WASHINGTON
UTC
UTILITIES AND TRANSPORTATION COMMISSION

TR-14-0301

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

BNSF Railway Company Petitioner, vs. County of Whatcom, WA Respondent	)	DOCKET NO. TR- PETITION TO CONSTRUCT OR RECONSTRUCT A HIGHWAY-RAIL GRADE CROSSING USDOT CROSSING NO.: 084848V

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 construction or reconstruction of a highway-rail grade crossing.

☐ **Construction** **X Reconstruction**

Section 1 – Petitioner's Information

BNSF Railway Company
Petitioner

Signature

2454 Occidental Ave South Suite 2D
Street Address

Seattle, WA 98134
City, State and Zip Code

Mailing Address, if different than the street address

Mr. Richard Wagner – Manager Public Projects
Contact Person Name

(206) 625-6152 Richard.Wagner@bnsf.com
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information

County of Whatcom, Washington
Respondent

322 N Commercial St Ste 210
Street Address

Bellingham, WA 98225
City, State and Zip Code

Mailing Address, if different than the street address

Mr. Frank M. Abart - Director of Public Works
Contact Person Name

(360) 676-6692 PublicWorks@co.whatcom.wa.us
Contact Phone Number and E-mail Address

Section 3 – Proposed or Existing Crossing Location

1. Existing highway/roadway Loomis Trail Road

2. Existing railroad BNSF Railway Company

3. Location of proposed crossing:
   Located in the SW 1/4 of the SE1/4 of Sec. 16, Twp. 40N, Range 1E W.M.

4. GPS location, if known 48.9501, -122.69025

5. Railroad mile post (nearest tenth) 115.02

6. City Blaine County Whatcom

Section 4 – Proposed or Existing Crossing Information

1. Railroad company BNSF Railway Company

2. Type of railroad at crossing x Common Carrier □ Logging □ Industrial

   x Passenger □ Excursion

3. Type of tracks at crossing x Main Line □ Siding or Spur

4. Number of tracks at crossing 1

5. Average daily train traffic, freight 11

   Authorized freight train speed 60 mph Operated freight train speed 0-60 mph

6. Average daily train traffic, passenger 4

   Authorized passenger train speed 79 mph Operated passenger train speed 0-79 mph

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.
   n/a

9. Does the petitioner propose to close any existing crossings?
Yes ____ No X

Section 5 – Temporary Crossing

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

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

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

Approximate date of removal n/a

Section 6 – Current Highway Traffic Information

1. Name of roadway/highway Loomis Trail Road

2. Roadway classification Rural Mino Collector

3. Road authority Whatcom County

4. Average annual daily traffic (AADT) 965

5. Number of lanes 2

6. Roadway speed 35 mph

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

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

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

10. If so, how many school buses travel over the crossing each day? 6

11. Describe any changes to the information in 1 through 7, above, expected within ten years:
None

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 X

2. If a safer location exists, explain why the crossing should not be located at that site.
   n/a

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 X 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.

The crossing cannot be relocated to avoid the obstruction. Vegetation on the Northwest quadrant of the crossing obstructs view from motorists approaching from the west. The obstruction could be mitigated by removing the vegetation. The obstruction is on adjacent private property to the crossing.

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 X

6. If an over-crossing or under-crossing is not feasible, explain why.
   The close proximity to the parallel highway, Portal Way, prevents the construction of a grade separation. Also, the volume of both train and vehicular traffic do not warrant the need for a grade separation at this time.

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 X

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.

   No options exist in the vicinity of the existing grade crossing.

9. Is there an existing public or private crossing in the vicinity of the proposed crossing?
   Yes ____ No X

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.

   The nearest crossings are located 2.5 miles north and 1.5 miles south of this location.

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 _____, 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	n/a
Right	200	n/a
Right	100 (70' to parallel road)	1275'
Right	50	1600'
Right	25	unlimited
Left	300	n/a
Left	200	n/a
Left	100 (70' to parallel road)	320'
Left	50	600'
Left	25	unlimited

b. Approaching the crossing from _____ , 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	50'
Right	200	75'
Right	100	100'
Right	50	1320'
Right	25	Unlimited
Left	300	50'
Left	200	50'
Left	100	200'
Left	50	1200'
Left	25	unlimited

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 X

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing.

