



CONSTRUCTION LEADERS

SUBMITTAL NO. : 7.1
Bearing Fabrication Drawings

Item No.	Specification	Description
1	531.03	Bearing Fabrication Drawings & Bonding Procedure

PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

MARCH 2, 2015

Vermont Agency of Transportation
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CK'D BY JC/RK **OK'D BY** WL

March 2, 2015

RESUBMIT NO **Approved**

BY KH **DATE** 3-5-2014



Seismic Energy Products, Inc.

Structural Bearings for Bridges & Buildings

518 PROGRESS WAY, ATHENS, TX 75751

(903) 675-8571

www.sepbearings.com

Vulcanize Bonding Plates During Bearing Vulcanization

Please note that some of the details are proprietary.

1. Steel plate shall be blasted to a near white finish and solvent cleaned.
2. Primer and adhesive shall be applied to plate surface per manufacturer's directions (for each type) and allowed to dry with strict precautions taken against contamination.
3. Vulcanization shall take place under controlled heat and pressure during the primary vulcanization of the bearing.

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Vertrans 8/2011 02/15/15 Bearing Approved 3-5-2015.pdf

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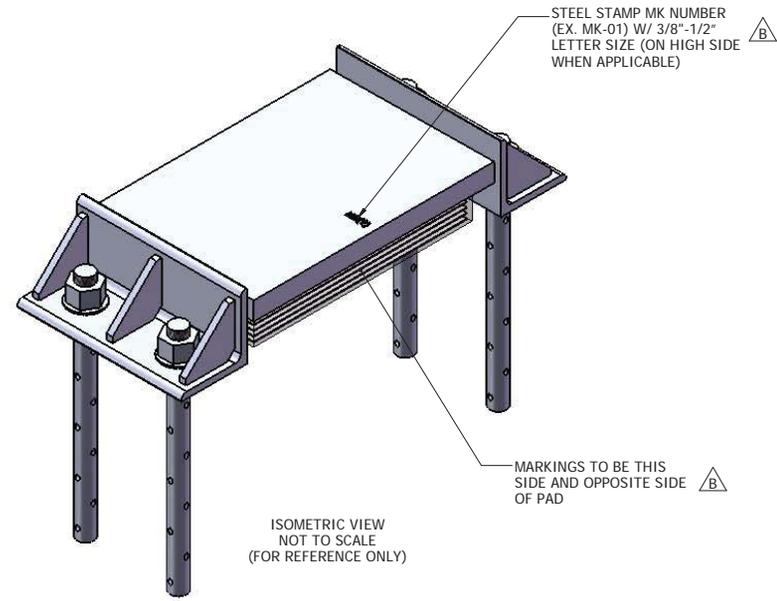
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GENERAL NOTES

- ALL BEARINGS SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION, SECTIONS 531 AND 731 AND THE CONTRACT PRINTS, UNLESS NOTED OTHERWISE.
- MATERIALS:**
 ELASTOMER.....50 DURO NATURAL, GRADE 4
 (110 ± 15 psi)
 CARBON STEEL SHIMS.....ASTM A1011, GR. 40
 SOLE PLATES.....ASTM A36 (AASHTO M270 GRADE 36) [△]
 SIDE RETAINERS.....ASTM A36 (AASHTO M270 GRADE 36) [△]
- TOLERANCES:**
LAMINATED ELASTOMERIC PADS:
 DUROMETER.....± 5
 OVERALL THICKNESS (VERTICAL) OVER 1 1/4".....-0, +1/4"
 OVERALL LENGTH & WIDTH (HORIZONTAL) 36" OR LESS.....-0, +1/4"
 THICKNESS OF INDIVIDUAL LAYERS OF ELASTOMER.....±1/8"
 PARALLELISM:
 TOP.....0.005 rad
 SIDES.....1/4"
 EDGE COVER.....-0, +1/8"
 HOLE/SLOT SIZE.....±1/8"
 HOLE/SLOT POSITION.....±1/8"
PLATES:
 OVERALL THICKNESS (VERTICAL).....0.001 X NOM.
 OVERALL LENGTH & WIDTH (HORIZONTAL).....±1/4"
 FLATNESS.....0.001 X NOM [△]
 BEVEL SLOPE.....±0.002 rad [△]
- MARKINGS:**
 EACH BEARING SHALL BE PERMANENTLY MARKED IN A LOCATION THAT IS VISIBLE WHEN THE DEVICE IS INSTALLED IN THE COMPLETED STRUCTURE. MARKING SHALL BE SEP STANDARD:
 CONTRACT/ORDER #
 LOT #
 BEARING ID # (MK. #)
 LOCATION/BRIDGE #
 ELASTOMER TYPE AND GRADE
 ORIENTATION (WHERE APPLICABLE)

