

2018 NWCCC Distinguished Project Award, Public Project Greater than \$10 Million

Bellevue College Student Housing



Washington State Department of Enterprise Services

For more information, contact Robert Colasurdo at robert.colasurdo@des.wa.gov or 206-510-8147.



NAC Architecture and Walsh Construction Company have worked closely with the Washington State Department of Enterprise Services, Bellevue College, and the City of Bellevue to plan and deliver the College's first student housing project. This project represents the evolution of Bellevue College from a commuter-oriented culture to a 24/7 live/learn residential campus.

Unique features include dramatic double-cantilevered building overhangs, public roof decks featuring million-dollar views, student-funded rain gardens, and 10,000 SF of ground floor public space featuring a café, lounge and study areas.

The student housing project was designed and constructed from March 2017 - August 2018 at a cost of approximately \$36 million.

2018 NWCCC Distinguished Project Award, Private Project Greater than \$10 Million

Light Naphtha Hydrotreater



Phillips 66 Ferndale Refinery

For more information, contact Mark Kitzan at mark.kitzan@p66.com or 360-384-8501.



Phillips 66's Light Naphtha Hydrotreater Project is an EPA compliance driven project that reduces the amount of sulfur in the gasoline production from 30 ppm to less than 10 ppm.

Before construction could begin on the new Hydrotreater, an out of service refinery unit and all associated piping, structures, and foundations had to be demolished. This complex work involved the removal of 31 tons of asbestos containing material, 230 tons of steel, 1,500 tons of concrete, 2,800 tons of contaminated soil. In addition, 123 piping tie-ins were required to disconnect the demolished unit from the operating refinery.

Phillips 66 and their major subcontractor JH Kelly implemented the "Last Planner" project scheduling system for the first time in the refinery's history. This enabled the involvement of the craft labor supervision in the detailed planning of daily work. With the vertically stacked nature of work with many crafts working above, below and next to several other crafts, this system allowed for a safe and highly efficient execution of construction.

The hydrotreater project was designed and constructed from February 2015 - December 2018 at a cost of approximately \$60 million.

2018 NWCCC Distinguished Project Award, Public Project Less than \$10 Million

South Plant Effluent Transfer System Duty & Peaking Pump Variable Frequency Drive Replacement



King County Wastewater Treatment Division

For more information, contact Crystal Fleet at crystal.fleet@kingcounty.gov or 206-477-5451.



King County Wastewater Treatment Division's Variable Frequency Drive Replacement Project is a response to the original equipment manufacturer of the VFDs no longer supporting the equipment with spare parts, field service, or technical engineering services. Because the motors on the pumps cannot be operated without functional VFDs, failures could result in King County discharging treated effluent into the Green River, potentially violating its operating permit with the Washington State Department of Ecology (DOE).

Primary designer Brown and Caldwell searched for creative solutions to maintain existing motors that were not at the end of useful life and install VFD equipment that would not require an expansion of the building. The project team opted for a Digital Front End (DFE) replacement of the peaking pump VFDs, offered by GE. This enabled King County to replace the unsupported controller parts of the VFDs with new digital components programmed and supported by GE, thus requiring minimal modifications to other associated devices thus saving several million dollars to tax and rate payers.

The VFD replacement project was designed and constructed from February 2016 - July 2018 at a cost of approximately \$8 million.

2018 NWCCC Distinguished Project Award, Private Project Less than \$10 Million

Reformer Chloride Management Improvements

BP Cherry Point Refinery

For more information, contact Shelley Stanton at Shelley.Stanton@bp.com or 360-526-4752.



BP Cherry Point Refinery's Reformer Chloride Management Project was implemented to reduce fouling within large compressors and to eliminate corrosion on the compressor seals. The corrosion and fouling had led to increased maintenance costs and operational downtime in the past.

The project's primary obstacle was a significantly compressed schedule to allow piping connections to be made during a scheduled outage on the equipment. The project assembled an integrated, high performing team that had early involvement from the operations department, utilized conservative assumptions, and completed the design in 10 months compared to 12 months originally scheduled.

The chloride management improvement project was designed and constructed from February 2017 - April 2018 at a cost of under \$3 million.

2018 NWCCC Patrick K. Lyneis Memorial Safety Award

Light Naphtha Hydrotreater

Phillips 66 Ferndale Refinery

For more information, contact Mark Kitzan at mark.kitzan@p66.com or 360-384-8501.



In addition to the 2018 NWCCC Distinguished Project Award for Best Private Project Greater than \$10 Million, Phillips 66's Light Naphtha Hydrotreater Project is also the winner of the 2018 NWCCC Patrick K. Lyneis Memorial Safety Award.

The project sustained no OSHA recordable injuries throughout the duration of the entire project. The demolition work to begin the project was highly complex and difficult. The vertical nature of much of the work required detailed planning to minimize exposure to crews from dropped objects or other overhead hazards.

Phillips 66 and their major subcontractor JH Kelly's implementation of the "Last Planner" project scheduling system not only was key to delivering the project several months ahead of original schedule but was also critical to making good safety performance happen through highly effective work planning. The project also utilized a thorough worker onboarding process, a recognition program for catching and resolving hazards, and new checklists to monitor a wide variety of risks.

The project's proactive approach on many levels to drive safety performance exemplifies that great safety outcomes are possible and controllable.