EB approach approx. 45'; WB approach approx. 10' (limited due to adjacent intersection with Portal Way) this is the existing alignment; no changes will be made on the East side of the tracks

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

Yes X 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 sidewalks are 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 warning devices will include Constant Warning Train Detection circuitry on all tracks which will control crossing equipment to include (2) gates with flashers, (2) mast mounted lights, and (2) over-head cantilever mounted lights. All road advance warning signage will be upgraded and brought into standard. Please see cover letter for additional supporting information.

2. Provide an estimate for maintaining the signals for 12 months. n/a

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 X

Section 12 – 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.

Improved approach grade on eastbound approach, new railroad flashing lights with gates on eastbound approach, additional adjacent track capacity to get trains moving more efficiently, improved sight distance, and updated signage and striping are all improvements from the existing condition at the crossing.

Section 13 – 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.: 084848V

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 ____ .

_____

Printed name of Respondent

_____

Signature of Respondent's Representative

_____

Title

_____

Name of Company

_____

Phone number and e-mail address

_____

Mailing address

Firgure 1. Aerial of Loomis Trail Rd showing sight obstructions.

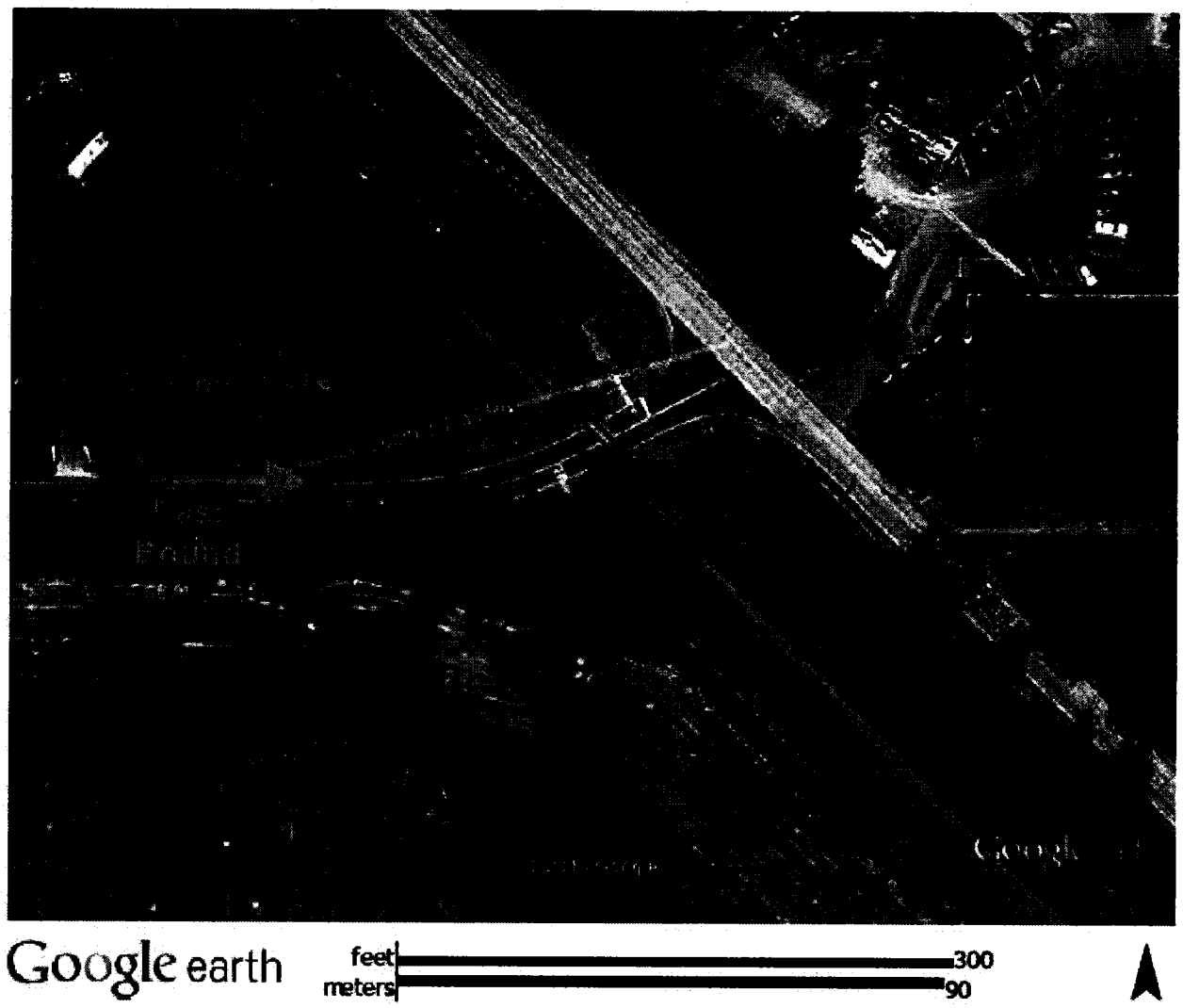
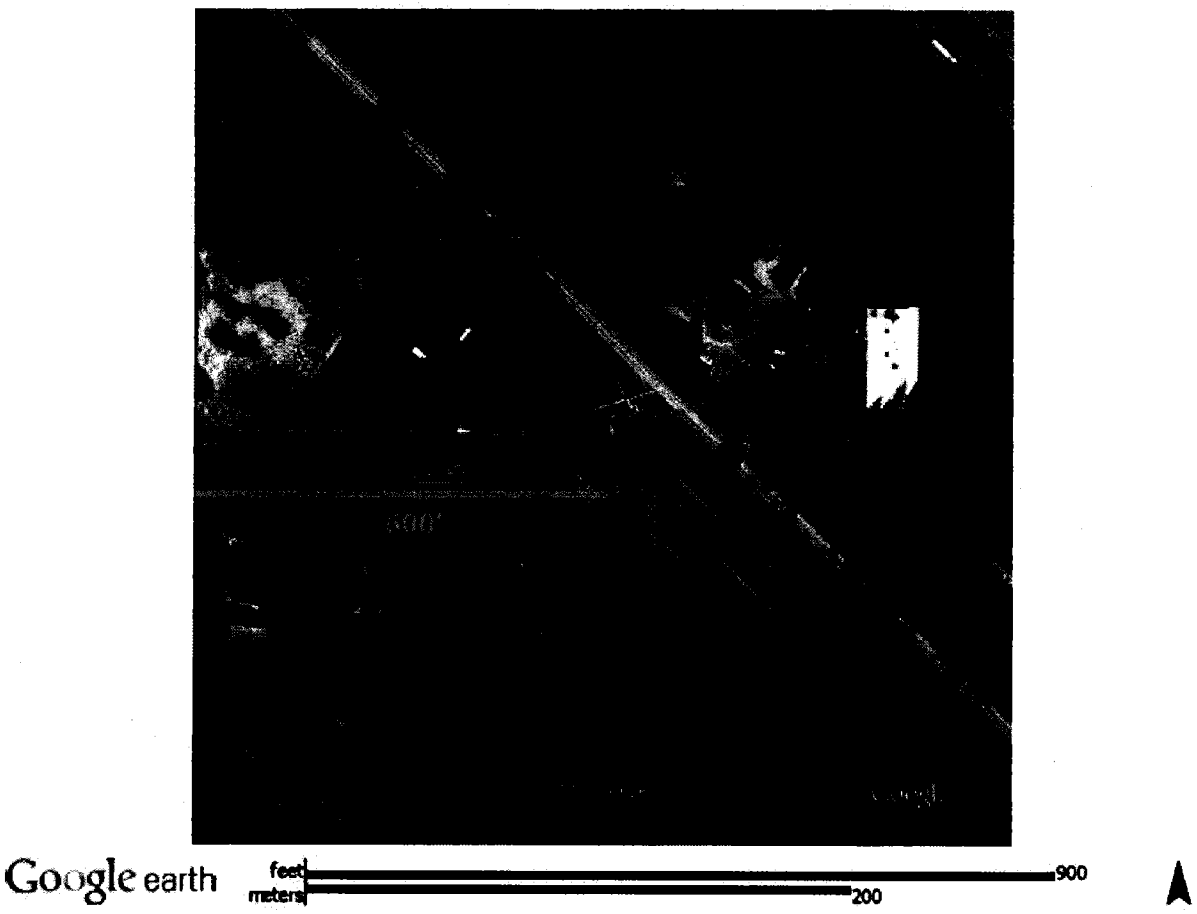
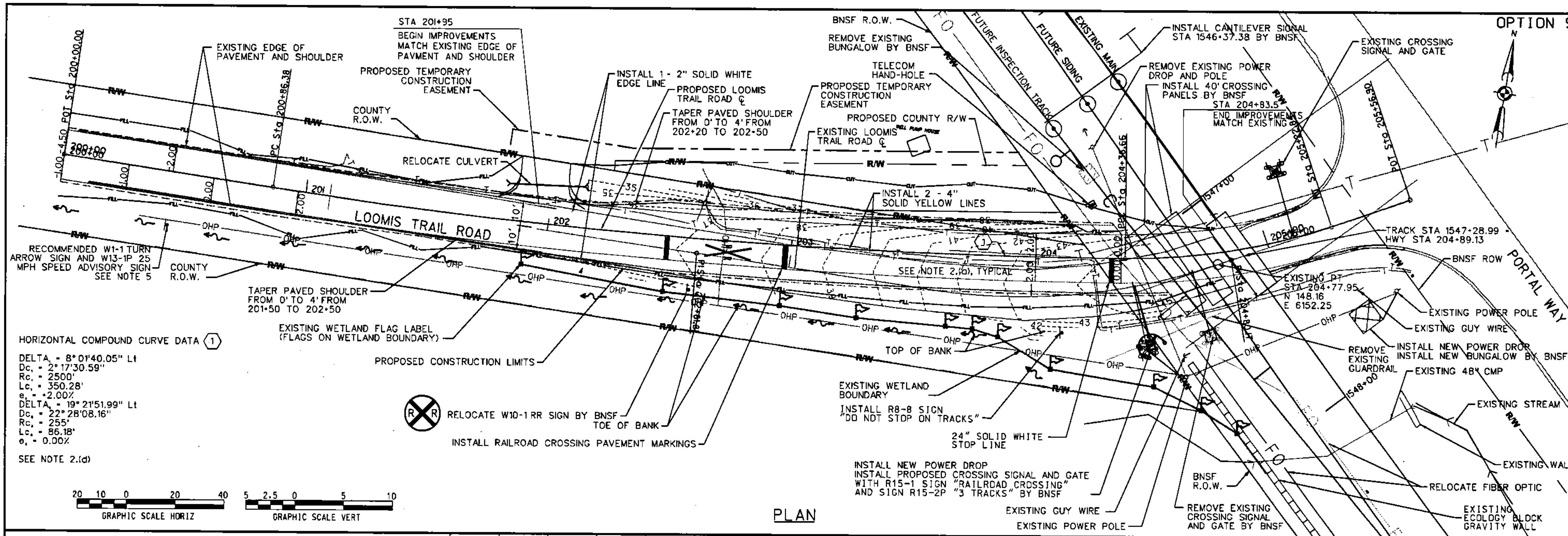
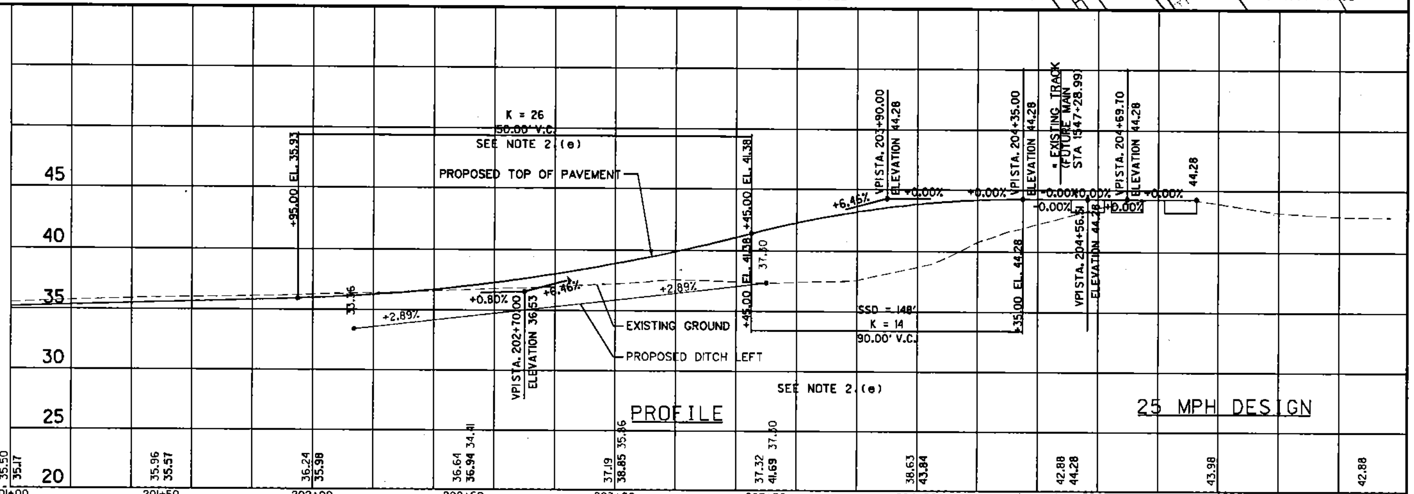


