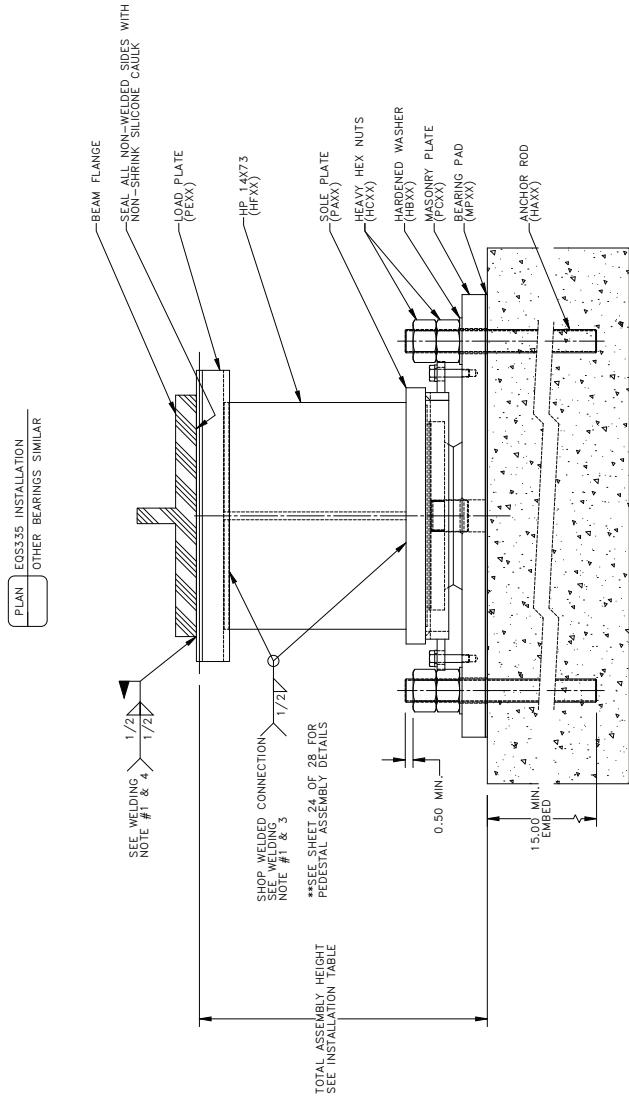
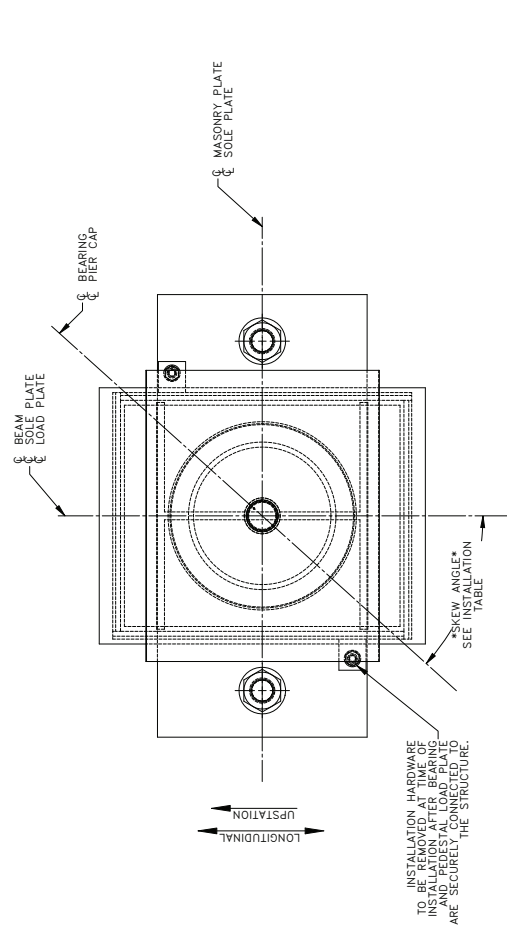


