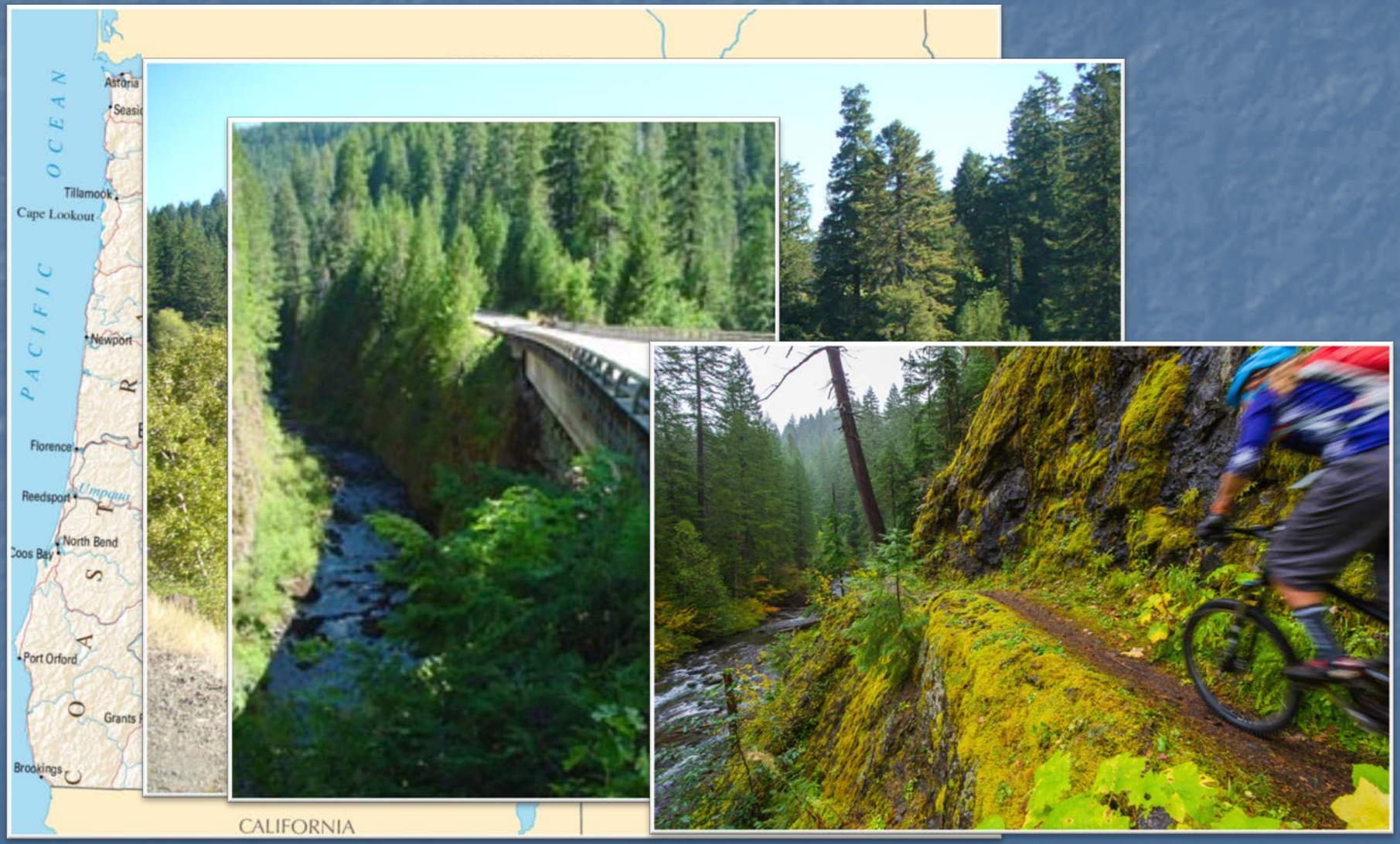
Tioga Pedestrian Bridge

Replacing what once was

Bob Grubbs, PE
ODOT Bridge Design Unit, Region 3

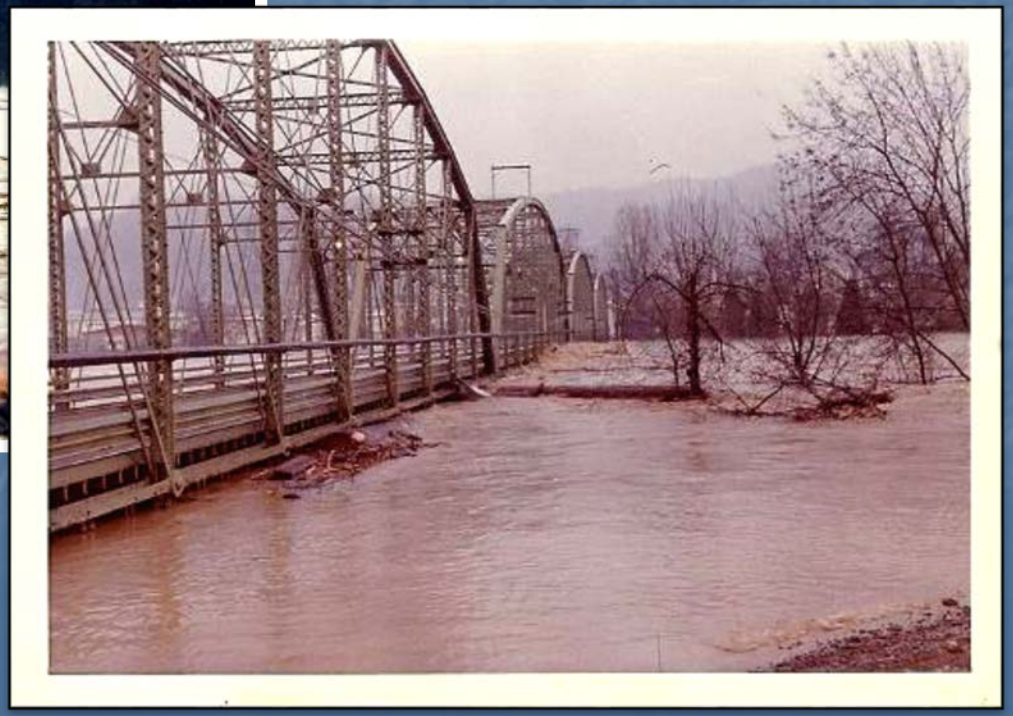
Location


PACIFIC OCEAN
Astoria
Tillamook
Cape Lookout
Newport
Florence
Reedsport
Umpqua
North Bend
Coos Bay
Port Orford
Grants
Brookings
COASTAL
CALIFORNIA

History

Original Bridge

1964 Flood



All That Remains

BLM Plan

Tioga Bridge and Susan Creek Day-Use Area Improvements
Roseburg District, Bureau of Land Management
Vicinity Map

T26S R2W, W.M.

Design Challenges
Narrow Adjacent Road

Design Challenges

No information on Existing Piers

Design Challenges
Poor Access to South Side

Design Challenges
Rock Abutment Along Trail

Project Challenges
