

**EXPANSION BEARING GEOMETRY**

BRIDGE NO.	SUB-STRUCTURE NO.	Δ SKEW ANGLE	QUANTITY REQ'D.	CAPACITY (K)		ONE WAY LONGIT. MOVEMENT	SOLE PLATE				MASONRY PLATE			ANCHOR BOLT					BEVELED WASHER				*A* DISTANCE (UPSTATION SIDE OF BEARINGS)									
				VERT.	HORIZ.		LENGTH (SPL)	WIDTH (SPW)	THICKNESS		LENGTH (MPL)	WIDTH (MPW)	THICKNESS (MPT)	SHL	SHW	Ø	BOLTS/ BEARING	OFFSET (BO)	OFFSET (BL)	BWL	BWW	WTA (UPSTATION)	WTB (DOWNSTATION)	ASSUMED BEARING HEIGHT (H) *	TEMPERATURE (°F)							
									SPT1 (UPSTATION)	SPT2 (DOWNSTATION)															0	15	30	45	60	75	90	105
<b>ABUTMENT BEARINGS</b>																																
25	ABUT. 1	45-49-20°	5	107	11	2 7/16"	1'-7"	2'-3 1/2"	3/4"	1 1/16"	1'-4"	2'-3 1/2"	1 1/2"	6 3/8"	7 7/8"	1 1/2"	4	10 9/16"	4 3/4"	7 3/8"	2 7/8"	3/8"	1/2"	2 7/8"	2 1/2"	2 1/4"	2 1/16"	1 3/16"	1 5/8"	1 3/8"	1 3/16"	1 5/16"
25	ABUT. 2	40-26-21°	5	99	20	1 3/8"	1'-3"	2'-3 1/2"	3/4"	1"	1'-2"	2'-3 1/2"	1 1/2"	4 3/8"	7 7/8"	1 1/2"	4	10 9/16"	3 3/4"	5 3/8"	2 7/8"	3/8"	7/16"	2 7/8"	1/4"	5/16"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
25A	ABUT. 1	34-20-15°	5	231	32	2 1/4"	1'-6"	2'-4"	7/8"	3/4"	1'-3 1/2"	2'-4"	2"	6"	7 7/8"	1 1/2"	4	11 3/16"	4 1/2"	7"	2 7/8"	7/16"	3/8"	3 1/8"	2 1/16"	7 7/8"	1 1/16"	1 1/2"	1 3/8"	1 3/16"	1"	1 3/16"
25A	ABUT. 2	23-34-31°	5	188	23	2 1/16"	1'-6"	2'-4"	7/8"	3/4"	1'-3 1/2"	2'-4"	2"	5 5/8"	7 7/8"	1 1/2"	4	11 3/16"	4 3/8"	6 5/8"	2 7/8"	7/16"	3/8"	2 7/8"	1/2"	1 1/16"	7 7/8"	1	1 3/16"	1 5/16"	1 1/2"	1 5/8"
<b>PIER BEARINGS</b>																																
25	PIER 1	44-25-12°	5	359	46	1 5/16"	1'-6 1/2"	2'-9 1/2"	3/4"	1 1/16"	1'-3 1/2"	2'-9 1/2"	3"	5 1/2"	7 7/8"	1 1/2"	4	1'-1 5/16"	4 1/4"	6 1/2"	2 7/8"	3/8"	1/2"	3 3/8"	2 3/16"	2"	7 7/8"	1 3/4"	1 9/16"	1 7/16"	1 5/16"	1 1/8"

**NOTES:**  
 THE DISTANCE FROM C BEARING TO THE END OF THE GIRDER VARIES AT EACH BEARING LOCATION FOR THIS DIMENSION AT BRIDGE 25 AND 25A SEE THE GIRDER ELEVATION FOR EACH BRIDGE.

**FIXED BEARING GEOMETRY**

BRIDGE NO.	SUB-STRUCTURE NO.	Δ SKEW ANGLE	QUANTITY REQ'D.	CAPACITY (K)		SOLE PLATE				MASONRY PLATE			ANCHOR BOLT					BEVELED WASHER				
				VERT.	HORIZ.	LENGTH (SPL)	WIDTH (SPW)	THICKNESS		LENGTH (MPL)	WIDTH (MPW)	THICKNESS (MPT)	FHD	Ø	BOLTS/ BEARING	OFFSET (BO)	OFFSET (BL)	BWL	BWW	WTA (UPSTATION)	WTB (DOWNSTATION)	ASSUMED BEARING HEIGHT (H)
								SPT1 (UPSTATION)	SPT2 (DOWNSTATION)													
<b>PIER BEARINGS</b>																						
25	PIER 2	41-37-48°	5	361	112	1'-3 1/2"	2'-9 1/2"	1 1/2"	1 3/4"	1'-3 1/2"	2'-9 1/2"	3"	7 7/8"	1 1/2"	4	1'-1 5/16"	3 1/8"	2 7/8"	2 7/8"	3/8"	7/16"	2 7/8"
25A	PIER 1	28-40-30°	5	565	143	1'-6 1/2"	3'-0"	1 5/8"	1 1/2"	1'-6 1/2"	3'-0"	3 1/2"	7 7/8"	1 1/2"	4	1'-3 3/16"	3 1/8"	2 7/8"	2 7/8"	3/8"	3/8"	3 1/4"

- NOTES:**
- \* THE DIMENSION "H" IN THE BEARING TABLE REPRESENTS THE ASSUMED TOTAL HEIGHT OF BEARING MECHANISM BETWEEN THE SOLE PLATE AND MASONRY PLATE USED BY THE DESIGNER TO ESTABLISH CONCRETE DIMENSIONS. THE CONTRACTOR SHALL RECOMPUTE ALL TOP OF PEDESTAL ELEVATIONS TO ACCURATELY REFLECT THE HEIGHT OF BEARING SUPPLIED.
  - DIM "A" IS THE DISTANCE MEASURED AFTER ALL DEAD LOADS ARE APPLIED.
  - SEE FIXED BEARING DETAILS ON BR6.
  - SEE EXPANSION BEARING DETAILS ON BR5.
  - SEE BEARING NOTES ON BR5.

FILE NAME: c:\p755\WIN145\B-dg\_TYP\expbrg.tbl.spl  
 DATE: 12/01/01  
 USER: 1564

**STATE OF VERMONT  
 AGENCY OF TRANSPORTATION**

Town of SEARSBURG	Bridge No.
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta.
VT. RTE. 9 OVER DEERFIELD RIVER	
BEARING GEOMETRY TABLES	
Designed By D. VIENI	Drawn by K. DETRICK
Checked By M. OLSTAD	Date 12/2001
Bridge Design Supervisor M. OLSTAD	Date 12/2001
PROJECT SEARSBURG - WILMINGTON	PROJECT NO. NHF 010-1181
I.G.C. Info.	
Bridge Sheet No. BR7	Sheet 100 of 435

