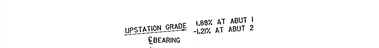
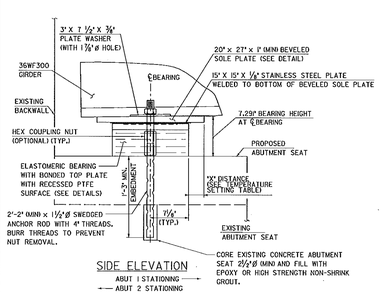
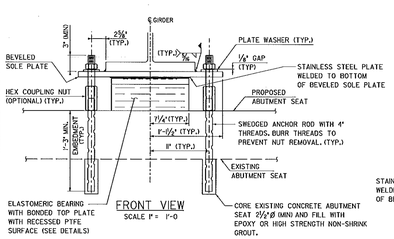


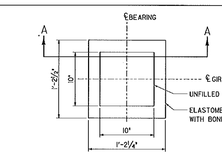
BEVELED SOLE PLATE DETAIL
SCALE: N.T.S.



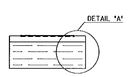
SIDE ELEVATION
ABUT 1 STATIONING
ABUT 2 STATIONING
SCALE 1" = 1'-0



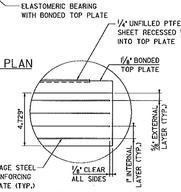
FRONT VIEW
SCALE 1" = 1'-0



ELASTOMERIC BEARING PLAN
SCALE 1" = 1'-0

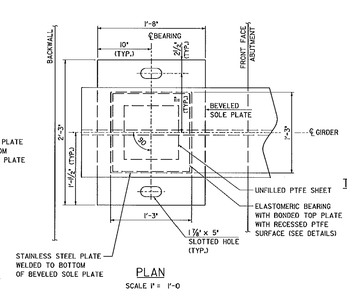


SECTION A-A
SCALE 1" = 1'-0



DETAIL "A"
SCALE: N.T.S.

ELASTOMERIC BEARING DETAILS



PLAN
SCALE 1" = 1'-0

ELASTOMERIC BEARING NOTES

1. ALTERNATE CONFIGURATIONS FOR ELASTOMERIC BEARINGS MAY BE SUBMITTED FOR APPROVAL. ANY ALTERNATE BEARING SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE LOADS AND CRITERIA SHOWN ON THIS SHEET AND MAINTAIN THE ANCHORAGE SYSTEM SHOWN. THE BEARINGS SHALL BE DESIGNED ACCORDING TO AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS" 2010 5TH EDITION AND ITS LATEST REVISIONS.
2. BEARINGS SHALL CONFORM TO APPLICABLE PROVISIONS OF SECTIONS 531 & 731 OF THE STANDARD SPECIFICATIONS, THE SUPPLEMENTAL SPECIFICATIONS, AND THE GENERAL SPECIAL PROVISIONS.
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
4. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL. EXISTING ANCHOR RODS SHALL BE CUT FLUSH AND SMOOTH WITH THE BRIDGE SEAT.
5. DESIGN CRITERIA:
   A. ELASTOMERIC BEARING TO CONCRETE PRESSURE: 900 PSI (FACTORED)
   B. ROTATION: 0.0035 RADIANS
   C. VERTICAL LOADS (UNFACTORED):

	MIN	MAX
DC+DW	44.7 KIP	47.8 KIP
LL+IM	-8.3 KIP	69.7 KIP

6. STEEL IN BEARING DEVICES SHALL BE AASHTO M-270, GRADE 36. ANCHOR RODS SHALL MEET THE REQUIREMENTS OF ASTM F1554, GRADE 36, AND SHALL BE SWEDGED ON THE EMBEDDED PORTION OF THE ROD. ALL STEEL SHALL BE GALVANIZED OR METALIZED AS PER SUBSECTION 531.01(B) AND 506.15 OF THE GENERAL SPECIAL PROVISIONS. AREAS OF GALVANIZING OR METALIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE PAINTED WITH A ZINC RICH PAINT IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513. IF THE BEARINGS ARE METALIZED, THEY SHALL BE SEALED WITH AN APPROVED SEALER AS SPECIFIED IN SUBSECTION 506.15.
7. THE ELASTOMERIC BEARING PAD SHALL BE DUROMETER 60, WITH A SHEAR MODULUS BETWEEN 130 PSI AND 200 PSI.
8. BEARINGS SHALL BE COVERED DURING TRANSIT.
9. 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 SHALL BE VISIBLE AFTER THE BEARING IS INSTALLED.
10. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PROTECT BEARING COMPONENTS FROM FIELD WELD FLASH AND SPLATTER. HEAT FROM WELDING OPERATIONS SHALL BE CONTROLLED SUCH THAT STEEL ADJACENT DOES NOT EXCEED 200 DEGREES FARENHEIT. THE TEMPERATURE SHALL BE VERIFIED BY THE USE OF TEMPERATURE INDICATING CRAYONS OR OTHER SUITABLE MEANS. THE FIELD WELD CONNECTING THE BOTTOM FLANGE WITH THE BEARING DEVICE SHALL BE MADE WITH E70XX ELECTRODES. AREAS OF GALVANIZING OR METALIZING DAMAGED BY WELDING AND/OR HANDLING SHALL BE REPAIRED IN ACCORDANCE WITH SECTION 513. WELD PROCEDURES MUST BE SUBMITTED FOR REVIEW.
11. ALL WASHERS SHALL BE 3/8" PLATE MINIMUM.
12. EPOXY OR HIGH STRENGTH NON-SHRINK GROUT USED TO FILL CORE HOLES AND FASTEN ANCHOR RODS TO EXISTING CONCRETE ABUTMENT SEAT SHALL BE ANCHORING MATERIAL FROM THE AGENCY'S PRE-QUALIFIED LIST.

TEMPERATURE SETTING TABLE

TEMP	"X" DIST
-30°	4 1/8"
-15°	3 3/8"
0°	3 7/8"
15°	3 1/2"
30°	3 1/4"
* 45°	2 7/8"
60°	2 5/8"
75°	2 3/8"
90°	2 1/8"
105°	1 7/8"
120°	1 5/8"

*THEORETICAL NEUTRAL POSITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town of BERKSHIRE		Bridge No. 30	
Highway No. VT 118		Log Stn. Perv. Stn.	
VT 118 OVER MISSISSQUOI RIVER			
ELASTOMERIC BEARING DETAILS			
Designed By S Kelly		Drawn By S Kelly	
Checked By C Taylor	Date 1/14/11	Bridge Design Supervisor R Hebert	Date 1/20/11
PROJECT BERKSHIRE		PROJECT NO. BHF 0283(39)S	
I.G.L. Info.		2030480.004	
Bridge Sheet No.		Sheet 16/81 of 41	