



## Craighead Bridge

**1899 Pittsburgh Bridge Company**

Erected by Nelson & Buchannan, Agents.

**Length** 134' - 40.8m **Weight**  
**Width** 17' - 5.2m **Transportation:**  
**Deck Width** 13.25' - 4.02m **Trucks:** 3

Located on Zion Road over Yellow Breeches Creek at PA 174, Old York Road near Mt. Holly Springs, Pennsylvania.



### Condition

This 8-panel Pin Connected Pratt Through Truss is a one lane bridge with a 5 ton load rating, before being closed in 2009 and declared "functionally obsolete for vehicular traffic" at this location. The Inspection Report cited deterioration of stone abutments and lower chord deterioration. Stringers and deck show extensive areas of rust and bottom chord will need to be replaced. Lead paint abatement required.

### Future Use

In an effort to preserve this bridge Cumberland County will transfer ownership to a third party for removal to a new location. A Scope of Work is included which details requirements for preservation and adheres to In-Kind\* Restoration Standards. A restrictive Covenant may be required by the County regarding any proposed changes to the historic characteristics of this bridge.

### Historic Value

1996 declared eligible for National Register of Historic Places (NRHP) under Criterion C as locally significant retaining excellent integrity. Only one of three of this bridge type left in Cumberland County. Deck & stringer replacement in 1960. Other repairs in succeeding decades.

### Availability & Funding Details

Bridge Marketed:	<u>4/1/2013</u>
Available Date:	<u>1/1/2015</u>
Funding:	<u>yes</u>
Estimated Total:	<u>\$572,400</u>

Federal Highway Administration Funding to be determined.

### Assessment

This is a classic pin-connected through truss. Bridges like were once the mainstay of bridge construction in America but are today increasingly rare. Constructed by the Pittsburgh Bridge Company using Carnegie steel, this bridge is the embodiment of America's rich iron and steel heritage. Restoring this bridge will be no small task, but the restored bridge would reward its new owner with a structure that is rich in both beauty and heritage and will only become more rare and unique over time, since surviving bridges of this type are rapidly being replaced across the country with new bridges. Nels Raynor – BACH Steel

Please contact:

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A final estimate will be required at time of purchase when location is defined with current market values calculated and or different engineers/contractors are selected.

Prepared By:

**bridges** **workin'**  
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## Photo Gallery - Craighead Bridge

Site Visit - 8/14/2014



Craighead Bridge is an 1899 Pittsburgh Bridge Company - pin connected, riveted lattice Pratt Truss crosses Yellow Breeches Creek on Zion Road in Cumberland County, Pennsylvania. The deck and substructure on this 134' x 17' wide truss need replaced, the modern rail could be eliminated and once blasted of the flaking lead paint and painted it could carry another creek for generations.

Prepared For



## Project for Pennsylvania Transportation and Heritage



**pennsylvania**  
DEPARTMENT OF TRANSPORTATION

# Craighead Bridge

### Project Scope of Work

**Estimate Grand Total: \$572,400**

<b>1</b>	<b>Planning, Engineering, Mobilization</b>	<b>40,200</b>
	Engineering: Use, Analysis, And Repair Design	
	Engineering - New Site Abutments/approaches By Owner	
	Equipment Rentals For Disassembly - Included	
	Mobilization Included In Disassembly/reassembly	
<b>2</b>	<b>Disassembly/Transportation</b>	<b>101,900</b>
	Lift By Contractor - Bid At Time Of New Bridge	
	Disassembly: Includes Equipment Rentals	
	Transportation: 3 Trucks To Michigan Then 750 Miles	
<b>3</b>	<b>Abutments/Approach*</b>	
	Abutments / Approaches - By Owner	
<b>4</b>	<b>Upper Chord</b>	<b>54,750</b>
	Shoe Replacement At Inclined End Posts	
	Replicate Bad Portions Of Riveted Inclined End Posts	
	Pack Rust Removal	
<b>5</b>	<b>Lower Chord</b>	<b>145,450</b>
	Replace Floor Beams - Fabricate Connections	
	Fabricate Lower Portion Of All Vertical Posts Including Pin Plates 14	
	Replace All Lateral Rod	
	Re-use Eyebars	
<b>6</b>	<b>Parts - Rivets/Pins</b>	<b>11,200</b>
	Replacement Pins And Nuts 18	
<b>7</b>	<b>Railing*</b>	<b>32,150</b>
	Remove Highway Railing And Install Picketed Railing	

Re-use Or New Picketed Rail,

**8    Decks\*** **47,250**

Replace Deck With 3x12x14' Treated Planks With Clipping System

Decking Installation Assuming 20' Approaches 175

**9    Finish\*** **95,000**

Blast And 3 Coat Paint System

**10    Landscape**

Na - Seeding New Landscape By Owner

**11    Trash & Clean Up** **500**

**12    Punch & Warranty**

One Year Warranty On All Steel Work.

**13    Contingency** **44,000**

Unknownables @ 10%

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### Summary

**\$572,400**

<b>Planning, Engineering, Mobilization</b>	<b>40,200</b>	
<b>Disassembly/Transportation</b>	<b>101,900</b>	
<b>Abutments/Approach*</b>		
<b>Upper Chord</b>	<b>54,750</b>	
<b>Lower Chord</b>	<b>145,450</b>	
<b>Parts - Rivets/Pins</b>	<b>11,200</b>	
<b>Railing*</b>	<b>32,150</b>	
<b>Decks*</b>	<b>47,250</b>	
<b>Finish*</b>	<b>95,000</b>	
<b>Landscape</b>		
<b>Trash &amp; Clean Up</b>	<b>500</b>	
<b>Punch &amp; Warranty</b>		
<b>Contingency / Long Term</b>	<b>44,000</b>	

### Design Assumptions:

- \* Abutments, pier systems, approaches and trails are all engineered by owner with design criteria for the bridge set provided by Workin' Bridges.
- \* White Oak, sealed for all decking estimates.
- \* Finish assumes that lead paint is present and will need mitigation on removal. Three coat paint system is in dark, standard colors or a linseed oil finish where possible on iron surfaces.
- \* Steel Picketed Rail, designed for 4" sphere guidelines or where rail exists.
- \* Tension Cable Rail System is applied where historic railing is not present, placed outside original.
- \* Transportation will require final estimates based as time of year, fuel, availability change.

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View on bridge.



Section loss at base of vertical member.



Pack rust and section loss at base of vertical member.



Upper chord connection with nearby upper chord splice (see arrow).



Upper chord connection (typical).



Lower chord connection (typical).