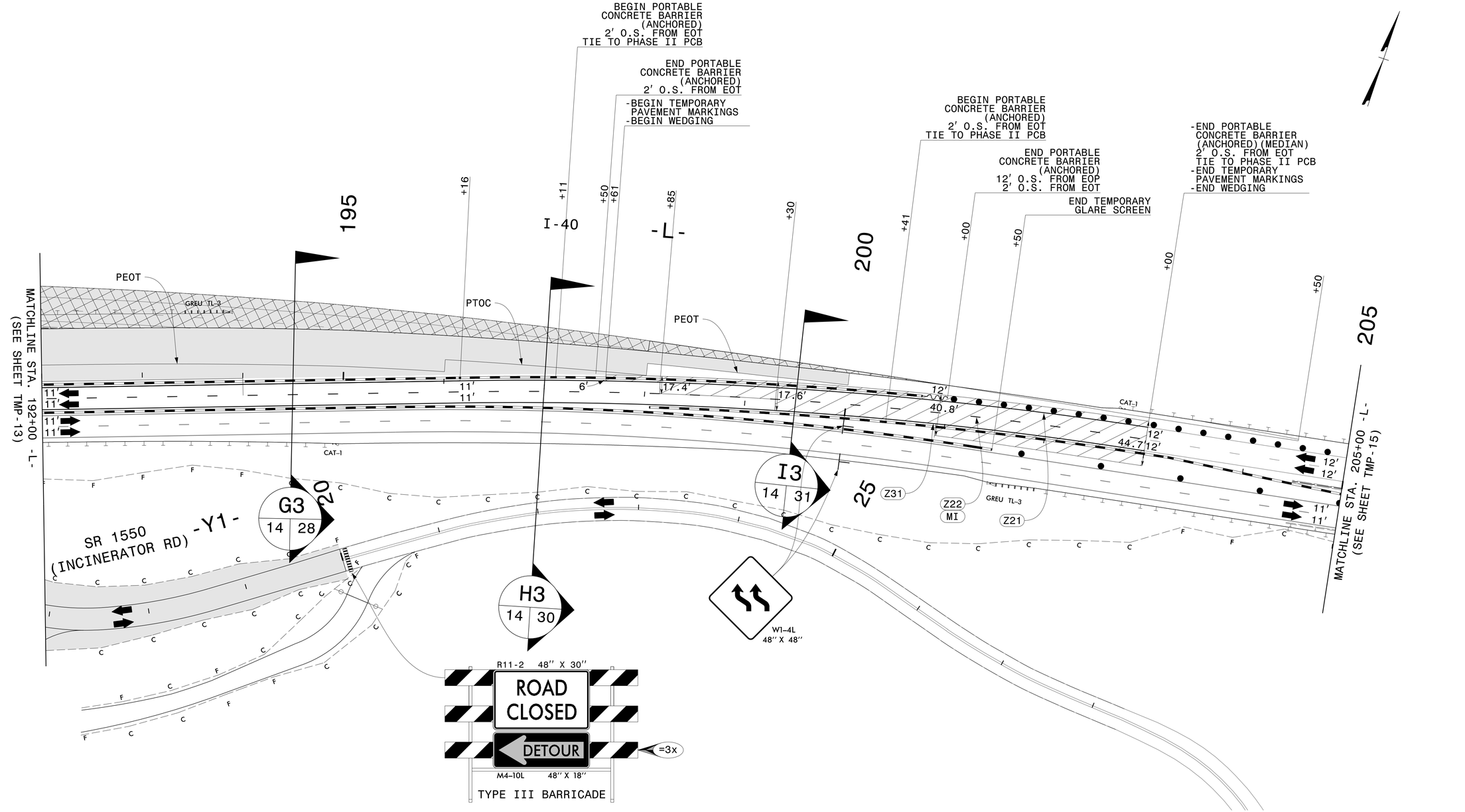

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PHASE III DETAIL

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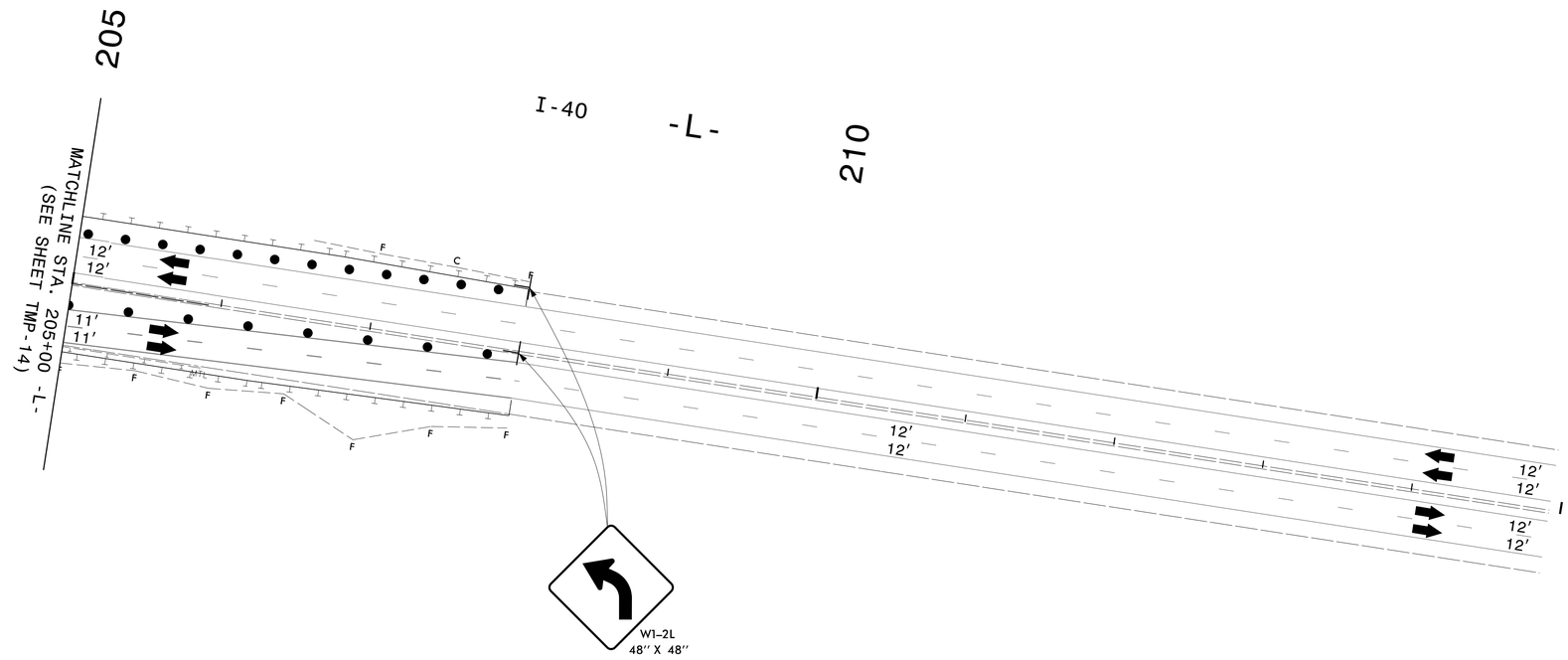
HB-0003	TMP-15



