

Blog Site 2010

Tuesday, June 1<sup>st</sup>, 2010

## ODOT's first official blog post



*From ODOT- Welcome to the Oregon Department of Transportation's first agency blog.*

I'm Dick Upton, ODOT's project manager for the Interstate 5 Willamette River Bridge replacement project.

As construction work continues, the project team and I promise to keep you updated, informed and I hope even a little entertained by what you read here. We invite you to ask questions and give us comments and feedback along the way.

ODOT is replacing the old I-5 bridge across the Willamette River between the cities of Eugene and Springfield. This is the biggest bridge replacement project ODOT has ever built.

When it's finished in late 2013, the new bridge will keep I-5 traffic moving safely over the Willamette River for the next 100 years and significantly protect and improve the river's health. As part of our commitment to the Eugene-Springfield communities, ODOT also is improving the park lands adjacent to the bridge to enhance the natural habitat and improve mobility for park path users.

We hope you'll like the end result and appreciate our efforts to be a good neighbor during construction.

While this is a moderated blog (please read our blog use and comment policy), I encourage you to post your thoughts and questions- either about what you read here or what you see as you drive, walk or ride your bike past the work zone.

Joining me in posting to the WRB Blog will be Jyll Smith, Public Affairs- Major Project Branch, ODOT. Jyll's current responsibilities include other major ODOT projects, but her ongoing knowledge about the WRB project uniquely prepares her to post to this site.

You can also find lots of project information at <http://www.willamettebridge.org/> and by following @OregonDOT on Twitter.

Posted by [Jyll Smith, ODOT PIO](#) at 12:47 PM

Wednesday, June 9<sup>th</sup>, 2010

### **Everybody likes watching big things being built.**

*From ODOT-*Now's a perfect time to go see the construction of the new I-5 Willamette River Bridge. A great spot to watch the work is from the Knickerbocker pedestrian and bike bridge in Alton Baker Park. Right now, installation of the bridge arch "falsework" is starting on the north bank of the Willamette River. Falsework is the temporary steel and wooden structures used to form the bridge arches. After the falsework is completely framed, steel reinforcing bars—called rebar—will be inserted and tied together to strengthen the arches before workers begin pouring concrete to form them. Contractors will pump high-strength concrete into the bridge falsework from large trucks. Later, once the concrete hardens, the falsework will be removed, revealing the new bridge arches for the first time. The falsework for the first set of arches is scheduled to be removed around August. The falsework is visible from several vantage points, but the Knickerbocker Bridge provides the best vantage point. There you have a perfect view of the construction work on the new Willamette River Bridge. You can return often to watch how construction goes and see the arches take form. Binoculars can give you a close-up view of the work. Enjoy your next visit. ~Dick Upton  
Posted by [Jyll Smith, ODOT PIO](#) at 1:30 PM

Tuesday, June 15<sup>th</sup>, 2010

### **Congratulations to Hamilton Construction for reaching a safety milestone!**

*From ODOT-* Safety is a major focus for all of us at ODOT and our contractors. On our Willamette River Bridge project, Hamilton Construction just celebrated a significant safety milestone with more than 50,000 person-hours worked without a significant injury or accident. For a project expected to take over 400,000 person-hours, current experience says a lot about the projects focus on safety.

Hamilton celebrated with a catered barbecue lunch for all its employees in Springfield's Island Park. They also provide employees with gift cards. In addition, Hamilton makes a gift to a local non-profit organization when its crews reach safety milestones.

Hamilton presented a \$2,500 check to Northwest Youth Corps which is a local non-profit located near the project in the Laurel Hill Valley neighborhood of Eugene. Northwest Youth Corps operates an accredited, alternative high school. It also employs over 1,000 young people, aged 16 to 19, performing outdoor work such as construction and maintenance of hiking trails, bridges, retaining walls, and campgrounds.

From my vantage point, Hamilton demonstrates the quality of company and the project it is managing by its willingness to take the time to recognize employees for their important role in creating a safe work environment and to make a contribution to Northwest Youth Corps.

Please join me in congratulating Hamilton and its employees for their focus on safety and giving back to our community.

~Jyll Smith, Public Affairs for ODOT

Posted by [Jyll Smith, ODOT PIO](#) at 11:29 AM

Wednesday, June 23<sup>rd</sup>, 2010



*From ODOT-*I don't know about you but I'm excited to see the sun is out and the temperatures are starting to climb. For many people, me included, that means getting outside more to enjoy the parks and wilderness in Oregon.

As you are probably aware, the Knickerbocker Bridge provides a great vantage point of the construction of the new Willamette River Bridge. If you are like me, you are curious to know more about what the construction crews are doing. With those two items in mind, we installed two informational signs where the bridge is wider for the benches. These signs will tell you a bit about what construction is currently occurring. I hope you will find the new signs helpful.

~Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 1:40 PM

Wednesday, June 30<sup>th</sup>, 2010

### **Web cast and PSA launched**

*From ODOT-*Summer seems to have finally arrived! The timing is great as we have just launched our second Web cast showing you the construction work that is underway and what to expect this year. After viewing the Web cast, as you walk, run or bike through the Whilamut Natural Area, you will have a better sense of the activity you are seeing.

Please also remember to be careful on the path detours and obey the flaggers. We've created a Public Service Announcement to alert path users of the importance of obeying flaggers. I encourage you to share this with others who enjoy the paths.

Enjoy the sun!

Posted by [Jyll Smith, ODOT PIO](#) at 4:31 PM

Wednesday, July 7<sup>th</sup>, 2010

## Boating and floating safely around the bridge project

*From ODOT-*The hot weather has arrived!! Earlier today I started seeing people floating down the Willamette River to cool off.

