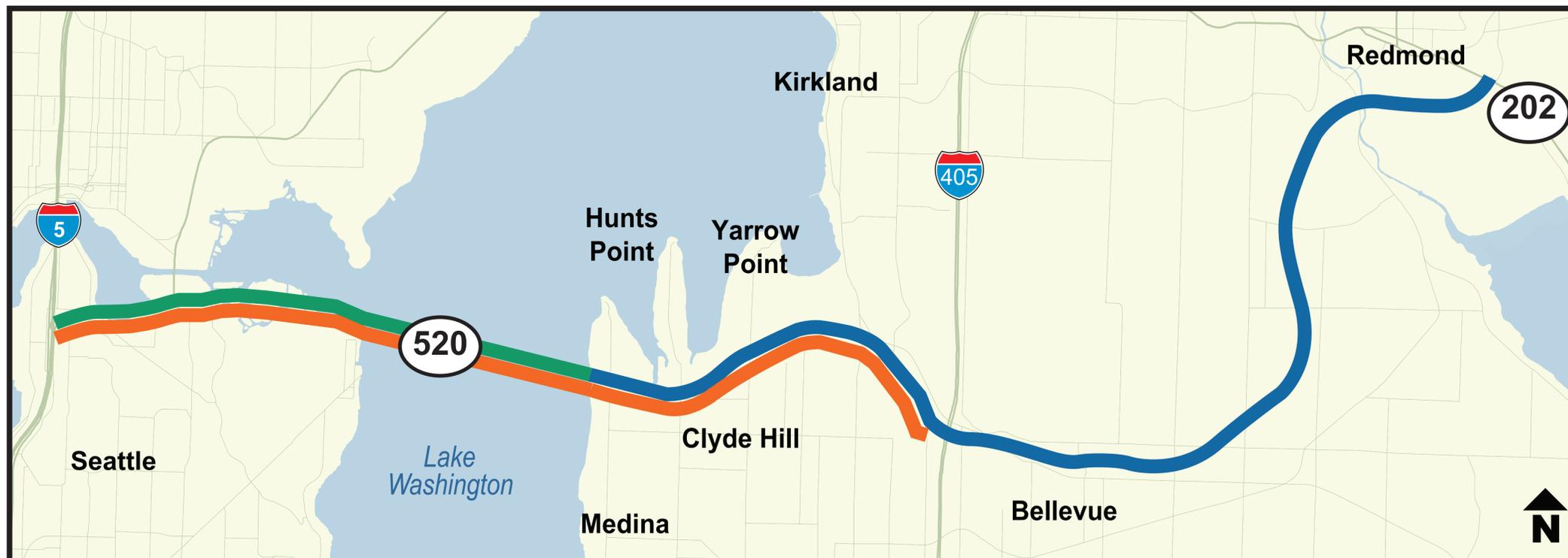


SR 520 program overview

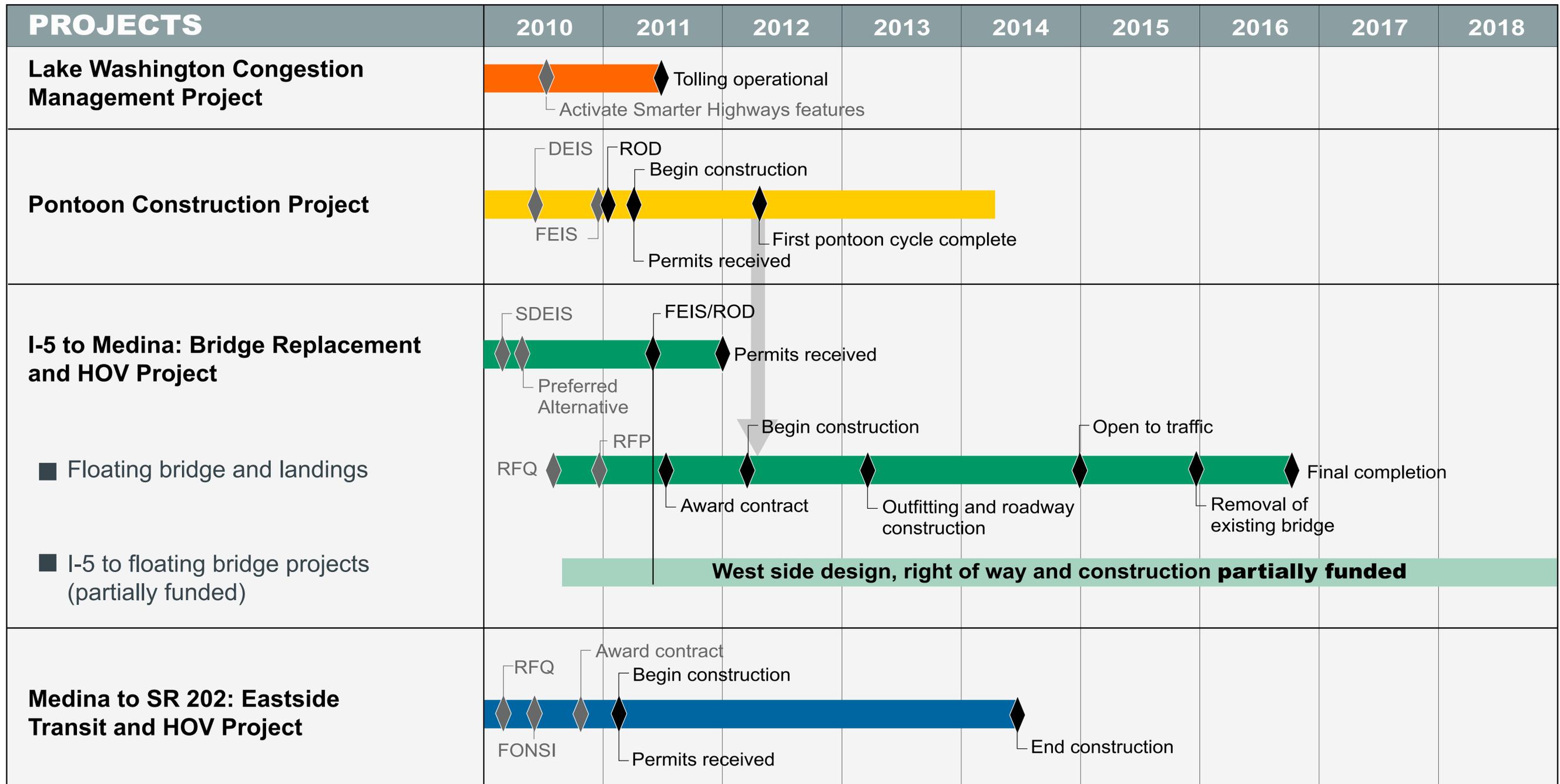
The SR 520 Bridge Replacement and HOV Program will replace the Portage Bay and Evergreen Point bridges and improve the existing roadway between I-5 in Seattle and SR 202 on the Eastside.

- I-5 to Medina: Bridge Replacement and HOV Project** – Replaces the SR 520 floating bridge and landings, and interchanges and roadway between I-5 and the eastern shore of Lake Washington.
- Medina to SR 202: Eastside Transit and HOV Project** – Completes and improves the transit and HOV system from Evergreen Point Road in Medina to the SR 202 interchange in Redmond.
- Lake Washington Congestion Management Project** – Implements tolls on the existing SR 520 floating bridge, and activates Smarter Highways features from I-5 to I-405.
- Pontoon Construction Project** – Advances pontoon construction to restore the floating section of the SR 520 bridge in the event of a catastrophic failure and to store those pontoons until needed.



