Calvin Nutt
Project Engineer
Northwest Division

BNSF Railway Company
2454 Occidental Ave. S. #2D
Seattle, WA 98134
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July 14, 2014

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

Re: Docket No. TR-140478, Revised Petition for Construction/Reconstruction of Brown Rd. (084839W) at Ferndale in Whatcom Co., WA

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 Brown Road (DOT# 084839W) in Whatcom Co., WA. The following is supplemental information as provided in Section 12 of the petition for proposed reconstruction.

The project is designed to increase capacity between Seattle, WA and Vancouver, BC by connecting the Ferndale and Custer sidings (ending 0.41 miles south and 2.46 miles north of the crossing, respectively) to create a 5-mile double track segment with two locations to hold full trains without parked trains blocking crossings. The extension of the double track segment will reduce the time trains are parked on sidings throughout the Bellingham Subdivision, as it closes the meet/pass waiting distance between sidings. The Brown Road crossing will not be blocked as a result of this project.

The proposed reconstruction of the crossing is to add this additional track creating a total of two (2) tracks at Brown Road. The reconstruction will improve the roadway grade across the tracks by decreasing the bump and carrying a constant grade across both tracks, which will result in a smoother transition for vehicle users. The reconstruction will also decrease the superelevation of the tracks, making the roadway grade less steep. The additional tracks through the crossing will not impact vehicular traffic in duration or number of trains blocking the intersection. Gate-down time will be reduced as fewer trains will be slowing down at this location due to the longer stretch of double track pushing the stopping points farther away. Regarding sight distance, there are no barriers obstructing a motorist's view of the crossing.

The current method of warning is two-quadrant gates and flashers with constant warning time track circuitry. With the construction of a second track through the crossing, BNSF is proposing two-quadrant gates and flashers with constant warning time track circuitry.

Please review the attached petition and feel free to contact me with any questions.

Sincerely,

Calvin Nutt

Attachments:
UTC Petition Docket No. TR-140478 (USDOT Crossing No. 084839W)

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

BNSF Railway Petitioner, vs. Whatcom County, Washington Respondent	)	DOCKET NO. TR-140478 PETITION TO CONSTRUCT OR RECONSTRUCT A HIGHWAY-RAIL GRADE CROSSING USDOT CROSSING NO.: 084839W

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** ■ **Reconstruction**

Section 1 – Petitioner's Information

BNSF Railway Company
Petitioner

Signature

2454 Occidental Avenue South, Suite 2D
Street Address

Seattle, WA 98134
City, State and Zip Code

Same as above
Mailing Address, if different than the street address

Rick 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 Ferndale, WA
Respondent

2095 Main Street
Street Address

Ferndale, WA 98248
City, State and Zip Code

P.O. Box 936
Mailing Address, if different than the street address

Greg Young (City Administrator)
Contact Person Name

(360) 685-2351 GregYoung@cityofferndale.org
Contact Phone Number and E-mail Address

Section 3 – Proposed or Existing Crossing Location

1. Existing highway/roadway Brown Road

2. Existing railroad BNSF Railway (Bellingham Subdivision)

3. Location of proposed crossing:
   Located in the NW 1/4 of the SW 1/4 of Sec. 008, Twp. 23N, Range 2E W.M.

4. GPS location, if known 48.8846509, -122.5920353

5. Railroad mile post (nearest tenth) 108.60

6. City Ferndale County Whatcom

Section 4 – Proposed or Existing Crossing Information

1. Railroad company BNSF Railway Company

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 One (1)

5. Average daily train traffic, freight Seventeen (17) trains/day

   Authorized freight train speed 60 mph Operated freight train speed 0-50 mph

6. Average daily train traffic, passenger Four (4) trains/day

   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 Brown Road

2. Roadway classification Rural Local

3. Road authority City of Ferndale, WA

4. Average annual daily traffic (AADT) 1468 (ADT Year: 2011)

5. Number of lanes Two (2)

6. Roadway speed 35 mph

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

8. If so, trucks are what percent of total daily traffic? 11% (2011)

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? 20 (School District 4/10/14)

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

N/A

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 ____ No X

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.

   N/A

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.
   Limited distance between railroad track(s) and intersection of Portal Way/Brown Road on the east side of existing BNSF Railway mainline for a grade separated approach.

