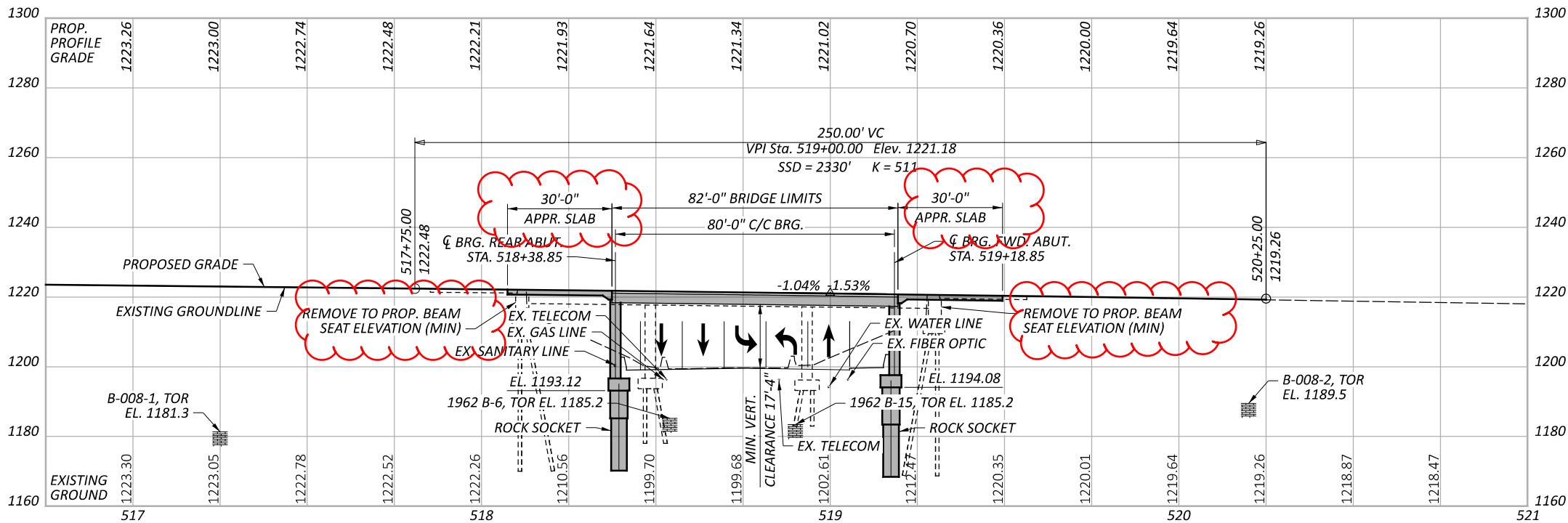
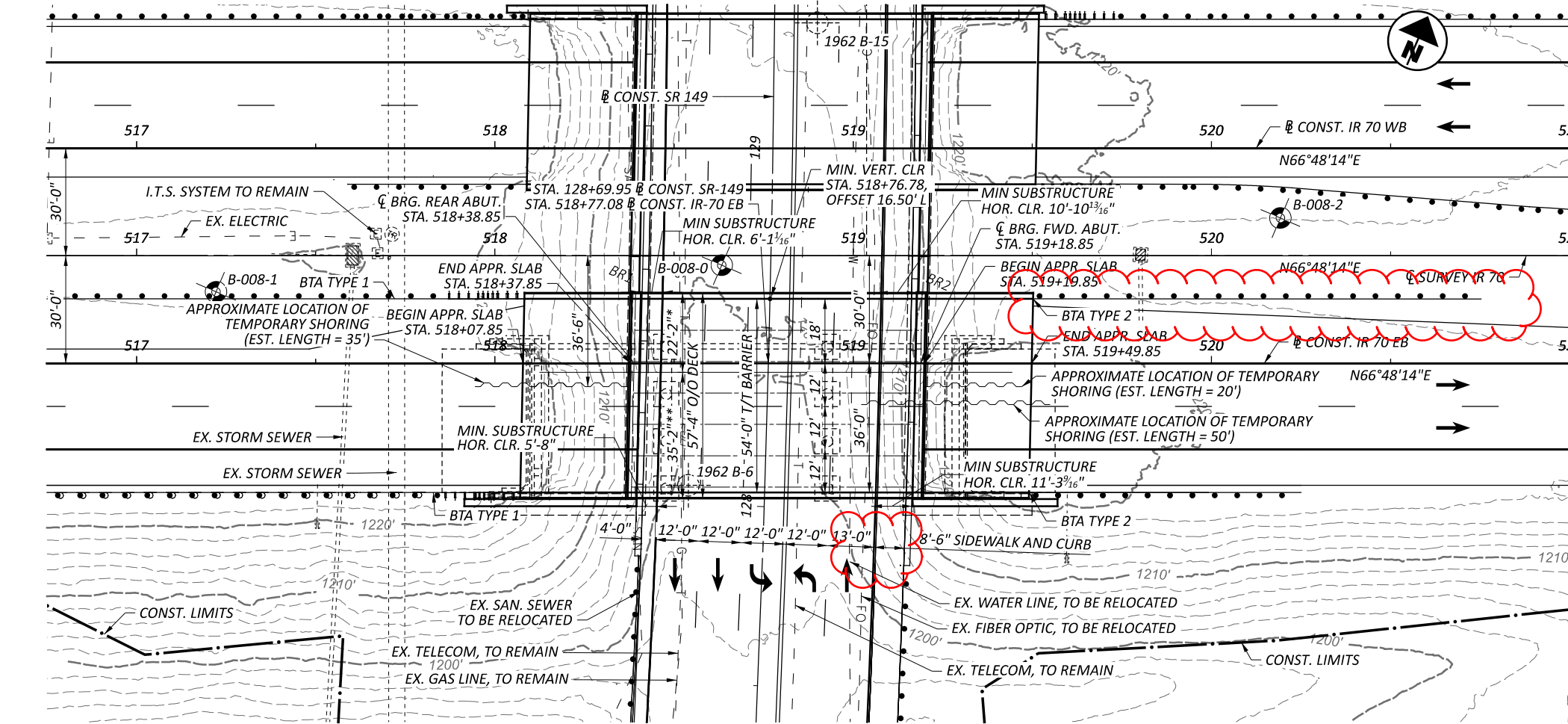




NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLANS.

DESIGN TRAFFIC:

2027 ADT = 37,460 2027 ADTT = 16,857

2047 ADT = 40,890 2047 ADTT = 18,401

DIRECTIONAL DISTRIBUTION = 50%

LEGEND

- BORING LOCATION
- HISTORIC BORING LOCATION
- * - PHASE 1 CONSTRUCTION
- ** - PHASE 2 CONSTRUCTION
- 16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 17'-4" ACTUAL MINIMUM VERTICAL CLEARANCE

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS COMPOSITE STEEL BEAM A709 GRADE 50W WITH CONCRETE DECK SUPPORTED BY MODIFIED SUBSTRUCTURE

SPANS: 35'-10", 44'-11³/₄", 35'-9¹/₄" C/C BEARINGS

ROADWAY: 43'-0" T/T BARRIER

LOADING: HS20 CASE I AND THE ALTERNATIVE MILITARY LOADING

SKREW: NONE

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81, 25' LONG

ALIGNMENT: TANGENT

CROWN: 0.016

STRUCTURE FILE NUMBER: 0702226R

DATE BUILT: 1964 (MODIFIED 2012)

DISPOSITION: TO BE REMOVED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN CONTINUOUS COMPOSITE STEEL GRADE 50 BEAMS WITH REINFORCED CONCRETE DECK ON SEMI-INTEGRAL ABUTMENTS

SPANS: 80'-0" C/C BEARINGS

ROADWAY: 54'-0" T/T BARRIER

LOADING: HS20 AND 0.06 KSF FUTURE WEARING SURFACE

SKREW: 1°11'59"

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-15, AS-2-15 TYPE C)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

