GENERAL NOTES:

1. PAD AND MATERIALS SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 2006 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.

2 THESE SHOP DRAWINGS ARE 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.

3 THE D.S. BROWN COMPANY TO SUPPLY ONLY THE PARTS SHOWN ON THESE DRAWINGS.

4 ALL STEEL SHALL BE PRODUCED IN THE UNITED STATES OF AMERICA.

5. ALL CORNERS AND EDGES OF STEEL PLATES SHALL BE GROUND TO A 1 6 RADIUS.

6. PTFE (TEFLON) SHALL BE VIRGIN, UNFILLED POLYTETRAFLUOROETHYLENE. PTFE IS PURCHASED ETCHED ON ONE SIDE FOR BONDING. SEE VULCANIZE BONDING PROCEDURE ELSEWHERE ON THIS SHEET.

7. STAINLESS STEEL SHALL CONFORM TO ASTM A240–TYPE 304 AND SHALL BE 11GA. STAINLESS STEEL SLIDING SURFACES IN CONTACT WITH PTFE SHALL HAVE A NO. 8 MIRROR FINISH AND ALL OTHERS SHALL HAVE A 2B FINISH

8. ALL STRUCTURAL STEEL SURFACES TO BE GALVANIZED SHALL BE CLEANED IN ACCORDANCE WITH SSPC–SP10.

9 ALL SPECIFIED STEEL TO BE GALVANIZED SHALL BE IN ACCORDANCE WITH ASTM A123 SPECIFICATIONS. REPAIR OF DAMAGED HOT DIPPED GALVANIZING PER ASTM A780, ANNEX A1.

10. WELDING PROCEDURES SHALL BE ESTABLISHED BY THE CONTRACTOR TO RESTRICT THE TEMPERATURE TO A MAXIMUM OF 93°C (200°F) FOR SURFACES IN CONTACT WITH THE ELASTOMER AND 149°C (300°F) FOR SURFACES IN CONTACT WITH PTFE. TEMPERATURES SHALL BE DETERMINED BY TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS

11 THE EXPANSION BEARINGS WILL BE SHIPPED CENTERED, AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OFFSET THE SLIDE PLATES IN THE FIELD DURING INSTALLATION. REFER TO THE CONTRACT DRAWINGS SHEET 32 OF 68 FOR INITIAL OFFSETS

12. PARTICULAR CARE SHOULD BE EXERCISED TO MASK AND PROTECT THE PTFE AND POLISHED STAINLESS STEEL SURFACES FROM BLAST ABRASIVES, WELD SPLATTER, AND CONCRETE RUN–OFF DURING CONSTRUCTION.

13 THE BEARINGS SHALL BE SUBJECTED TO RANDOM IN–HOUSE ELASTOMER TESTING AND IN–HOUSE PROOF LOAD TESTING IN ACCORDANCE WITH AASHTO DIVISION I, SECTION 14 (METHOD "A") AND AASHTO DIVISION II, SECTION 18.

14 BLAST AREA OF STEEL TO BE BONDED TO ELASTOMER TO REMOVE GALVANIZATION PRIOR TO VULCANIZE BONDING OF PAD TO STEEL.

PROCEDURE FOR VULCANIZE BONDING PTFE TO STAINLESS STEEL

1) WIPE OFF GREASE AND EXCESS DIRT ON STAINLESS STEEL (S.S.) & PTFE SURFACES USING A SOLVENT.

2) BLAST S.S. SURFACE TO A WHITE METAL FINISH AND RE–WIPE WITH A SOLVENT.

3) DIP S.S. INTO A PRIMER COAT OF "CHEMLOK 205 METAL–TO–RUBBER ADHESIVE PRIMER" (LORD) ON BLASTED AREA. DRY–FILM THICKNESS OF PRIMER COAST SHOULD BE BETWEEN 0.2 TO 0 4 MILS PER PRODUCT DATA SHEETS.

4) LET DRY FOR A MINIMUM OF 30 MINUTES.

5) DIP S.S. INTO A FINAL COAT OF "CHEMLOK 220 ONE–COAT ADHESIVE" (LORD) OVER PRIMER. DRY–FILM THICKNESS OF FINAL COAT SHOULD BE BETWEEN 0.4 AND 0.7 MILS PER THE PRODUCT DATA SHEETS.

