

# MILLER CONSTRUCTION, INC.

P.O. BOX 86 ASCUTNEY BLVD WINDSOR, VERMONT 05089-0086

TELEPHONE (802) 674-5525 / FAX (802) 674-5245

## TRANSMITTAL

|   |           |                            |
|---|-----------|----------------------------|
| TO: Jennifer Fitch, PE<br>Project Manager<br>Vermont Agency of Transportation | DATE      | PROJECT NO.                |
|   | 6/11/2014 | Brookfield<br>BRF FLBR (2) |
|   |           |                            |

XX WE ENCLOSE THE FOLLOWING:

\_\_\_\_\_ UNDER SEPARATE COVER WE ARE SENDING THE FOLLOWING

| COPIES | NUMBER | DESCRIPTION                                   | CODE |
|--------|--------|---|------|
| 1      |        | Bearing Device Assembly Shop Drawings - Rev 0 | H    |
| 1      |        | Bearing Device Assembly WPS - Rev 0           | H    |
|        |        |   |      |
|        |        |   |      |
|        |        |   |      |
|        |        |   |      |
|        |        |   |      |
|        |        |   |      |
|        |        |   |      |

CODE:

A FOR INITIAL APPROVAL

B FOR FINAL APPROVAL

C APPROVED AS NOTED-RESUBMISSION REQUIRED

D APPROVED AS NOTED-RESUBMISSION NOT REQUIRED

E DISAPPROVED-RESUBMIT

F QUOTATION REQUESTED

G APPROVED

H FOR APPROVAL

I AS REQUESTED OR REQUIRED

J FOR USE IN ERECTION

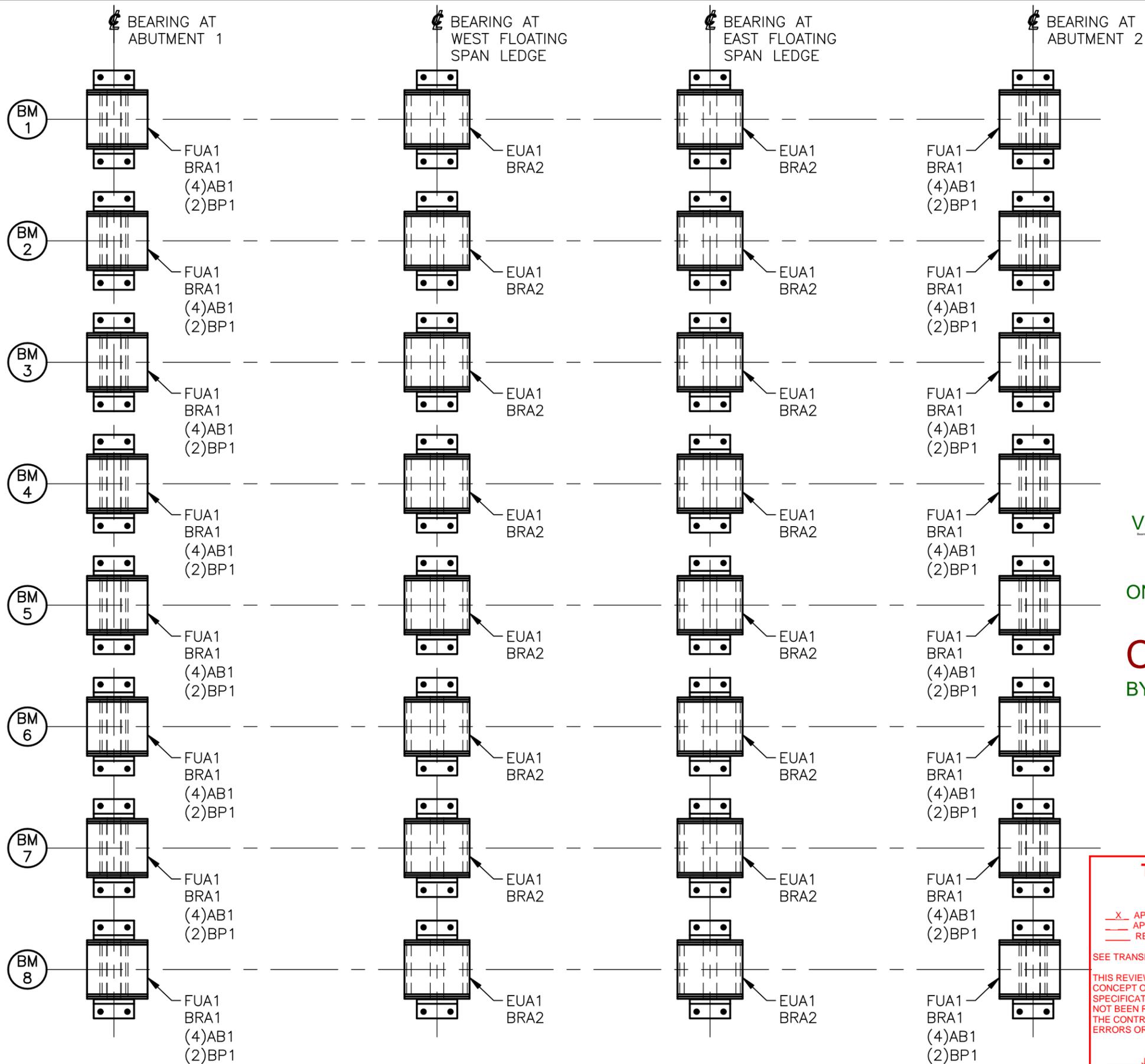
K LETTER FOLLOWS

L FOR FIELD CHECK

M FOR YOUR USE

BY: \_\_\_\_\_





**ERECTION DIAGRAM**

Vermont Agency of Transportation

**RECEIVED**

ON: **June 11, 2014**

and Checked for

**CONFORMANCE**

BY: **Jennifer Fitch** DATE: **06/18/2014**

SEE SHEET 1  
FOR GENERAL NOTES  
SEE SHEETS 1, 2, 3 & 5  
FOR ASSEMBLY DETAILS

SEE SHEETS 4 & 6  
FOR COMPONENT DETAILS

SEE SHEET 6  
FOR ANCHOR BOLT & PAD DETAILS

SEE SHEETS E2 THRU E4  
FOR INSTALLATION DIAGRAMS

**T.Y. LIN INTERNATIONAL**  
THE STAMPED DOCUMENTS ARE HEREBY:  
 APPROVED  
 APPROVED AS NOTED  
 REVISE AND RESUBMIT  
 SEE TRANSMITTAL FOR ADDITIONAL INFORMATION AS APPLICABLE.  
 THIS REVIEW IS FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY. ANY DEVIATION FROM THE PLANS OR SPECIFICATIONS NOT CLEARLY NOTED BY THE CONTRACTOR HAS NOT BEEN REVIEWED. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF THE CONTRACTUAL RESPONSIBILITY FOR ANY ERRORS OR DEVIATION FROM THE CONTRACT REQUIREMENTS.  
 JOSH OLUND 06/17/2014  
 REVIEWER DATE

|   |                |                                   |
|---|----------------|-----------------------------------|
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION  |                |                                   |
| VT ROUTE 65 (MINOR COLLECTOR)<br>BRIDGE NO. 2<br>TOWN OF BROOKFIELD   |                |                                   |
| STATE   | COUNTY         | CONTROL NO.                       |
| VT  | ORANGE         | NA                                |
| PROJECT NO.: BRF FLBR(2)  |                |                                   |
| COSMEC, INC.<br>STAINLESS STEEL BEARING ASSY.'S   |                |                                   |
|  1501 ROCKY RIDGE ROAD<br>P.O. BOX 2159<br>ATHENS, TEXAS 75751 |                |                                   |
| SCALE: NONE   | DRAWN BY: MH   | CHECKED BY: SL                    |
|   | DATE: 05/28/14 | DATE: 06/06/14                    |
| SHEET E1 OF 4 JOB NO.: 12445  |                |                                   |
| CUSTOMER<br>MILLER CONSTRUCTION, INC.   |                | DRAWING NUMBER REV.<br>12445-E1 0 |

| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|------|-------------|----|------|------|------|
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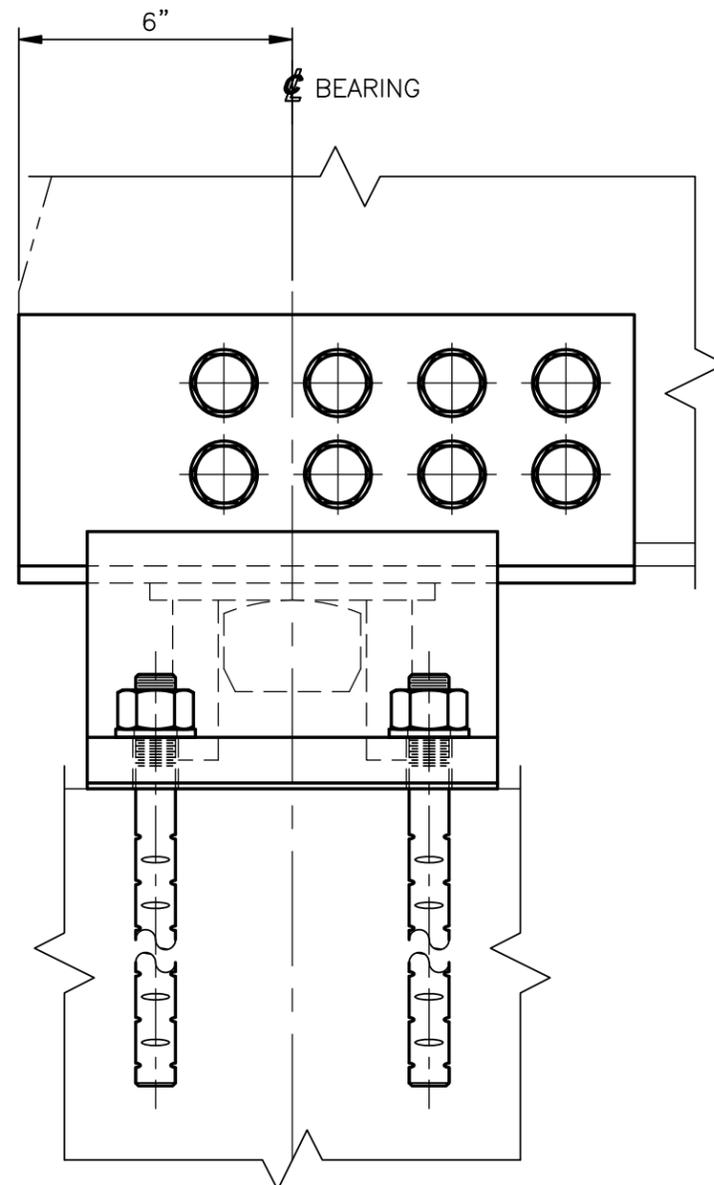
**RECEIVED**

