

KUBRICKY CONSTRUCTION CORP.
269 BALLARD ROAD

WILTON, NY 12831
518 792-5864



Rutland City BRF 3000 (2014036)
SUBMITTAL 21

Issued 12/05/14
Respond by 12/19/14

To

Timothy Pockette, PE

Topic 531.17 Bearing Device Assy, Steel Reinforced Elastomeric Pad
Status For Approval
Spec section 531.17
Sent to approver 12/5/14
Required from approver 12/19/14

From

Volker H.D. Burkowski

Signed by

Date

12/5/14

Proceed as Indicated

Owner Authorized Representative

Date

DS Brown Company
300 East Cherry Street
North Baltimore, OH 45872
(419) 257-3561
(419) 257-0332 [Engineering Fax #]



Date: December 04, 2014

Kubricky Construction Corporation

Volker Burkowski
269 Ballard Road
Wilton, NY 12831
Telephone #: (518) 792-5864

DSB Project #: 45525-1104-1
Description: River Street (TH 8) over Otter Creek
Owner Project #: BRF 3000(16)
County, State: Rutland County, VT
Customer PO: 201403606

The following documents are being submitted for:

- Approval**
- Distribution
- Per your Request
- Information

Drawings submitted via:

- via FedEx
- via e-mail to vburkowski@dacollins.com*

# of Copies	Sheet #s	Document Size	Description
1	GN1, 1	11" x 17"	"Elastomeric Bearing Assembly" Shop Drawings
1	Sht-01	11" x 17"	"Elastomeric Bearing" Shop Drawing

Please verify un-factored live load w/o impact is 0 as shown on the laminated Elastomeric Bearing shop drawing.

Please verify total bearing height shown on sheet 01 of the expansion Elastomeric Bearing Assembly shop drawings.

If you have concerns or questions about the content of this submittal, Chad Suon is the Project Engineer and can be reached at (419) 257-7136 or csuon@dsbrown.com.

Please forward the enclosed documents to the appropriate party for review. Return the reviewed documents to DS Brown as soon as possible. Note that once drawings are returned, 10-12 weeks will be required for product fabrication. Your assistance in expediting the approval process would be appreciated.

Remarks:

Please return the review documents to LuAnn Hayfield, Engineering Administrator @ (419) 257-3561 or lhayfield@dsbrown.com.

TOLERANCE TABLE	
DESCRIPTION	TOLERANCE (INCHES U.N.O.)
ELASTOMERIC BEARING DESIGN THICKNESS ≤ 1.250"	-0, +0.1181
ELASTOMERIC BEARING DESIGN THICKNESS > 1.250"	-0, +0.2362
ELASTOMERIC BEARING PLAN DIMENSIONS ≤ 36"	-0, +0.2362
ELASTOMERIC BEARING PLAN DIMENSIONS > 36"	-0, +0.4724
THICKNESS OF INDIVIDUAL LAYERS OF ELASTOMER (LAMINATED BEARINGS ONLY) AT ANY POINT WITHIN THE BEARING	±0.1181
VARIATION FROM A PLANE PARALLEL TO THE THEORETICAL SURFACE (AS DETERMINED BY MEASUREMENTS AT THE EDGE OF THE BEARINGS) (PARALLELISM):	
TOP & BOTTOM	±0.005 RAD
SIDES	±0.2362
POSITION OF EXPOSED CONNECTION MEMBERS	±0.1181
ELASTOMERIC COVER: TOP & BOTTOM	-0, +0.1181
ELASTOMERIC COVER: SIDES	-0, +0.1181
ELASTOMERIC BEARING HOLE OR SLOT SIZE	±0.1181
ELASTOMERIC BEARING HOLE OR SLOT LOCATION	±0.1181
STEEL PLATE THICKNESS	±0.063
STEEL PLATE PLAN DIMENSIONS ≤ 30"	±0.250
STEEL PLATE PLAN DIMENSIONS > 30"	±0.250
STEEL PLATE FLATNESS IN CONTACT WITH BEARING	0.001 X NOM. DIMENSION
STEEL PLATE FLATNESS: GROUT OR CONCRETE SIDE	0.005 X NOM. DIMENSION
STEEL PLATE FLATNESS: STEEL GIRDER SIDE	0.002 X NOM. DIMENSION
STEEL PLATE FLATNESS: STEEL PLATE SIDE	0.001 X NOM. DIMENSION
STEEL PLATE SURFACE FINISH IN CONTACT WITH BEARING	125 μ" RMS
BEVEL SLOPE	±0.002 RAD
ANCHOR HOLE OR SLOT SIZE	±1/8
ANCHOR HOLE OR SLOT LOCATION	±1/8

