



⊕ DENOTES SOIL BORING LOCATIONS

LEGEND:
 ROCK CHANNEL PROTECTION TYPE C, WITH FILTER
 KEY TO WINGWALL MOUNTED RAILPOST LOCATIONS:
 'A': STA 130+39.52, 22' LT.
 'B': STA 130+70.37, 22' LT.
 'C': STA 130+25.71, 22' RT.
 'D': STA 130+56.56, 22' RT.

0' 10' 20' 40'
 HORIZONTAL SCALE IN FEET


- NOTES:**
1. WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC PART OF THE EXISTING STRUCTURE SHALL BE REMOVED UPON RECEIVING PERMISSION FROM THE ENGINEER.
 2. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
 3. MAXIMUM SLOPE OF THE ROCK CHANNEL PROTECTION IS 2:1
 4. FOR CLARITY, ONLY @ CONSTRUCTION IS SHOWN FROM STA 129+00 TO 132+00

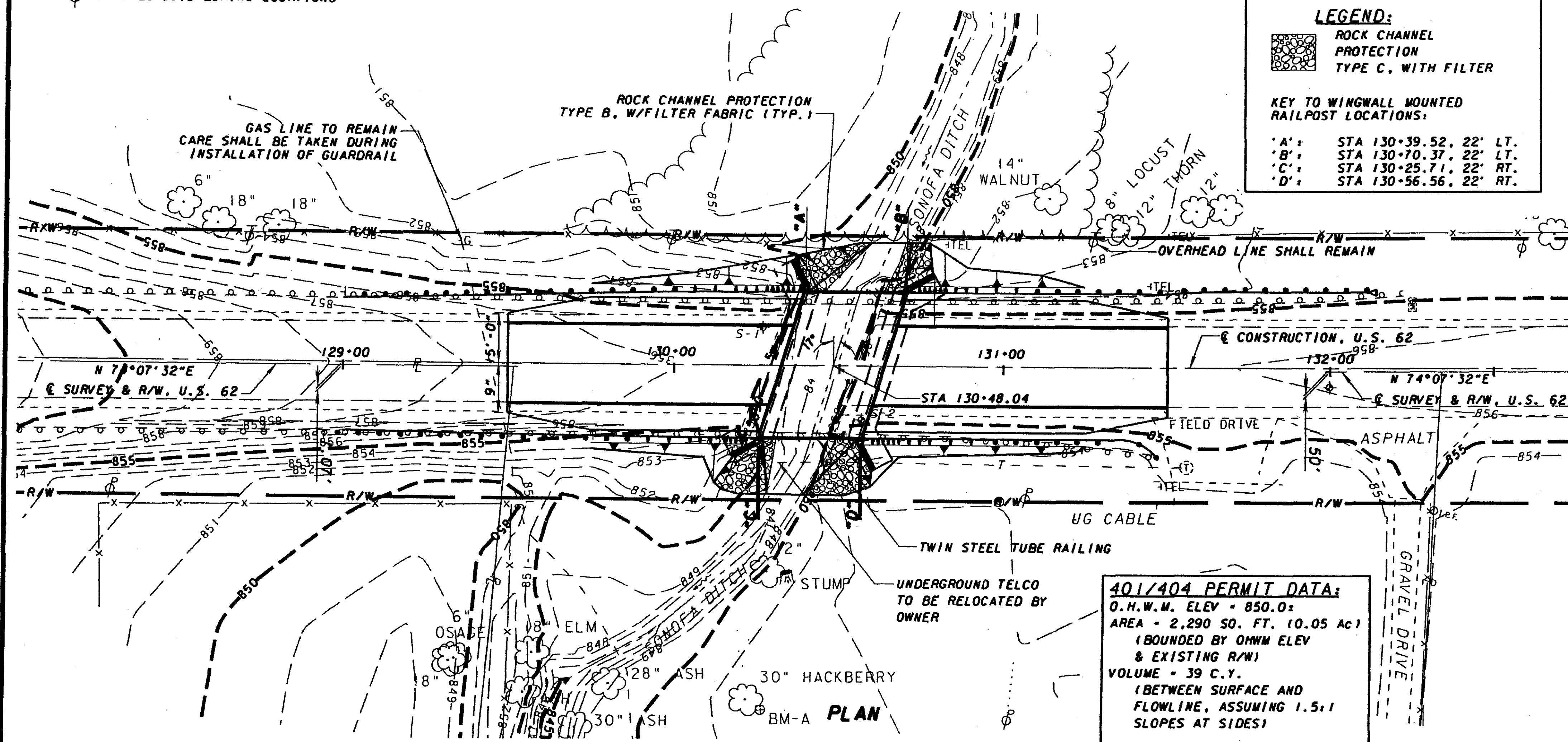
TRAFFIC DATA
 CURRENT 2006 ADT - 7893
 DESIGN YEAR 2026 ADT - 9631
 CURRENT 2006 ADTT - 514
 DESIGN YEAR 2026 ADTT - 627

HYDRAULIC DESIGN DATA

DRAINAGE AREA	1.70 sq. miles.
MAIN CHANNEL SLOPE	31.5 f1/mile
FREE BOARD	1.0 f1
DESIGN YEAR	
Q25	480 cfs
V25	3.39 f1/s
H25	852.27 f1
100 YEAR	
Q100	667 cfs
V100	4.27 f1/s
H100	852.94 f1

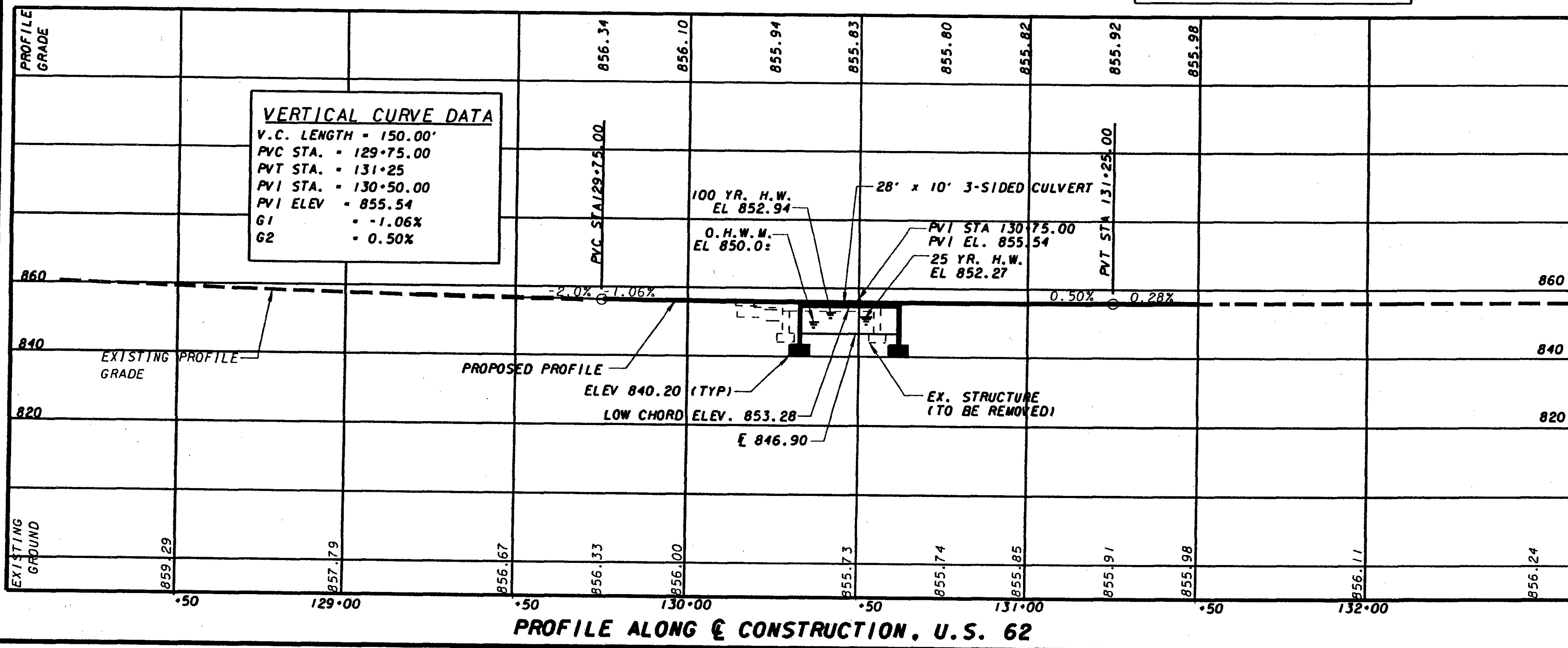
EXISTING STRUCTURE
 TYPE: SINGLE SPAN CONTINUOUS SLAB WITH REINFORCED CONCRETE ABUTMENTS
 SPAN: 28'
 ROADWAY: 39'-0" F/F GUARDRAIL
 SKEW: 20° LF
 APPROACH SLAB: 9'-0"
 LOADING: H-15
 DECK: CONCRETE DECKING
 WEARING SURFACE: 8" OF ASPHALT
 ALIGNMENT: TANGENT
 DATE BUILT: 1933
 STRUCTURE FILE NUMBER (SFN): 4902076
 LATITUDE: 39°43'27" N
 LONGITUDE: 83°15'15" W

PROPOSED STRUCTURE
 TYPE: 3-SIDED PRECAST CULVERT WITH CAST-IN-PLACE WINGWALLS ON SPREAD FOOTING
 SPAN: 28' RISE: 10'
 ROADWAY: 44'-0" F/F GUARDRAIL
 SKEW: 17° LF
 APPROACH SLAB: NONE
 LOADING: H25 AND THE ALTERNATE MILITARY LOADING, PLUS 60 PSF FWS
 WEARING SURFACE: ASPHALT CONCRETE
 ALIGNMENT: TANGENT
 CROWN: 0.0156'
 STRUCTURE FILE NUMBER (SFN): 4202084
 LATITUDE: 39°43'27" N
 LONGITUDE: 83°15'15" W



401/404 PERMIT DATA:
 O.H.W.M. ELEV = 850.0;
 AREA = 2,290 SQ. FT. (10.05 Ac)
 (BOUNDED BY OHWM ELEV & EXISTING R/W)
 VOLUME = 39 C.Y.
 (BETWEEN SURFACE AND FLOWLINE, ASSUMING 1.5:1 SLOPES AT SIDES)

VERTICAL CURVE DATA
 V.C. LENGTH = 150.00'
 PVC STA. = 129+75.00
 PVT STA. = 131+25
 PVI STA. = 130+50.00
 PVI ELEV = 855.54
 G1 = -1.06%
 G2 = 0.50%



DESIGN AGENCY: PRIME ENGINEERING & ARCHITECTURE, INC.
 DATE: 7-04
 REVIEWED: SAN 7-04
 DRAWN: RHW
 DESIGNED: RHW
 CHECKED: KB
 STRUCTURE FILE NUMBER: 4202084
 STA. 130+33.40
 STA. 130+62.68
 SITE PLAN
 BRIDGE No. MAD-62-0247
 OVER SONOFA DITCH
 MAD-62-(2.47)
 (2.55)(2.80)
 PID 12767
 33
 51

D:\03016\MAD-62-0247\BRCG01_MDO62sp1.dgn

STRUCTURAL GENERAL NOTES

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 INCLUDING 17TH ED., INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2004.

DESIGN LOADING:

HS25 CASE AND THE ALTERNATE MILITARY LOADING FUTURE WEARING SURFACE (FWS) OF 60 LBS./SQ. FT.

DESIGN STRESSES:

CAST-IN-PLACE STRUCTURES
CONCRETE CLASS "C" - $f'c = 4,000$ psi SUBSTRUCTURE
REINFORCING STEEL - ASTM A615, A996 GRADE 60
 $Fy = 60,000$ psi

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):
DS-1-92 DATED/REVISED 7-18-03
PCB-91 DATED/REVISED 7-19-02
TST-1-99 DATED/REVISED 10-17-03

DECK PROTECTION METHOD

WATERPROOFING AND ASPHALT CONCRETE OVERLAY
STEEL DRIP STRIP

REMOVAL OF EXISTING STRUCTURE:

THE EXISTING STRUCTURE SHALL BE REMOVED AS INDICATED.

SEALING OF CONCRETE SURFACES:

ALL EXPOSED FORESLOPE WALL AND WINGWALL CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER FEDERAL COLOUR 17778 (LIGHT NEUTRAL). THE LIMITS SHALL BE AS SHOWN ON SHEET 8/11 AND 9/11. PAYMENT FOR THE EPOXY-URETHANE SEALER SHALL BE PER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).

FOUNDATION BEARING PRESSURE:

WINGWALL AND CULVERT FOOTINGS, AS DESIGNED PRODUCE A MAXIMUM BEARING PRESSURE OF 2400 POUND PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 2500 POUND PER SQUARE FOOT.

THREE-SIDED CULVERT WALL AND TOP SLAB THICKNESS:

THE WALL AND TOP SLAB THICKNESSES SHOWN ON THE PLANS WERE OBTAINED FROM THE MANUFACTURER AT THE TIME THE PLANS WERE PREPARED. IF THE WALL AND/OR TOP SLAB THICKNESS OF THE CULVERT PROPOSED ARE DIFFERENT FROM WHAT IS SHOWN ON THE PLANS, A MARKED COPY OF THE PROJECT PLANS, INCLUDING ALL PLAN NOTES AND DETAILS SHOWING ALL ITEMS AFFECTED BY THE DIFFERENT CULVERT DIMENSIONS, SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. ALL WORK REQUIRED TO ACCOMMODATE ANY REVISED DIMENSIONS SHALL BE AT NO EXTRA COST TO THE STATE.

ITEM 511. CLASS C CONCRETE, FOOTING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 511, INSTALL A REFERENCE MONUMENT AT EACH END OF EACH SPREAD FOOTING. THE REFERENCE MONUMENT SHALL CONSIST OF A #8, OR LARGER, EPOXY COATED REBAR EMBEDDED AT LEAST 6" INTO THE FOOTING AND EXTENDED VERTICALLY 4 TO 6 INCHES ABOVE THE TOP OF THE FOOTING. INSTALL A SIX INCH DIAMETER, SCHEDULE 40, PLASTIC PIPE AROUND THE REFERENCE MONUMENT. CENTER THE PIPE ON THE REFERENCE MONUMENT AND PLACE THE PIPE VERTICAL WITH ITS TOP AT THE FINISHED GRADE. THE PIPE SHALL HAVE A REMOVABLE, SCHEDULE 40, PLASTIC CAP. PERMANENTLY ATTACH THE BOTTOM OF THE PIPE TO THE TOP OF THE FOOTING.

ESTABLISH A BENCHMARK TO DETERMINE THE ELEVATIONS OF THE REFERENCE MONUMENTS AT VARIOUS MONITORING PERIODS THROUGHOUT THE LENGTH OF THE CONSTRUCTION PROJECT. THE BENCHMARK SHALL BE THE SAME THROUGHOUT THE PROJECT AND SHALL BE INDEPENDENT OF ALL STRUCTURES.

RECORD THE ELEVATION OF EACH REFERENCE MONUMENT AT EACH MONITORING PERIOD SHOWN IN THE TABLE BELOW.

