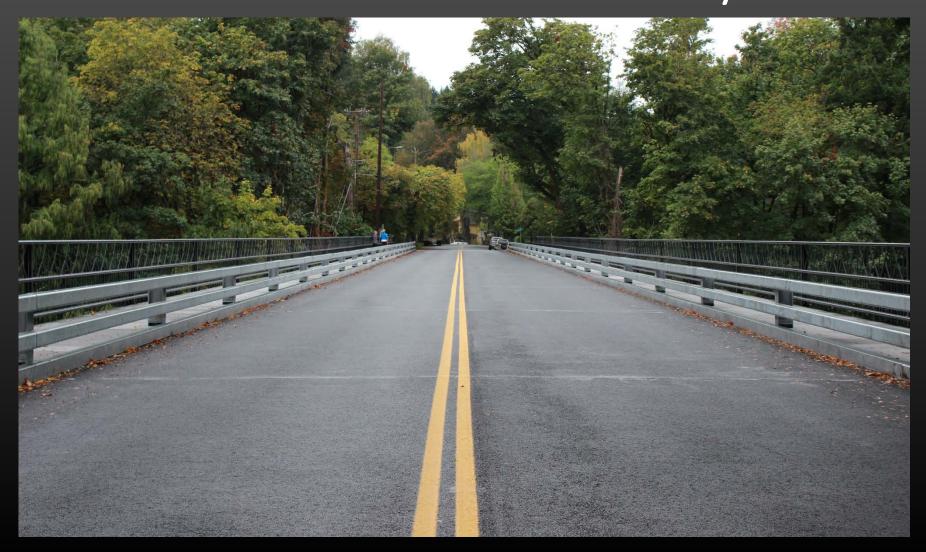
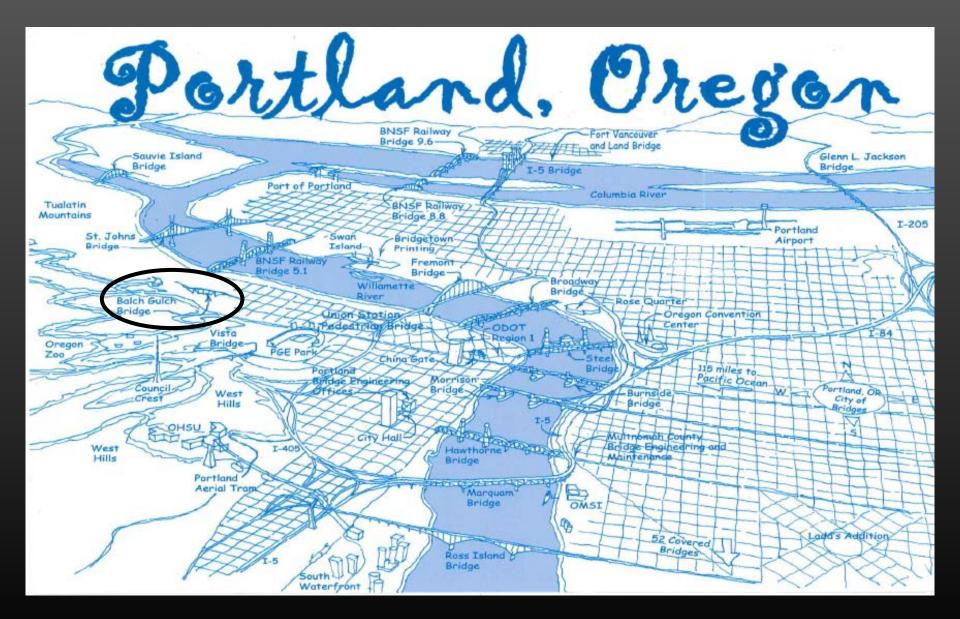
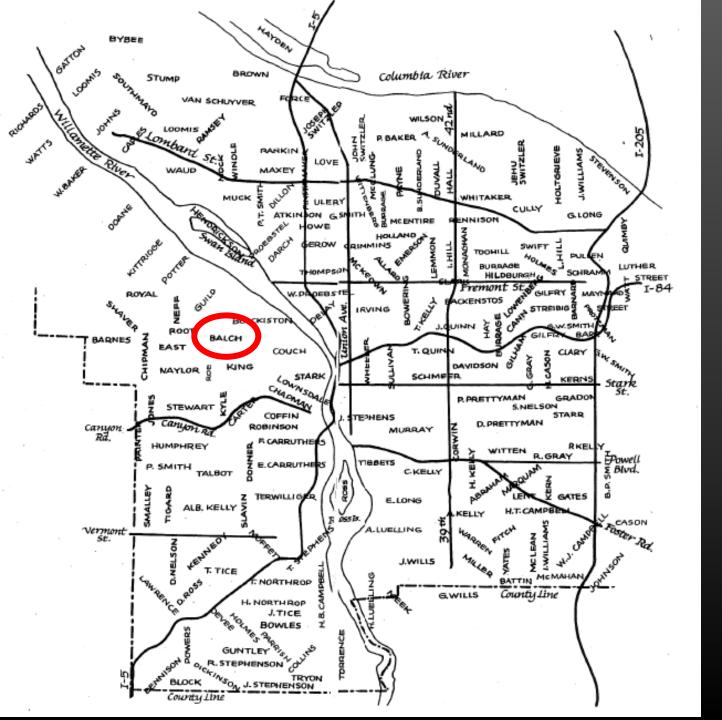
Balch Gulch Bridge NW Thurman Street over Macleay Park