ON: **June 11, 2014**

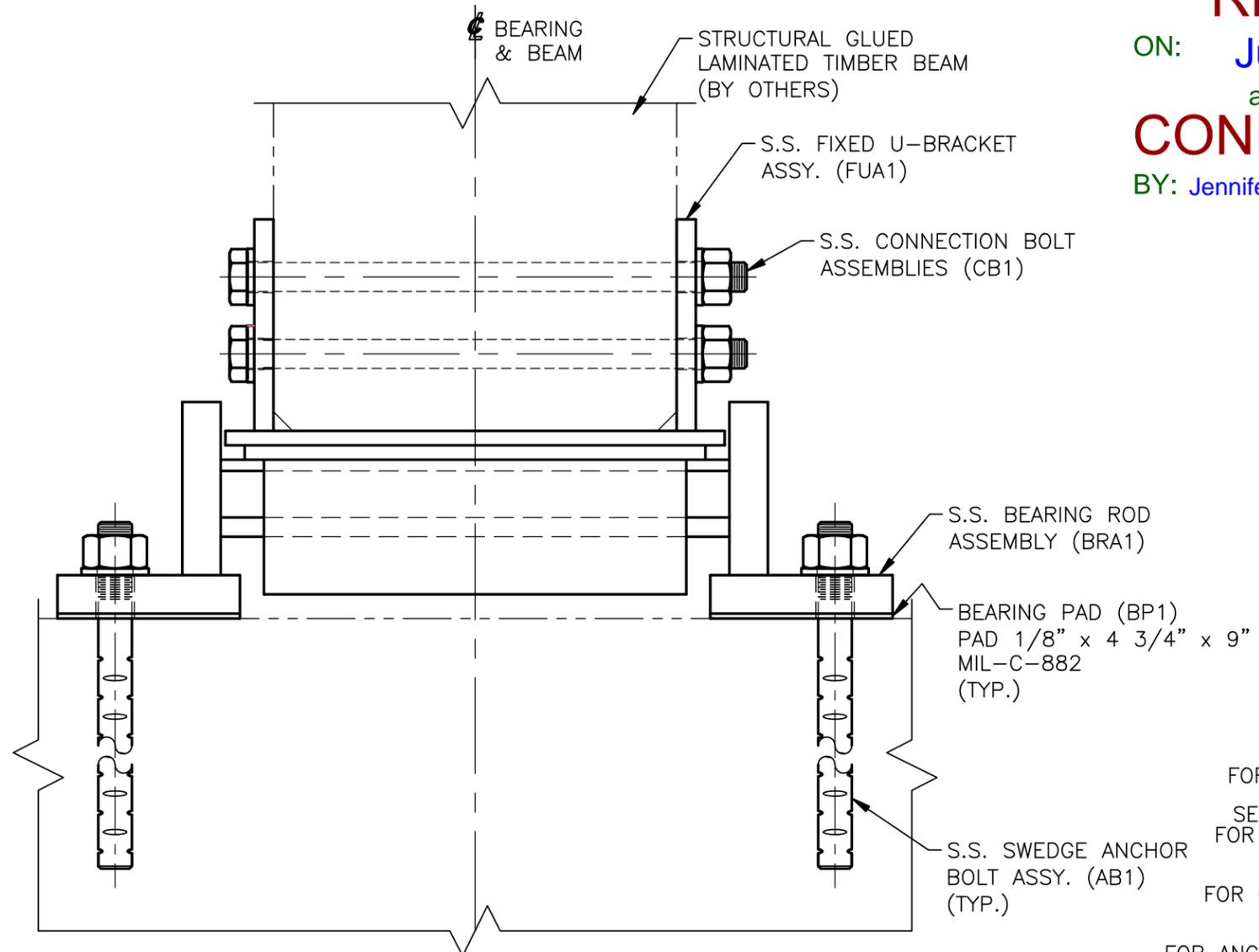
and Checked for

**CONFORMANCE**

BY: **Jennifer Fitch** DATE: **06/18/2014**



**ELEVATION VIEW**



**FRONT VIEW**

**FIXED BEARING ASSEMBLY INSTALLATION DIAGRAM**

- (8) LOCATED @ ABUTMENT 1
- (8) LOCATED @ ABUTMENT 2
- (16) REQUIRED

SEE SHEET 1  
FOR GENERAL NOTES

SEE SHEETS 1 & 3  
FOR ASSEMBLY DETAILS

SEE SHEET 4  
FOR COMPONENT DETAILS

SEE SHEET 7  
FOR ANCHOR BOLT, CONNECTION  
BOLT & PAD DETAILS

**T.Y. LIN INTERNATIONAL**

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JOSH OLUND 06/17/2014  
REVIEWER DATE

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
VT ROUTE 65 (MINOR COLLECTOR)  
BRIDGE NO. 2  
TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)

**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

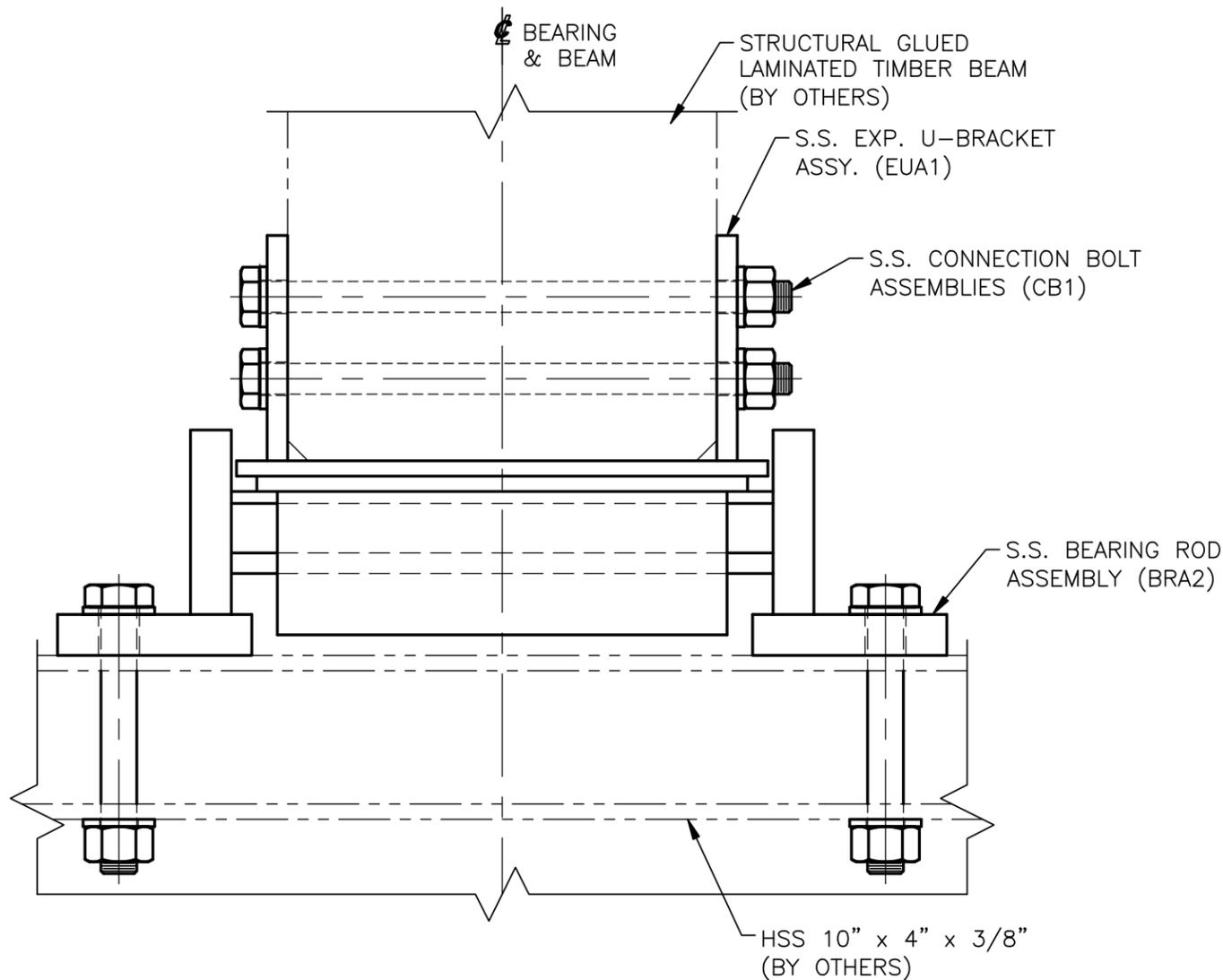
**Cosmec** 1501 ROCKY RIDGE ROAD  
P.O. BOX 2159  
ATHENS, TEXAS 75751

|             |                |                |
|-------------|----------------|----------------|
| SCALE: NONE | DRAWN BY: MH   | CHECKED BY: SL |
|             | DATE: 05/28/14 | DATE: 06/06/14 |

SHEET E2 OF 4 **JOB NO.: 12445**

|                                       |                            |           |
|---------------------------------------|----------------------------|-----------|
| CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-E2 | REV.<br>0 |
|---------------------------------------|----------------------------|-----------|

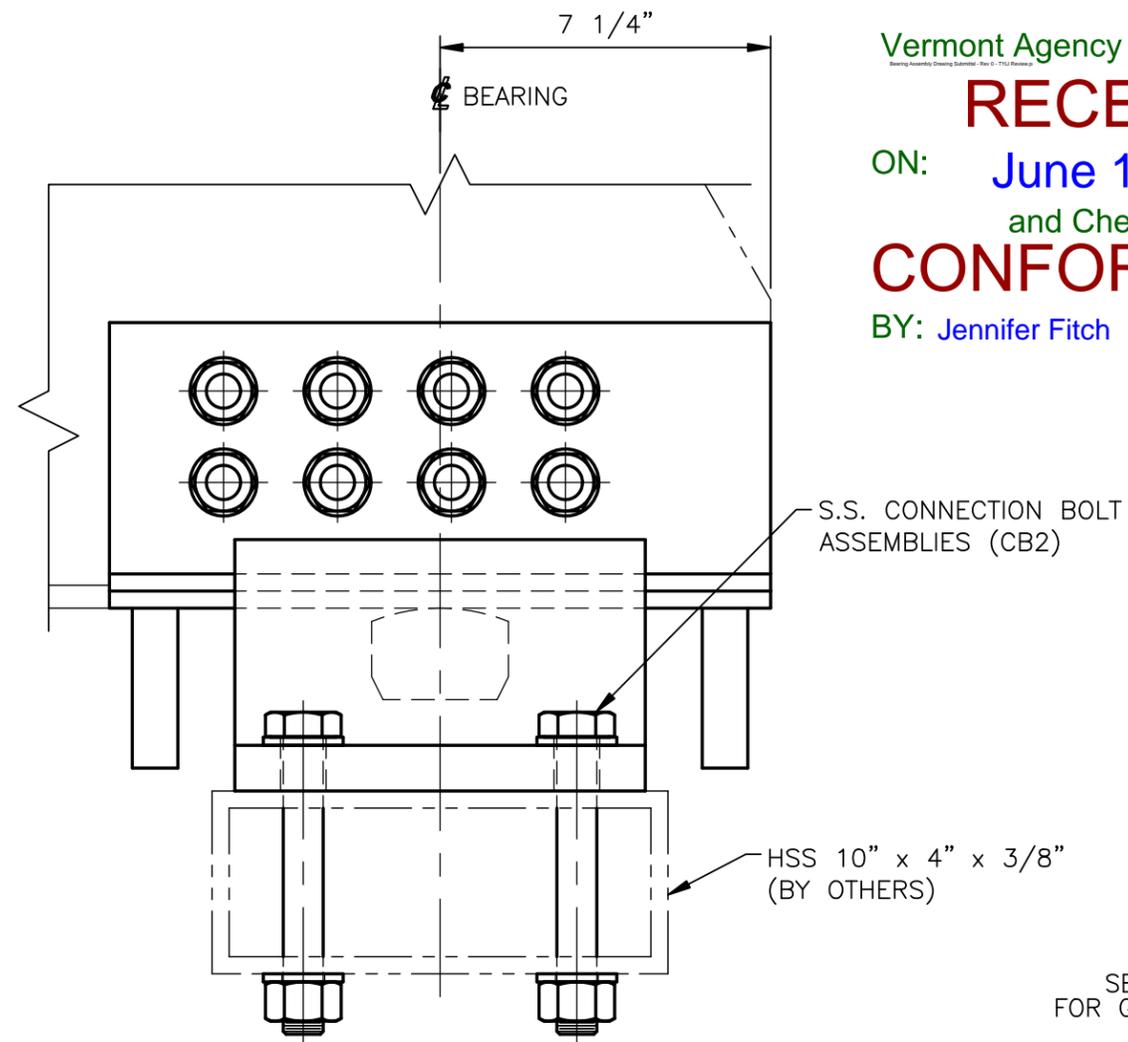
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|------|-------------|----|------|------|------|
| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|      |             |    |      |      |      |



