ART THURESON, INC.

Phone: 248-623-8599 Fax: 248-623-8766

Treated Timber Bridges

- Prefabricated ready to assemble
- Quotation includes: *Lumber, Piling & Hardware*

Boardwalk Lumber and Timber

- Treating: *CCA, ACQ, Creosote, Penta, CuNap*
- Special Fabrication
- Glue Laminated Lumber

Piling and Poles

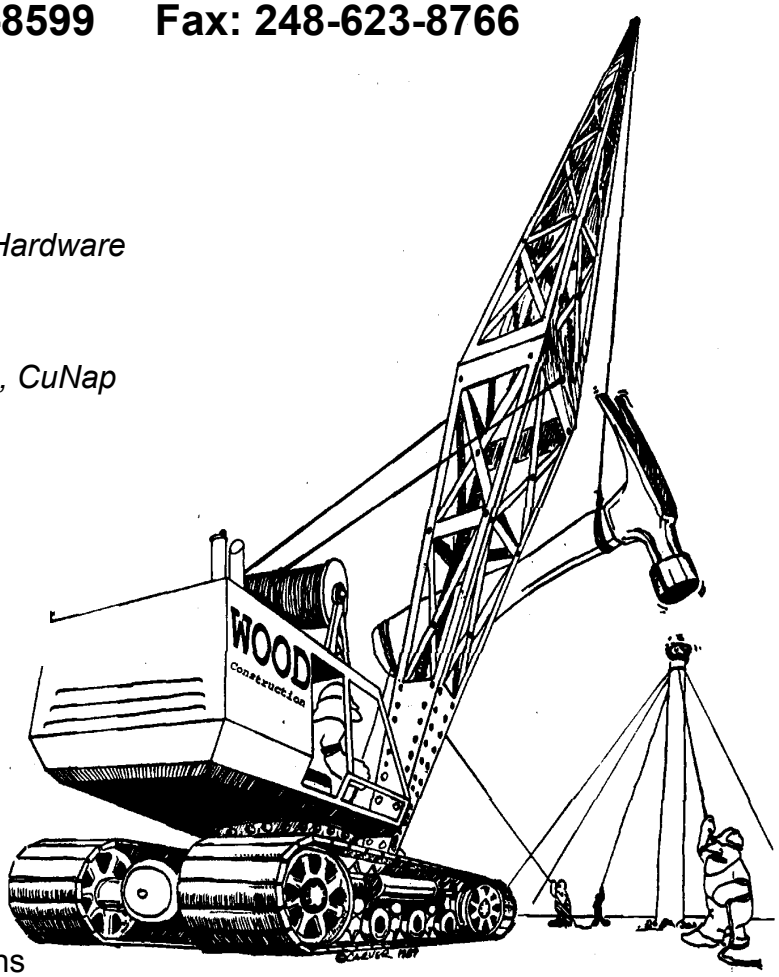
- Southern Pine, Douglas Fir

Crane Mats

- Made with cut-outs or cable loops
- Quick delivery-Any width or Length

Steel Pedestrian Bridges

- AISC Certification
- Treated timber or concrete deck options
- Clear-span lengths up to 250 feet.



Prefabricated Steel Pedestrian Bridge

Covered Timber Bridge

Contact: Jon Cheney- Jon@artthuresoninc.com

ART THURESON, INC 4000 West Walton Waterford, MI 48329

Phone: 248–623-8599 Fax: 248-623-8766

RECOMMENDATIONS FOR THE INSPECTION AND MAINTENANCE OF STEEL BRIDGES

The purpose of this set of recommendations is to suggest some minimum guidelines for inspection and maintenance of Steel Bridges, in order to maintain the overall structural integrity and user safety throughout the serviceable life of the structure. These procedures are not all inclusive and more detailed procedures may be warranted depending upon bridge location, environment, and usage. Establishing the requirements for, and verifying the performance of, all field inspection and maintenance is the responsibility of the owner.

INSPECTION

I. User Safety (Inspection by others)

A. Each bridge should be inspected at regular intervals (at least once per year) to ensure that all items of user safety are accounted for and performing properly. Areas of inspection should include:

1. All safety rails, handrails, rubrails, fencing or other types of safety features should be in place with complete structural integrity and capacity. There shall be no sharp edges or protrusions on any feature that could produce bodily harm to be a hazard to the user.

2. All deck surfaces should be without gaps, cracks or projections that could create a trip hazard or interfere with the user in any way. Special consideration should be given to any smooth deck surface that could also create a possible slip hazard.

II. Structural Integrity (Inspection by others)

A. Each bridge should be inspected at regular intervals not to exceed one year (1) year. This visual inspection should include, but not be limited to, the following:

1. Check the decking to insure it is in satisfactory condition. Inspect timber decks at their contact surfaces where they bear on stringers.

2. All steel surfaces should be inspected to insure that they are performing satisfactorily. Check for any excessive corrosion on weathering steel bridges, or paint and caulk integrity on painted bridges. Areas of inspection should include:

a. All steel below the deck, particularly the tops of stringers supporting wood decks.

b. Truss or floor system joints where debris or water may accumulate.

c. Anywhere vegetation or other material may have come in contact with the steel.

NOTE: Weathering steel surface not exposed to the atmosphere should be checked to insure it has formed its protected oxide layer.

3. Check all steel surfaces and welded and bolted connections for cracks. Pay attention to the welded truss and floor beam joints in all bridges subject to fatigue stresses.

4. Check the ends of the bridge for any damage which may have been caused by vehicular impact.

5. Check the integrity of concrete abutments and/or piers for scour due to water flow if applicable, etc., per AASHTO's Manual for Maintenance Inspection or the foundation engineer's recommendations.

6. Check anchor bolts for damage and see that they are secure. Examine all bearings to ascertain that they are functioning properly. Expansion bearings and the expansion joints at the ends of the bridge must be checked to see that they can move freely and are clear of all foreign material.

7. Spliced Bridges:

a. Check the bolted splices for any excessive corrosion or cracking of the steel or fasteners.

b. Make sure all weep holes are open and clear of debris to allow for complete drainage of any moisture which may collect on the interior tube surfaces.

B. If problems are seen during the inspection procedure, cleaning and repair or replacement of weathering steel bridge components may be necessary; painted bridges may require cleaning and repainting or replacement of all members.

MAINTENANCE FOR WEATHERING BRIDGES

The following steps will help increase the life span of your Self-Weathering bridge:

A. Try to avoid using de-icing salts for snow removal.

B. Avoid retention of debris on the steel surfaces. Flush bridges at areas which accumulate debris (including salt) on a regular basis.

C. Prevent weathering steel from contact with soil, vegetation, masonry, or other materials so that the weathering process can proceed on a natural basis.

