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 makes it all happen.

Archie Kollmorgen, *Steel Structure Superintendent, Hood Canal Bridge site*

Archie Kollmorgen has been involved with the Hood Canal Bridge Project for almost two years and has proved to be a valuable member of the team in his various positions. Before joining the project, Archie gained knowledge and experience both in school and work to help prepare him for his current duties.

Archie began working as a carpenter in college, but soon discovered his true passion was in engineering. He successfully transferred to Michigan Technological University and earned his masters degree in Civil Engineering. After graduation, Kiewit Engineering in Omaha, Neb. hired him as a structural design engineer where he worked on false work (temporary bridge support systems) design, concrete analysis, and cofferdam and supportive soil designs.

He began working on Hood Canal Bridge Project-related work while designing the lowering system that was used to place the 20 new Hood Canal Bridge anchors on the bottom of the canal. When the design work was complete, Archie helped plan and coordinate anchor setting operations.

Once the anchors were put in place in summer 2007, Archie transferred to the Todd Pacific Shipyards work site to assist the team with draw span assembly, putting his project history and engineering experience to good use as the draw span outfitting Project Engineer.

Archie is now the Steel Structure Superintendent at the Hood Canal Bridge site where he is planning for the removal and replacement of the east and west trusses and transition spans, including installation of the new A-frames, during the May-June 2009 closure.

When asked about his various duties while on the project Archie said, "Due to the diversity and complexity of the work performed, I feel it has and will continue to increase my professional capacities and development."

There is no doubt that planning his skills and ability to get work done have contributed significantly to the success of the project.

Even though he is a critical team member, he does take time to rest, relax and reenergize. When he's not busy planning various phases of the Hood Canal Bridge Project, Archie enjoys camping, fishing and hiking.

Contact archie.kollmorgen@kiewit.com or 206-920-1490

Next Month's Activities

Crews install the catwalk on the east control tower. Aug. 13, 2008.

East-half Assembly, Outfitting and Testing
- Install conduit on east control tower
- Complete assembly of pontoons U, V, W and X

Fabrication at Oregon Iron Works
- Install floor beams on east truss for fit-up in preparation for welding
- Complete welding main diagonal members to the horizontal members on the west A-frame

Hood Canal Bridge Site
- Continue installing conduit between power panels, control cabinets, lighting and receptacles
- Completed asbestos removal to facilitate east-half electrical retrofit operations

Hood Canal Bridge
West-half Retrofit and
East-half Replacement Project
East-half Replacement: 2009
West-half Retrofit: 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**.

This report highlights updated Hood Canal Bridge Project information from **August 1 – 31, 2008.**

For more information about the Hood Canal Bridge Project visit the project web site, **www.HoodCanalBridge.com**, or contact project staff:

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Washington State Department of Transportation
Monthly Report
EAST-HALF REPLACEMENT COMPLETION GOAL: 2009
WEST-HALF RETROFIT COMPLETION GOAL: 2010
August 2008

Hood Canal Bridge West-Half Retrofit and East-Half Replacement Project

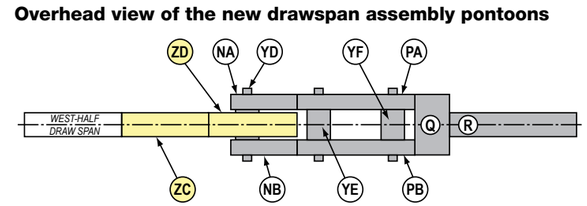
Crews place concrete for the first of nine Z pontoon deck spans. Aug. 8, 2008.

Project Delivery

All hands on Z pontoon deck pour

WSDOT and Kiewit-General (K-G) "poured it on" again in August by placing approximately 313 cubic yards of the concrete needed for the new draw span roadway. This roadway – built on top of the Z pontoons – is comprised of connected concrete deck spans that allow for independent, limited movement, letting the bridge flex as needed as the tide rises and falls.

Overhead view of the new drawspan assembly pontoons



Excellent preparation made the pours go smoothly. Prior to the concrete pours, crews constructed 20 columns and 10 crossbeams on the draw span, putting the necessary support structure in place for the roadway.

These deck pours were the first significant roadway sections completed since September 2007 when the team replaced roadway on the 1980s pontoons, R, S and T. By using the lessons learned from the 2007 work, crews completed draw span deck pours on seven of the nine concrete roadway spans, pushing the project past the 84 percent mark.

