



STATE OF WASHINGTON
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY (360) 586-8203

March 19, 2009

The Honorable David Poucher
Mayor of White Salmon
City of White Salmon
1100 North Main Street
Post Office Box 2139
White Salmon, Washington 98672

Re: TR-090161, Proposed Quiet Zone, South Dock Grade Road

Dear Mayor Poucher:

Thank you for the opportunity to comment on the South Dock Grade Road proposed quiet zone, as described in Docket TR-090161.

The Washington Utilities and Transportation Commission (UTC) received notice on January 26, 2009, from the City of White Salmon (city) of its intent to establish a railroad quiet zone at the South Dock Grade Road highway rail grade crossing, DOT #090164L. On January 30, 2009, UTC received a second notice from the city transmitting a revised Notice of Intent. The city is proposing a quiet zone extending one-quarter mile east and west of the crossing in effect 24 hours, seven day per week.

The city filed an earlier Notice of Intent to establish a quiet zone at this crossing on February 19, 2008. UTC assigned TR-080397 to this notice. UTC provided comments on the proposal and a copy of our comments is attached. Staff understands that the city originally qualified for a quiet zone under this Notice of Intent but later did not due to a change in the Quiet Zone Calculator.

Staff participated in several on-site diagnostic reviews with the city, BNSF Railway Company (BNSF) and the Federal Railroad Administration (FRA). The most recent was on November 14, 2008.

UTC staff entered information about this crossing into the Quiet Zone Calculator and received an unofficial risk index of 4,574.1. This risk index calculation assumes the inclusion of Supplemental Safety Measure No.12, mountable medians with reflective



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traffic channelization devices at the crossing. Addition of this Supplemental Safety Measure is described in the city's Notice of Intent.

Staff recommends that the city review the Federal Railroad Administration's (FRA) publication, "Guidance on the use of Traffic Channelization Devices at Highway-Rail Grade Crossings," prior to installing the channelization devices. The devices selected should meet all FRA requirements in order to receive the full 0.75 effectiveness rate based on the devices' ability to reduce the probability of a collision at a grade crossing. A copy of this publication is attached.

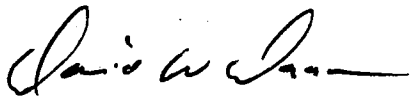
The current Nationwide Significant Risk Threshold (NSRT) is 17,610.00. The South Dock Grade Road crossing is well below the current threshold and eligible to be designated as a quiet zone.

As you know, under current federal rules, the UTC may comment on the quiet zone proposal, but does not approve or disapprove it. Based on our participation and observations at the diagnostic reviews, UTC staff continues to be concerned about the limited sight distance at the crossing, which is located between two curves and has some overgrown vegetation. From the southbound approach, sight distance to both the east and the west is approximately 300 feet. From the north, sight distance is about 1500 feet in each direction. Therefore, to improve sight distance staff recommends that the city work closely with BNSF Railway to cut back and maintain vegetation near the crossing before implementing the quiet zone.

The UTC acknowledges that the South Dock Grade Road railroad crossing qualifies for designation as a quiet zone under its NSRT rating.

Thank you for the opportunity to provide comments. Please feel free to contact Kathy Hunter at (360) 664-1257 or by e-mail at khunter@utc.wa.gov if you would like additional information.

Sincerely,



David W. Danner
Executive Director and Secretary

cc: Todd Kuhn, BNSF Railway
Christine Adams, FRA
Alvin Richardson, AMTRAK
Mike Miller, MGH Associates
Ted Trepanier, WSDOT
Darrin Eckman, Tenneson Engineering Corporation



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April 21, 2008

David Poucher, Mayor
City of White Salmon
1100 North Main Street
P.O. Box 2139
White Salmon, WA 98672

Re: TR-080397, Proposed Quiet Zone, South Dock Grade Road

Dear Mayor Poucher:

Thank you for the opportunity to comment on the South Dock Grade Road proposed quiet zone, as described in Docket TR-080397.

On February 19, 2008, the City of White Salmon (city) notified the Washington Utilities and Transportation Commission (UTC) of its intent to establish a railroad quiet zone at the South Dock Grade Road highway rail grade crossing, DOT #090164L.

On August 30, 2007, UTC staff participated in an on-site diagnostic review with the city, BNSF Railway Company (BNSF) and the Federal Railroad Administration (FRA). The city is proposing a one-quarter mile east and west, 24-hour, seven day per week quiet zone at this crossing.

The consultant for the city entered information about this crossing into the Quiet Zone Calculator and received a risk index of 14,092.13 with no supplementary safety measures proposed. The current Nationwide Significant Risk Threshold (NSRT) is 19,047.00, which places the South Dock Grade Road crossing well below the current threshold and eligible to be designated as a quiet zone.

As you know, the UTC may comment on the quiet zone proposal, but does not approve or disapprove it because states have been preempted in this area by federal rule. Based on our participation and observations at the diagnostic review, UTC staff is very concerned about the limited sight distance at the crossing, which is located between two curves. From the southbound approach, sight distance to both the east and the west is approximately 300 feet. From the north, sight distance is about 1500 feet in each direction. UTC staff therefore recommends that if the train horn is removed from the





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these devices. With proprietary systems, be careful to ensure that all anchorages to the pavement are completed according to the manufacturer's instructions or State or local standards; in addition, be sure that the attachment of each vertical panel is secure. Any deflectable hinges must function properly.

In the case of proprietary systems utilizing modular plastic curbs with vertical panels or road tubes, these devices should be known to have been crash tested. This will ensure that they do not have the potential to send an errant vehicle out of control when struck. In addition, the vertical elements should not separate upon impact, nor should impacted curbs separate from the pavement and become airborne.