REV.	DESCRIPTION	DT/LR	AP/YR	DATE

BEARING INSTALLATION TABLE

BRG NO.	BRIDGE	LOCATION	GRID	TOTAL ASSEMBLY HEIGHT @ 0°	SKIEW ANGLE
15	MUS-70-1159	PIER 1	B1	9.65	84.90
16	MUS-70-1159	PIER 1	B2	13.59	84.90
17	MUS-70-1159	PIER 1	B3	18.33	86.01
18	MUS-70-1159	PIER 1	B4	20.42	87.16
19	MUS-70-1159	PIER 1	B5	20.66	88.33
20	MUS-70-1159	PIER 1	B6	19.51	89.53
21	MUS-70-1159	PIER 1	B7	17.25	90.77
22	MUS-70-1159	PIER 1	B8	17.79	90.77
23	MUS-70-1159	PIER 1	B9	17.79	90.77
24	MUS-70-1159	PIER 1	B10	13.51	90.77
25	MUS-70-1159	PIER 1	B11	12.56	90.77
26	MUS-70-1159	PIER 1	B12	19.02	90.77
27	MUS-70-1159	PIER 1	B13	20.92	90.77
28	MUS-70-1159	PIER 1	B14	19.02	90.77
29	MUS-70-1159	PIER 1	B15	17.02	92.06
30	MUS-70-1159	PIER 1	B16	17.13	93.40
31	MUS-70-1159	PIER 1	B17	18.00	94.81
32	MUS-70-1159	PIER 1	B18	14.59	96.28
33	MUS-70-1159	PIER 1	B19	20.55	97.81
34	MUS-70-1159	PIER 4	G1	24.00	110.23
35	MUS-70-1159	PIER 4	G2	24.00	109.68
36	MUS-70-1159	PIER 4	G3	24.00	109.85
37	MUS-70-1159	PIER 4	G4	24.00	110.21
38	MUS-70-1159	PIER 4	G5	24.00	109.92
39	MUS-70-1159	PIER 4	G6	24.00	109.99
40	MUS-70-1159	PIER 4	G7	24.00	109.78
41	MUS-70-1159	PIER 4	G8	24.00	109.98
42	MUS-70-1159	PIER 4	G9	24.00	109.98
43	MUS-70-1159	PIER 4	G10	24.00	109.97
44	MUS-70-1159	PIER 5	G1	24.00	110.23
45	MUS-70-1159	PIER 5	G2	24.00	109.68
46	MUS-70-1159	PIER 5	G3	24.00	109.85
47	MUS-70-1159	PIER 5	G4	24.00	110.21
48	MUS-70-1159	PIER 5	G5	24.00	109.92
49	MUS-70-1159	PIER 5	G6	24.00	109.99
50	MUS-70-1159	PIER 5	G7	24.00	110.08
51	MUS-70-1159	PIER 5	G8	24.00	109.78
52	MUS-70-1159	PIER 5	G9	24.00	109.97
53	MUS-70-1159	PIER 5	G10	24.00	109.97
54	MUS-70-1159	PIER 8	B20	22.44	115.58
55	MUS-70-1159	PIER 8	B21	20.46	115.03
56	MUS-70-1159	PIER 8	B22	23.04	114.48
57	MUS-70-1159	PIER 8	B23	22.74	113.92
58	MUS-70-1159	PIER 8	B24	23.44	113.36
59	MUS-70-1159	PIER 8	B25	23.44	113.36
60	MUS-70-1159	PIER 8	B26	19.49	113.36
61	MUS-70-1159	PIER 8	B27	17.45	113.36
62	MUS-70-1159	PIER 8	B28	19.57	113.36
63	MUS-70-1159	PIER 8	B29	17.98	113.36
64	MUS-70-1159	PIER 8	B30	22.72	113.36
65	MUS-70-1159	PIER 8	B31	22.72	113.36
66	MUS-70-1159	PIER 8	B32	22.58	111.94
67	MUS-70-1159	PIER 8	B33	19.07	110.49
68	MUS-70-1159	PIER 8	B34	20.58	109.01
69	MUS-70-1159	PIER 8	B35	21.36	107.51



TO INSTALLATION HARDWARE
INSTALLATION AFTER BEARING
AND PEDESTAL LOAD PLATE
ARE SECURED TO STRUCTURE.
SEE INSTALLATION TABLE

TOTAL ASSEMBLY HEIGHT
SEE INSTALLATION TABLE

ALL DIMENSIONS ARE IMPERIAL

RELEASED FOR
FABRICATION
R.J. WATSON, INC
DATE: 6/20/2022

REV. NO: 0	DATE: 10/13/2021
TITLE: BEARING INSTALLATION	
D/L'D BY: BW DATE: 10/1/2021	
R/W'D BY: JR DATE: 10/5/2021	
C/H'K'D BY: JC DATE: 10/12/2021	
ORDER NO: 2102648 SHEET: 4 OF 28	

