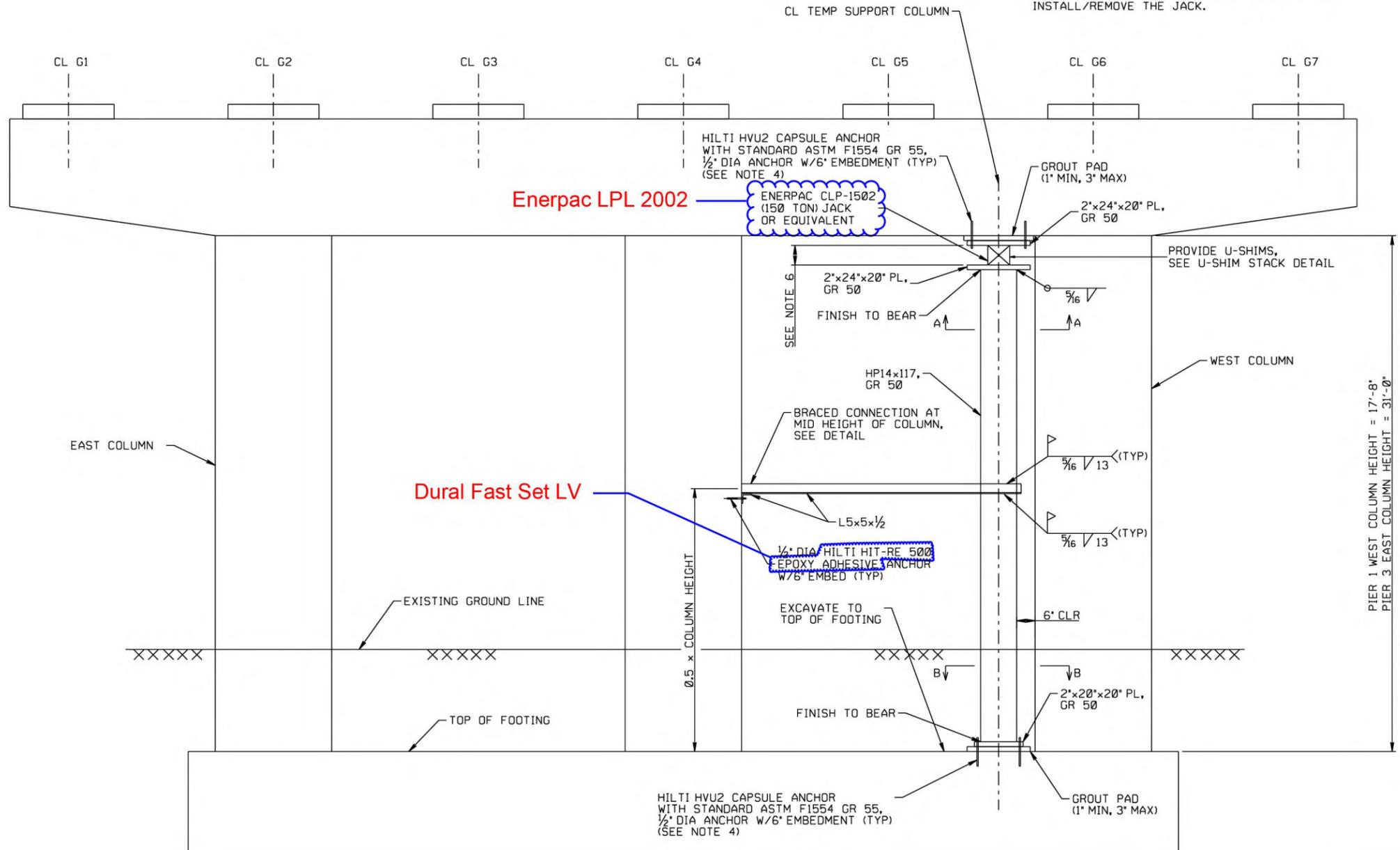


# PIER ELEVATION

PIER 1 SHOWN, OTHERS SIMILAR  
 LOOKING AHEAD STATION  
 (NOT TO SCALE)

**NOTES:**

1. ALL WELDS USE  $F_{exx} = 70$  KSI ELECTRODES.
2. ALL STEEL IS AASHTO M270, GRADE 50.
3. USE 3 KSI GROUT.
4. LOCATE ANCHORS WITH PACHOMETER TO MISS REINFORCEMENT STEEL.
5. ~~PAINT STRUCTURAL STEEL IN ACCORDANCE WITH PUBLICATION 400, SECTION 1000.~~
6. CONTRACTOR TO ESTABLISH DIMENSION BASED ON JACK HEIGHT AND CLEARANCE REQUIRED TO INSTALL/REMOVE THE JACK.



