

TYPICAL SPLICE FOR BRIDGE SPANS > THAN 80'-0"

SPLICE BOLTS (IF REQUIRED)

Field connection bolts, shall consist of: Material:

- Type 304 Stainless Steel meeting ASTM A276-71 Condition A or
- Type 316 Stainless Steel meeting ASTM A276-88A.
- Bolt: • UNC rolled thread Stainless Steel per ASTM A193, Grade
- B8(Type 304) or • UNC rolled thread Stainless Steel per ASTM A193, Grade B8M(Type 316)

Nut:

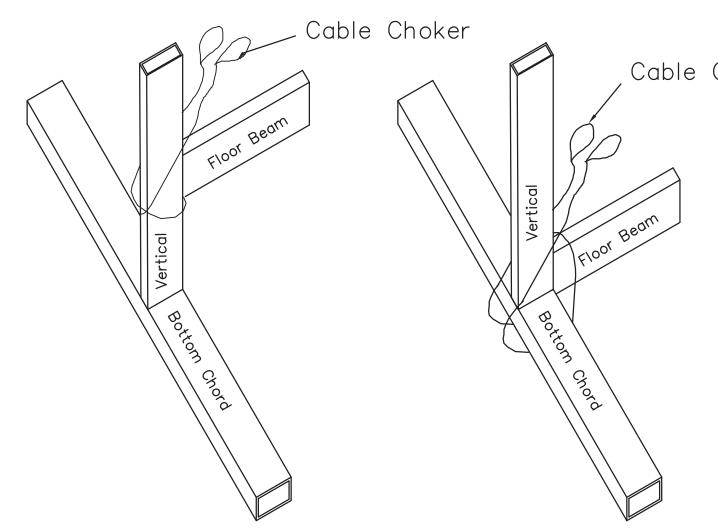
- Heavy Hex, Stainlesss Steel per ASTM A194, Grade 8 (Type 304) coated to prevent galling. or
- Heavy Hex, Stainless Steel per ASTM A194 Grade 8M (Type 316) coated to prevent galling.

Number of Nuts and Bolts vary per design requirements. The number of bolts required will vary depending on reactions and length of the span.

Bolts and Nuts to be tightened by the tightening method listed below to obtain proper torque:

- 1. Bolts shall be installed in all holes of the connection and brought to a finger—tight condition (about one foot-pound of torque or less.
- 2. Tighten the nut one additional turn, 360 degrees, for proper torque. This is an aribitrary figure that applies primarily to 300 Series fasteners. For hardened and tempered 400 series fasteners, they may be too high. In any event, a trial test should be conducted with a torque wrench for best results.
- 3. Do not use zinc—and copper—bearing anti—seize lubricants as these are not recommended for use with stainless steel.

Where splices are used the plates are "shop drilled" and "matched marked". <u>DO NOT</u> mix plates as holes may not match. Keep plates in same orientation as shop bolted for shipment.



FIELD USE ONLY, VERIFY DIMENSIONS AND INFORMATION WITH LIBERTY PRODUCTS, LLC

Bridge Installation

- After anchor bolts are installed and checked for proper dimensions, place setting plate and shim to approximate elevation. Setting plates are delivered along with structure.
- 2. Place Teflon pads on setting plate. Structure requires Teflon pads on each end.
- 3. Set structure in place (See Choker Placement Diagram). Check for proper elevation at abutment headwall. If necessary, adjust to correct height.
- 4. Grout under setting plate with approved non-shrink grout.
- 5. Bolt structure to anchor bolts. Hand tighten nuts to allow for expansion and contraction.
- 6. Deforming bolt threads are recommended.

Choker Placment Diagram

Place choker around floor beam or bottom chord of truss as shown. Attachment to top chord not recommended. Under no circumstances should cable or chokers be attached to or rub against railing or toe plates. For accurate lifting weight consult "Bill of Material List" furnished on all shop drawings. For estimate weight reference quote. For larger catwalks or bridges we recommend that professional steel erectors be consulted for unloading and installation.