TOLERANCING:
AS PER AASHTO LEAD
SPECIFICATIONS TABLE
UNLESS OTHERWISE
NOTED OTHERWISE

PROJECT INFORMATION:
I-70 RECONSTRUCTION, MUSKINGUM COUNTY,
OHIO
BRIDGE NO: MUS-70-1159

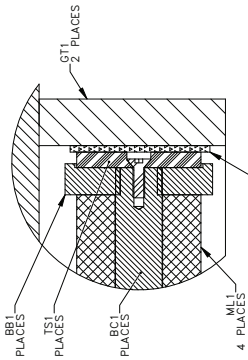
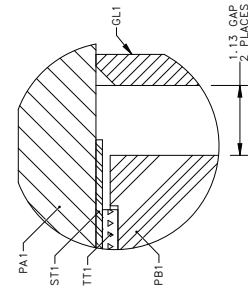
OWNER: OHIO DOT
CONSULTANT: GANNETT FLEMING
CONTRACTOR: SHELLY & SANDS CONSTRUCTION

**PROPRIETARY AND
REGISTERED TRADEMARKS:**
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REV.	DESCRIPTION	AUTHOR	APPROVED	DATE
1	UPDATED BEARING PAD MATERIAL	OH	JV	11/29/2021
2	BRG #'S REVISED	MS	JV	12/2/2021

REV. NO.	ITEM NO.	JOB ID	PIECE MARK	QTY.	TOTAL QTY.	LNQ.	WDTH.	THK.	DIA.	ID.	DESCRIPTION	MATERIAL	REMARKS
0	1	2102648-01	PA1	1	31	23.000	15.750	1.250	--	--	SOLE PLATE	ASTM A709 GR 50	--
0	2	2102648-01	PB1	1	31	11.000	11.000	2.750	--	--	UPPER BEARING PLATE	ASTM A709 GR 50	--
0	3	2102648-01	PCI	1	31	13.500	26.000	1.500	--	--	WASHER PLATE	ASTM A709 GR 50	--
0	4	2102648-01	G11	2	62	20.953	3.000	0.500	--	--	GUIDE BAR	ASTM A709 GR 50	--
0	5	2102648-01	B11	32	173.60	3.000	0.750	2.000	--	--	SM	ASTM A29 GR 4000 SERIES	FAMINE - 10564
0	6	2102648-01	B11	32	2.406	--	--	--	--	--	MER PISTON	ASTM A29 GR 4000 SERIES	FAMINE - 10564
0	7	2102648-01	B11	4	124	6.688	--	0.500	2.375	--	MER SHAFT	ASTM A29 GR 4000 SERIES	FAMINE - 10564
0	8	2102648-01	BC1	4	124	6.688	--	0.750	--	--	POLYMER DISC	POLYETHER URETHANE 6/20	--
0	9	2102648-01	MA1	1	31	8.813	2.063	--	1.031	8.813	MER SPRING LONGITUDINAL	POLYETHER URETHANE 95A	--
0	10	2102648-01	ML1	4	124	4.250	--	2.000	0.766	--	TOP PTFE	PTFE UNFILLED SHEET	--
0	11	2102648-01	TT1	1	31	9.250	0.250	2.000	--	--	PISTON PTFE	PTFE UNFILLED SHEET	--
0	12	2102648-01	TS1	4	124	--	0.250	2.000	--	--	TOP STAINLESS STEEL	ASTM A240 TYPE 304	--
0	13	2102648-01	ST1	1	31	14.750	11.500	0.105	--	--	SIDE STAINLESS STEEL	ASTM A240 TYPE 304	--
0	14	2102648-01	SS1	2	62	7.250	2.250	0.105	--	--	#10-32 X 0.625 FHCS	ASTM F835	--
0	15	2102648-01	CS1	4	124	0.625	--	--	0.190	--	#10-32 X 0.625 FHCS	ASTM F835	--
0	16	2102648-01	CT1	4	124	0.625	--	0.625	--	--	RESTRAINT TAB	ASTM F835	--
0	17	2102648-01	MW1	2	62	1.750	2.000	0.500	--	--	BEARING PAD	ASTM A36 OR BETTER	--
0	18	2102648-01	MP1	1	31	13.500	26.000	0.125	--	--	RANDOM FIBER PAD	ASTM A36 OR BETTER	ODOT 711.21
0	19	2102648-01	HA1	2	62	21.000	--	--	1.500	--	01.500 X 21.000 ANCHOR ROD	ASTM F1554 GR 105 HDG FULLY THREADED	--
0	20	2102648-01	HB1A	2	62	--	--	--	1.500	--	01.500 HARDENED WASHER	ASTM F436 HDG	--
0	21	2102648-01	HB1B	2	62	--	--	--	1.500	--	00.500 HARDENED WASHER	ASTM F436 HDG	--
0	22	2102648-01	HC1	4	124	--	--	--	1.500	--	01.500 HEAVY HEX NUT	ASTM A563 HDG	--
0	23	2102648-01	HE1	2	62	2.500	--	--	0.500	--	00.500 X 2.500 HEAVY HEX BOLT	GRADE 5	--

