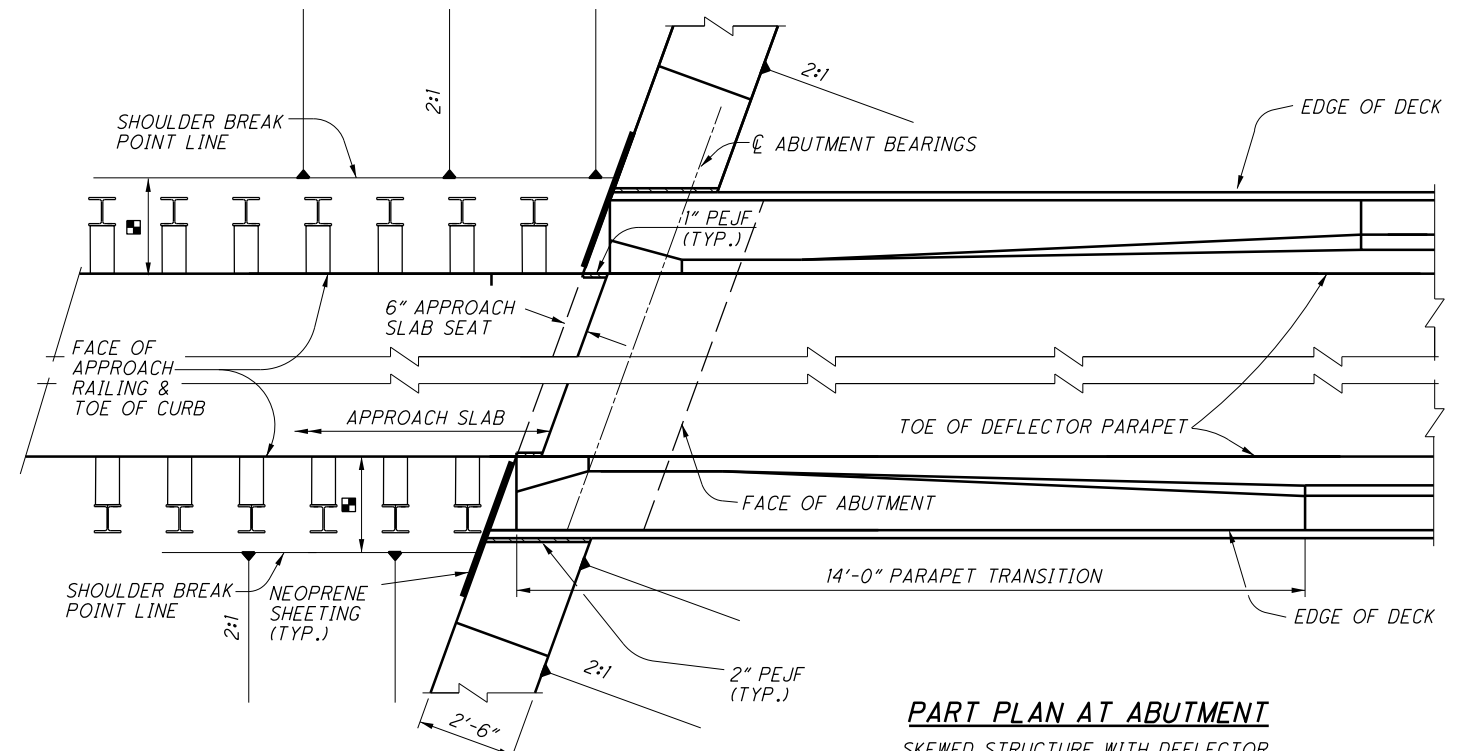
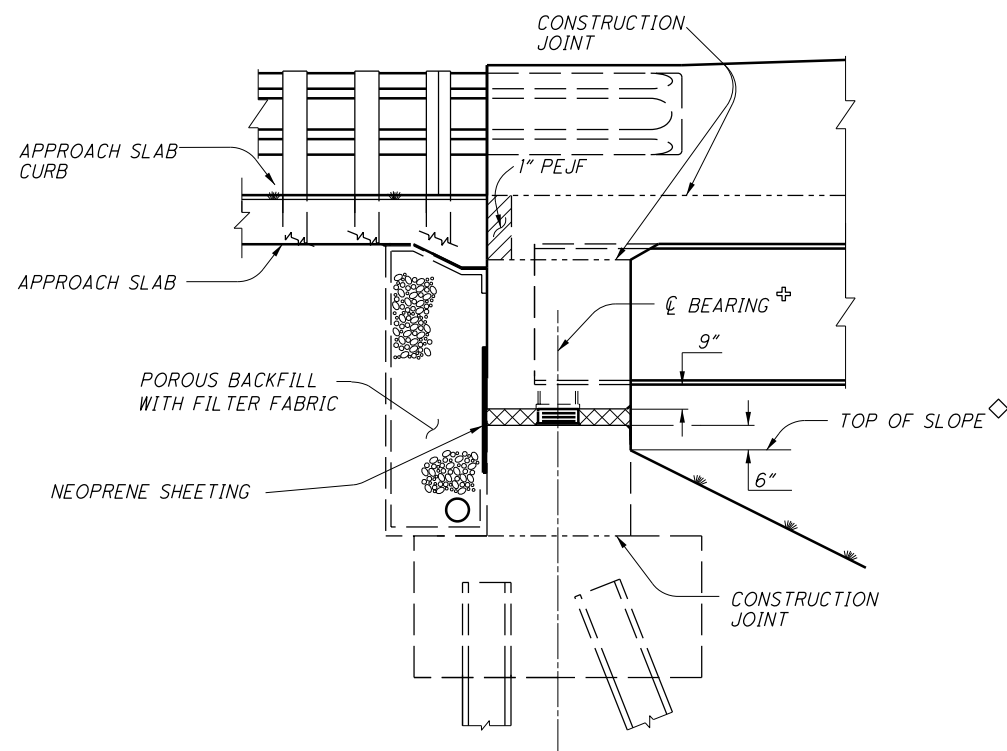


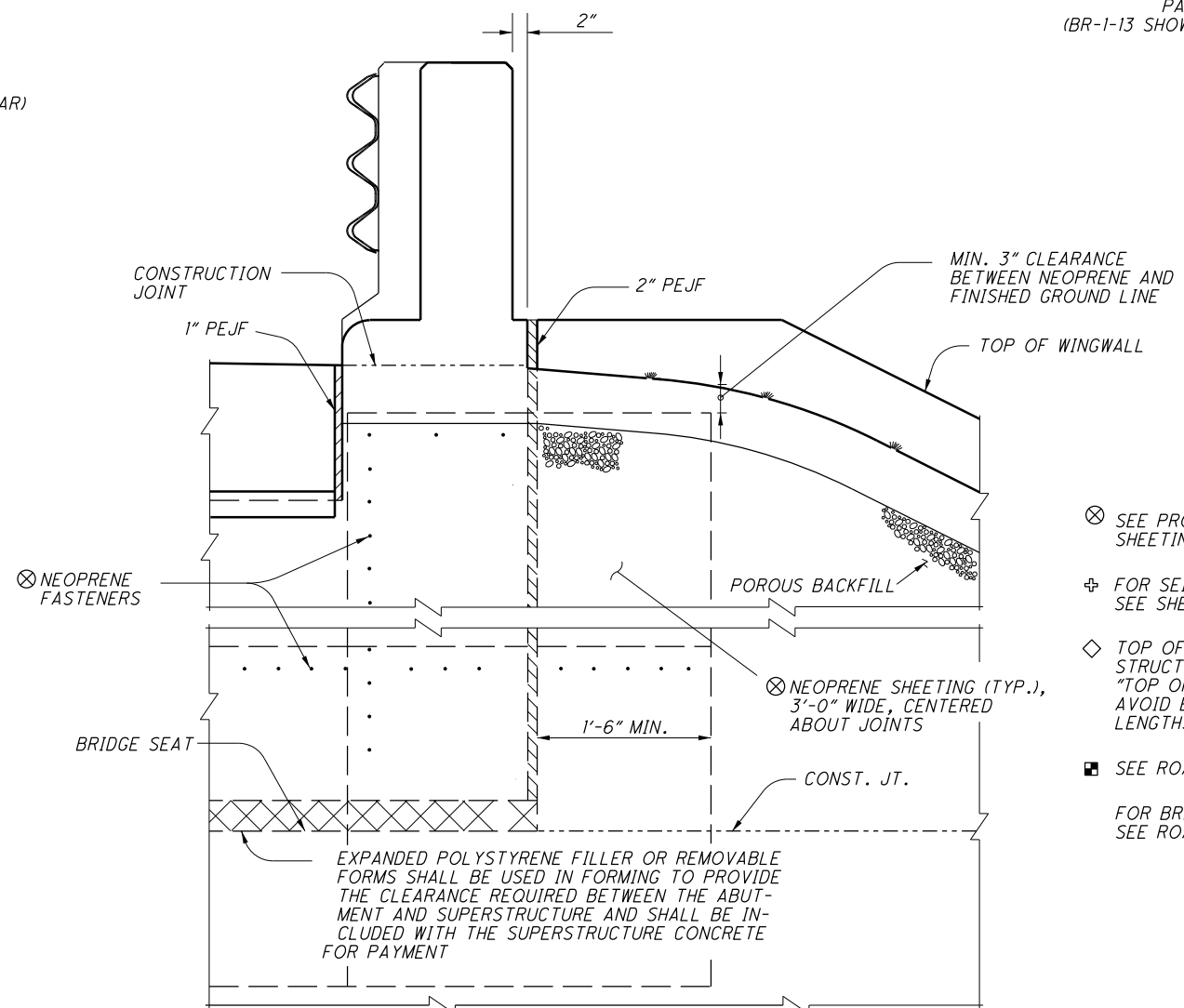
PART PLAN AT ABUTMENT
 SQUARE STRUCTURE WITH DEFLECTOR
 PARAPET TYPE RAILING
 (BR-1-13 SHOWN, SBR-1-13 SHALL BE SIMILAR)



PART PLAN AT ABUTMENT
 SKEWED STRUCTURE WITH DEFLECTOR
 PARAPET TYPE RAILING
 (BR-1-13 SHOWN, SBR-1-13 SHALL BE SIMILAR)