**FRONT VIEW**

**EXPANSION BEARING ASSEMBLY INSTALLATION DIAGRAM**

- (8) LOCATED @ WEST FLOATING SPAN LEDGE
- (8) LOCATED @ EAST FLOATING SPAN LEDGE
- (16) REQUIRED



**FRONT VIEW**

**T.Y. LIN INTERNATIONAL**

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06/17/2014  
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SEE SHEET 1  
FOR GENERAL NOTES

SEE SHEETS 2 & 5  
FOR ASSEMBLY DETAILS

SEE SHEET 6  
FOR COMPONENT DETAILS

SEE SHEET 7  
FOR CONNECTION BOLT DETAILS

|   |                |   |
|---|----------------|---|
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION                        |                |   |
| VT ROUTE 65 (MINOR COLLECTOR)<br>BRIDGE NO. 2<br>TOWN OF BROOKFIELD |                |   |
| STATE   | COUNTY         | CONTROL NO.   |
| VT  | ORANGE         | NA  |
| PROJECT NO.: BRF FLBR(2)  |                |   |
| <b>COSMEC, INC.</b><br><b>STAINLESS STEEL BEARING ASSY.'S</b>       |                |   |
|   |                | 1501 ROCKY RIDGE ROAD<br>P.O. BOX 2159<br>ATHENS, TEXAS 75751 |
| SCALE: NONE   | DRAWN BY: MH   | CHECKED BY: SL  |
|   | DATE: 05/28/14 | DATE: 06/06/14  |
| SHEET E3 OF 4   |                | JOB NO.: 12445  |
| CUSTOMER<br>MILLER CONSTRUCTION, INC.                               |                | DRAWING NUMBER REV.<br>12445-E3 0                             |

**APPROVER NOTE:**  
PLEASE VERIFY HOLE DIAMETER IS ACCEPTABLE.

**1" HOLES ACCEPTABLE FOR ABUTMENT BEARINGS**

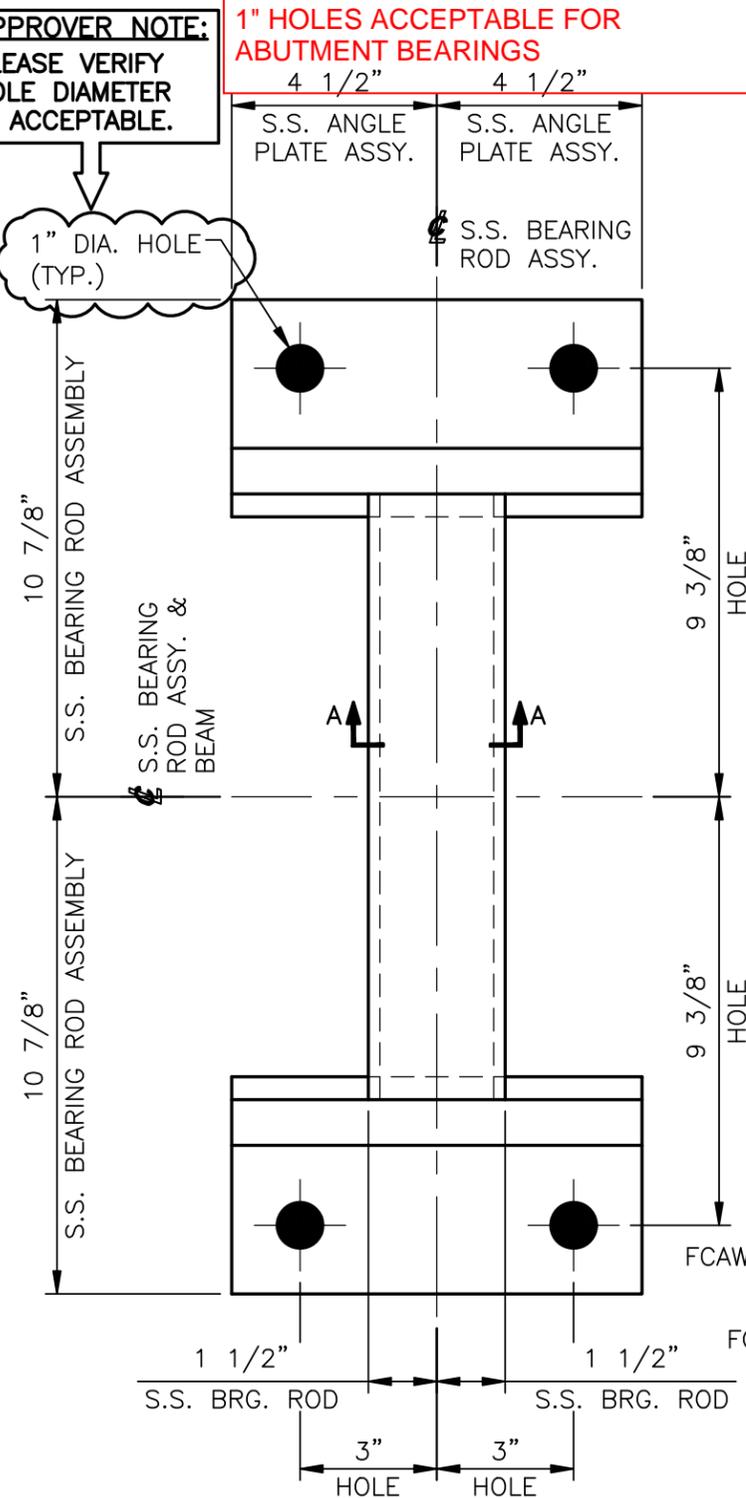
**GENERAL NOTES:**

- ALL BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 731.01 OF THE 2011 VTAOT STANDARD SPECIFICATIONS AND SECTION "BEARING DEVICE ASSEMBLY, FLOATING BRIDGE" OF THE SPECIAL PROVISIONS FOR: BROOKFIELD BRIDGE (2) DATED 02/11/14.
- MATERIAL:  
 STEEL COMPONENTS: ASTM A240 TYPE 304 (UNPAINTED)  
 S.S. SWEDGE ANCHOR BOLT: ASTM F593, ALLOY GROUP 2, CONDITION CW  
 7/8" DIA. S.S. CONNECTION BOLT: ASTM F593, ALLOY GROUP 2, CONDITION CW  
 7/8" DIA. S.S. HEX NUT: ASTM F594, ALLOY GROUP 2, CONDITION CW  
 7/8" DIA. S.S. WASHER: TYPE 316 STAINLESS STEEL  
 3/4" DIA. S.S. CONNECTION BOLT: ASTM F593, ALLOY GROUP 2, CONDITION CW  
 3/4" DIA. S.S. HEX NUT: ASTM F594, ALLOY GROUP 2, CONDITION CW  
 3/4" DIA. S.S. WASHER: TYPE 316 STAINLESS STEEL  
 BEARING PAD: MIL-C-822  
~~PLAIN PAD (IN ROLLS): 60 DUROMETER GRADE 3 NEOPRENE~~
- COSMEC REPRESENTATIVE KERRY MARCHAND: (508) 455-3290

**STAINLESS STEEL PLATES AND BARS TO HAVE A MINIMUM TENSILE YIELD STRENGTH OF 30 KSI AND ULTIMATE TENSILE STRENGTH OF 70 KSI. TYPE 304 (UNS DESIGNATION S30400) IS ACCEPTABLE.**

**BOLTS ARE ACCEPTABLE PROVIDED THEY CONFORM TO CONDITION 'CW1' AND NOT 'CW2' TO ENSURE A MINIMUM YIELD STRENGTH IN EXCESS OF 43 KSI.**

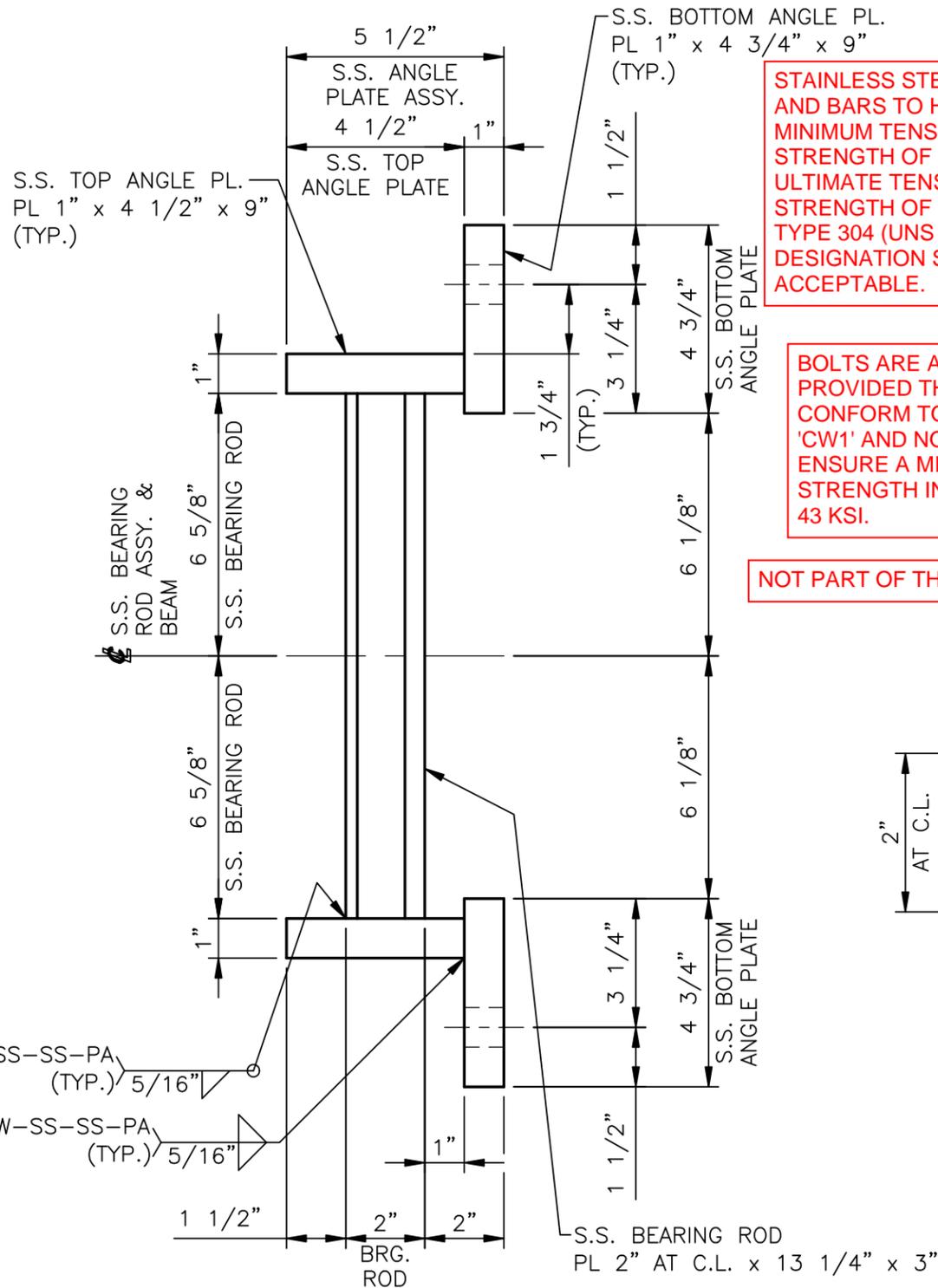
**NOT PART OF THIS SUBMITTAL**



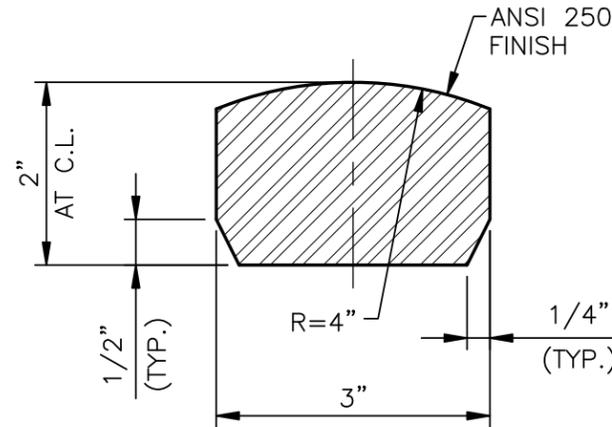
**PLAN VIEW**

**S.S. BEARING ROD ASSEMBLY  
MARK: BRA1**

- (8) LOCATED @ ABUTMENT 1
- (8) LOCATED @ ABUTMENT 2
- (16) REQUIRED



**FRONT VIEW**



**SECTION A-A**

BEARING ROD  
ASTM A240 TYPE 304  
PL 2" AT C.L. x 13 1/4" x 3  
(16) REQUIRED

**T.Y. LIN INTERNATIONAL**

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JOSH OLUND REVIEWER DATE 06/17/2014