The crews are on schedule to place the final deck pours on the Z pontoon end spans, which will complete the 495-foot-long by 40-foot-wide section of roadway, by the end of September. The remaining draw span work focuses on electric, hydraulic and mechanical component installation and testing. The entire draw span is schedule for completion by April 2009.

Source: WSDOT Hood Canal Bridge Project Office

Accountability

Timing Closures to Keep the Bridge Open
Every part of the Hood Canal Bridge Project, whether construction or maintenance-related, is designed and scheduled with this primary thought in mind – how can WSDOT keep traffic moving across the bridge?

WSDOT is using several strategies:

Preventive Maintenance
The Hood Canal Bridge mechanical and electrical operations are inspected by WSDOT's bridge preservation office each year. Structural inspections are also done annually. In addition, a full-time maintenance crew on the Hood Canal Bridge monitors the bridge's structure daily, ensures pontoons are watertight, and keeps the bridge operational for drivers who rely on it every day to get to school, work, medical care and family.

In August, the Hood Canal Bridge was closed several times over the span of two weeks to accommodate the annual inspections. It may seem strange that short bridge closures contribute to making a better drive for bridge users, but they do. Closing the bridge for a few hours during this extensive mechanical and electrical inspection and draw span testing allows crews to identify any wear on the draw span components. The crews then have time to make any necessary adjustments or repairs so the bridge is in top condition before the winter storm season. That way, the bridge will open and close properly, keeping traffic delays to a minimum.

Choosing the Closure Date
The May-June 2009 closure date was chosen because it meets the needs of both the project and the community. Starting on May 1 allows WSDOT to avoid the winter storm season but still accomplish the work before the busy July-August tourist season.

2009 Closure Planning and Preparation Work
Closure preparation work is happening now in order to complete as much work as possible before the 2009 closure. This will ensure the bridge will be opened to traffic by the end of the six-week closure period. Some of that work requires closing the bridge to traffic for short periods of time. WSDOT was able to do this work at the same time the annual inspections occurred to better serve drivers by reducing the number of times the bridge had to be closed to traffic.

We know the Hood Canal Bridge is a vital economic and social link between the greater Puget Sound and the Olympic Peninsula. This knowledge keeps us focused on keeping the bridge open to traffic as much as possible.

Hood Canal Bridge draw spans retract.

Performance Measures

Keeping to a Schedule
Staying on schedule is vital to the overall success of the Hood Canal Bridge Project.

This summer, the Hood Canal Bridge Project completed another progress-filled construction season. Through this intensive work effort, project managers actively evaluated the project schedule to ensure the new east-half of the bridge will be ready for the May 2009 closure.

Initial schedules are developed with time to deal with potential challenges. That way, engineers and managers have the ability to adjust operations and maintain the project milestones, such as the May 2009 closure.

To know how well the team is performing, actual accomplishments are compared against projected completion dates. Here is how the team has done so far in 2008:

Project Schedule

Lift spans complete — **Goal: February 2008** / **Accomplished: June 2008**

This work was completed about four months behind schedule. Work was suspended on the lift spans for a period of time so WSDOT could focus on the truss assembly, which had a more critical timeline. Even though the work finished later than planned, the delayed delivery of the two lift spans to TPS did not affect subsequent operations nor the overall schedule.

Float-out
Fourth cycle pontoons — **Goal: October 2008** / **Accomplished: August 2008**

This work was completed about two months ahead of schedule, which essentially added 60 days into the project schedule to deal with potential challenges. It was important to complete this cycle earlier than originally planned so pontoons UVWX could be joined sooner. Starting this work earlier in the year reduces the risk of delays associated with building roadway decks during the winter.

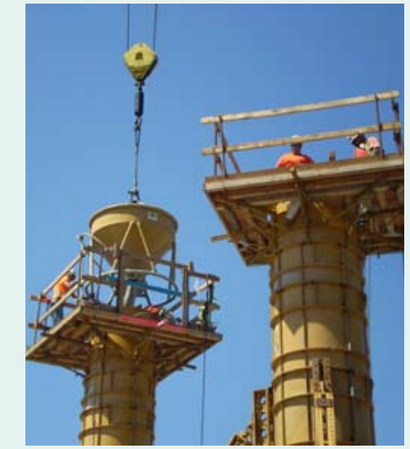
Working draw span — **Goal: December 2008** / **Scheduled: March 2009**

This work is scheduled to be completed about four months behind the initial schedule. Fit-up and installation of the draw span machinery and controls has created some delays, but due to the early completion of the pontoons, the overall schedule is not affected. Managers are actually maintaining these operations and making adjustments with the workforce to ensure construction is completed on time.

