

HAS-BRIDGE STREET BRIDGE REPLACEMENT

MODEL: General Summary - Sheet 2 PAPER SIZE: 34x22 (in.) DATE: 7/24/2026 TIME: 1:31:39 PM USER: hbrendlinger
J:\20230339\ODOT07_D11 Bridge St_Bowerton\120494\400-Engineering\Roadway\Sheets\120494_GG001.dgn

SHEET NUMBER									PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.24	P.25	P.29						01/BRF							
														TRAFFIC CONTROL	
9								9	626	00110	9	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL		
	42							42	630	03100	42	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
	14							14	630	08520	14	FT	STREET NAME SIGN SUPPORT, NO. 3 POST		
	1							1	630	79600	1	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, TYPE 1		
	12							12	630	80100	12	SF	SIGN, FLAT SHEET		
	2							2	630	80500	2	EACH	SIGN, DOUBLE FACED, STREET NAME		
	6							6	630	84900	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
	4							4	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
0.09								0.09	646	10010	0.09	MILE	EDGE LINE, 6"		
0.05								0.05	646	10200	0.05	MILE	CENTER LINE		
														STRUCTURE OVER 20 FOOT SPAN (3431790)	
		LS						LS	202	11003	LS			STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	P.28
		192						192	202	23500	192	SY		WEARING COURSE REMOVED	
		LS						LS	503	11100	LS			COFFERDAMS AND EXCAVATION BRACING	
		LS						LS	503	11101	LS			COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 1	P.28
		LS						LS	503	11101	LS			COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 2	P.28
		LS						LS	503	11101	LS			COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 3	P.28
		387						387	503	21100	387	CY		UNCLASSIFIED EXCAVATION	
		LS						LS	505	11100	LS			PILE DRIVING EQUIPMENT MOBILIZATION	
		1,390						1,390	507	00300	1,390	FT		STEEL PILES HP14X73, FURNISHED	
		1,220						1,220	507	00350	1,220	FT		STEEL PILES HP14X73, DRIVEN	
		170						170	507	92200	170	FT		PREBORED HOLES	
		34						34	507	93300	34	EACH		STEEL POINTS OR SHOES	
		22,928						22,928	509	10000	22,928	LB		EPOXY COATED STEEL REINFORCEMENT	
		74						74	511	31613	74	CY		CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN	P.28
		73						73	511	44112	73	CY		CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	
		86						86	511	46512	86	CY		CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
		196						196	512	10100	196	SY		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
		29						29	512	33000	29	SY		TYPE 2 WATERPROOFING	
		8						8	515	12091	8	EACH		PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB33-48, AS PER PLAN (BEAM LENGTH = 84'-0")	P.39
		21						21	516	13900	21	SF		2" PREFORMED EXPANSION JOINT FILLER	
		91						91	516	14020	91	FT		SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
		32						32	516	41100	32	EACH		1/8" PREFORMED BEARING PAD, TYPE CDP	
		32						32	516	44101	32	EACH		ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (9"x14"x2.001" WITH 10"x15"x1.5" LOAD PLATE)	P.38
		26						26	517	70001	26	FT		RAILING (TWIN STEEL TUBE), AS PER PLAN (WINGWALL MOUNTED)	P.44
		178						178	517	70001	178	FT		RAILING (TWIN STEEL TUBE), AS PER PLAN	P.42 - P.43
		66						66	518	21200	66	CY		POROUS BACKFILL WITH GEOTEXTILE FABRIC	
		108						108	518	40000	108	FT		6" PERFORATED CORRUGATED PLASTIC PIPE	
		60						60	518	40010	60	FT		6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
		89						89	526	25011	89	SY		REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	P.45
		107						107	526	30011	107	SY		REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN	P.45
		64						64	526	90010	64	FT		TYPE A INSTALLATION	
		LS						LS	SPECIAL	53014000	LS			STRUCTURAL SURVEY AND MONITORING OF VIBRATION	P.28
		220						220	601	32200	220	CY		ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
		1						1	625	33000	1	EACH		STRUCTURE GROUNDING SYSTEM	
										</					

