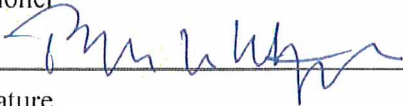


Section 1 – Petitioner's Information

BNSF Rwy. Co.
Petitioner

Signature
2454 Occidental Ave. S.
Street Address
Seattle, WA. 98134
City, State and Zip Code
Mailing Address, if different than the street address
Richard Wagner
Contact Person Name
206-625-6152, Richard.Wagner@bnsf.com
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information

City of Auburn
Respondent
25 W. Main St
Street Address
Auburn, WA 98001-4998
City, State and Zip Code
Mailing Address, if different than the street address
Pablo Para
Contact Person Name
253-876-1958, ppara@auburnwa.gov
Contact Phone Number and E-mail Address

Section 3 – Proposed or Existing Crossing Location

1. Existing highway/roadway 37th St. NW
BNSF Railway Co.

2. Existing railroad _____

3. Location of proposed crossing:
Located in the ___ 1/4 of the ___ 1/4 of Sec. 13, Twp. 21N, Range 4E W.M.

4. GPS location, if known 47deg20'24"N, 122deg13'57"W

5. Railroad mile post (nearest tenth) 19.16X

6. City Auburn County King

Section 4 – Proposed or Existing Crossing Information

1. Railroad company BNSF Railway

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 crossing 2

5. Average daily train traffic, freight 24
Authorized freight train speed 60 Operated freight train speed 60

6. Average daily train traffic, passenger 23
Authorized passenger train speed 79 Operated passenger train speed 79

7. Will the proposed crossing eliminate the need for one or more existing crossings?
Yes ___ No X

8. If so, state the distance and direction from the proposed crossing.

9. Does the petitioner propose to close any existing crossings?

Yes No

Section 5 – Temporary Crossing

1. Is the crossing proposed to be temporary? Yes No

2. If so, describe the purpose of the crossing and the estimated time it will be needed

3. Will the petitioner remove the crossing at completion of the activity requiring the temporary crossing? Yes No

Approximate date of removal _____

Section 6 – Current Highway Traffic Information

1. Name of roadway/highway 37th St. NW

2. Roadway classification City Street
City of Auburn

3. Road authority _____

4. Average annual daily traffic (AADT) 5200

3

5. Number of lanes _____

6. Roadway speed 40

7. Is the crossing part of an established truck route? Yes No

8. If so, trucks are what percent of total daily traffic? 8

9. Is the crossing part of an established school bus route? Yes No

10. If so, how many school buses travel over the crossing each day? 10

11. Describe any changes to the information in 1 through 7, above, expected within ten years:

Section 7 – Alternatives to the Proposal

1. 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.

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.

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 _____

8. If such a location exists, state:

- ◆ 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.

Section 8 – Sight Distance

1. Complete the following table, describing the sight distance for motorists when approaching the tracks from either direction.

a. Approaching the crossing from West, the current approach provides an unobstructed view as follows: (North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	26
Right	200	35
Right	100	85
Right	50	430
Right	25	Unobstructed
Left	300	60
Left	200	85
Left	100	115
Left	50	570
Left	25	2610

b. Approaching the crossing from East, the current approach provides an unobstructed view as follows: (Opposite direction-North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	25
Right	200	35
Right	100	210
Right	50	610
Right	25	Unobstructed
Left	300	145
Left	200	195
Left	100	485
Left	50	Unobstructed
Left	25	Unobstructed

2. Will the new crossing provide a level approach measuring 25 feet from the center of the railway on both approaches to the crossing?

Yes No

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing. 7ft west, no change to the east

4. Will the new crossing provide an approach grade of not more than five percent prior to the level grade?

Yes No

5. If not, state the percentage of grade prior to the level grade and explain why the grade exceeds five percent.

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 change to existing sidewalks.

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.

Will relocate existing BNSF crossing signals to the west to accommodate new track.

Relocation will be at BNSF expense.

