

Lynn Peterson Secretary of Transportation Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

March 20, 2015

Kathy Hunter Deputy Assistant Director, Trans. Safety Washington Utilities and Transportation Commission 1300 S Evergreen Park Dr. SW Olympia, WA 98504-7250 STATE OF WASH.
UTILL AND TRANSP.

2015 MAR 30 AM 8: 56

Re: Petition for Reconstruction and Installation of an Inter-Tie at the 41st Division Drive Crossing (085830N) in Joint Base Lewis-McChord within Pierce County, WA

Dear Ms. Hunter,

This letter is in support of the aforementioned WUTC petition on behalf of WSDOT for the highway-rail grade crossing upgrades at 41st Division Drive (USDOT Crossing #085830N) within Pierce County, WA. The following supplemental information is a summary of the proposed improvements to the highway-rail grade crossing at 41st Division Drive.

The Washington State Department of Transportation (WSDOT) is implementing a program of infrastructure improvement projects along the Pacific Northwest Rail Corridor (PNWRC) also known as the PNWRC Improvement Program. This program is comprised of approximately 17 component projects that when combined will; provide two additional roundtrips for the Cascades intercity passenger rail service between Seattle, WA and Portland, OR; improve on time reliability to 88%; and provide a 10 minute reduction in travel time between the aforementioned termini. One of the 17 PNWRC Improvement projects is the Point Defiance Bypass project. In addition to the Cascades service, the Amtrak long distance service, the Coast Starlight, will also utilize the Point Defiance Bypass alignment.

The Point Defiance Bypass project includes five highway-rail grade crossings that will be reconstructed to support the above mentioned passenger rail services between Lakewood, WA and DuPont, WA. Those highway-rail grade crossings are Clover Creek Drive SW, North Thorne Lane SW, Berkeley Street SW, 41st Division Drive, and Barksdale Avenue. The Berkeley Street SW highway-rail grade crossing improvements are being constructed by the city of Lakewood as part of their Madigan Access Improvement project. The city of Lakewood project will incorporate the necessary highway-rail grade crossing improvements to support the intercity and long distance passenger rail services.

In January of 2010, WSDOT filed a petition with the WUTC to modify the 41st Division Drive at-grade crossing to support the Amtrak Cascades intercity passenger

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rail service under WSDOT state funding. The WUTC granted this petition in March of 2010 for the improvements detailed in the petition with signature to the Waiver of Hearing from Sound Transit, United States Army, and Tacoma Rail. During this same timeframe, WSDOT had applied for American Recovery and Reimbursement Act (ARRA) funding administered through the federal lead agency, Federal Railroad Administration (FRA), for the delivery of the PNWRC Program. This Program is to deliver approximately 17 individual projects with the purpose and intent of providing more reliable, increased frequency, and a reduction in running time for the Amtrak Cascades intercity passenger rail service. Additionally, accommodations for the Amtrak long distance passenger rail service, the Coast Starlight, also fall within the scope of work under the PNWRC Program.

One of the aforementioned 17 projects is the Task 2 – Tacoma – Point Defiance Bypass which will reroute Amtrak passenger rail trains from the existing Point Defiance route to a more inland route extending from Tacoma, Lakewood, DuPont and Nisqually, WA. The scope of work under the FRA ARRA funding included the need to complete a project level Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) prior to the reimbursement of any portion of construction. Due to this prerequisite requirement under the FRA ARRA funding, the construction for the 41st Division Drive at-grade crossing improvements was postponed until FRA approval was achieved for both environmental and design.

The improvements at the 41st Division Drive highway-rail grade crossing include new flashing light masts and gates, a constant warning-time grade crossing warning device and a new concrete crossing panel with rubber flange way fillers. The off connection from southbound Interstate 5 will be realigned slightly near the mouth of the ramp termini to improve the right turn radius. Raised median will be installed on the north and south sides of the crossing to prevent vehicles from circumventing the new gates. Queue cutter signals will also be installed in both directions at this location and coordinated with the advanced preemption sequence and queue detector loops. This configuration will assist in managing the potential traffic queues resulting from the 41st Division Drive Joint Base Lewis-McChord military base entrance.

