

## Communication

### Hood Canal Bridge Project Team

The ultimate goal of the Hood Canal Bridge team is to administer a world-class project to replace the Hood Canal Bridge. Meet one of the people who make it all happen.



**Aileen Shiigi, Plans Technician, Hood Canal Bridge Team**

Aileen joined the Hood Canal Bridge Project as the Plans Technician in April 2006 and quickly became an integral part of the team. Her work focused on updating the project plan contract sheets. Aileen meticulously noted all changes to the original Hood Canal Bridge design on these sheets and distributed the important documents to WSDOT and Kiewit-General staff in both written and electronic formats. Her attention to detail during this process and strong drive for accuracy provided the team with quality plans to use when building each important bridge component.

It was with great sadness that the team received word that Aileen passed away on September 17, 2007. Aileen made a great contribution to the team not only by doing her work well but also by providing the energy to the team that was needed to help facilitate delivering a quality project. She lived each day to its fullest and was full of enthusiasm.



Although she had other obligations after work, she still found the time to cook food for Hood Canal Bridge team get-togethers. Aileen was one of the top chefs at the office. Through her sharing spirit, cheerful laugh and honest communication, Aileen supported her team members daily. Her ability to quickly help others locate important information was greatly appreciated during this summer, the busiest construction season of the project.

Aileen touched many lives, especially in the Hood Canal Bridge Project Office

where she spent a majority of her days. The work she did will be referenced and used by the team throughout the rest of the project and by WSDOT engineers in years to come.

## Next Month's Activities

### Pontoon Construction

- Pour pontoon ZC concrete floor
- Pour concrete walls for pontoon X
- Complete pontoon V concrete floor pours

### Drawspan Assembly

- Connect pontoons PA and NA
- Place the YF pontoon under pontoons PA and PB

### Hood Canal Bridge West-half Leak Detection System

- Complete system

### Transition Span Fabrication

- Assemble second of four transition span chords
- Begin welding diagonal pipes to first completed span chord

### Hood Canal Bridge Retrofit and East-half Replacement Project

East-half Replacement

Completion Goal: 2009

West-half Retrofit Completion Goal : 2010

#### Q. Where is the bridge?

A. *The Hood Canal Bridge is located between Kitsap and Jefferson counties at the mouth of the Hood Canal.*

#### Q. Why is it important?

A. *It serves as a vital economic and social link between the greater Puget Sound and the Olympic Peninsula.*

#### Q. What is WSDOT doing?

A. *The Washington State Department of Transportation is improving this lifeline by replacing the east-half floating portion of the bridge, replacing the east and west approach spans, replacing the east and west transition truss spans and updating the west-half electrical system. The project completion estimate is 2010.*

#### Q. What can drivers do to stay informed?

A. *Sign up to receive the latest news regarding the Hood Canal Bridge Project and other related area transportation news in your e-mail. Visit [www.hoodcanalbridge.com](http://www.hoodcanalbridge.com).*

This report highlights updated Hood Canal Bridge Project information from **September 1 – 30, 2007.**

For more information about the Hood Canal Bridge Project visit the project web site, [www.hoodcanalbridge.com](http://www.hoodcanalbridge.com), or contact project staff:

**Becky Hixson, Communication Manager,** (253) 305-6450, [hixsonb@wsdot.wa.gov](mailto:hixsonb@wsdot.wa.gov)

**Eric Soderquist, Project Director,** (253) 305-6400, [soderqe@wsdot.wa.gov](mailto:soderqe@wsdot.wa.gov)



Washington State  
Department of Transportation

## Monthly Report

### Hood Canal Bridge Retrofit and East Half Replacement Project

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009  
WEST-HALF RETROFIT COMPLETION GOAL: 2010

September 2007



Crews secure newly refurbished pontoons R, S and T in Port Gamble Bay, October 1, 2007.

## Project Delivery

### Hood Canal Bridge Pontoons Tow Home

Three refurbished concrete Hood Canal Bridge pontoons, named R, S and T, sailed smoothly across the Puget Sound on Sunday, September 30. The 900-foot pontoons left Seattle's Terminal 91 just after 7 p.m. and arrived in Kitsap Peninsula's Port Gamble at 5 a.m. October 1. WSDOT and Kiewit-General crews secured the pontoons at their moorage location in Port Gamble Bay around 10 a.m.

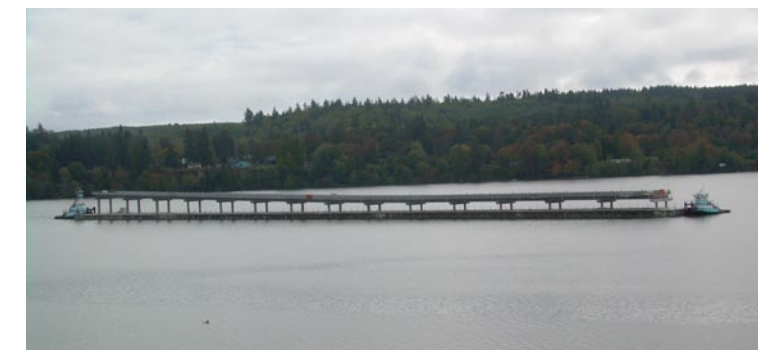
The work required to refurbish R, S and T was completed in only nine months. Crews removed the old roadway and constructed a new, taller, wider roadway on top of the 60-foot wide pontoons so the roadway matches the widened west-half roadway. A leak detection system and updated electrical systems were also added.