 SEE ISOMETRIC VIEW ON THIS SHEET FOR MARKING DETAILS
- TESTING:** PER SPECIFICATIONS CITED IN GENERAL NOTE #1.
- PAINT/FINISH:** EXTERNAL PLATES, RETAINER ANGLES AND HARDWARE HOT DIP GALVANIZED PER ASTM A123 OR ASTM A153 AS APPLICABLE.
- SEP TO PROVIDE ONLY THE ITEMS SHOWN ON THIS DRAWING.
- SHIPPING:** BEARINGS SHALL BE PACKAGED IN SUCH A MANNER TO ENSURE THAT DURING SHIPMENT AND STORAGE THE BEARINGS WILL BE PROTECTED AGAINST DAMAGE FROM HANDLING, WEATHER OR ANY NORMAL HAZARD.
- REPRESENTATIVE**
 CUSTOMER SERVICE: STEVE BOWMAN.....903-677-4318
 TECHNICAL: MIKE SPELLMAN.....903-677-4342

REVISIONS			
REV.	DESCRIPTION	BY	DATE
A	SUBMITTAL	MS	2/10/2015
B	CHANGES PER MARK-UPS DATED 2/13/15	AL	3/2/2015



ISOMETRIC VIEW
NOT TO SCALE
(FOR REFERENCE ONLY)

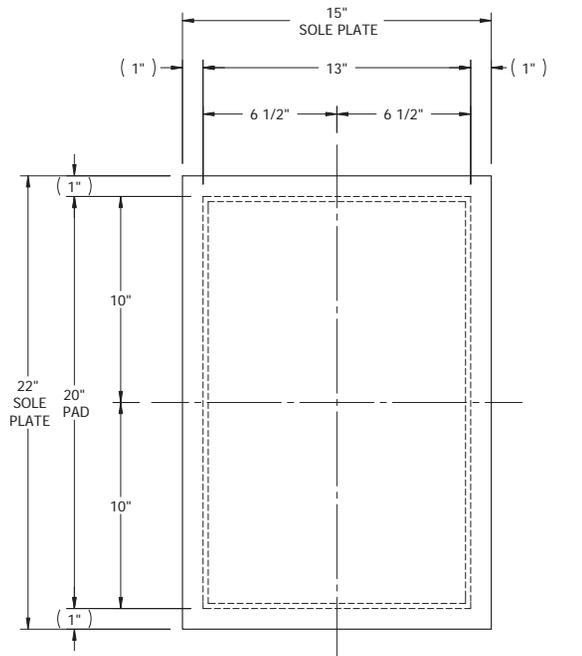
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PROJECT NO.	IM 091-2(79)
BRIDGE NO	43 N/S
COUNTY	WINDSOR
TOWN	HARTFORD

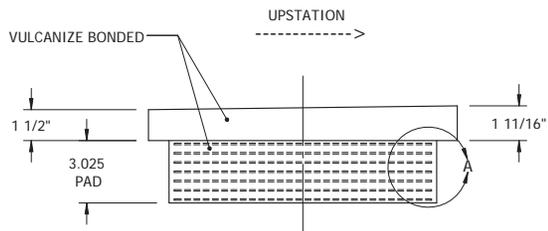
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