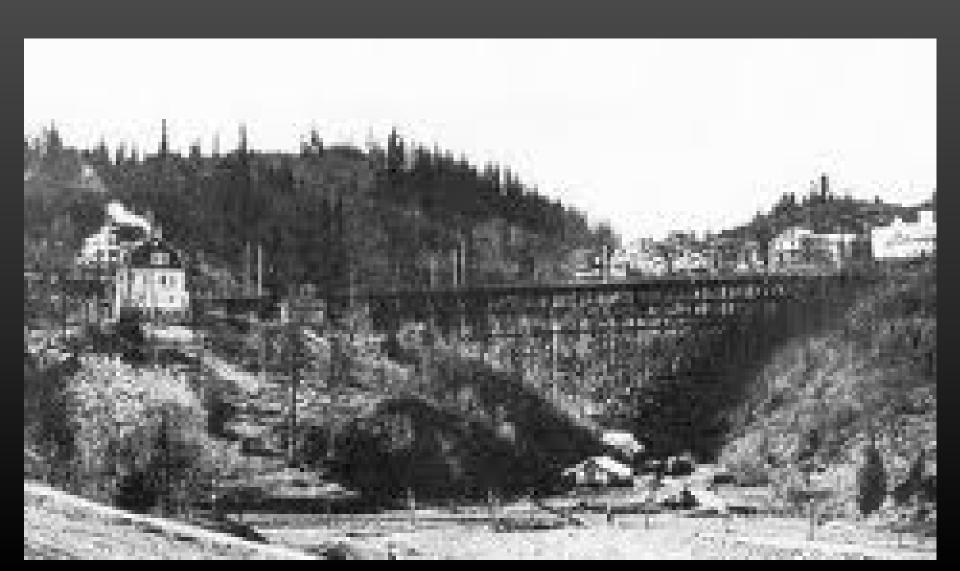


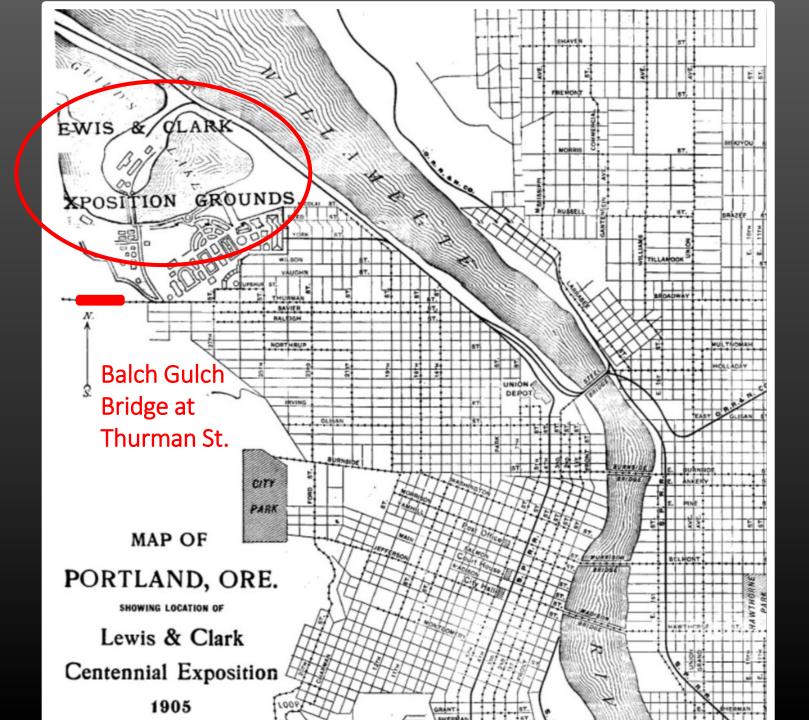




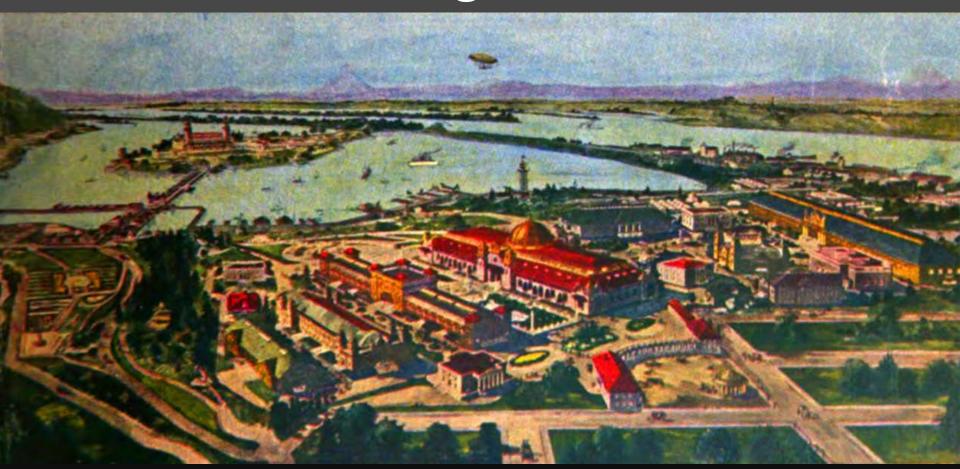
City of **Portland** 1840's **Donation** Land Claim Holders

Pre-1905 Trellis Structure at Balch Gulch

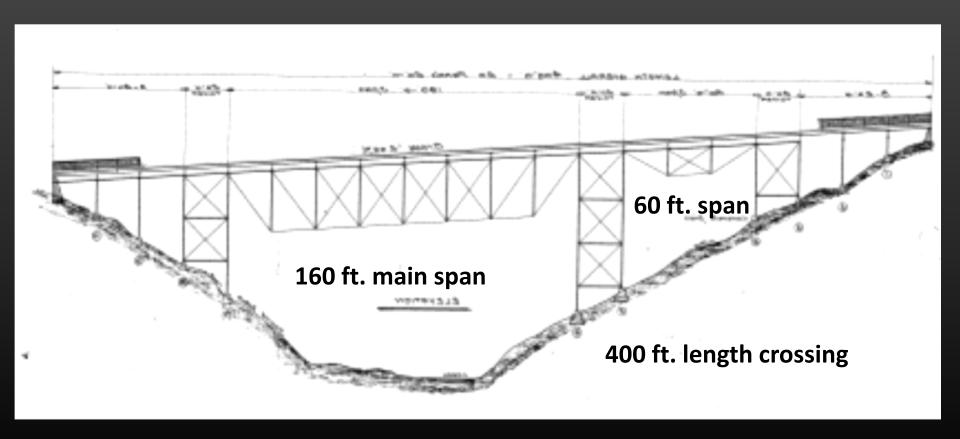




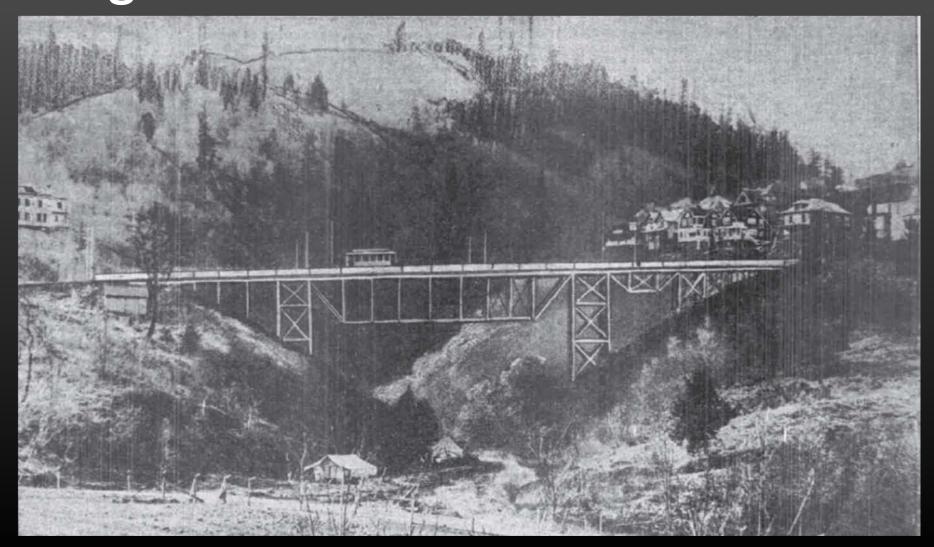
View of Exposition Site taken from Balch Gulch Bridge on Thurman St.



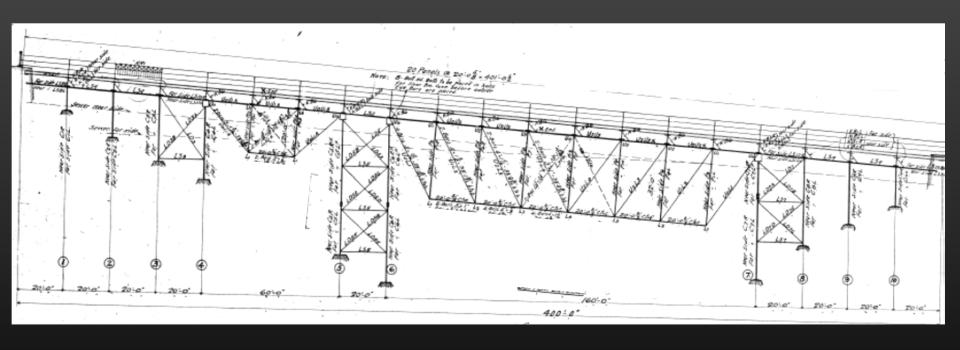
Proposals for new Bridge for World Trade Fair Development Opportunity