In conjunction with the attached petition, WSDOT is working closely with the Joint Base Lewis-McChord, Sound Transit, BNSF, and Tacoma Rail on the proposed improvements for 41st Division Drive. In addition, please find the signed Waiver of Hearing by Respondent found in Section 13 of this petition from each of the applicable project stakeholders as consent without a hearing.

Ms. Hunter March 20, 2015 Page 3

If you should have any questions, please contact myself at (360)905-1578.

Sincerely,

Casey Liles, MSCE, PE WSDOT Rail Division

Point Defiance Bypass Project Lead

CL:ts

Enclosure: WUTC Petition for Reconstruction and Installation of an Inter-Tie at the 41st Division Drive Highway-Rail Grade Crossing, No. 085830N

cc: David Smelser Michael Williams Chris Dunster Devin Reck

Jason Dao

Thomas Slimak

Document Controls



WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

ON TO CONSTRUCT OR	
STRUCT A HIGHWAY-RAIL CROSSING AND INSTALL	
AN INTER-TIE BETWEEN A HIGHWAY SIGNAL AND A RAILROAD CROSSING SIGNAL SYSTEM	
CROSSING # 085830N	

Prior to submitting a Petition to Construct a highway-rail grade crossing and install an inter-tie between a Highway Signal and a Railroad Crossing Signal System to the Washington Utilities and Transportation Commission (UTC), State Environmental Protection Act (SEPA) requirements must be met. Washington Administrative Code (WAC) 197-11-865 (2) requires:

All actions of the utilities and transportation commission under statutes administered as of December 12, 1975, are exempted, except the following:

(2) Authorization of the openings or closing of any highway/railroad grade crossing, or the direction of physical connection of the line of one railroad with that of another;

Please attach sufficient documentation to demonstrate that the SEPA requirement has been fulfilled. For additional information on SEPA requirements contact the Department of Ecology.

The Petitioner asks the Washington Utilities and Transportation Commission to approve installation of an inter-tie between a highway signal and a railroad crossing signal system.

☐ Construction ☑ Reconstruction

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STATE OF WASH.
UTIL. AND TRANSP.

Project Summary:

The 41st Division Drive highway-rail grade crossing is part of the Point Defiance Bypass Project that has been proposed to respond to deficiencies in the existing rail operations around Point Defiance between Tacoma and Nisqually in Washington State. As part of the Pacific Northwest Rail Corridor (PNWRC) Improvement Program, when combined with the other component projects, this Project would allow for two additional round trips of the Amtrak Cascades service between Seattle, Washington, and Portland, Oregon with improved reliability and reduced travel time. This Project would also support Amtrak's longer-distance Pacific Northwest passenger rail service, the Coast Starlight.

The improvements at the 41st Division Drive highway-rail grade crossing include:

- Flashing light masts and gates are set between 5 feet and 7 feet from face of curb.
- The crossing will have a constant warning-time grade crossing warning device.
- Crossing surface will be concrete panels with attached rubber flange way fillers.
- The off ramp from Southbound Interstate 5 will be realigned slightly near the intersection with 41st Division in order to accommodate WB-67 size design vehicles. The current off ramp does not accommodate such vehicles.
- The existing channelization configuration has one northbound lane across the tracks closed with delineators to allow a free-flow right off the freeway. This will be "formalized" with curb and gutter. This will allow a median wide enough for a crossing gate on the north side of the tracks. Mr. Bill Velez of the military has reviewed this design and has indicated that Joint Base Lewis-McChord has "no comments" on the design.
- New medians will be installed on the south side of the tracks, and the median on the north side of the tracks will be lengthened and will be wide enough for a center crossing gate.
- Queue-cutter signals will be installed in both directions, coordinated with advance preemption sequence and queue detector loops, will assist with the mitigation of vehicles queuing onto the tracks.
- The Interstate 5 southbound off ramp onto northbound 41st Division Drive is proposed to be widened at the connection with 41st and incorporates new curb and gutter. The curb and gutter has been moved away from the edge line to accommodate the turning movements of the larger WB-67 design vehicle.