DECK AREA: 4,702 SF

COORDINATES: LATITUDE 40°03'36" N

LONGITUDE 81°03'11" W

SITE PLAN
BRIDGE NO. BEL-70-0963 R
I.R. 70 OVER S.R. 149

SFN
0702251

DESIGN AGENCY



DESIGNER

CHECKER

LAB

CMH

REVIEWER

CJW 03-17-25

PROJECT ID

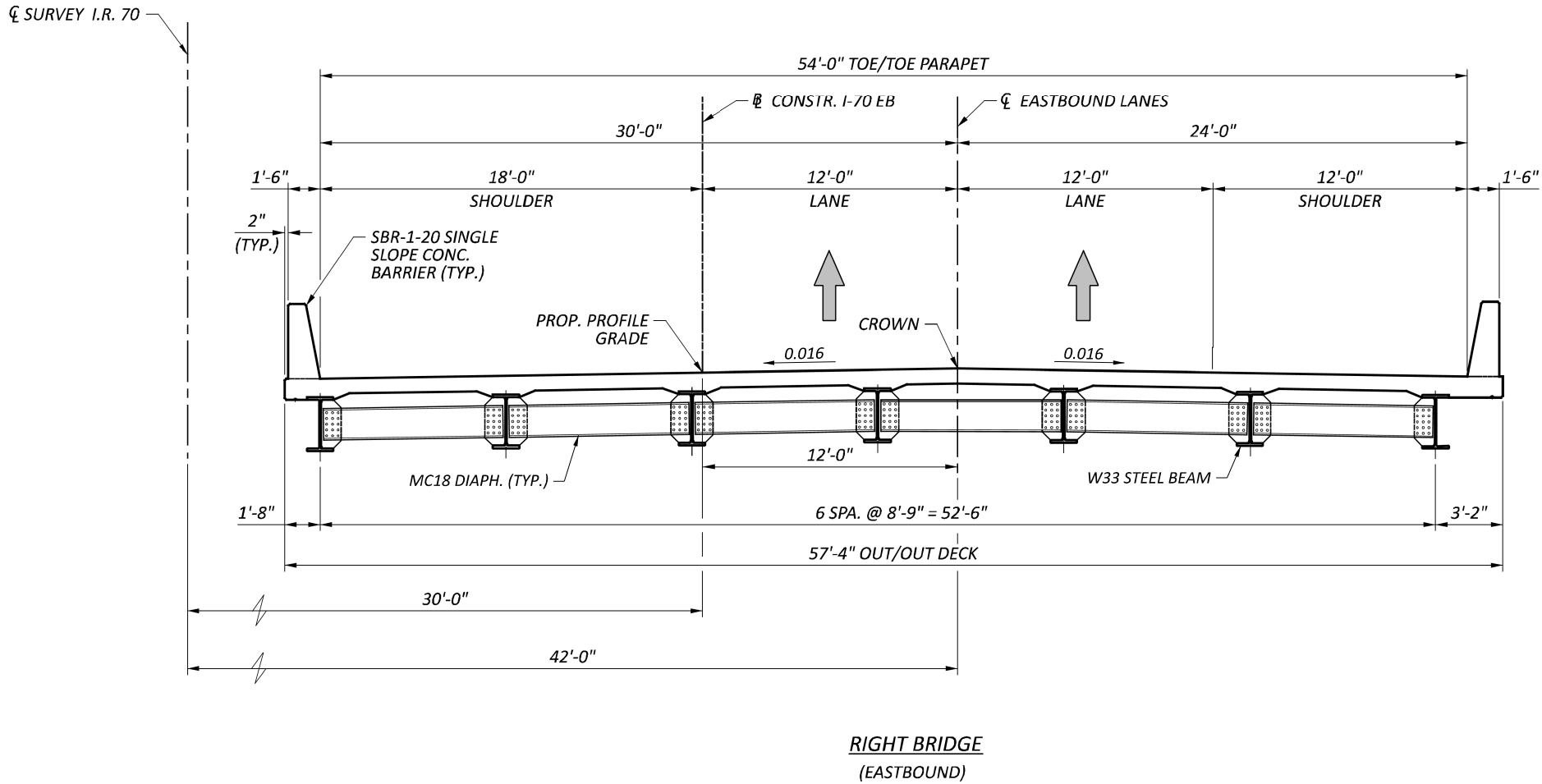
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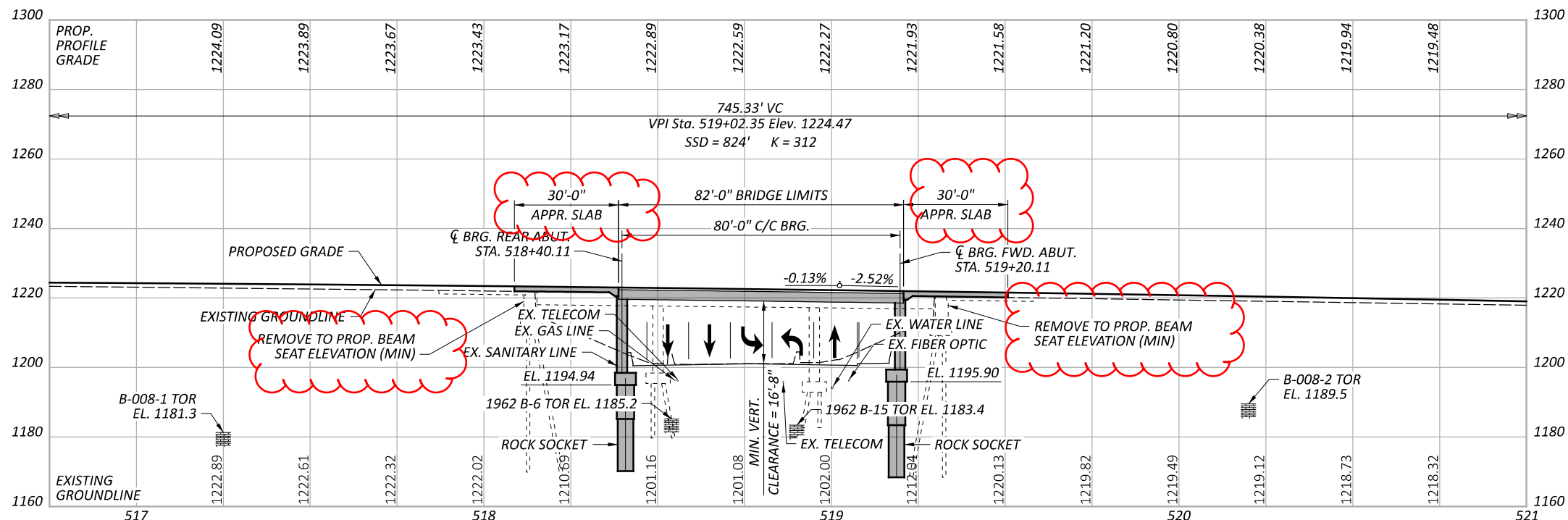
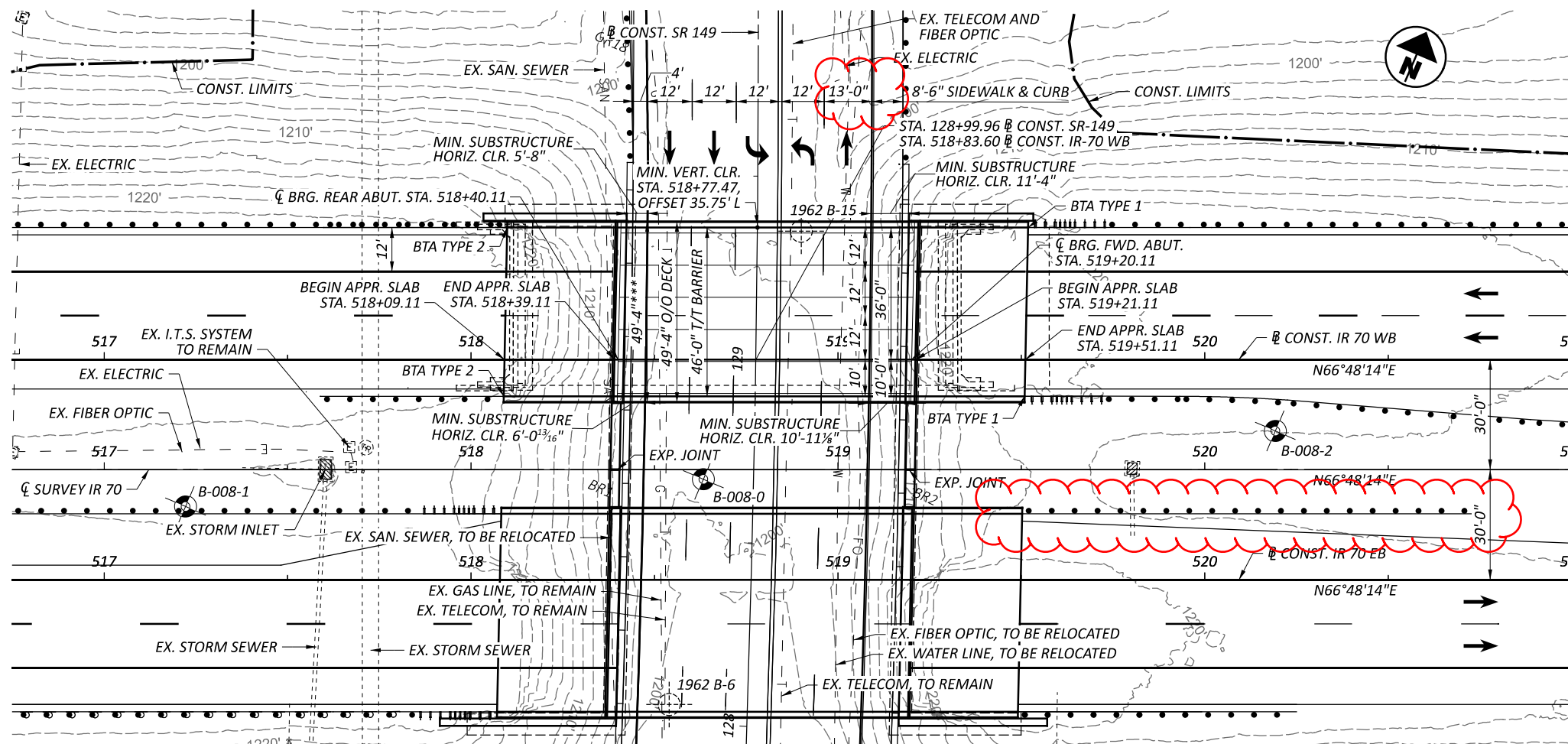
SUBSET

1 11

SHEET

P.O 0



**NOTES**

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLANS.

DESIGN TRAFFIC:

2027 ADT = 37,460 2027 ADTT = 16,857
2047 ADT = 40,890 2047 ADTT = 18,401
DIRECTIONAL DISTRIBUTION = 50%

LEGEND

- BORING LOCATION
- HISTORIC BORING LOCATION
- *** - PHASE 3 CONSTRUCTION
- 16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 16'-8" ACTUAL MINIMUM VERTICAL CLEARANCE

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS COMPOSITE STEEL BEAM A709 GRADE
50W WITH CONCRETE DECK SUPPORTED BY MODIFIED
SUBSTRUCTURE

SPANS: 35'-10", 44'-11³/₄", 35'-9¹/₄" C/C BEARINGS

ROADWAY: 43'-0" T/T BARRIER

LOADING: HS20 CASE I AND THE ALTERNATIVE MILITARY LOADING

SKIEW: NONE

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81, 25' LONG

ALIGNMENT: TANGENT

CROWN: 0.016

STRUCTURE FILE NUMBER: 0702226L

DATE BUILT: 1964 (MODIFIED 2012)

DISPOSITION: TO BE REMOVED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN CONTINUOUS COMPOSITE STEEL GRADE 50 BEAMS
WITH REINFORCED CONCRETE DECK ON SEMI-INTEGRAL
ABUTMENTS

SPANS: 80'-0" C/C BEARINGS

ROADWAY: 46'-0"

LOADING: HL93 AND 0.06 KIPS PER SQ. FT. FUTURE WEARING SURFACE

SKIEW: 1°11'59"

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-15, AS-2-15 TYPE C)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