Liberty Catwalks

A Division of Liberty Products,LLC

Model or Series:

Splice Information Sheet Liberty Series Lifting Information Sheet

Bridge Design Criteria:

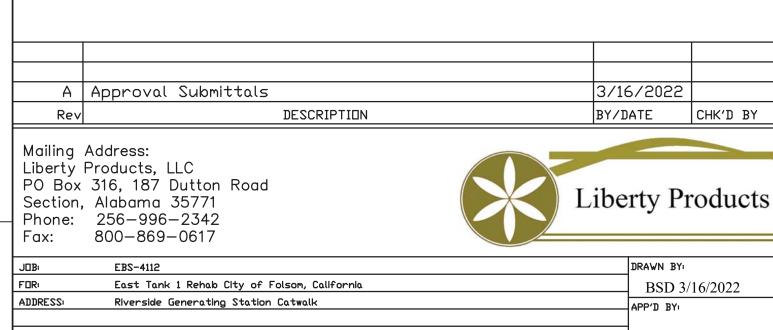
- All design stresses are in accordance with the specifications of The Aluminum Association, Specifications and Guidelines for Aluminum Structures, latest edition.
- 2. Welding to conform with the American Welding Society D1.2 latest revision. Welding to be performed by experienced welders qualified in accordance with A.W.S. procedures.
- 3. Aluminum to be 6061—T6 with minimum yield strength of 35,000 psi or 6063 (Decking).
- 4. Anchor Bolts to be stainless steel type 316.
- 5. Hand rails and all other accessible surfaces to be ground smooth with no sharp edges or corners.
- 6. Length of anchor bolts and foundation details are for general arrangement purposes only. Actual foundation and substructure design, railing, camber, and slope requirements, electrical grounding, and clearances (flood plain, roadway, and waterway) are the responsibility of others.
- 7. Structural welds will be a minimum of 3/16" fillet unless shown otherwise. Minimum weld does not apply to seal welds.
- 8. 1/2" Tolerance for Warping and Distortion possible while heating or welding. Adjust in shop as required.

Design Based on Following:

- Dead Load: 17 psf
- Distributed Live Load: 90 psf
- Wind Load: 29 psf calculated on the entire vertical surface as though fully enclosed (115mph 700yr MRI)

Floor Design Information

GAL (19-S-4) Serrated Banded 1" x $\frac{3}{16}$ " Grating.