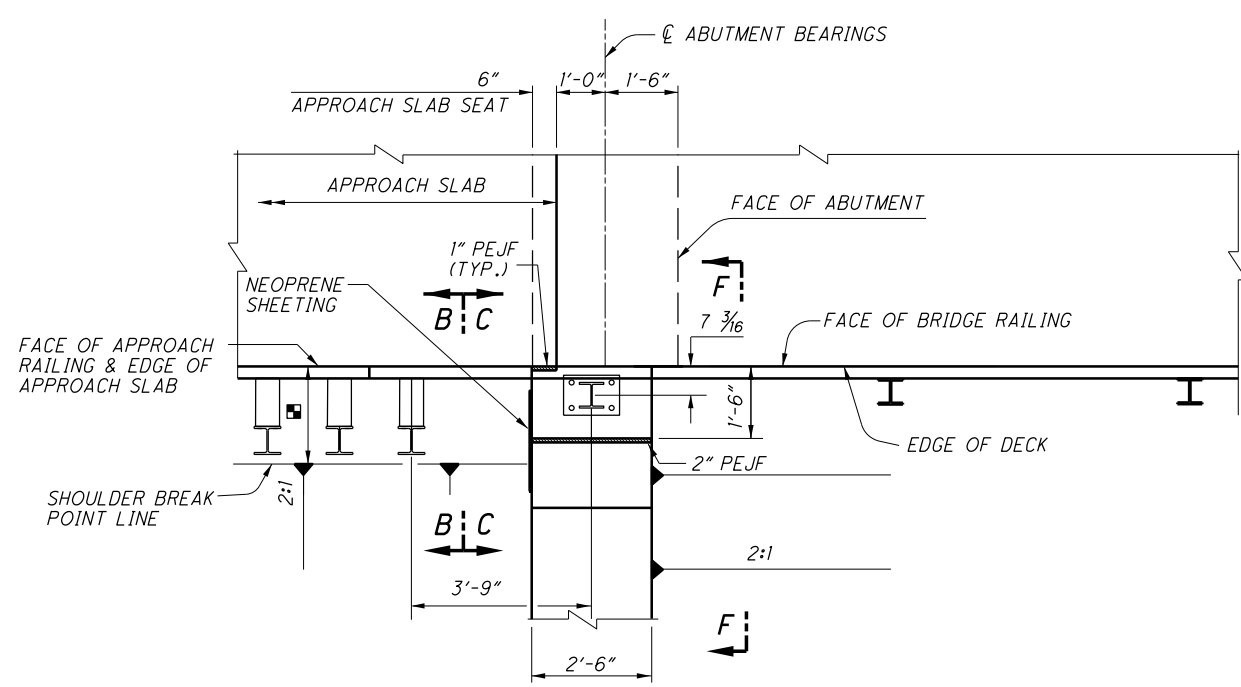
ELEVATION



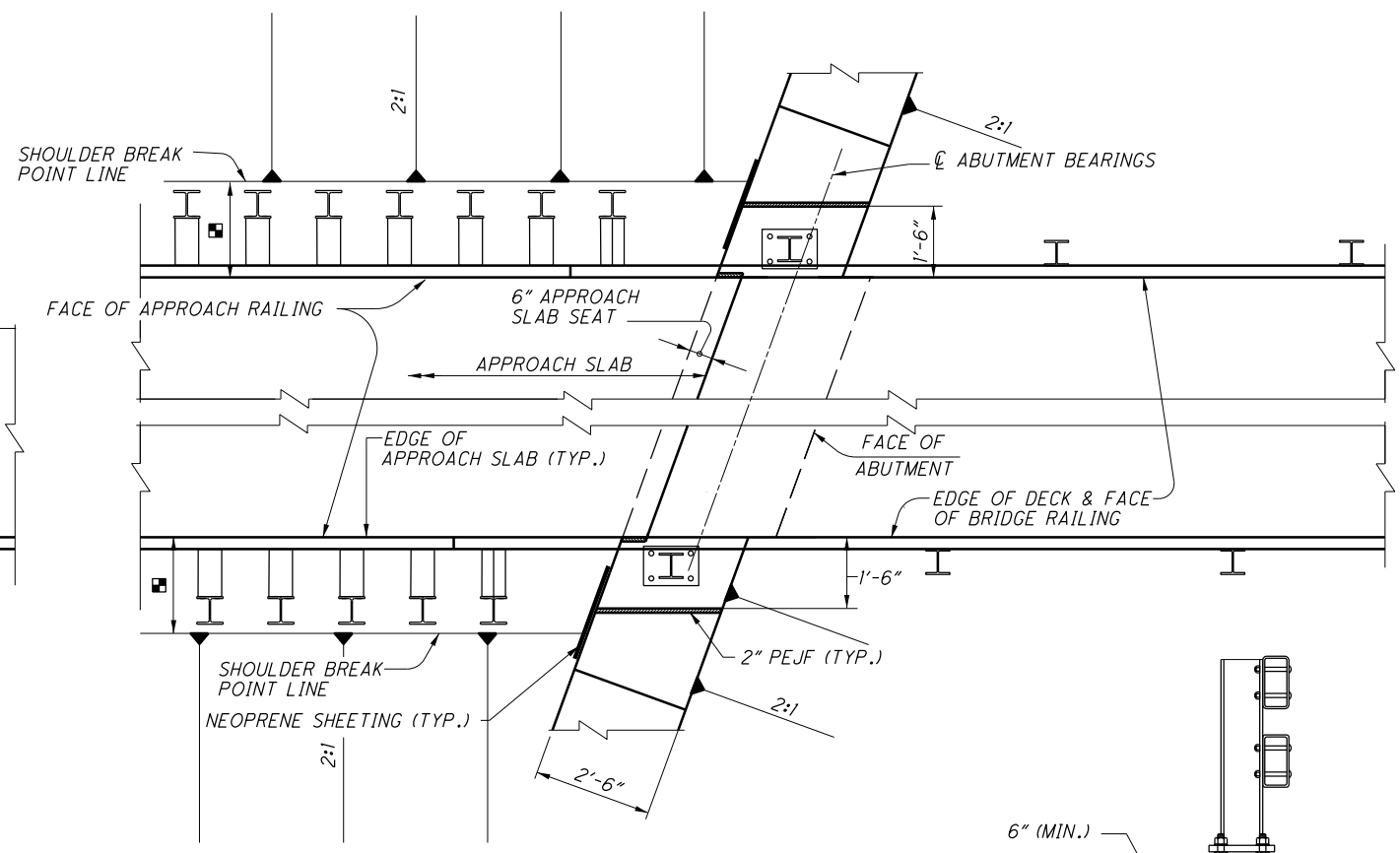
SECTION A-A

- ⊗ SEE PROJECT PLANS FOR ADDITIONAL NEOPRENE SHEETING PLACEMENT REQUIREMENTS.
 - ⊕ FOR SEISMIC PEDESTAL REQUIREMENTS SEE SHEET [6 / 7].
 - ◇ TOP OF SLOPE: ON SUPERELEVATED STRUCTURES, A LATERALLY SLOPING "TOP OF SLOPE" MAY BE USED TO AVOID EXCESSIVELY LONG WING WALL LENGTHS.
 - SEE ROADWAY TYPICAL SECTION.
- FOR BRIDGE TERMINAL ASSEMBLY
 SEE ROADWAY PLAN SHEET MGS-3.1.

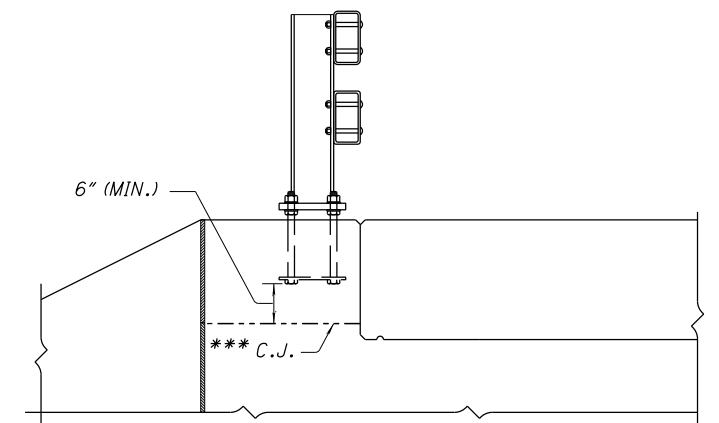
STATE OF OHIO DEPARTMENT OF TRANSPORTATION	DATE 02-12-97
ADMINISTRATOR Brad Fogwell	
DESIGNED WLE	REVIEWED LMW
CHECKED MRG/JJS	REVIEWED LMW
OFFICE OF STRUCTURAL ENGINEERING	
SEMI-INTEGRAL CONSTRUCTION DETAILS FOR STEEL BEAM AND GIRDER BRIDGES ON RIGID ABUTMENTS	
STANDARD BRIDGE DRAWING	
SCD NUMBER SICD-1-96	
1 / 7	