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PROJ. REFERENCE NO.	SHEET NO.
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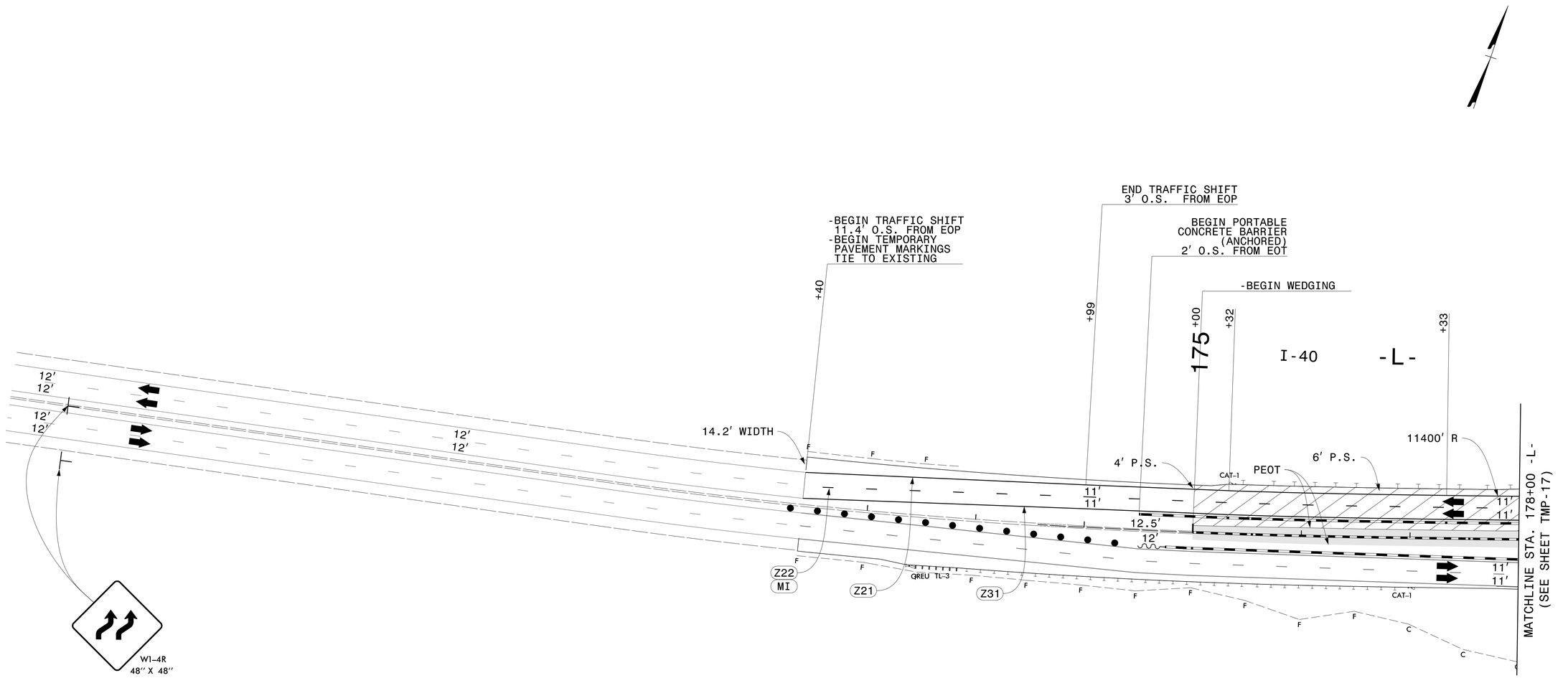

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PHASE IV DETAIL

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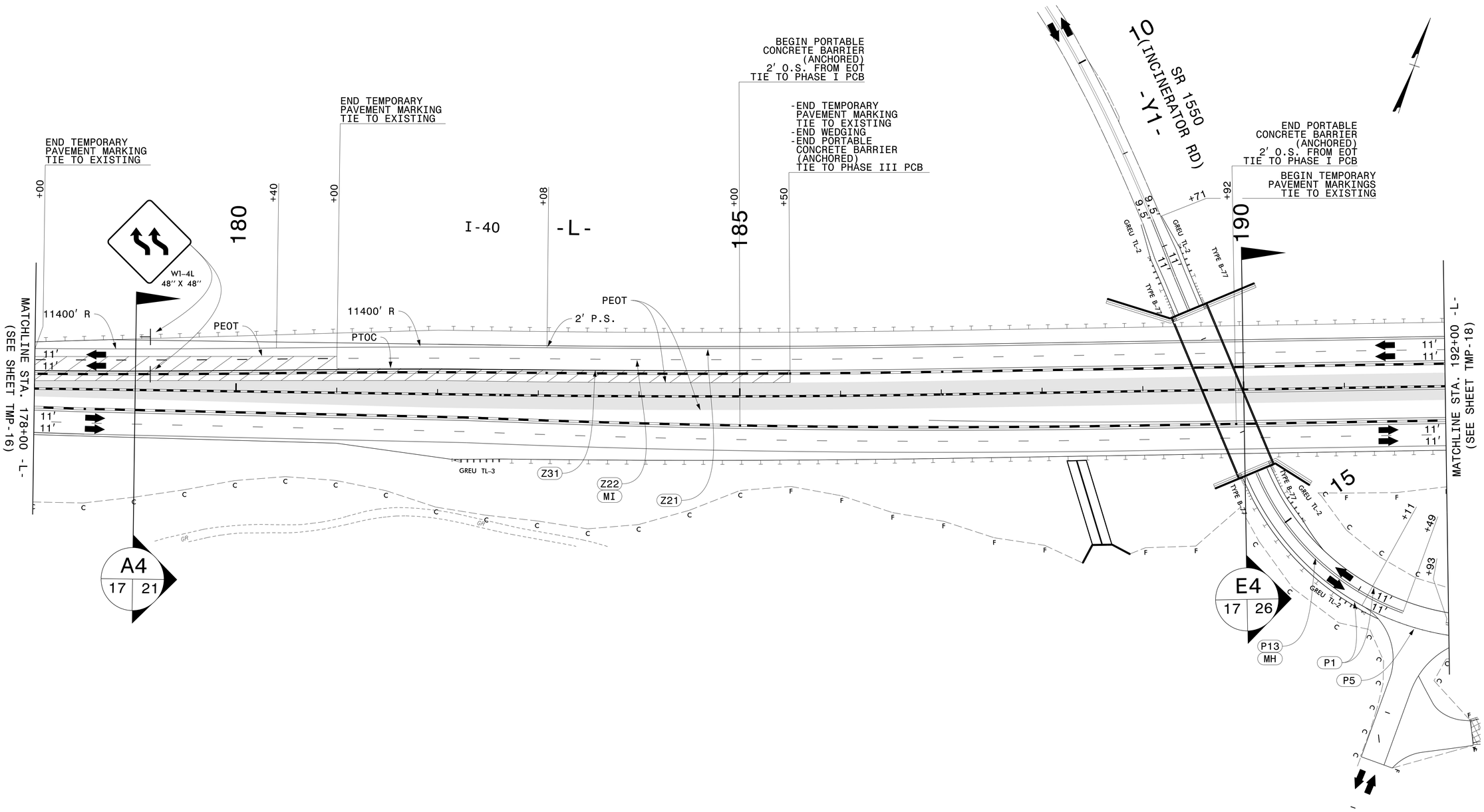