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Seismic Energy Products, Inc. STRUCTURAL BEARINGS FOR BRIDGES & BUILDINGS ATHENS, TX PHONE: 903-675-8571			
BEARING ASSY FOR: STATE OF VERMONT AGENCY OF TRANSPORTATION INTERSTATE 91 EXIT 11			
CONTRACTOR: PCL CIVIL CONSTRUCTORS			
DRAWN	ALUTTRELL	DATE	2/9/15
CHECKED		DATE	
REVIEWED	MSPELLMAN	DATE	2/10/15
PO #	EM	SO NO. & ST.	61614 VT
			SHEET 1 OF 5



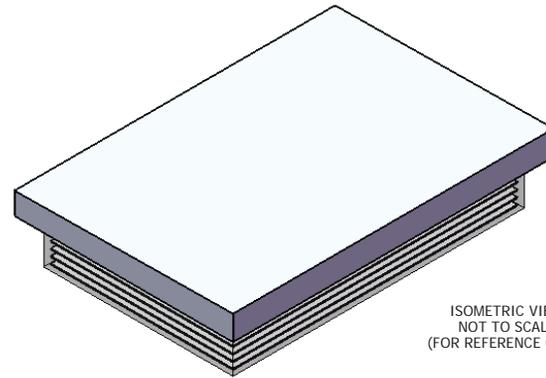
PLAN VIEW



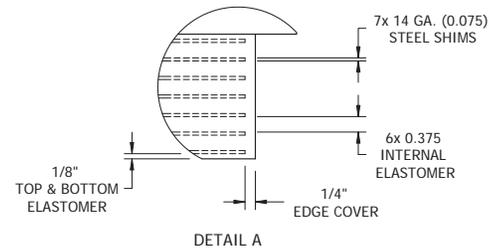
ELEVATION VIEW

**MK.01
BEARING PADS
@ ABUTS 1 & 2
(12) REQ'D**

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DETAIL A

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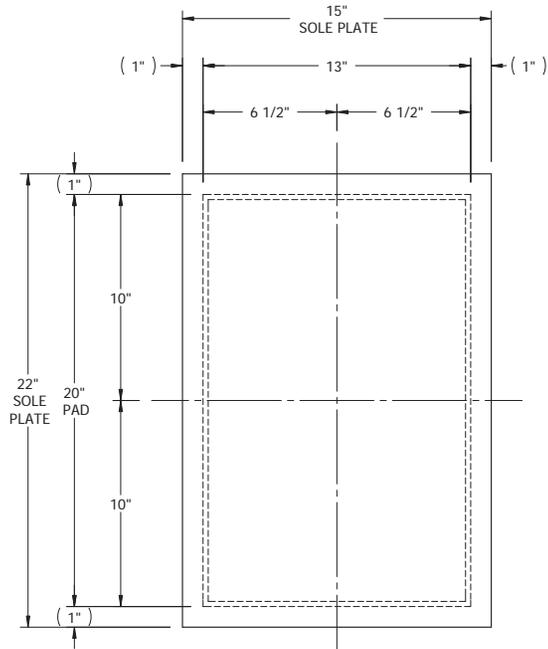
SEP Seismic Energy Products, Inc.
STRUCTURAL BEARINGS FOR BRIDGES & BUILDINGS
ATHENS, TX PHONE: 903-675-8571

BEARING ASSY FOR:
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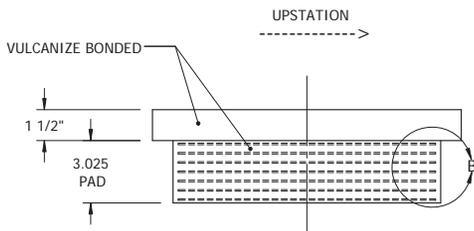
INTERSTATE 91 EXIT 11

