



## Pontoon Assembly, Outfitting and Testing

At Todd Pacific Shipyards in Seattle, Kiewit-General (K-G) crews will connect the individual pontoons into large sections, build the elevated roadway sections on top of the pontoons, install all electrical and mechanical parts and test the draw span retractable assembly units.

Pontoon assembly is scheduled to start in October 2007 after the first two cycles of pontoons have been constructed and floated to Seattle. Assembling every component correctly is essential to completing the project on time and to keeping the Hood Canal site work (and bridge closure) to a minimum.

### Assembly

Pontoons PA, PB, Q, NA and NB will be assembled together to form a "U" shape area around the location where the draw span retractable assembly units pull back. Then pontoons YD, YE and YF will be lowered under water, positioned underneath the other pontoons and connected.

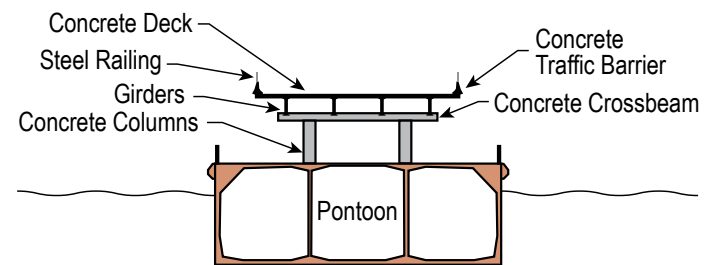
When the third cycle of pontoon construction is completed, the two pontoons that make up the retracting section of the draw span will be connected together and assembled with the other eight draw span pontoons.

After the last pontoon construction cycle, the final roadway section made up of pontoons U, V, W and X will be connected together. An animation demonstrating the assembly and outfitting process for the pontoons U, V, W and X is available on the project web site, [www.hoodcanalbridge.com](http://www.hoodcanalbridge.com).

Once the three existing pontoons (R, S, and T) are moved to Seattle and all the 14 new pontoons are assembled, the work can proceed on outfitting, or building the elevated roadway sections on top of the pontoons.

### Outfitting

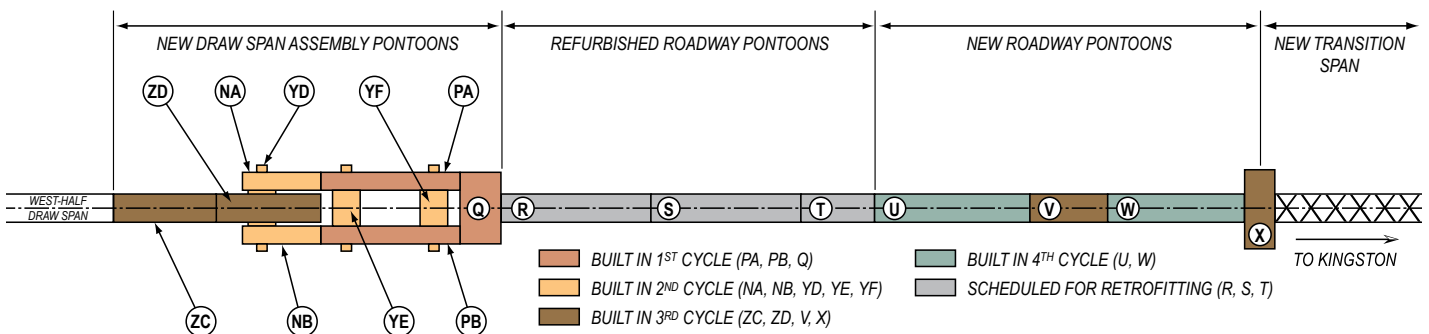
The elevated roadway sections on top of the pontoons are constructed from the ground up. First, two large round concrete columns are constructed. Second, a concrete crossbeam is placed on top of the two columns. Then, four concrete girders (large beams) are placed on top of two crossbeams, spanning the distance between them. These girders provide support for the roadway. With all four girders in place, the concrete deck (or roadway) is poured. When the deck has cured, concrete traffic barriers and steel railings are added to the edges of the deck.



This process is repeated over and over until the entire deck for all the pontoons is completed. When outfitting work comes to a close by December 2008, work will then turn toward installing all the electrical and mechanical systems and testing the draw spans retractable assembly units.

### Testing

Thousands of feet of electrical conduit, electrical wiring, and hydraulic piping run through the pontoons, into the draw span retractable assembly units and into the maintenance buildings. Both the mechanical and electrical systems on the draw span will be tested extensively before it is floated to the bridge site for installation. K-G crews are focusing on doing as many tasks as possible before floating the pontoons to Hood Canal in order to keep the bridge closure in May-June 2009 as short as possible.



Birds-eye View of New East-half