Section 1 – Petitioner's Information

WSDOT Rail Division	
Petitioner	
Street Address	
Olympia, WA 98504	
City, State and Zip Code	
P.O. Box 47407	
Mailing Address, if different than the street address	
David Smelser	
Contact Person Name	
360-705-6916; David.Smelser@wsdot.wa.gov	
Contact Phone Number and E-mail Address	

Section 2 – Respondent's Information

Respondent	
401 South Jackson Street	
Street Address	
Seattle, WA 98104-2826	
City, State and Zip Code	
Mailing Address, if different than the street address	
Jodi Mitchell	
Contact Person Name	
206-398-5080; Jodi.Mitchell@SoundTransit.or	

Section 2 – Respondent's Information (cont'd)

Respondent	
0.0 th 0.11	
2454 Occidental Avenue S; Suite 2D	
Street Address	
Seattle, WA 98134	
City, State and Zip Code	
Mailing Address, if different than the street address	
Richard Wagner	
C P N	
Contact Person Name	
Contact Person Name	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail Respondent 2601 SR 509 North Frontage Road	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail Respondent	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail Respondent 2601 SR 509 North Frontage Road	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail Respondent 2601 SR 509 North Frontage Road Street Address Tacoma, WA 98421	
Contact Person Name 206-625-6152; Richard.Wagner@BNSF.com Contact Phone Number and E-mail Address Tacoma Rail Respondent 2601 SR 509 North Frontage Road Street Address	

Kyle Kellem
Contact Person Name

253-377-3554; kkellem@cityoftacoma.org
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information (cont'd)

Respondent	
Bldg 2012 Liggett Avenue	
Street Address	
Joint Base Lewis-McChord, WA 98433	
City, State and Zip Code	
PO Box 33950	
Mailing Address, if different than the street address	
Sallie K. Donahue, PE, DPW, BOID	
Contact Person Name	

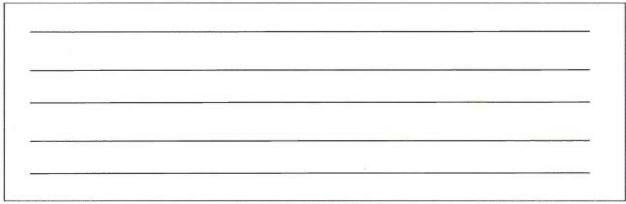
Section 3 – Crossing Location

1. Existing highway/roadway41st Division Dr
2. Existing railroad
3. USDOT Crossing No. <u>085830N</u>
4. Located in the1/4 of the1/4 of Sec, Twp. 19N, Range 2E W.M.
5. GPS location, if known 47.105602, -122.589215
7. Railroad mile post (nearest tenth) 5.7
8. City JBLM County Pierce
Section 4 – Proposed or Existing Crossing Information
1. Railroad company Sound Transit Note: Sound Transit owns crossing property while Tacoma Rail and BNSF Railway Company share a franchising agreement of the rail.
2. Type of railroad at crossing: ☑ Common Carrier □ Logging □ Industrial
☑ Passenger □ Excursion
3. Type of tracks at crossing: ☑ Main Line □ Siding or Spur
4. Number of tracks at crossing1
5. Average daily train traffic, freight2
Authorized freight train speed 40mph Operated freight train speed 40 mph
6. Average daily train traffic, passenger16_
Authorized passenger train speed
7. Will the proposed crossing eliminate the need for one or more existing crossings? Yes No
8. If so, state the distance and direction from the proposed crossing.