CONTRACTOR: PCL CIVIL CONSTRUCTORS

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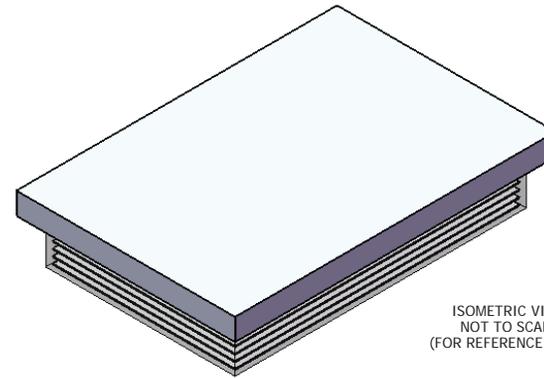


PLAN VIEW

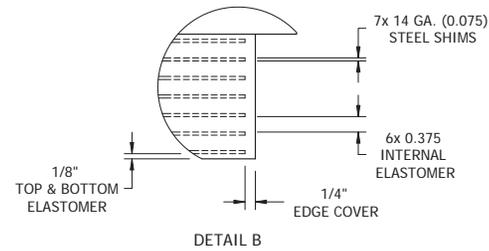


ELEVATION VIEW

MK.02 BEARING PADS @ ABUT 3 (6) REQ'D



ISOMETRIC VIEW NOT TO SCALE (FOR REFERENCE ONLY)



DETAIL B

REVISIONS			
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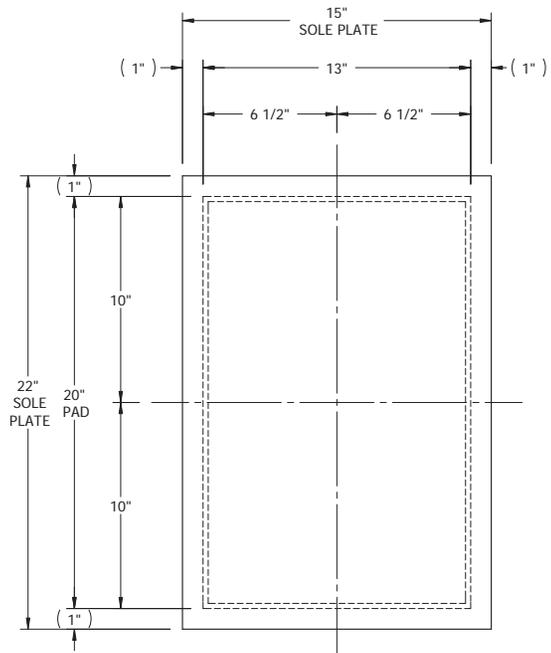
SEP Seismic Energy Products, Inc.
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 ATHENS, TX PHONE: 903-675-8571

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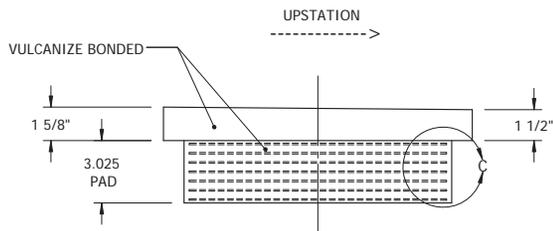
INTERSTATE 91 EXIT 11

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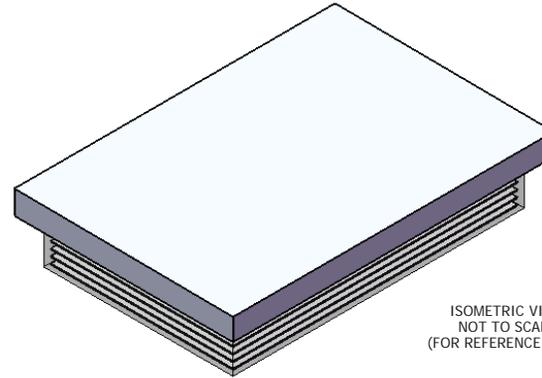