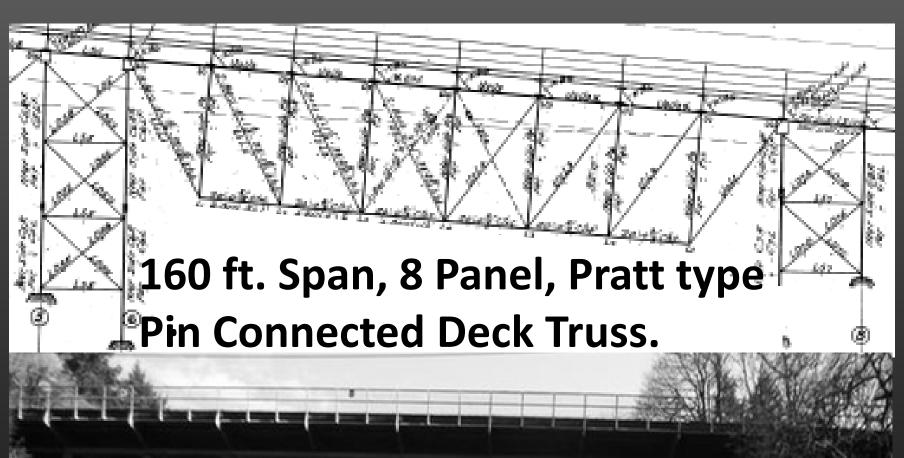
1904 Newspaper Clipping of Proposed Bridge over Balch Gulch at Thurman St.



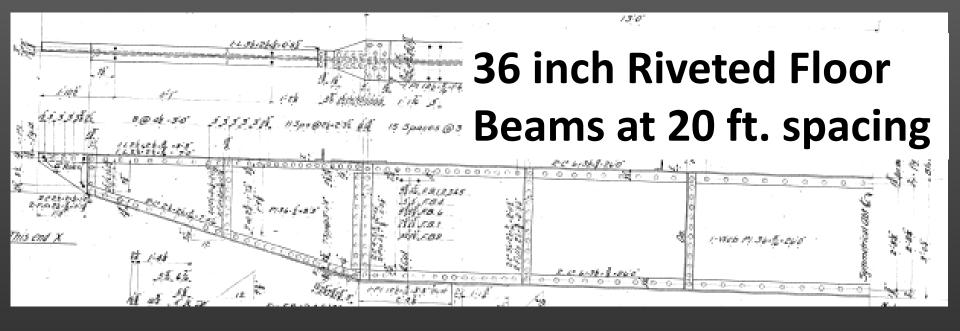
Contract awarded for \$28,000 in 1904



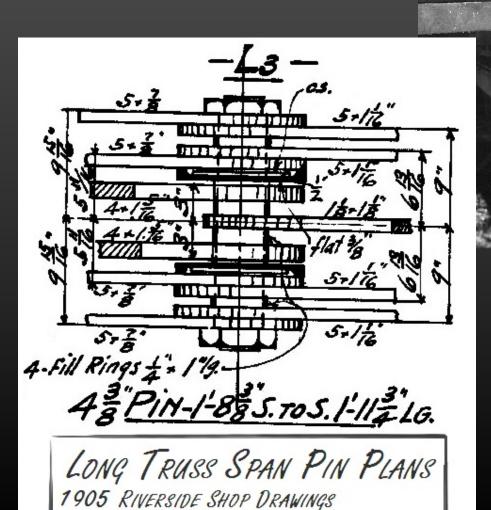
Shop Drawings prepared by: Riverside Bridge Co., Wheeling, West Virginia











Pin Connections.
Only surviving
type in Oregon.

E.O. 1593

BETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places National Park Service

ocation: variou	us Counties		State: OR
equest submitt	ted by: DOT/FHWA Da	le E. Wilken	
Date received:	4 35 05 Ad.	ditional information	

The Secretary of the Interior has determined that this property is:

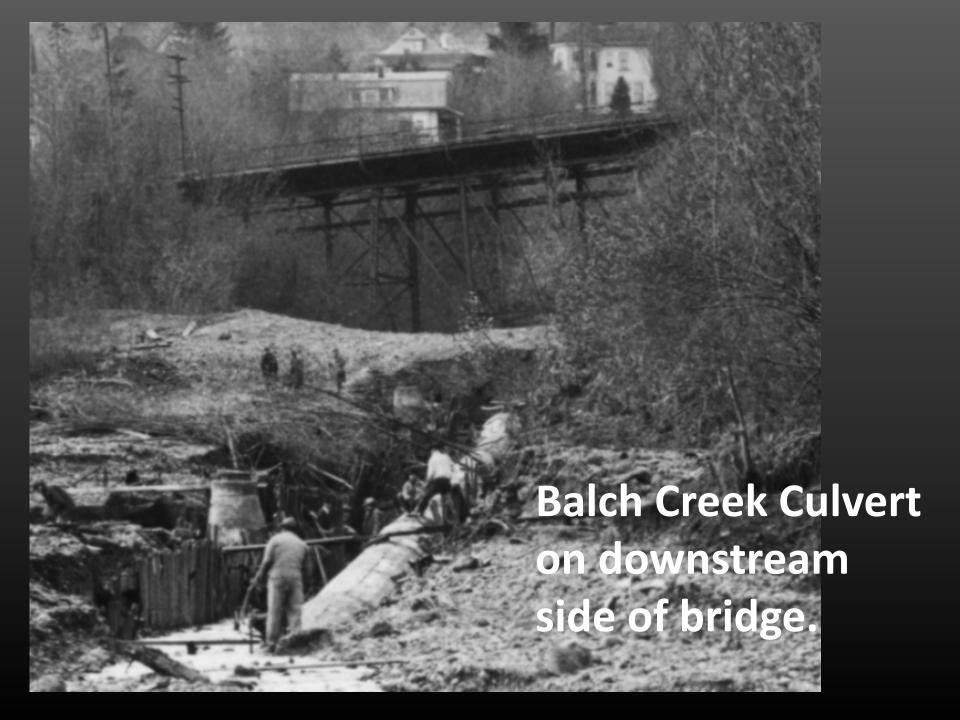
☐ Eligible Applicable criteria: ☐ Not Eligible

