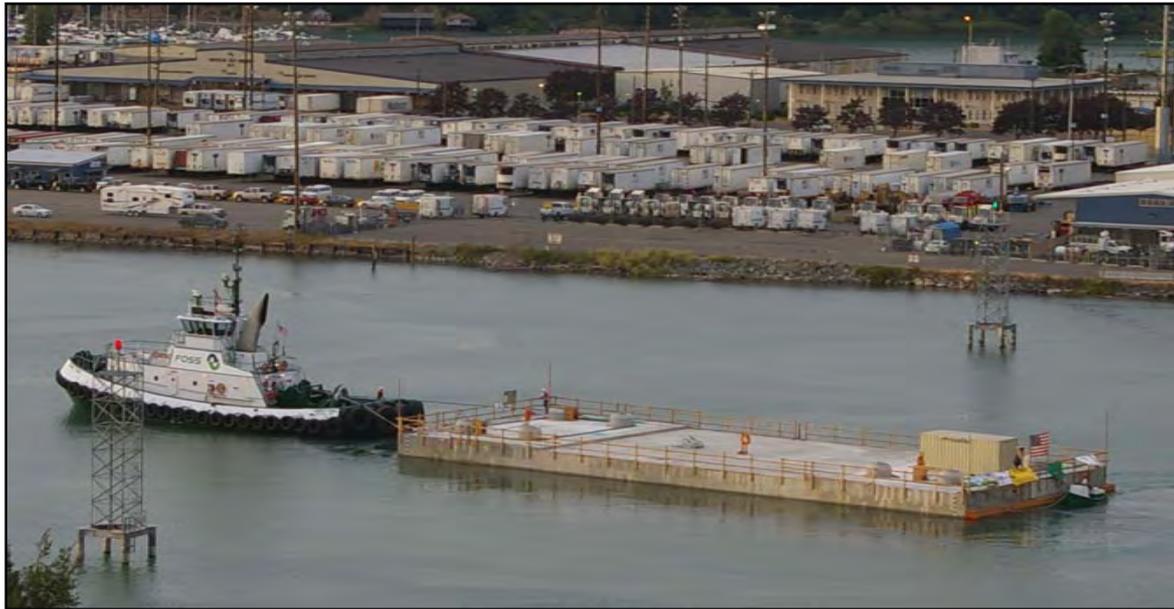


## Hoquiam Rotary Meeting Pontoon Construction Project Overview



January 29, 2009

# Presentation agenda

- Overall SR 520 Program Description
- Pontoon Construction Project
- Advanced Construction Methods and Engineering  
**(NEW)**
- Next Steps in 2009



# SR 520 Program description

The SR 520 Corridor Program will replace the Portage Bay and Evergreen Point bridges and improve existing roadway between I-5 in Seattle and SR 202 on the Eastside.

The SR 520 Corridor Program includes four projects:

**Urban Partnership** – Traffic management and tolling from I-5 to I-405.

**Eastside Transit and HOV** – Evergreen Point Road to SR 202.

**Pontoon Construction Project** – pontoons for catastrophic failure planning.

**Bridge Replacement and HOV Project** – I-5 to the vicinity of Evergreen Point Road.



# Four environmental processes

**Pontoon Construction Project draft environmental impact statement** – Evaluate options to expedite construction of pontoons to be used to restore the floating section of the SR 520 Evergreen Point Bridge in the event of a catastrophic failure, and to construct and store these pontoons until needed.

**Eastside Transit and HOV Project environmental assessment** – Evaluate improvements for transit and HOV from the vicinity of Evergreen Point Road to one mile beyond SR 202.

**Urban Partnership environmental assessment** – Study potential effects of tolling on SR 520.

**Bridge Replacement and HOV Project Supplemental draft environmental impact statement** – Study new alternatives for the SR 520 west side interchange; construction techniques, staging and durations; and mitigation.





# SR 520 Pontoon Construction Project

## Why are we building new pontoons for SR 520?

**Vulnerability and Safety Concerns:** Natural disasters could strike the Puget Sound region before SR 520 bridge can be replaced.