I have floated and canoed the Willamette River in years past as I'm sure many of you have as well. You are accustomed to navigating the Willamette River near the I-5 bridge but what you may not know is that the construction has limited the channel you can safely use in the construction area. The Willamette River Bridge project was designed and is being constructed to keep a river channel open throughout construction.

Our contractor built a workbridge over the Willamette to protect the river from construction debris and to provide a work platform. The pilings to support the bridge have restricted the river to one channel through the construction zone. Always stay to the north side of the river, avoiding the channel near the south bank. Signs posted at ramps and in the river will direct you to the safest channel. For your safety, please obey the signs.

Enjoy the wonderful days of summer, use the river safely and check out our project as you go by.

~Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 2:52 PM

Tuesday, July 13<sup>th</sup>, 2010

## The arches are taking shape!

*From ODOT-*



One of the best parts of a major bridge project is watching the construction team work its magic as a structure takes form. Such is the case on the new Willamette River Bridge. As the pictures below show, the outline of the bridge arches is now visible through falsework built to form the arches. Construction of the falsework requires close attention to detail, ensuring appropriate alignment, and safety for the new bridge. The construction team is doing great work as demonstrated by the progress being made. Take a look the next time you're on the Knickerbocker Bridge and start to visualize the gracefulness of the new bridge.



Posted by Jyll Smith, ODOT PIO at 1:18 PM

Friday, July 16<sup>th</sup>, 2010

### **Pouring a column**

*From ODOT- Pictures from the project.*



Pouring a column.



Base of an arch.

Posted by [Jyll Smith, ODOT PIO](#) at 3:33 PM

Wednesday, July 21<sup>st</sup>, 2010

## Ramps and walls

*From ODOT-*

I know people are pleased that the I-5 northbound off-ramp to Franklin Blvd. has reopened. Now, the I-5 southbound on-ramp from Franklin Blvd. is closed through November 30. Glenwood Blvd. remains the detour route.

Rather than close the southbound on-ramp multiple times over the next two years, we decided to close it once for 18 to 20 weeks. During that time, we'll rebuild the ramp to align it with the new southbound bridge, which is higher than the I-5 Willamette River Bridge that it is replacing.

As you have driven through the area, you may have noticed additional work west of the ramp; we are building a sound wall. Over the past year, we spoke with Laurel Hill Valley residents and other community members about the sound wall's design. We also discussed enhancements that would help it blend into the neighborhood. In addition to mitigating traffic noise from the ramp and I-5, the wall has many improvements over our standard design.

I encourage you to check the blog and follow us on Twitter ([@OregonDOT](#)) for updates for the date when the ramp will re-open.

~ Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 3:49 PM

Wednesday, July 28<sup>th</sup>, 2010

### How many bridges will be built?

From ODOT- When ODOT completes its bridge replacement project, how many bridges will there be over the Willamette River? You probably think there will be two- one going south and one headed north over the Willamette. Actually, those are the most noticeable bridges to motorists.

There are two more bridges over the Canoe Canal, north of the river, that are also being replaced.

Besides crossing the Canoe Canal, they pass over a major east-west pedestrian and bike path linking the cities of Eugene and Springfield. These bridges allow local park users to enjoy the Whilamut Natural Area and move easily between the two communities.

Our contractors recently completed the bridge piers, placed the bridge beams, and started construction on the Canoe Canal Bridge deck. Pouring the concrete deck will begin mid-August. Drivers on I-5 won't notice this work, but those walking or riding on the paths in the Whilamut Natural Area will get a very close look.

Make time some nice summer day to walk, ride or run on the Canoe Canal path as it passes through the construction site. We've provided a map to make your trip easier. Enjoy!

~Jyll



Posted by Jyll Smith, ODOT PIO at 10:26 AM

Wednesday, August 4<sup>th</sup>, 2010

### Construction activity over Franklin Blvd.

From ODOT- If you are like me, driving through a construction zone always puts me on alert, not only am I wanting to look to see what work is taking place but also watching for lane changes, workers in or near the roadway and equipment. If you travel on Franklin Boulevard as it passes under Interstate 5, you've noticed a lot of activity.

In recent weeks, work crews have closed at least one lane in each direction, driven pile in the middle of the roadway to support bridge falsework, and erected and poured bridge piers on either side of the roadway. All of this activity is taking place while traffic continues to move between Eugene and Springfield.

As construction progresses, watch for future lane closures and shifts when construction actually begins on the bridge overhead. At times it might feel more like going through a tunnel than under a bridge, but traffic will always move between the two cities, with minimal delays.

Please be alert to the ongoing activity on the new Willamette River Bridge as it passes over Franklin Boulevard.

~Jyll



Posted by [Jyll Smith, ODOT PIO](#) at 3:41 PM

Wednesday, August 11<sup>th</sup>, 2010

### **A year ago today...**

*From ODOT-*

A year ago today, we broke ground for this project. Thinking back to that day and looking at where the project is today, all I can say is "Wow!" The construction team has done amazing work.

With golden shovels flashing in the August sun, transportation advocates U.S. Sen. Ron Wyden and U.S. Rep. Peter DeFazio helped ODOT Director Matt Garrett and a number of local officials break ground to begin construction on the Willamette River Bridge.



Today it was fitting for ODOT to host a tour with local state elected representatives. The representatives learned about stream enhancement, river protection and safety around the project and the process of building the bridge.

I encourage you to take a tour of the project. Tours are regularly scheduled on the second Wednesday of each month at 10 a.m. Tours are limited to a maximum of 15 participants. Sign-up in advance is required by contacting John Lively at (541) 484-7052.

~ Jyll



Officials being briefed on stream enhancements and Mill Race ruins as part of the WRB project.



Director Garrett, Senator Chris Edwards and other officials looking south towards columns and construction around Franklin Boulevard.