Comments: ☐ OF CED Down COD

36 CFR Part 63.3 Determination

1930's Balch Gulch Infill



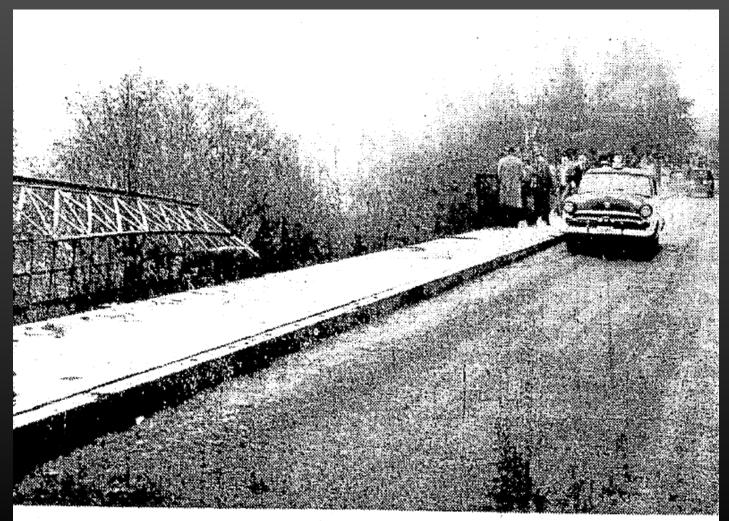






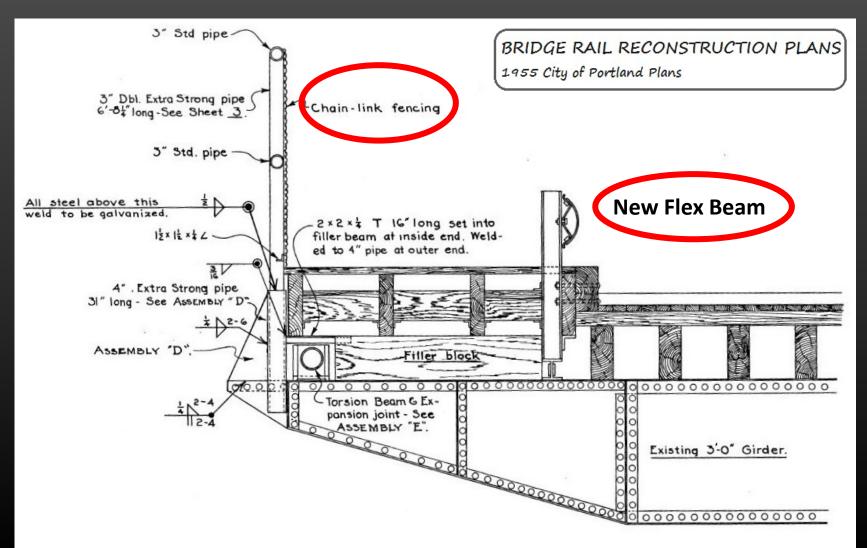
1954 Tragedy

Dec 16th, 1954 Tragic Accident



Skidding car ripped out this section of guard rail on north side of Thurman street bridge Thursday morning, then plunged 58 feet into gully below. Two occupants suffered injuries.

Immediate plans drawn up for rail "Modernization"





The declining years 1954-2014

Floor Beam Deterioration.



Abutment Condition



Weight Restriction due to deterioration



Federal HBP Project

Project Timeline

 Scoping with Local Agency 	10.12.2012	
• \$3.4M HBP Funding Approval	03.19.2013	
• Funded Design Begins	05.01.2013	
PS&E Approved to Bid	08.19.2013	
• On Site work Begins	03.17.2014	
 Project Ribbon Cutting 	10.17.2014	

The project goals

 Modernize the bridge while still preserving its unique historic character.

- Modernize the bridge while still preserving its unique historic character.
- Strengthen the bridge so that Fire, Delivery, Garbage & Moving Trucks can safely cross the bridge for the first time in 20 years.

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- Modernize the bridge while still preserving its unique historic character.
- Strengthen the bridge so that Fire, Delivery, Garbage & Moving Trucks can safely cross the bridge for the first time in 20 years.
- Restore the original appearance of the 1905 historic handrail, but strengthen it to meet modern safety standards.
- Provide safer pedestrian access on the bridge by replacing the slippery wooden sidewalk with non-slip planks.

Project Objectives & Goals (contd.)

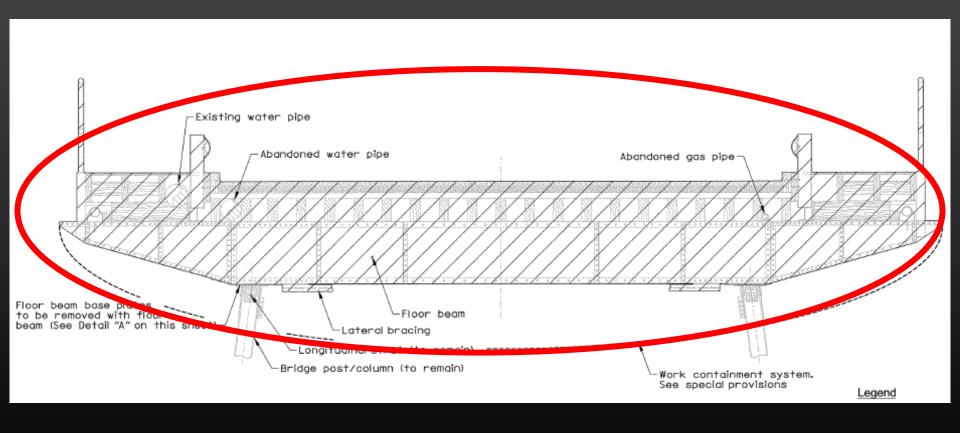
 Provide continuous bus shuttle service to Willamette Heights during the 6 month bridge closure.

Project Objectives & Goals (contd.)

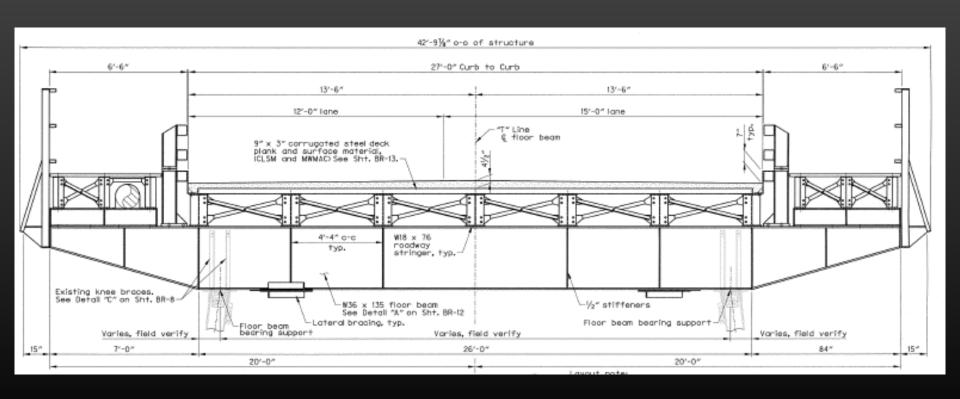
- Provide continuous bus shuttle service to Willamette Heights during the 6 month bridge closure.
- Ensure that Macleay Park remains open to the public during construction.

Project Scope

Remove Timber Joists & Deck, and Riveted Steel Floor Beams



Rebuild with Steel Stringers, Deck, Floor Beams. Match historic appearance.



