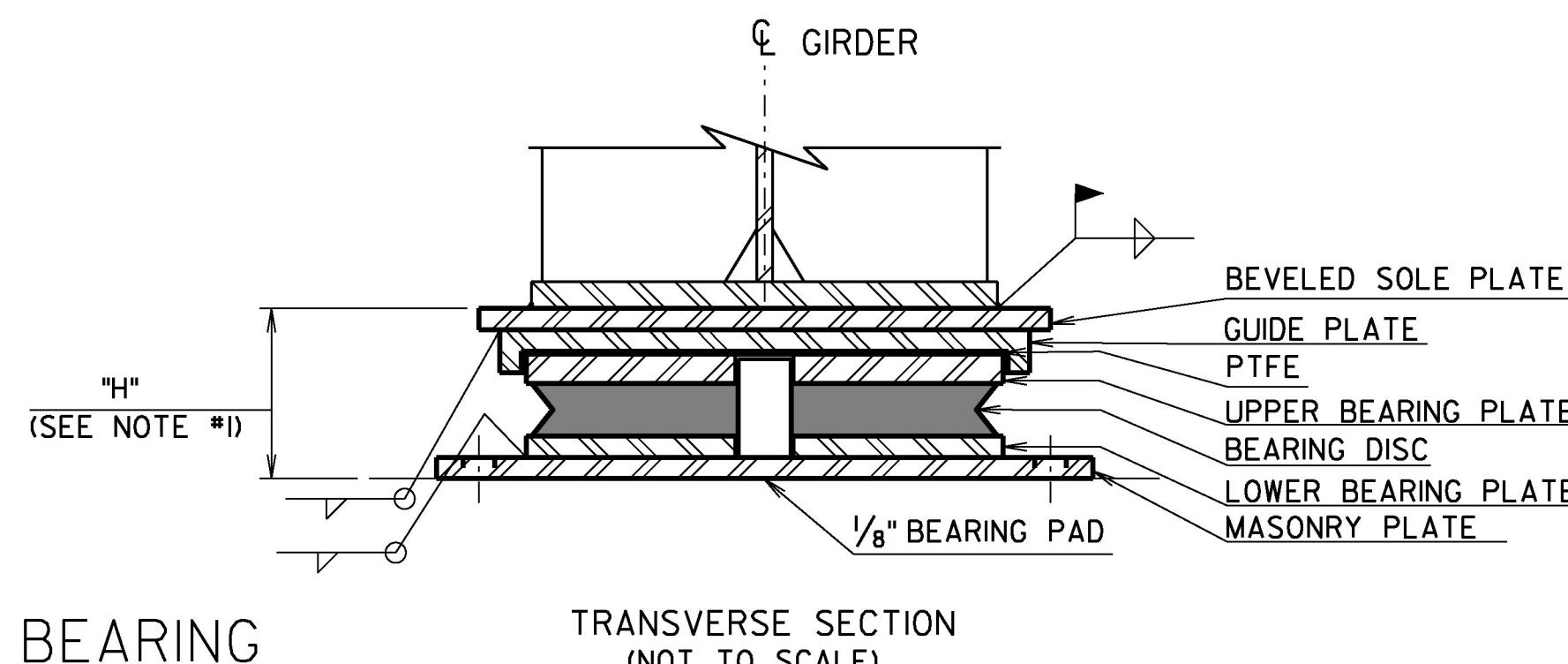
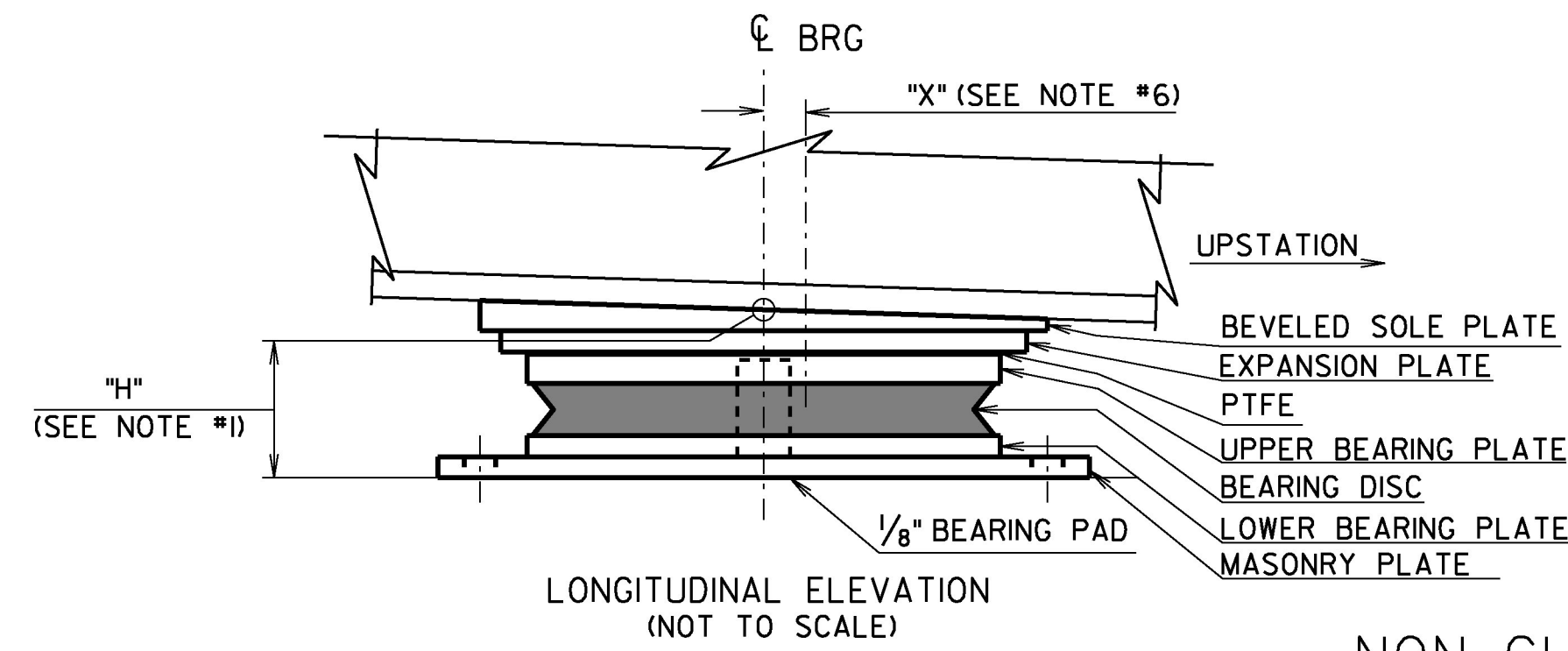