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PHASE IV DETAIL

PROJ. REFERENCE NO.	SHEET NO.
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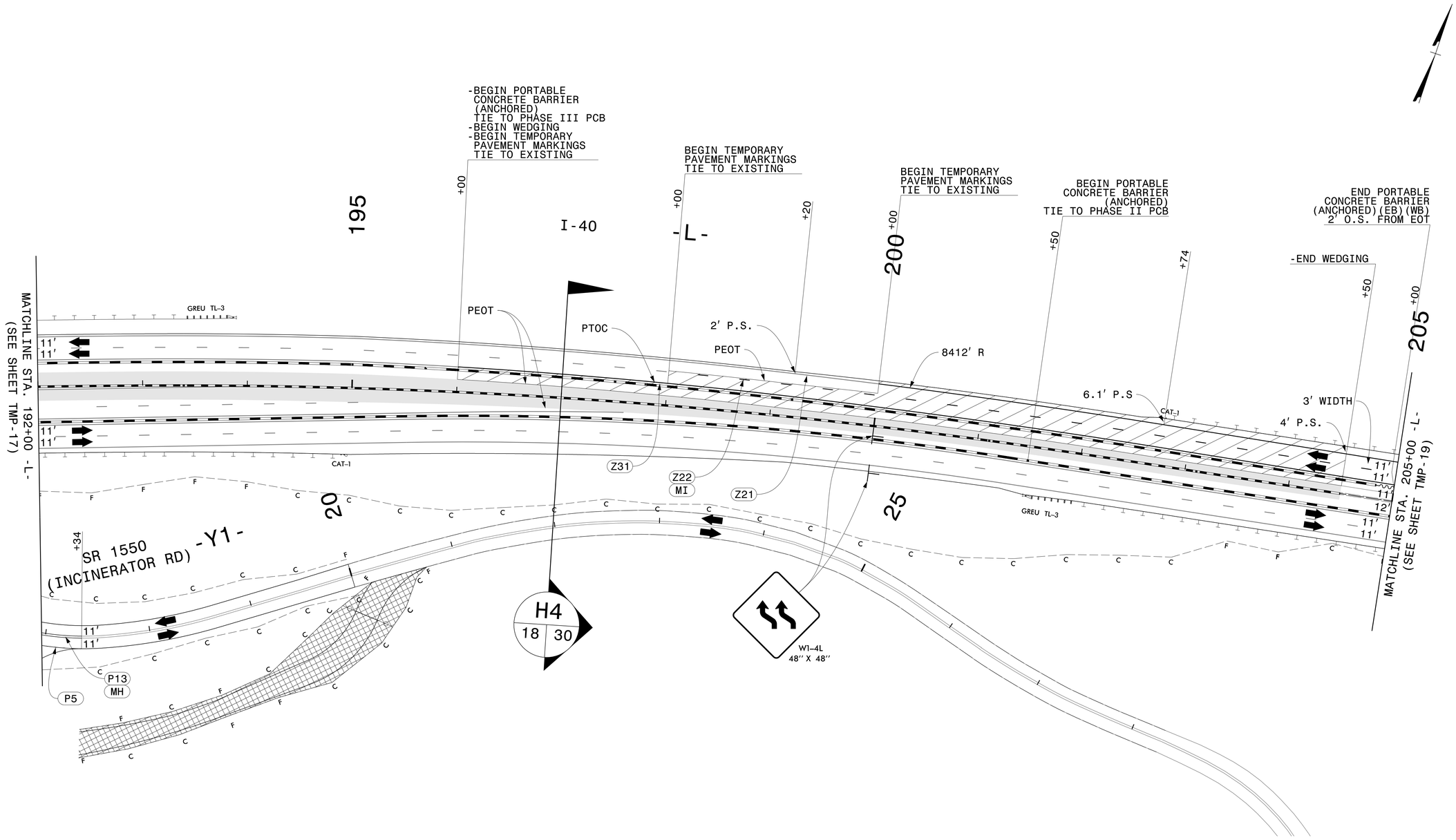

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PHASE IV DETAIL

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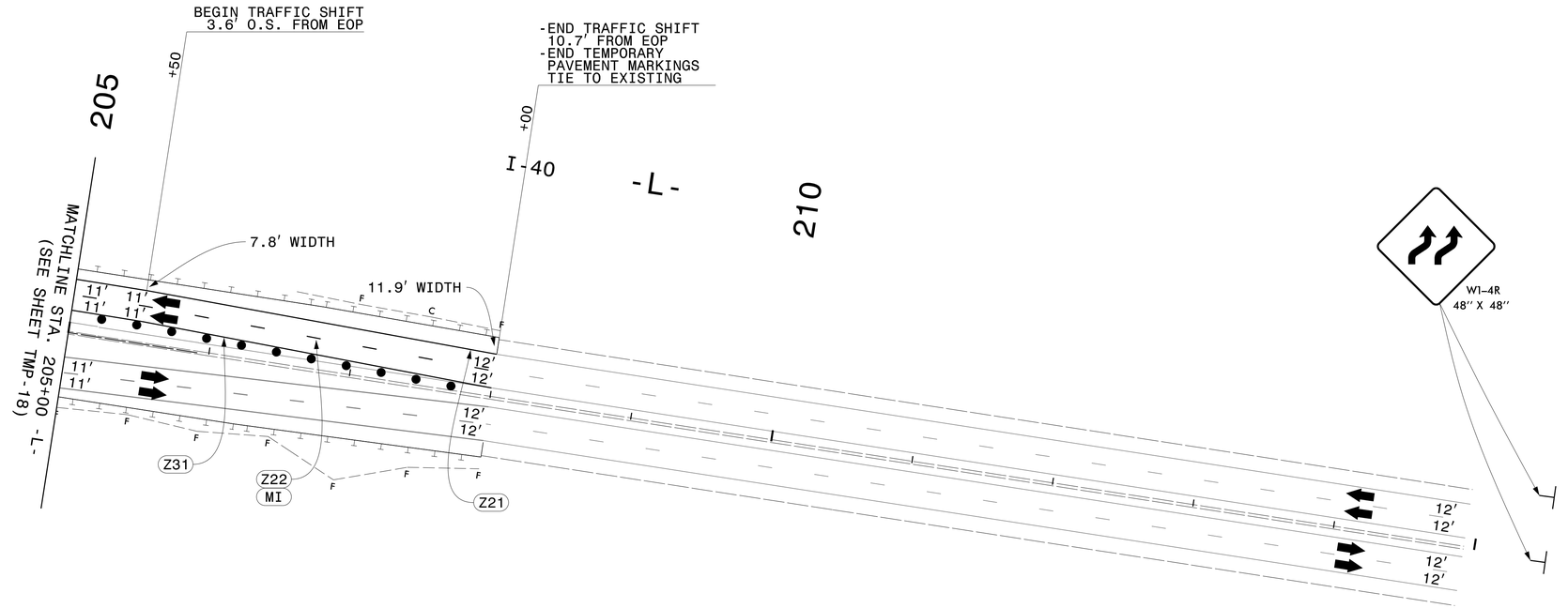