Posted by [Jyll Smith](#), ODOT PIO at 5:07 PM

Friday, August 13<sup>th</sup>, 2010

## Intersection safety



*From ODOT-*

Last week we received comments about safety on the path in the area just north of Knickerbocker Bridge where paths from all directions merge into one very busy intersection. If you frequently use the paths near the Willamette River Bridge project in the Whilamut Natural Area you are familiar with this area. I encourage you to use caution at all times and follow the signs and flaggers.

Good news is this intersection is temporary during the duration of the project. Currently, now it balances safety and ongoing mobility for path users and construction traffic. Land use regulations and discussions with key stakeholders were also considered when this configuration was created.

I encourage you to slow down and observe path traffic in this area so you minimize risk to yourself and other path users. We have recently moved construction fencing and added signage to increase visibility and awareness of this key intersection. Please be alert through the area and stay safe.

On another note, users of the Canoe Canal Path as it passes under I-5 should watch for concrete water dripping from overhead. The bridge deck was poured on Thursday, Aug. 12, and the dripping will continue for the next two weeks as the new deck dries.

With the heatwave this weekend, stay safe!

~Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 2:18 PM

Thursday, August 19<sup>th</sup>, 2010

## **Canoe Canal Bridge progress**

*From ODOT-*

With the completion of the deck on the new southbound Canoe Canal Bridge, we have reached another milestone on the Willamette River Bridge project. Once the deck is cured, it will be ready for use, and we can proceed to demolish the remaining decommissioned Canoe Canal Bridge just east of the new bridge. The remaining decommissioned bridge was used as a work bridge for building the new Canoe Canal Bridge.

If you use the Canoe Canal path daily, the upcoming work to demolish the bridge will require some adjustments for one or two days. Because the demolition occurs directly overhead, people using the path will be detoured south to the north bank path and will pass through the construction of the new Willamette River Bridge. Flaggers will direct you to the designated route. You will be on a very rough gravel path that will require dismounting and walking your bike.

I appreciate your cooperation and extra awareness as the remaining bridge is demolished. Our commitment remains to keep an east/west route open at all times in the safest possible manner, but you may experience some inconveniences.

~Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 2:22 PM

Friday, September 3<sup>rd</sup>, 2010

### **Coordination is key**

*From ODOT-*I don't know about you, but setting meetings, coordinating with others and meeting deadlines is an ongoing effort. The same is true with building a bridge, but multiplied many times.

To complete the new Willamette River Bridge on time and on budget requires ongoing coordination with a large list of agencies that have jurisdiction or are affected by the project. Most people are aware of the need for environmental assessment, land use permits, and construction permits. But construction also impacts power lines, water lines, underground cables and the railroad.

Careful timing and cooperation minimizes the risk of any disruptions to service, while allowing bridge construction to proceed. In some cases utilities have to be moved or at least temporarily relocated to minimize the risk of service disruptions. Locations of bridge supports have been adjusted to avoid existing under ground services. And in the case of the railroad, working in the right of way and building overhead, requires precise coordination to avoid slowing trains and maintain safety.

While all of this is a lot to negotiate and coordinate, our team and the affected agencies continue to work closely to avoid service disruptions and keep the project on schedule.

~Jyll

Posted by Jyll Smith, ODOT PIO at 4:41 PM

Friday, September 10<sup>th</sup>, 2010

## **Congressman Jim Oberstar (D-Minnesota) visits**

*From ODOT-*

On Wednesday, Sept. 8, Congressman Jim Oberstar (D-Minnesota), chairman of the House Transportation and Infrastructure Committee, and Congressman Peter DeFazio (D-Oregon), chairman of the House Subcommittee on Highways and Transit, arrived in style thanks to Emerald City Rickshaw for a quick site tour of the Willamette River Bridge project.



"It's significance to the national economy-- three percent of our gross domestic product passes over this 2,000 mile roadway. And this critical link that is what makes a difference," said Oberstar.

Oberstar was in town as part of a tour of the Pacific Northwest to view stimulus-funded projects, push for job creation through infrastructure spending and gather support for the reauthorization of the transportation bill.



Posted by Jyll Smith, ODOT PIO at 2:30 PM

Thursday, September 16<sup>th</sup>, 2010

*From ODOT-*

*For me the Willamette River Bridge project is more than just building a bridge. It is the Oregon Department of Transportation's largest current bridge project. It's also an opportunity to leave a very special place even better than when the construction started.*

*Surrounding this project is the Whilamut Natural Area and major east-west pedestrian paths used daily by Lane County citizens. Currently, ODOT and the contractor are limiting the impact of construction on the natural areas and keeping pedestrian paths open and safe.*

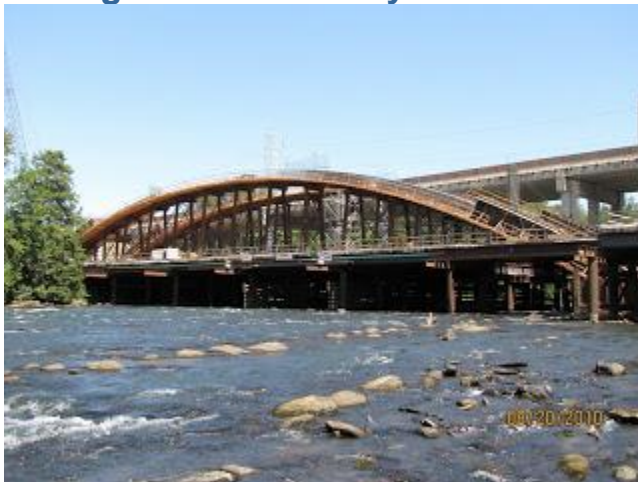
*When the bridge is complete, you will see improved paths, natural areas restored with greater numbers of native species and new park art and features complementing the already beautiful environment.*

*I appreciate the hundreds of hours spent by volunteers and key stakeholders to guide the ongoing efforts to restore and enhance the natural environment. Your input is always welcome, either through this blog or through the contacts listed on the Willamette River Bridge website.*

Posted by John Lively at 12:23 PM

Friday, September 24<sup>th</sup>, 2010

## **Saving time and money**



*From ODOT-*

The Willamette River Bridge project is ODOT's largest bridge replacement project to date. We work closely with our contractor to find opportunities to save time and money, while constructing a bridge designed to last 100 years.