Figure 2. Aerial of Loomis Trail vicinity.




OPTION 9
N
STA 201+95
BEGIN IMPROVEMENTS
MATCH EXISTING EDGE OF
PAVMENT AND SHOULDER
EXISTING EDGE OF
PAVEMENT AND SHOULDER
PROPOSED TEMPORARY
CONSTRUCTION
EASEMENT
COUNTY
R.O.W.
RELOCATE CULVERT
INSTALL 1 - 2" SOLID WHITE
EDGE LINE
PROPOSED LOOMIS
TRAIL ROAD ℄
TAPER PAVED SHOULDER
FROM 0' TO 4' FROM
202+20 TO 202+50
PROPOSED TEMPORARY
CONSTRUCTION
EASEMENT
EXISTING LOOMIS
TRAIL ROAD ℄
PROPOSED COUNTY R/W
BNSF R.O.W.
REMOVE EXISTING
BUNGALOW BY BNSF
TELECOM
HAND-HOLE
INSTALL 2 - 4"
SOLID YELLOW LINES
FUTURE INSPECTION TRACK
FUTURE SIDING
EXISTING MAIN
INSTALL CANTILEVER SIGNAL
STA 1546+37.38 BY BNSF
REMOVE EXISTING POWER
DROP AND POLE
INSTALL 40' CROSSING
PANELS BY BNSF
STA 204+83.5
END IMPROVEMENTS
MATCH EXISTING
EXISTING CROSSING
SIGNAL AND GATE
POT Sta 200+00.00
PC Sta 200+86.38
PCC Sta 204+36.66
PT Sta 205+56.90
POT Sta 205+56.90
LOOMIS TRAIL ROAD
RECOMMENDED W1-1 TURN
ARROW SIGN AND W13-1P 25
MPH SPEED ADVISORY SIGN
SEE NOTE 5
COUNTY
R.O.W.
TAPER PAVED SHOULDER
FROM 0' TO 4' FROM
201+50 TO 202+50
EXISTING WETLAND FLAG LABEL
(FLAGS ON WETLAND BOUNDARY)
PROPOSED CONSTRUCTION LIMITS
SEE NOTE 2.(d), TYPICAL
TOP OF BANK
EXISTING WETLAND
BOUNDARY
INSTALL R8-8 SIGN
"DO NOT STOP ON TRACKS"
24" SOLID WHITE
STOP LINE
RELOCATE W10-1 RR SIGN BY BNSF
TOE OF BANK
INSTALL RAILROAD CROSSING PAVEMENT MARKINGS
INSTALL NEW POWER DROP
INSTALL PROPOSED CROSSING SIGNAL AND GATE
WITH R15-1 SIGN "RAILROAD CROSSING"
AND SIGN R15-2P "3 TRACKS" BY BNSF
EXISTING GUY WIRE
EXISTING POWER POLE
BNSF
R.O.W.
REMOVE EXISTING
CROSSING SIGNAL
AND GATE BY BNSF
TRACK STA 1547+28.99
HWY STA 204+89.13
BNSF ROW
PORTAL WAY
EXISTING PT
STA 204+77.95
N 148.16
E 6152.25
EXISTING POWER POLE
EXISTING GUY WIRE
REMOVE
EXISTING
GUARDRAIL
INSTALL NEW POWER DROP
INSTALL NEW BUNGALOW BY BNSF
EXISTING 48" CMP
EXISTING STREAM
EXISTING WALL
RELOCATE FIBER OPTIC
EXISTING
ECOLOGY BLOCK
GRAVITY WALL
HORIZONTAL COMPOUND CURVE DATA (1)
DELTA₁ = 8° 01'40.05" Lt
Dc₁ = 2° 17'30.59"
Rc₁ = 2500'
Lc₁ = 350.28'
e₁ = +2.00%
DELTA₂ = 19° 21'51.99" Lt
Dc₂ = 22° 28'08.16"
Rc₂ = 255'
Lc₂ = 86.18'
e₂ = 0.00%
SEE NOTE 2.(d)
GRAPHIC SCALE HORIZ
GRAPHIC SCALE VERT

