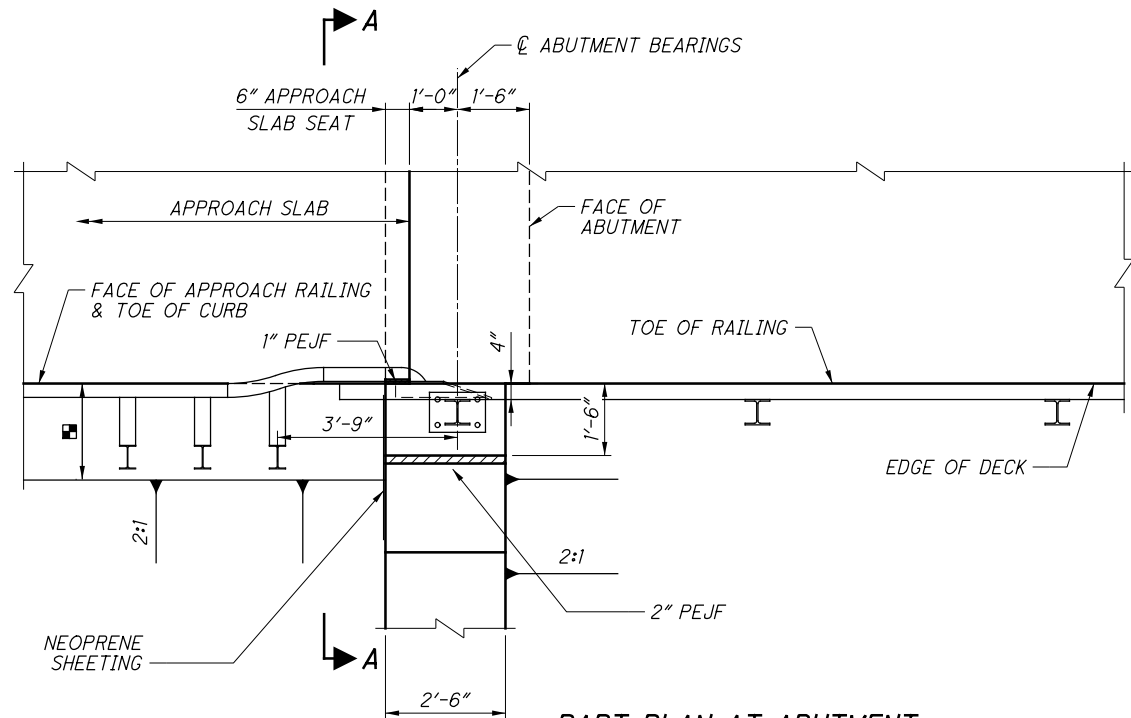
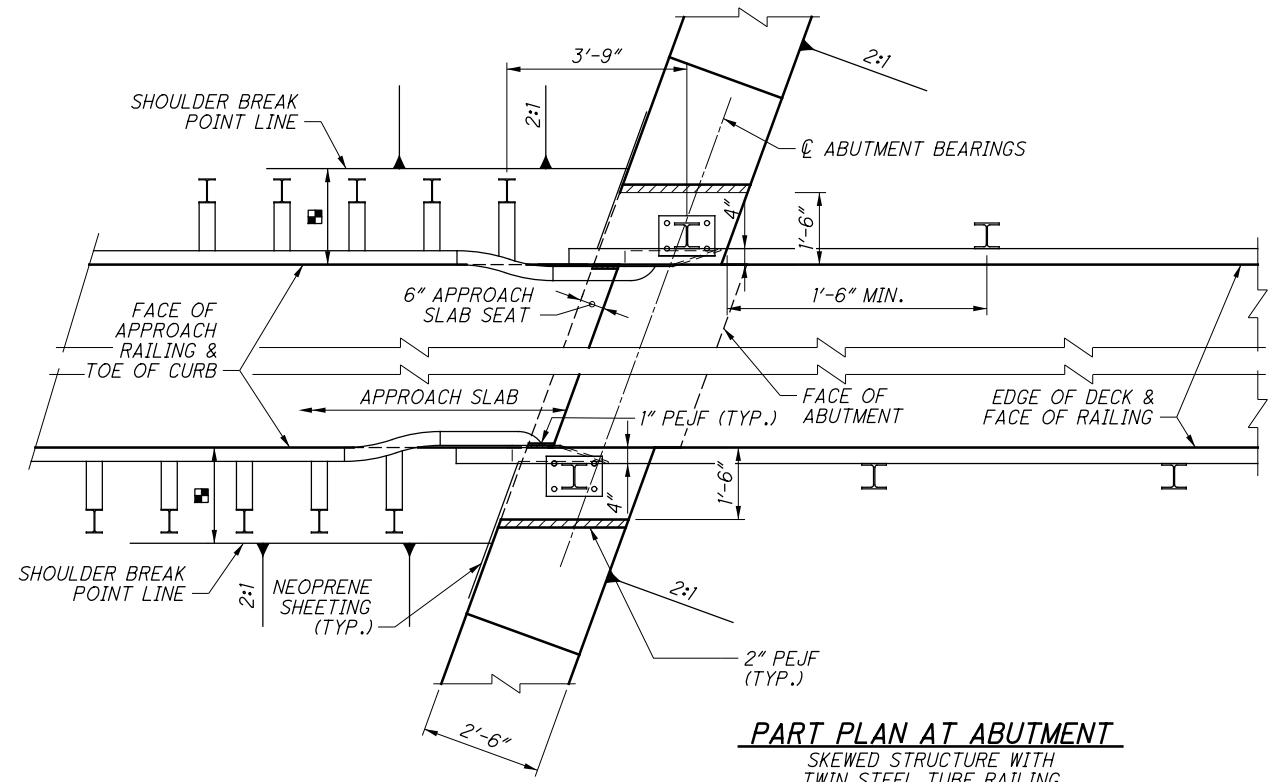


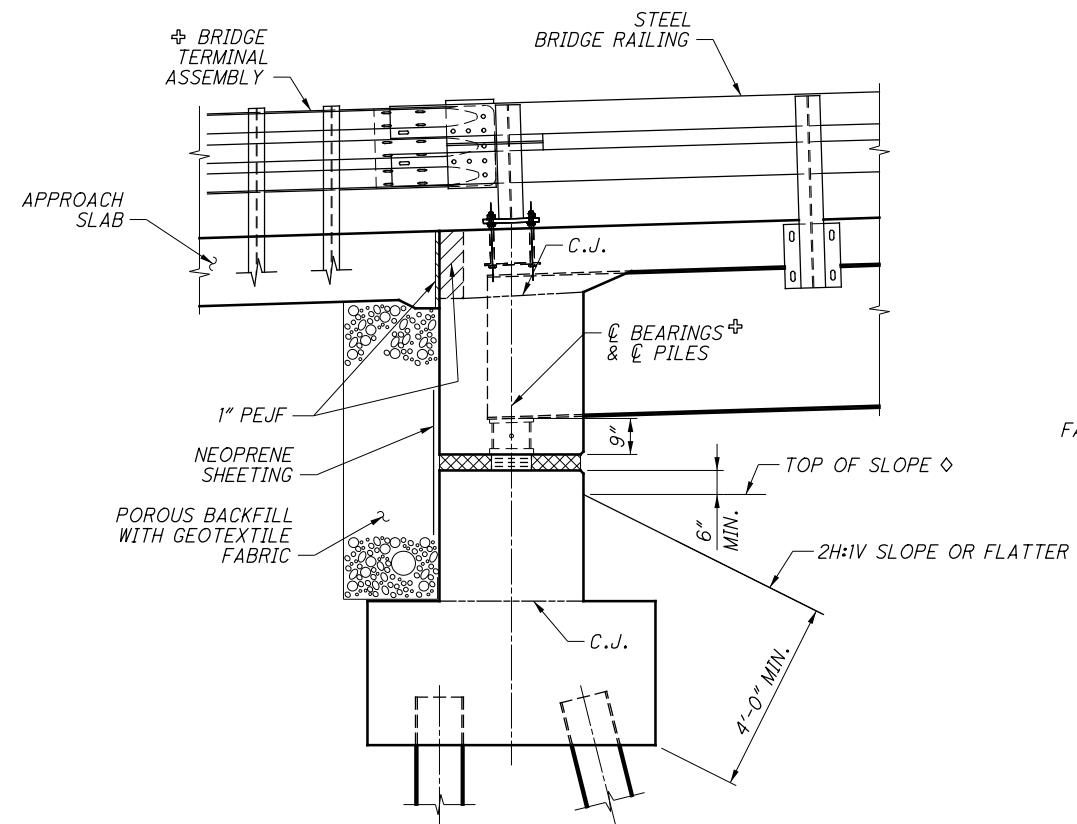
- NOTES/LEGEND:**
- ◇ - TOP OF SLOPE: ON SUPERELEVATED STRUCTURES, A LATERALLY SLOPING "TOP OF SLOPE" MAY BE USED TO AVOID EXCESSIVELY LONG WINGWALL LENGTHS.
 - - SEE ROADWAY TYPICAL SECTIONS
 - ⊕ - FOR GUIDE PEDESTAL REQUIREMENTS SEE BRIDGE STANDARD DRAWING SICD-2-14.
 - C.J. - CONSTRUCTION JOINT. REFER TO BDM SECTION 304.2.3 FOR DESIGN REQUIREMENTS.
- FOR BRIDGE TERMINAL ASSEMBLY
SEE ROADWAY STANDARD
CONSTRUCTION DRAWING MGS-3.1