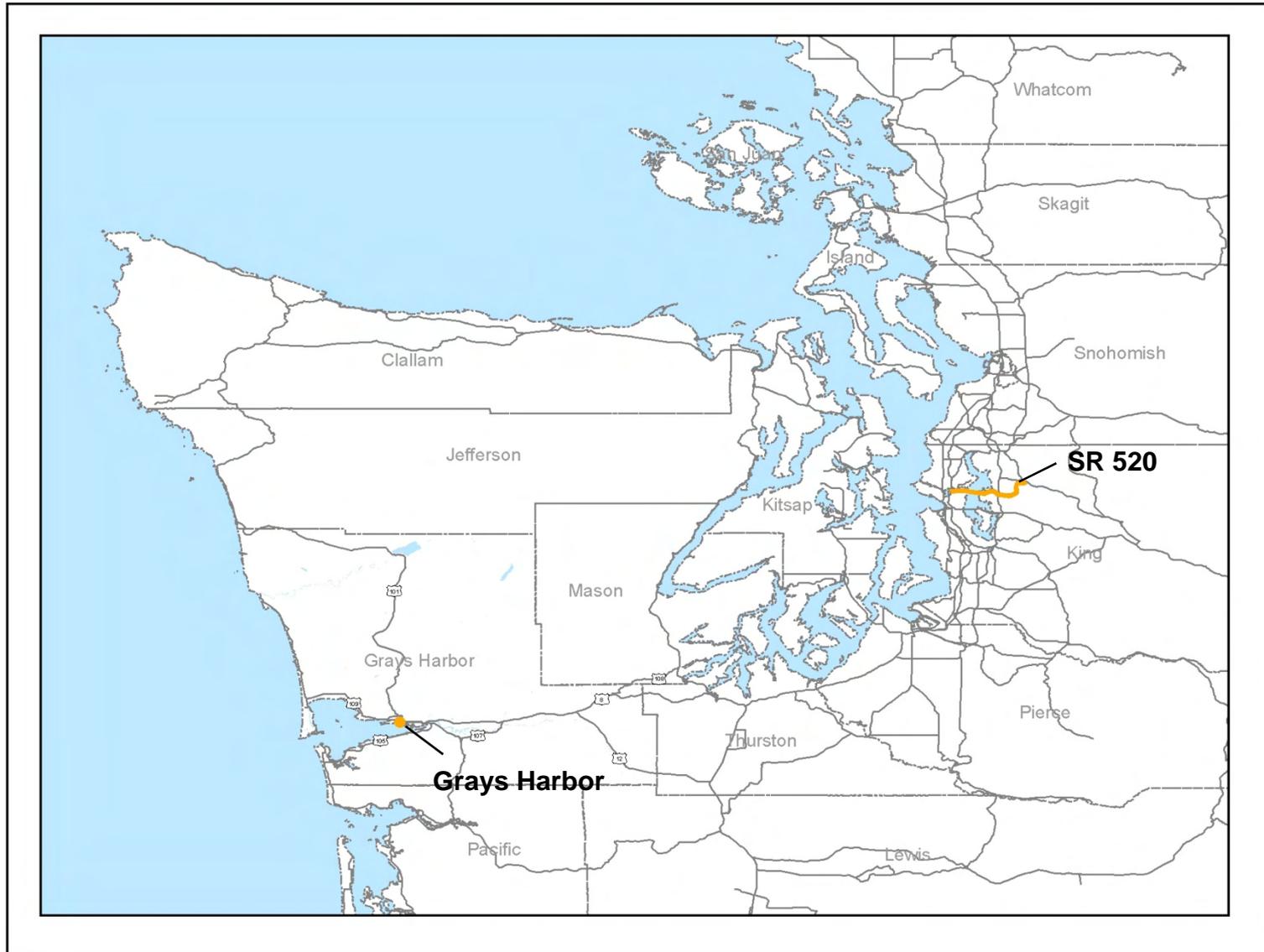
# SR 520 Pontoon Construction Project

## Why is the project needed now?

- Constructing and storing pontoons are a key element in catastrophic failure planning.
- If the floating bridge failed, available detour routes would be overwhelmed with rerouted traffic.
- Recovering the bridge after a catastrophic failure will require new pontoons. We estimate it would take approximately three years to construct enough pontoons to restore the SR 520 bridge.