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

BLM

REVIEWER
HRB 12/19/25

PROJECT ID
120494

SHEET	TOTAL
P.10	51

ESTIMATED QUANTITIES					CALCULATED BY:	AI	DATE:	12/7/2025
					CHECKED BY:	AJH	DATE:	12/8/2025
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT	SUPER	GEN	SHEET #
202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LS	2 / 20
202	23500	192	SY	WEARING COURSE REMOVED			192	
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING			LS	
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 1			LS	2 / 20
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 2			LS	2 / 20
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, WALL 3			LS	2 / 20
503	21100	387	CY	UNCLASSIFIED EXCAVATION	387			
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION			LS	
507	00300	1,390	FT	STEEL PILES HP14X73, FURNISHED	1,390			
507	00350	1,220	FT	STEEL PILES HP14X73, DRIVEN	1,220			
507	92200	170	FT	PREBORED HOLES	170			
507	93300	34	EACH	STEEL POINTS OR SHOES	34			
509	10000	22,928	LB	EPOXY COATED STEEL REINFORCEMENT	13,069	9,859		
511	31613	74	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN		74		2 / 20
511	44112	73	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	73			
511	46512	86	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	86			
512	10100	196	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	55	141		
512	33000	29	SY	TYPE 2 WATERPROOFING	29			
515	12091	8	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB33-48 , AS PER PLAN, (BEAM LENGTH = 84'-0")		8		13 / 20
516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	21			
516	14020	91	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	91			
516	41100	32	FT	1/8" PREFORMED BEARING PAD, TYPE CDP		32		
516	44101	32	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (9"x14"x2.001" WITH 10"x15"x1.5" LOAD PLATE)		32		12 / 20
517	70001	26	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN (WINGWALL MOUNTED)		26		18 / 20
517	70001	178	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN		178		16 / 20 - 17 / 20
518	21200	66	CY	POROUS BACKFILL WITH FILTER FABRIC	66			
518	40000	108	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	108			
518	40010	60	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	60			
526	25011	89	SY	REINFORCED CONCRETE APPROACH SLABS (T=15") WITH QA/QC, AS PER PLAN			89	19 / 20
526	30011	107	SY	REINFORCED CONCRETE APPROACH SLABS (T=17") WITH QA/QC, AS PER PLAN			107	19 / 20
526	90010	64	FT	TYPE A INSTALLATION			64	
530	14000	LS		SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION			LS	2 / 20
601	32200	220	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER			220	
625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM			1	

ESTIMATED QUANTITIES
BRIDGE NO. HAS-BRIDGE-00.045
OVER CONOTTON CREEK

SFN
3431790

DESIGN AGENCY
EMHT

DESIGNER
AI

CHECKER
TDA

REVIEWER
CAS 12/19/25

PROJECT ID
120494

SUBSET
3

TOTAL
20

SHEET
P.29

TOTAL
51

LEGEND:

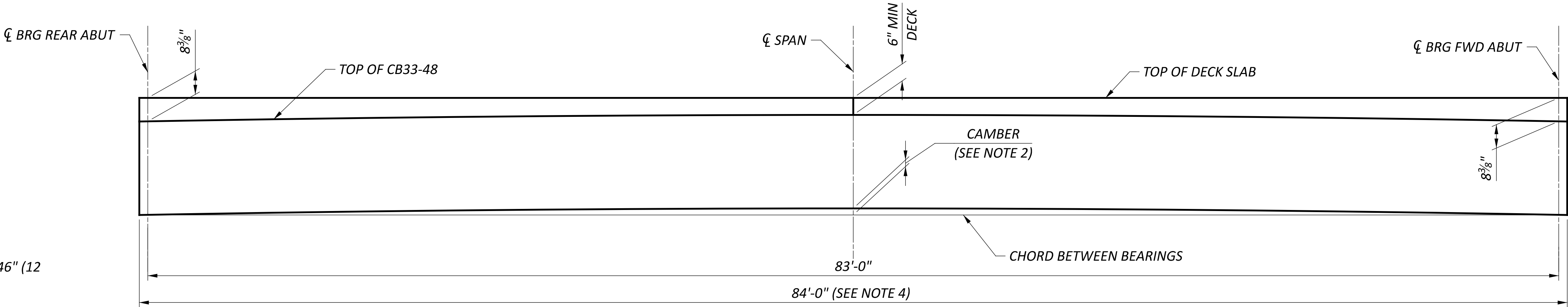
- t_i - THICKNESS OF INTERNAL LAYER
 t_e - THICKNESS OF EXTERNAL LAYER
 t_s - THICKNESS OF EXTERNAL LAYER
 T - TOTAL ELASTOMERIC BEARING THICKNESS
 T_{S1} - DOWNSTATION THICKNESS
 T_{S2} - UPSTATION THICKNESS
 N - NUMBER OF STEEL LAMINATES
INTERNAL STEEL LAMINATE THICKNESS = 0.1046" (12 GAGE)