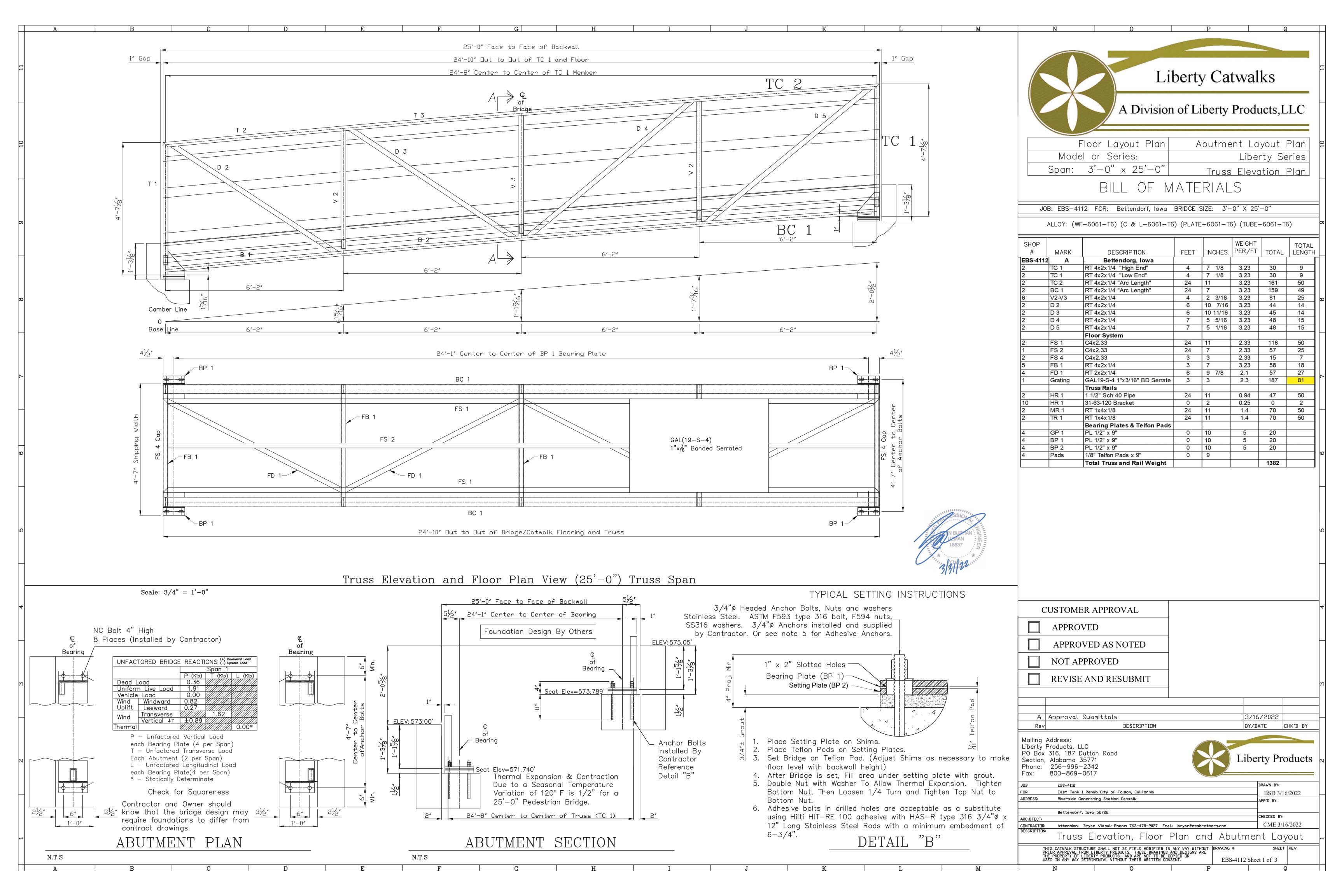


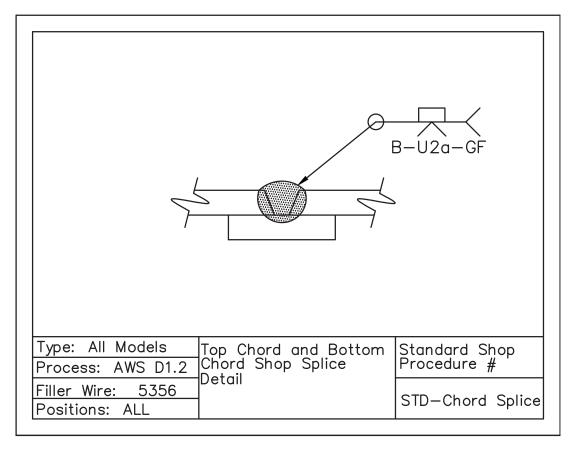


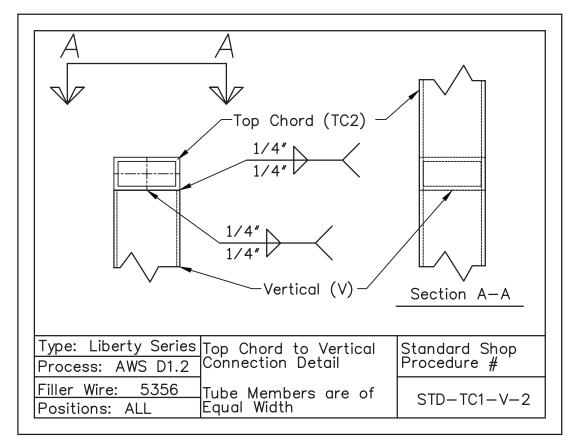
Attention: Bryan Vlasak Phone: 763-478-2027 Email: bryan@essbrothers.com CME 3/16/2022 LIFTING AND INFORMATION SHEET THIS CATWALK STRUCTURE SHALL NOT BE FIELD MODIFIED IN ANY WAY WITHOUT PRIOR APPROVAL FROM LIBERTY PRODUCTS. THESE DRAWINGS AND DESIGNS ARE THE PROPERTY OF LIBERTY PRODUCTS. AND ARE NOT TO BE COPIED OR USED IN ANY WAY DETRIMENTAL WITHOUT THEIR WRITTEN CONSENT.

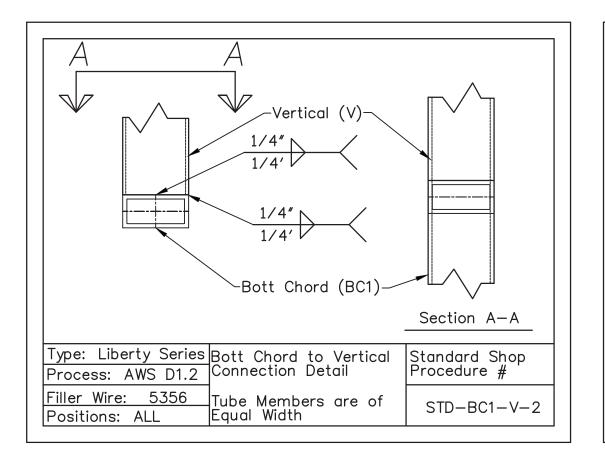
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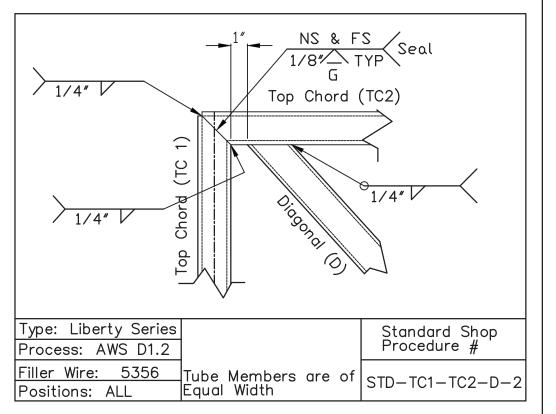
EBS-4112-Installation