Program schedule

Updated: December 20, 2010





Project purpose

The purpose of the SR 520 Pontoon Construction Project is to accomplish the following:

1. Expedite construction of the pontoons needed to replace the existing traffic capacity of the Evergreen Point Bridge if a catastrophic failure occurs.
2. Store these pontoons in case they are needed for catastrophic failure response or until they are incorporated into the SR 520 Program's I-5 to Medina: Bridge Replacement and HOV Project.



In 2006, a windstorm led to the closure of the Evergreen Point Bridge during the peak afternoon traffic period.



WSDOT has discovered cracks in the Evergreen Point Bridge pontoons.



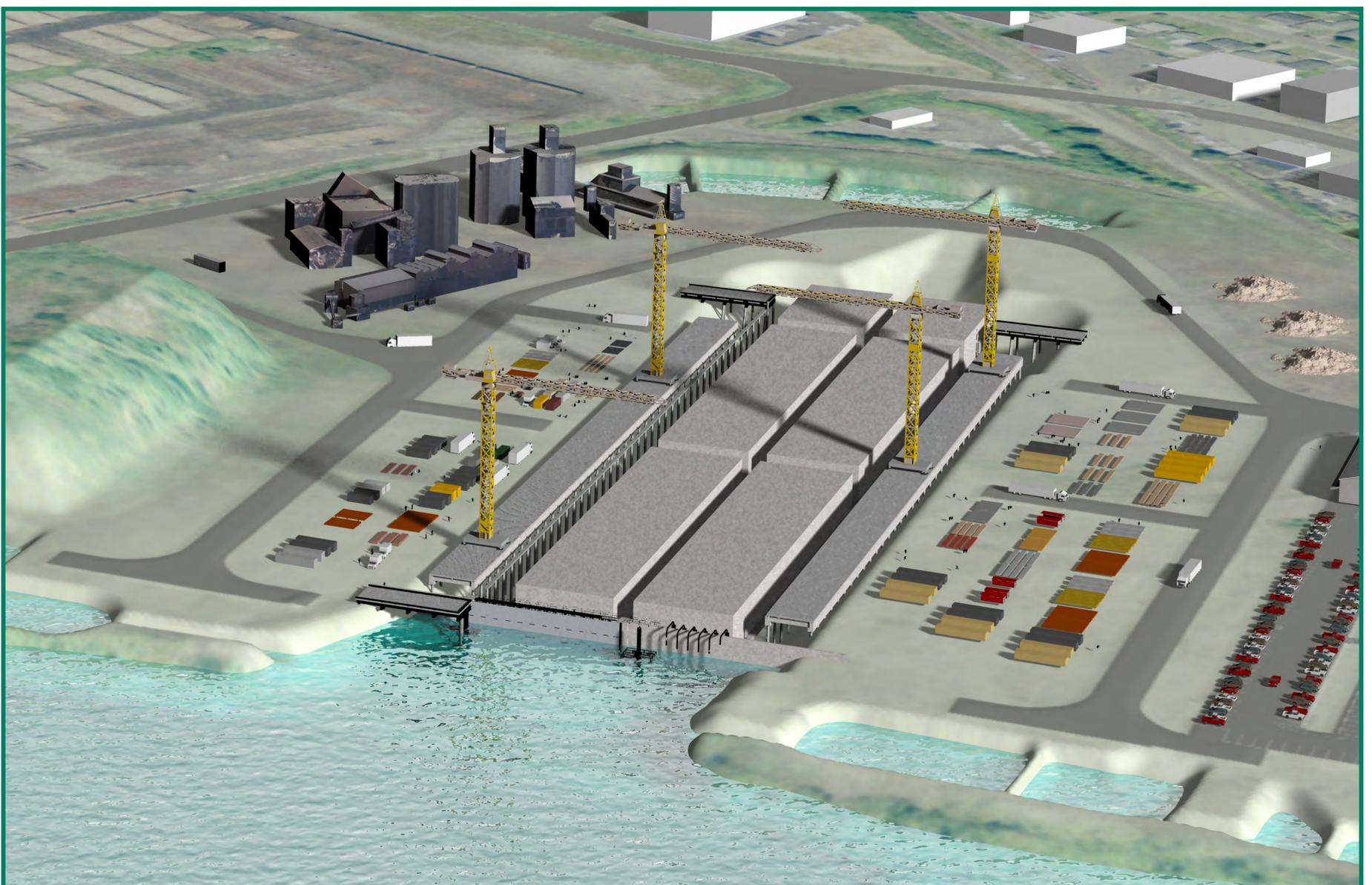
Project overview

We recently completed our environmental analysis. The Federal Highway Administration issued a record of Decision on Jan. 10, 2011, selecting the Aberdeen Log Yard as the preferred site for the Pontoon Construction Project.