More than engineering challenges

- Funding
- Environmental permitting
- Public expectations
- Public outreach
- Design & contracting methods

Funding

- Forest Enhancement
- Western Federal Lands Highway Division
- Scenic Byways

Environmental Permitting

- Biological assessment for spotted owls
- Archaeological clearances required
- Storm water management plan
- Sctn. 7a Wild & Scenic River Requirements
- In-water-work for access to south side

Public Expectations

Public Outreach

- Field Trips

Public Outreach

- Field Trips
- Circle of Trust

Circle of Trust

BLM Expectations

WESTERN WOOD STRUCTURES, INC.

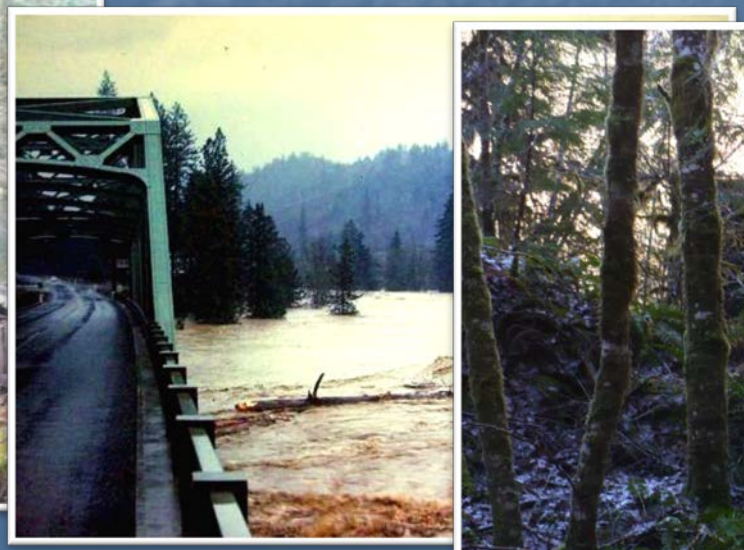
Working Wonders with Wood

Bumps In the Road

- Evidently you don't care for this project?