LONGITUDINAL ELEVATION
(NOT TO SCALE)

GUIDED BEARING
(GUIDED LONGITUDINALLY SHOWN,
GUIDED TRANSVERSELY SIMILAR)

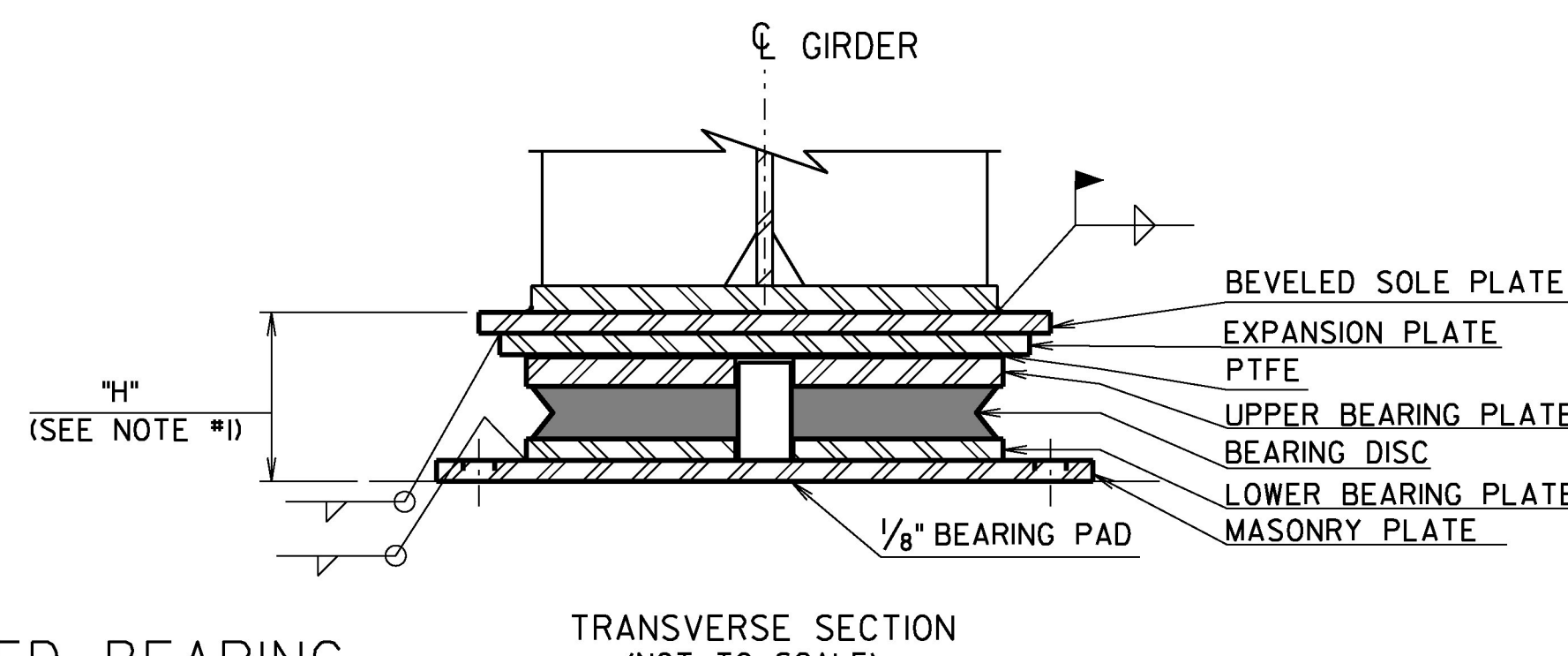


TRANSVERSE SECTION
(NOT TO SCALE)