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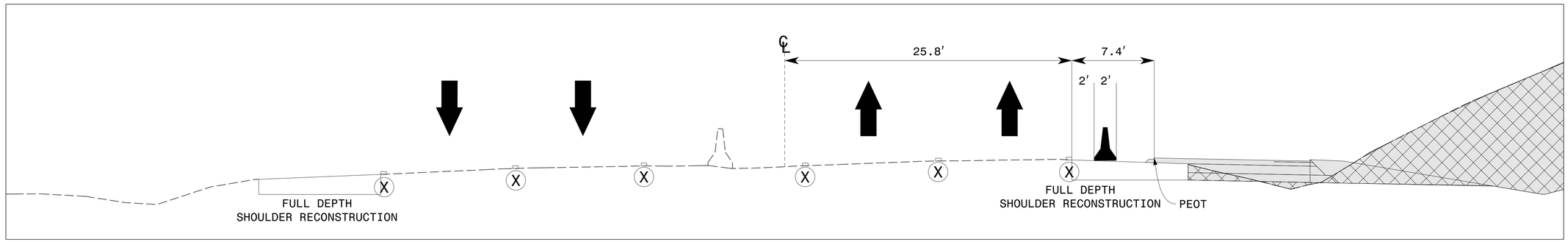
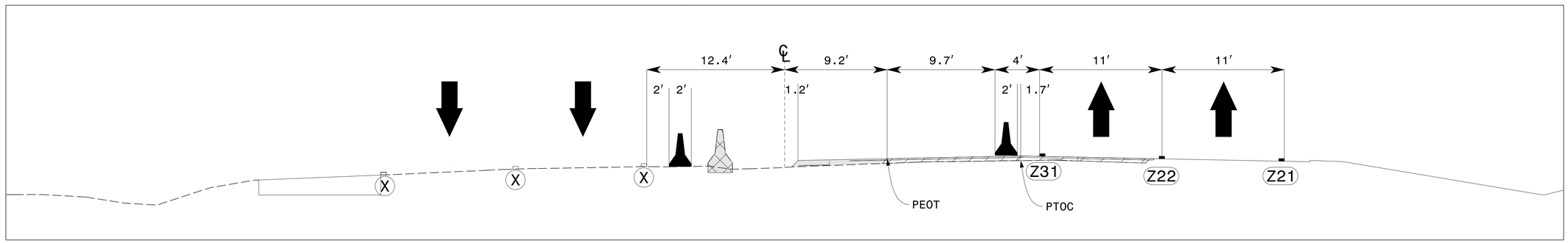
PHASE IV DETAIL

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-20



A1 / 05 | 20 — STA. 179+00 -L-
CUT SECTION



A2 / 09 | 20 — STA. 179+00 -L-
CUT SECTION

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CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

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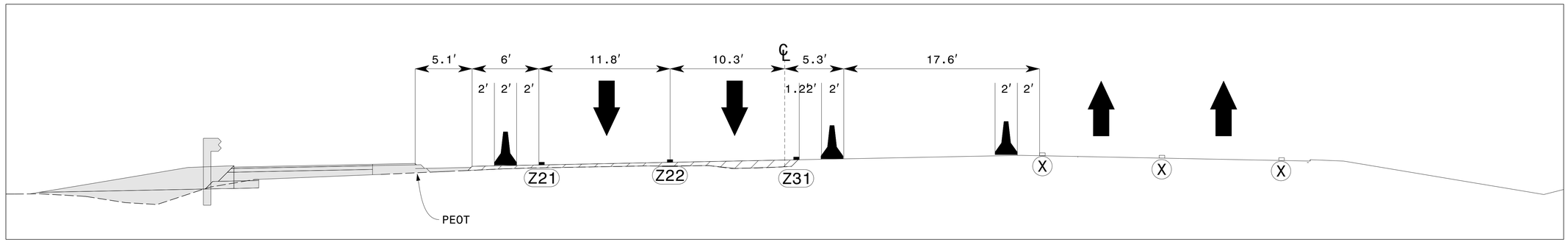
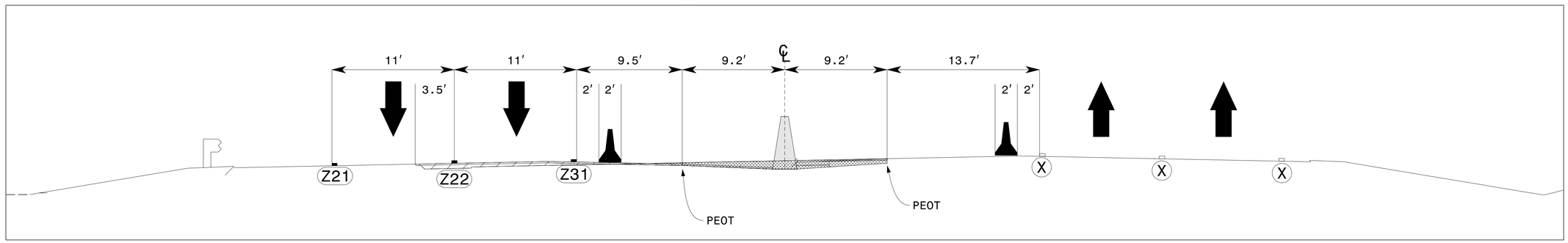
TEMPORARY CUT SECTION A