DECK AREA: 4,046 SF

COORDINATES: LATITUDE 40°03'36" N
LONGITUDE 81°03'11" W

SITE PLAN
BRIDGE NO. BEL-70-0963 L
I.R. 70 OVER S.R. 149

SFN
0702227

DESIGN AGENCY

TRC

DESIGNER JCP
CHECKER CMH

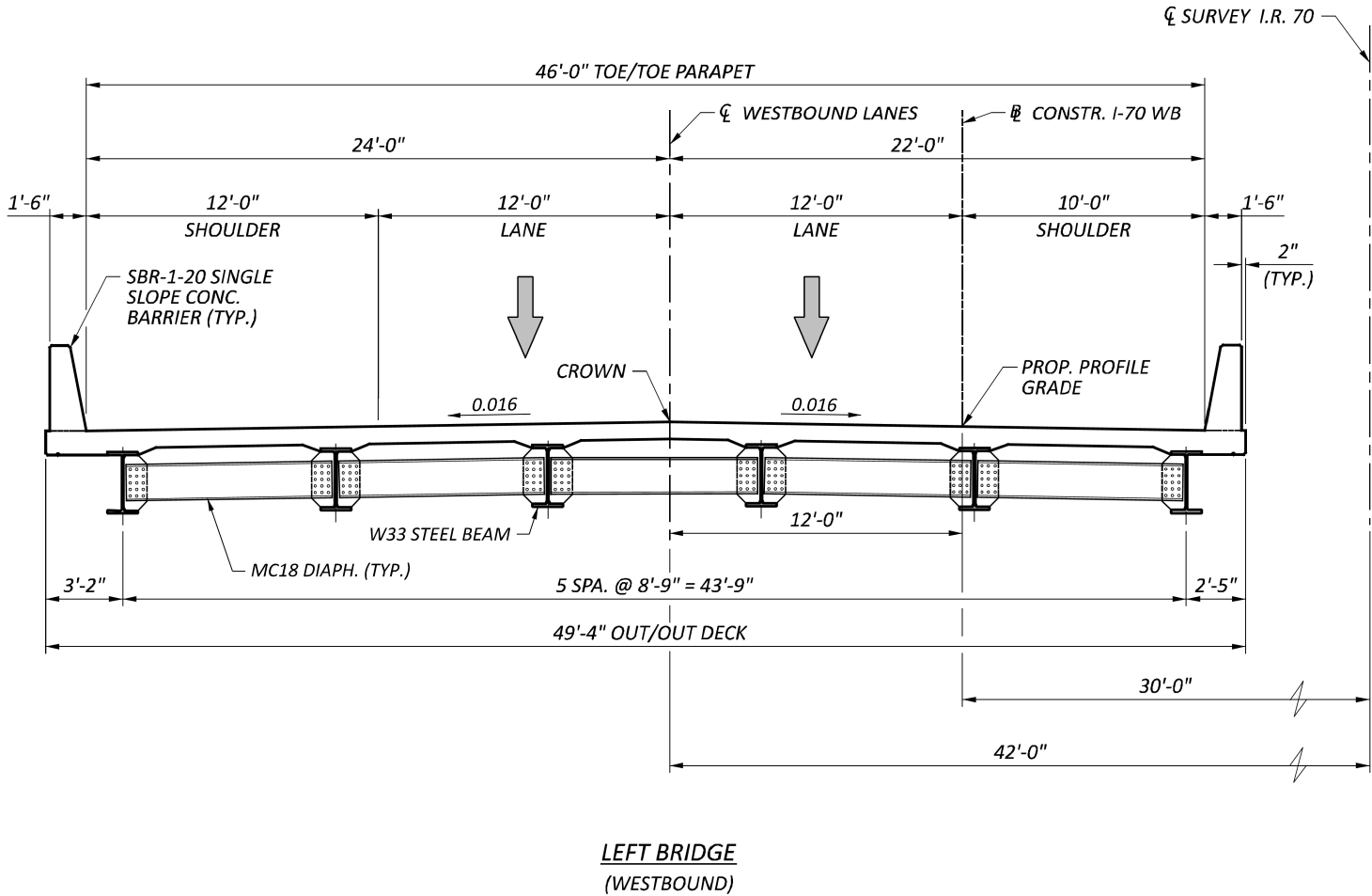
REVIEWER

CJW 03-17-25

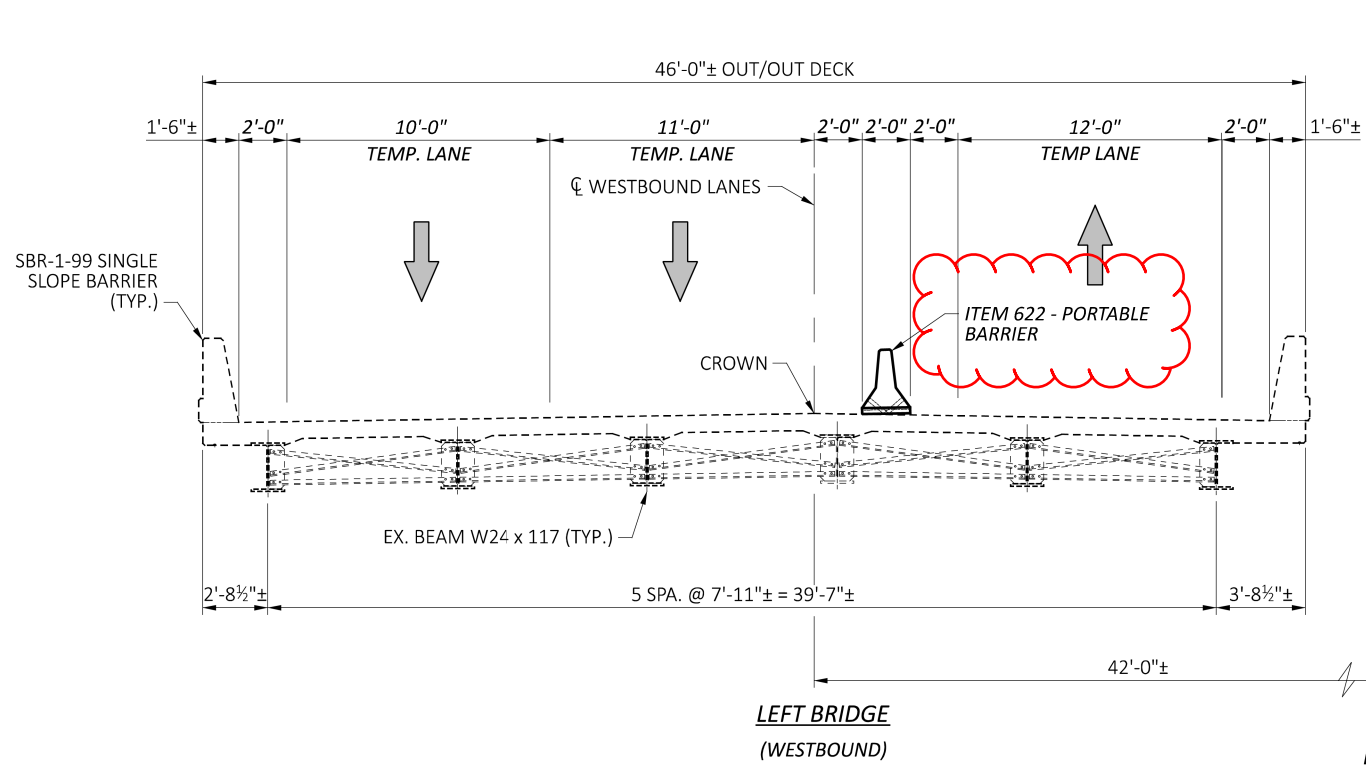
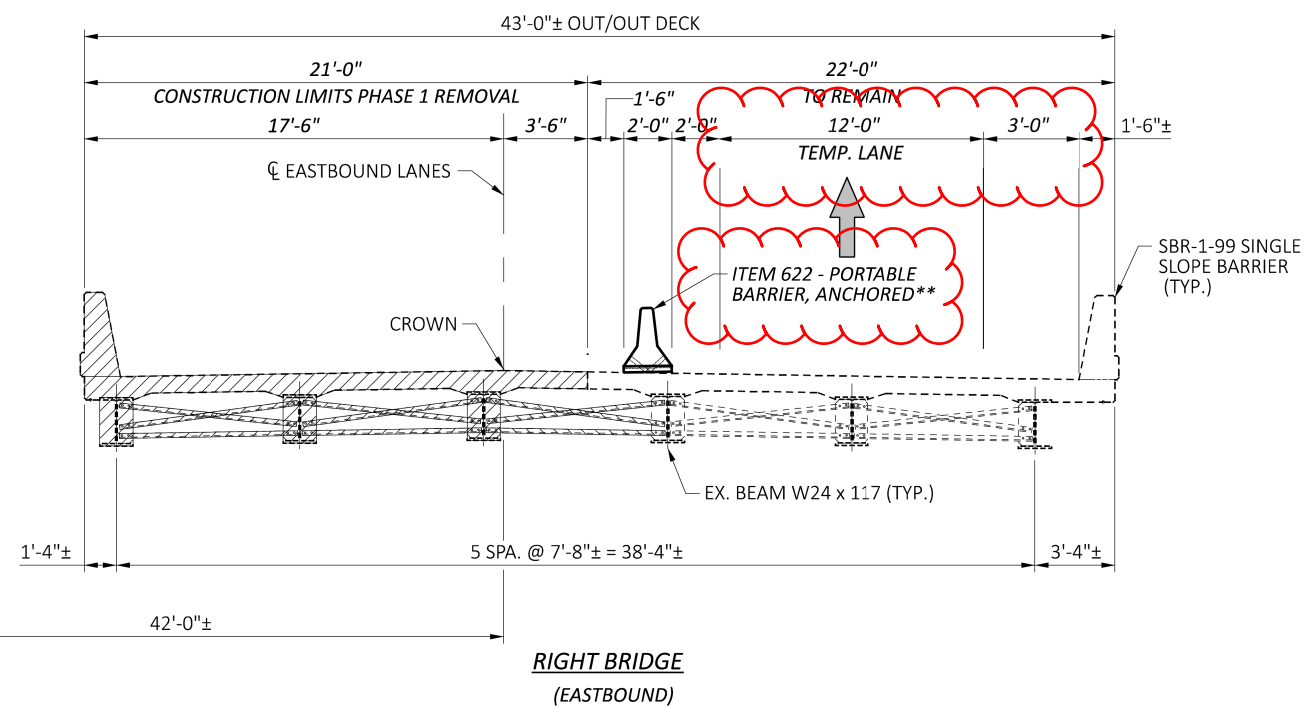
PROJECT ID
120457