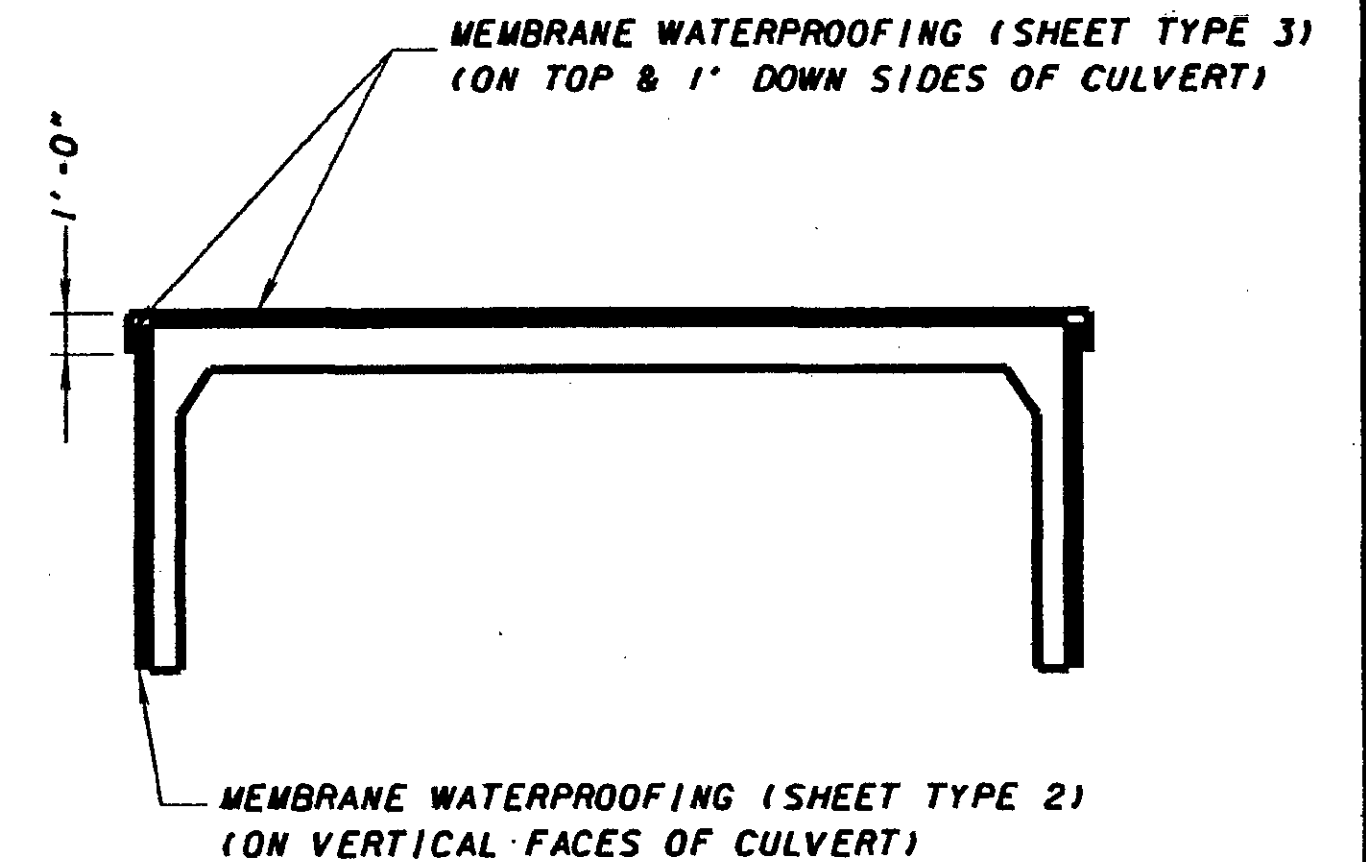
THE ORIGINAL COMPLETED TABLES WILL BECOME PART OF THE DISTRICT'S PROJECT PLAN RECORDS. SEND A COPY OF THE COMPLETED TABLES TO THE OFFICE OF STRUCTURAL ENGINEERING.

PROJECT NO.: MAD-62-(2.47) (2.55)(2.80)	MAXIMUM BEARING PRESSURE: 2500 PSF.	
BRIDGE NUMBER: MAD-62-0247	STRUCTURE FILE NUMBER: 4202084	
BENCHMARK LOCATION:	STA 138+58.82; 45.00' RT. ELEV. 853.34	
FOOTING LOCATION: REAR FOOTINGS	STA 130+18.67, 29.67 RT. & 130+37.75, 32.83 LT.	
MONITORING PERIOD	LEFT MONUMENT	RIGHT MONUMENT
AFTER FOOTING CONCRETE IS PLACED		
BEFORE PLACEMENT OF 3-SIDED PRECAST SEGMENTS		
BEFORE PLACEMENT OF ASPHALT W.S.		
AFTER PLACEMENT OF ASPHALT W.S.		
PROJECT COMPLETION		
FOOTING LOCATION: FORWARD FOOTING	STA 130+58.33, 32.83 RT. & 130+77.41, 29.67 LT.	
MONITORING PERIOD	LEFT MONUMENT	RIGHT MONUMENT
AFTER FOOTING CONCRETE IS PLACED		
BEFORE PLACEMENT OF 3-SIDED PRECAST SEGMENTS		
BEFORE PLACEMENT OF ASPHALT W.S.		
AFTER PLACEMENT OF ASPHALT W.S.		
PROJECT COMPLETION		

WATERPROOFING:

TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

TYPE 3 WATERPROOFING, PER CMS 512.10 AND 711.29 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 3 WATERPROOFING.



ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHEET
202	11002	LUMP	-	STRUCTURE REMOVED, OVER 20 FOOT SPAN	
503	11100	LUMP	-	COFFERDAMS, CRIBS AND SHEETING	
503	21300	LUMP	-	UNCLASSIFIED EXCAVATION	
509	10000	10109	POUND	EPOXY COATED REINFORCING STEEL	
511	46000	16	CU. YD.	CLASS C CONCRETE (WINGWALL)	
511	46501	107	CU. YD.	CLASS C CONCRETE, FOOTING, AS PER PLAN	2/11
512	10100	30	SO. YD.	SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)	
512	33000	108	SO. YD.	TYPE 2 WATERPROOFING	
512	33010	156	SO. YD.	TYPE 3 WATERPROOFING	
516	13600	62	SO. FT.	1" PREFORMED EXPANSION JOINT FILLER	
517	70000	70	FT.	RAILING (TWIN STEEL TUBE)	
518	21230	LUMP	-	POROUS BACKFILL WITH FILTER FABRIC	
518	22300	71	FT.	SPECIAL - STEEL DRIP STRIP	
603	70000	44	FT.	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE FLAT	
				TOPPED THREE SIDED CULVERT.	
				(28'-0" SPAN X 10'-0" RISE)	

DESIGN AGENCY
PRIME
ENGINEERING & ARCHITECTURE, INC.
1000 W. 10TH ST. SUITE 100
DENVER, CO 80202

DATE 7/04
REVIEWED SAN
DRAWN RHM
CHECKED RG
REVISED 01-07-05
STRUCTURE FILE NUMBER 4202084

STRUCTURE ESTIMATED QUANTITIES AND GENERAL NOTES
BRIDGE NO. MAD-62-0247
OVER SONOEA DITCH

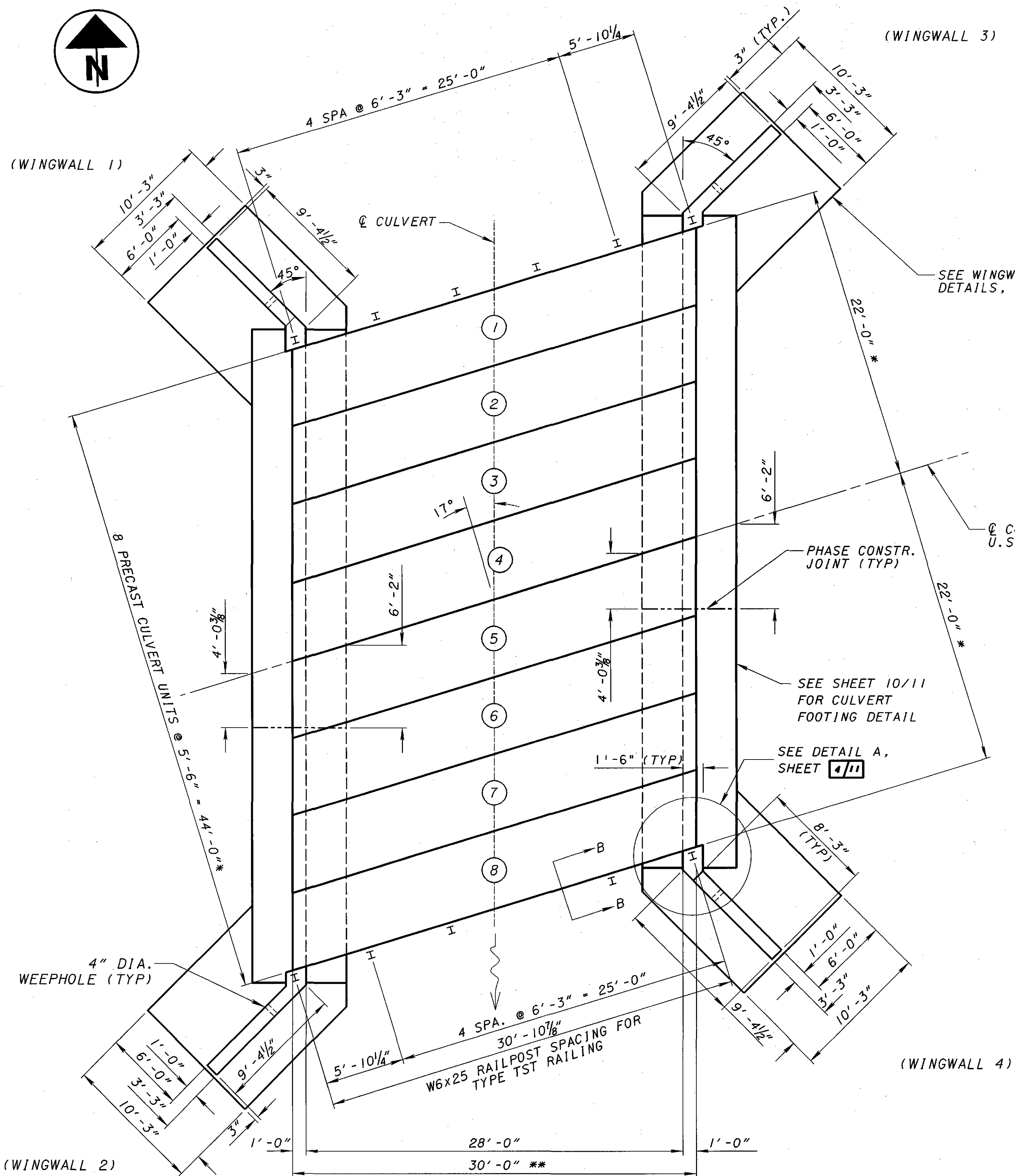
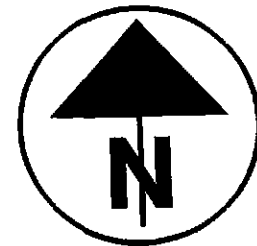
MAD-62-(2.47)
(2.55)(2.80)
PID 12767

2/11

34
51

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\$ TIME \$



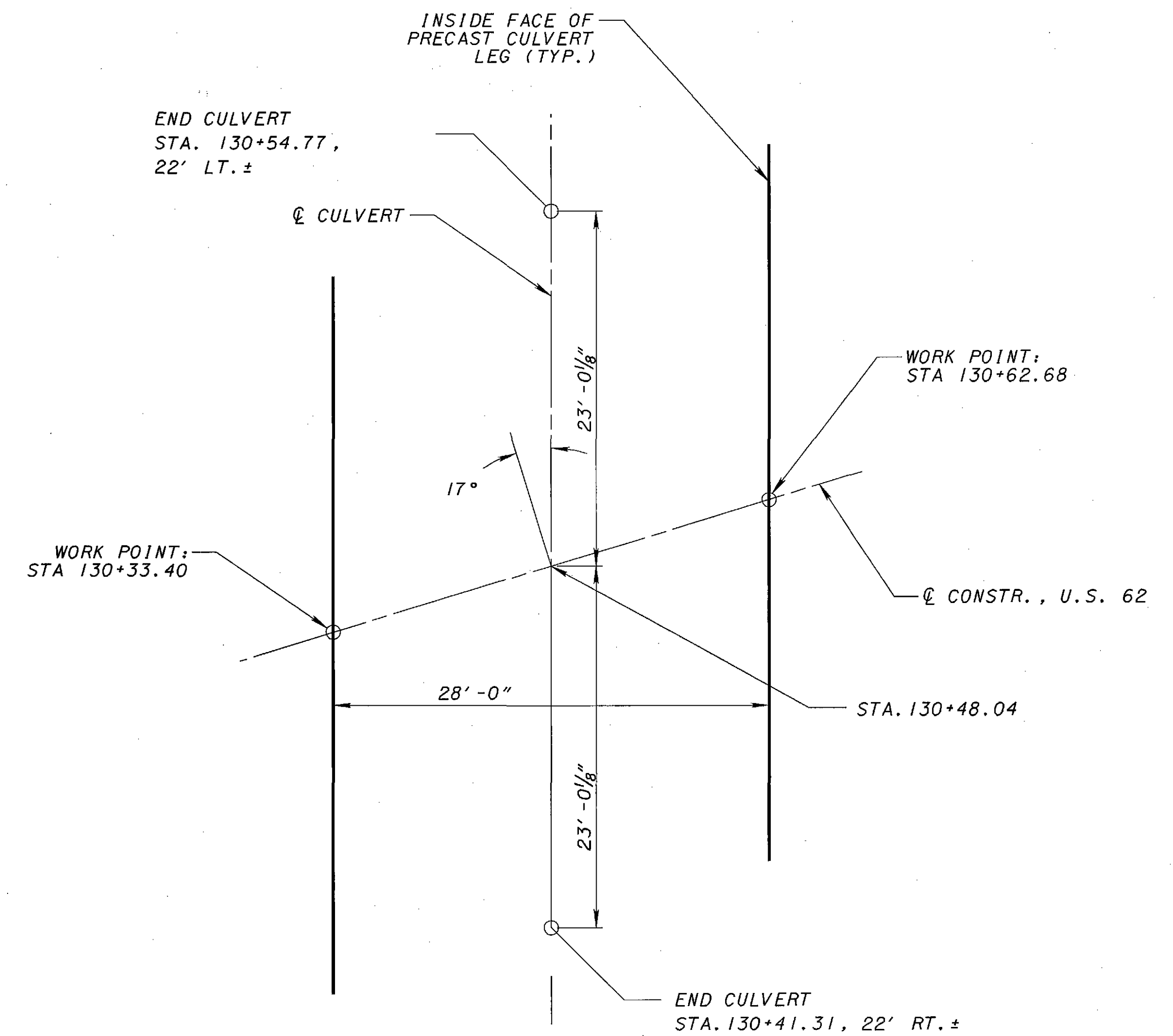
CULVERT & WINGWALL LAYOUT

FOR SECTION B-B, SEE SHEET **4/11**

FOR WINGWALL DETAILS, SEE SHEET **8/11**

* PLUS FIT-UP ALLOWANCE (APPROX. 1/2" PER JOINT)