Recently, we agreed to purchase steel ahead of schedule to start building the second work bridge a year earlier than originally planned. This allows us to complete some work before this year's in-water work windows ends. For this project working in the river is restricted to windows of time between July and October and the month of April in order to protect endangered and sensitive species in the Willamette River.

Early completion of the work bridge means the contractor can dismantle the detour bridge and do other preparatory work on the northbound Interstate 5 bridge at least six months earlier than originally expected. Saving time helps to save money.

~Jyll

Posted by [Jyll Smith, ODOT PIO](#) at 1:10 PM

Friday, October 1<sup>st</sup>, 2010

## **Sound wall work along I-5 southbound on-ramp**

*From ODOT-*

Timelines on a construction project are based on many factors, including scheduling work to limit mobility impacts that may be required. We focus on providing notice of potential delays, alternatives available and how long the changes will be in place.

Earlier this week, a comment was posted regarding completion of the sound wall along I-5 southbound on-ramp from Franklin Boulevard. The on-ramp was closed on June 21 of this year with an expected re-opening date of November 30. The opening date is now slated for December 30. By extending the date, we can complete the new sound wall adjacent to the Laurel Hill Valley neighborhood during this construction season. We are now installing the block for the wall. Finishing touches, including landscaping, will occur later this year or early next year. See my comment on the July 21- Ramps and Walls post for more details. Completion of the sound wall and re-opening of the on-ramp is something we at ODOT look forward to along with, I am sure, all those who live in the Laurel Hill Valley neighborhood.



Posted by [Jyll Smith, ODOT PIO](#) at 3:47 PM

Wednesday, October 6<sup>th</sup>, 2010

## Tree wall shields park users of freeway noise

*From ODOT-*

Original plans for the Willamette River Bridge included removal of existing trees west of Interstate 5 and north of the bridge. Early on, local community stakeholders identified the importance of preserving these trees, which shield park users from the noise of the freeway.

We took the stakeholder's interest seriously. The best solution turned out to be a tree wall along the west side of the southbound I-5 lanes just before the bridge. The wall preserves the trees and provides an edge for the widened southbound lanes without increasing the width of the embankment impacting the trees.

For more information on additional environmental measures we're taking with the I-5 Willamette River Bridge, check out this article from HubDOT, written by ODOT environmental program manager Geoff Crook: [Bringing new life to the Willamette River Bridge](#).

Below is a picture of the now completed wall being constructed.



Posted by Jyll Smith, ODOT PIO at 4:11 PM

Friday, October 8<sup>th</sup>, 2010

## National Science Foundation and the Willamette River Bridge



*From ODOT-*

Earlier this week I had the privilege of escorting a film crew associated with Oregon State University, the Harvard-Smithsonian Center for Astrophysics Science and the National Science Foundation around the WRB project. The end product is a NSF piece for classroom use, aimed at students who are having a harder time grasping math concepts as they apply to real world.

This bridge project attracted them because of the unique arches that will support the new bridges. The arches, which may appear decorative to the casual observer, are actually highly technical, carefully engineered supports based on a modern update of construction principles used in the Roman Empire. The process to construct the arches requires a series of complex steps executed perfectly in concert- from the wooden arch structure and rebar cages that will frame poured concrete to the casting of the crown used to support the weight of both sides holding the arches together and providing the necessary strength for the overall bridge structure.

In addition to interviewing the project manager and a couple of engineers, the crew also interviewed one of the carpenter apprentice workers. She explained how she uses fundamental physics and math everyday in her job on the construction site.

Once the video and supporting curricular materials are completed, the NSF will make the materials available for free download through an associated website and catalogued by the NSF National Science Digital Library.

Posted by [Jyll Smith, ODOT PIO](#) at 3:25 PM

Friday, October 15<sup>th</sup>, 2010

## **Bridge design and enhancements**

*From ODOT-*

Meeting since 2008, members of the Citizen Advisory Group and Project Development Team have provided invaluable input regarding bridge design and enhancements in the open space surrounding the bridge. Recently they approved a request for proposals for art



to be installed above the deck -- that is, next to Interstate 5 just north or south of the bridge. They also agreed to the next steps for development of art pieces on the south and north banks of the Willamette River.

Pictured below are two of the enhancements currently being developed. Additional information can be obtained by going to our website at <http://www.willamettebridge.org/> as well as participating in opportunities early next year to view refinements to these and other concepts. We will keep you informed as meetings are scheduled.



The columns have been recommended based on having some remains of the old structures in place reminding current and future citizens of previous bridges that were here along with something to compare the new columns to.



The dovetail designs for the path represents the passing from one city to the next while at the same time showing the two communities are linked by the connection of the paths under the bridges.

We are excited to watch these designs progress and look forward to the public conversations that will contribute to them.

Posted by [Jyll Smith, ODOT PIO](#) at 1:43 PM

Tuesday, October 19<sup>th</sup>, 2010

## **Building the arches**

*From ODOT-*



Have you wondered what is going on at the bridge site as you ride or walk by? The pictures below show workers pouring concrete into the arch ribs that will take shape between the roadway and river.