SUBSET TOTAL
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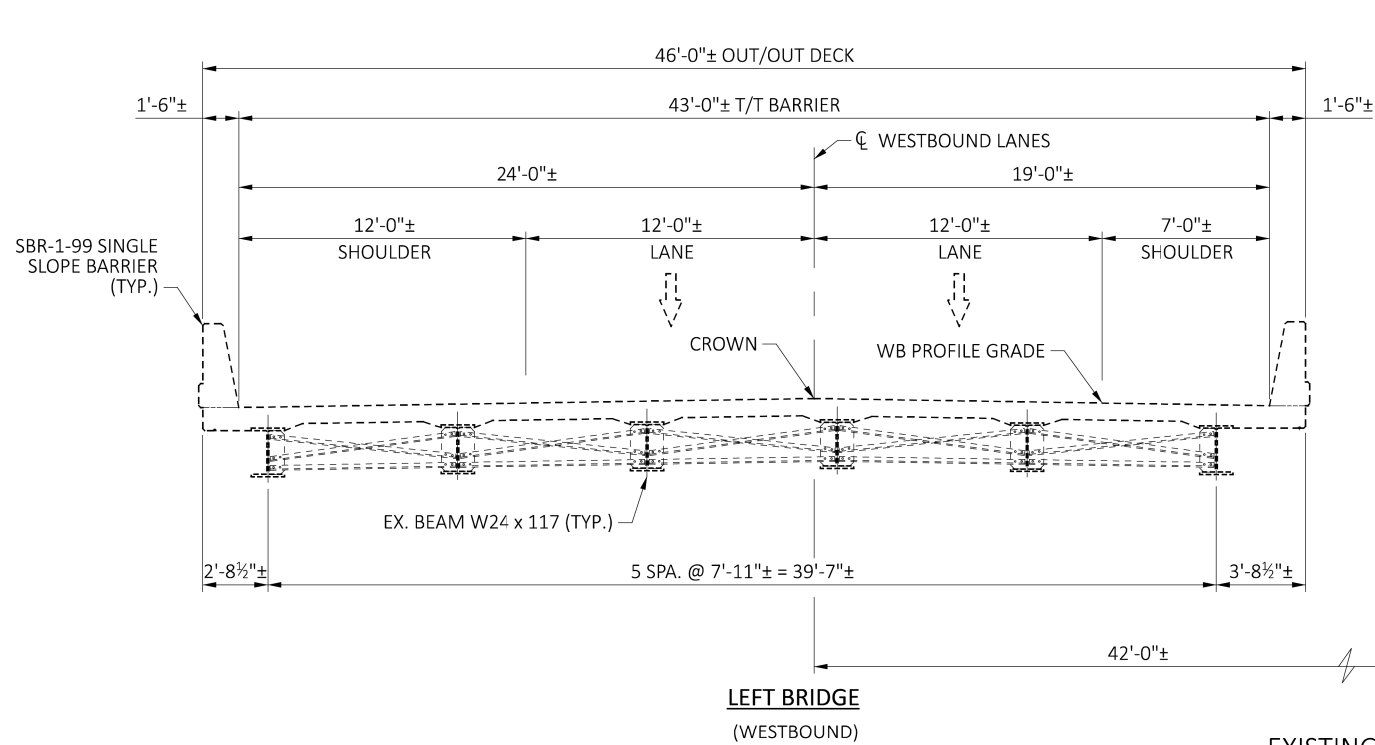
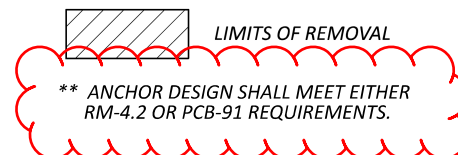
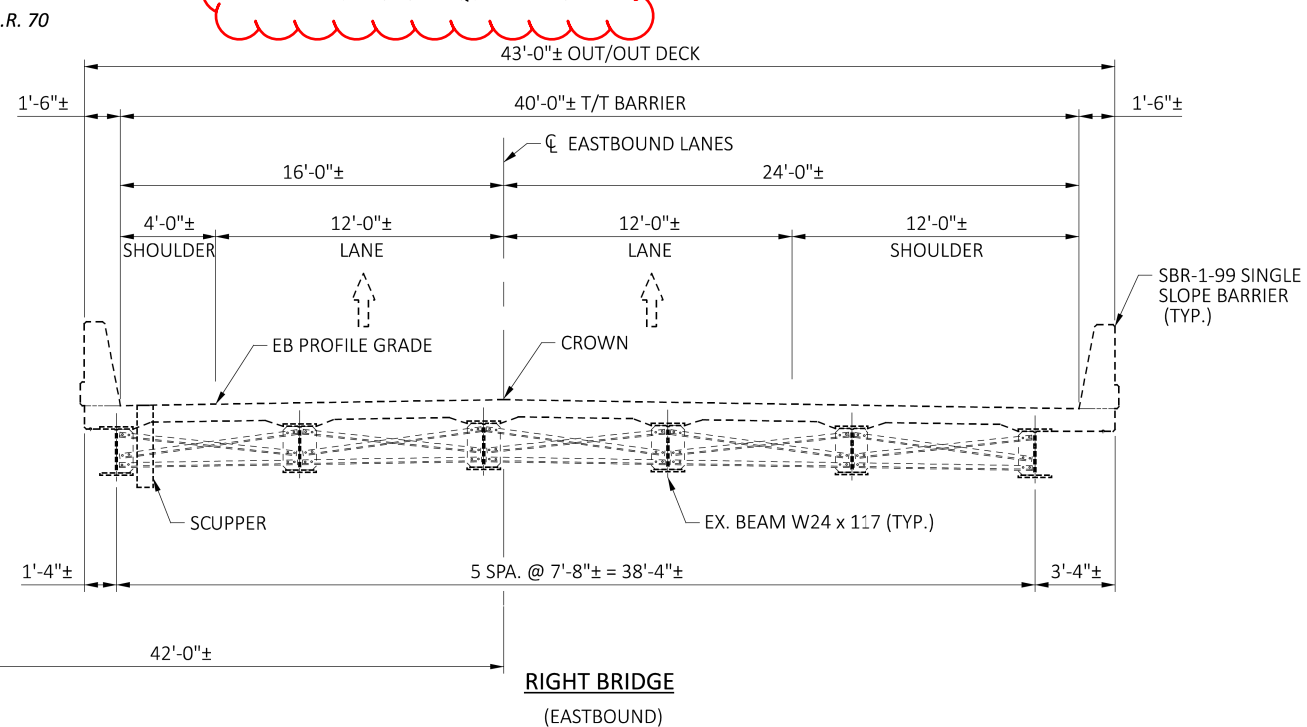
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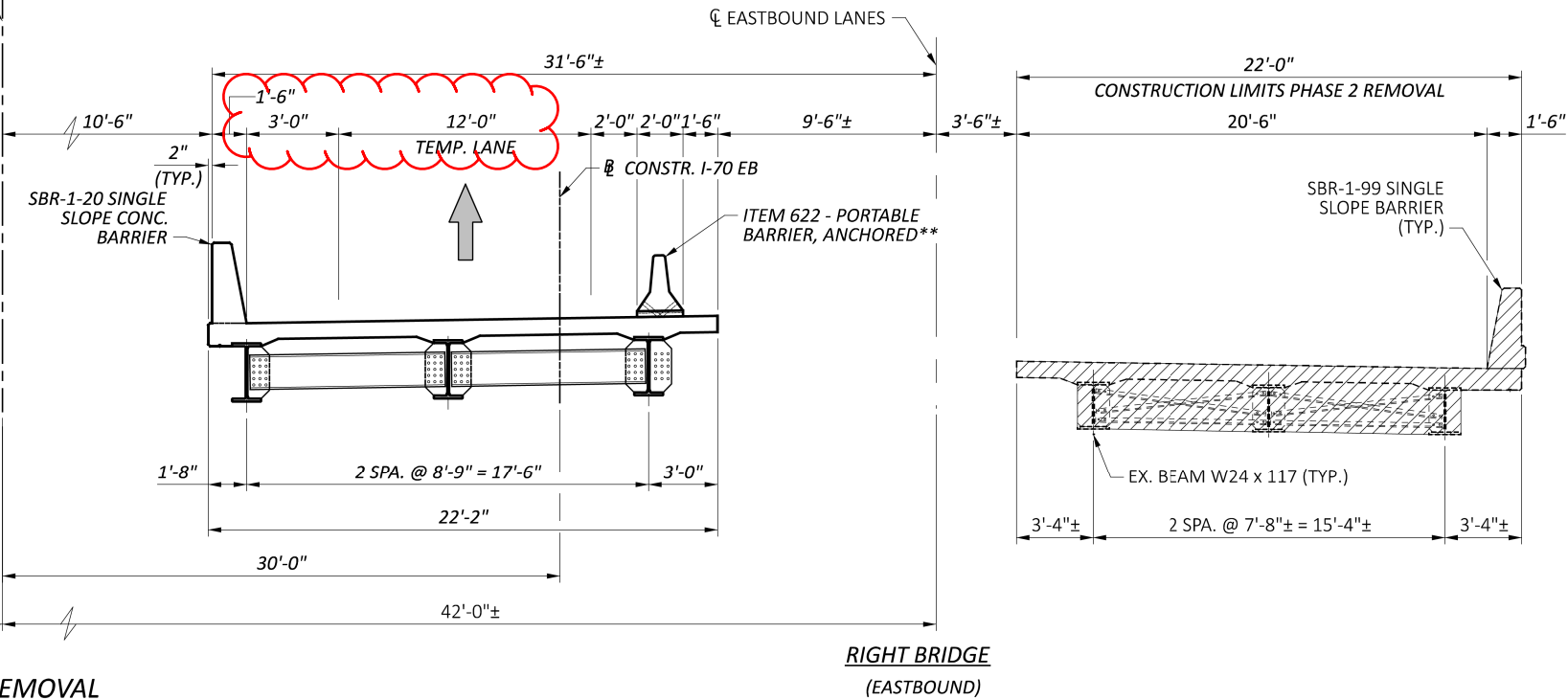
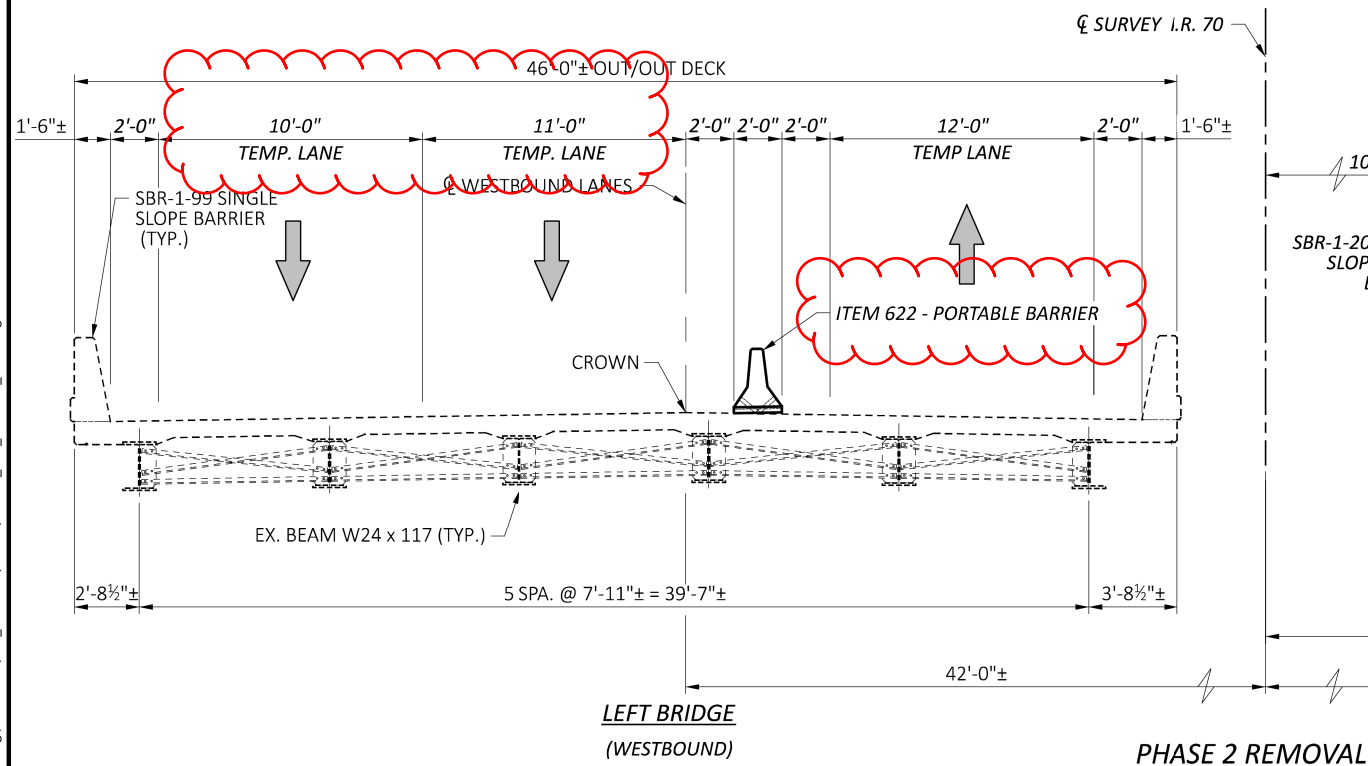


