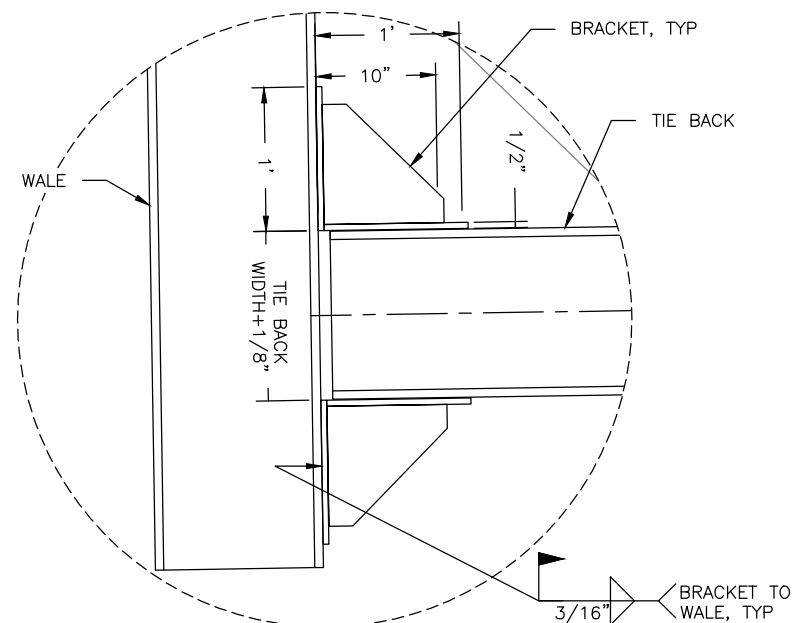
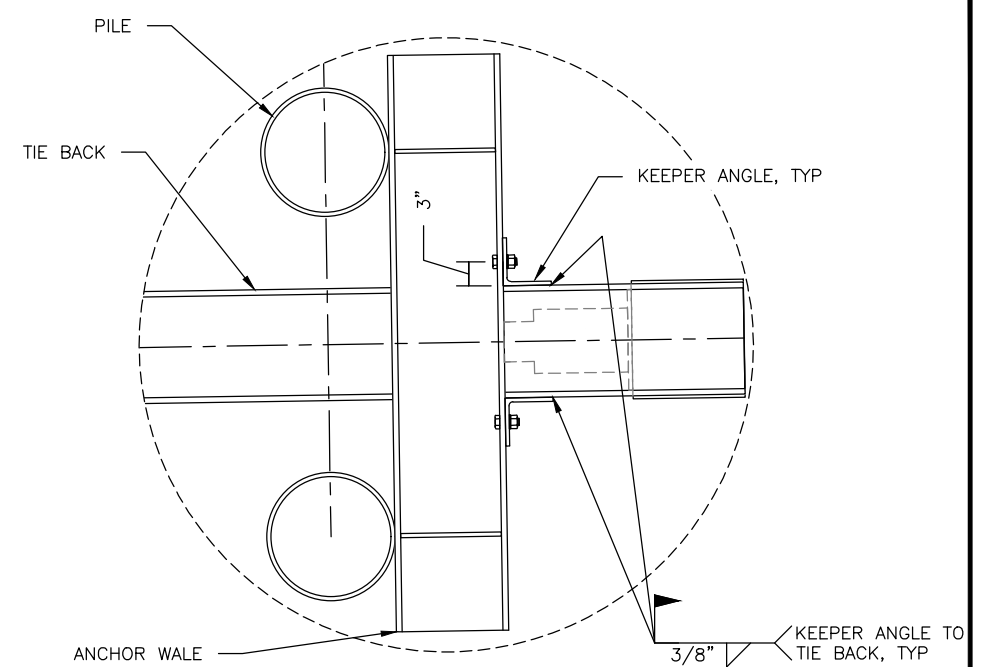