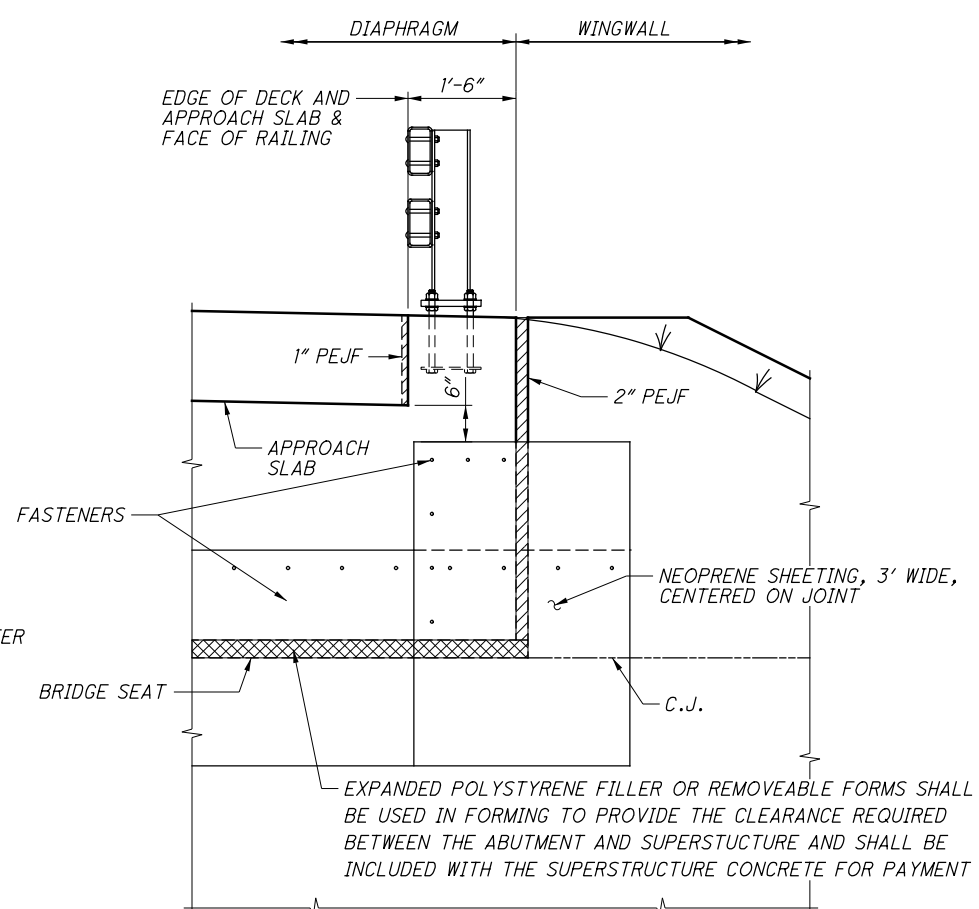
PART PLAN AT ABUTMENT
SQUARE STRUCTURE WITH
TWIN STEEL TUBE RAILING



PART PLAN AT ABUTMENT
SKEWED STRUCTURE WITH
TWIN STEEL TUBE RAILING

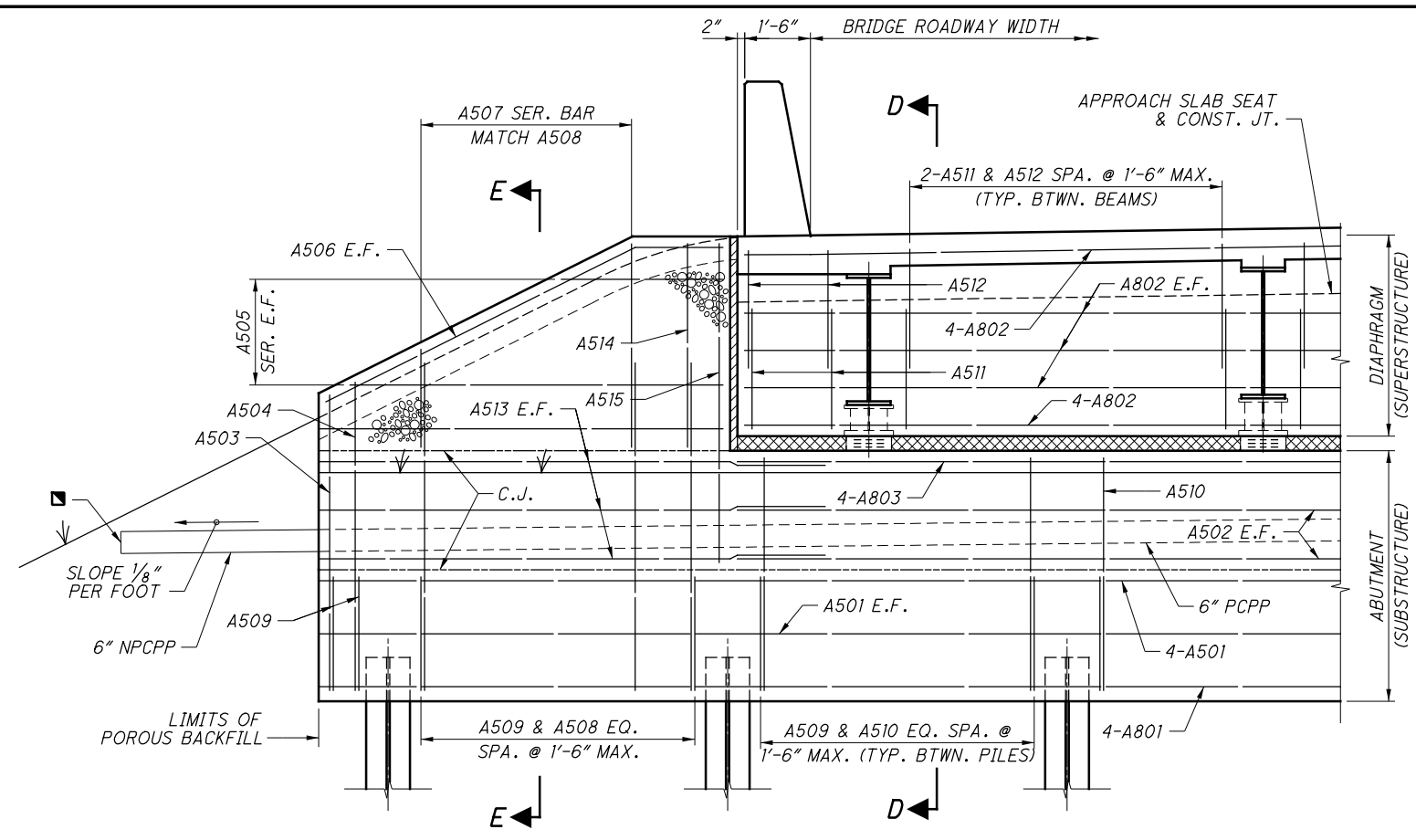


ELEVATION



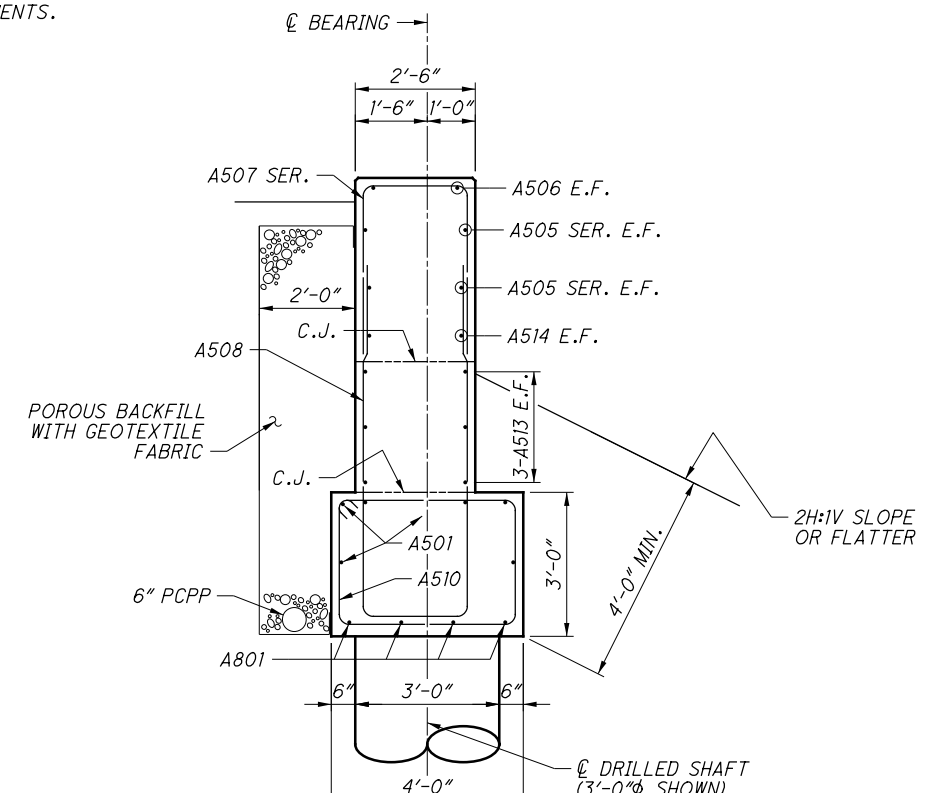
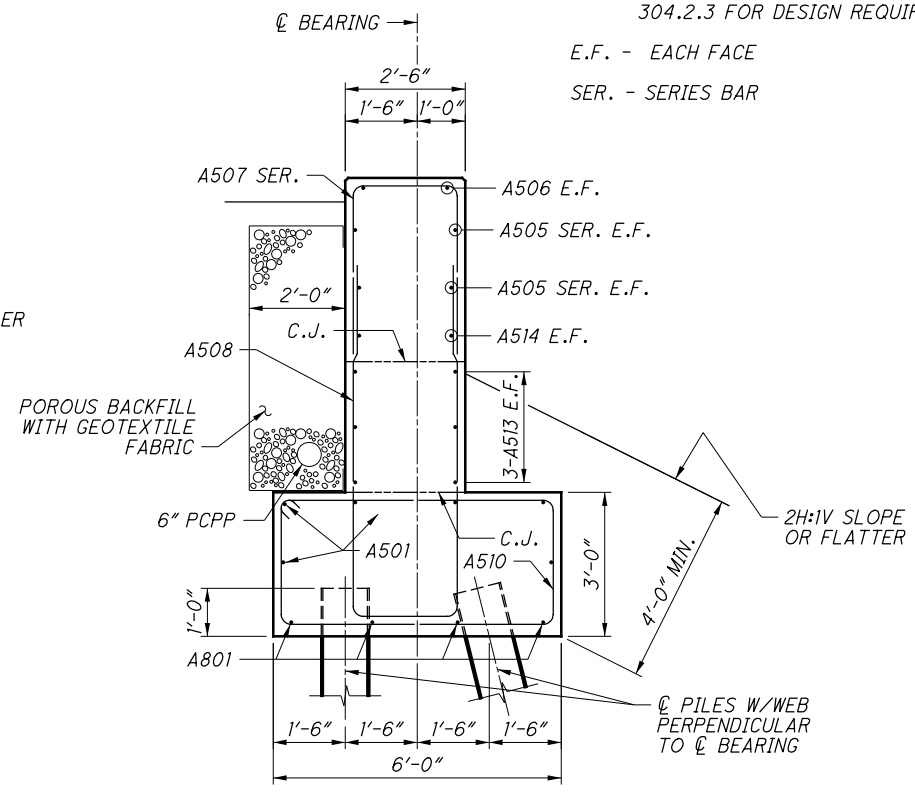
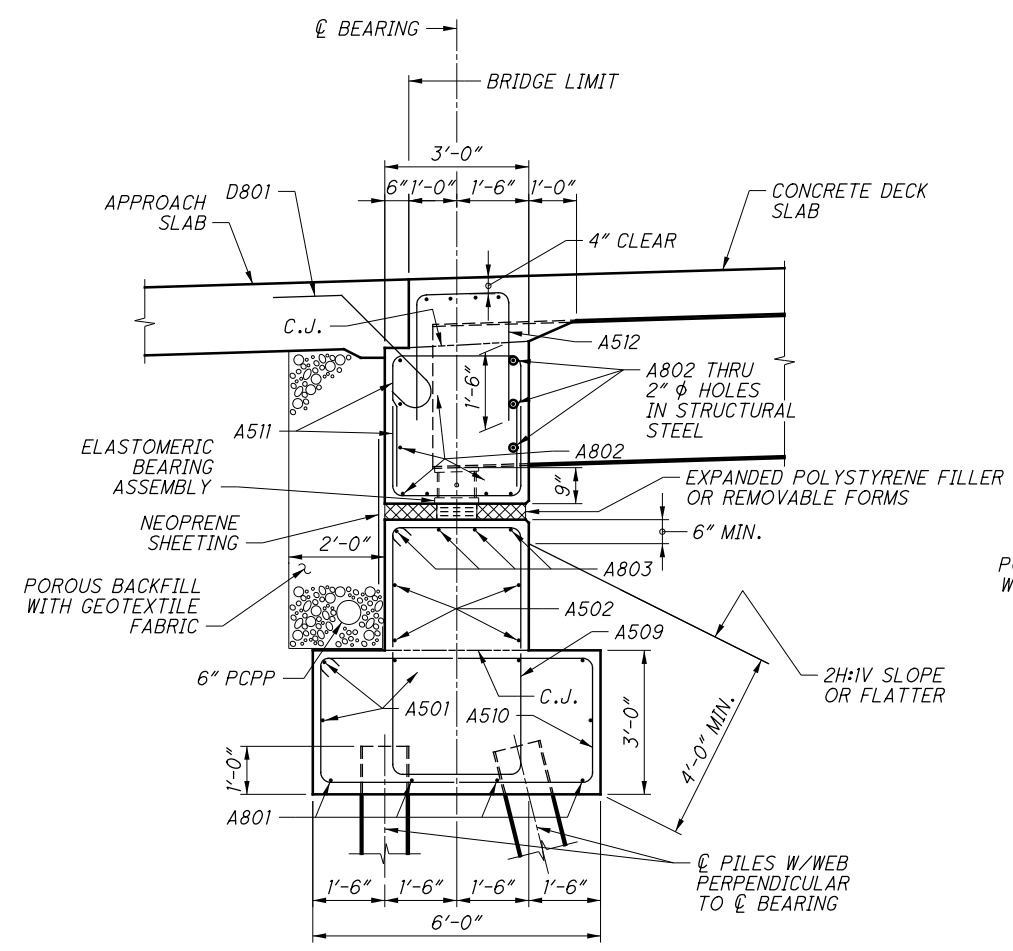
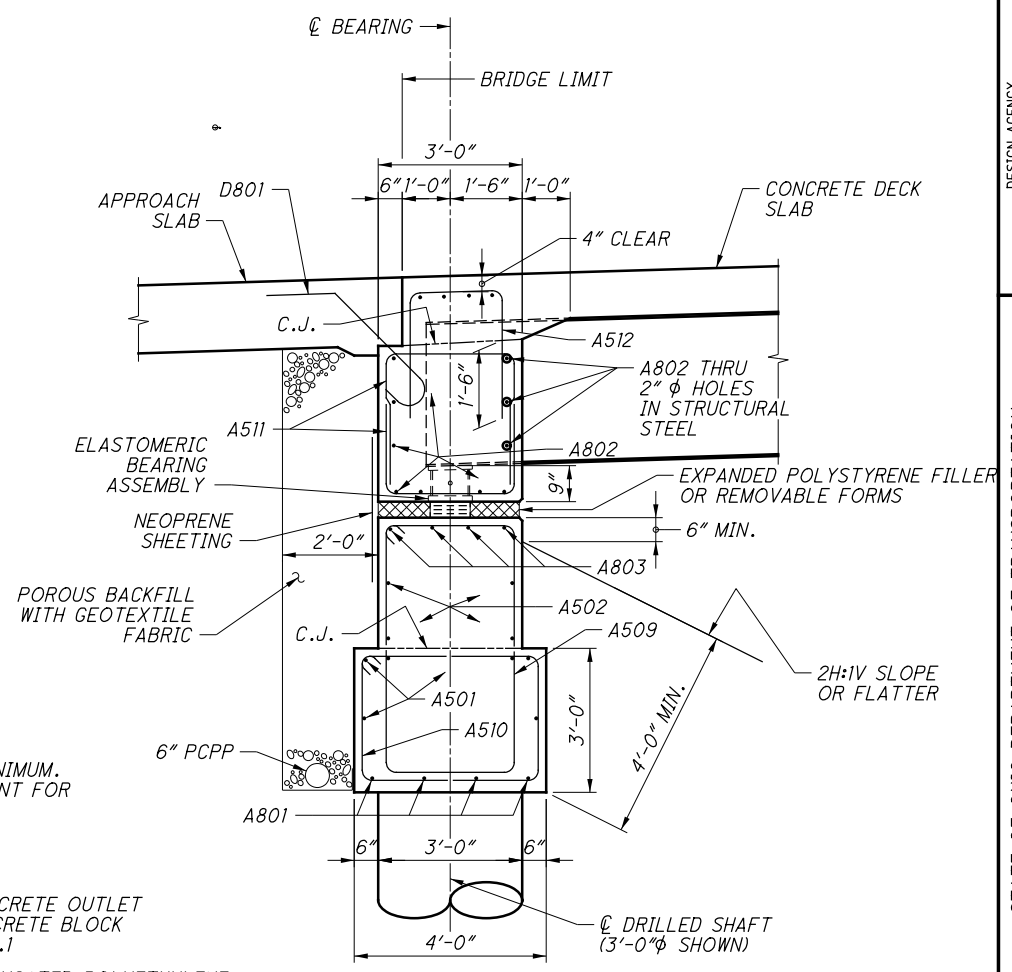
SECTION C-C

- NOTES/LEGEND:**
- ◇ - TOP OF SLOPE: ON SUPERELEVATED STRUCTURES, A LATERALLY SLOPING "TOP OF SLOPE" MAY BE USED TO AVOID EXCESSIVELY LONG WINGWALL LENGTHS.
 - - SEE ROADWAY TYPICAL SECTIONS
 - ⊕ - FOR GUIDE PEDESTAL REQUIREMENTS SEE BRIDGE STANDARD DRAWING SICD-2-14.
 - C.J. - CONSTRUCTION JOINT. REFER TO BDM SECTION 304.2.3 FOR DESIGN REQUIREMENTS.
- FOR BRIDGE TERMINAL ASSEMBLY
SEE ROADWAY STANDARD
CONSTRUCTION DRAWING MGS-3.1



NOTE:
REINFORCING STEEL SHOWN IS MINIMUM.
PROVIDE SUFFICIENT REINFORCEMENT FOR
THE INDIVIDUAL STRUCTURE.