Existing simultaneous pre-emption will be replaced with advanced pre-emption.
City of Auburn is responsible for any traffic signal upgrades required due to BNSF's
advanced pre-emptions upgrades.

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 Guide for Determining Time Requirements for Traffic Signal Preemption at Highway-Rail Grade Crossings.

1. Specify simultaneous or advance preemption requested.

Advanced

If advance preemption, what is the preemption time.

23 seconds

Section 13 – Additional Information

Provide any additional information supporting the proposal, including information such as the public benefits that would be derived from constructing a new crossing as proposed or modifying an existing crossing. Provide project specific information.

BNSF is constructing the third main line in this area to expedite train movement through

the City of Auburn. The addition of the third main line will allow commuter trains to access the passenger platforms, just south of W. Main St, while other trains will be able

to continue to move down the third track.

Section 14 – Waiver of Hearing by Respondent

Waiver of Hearing

The undersigned represents the Respondent in the petition to construct or reconstruct a highway-railroad grade crossing and inter-tie the highway signal with the railroad crossing signal system.

USDOT Crossing No.: 85647H

We have investigated the conditions at the proposed or existing crossing site. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree that a crossing be installed or reconstructed and the highway signals inter-tied with the railroad crossing signal system and consent to a decision by the commission without a hearing.

Dated at _____, Washington, on the _____ day of _____, 20 ____.

Nancy Backus

Printed name of Respondent

Nancy Backus
Signature of Respondent's Representative

Mayor

Title

City of Auburn

Name of Company

253-931-3041, nbackus@auburnwa.gov

Phone number and e-mail address

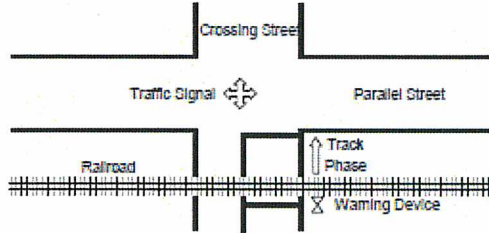
25 W. Main St.

Auburn, WA 98001

Mailing address

GUIDE FOR DETERMINING TIME REQUIREMENTS FOR TRAFFIC SIGNAL PREEMPTION AT HIGHWAY-RAIL GRADE CROSSINGS

City Auburn Date 01/21/14
 County King Completed by AMK
 District _____ District Approval _____



Parallel Street Name
B St NW
 Crossing Street Name
37th St NW

Railroad BNSF Railroad Contact _____
 Crossing DOT# 085647H Phone _____

SECTION 1: RIGHT-OF-WAY TRANSFER TIME CALCULATION

Preempt verification and response time

- | | | | |
|--|----|----------------------------------|------------------------|
| 1. Preempt delay time (seconds) | 1. | <input type="text" value="0.0"/> | Remarks |
| 2. Controller response time to preempt (seconds) | 2. | <input type="text" value="0.0"/> | Controller type: _____ |
| 3. Preempt verification and response time (seconds): add lines 1 and 2 | 3. | <input type="text" value="0.0"/> | |

Worst-case conflicting vehicle time

- | | | | |
|---|----|-----------------------------------|---------|
| 4. Worst-case conflicting vehicle phase number | 4. | <input type="text" value="4"/> | Remarks |
| 5. Minimum green time during right-of-way transfer (seconds) | 5. | <input type="text" value="5.0"/> | _____ |
| 6. Other green time during right-of-way transfer (seconds) | 6. | <input type="text"/> | _____ |
| 7. Yellow change time (seconds) | 7. | <input type="text" value="4.0"/> | _____ |
| 8. Red clearance time (seconds) | 8. | <input type="text" value="1.0"/> | _____ |
| 9. Worst-case conflicting vehicle time (seconds): add lines 5 through 8 | 9. | <input type="text" value="10.0"/> | |