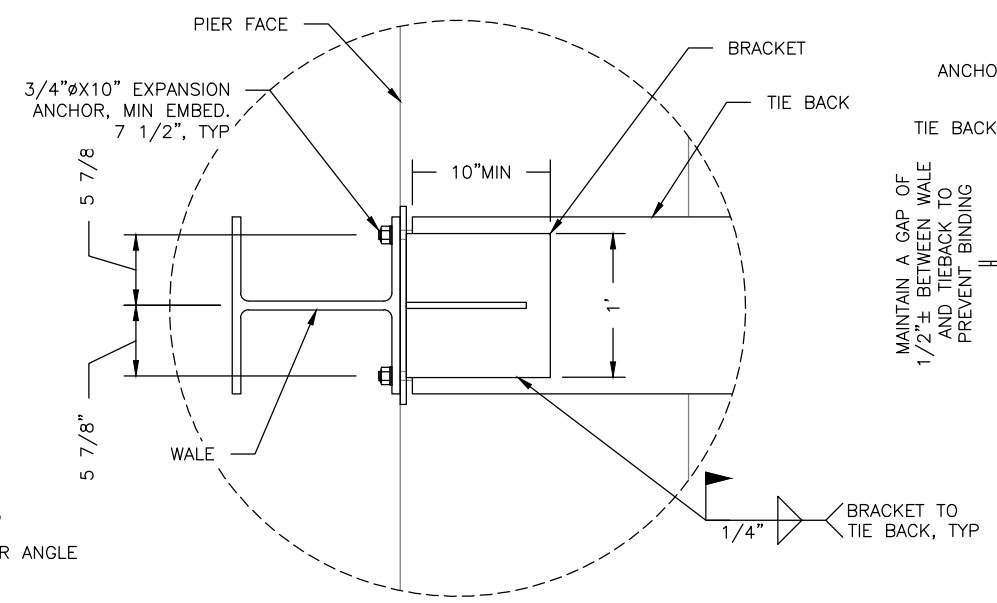
A PLAN VIEW
1 SCALE: 1/8"=1'-0"



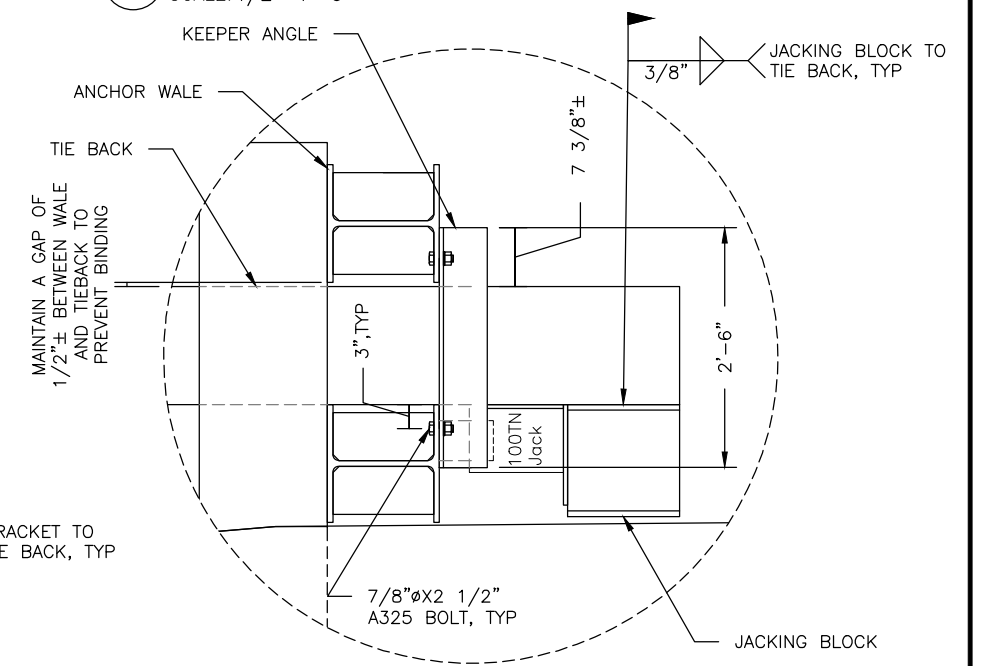
C WALE - TIE BACK PLAN
1 SCALE: 3/4"=1'-0"