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-21



A3 / 13 | 21 — STA. 179+00 -L- CUT SECTION



A4 / 17 | 21 — STA. 179+00 -L- CUT SECTION

NOTES:
1) PEOT = PROPOSED EDGE OF TRAVEL
PTOC = PROPOSED TOP OF CROWN

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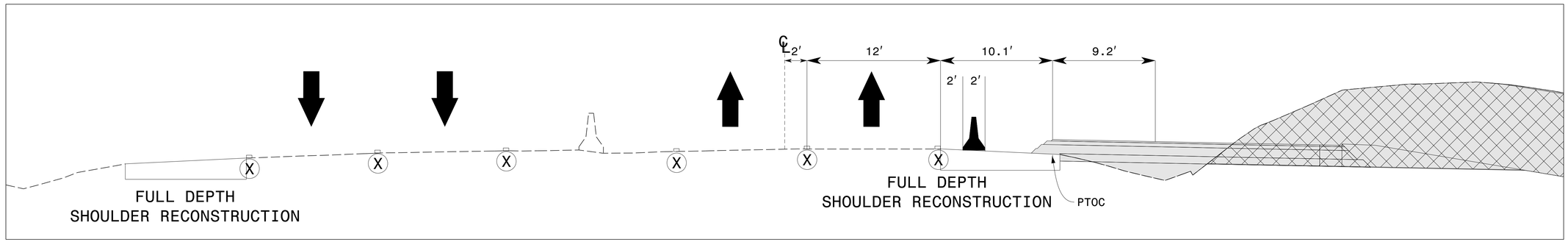
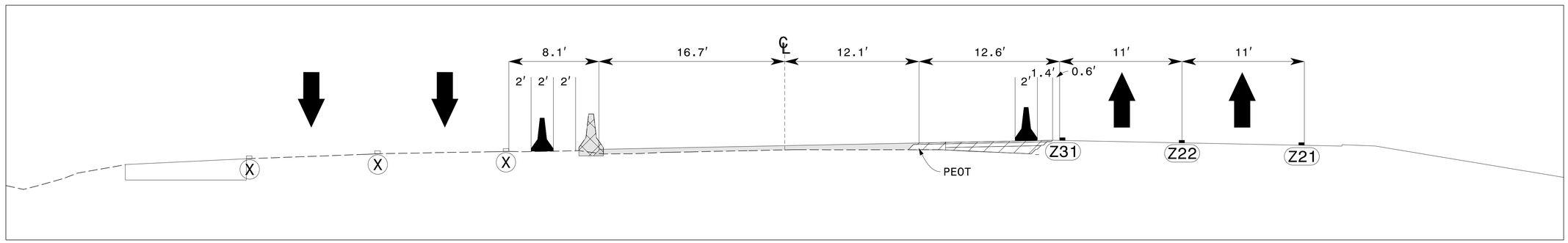
TEMPORARY CUT SECTION A

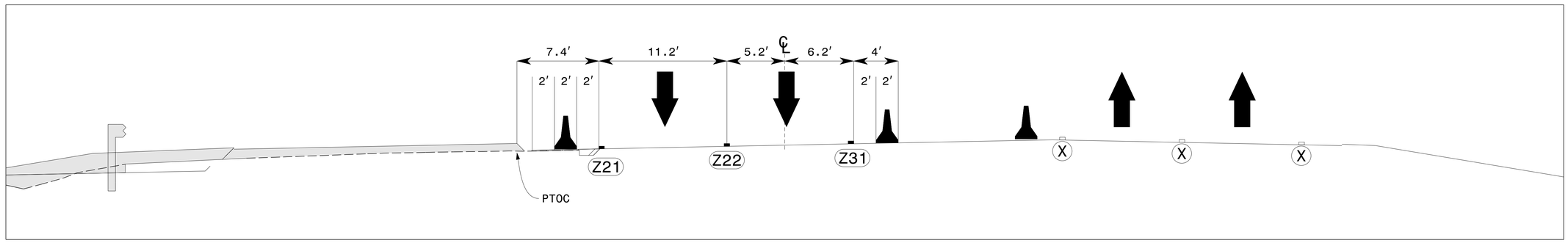
PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-22



B1 (05 | 22) STA. 181+00 -L-
CUT SECTION



B2 (09 | 22) STA. 181+00 -L-
CUT SECTION



B3 (13 | 22) STA. 181+00 -L-
CUT SECTION

NOTES:
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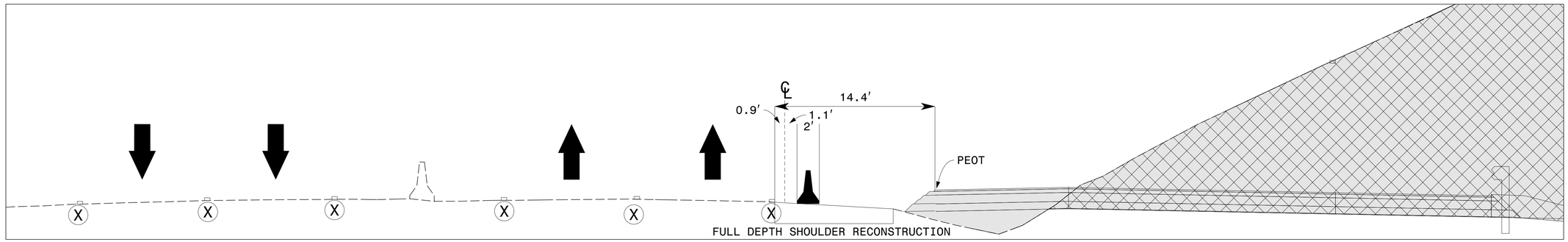
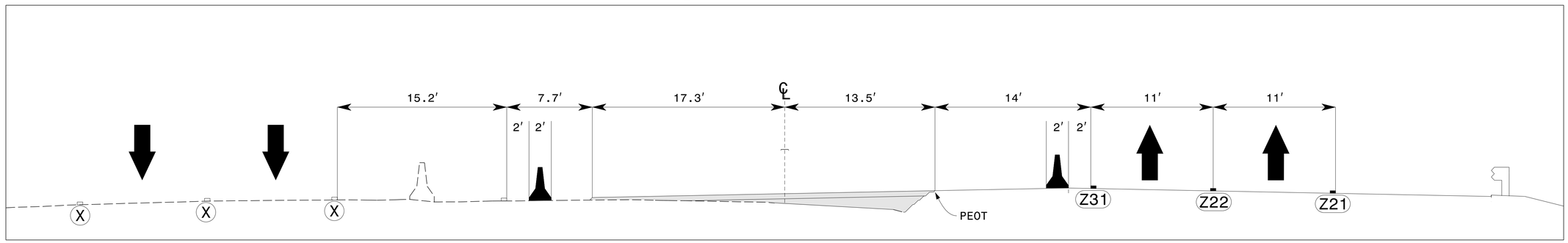
TEMPORARY CUT SECTION B