As soon as final permits are obtained, we will begin building a new pontoon casting facility in Aberdeen to construct pontoons

for the new SR 520 floating bridge. In addition to the casting facility construction, we will:

- Build 33 pontoons.
- Transport the pontoons to an approved moorage location.
- Store and/or moor the pontoons until they are needed.
- Maintain the pontoon casting facility while it is owned and operated by WSDOT.





SR 520 bridge pontoons

Pontoons are the foundation of a floating bridge. They are hollow concrete structures designed to support the weight of the road and the vehicles that use the bridge.

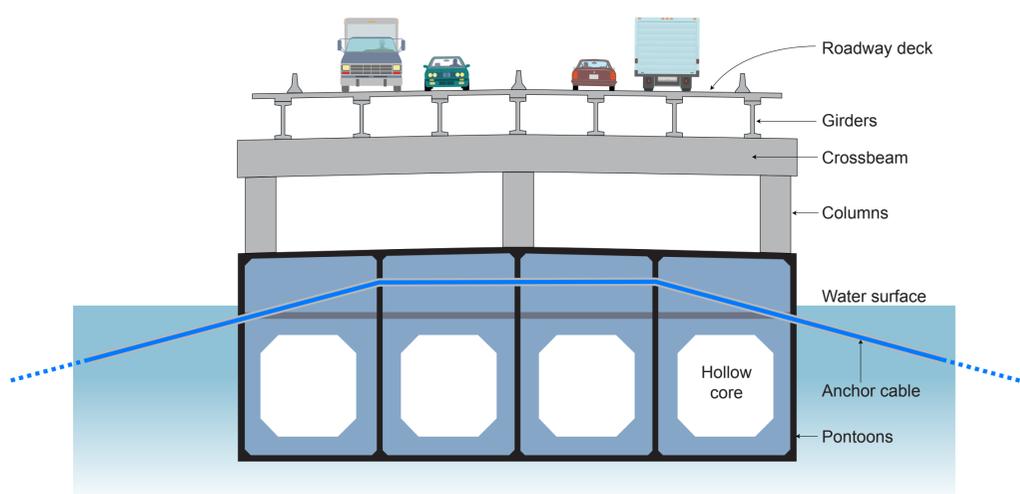
These pontoons must be built at specialized facilities with access to water.

SR 520 pontoons can be up to:

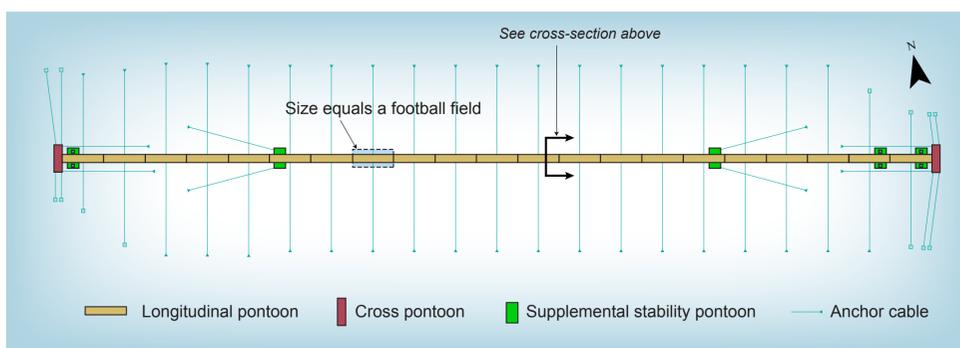
- 75 feet wide
- 360 feet long
- 35 feet high
- 11,000 tons