GENERAL NOTES:

- MATERIALS SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011 AND THE LATEST REVISIONS, INCLUDING SUPPLEMENTARY SPECIFICATIONS, CONTRACT PLANS, AND THE SPECIAL PROVISIONS. GENERAL SHOP PRACTICES, STRUCTURAL FABRICATION, WELDING AND ASSEMBLY SHALL BE GOVERNED BY ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.
- THESE SHOP DRAWINGS WERE PREPARED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS. THE D.S. BROWN COMPANY DOES NOT ACCEPT LIABILITY FOR THE DESIGN OF THE PRODUCTS DETAILED IN THESE SHOP DRAWINGS.
- THE D.S. BROWN COMPANY TO SUPPLY ONLY THE PARTS SHOWN ON THESE SHOP DRAWINGS.
- THE BEARINGS SHALL BE SUBJECT TO RANDOM IN-HOUSE ELASTOMER TESTING AND IN-HOUSE PROOF LOAD TESTING IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 14 (METHOD 'A') AND AASHTO LRFD CONSTRUCTION SPECIFICATIONS SECTION 18.
- IN ACCORDANCE WITH CONTRACT PLANS, FABRICATOR MAY USE NATURAL RUBBER FOR THE ELASTOMER.
- ALL STEEL SHALL BE PRODUCED IN THE UNITED STATES OF AMERICA.
- ALL CORNERS AND EDGES OF STEEL PLATES SHALL BE GROUND TO A 1/16" RADIUS FOR GALVANIZING.
- ALL EXTERNAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 & A153 SPECIFICATIONS. IN ACCORDANCE WITH SECTION 726.08 OF THE STANDARD SPECIFICATIONS, REPAIR DAMAGED HOT DIPPED GALVANIZING PER ASTM A780, ANNEX A2. THE PAINT USED IN THE REPAIR SHALL BE ORGANIC-ZINC, CONTAINING 92% MINIMUM ZINC BY WEIGHT IN THE DRY FILM. THE PAINT SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS TO A THICKNESS EQUIVALENT TO THE SURROUNDING GALVANIZING.
- GALVANIZATION LIFTING DEVICES MAY BE WELDED TO PARTS IF NECESSARY. WHEN THEIR USE IS COMPLETE, REMOVE AND GRIND FLUSH ALL CONNECTION LOCATIONS. REPAIR AREA PER ASTM A780, ANNEX A2.
- BEARING MANUFACTURING FACILITY AND REPRESENTATIVE FOR COORDINATING PRODUCTION:
THE D.S. BROWN COMPANY
300 EAST CHERRY STREET
NORTH BALTIMORE, OHIO 45872
CSR - MARCIE MCKINNON - (419) 257-3561

MARKING NOTES:

- EACH BEARING SHALL BE PERMANENTLY MARKED. THE MARKING SHALL CONSIST OF THE ORDER NUMBER, LOT NUMBER, PAD IDENTIFICATION NUMBER, UP STATION AND ELASTOMER TYPE AND GRADE. WHERE POSSIBLE, THE MARKING SHALL BE ON A FACE WHICH IS VISIBLE AFTER ERECTION OF THE STRUCTURE.
- MARK THE THICKER EDGE OF THE BEVELED PLATE FOR IDENTIFICATION IN THE FIELD.

