



STATE OF 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

Oct. 23, 2018

Rob Brown
City Traffic Engineer, Public Works
City of Kent
230 Fourth Ave. S.
Kent, WA 98032

Sent by email and First Class mail

Re: TR-180721 – Notice of Intent to Establish a Railroad Quiet Zone on the BNSF Railway Mainline in Kent

Dear Mr. Brown:

On Aug. 28, 2018, the Washington Utilities and Transportation Commission (UTC) received notification from the City of Kent (City) of its intent to establish a railroad quiet zone at eight crossings on the BNSF Railway Company (BNSF) mainline in Kent. The affected crossings include:

USDOT Crossing Number	Road Name
085625H	S. 212 th Street
085629K	E. James Street
085633A	E. Smith Street
085636V	E. Meeker Street
085637C	E. Gowe Street
085639R	E. Titus Street
085640K	Willis Street/SR-516
085642Y	S. 259 th Street

On Nov. 15, 2017, UTC Staff (Staff) participated in an onsite quiet zone review of the Kent BNSF crossing corridor along with representatives from the City, the City's consultant, the Federal Railroad Administration (FRA), and BNSF.

The proposed quiet zone will be in effect 24 hours per day, seven days per week. While the notice provided did not specify length, Staff assumes that the proposed quiet zone will extend one-quarter mile on each side of the crossings, which is the minimum length required by Title 49, Code of Federal Regulations, Part 222 – Use of Locomotive Horns at Public Highway-Rail Grade Crossings.

The City proposes to install Supplemental Safety Measures (SSM) and Alternative Safety Measures (ASM) at several crossings to qualify for quiet zone designation, as well as other upgrades described in the notice. ASMs require approval from the FRA.

As the information was not provided with the Notice of Intent, Staff requested and received the City's calculations of the impacts of its proposed upgrades relative to the National Quiet Zone Risk Index (QZRI). As the crossings now stand, the crossing corridor QZRI for the proposed quiet zone without train horns is 126,421.28, which exceeds the Nationwide Significant Risk Threshold. With the proposed SSMs and ASMs, the City's calculations indicate that the QZRI for the corridor will be 122,497.50, which the City represents is below the significant risk threshold for the corridor. The City reported that these calculations were the result of discussions between the City's consultant and senior staff at the FRA.

Under current federal rules, the UTC may comment on quiet zones but it does not have the authority to approve or deny them. Staff acknowledges that, based on the City's QRZI calculations, the City believes these crossings will qualify for designation as a quiet zone with the implementation of the proposed SSM/ASM upgrades. Staff supports the proposed SSMs and ASMs, as well as the other proposed improvements, as they will improve safety and reduce the possibility of motorists driving around downed crossing gates when a train is approaching. The proposed installation of fencing in specific locations along the corridor will help prevent pedestrian trespass over the tracks.

Additional recommendations by Staff for safety improvements, as discussed at the Nov. 2017 onsite meeting, include:

- **LED light upgrades:** Staff strongly recommends that, in addition to the proposed upgrades, all crossing signals be upgraded to LEDs prior to quiet zone establishment. Staff acknowledges that these upgrades are outside of the quiet zone requirements; however, the absence of a train horn only increases the need for railroad warning devices to be seen, and Staff believes these upgrades would improve visibility of the crossing signals for motor vehicles and pedestrians.

- **Vehicle queuing/traffic signal preemption:** At the Nov. 2017 onsite meeting, Staff observed vehicles queuing over several crossings while drivers were waiting for nearby traffic signals. Only the S. 212th crossing currently has traffic signal preemption in place. Based on a 2011 study prepared for BNSF by Campbell Technology Corporation, the simultaneous preemption at the S. 212th crossing does not provide enough time for a design vehicle to clear the track during a worst-case scenario. Staff acknowledges that this is outside of the quiet zone requirements; however, Staff recommends that the traffic signal preemption issue at S. 212th be addressed as soon as possible to prevent vehicle/train collisions. In addition, if there is vehicle queuing at other crossings located within 200 feet of a traffic signal, the crossings should be evaluated for preemption.
- **Willis St. (USDOT 085640K)** – Staff recommends ensuring that the removal and replacement of the existing median barrier/channelization is close enough to tracks to deter illegal left turns from Railroad Ave. in the SE quadrant, as discussed in the Nov. 2017 onsite meeting notes.

Prior to making modifications to the crossings in the proposed quiet zone, the City must submit petitions to the UTC to obtain approval. Staff also recommends that the City review the FRA's publication, "Guidance on the Use of Traffic Channelization Devices at Highway-Rail Grade Crossings." The devices selected should meet all FRA requirements. When the quiet zone is implemented, "NO TRAIN HORN" signs must be added to the advance warning signs on each approach to the crossing.

Thank you for the opportunity to provide comments. Please contact Betty Young, Transportation Planning Specialist, at (360) 664-1202 or by email at betty.young@utc.wa.gov, if you would like additional information.