Once the concrete is placed, crews will remove the vertical structures you see supporting the arches.

Bridges are enormous structures. Here workers are inside one of the arch reinforcement tunnels that are now being filled with concrete. Seeing how small the workers look inside the tunnel offers some perspective of just how big it is.



Posted by [Jyll Smith, ODOT PIO](#) at 1:13 PM

Wednesday, October 27<sup>th</sup>, 2010

## **Traffic delays on Franklin Boulevard**

*From ODOT-*

The project is about to reach another milestone. The final supports and falsework for the Willamette River Bridge are about to be built south of the river, spanning over Franklin Boulevard.

Once the supports are in place, we can begin building the bridge from the north side of Franklin Blvd. to where it connects with Interstate 5 on the south side.

November 1-3, the right hand lanes of Franklin Blvd. will be closed due to construction activity starting at 5 a.m. and continuing until 5 p.m. daily. Expect traffic delays in both directions for up to 20 minutes as beams are placed over the roadway.

Be sure to slow down and follow the instructions of flaggers and construction warning signs throughout the project area.



This view from Franklin Blvd. is about to change as we build the new bridge overhead.

Posted by [Jyll Smith, ODOT PIO](#) at 3:16 PM

Friday, October 29<sup>th</sup>, 2010

## **Above deck enhancements**

*From ODOT-*

Did you know that long before there was a bridge over it, the Willamette River was vital to the Kalapuya Tribe for commerce, travel, carrying news and as a source of food. The river is the center of many stories handed down by the Kalapuya over time. One story is how the Coyote tricked the Frog Sisters into releasing water into the valley, creating the river.

What do Kalapuya culture and stories have to do with the new bridge? In building a bridge and including art enhancements, we have a unique opportunity to create greater awareness of the Kalapuya and other historical and natural features of the area.

Information on the Kalapuya culture, other proposed enhancements, available space, and maintenance requirements were just some of the topics discussed at an informational meeting on Oct. 25 for artists interested in proposing design enhancements adjacent to the roadway near the new bridges.

I am proud of the efforts of our team to engage in ongoing dialogue to discover the range of opportunities for displaying the historical significance of the area surrounding the bridge.

Watch for results of these efforts when final enhancements are built in late 2013 or early 2014.

Posted by John Lively at 1:19 PM

Wednesday, November 3<sup>rd</sup>, 2010

### **Welcome three new ODOT bloggers**

*From ODOT-*We all experience change in our lives. With change comes the opportunity for growth and new experiences. Such is the case with the Willamette River Bridge project team. Dick Upton, who has been key in the project's success as the ODOT Project Manager since the fall of 2008, has accepted a new assignment at ODOT.

With that change, I welcome three new ODOT bloggers: Ray Mabey, Sonny Chickering and Karl Wieseke.

Ray, the OTIA III Bridge Delivery Unit manager, assumes responsibility for overall project management. Sonny, the Area Manager responsible for delivering projects throughout Lane County, is assuming project stakeholder involvement, working with the Citizen Advisory Group, Project Development Team, Design Enhancement Steering Committee and local government entities. Karl will continue his steady hand as Construction Project Manager.

Welcome Ray, Sonny and Karl!

Posted by Jyll Smith, ODOT PIO at 3:59 PM

Thursday, November 4<sup>th</sup>, 2010

### **Willamette River Bridge Blog wins award!**

*From ODOT-*As many of you know, this is ODOT's first blog- we started it in June to keep you informed about the Willamette River Bridge project and to share interesting tidbits and other information about the project's progress. Last Thursday night the Portland Public Relations Society of America awarded ODOT a prestigious Spotlight Award and I had the privilege of accepting it on behalf of the team whose work has contributed to the blog's launch.

We are thrilled that the Portland PRSA recognized our efforts with a Spotlight Award, and look forward to continuing to keep you informed and answer any questions you may have about the project. (As always, if there's anything specific you'd like to see here, please let us know by leaving a comment.)

Congratulations to each of the team members who make the blog possible, and thanks to each of our readers for your support!



Jyll Smith and Karen Jones Jackley accept a 2010 PRSA Spotlight Award for the Willamette River Bridge.  
Posted by [Jyll Smith, ODOT PIO](#) at 1:10 PM

Monday, November 8<sup>th</sup>, 2010

## **New Opportunities**

*From ODOT-* Writing for the I-5 Willamette River Bridge project blog is a new experience for me. I'm looking forward to joining the ongoing dialogue around this important project and providing you with timely and interesting information. You've all no doubt heard about the [OTIA III State Bridge Delivery Program](#). My job is to manage this 10-year program for ODOT which WRB is a part of. I have an uniquely vested interest in the program - nine years ago I was ODOT's bridge load rating engineer who lead ODOT's study of distressed state and local bridges that prompted the Legislature to create the OTIA program. I assumed leadership of the I-5 Willamette River Bridge project in September and am impressed with the ongoing efforts of our team and the local communities to build a project that respects and responds to the local community and preserves and enhances the special attributes around the project area. Even though I've worked in the structural engineering field for 21 years, I am excited by the unique project management opportunity the Willamette River Bridge project provides. I look forward to sharing my perspective on our progress as we move forward together.

Posted by [Raymond Mabeyat](#) 4:20 PM

Friday, November 12<sup>th</sup>, 2010

## **Canoe Canal Path safety**

*From ODOT-* If you have been under the Canoe Canal Bridge lately, you may have noticed part of the old south embankment has been removed. This has improved visibility on what was a dangerous curve in the Canoe Canal Path, making the east-west commute safer for pedestrians and bicyclists.

Our decision to do this came out of discussions with path users about acceptable detours, how to keep an east-west route open at all times, and other changes to increase safety during construction in the Whilamut Natural Area.