** NOMINAL DIMENSION - MAY VARY WITH PRECAST MFR'S APPROVED DESIGN



REFERENCE DIAGRAM

\$TIMES\$

\$FILES\$

DATE	07/04
REVIEWED	SAN
STRUCTURE FILE NUMBER	4202084
DRAWN	RHM
REVISION	01-07-05
DESIGNED	RHM
CHECKED	RG

STRUCTURE LAYOUT
BRIDGE NO. MAD-62-0247
OVER SONOFA DITCH

MAD-62-(2.47)
(2.55)(2.80)
PID12767

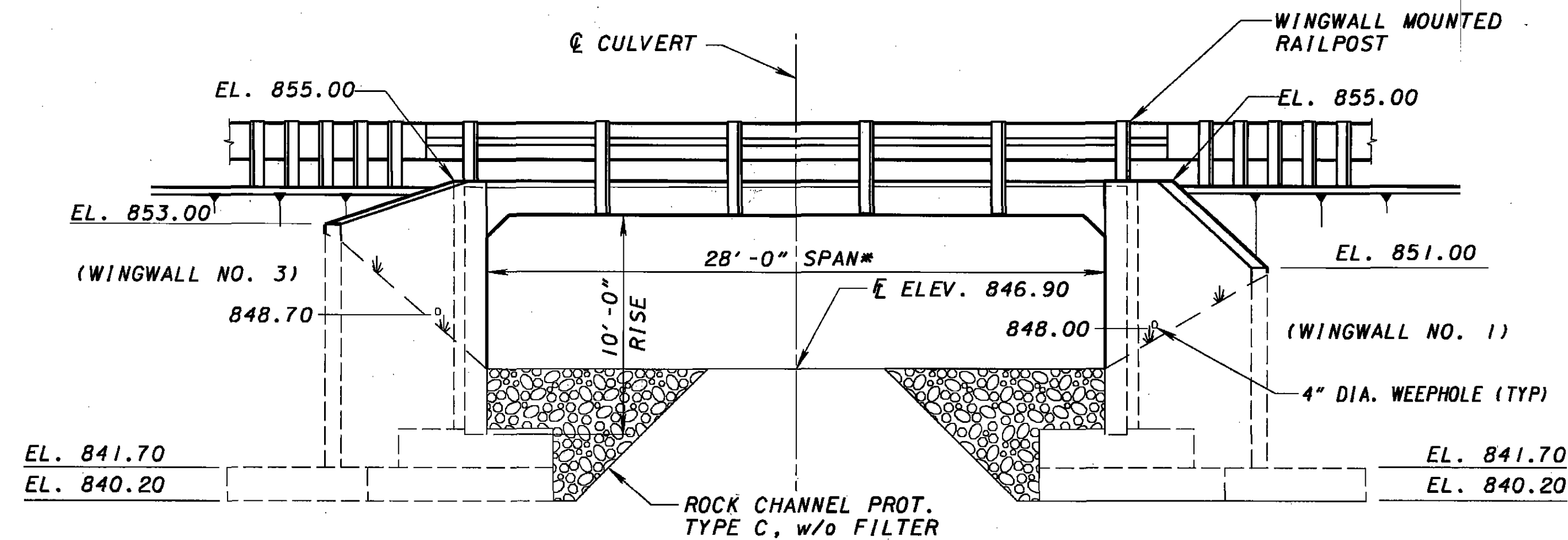
3/11

35
51

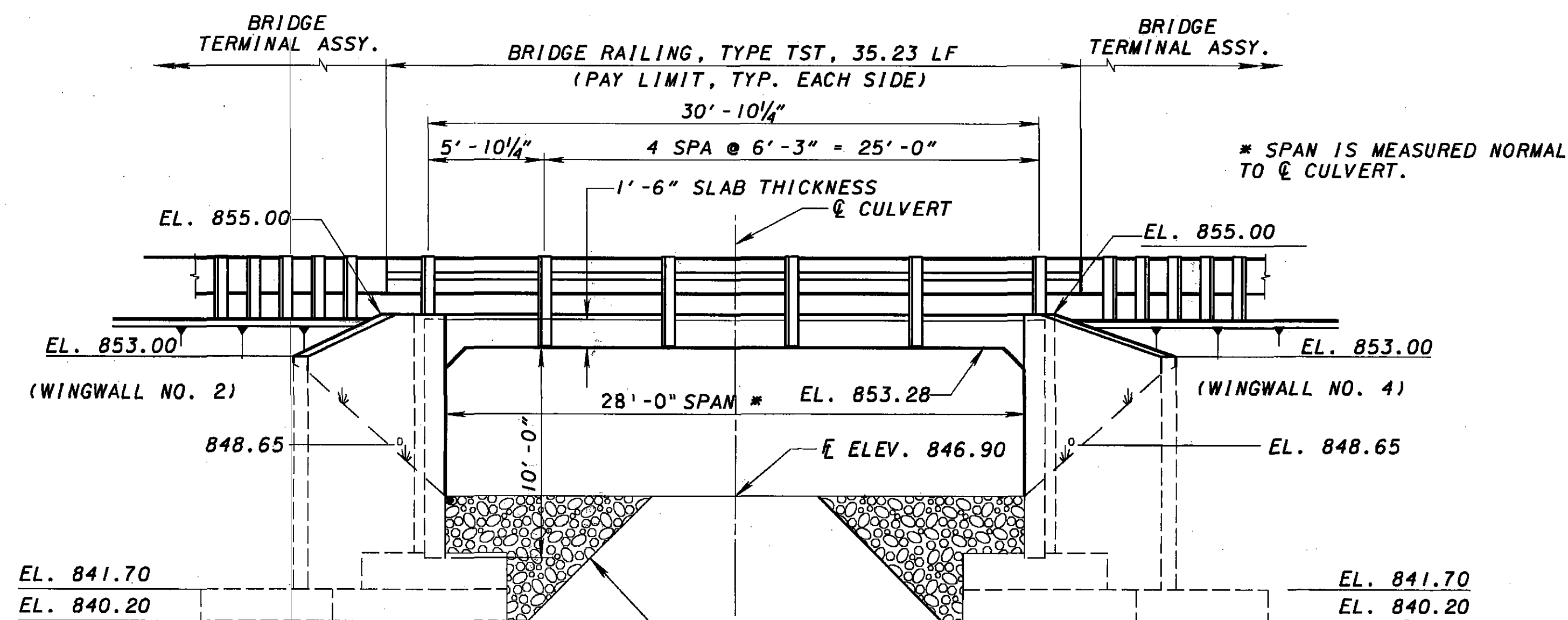
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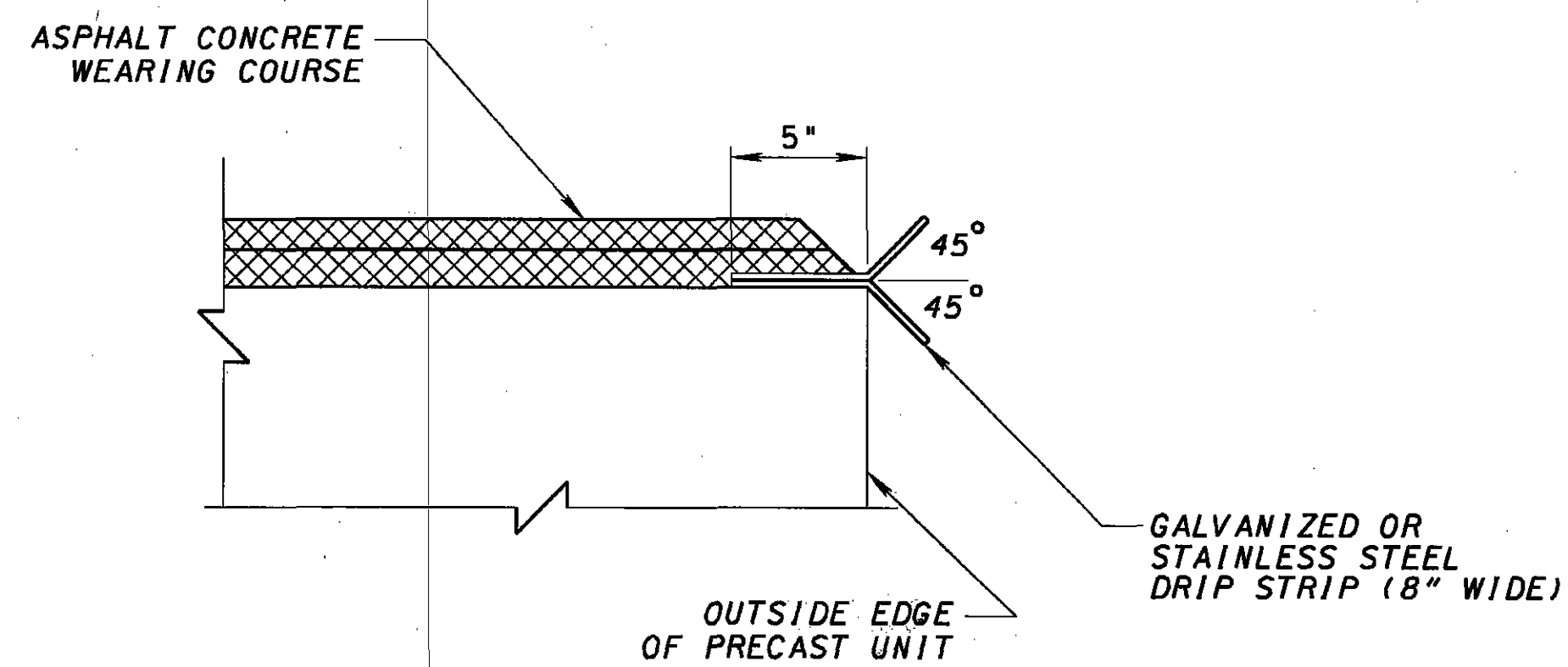
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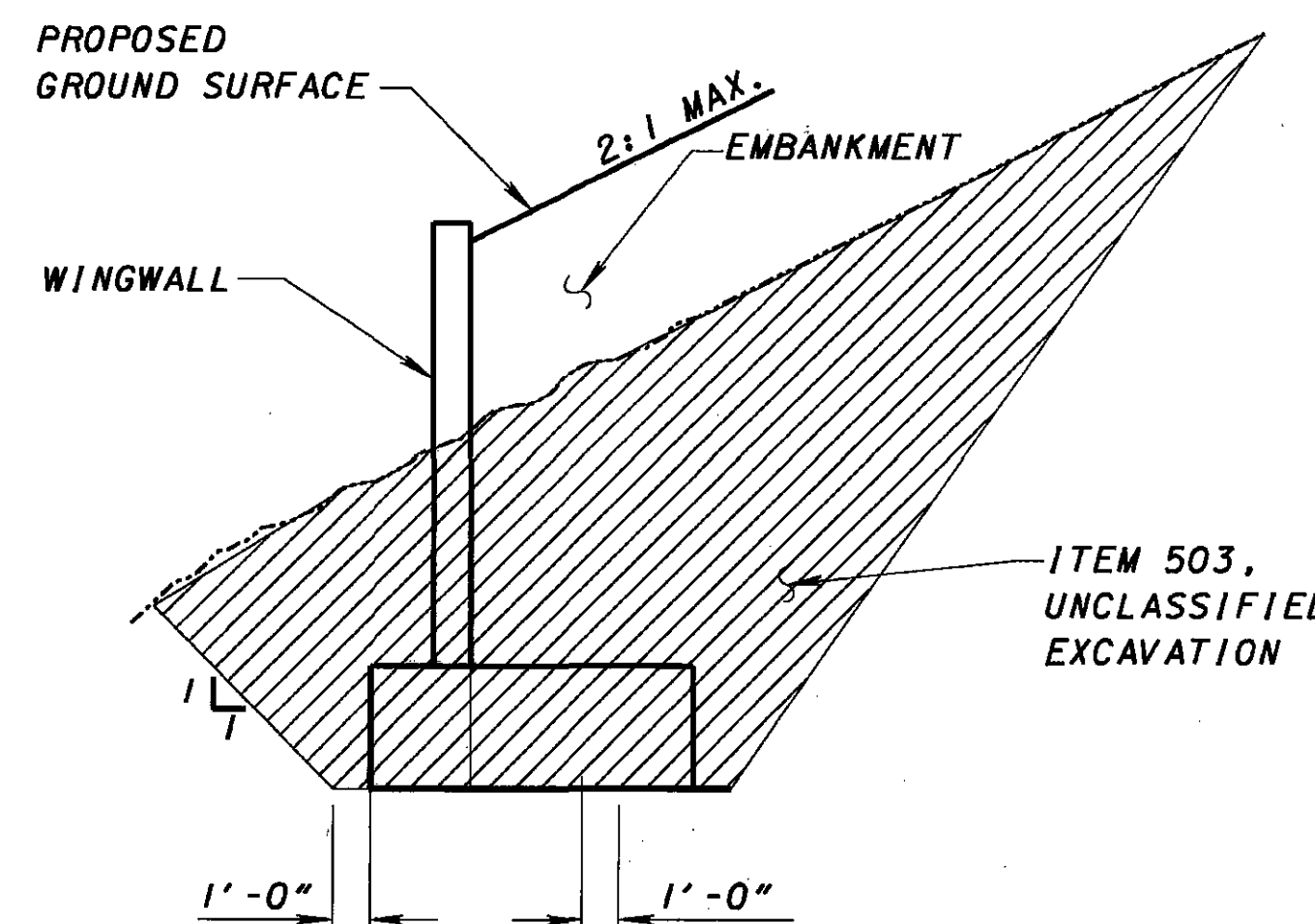
INLET ELEVATION



OUTLET ELEVATION

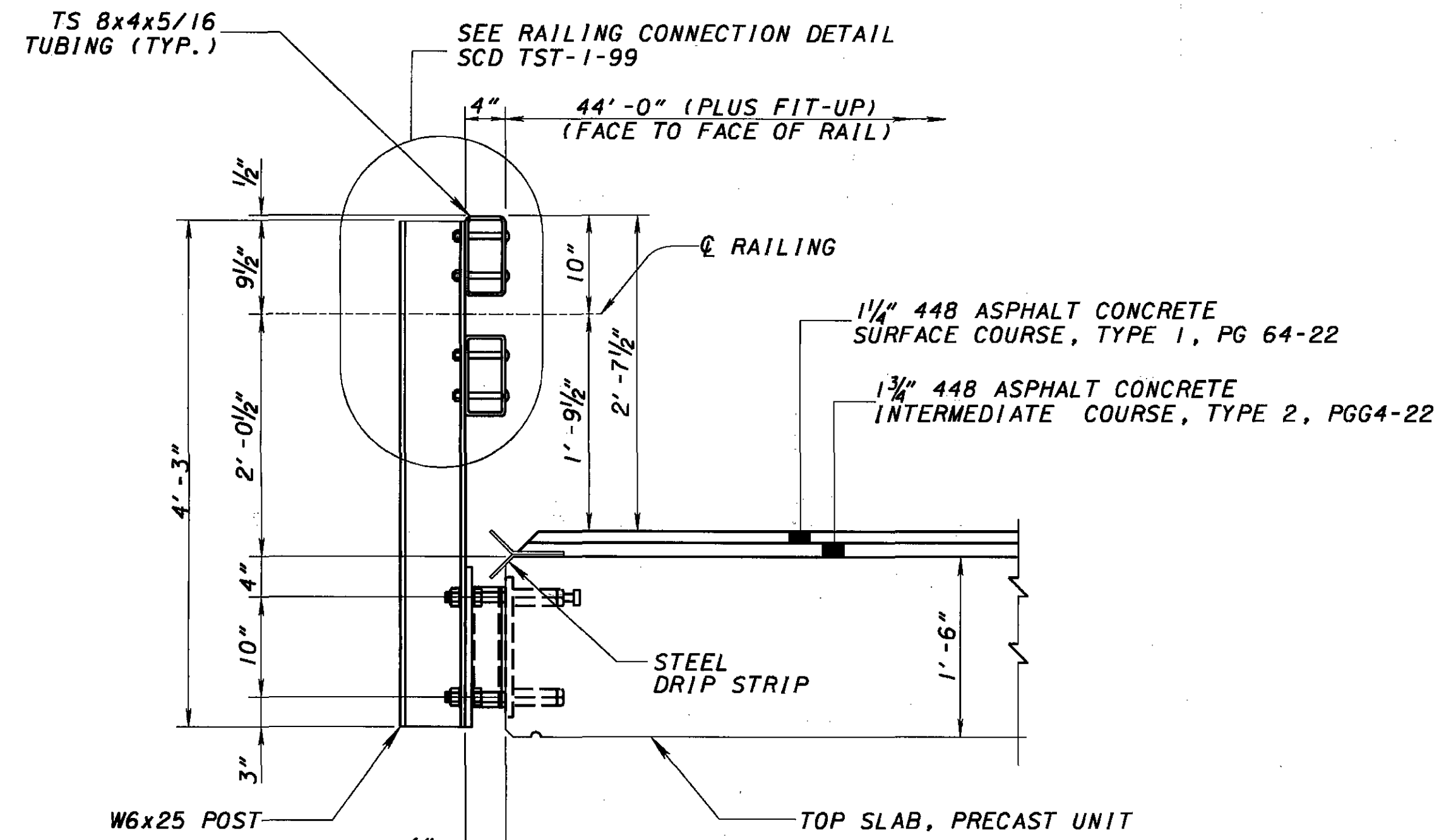


STEEL DRIP STRIP



LIMITS OF UNCLASSIFIED EXCAVATION (WINGWALL)

