Ballard Siphon replacement

Completed spring 2014

Project description

To protect public health and keep sewage out of Salmon Bay, King County built a new 7-foot wide sewer pipe under Salmon Bay between the Ballard and Interbay areas of Seattle. The new pipe is more than 120 feet underground.

The new pipe will partner with two 3-foot wide wooden pipes (PDF) built in the 1930’s to serve north Seattle through the end of the century. The wooden pipes were cleaned out and relined as part of this project.

On most days, sewage and polluted stormwater from north Seattle will flow through the older pipes. The new pipe will carry any extra stormwater and sewage during storms when the older pipes are full. All of north Seattle’s sewage and stormwater is sent to King County’s West Point Treatment Plant in Magnolia where it is cleaned and safely discharged to Puget Sound.

Project location

Construction photos - South site

The tunnel boring machine launch shaft was located on the south site. The launch shaft was excavated using a Vertical Shaft Machine (VSM) to a depth of approximately 145 feet. Tunneling for the new siphon pipeline was completed in fall 2013.
Construction photos - North site

The tunnel boring machine retrieval shaft was located on the north site. The retrieval shaft was excavated to a depth of approximately 93 feet.

View more photos (external link, Flickr).

Library

Visit Software Help if you have trouble viewing or downloading documents.

News releases

- Jan. 16, 2014 – Sewer upgrades in Ballard bring temporary traffic detours starting Jan. 20
Nov. 6, 2013 – Repaving project to temporarily close section of W Commodore Way

- May 24, 2012 – Pipe connection work requires temporary closure of a section of W Commodore Way
- April 4, 2012 – New technology makes North American debut on a Ballard tunneling project
- Jan. 25, 2012 – Infrastructure investments top 2012 priority list for clean-water utility
- Feb. 23, 2011 – Clean-water investments bolster economic growth, support regional environmental goals; sewer improvement projects top King County priority list in 2011
- Jan. 18, 2011 – County Council secures funding for Ballard siphon upgrade; construction slated to begin this year

Project updates

- Shilshole Ave NW westbound lane to re-open early, March 31, 2014
- South site project update: crews clean siphons week of Feb. 4 and begin restoring W Commodore Way right-of-way, January 31, 2014
- New siphon in use during re-lining work: north and south sites project update, January 23, 2014
- Revised Shilshole Ave NW traffic detour begins Monday, January 20, January 15, 2013
- Shilshole Ave NW traffic detour begins January 20, December 31, 2013
- North and south site project updates, December 20, 2013
- Detour begins in early 2014 on Shilshole Ave NW, November 27, 2013
- W Commodore Way to re-open this afternoon, November 27, 2013
- Three-week closure on W Commodore Way between 23rd Ave W and 24th Ave W begins November 11, October 29, 2013
- Tunnel complete! Crews begin installing pipe from the south site, October 1, 2013
- Project milestone! Tunneling across Salmon Bay complete week of August 19; construction activities increase at the north site, August 16, 2013
- Paving on the south right of way of Shilshole Ave NW to impact traffic July 10 - 17, July 9, 2013
- Shoring removal complete near W Commodore Way, May 23, 2013
- Shoring will be removed near W Commodore Way beginning May 21; near neighbors may experience vibration, May 20, 2013
- North and south site updates, April 25, 2013
- Night work begins at the south project site February 7, February 4, 2013
- Utility investigations on Shilshole Ave NW January 23 and 24; crews begin removing shoring at north project site January 25, January 18, 2013
- North site and south site project update, December 10, 2012
- Shoring installation ends this weekend at the south site, November 8, 2012
- Tunneling begins this week at south site, November 1, 2012
- North site and south site project update, October 25, 2012
- North site and south Site project update, September 28, 2012
- South site: shoring will be removed in W Commodore Way beginning September 24. Near neighbors may experience vibration. Road closure and detour continue through mid-October, September 20, 2012
- South site construction update, September 13, 2012
- North and south site construction updates, July 23, 2012
- South site project update, June 19, 2012
- Project fact sheet, June 2012
- Heavy truck traffic Friday, June 1: road closure begins Saturday, June 2, May 29, 2012
- W Commodore Way closed between 23rd Ave W and 24th Ave W beginning in June, May 10, 2012
- Puget Sound Energy work begins at the south site, March 14, 2012
- North and south site construction updates, February 28, 2012
- North and south site construction updates, February 9, 2012
- Construction photos at the north site – install shoring for tunnel boring machine retrieval shaft, January 30, 2012
- North and south site construction updates, January 24, 2012
- South site: parking along 24th Ave W project border closed from November 29 through project completion; northern right of way and westbound traffic lane of W Commodore Way closed temporarily during the week of November 28, November 22, 2011
- North site: preparation work for shoring installation begins the week of November 14.
South site: site preparation continues, parking to close along 24th Ave W border.
November 9, 2011

- North site: building demolition during the week of September 26; South site: preliminary excavation begins early October, September 22, 2011
- Ballard siphon construction begins Summer 2011, August 2011
- Project update, Winter 2007

**Project drawings**

- Conceptual design drawing

**Environmental documents**

- DNS and environmental checklist, issued March 18, 2008
- Addendum, issued June 9, 2008

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**Wastewater Treatment Division**

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