Vermont Agency of Transportation

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BY: Jennifer Fitch DATE: 06/18/2014

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
VT ROUTE 65 (MINOR COLLECTOR)  
BRIDGE NO. 2  
TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)  
**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

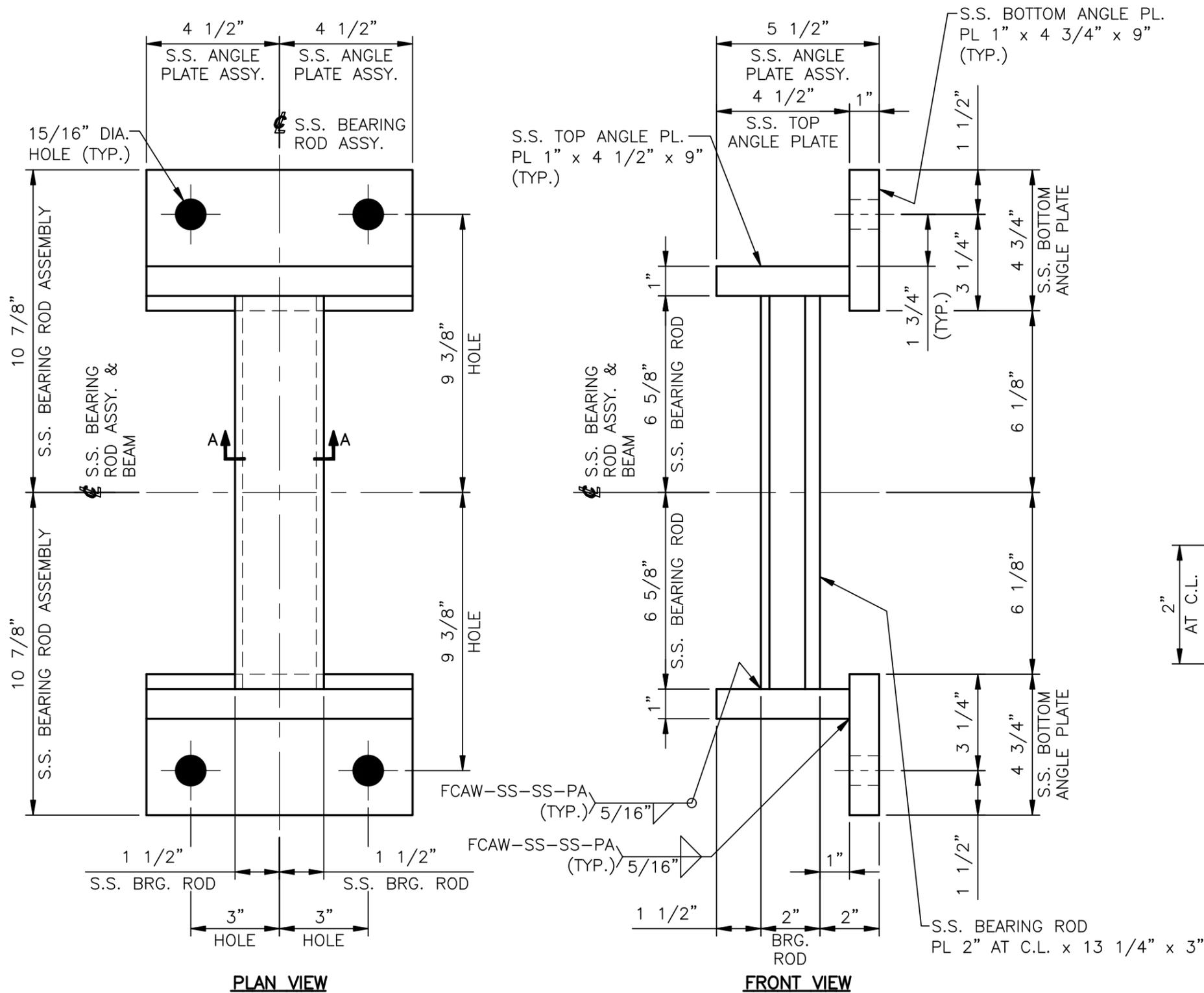
**Cosmec** 1501 ROCKY RIDGE ROAD  
P.O. BOX 2159  
ATHENS, TEXAS 75751

|             |                |                |
|-------------|----------------|----------------|
| SCALE: NONE | DRAWN BY: MH   | CHECKED BY: SL |
|             | DATE: 05/28/14 | DATE: 06/06/14 |

SHEET 1 OF 7 **JOB NO.: 12445**

|                           |                |      |
|---------------------------|----------------|------|
| CUSTOMER                  | DRAWING NUMBER | REV. |
| MILLER CONSTRUCTION, INC. | 12445-D1       | 0    |

| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|------|-------------|----|------|------|------|
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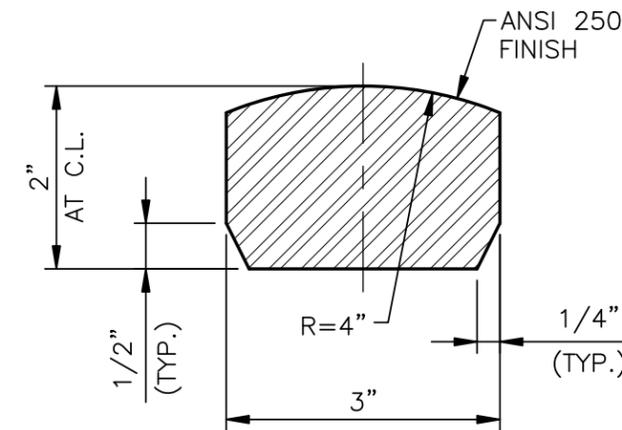


**PLAN VIEW**

**FRONT VIEW**

**S.S. BEARING ROD ASSEMBLY  
MARK: BRA2**

- (8) LOCATED @ WEST FLOATING SPAN LEDGE
- (8) LOCATED @ EAST FLOATING SPAN LEDGE
- (16) REQUIRED



**SECTION A-A**  
BEARING ROD  
ASTM A240 TYPE 304  
PL 2" AT C.L. x 13 1/4" x 3  
(16) REQUIRED

**T.Y. LIN INTERNATIONAL**

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REVIEWER DATE

Vermont Agency of Transportation

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BY: Jennifer Fitch DATE: 06/18/2014

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**STATE OF VERMONT**  
AGENCY OF TRANSPORTATION  
VT ROUTE 65 (MINOR COLLECTOR)  
BRIDGE NO. 2  
TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)

**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

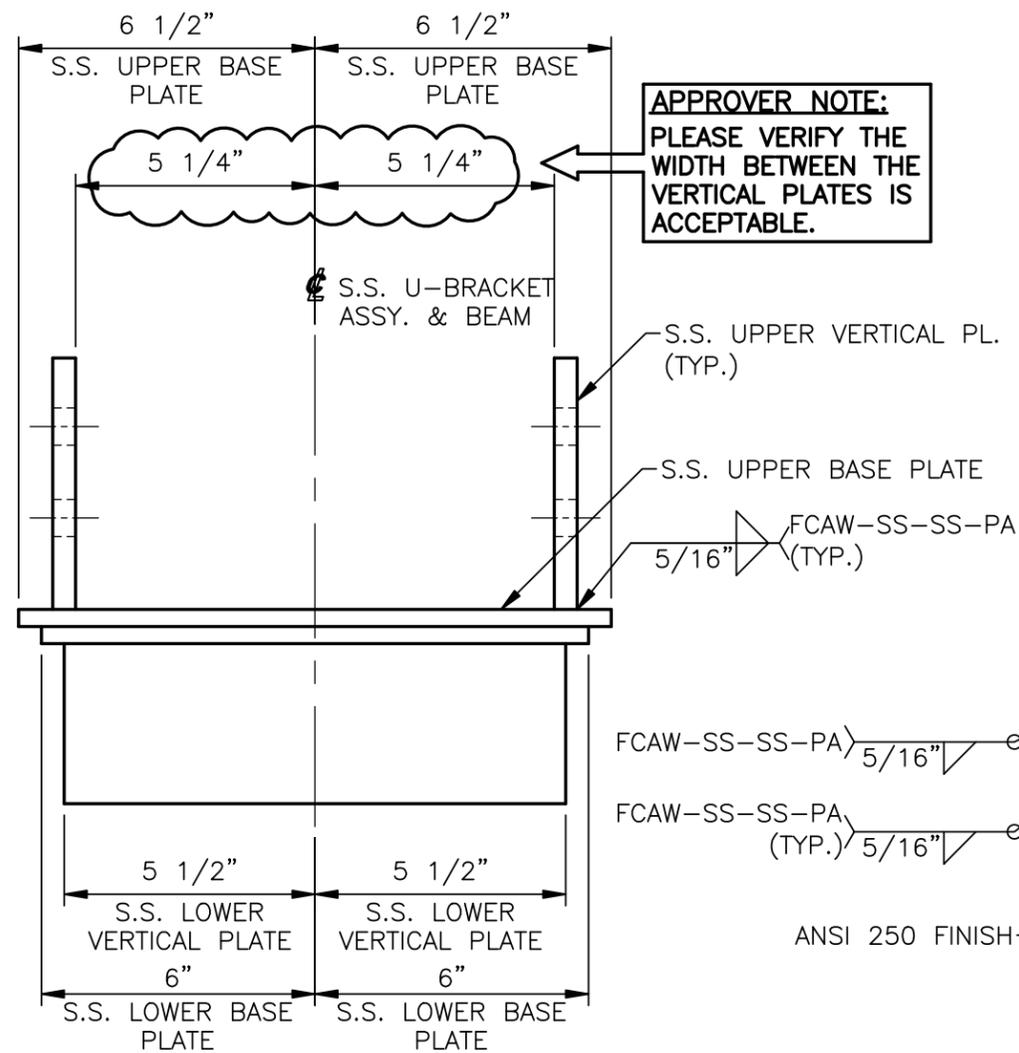
**Cosmec** 1501 ROCKY RIDGE ROAD  
P.O. BOX 2159  
ATHENS, TEXAS 75751

|             |                |                |
|-------------|----------------|----------------|
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|             | DATE: 05/28/14 | DATE: 06/06/14 |