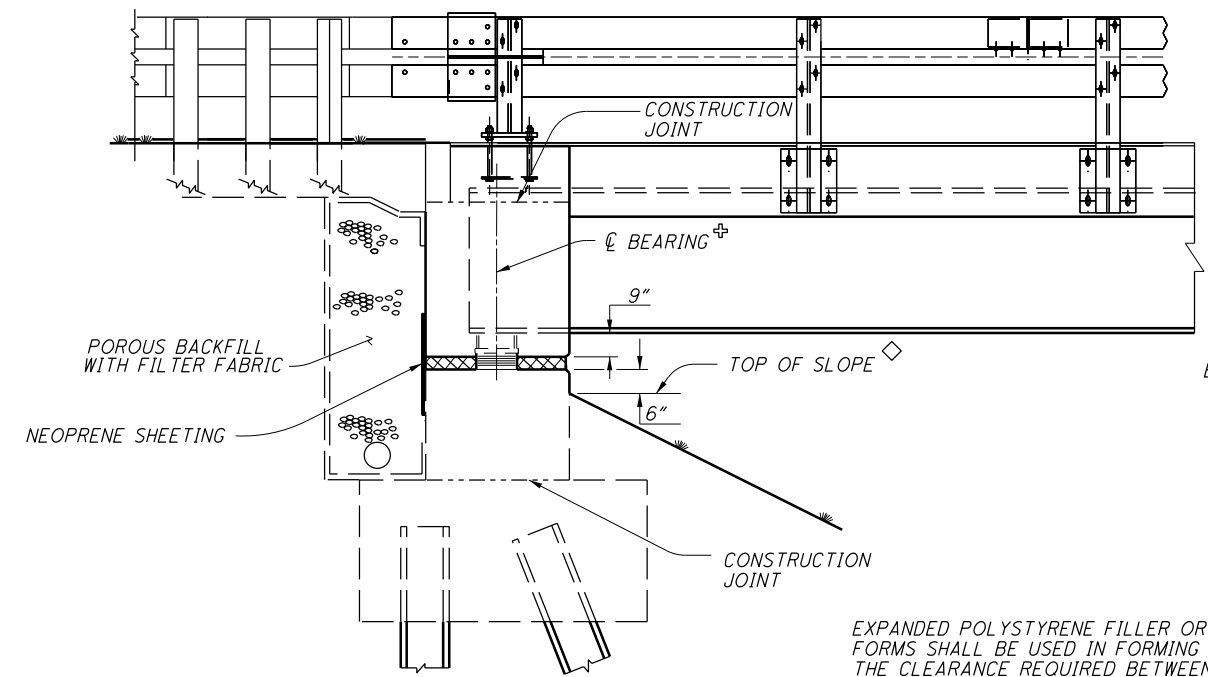
PART PLAN AT ABUTMENT
 SQUARE STRUCTURE WITH TWIN
 STEEL TUBE BRIDGE RAILING



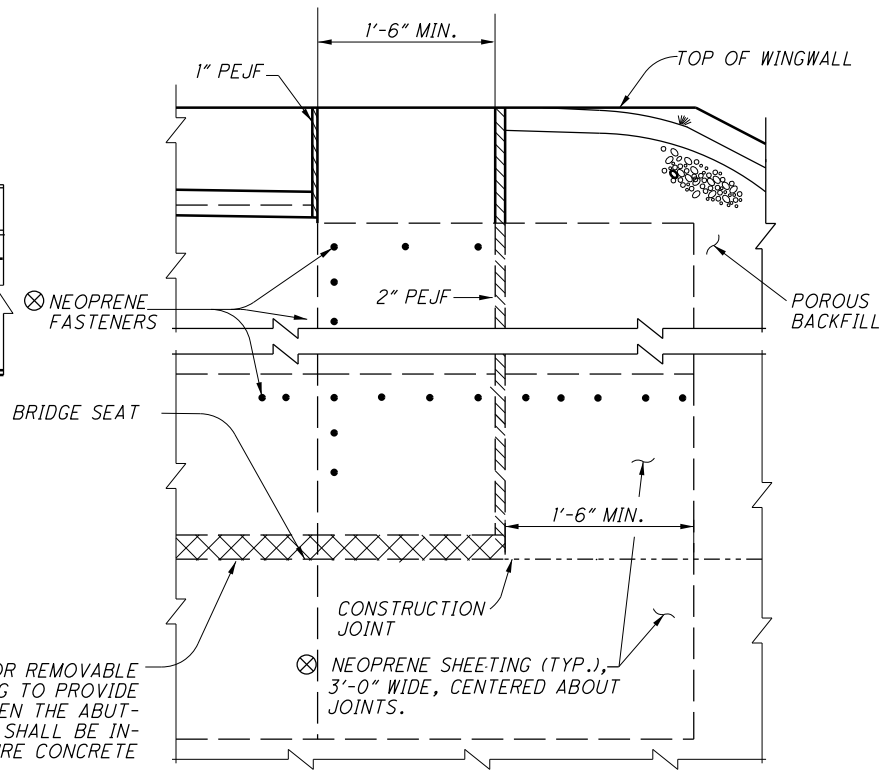
PART PLAN AT ABUTMENT
 SKEWED STRUCTURE WITH TWIN
 STEEL TUBE BRIDGE RAILING



SECTION F-F



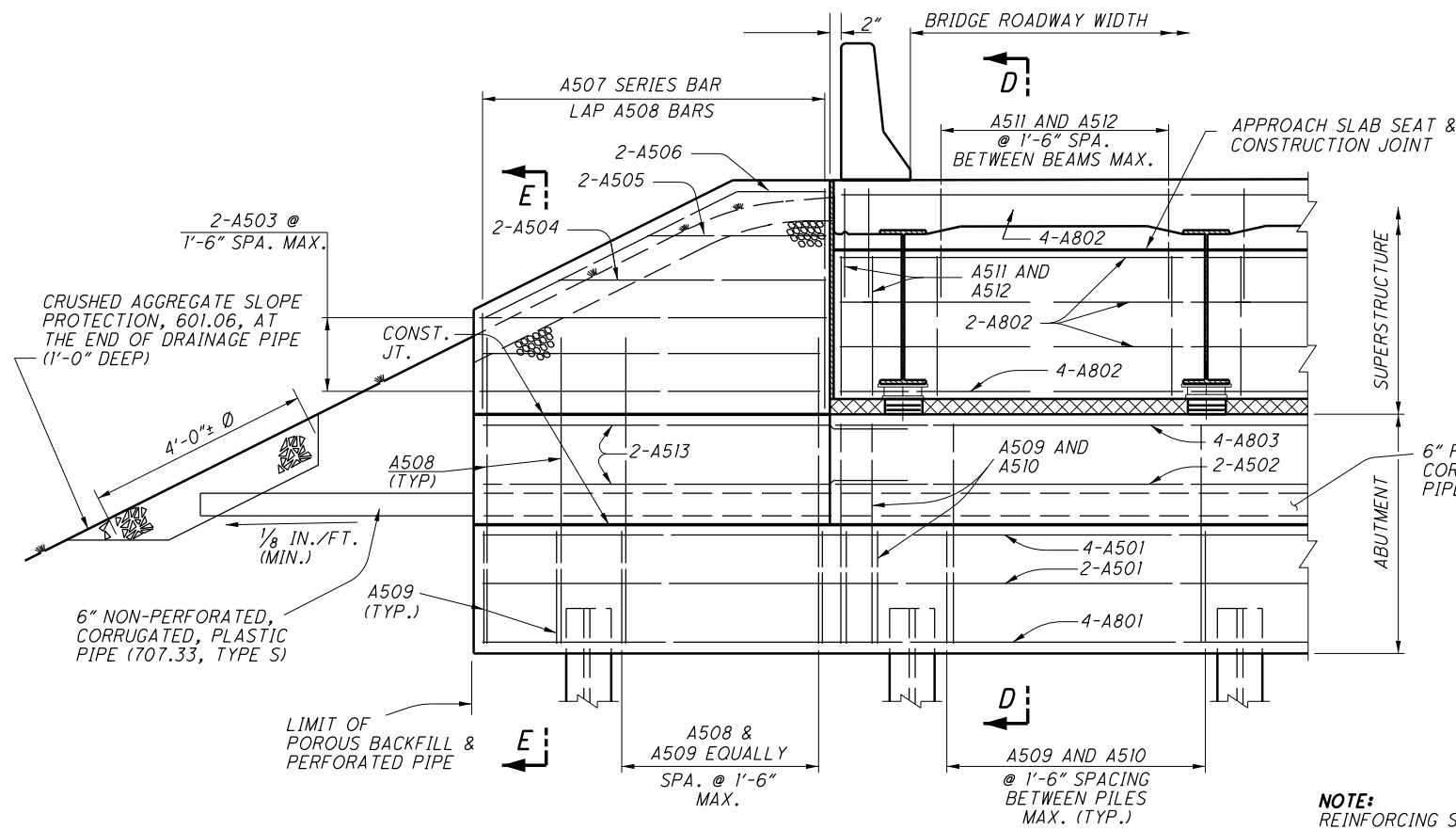
ELEVATION



SECTION C-C
 (RAILING NOT SHOWN FOR CLARITY)

EXPANDED POLYSTYRENE FILLER OR REMOVABLE FORMS SHALL BE USED IN FORMING TO PROVIDE THE CLEARANCE REQUIRED BETWEEN THE ABUTMENT AND SUPERSTRUCTURE AND SHALL BE INCLUDED WITH THE SUPERSTRUCTURE CONCRETE FOR PAYMENT.