Now, R, S and T are ready to be used a second time — as part of the new Hood Canal Bridge east half. They will be moored and monitored in Port Gamble Bay until installed during the six-week May-June 2009 bridge replacement process.

Retrofitting these pontoons helps the Hood Canal Bridge Project meet its May-June 2009 float-in date and saves tax payers money through refurbishing pontoons rather than building and assembling three new ones.



Completed pontoons R, S and T ready to tow home, September 30, 2007.



Pontoons R, S and T arrive in Port Gamble Bay, October 1, 2007.

## Accountability

### Working on Welds

This month, Oregon Iron Works in Vancouver, Washington, began assembling steel sections of the new 280 feet long, 67 feet 9 inches wide, by 35 feet tall transition spans. Tremendous planning was completed by WSDOT bridge engineers, Hood Canal Bridge staff and expert welders prior to the work beginning. This effort ensured everything would be assembled correctly to create a quality product that will last for decades to come.

The new transition spans tubular design is very efficient. It will accommodate a wider

roadway, is extremely strong, and will flex as needed during the winter storms, winds and tides on Hood Canal. This technology is commonly used on off-shore oil drilling rigs, but not in bridge construction projects. As a result, Oregon Iron Works hired specialized welders to do the job.

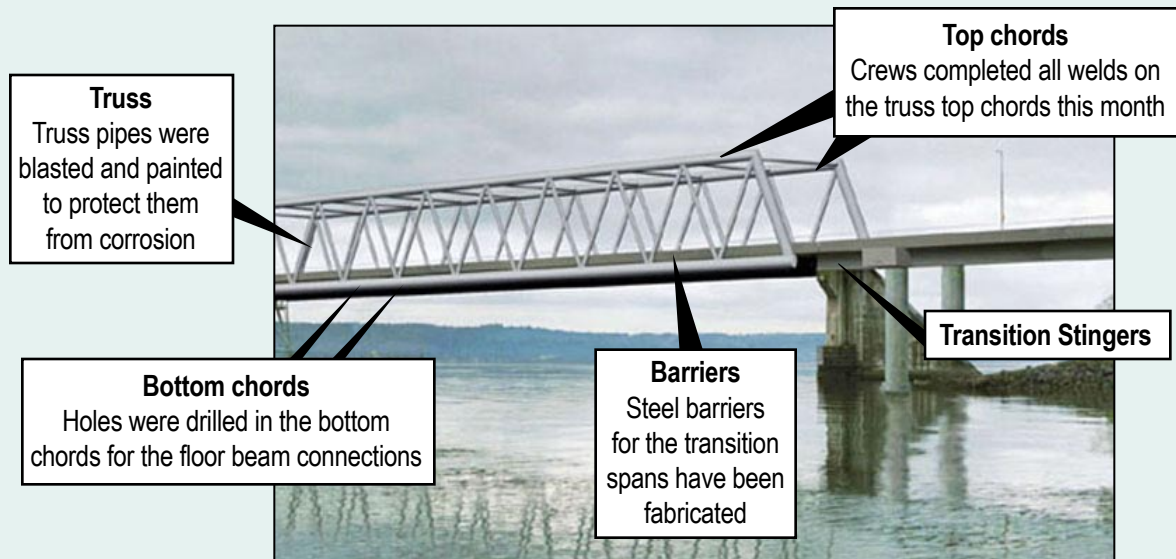
First, the crew familiarized themselves with the different types of welds by studying the plan sheets and discussing welding requirements with WSDOT engineers. Then the welders completed test welds, or mock ups, simulating the most complicated connections. These mock ups were cut

apart and inspected by WSDOT engineers for soundness. Actual transition span assembly began only after the welders had been certified to perform each required weld, crews discussed lessons learned from the tests and all the test welds were approved.

Completed welds are inspected using an ultrasonic testing system. This electronic machinery, much like an MRI, allows WSDOT inspectors to examine the welds inside the pipes and ensure they meet required specifications.

Crews made significant progress this month.

### New Transition Span Illustration



Fabricating and assembling these massive structures off site, then transporting them to the Hood Canal and lifting them into place is one of the ways the Hood Canal Bridge Project is

able to minimize the May-June 2009 bridge closure duration. The meticulous planning and extensive training has allowed work to progress quickly toward this goal.



Crews complete a mockup for the welding of the transition spans, September 7, 2007.



Crews drill holes for the floor beam connections to a bottom chord, September 20, 2007.



Two truss top chords are transported to a larger facility where assembly will occur, September 24, 2007.