- LEGEND:**
- - PROVIDE PRECAST CONCRETE OUTLET WITH TYPE 1 TIED CONCRETE BLOCK MAT AS SHOWN IN DM-1.1
 - NPCPP - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE S)
 - PCPP - PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE SP)
 - C.J. - CONSTRUCTION JOINT. REFER TO BDM SECTION 304.2.3 FOR DESIGN REQUIREMENTS.
 - E.F. - EACH FACE
 - SER. - SERIES BAR

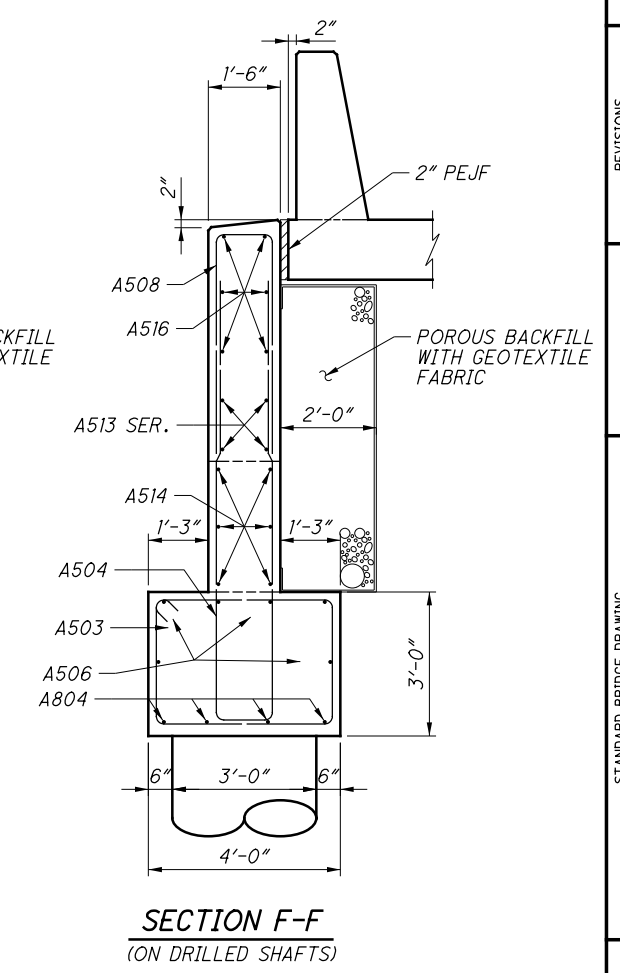
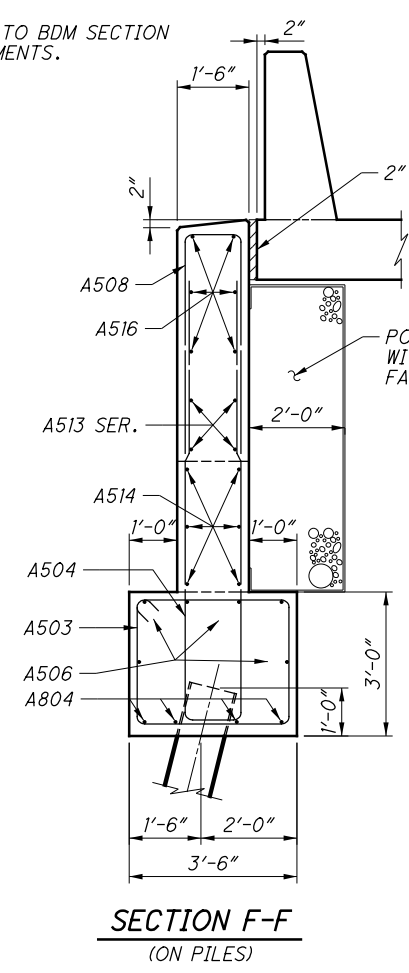
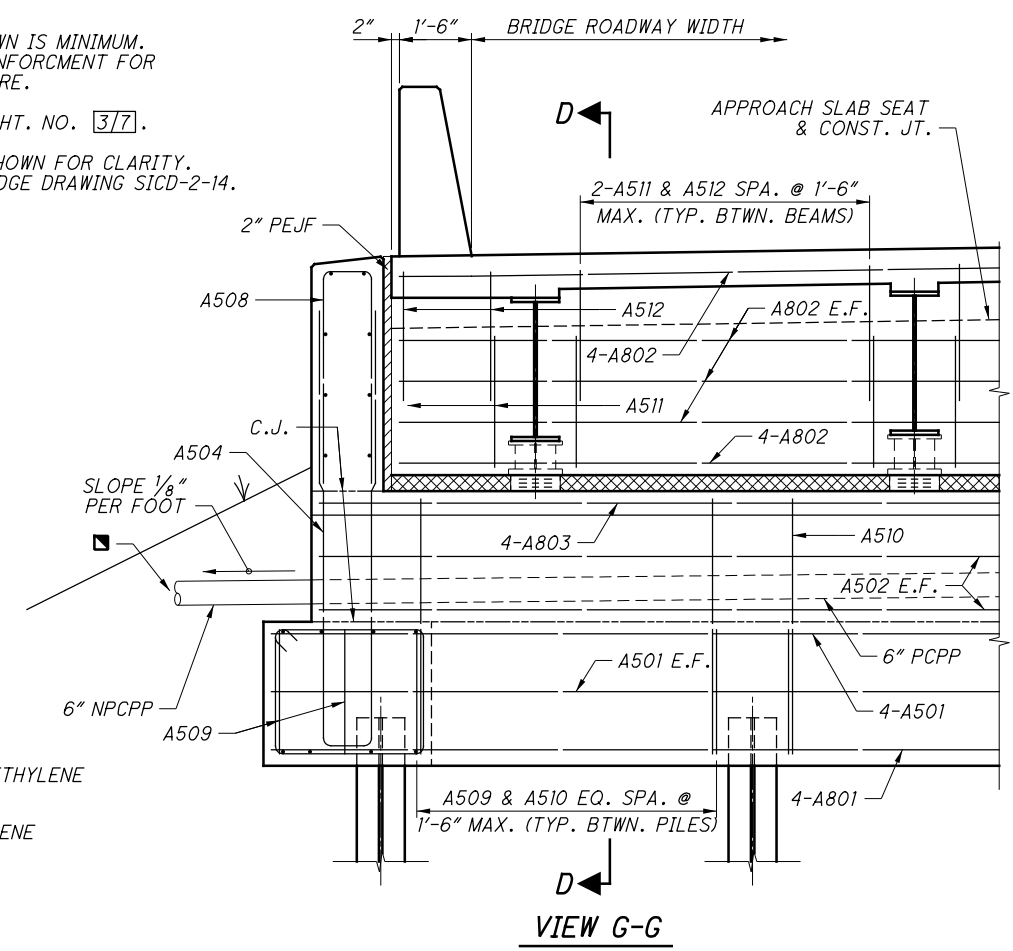
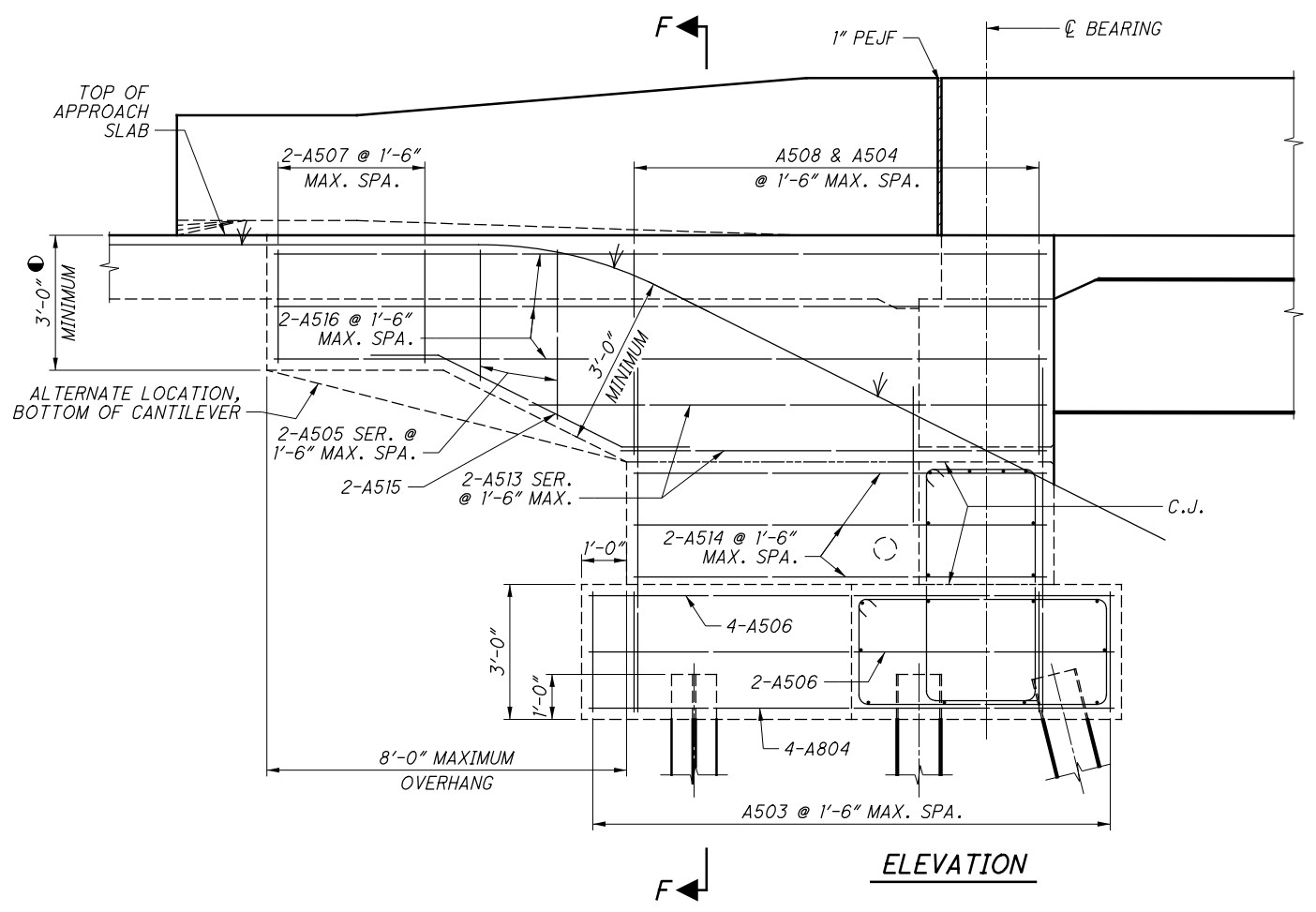
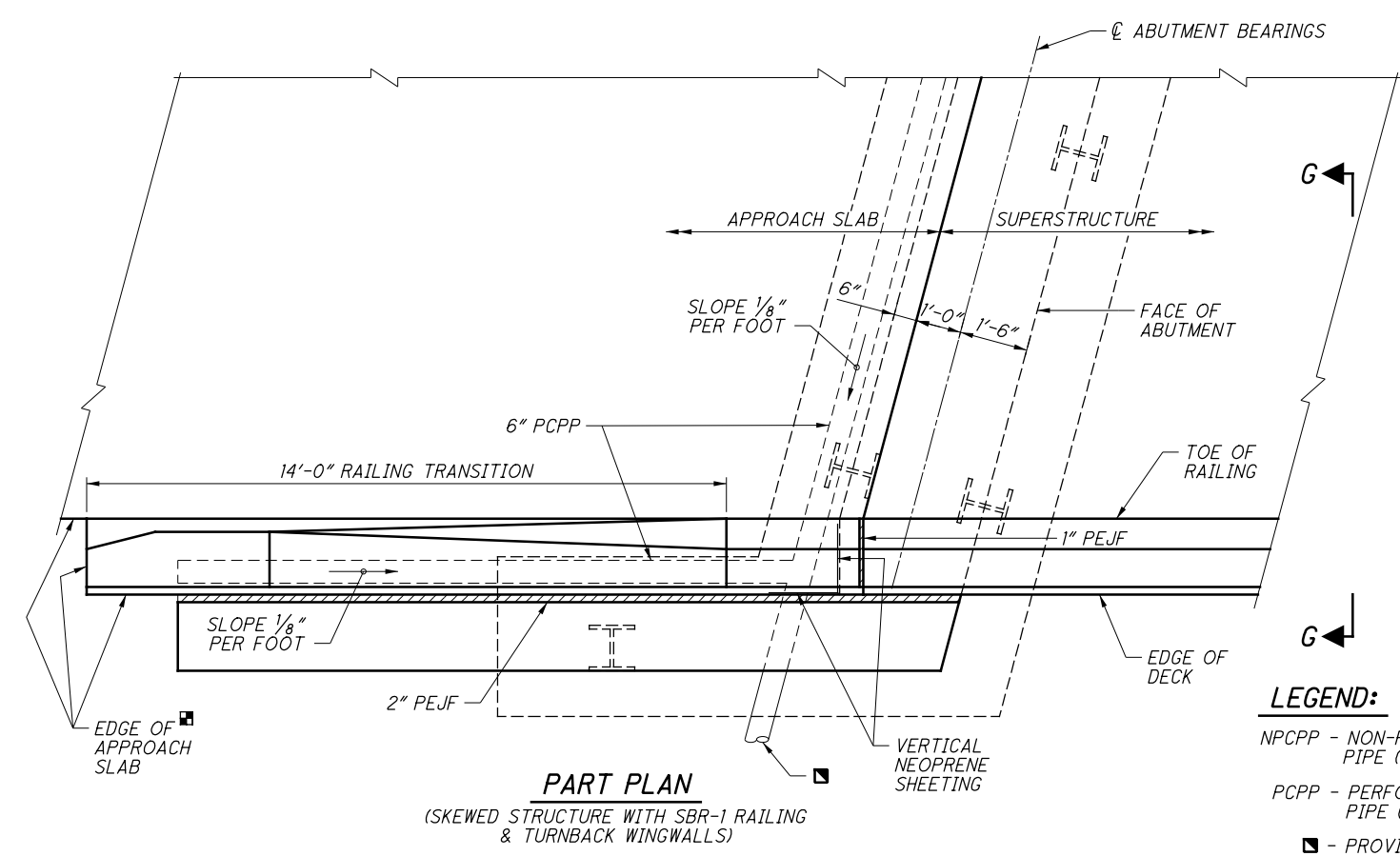