# SR 520 Pontoon Construction Project





# SR 520 Pontoon Construction Project

## What does the pontoon project include?

- **Five project components:**
  1. **Advanced Construction Methods and Engineering (NEW)**
  2. **Use of the existing facility at Concrete Technology Corporation, Inc. (CTC) for limited pontoon construction**
  3. **Construction of a new pontoon facility in Grays Harbor**
  4. **Construction of pontoons at the new facility**
  5. **Store the pontoons until needed**



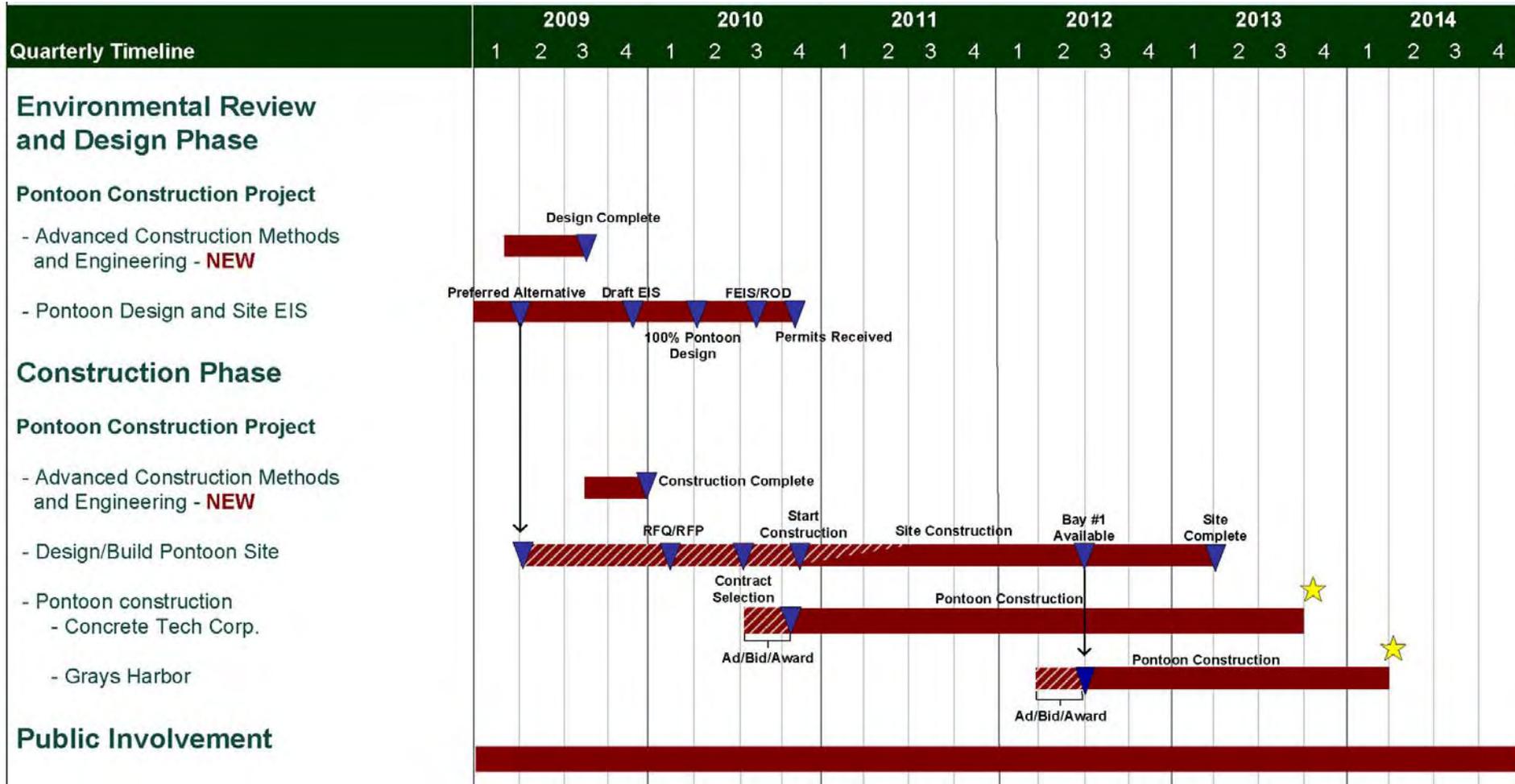
# SR 520 Pontoon Construction Project

## Advanced Construction Methods and Engineering

- Support accelerated schedule, reduce risk, and minimize costs
- Field test for pontoons, i.e., form systems, concrete mixes, full-scale mockups of pontoon sections
- Advertise in Spring 2009--  
Posted on WSDOT Contract Ad and Award Web site



# Pontoon Construction Project schedule



★ Additional pontoon construction for the planned bridge replacement will be determined through a separate environmental process. Schedule dependent on availability of funding.