We removed the embankment material with minimal impacts to path users and before the winter rains began, which would have delayed the safety improvement until next year.

This is just one example of the unique opportunities we have to work collaboratively with local stakeholders. I'm reminded of the success of these efforts as I look at some of the many improvements already completed around the bridge project. Ongoing coordination and communication between the project construction team, the local communities and park users will continue through completion of the new Willamette River Bridge in spring 2014.



Posted by [Jyll Smith, ODOT PIO](#) at 2:26 PM

Tuesday, November 16<sup>th</sup>, 2010

### **Next steps in the arches**

*From ODOT-* I am continually amazed with how fast things change on the Willamette River Bridge project.

This week the contractor will install the final steel supports for the bridge framework. The outline of the entire new southbound Willamette River Bridge is now visible in the steel and wood framework crossing over Franklin Boulevard, park paths, the railroad track and the I-5 on- and off-ramps to Franklin Boulevard.

Getting ready to pour the bridge is similar to the preparation for building the foundation of a house, but on a far greater scale. Crews have started to pour the concrete that forms the bottom of the bridge box girder beams south of Franklin Boulevard.

You'll see how this was done on our blog in the next few weeks through a series of close-up photos. Crews have framed and poured bridge columns, erected steel support structures, built wooden frames, installed rebar and completed all preparations to pour the concrete for the bridge.

The next time you are in the area, take a look at all the work going on overhead. By the fall of 2011 it will result in completion of the new southbound Willamette River Bridge.



Posted by [Jyll Smith, ODOT PIO](#) at 3:29 PM

Thursday, November 18<sup>th</sup>, 2010

### **OIT students tour project**

*From ODOT-Yesterday*, on their way from Portland to Klamath Falls, 12 Oregon Institute of Technology students and two instructors took the time to tour the Willamette River Bridge project. The students, including 11 seniors and one sophomore, wanted to gain a better understanding of how to manage a complex construction project. The discussions ranged from dealing with multiple jurisdictions, coordinating contractors, protecting environmentally sensitive areas and scheduling construction activities.

As they toured through the site some of the reactions were "Fantastic," "I didn't realize how complex it would be" to the bridge will be "a beautiful addition to the community." The students climbed to the top of the falsework to watch the pouring of box girders beams, walked across the work bridge observing multiple activities occurring in a very small area and stood on top of one of the arches discussing the projects next steps: finishing the arches and moving to the next phases.

Using cell phones and small cameras, the students captured many images for use in future discussions and summaries of the visit. At the conclusion they were excited to learn that a blog exists, so they can follow the progress from their campus in Klamath Falls.

Many of the students hope to work on very similar projects when they complete their



studies.

Posted by [Jyll Smith, ODOT PIO](#) at 11:14 AM

Friday, November 19<sup>th</sup>, 2010

## Arch ribs photo story- part 1 of 4

*From ODOT-*In the next two months, we'll reach another major milestone on the new Willamette River Bridge: the closing pours will complete the first set of deck arches.

The arches for the new southbound I-5 bridge will sail gracefully upward from their foundations and may appear decorative to the casual observer, but far from it. They are actually highly technical, carefully engineered supports based on a modern update of construction principles used by engineers to build bridges and aqueducts during the Roman Empire, 2,000 years ago. The process to build the arches requires a series of complex steps executed perfectly in concert.

To give you a close-up look at each step in the process, we'll post photographs over the next few weeks showing the various stages of the arch construction. This week, we'll start by taking you 50 feet underground for the first stage of the arch ribs process.



Most structures - from the smallest garage to the tallest skyscraper - start with a sturdy foundation. Before ODOT's team could start building the arches they had to make sure the whole structure would connect with solid ground, or what project engineers call "competent rock." To reach that ground, they had to drill down about 50 feet and install rebar-reinforced, poured-concrete drilled shafts. The southbound structure requires 20 drilled shafts in total, which crews were able to build in only 30 days. These shafts will support and distribute the weight of the bridge and the traffic it carries for the coming decades.

Once the holes are drilled, crews installed a rebar cage that provides critical strength for the concrete that fills the shaft. Crew members were lowered into the shaft to inspect the work, ensure everything was correctly placed and make last-minute changes before the contractor poured the nearly 100 cubic yards of concrete that filled each shaft.





Next time: shaft caps.

Posted by [Jyll Smith, ODOT PIO](#) at 1:13 PM

Tuesday, November 23<sup>rd</sup>, 2010

### **Safety tips**

From ODOT-The Thanksgiving weekend is the busiest travel weekend of the year. As thoughts turn to celebrating with family and friends, we will suspend construction on the Willamette River Bridge project from Nov. 25 through Nov. 28.

Although actual roadwork will pause for the holiday, the work zone is still considered "active." The on-ramp from Franklin Boulevard to southbound I-5 is still closed, park path detours are still in effect and equipment is still in the area.

There are many standard safety tips to follow, but my top-three favorites are:

- Obey the speed limit - remember that fines double in highway work zones.
- Wear your seat belts - Oregon is joining traffic enforcement nationwide to reduce crashes, injuries and deaths during the holiday period's special *Click It or Ticket* enforcement effort.
- Stay sober and alert - don't drink and drive or get into a vehicle with a driver who has been drinking.

On a related note, I've recently learned that, statewide, there's been a significant increase in pedestrian vs. auto accidents compared to the same time last year. Many pedestrians and bicyclists share the paths in Alton Baker Park. Some of the paths near the work site are now affected by construction detours as well as the dark and wet conditions of winter. Please use extra caution on the paths and on the roadways.

Our entire ODOT and Hamilton Construction team urges you to drive carefully and plan for extra time to reach your destination during the weekend.

