Project Background

- The existing bridge has been in service for a long time
- Built in 1924
- Lift span added in 1938 for Bonneville Dam

Shortcomings:

- Narrow Travel Lanes (9’-4 3/4”)
- No Safety Shoulders for Stranded Vehicles
- No Bike and Pedestrian Access
- Vertical Restriction of 14’-7”
- Weight Restricted to 80,000 lbs
- Narrow Navigation Span (246’ wide)

Role of the Bridge

- Provides residents and businesses with **cross-river access**
- Supports the **movement of goods and services** in the region
- Provides access to **recreational attractions** and **tourism**
- Provides access for **emergency services**

The bridge provides a vital link to the communities and any disruption of bridge service would have a detrimental impact on the regional economy.

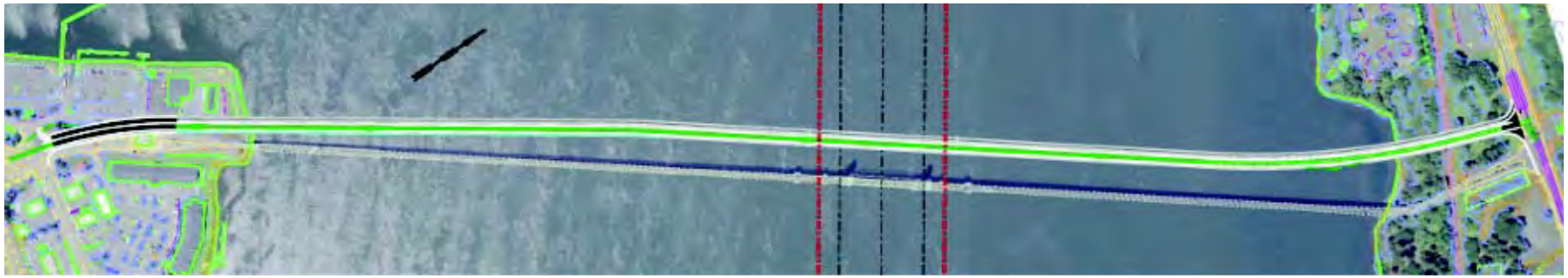
RTC

Oregon Department of Transportation

Washington State Department of Transportation

2004 Feasibility Study and Draft EIS

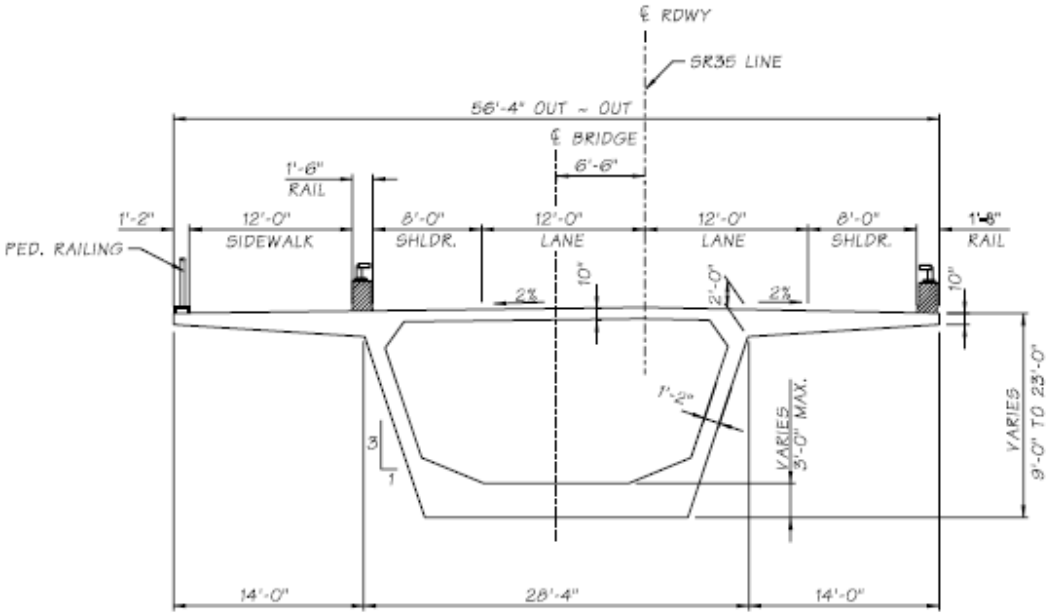
- Basis for current TS&L study
- Recommended bridge alignment is just west of the existing bridge:



- Three bridge types to be evaluated:
  - Steel girder bridge
  - Concrete segmental box girder bridge
  - Steel tied arch bridge

Bridge Type, Size and Location Study

- Collected data to further the engineering:
  - Ground survey
  - Subsurface exploration and testing
  - Geophysical survey
  - Bathymetric survey
- Design criteria defined the section



MAIN SPAN TYPICAL SECTION

Evaluation of Three Bridge Types

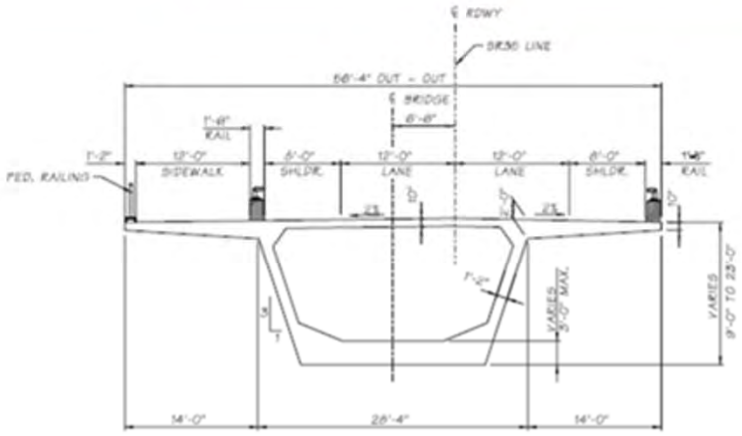
Each alternative was evaluated against the weighted criteria

Weighting	Evaluation Criteria	Steel Girder	Segmental Box	Tied Arch
4%	Design Criteria	X	X	
40%	Cost		X	
12%	Construction		X	
12%	Risk	X	X	
13%	Bridge Aesthetics	X	X	
10%	Impact to Recreation Users		X	
9%	Natural Environment		X	X