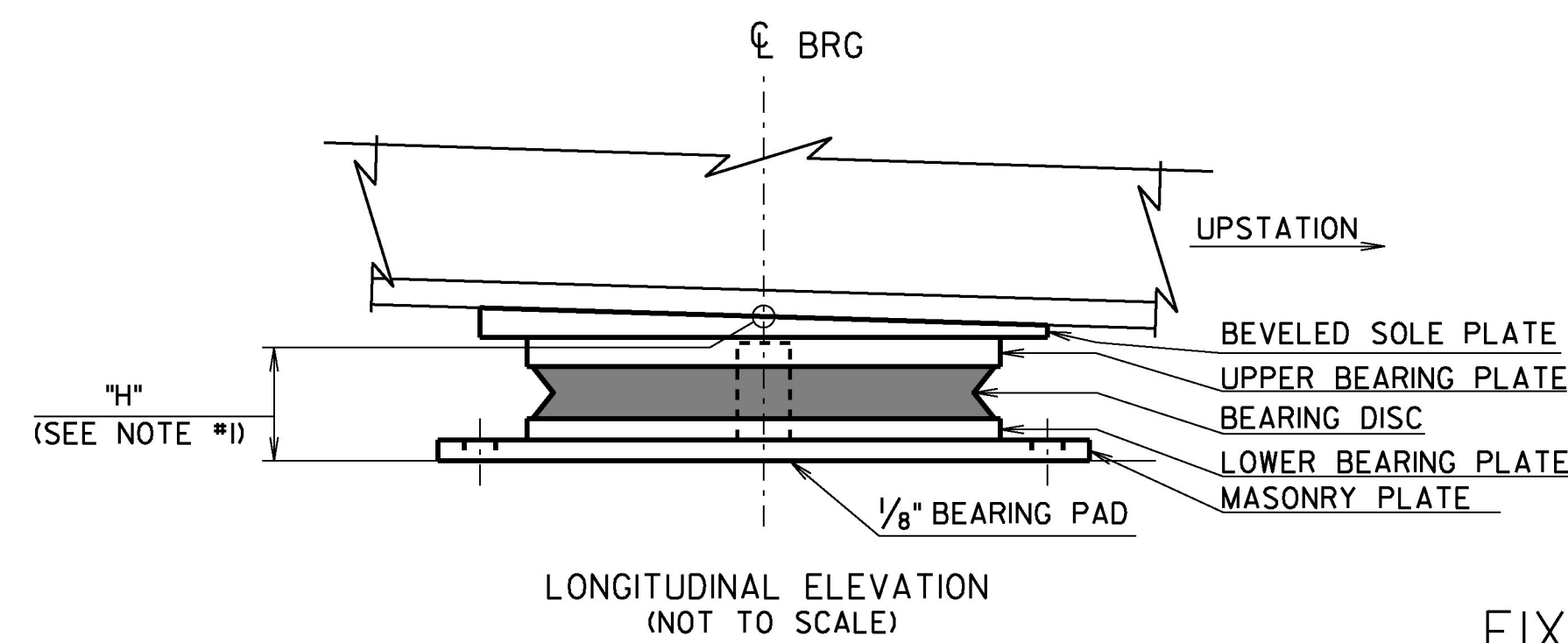


LONGITUDINAL ELEVATION
(NOT TO SCALE)

