

## ***King County's tunnel machine repairs at Maywood Hills Elementary School in Bothell***

Brightwater is a new wastewater treatment system being built by King County in response to continuing growth in our region. When completed it will serve north King and south Snohomish counties.

One of the tunneling machines being used to build the 13-miles of tunnels required for Brightwater is now stopped approximately 330 feet below ground, beneath the parking lot area at Maywood Hills Elementary School. Workers are getting ready to perform repairs at the front of the machine so it can complete the two-mile segment of tunnel between Kenmore and Bothell. Because of the tunnel machine's current location and depth, repairing the machine in place is the only feasible option.

Because the soils around the tunnel machine contain groundwater, the work area at the front of the machine is pressurized to keep water and soil from entering. Under these conditions workers at the front of the machine are exposed to high pressures similar to pressures experienced by deep sea divers.

To relieve these pressures and enable crews to work below ground in normal atmospheric conditions, dewatering wells were installed this summer from the surface to draw out ground water from around the front of the machine. These wells were installed by King County's contractor in the south access road to the school, located near the intersection of 104<sup>th</sup> Avenue Northeast and Northeast 195<sup>th</sup> Street in Bothell.

In addition to the dewater wells, a monitoring well and an injection well are also located at this site. All the wells are covered by metal plates or behind fencing, along with piping, meters and support equipment. This area is checked regularly.

***This area is secured, but as an additional safety precaution, we ask that Maywood students and others stay away from this construction area.***

***All repairs to the machine will be done below ground*** and will be accessed from the tunnel entrance in Kenmore. ***No adverse or long-term surface impacts are expected.*** When repairs are done, the wells will be removed in accordance with state guidelines and the site fully restored.

### **Ongoing activities**

Water is being pumped to the surface from the dewatering wells. This water is being treated and disposed of through the sanitary sewer system. As approved by the state Department of Ecology, additional water will be disposed of by treating it and then pumping it below ground. When the below ground pressure is reduced, tunnel crews will start making repairs at the head of the machine. Repairs are expected to be completed sometime this fall.

## **How is the county ensuring that any unexpected impacts are identified and addressed?**

A monitoring well has been installed at the work site and all dewatering work is being monitored on a continual basis. In addition, the county has eight other groundwater monitoring wells within a half mile of the site. The county is also monitoring groundwater levels at one nearby private well and at the City of Bothell's William Penn Park wells. The county maintains a 24-hour information line where construction related issues can be reported and responded to immediately.

## **Contact us if you need more information**

**For construction-related questions** contact the 24-hour construction information line at 206-205-5989 (remember to dial 911 for emergencies).

**For general questions and information** call 206-263-9453, or 711 for TTY access, or email us at: [brightwater@kingcounty.gov](mailto:brightwater@kingcounty.gov)

You can also call or email us to request regular updates on this work.

Our June 2009 fact sheet with more information about this work is available at <http://www.kingcounty.gov/brightwater/>