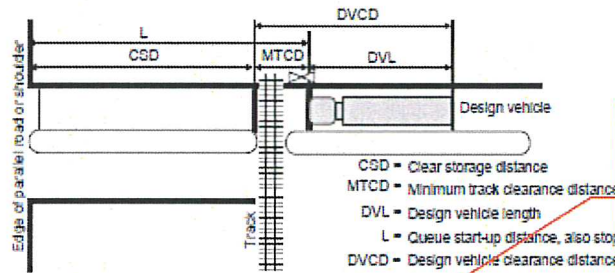
Worst-case conflicting pedestrian time

- | | | | |
|---|-----|----------------------------------|------------------|
| 10. Worst-case conflicting pedestrian phase number | 10. | <input type="text" value="4"/> | Remarks |
| 11. Minimum walk time during right-of-way transfer (seconds) | 11. | <input type="text"/> | _____ |
| 12. Pedestrian clearance time during right-of-way transfer (seconds) | 12. | <input type="text"/> | OPTED OUT |
| 13. Vehicle yellow change time, if not included on line 12 (seconds) | 13. | <input type="text"/> | _____ |
| 14. Vehicle red clearance time, if not included on line 12 (seconds) | 14. | <input type="text"/> | _____ |
| 15. Worst-case conflicting pedestrian time (seconds): add lines 11 through 14 | 15. | <input type="text" value="0.0"/> | |

Worst-case conflicting vehicle or pedestrian time

- | | | |
|--|-----|-----------------------------------|
| 16. Worst-case conflicting vehicle or pedestrian time (seconds): maximum of lines 9 and 15 | 16. | <input type="text" value="10.0"/> |
| 17. Right-of-way transfer time (seconds): add lines 3 and 16 | 17. | <input type="text" value="10.0"/> |

SECTION 2: QUEUE CLEARANCE TIME CALCULATION



6' BEYOND RAIL TO FACE OF CURB PLUS 100' FOR LEFT TURN NB TO WB MOVEMENT

		Remarks		
18.	Clear storage distance (CSD, feet)	18.	142	6' BEYOND RAIL TO FACE OF CURB P.
19.	Minimum track clearance distance (MTCD, feet)	19.	65	GATE TO 6' BEYOND RAIL
20.	Design vehicle length (DVL, feet)	20.	75	Design vehicle type: WB-67
21.	Queue start-up distance, L (feet): add lines 18 and 19	21.	207	
22.	Time required for design vehicle to start moving (seconds): calculate as $2+(L+20)$	22.	12.4	
23.	Design vehicle clearance distance, DVCD (feet): add lines 19 and 20	23.	140	
24.	Time for design vehicle to accelerate through the DVCD (seconds)	24.	17.0	Read m
25.	Queue clearance time (seconds): add lines 22 and 24	25.	29.4	

GRAPH INDICATES ~16.2 SEC FOR WB-50, ROUNDED UP TO ACCOUNT FOR LARGER, HEAVIER VEHICLE

SECTION 3: MAXIMUM PREEMPTION TIME CALCULATION

		Remarks		
26.	Right-of-way transfer time (seconds): line 17	26.	10.0	
27.	Queue clearance time (seconds): line 25	27.	29.4	
28.	Desired minimum separation time (seconds)	28.	4.0	
29.	Maximum preemption time (seconds): add lines 26 through 28	29.	43.4	

SECTION 4: SUFFICIENT WARNING TIME CHECK

		Remarks		
30.	Required minimum time, MT (seconds): per regulations	30.	20.0	
31.	Clearance time, CT (seconds): get from railroad	31.	1.0	CURRENT DESIGN; TO BE UPI
32.	Minimum warning time, MWT (seconds): add lines 30 and 31	32.	21.0	Excludes buffer time (BT)
33.	Advance preemption time, APT, if provided (seconds): get from railroad	33.	0.0	
34.	Warning time provided by the railroad (seconds): add lines 32 and 33	34.	21.0	
35.	Additional warning time required from railroad (seconds): subtract line 34 from line 29, round up to nearest full second, enter 0 if less than 0	35.	23	

If the additional warning time required (line 35) is greater than zero, additional warning time has to be requested from the railroad. Alternatively, the maximum preemption time (line 29) may be decreased after performing an engineering study to investigate the possibility of reducing the values on lines 1, 5, 6, 7, 8, 11, 12, 13 and 14.