MAINTENANCE FOR PAINTED BRIDGES

Painted bridges, like any painted structure, require periodic inspections and painting. The following steps will help increase the life span of your bridge:

A. After inspections, or any time loss or damage of the paint coat is noticeable, problem areas should be repaired as follows:

1. Select a maintenance coating system based on the following:
    a. Inspection report findings
    b. Environment (identify any corrosives)
    c. Degree of surface preparation attainable
    d. Current paint compatibility

NOTES:
* Generic type compatibility is a major factor in the selection of a system (some coating systems are not recommended over a particular type of existing material.)
* Depending upon the surface performance, an upgrade in the coating system may be necessary at this time.

2. Clean all applicable surfaces as dictated by the repair system chosen (i.e. pressure wash, brush off, blast clean, etc.)

3. Apply repair coats per the coating manufacturer's recommendations.

4. Caulk all unwelded seams which are in need of repair with a good quality clear silicone caulk suitable for exterior use.

B. The entire bridge structure will require periodic repainting dependent upon varying factors such as the existing paint system, bridge usage, atmospheric environment, etc. Repainting will typically be required every 2-10 years. The frequency of painting will need to be determined by the inspector.

The following steps should be followed when repainting the bridge structures:

1. Remove wood decking or grating, fencing, wood rubrails, and any other non-painted items which will not be receiving new paint. Concrete and asphalt decked bridges will be painted with the deck in place, unless these decks have deteriorated to the point of replacement. If this is the case, remove the deck prior to painting.

2. Select a coating system paying attention to the following items:

* Environment, specifically any corrosives identified during inspections
* Substrate condition
* Surface preparation limitations

3. After selecting a system compatible with all existing surface conditions and site limitations, clean all surfaces and apply according to the coating manufacturer's recommendations.

4. After the coating system has properly cured, caulk all unwelded seams with a good quality clear silicon caulk suitable for exterior use and inspect the decking, fencing, etc., which were removed prior to cleaning and repainting the structure. This would be a good time to replace any wood that shows any signs of deterioration.

MAINTENANCE FOR DECKING

Wood is a natural material which exhibits volume changes with variations in moisture content and time, particularly in the width direction, which can cause gaps to form between the planks. Cupping and splits may occur which need to be repaired. Deck maintenance is the Bridge owners responsibility

A. Replace all planks that have deteriorated past a useful life.

B. Eliminate gaps between the planks which might be large enough for a high-heeled shoe to become lodged. Eliminating gaps can be done the following way:

1. Remove all deck bolts.
2. Remove plank holddown angles. Be sure to mark their locations for ease of reinstallation.
3. Slide wood planks together.
4. Add new plank or planks to fill up the excess space.
5. Reinstall plank holddown angles.
6. Drill new holes in wood planks.
7. Install new deck bolts (see shop drawings for size and material).

C. Replacement planks may be purchased through Art Thureson.

NOTE: On two layered deck systems, the top layer can be easily removed, flipped and reattached.

GENERAL MAINTENANCE

A. Soil Clearance

Soil or dirt must not be left in contact with bare weathering or painted steel surfaces. In addition, adequate clearance for ventilation must be maintained between the ground and weathering steel surfaces to allow the steel to dry after wetting, forming its protective patina. If the initial construction of abutments and back slopes did not allow for adequate ventilation (approximately 18"-24"), enough soil, debris, and/or vegetation should be removed and kept cut back to allow for adequate airflow. If this is not possible, a coating designed for “ground contact” protection of steel may be applied to the members in the affected area.

B. Snow Removal

Due to the possible accumulation of chlorides at truss joints, in the gaps between planks on structures with timber decks, on below deck members, and/or along the edges of decks where runoff occurs, the use of de-icing salts should be avoided on these structures. The best and safest way to remove snow from these bridges, as far as the issue of steel corrosion is concerned, is by shoveling or plowing snow from the bridge deck. Non-corrosive traction aids such as sand may be used on the deck surfaces; however, if corrosive de-icing agents are used on the structure; accelerated corrosion of members which are exposed to the agent will take place, voiding the bridge warranty and necessitating repair or replacement of affected members. Care must still be taken to maintain the structure by cleaning or rinsing areas where water drains or salt get thrown onto ungalvanized steel surfaces by wheel traffic, spreading, etc.

Bridge Types

Art Thureson, Inc
4000 west Walton
Waterford, MI. 48329

PHONE: 248-623-8599 **FAX: 248-623-8766**

www.artthuresoninc.com

History:

Art Thureson, Inc has been supplying contractors with various types of timber products for over twenty years. We supply timber and steel bridges, walkways, construction lumber (large and odd pieces), crane mats, piling, etc. We provide material to Contractors doing Heavy Hwy, County, State DOT, DNR, Parks and Rec, ETC type of work.

Our steel bridges are manufactured by ***Anderson Bridges***. Anderson Bridge is AISC certified and has been manufacturing bridges since 1989. Anderson Bridge applications include snowmobile, ATV, bicycle, golf cart, and pedestrian trails. Each bridge is custom designed and suited to meet the client's needs.

There are four standard Bridge System Types:

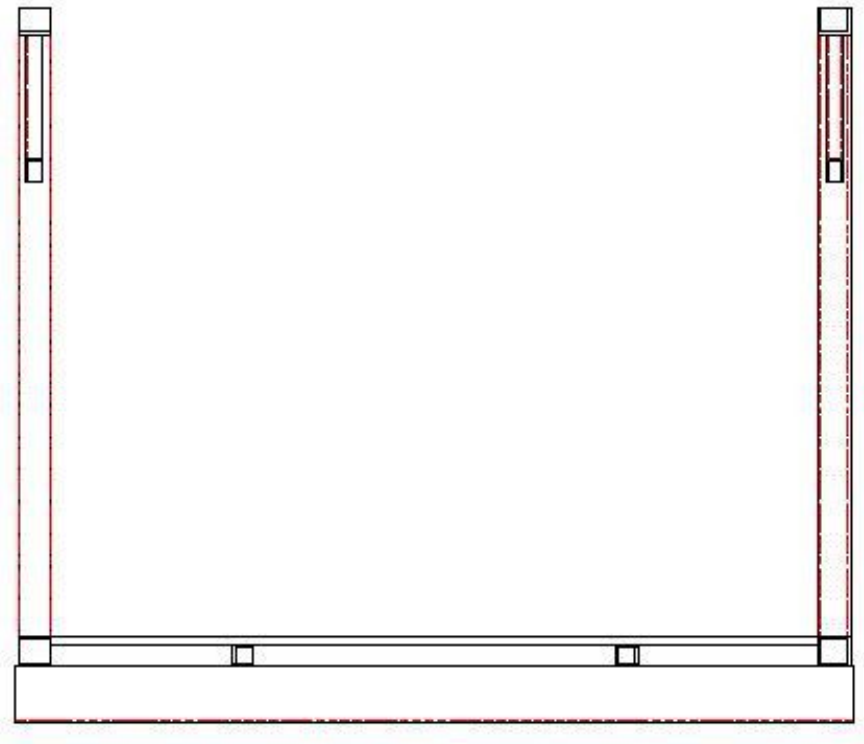
- **Half-Through Pony**
- **Half-Through H-Section**
- **Full-Through Box**
- **Bowstring**

Within each of these four types, there are a variety of end and diagonal configurations.