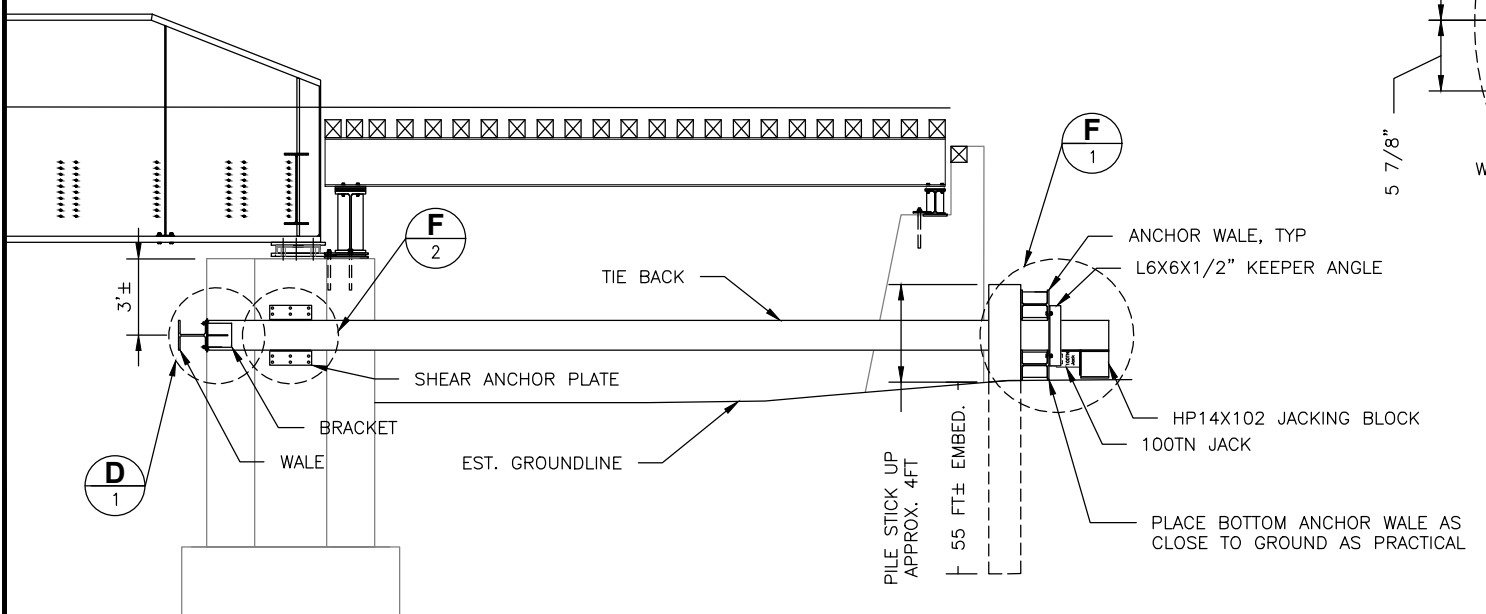
E ANCHOR WALE - TIE BACK PLAN
1 SCALE: 1/2"=1'-0"



D WALE - TIE BACK ELEV.
1 SCALE: 3/4"=1'-0"



F ANCHOR WALE - TIE BACK ELEV.
1 SCALE: 1/2"=1'-0"




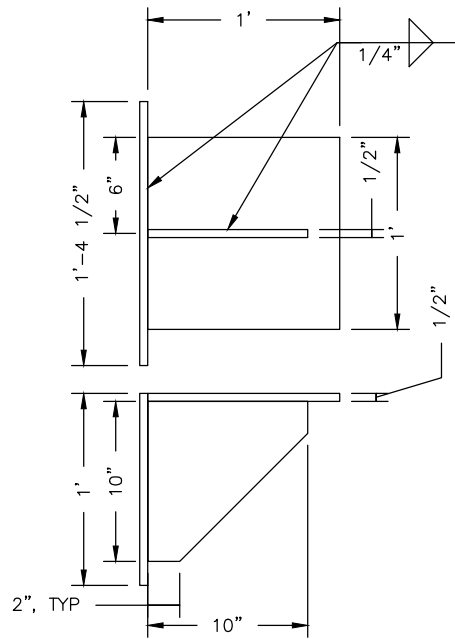
B ELEVATION VIEW
1 SCALE: 1/8"=1'-0"