Three types of pontoons

- 33 pontoons are planned to be built in Grays Harbor.
- Cross pontoons (2) are used to support the western and eastern highrise portion of the Evergreen Point Bridge.
- Longitudinal pontoons (21) make up most of the floating bridge section that crosses Lake Washington.
- Supplemental stability pontoons (10) are the smallest of the three types of pontoons and are strategically placed alongside longitudinal pontoons to provide additional stability.
- Additional supplemental stability pontoons for the proposed SR 520 bridge replacement may be built at another location.



Bridge and Pontoon Cross-Section



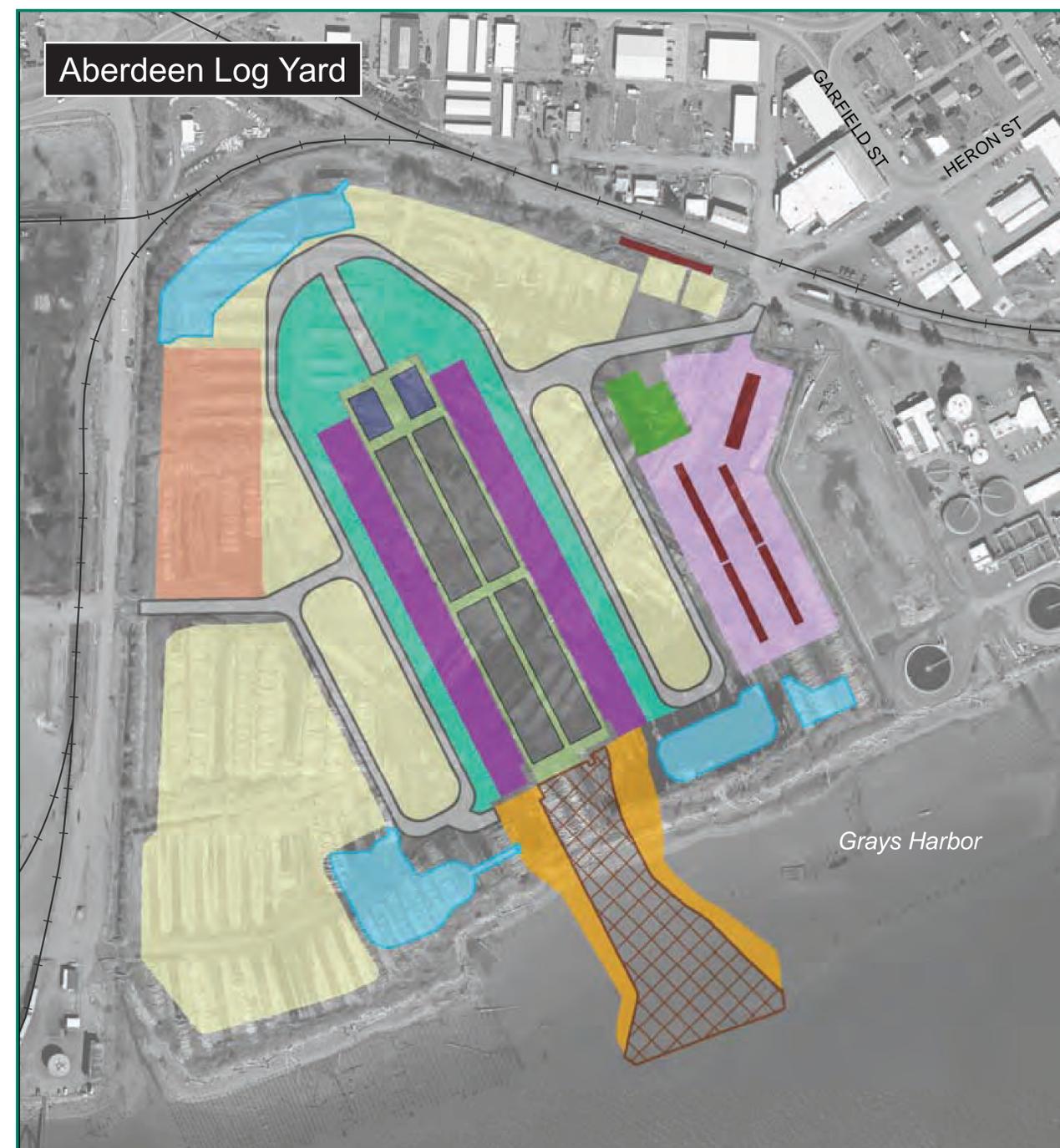
Aerial View of Pontoon Configuration



Pontoon Construction Project contractor

Kiewit-General Joint Venture

- WSDOT hired Kiewit-General Joint Venture (K-G) as the best apparent value for the Pontoon Construction Project.
- K-G's bid amount was \$367 million, \$180 million less than the engineer's estimate.
- WSDOT is contracting with K-G to complete preliminary and final design and then build the project. WSDOT chose to award the design-build contract earlier than usual to expedite the project and encourage design innovation as early as possible in the project.
- K-G's approach includes:
 - Longer but narrower casting basin.
 - Narrower launch channel.
 - Single chamber basin with a single gate.





Building pontoons

How will K-G build the pontoons?

1. Form the box-like shape of the pontoons by assembling wood forms around a steel framework.
2. Pour concrete into the forms to create the pontoon floors, walls and top slabs.



Crews construct a test pontoon at Satsop Business Park.



Constructing a new casting basin facility

How is a casting facility built?

1. Excavate a deep work area (or basin), drive piles, and pour a concrete slab at the bottom.
2. Stabilize the sides of the basin with concrete walls and seal off the work area from open water with a gate.
3. Construct the support facilities (i.e., construction offices, cranes).
4. Excavate the launch channel to connect the facility with the deep water navigation channel.
5. Reinforce the existing shoreline berm to protect the facility.



Pontoon construction for the Hood Canal Bridge pontoons.



Transporting pontoons from the casting basin

How do pontoons leave the casting basin?

1. Fill the basin with water once the pontoons are complete and ready to launch.
2. Open the gate and use tugboats to tow the pontoons to the moorage location
3. Drain the basin and repeat the process for other pontoons.



A tugboat towing a Hood Canal Bridge pontoon.