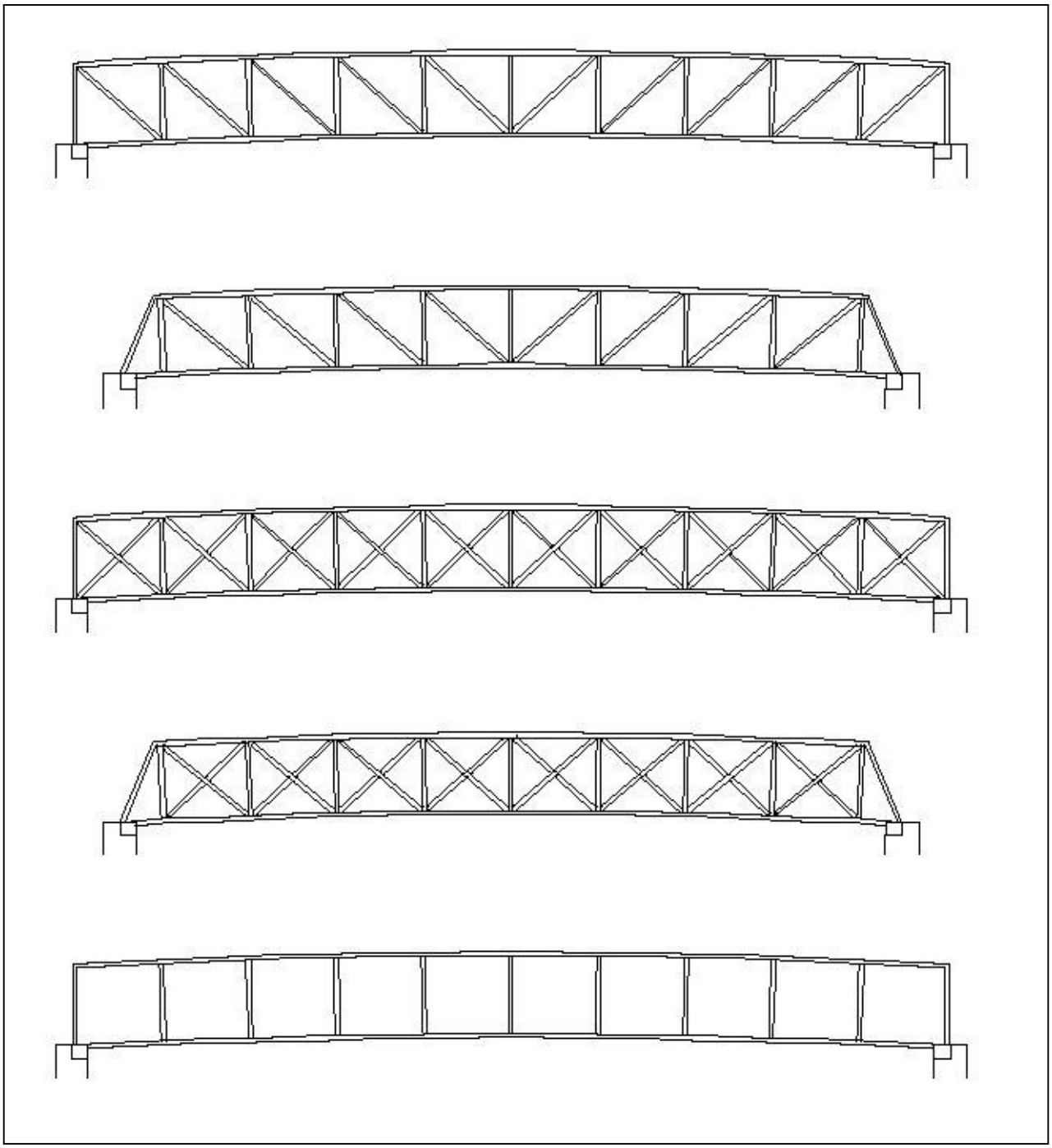
Half-Through Pony

FEATURES

- A cost effective option for bridge spans from zero to 80 feet.
- Side trusses act as the handrail system, allowing an unobstructed view with no overhead members. Typical handrail heights (distance from top of deck to top of top chord) are either 42” or 54”.
- Constructed utilizing an underhung floor beam. That is, the top of the floor beam is directly welded to the bottom of the bottom chord.
- This system offers the most minimal top of deck to underside of steel dimension.
- Usually shipped in one piece for spans up to eighty feet. Installation is as easy as removing the bridge from the truck and setting into place.



Half-Through Pony System Models



Half-Through H-Section

FEATURES

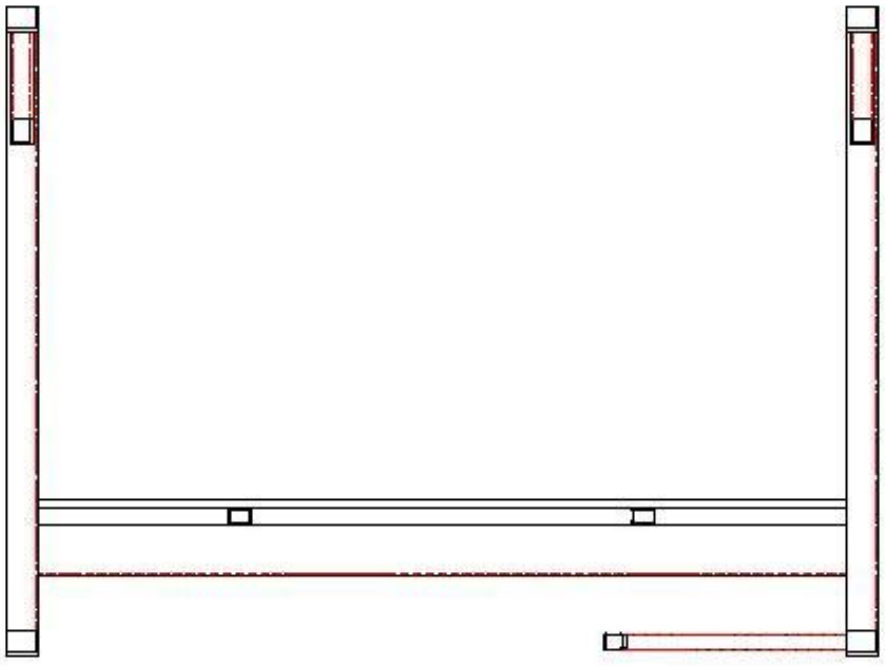
- A cost-effective option for bridge spans from 80 feet to 220 feet.

- Best option when maximum handrail heights are a controlling issue, but deep trusses are necessary for the span length. Side trusses act as the handrail system, allowing an unobstructed view with no overhead members. Typical handrail heights (distance from top of deck to top of top chord) are either 42” or 54”. Remaining truss extends below deck.