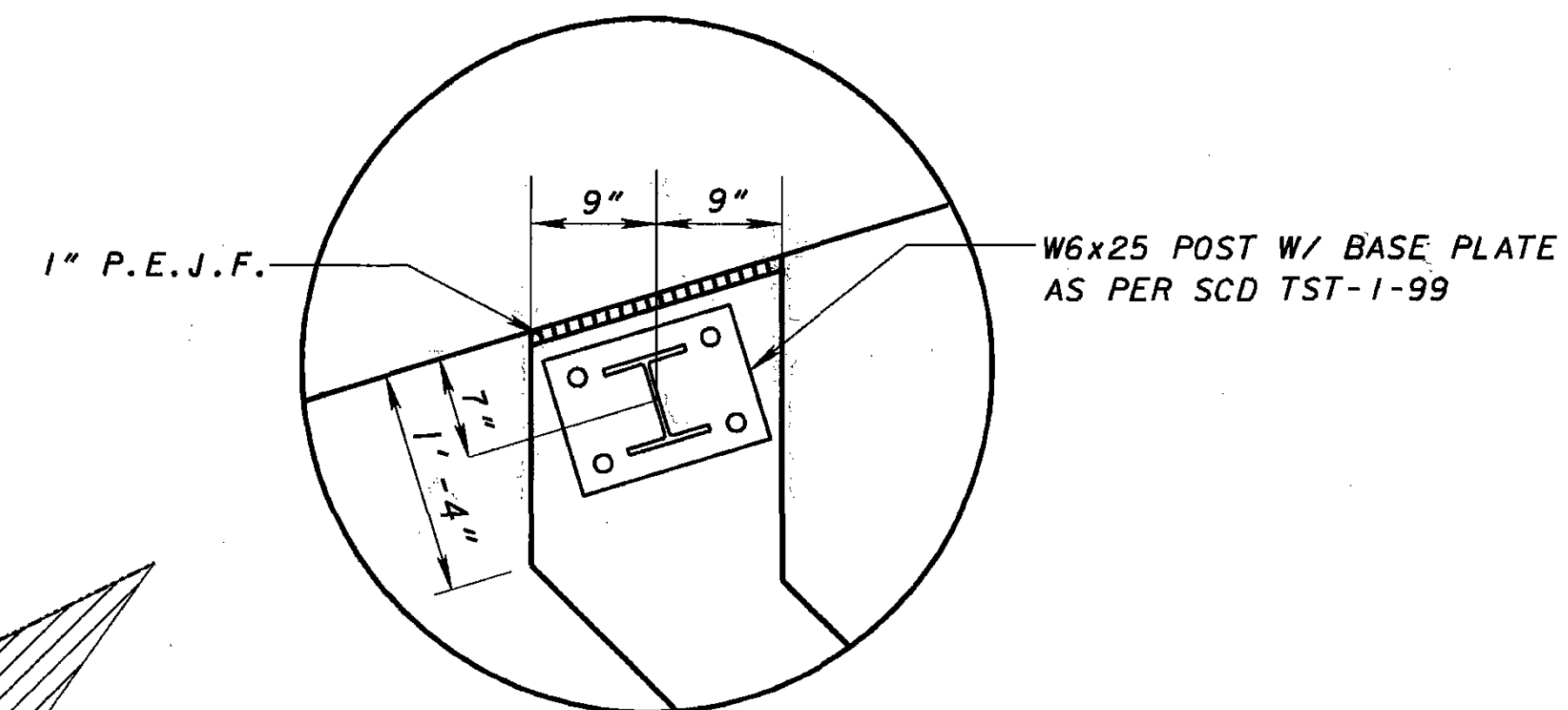
NOTE:
 ASPHALT CONC. SURFACE COURSE SHALL CONSIST OF VARIABLE THICKNESS OF 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 AND 1-1/4" THICKNESS OF 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22. THE 448 INTERMEDIATE COURSE SHALL BE PLACED IN TWO OPERATIONS. THE FIRST PORTION OF THE COURSE SHALL BE OF 1-3/4" UNIFORM THICKNESS. THE SECOND PORTION OF THE COURSE SHALL BE FEATHERED TO PLACE THE SURFACE PARALLEL TO 1-3/4" BELOW FINAL PAVEMENT SURFACE ELEVATION.



SECTION B-B

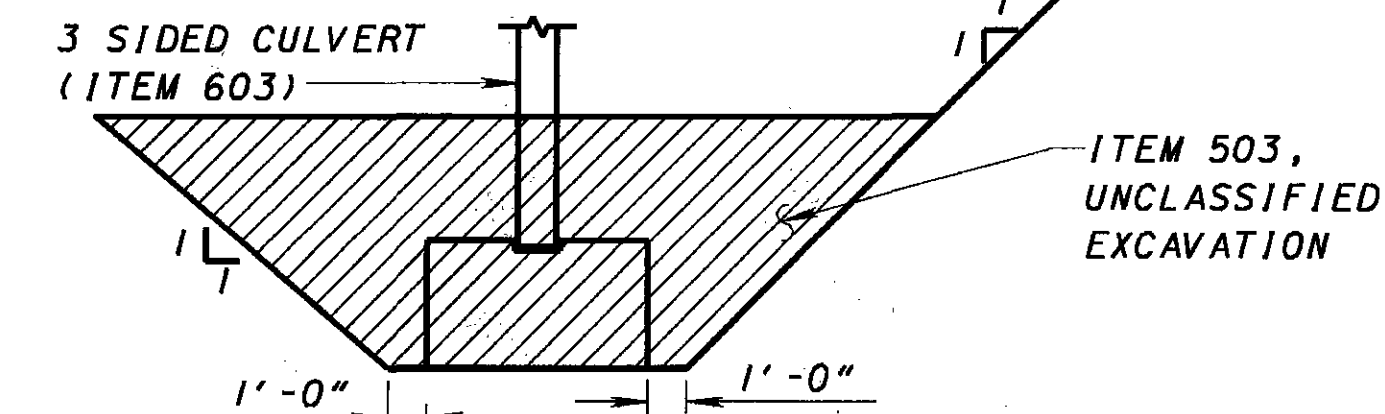
FROM SHEET 3/11

FOR ADDITIONAL DETAILS, SEE SCD TST-1-99



DETAIL A

SEE SHEET 3/11



LIMITS OF UNCLASSIFIED EXCAVATION (CULVERT)



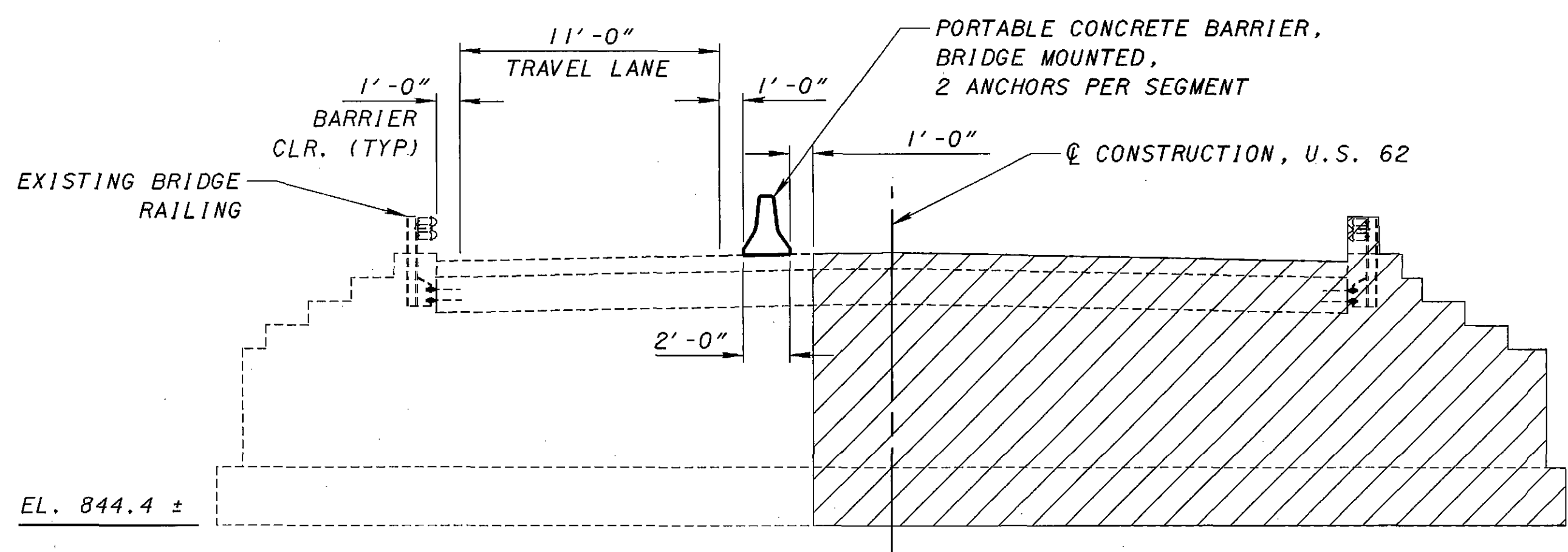
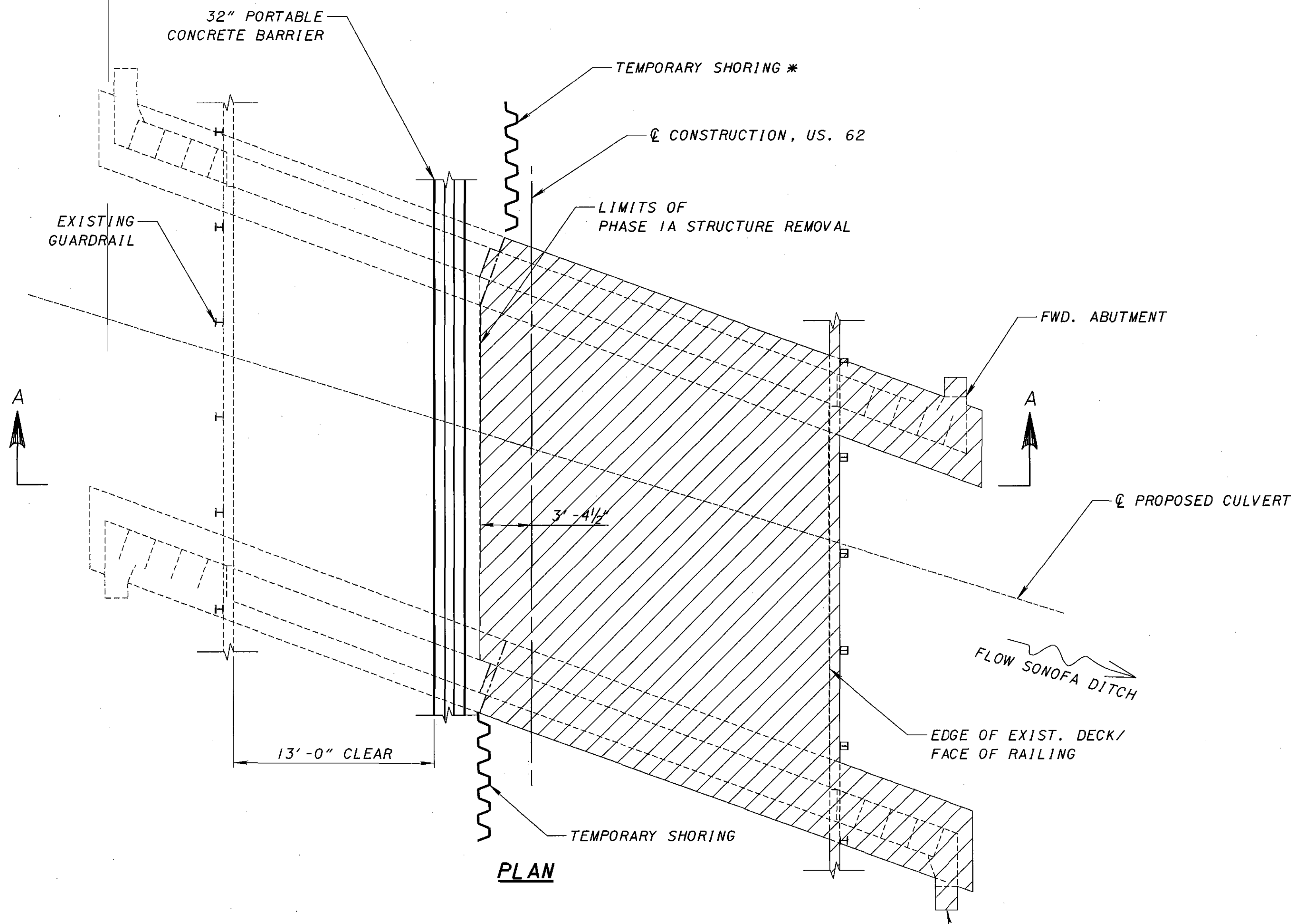
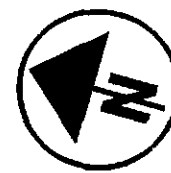
DESIGNED	RHM	CHECKED	RG
DRAWN	RHM	REVISED	01-07-05
REVIEWED	SAN	STRUCTURE FILE NUMBER	4202084
DATE	7/04		

STRUCTURE ELEVATIONS
 BRIDGE NO. MAD-62-0247
 OVER SONOFA DITCH

MAD-62-(2.47)
 (2.55) (2.80)
 P/D 12767

4/11

36
 51



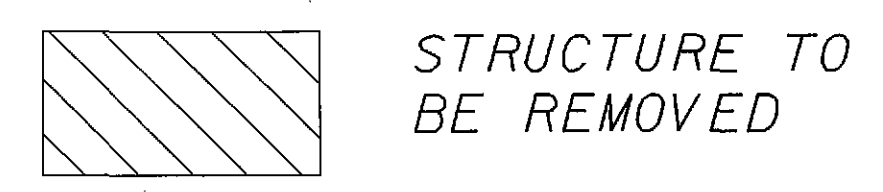
SECTION A-A
PHASE IA - REMOVAL

PHASE IA - NOTES:

1. INSTALL TEMPORARY TRAFFIC BARRIER ON LEFT (NORTH) HALF OF EXISTING STRUCTURE, AS SHOWN.
2. SHIFT TRAFFIC TO LEFT HALF OF EXISTING STRUCTURE.
3. PLACE TEMPORARY SHORING AS NEEDED TO SUPPORT ADJACENT EXISTING ROADWAY EMBANKMENT.
4. REMOVE EXISTING STRUCTURE TO LIMITS SHOWN AND ADDITIONALLY AS REQUIRED PER ITEM 202 TO PROVIDE SUFFICIENT SPACE TO CONSTRUCT PROPOSED STRUCTURE.