NON-GUIDED BEARING

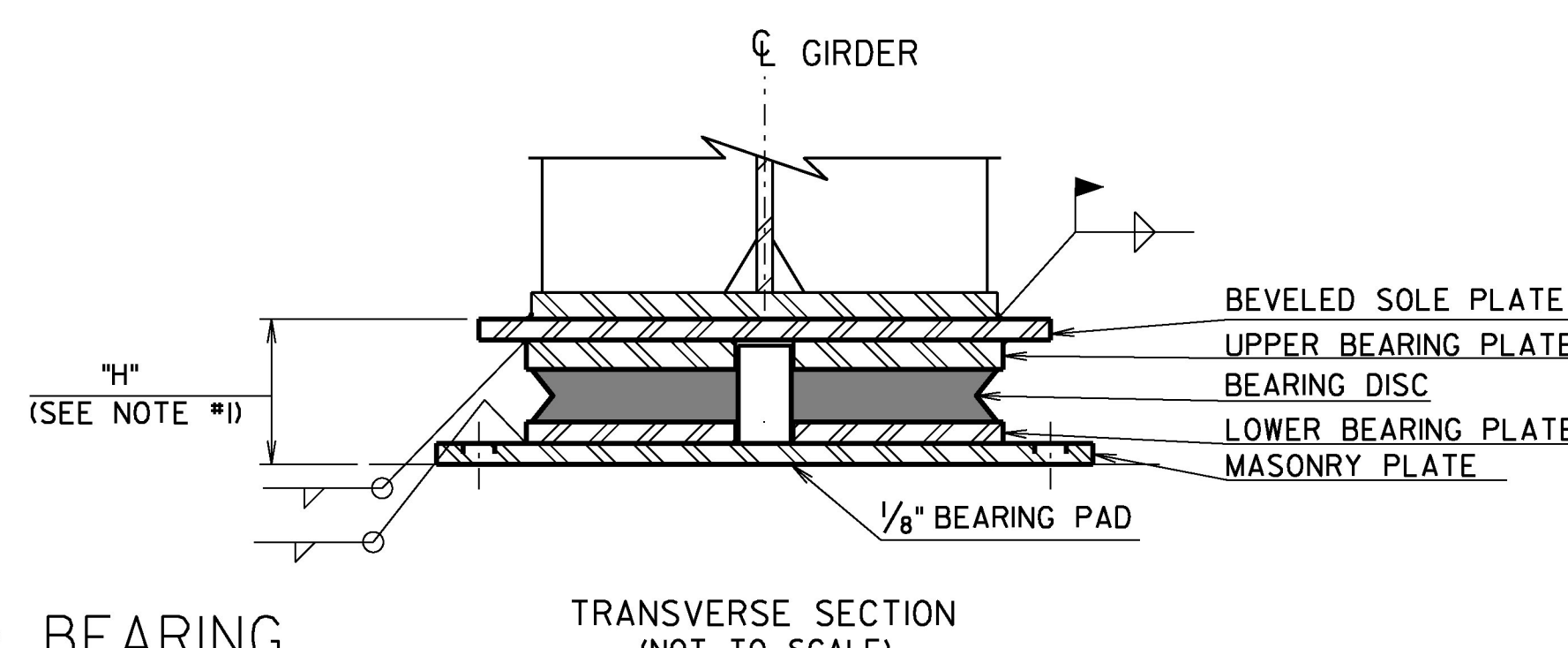


TRANSVERSE SECTION
(NOT TO SCALE)