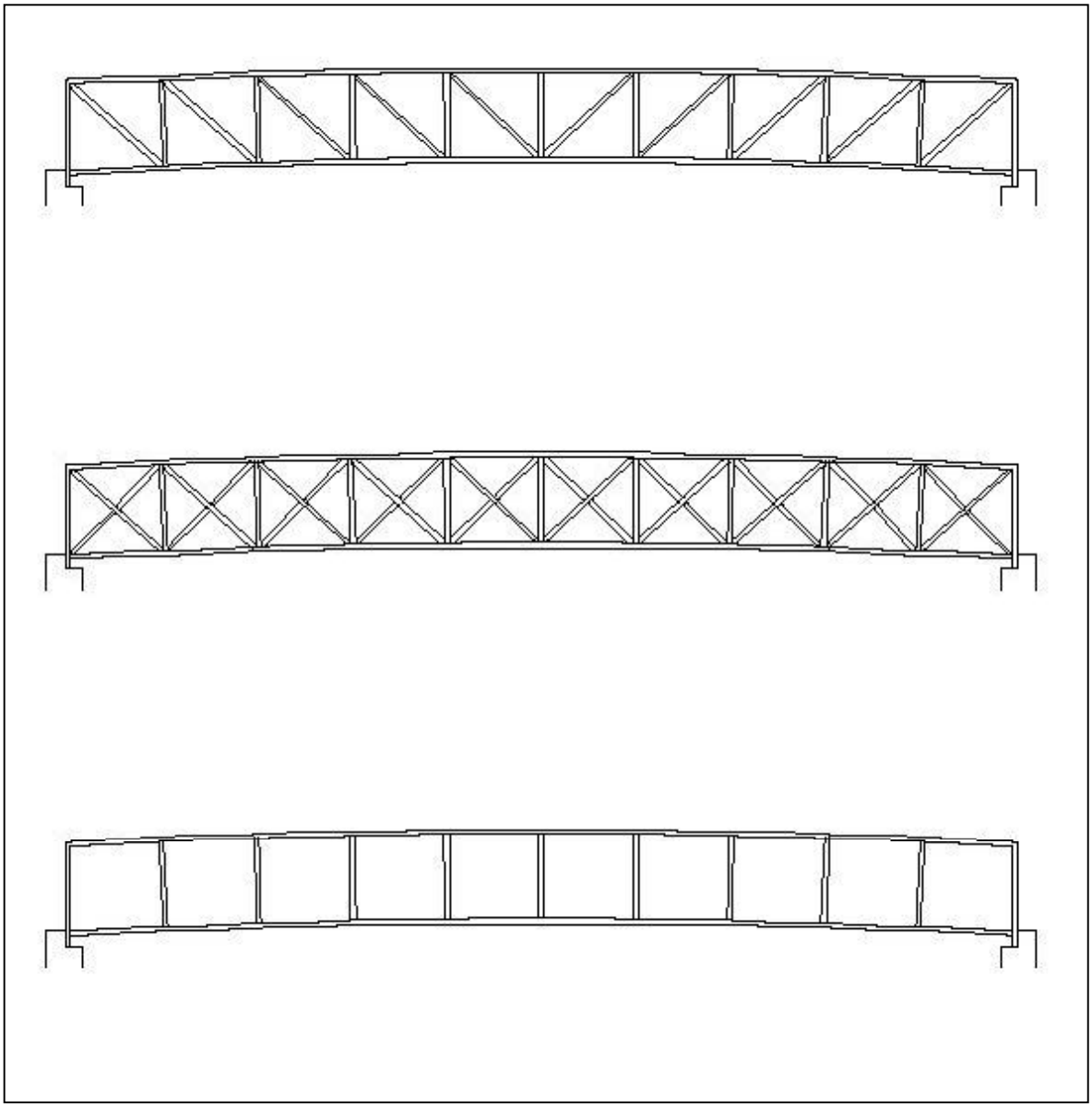
- Ideal when long spans are necessary and below deck steel clearance is not an issue.

- Constructed utilizing a floor beam that is welded into the side face of the truss verticals.

- Usually shipped in multiple sections. Sections utilize all bolted field splices. No field welding is required.