Have a safe and fun holiday!

Posted by [Jyll Smith, ODOT PIO](#) at 1:36 PM

Wednesday, December, 1<sup>st</sup>, 2010

## **The Rain is Here**

*From ODOT*-Hi, Karl Wieseke here from ODOT's Springfield area office. As ODOT's construction project manager on WRB, I see firsthand how the weather affects our construction activities.

The rainy fall and winter months present new challenges to ODOT's commitment to minimizing impacts to the environment by ongoing construction activities.

Over the past several weeks, ODOT and our contractor, Hamilton Construction and their subcontractors, have prepared the work site to minimize the impacts of rain and to keep construction on schedule and within permit requirements.

- We have seeded bare slopes and open spaces, or covered them with straw to absorb and better control runoff.
- Hamilton Construction crews inspected the work bridge and made necessary adjustments to ensure that it captures and treats all the runoff before it reaches the Willamette River.
- We have cleaned out drift logs stuck around and under the work bridge to avoid potential problems from rising river levels brought on by winter rains.
- We have also checked equipment for appropriate protection to capture any possible oil or lubricant leaks mixing with rainwater.

Together, ODOT and Hamilton Construction are determined that when the bridge work is done, the work area, riverbanks and adjacent parklands will be in better condition than before we started work.

Posted by [Karl Wieseke, ODOT Construction Project Manager](#) at 9:24 AM

Thursday, December 2<sup>nd</sup>, 2010

## **Arch ribs photo story- part 2 of 4**

*From ODOT*- Over the last few months we've posted photos of work on the Willamette River Bridge, but as the southbound bridge arches near completion, let's look back at how they took shape. We've seen how the crews installed a rebar cage that provides critical strength for the foundation of the bridge. Next we'll explore the point where the arch ribs touch down - a point where we can begin to see the construction of the arch frame.



On top of the drilled shafts that anchor the bridge in place sit custom-designed shaft caps. The caps at each point where the arch ribs touch down are unique, created to perfectly match with the ribs and the bridge's vertical supports. At the single touch point in the middle of the Willamette River, building the shaft cap was exceptionally challenging. This point will support not only the north- and southbound arch ribs, but also two vertical pillars. This center shaft cap is 8 feet wide, 12 feet tall and 6 feet thick. It is shown here with rebar cages coming out of the top to frame the vertical supports and the arch rib connection points sprouting from its sides.



While one part of the team dug deep below the river, another was busy building a frame high above the work bridge to the support for the falsework that would shape the reinforced concrete arches. During construction, this frame will provide critical support to both the arch and the crews working on its construction.

Next time: framing the arches and building the skeleton.

Posted by [Jyll Smith, ODOT PIO](#) at 4:28 PM

Tuesday, December 7<sup>th</sup>, 2010

### Arch Ribs photo story part 3 of 4

*From ODOT-*This is part three of our series on the creation of the deck arches that will support the new Willamette River Bridge, and will be beautiful, graceful structures in their own right.

First, we saw how the foundations are built to provide support for the arches. Then, we learned how the arches will connect, and saw the initial formation of the arch frames. This week, we will see how wooden frames and concrete pours shape the columns and arch frams.



In the foreground of this picture are the vertical support spandrels, which were built using the same method as the arch ribs. Based on the rebar-cage frame, crews built wooden forms to define the shape of the columns, filled them with poured concrete in sections and once the concrete is cured, removed the forms to reveal the finished columns.

On top of the steel falsework support frame, crews built a wooden frame to provide a safe platform for the workers and a steady foundation for the massive rebar cages that form the backbone of the arch ribs.



Rebar cages provide support for the concrete, which is poured in sections. The strength of the steel physically ties each section

together, making a single, continuous arch out of individually constructed segments. The reinforcing steel used on the Willamette River Bridge is the largest diameter available and weighs about 13 pounds per foot. With such a heavy frame, once the arch ribs are poured they will tip the scales at more than 11 million pounds.



In this photo, ironworkers prepare the rebar cages for the wooden forms that surround them and give shape to the poured concrete arch sections.

Next: framing and pouring the arch ribs.

Posted by [Jyll Smith, ODOT PIO](#) at 10:48 AM

Thursday, December 9<sup>th</sup>, 2010

## **Southbound on-ramp to reopen Dec. 15**

*From ODOT-* On June 21, we closed the Interstate 5 southbound on-ramp from Franklin Boulevard to continue work on the Willamette River Bridge project. When the ramp reopens on Dec. 15, you will see many changes, such as:

- The ramp, now higher and wider, merges more smoothly with I-5.
- New lighting improves visibility at night.
- New retaining walls support the raised roadway.

The most visible change is the new sound wall on the west side of the ramp to decrease traffic noise in the Laurel Hill Valley Neighborhood.

The design on the east side of the sound wall represents a sound wave as it travels from the foothills to the valley floor. On the neighborhood side, our contractors installed sculptured concrete representing local geologic forms such as Judkins Point, Coburg Hills, Mount Pisgah and Laurel Hill.

This reopening is a significant milestone on the way to wrapping up construction of the southbound Willamette River Bridge.

Thanks for your patience during the construction work. We really appreciate it.

Posted by [Jyll Smith, ODOT PIO](#) at 9:36 AM

Monday, December 13<sup>th</sup>, 2010

### **Arch rib photo story part 4 of 4**

*From ODOT-*In the past few weeks, we have explored how the Willamette River Bridge deck arches are built. We started with the steel-reinforced shafts that provide a support for the arches. Then, we described the intricate work to connect the arches with the foundation. Next, we saw the skeletal elements of the arches. Now we will see what gives the arches their strength and makes up the part that is actually visible. The picture at the top of our blog page can help you visualize the finished arches.