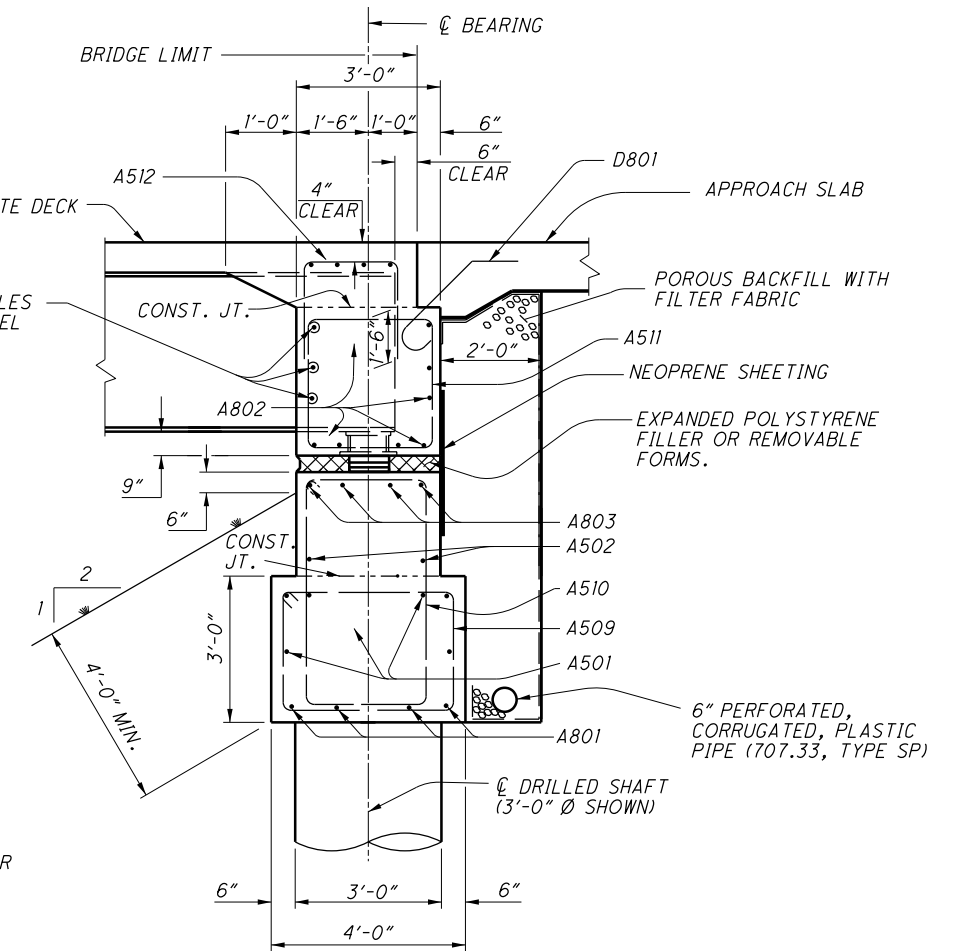
- *** - PLACE THE CONCRETE ABOVE THE CONSTRUCTION JOINT AFTER INSTALLATION OF THE RAILING IS COMPLETE.
- ⊗ SEE PROJECT PLANS FOR ADDITIONAL NEOPRENE SHEETING PLACEMENT REQUIREMENTS.
- ⊕ FOR SEISMIC PEDESTAL REQUIREMENTS SEE SHEET [6 / 7].
- ◇ TOP OF SLOPE: ON SUPERELEVATED STRUCTURES, A LATERALLY SLOPING "TOP OF SLOPE" MAY BE USED TO AVOID EXCESSIVELY LONG WING WALL LENGTHS.
- SEE ROADWAY TYPICAL SECTION.
- SEE STANDARD BRIDGE DRAWINGS TST-1-99 FOR BRIDGE TERMINAL ASSEMBLIES AND OTHER PERTINENT DETAILS.
- SEE SHEET [1 / 7] FOR ADDITIONAL DETAILS AND NOTES.
- FOR BRIDGE TERMINAL ASSEMBLY SEE ROADWAY PLAN SHEET MGS-3.1.



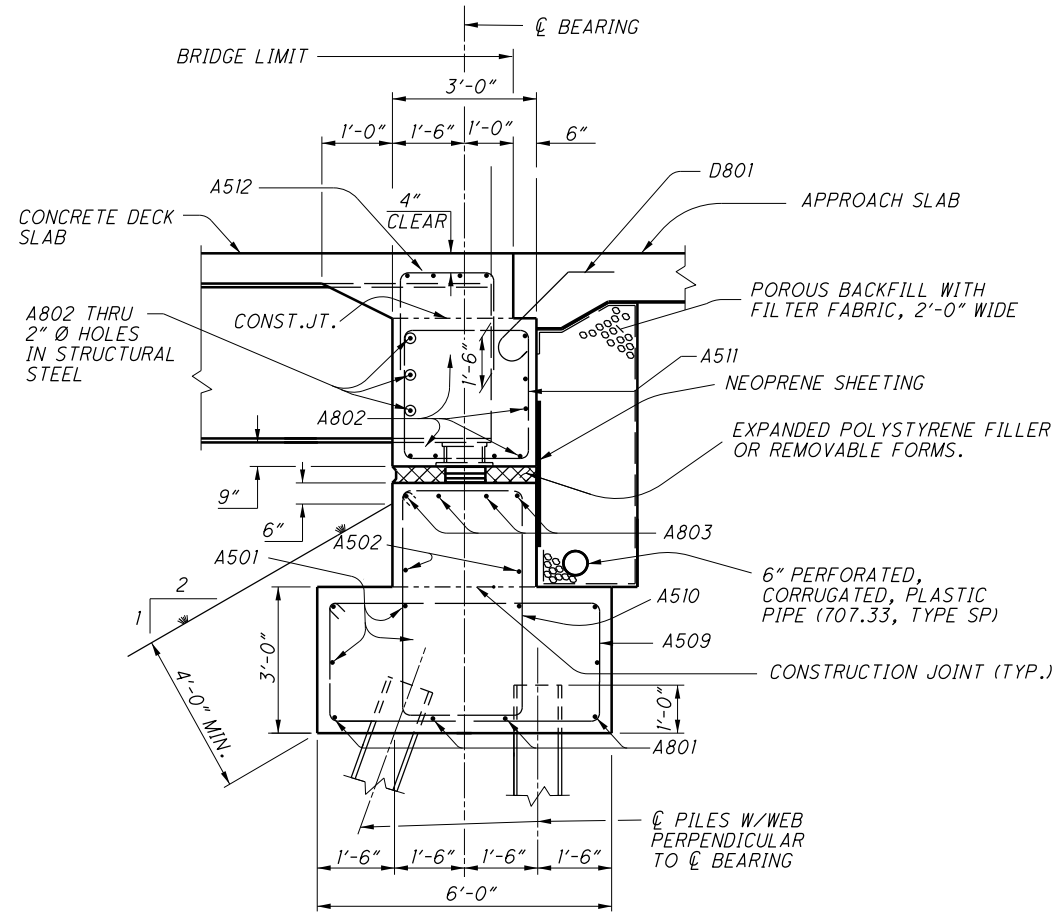
PART ELEVATION

6" PERFORATED, CORRUGATED, PLASTIC PIPE (707.33, TYPE SP)

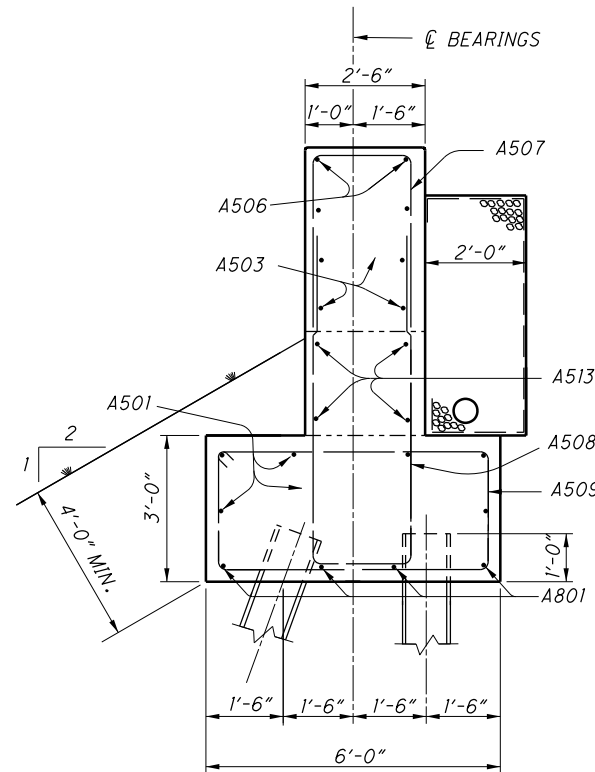
NOTE:
REINFORCING STEEL SHOWN IS MINIMUM. DESIGNER SHALL PROVIDE THE REINFORCEMENT REQUIRED FOR THE INDIVIDUAL STRUCTURE.