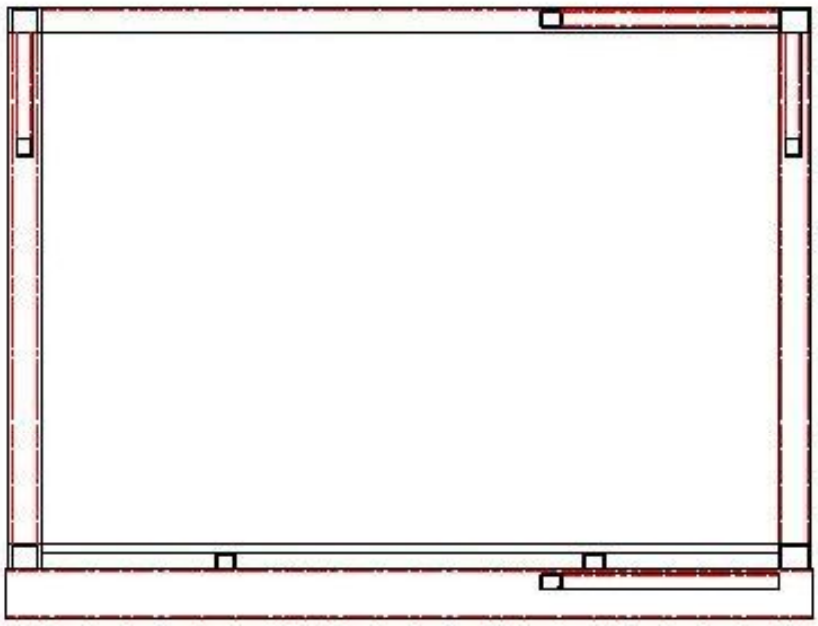
Full-Through H-Section System Models



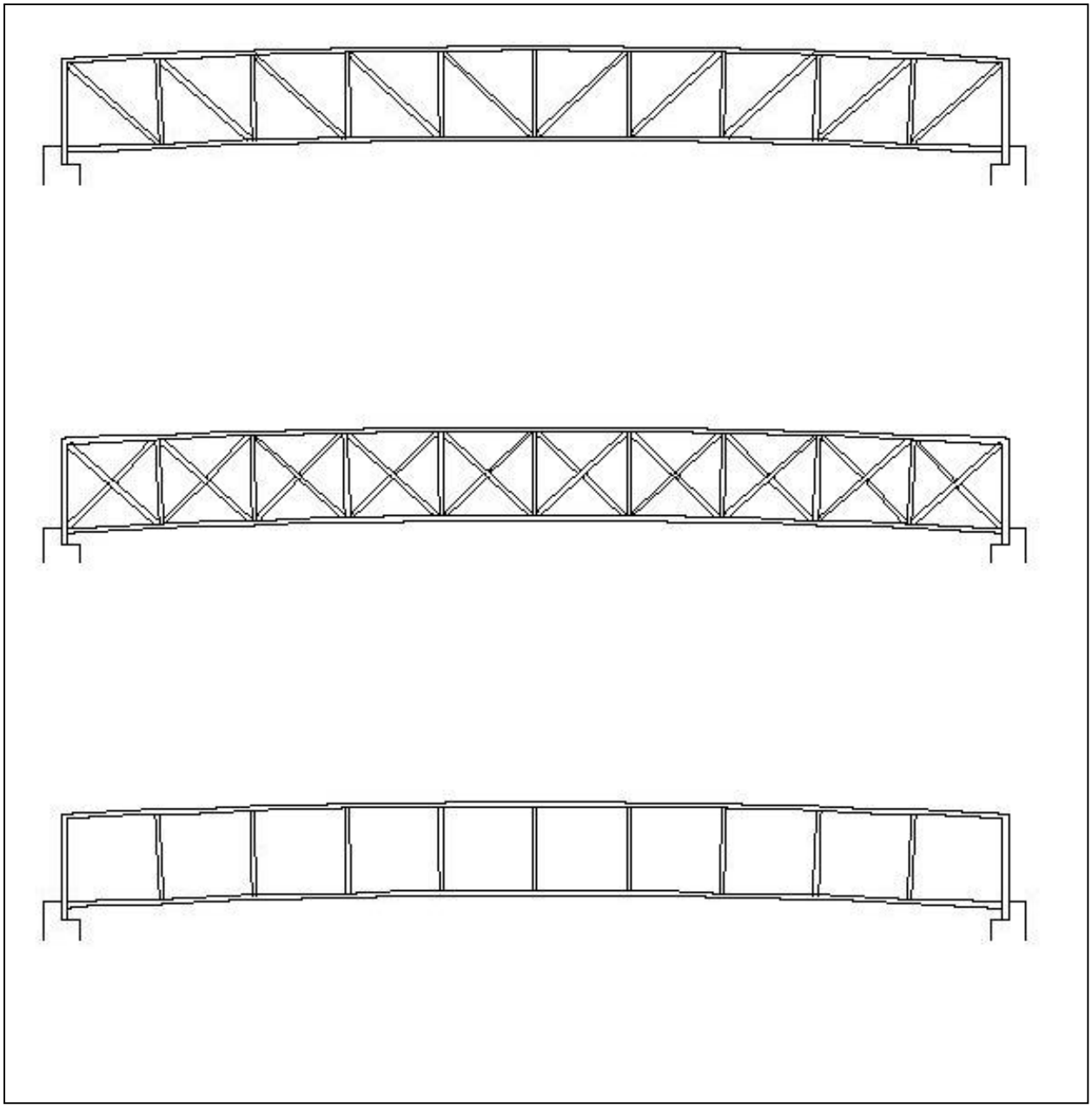
Full-Through Box

FEATURES

- A very cost-effective option for bridge spans from 100 feet to 250 feet, or for any span needing to be fully enclosed.
- This bridge system utilizes overhead framing members to laterally support the top chord and provide wind load resistance.
- Ideal when long spans are necessary and the necessity for minimizing below deck steel clearance is critical.
- Constructed utilizing an underhung floor beam. That is, the top of the floor beam is directly welded to the bottom of the bottom chord.
- Excellent system for use as an overpass or skywalk system. Enclosing materials such as fencing and glazing are easily installed.
- Usually shipped in multiple sections. Sections utilize all bolted field splices. No field welding is required.



Full-Through Box System Models

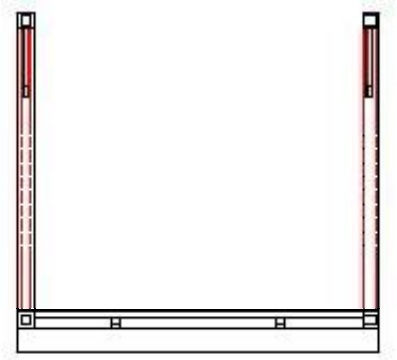


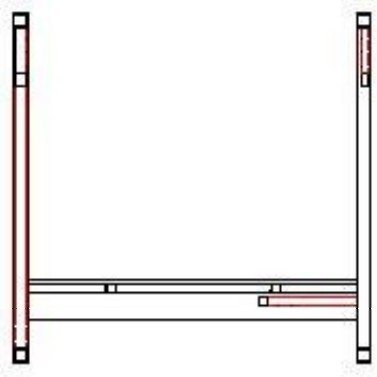
Bowstring

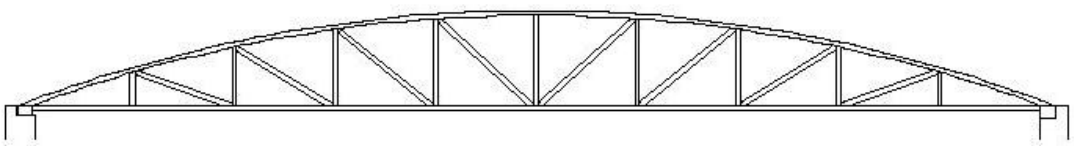
FEATURES

- Effective for bridge spans from 80 feet to 180 feet.
- Side trusses act as the handrail system. The truss height varies along the length of the bridge, following the camber of the top chord.
- Model BS1-U is constructed utilizing an underhung floor beam. That is, the top of the floor beam is directly welded to the bottom of the bottom chord. This model is typically used for spans less than 100 feet.
- Model BS1-H is constructed utilizing a floor beam that is welded into the side face of the truss verticals.
- Excellent choice for when an architectural statement is desired. Usually a more expensive option than the Half-Through Pony or Half-through H section Systems.