### Performance Measures: Keeping to a Schedule

Keeping to a schedule is very important to the overall success of the Hood Canal Bridge project. This summer, the Hood Canal Bridge Project completed its busiest construction season for the project. Through this intensive work effort, crews met project milestones and kept the work on-track to meet the May-June 2009 bridge replacement date.

To know how well the team is performing, actual accomplishments are compared against projected completion dates. Here is how the team has done during 2007:

#### Project Schedule

##### 2007 MILESTONES COMPLETION

■ Float Out – Goal: Feb. 07  
1st cycle of pontoons Accomplished: Dec. 06

This work was completed two months ahead of the goal due to the team's ability to find time-saving efficiencies throughout construction.

■ Anchor Construction Goal: June 07  
Accomplished: June 07

This work was completed on-time.

■ Float Out – Goal: Sept. 07  
2nd cycle of pontoons Accomplished: July 07

This work was completed two months ahead of the goal due to the team's ability to find time-saving efficiencies throughout construction.

■ Anchor Placement Goal: Sept. 07  
Accomplished: Aug. 07

This work was completed one month ahead of the goal due to the process going more smoothly and faster than anticipated.

■ Rehabilitation of Pontoons R, S & T Goal: Aug. 07  
Accomplished: Oct. 07

This work was completed two months behind schedule due to unanticipated repairs within the pontoon anchor galleries.

■ Draw Span Assembly and Outfitting Goal: Dec. 07

This work has started and is currently on-track.

WSDOT is committed to keeping the Hood Canal Bridge project on schedule and to being accountable to deliver each portion of the project on time. The five milestones accomplished this year are stepping stones that bring the project closer to its completion date.

### Financial Status Project Cost Summary

Period Ending September 30, 2007

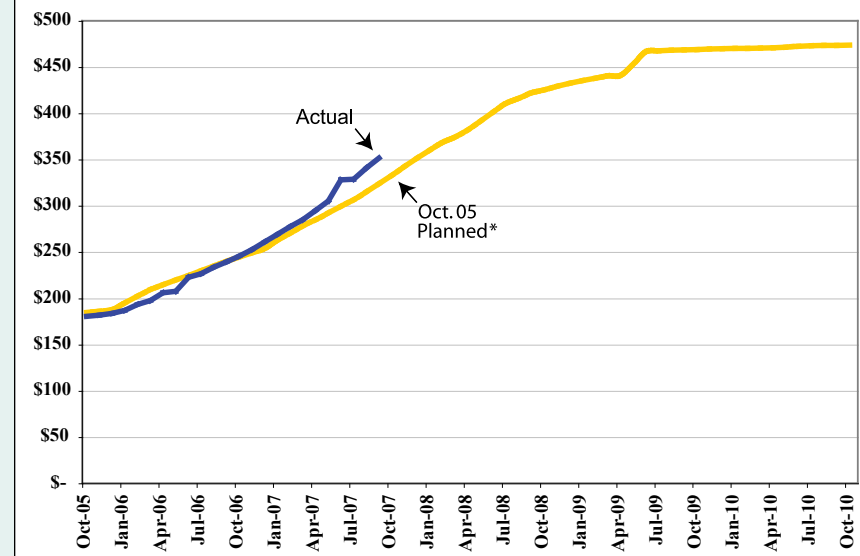
CATEGORY	BUDGET	EXPENDED
Original Commitments		
Port Angeles	\$82,741,000	\$82,878,000
Bridge Site Work	\$41,594,000	\$41,594,000
Work in Progress	\$81,728,000	\$70,716,000
Subtotal Original Commitments	\$206,063,000	\$195,188,000
Modified Commitments		
WSDOT Construction Management	\$32,036,000	\$14,031,000
Bridge Closure Mitigation	\$9,644,000	\$979,000
New Facilities & Bridge Construction	\$223,225,000	\$132,977,000
Subtotal Modified Commitments	\$264,905,000	\$147,987,000
Port Angeles Remediation (PAR)		
PAR - Construction	\$2,680,000	\$1,867,000
PAR - Design & Construction Engineering	\$3,800,000	\$849,000
PAR - Settlement & Other Costs	\$3,040,000	\$2,655,600
Subtotal PAR	\$9,520,000	\$5,371,600
Project Total	\$480,488,000	\$348,546,600

Note: Data includes all costs as of September 30, 2007.

### Planned vs. Actual Expenditures

Period Ending September 30, 2007

Total Project Cost, Dollar (millions).



\*In 2005, when the Hood Canal Bridge Project Budget was developed, the plans to remove construction materials from the Port Angeles site had not yet been finalized; therefore, the estimated cost for this work was not included. After reaching an agreement with multiple parties on the Port Angeles Remediation work, the money needed to accomplish the effort was added to the overall Hood Canal Bridge Project. In the graph above, this change is represented by the difference between the October 2005 planned budget and the September 2007 actual expenditures.

Source: WSDOT Hood Canal Bridge Project Office