SFN	
0702227	
DESIGN AGENCY	
TRC	
DESIGNER	CHECKER
LAB	CMH
REVIEWER	
CJW 03-17-25	
PROJECT ID	
120457	
SUBSET	TOTAL
4	11
SHEET	TOTAL
P.0	0

**PHASE 1 REMOVAL****PHASE 1 REMOVAL**

1. PLACE PORTABLE CONCRETE BARRIERS. DIRECT EASTBOUND AND WESTBOUND TRAFFIC AS REQUIRED.
2. REMOVE EXISTING SUPERSTRUCTURE AND APPROACH SLABS TO THE LIMITS SHOWN IN THE PLANS.

LEGEND:**EXISTING TRANSVERSE SECTION**



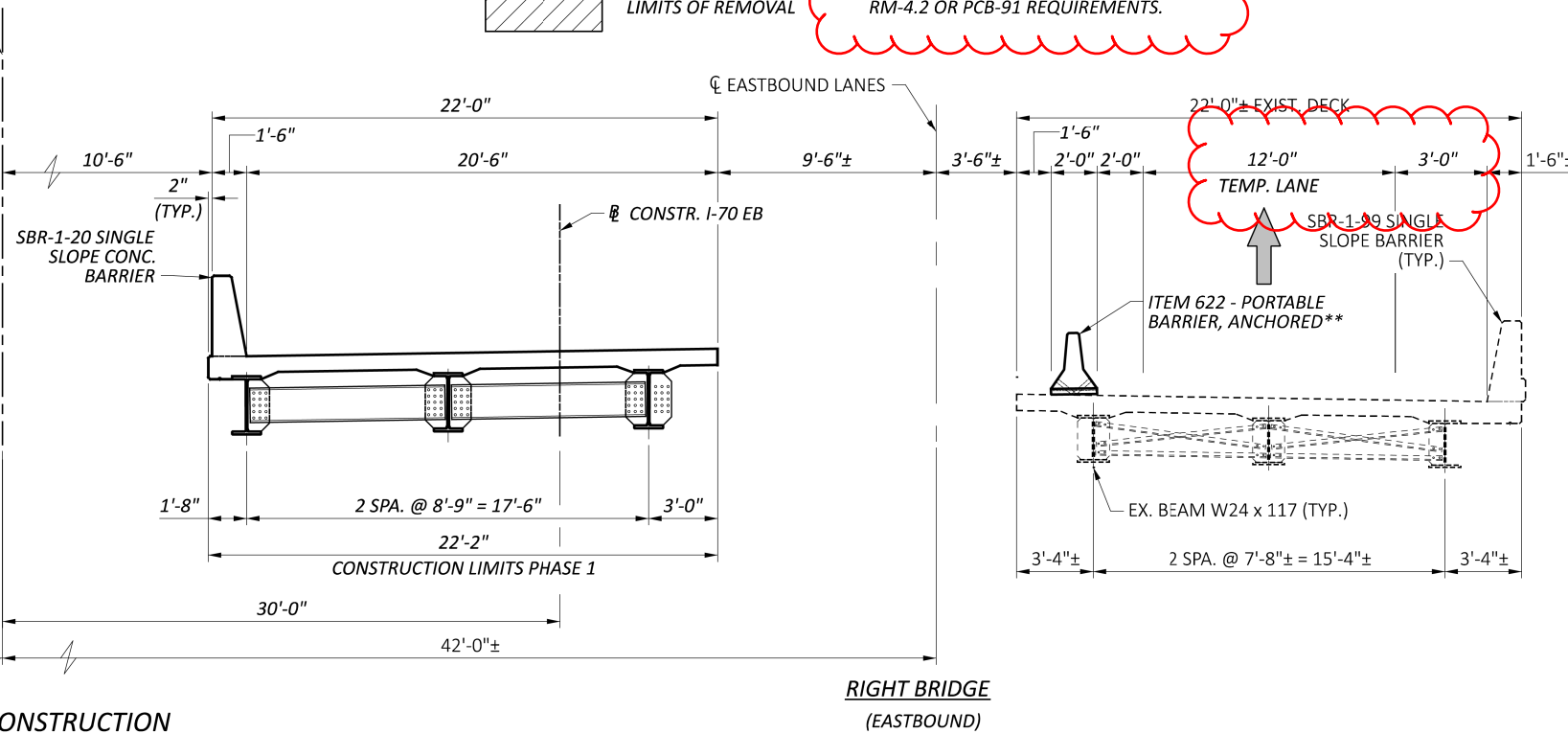
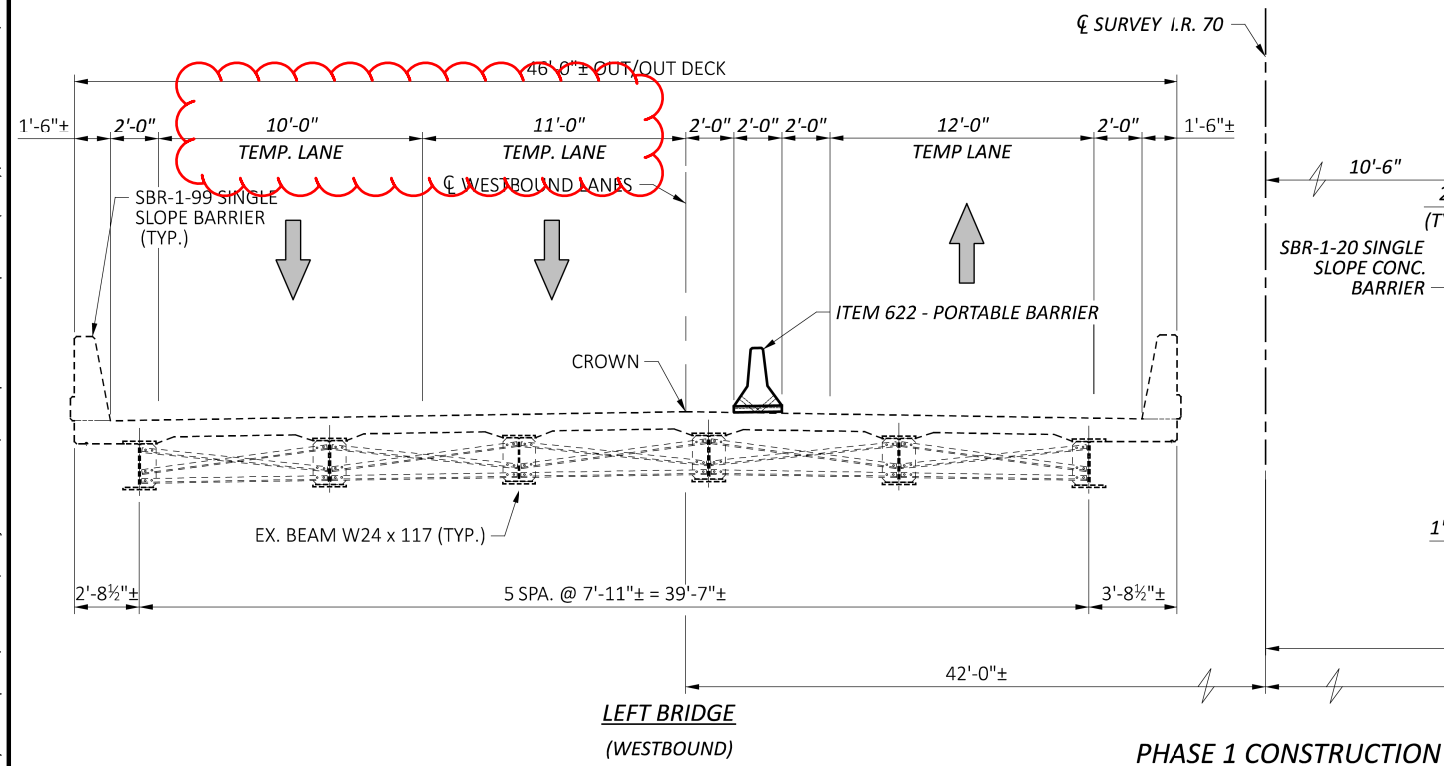
1. PLACE PORTABLE CONCRETE BARRIERS. DIRECT EASTBOUND AND WESTBOUND TRAFFIC AS REQUIRED.
2. REMOVE EXISTING SUPERSTRUCTURE AND APPROACH SLABS TO THE LIMITS SHOWN IN THE PLANS.