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 X 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.

As a part of the BNSF Railway project, two public crossings and one private crossing in or near the City of Ferndale, WA will be revised/reconstructed. The closest existing public crossing to Brown Road is Grandview Road (DOT# 084841X). It is located approximately 0.72 miles to the north of the existing Brown Road crossing. It is feasible to divert traffic to Grandview Road during the revision/reconstruction of Brown Road.

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	N/A Portal Way Intersection
Right	200	N/A Portal Way Intersection
Right	100	525'
Right	50	3,500'
Right	25	3,500'
Left	300	N/A Portal Way Intersection
Left	200	N/A Portal Way Intersection
Left	100	1,025'
Left	50	1,025'
Left	25	950'

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	15'
Right	200	30'
Right	100	450'
Right	50	725'
Right	25	780'
Left	300	50'
Left	200	100'
Left	100	150'
Left	50	275'
Left	25	600'

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. 0' 4.29% grade across tracks due to superelevation reduction from 4" to 3" Constant grade across both tracks to eliminate bump from superelevated 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.

N/A.

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.

N/A

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.

Crossing will have the following items at the completion of the project:

Signs – Advanced Warning Signs, Stop Lines, RR Xing Symbols, and 2 Tracks Signs

Train-Activated Devices – Two (2) Gates, Two (2) Mast-Mounted Flashing Lights w/ Bells

Track will be equipped with (Constant Warning) train Detection Circuitry

Flashers will be directed towards oncoming traffic of skewed Portal Way

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.

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.: 084839W

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 ____.

Greg Young

Printed name of Respondent

Signature of Respondent's Representative

City Administrator

Title

City of Ferndale, WA

Name of Company

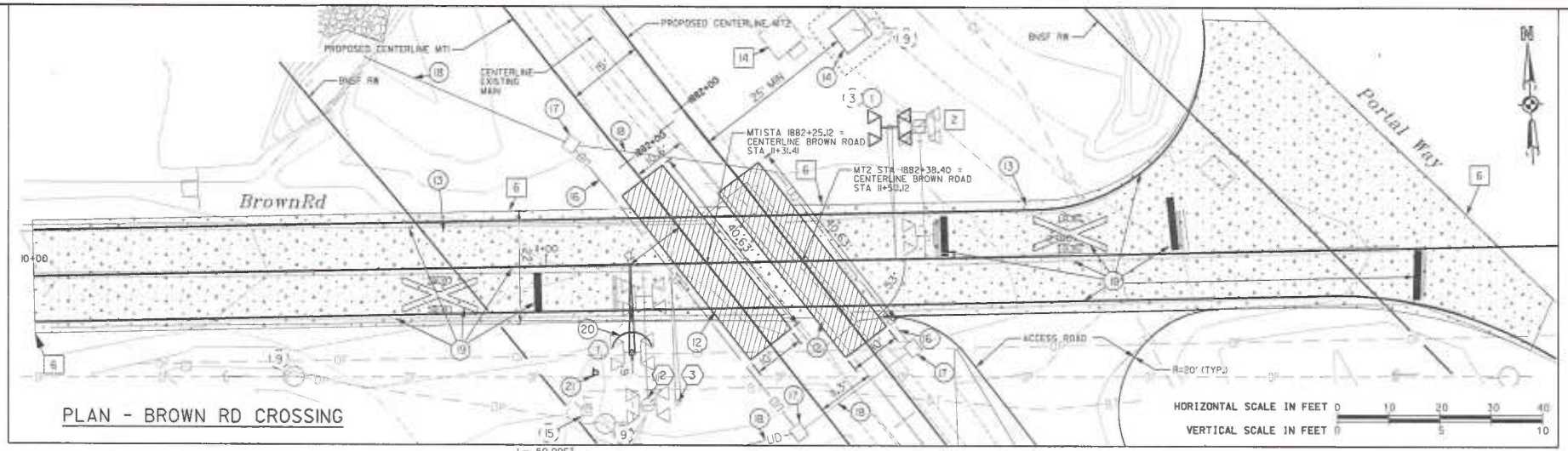
(360) 685-2351 GregYoung@cityofferndale.org