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 three milestones accomplished this year are stepping stones that bring the project closer to its completion date and on track to replace the east half in May-June 2009.

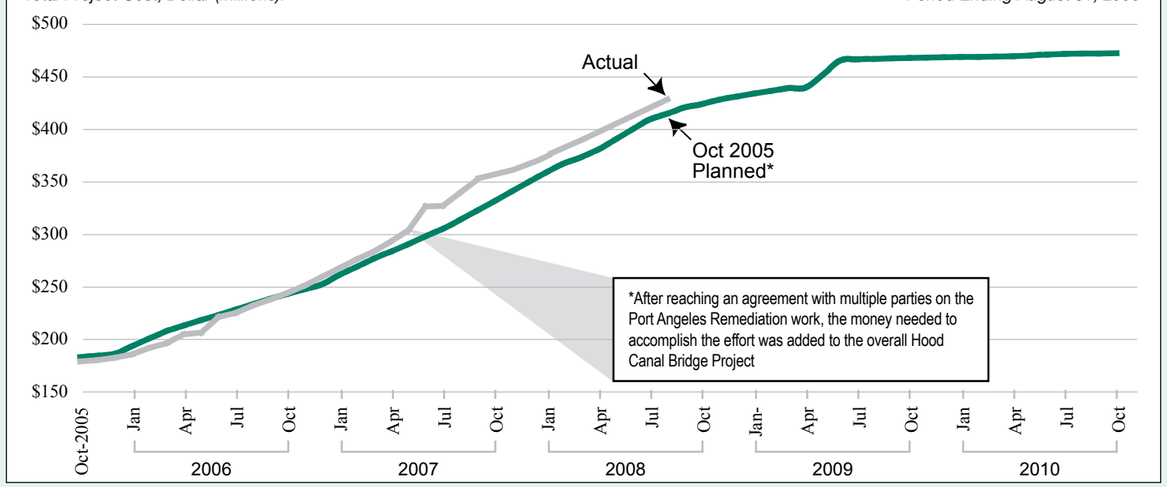
Financial Status
Project Cost Summary — *Period Ending August 31, 2008*

CATEGORY	BUDGET	EXPENDED
Original Commitments		
Port Angeles	$82,741,000	$82,225,000
Bridge Site Work	$41,594,000	$41,694,000
Work in Progress	$81,728,000	$79,664,000
Subtotal Original Commitments	$206,063,000	203,583,000
Modified Commitments		
WSDOT Construction Management	$32,036,000	$21,501,000
Bridge Closure Mitigation	$9,644,000	$2,308,000
New Facilities & Bridge Construction	$223,225,000	$193,895,000
Subtotal Modified Commitments	$264,905,000	$217,704,000
PAR - Port Angeles Remediation		
PAR - Construction & Engineering	$2,300,000	$2,286,000
PAR - Design Engineering	$1,500,000	$738,000
PAR - Settlement & Other Costs	$3,040,000	$2,657,000
Subtotal Port Angeles Remediation	$6,840,000	$5,681,000
Project Total	$477,808,000	$426,968,000

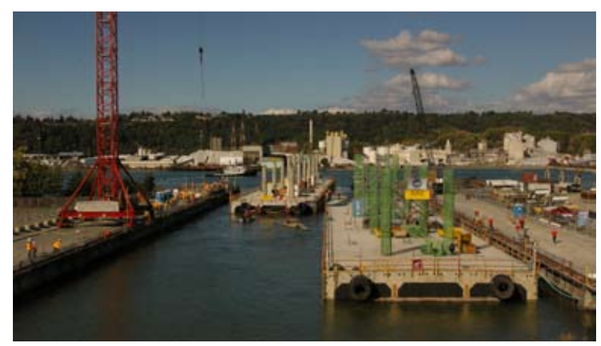


K-G crews place concrete into forms to complete columns on pontoon W. Aug. 14, 2008.

Planned vs. Actual Expenditures
Total Project Cost, Dollar (millions). — *Period Ending August 31, 2008*



Source: WSDOT Hood Canal Bridge Project Office



Pontoons U and W are towed from the CTC graving dock during the fourth cycle float-out. Aug. 1, 2008.

Crews at TPS pour roadway spans on the Z pontoons. Aug. 14, 2008.