With the rebar arch skeleton in place and the first of the arch forms built, trucks started lining up to provide a constant supply of fresh concrete to pour the arches. The intricate twists and bends of the rebar cages create a challenge: Air bubbles, poor mixture or inconsistent filling of the form can lead to weaknesses in the concrete, compromising the integrity of the arch. To avoid this, the team brought in a local concrete-mixing expert to oversee the process. This specialty contractor developed a variety of "concrete cocktails" that resulted in a mixture capable of flowing almost like water to fill every nook and cranny within the arch form, yet able to strengthen enough to support the bridge.

Next: Watch for the crown pouring and the jacking of the arches.

Posted by [Jyll Smith, ODOT PIO](#) at 3:57 PM

Wednesday, December 15<sup>th</sup>, 2010

### **Ready to stand on our own two arches**

*From ODOT-* This week marks the beginning of the end for completing the reinforced concrete arches that will support the southbound Interstate 5 bridge deck.

Over the past few weeks, this project blog has included details on building the deck arches.

The final step is a precise process to pour the final link at the top of each arch to complete its graceful curve. This will ensure that the bridge arches meet the designed strength requirements while raising them just high enough to remove the supporting falsework that was used to create them.

The construction team will start by placing big hydraulic jacks in the opening at the center of the northernmost set of arches. Crews will then slowly jack the arches up and apart about six inches and then pour the last of the concrete to finish each arch. Once the concrete has cured, the construction falsework will be removed and the arches will stand without their wooden "arch supports."

We'll repeat the process on the second set of arches in January. Construction will then focus on the new bridge deck.

While you won't actually notice the arches moving as they are slowly jacked apart over the course of several days, they will be. We'll post close-up photos of this careful and challenging work here for you to see.



Posted by [Jyll Smith, ODOT PIO](#) at 4:46 PM

Thursday, December 16<sup>th</sup>, 2010

## **WRB Impacting Local Economy**

*From ODOT-* I am proud of the progress on the Willamette River Bridge project and the positive impact the construction has had on the local workforce and contracting community. This is the biggest bridge replacement project in Oregon's history, with a large crew working diligently to complete the project. There are a wide range of subcontractors supplying material and services. In fact, there are more than 50 contractors and subcontractors working on the project from as far away as Vancouver, Washington and south to Coquille, Oregon. The majority of the subcontractors are from Lane County and surrounding area.

Some of the services provided by these contractors include engineering, surveying, demolition, paving, fencing, seeding, mulching, erosion control, striping, flagging, job site security, and sweeping - to name a few. Local suppliers provide materials for welding, pile driving, scaffolding, and on the job safety. I hope you too can gain an appreciation for the positive impact this project is already having and will continue to have in the local economy.

Posted by Raymond Mabeyat 11:13 AM

Monday, December 20<sup>th</sup>, 2010

*From ODOT-* I imagine that those who live in the Laurel Hill Valley Neighborhood appreciate that our sound wall construction is nearly complete. Some of you may have noticed that the side facing the neighborhood is enhanced with sculptured concrete representing local geologic forms. Vegetation will be planted later in the areas not covered by this architectural treatment. The sculpted concrete design was chosen by the Laurel Hill Valley Neighborhood last year. Throughout the input process, it was explained that the sculpted design elements would be used as accents at intermittent points, instead of along the entire wall. The amount of wall that would ultimately be covered by the sculpted concrete design was determined as the overall project budget was refined. As stewards of the public funds, it was important for us to make a fiscally responsible decision. That is why we placed the design treatment on the most highly visible areas of the new sound wall that will not be covered by vegetation. Information provided to the public included renderings of this design that evolved over time as we learned more about the resources available to us. The patience of the nearby residents with the noise and disruptions during construction made finishing the job easier. This wall is designed to reduce the overall noise levels we expect from projected increases in traffic on I-5 over the next 20 years. All that remains is straw mulching the soil for the winter and installing plants that will eventually grow onto the sound wall and cover the slopes of the retaining wall. Over time, the growing vegetation will blend with the sculptured elements to create a look that I think will nicely complement the wall.



(Picture of the wall today and rendering of the wall as it will look once vegetation grows in.)



Posted by Karl Wieseke, ODOT Construction Project Manager at 12:53 PM

Wednesday, December 20<sup>th</sup>, 2010

### Happy Holidays!

*From ODOT-* Over the next two weeks, work on the Willamette River Bridge replacement will all but stop as crews take some well-deserved time off to celebrate the Christmas and New Year's holiday. The minimal work you may see will be preparation to complete the deck arches and the final pouring of concrete on the first set of arches. Please remember that while crews may be away for the holidays, the construction zone is still active and work zone speed limits are still in effect. We wish you a joyous and safe new year!

Posted by [Suzanne Roberts](#) at 10:35 AM

Wednesday, December 29<sup>th</sup>, 2010

### Close up pictures of the new beams

*From ODOT-* This blog gives people an opportunity to see components of the Willamette River Bridge construction up-close that they otherwise wouldn't get to see. Now that the arch ribs have been successfully jacked, work has begun on the next stage of the bridge; placing precast beams.

The concrete structures shown below are precast beams that will eventually support the bridge deck over the project's graceful arches. Unlike the arches and other bridge components-- which we are building, forming and pouring on site-- these beams were brought in already formed; we simply put them into place.



The wood handrails on top of the beams are part of a temporary walkway that allows workers to move from one arch to the other without having to go up and down stairs.



Contractors laterally brace the falsework used to frame and pour the arches to ensure they're the same distance apart and remain aligned as work continues. As shown below, these braces have an impressive appearance



both from a distance and up close.



Posted by Jyll Smith, ODOT PIO at 4:01 PM