Bumps In the Road

- Evidently you don't care for this project?
- Design Challenges



Bumps In the Road

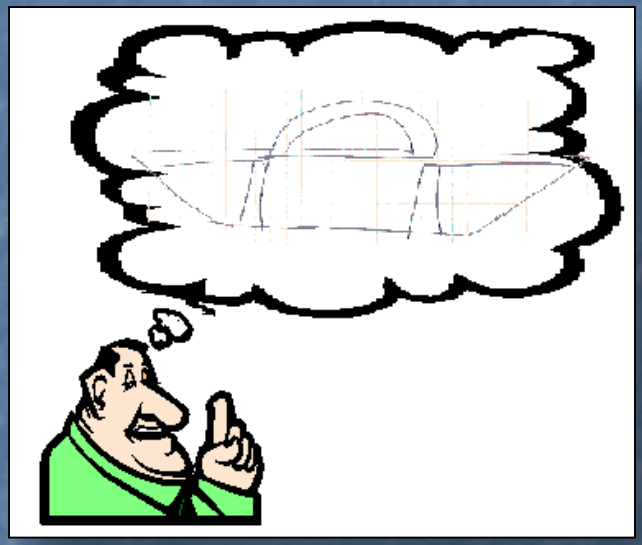
- Evidently you don’t care for this project?
- Design Challenges
- Right of Way and road use agreements
- You want to add what?

How Do We Do This?

- Design it ourselves?
- Add it as a proprietary item?
- Purchase through procurement contract?
- Acquire through an AE Contract?
- Design Build-Low Bid…yeah that'll work

The Steps of the DBLB

From here:

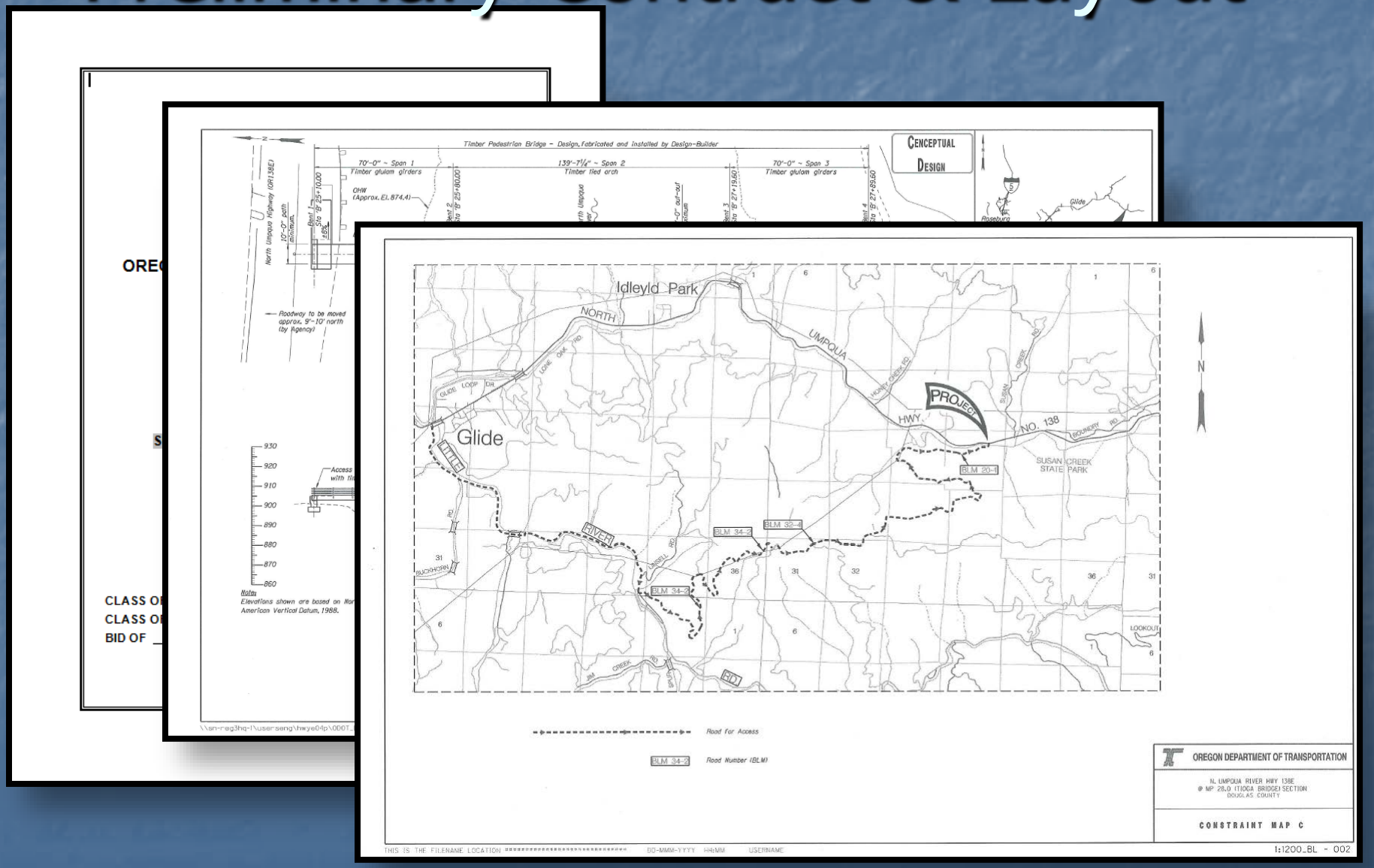


To here:

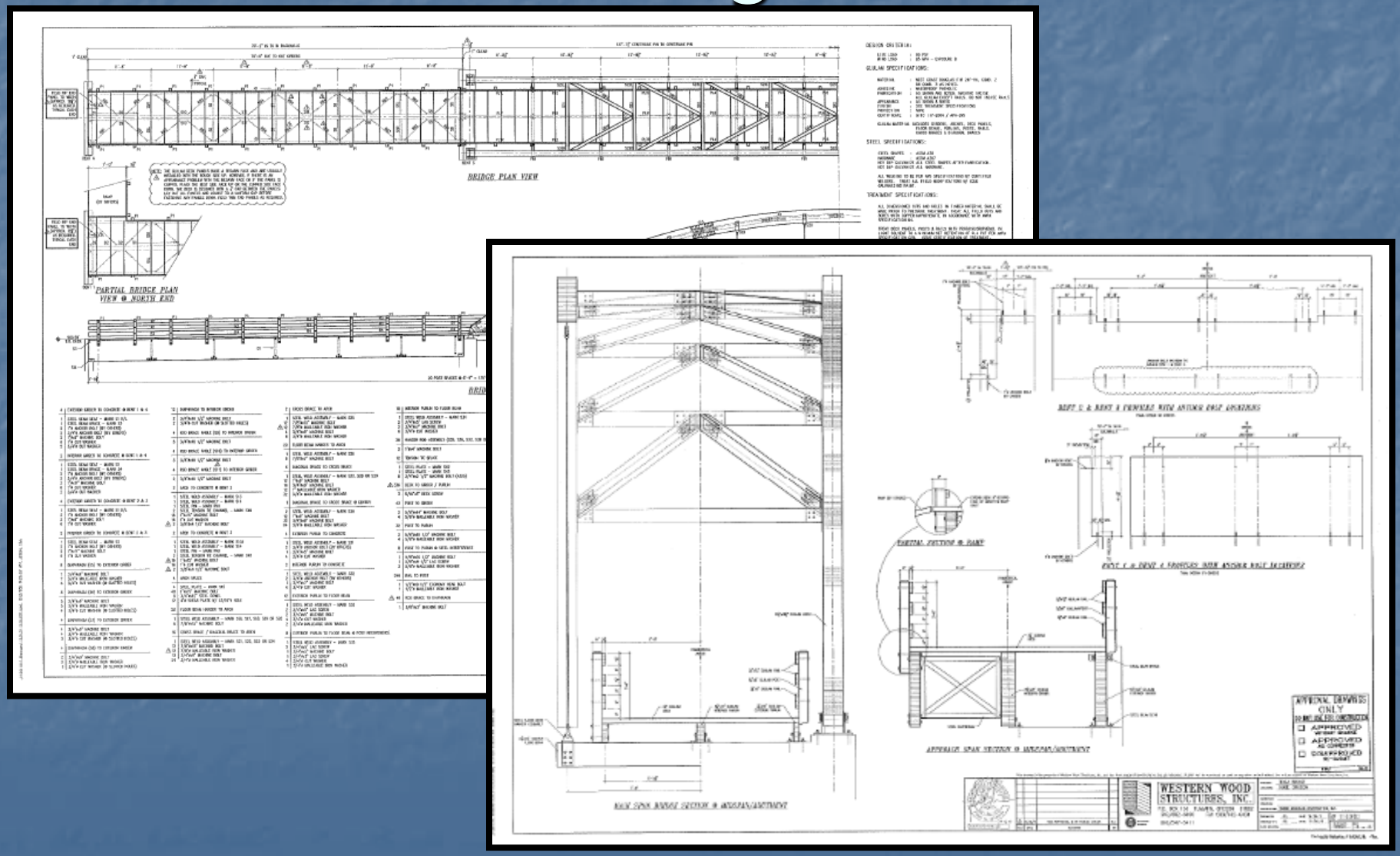
Design Build Low Bid

- Challenges
  - First DBLB, first time bugs
  - Not set up for this unique case
- Requirements
  - Schedule between projects
  - Who inspects?
- Next time
  - Clearly define roles for inspection, details, etc.
  - Better defined schedule between contracts

Preliminary Contract & Layout



Design


BRIDGE PLAN VIEW
PARTIAL BRIDGE PLAN VIEW @ NORTH END
WESTERN WOOD STRUCTURES, INC.