-	er propose to close any existing crossings? No✓
	Section 5 – Temporary Crossing
	e purpose of the crossing and the estimated time it will be needed
3. Will the petitione crossing?	er remove the crossing at completion of the activity requiring the temporary Yes No N/A
Approximate date o	f removal
	Section 6 - Current Highway Traffic Information
	y/highway 41 st Division Dr cation Minor Arterial
2. Roadway classifi	
2. Roadway classification. 3. Road authority	cation Minor Arterial WSDOT
2. Roadway classification 2. Road authority 2. Average annual description 2.	WSDOT daily traffic (AADT) 7,300 (2013)
2. Roadway classifications. Road authority 3. Average annual descriptions. Number of lanes	WSDOT daily traffic (AADT)
2. Roadway classifications. Road authority 4. Average annual decompositions. Number of lanes 5. Roadway speed	WSDOT daily traffic (AADT)
2. Roadway classifications. Road authority	WSDOT daily traffic (AADT) 7,300 (2013) 4 (2 in each direction) 30 mph
2. Roadway classified. 3. Road authority	Minor Arterial WSDOT daily traffic (AADT)
2. Roadway classified 3. Road authority 4. Average annual d 5. Number of lanes 6. Roadway speed 7. Is the crossing pa 8. If so, trucks are w 9. Is the crossing pa	Minor Arterial WSDOT daily traffic (AADT)

Section 7 – Alternatives to the Proposal

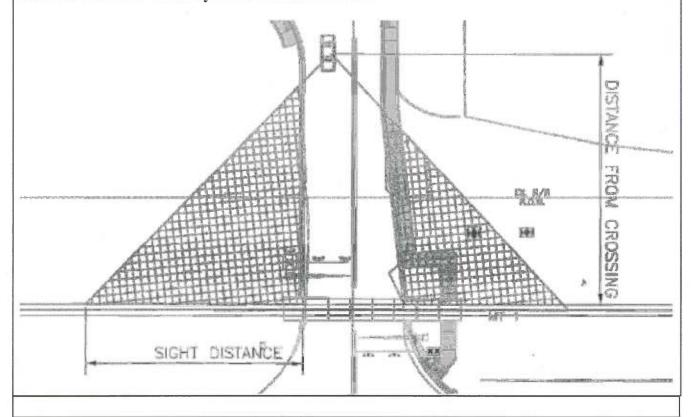
 Does a safer location for a crossing exist within a reasonable distance of the proposed location? Yes No _✓
2. If a safer location exists, explain why the crossing should not be located at that site.
3. Are there any hillsides, embankments, buildings, trees, railroad loading platforms or other barriers in the vicinity which may obstruct a motorist's view of the crossing? Yes✓ No
4. If a barrier exists, describe:
 Whether petitioner can relocate the crossing to avoid the obstruction and if not, why not. How the barrier can be removed.
♦ How the petitioner or another party can mitigate the hazard caused by the barrier.
Stopping sight distances are maintained but due to curves in 41 st Division Dr views of the crossing are obstructed further away by trees and shrubs in both directions. See Section 8.
5. Is it feasible to construct an over-crossing or under-crossing at the proposed location as an alternative to an at-grade crossing? Yes No
6. If an over-crossing or under-crossing is not feasible, explain why.
The existing site is surrounded by Interstate 5, on-ramps and off-ramps, and two military base entrances. Constructing an overcrossing or undercrossing would require elimination, reconstruction and/or relocation of these facilities.
7. Does the railway line, at any point in the vicinity of the proposed crossing, pass over a fill area or trestle or through a cut where it is feasible to construct an over-crossing or an under-crossing, even though it may be necessary to relocate a portion of the roadway to reach that point? Yes No
♦ The distance and direction from the proposed crossing.
 ♦ The approximate cost of construction. ♦ Any reasons that exist to prevent locating the crossing at this site.
9. Is there an existing public or private crossing in the vicinity of the proposed crossing? Yes No✓
10. If a crossing exists, state:
 The distance and direction from the proposed crossing. Whether it is feasible to divert traffic from the proposed to the existing crossing.
L-1



Section 8 – Sight Distance

1. Complete the following table, describing the sight distance for motorists when approaching the tracks from either direction. "Number of feet from proposed crossing" is measured from the outside track along the centerline of the "outside" lane. Sight distance is measured from the driver's position within the lane facing the crossing with the front of the vehicle the number of feet from the proposed crossing.