 N_i - NUMBER OF INTERNAL LAYERS
 N_e - NUMBER OF EXTERNAL LAYERS
- LOADS GIVEN IN THE BEARINGS TABLE ARE SERVICE LOADS AND WITH NO IMPACT.

NOTES:

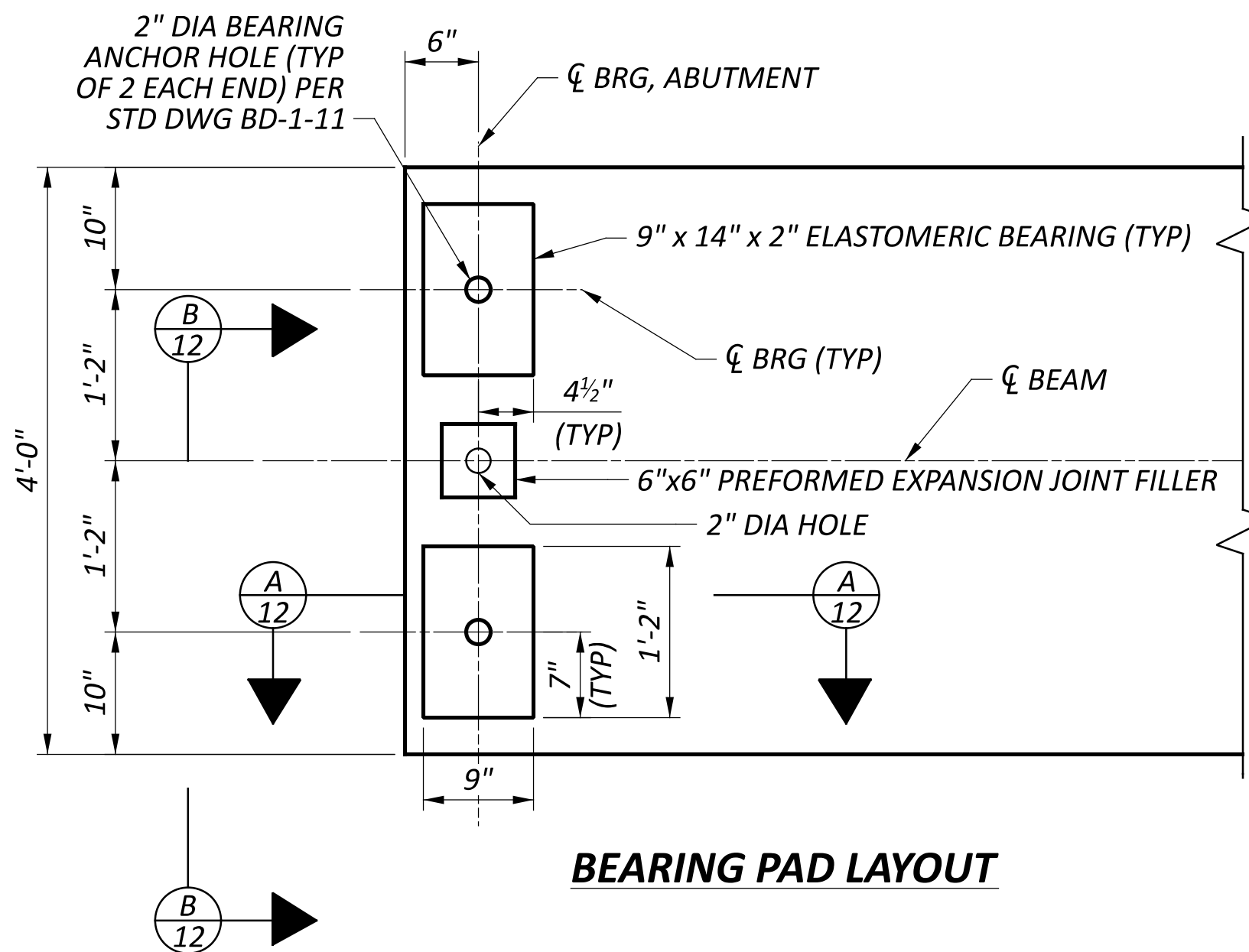
- THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER, THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
- CAMBER:

ESTIMATED CAMBER AT DAY 0 (D_0) IS	1.76	INCHES
ESTIMATED CAMBER AT DAY 30 (D_{30}) IS	3.12	INCHES
DEFLECTION DUE TO REMAINING DEAD LOAD (E.G. CONCRETE DECK, DIAPHRAGMS, BRIDGE RAILINGS, ETC.) IS	0.79	INCHES
- THE BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30.
- NOTE TO FABRICATOR: THE DIMENSIONS MEASURED ALONG THE LENGTH OF THE BEAM DO NOT CONTAIN ALLOWANCE FOR THE EFFECT OF THE LONGITUDINAL GRADE. INCLUDE THE PROPER ALLOWANCE FOR THESE DIMENSIONS IN THE SHOP DRAWINGS.
- STEEL LOAD PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. THE STEEL PLATES SHALL BE ASTM A709 GRADE 50 AND METALIZED ACCORDING TO C&MS 516.03.
- BASIS OF PAYMENT: PAYMENT FOR ALL MATERIALS, LABOR, TESTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE ELASTOMERIC BEARINGS FOR THE BEAMS WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), EACH.
- ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UPSTATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.

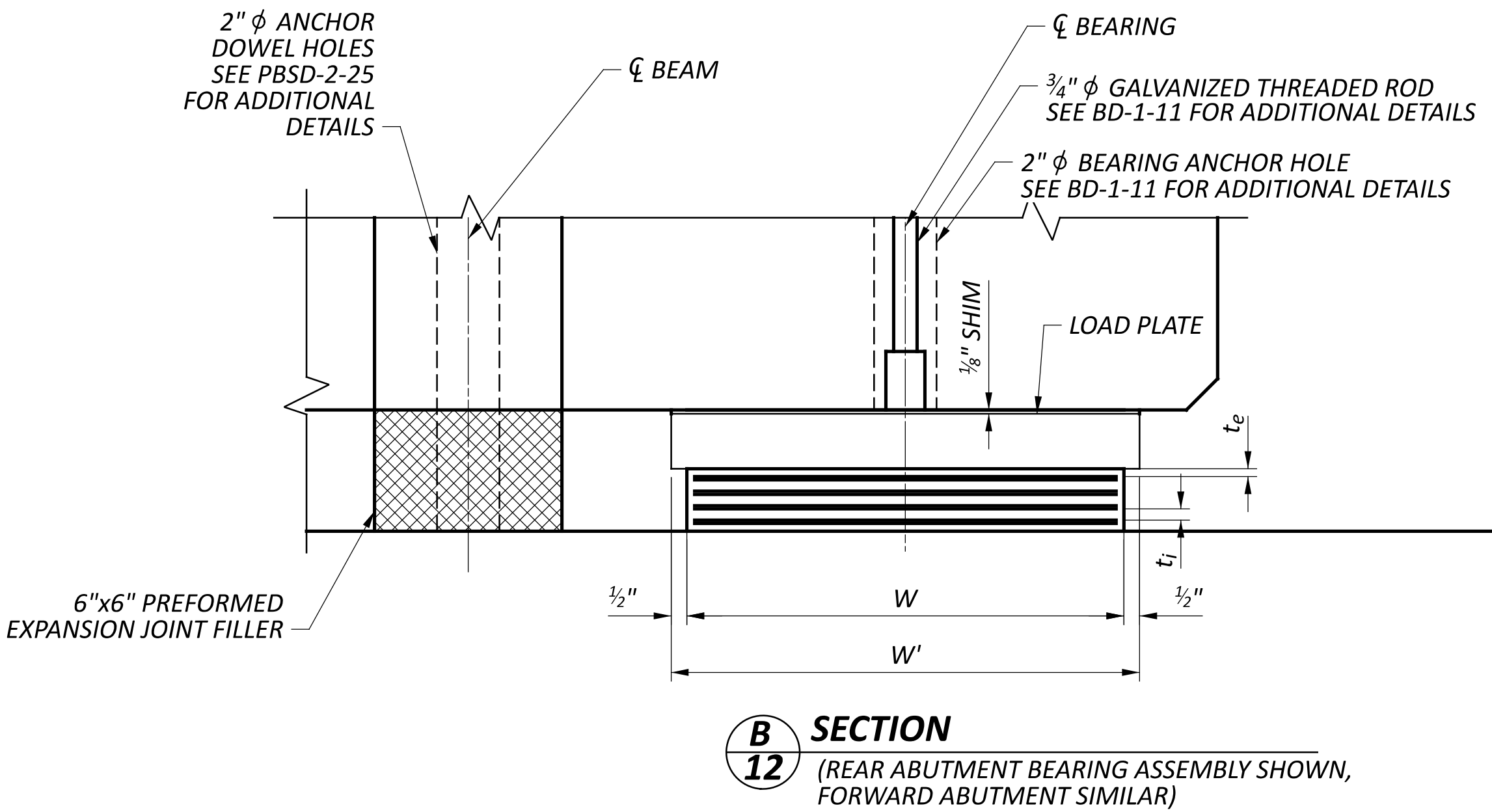
LAMINATED ELASTOMERIC BEARING																
LOCATION	ELASTOMERIC BEARING DIMESNIONS									STEEL LOAD PLATE DIMENSIONS				REACTIONS#		
	L (in)	W (in)	t_e (in)	t_i (in)	T (in)	t_s (12 GAGE) (in)	N	N_i	N_e	L' (in)	W' (in)	T_{S1}' Downstation (in)	T_{S2}' Upstation (in)	MAX DL (KIPS)	MAX LL (KIPS)	MAX TOTAL LOAD (KIPS)
RA	9	14	0.1875	0.5	2.001	0.1046	3	3	1	10	15	1.776	1.500	31.46	24.84	56.30
FA	9	14	0.1875	0.5	2.001	0.1046	3	3	1	10	15	1.878	1.500	31.46	24.84	56.30