The Office of Highway Safety of the Federal Highway Administration can supply the relevant test criteria and procedures; see their website at:

<http://safety.fhwa.dot.gov/>

APPLICABILITY FOR QUIET ZONE ESTABLISHMENT - see FRA website at:

<http://www.fra.dot.gov>

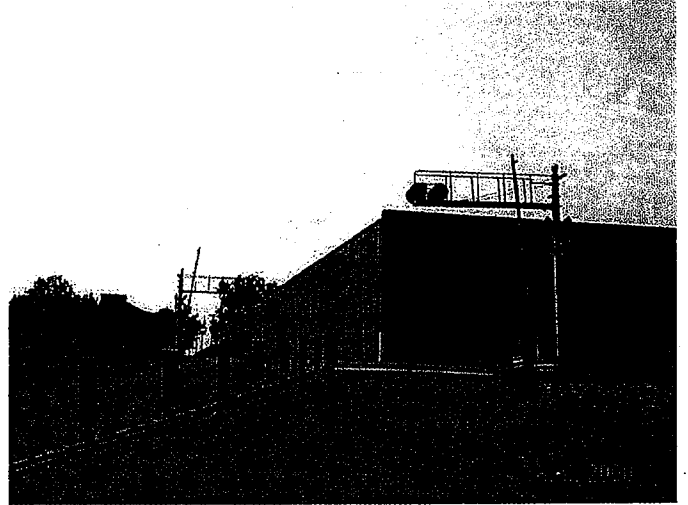
The Federal Railroad Administration has recognized these channelizing devices as qualified Supplemental Safety Measures when used according to its regulations for the use of locomotive horns at grade crossings, found at 49 CFR Part 222. For purposes of establishing a Quiet Zone under Part 222, these devices have been assigned an effectiveness rate that represents their ability to reduce the probability of a collision at a grade crossing. For traversable channelizing devices with vertical panels, the effectiveness rate is 0.75. For non-traversable channelizing devices, with or without vertical panels, the effectiveness rate is 0.80.

These values are used by the Quiet Zone Calculator in determining the risk of a collision at a crossing to be included in a (new or existing) quiet zone.



**U.S. Department
of Transportation
Federal Railroad
Administration**

Guidance on the use of Traffic Channelizing Devices at Highway-Rail Grade Crossings



Several types of traffic channelizing devices are finding new application at highway-rail grade crossings that are equipped with flashing light signals and crossing gates. These channelizing devices, when used appropriately, can reduce the risk of a collision between a vehicle and a train by 75%! This high level of risk reduction makes traffic channelizing devices a good choice to enhance safety and greatly reduce gate violations at highway-rail grade crossings.

Each device has its own special properties and installation requirements. This guidance is offered to facilitate the effective use of these traffic control devices.

The Federal Highway Administration issued the report "Guidance on Traffic Control Devices at Highway-Rail Grade Crossings." Channelizing devices may be grouped in a few general categories.

BARRIER WALL SYSTEMS

Concrete barriers and similar proprietary systems are substantial, and may require a wide space between opposing lanes of traffic on approach to the grade crossing. While these are the most effective at deterring "drive-around" gate violations, their large

size may preclude their use in many applications.

In addition, the upstream end of a barrier must be equipped with a site-appropriate energy absorbing end treatment. For this reason, this class of device can be more cost effective where continuous runs of 150 feet or more may be achieved.



WIDE RAISED MEDIANS

In special situations where median width is available, a raised median of between four and 100 feet in width may be employed. Such a wide median may prove effective in deterring gate violations, even though it does not actually constitute a true barrier as commonly defined.

In addition, a well-landscaped wide median will also provide aesthetic benefits to the surrounding neighborhood. A wide median, if attractively landscaped, is often the most aesthetically pleasing separation method.

NON-TRAVERSABLE CURB ISLANDS

This class of device has the advantage of a narrower footprint, but its use should be restricted to approach roadways with posted speeds of 40 MPH or below. These devices are substantial enough that each installation should be carefully designed, as an inappropriately placed device can constitute a hazard if struck by an errant vehicle. These devices are generally from six to nine inches in height, and usually about 2 feet wide. They should be equipped with reboundable, reflectorized vertical panels, to

enhance device visibility, and to increase “drive-around” deterrence. Road users would encounter significant difficulty attempting to cross over such a non-traversable island, because the six to nine inch heights cannot be readily mounted by most vehicles.

Retroreflective materials (in the color appropriate for the direction of travel in adjacent lanes) should be applied to the curbs to enhance their low-light visibility.

TRAVERSABLE RAISED CURB SYSTEMS

This class of channelizing device is the narrowest, and therefore the easiest to fit in a wide range of roadway cross-section widths.

Traversable raised curb systems should always be used with reboundable, reflectorized vertical panels. This combination of devices will present road users with a visual deterrent to crossing over into the opposing traffic lane in order to violate lowered gates.

The curb portion is not more than six inches in height, and generally less than twelve inches in width. Curbs are formed with a rounded shape that will create minimal vehicle deflection upon impact. In most cases, these systems can be installed on existing roadway centerlines, without the need for widening the roadway approaches to the crossing

Retroreflective materials (in the color appropriate for the direction of travel in adjacent lanes) should be applied to the curbs to enhance their low-light visibility.

These traversable curbs may present less of a physical barrier to crossovers than the more substantial devices discussed previously, but they still provide a considerable deterrent to gate violations. These devices can be used where appropriate to enhance safety at a wide variety of gated crossings.

Special care should be taken during installation of