

**BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of)	DOCKET TR-090912
)	
CITY OF RICHLAND,)	ORDER 01
)	
Petitioner,)	ORDER GRANTING PETITION TO
)	RECONSTRUCT THE STEPTOE
)	STREET HIGHWAY-RAIL GRADE
)	CROSSING AND MODIFY ACTIVE
TRI-CITY AND OLYMPIA)	WARNING DEVICES
RAILROAD and PORT OF BENTON)	
)	
Respondents.)	USDOT: 310397T
.....)	

BACKGROUND

- 1 On June 15, 2009, the city of Richland (City or Petitioner) filed with the Washington Utilities and Transportation Commission (Commission), a petition seeking approval to reconstruct a railroad-highway grade crossing and modify existing warning devices. The city of Richland is a first-class city and modifications to railroad-highway grade crossings are generally not subject to Commission review or approval (RCW 81.53.240). However, the City, under the provisions of RCW 81.53.291, has elected Commission review of the proposed modifications to the Steptoe Street highway-rail grade crossing and requested an order be issued in response to the petition. The crossing is identified as USDOT #310397T and is located at the intersection of Steptoe Street and the respondents' tracks in the city of Richland, Benton County.
- 2 The respondents, Tri-City and Olympia Railroad and Port of Benton have consented to entry of an Order by the Commission without further notice or hearing. The Port of Benton owns the tracks at this location and Tri-City and Olympia Railroad is the operator.
- 3 Steptoe Street is a five-lane principal arterial with two southbound and two northbound lanes. The City estimates average daily vehicle traffic over the crossing at 15,000 which includes two percent commercial motor vehicle traffic and eight school bus trips. The posted vehicle speed is 35 miles per hour. The tracks at this location are classified as main line by the Tri-City and Olympia Railroad. Average daily train traffic is two to four freight trains operating at 10 miles per hour. No passenger trains operate on this track.

- 4 Railroad warning devices at the intersection of Steptoe Street and the respondent's tracks consist of advance warning signs, pavement markings, cross-bucks, cantilever mounted gates and 12 inch flashing lights.
- 5 Currently, Tapteal Drive extends to the east of Steptoe Street and is stop-controlled at Steptoe Street just south of the grade crossing. Tapteal Drive is a three-lane collector road with average daily vehicle traffic of 800. The posted speed limit is 30 miles per hour. Tapteal Drive serves a nearby developing commercial area.
- 6 The City intends to construct a west leg to Tapteal Drive for commercial development purposes. The City and the Tri-City and Olympia Railroad have done extensive research into the safest and most efficient way to move traffic through the area and across the tracks. They propose to realign the east leg of Tapteal Drive, and construct the west leg, to intersect Steptoe Street coincident with the rail crossing. The end result is a highway intersection on top of a highway-rail grade crossing. The City's consulting engineer has determined that this is the safest and most efficient of many alternatives considered. The Tri-City and Olympia Railroad concurs.
- 7 In order to improve traffic flow at the highway intersection and enhance the safety at the railroad grade crossing, the City proposes to construct a roundabout to provide traffic control for the new highway intersection/grade crossing.

DISCUSSION

- 8 The City involved Commission Staff (Staff) in discussions about this project from its conception. Locating a roundabout and a highway rail grade crossing at one location is an unusual concept that is generally viewed negatively by the rail crossing safety community. The United States Department of Transportation, Federal Highway Administration (FHWA), in its highway design manual, describes the center crossing of railroad tracks through a roundabout as "Not Desirable."
- 9 Staff shares the concerns of other rail crossing safety experts and concurs with FHWA's view that the center crossing of railroad tracks through a roundabout is undesirable. However, the City, at Staff's request, conducted extensive research and outreach related to the proposed intersection/roundabout design. The results of these efforts are fully documented in an extensive and thorough report. The report contains the results of the city consultant's operational analysis; comments received from stakeholders and other design professionals; and a summary of literature used in developing the project.