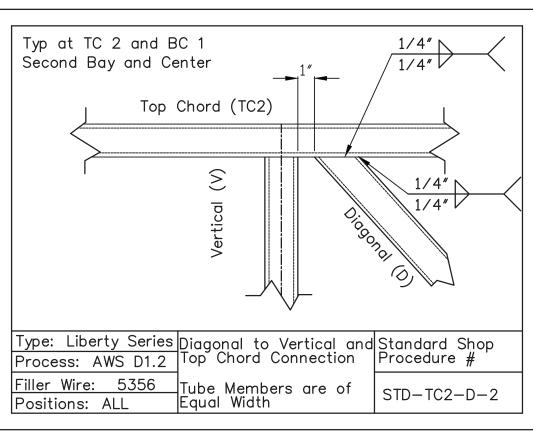


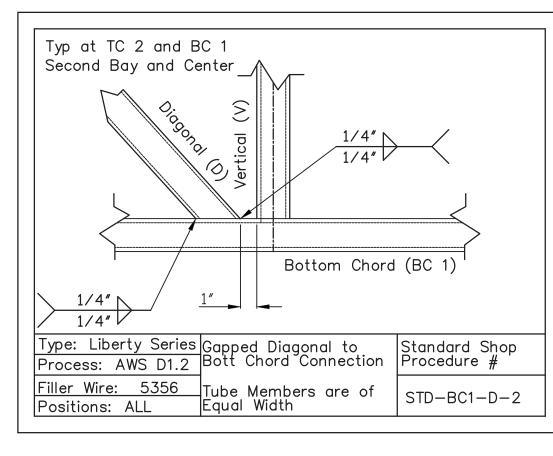


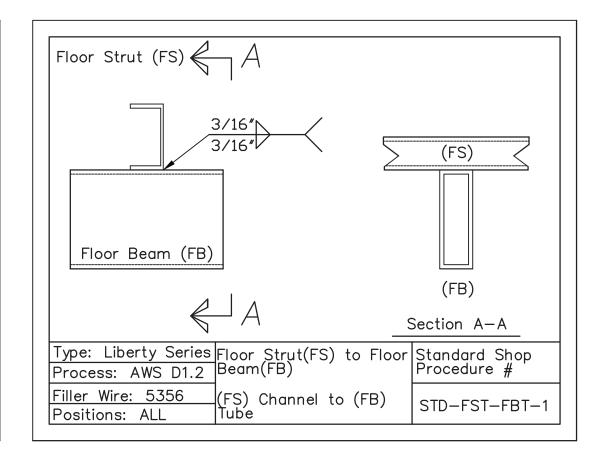


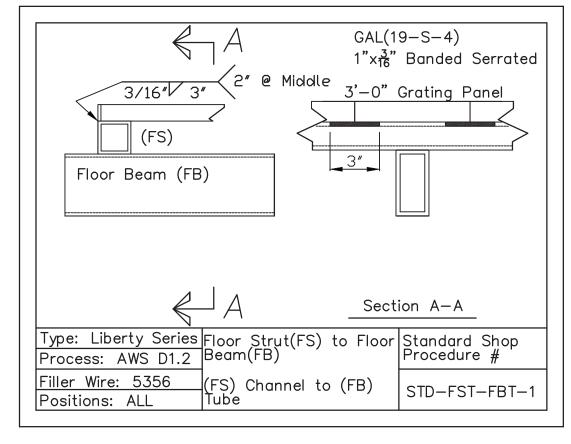


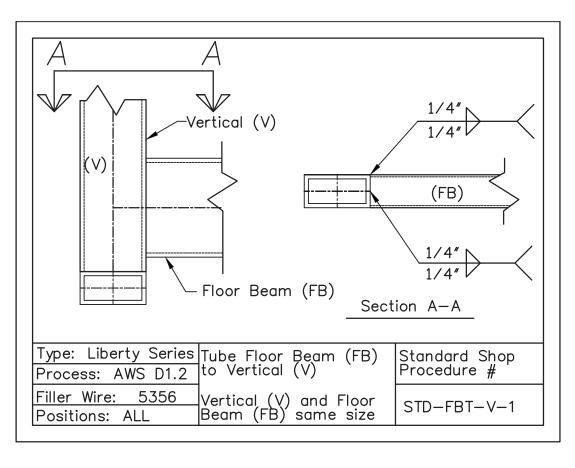


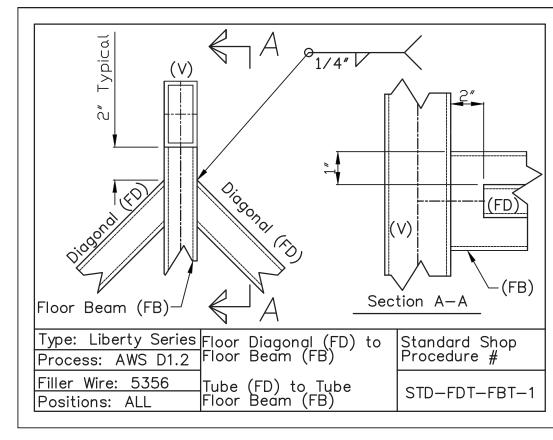