REVISION 2

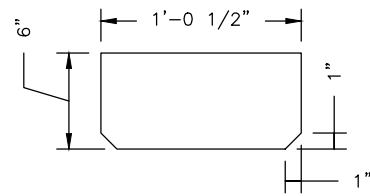
- CONSTRUCTION PROCEDURE:
1. WELD BRACKETS ON WALE AND DRILL ANCHORS ON PIER FACE.
 2. INSTALL WALE.
 3. SET TIE BACKS INTO POSITION TO HELP LAYOUT ANCHOR PILE.
 4. LAYOUT AND DRIVE ANCHOR PILE.
 5. INSTALL BOTTOM ANCHOR WALE AND TACK WELD TO PILE.
 6. WELD TIE BACKS TO BRACKETS.
 7. DRILL ANCHORS AND INSTALL SHEAR PLATE.
 8. WELD SPACER PLATES TO SHEAR PLATES AND TIE BACKS.
 9. WELD JACKING BLOCKS TO TIE BACKS.
 10. INSTALL TOP ANCHOR WALE AND TACK WELD TO PILE.
 11. BOLT KEEPER ANGLE TO ANCHOR WALES.
 12. PLACE 100TN JACKS INTO POSITION AND JACK TO 50TN EA..
 13. WELD TIE BACK TO KEEPER ANGLE.

NOTE: TIE BACKS SHALL BE SET AS SAME ELEVATION E&W AND AS LEVEL AS PRACTICAL.

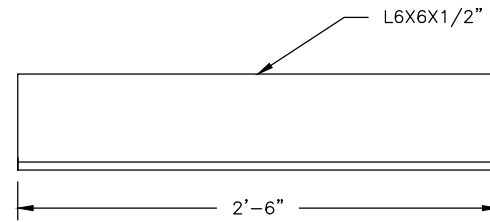
 ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT: BRIDGE 147.4 PIER 2 STABILIZATION		
TITLE: TIE BACK LAYOUT		
DESIGNED BY: <u>DJS</u>	SCALE: AS NOTED	AFE NO.:
DRAWN BY: <u>DJS</u>	DATE: 5/18/20	ACAD FILE:
CHECKED BY: _____		DWG NO. 1 OF 2
APPROVED BY: _____		



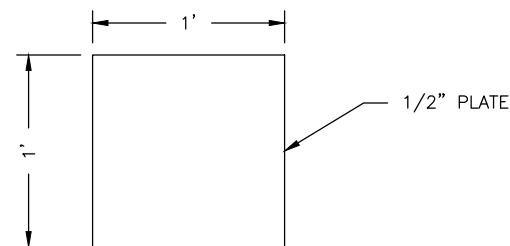
A BRACKET - 4 REQ'D
2 SCALE: 1"=1'-0"



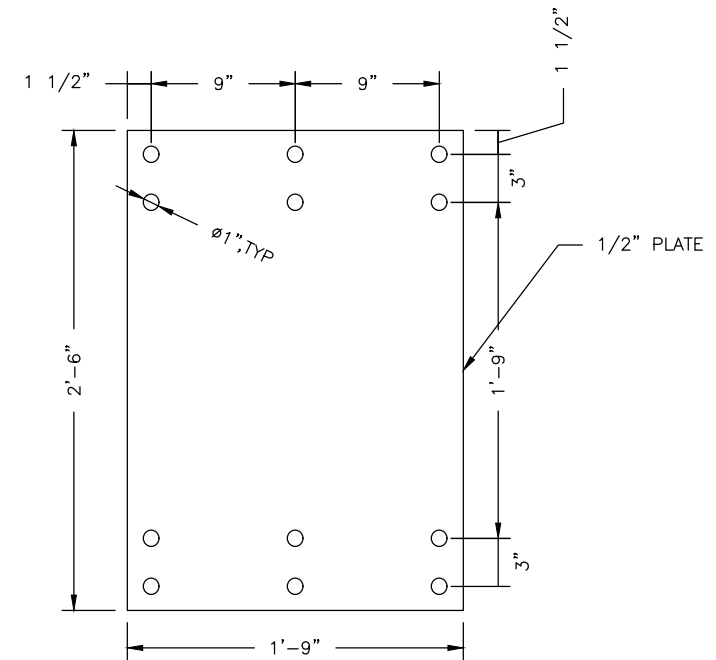
B STIFFENERS - 24 REQ'D
2 SCALE: 1"=1'-0"



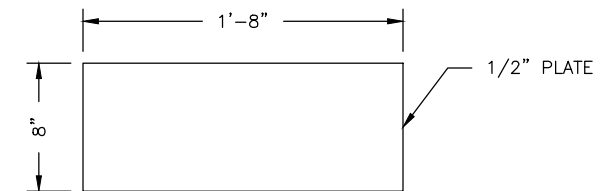
C KEEPER ANGLE - 4 REQ'D
2 SCALE: 1"=1'-0"