NOTE:

REINFORCING STEEL SHOWN IS MINIMUM.
PROVIDE SUFFICIENT REINFORCEMENT FOR
THE INDIVIDUAL STRUCTURE.

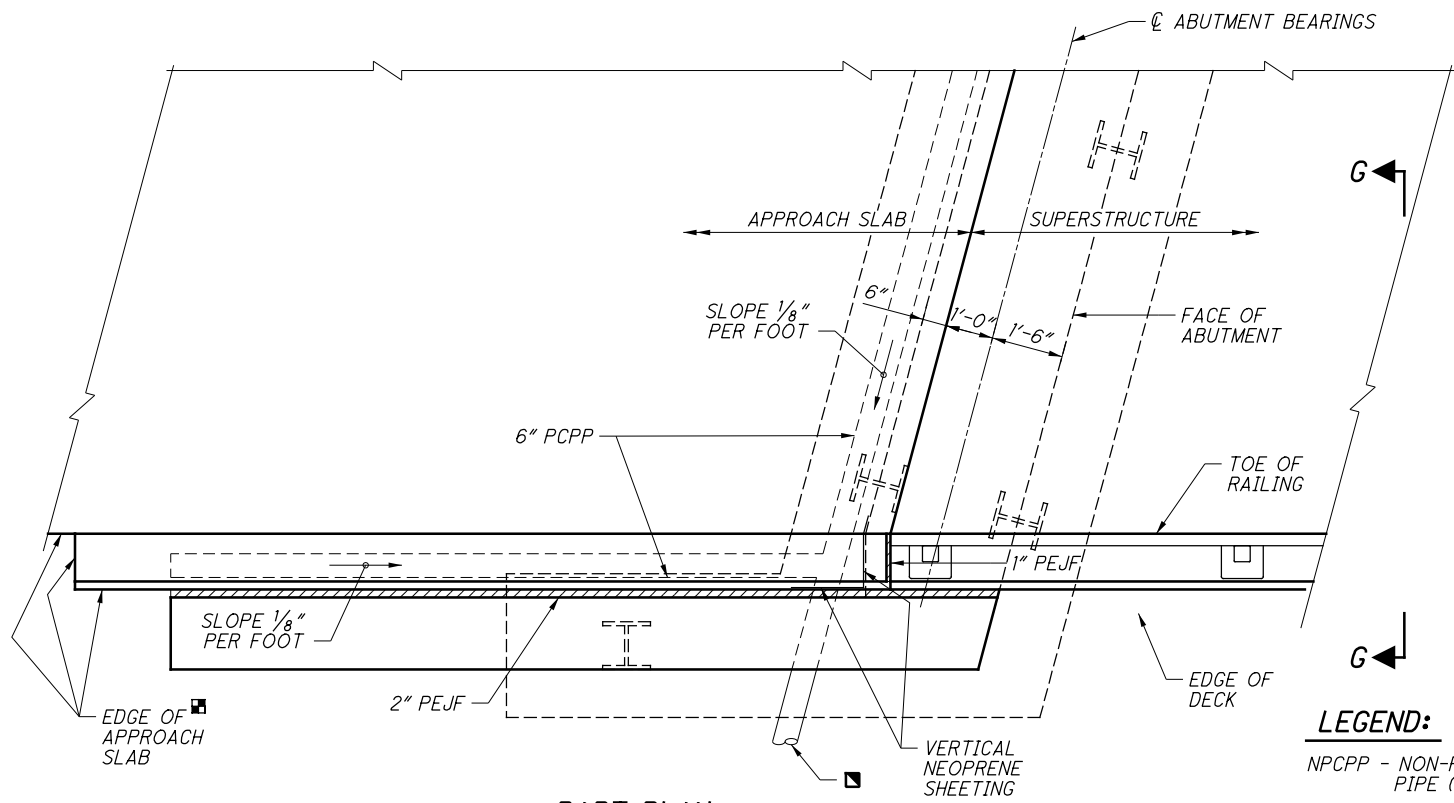
FOR SECTION D-D, SEE SHT. NO. **[37]**.

DIAPHRAGM GUIDE NOT SHOWN FOR CLARITY.
REFER TO STANDARD BRIDGE DRAWING SICD-2-14.