Sincerely,



Mark L. Johnson *for*
Executive Director and Secretary

cc: Jeffrey Stewart, Federal Railroad Administration
Federal Railroad Administration, Office of Safety, Washington DC
Megan McIntyre, BNSF
Stephen Semenick, BNSF
Patrick Sullivan, AMTRAK

City of Kent – Proposed Quiet Zone Improvements – BNSF corridor

Road Name/ USDOT #	Proposed Improvement	Type of Improvement
S. 212 th Street (085625H)	<ul style="list-style-type: none"> West approach: Installation of 126 feet of delineator posts (reflective traffic channelization devices) on existing mountable medians. East approach: Extend existing mountable median by 80 feet for a total of 120 feet. Install 120 feet of delineator posts on top of median. 	SSM
	<ul style="list-style-type: none"> Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side street. Replace existing “Do Not Stop on Tracks” signs on both approaches. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Look” signs on non-gated pedestrian approaches. Install dynamic envelope pavement markings on crossing surface. 	Other (non-SSM or ASM)
E. James Street (085629K)	<ul style="list-style-type: none"> East approach: Remove and replace existing 110 feet of mountable median curb with delineator posts. West approach: Replace and extend existing 40-foot mountable median curb with delineator posts to 110-foot total length. Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side street. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on non-gated pedestrian approaches. Install dynamic envelope pavement markings on crossing surface. 	ASM
	<ul style="list-style-type: none"> Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side street. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on non-gated pedestrian approaches. Install dynamic envelope pavement markings on crossing surface. 	Other (non-SSM or ASM)
E. Smith Street (085633A)	<ul style="list-style-type: none"> East approach: Remove and replace 95 feet of mountable median curb with delineator posts. West approach: Refresh 56 feet of existing mountable median curb with delineator posts and install 50 feet of new delineator posts on existing median for 106 feet total length. A roadway intersects E. Smith Street at 17 feet from the grade crossing. Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side street. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on non-gated pedestrian approaches. 	ASM
	<ul style="list-style-type: none"> Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side street. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on non-gated pedestrian approaches. 	Other (non-SSM or ASM)

Road Name/ USDOT #	Proposed Improvement	Type of Improvement
	<ul style="list-style-type: none"> Extend pedestrian railing in NE quadrant from back of sidewalk to connect into existing Sound Transit platform railing. Install fence on west side of tracks between Meeker and Smith. 	
E. Meeker Street (085636V)	<ul style="list-style-type: none"> West approach: Remove and replace 65 feet of existing mountable median curb with delineator posts. East approach: Remove and replace 98 feet of mountable median curb with delineator posts. East: close access point adjacent to tracks at bungalow. Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side streets. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on four non-gated pedestrian approaches. Narrow travel lanes to 12 feet. Install fence on west side of tracks between Gowe and Meeker and Meeker and Smith. Install fence in SE quadrant from ROW line to corner of BNSF building. 	Other (non-SSM or ASM)
E. Gowe Street (085637C)	<ul style="list-style-type: none"> West approach: Remove and replace 65 feet of existing mountable median curb with delineator posts. East approach: Remove and replace 98 feet of mountable median curb with delineator posts. A roadway intersects E. Gowe St. 30 feet from the grade crossing. (<i>Note: NOI says Smith Street – should be Gowe St.</i>) Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side streets. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install “Do Not Stop on Tracks” signs on both approaches. Install “Look” signs on four non-gated pedestrian approaches. Narrow travel lanes to 12 feet. Install fence on west side of tracks between Titus and Gowe, and on NE quadrant from right-of-way line connecting to corner of BNSF building. 	Other (non-SSM or ASM)
E. Titus Street (085639R)	<ul style="list-style-type: none"> Install “No Train Horn” signs on both approaches to crossing and on advance warning sign on side streets. 	Other

Road Name/ USDOT #	Proposed Improvement	Type of Improvement
	<ul style="list-style-type: none"> West approach: Remove existing mountable curb with delineator posts and replace with 72 feet of existing mountable median curb with delineator posts. East approach: Remove existing median curb with delineator posts and replace with 65 feet of mountable median curb with delineator posts. Close driveway on west side adjacent to crossing gate in NW quadrant. Close driveway on north side between main lines and industry spur track. East approach: Relocate crossbuck and "3 Tracks" sign for westbound traffic to stop line location. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install "Look" signs on four non-gated pedestrian approaches. Narrow travel lanes to 12 feet. Install "Right Only" sign for driveway in SE quadrant. Install fence on west side between Titus and Gowe. 	(non-SSM or ASM)
Willis Street/ SR-516 (085640K)	<ul style="list-style-type: none"> Install "No Train Horn" signs on both approaches to crossing and on advance warning sign on side streets. West approach: Remove and replace 100 feet of mountable median curb with delineator posts. East approach: Remove and replace 100 feet of mountable median curb with delineator posts. Install ADA-compliant detectable warning surfaces on all four pedestrian approaches. Install "Look" signs on four non-gated pedestrian approaches. Install painted lines behind cantilever bases to define pedestrian paths. Install dynamic envelope pavement markings on crossing surface. 	Other (non-SSM or ASM)
S. 259 th Street (085642Y)	<ul style="list-style-type: none"> Install "No Train Horn" signs on both approaches to crossing and on advance warning sign on side streets. Install "Do Not Stop on Tracks" signs on both approaches. East approach: Install 110 feet of mountable median curb with delineator posts. Install "No Truck Parking" signage in NE quadrant. 	Other (non-SSM or ASM)