PLAN VIEW

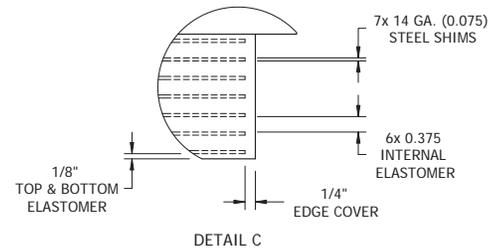


ELEVATION VIEW

**MK.03
BEARING PADS
@ ABUT. 4
(6) REQ'D**



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DETAIL C

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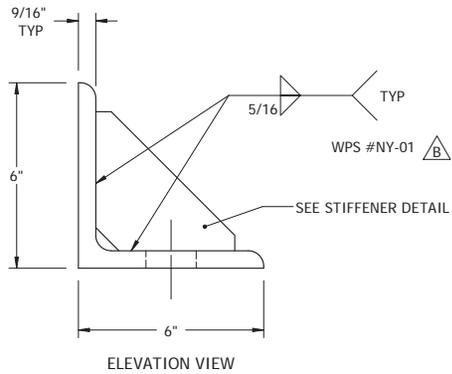
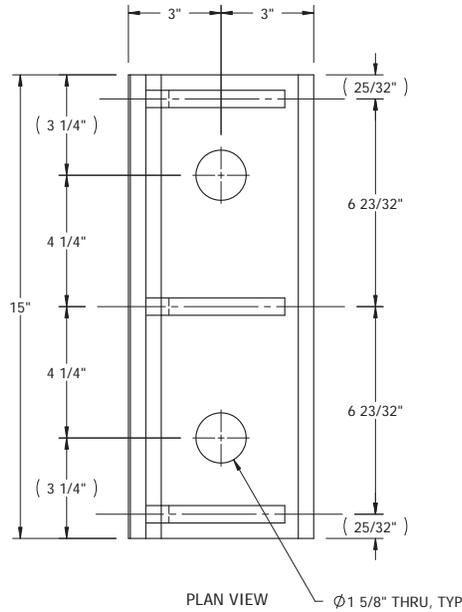
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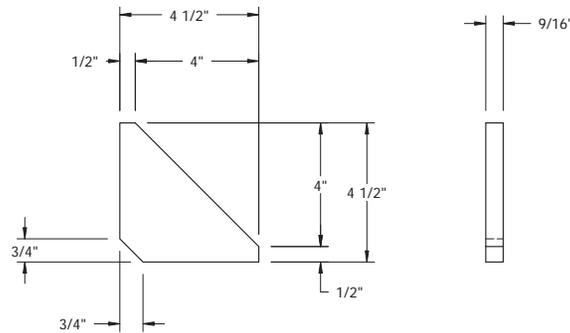
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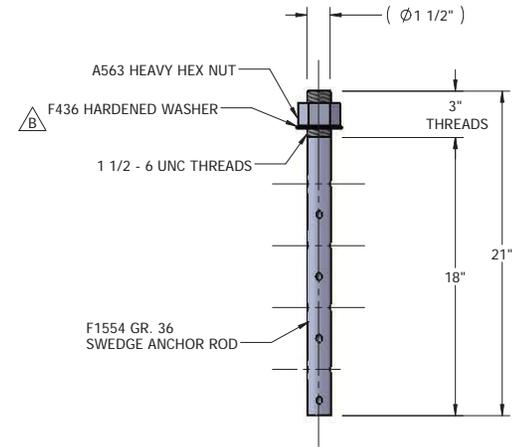
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**MK.04
RETAINERS
(48) REQ'D
(2 @ EACH BEARING)**



**STIFFENER
(144) REQ'D
(3 @ EACH ANGLE ASSY)**



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