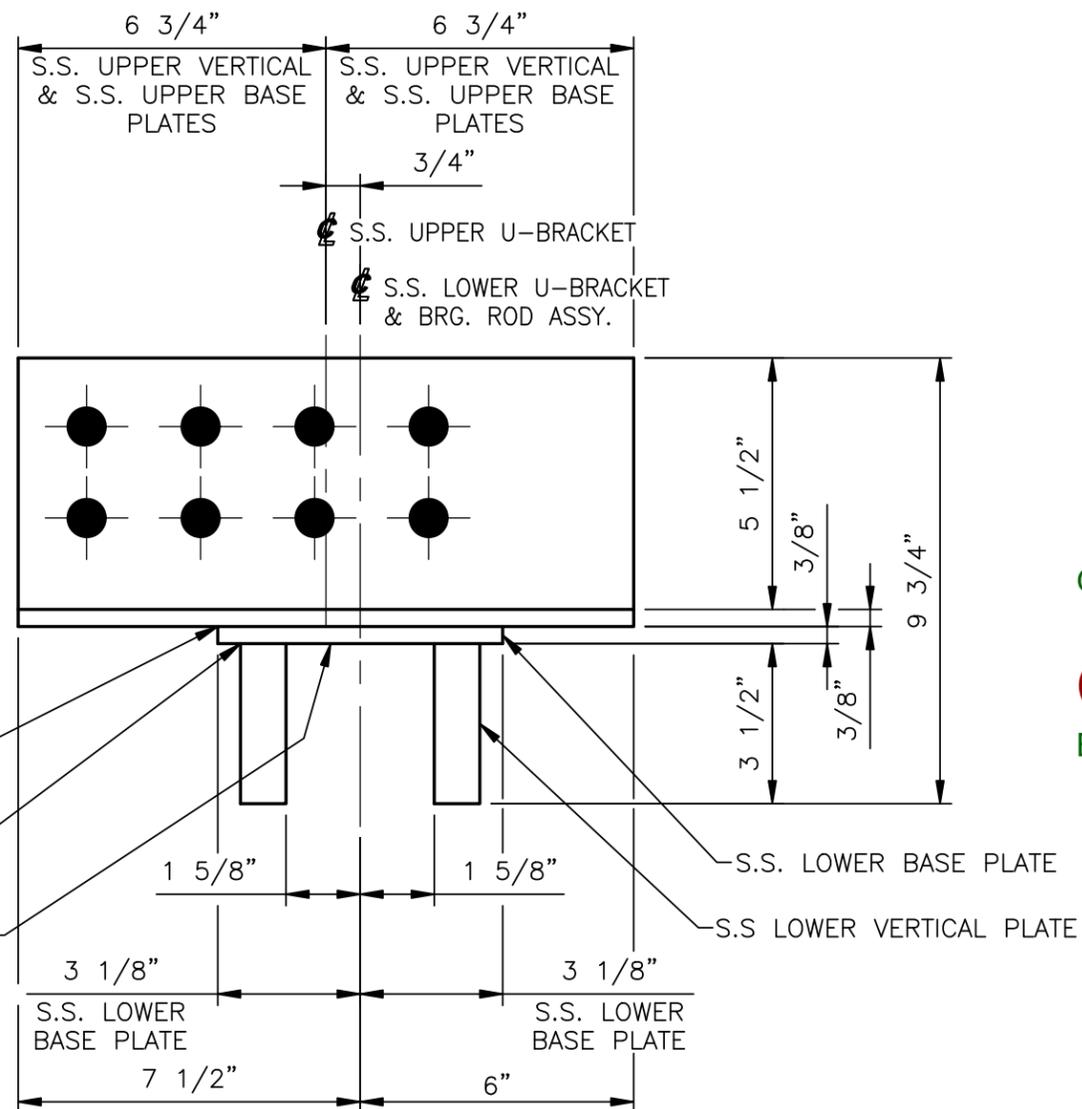
SHEET 2 OF 7 **JOB NO.: 12445**

|                                       |                            |           |
|---------------------------------------|----------------------------|-----------|
| CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-D2 | REV.<br>0 |
|---------------------------------------|----------------------------|-----------|

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|------|-------------|----|------|------|------|
| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|      |             |    |      |      |      |



**FRONT VIEW**



**ELEVATION VIEW**

**S.S. FIXED U-BRACKET ASSEMBLY  
MARK: FUA1**

- (8) LOCATED @ ABUTMENT 1
- (8) LOCATED @ ABUTMENT 2
- (16) REQUIRED

Vermont Agency of Transportation  
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SEE SHEET 1  
FOR GENERAL NOTES

SEE SHEET 4  
FOR COMPONENT DETAILS

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
VT ROUTE 65 (MINOR COLLECTOR)  
BRIDGE NO. 2  
TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)

**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

**Cosmec** 1501 ROCKY RIDGE ROAD  
P.O. BOX 2159  
ATHENS, TEXAS 75751

|             |                     |                       |
|-------------|---------------------|-----------------------|
| SCALE: NONE | DRAWN BY: <b>MH</b> | CHECKED BY: <b>SL</b> |
|             | DATE: 05/28/14      | DATE: 06/06/14        |

SHEET 3 OF 7 **JOB NO.: 12445**

|                                       |                            |           |
|---------------------------------------|----------------------------|-----------|
| CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-D3 | REV.<br>0 |
|---------------------------------------|----------------------------|-----------|

**T.Y. LIN INTERNATIONAL**  
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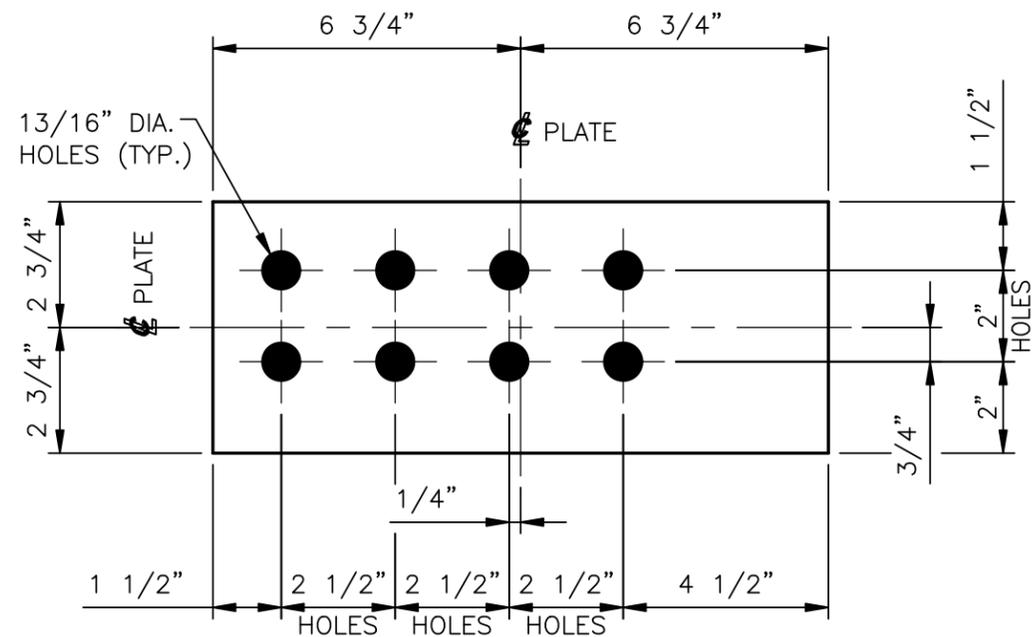
APPROVED  
 APPROVED AS NOTED  
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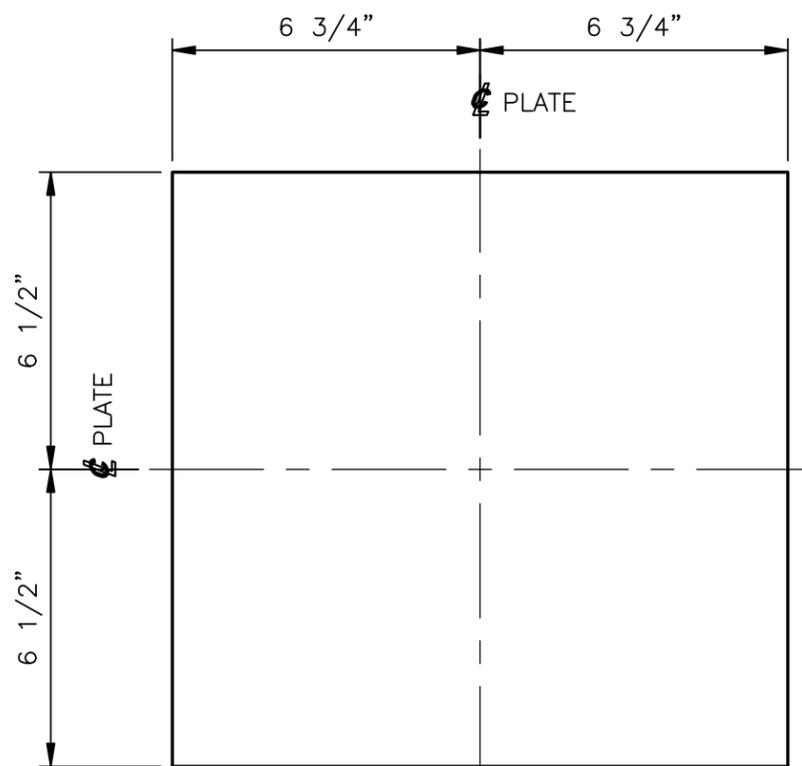
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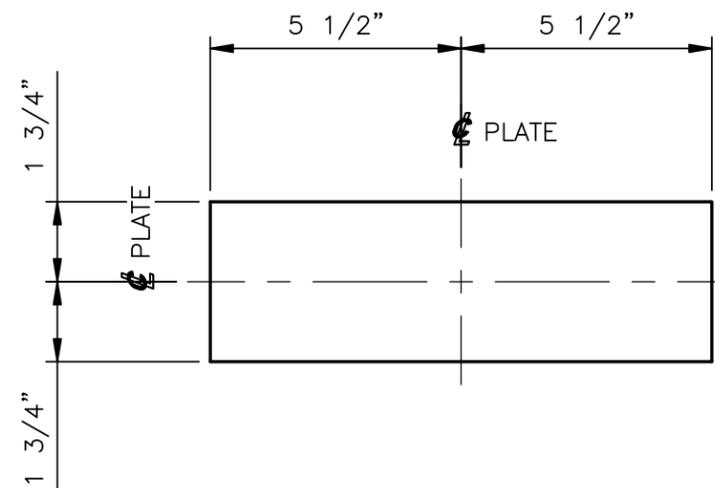
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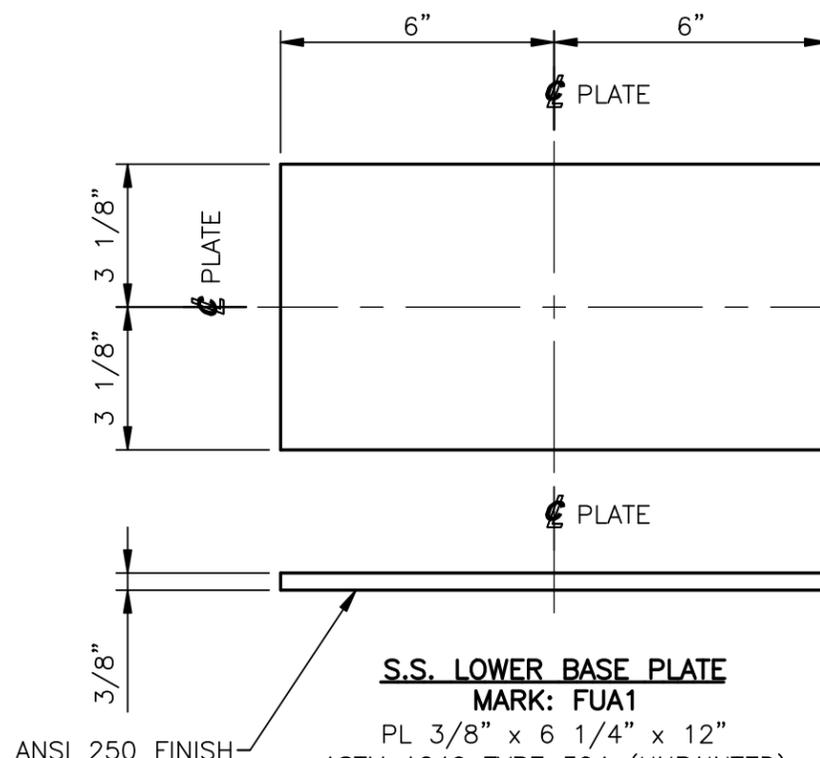
**S.S. UPPER VERICAL PLATE**  
**MARK: FUA1**  
 PL 1/2" x 5 1/2" x 13 1/2"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (32) REQUIRED



