

## **Road Services Division**

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January 7, 2010

The Honorable Jane Hague Chair, Physical Environment Committee King County Council Room 1200 C O U R T H O U S E

Dear Councilmember Hague,

The purpose of this letter is to respond to the question you asked at the December 8, 2009, Physical Environment Committee meeting about whether bridge load limit notices include alternate route suggestions. The question arose during discussion about detour routes for two bridges that were recently posted with load limits.

When a county bridge is posted for load limit, a copy of the approval, which is signed by the County Road Engineer, is sent to the Department of Transportation's (DOT) Public Affairs office, the Department of Executive Services' Real Estate Services Section (RESS), and the Road Services Division's (RSD) Traffic Engineering Section. The DOT Public Affairs office determines the notification needs and informs fire districts, school districts, haulers, and other affected agencies. RESS evaluates all of their over legal/posted permits and right-of-way use permits, and based on this information, coordinates any special conditions with the bridge engineer. The Traffic Engineering Section posts advanced warning signs notifying drivers of the posted bridge before traffic turns onto the posted load-limited bridge route. The authority of the County Road Engineer to post load limits elapses after one year. Thereafter, ongoing load limits must be established by ordinance.

In this case, the two bridges posted with load limits are on sole-access roads and, therefore, there are no detour routes. Fifteen Mile Creek Bridge, located south of Issaquah on 240th Avenue SE north of SE Tiger Mountain Road, serves a small residential neighborhood of approximately 20 homes. The bridge's southeast wing wall and south abutment were heavily damaged during a storm on January 7, 2009. The bridge was subsequently posted with a load limit in May 2009, following an engineering assessment of the remaining capacity of the bridge. The load rating was performed based on an assumption that traffic is restricted to 14 feet from the east railing of the bridge due to a broken pile located on the west side. No overload permits have been requested to date since the posting. Upon request, the RSD will work with service providers to determine whether specific overload trucks can safely cross the bridge. The load restriction shall remain until the bridge is replaced.

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A project to replace the bridge, funded through the RSD's Capital Improvement Program, will begin in 2010 with construction scheduled for 2012. The RSD is currently seeking additional funding for the replacement of the bridge. Traffic markers and signage are situated on the road approach and bridge deck to restrict traffic to one lane, away from the damaged portion of the bridge. Low average daily traffic and good approach visibility allows for use of one lane without traffic lights or flagging. During bridge replacement construction, temporary access will be maintained for residents throughout construction of the new bridge, which will last through the summer months.

The Lake Dorothy Overflow Bridge is on the Middle Fork Snoqualmie River Road and serves forestry and recreational access into the Mt. Baker-Snoqualmie National Forest. The U.S. Forest Service has installed a temporary bridge to enhance the capacity of the old log bridge crossing. The temporary bridge allows heavy construction equipment to access sites that are under repair within the national forest. The load limits apply to the permanent log bridge and will remain in place when the temporary bridge is removed.

For hauling needs in excess of the posted limit for these or any other unincorporated King County bridges, a permit may be sought from the RESS. This permit system allows the RSD to evaluate specific configurations of loaded trucks or service vehicles, such as propane delivery, septic pumpers, emergency vehicles, or school busses. Overload permits, up to the maximum safe capacity of the bridge, are issued for a limited number of crossings on load-limited bridges.

I hope this information answers your question. If you have any other questions or concerns related to load limited bridges, please feel free to contact Matthew Nolan, P.E., Acting County Road Engineer, at 206-296-8208 or via e-mail at matthew.nolan@kingcounty.gov.

Sincerely,

Linda Dougherty Division Director

cc: Harold S. Taniguchi, Director, Department of Transportation (DOT)

Matthew Nolan, P.E., Acting County Road Engineer, Road Services Division (RSD), DOT

Rick Brater, P.E., Manager, Engineering Services Section (ESS), RSD, DOT Jim Markus, P.E., Managing Engineer, Bridge and Structural Design Unit, ESS, RSD, DOT