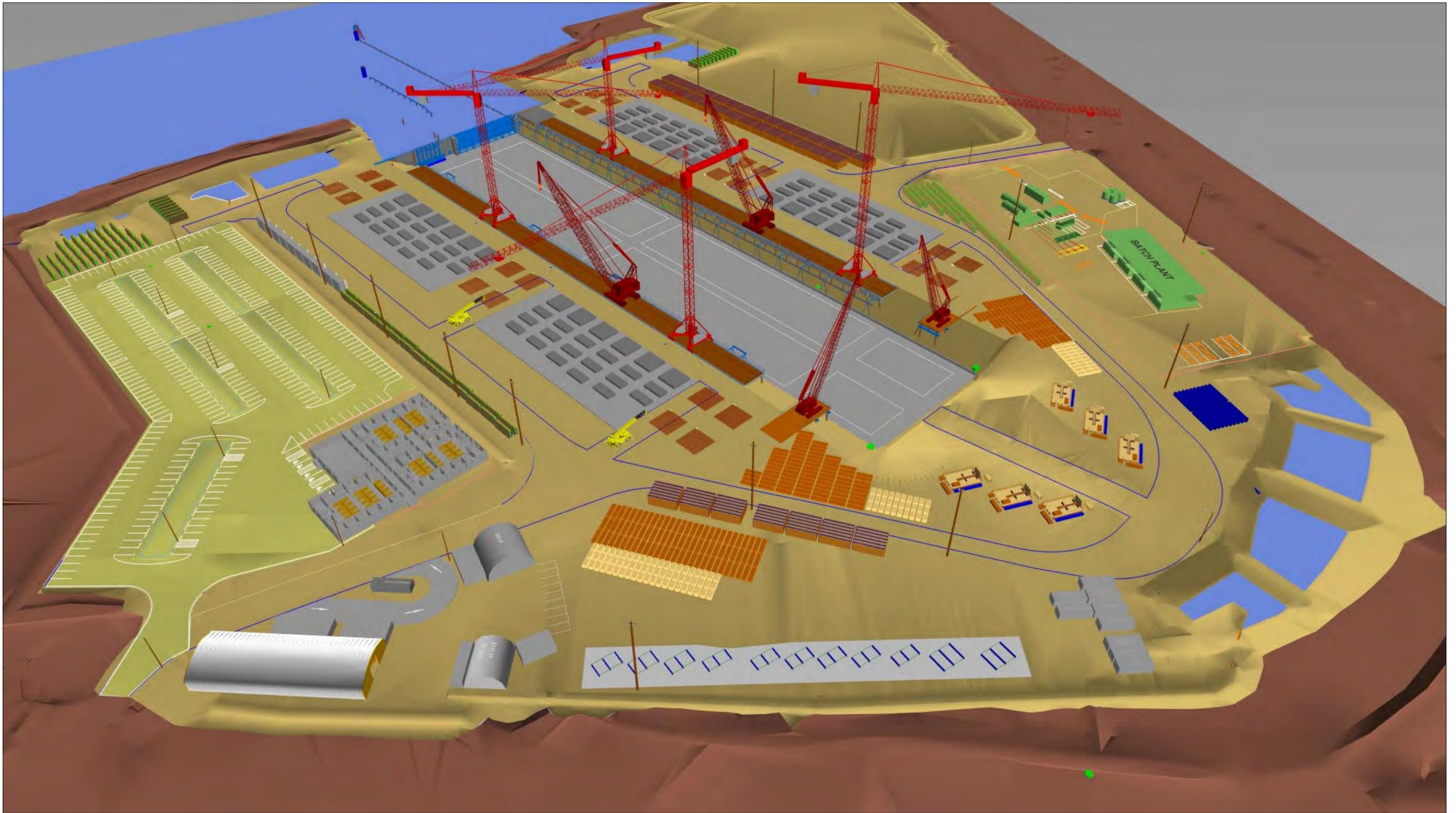
Maintaining the Grays Harbor facility

When the casting basin facility is no longer needed to build SR 520 bridge pontoons, WSDOT would maintain the facility while adhering to environmental regulations applicable to the site and facility until decisions are made about the facility's future.

Potential future options for using the casting facility include:

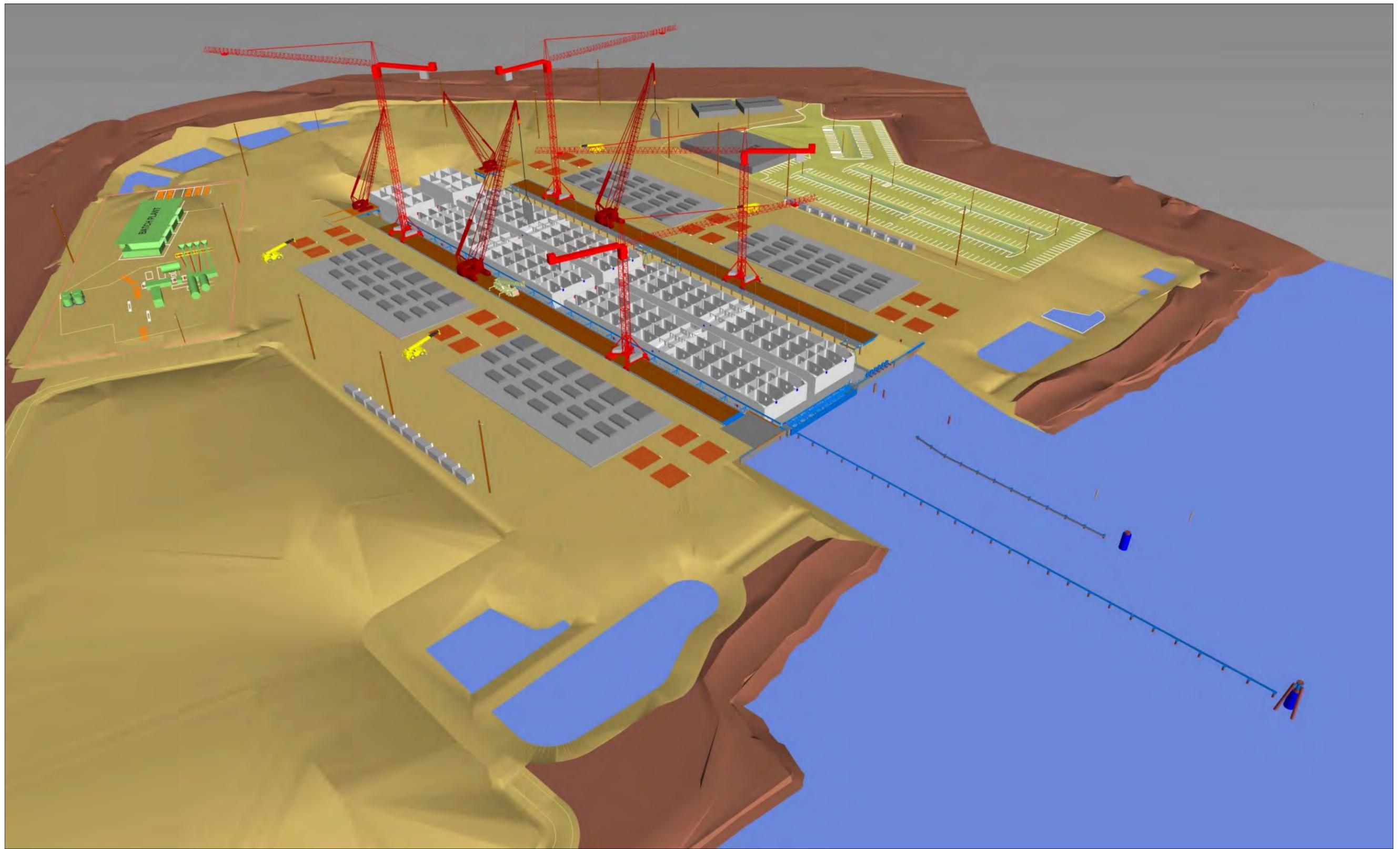
- Reopen the facility for future (currently unplanned) WSDOT pontoons or other types of construction projects.
- Sell the property with the improvements.
- Decommission the facility and restore the site to as close to its original condition as possible before selling it.

Any future uses of the facility (including decommissioning) will require a new and separate environmental and permitting process with public input.



CONCEPTUAL DESIGN OF THE CASTING BASIN FACILITY





CONCEPTUAL DESIGN OF THE CASTING BASIN FACILITY



Meet the Project Team



Kiewit—General



Pat Soderberg
Project Sponsor



Phil Wallace
Project Director



Jeff Billows
Project Engineer



Stuart Moore, P.E.
Casting Basin Manager



Dustin Donahoo, P.E.
Pontoon Manager



Kati Donahoo
Public Information Specialist



Bob Dyer, P.E.
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Dave Ziegler, P.E.
Principal Engineer



Brenden Clark, P.E.
Design Project Engineer



Gaius Sanoy, P.E.
Asst. Project Engineer



Dewayne Matlock, P.E.
Construction Project Engineer



Joe Irwin
Public Information Officer