**INSTALLATION PROCEDURE:**

1. INSTALL TEMP SUPPORT COLUMN AT PIER 1 WEST COLUMN AND PIER 3 EAST COLUMN.
2. EXCAVATE MATERIAL ON TOP OF FOOTING AS NEEDED TO PLACE TEMP SUPPORT COLUMN IN ACCORDANCE WITH OSHA REQUIREMENTS.
3. GROUT ON TOP OF FOOTING TO PROVIDE A LEVEL SURFACE TO PREPARE FOR INSTALLATION OF TEMP SUPPORT COLUMN.
4. COLUMN TO BE INSTALLED PLUMB. COLUMN TO BE ANCHORED INTO TOP OF FOOTING AND BOTTOM OF PIER CAP AS SHOWN IN SKETCHES.
5. INSTALL BRACED CONNECTION TO EXISTING INTERIOR COLUMN AS SHOWN IN SKETCHES.
6. JACK TO 200 K LOAD AND INSTALL U-SHIMS.
7. WELD U-SHIMS TO EACH OTHER AND TO TOP AND BOTTOM 2" PLATES.
8. REMOVE JACK AFTER WELDING U-SHIMS.

PIER 1:  
 MAX FACTORED AXIAL LOAD ON TEMP SUPPORT = 872 K  
 HP14x117 AXIAL CAPACITY (17.67' COLUMN HT) = 1489 K

PIER 2:  
 MAX FACTORED AXIAL LOAD ON TEMP SUPPORT = 747 K  
 HP14x117 AXIAL CAPACITY (25' COLUMN HT) = 1357 K

PIER 3:  
 MAX FACTORED AXIAL LOAD ON TEMP SUPPORT = 1033 K  
 HP14x117 AXIAL CAPACITY (31' COLUMN HT) = 1229 K

PIER 6:  
 MAX FACTORED AXIAL LOAD ON TEMP SUPPORT = 1188 K  
 HP14x117 AXIAL CAPACITY (19' COLUMN HT) = 1468 K

Jacked to 5000 psi

**CERTIFIED CORRECT PLANS**

*Will N. D. P.E.*  
 Professional Engineer  
 Approved by Bureau of Technical Utility Services

**PA PUBLIC UTILITY COMMISSION**

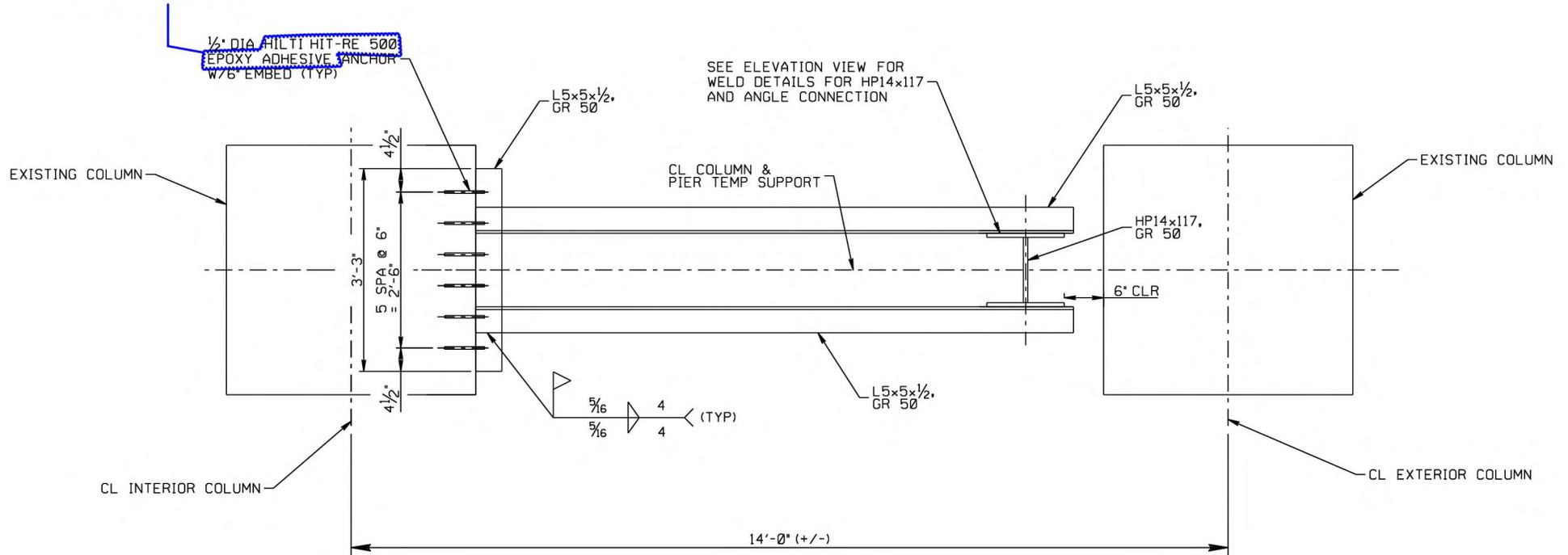
ATTEST *Matthew L. Hensel* 10/14/2025  
 Secretary Docket: A-2025-3055600