CONTRACTOR NOTES:

- WELDING PROCEDURES SHALL BE ESTABLISHED BY THE CONTRACTOR TO RESTRICT THE TEMPERATURE TO A MAXIMUM OF 200°F (93°C) FOR SURFACES IN CONTACT WITH THE ELASTOMER. TEMPERATURES SHALL BE DETERMINED BY TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS.

TESTING NOTES:

- THE BEARING SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AASHTO M251, APPENDIX X1.

REV.	DESCRIPTION	DATE	DET.	CKD.



D.S. BROWN
A GIBRALTAR INDUSTRIES COMPANY

THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

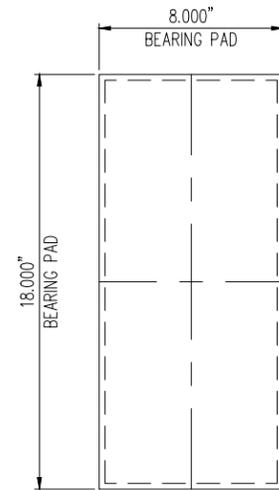


LOCATION	ITEM	QUANTITY
LOCATION — RIVER STREET OVER OTTER CREEK	—	—
BRIDGE — 2 (TH 8)	—	—
PROJECT — BRF 3000 (16)	—	—
PROJECT NAME — RUTLAND CITY	—	—
P.O. NO. — 201403606	—	—
DESIGNER — EVANS-MONGEON	—	—
CUSTOMER — KUBRICKY CONSTRUCTION CORP.	—	—

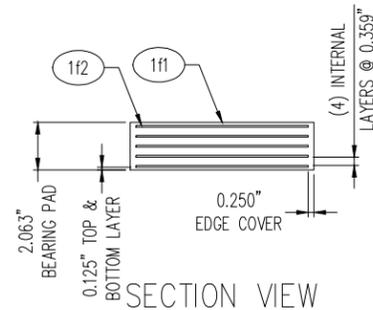
DESCRIPTION	SCALE: N.T.S.	DRAWN BY: DA	CHECKED BY: CMS	DATE: 12/5/14	—
GENERAL NOTES & COATING LIMITS RUTLAND CO., VT	PROJECT NUMBER: 45525	PRODUCT CODE: 1104	RELEASE: 1	SHEET: GN1	

MK	QTY	DESCRIPTION	MATERIAL	LENGTH	REMARKS	WT*	REV
1A	7	ELASTOMERIC BEARING	45525.1103.2		5 + 2 SAMPLES	26	
1f1	7	2.063" X 18.000"	NATURAL RUBBER	8.000"	50+/-5 DURO GR.4	12	
1f2	35	14 GA. X 17.500"	A1011 GR 36	7.500"	PLAIN	3	
		*Approx. Gross Wt. Lbs Per Single Unit					12/4/2014 8:04:15 AM

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1A - PLAN VIEW
LAMINATED ELASTOMERIC BEARING
DSB ITEM 45525.1103.2
(7) REQ'D @ ABUT. 2



SECTION VIEW

LOAD TABLE (KIPS)		
DL+SDL (UNFACTORED)	LL W/O IMP. (UNFACTORED)	TOTAL DESIGN REACTION (UNFACTORED)
60.2	0.0	60.2

REVIEWER TO VERIFY

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DESIGNER — EVANS-MONGEON	—	—
CUSTOMER — KUBRICKY CONSTRUCTION CORPORATION	—	—

DESCRIPTION	SCALE	DRAWN BY	CHECKED BY	DATE	BRIDGE SHEET
VERSIFLEX ELASTOMERIC BEARING RUTLAND CO., VT	N.T.S.	DJA	CMS	12/5/2014	—
PROJECT NUMBER	PRODUCT CODE	RELEASE	SHEET		
45525	1103	1	01		