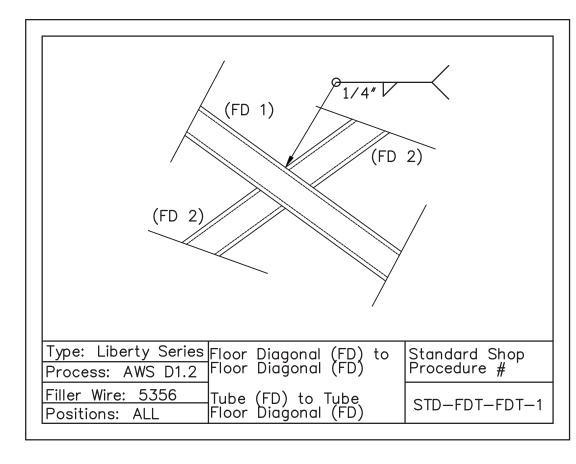


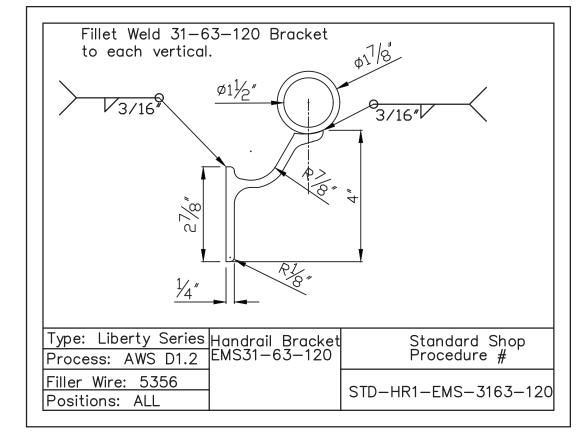


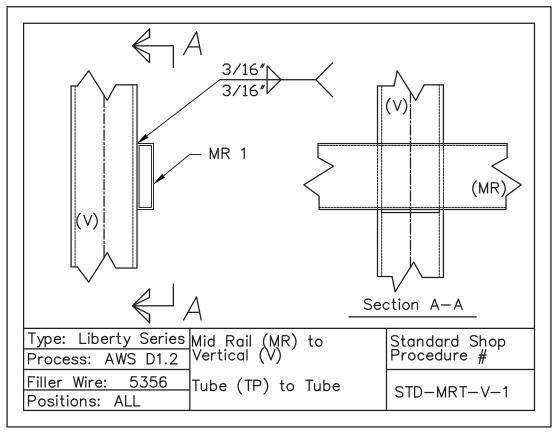


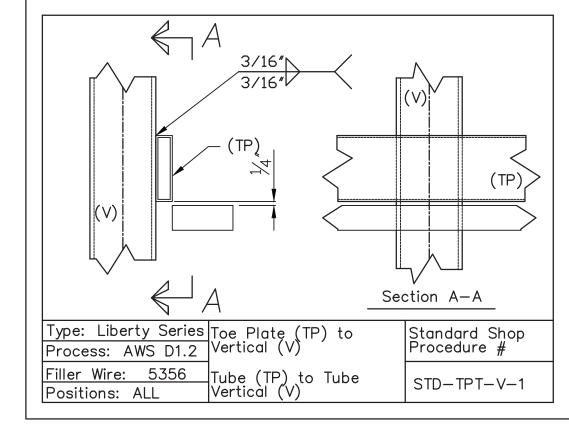


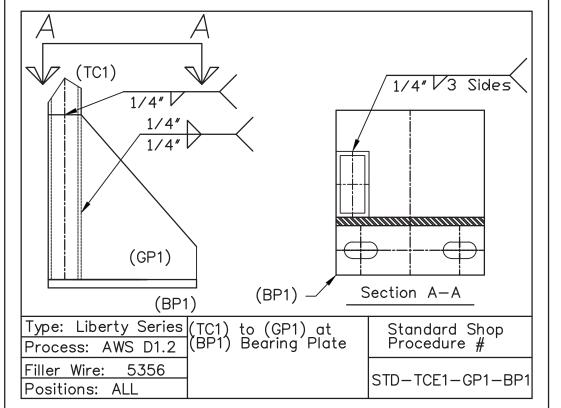


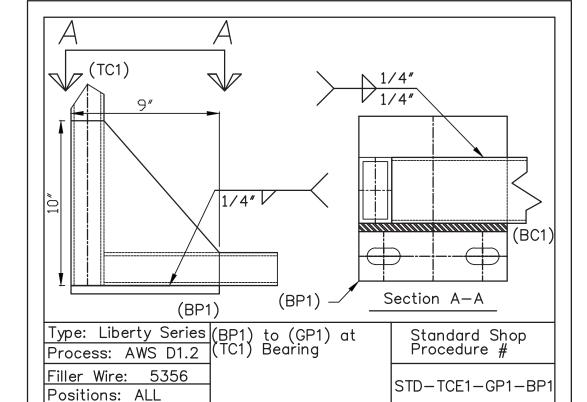


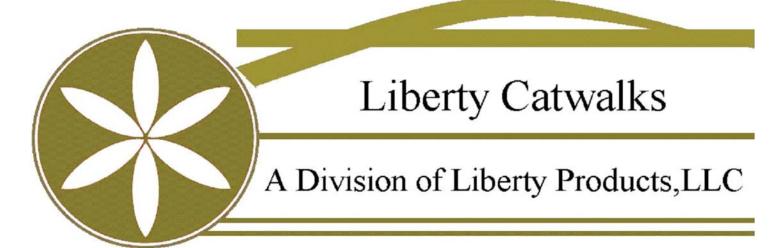