PLAN


K = 26
50.00' V.C.
SEE NOTE 2.(e)
PROPOSED TOP OF PAVEMENT
+95.00 EL. 35.93
+45.00 EL. 41.38
+45.00 EL. 41.38
VPISTA. 202+10.00
ELEVATION 36.53
VPISTA. 203+90.00
ELEVATION 44.28
VPISTA. 204+35.00
ELEVATION 44.28
+35.00 EL. 44.28
• EXISTING TRACK
(FUTURE MAIN)
STA 1547+28.99
VPISTA. 204+56.51
ELEVATION 44.28
VPISTA. 204+69.10
ELEVATION 44.28
+2.89%
+0.80%
+6.46%
+2.89%
+6.46%
-0.00%
0.00%
EXISTING GROUND
PROPOSED DITCH LEFT
SSD = 148'
K = 14
90.00' V.C.
SEE NOTE 2.(e)
PROFILE
25 MPH DESIGN
45
40
35
30
25
20
201+00
201+50
202+00
202+50
203+00
203+50
204+00
204+50
205+00
205+50

NOTES:

1. LOOMIS TRAIL ROAD. CLASSIFIED AS A RURAL MINOR COLLECTOR. TO MEET CURRENT STANDARDS REQUIRES DESIGN CRITERIA AND A TYPICAL SECTION AS DESCRIBED IN WHATCOM COUNTY CHAPTER 5. ROAD STANDARDS. 505 ROAD TYPES AND GEOMETRICS. TABLE 1. UNDER 400 - 2000 ADT AND DRAWING 508.C-1.

2. DUE TO THE FACTORS OF EXISTING CONDITIONS INCLUDING CRITICALLY ANGLED RIGHT-OF-WAY AND CLOSE PROXIMITY OF WETLANDS AS OUTLINED IN THE ATTACHED LETTER. APPROVAL IS REQUESTED FOR THE FOLLOWING DESIGN VARIANCES FROM THE WHATCOM COUNTY ROAD STANDARDS:
   (a) A MODIFIED TYPICAL SECTION WIDTH TO 2 - 10 FOOT TRAVEL LANES AND 4 FOOT SHOULDERS (4 FOOT PAVED SHOULDER ON NORTH WILL TAPER FROM 0 FEET TO 4 FEET FROM 202+20 TO 202+50 AND REMAIN 4 FOOT TO CROSSING. SHOULDER ON SOUTH WILL TIE INTO EXISTING SUBSTANDARD SHOULDER AT STA 201+95. TRANSITION TO 4 FOOT SHOULDER AT STA 203+12. AND REMAIN 4 FOOT TO CROSSING)
   (b) NO BIKE LANES
   (c) NO PARKING
   (d) HORIZONTAL ALIGNMENT BASED ON 25 MPH DESIGN SPEED
   (e) VERTICAL ALIGNMENT BASED ON 25 MPH DESIGN SPEED

3. ROAD CONSTRUCTION. GUARDRAIL. PAVEMENT MARKINGS. AND STRIPING BY CONTRACTOR.

4. THE PAVEMENT MARKINGS FOR RAILROAD GRADE CROSSING MEET THE MUTCD FIGURE 8B-6 PLACEMENT GUIDELINES AND TABLE 2C-4 GUIDELINES FOR ADVANCE PLACEMENT OF WARNING SIGNS.

5. W1-1 TURN ARROW SIGN AND W13-1P 25 MPH SPEED ADVISORY SIGN RECOMMENDED. FINAL DETERMINATION (AND INSTALLATION) BY WHATCOM COUNTY.

PRELIMINARY NOT FOR CONSTRUCTION					
PRELIMINARY ENGINEERING					
REV	DATE	DESCRIPTION	BY	SUB	APP

INFORMATION CONFIDENTIAL ALL PLANS, DRAWINGS SPECIFICATIONS, AND/OR INFORMATION FURNISHED HEREWITH SHALL REMAIN THE PROPERTY OF BNSF RAILWAY COMPANY AND SHALL BE HELD CONFIDENTIAL AND SHALL NOT BE USED FOR ANY PURPOSE NOT PROVIDED FOR IN AGREEMENTS WITH BNSF RAILWAY COMPANY.