*TEMPORARY SHORING SHALL BE PAID UNDER ITEM 503 COFFERDAM, CRIBS, SHEETING

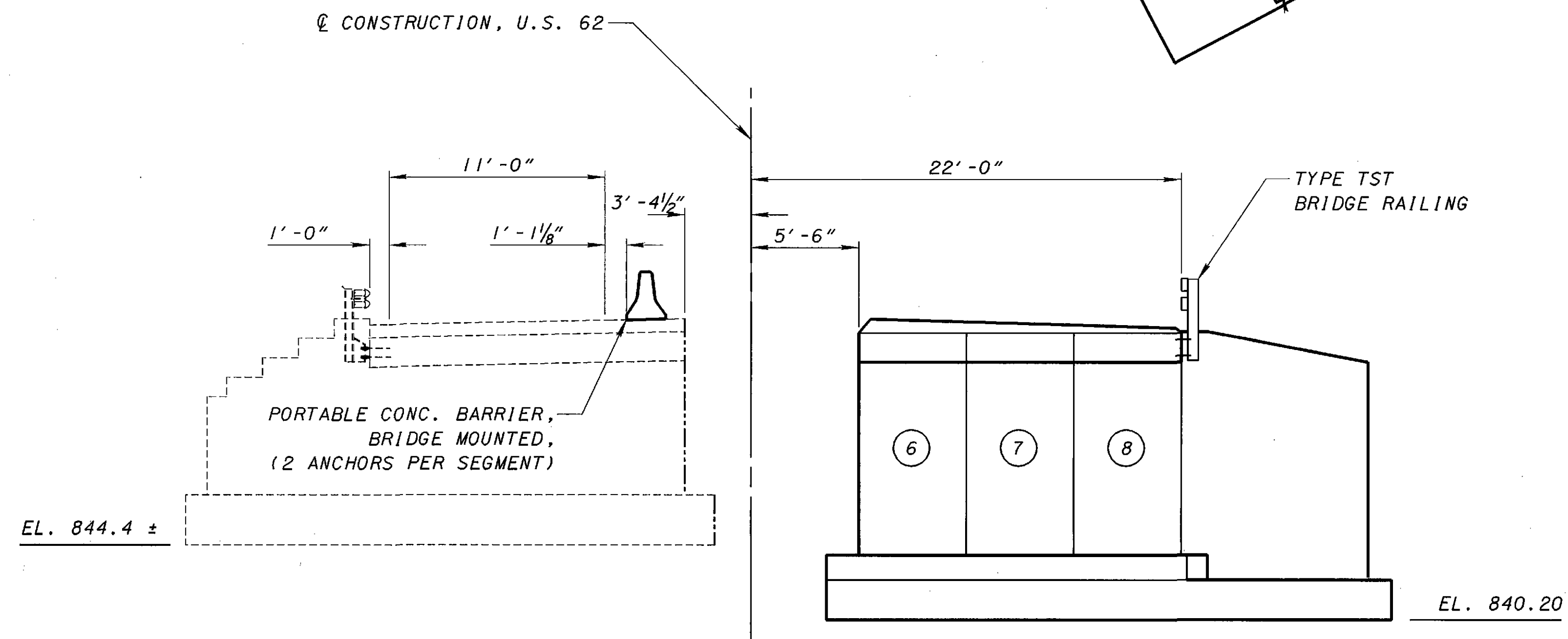
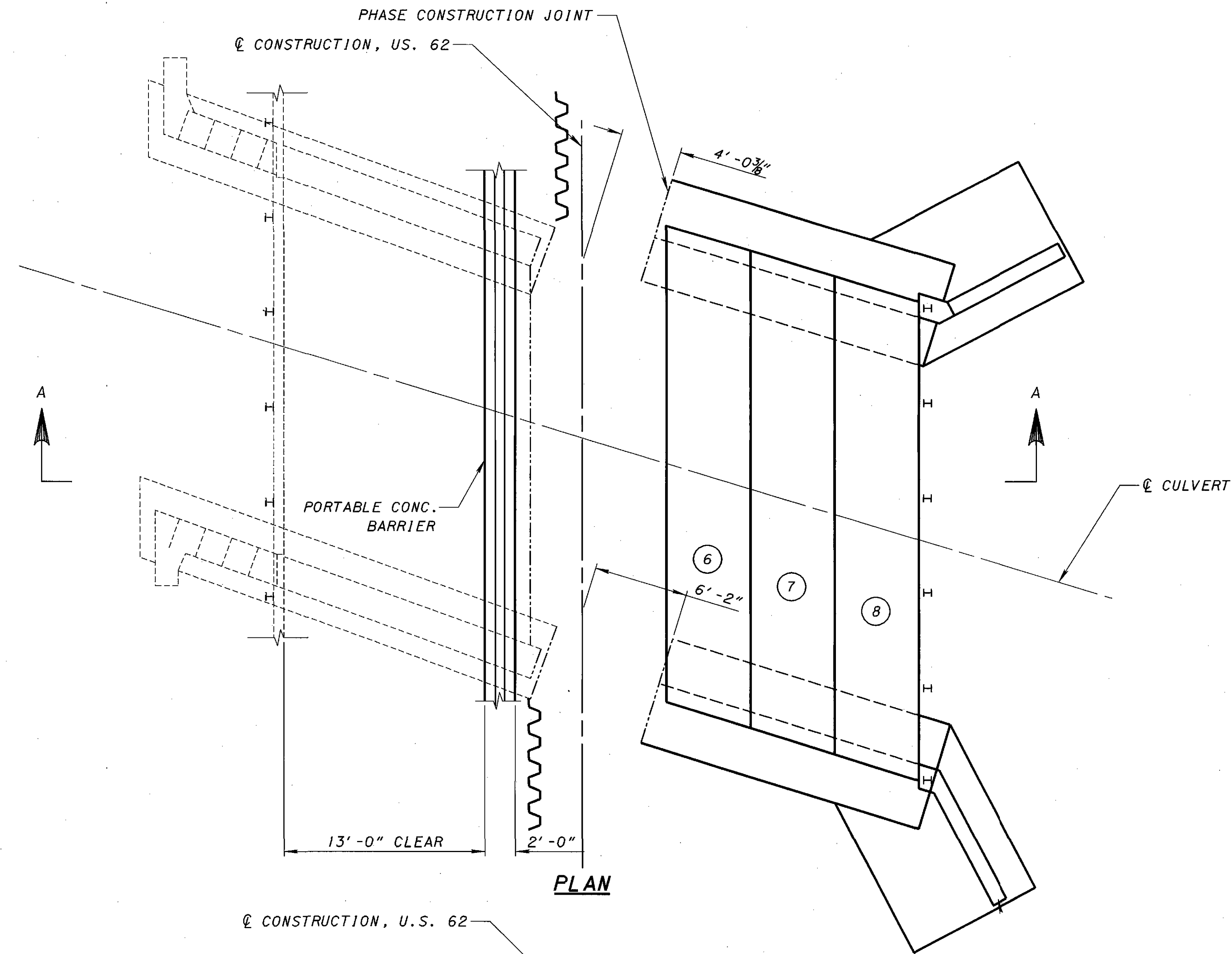
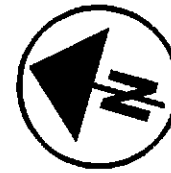
LEGEND:



NOTES

1. TIMBER PILES TO BE REMOVED 9" FROM THE BOTTOM OF THE PROPOSED CULVERT FOOTING. PILES NOT SHOWN FOR CLARITY.

SCALE

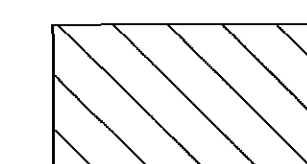


SECTION A-A
PHASE 1B - CONSTRUCTION

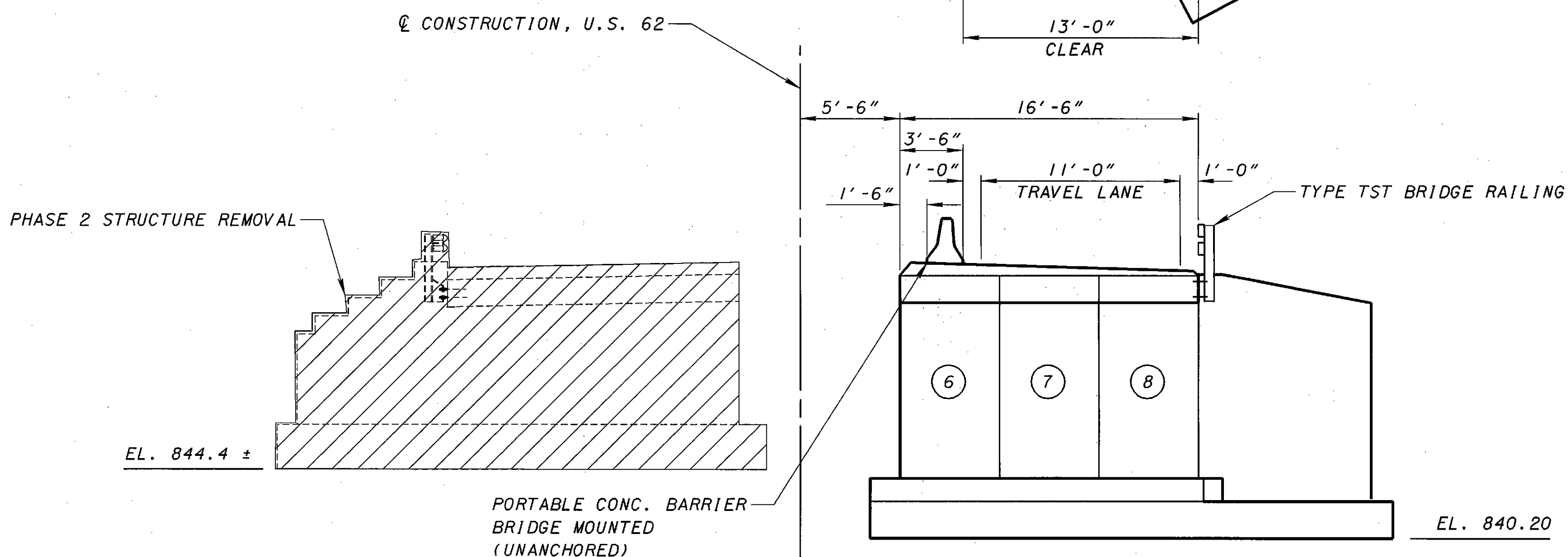
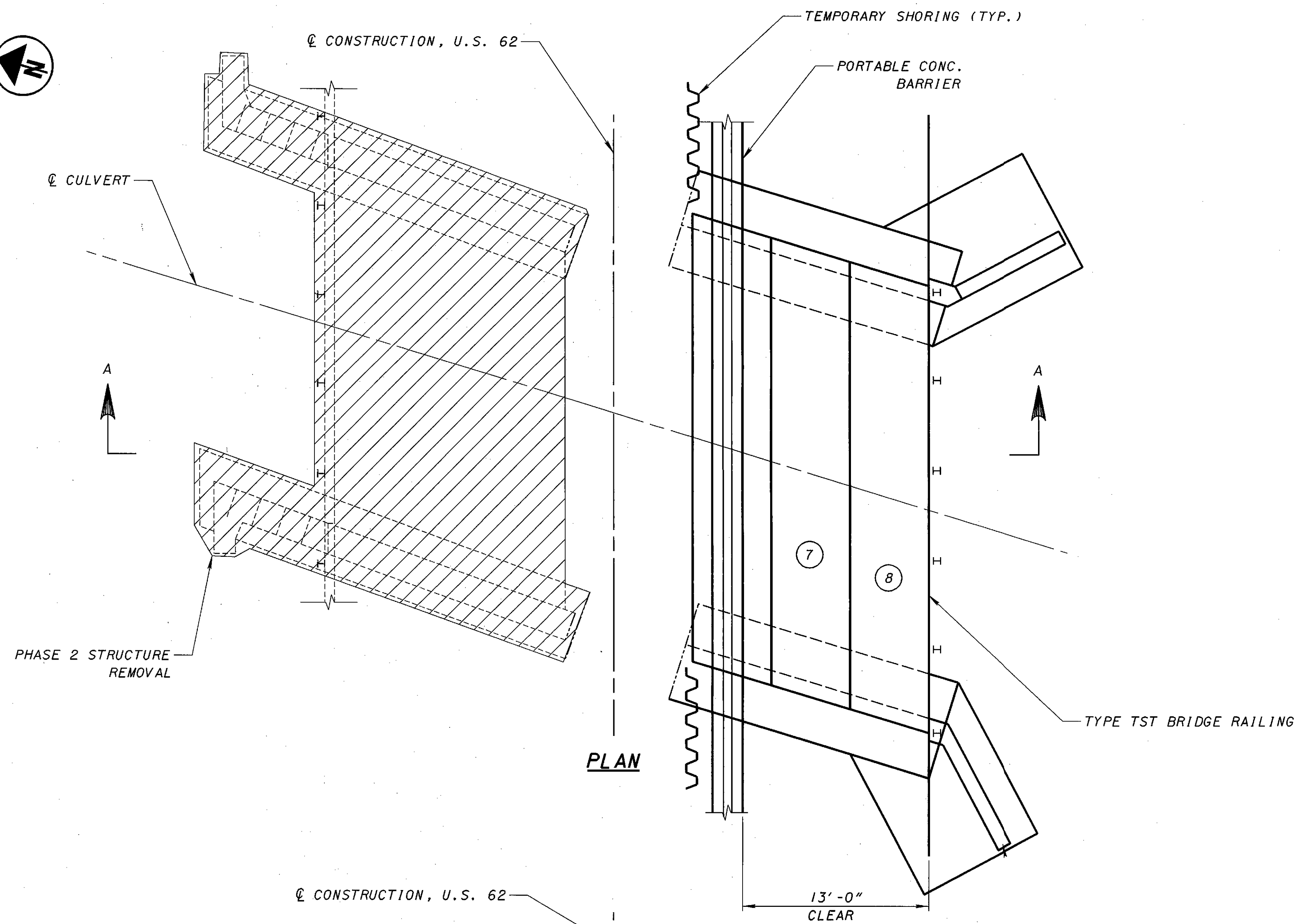
PHASE 1B - NOTES:

1. MAINTAIN ONE-LANE, TWO-WAY TRAFFIC ON LEFT HALF OF EXISTING STRUCTURE, AS SHOWN ON THE M.O.T. PLANS, BEGINNING ON SHEET $\frac{8}{51}$
2. CONSTRUCT RIGHT HALF OF PROPOSED STRUCTURE, TO THE LIMITS SHOWN, INCLUDING TEMPORARY SHORING NECESSARY TO RETAIN PROPOSED STRUCTURE BACKFILL & ROADWAY EMBANKMENT.
3. THE SURFACE COURSE OF ASPHALT CONCRETE WILL NOT BE PLACED UNTIL THE END OF PHASE 2..

LEGEND:



STRUCTURE TO BE REMOVED

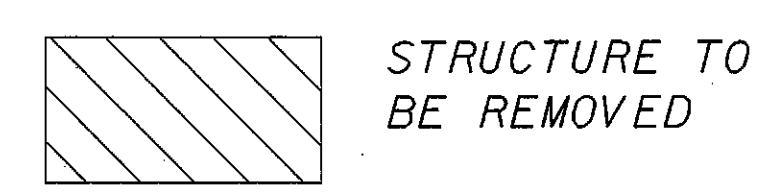


SECTION A-A
PHASE 2 - REMOVAL/CONSTRUCTION

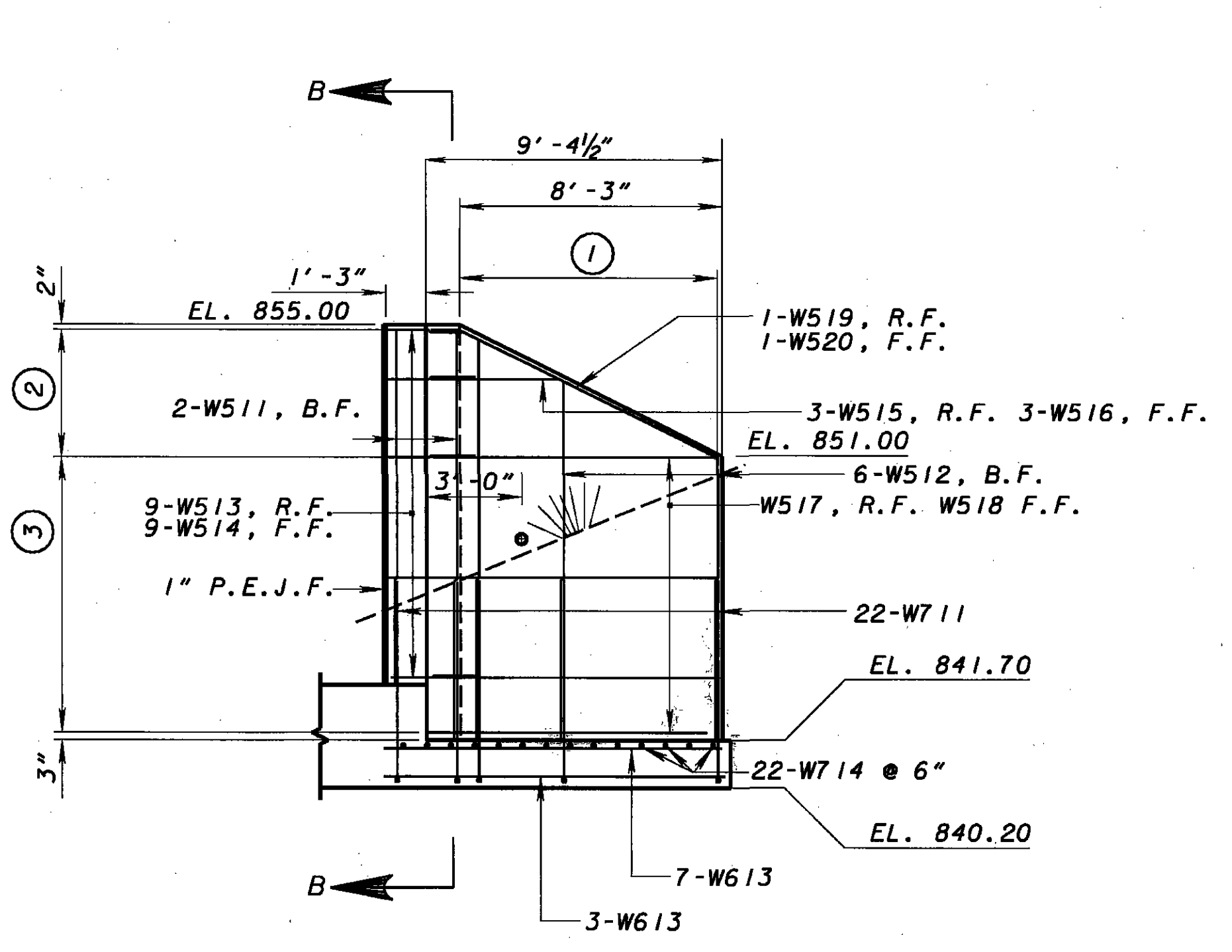
PHASE 2 - NOTES:

1. INSTALL TEMPORARY TRAFFIC BARRIERS AND OTHER REQUIRED TRAFFIC CONTROL DEVICES ON RIGHT HALF OF PROPOSED STRUCTURE AS SHOWN.
2. SHIFT TRAFFIC TO RIGHT HALF OF PROPOSED STRUCTURE AND MAINTAIN ONE-LANE, TWO-WAY TRAFFIC AS SHOWN ON THE M.O.T. PLANS, BEGINNING ON SHEET 39/51
3. REMOVE REMAINDER OF EXISTING STRUCTURE AS REQUIRED PER ITEM 202.
4. CONSTRUCTURE REMAINDER OF PROPOSED STRUCTURE, WITH EXCEPTION OF ASPHALT CONCRETE SURFACE COURSE.
5. REMOVE TEMPORARY TRAFFIC BARRIERS AND OPEN ROADWAY TO FULL-WIDTH TRAFFIC.
6. PLACE SURFACE COURSE OF ASPHALT CONCRETE USING SHORT-TERM LANE CLOSURES AS PER SCD MT-97.11

LEGEND:



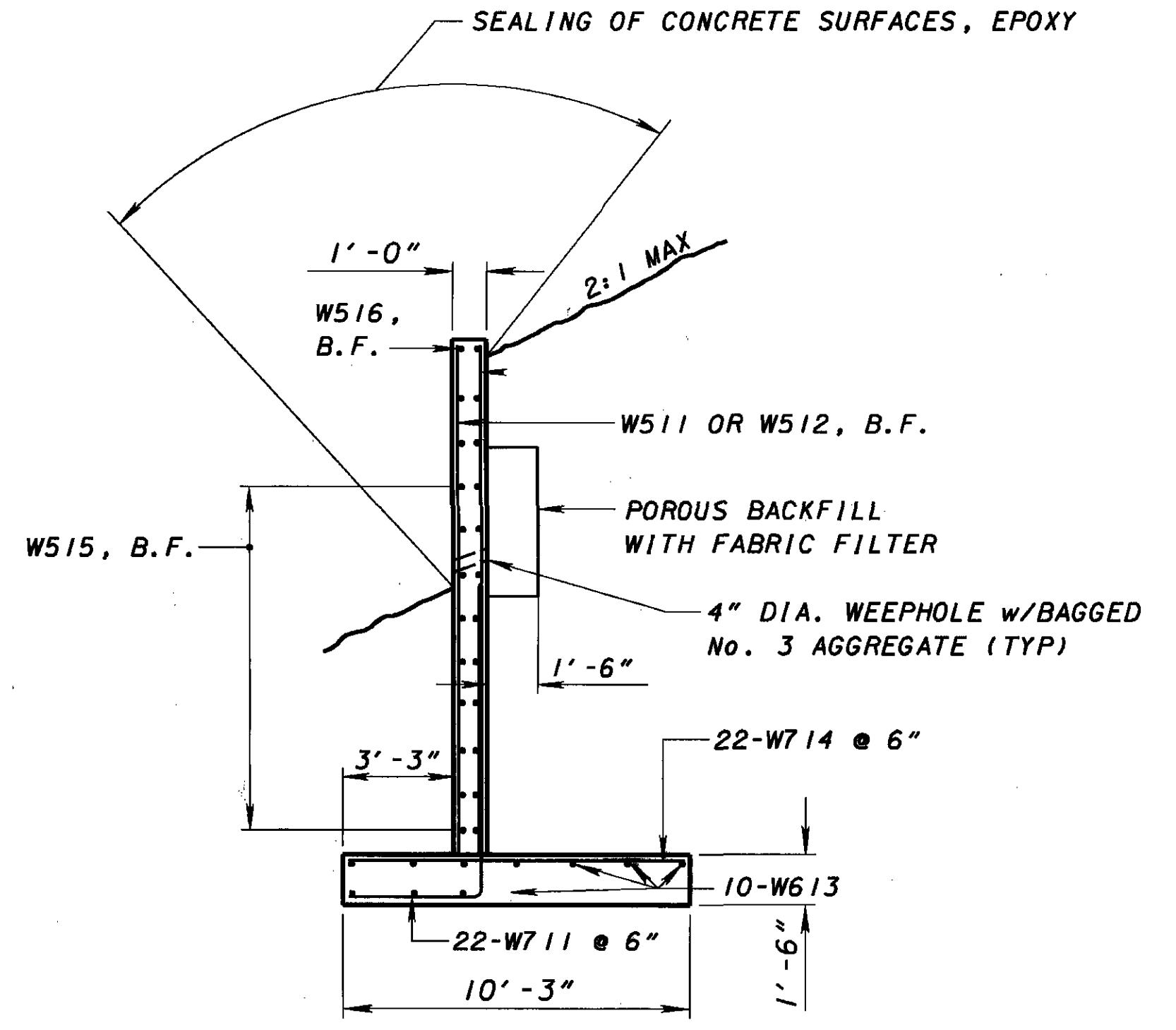
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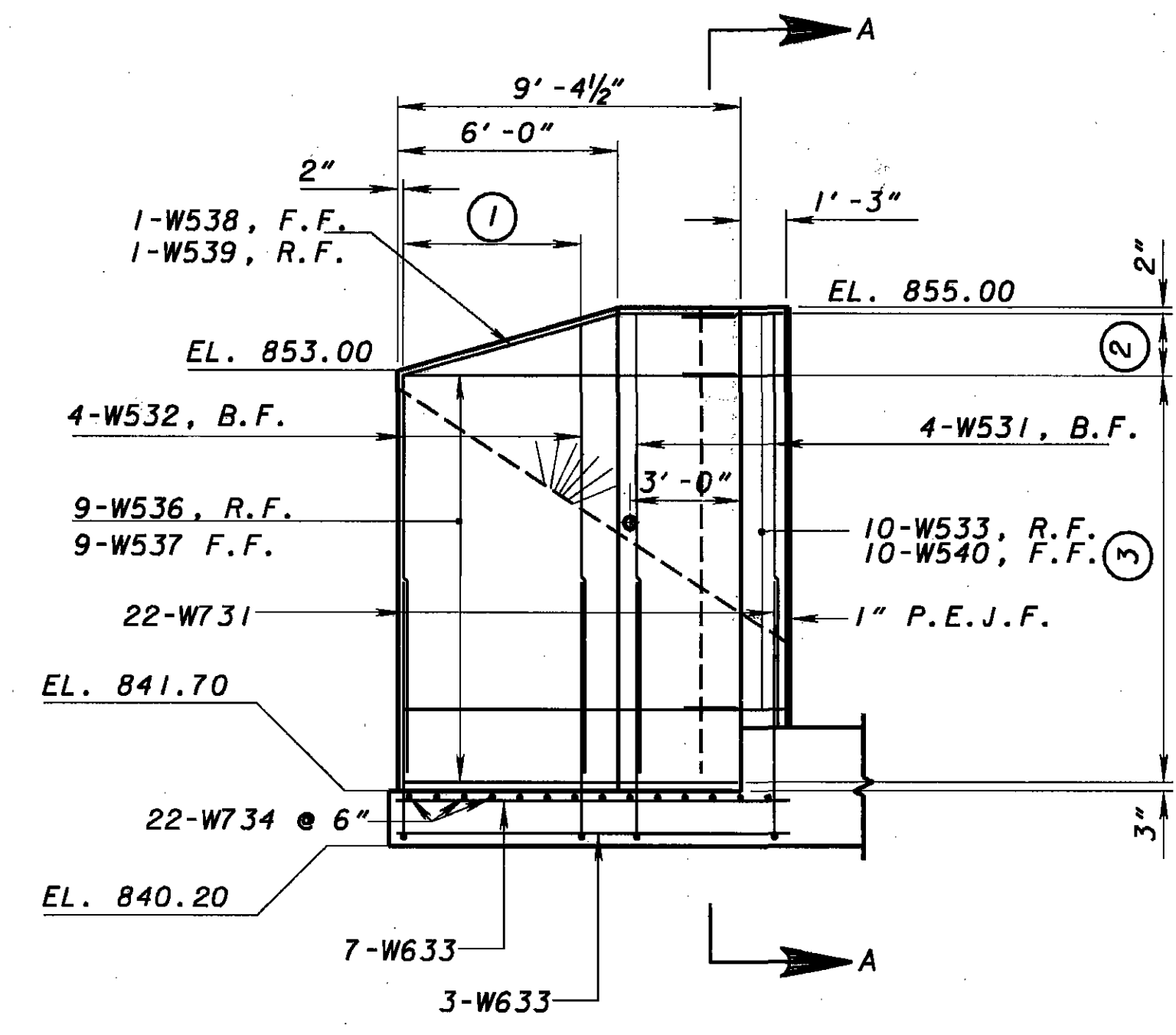
WINGWALL 1 ELEVATION

NOTE: 4" DIA. WEEPHOLE
ELEV. =848.0

- ① SER. OF 7 @ 1'-0"
- ② 3 SPACE @ 1'-4"
- ③ 6 SPACES @ 1'-6"



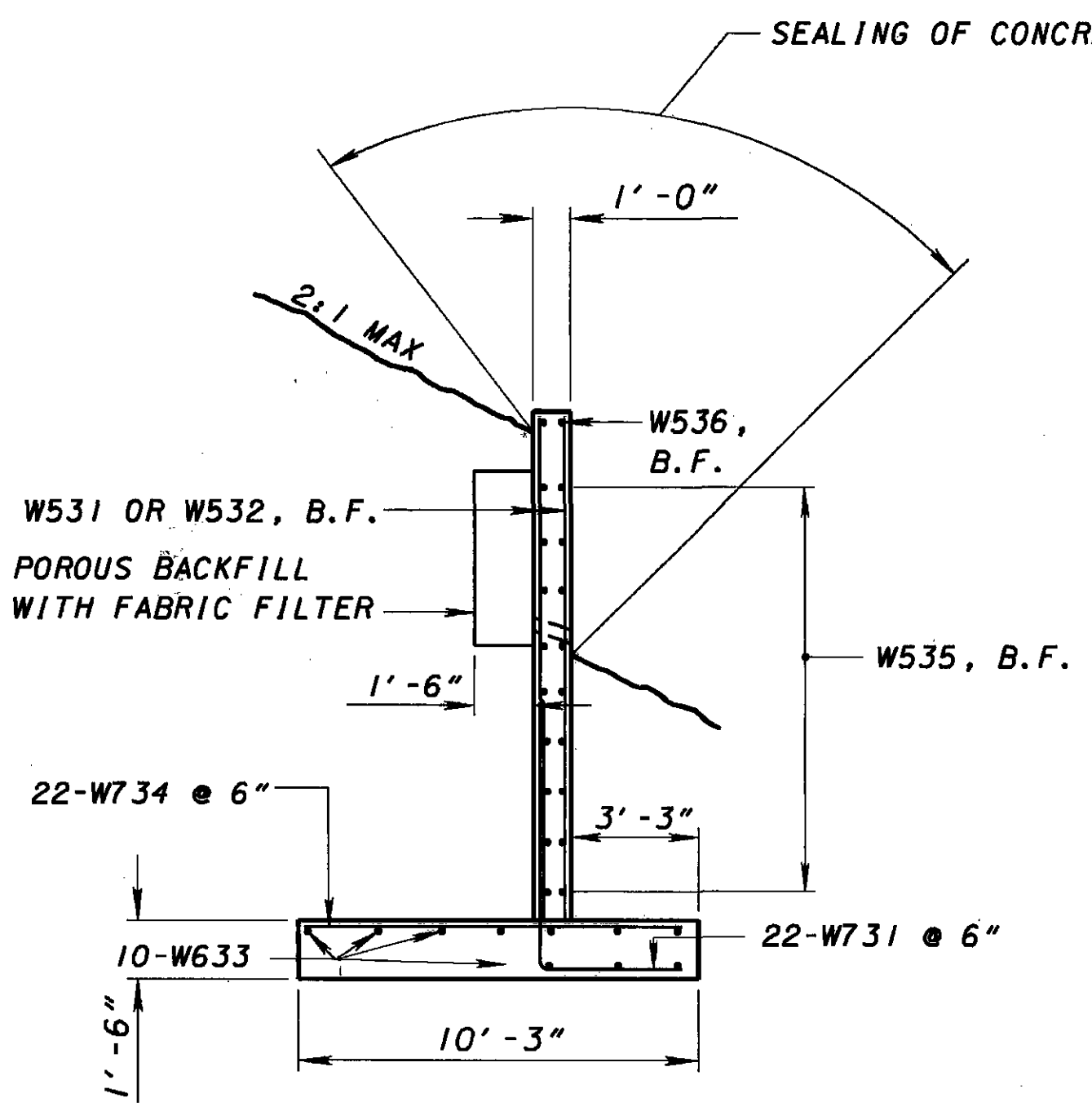
SECTION B-B



WINGWALL 3 ELEVATION

NOTE: 4" DIA. WEEPHOLE
ELEV. =848.70

- ① SER. OF 5 @ 1'-0"
- ② 1 SPACE @ 1'-7"
- ③ 7 SPACES @ 1'-7"



SECTION A-A

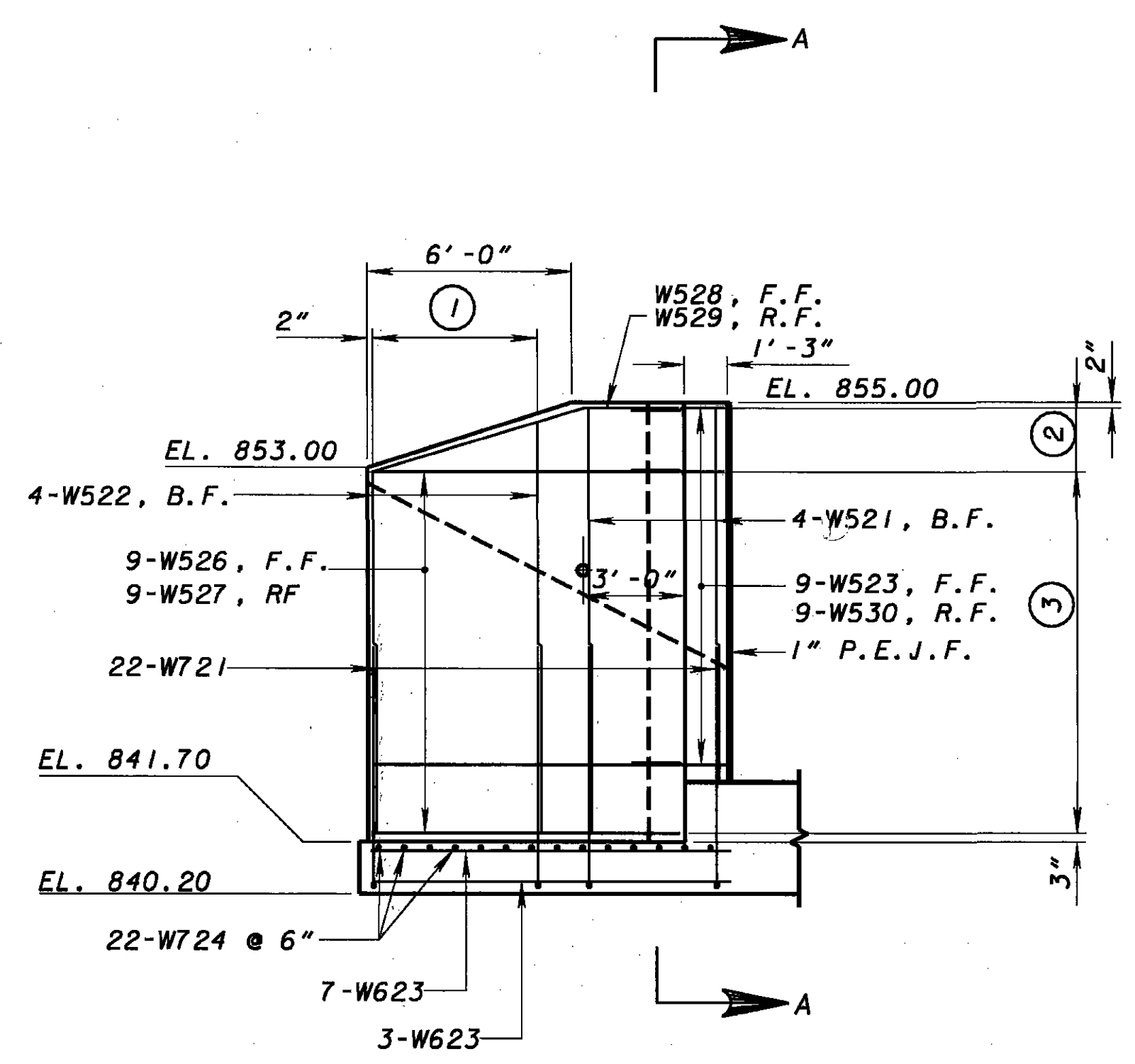
LEGEND

- F.F. - FRONT FACE
- R.F. - REAR FACE
- B.F. - BOTH FACE

NOTES:

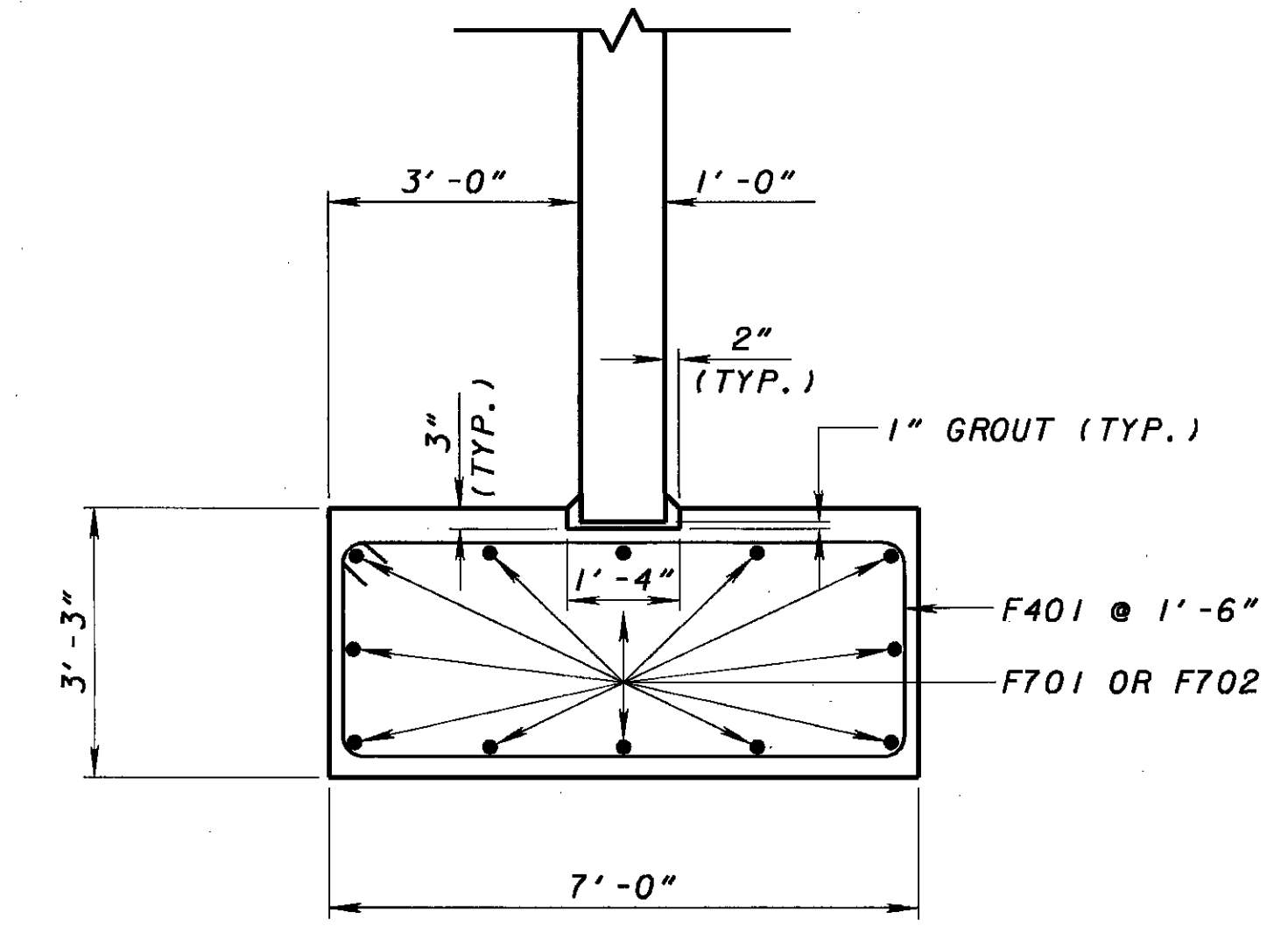
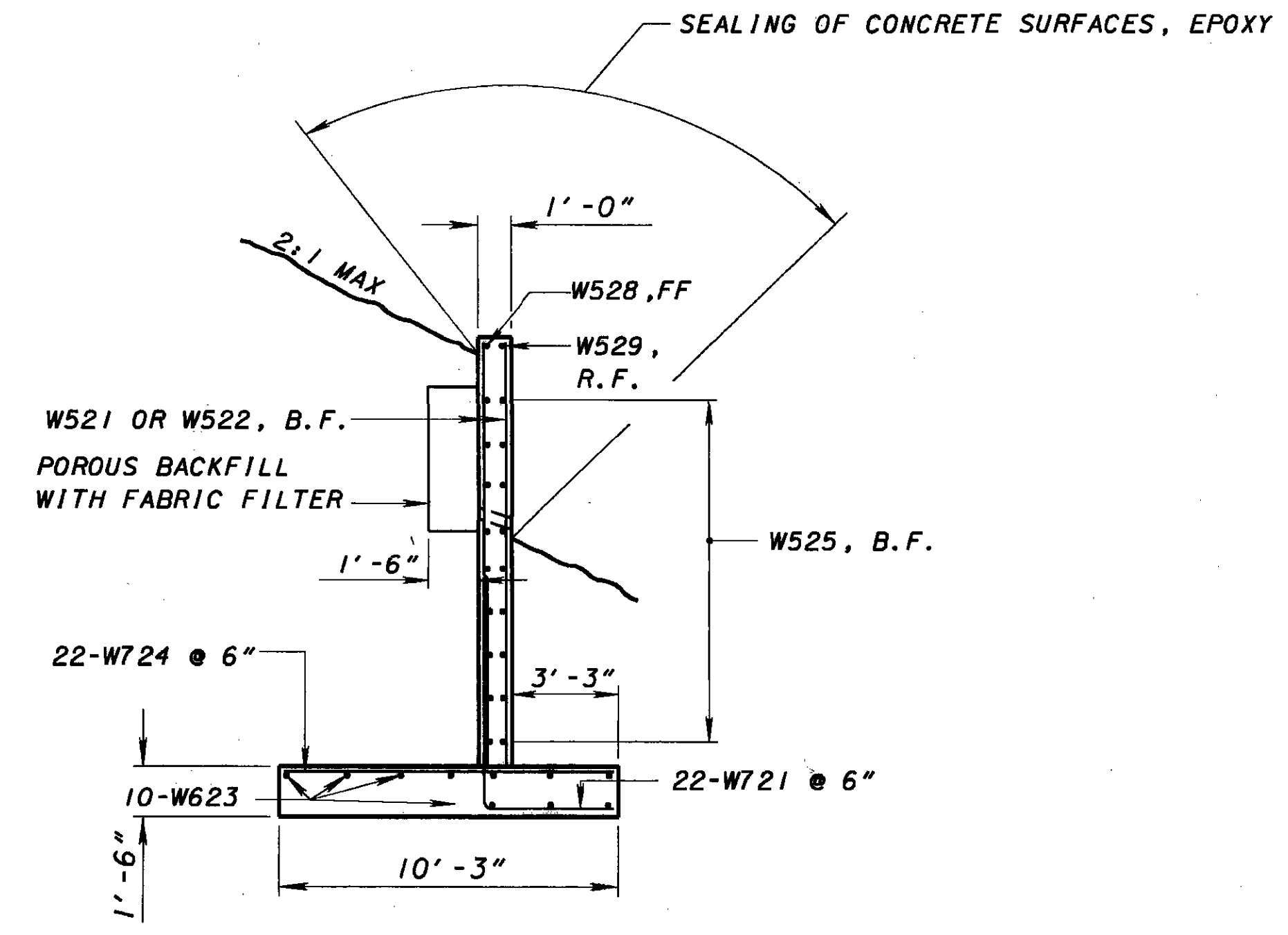
1. ITEM 518 - POROUS BACKFILL W/FILTER FABRIC 1'-6" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 1' BELOW THE EMBANKMENT SURFACE AND LATERALLY TO THE ENDS OF THE WINGWALLS. PLACE TWO CUBIC FEET OF BAGGED No. 3 AGGREGATE AT EACH WEEPHOLE. BAGGED AGGREGATE WILL BE INCLUDED WITH POROUS BACKFILL FOR PAYMENT. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND EXCAVATION PLACED ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL, AND RETURN 6" UP THE BACK FACE OF WINGWALL.
2. 1" PREFORMED EXPANSION JOINT FILLER (PEJF) SHALL EXTEND FROM TOP OF FOOTING TO TOP OF WINGWALL/PRECAST CULVERT JOINT.
3. FOR WEEPHOLE ELEVATIONS, SEE SHEET 4/11

Q:\03010\MAD-62-0247\BRG05_MD062MD2.dgn

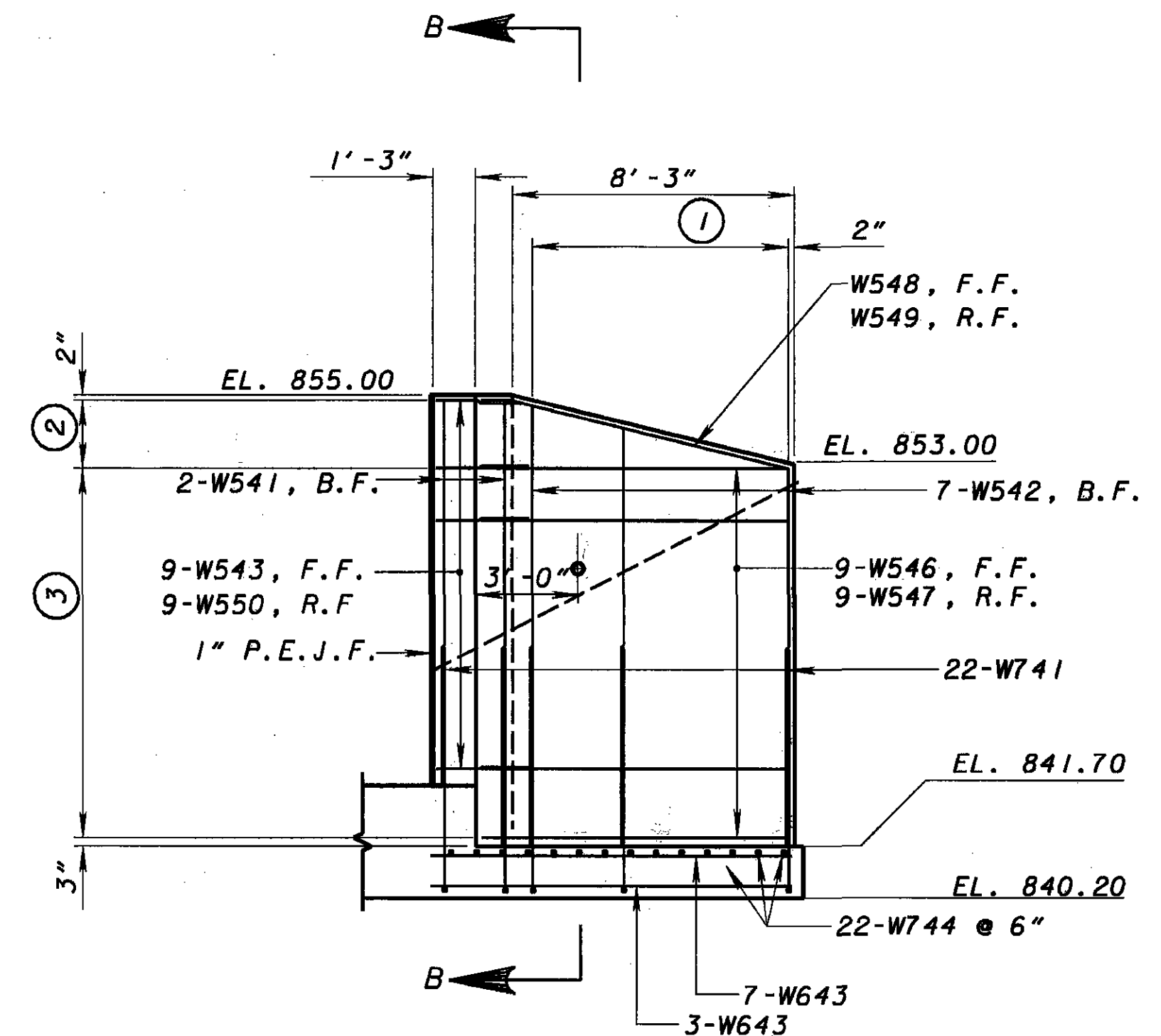


NOTE: 4" DIA. WEEPHOLE
ELEV. = 848.65

- ① SER. OF 5 @ 1'-0"
- ② 1 SPACE @ 1'-7"
- ③ 7 SPACES @ 1'-7"