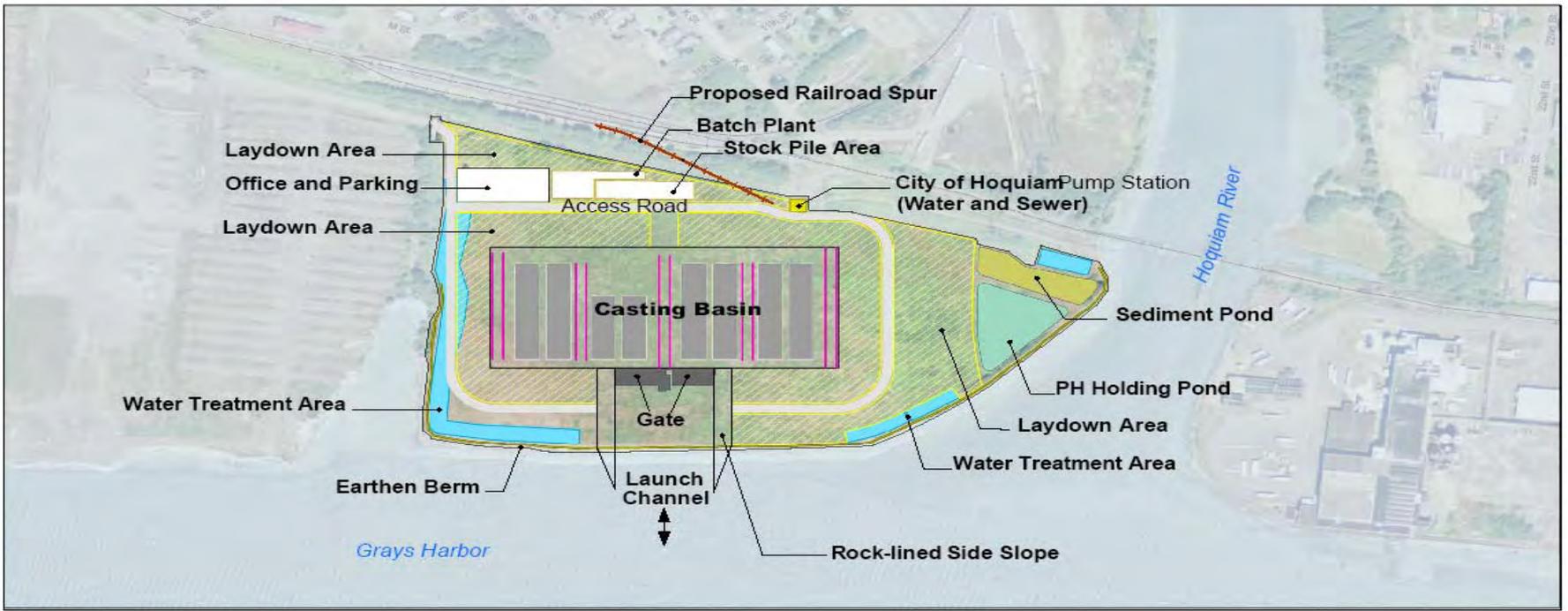
# SR 520 Pontoon Construction Project

## Three Sites Under Environmental Review



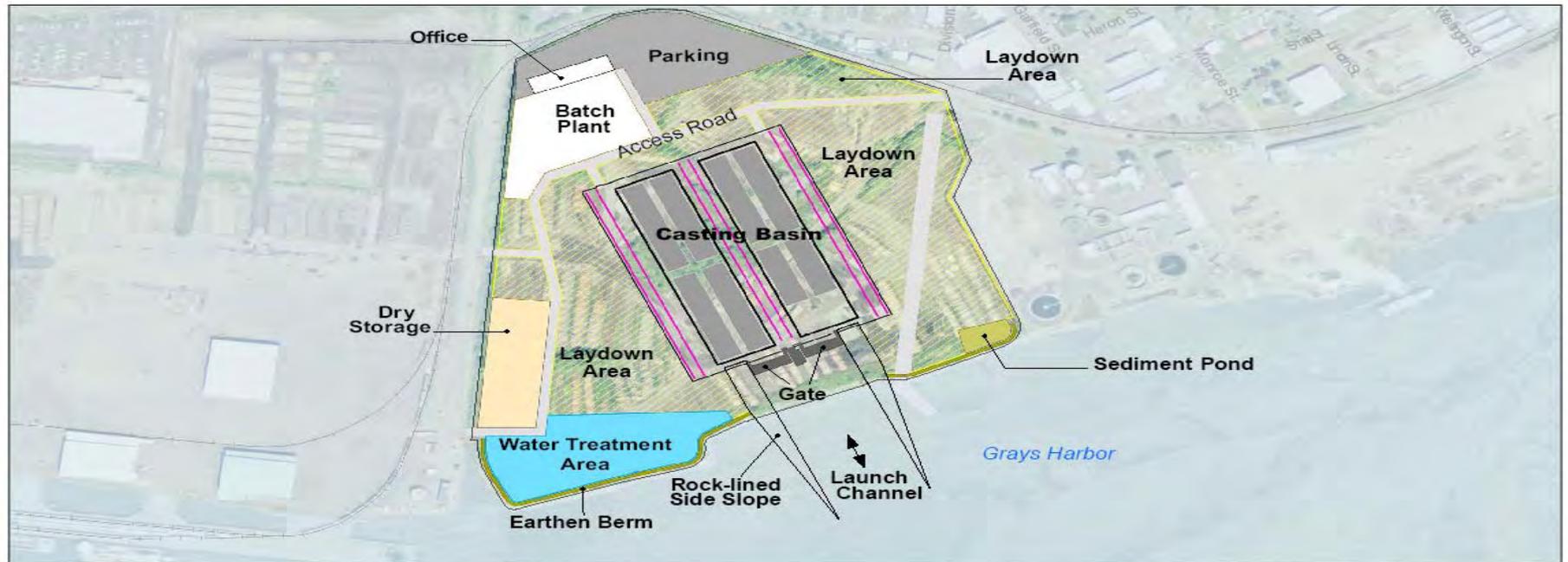
# SR 520 Pontoon Construction Project

## Industrial Development