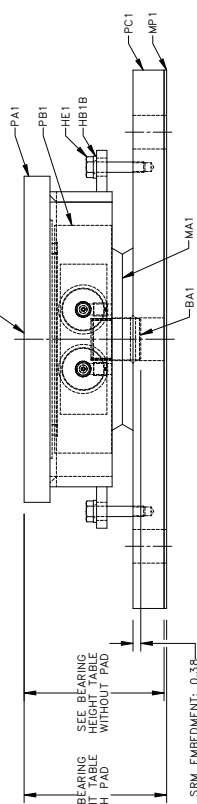
EQS285 BEARING CAPACITY TABLE	
VERTICAL SERVICE LOAD (KIPS)	285
VERTICAL DEAD LOAD (KIPS)	151
VERTICAL STRENGTH LOAD (KIPS)	424
HORIZONTAL SERVICE LOAD (KIPS)	17.1
HORIZONTAL STRENGTH LOAD (KIPS)	28.5
TOTAL LONGITUDINAL DISPLACEMENT (IN)	5.500
TOTAL TRANSVERSE DISPLACEMENT (IN)	2.250
SERVICE ROTATION (rad)	+0.022
STRENGTH ROTATION (rad)	+0.022
APPROX. DEAD LOAD DEFLECTION (IN)	0.053



DET TRANSVERSE GAP DETAIL

DET LONGITUDINAL SPRING INTERFACE

PEDESTAL ASSEMBLY TO BE WELDED CENTERED ON TOP OF SOLE PLATE ASSEMBLY - SEE SHEET 4 OF Z7 (BEARING INSTALLATION) FOR WELDED VIEW**



ELEV EQS285 ASSEMBLY
31 WEIGHT: 419 LBS.

BRG #'S 55-68 SHOWN

EQS285 BEARING HEIGHT TABLE							
BRG NO.	SOLE PLATE	INTERFACE PLATE	UPPER BRG. PLATE	MASTERY PLATE	LOWER BRG. PLATE	HEIGHT AT ϕ WITH PAD	HEIGHT AT ϕ WITHOUT PAD
16-32	PA1	--	PB1	PCI	--	6.89	6.76
55-68	PA1	PE1	PB1	PCI	--	6.89	6.76

BILL OF MATERIALS NOTES:
 1. DIMENSIONS IN BILL OF MATERIALS REFLECT THE DIMENSIONS OF RAW MATERIALS TO BE ORDERED. SEE DETAIL SHEETS FOR FINAL DIMENSIONS OF FABRICATED INDIVIDUAL PARTS.
BEARING CAPACITY NOTES:
 1. ROTATION CAPACITY INCLUDES +/- 0.005 RADIAN FOR CONSTRUCTION TOLERANCE.
ASSEMBLY NOTES:
 1. ALL HEIGHTS ARE MEASURED AT THE ϕ . UNLOADED HAVING A TOLERANCE OF +0.19/-0.06.

RELEASED FOR FABRICATION
 R.J. WATSON, INC
 DATE: 6/20/2022

ALL DIMENSIONS ARE IMPERIAL

REV. NO: 2 DATE: 12/01/2021
 TITLE: EQS285 ASSEMBLY
 DTL'D BY: BW DATE: 10/1/2021
 R/W/D BY: JR DATE: 10/5/2021
 CHK'D BY: JC DATE: 10/12/2021
 ORDER NO: 2102648 SHEET: 5 OF 28

TOLERANCING:
 AS PER ASSHOLD LRD SPECIFICATIONS TABLE UNLESS OTHERWISE NOTED OTHERWISE

PROJECT INFORMATION:
 I-70 RECONSTRUCTION, MUSKINGUM COUNTY, OHIO
 BRIDGE NO: MUS-70-1159

OWNER: OHIO DOT
CONSULTANT: GANNETT FLEMING
CONTRACTOR: SHELLEY & SANDS CONSTRUCTION

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RJ Watson Inc
 1000 W. WATSON AVE.
 WATSON, OHIO 45792-1000
 (614) 885-1000
 www.rjwatson.com