Contract Awarded \$3.2 million after Special Prequalification

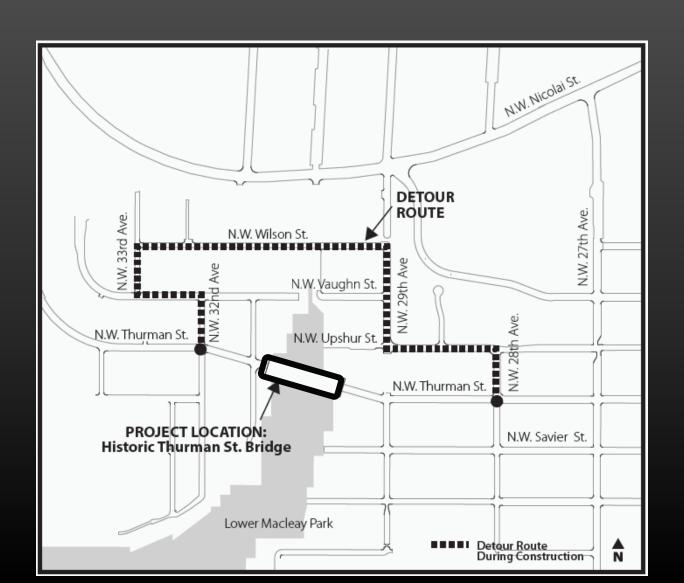


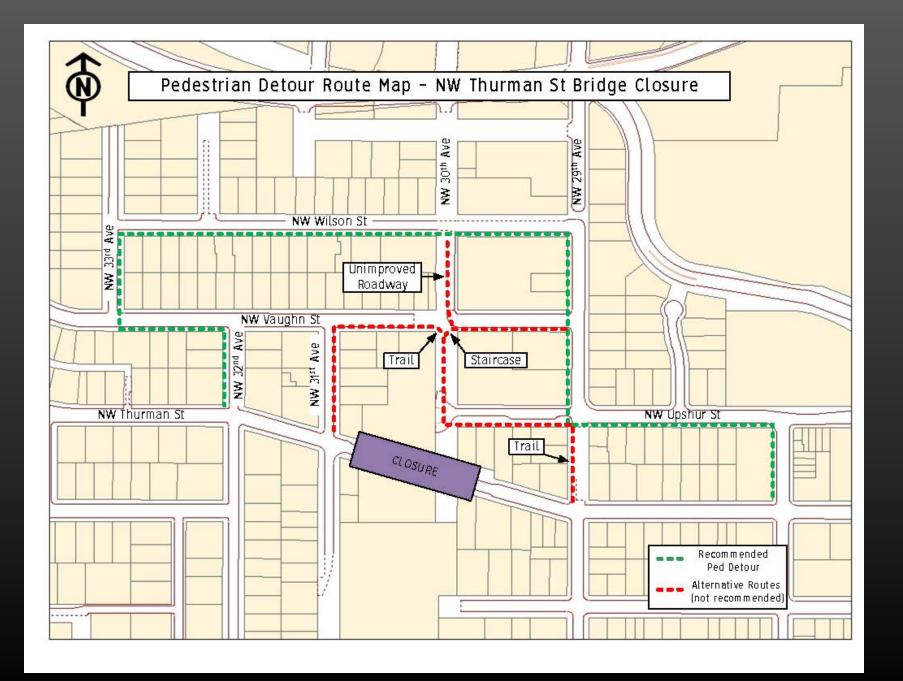
Let the Games begin...

April 1st Bridge Closure



Construction Detour

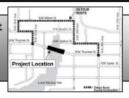




Monthly Project Newsletters

NW Thurman St. Bridge Rehabilitation Project Balch Gulch Bridge at Macleay Park

www.thurmanbridge.com
Project Newsletter



September 2013

Issue 1

Repairs Slated for Portland's Oldest Bridge

The City of Portland Bureau of Transportation is pleased to announce that the NW Thurman Street Bridge at Macleay Park has been funded for a repair and rehabilitation project that will rebuild the bridge deck, sidewalk, superstructure, and historic pedestrian railing.



1904 Rendering of the Thurman Street Bridge Source: *Oregonian*, March 10th, 1904.

The historic 108 year old bridge, shown above, spans Lower Macleay Park near the entrance to Forest Park. The bridge is in poor condition with a weight restriction that prohibits heavy traffic; when the project is completed, the bridge weight restriction will be lifted.

Power Line Relocation Marks First Work

PGE, Comcast, and Century Link will be relocating their power lines that cross Balch Gulch in the near future. To facilitate this, PGE and City Foresters will be trimming and removing trees alongside the bridge in September and October. The trees being removed have been identified by a certified City Forester as either invasive species, nuisance trees, or in very poor condition. Minimal lane closures are anticipated for the tree trimming and removal work.

Project at a Glance

Current Project Phase Final Bidding

Document Preparation

Cost: \$3.781 Million

- Federal Funding: \$3.392 Million.
- City Funding: \$388,309

Work in Progress

Tree Trimming

Estimated Construction

Early 2014

Estimated Completion

Mid 2014





Questions?

Portland Bureau of Transportation

1120 SW Fifth Ave, Suite 800 Portland, OR 97204

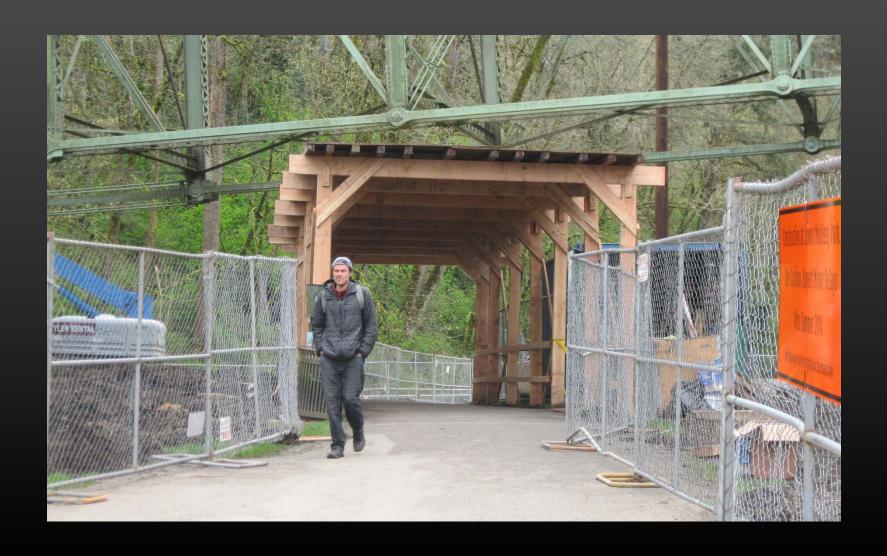
(503) 823-5181

info@thurmanbridge.com

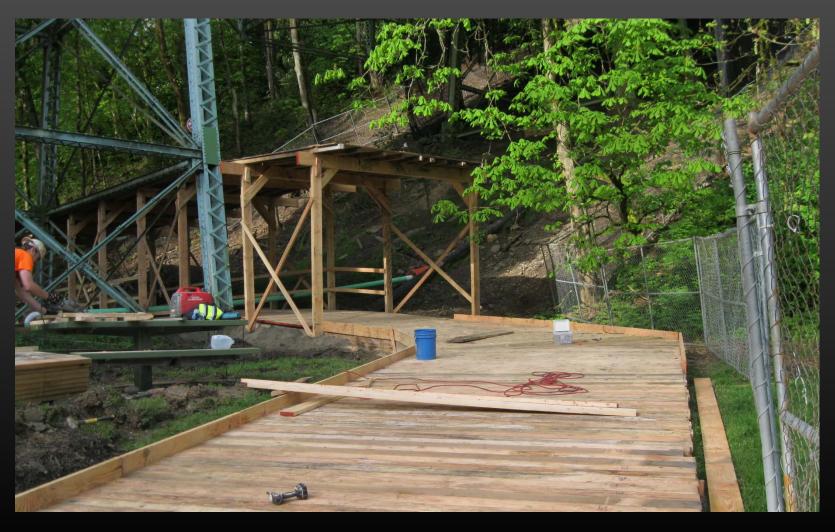
www.thurmanbridge.com

For ADA Title II or Civil Rights Title VI Accommodations, Translation/Interpretation Services, Complaints, or for additional information, call 503-823-5181, or City TDD 503-823-6868.