District #1



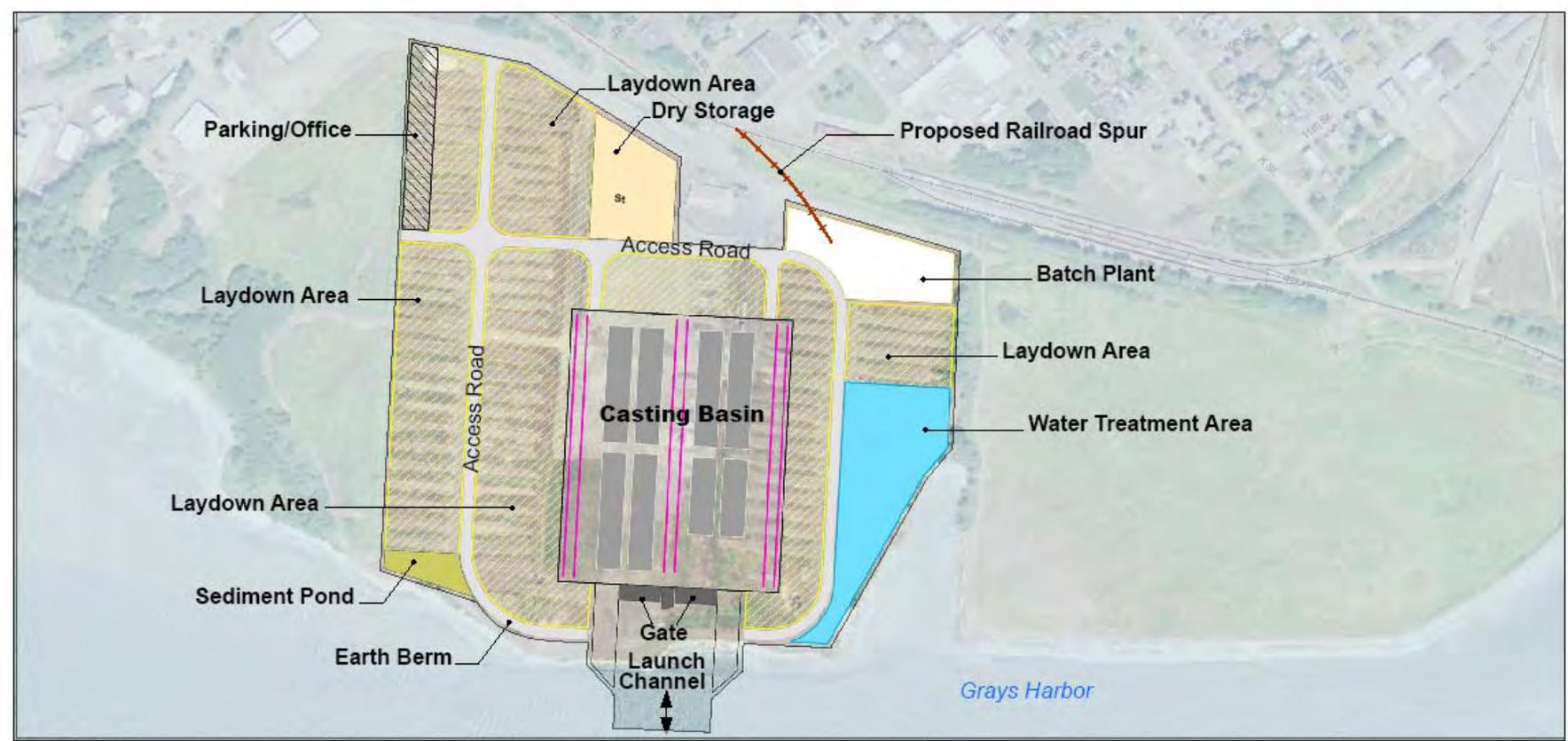
# SR 520 Pontoon Construction Project

## Aberdeen Log Yard

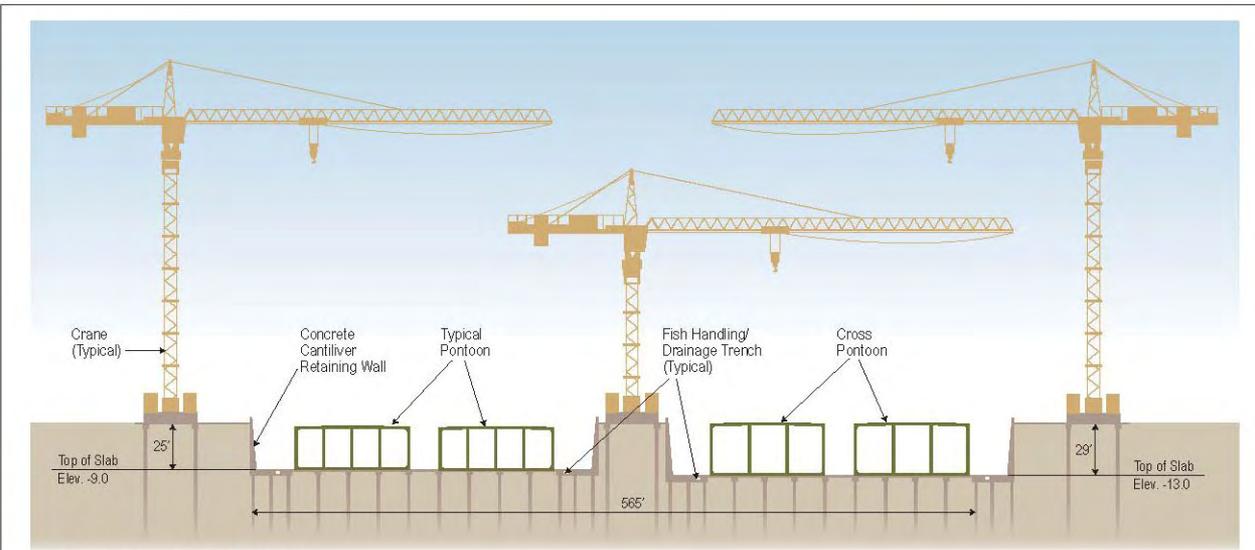


# SR 520 Pontoon Construction Project

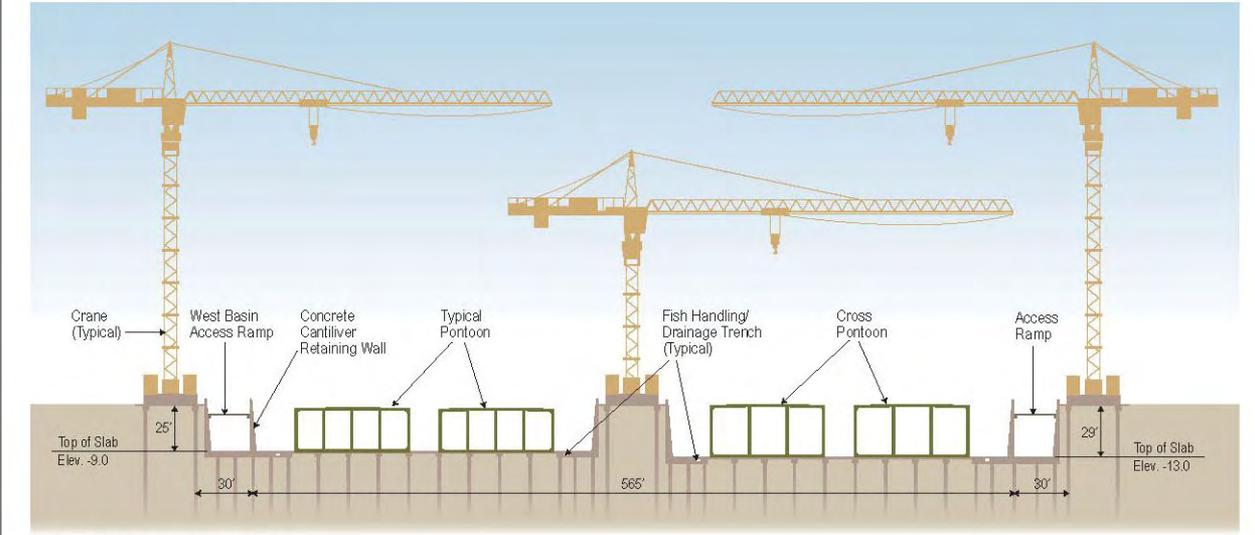
## Anderson & Middleton



# SR 520 Pontoon Construction Project



**A. Section near front of basin**



**B. Section near back of basin**



# SR 520 Pontoon Construction Project

## Preliminary investigations

- Completed soil and sediment analysis.
- Identified natural resources affected.
- Tested for environmental contaminants.
- Assessed potential for historic and cultural resources (preliminary assessment at Anderson & Middleton site).