9/22/2025 As-built

# BRACED CONNECTION DETAIL

(NOT TO SCALE)

## Dural Fast Set LV



### NOTES:

1. USE ASTM F1554 GR. 55, 1/2" DIAMETER ANCHORS.
2. LOCATE ANCHORS WITH PACHOMETER TO MISS REINFORCEMENT STEEL.
3. DRILL HOLES FOR ANCHORS USING A CARBIDE TIPPED HAMMER DRILL BIT. FOLLOW INSTALLATION PROCEDURES AND HOLE PREPARATION GUIDELINES IN ACCORDANCE WITH ANCHOR MANUFACTURER.

MAX FACTORED TENSION LOAD PER ANCHOR (6 TOTAL) = 4.0 K

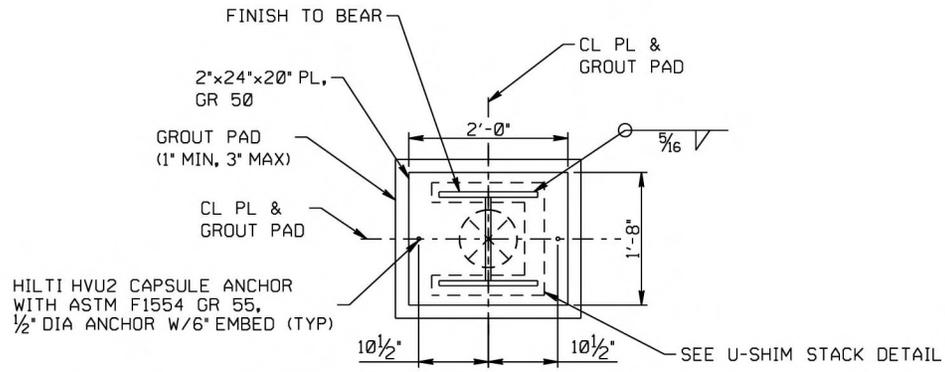
TENSILE DESIGN STRENGTH OF 1/2" DIA HILTI HIT-RE 500 EPOXY ADHESIVE ANCHOR WITH SHOWN SPACING AND 6" EMBEDMENT = 4.4 K

STEEL DESIGN STRENGTH OF 1/2" DIA HILTI HIT-RE 500 EPOXY ADHESIVE ANCHOR WITH SHOWN SPACING AND 6" EMBEDMENT = 7.9 K

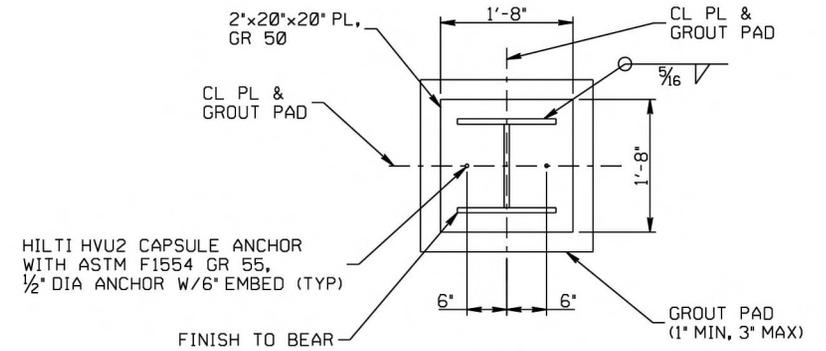
**Dural Fast Set LV has stronger cured material properties than Hilti Hit-RE 500.**

BY: MAW DATE: 6/24/2025

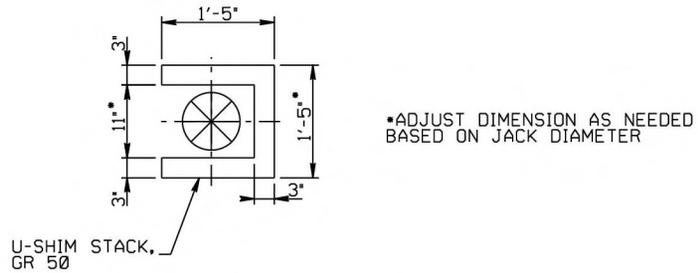
Checked: JRB 6/25/2025



SECTION A-A  
(NOT TO SCALE)



SECTION B-B  
(NOT TO SCALE)



U-SHIM STACK DETAIL  
(NOT TO SCALE)

NOTE:  
AFTER JACKING, TACK WELD SHIMS TOGETHER  
AND TO TOP AND BOTTOM PLATES.