Note that sight distances from the I-5 Southbound Off Ramps are NOT reflected in the tables below. The I-5 Off Ramps are both parallel and very close to the tracks. Motorists on the Off-Ramp may have their forward visibility along the track, at certain angles, obstructed somewhat by the railroad crossing cantilever mast and gate mechanism. Since the tracks also extend behind motorists on the Off-Ramp, rearward visibility, though unlimited by obstacles, is likely to be zero, based on motorists' tendency to not look behind them.



Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	370 (obscured by trees)
Right	200	640 (obscured by trees)
Right	100	2040 (obscured by trees)
Right	50	1040 (obscured by trees)
Right	25	540 (obscured by trees)
Left	300	480 (obscured by trees)
Left	200	580 (obscured by trees)
Left	100	3000+
Left	50	3000+
Left	25	3000+
Collows: (Opposite direction-Not	th, South, East, West) Number of feet from	pproach provides an unobstructed view as Provides an unobstructed
Direction of sight (left or right)	proposed crossing	view for how many feet
Right	300	80 (obscured by trees)
Right	200	90 (obscured by trees)
Right	100	110 (obscured by trees)
Right	50	140 (obscured by trees)
Right	25	170 (obscured by trees)
Left	300	110 (obscured by trees)
Left	200	120 (obscured by trees)
Left	100	140 (obscured by trees)
Left	50	210 (obscured by trees)
Left	25	270 (obscured by trees)
both approaches to the crossing Yes No _✓	of level grade from the cente g the track: Right 0.13% fo	er of the railway on both approaches to the r 50'; Left 0.78% for 30'. ore than five percent prior to the level grad
4 Will the new crossing provid		

Section 9 - Illustration of Proposed Crossing Configuration

Attach a detailed diagram, drawing, map or other illustration showing the following:

- ♦ The vicinity of the proposed crossing.
- ♦ Layout of the railway and highway 500 feet adjacent to the crossing in all directions.
- ♦ Percent of grade.
- Obstructions of view as described in Section 7 or identified in Section 8.
- Traffic control layout showing the location of the existing and proposed signage.

Section 10 - Sidewalks

- 1. Provide the following information:
 - a. Provide a description of the type of sidewalks proposed.
 - b. Describe who will maintain the sidewalks.
 - c. Attach a proposed diagram or design of the crossing including the sidewalks.

No sidewalk exists and none is proposed.

Section 11-Proposed Warning Signals or Devices

1. Explain in detail the number and type of automatic signals or other warning devices planned at the proposed crossing, including a cost estimate for each. If requesting pre-emption include the type of train detection circuitry, sequencing and advanced preemption time, justification for the changes and its effects on current warning devices and warning times for drivers.

The crossing will have active warning devices, including crossing gates, controlled by constant motion predictors. The warning lights are mounted on the crossing gates structures.

The railroad control equipment for the crossing is interconnected with the traffic signal controller using a 6-wire connection. Upon a preemption signal from the railroad control equipment the traffic signal controller will transfer right-of-way by stopping all vehicles moving towards the crossing and provide green lights for track clearance before the gates start to drop. The I-5 ramp meters are independently connected to the railroad bungalow and preempted by the railroad.

The traffic signal system will have a generator for backup power.

2. Provide an estimate for maintaining the signals for 12 months. ______

3. Is the petitioner prepared to pay to the respondent railroad company its share of installing the warning devices as provided by law?