**S.S. UPPER BASE PLATE**  
**MARK: FUA1**  
 PL 3/8" x 13" x 13 1/2"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (16) REQUIRED



**S.S. LOWER VERICAL PLATE**  
**MARK: FUA1**  
 PL 1" x 3 1/2" x 11"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (32) REQUIRED



**S.S. LOWER BASE PLATE**  
**MARK: FUA1**  
 PL 3/8" x 6 1/4" x 12"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (16) REQUIRED

Vermont Agency of Transportation

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 REVIEWER

06/17/2014  
 DATE

SEE SHEET 1  
 FOR GENERAL NOTES

SEE SHEET 3  
 FOR ASSEMBLY DETAILS

STATE OF VERMONT  
 AGENCY OF TRANSPORTATION  
 VT ROUTE 65 (MINOR COLLECTOR)  
 BRIDGE NO. 2  
 TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)  
**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

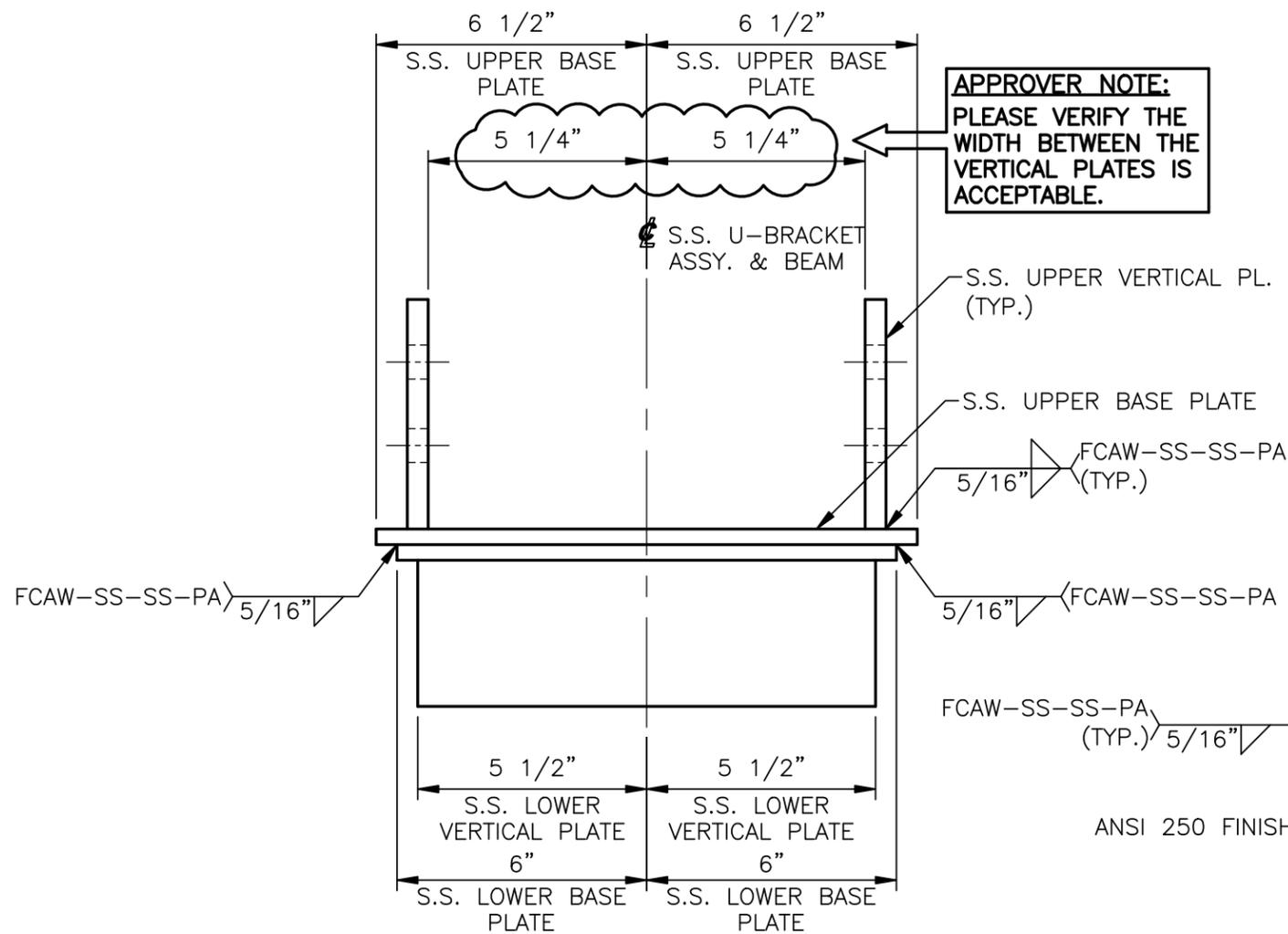
**Cosmec** 1501 ROCKY RIDGE ROAD  
 P.O. BOX 2159  
 ATHENS, TEXAS 75751

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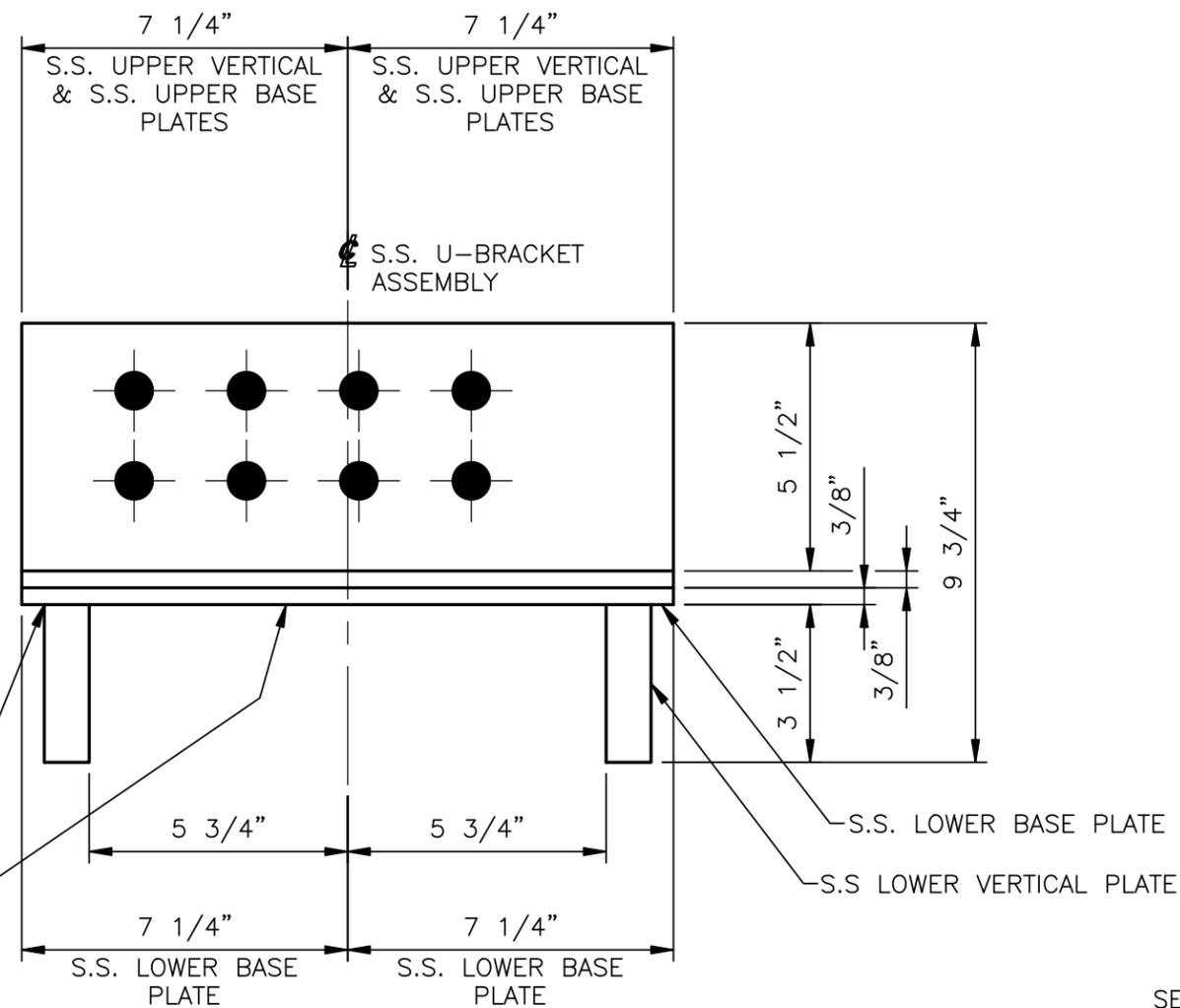
SHEET 4 OF 7 **JOB NO.: 12445**

|                                       |                            |           |
|---------------------------------------|----------------------------|-----------|
| CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-D4 | REV.<br>0 |
|---------------------------------------|----------------------------|-----------|

|      |             |    |      |      |      |
|------|-------------|----|------|------|------|
| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|      |             |    |      |      |      |



**FRONT VIEW**



**ELEVATION VIEW**

**APPROVER NOTE:**  
PLEASE VERIFY THE WIDTH BETWEEN THE VERTICAL PLATES IS ACCEPTABLE.

**S.S. EXPANSION U-BRACKET ASSEMBLY**  
**MARK: EUA1**

- (8) LOCATED @ WEST FLOATING SPAN LEDGE
- (8) LOCATED @ EAST FLOATING SPAN LEDGE
- (16) REQUIRED

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**T.Y. LIN INTERNATIONAL**

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- APPROVED AS NOTED
- REVISE AND RESUBMIT

SEE TRANSMITTAL FOR ADDITIONAL INFORMATION AS APPLICABLE.

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JOSH OLUND 06/17/2014  
REVIEWER DATE

SEE SHEET 1  
FOR GENERAL NOTES

SEE SHEET 6  
FOR COMPONENT DETAILS

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
VT ROUTE 65 (MINOR COLLECTOR)  
BRIDGE NO. 2  
TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)

**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

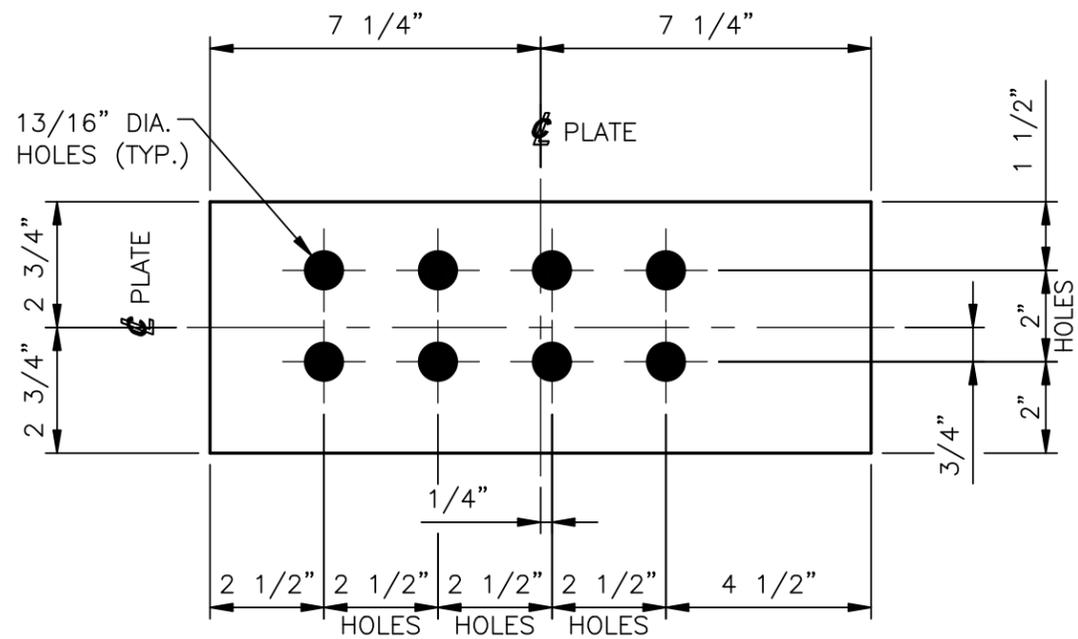
**Cosmec** 1501 ROCKY RIDGE ROAD  
P.O. BOX 2159  
ATHENS, TEXAS 75751

|             |                |                |
|-------------|----------------|----------------|
| SCALE: NONE | DRAWN BY: MH   | CHECKED BY: SL |
|             | DATE: 05/28/14 | DATE: 06/06/14 |