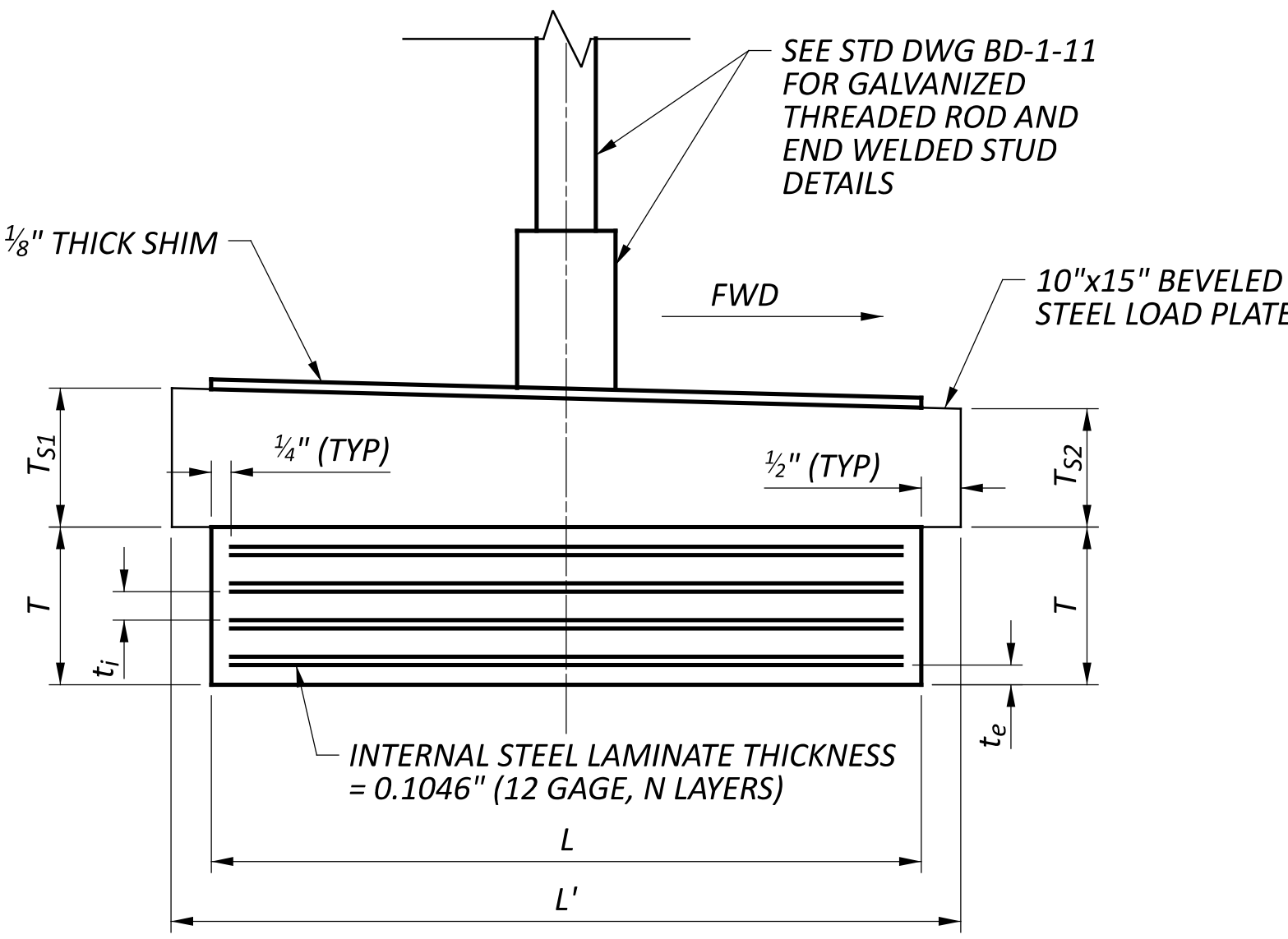
CAMBER AND TOPPING THICKNESS



BEARING PAD LAYOUT



SECTION B
(REAR ABUTMENT BEARING ASSEMBLY SHOWN, FORWARD ABUTMENT SIMILAR)



SECTION A
(REAR ABUTMENT BEARING ASSEMBLY SHOWN, FORWARD ABUTMENT SIMILAR)
(BOX BEAM NOT SHOWN FOR CLARITY)