Yes ______ No _____

Section 12 - Traffic Signal Preemption

Complete the attached <u>Guide for Determining Time Requirements for Traffic Signal Preemption at Highway-Rail Grade Crossings.</u>

1. Specify simultaneous or advance preemption requested.

Advanced preemption

If advance preemption, what is the preemption time.

5 seconds. A queue-cutter signal will be implemented at this crossing. Traffic signal indications on both sides of the railroad crossing will change to red for vehicles approaching the crossing anytime a queue develops. The advanced preemption time is based on the cycle time of yellow (~4 seconds) and all-red (~1 second) traffic signal indications.

The UTC Advance Preemption Calculation sheet is not applicable, as advanced preemption is not being integrated at this crossing location

Section 13 - Waiver of Hearing by Respondent

Waiver of Hearing		
	s the Respondent in the petition to install an inter-tie between using signal system at the following crossing.	the highway
USDOT Crossing No.	85830N	
	onditions at the crossing. We are satisfied the conditions are to in this docket. We agree the inter-tire should be installed and in without a hearing.	
Dated at JBLM	, Washington, on the day of	
FEBRUAR 4	, Washington, on the3 day of $\frac{15}{20}$.	
		1000 100
	JOINT BASE LEWIS - MCCHO Printed name of Respondent	(2)
	Sallie K Conahue	
	Signature of Respondent's Representative	
	TEANSPORTATION SYSTEM MANAGER	
	Title	
	253-967-7992 Sallie. Kidonahoc	· Cive mail.
	Phone number and e-mail address	
	BLIXI 2012 LIGGETT AVE	
	MSIT BOX 339500 JOINT BASELEWIS-MCCHORD, WA	98433
	Mailing address	20

Section 13 - Waiver of Hearing by Respondent

Waiver of Hearing	
The undersigned represents the Respondent in the petition to install an inter-tie between the high signal and the railroad crossing signal system at the following crossing.	way
USDOT Crossing NoO8 58 30 N	
We have investigated the conditions at the crossing. We are satisfied the conditions are the same described by the Petitioner in this docket. We agree the inter-tire should be installed and consent decision by the commission without a hearing.	as to a
Dated at Seattle, Washington, on the 9th day of	
Johnnary , 20 15.	
DATE (EWIS	
Printed name of Respondent	
Due Sew	
Signature of Respondent's Representative Paul Posseuger Syrg Mgg Title	
206 903 7363 Phone number and e-mail address	
401 S Juckson ST	
Sultte, WA 93104	
Mailing address	2015 MAR 30
S T	30 A

Section 13 - Waiver of Hearing by Respondent

Waiver of Hearing
The undersigned represents the Respondent in the petition to install an inter-tie between the highway signal and the railroad crossing signal system at the following crossing.
USDOT Crossing No. O85830 N
We have investigated the conditions at the crossing. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the inter-tire should be installed and consent to a decision by the commission without a hearing.
Dated at Tacoma, Washington, on the 19th day of
January , 20 15.
Tacoma Rail
Printed name of Respondent
1/hell
Signature of Respondent's Representative
Roadmaster
Title
253-377-3554 KKelleme city of tacoma.org Phone number and e-mail address
2601 SR 509 N Frontage Rd.
Tacoma, WA 98421
Mailing address

Section 13 – Waiver of Hearing by Respondent

Waiver of Hearing
The undersigned represents the Respondent in the petition to install an inter-tie between the highway signal and the railroad crossing signal system at the following crossing.
USDOT Crossing No085830N
We have investigated the conditions at the crossing. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the inter-tire should be installed and consent to a decision by the commission without a hearing.
Dated at Scarre, Washington, on the day of
Monest , 20 15
RICHARS W WZGNER
Printed name of Respondent
Signature of Respondent's Representative
Man Puper Projects Title
Phone number and e-mail address
Mailing address South Scattle, WA