Remarks: _____

SECTION 5: TRACK CLEARANCE GREEN TIME CALCULATION (OPTIONAL)

Preempt Trap Check

36. Advance preemption time (APT) provided (seconds):	36.	<input type="text" value="23.0"/>	Line 33 only valid if line 35 is zero.
37. Multiplier for maximum APT due to train handling	37.	<input type="text" value="1.00"/>	See Instructions for details.
38. Maximum APT (seconds): multiply line 36 and 37	38.	<input type="text" value="23.0"/>	Remarks
39. Minimum duration for the track clearance green interval (seconds)	39.	<input type="text" value="15.0"/>	<u>For zero advance preemption time</u>
40. Gates down after start of preemption (seconds): add lines 38 and 39	40.	<input type="text" value="38.0"/>	
41. Preempt verification and response time (seconds): line 3	41.	<input type="text" value="0.0"/>	Remarks
42. Best-case conflicting vehicle or pedestrian time (seconds): usually 0.....	42.	<input type="text" value="0.0"/>	
43. Minimum right-of-way transfer time (seconds): add lines 41 and 42	43.	<input type="text" value="0.0"/>	
44. Minimum track clearance green time (seconds): subtract line 43 from line 40	44.	<input type="text" value="38.0"/>	

Clearing of Clear Storage Distance

45. Time required for design vehicle to start moving (seconds), line 22	45.	<input type="text" value="12.4"/>	
46. Design vehicle clearance distance (DVCD, feet), line 23	46.	<input type="text" value="140"/>	Remarks
47. Portion of CSD to clear during track clearance phase (feet) ...	47.	<input type="text" value="42"/>	<u>CSD* in Figure 3 in Inst</u>
48. Design vehicle relocation distance (DVRD, feet): add lines 46 and 47	48.	<input type="text" value="182"/>	
49. Time required for design vehicle to accelerate through DVRD (seconds)	49.	<input type="text" value="19.5"/>	<u>Read from</u>
50. Time to clear portion of clear storage distance (seconds): add lines 45 and 49	50.	<input type="text" value="31.9"/>	
51. Track clearance green interval (seconds): maximum of lines 44 and 50, round up to nearest full second	51.	<input type="text" value="38"/>	

GRAPH INDICATES
~18.5 SEC FOR
WB-50, ROUNDED
UP TO ACCOUNT
FOR LARGER,
HEAVIER VEHICLE

SECTION 6: VEHICLE-GATE INTERACTION CHECK (OPTIONAL)

52. Right-of-way transfer time (seconds): line 17	52.	<input type="text" value="10.0"/>	
53. Time required for design vehicle to start moving (seconds), line 22	53.	<input type="text" value="12.4"/>	
54. Time required for design vehicle to accelerate through DVL (on line 20, seconds)	54.	<input type="text" value="12.5"/>	<u>Read from</u>
55. Time required for design vehicle to clear descending gate (seconds): add lines 52 though 54	55.	<input type="text" value="34.9"/>	Remarks
56. Duration of flashing lights before gate descent start (seconds): get from railroad	56.	<input type="text" value="1.0"/>	
57. Full gate descent time (seconds): get from railroad	57.	<input type="text" value="12.0"/>	Remarks
58. Proportion of non-interaction gate descent time	58.	<input type="text" value="0.25"/>	<u>Read from Figure 5 in Instructions.</u>
59. Non-interaction gate descent time (seconds): multiply lines 57 and 58	59.	<input type="text" value="3.0"/>	
60. Time available for design vehicle to clear descending gate (seconds): add lines 56 and 59	60.	<input type="text" value="6.0"/>	
61. Advance preemption time (APT) required to avoid design vehicle-gate interaction (seconds): subtract line 60 from line 55, round up to nearest full second, enter 0 if less than 0	61.	<input type="text" value="29"/>	

GRAPH INDICATES
~11.5 SEC FOR
WB-50, ROUNDED
UP TO ACCOUNT
FOR LARGER,
HEAVIER VEHICLE