Safety Tunnel on Ped Path



Alternate Safety Path Route ADA Accessible



Tri-Met Shuttle Bus



Temporary Bracing

Provide **Temporary** Bracing to maintain Bridge & Truss stability during & following demolition





Bridge Demolition

First Bay & First Floor Beam



First Floor Beam removed



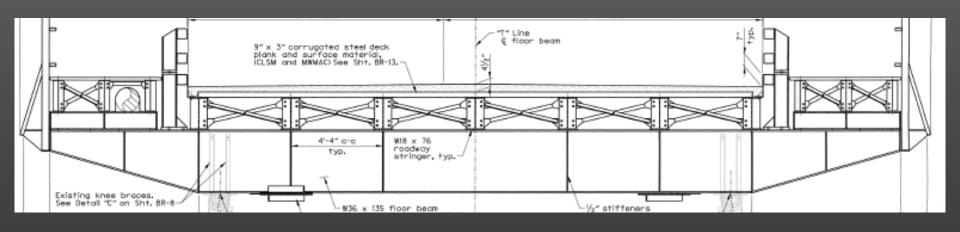
Top Flange Floor Beam -Corrosive Deterioration!







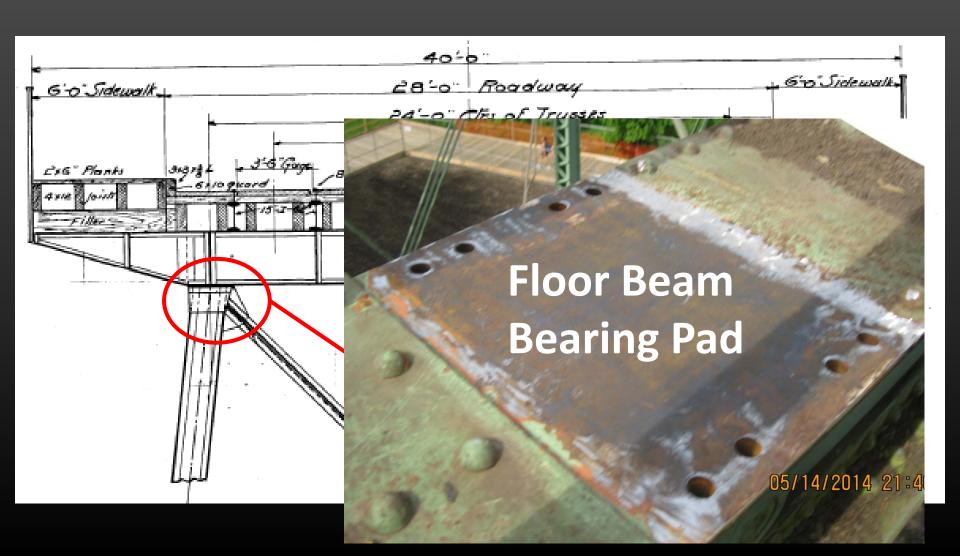
Fabrication Inspection



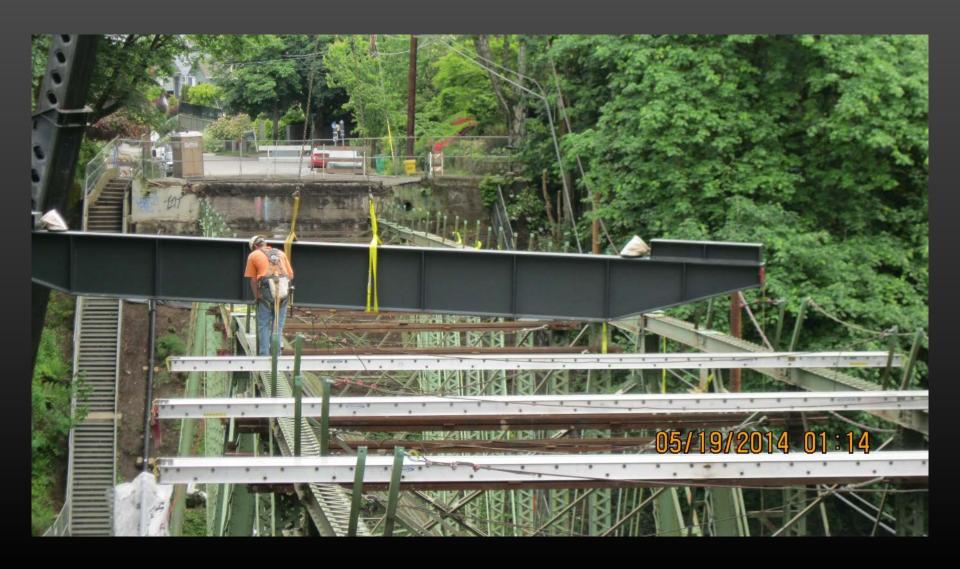


Steel Erection

Floor Beam Fit Up & Fabrication



First Floor Beam Setting



Beam Bolts In... Tension Control Bolts (Dome)



Floor Beam Installation progress



Broken footing

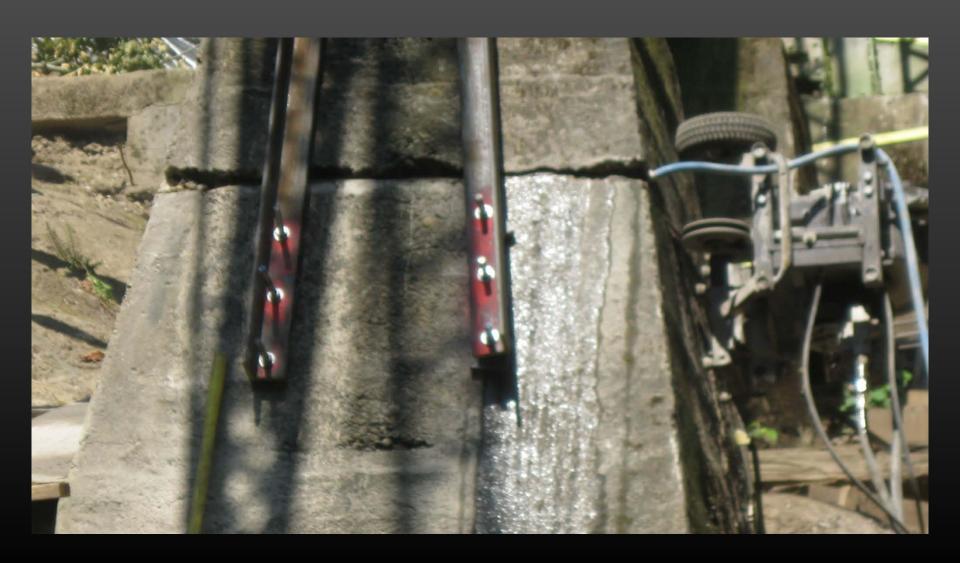
Broken – All the way through Proceed under Force Account