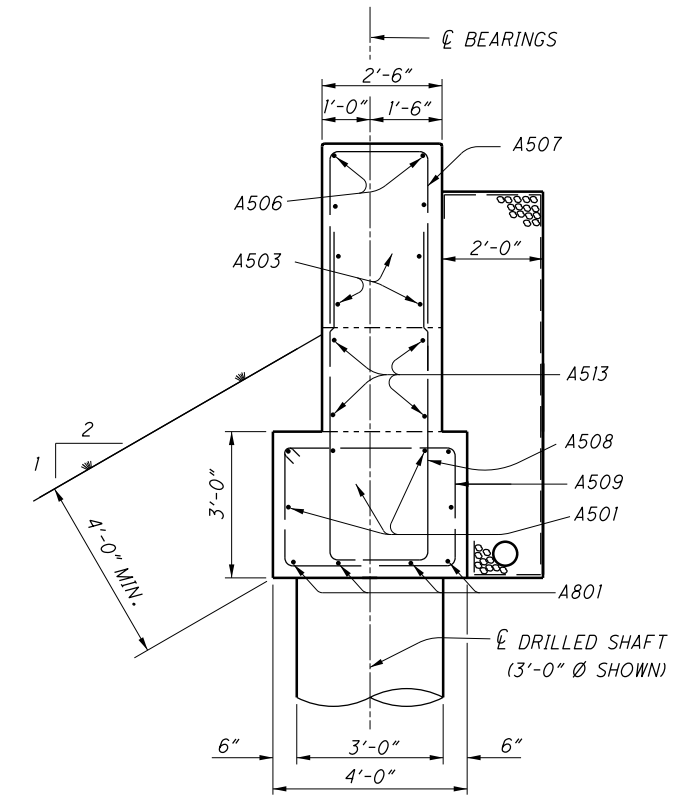
**SECTION D-D
(ON DRILLED SHAFT)**



**SECTION D-D
(ON PILES)**

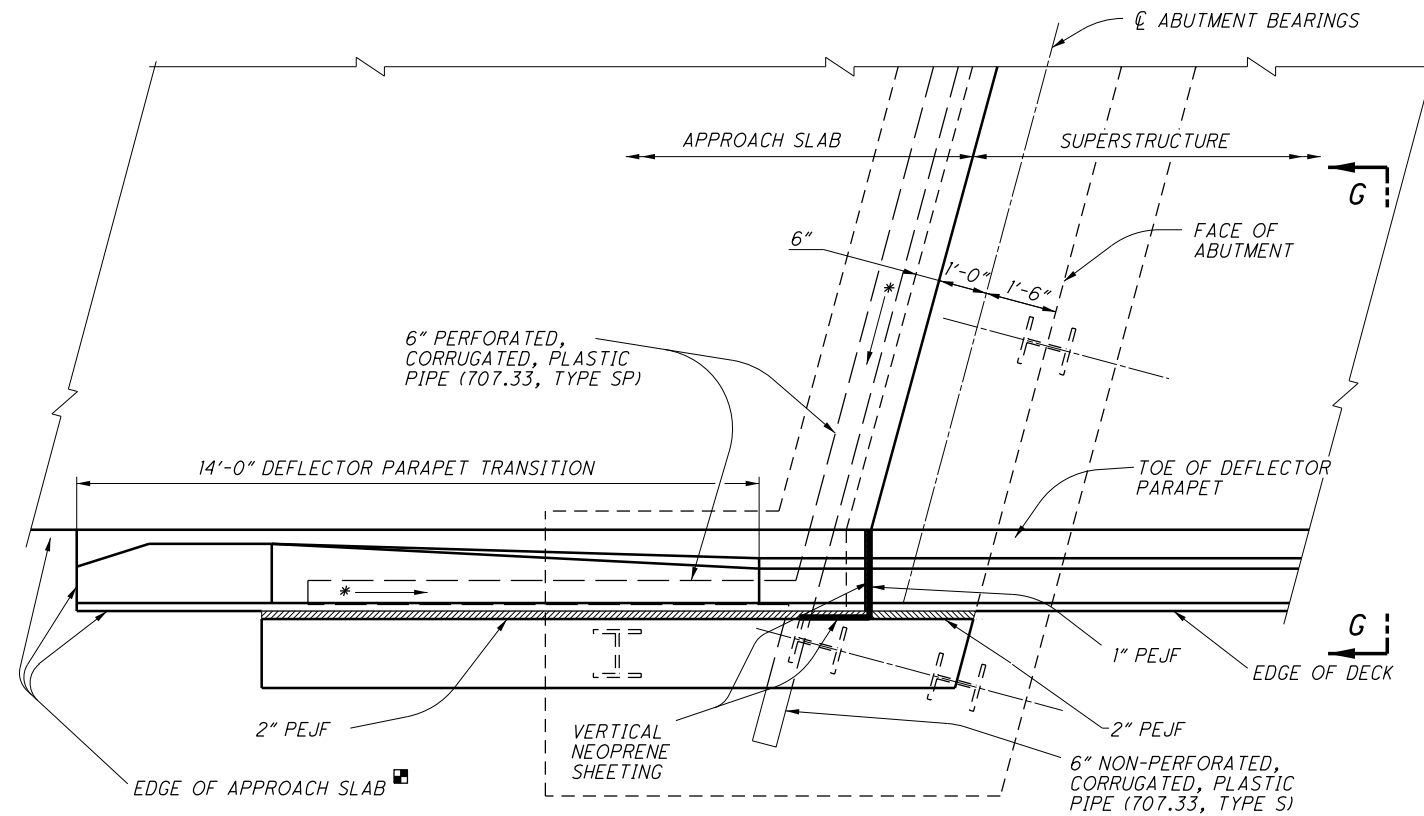


**SECTION E-E
(ON PILES)**



**SECTION E-E
(ON DRILLED SHAFT)**

STATE OF OHIO DEPARTMENT OF TRANSPORTATION	02-12-97	DATE
ADMINISTRATOR	Brad Fogwell	
REVISIONS	04-20-01	
	07-19-02	
	07-18-14	
CHECKED	MRC/JJS	L MW
DESIGNED	WLE	WLE
DRAWN	WLE	
OFFICE OF STRUCTURAL ENGINEERING	STANDARD BRIDGE DRAWING	SEMI-INTEGRAL CONSTRUCTION DETAILS FOR STEEL BEAM AND GIRDER BRIDGES ON RIGID ABUTMENTS
SCD NUMBER	SICD-1-96	
	3 / 7	

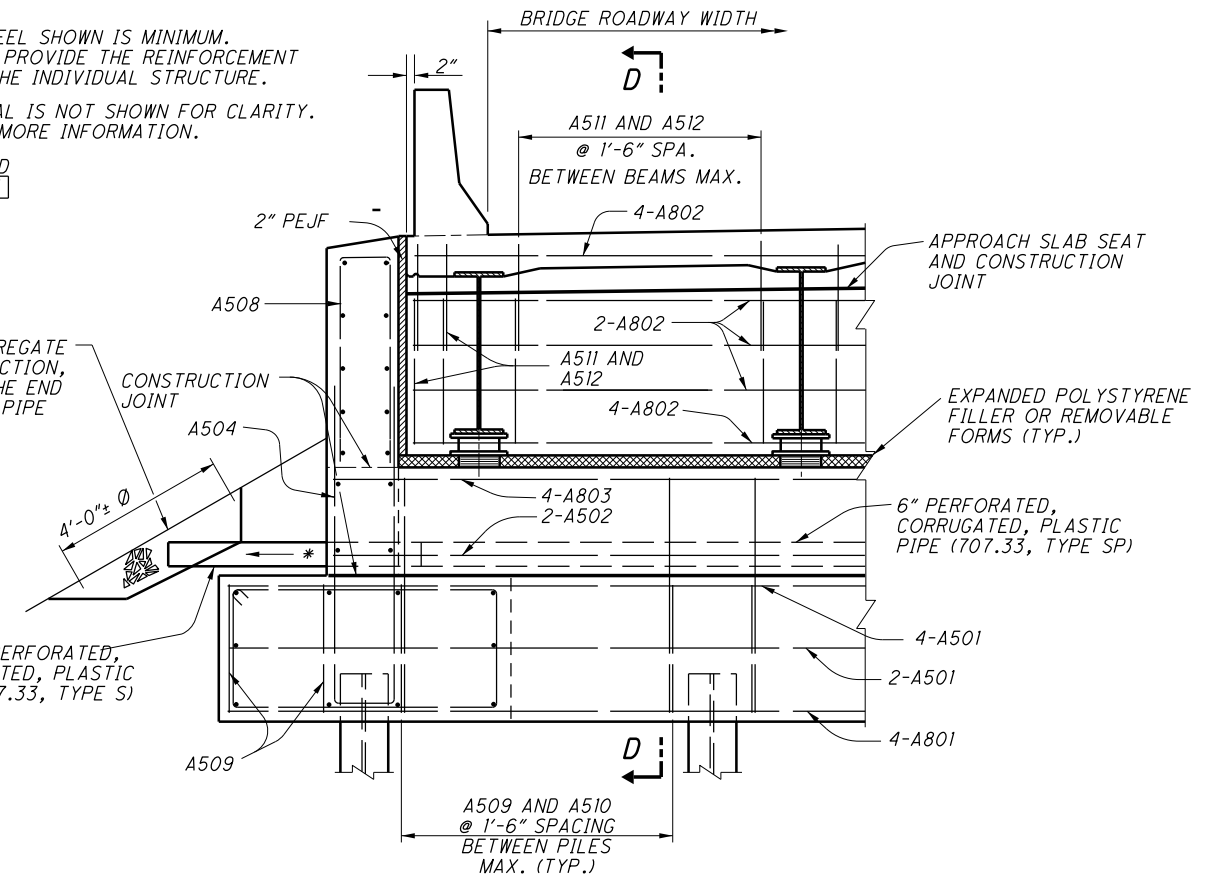


PART PLAN

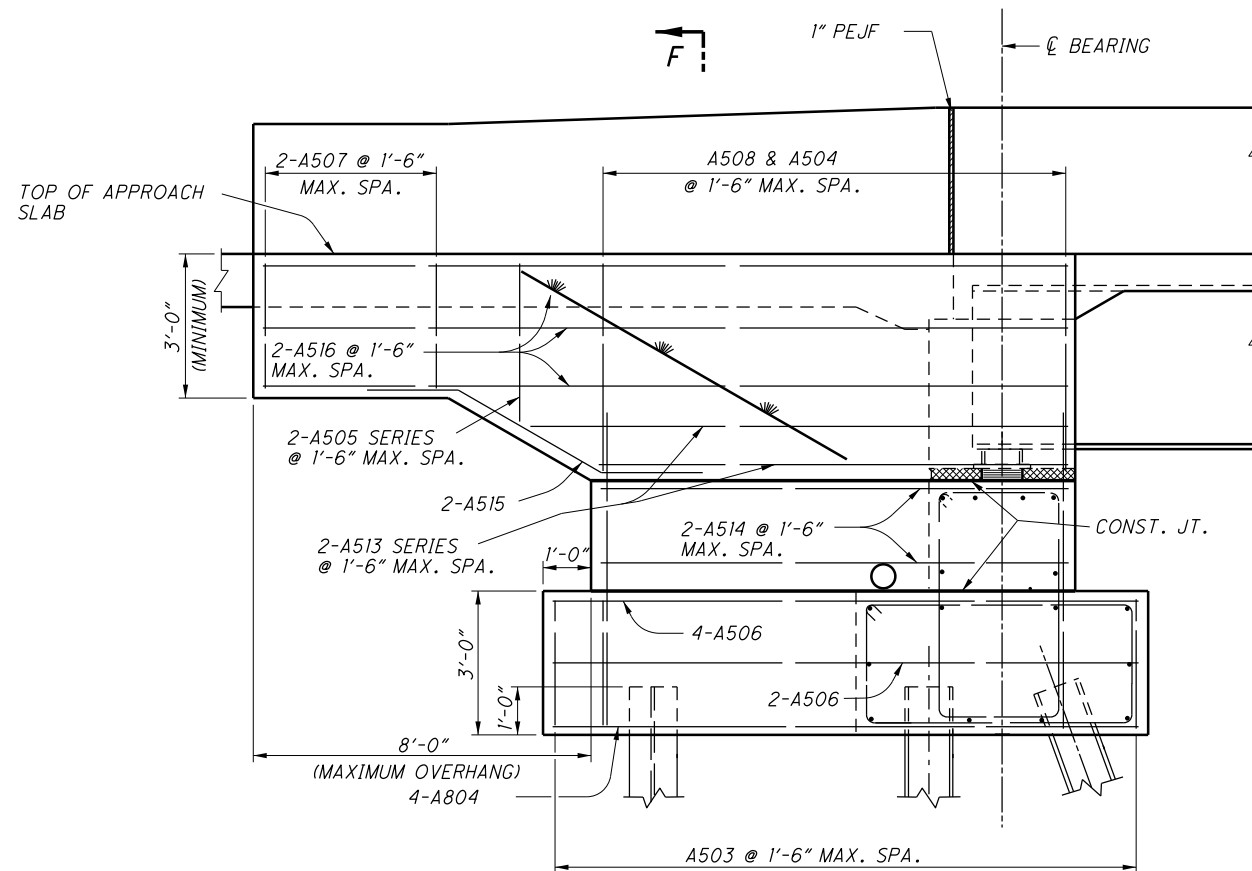
■ SPECIAL DESIGN OF APPROACH SLAB MAY BE REQUIRED

NOTE:
 REINFORCING STEEL SHOWN IS MINIMUM. DESIGNER SHALL PROVIDE THE REINFORCEMENT REQUIRED FOR THE INDIVIDUAL STRUCTURE.
 SEISMIC PEDESTAL IS NOT SHOWN FOR CLARITY. SEE 6/7 FOR MORE INFORMATION.
 FOR SECTION D-D SEE SHEET 3/7