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-23



C1 | 05 | 23 — STA. 183+00 -L- CUT SECTION



C2 | 09 | 23 — STA. 183+00 -L- CUT SECTION

NOTES:
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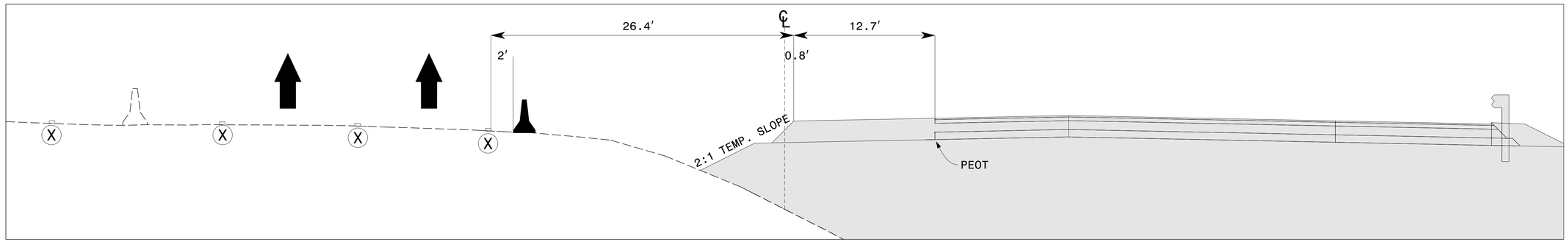
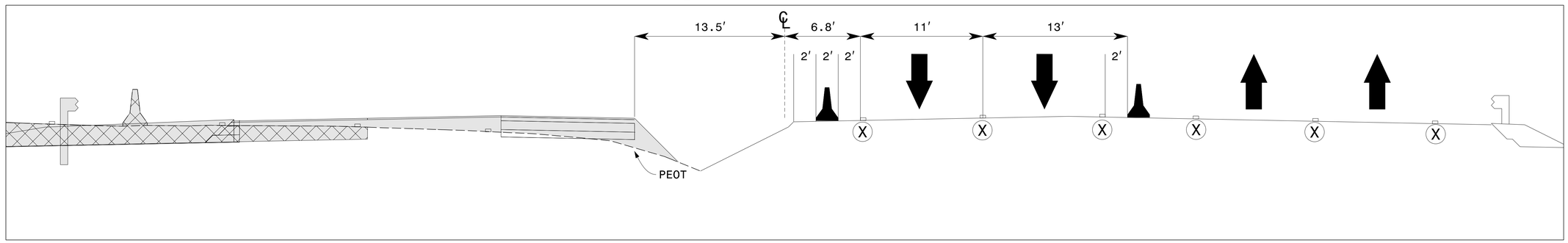
TEMPORARY CUT SECTION C

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-24



D1 / 05 | 24 — STA. 188+00 -L- CUT SECTION



D3 / 13 | 24 — STA. 188+00 -L- CUT SECTION

NOTES:
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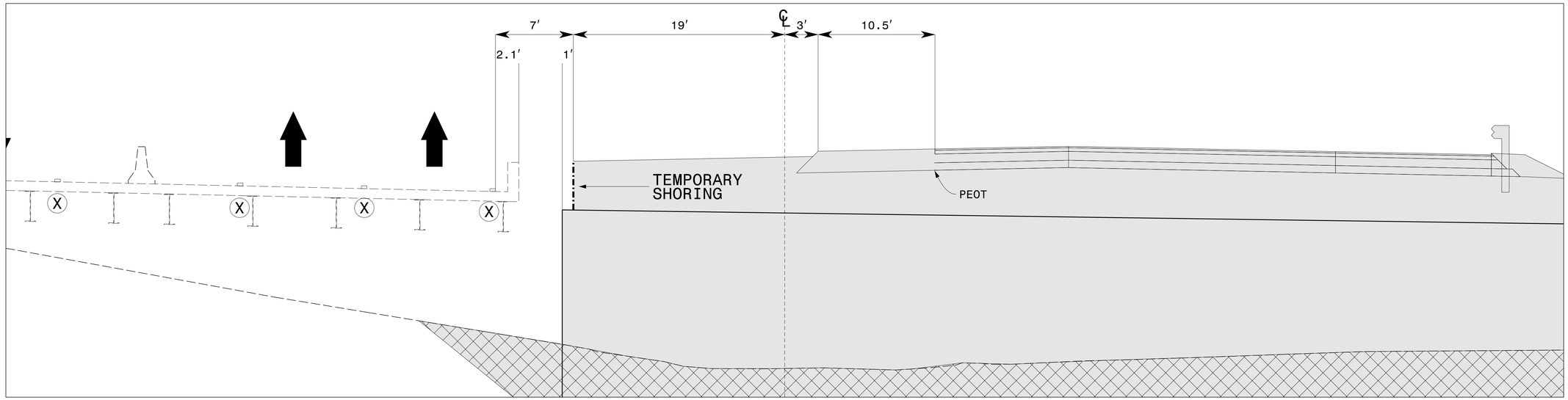
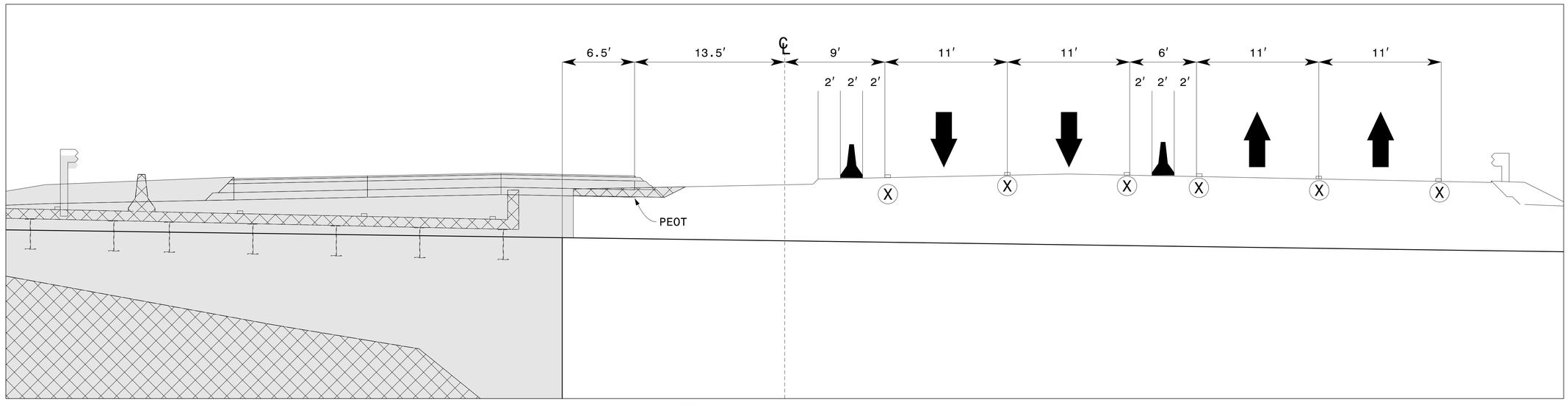
TEMPORARY CUT SECTION D