LONGITUDINAL ELEVATION
(NOT TO SCALE)

FIXED BEARING



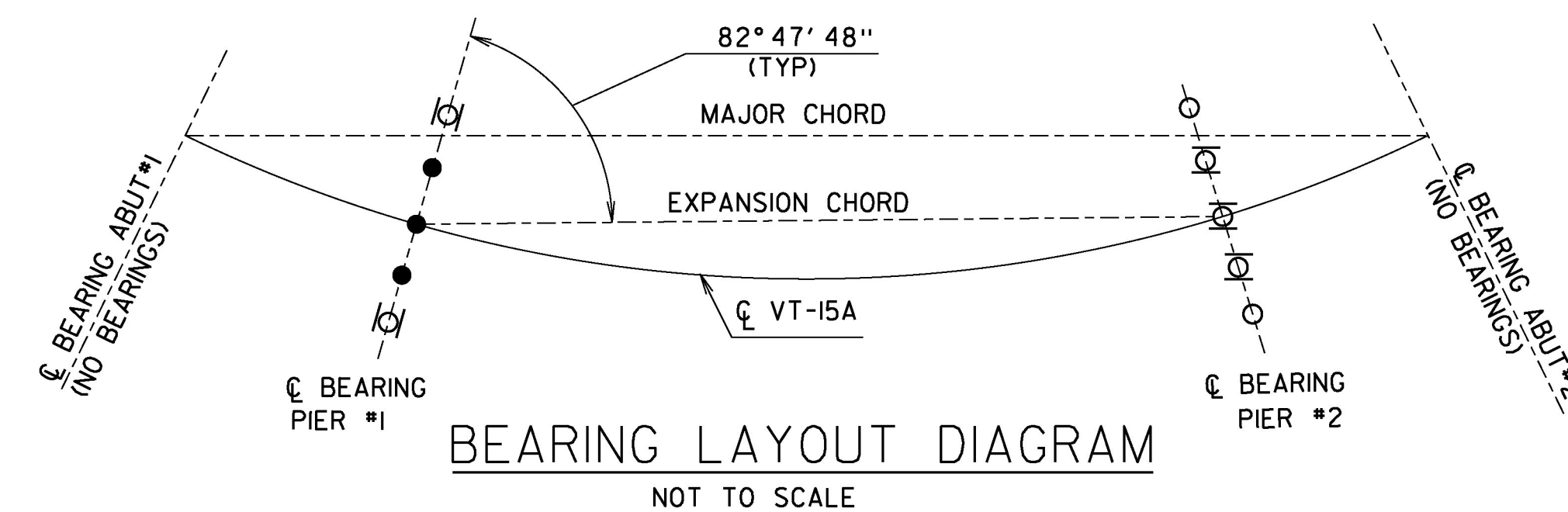
TRANSVERSE SECTION
(NOT TO SCALE)

NOTES:

- BRIDGE SEAT ELEVATIONS PROVIDED ON THE PLANS ARE BASED ON AN "H" DIMENSION OF 6.0 INCHES. THE ACTUAL DIMENSION "H" IS THE RESPONSIBILITY OF THE CONTRACTOR. THE FINAL BRIDGE SEAT ELEVATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND SUBMITTED WITH THE FABRICATION DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION OF THE SUBSTRUCTURE UNITS.
- THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL BEARING DEVICE ASSEMBLY COMPONENTS INCLUDING THE SOLE PLATES, MASONRY PLATES, AND ANCHOR RODS. THE MINIMUM SOLE PLATE THICKNESS, MEASURED AT THE THINNEST EDGE, AND THE MINIMUM MASONRY PLATE THICKNESS SHALL EACH BE 1 INCH. DESIGN OF THE BEARINGS SHALL BE IN ACCORDANCE WITH NOTE 1 ON THE PROJECT NOTES SHEET. PAYMENT WILL BE MADE UNDER ITEM 531.15, "BEARING DEVICE ASSEMBLY, HIGH LOAD, MULTI-ROTATIONAL."
- BEARING SOLE PLATE BEVEL VALUE IS POSITIVE UPSTATION.
- BEARING DEVICE ASSEMBLIES SHALL BE PLACED ON 1/8" THICK BEARING PADS IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANCHOR ROD LAYOUT WITH THE BEARING FABRICATOR.
- IN THE BEARING SETTING CORRECTIONS TABLE, A NEGATIVE DIMENSION INDICATES A DOWNSTATION DIRECTION AND A POSITIVE DIMENSION INDICATES AN UPSTATION DIRECTION. TEMPERATURES SHOWN IN THE BEARING SETTING CORRECTIONS TABLE ARE THOSE OF THE STEEL GIRDERS AND NOT NECESSARILY THE AMBIENT AIR TEMPERATURE.
- THE DESIGN TEMPERATURE RANGE SHALL BE 150°F (-30°F TO 120°F).
- THE DESIGN OF THE BEARINGS SHALL INCLUDE A ROTATION TOLERANCE OF 0.010 RADIAN, WHICH SHALL BE ADDED TO THE STRENGTH LIMIT STATE ROTATIONS SHOWN IN THE BEARING TABLE. THE MINIMUM DESIGN ROTATION SHALL BE 0.015 RADIAN.
- ALL STEEL, UNLESS OTHERWISE SPECIFIED, SHALL MEET THE REQUIREMENTS OF AASHTO M 270, GRADE 50.
- ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATIONS ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UPSTATION. ALL MARKS SHALL BE PERMANENT AND SHALL BE VISIBLE AFTER THE BEARING IS INSTALLED.
- THE CONTRACTOR MAY SUBMIT DESIGNS FOR ALTERNATE BEARINGS FOR APPROVAL.

	DIMENSION "X" (IN)					
	15° F	30° F	45° F	60° F	75° F	90° F
PIER # 1	0	0	0	0	0	0
PIER # 2	-3/8"	-3/16"	0	3/16"	3/8"	3/16"

	BEARING SOLE PLATE BEVEL (%)	
	PIER 1	PIER 2
ALL GIRDERS	-2.93	-0.82



BEARING LAYOUT DIAGRAM
NOT TO SCALE

LEGEND	
○	NON-GUIDED
●	FIXED
○ with horizontal line	GUIDED, LONGITUDINAL EXPANSION
○ with vertical line	GUIDED, TRANSVERSE EXPANSION

BEARING TABLE

LOCATION	GIRDER	BEARING TYPE	VERTICAL LOADS (KIP)				HORIZONTAL LOADS (KIPS)*						STRENGTH LIMIT STATE DESIGN ROTATION (RADIAN) (NOTE NO. 8)	TOTAL LONG. MOVEMENT (IN.)
			STRENGTH	EXTREME EVENT	SERVICE		STRENGTH		EXTREME EVENT		SERVICE			
					TOTAL	DEAD	TOTAL	LONG	TRANS	LONG	TRANS	LONG		
PIER #1	1, 5	GUIDED, TRANS	540	300	230	375	95	24	2	2	95	24	0.010	0
	2, 3, 4	FIXED	600	305	240	410	95	32	2	5	95	32	0.009	0
PIER #2	1, 5	NON-GUIDED	540	300	230	375	24	24	2	2	22	22	0.010	2 1/4"
	2, 3, 4	GUIDED, LONG	600	305	240	410	24	32	2	5	22	24	0.009	2 1/4"

* HORIZONTAL LOADS SHOWN ARE ANTICIPATED DEMANDS. ACTUAL DESIGN FORCES SHALL BE IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTIONS 3.10.9 AND 14.7.

TYLIN INTERNATIONAL

PROJECT NAME: MORRISTOWN	NO. 72818	10/17
PROJECT NUMBER: BRS 0240(3)S/STP HES 030-2(28)	Structural Part II	
FILE NAME: s78f329brg.dgn	DESIGNED BY: J. OLUND	CHECKED BY: D. MYERS
PROJECT LEADER: C. CARLSON	BEARING DETAILS	SHEET 87 OF 175
PLOT DATE: 12-APR-2017		
DRAWN BY: G. ROKES		