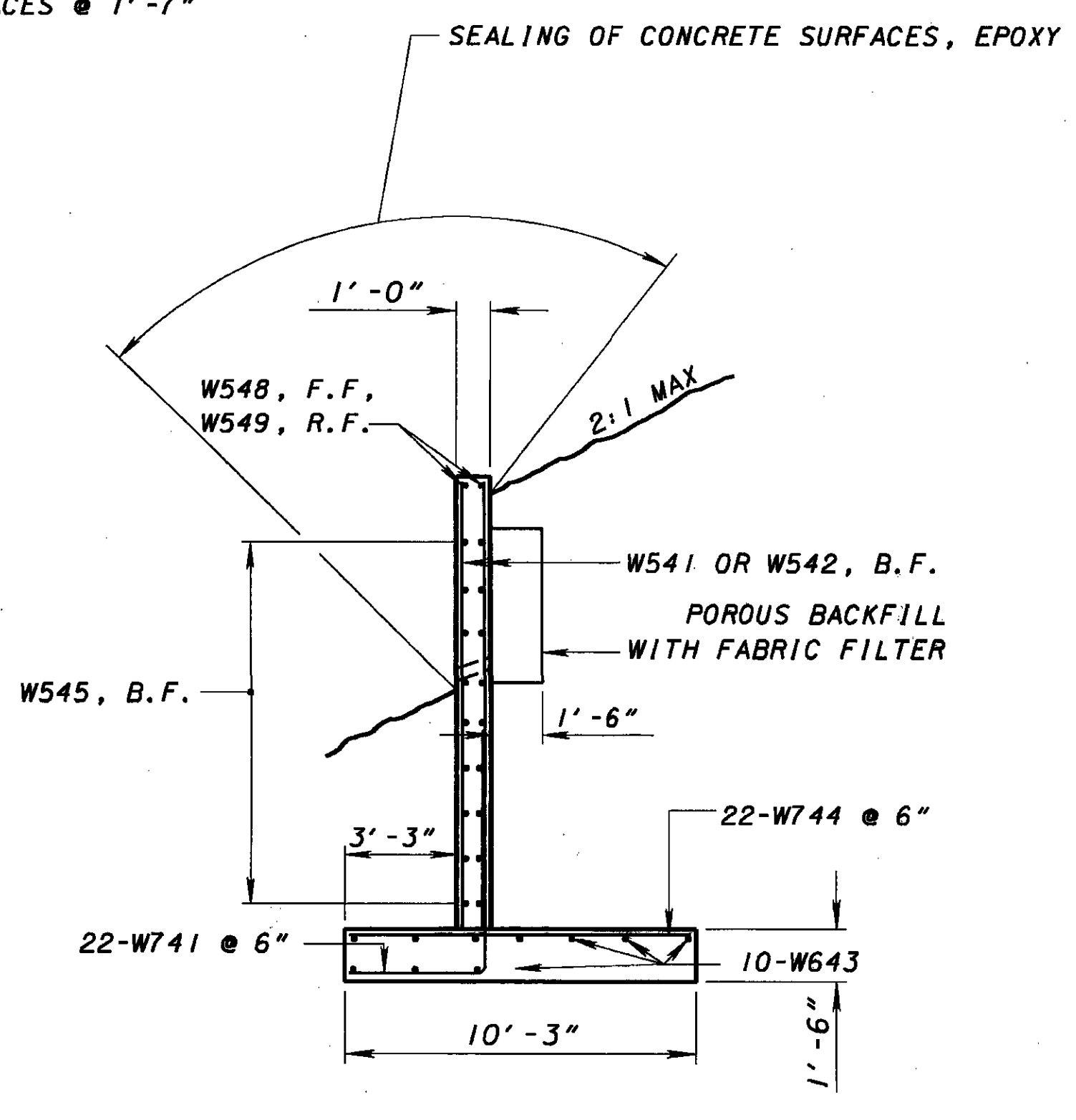


- LEGEND
- F.F. - FRONT FACE
 - R.F. - REAR FACE
 - B.F. - BOTH FACE



NOTE: 4" DIA. WEEPHOLE
ELEV. = 848.65

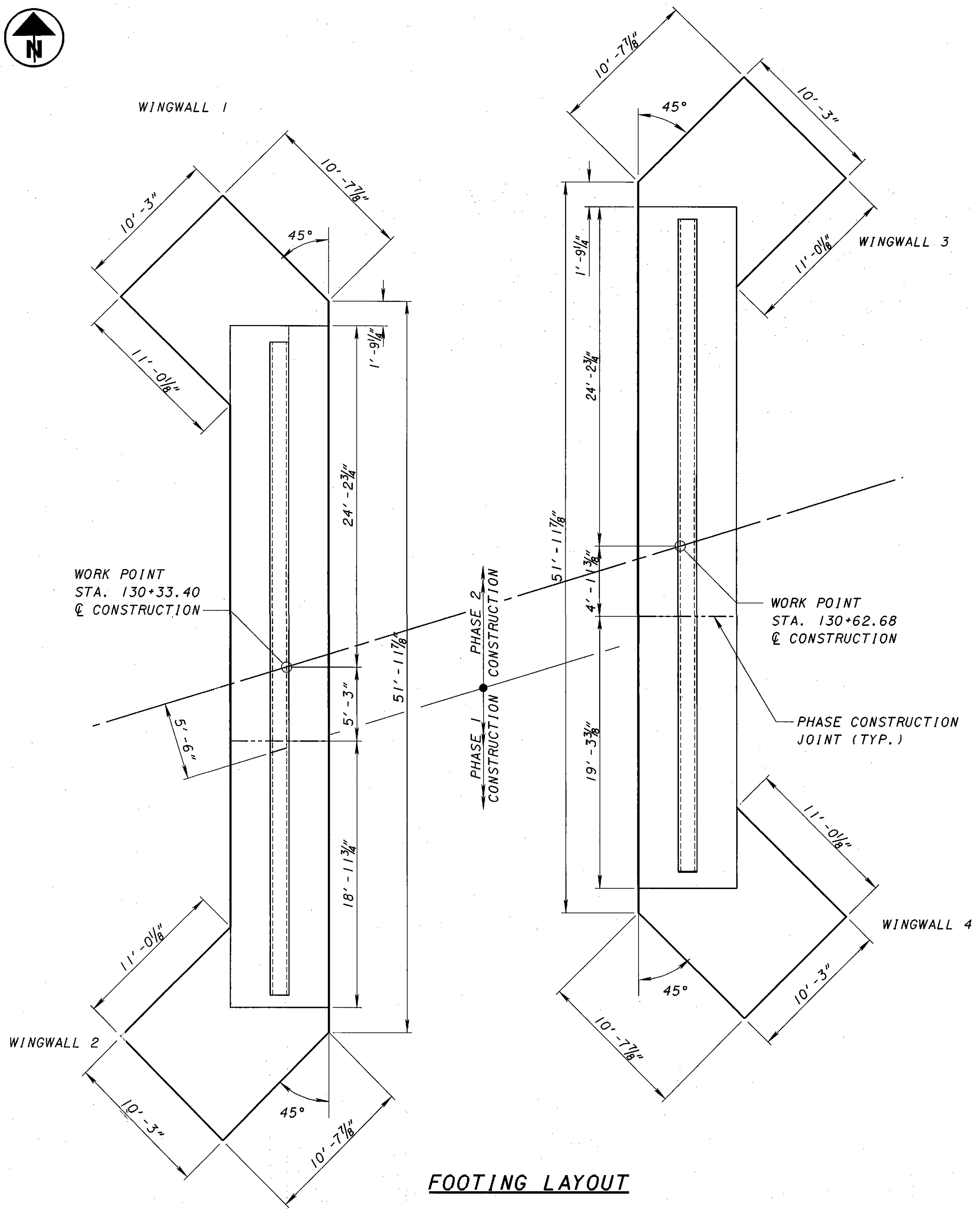
- ① SER. OF 7 @ 1'-0"
- ② 1 SPACE @ 1'-7"
- ③ 7 SPACES @ 1'-7"



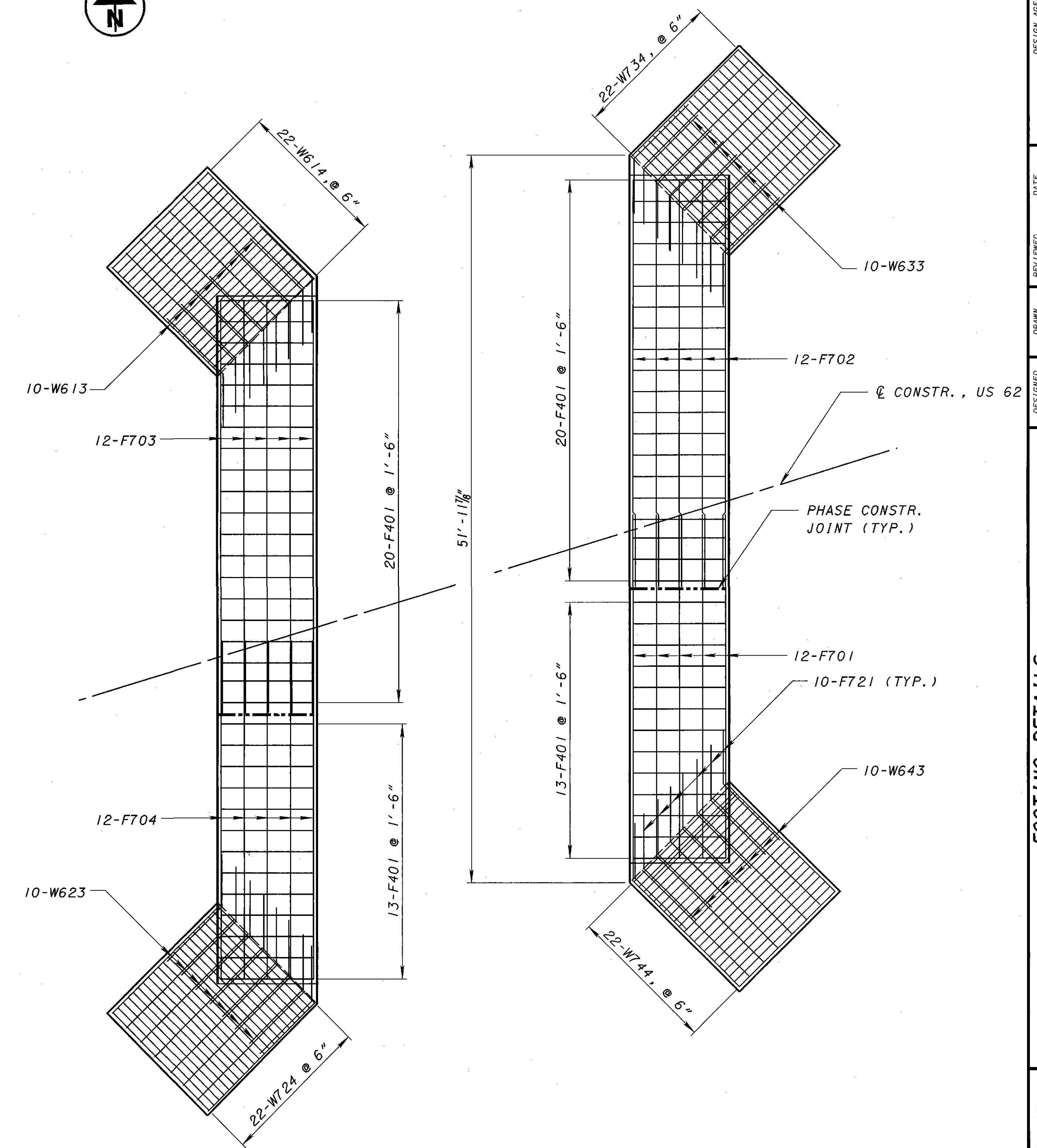
NOTES:

1. ITEM 518 - POROUS BACKFILL w/FILTER FABRIC 1'-6" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 1' BELOW THE EMBANKMENT SURFACE AND Laterally TO THE ENDS OF THE WINGWALLS. PLACE TWO CUBIC FEET OF BAGGED No. 3 AGGREGATE AT EACH WEEPHOLE. BAGGED AGGREGATE WILL BE INCLUDED WITH POROUS BACKFILL FOR PAYMENT. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND EXCAVATION PLACED ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL, AND RETURN 6" UP THE BACK FACE OF WINGWALL.
2. 1" PREFORMED EXPANSION JOINT FILLER (PEJF) SHALL EXTEND FROM TOP OF FOOTING TO TOP OF WINGWALL/PRECAST CULVERT JOINT.
3. FOR WEEPHOLE ELEVATIONS, SEE SHEET 4/11

Q:\030\B\MAD-62-0247\BRC06_MD062MD3.dgn



FOOTING LAYOUT



FOOTING REINFORCING PLAN

O:\03016\MAD-62-0247\...NBRG10_MD062FP1.dgn

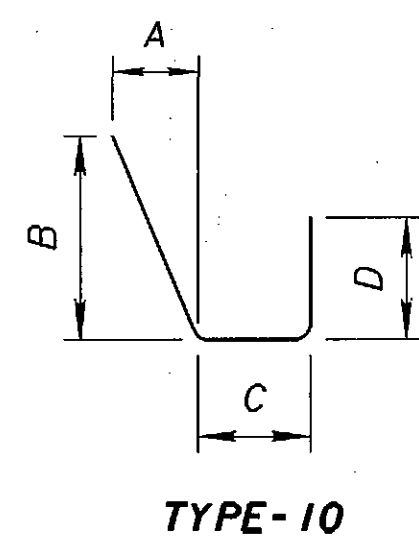
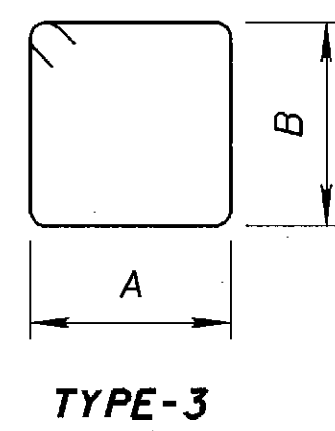
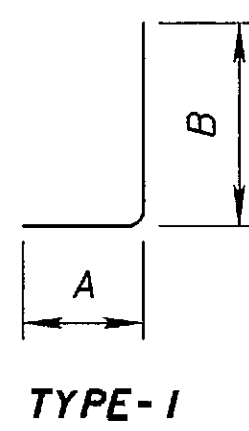
DESIGNED	RHM	CHECKED	RG
DRAWN	RHM	REVISED	01-07-05
REVIEWED	SAN	DATE	7/04
STRUCTURE FILE NUMBER	4202084		

FOOTING DETAILS
 BRIDGE NO. MAD-62-0247
 OVER SONOMA DITCH

MAD-62-(2.47)
 (2.55)(2.80)
 PID 12767

Q:\16\BRIDGES\MAD-62-0280\BRG11_MD06ZRL1.dgn

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	REAR	FWD	TOTAL				A	B	C	D	E	R	INC.
WINGWALL 1													
W511	2		2	12'-4"	32	STR							
W512	6		6	8'-4"	TO							8"	
1 SERIES OF 6				11'-8"	40	STR							
W513	9		9	2'-10"	24	10	10"	10"	1'-8"	--			
W514	9		9	2'-4"	21	10	10"	10"	1'-2"	--			
W515	3		3	2'-1"	TO							1'-6"	
1 SERIES OF 3				8'-1"	23	STR							
W516	3		3	3'-1"	TO							1'-6"	
1 SERIES OF 3				9'-1"	25	STR						1'-6"	
W517	6		6	8'-1"		STR							
W518	6		6	9'-1"	56	STR							
W519	1		1	9'-2"	10	STR							
W520	1		1	10'-2"	11	STR							
W611	2		2	12'-4"	46	STR							
W612	6		6	8'-4"	TO							8"	
1 SERIES OF 6				11'-8"	67	STR							
W613	10		10	9'-6"	135	STR							
W614	12		12	8'-6"	153	STR							
W711	16		16	8'-9"	252	1	6'-3"	2'-8"					
WINGWALL 2													
W521	4		4	12'-4"	42	STR							
W522	4		4	10'-4"	TO							6"	
1 SERIES OF 4				11'-10"	37	STR							
W523	9		9	2'-1"	19	10	10"	10"	11"	--			
W524	2		2	3'-1"	TO							3'-0"	
1 SERIES OF 2					13	STR							
W525	2		2	2'-1"	TO							3'-0"	
1 SERIES OF 2				8'-1"	11	STR							
W526	8		8	8'-1"	67	STR							
W527	8		8	9'-1"	77	STR							
W528	1		1	8'-9"	9	10	5'-10"	2'-2"	2'-1"	--			
W529	1		1	9'-9"	10	10	5'-10"	2'-2"	3'-1"	--			
W530	9		9	2'-3"	21	2	10"	10"	13"				
W621	4		4	12'-4"	61	STR							
W622	4		4	10'-10"	TO							6"	
1 SERIES OF 4				11'-10"	52	STR							
W623	10		10	9'-0"	135	STR							
W624	12		12	8'-6"	153	STR							
W721	18		18	8'-9"	252	1	6'-3"	2'-8"					



MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	REAR	FWD	TOTAL				A	B	C	D	E	R	INC.
WINGWALL 3													
W531		4	4	12'-4"	42	STR							
W532		4	4	10'-4"	37	STR						6"	
1 SERIES OF 4				11'-10"									
W533		9	9	2'-1"	19	10	10"	10"	11"	--			
W534		2	2	3'-1"	13	STR						3'-0"	
SERIES				9'-1"									
W535		2	2	2'-1"	11	STR						3'-0"	
1 SERIES OF 2				8'-1"									
W536		8	8	8'-1"	67	STR							
W537		8	8	9'-1"	75	STR							
W538		1	1	8'-9"	9	10	5'-10"	2'-2"	2'-1"	--			
W539		1	1	9'-9"	10	10	5'-10"	2'-2"	3'-1"	--			
W540		9	9	2'-3"	21	10	10"	10"	13"	--			
W631		4	4	12'-4"	61	STR							
W632		4	4	10'-4"	52	STR						6"	
1 SERIES OF 4				11'-10"									
W633		10	10	9'-0"	135	STR							
W634		12	12	8'-6"	153	STR							
W731		18	18	8'-9"	252	3	6'-3"	2'-8"					
WINGWALL 4													
W541		2	2	12'-4"	42	STR							
W542		6	6	10'-4"	37	STR						3 1/2"	
1 SERIES OF 6				11'-10"									
W544		2	2	3'-1"	13	STR							
W545		2	2	2'-11"	11	STR						6'-0"	
1 SERIES OF 2				8'-11"									
W546		8	8	8'-11"	67	STR							
W547		8	8	9'-1"	75	STR							
W548		1	1	8'-9"	9	10	5'-10"	2'-2"	2'-1"	--			
W549		1	1	9'-9"	10	10	5'-10"	2'-2"	3'-1"	--			
W550		8	8	2'-4"	19	10	10"	10"	1'-2"	--			
W641		2	2	11'-6"	61	STR							
W642		3	3	10'-4"	39	STR						1'-6"	
1 SERIES OF 3				11'-10"									
W643		10	10	9'-0"	135	STR							
W644		12	12	8'-6"	153	STR							
W741		14	14	8'-9"	252	STR							
CULVERT FOOTING													
F401	33	33	66	18'-10"	850	3	6'-8"	2'-7"					
F701		12	12	24'-2"	554	STR							
F702		12	12	28'-11"	709	STR							
F703	12		12	29'-2"	715	STR							
F704	12		12	23'-1"	566	STR							
F721	20	20	40	10'-3"	238	10	3'-3"	3'-3"	5'-8"	--		4"	
4 SERIES OF 10				13'-0"			5'-2"	5'-2"					

REINFORCING STEEL LIST
 MAD-62-(2.47)
 (2.55) (2.80)
 PID 12767
 BRIDGE No. MAD-62-0247
 OVER SONOFA DITCH
 DESIGN AGENCY
PRIME
 ENGINEERING & ARCHITECTURE, INC.
 DATE 7/04
 REVIEWED SAN
 DRAWN RHM
 CHECKED RG
 STRUCTURE FILE NUMBER 4202084
 01-07-05