BOWSTRING SYSTEM







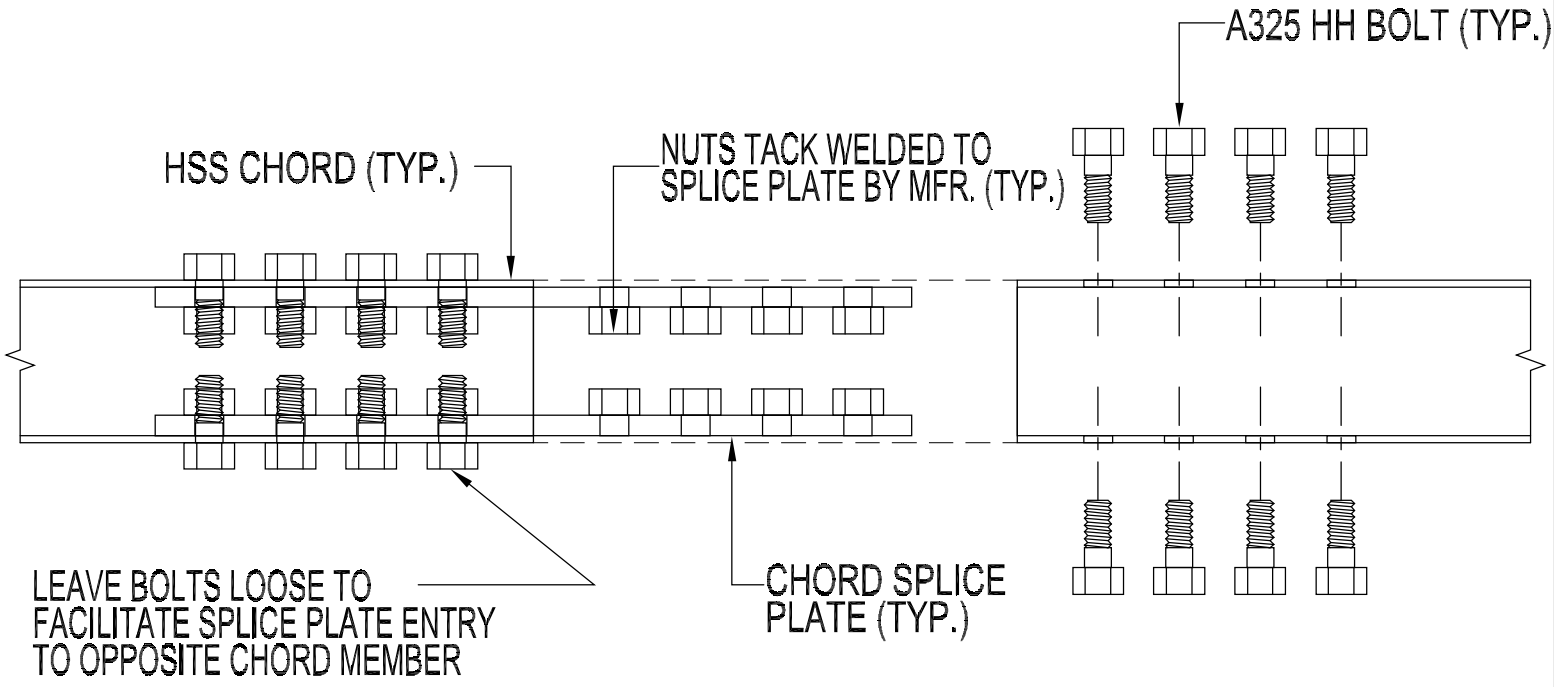
BOLTED SPLICE ASSEMBLY GUIDE

HSS - TO - HSS TRUSS CHORD

NOTE:

DIAGRAM SHOWN FOR GENERAL REFERENCE ONLY
SEE BRIDGE DESIGN DRAWINGS FOR BOLT COUNT, SIZE, AND PLACEMENT

THE METHOD AND SEQUENCE OF SPLICING IS THE RESPONSIBILITY OF THE ERECTOR
AND IS DEPENDENT UPON SUCH ITEMS AS SITE CONDITIONS, ACCESSIBILITY, EQUIPMENT, AND MANPOWER.



NOTE:

START ALL BOLTS IN EACH SPLICE LOCATION AND ENSURE PROPER BRIDGE ALIGNMENT
AND FIT BEFORE BRINGING THEM TO THE REQUIRED FINAL TIGHTENED CONDITION

ALL CONNECTIONS SHALL UTILIZE "TURN-OF-THE-NUT" TIGHTENING AS DETAILED
IN THE RSCS "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS."

AMERICAN ENGINEERING TESTING, INC.

CONSULTANTS
• ENVIRONMENTAL
• GEOTECHNICAL
• MATERIALS
• FORENSICS

WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name **Jamie Bonjour** Identification No. **JB** Date: **5-15-07**
Welding process **FCAW** Manual _____ Semiautomatic **XXX** Machine _____
Position **3G Vertical, 4G overhead**
(Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
In accordance with procedure specification no **AWS D1.5**
Material specification **Grade 50W**
Diameter and wall thickness (if pipe) - otherwise, joint thickness **3/8"**
Thickness range this qualifies **1/8" - 3/4"** Positions qualified **All positions, groove and fillet**

FILLER METAL

Specification No. **A5.20** Classification **E71T-1/T** F No. **6**
Describe filler metal (if not covered by AWS specification) _____
Is backing strip used? **Yes**
Filler metal diameter and trade name **.045"**
Flux for submerged arc or gas for gas metal arc or flux cored arc welding **Ar/CO2 75/25%**

VISUAL INSPECTION (9.25.1)

Appearance **Satisfactory** Undercut **Satisfactory** Piping Porosity **Satisfactory**

Guided Bend Test Results

Type	Result	Type	Result
N/A			

Tests conducted and witnessed by **James Lesmeister CWI#04100561** Laboratory Test No. **06-01422**
per **American Engineering Testing Inc.** Test Date **5-15-07**

Fillet Test Results

Appearance _____ Fillet size _____
Fracture test root penetration _____ Macroetch _____
(Describe the location, nature, and size of any crack or tearing of the specimen.)
Test conducted by _____ Laboratory Test No. _____
per _____ Test Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks
JB 4G	**Accept**	**None**			
JB 3G	**Accept**	**None**			

Test reviewed by **Patrick Liebl CWI#00090023** Test No. **06-01422**
Signed _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of section 5, Part C or D of ANSI/AWS D1.1,-2006 Structural Welding Code Steel and section 5, Part B of AASHTO/AWS D1.5,-2002 Bridge Welding Code.

Manufacturer or Contractor **Anderson Bridges**
Authorized by _____
Date 3/22/10

AMERICAN ENGINEERING TESTING, INC.

WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

CONSULTANTS
- ENVIRONMENTAL
- GEOTECHNICAL
- MATERIALS
- FORENSICS

Welder or welding operator's name **Rodney Prill, Jr.** Identification No. **RP** Date: **7-15-05**
Welding process **FCAW** Manual _____ Semiautomatic **XXX** Machine _____
Position **3G vertical, 4G overhead**
(Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
In accordance with procedure specification no **AWS D1.5**
Material specification **A36**
Diameter and wall thickness (if pipe) - otherwise, joint thickness **3/8"**
Thickness range this qualifies **1/8" - 3/4"** Positions qualified **All positions, groove and fillet**

FILLER METAL

Specification No. **A5.20** Classification **E71T-1/T** F No. **6**
Describe filler metal (if not covered by AWS specification) _____
Is backing strip used? **Yes**
Filler metal diameter and trade name **.045"** Flux for submerged arc or gas for gas metal arc or flux cored arc welding **AR/CO2 75/25%**

VISUAL INSPECTION (9.25.1)

Appearance **Satisfactory** Undercut **Satisfactory** Piping Porosity **Satisfactory**

Guided Bend Test Results

Type	Result	Type	Result
N/A			

Tests conducted and witnessed by **James Lesmeister CWI#04100561** Laboratory Test No. **06-01422**
per **American Engineering Testing Inc.** Test Date **7-15-05**

Fillet Test Results

Appearance _____ Fillet size _____
Fracture test root penetration _____ Macroetch _____
(Describe the location, nature, and size of any crack or tearing of the specimen.)
Test conducted by _____ Laboratory Test No. _____
per _____ Test Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks
RP 3G	**Accept**	**None**			
RP 4G	**Accept**	**None**			

Test reviewed by **Patrick Liebl CWI #00090023** Test No. **06-01422**
Signed _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of section 5, Part C or D of ANSI/AWS D1.1,-2004 Structural Welding Code Steel and section 5, Part B of AASHTO/AWS D1.5,-2002 Bridge Welding Code.