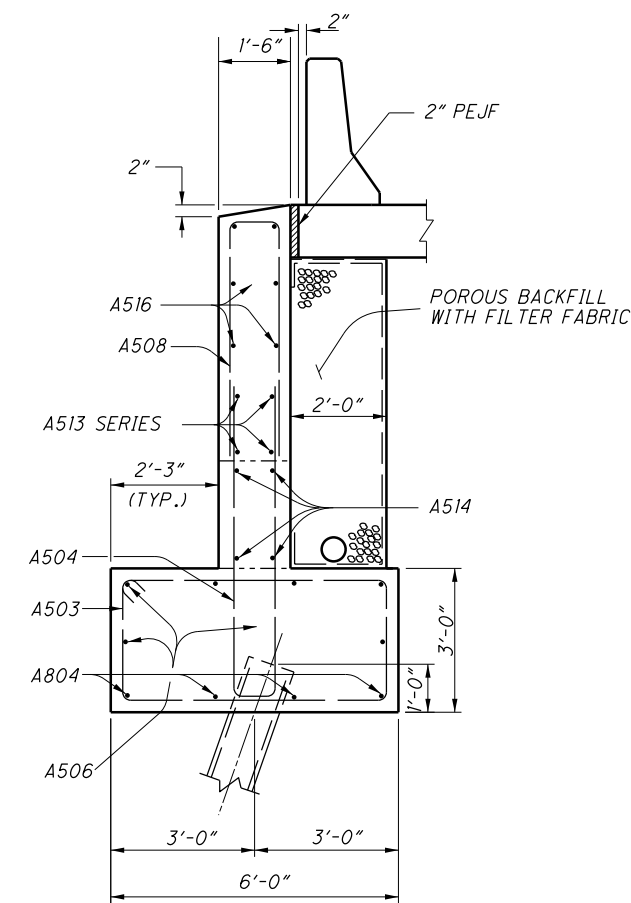
CRUSHED AGGREGATE SLOPE PROTECTION, 601.06, AT THE END OF DRAINAGE PIPE (1'-0" DEEP),
 * MINIMUM SLOPE OF PIPE IS 1/8 IN./FT.
 6" NON-PERFORATED, CORRUGATED, PLASTIC PIPE (707.33, TYPE S)



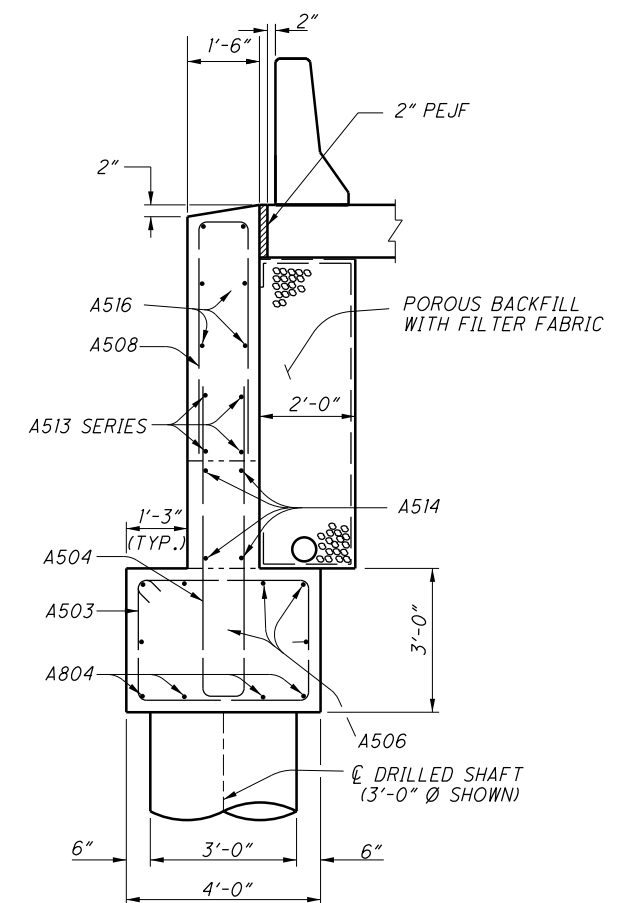
VIEW G-G



ELEVATION

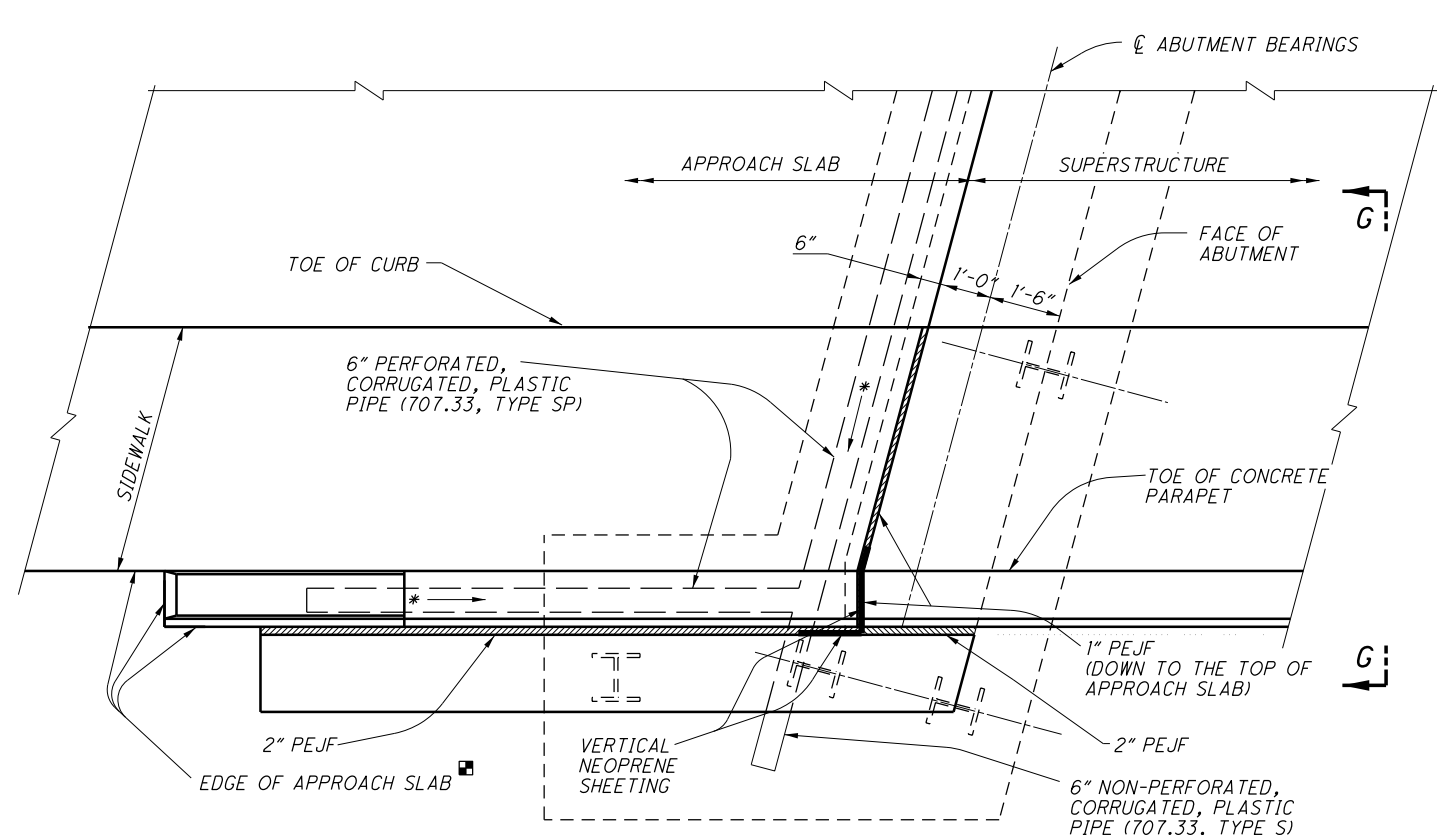


**SECTION F-F
 (ON PILES)**



**SECTION F-F
 (ON DRILLED SHAFTS)**

STATE OF OHIO DEPARTMENT OF TRANSPORTATION	02-12-97	DATE
ADMINISTRATOR	Brad Fogwell	
REVISIONS	04-20-01	
	07-19-02	
	07-18-14	
CHECKED	MRC/JJS	REVIEWED
DESIGNED	WLE	DRAWN
	WLE	L MW
OFFICE OF	STRUCTURAL	ENGINEERING
STANDARD BRIDGE DRAWING	SEMI-INTEGRAL CONSTRUCTION DETAILS	FOR STEEL BEAM AND GIRDER BRIDGES ON RIGID ABUTMENTS
SCD NUMBER	SICD-1-96	
	4	7



