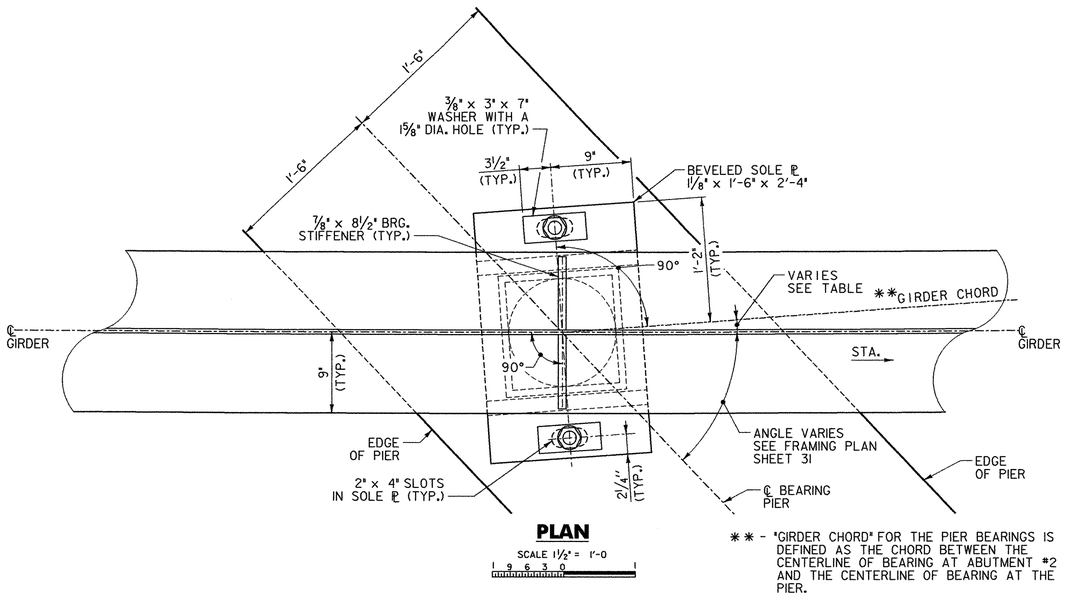
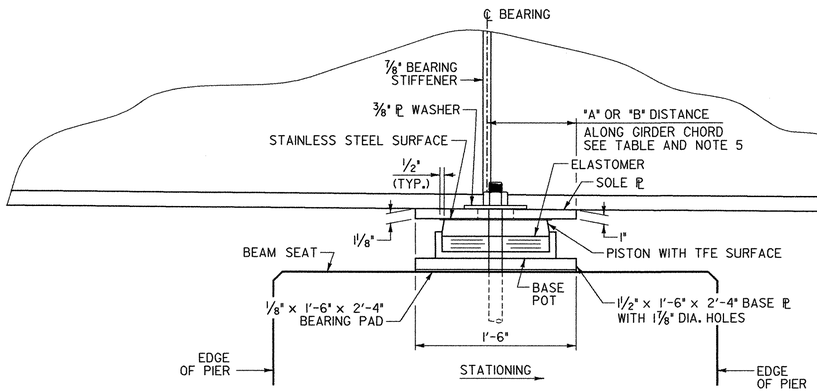


PLAN

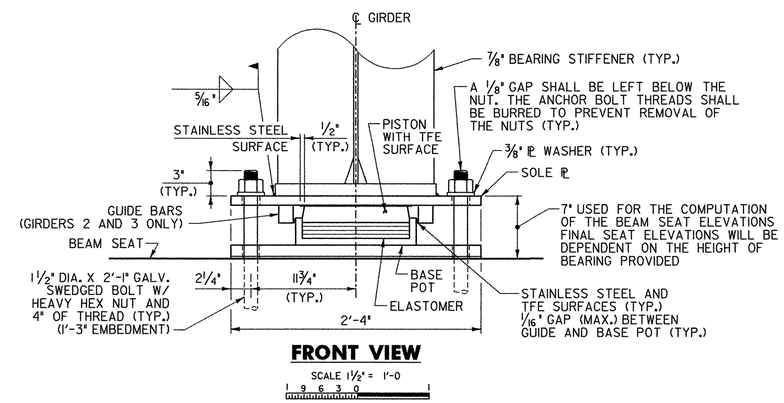
SCALE 1 1/2" = 1'-0

** - "GIRDER CHORD" FOR THE PIER BEARINGS IS DEFINED AS THE CHORD BETWEEN THE CENTERLINE OF BEARING AT ABUTMENT #2 AND THE CENTERLINE OF BEARING AT THE PIER.



SIDE ELEVATION

SCALE 1 1/2" = 1'-0



FRONT VIEW

SCALE 1 1/2" = 1'-0

BEARING NOTES:

1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF THE STANDARD SPECIFICATION SECTIONS 531 AND 731
2. BEARINGS SHALL BE PAID FOR UNDER THE ITEM 531.10, "BEARING DEVICE ASSEMBLY".
3. SHOP DRAWINGS CONFORMING TO STANDARD SPECIFICATION SUBSECTION 513.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
4. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
5. THE "A" DISTANCE IS LISTED FOR SETTING THE BEARING AFTER THE STRUCTURAL STEEL IS ERECTED AND BEFORE THE CONCRETE DECK IS POURED. THE "B" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER THE CONCRETE SLAB, CURB, SIDEWALK, PAVEMENT, AND BRIDGE RAIL ARE PLACED. THE DIFFERENCE IS THE THEORETICAL ELONGATION OF THE BOTTOM FLANGE DUE TO DEAD LOAD DEFLECTION. THE FINAL "B" DISTANCE, AS SHOWN IN THE TABLE, MUST BE ATTAINED WITHIN 1/8".
6. DESIGN CRITERIA:
   A. BASE PLATE TO CONCRETE DESIGN PRESSURE = 1000 P.S.I. MAXIMUM.
   B. SEE TABLES BELOW FOR DESIGN LOADS.
7. ALL STEEL IN BEARING DEVICES (EXCEPT STAINLESS STEEL) SHALL BE AASHTO M-270, (ASTM A-709) GRADE 36.
8. ANCHOR BOLTS SHALL HAVE A MINIMUM OF 1'-3" EMBEDMENT INTO THE CONCRETE AND SHALL CONFORM TO STANDARD SPECIFICATION SUBSECTION 714.08. ANCHOR BOLTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-183 (ASTM A-36).
9. ALL THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED. ALL WASHERS SHALL BE 3/8" PLATE (MINIMUM). PAYMENT FOR ANCHOR BOLTS, NUTS AND WASHERS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "BEARING DEVICE ASSEMBLY".
10. BEARING DEVICES SHALL BE GALVANIZED OR METALIZED AS PER STANDARD SPECIFICATION SUBSECTIONS 531.04(b) AND 506.15(a) AND (b). AREAS OF DAMAGED GALVANIZING SHALL BE COATED IN ACCORDANCE WITH ASTM A 760/A 760M AND A780. AREAS OF DAMAGED METAILIZING SHALL BE COATED WITH THE SAME SEALANT USED BY THE BEARING SUPPLIER.

ABUTMENT NO. 1 BEARING DESIGN LOAD TABLE

LOCATION	DESCRIPTION	* VERTICAL LOAD CAPACITY (KIPS)	TRANSVERSE LOAD CAPACITY (KIPS)	LONGITUDINAL LOAD CAPACITY (KIPS)	** MOVEMENT CAPACITY (INCHES)	ROTATION CAPACITY (RADIANS)
GIRDER NO. 4	NON-GUIDED EXP. BEARING	170	N/A	N/A	2 1/2"	0.020
GIRDER NO. 3	GUIDED EXP. BEARING (LONG.)	170	34	N/A	2 1/2"	0.020
GIRDER NO. 2	GUIDED EXP. BEARING (LONG.)	170	34	N/A	2 1/2"	0.020
GIRDER NO. 1	NON-GUIDED EXP. BEARING	170	N/A	N/A	2 1/2"	0.020

PIER BEARING DESIGN LOAD TABLE

LOCATION	DESCRIPTION	* VERTICAL LOAD CAPACITY (KIPS)	TRANSVERSE LOAD CAPACITY (KIPS)	LONGITUDINAL LOAD CAPACITY (KIPS)	** MOVEMENT CAPACITY (INCHES)	ROTATION CAPACITY (RADIANS)
GIRDER NO. 4	NON-GUIDED EXP. BEARING	335	N/A	N/A	1 1/2"	0.015
GIRDER NO. 3	GUIDED EXP. BEARING (LONG.)	335	67	N/A	1 1/2"	0.015
GIRDER NO. 2	GUIDED EXP. BEARING (LONG.)	335	67	N/A	1 1/2"	0.015
GIRDER NO. 1	NON-GUIDED EXP. BEARING	335	N/A	N/A	1 1/2"	0.015

ABUTMENT NO. 2 BEARING DESIGN LOAD TABLE

LOCATION	DESCRIPTION	* VERTICAL LOAD CAPACITY (KIPS)	TRANSVERSE LOAD CAPACITY (KIPS)	LONGITUDINAL LOAD CAPACITY (KIPS)	MOVEMENT CAPACITY (INCHES)	ROTATION CAPACITY (RADIANS)
GIRDER NO. 4	FIXED	150	15	15	0	0.016
GIRDER NO. 3	FIXED	150	15	15	0	0.016
GIRDER NO. 2	FIXED	150	15	15	0	0.016
GIRDER NO. 1	FIXED	150	15	15	0	0.016

* DESIGN LOAD SHOWN IS THE MAXIMUM ACTUAL LOAD FOR ALL GIRDERS.
** MOVEMENT IS IN THE DIRECTION OF GIRDER CHORDS.

GIRDER CHORD ANGLE TABLE

LOCATION	ANGLE BETWEEN GIRDER CHORD AND THE TANGENT AT ℄ BRG. FOR THE PIER
GIRDER NO. 4	4° 09' 30"
GIRDER NO. 3	4° 03' 54"
GIRDER NO. 2	3° 58' 36"
GIRDER NO. 1	3° 53' 35"

TEMPERATURE SETTING TABLE

TEMP.	"A" DIST.	"B" DIST.
0° F	9 5/8"	9 3/8"
15° F	9 1/2"	9 1/4"
30° F	9 3/8"	9 1/8"
45° F	9 1/4"	9"
60° F	9 1/8"	8 7/8"
75° F	9"	8 3/4"
90° F	8 7/8"	8 5/8"
105° F	8 3/4"	8 1/2"

SEE NOTE 5 THIS SHEET

Dufresne-Henry

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of HUNTINGTON	Bridge No. 42
Highway No. T.H. 4	Log Sta. / Surv. Sta.

EAST STREET (T.H. #4) OVER HUNTINGTON RIVER

PIER BEARING DETAILS

Designed By G. BOGUE	Drawn By S. BURBANK
Checked By M. CHENETTE Date 08/05	Bridge Design Supervisor M. CHENETTE Date 09/05
PROJECT HUNTINGTON	PROJECT NO. BRO 1445 (29)

DH Dgn.: ...\Cadd\Trans\z01j302brgs2.dgn Plot Date: 01/31/2006

Bridge Sheet No. Sheet 36 of 63