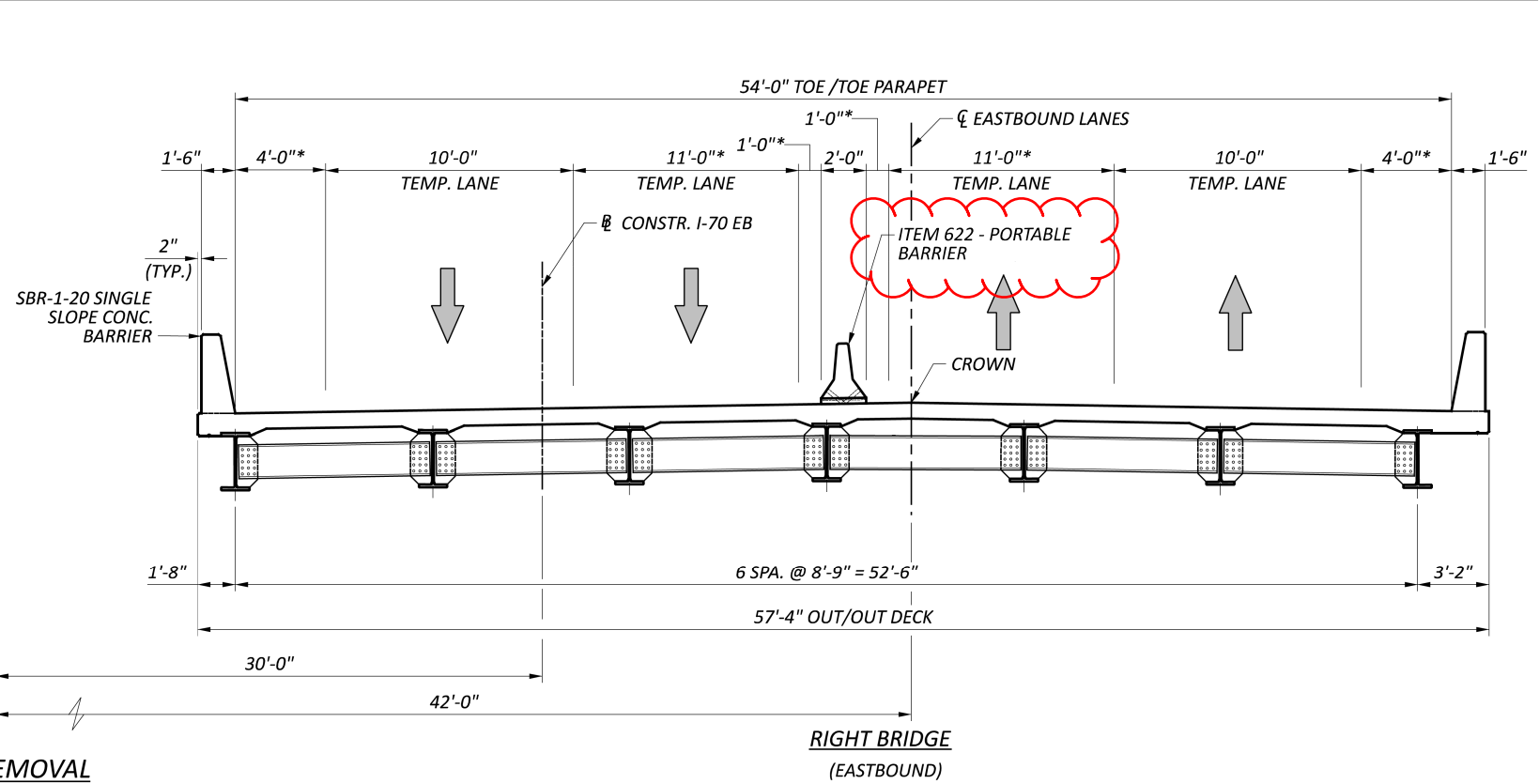
LEGEND:



LIMITS OF REMOVAL

** ANCHOR DESIGN SHALL MEET EITHER RM-4.2 OR PCB-91 REQUIREMENTS.

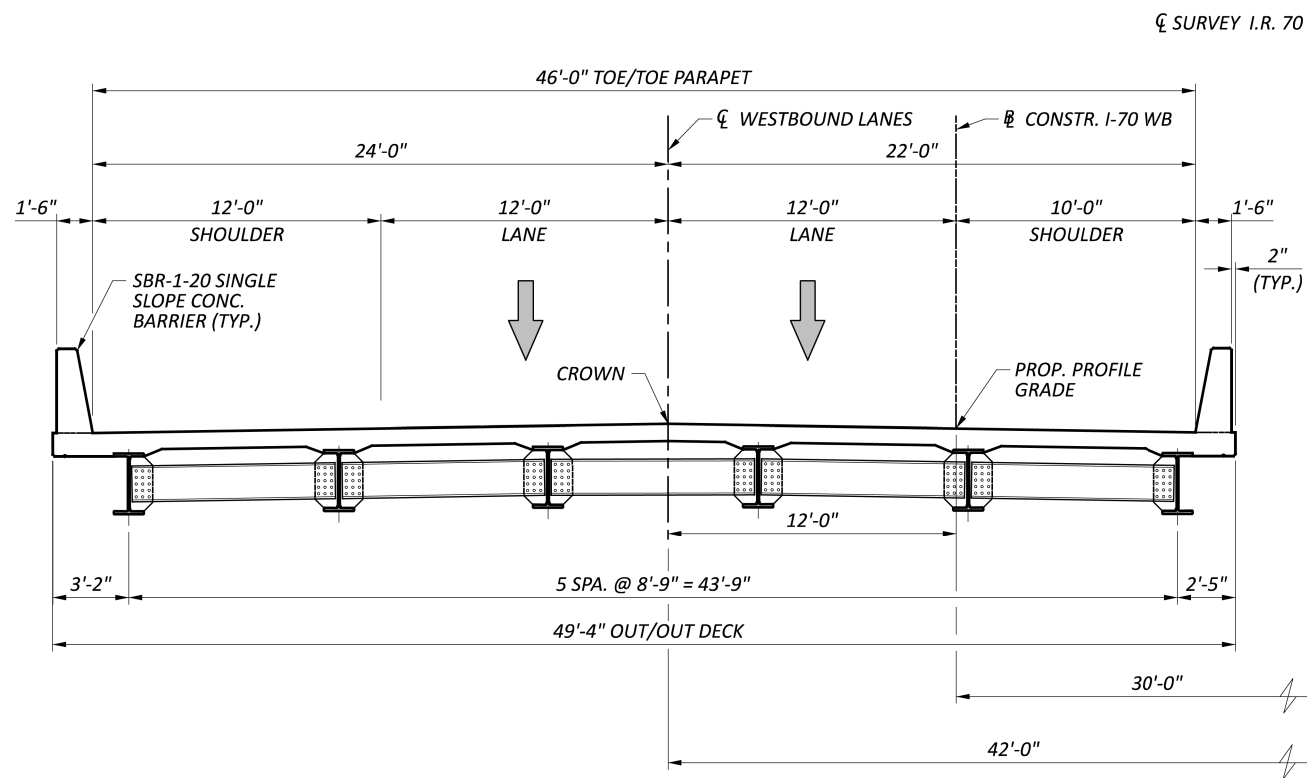




LIMITS OF REMOVAL

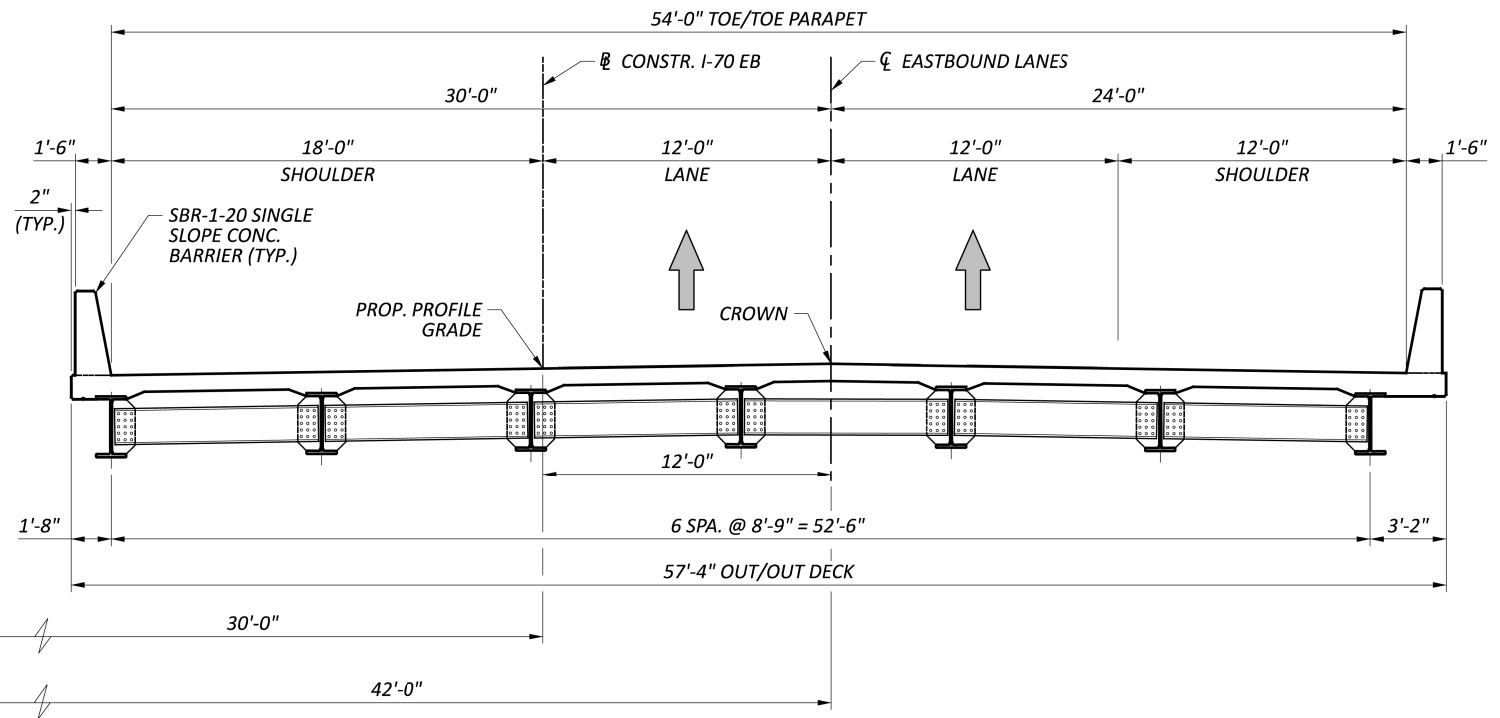
**** ANCHOR DESIGN SHALL MEET EITHER RM-4.2 OR PCB-91 REQUIREMENTS.**



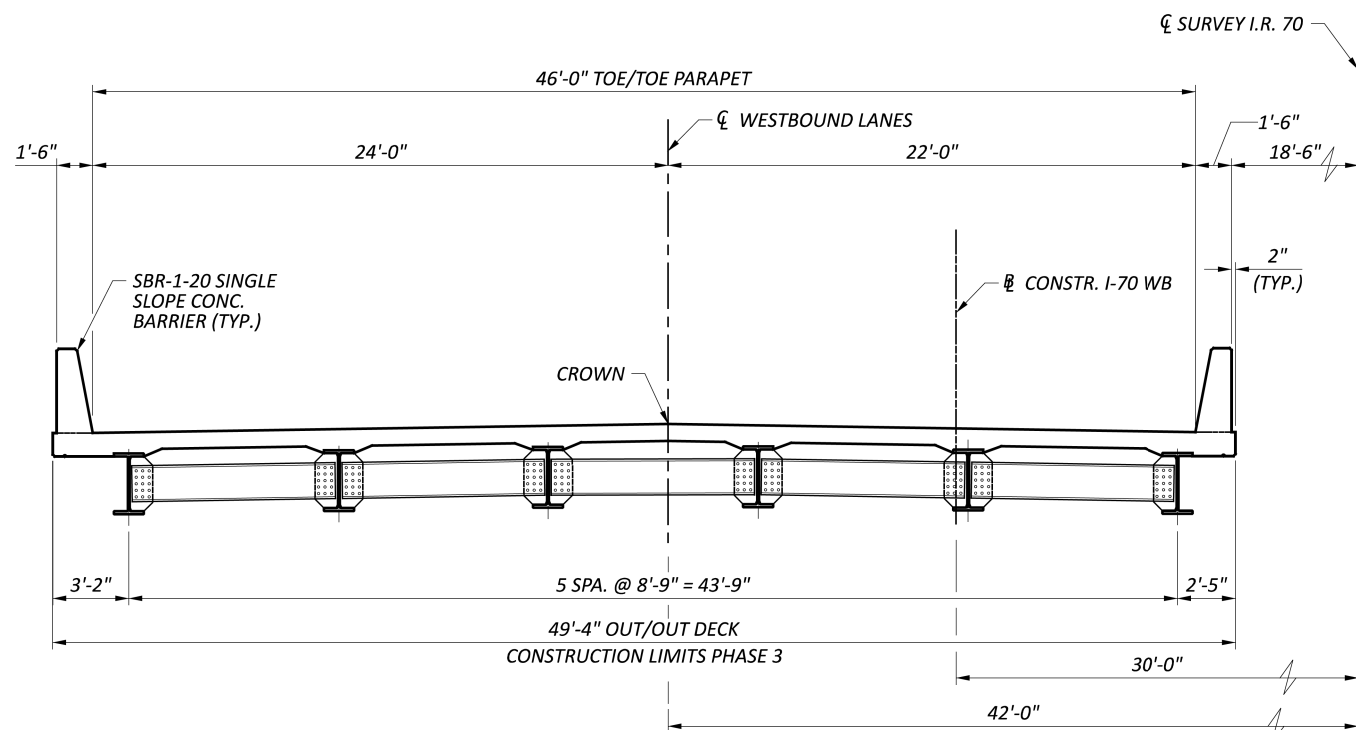


LEFT BRIDGE
(WESTBOUND)

FINAL CONDITION

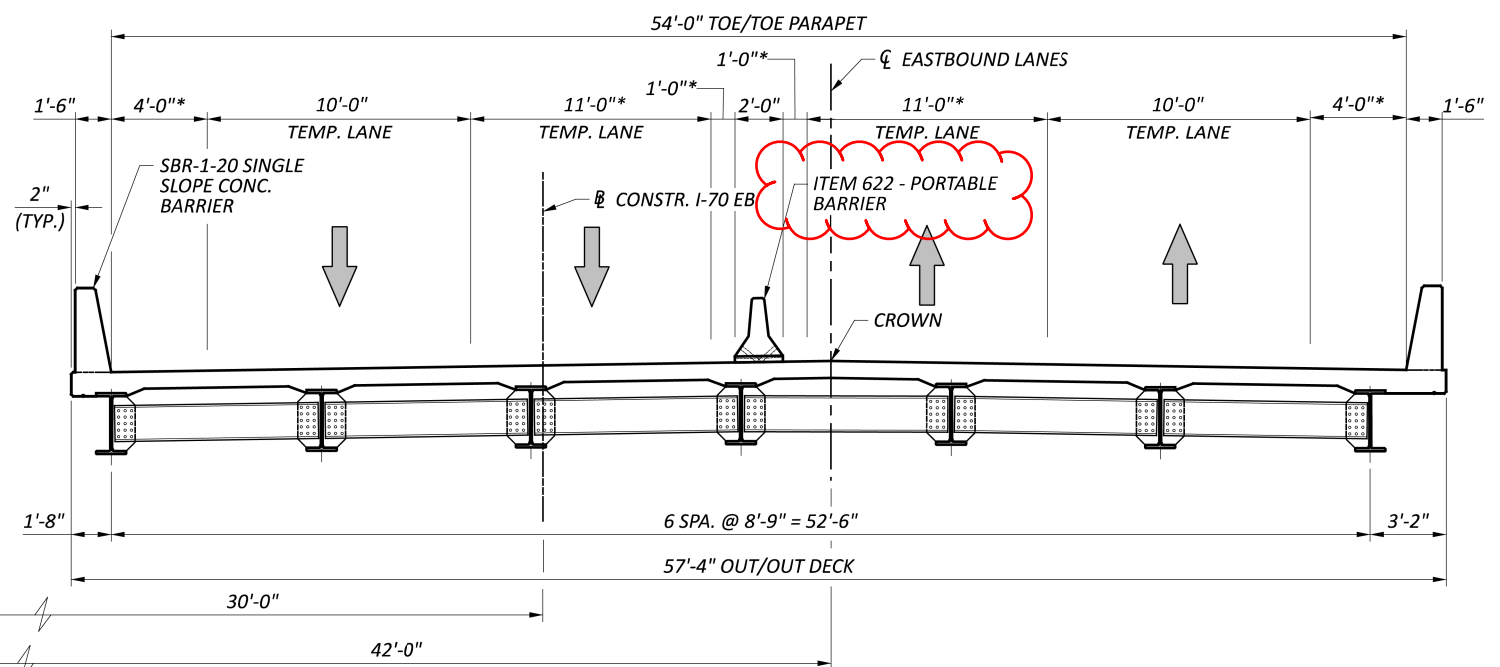


RIGHT BRIDGE
(EASTBOUND)

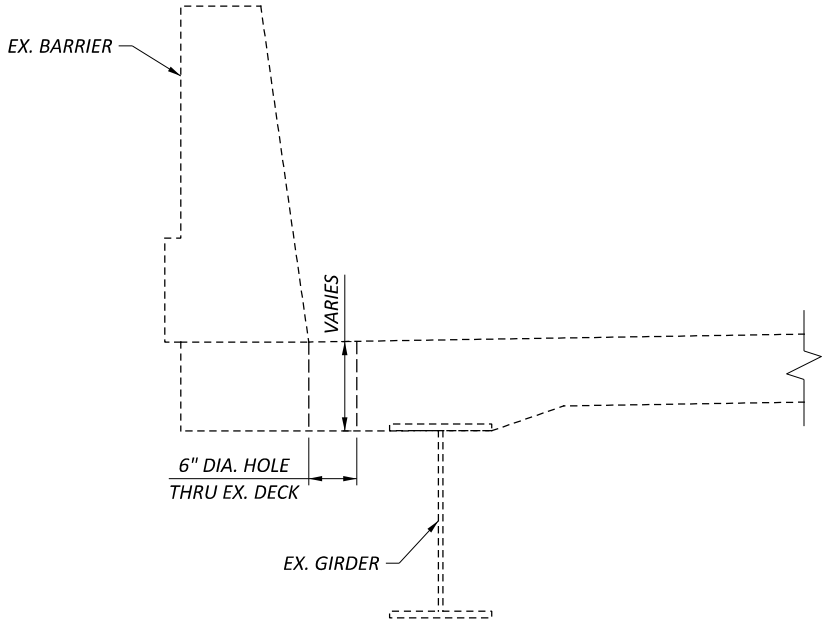


LEFT BRIDGE
(WESTBOUND)