DESIGNED BY	MD
DRAWN BY	MD
CHECKED BY	KB
APPROVED BY	CDC
DATE	12/18/13

BNSF RAILWAY

HANSON — Hanson Professional Services Inc. 11130 NE 33rd Place, Suite 200 Bellevue, Wa 98004 Offices Nationwide

BNSF RAILWAY
BELLINGHAM SUBDIVISION
BLAINE-SWIFT CUSTOMS FACILITY TASK 15
LOOMIS TRAIL ROAD PLAN & PROFILE
STA. 1547+28.99
MP 115.02

CONTRACT NO.	12R0004
DRAWING NO.	SP-02
REVISION 12/18/13	SHEET NO. 2 OF 2
SCALE	AS SHOWN

Plot driver: pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\Project_Workspace\MicroStation\Users\Clients\BNSF\BNSF_Railway\tables\pen\BNSF_Railway_pdf_half.pltcfg
Pen tbl: pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\Jobs\R0087\CAD\Shared\Borders\BNSF_Railway_Color.tbl
File: pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\Jobs\R0087\CAD\Rail\Sheet\Vrock crossing pp-Option9-InRedesign.dgn
Date: 12/18/2013 Time: 9:21:42 AM

Zach Dombrow
Project Engineer
Northwest Division
ARRA Construction

BNSF Railway Company
2454 Occidental Ave S #2D
Seattle, WA 98134
206.625.6491 Office
206.625.6356 Fax
William.dombrow@bnsf.com

January 21, 2014

Kathy Hunter
Deputy Assistant Director, Trans. Safety
WUTC
1300 S Evergreen Park Dr SW
PO Box 47250
Olympia, WA 98504-7250

Re: WUTC Docket No. TR-XXXXXXXXXX USDOT Crossing No.: 084848V

Dear Ms. Hunter,

This letter is in support of the aforementioned WUTC petition on behalf of BNSF Railway Company for highway-rail grade crossing upgrades at Loomis Trail Rd (DoT# 084848V) in Whatcom Co., WA. The following is supplemental information as provided in Section 11 of the petition for proposed reconstruction.

The project is designed to alleviate freight train traffic interference with Amtrak passenger trains just south of Blaine, WA by constructing a new main track through the current inspection area and converting the existing main track into a second siding. The second siding track will allow freight trains awaiting Customs inspections to clear the main line thus providing an open track for unimpeded movement of Amtrak Cascade service. The ability to relieve main track inspections will improve Cascades intercity passenger service. In order to provide the needed capacity of the siding tracks for inspections, both tracks will be extended south through Loomis Trail Road. The proposed reconstruction of the crossing is to add these two additional tracks creating a total of three (3) tracks at Loomis Trail Road. The additional tracks through the crossing will not cause an increase of occurrence or duration of trains blocking the intersection compared to current conditions.

In addition to the benefits of passenger rail service in the area, this proposal will include improvements to the grade and surface of the Loomis Trail Road. The roadway crossing surface will be extended to the west to accommodate three tracks. With the extension, the east bound approach will be modified with a more gradual slope up to the tracks conforming to standards while enhancing passenger comfort. Additional improvements to the roadway include widened travel lanes, installation of shoulders, and traffic safety barrier between the roadway and immediate adjacent stream. All automatic warning devices will be replaced with new equipment while the level of protection will remain the same. The current method of warning consists of gates, mast mounted flashing lights, and overhead flashing lights which are activated by constant warning train detection circuitry (the additional tracks will be equipped with the same circuitry). In addition to the replacement of equipment, the advance warning signage and

BNSF RAILWAY

stripping will be upgraded to conform with current standards. Additional signs will include: "Do Not Stop on Tracks" and "3 tracks".

Regarding sight distance, there is no obstruction for vehicles exiting Portal Way for westbound movement over the crossing. Eastbound vehicular traffic has a clear view to the south as well. Looking north during as westbound movement the sight line has some obstruction caused by vegetation outside of the railroad right of way.

In conclusion, this project will benefit the public by upgrading all warning devices and grade surface at Loomis Trail Rd. The additional capacity will alleviate delays to passenger service in the area and increase traffic flow thus decreasing blockage at the public crossing.
Please review the attached petition and feel free to contact me with any questions.

Sincerely,

William Dombrow

Attachments:
UTC Petition Docket No. TR XXXXXXXX