Temporary Bracing prior to removal



Wire Saw...fresh cut



Removal Done, Infill Steel Stub

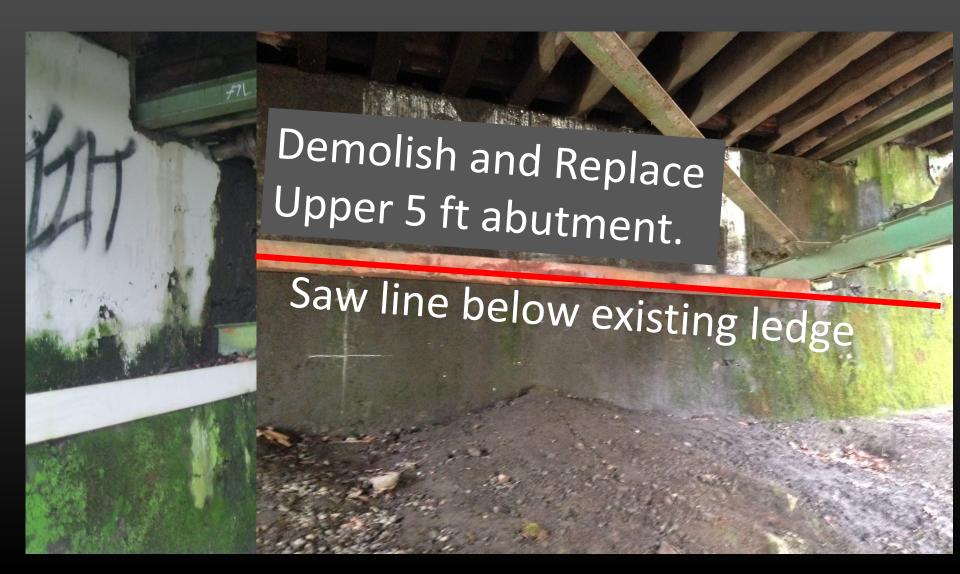


Completed Repair, Stub left in place



Rebuilding Abutments

Abutment: Poor(er)Condition



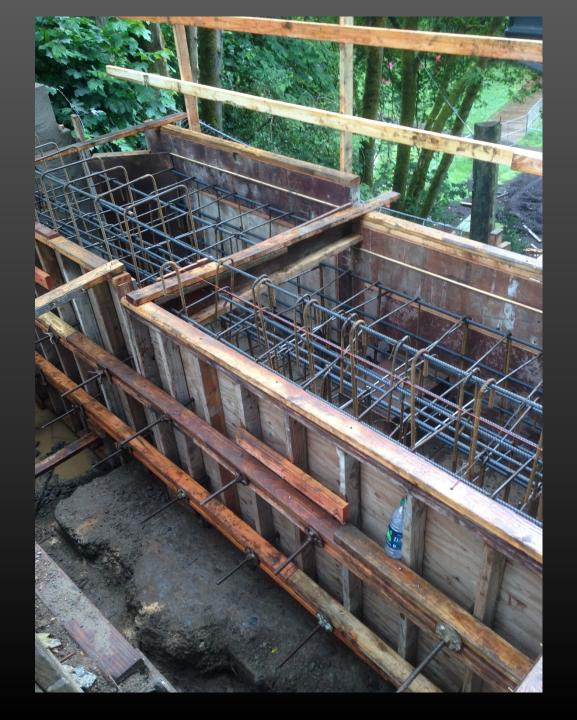
Plan of Action





Upper abutment rebuild.

Heavily reinforced.



Finished Product



Deck Installation

Form-lock Bridge deck 9 inch wide planks



Install one plank at a time...



Deck Install Completed



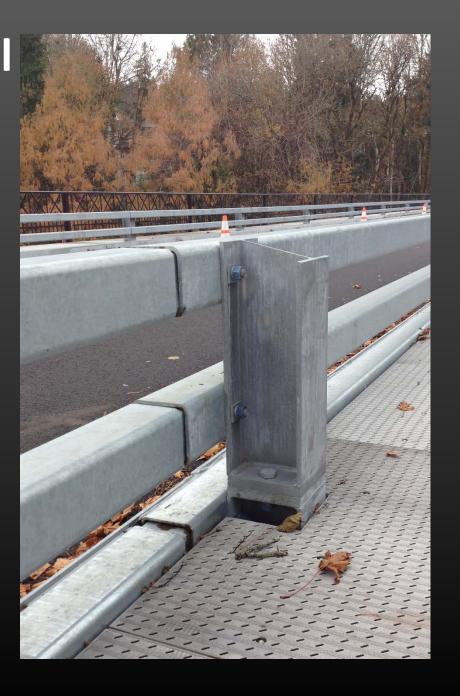


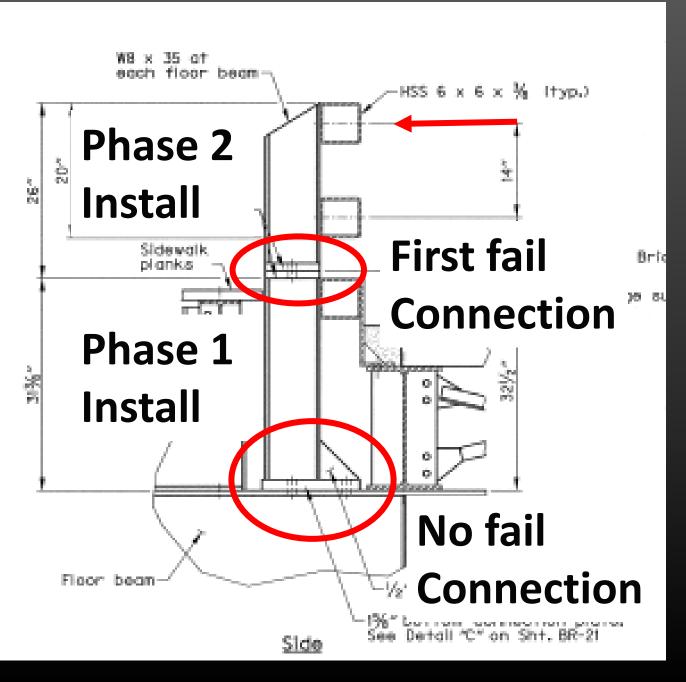


Traffic Rail Installation

2014 Guardrail 1955 Flex Beam



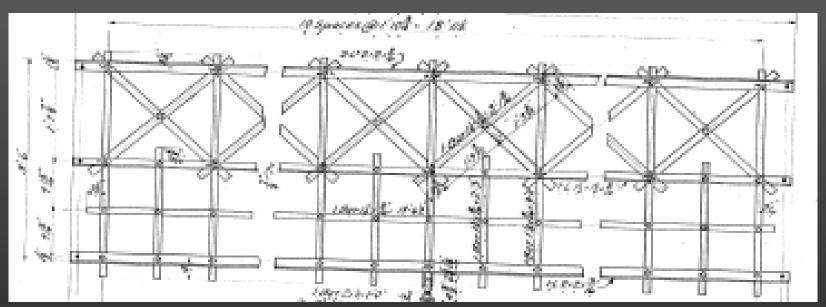




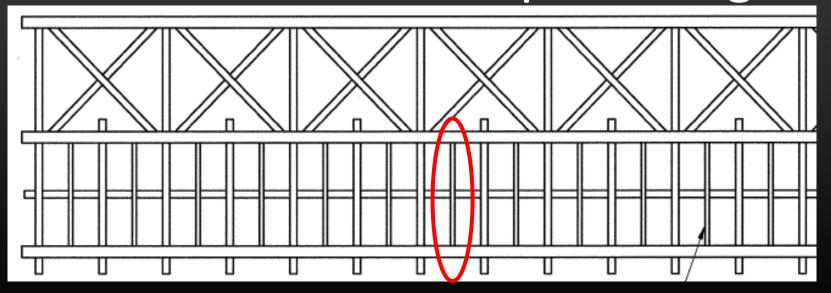
Guardrail:

Controlled failure

Pedestrian Rail Installation



Historic 1905 Shop Drawings



Mock Up Sample Inspection: Fabrication, Galvanizing, Painting



First Rail panel lift







Sidewalk Planks

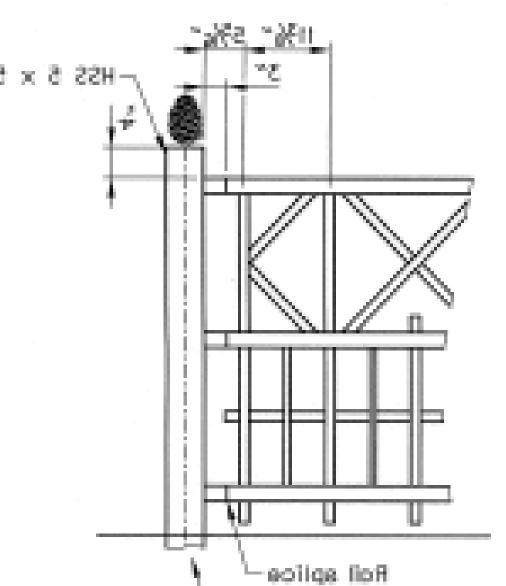




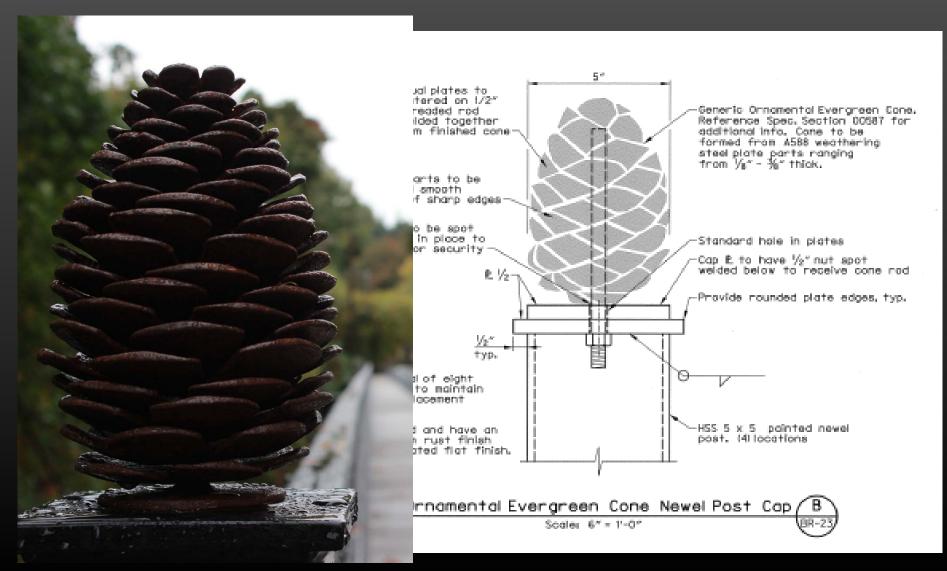
Then and Now

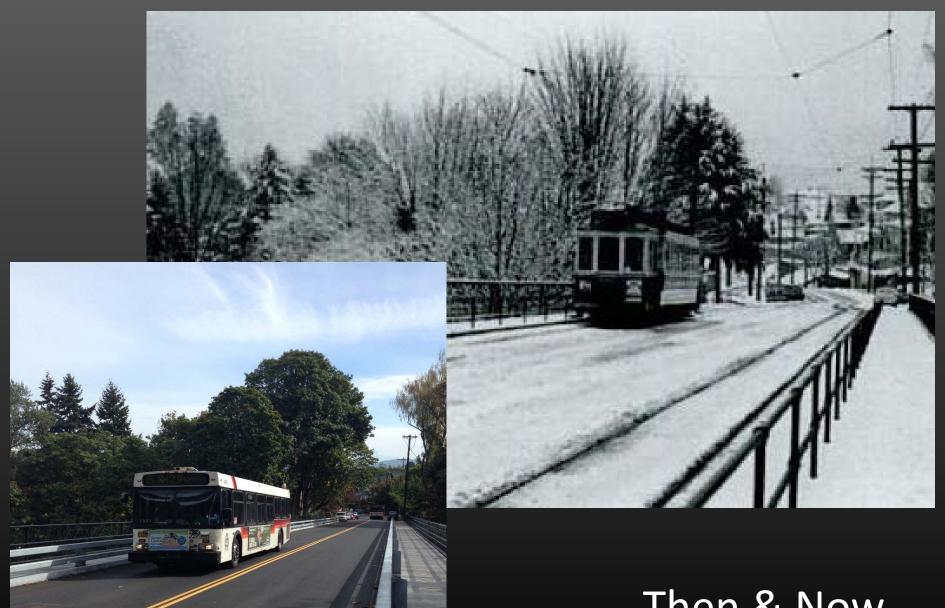
Ornamental **End Treatment**





Ornamental Evergreen Cone Post Cap





Then & Now



Then & Now

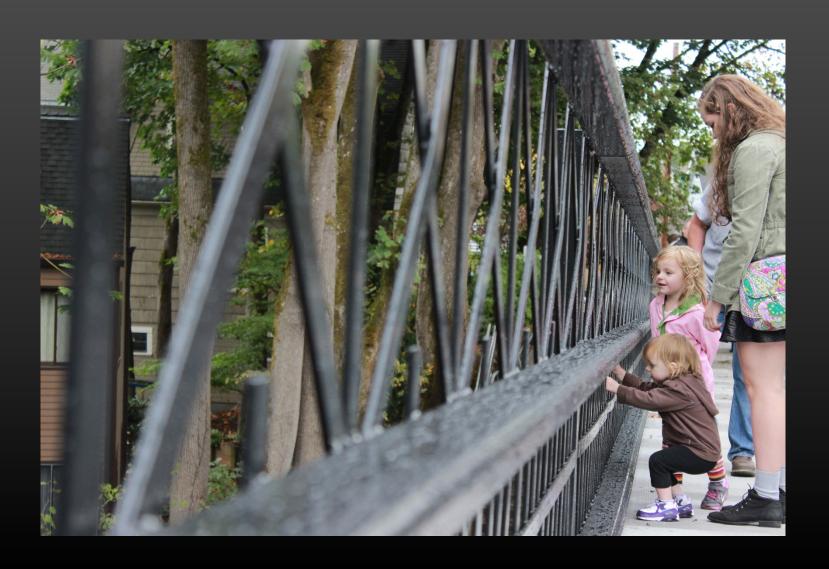




Stump Town

Who Loves This Bridge?

Kids love this Bridge







The community loves this Bridge

Soft Opening Friday 10.10.14 4pm



Project Team: Design & Construction



Successful Project Elements

- Preservation of historic asset inspired passion and enthusiasm from project team and neighborhood
- Scoping done with Local Agency representative present
- Nearly daily check-ins among design team
- ODOT staff completed NEPA documentation
- Special Prequalification for experienced contractor
- Using ODOT steel fabrication inspection
- Mock-up requirement for complex steel fabrication

Successful Project Elements

 Proceeding under Force Account Provisions for high-risk changes

Balch Gulch Bridge at NW Thurman Street Rehabilitation PROJECT AWARDS

2. Professional Partnership Award *ODOT Geo-Environmental*



1. Project of the Year – Historic Preservation APWA, Oregon Chapter



3. Heritage Excellence Award *Oregon Heritage Commission*



4. National Project of the Year Award

APWA, Historic Preservation

5. Top Project Award

Daily Journal of Commerce, Portland







Project Timeline

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- Funding Committee Approval
- Funding On-Line, Design Begins
- Design Approved to Bid
- Bids Opened
- Contract Awarded Cascade \$
- On Site work Begins
- Bridge Closed
- Bridge Reopened for use
- Project Ribbon Cutting

04.26.2012

03.19.2013

05.01.2013

08.19.2013

10.23.2013

11.27.2013

03.17.2014

04.01.2014

10.10.2014

10.17.2014

Public Outreach

- Open Houses
- Neighborhood Association Transportation Comm.
- Neighborhood In-house Outreach
 - Street Meetings on detour route
- Project specific Website
- Staffed Telephone Hotline
- Monthly newsletters to Community