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-25



E1 / 05 | 25 — STA. 190+00 -L- CUT SECTION



E3 / 13 | 25 — STA. 190+00 -L- CUT SECTION

NOTES:
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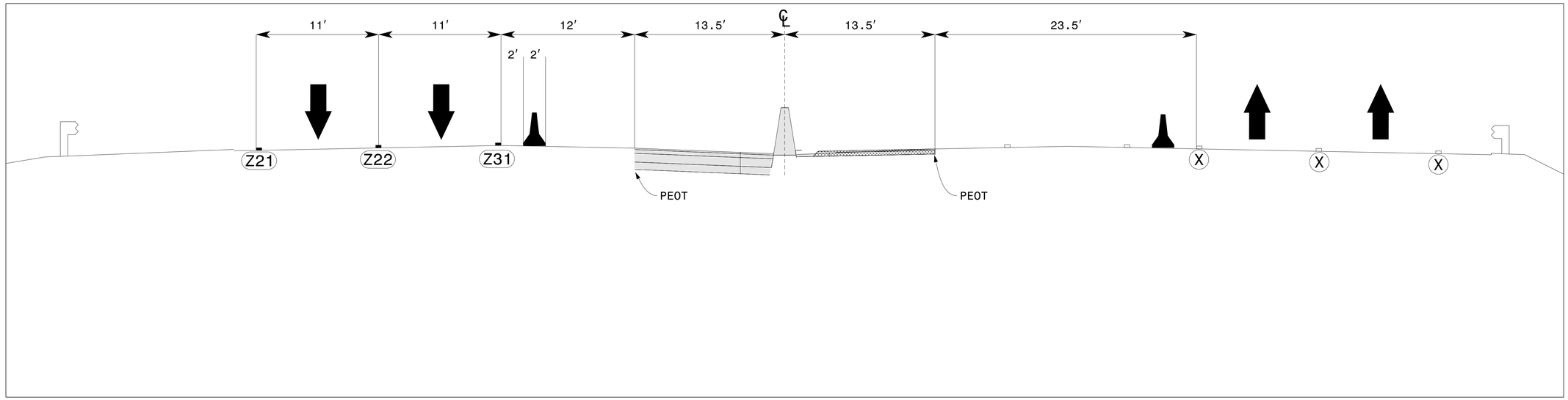
TEMPORARY CUT SECTION E

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-26



E4
17 | 26

STA. 190+00 -L-
CUT SECTION

NOTES:
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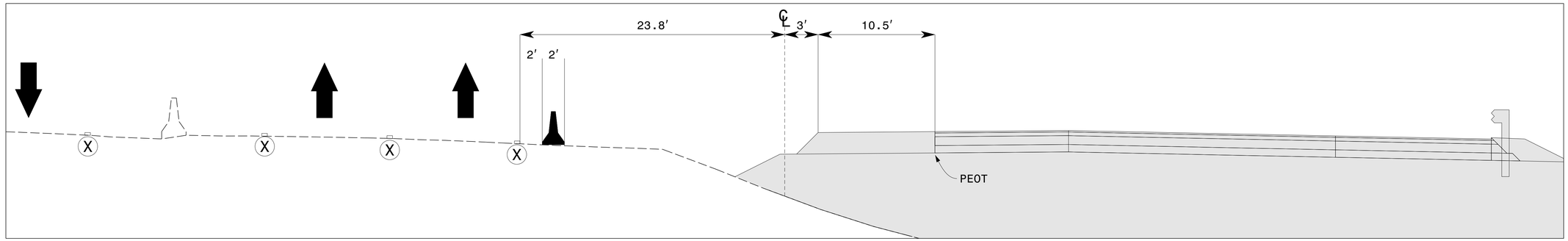
TEMPORARY CUT SECTION E

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-27



F1
05 | 27

STA. 191+00 -L-
CUT SECTION

NOTES:
1) PEOT = PROPOSED EDGE OF TRAVEL
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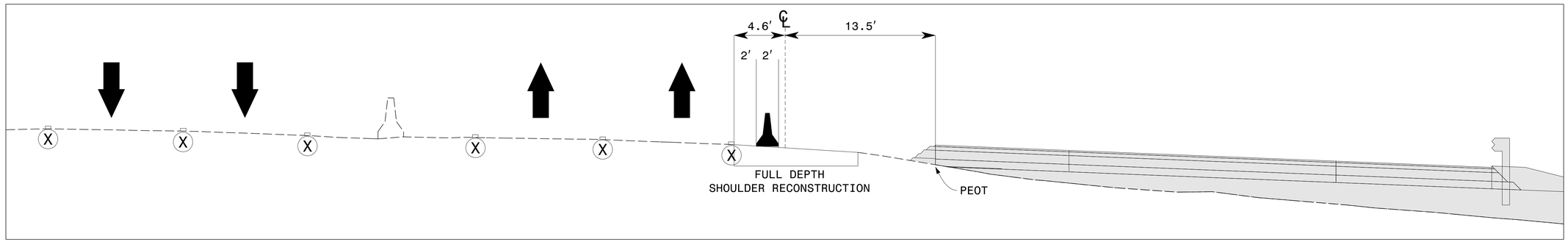
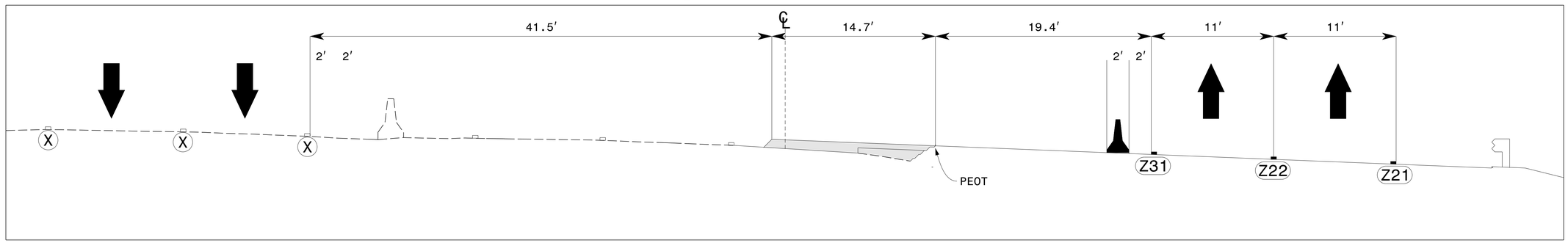
TEMPORARY CUT SECTION F

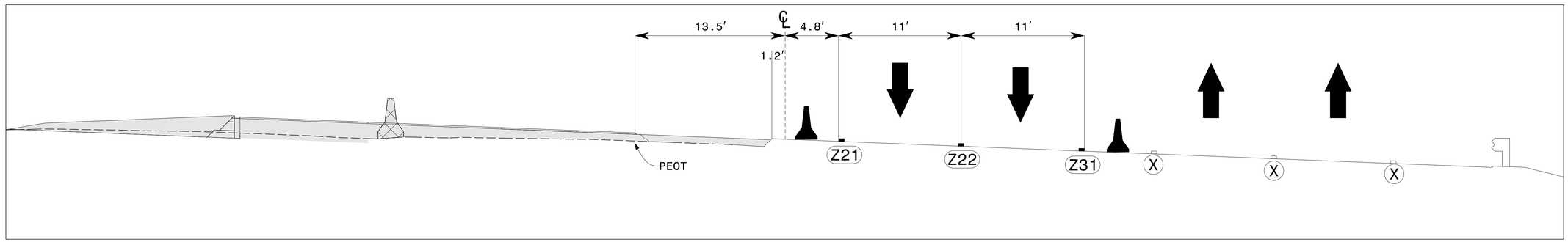
PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-28