Manufacturer or Contractor **Anderson Bridges**
Authorized by _____
Date 3/22/10

550 Cleveland Avenue North| St. Paul, MN 55114
Phone 651-659-9001| Toll Free 800-972-6364| Fax 651-659-1379| www.amengtest.com| AA/EEO

AMERICAN ENGINEERING TESTING, INC.

CONSULTANTS
• ENVIRONMENTAL
• GEOTECHNICAL
• MATERIALS
• FORENSICS

WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name **Jesse Coates** Identification No. **JC** Date **5-15-07**
Welding process **FCAW** Manual _____ Semiautomatic **XXX** Machine _____
Position **3G Vertical, 4G overhead**
(Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
In accordance with procedure specification no **AWS D1.5**
Material specification **Grade 50W**
Diameter and wall thickness (if pipe) - otherwise, joint thickness **3/8"**
Thickness range this qualifies **1/8" - 3/4"** Positions qualified **All positions, groove and fillet**

FILLER METAL

Specification No. **A5.20** Classification **E71T-1/T** F No. **6**
Describe filler metal (if not covered by AWS specification) _____
Is backing strip used? **Yes**
Filler metal diameter and trade name **.045"** Flux for submerged arc or gas for gas metal arc or flux cored arc welding **Ar/CO2 75/25%**

VISUAL INSPECTION (9.25.1)

Appearance **Satisfactory** Undercut **Satisfactory** Piping Porosity **Satisfactory**

Guided Bend Test Results

Type	Result	Type	Result
N/A			

Tests conducted and witnessed by **James Lesmeister CWI#04100561** Laboratory Test No. **06-01422**
per **American Engineering Testing Inc.** Test Date **5-15-07**

Fillet Test Results

Appearance _____ Fillet size _____
Fracture test root penetration _____ Macroetch _____
(Describe the location, nature, and size of any crack or tearing of the specimen.)
Test conducted by _____ Laboratory Test No. _____
per _____ Test Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks
JB 4G	**Accept**	**None**			
JB 3G	**Accept**	**None**			

Test reviewed by **Patrick Liebl CWI#00090023** Test No. **06-01422**
Signed _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of section 5, Part C or D of ANSI/AWS D1.1,-2006 Structural Welding Code Steel and section 5, Part B of AASHTO/AWS D1.5,-2002 Bridge Welding Code.

Manufacturer or Contractor **Anderson Bridges**
Authorized by _____
Date 3/22/10

AMERICAN ENGINEERING TESTING, INC.

CONSULTANTS
• ENVIRONMENTAL
• GEOTECHNICAL
• MATERIALS
• FORENSICS

WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

Welder or welding operator's name **Joshua J. Dupee** Identification No. **JD** Date: **6-30-05**
Welding process **FCAW** Manual _____ Semiautomatic **XXX** Machine _____
Position **3G vertical**
(Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
In accordance with procedure specification no **AWS D1.5**
Material specification **A36**
Diameter and wall thickness (if pipe) - otherwise, joint thickness **3/8"**
Thickness range this qualifies **1/8" - 3/4"** Positions qualified **1G,2G,3G, 1F,2F,3F**

FILLER METAL

Specification No. **A5.20** Classification **E71T-1/T** F No. **6**
Describe filler metal (if not covered by AWS specification) _____
Is backing strip used? **Yes**
Filler metal diameter and trade name **.045"** Flux for submerged arc or gas for gas metal arc or flux cored arc welding **AR/CO2 75/25%**

VISUAL INSPECTION (9.25.1)

Appearance **Satisfactory** Undercut **Satisfactory** Piping Porosity **Satisfactory**

Guided Bend Test Results

Type	Result	Type	Result
N/A			

Tests conducted and witnessed by **James Lesmeister CWI#04100561** Laboratory Test No. **06-01422**
per **American Engineering Testing Inc.** Test Date **6-30-05**

Fillet Test Results

Appearance _____ Fillet size _____
Fracture test root penetration _____ Macroetch _____
(Describe the location, nature, and size of any crack or tearing of the specimen.)
Test conducted by _____ Laboratory Test No. _____
per _____ Test Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks
JD 3G	**Accept**	porosity, undercut			

Test reviewed by **Patrick Liebl CWI #00090023** Test No. **06-01426**
Signed _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of section 5, Part C or D of ANSI/AWS D1.1,-2004 Structural Welding Code Steel and section 5, Part B of AASHTO/AWS D1.5,-2002 Bridge Welding Code.

Manufacturer or Contractor **Anderson Bridges**
Authorized by _____
Date 3/22/10

AMERICAN ENGINEERING TESTING, INC.

WELDER AND WELDING OPERATOR QUALIFICATION TEST RECORD

CONSULTANTS
• ENVIRONMENTAL
• GEOTECHNICAL
• MATERIALS
• FORENSICS

Welder or welding operator's name **Josh Dupee** Identification No. **JD** Date: **5-15-07**
Welding process **FCAW** Manual _____ Semiautomatic **XXX** Machine _____
Position **4G overhead**
(Flat, horizontal, overhead or vertical - if vertical, state whether upward or downward)
In accordance with procedure specification no **FC4XG8X**
Material specification **ASTM A588 Grade 50W**
Diameter and wall thickness (if pipe) - otherwise, joint thickness **1"**
Thickness range this qualifies **1/8" - Unlimited** Positions qualified **1G, 4G, 1F, 2F, 4F**

FILLER METAL

Specification No. **A5.29** Classification **E81T1-Ni 1** F No. **6**
Describe filler metal (if not covered by AWS specification) _____
Is backing strip used? **Yes**
Filler metal diameter and trade name **.045"** Flux for submerged arc or gas for gas metal arc or flux cored arc welding **Ar/CO2 75/25%**

VISUAL INSPECTION (9.25.1)

Appearance **Satisfactory** Undercut **Satisfactory** Piping Porosity **Satisfactory**

Guided Bend Test Results

Type	Result	Type	Result
Side	Accept - No discontinuities present	Side	Accept - No discontinuities present
Side	Accept - No discontinuities present	Side	Accept - No discontinuities present

Tests conducted and witnessed by **James Lesmeister CWI#04100561** Laboratory Test No. **06-01422**
per **American Engineering Testing Inc.** Test Date **5-15-07**

Fillet Test Results

Appearance _____ Fillet size _____
Fracture test root penetration _____ Macroetch _____
(Describe the location, nature, and size of any crack or tearing of the specimen.)
Test conducted by _____ Laboratory Test No. _____
per _____ Test Date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test reviewed by **Patrick Liebl CWI#00090023** Test No. **06-01422**
Signed _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in accordance with the requirements of section 5, Part C or D of ANSI/AWS D1.1,-2006 Structural Welding Code Steel and section 5, Part B of AASHTO/AWS D1.5,-2002 Bridge Welding Code.