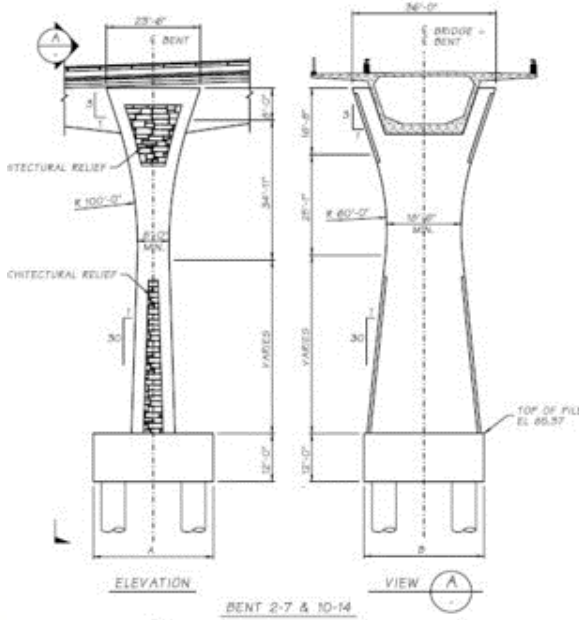
100%

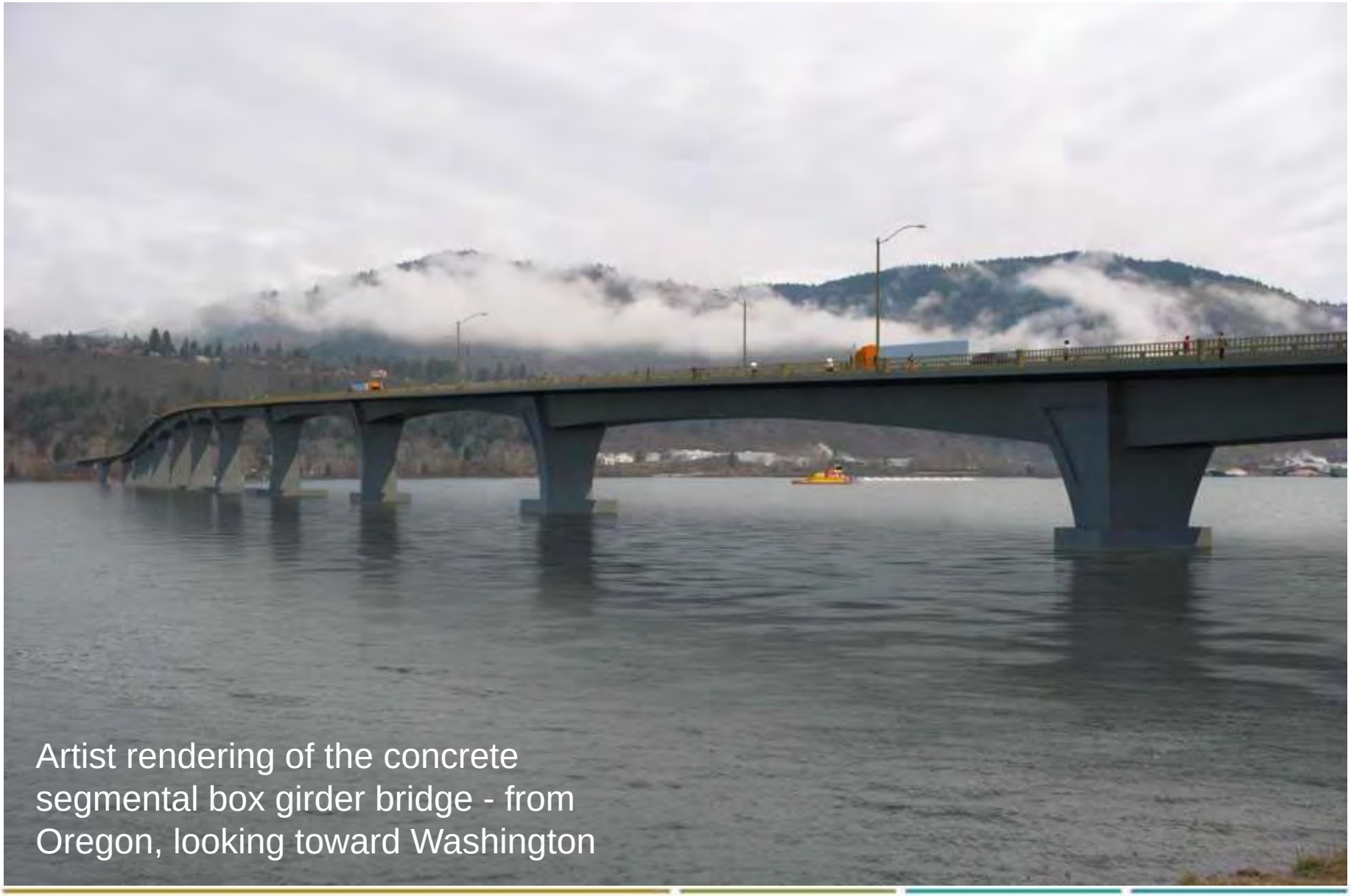
Recommendation

- Concrete segmental box girder bridge type
- Two 12-foot travel lanes and 8-foot shoulders
- 12-foot multi-use path on the west side of the bridge
- Concrete deck
- Hourglass-shaped piers
- Two pedestrian overlooks
- Aesthetic treatment at entry points and multi-use path
- 450-foot main span for navigation clearance



MAIN SPAN TYPICAL SECTION





Artist rendering of the concrete segmental box girder bridge - from Oregon, looking toward Washington

Oregon Department of Transportation

Washington State Department of Transportation

Artist rendering of the view
from the pedestrian path

Oregon Department of Transportation

Washington State Department of Transportation

Project Summary

Next Phase

- Final environmental impact statement (EIS): estimated to cost $1.8-$2.2 million

Next Steps

- Memorandum of understanding between agencies

Construction Cost

- $190-205 million in 2011 dollars

Outlook

- There are no additional funds to proceed: construction could be 20 or more years away.