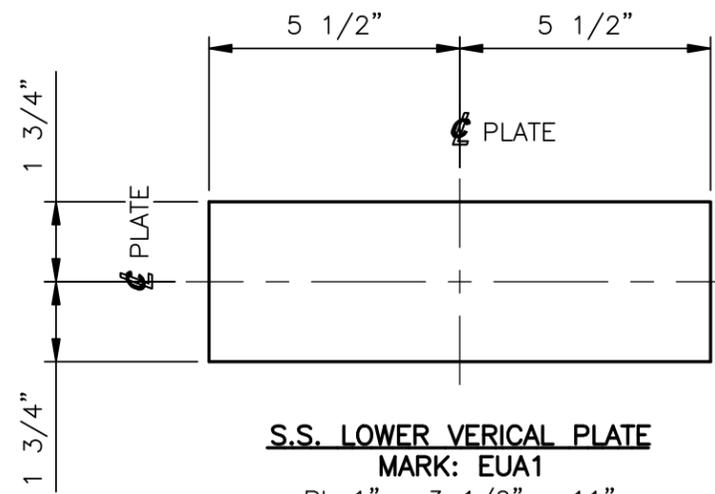
SHEET 5 OF 7 **JOB NO.: 12445**

|                                       |                            |           |
|---------------------------------------|----------------------------|-----------|
| CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-D5 | REV.<br>0 |
|---------------------------------------|----------------------------|-----------|

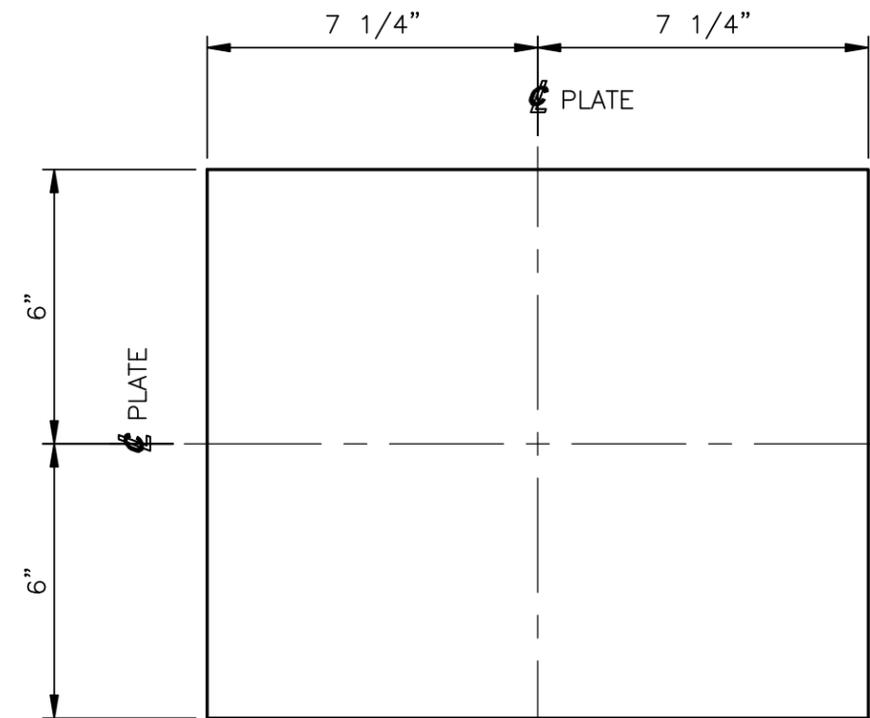
| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|------|-------------|----|------|------|------|
|      |             |    |      |      |      |



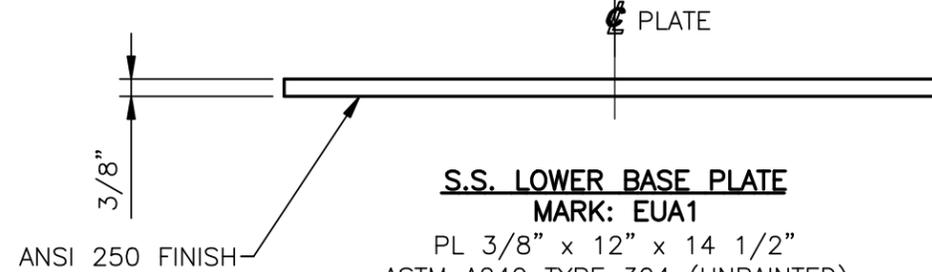
**S.S. UPPER VERTICAL PLATE**  
**MARK: EUA1**  
 PL 1/2" x 5 1/2" x 14 1/2"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (32) REQUIRED



**S.S. LOWER VERTICAL PLATE**  
**MARK: EUA1**  
 PL 1" x 3 1/2" x 11"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (32) REQUIRED



**S.S. UPPER BASE PLATE**  
**MARK: EUA1**  
 PL 3/8" x 13" x 14 1/2"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (16) REQUIRED



**S.S. LOWER BASE PLATE**  
**MARK: EUA1**  
 PL 3/8" x 12" x 14 1/2"  
 ASTM A240 TYPE 304 (UNPAINTED)  
 (16) REQUIRED

Vermont Agency of Transportation

**RECEIVED**

ON: **June 11, 2014**

and Checked for  
**CONFORMANCE**

BY: **Jennifer Fitch** DATE: **06/18/2014**

**T.Y. LIN INTERNATIONAL**

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JOSH OLUND REVIEWER 06/17/2014 DATE

SEE SHEET 1  
 FOR GENERAL NOTES

SEE SHEET 5  
 FOR ASSEMBLY DETAILS

STATE OF VERMONT  
 AGENCY OF TRANSPORTATION  
 VT ROUTE 65 (MINOR COLLECTOR)  
 BRIDGE NO. 2  
 TOWN OF BROOKFIELD

|       |        |             |
|-------|--------|-------------|
| STATE | COUNTY | CONTROL NO. |
| VT    | ORANGE | NA          |

PROJECT NO.: BRF FLBR(2)

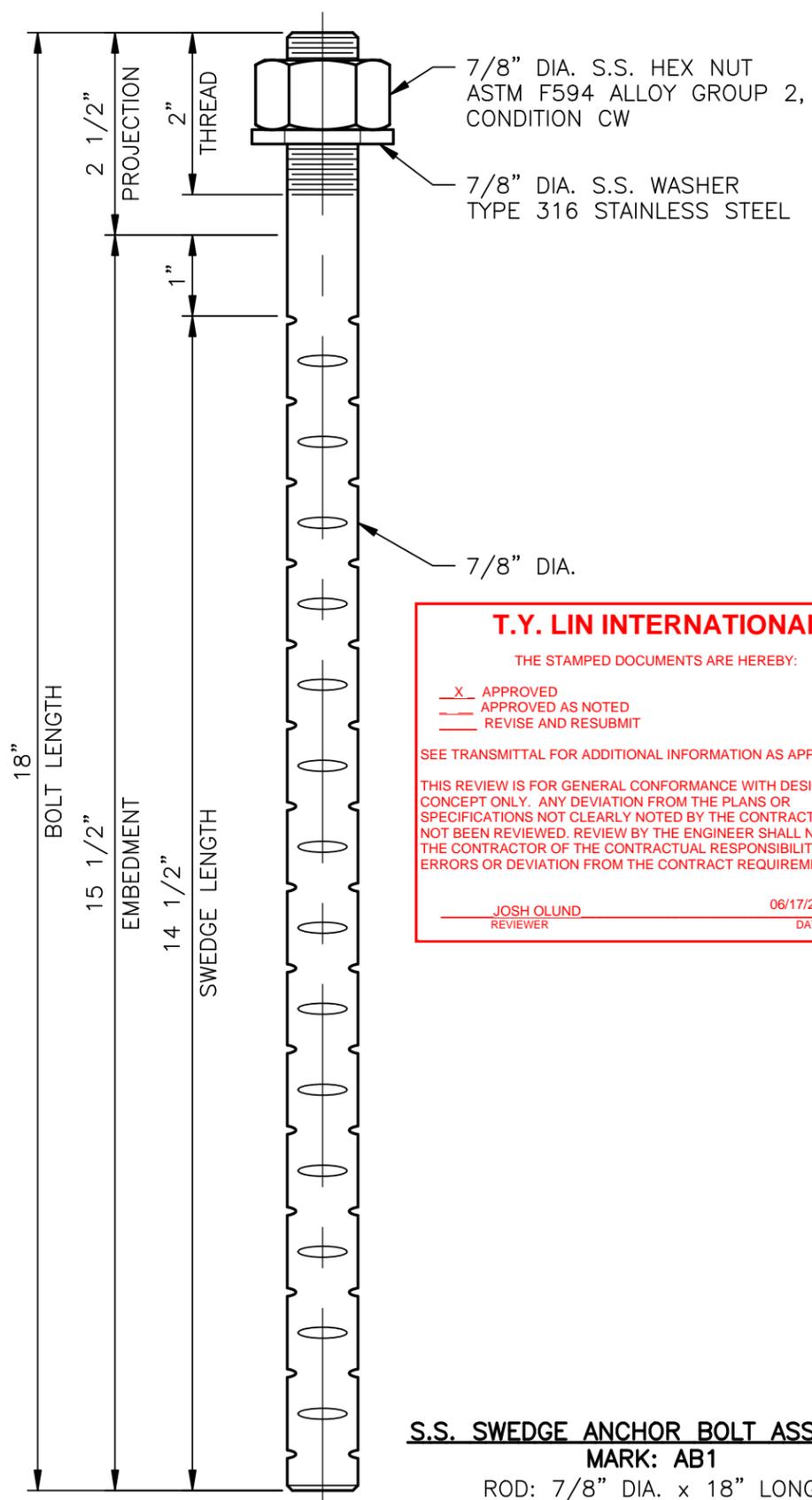
**COSMEC, INC.**  
**STAINLESS STEEL BEARING ASSY.'S**

**Cosmec** 1501 ROCKY RIDGE ROAD  
 P.O. BOX 2159  
 ATHENS, TEXAS 75751

|             |                       |                       |
|-------------|-----------------------|-----------------------|
| SCALE: NONE | DRAWN BY: <u>MH</u>   | CHECKED BY: <u>SL</u> |
|             | DATE: <u>05/28/14</u> | DATE: <u>06/06/14</u> |

SHEET 6 OF 7 **JOB NO.: 12445**

|      |             |    |      |      |      |                                       |                            |           |
|------|-------------|----|------|------|------|---------------------------------------|----------------------------|-----------|
| REV. | DESCRIPTION | BY | DATE | CK'D | DATE | CUSTOMER<br>MILLER CONSTRUCTION, INC. | DRAWING NUMBER<br>12445-D6 | REV.<br>0 |
|------|-------------|----|------|------|------|---------------------------------------|----------------------------|-----------|



**S.S. SWEDGE ANCHOR BOLT ASSEMBLY**  
**MARK: AB1**  
 ROD: 7/8" DIA. x 18" LONG  
 ASTM F593, ALLOY GROUP 2, CONDITION CW  
 (32) LOCATED @ ABUTMENT 1  
 (32) LOCATED @ ABUTMENT 2  
 (64) REQUIRED

