

May 2013

Working with project stakeholders during facility siting and design

King County is building a combined sewer overflow (CSO) Control Facility in Magnolia to meet state and federal water quality standards and help protect Puget Sound by reducing discharges of untreated stormwater and sewage during heavy rains. Flows exceeding system capacity during storms will be diverted at 32nd Avenue West to an underground storage tank located in the Terminal 91 West Yard area. The tank will store stormwater and wastewater volumes exceeding system capacity until storms pass and stored flows can be sent to West Point Treatment Plant in Discovery Park. The South Magnolia CSO Control Facility will help King County meet current standards of no more than one untreated CSO event per year on a long-term average.

King County's project team worked with the Magnolia community as CSO control options were developed and evaluated. After King County identified this option for CSO Control in 2010, work with project stakeholders on facility location and site design began in earnest. The County evaluated potential locations in the Port of Seattle's Terminal 91 West Yard or the adjacent Smith Cove Park Athletic Field, proximal to the Magnolia Bridge. The County participated in meetings and workshops with the City of Seattle and Port of Seattle to investigate the feasibility of different locations and discuss future land use plans. In March 2011, the current facility location was presented to the Magnolia community. This location was identified by King County, the Port of Seattle and the City of Seattle as the best option to allow a range of future uses in the surrounding West Yard, as well as construction of a future Magnolia Bridge replacement.



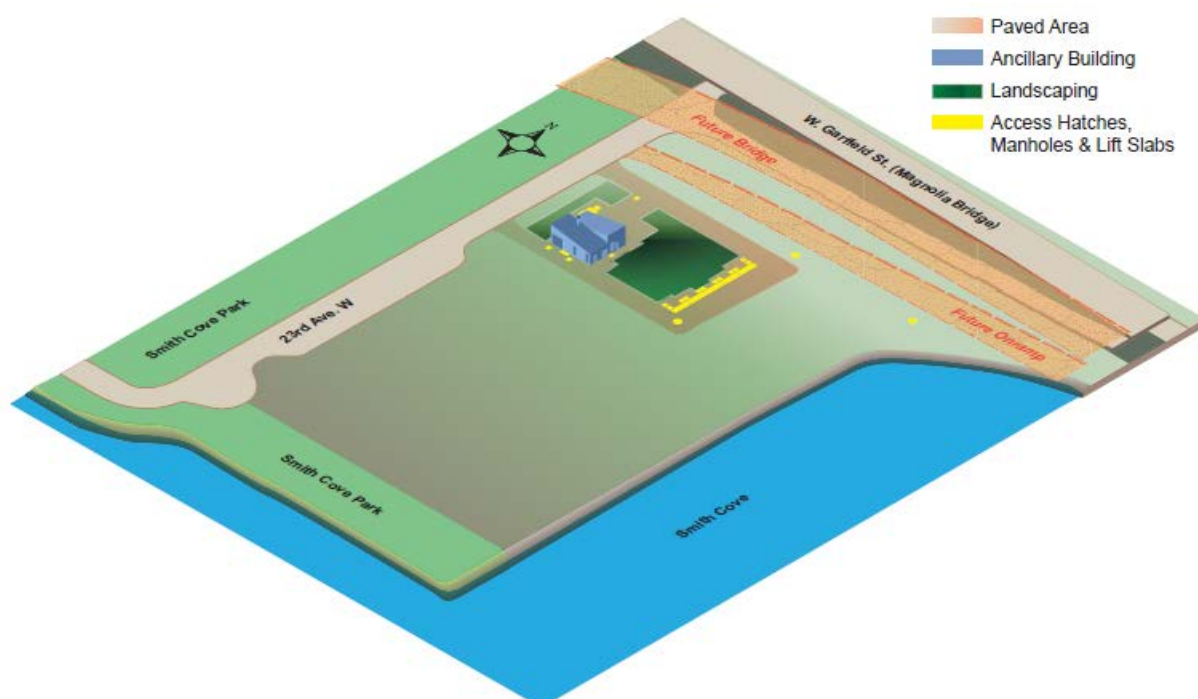
Smith Cove Park/ Terminal 91 West Yard area today.

The potential storage facility siting area shown in 2010, above left, and today's facility layout, right.

Configuring the storage facility to accommodate future uses

King County's project team kept in mind future uses throughout the design process. As a first step, the team optimized the facility configuration to reduce visibility to surrounding area users, and lowered the overall site footprint from the size originally proposed to project stakeholders and Washington Department of Ecology:

- The entire facility was located in the northwest corner of the West Yard adjacent to the future Magnolia Bridge on ramp. This maintains flexibility for future uses in the surrounding West Yard area.
- The tank structure is almost entirely below-grade, and was reduced in size by 20 percent.
- The number of hatches was cut nearly in half.
- The above grade building was reduced in size about 60 percent by putting some equipment underground.
- The building was placed on top of the underground storage tank to reduce site footprint.



Designing to changing surroundings

After the facility layout was established, King County's design team developed a landscape and architecture concept. During this time, discussions about the use of the surrounding West Yard area were still underway, so the team faced a unique challenge in developing a design concept without a defined vision of what the surrounding West Yard would look like in the future. To facilitate the design process, a vision was developed for the County's facility site:

Acknowledging that the CSO control facility is a distinct part of an as-yet un-designed whole, we are designing the landscape and architecture to express King County Wastewater Treatment Division's mission of protecting water quality.

The team identified guiding principles that helped to shape the design, which was reviewed with the community and refined with community input. After the design was completed, a long-term community vision for a future waterfront park was realized when the City of Seattle agreed to purchase the land around the County's facility site from the Port of Seattle. King County will acquire the facility site separately from the Port. The South Magnolia CSO Control Facility design incorporates both the site vision and these guiding principles, providing positive examples of sustainable stormwater management and landscape design for people using the area today and for future park visitors.

Landscape guiding principles

- Consider sightlines and views towards Puget Sound
- Develop an engaging design that is compatible with future adjacent use
- Balance vision with cost-effective solutions for implementation and maintenance
- Incorporate sustainable, wildlife-friendly design
- Meet City green stormwater infrastructure (GSI) requirements
- Meet County and City landscape design guidelines for low maintenance, drought tolerant plantings and use of native plants

Architecture guiding principles

- Limit building height and visual impact
- Use natural and muted color palette and materials
- Specify durable and low maintenance materials
- Harmonize building with landscape design
- Emphasize WTD mission of protecting water quality
- Utilize roof to collect and direct rainwater
- Integrate custom gutter, or "scupper" as a visible educational feature



Want more information?

For more detail on landscape and architecture design, see the fact sheet "Site Design and Architecture", available on the project Web at www.kingcounty.gov/environment/wtd/Construction/Seattle/SMagnoliaCSOStorage.

For a list of plants used in the landscape, along with gardening information and benefits to wildlife, see the "Plant Palette" fact sheet.

To view presentations and meeting summaries from the facility siting phase of the CSO Control Project, visit www.kingcounty.gov/environment/wtd/Construction/Seattle/BeachCSO/MeetingCalendar.

To view presentations and meeting summaries from the design phase of the CSO Control Project, visit <http://www.kingcounty.gov/environment/wtd/Construction/Seattle/SMagnoliaCSOStorage/MeetingCalendar.aspx>.

For information about the City of Seattle's plans for the area surrounding the CSO facility, visit <http://www.seattle.gov/parks/proparks/projects/smithcove.htm>.