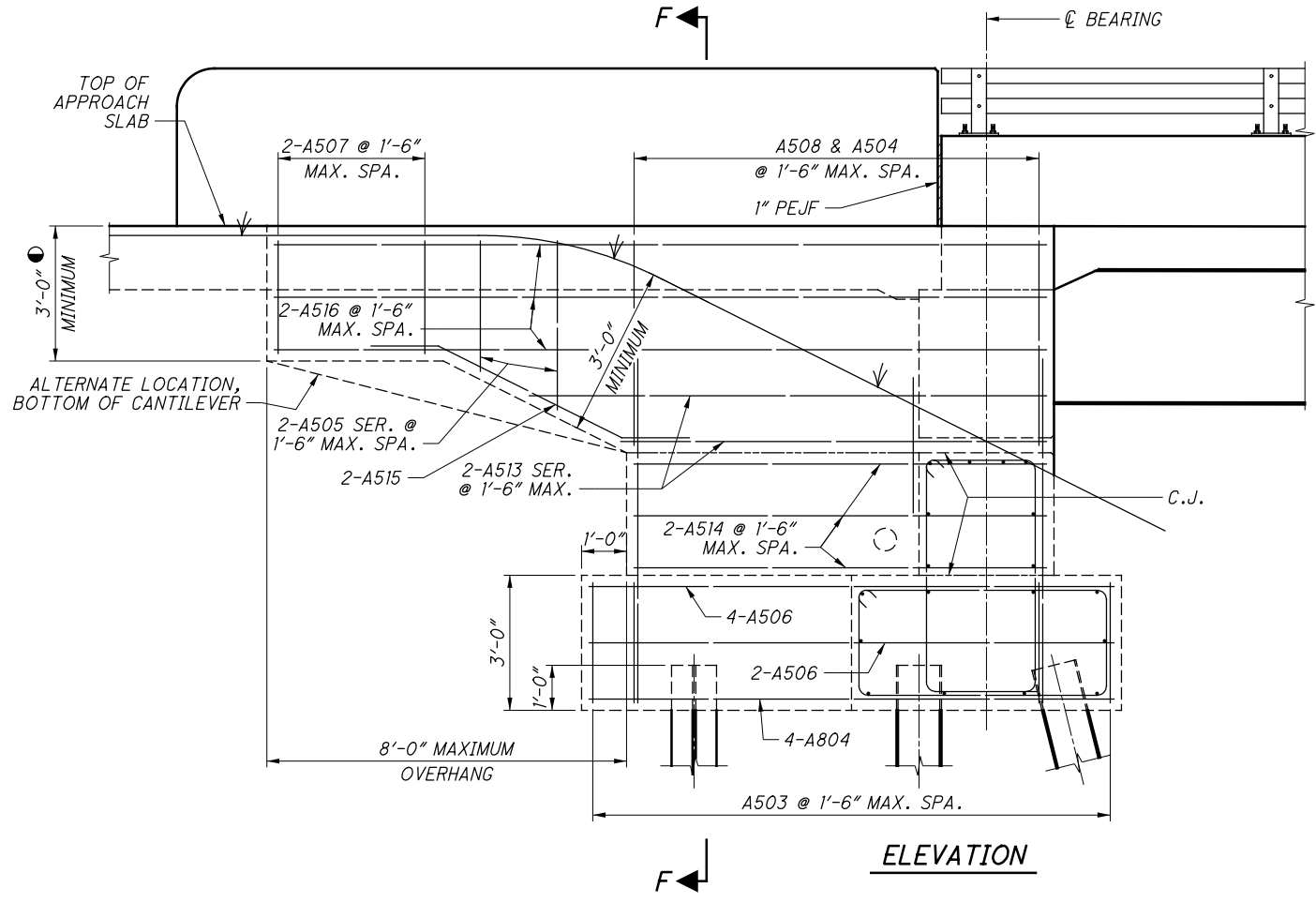


LEGEND:

- NPCPP - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE S)
- PCPP - PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE SP)
- ▣ - PROVIDE PRECAST CONCRETE OUTLET WITH TYPE 1 TIED CONCRETE BLOCK MAT AS SHOWN IN DM-1.1
- ▣ - SPECIAL DESIGN OF APPROACH SLAB MAY BE REQUIRED
- C.J. - CONSTRUCTION JOINT. REFER TO BDM SECTION 304.2.3 FOR DESIGN REQUIREMENTS.
- ⊙ - 3'-0" + CURB THICKNESS IF APPROACH SLAB IS CURBED



PART PLAN
(SKewed STRUCTURE WITH BR-2-15 RAILING & TURNBACK WINGWALLS)

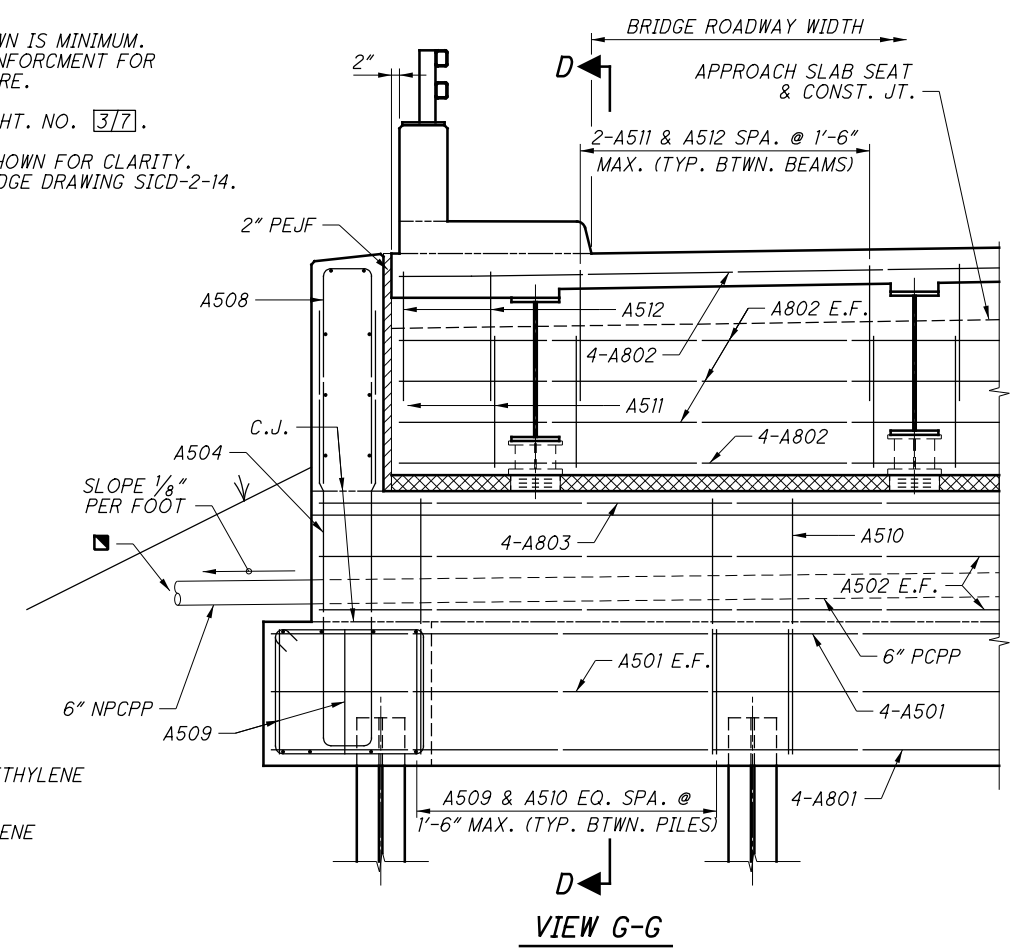


ELEVATION

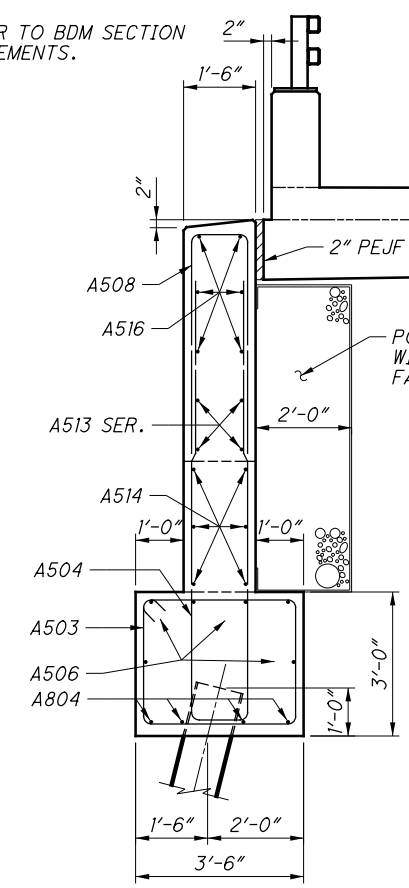
NOTE:
REINFORCING STEEL SHOWN IS MINIMUM. PROVIDE SUFFICIENT REINFORCEMENT FOR THE INDIVIDUAL STRUCTURE.
FOR SECTION D-D, SEE SH. NO. 3/7.
DIAPHRAGM GUIDE NOT SHOWN FOR CLARITY. REFER TO STANDARD BRIDGE DRAWING SICD-2-14.