G1 / 06 | 28 — STA. 194+50 -L- CUT SECTION



G2 / 10 | 28 — STA. 194+50 -L- CUT SECTION



G3 / 14 | 28 — STA. 194+50 -L- CUT SECTION

NOTES:
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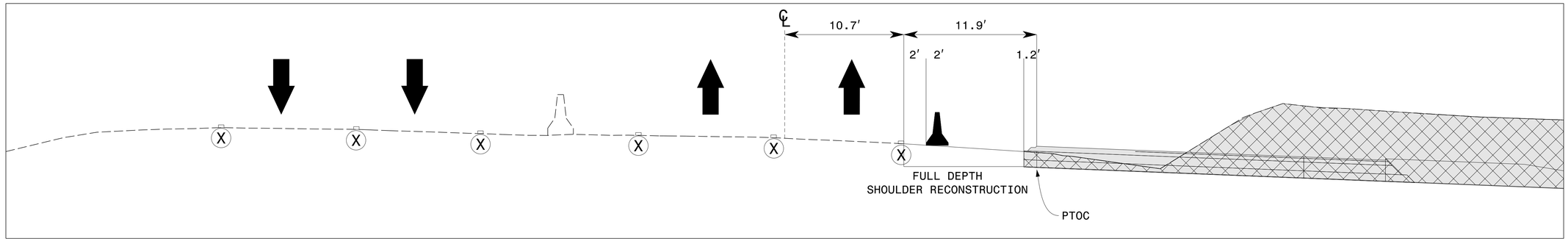
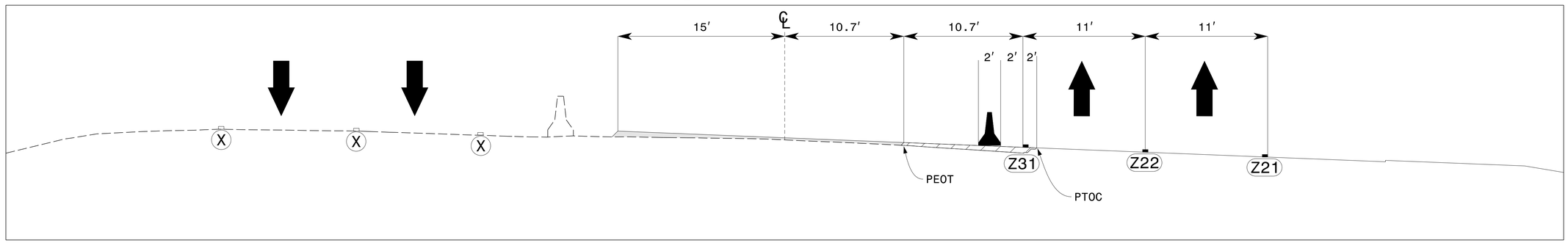
TEMPORARY CUT SECTION G

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-29



H1 / 06 | 29 — STA. 197+00 -L-
CUT SECTION



H2 / 10 | 29 — STA. 197+00 -L-
CUT SECTION

NOTES:
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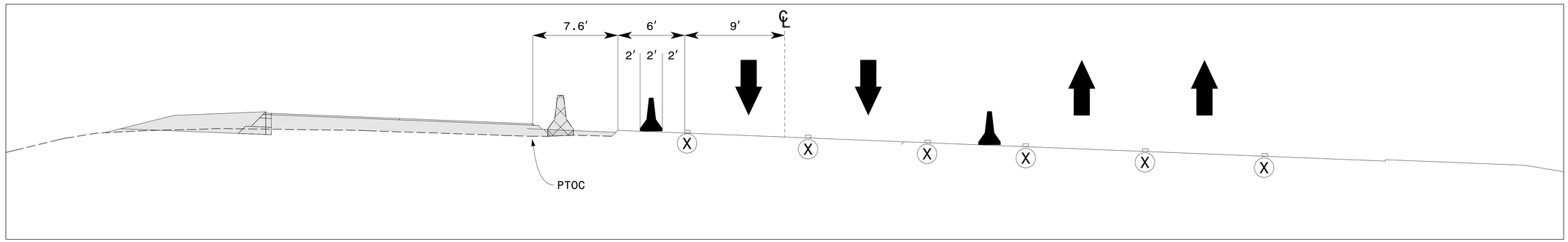
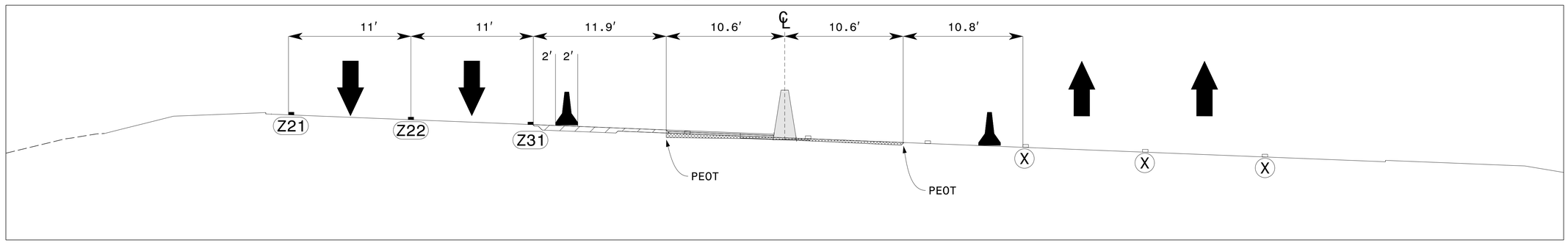
TEMPORARY CUT SECTION H

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-30



H3 (14 | 30) STA. 197+00 -L-
CUT SECTION



H4 (18 | 30) STA. 197+00 -L-
CUT SECTION

NOTES:
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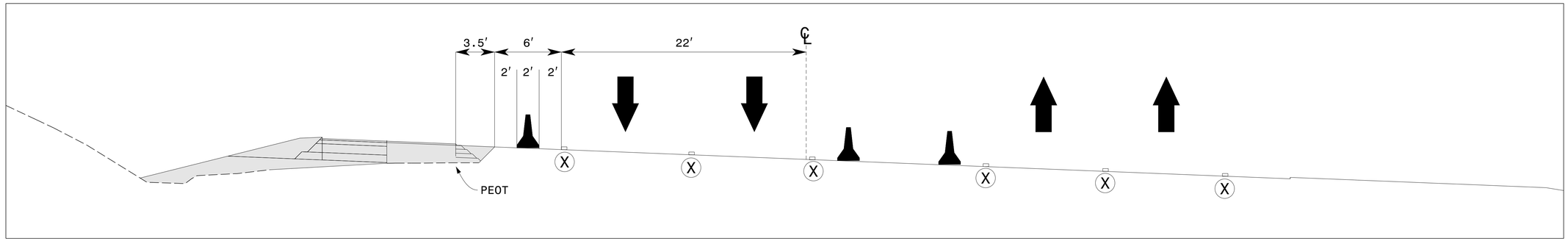
TEMPORARY CUT SECTION H

PROJ. REFERENCE NO.	SHEET NO.
HB-0003	TMP-31



I3
14 | 31

STA. 199+50 -L-
CUT SECTION

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TEMPORARY CUT SECTION I