PHASE 3 CONSTRUCTION



RIGHT BRIDGE
(EASTBOUND)



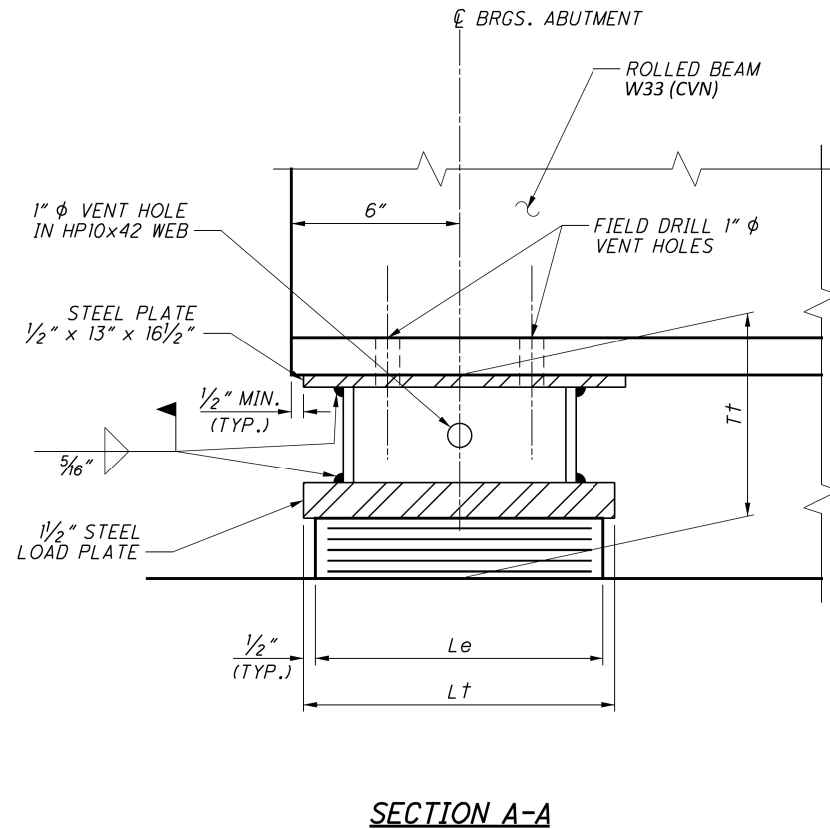
TYPICAL HOLE DETAIL

LEFT BRIDGE	
LEFT PARAPET	RIGHT PARAPET
STA. 518+25.00	STA. 518+25.00
STA. 518+35.00	
STA. 518+45.00	STA. 518+40.00
STA. 518+59.50	STA. 518+55.00
STA. 518+85.50	STA. 518+90.00
STA. 519+01.00	STA. 519+05.00
STA. 519+11.00	
STA. 519+21.00	STA. 519+20.00

NOTE: THIS SPACING AVOIDS TRAFFIC LANES UNDER THE STRUCTURE.

NOTES:

- CONTRACTOR SHALL VERIFY EXISTING BEAM POSITION PRIOR TO DRILLING NEW HOLES.
- ALL HOLES THROUGH THE EXISTING DECK SHALL BE DRILLED DURING PHASE 1. THE CONTRACTOR SHALL ADHERE TO ODOT STANDARD DRAWING MT-95.30 REQUIREMENTS FOR LANE CLOSURE. HOLES SHALL BE PAID FOR UNDER ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.



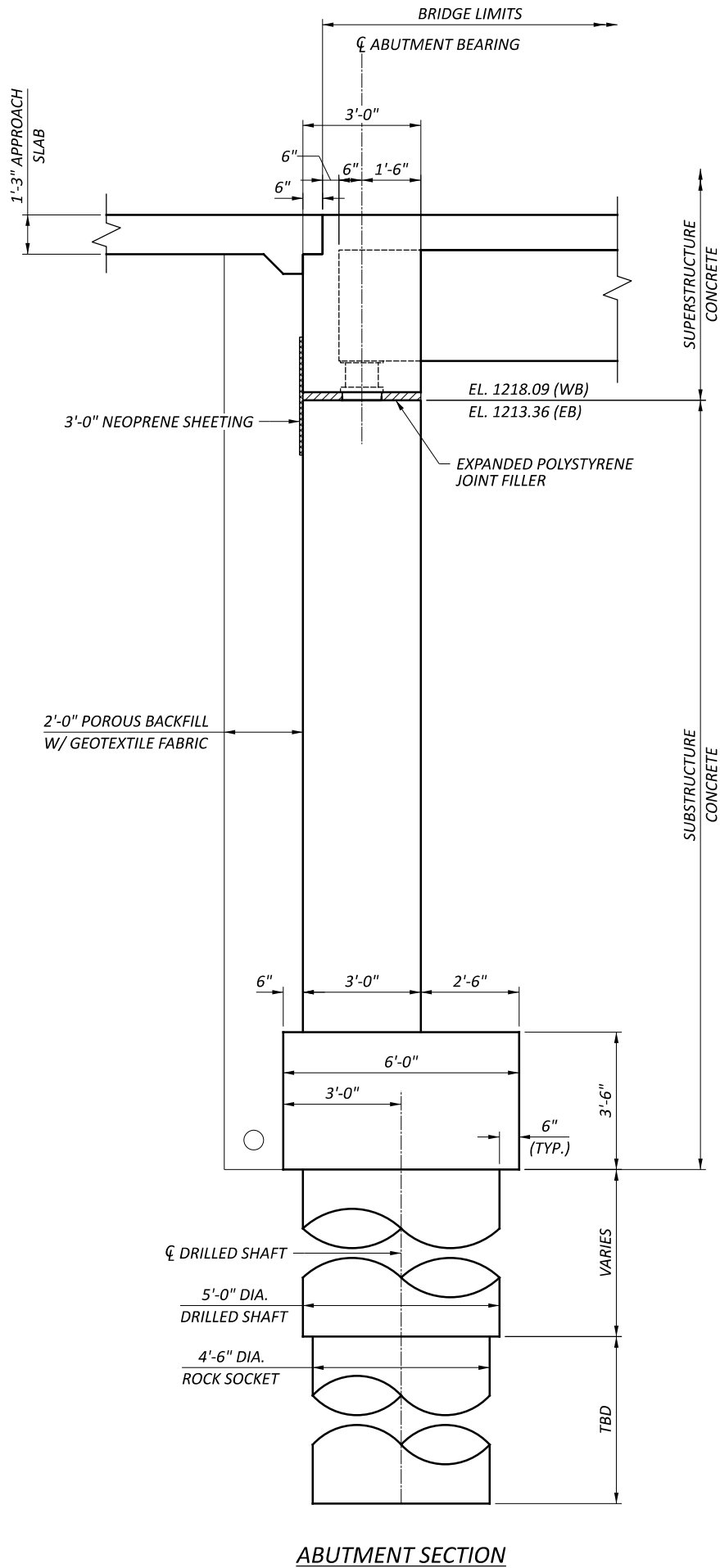
- ## NOTES:
1. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
 2. LOAD PLATES & HP10x42 BEARINGS PEDESTALS: THE STEEL LOAD PLATE SHALL MEET THE GRADE 50 REQUIREMENTS OF STRUCTURAL STEEL ASTM A709 AND SHALL BE GALVANIZED PER CMS 711.02.
 3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
 4. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
 5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACT IS NOT INCLUDED. LOADS ARE UNFACTORED.
 6. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE THE LOAD PLATE, HP10x42 PEDESTAL, STEEL PLATE, AND ALL MATERIALS, LABOR, TESTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. FOR THE ABUTMENTS, PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
 7. FOR ADDITIONAL DETAILS, SEE ODOT STANDARD DRAWING SICD-1-21.

ELASTOMERIC BEARINGS															
BEARING LOCATION	TYPE	NO. REQ'D	DEAD LOAD KIPS	LIVE LOAD KIPS	TOTAL LOAD (DL +LL) KIPS	Le	We	Tpi	NO. OF Tpi'S	Tpe (1 EA)	N	Te	STEEL LOAD PLATE		REMARK
													Wt	Lt	
REAR ABUTMENT	EXP	13			197.0	12"	18"	0.375"	5	0.25"	5	2.500"	19"	13"	H & Tt VARIES
FORWARD ABUTMENT	EXP	13			197.0	12"	18"	0.375"	5	0.25"	5	2.500"	19"	13"	H & Tt VARIES

T_{pi} = THICKNESS OF INTERNAL ELASTOMER LAYER	N = NO. OF STEEL LAMINATES
T_{pe} = THICKNESS OF EXTERNAL ELASTOMER LAYER	STEEL LAMINATE THICKNESS = 0.0747"
T_e = TOTAL THICKNESS OF ELASTOMERIC BEARING	DUROMETER OF ELASTOMER = 50 DUROMETER
$T^\dagger$ = TOTAL THICKNESS OF BEARING ASSEMBLY	

BEARING DETAILS
BRIDGE NO. BEL-70-0963 L/R
I.R. 70 OVER S.R. 149

SFN		0702227	
DESIGN AGENCY			
			
DESIGNER		CHECKER	
LAB		CMH	
REVIEWER			
CJW		03-17-25	
PROJECT ID			
120457			
SUBSET		TOTAL	
10		11	
SHEET		TOTAL	
P.0		0	



ABUTMENT SECTION

ABUTMENT DETAILS
BRIDGE NO. BEL-70-0963 L/R
I.R. 70 OVER S.R. 149

SFN	
0702251	
DESIGN AGENCY	
TRC	
DESIGNER	CHECKER
LAB	CMH
REVIEWER	
CJW 03-17-25	
PROJECT ID	
120457	
SUBSET	TOTAL
11	11
SHEET	TOTAL
P.0	0