LEGEND:

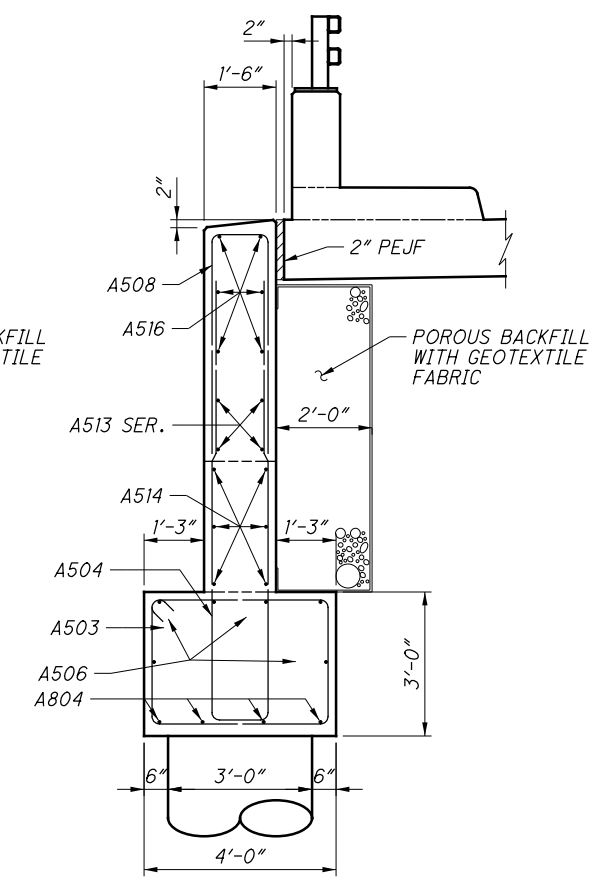
- NPCPP - NON-PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE S)
- PCPP - PERFORATED CORRUGATED POLYETHYLENE PIPE (C&MS 707.33, TYPE SP)
- ▣ - PROVIDE PRECAST CONCRETE OUTLET WITH TYPE 1 TIED CONCRETE BLOCK MAT AS SHOWN IN DM-1.1
- ▣ - SPECIAL DESIGN OF APPROACH SLAB MAY BE REQUIRED
- C.J. - CONSTRUCTION JOINT. REFER TO BDM SECTION 304.2.3 FOR DESIGN REQUIREMENTS.
- ⊙ - 3'-0" + CURB THICKNESS IF APPROACH SLAB IS CURBED



VIEW G-G



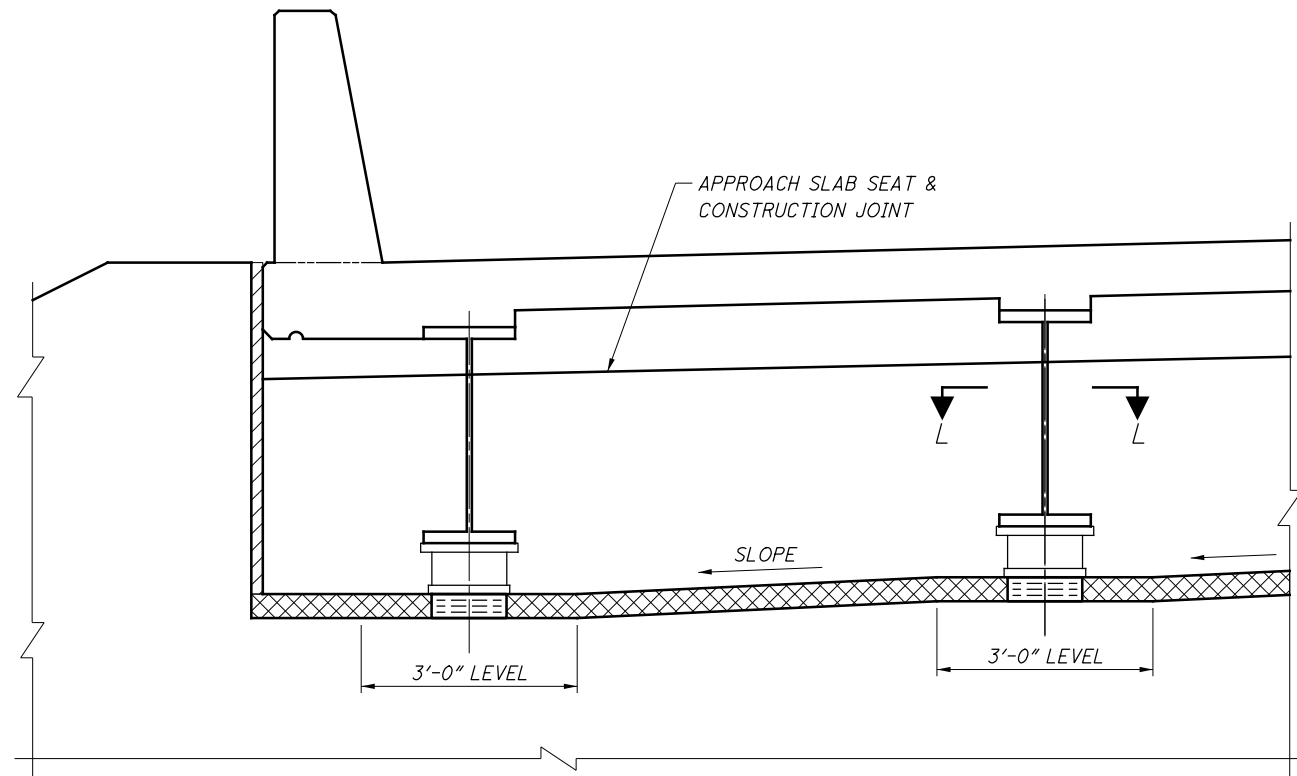
SECTION F-F
(ON PILES)



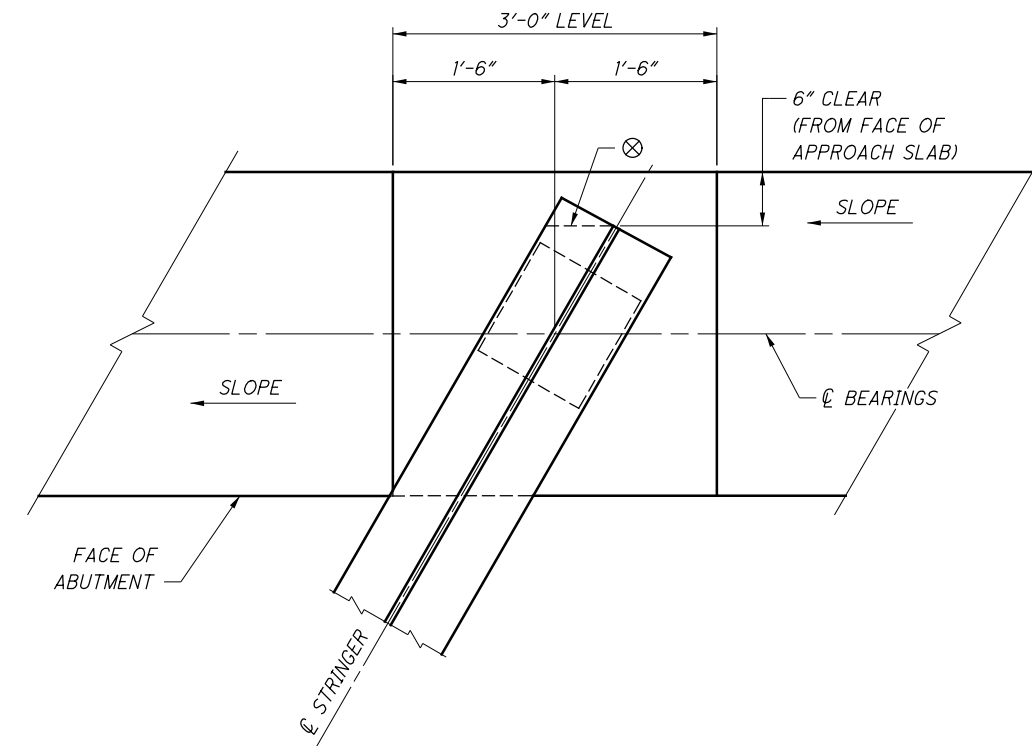
SECTION F-F
(ON DRILLED SHAFTS)

NOTE:

1. INCLUDE STEEL SHAPE (W OR HP) WITH ELASTOMERIC BEARING FOR PAYMENT.
2. SEE NOTES ON SHT. NO. [77] FOR ADDITIONAL REQUIREMENTS.