PART PLAN
STEEL TUBE & POSTS NOT SHOWN

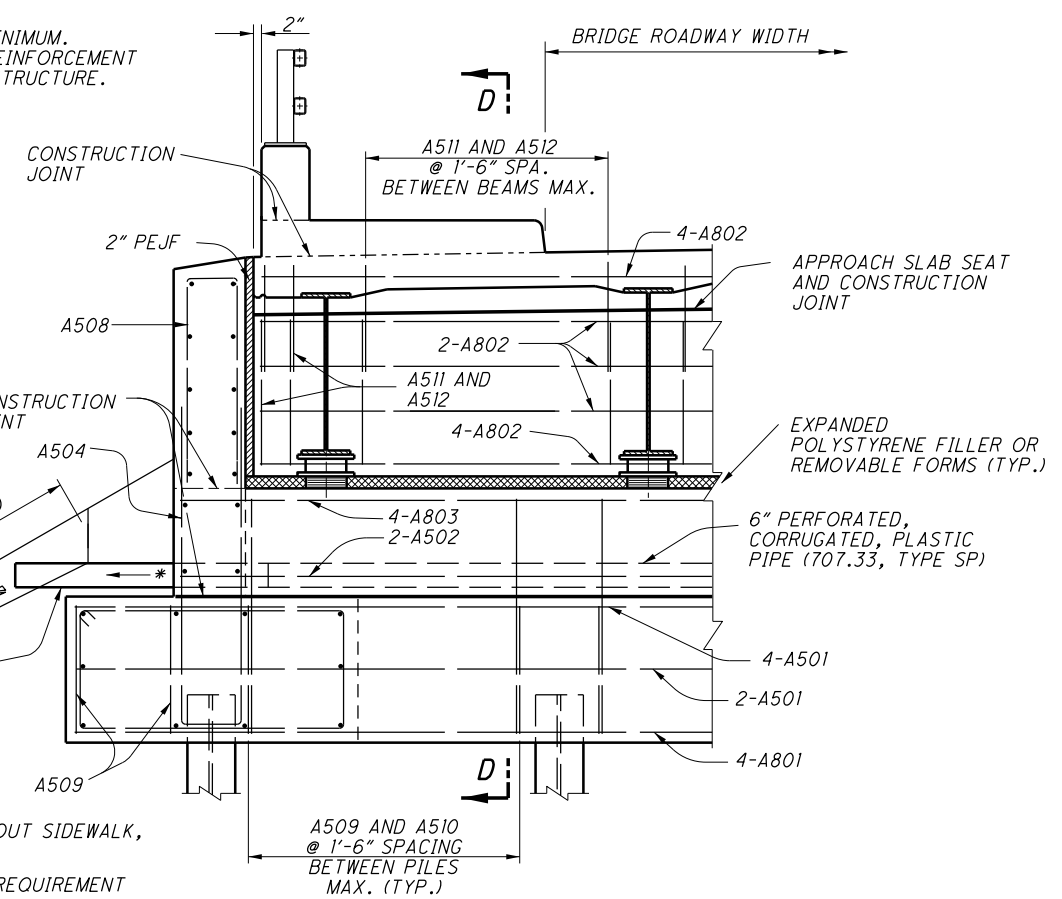
■ SPECIAL DESIGN OF APPROACH SLAB MAY BE REQUIRED

NOTE: REINFORCING STEEL SHOWN IS MINIMUM. DESIGNER SHALL PROVIDE THE REINFORCEMENT REQUIRED FOR THE INDIVIDUAL STRUCTURE.

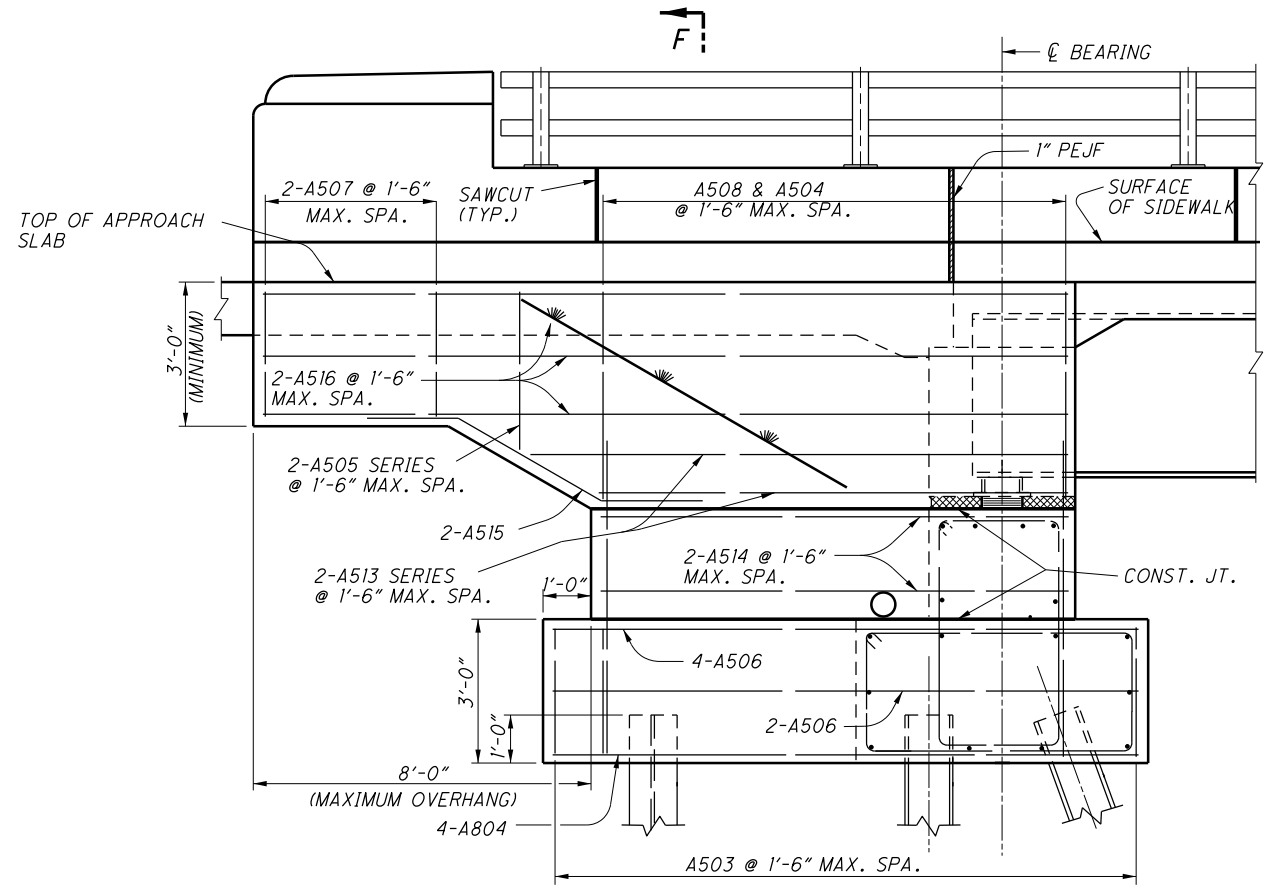
*MINIMUM SLOPE OF PIPE IS 1/8 IN./FT.

CRUSHED AGGREGATE SLOPE PROTECTION, 601.06, AT THE END OF DRAINAGE PIPE (1'-0" DEEP),

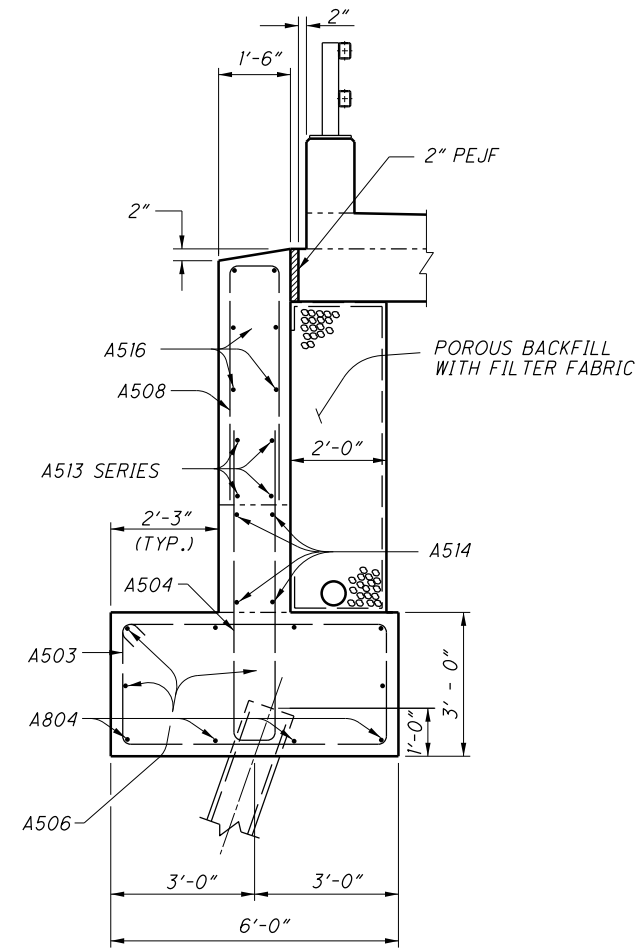
NOTE: FOR SECTION D-D, WITHOUT SIDEWALK, SEE SHEET 3/7
FOR SEISMIC PEDESTAL REQUIREMENT SEE SHEET 6/7



