



# King County

Department of Transportation  
Road Services Division

June 16, 2017

TO: Dow Constantine, King County Executive

FR: Harold S. Taniguchi, Director  
Department of Transportation

Brenda Bauer, Director  
Road Services Division

RE: Emergency Proclamation, Tolt Hill Bridge #1834A

King County owns and maintains the Tolt Hill Bridge (the “Bridge”) located near Carnation, Washington. The construction of the Bridge began in June 2006 and opened for public use on May 30, 2008.

The Bridge is approximately 1,000 feet long consisting of two 300-foot long steel trussed spans, a short approach span on the west side, and three 120-foot long concrete girder spans on the east side of the river. The Bridge has two travel lanes and two shoulders.

Following the 2007 collapse of the eight-lane bridge on Interstate 35W in Minnesota, and the federal decision to allow heavier trucks on roadways, the Federal Highway Administration (FHWA) developed new requirements for bridge load ratings. The new requirements for load ratings from FHWA and the Washington State Department of Transportation (WSDOT) require all bridges to be evaluated by 2022 using the new criteria. Agencies are required to review gusset plate connections, which are thick sheets of steel bolting together structural elements of truss bridges, as part of this new criteria.

There are about 36,000 bolts fastening the plates on the two 300-foot long steel trusses of the Bridge. The King County Department of Transportation (KCDOT) has a bridge structural engineer who calculates bridge load ratings using specialized software. In the spring of 2017, the KCDOT bridge structural engineer recalculated the bridge load ratings for the Bridge. The recalculation revealed serious questions about the structural integrity of the Bridge.

The County hired an independent structural engineering firm to review the KCDOT bridge structural engineer’s recalculation of the bridge load ratings for the Bridge. The independent structural engineering firm confirmed the KCDOT structural engineer’s recalculation of the bridge load ratings for the Bridge and brought to light further concerns regarding the structural integrity of the Bridge.

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On June 16, 2017, the County reviewed these determinations with WSDOT and they concurred that the Bridge should be closed. The County made the decision to close the Bridge to vehicular traffic on June 16, 2017.

The average daily traffic/ADT of the Bridge is approximately 3,000 vehicle trips; motorists will be forced to take detours of approximately 12 miles depending upon the route. The closure of the Bridge to avoid potential life-safety impacts to King County citizens, constitutes an unforeseen circumstance beyond the County's control that presents a real and immediate threat to the proper performance of an essential government facility and will likely result in material loss or damage to property unless expeditious action is taken to repair the Bridge. The repairs are complex, will require special expertise to resolve, and will take time to design and implement. The communities are impacted by reduced access to transportation networks, school access, first responder service, and potential isolation during storm and flooding events which requires immediate action.

An emergency waiver of competitive bidding and formal solicitation requirements of state and county law is necessary to assure the timely procurement of design, construction and other required services, materials and equipment necessary to prevent delay in completing the repair of the damaged portions of the Bridge. This emergency waiver will allow King County to contract for expedited replacement of the damaged portions of the Bridge.

Enclosed is a draft emergency proclamation for your consideration. Because the additional and substantial work that is required is likely in excess of the basic \$250,000 dollar threshold, a motion by the County Council waiving requirements of competitive bidding and solicitation requirements for contracts relating to the repair and replacement of damaged structures at the Bridge and extending the 10-day period in KCC 2.93.080.B, is also required. The motion is being submitted separately via the standard legislative process. If you have any questions, please contact Brenda Bauer, Director, Road Services Division, at 477-3580.

Attachments: Emergency Proclamation, Tolt Hill Bridge #1834A

cc: Caroline Whalen, County Administrative Officer, Department of Executive Services  
Danielle Hinz, Chief Procurement Officer, Department of Executive Services  
Laurie Brown, Deputy Director, Department of Transportation (DOT)  
Rick Brater, County Road Engineer, Road Services Division, DOT  
Ed Conyers, Manager, Engineering Services Section, Road Services Division, DOT