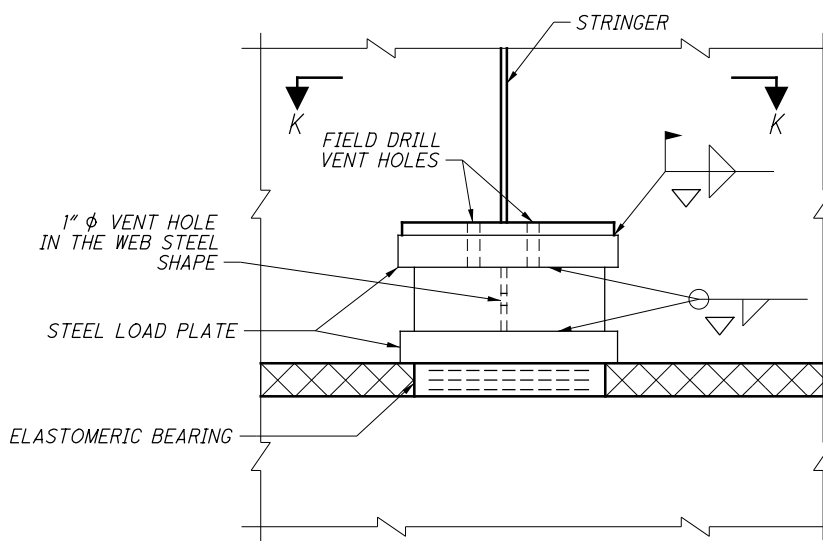


PART ELEVATION OF BEAM SEAT



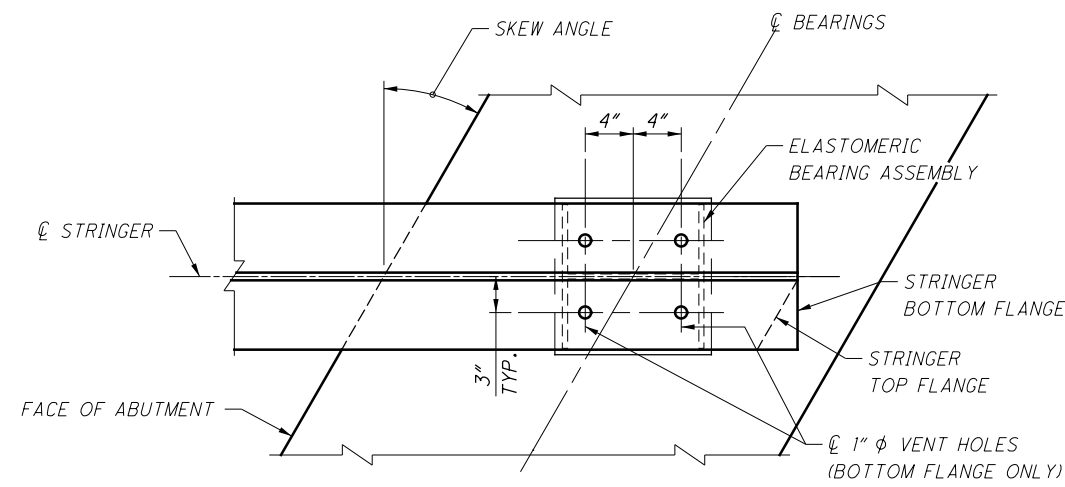
SECTION L-L

⊗ - CLIP ONLY THE TOP FLANGE TO MAINTAIN THE CLEARANCE

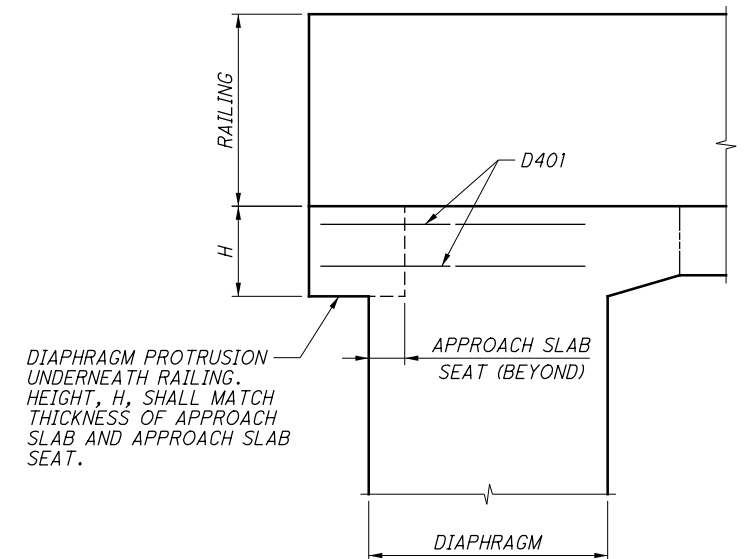


BEARING DETAIL

▽ - DESIGNER SHALL PROVIDE THE REQUIRED WELD SIZE IN THE PROJECT PLANS (5/16" MIN.)



SECTION K-K



DIAPHRAGM PROTRUSION UNDERNEATH RAILING. HEIGHT, H, SHALL MATCH THICKNESS OF APPROACH SLAB AND APPROACH SLAB SEAT.

RAILING DETAIL

(APPLIES AT BOTH ENDS OF ABUTMENT)
(BEAM & APPROACH RAILING NOT SHOWN)

REINFORCING STEEL FOR STRAIGHT WINGWALL ABUTMENTS

MARK	LENGTH	TYPE	A	B	C	BENDING DIAGRAMS
A801	*	STR		---	---	<p>TYPE 1</p> <p>TYPE 2</p> <p>TYPE 3 SEE STANDARD BRIDGE DWG. AS-1-15</p> <p>TYPE 4</p>
A802	*	STR		---	---	
A803	*	STR		---	---	
A501	*	STR		---	---	
A502	*	STR		---	---	
A503	*	2	2'-2"	*		
A504	*	2	2'-2"	*		
A505	SERIES BAR	STR				
A506	*	4	*	*	*	
A507	SERIES BAR	1	2'-2"	*		
A508	*	1	2'-2"	*		
A509	*	2	*	2'-7"		
A510	*	2	2'-8"	*		
A511	*	2	2'-8"	*		
A512	*	1	1'-10"	*		
A513	*	STR			---	
A514	*	1	2'-2"	*		
A515	*	1	2'-2"	*		
D801	*	3				

* DIMENSIONS VARY

REINFORCING STEEL FOR U-TYPE ABUTMENT

MARK	LENGTH	TYPE	A	B	C	BENDING DIAGRAMS
A801	*	STR		---	---	<p>TYPE 1</p> <p>TYPE 2</p> <p>TYPE 3 SEE STANDARD BRIDGE DWG. AS-1-15</p> <p>TYPE 4</p>
A802	*	STR		---	---	
A803	*	STR		---	---	
A804	*	STR		---	---	
A501	*	STR		---	---	
A502	*	STR		---	---	
A503	*	2	*	2'-7"		
A504	*	1	1'-2"	*		
A505	SERIES BAR	1	1'-2"	*		
A506	*	STR				
A507	*	1	1'-2"	*		
A508	*	1	1'-2"	*		
A509	*	2	*	2'-7"		
A510	*	2	2'-8"	*		
A511	*	2	2'-8"	*		
A512	*	1	1'-10"	*		
A513	SERIES BAR	STR				
A514	*	STR				
A515	*	4	*	*	*	
A516	*	STR				
D801	*	3				

* DIMENSIONS VARY

GENERAL:

THIS STANDARD DRAWING PROVIDES PREFERRED AND/OR TYPICAL DETAILS FOR SEMI-INTEGRAL ABUTMENTS. TREAT THE ABUTMENT DIMENSIONS, CONSTRUCTION JOINTS AND REINFORCEMENT SHOWN IN THIS DRAWING AS MINIMUM VALUES AND PERFORM A COMPLETE DESIGN FOR THE ABUTMENT.

DO NOT REFERENCE THIS DRAWING IN THE CONTRACT PLANS. RATHER, PROVIDE ALL INFORMATION REQUIRED TO CONSTRUCT THE ABUTMENT IN THE PROJECT PLANS.

DETAILS SHOWN ARE TYPICAL FOR A STEEL BEAM OR GIRDER BRIDGE WITH ELASTOMERIC BEARINGS.

LIMITATIONS:
THESE ABUTMENT DETAILS ARE INTENDED FOR USE ON STRAIGHT ALIGNMENT STRUCTURES WITHOUT LIMITATION ON THE SKEW ANGLE, A BRIDGE EXPANSION LENGTH UP TO 250'-0" AND/OR A TOTAL LENGTH OF 400'-0"

SEMI-INTEGRAL ABUTMENT DETAILS CAN BE USED ON WALL TYPE ABUTMENTS, SPILL THRU TYPE ABUTMENTS ON TWO OR MORE ROWS OF PILES, SPREAD FOOTING TYPE ABUTMENTS FOUNDED ON ROCK, OR ABUTMENTS ON DRILLED SHAFTS. THIS ABUTMENT DESIGN SHOULD NOT BE USED ON NEW STRUCTURES WITH SPREAD SPREAD FOOTINGS ON SOIL ARE EXPECTED TO CONTINUE TO HAVE SETTLEMENT.

HOLE LOCATIONS:
THE DESIGNER SHALL DETAIL THE HOLE LOCATIONS IN THE PROJECT PLANS. FIELD CUTTING OF THE HOLES WILL NOT BE PERMITTED.

ELASTOMERIC BEARING ASSEMBLY:
THE DESIGNER SHALL SPECIFY THE STEEL MATERIAL FOR THE LOAD PLATE AND THE STEEL SHAPE (W OR HP) SUPPORT MEMBER TO BE THE SAME GRADE OF STEEL AS THE MAIN STRUCTURAL MEMBERS. THE BEARINGS SHALL BE FURNISHED AND INSTALLED ACCORDING TO C&MS 516. THE DESIGNER SHALL SHOW ALL BEARING DETAILS, INCLUDING NOTES, IN THE PROJECT PLANS. THE STEEL SHAPE IS CONSIDERED A COMPONENT OF THE BEARING.

UTILIZE A WIDE FLANGE SHAPE IN LIEU OF AN HP SHAPE IN THE BEARING ASSEMBLY IF THE STRUCTURAL STEEL FOR THE MAIN STRUCTURAL MEMBERS ARE WEATHERING STEEL.

PAINTING OF STRUCTURAL STEEL:
REFER TO C&MS 514.17 FOR PAINTING OF THE STRUCTURAL STEEL REQUIREMENTS.