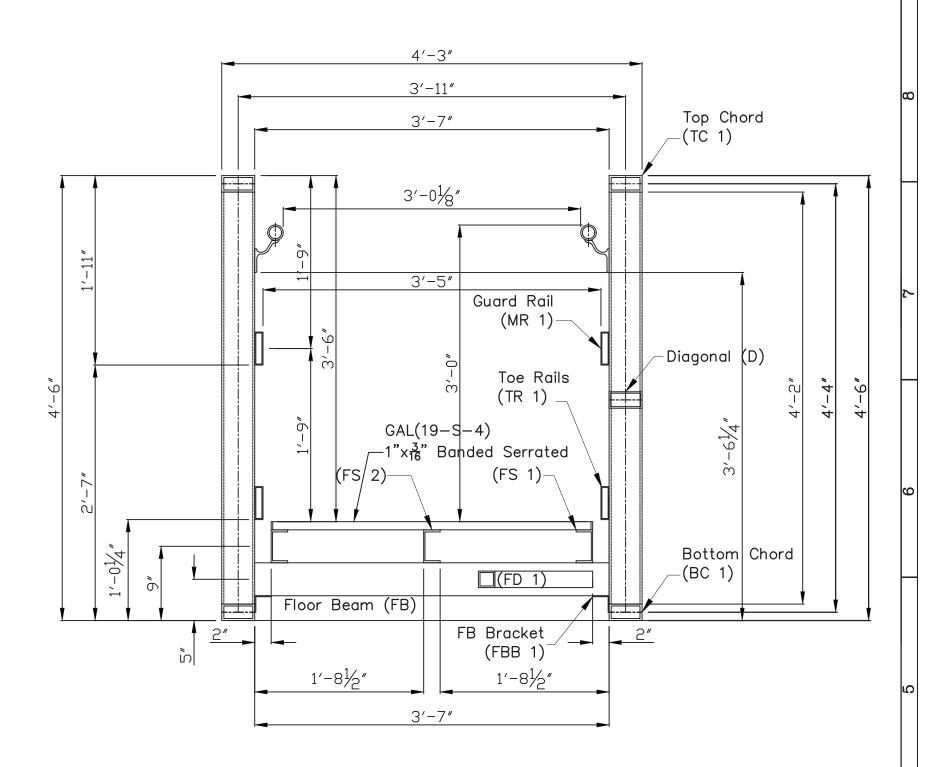




Shop Procedures Section Views Model or Series: Liberty Series $3'-0" \times 25'-0"$ Weld Procedures

Weld Procedures

Welds are typically for bridge and catwalk members. Members may vary per design requirements.