# SR 520 Pontoon Construction Project

## How will we build the new pontoon facility?

- **Construct a graving dock by excavating a 28-foot deep casting basin, drive piles, and pour a concrete slab at the bottom**
- **Stabilize the sides of the basin with concrete walls and seal off from open water with a gate**
- **Develop the support facilities, such as laydown areas, a concrete batch plant, and water treatment**

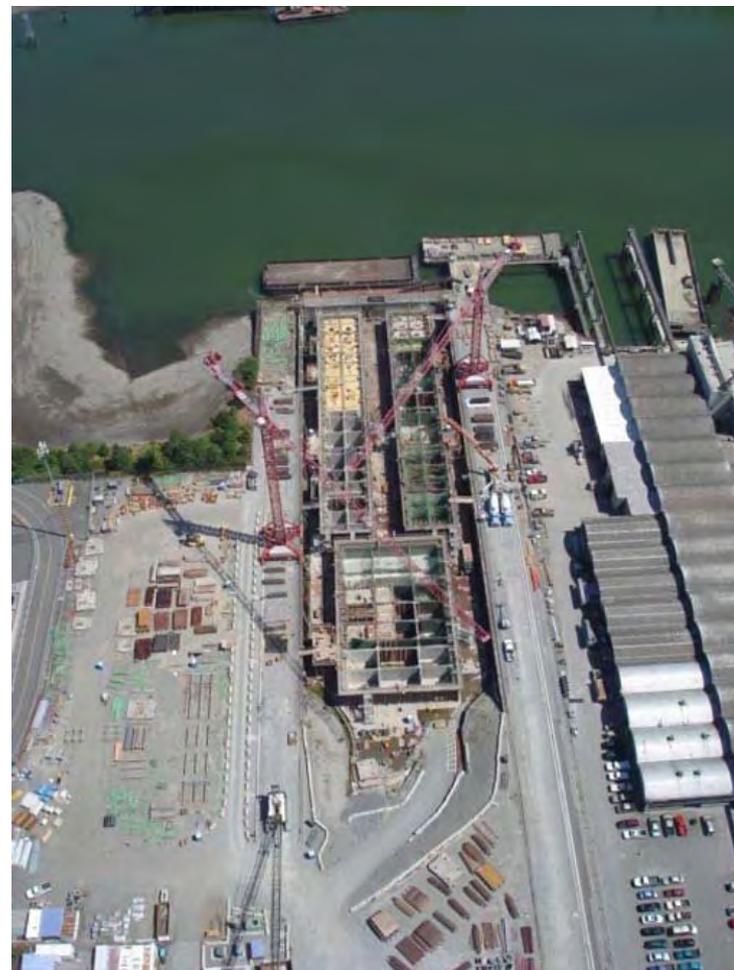




# SR 520 Pontoon Construction Project

## How are pontoons built?

- Prepare site
  - Excavate a basin, drive piles, pour concrete slab.
  - Stabilize sides of basin with concrete walls; seal off from open water with a gate.
  - Construct support facilities
- Construct pontoons
  - Assemble wood forms around steel frame.
  - Pour concrete into forms to create pontoon.
- Launch pontoons
  - Fill basin with water.
  - Open gate and use tugboat to tow pontoon to moorage location
  - Drain basin and repeat process for other pontoons





# SR 520 Pontoon Construction Project

## Next Steps in 2009

- Public comment period on the purpose and need/range of alternatives (Jan. 15-Feb. 19, 2009)
- Three sites will be evaluated during environmental process
- Advanced Construction Methods and Engineering begins in Spring 2009
- DEIS published in late 2009
- Continued collaboration with resource agencies and the public





# SR 520 Pontoon Construction Project

## Public Meeting Tonight

**Hoquiam High School  
Cafeteria  
501 West Emerson Avenue  
Hoquiam, WA**

**5:30 p.m. – 7:30 p.m.**

**A short presentation will  
begin at 6 p.m.**





# SR 520 Pontoon Construction Project



For more information visit the project website at:

[www.wsdot.wa.gov/projects/SR520/Pontoons](http://www.wsdot.wa.gov/projects/SR520/Pontoons)