Manufacturer or Contractor **Anderson Bridges**
Authorized by _____
Date 3/22/10

550 Cleveland Avenue North | St. Paul, MN 55114
Phone 651-659-9001 | Toll Free 800-972-6364 | Fax 651-659-1379 | www.amengtest.com | AA/EEO

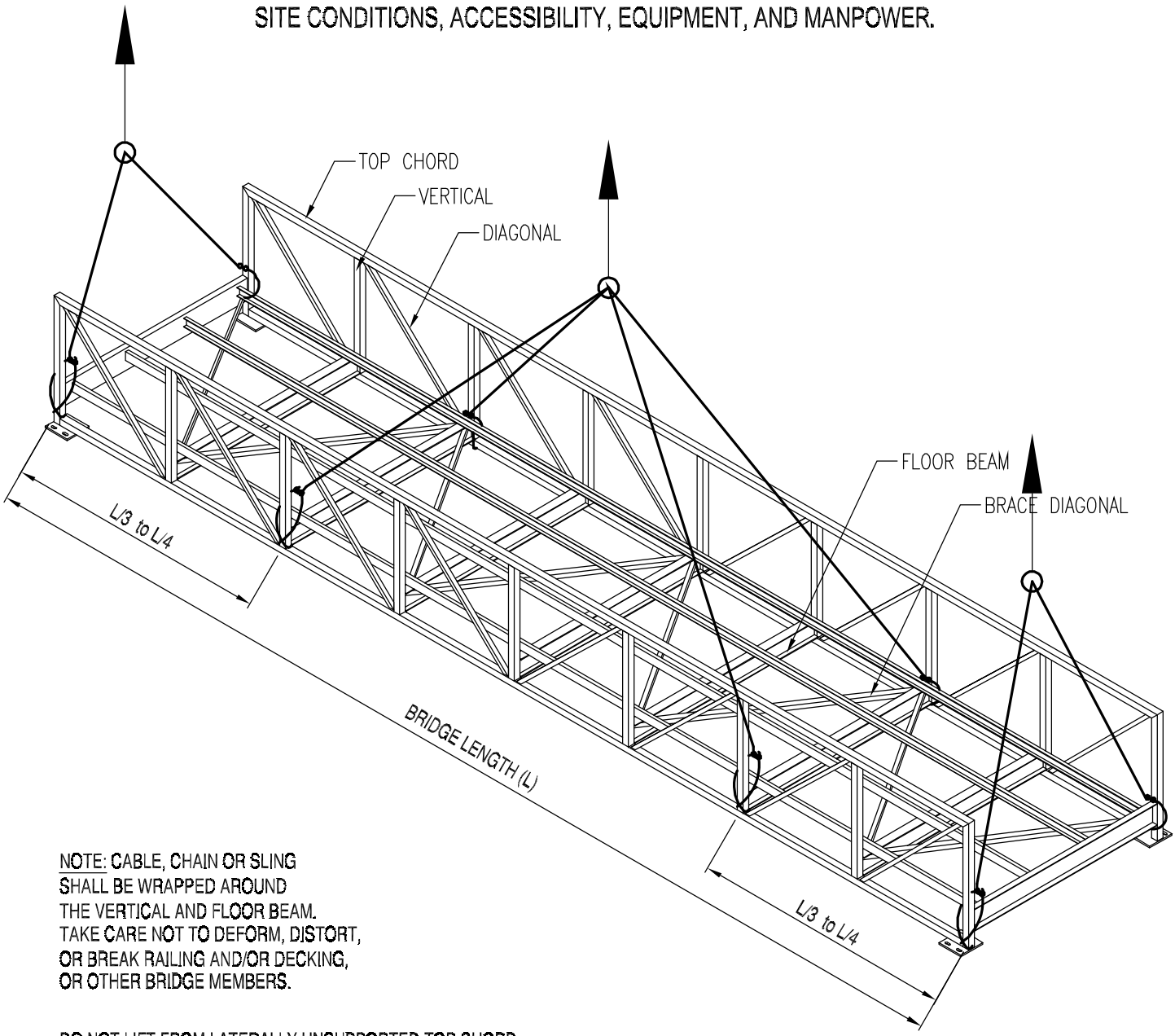
BRIDGE LIFTING GUIDE

HALF-THROUGH TRUSS BRIDGE

NOTE:

DIAGRAM SHOWN FOR GENERAL REFERENCE ONLY
SEE BRIDGE DESIGN DRAWINGS FOR ACTUAL BRIDGE SIZE AND MEMBER LAYOUT.

THE METHOD AND SEQUENCE OF LIFTING AND PLACING THE BRIDGE SUPERSTRUCTURE IS THE RESPONSIBILITY OF THE ERECTOR AND IS DEPENDENT UPON SUCH ITEMS AS SITE CONDITIONS, ACCESSIBILITY, EQUIPMENT, AND MANPOWER.



NOTE: CABLE, CHAIN OR SLING SHALL BE WRAPPED AROUND THE VERTICAL AND FLOOR BEAM. TAKE CARE NOT TO DEFORM, DISTORT, OR BREAK RAILING AND/OR DECKING, OR OTHER BRIDGE MEMBERS.

DO NOT LIFT FROM LATERALLY UNSUPPORTED TOP CHORD, DAMAGE TO THE STRUCTURE MAY OCCUR.

THE BRIDGE STRUCTURES ARE DESIGNED TO BE LIFTED FROM EITHER THE APPROXIMATE 1/4 TO 1/3 POINTS OR FROM THE BEARING LOCATIONS. BRIDGE STRUCTURES ARE NOT DESIGNED FOR LAUNCHING STRESSES.

Anderson Bridges Limited Warranty

Anderson Bridges shall warrant their steel bridges to be free of design, material and workmanship defects for a period of ten years from the date of delivery.

This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration or any other cause not the result of defective materials or workmanship.

Repair or replacements shall be the exclusive remedy for defects under this warranty. Anderson Bridges shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structure(s).

NOTE: There is no warranty on SYP, DF, or composite decking.

111 Willow Street – Colfax, WI 54730 – Phone: 715-962-2800 – Fax: 715-962-2801

American Institute of Steel Construction

is proud to recognize

Anderson Bridges, LLC

111 Willow Street, Colfax, WI

for successfully meeting the quality certification requirements for

Certified Bridge Fabrication - Intermediate (Major)

Fracture Critical Endorsement

Roger E. Ferch

205081011-2015

Certificate Number