Fabrication

Construction
Road Realignment

Construction
Preparing Piers for Bridge

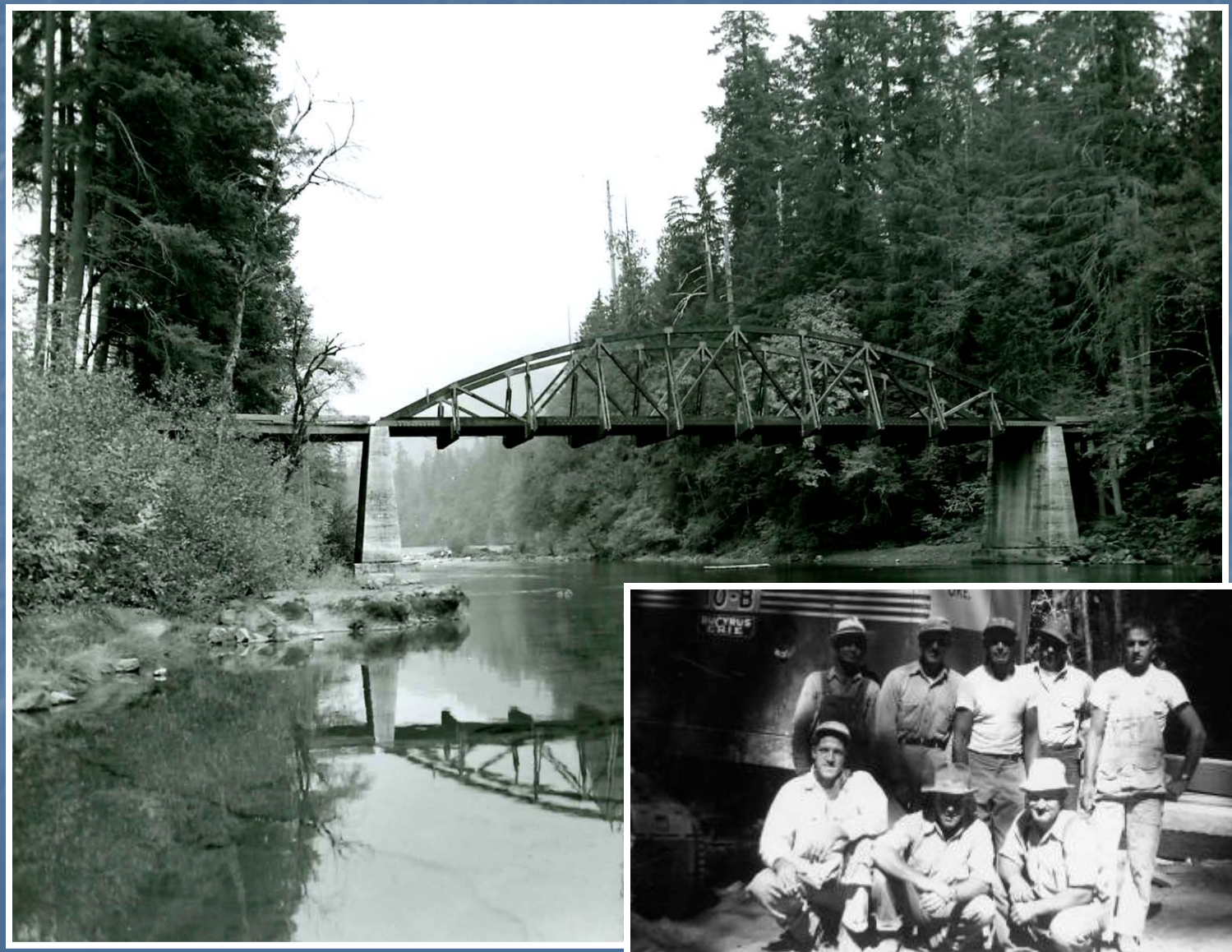
Construction
Assemble Bridge on Site

Construction
Fly it in!


08/30/2012 12:07PM


08/30/2012 12:24PM

Then



Now

Questions