6) TOTAL THICKNESS SHOULD BE 0.6 TO 1.1 MILS

7) LET DRY FOR APPROXIMATELY 1 HOUR

8) MOLD RUBBER OR NEOPRENE TO PREPPED S.S. UNDER HEAT AND PRESSURE. MOLD TIME, HEAT, AND PRESSURE SHALL VARY DUE TO SIZE AND THICKNESS OF BEARINGS S.S SHOULD REACH A TEMPERATURE OF 260 DEGREES (F) DURING THE MOLDING PROCESS FOR BONDING.

PROCEDURE FOR PREPARING PTFE

1) WIPE OFF GREASE AND EXCESS DIRT ON ETCHED SIDE OF PTFE.

2) FOLLOW STEPS #3–#7 FROM ABOVE FOR PREPPING PTFE.

3) WHEN MOLDING PTFE, PLACE A 0 030" THICK PIECE OF RUBBER BETWEEN S S & PTFE AND FOLLOW STEP #8 FROM ABOVE FOR MOLDING

TOLERANCE TABLE	
DESCRIPTION (ELASTOMER)	TOLERANCE
ELASTOMERIC BEARING DESIGN THICKNESS > 1. 250"	+ 1/4", -0
ELASTOMERIC BEARING PLAN ≤ 36"	+ 1/4", -0
ELASTOMERIC BEARING PLAN > 36"	+ 1/2", -0
ELASTOMERIC COVER TOP & BOTTOM	+ 1/8", -0
ELASTOMERIC COVER SIDES	+ 1/8", -0
ELASTOMERIC DISC SHORE DUROMETER	60 ± 5
THICKNESS OF INDIVIDUAL LAYERS OF ELASTOMER (LAMINATED BEARINGS	
ONLY) AT ANY POINT WITHIN THE BEARING	± 1/8"
VARIATION FROM A PLANE PARALLEL TO THE THEORETICAL SURFACE	
(AS DETERMINED BY MEASUREMENTS AT THE EDGE OF THE BEARINGS)	
TOP	± 0. 005 rad
SIDES	± 1/4"
POSITION OF EXPOSED CONNECTION MEMBERS	± 1/8"
EDGE COVER OF EMBEDDED LAMINATES OF CONNECTION MEMBERS	+ 1/8", -0
SIZE OF HOLES, SLOTS, OR INSERTS	± 1/16"
POSITION OF HOLES, SLOTS, OR INSERTS	± 1/16"
SOLE PL. PLAN DIMENSIONS	± 1/16"
SOLE PL. THICKNESS	± 1/16"
HOLE LOCATION	± 1/16"
SOLE PL. UNDERSIDE SURFACE FLATNESS	CLASS A
PTFE THICKNESS	+1/16, -1/32"
PTFE PLAN DIMENSION, TOTAL DESIGN AREA	± 1/16"
SLIDING STAINLESS STEEL FINISH	~~≤20μ"~~ RMS #8 MIRROR <10μ"

FLATNESS TOLERANCE	
CLASS	X NOM. DIM.
A	0. 001
B	0. 002
C	0. 003

VTrans - PDD

MAY 2 2 2009

Structures Design Section

Accepted	
Accepted as Noted	✓
Accepted Noted Resubmit	
Rejected. Revise Resubmit	
Rejected - Unacceptable	

Checking is only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents The Engineer assumes no liability for errors or omissions that may be contained herein The Contractor by approving and submitting these documents, verifies their accuracy as stipulated on the Contractor's Shop Drawing Stamp

DuBOIS AND KING

6/8/09 By

KMH 6/12/09

REV	DESCRIPTION	DATE	DET	CKD

D.S. BROWN

THE D S BROWN COMPANY
300 E CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419 257 3561
FAX 419 257 0332
WWW DSBROWN COM

LOCATION — TH NO. 1 OVER THE GIHON RIVER
BRIDGE — 5
PROJECT — BHO 1448 (29)
—
P.O. NO. — 6045
DESIGNER — DuBOIS & KING, INC.
CUSTOMER — SD IRELAND CONSTRUCTION

ITEM	QUANTITY
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DESCRIPTION
GENERAL NOTES
LAMOILLE CO., VT

SCALE	DRAWN BY	CHECKED BY	DATE	
N.T.S.	SP	EK	5/09	–
PROJECT NUMBER	PRODUCT CODE	RELEASE	SHEET	
26274	1104	1	GN1	