- 10 The consultant's report concludes, in summary, that while the roundabout design with a railroad crossing through the central circle is unique, it is an appropriate design for the grade crossing at the Steptoe Street/Tapteal intersection. This design eliminates the problems of queuing vehicles across the tracks that might occur at a traditional signalized or stop controlled intersection with a rail crossing nearby. This design also provides the best level of service for the vehicular traffic. Locating the crossing gates outside the roundabout near cantilevered light structures is similar to a standard rail crossing configuration and should be easily understood by drivers. Use of standard signing and appropriately placed safety devices will ensure that this railroad crossing through a roundabout operates at least as safely as any other at-grade railroad crossing.
- 11 Staff continues to have some reservations about the design of this crossing configuration, not because Staff doubts the integrity, competence or professionalism of the engineers and other design experts involved in this project, but because it is unfamiliar, relatively untried, and new in Washington State. Utah and Florida have similar roundabouts with railroad crossings in the central circle in operation today. The roundabout crossing in Utah was constructed in 2003 and involves two tracks that accommodate light rail traffic. The train traffic is high volume with trips every 15 minutes. There have been no rail related accidents at this crossing. The roundabout in Florida was constructed in 1999 and an average of 28 trains per day, traveling up to 60 miles per hour, cross the roundabout/rail crossing. There have been five reported vehicle to vehicle accidents, none involving the train. Staff is convinced that the City and the Tri-City and Olympia Railroad have performed their due diligence in developing this design concept for the Steptoe/Tapteal intersection.

FINDINGS AND CONCLUSIONS

- 12 (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington having jurisdiction over public railroad-highway grade crossings within the state of Washington. *RCW 81.53*.
- 13 (2) The railroad-highway grade crossing at the intersection of Steptoe Street and the respondent's tracks in Richland, Washington, identified as USDOT #310397, is a public railroad-highway grade crossing within the state of Washington.
- 14 (3) *RCW 81.53.261* requires the Commission grant approval prior to any changes to public railroad-highway grade crossings within the state of Washington in non-first class cities. *See also WAC 480-62-150*.

- 15 (4) The city of Richland is a first-class city and modifications to railroad-highway grade crossings are generally not subject to Commission review or approval (RCW 81.53.240). However, the city, under the provisions of RCW 81.53.291, has elected Commission review of the proposed modifications to the Steptoe Street highway-rail grade crossing.
- 16 (5) Commission Staff investigated the petition and recommended that it be granted, subject to specified conditions.
- 17 (6) After reviewing the city of Richland's petition filed on June 15, 2009, and giving due consideration to all relevant matters and for good cause shown, the Commission grants the petition.

ORDER

THE COMMISSION ORDERS:

- 18 The city of Richland's petition to reconstruct and modify warning devices at a railroad-highway grade crossing, located at the intersection of Steptoe Street, Tapteal Drive, and the respondent's tracks in Richland, Washington, is granted. Approval of the petition is subject to the following conditions:
- (1) Traffic control devices must comply with all applicable standards specified in the U.S. Department of Transportation *Manual on Uniform Traffic Control Devices*.
 - (2) The modifications must conform to those described in the petition.
 - (3) The City of Richland must notify the Commission upon completion of the modifications authorized in this Order. Acceptance of the modifications is subject to inspection by Commission Staff, and verification that the crossing is in full compliance with applicable laws, regulations, and the conditions specified in this Order.

The Commissioners have delegated authority to the Secretary to enter this Order pursuant to RCW 80.01.030 and WAC 480-07-904((1)(a)).

DATED at Olympia, Washington, and effective July 2, 2009.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER
Executive Director and Secretary

NOTICE: This is an order delegated to the Secretary for decision. In addition to serving you a copy of the decision, the Commission will post on its Internet Web site for at least fourteen (14) days a listing of all matters delegated to the Secretary for decision. You may seek Commission review of this decision. You must file a request for Commission review of this order no later than fourteen (14) days after the date the decision is posted on the Commission's Web site. The Commission will schedule your request for review for consideration at a regularly scheduled open meeting. The Commission will notify you of the time and place of the open meeting at which the Commission will review the order.

The Commission will grant a late-filed request for review only on a showing of good cause, including a satisfactory explanation of why the person did not timely file the request. A form for late-filed requests is available on the Commission's Web site.

This notice and review process is pursuant to the provisions of RCW 80.01.030 and WAC 480-07-904(2) and (3).