**T.Y. LIN INTERNATIONAL**  
 THE STAMPED DOCUMENTS ARE HEREBY:

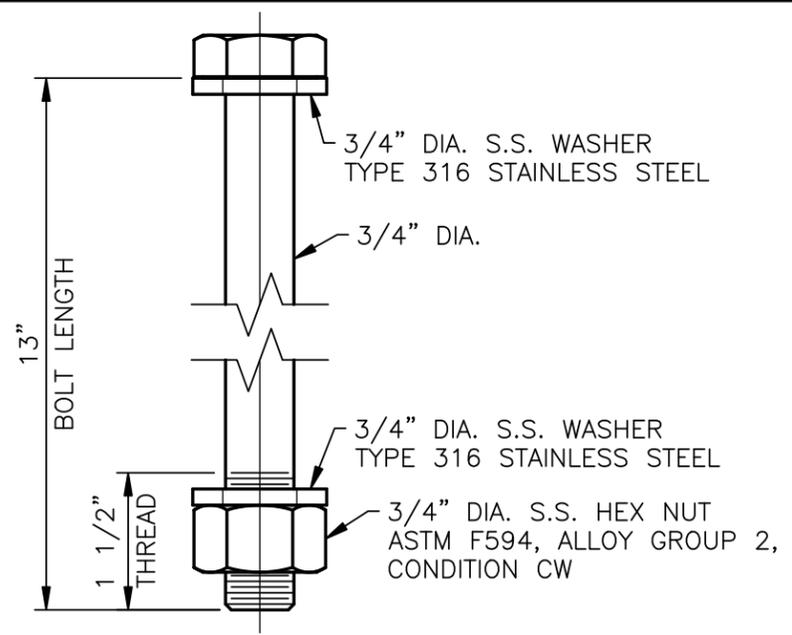
APPROVED  
 APPROVED AS NOTED  
 REVISE AND RESUBMIT

SEE TRANSMITTAL FOR ADDITIONAL INFORMATION AS APPLICABLE.

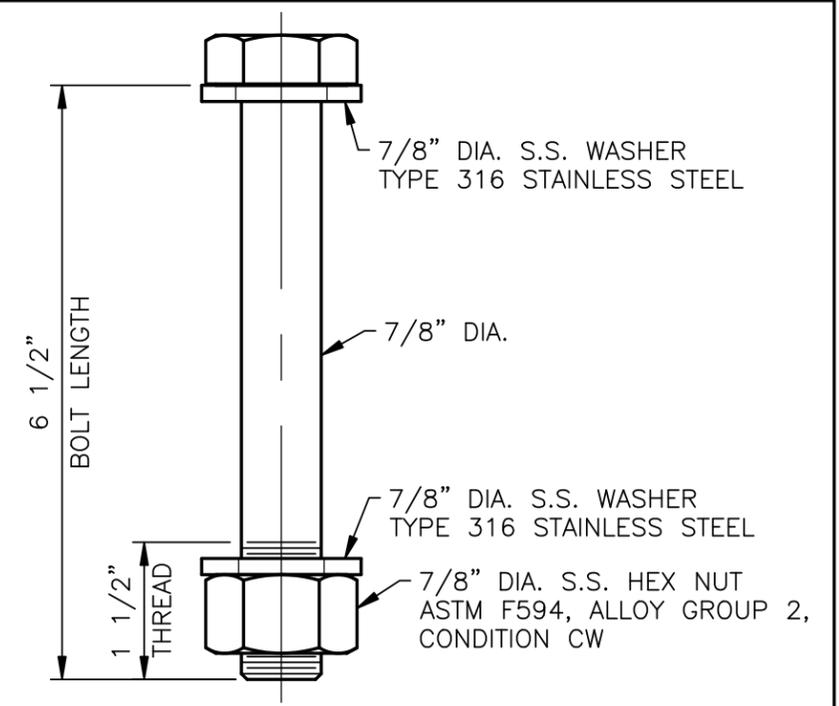
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JOSH OLUND  
 REVIEWER

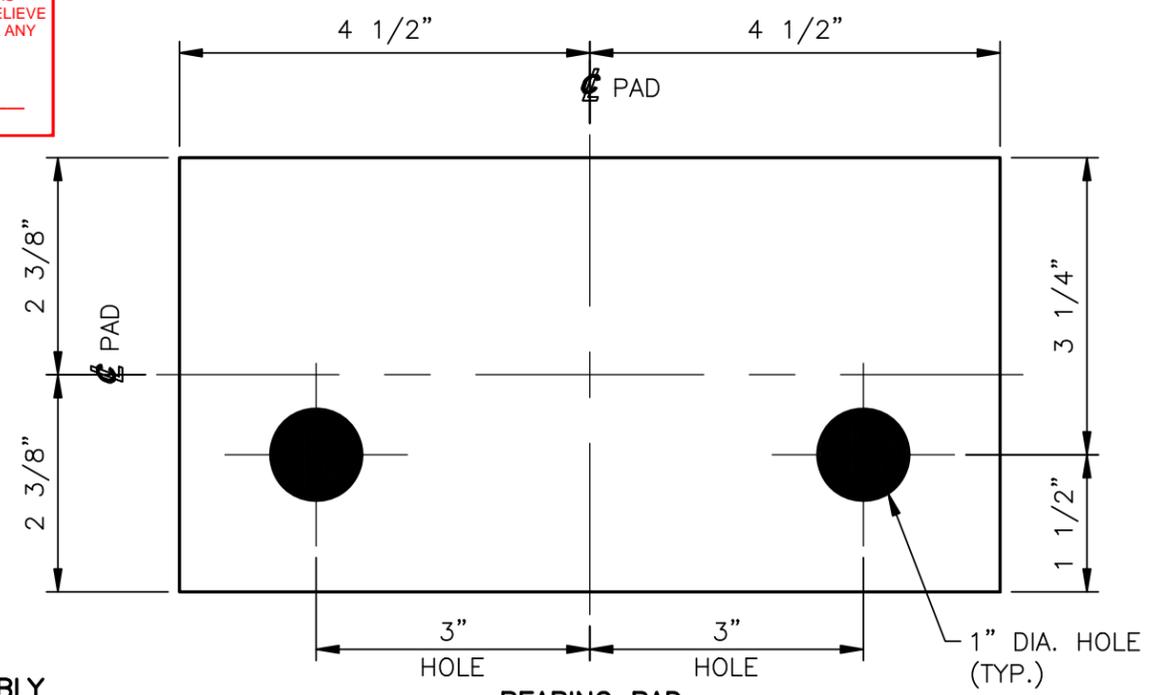
06/17/2014  
 DATE



**S.S. CONNECTION BOLT ASSEMBLY**  
**MARK: CB1**  
 3/4" DIA. x 13" LONG  
 ASTM F593, ALLOY GROUP 2, CONDITION CW  
 (64) LOCATED @ ABUTMENT 1  
 (64) LOCATED @ WEST FLOATING SPAN LEDGE  
 (64) LOCATED @ ABUTMENT 2  
 (64) LOCATED @ EAST FLOATING SPAN LEDGE  
 (256) REQUIRED



**S.S. CONNECTION BOLT ASSEMBLY**  
**MARK: CB2**  
 7/8" DIA. x 6 1/2" LONG  
 ASTM F593, ALLOY GROUP 2, CONDITION CW  
 (32) LOCATED @ WEST FLOATING SPAN LEDGE  
 (32) LOCATED @ EAST FLOATING SPAN LEDGE  
 (64) REQUIRED



**BEARING PAD**  
**MARK: BP1**  
 PAD 1/8" x 4 3/4" x 9"  
 MIL-C-882  
 (16) LOCATED @ ABUTMENT 1  
 (16) LOCATED @ ABUTMENT 2  
 (32) REQUIRED

Vermont Agency of Transportation  
**RECEIVED**  
 ON: June 11, 2014  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 06/18/2014

SEE SHEET 1  
 FOR GENERAL NOTES  
 SEE SHEETS E1 THRU E3  
 FOR INSTALLATION DETAILS

|   |                |                                   |
|---|----------------|-----------------------------------|
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION                  |                |                                   |
| VT ROUTE 65 (MINOR COLLECTOR)<br>BRIDGE NO. 2                 |                |                                   |
| TOWN OF BROOKFIELD  |                |                                   |
| STATE   | COUNTY         | CONTROL NO.                       |
| VT  | ORANGE         | NA                                |
| PROJECT NO.: BRF FLBR(2)                                      |                |                                   |
| COSMEC, INC.<br>STAINLESS STEEL BEARING ASSY.'S               |                |                                   |
| 1501 ROCKY RIDGE ROAD<br>P.O. BOX 2159<br>ATHENS, TEXAS 75751 |                |                                   |
| SCALE: NONE   | DRAWN BY: MH   | CHECKED BY: SL                    |
|   | DATE: 05/28/14 | DATE: 06/06/14                    |
| SHEET 7 OF 7  |                | JOB NO.: 12445                    |
| CUSTOMER<br>MILLER CONSTRUCTION, INC.                         |                | DRAWING NUMBER REV.<br>12445-D7 0 |

| REV. | DESCRIPTION | BY | DATE | CK'D | DATE |
|------|-------------|----|------|------|------|
|      |             |    |      |      |      |

COSMEC INC.  
WELDING PROCEDURE SPECIFICATION

SPECIFICATIONS AND CODE: D1.6  
 MATERIAL SPECIFICATION ASTM A240 TYPE 304  
 WELDING PROCESS----- FCAW  
 MANUAL OR MACHINE----- SEMI-AUTO  
 POSITION OF WELDING----- 2F  
 FILLER METAL SPECIFICATION ER309LT1-1 CLASSIFICATION: A5.22  
 MANUFACTURER: AVESTA TRADENAME: N/A  
 FLUX----- INTERNAL  
 SHIELDING GAS----- CO2 FLOW RATE 45 CFH  
 SINGLE OR MULTIPLE PAS S SINGLE  
 SINGLE OR MULTIPLE ARC SINGLE  
 WELDING CURRENT----- DC  
 POLARITY: REVERSE (EP)  
 WELDING PROGRESSION-----  
 ROOT TREATMENT----- CLEANED & PREPARED BRIGHT METAL  
 PREHEAT AND INTERPASS TEMPERATURE----- SEE BELOW  
 POSTHEAT TEMPERATURE N/A  
 HEAT IMPUT MIN.----- MAX.-----

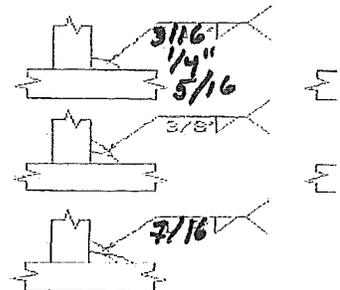
WELDING PROCEDURE

| PASS NO. | ELECTRODE SIZE | WELDING CURRENT AMPERES | TRAVEL SPEED | JOINT DETAIL |
|----------|----------------|-------------------------|--------------|--------------|
| ALL      | 0.045          | 190---220               | 11 IPM       |              |

BM THICKNESS  
 T1= 1/2" TO U T2= 1/2"

**PREHEAT TEMPS.**

| THICKNESS             | TTEMP.   |
|-----------------------|----------|
| UP TO 3/4"            | 100 DEG. |
| OVER 3/4" TO 1 1/2"   | 100 DEG. |
| OVER 1 1/2" TO 2 1/2" | 100 DEG. |
| OVER 2 1/2"           | 100 DEG. |



THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT-UP, PASS SIZE, ETC.  
 WITHIN THE LIMITATION OF VARIABLES GIVEN IN SECTION 5.

SUPPORTING PQR:

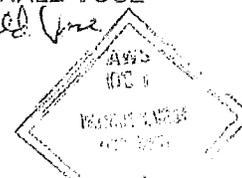
PROCEDURE NO. FCAW-SS--SS-PA

REVISION NO.

CONTRACTOR: COSMEC INC.  
 AUTHORIZED BY: DONALD VOSE

*Donald Vose*

DATE:--- 11/17/2005



Donald F Vose  
 CWI 01100651  
 QC1 EXP. 10/1/2016