

# unlimited

Volume 9 • Issue 2 • 2008

A quarterly newsletter for employees and their families

- 2 | Supercomputer A model of cool efficiency
- 3 | Wisconsin wonder Breakthrough Milwaukee program honored
- 4 | CH2M HILL OMI Public works excellence
- 6 | Safe harbors Protecting ports in California
- 13 | Singapore scents P&G launches perfume plant
- 15 | Krakow to Spartanburg Transatlantic connection

#### In addition:

Employee milestones

Panama Canal: Most significant project

"Coined" in Qatar

Planes, trains, and automobiles: Four transportation projects in the Seattle, Washington, area are changing the pace of the Pacific Northwest—Sea-Tac International Airport upgrades, U-Link light-rail tunnel, I-5 Everett expansion, and Coal Creek Parkway improvements.

## Washington's largest design-build transportation project a solid success

Just a few years ago, residents in towns like Everett, Washington, faced an arduous commute into and out of Seattle along Interstate 5.

When the highway opened in the 1950s, it adequately served the needs of residents. But in recent years, with 170,000 cars using the highway daily, this stretch of I-5 had become overcrowded, dangerous, and slow.

In 2005, the Washington State Department of Transportation selected the Atkinson-CH2M HILL team to provide design-build services for the I-5 expansion project in Snohomish County. Using design-build instead of the more traditional linear design-bid-build linear approach enabled the team to complete the project sooner while minimizing interruptions to traffic flow on this heavily traveled section of highway.

The project was originally slated to begin in 2009 and end in 2012. But state officials, anticipating increased traffic demands related to the 2010 Olympic Winter Games in nearby Vancouver, B.C., decided to shift to design-build to shorten the project schedule. CH2M HILL's design-build project team helped meet this major schedule shift.

(continued coverage on page 8)



**Falkland Islands** 

IT project links rural islanders (page 11)



#### **Water For People**

Campaign raises more than \$170,000 (page 16)



The I-5 expansion project in Everett is the third largest highway project in the state's history.

Snapshot: I-5 expansion project

Start date: September 2005

Cost: \$263 million

#### Scope:

- · Widen the freeway in Everett
- · Extend the current northbound and southbound high-occupancy vehicle lanes
- · Widen or replace 23 overpasses
- · Construct water treatment facility to filter highway runoff
- · Construct 11 freeway exits and onramps Staffing: 96 designers and 100 onsite workers at the peak of the project

(continued from cover)

### I-5 Everett design-build project

"This is the largest design-build project ever undertaken by the Washington State Department of Transportation," said Jay McRae, CH2M HILL's northwest transportation regional business group manager, "and the second largest design-build project ever done." The Tacoma Narrows Bridge was the state's first large-scale design-build effort.

"Design-build was a new way of thinking for a lot of the construction team," said Roch Player, CH2M HILL's geotechnical engineer, who saw the project through from start to ribbon cutting. "Many had never worked in such an environment where their sole focus is on a single project, and where phases are intertwined and moving ahead at the same time. Decisions were made in real time, reflecting the changing conditions and project site discoveries that occur on any big project."

While the effort was a challenge, many on the Atkinson-CH2M HILL team and the transportation department staff reveled in the design-build environment. "One state inspector shared with me how he loved working on the project—he never got bored, there was always progress, and things kept moving forward," said McRae. "He told me that the design-build environment shifts from the traditional adversarial relationship to more of a teamwork setting with the owner, and he did not want to go back to design-bid-build."

The design-build approach also gave the department flexibility in how it approached the widening project. For example, it was decided late in the construction project to add an interchange and overpass at 41st Street, a change order costing \$48.2 million.

"The Everett I-5 project was vital in building CH2M HILL's design-build business and establishing us as an industry leader."

—Jay McRae, CH2M HILL's Northwest Transportation regional business group manager

So after more than 2 years of singular focus, state and local officials, and Atkinson-CH2M HILL team members gathered on June 5 to formally open this new, improved, safer stretch of highway.

"Transportation and the way in which people move has significantly improved in this community," said Ray Stephanson, mayor of Everett. Stephanson added that he used to bypass the city's I-5 traffic bottleneck but no longer needs to because the highoccupancy vehicle lanes have improved flow significantly.

At the opening ceremonies, Mary Margaret Haugen, state senator and chair of the Senate Transportation Committee, noted the efforts of the transportation department and Atkinson-CH2M HILL to finish the project ahead of schedule and complete the project in phases to maintain traffic flow.

Haugen also commended the design-build approach, which resulted in the first major highway improvements made in the area in 40 years. "This project helps residents get home to their families more quickly and safely every day."

According to Washington State Transportation Secretary Paula Hammond, the state saved an estimated \$20 million designing the project on the fly. "It was a great example of how nimble [the department] and its contractors can be," said Hammond.

"The Everett I-5 project was vital in building CH2M HILL's design-build business and establishing us as an industry leader in this type of project delivery, both here in the Northwest and throughout the country," said McRae.

Wrapped up in the neatly organized combination of concrete, overpasses, retaining walls, and striping paint is the heart of the Everett I-5 project: increasing safety, providing transportation options for the future, and making life easier for residents.