Section A-A Scale: 1'' = 1'-0''

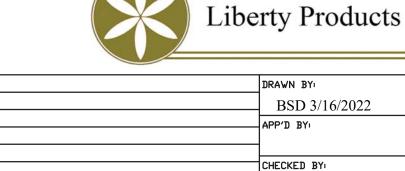
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A | Approval Submittals 3/16/2022 DESCRIPTION BY/DATE | CHK'D BY

Mailing Address: Liberty Products, LLC PO Box 316, 187 Dutton Road Section, Alabama 35771 Phone: 256-996-2342 800-869-0617

East Tank 1 Rehab City of Folsom, California

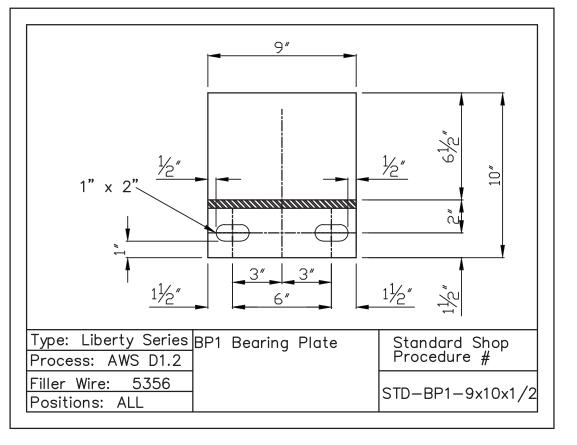
Riverside Generating Station Catwalk

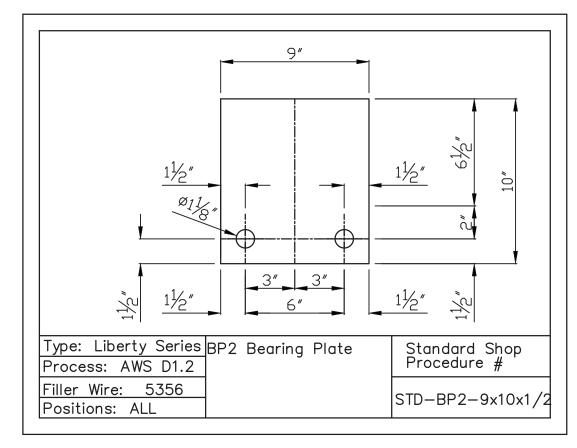


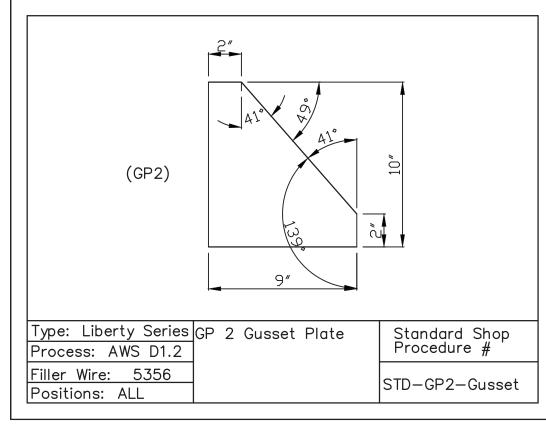
EBS-4112 Sheet 2 of 3

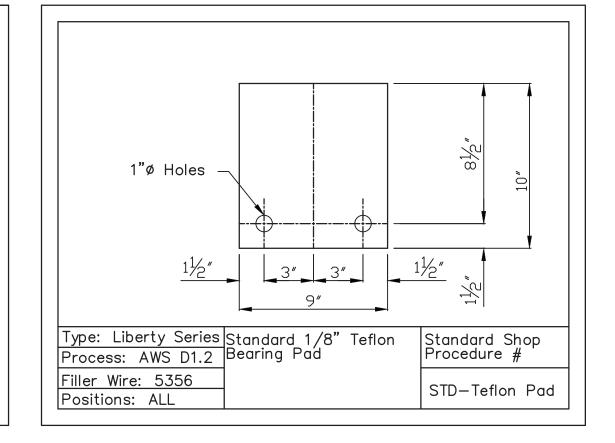
CME 3/16/2022 Attention: Bryan Vlasak Phone: 763-478-2027 Email: bryan@essbrothers.com Section Views, Weld Procedures, and Shop Procedures THIS CATWALK STRUCTURE SHALL NOT BE FIELD MODIFIED IN ANY WAY WITHOUT PRIOR APPROVAL FROM LIBERTY PRODUCTS. THESE DRAWINGS AND DESIGNS ARE THE PROPERTY OF LIBERTY PRODUCTS. AND ARE NOT TO BE COPIED OR USED IN ANY WAY DETRIMENTAL WITHOUT THEIR WRITTEN CONSENT.