D SHIM PLATE - 4 REQ'D
2 SCALE: 1"=1'-0"

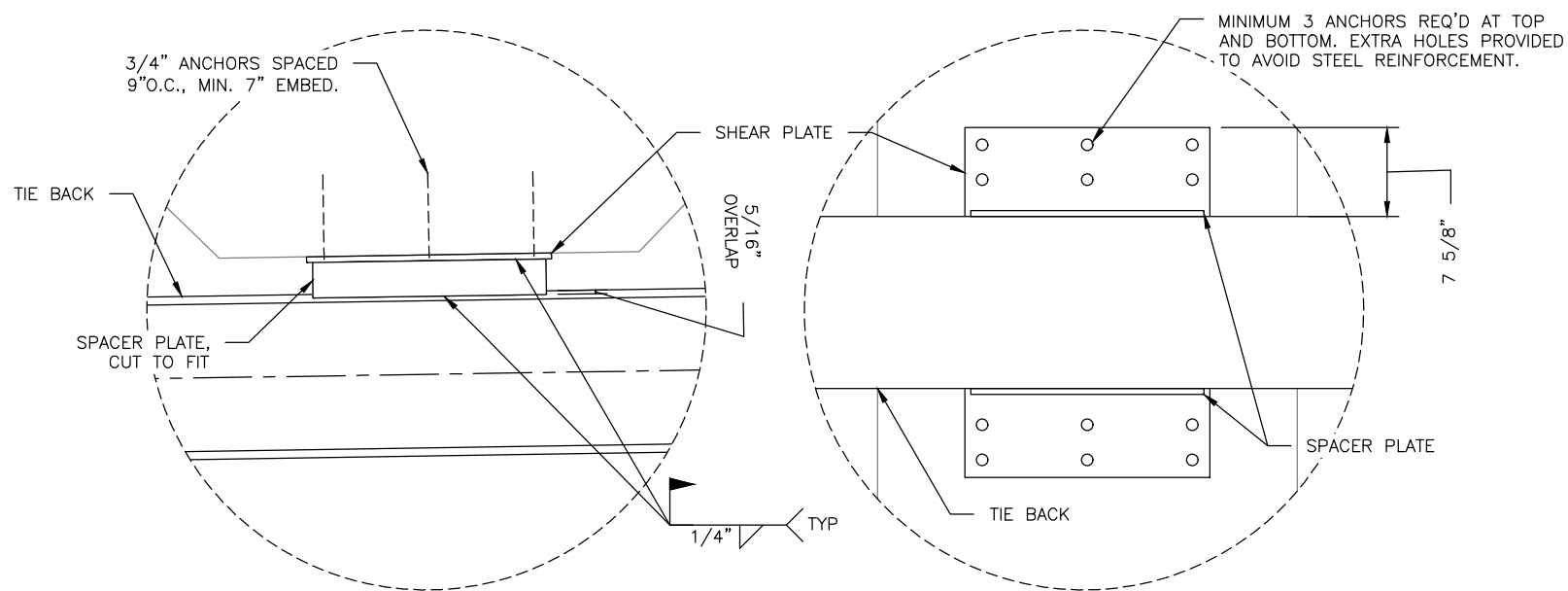


G SHEAR PLATE - 2 REQ'D
2 SCALE: 1"=1'-0"



H SPACER PLATE - 4 REQ'D
2 SCALE: 1"=1'-0"

- NOTES:
1. ALL PLATE SHALL BE GRADE 50.
2. ALL ANGLE SHALL BE GRADE 36 OR BETTER.
3. ALL STEEL TO BE UNCOATED.
4. ALL WELDS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70,000 PSI.



E SHEAR PLATE PLAN
2 SCALE: 3/4"=1'-0"

F SHEAR PLATE ELEV.
2 SCALE: 3/4"=1'-0"

REVISION 2

ALASKA RAILROAD CORPORATION ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT: BRIDGE 147.4 PIER 2 STABILIZATION		
TITLE: PARTS DETAILED		
DESIGNED BY: <u>DJS</u>	SCALE: AS NOTED	AFE NO.:
DRAWN BY: <u>DJS</u>	DATE: 5/18/20	ACAD FILE:
CHECKED BY: _____		DWG NO. 2 OF 2
APPROVED BY: _____		