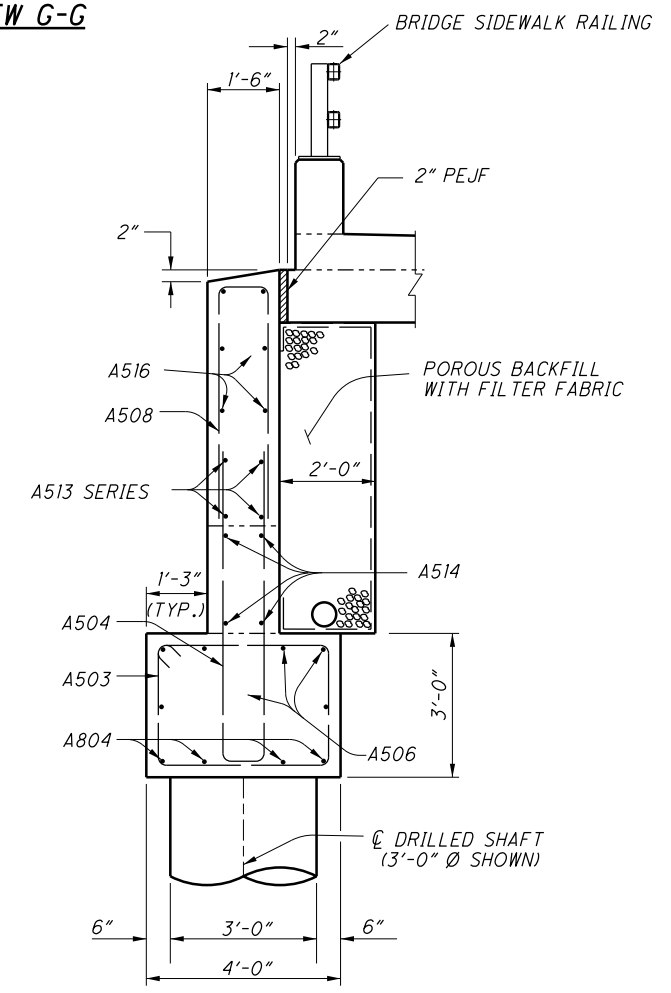
VIEW G-G



ELEVATION

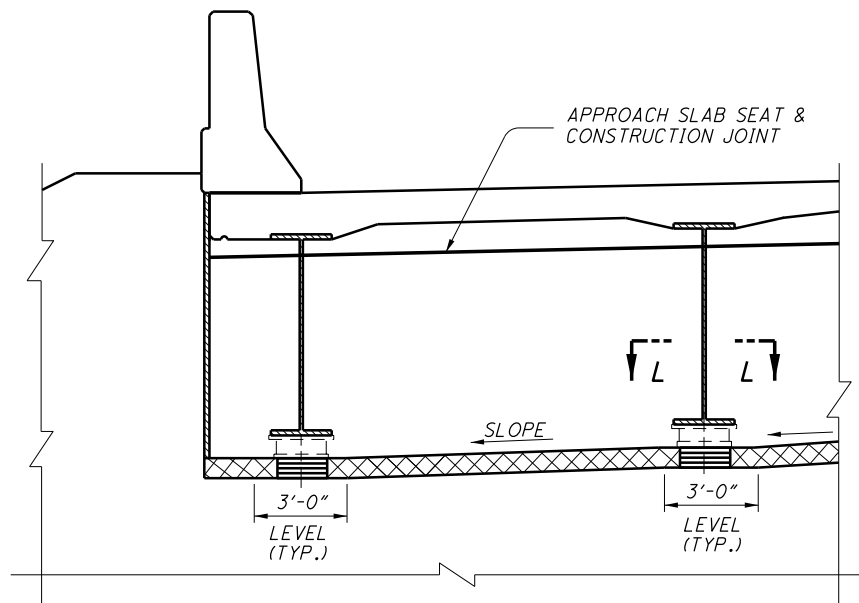


SECTION F-F
(ON PILES)

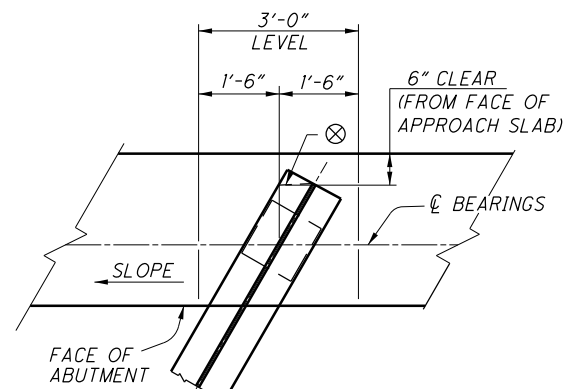


SECTION F-F
(ON DRILLED SHAFTS)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION	02-12-97	DATE
ADMINISTRATOR	Brad Fogwell	
REVISIONS	04-20-01	
	07-19-02	
	07-18-14	
CHECKED	MRG/JJS	REVIEWED
DESIGNED	WLE	DRAWN
	WLE	L MW
OFFICE OF	STRUCTURAL	ENGINEERING
STANDARD BRIDGE DRAWING	SEMI-INTEGRAL CONSTRUCTION DETAILS	FOR STEEL BEAM AND GIRDER BRIDGES
	ON RIGID ABUTMENTS	
SCD NUMBER	SICD-1-96	
	5	7



PART ELEVATION OF BEAM SEAT



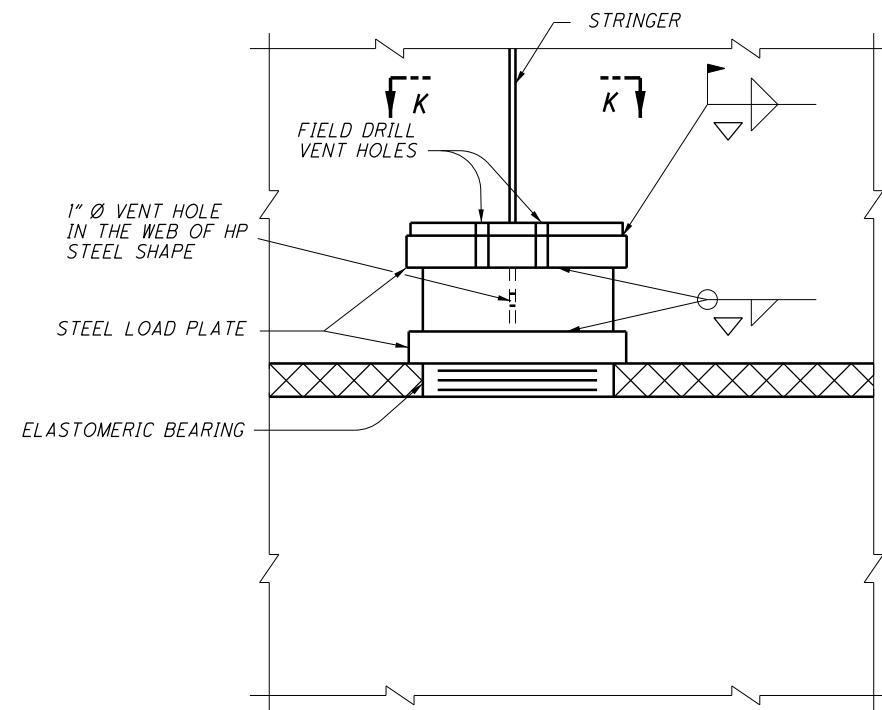
SECTION L-L

⊗ - CLIP ONLY THE TOP FLANGE TO MAINTAIN THE CLEARANCE

NOTE:

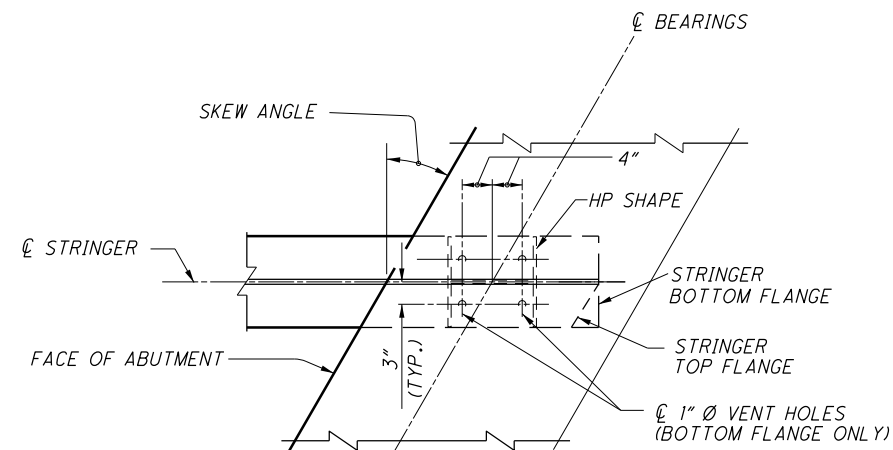
HP STEEL SHAPE INCLUDED WITH ELASTOMERIC BEARING FOR PAYMENT.

SEE NOTES ON SHEET 7/7 FOR ADDITIONAL REQUIREMENTS.



BEARING DETAIL

▽: DESIGNER SHALL PROVIDE THE REQUIRED WELD SIZE IN THE PROJECT PLANS (3/16" MIN.).



SECTION K-K

REVISIONS
04-20-01
07-19-02
07-18-14

CHECKED	MRG/JS	REVIEWED	LMW
DESIGNED	WLE	DRAWN	WLE

OFFICE OF
 STRUCTURAL
 ENGINEERING

STANDARD BRIDGE DRAWING
 SEMI-INTEGRAL CONSTRUCTION DETAILS
 FOR STEEL BEAM AND GIRDER BRIDGES
 ON RIGID ABUTMENTS

SCD NUMBER
 SICD-1-96

REINFORCING STEEL FOR STRAIGHT WINGWALL ABUTMENTS						
MARK	LENGTH	TYPE	A	B	C	BENDING DIAGRAMS
A801	*	STR				
A802	*	STR				
A803	*	STR				
A501	*	STR				
A502	*	STR				
A503	*	STR				
A504	*	STR				
A505	*	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				
D801	*	3				

* DIMENSIONS VARY

REINFORCING STEEL FOR U-TYPE ABUTMENT						
MARK	LENGTH	TYPE	A	B	C	BENDING DIAGRAMS
A801	*	STR				
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:

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 FOOTINGS FOUNDED ON SOIL OR EXISTING STRUCTURES WHERE 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 IN THE FIELD WILL NOT BE PERMITTED.

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

PAINTING OF STRUCTURAL STEEL: THE ENTIRE SURFACE AREA ENCASED WITHIN THE ABUTMENT DIAPHRAGM AND EXTENDING 1'-0" OUTSIDE THE DIAPHRAGM, SHALL BE COATED WITH A SHOP APPLIED, INORGANIC ZINC PRIME COAT ACCORDING TO C&MS 514. NO ADDITIONAL COATINGS ARE REQUIRED ON THE EMBEDDED STEEL SURFACES. THE COST OF APPLYING THE PRIME COAT IS INCIDENTAL TO THE BID FOR STRUCTURAL STEEL. REPAIR COATING DAMAGED BY WELDING ACCORDING TO C&MS 514.22.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

02-12-97 DATE

ADMINISTRATOR

Brad Fogwell

REVISIONS

04-20-01
07-19-02
07-18-14

CHECKED	MRC/JS
DESIGNED	WLE
DRAWN	WLE
REVIEWED	LMW

OFFICE OF STRUCTURAL ENGINEERING

STANDARD BRIDGE DRAWING

SEMI-INTEGRAL CONSTRUCTION DETAILS FOR STEEL BEAM AND GIRDER BRIDGES ON RIGID ABUTMENTS

SCD NUMBER

SICD-1-96

7 / 7