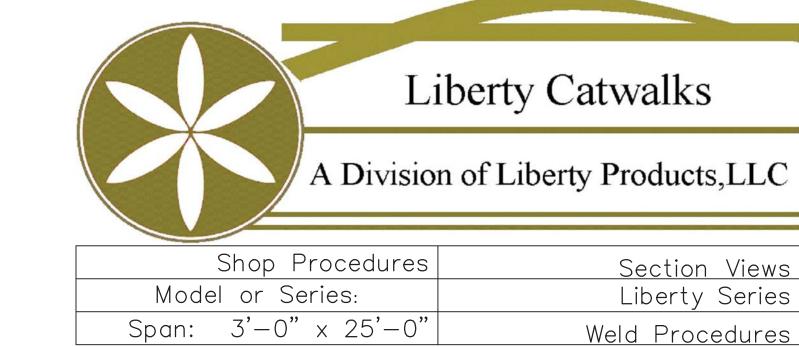
Top Chord, Bottom Chord, Vertical and Diagonal Weld Procedures









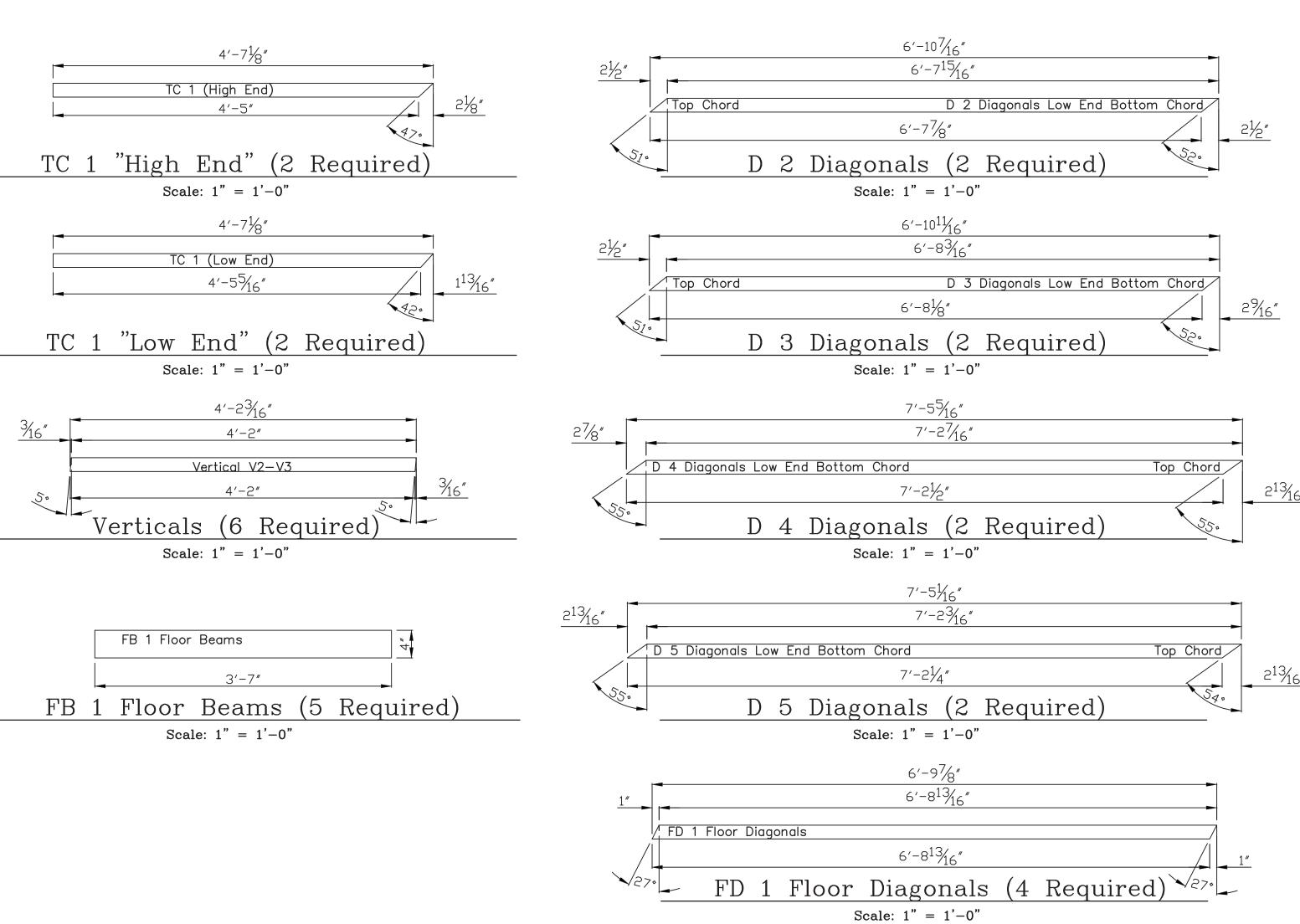


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Section Views

Liberty Series





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