Phone number and e-mail address

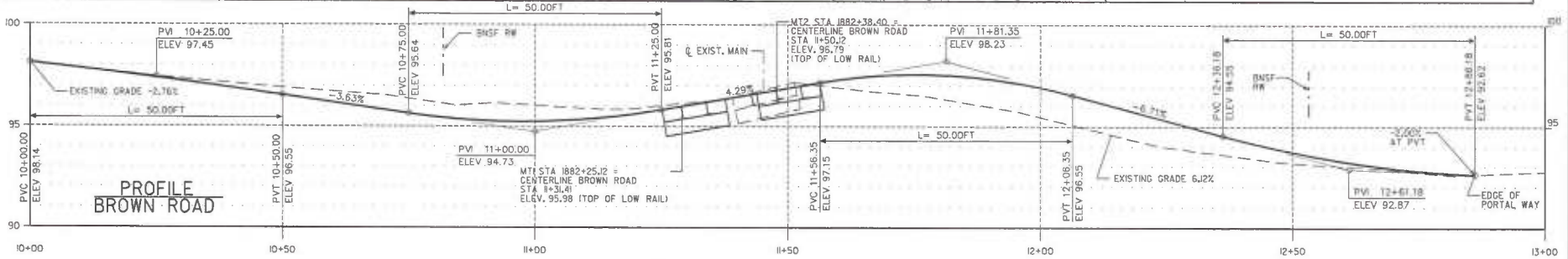
P.O. Box 936

Ferndale, WA 98248

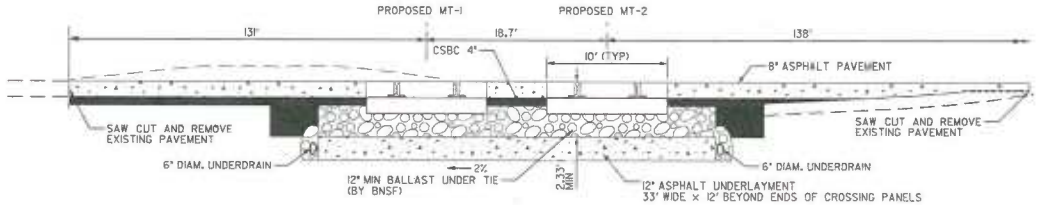
Mailing address



PLAN - BROWN RD CROSSING



PROFILE
BROWN ROAD



TYPICAL SECTION - BROWN RD CROSSING
ALONG ℄ BROWN ROAD (NTS)

NOTES:

1. COORDINATE WITH BNSF RAILWAY BEFORE BEGINNING CONSTRUCTION TO INSTALL NEW CONCRETE CROSSINGS.
2. TRANSITION PAVEMENT AS NECESSARY TO MATCH EXISTING.
3. REPLACE STRIPING/PAVEMENT MARKING IN LIKE KIND. REMOVE EXISTING MARKINGS BY GRINDING.
4. INSTALL RAILROAD GRADE CROSSING PAVEMENT MARKINGS PER WSDOT STD. PLAN NO. M-11.10-01
5. CROSSING SIGNALS WITH GATES TO BE INSTALLED BY BNSF PER BNSF STANDARD DRAWING NUMBER DE0005.01
6. SEE DWG NO. GC02 FOR CALL OUT NUMBER DESCRIPTIONS
7. UNDERDRAIN SHALL BE INSTALLED WITH INVERT NO HIGHER THAN 25" BELOW TOP OF RAIL AND SLOPED 1% MIN AWAY FROM CENTER OF ROADWAY TO DAYLIGHT

100% SUBMITTAL - NOT FOR BID OR CONSTRUCTION

CONSULTANT	DATE
DESIGNED BY J B BRENDEN	6-16-14
ENTERED BY J B BRENDEN	6-16-14
CHECKED BY C K ROE	6-16-14
PROJ. MGR. J B BRENDEN	6-16-14

ISSUE			
NO.	DATE	BY	DESCRIPTION

BNSF APPROVALS		
DEPARTMENT	SIGNATURE	DATE

HNTB
HNTB Corporation
600 108th Avenue NE, Suite 900
Bellevue, Washington 98004
Tel (425) 455-7775 Fax (425) 453-2179

BNSF RAILWAY

FINAL DESIGN FOR
CUSTER TO FERNDALE
DOUBLE TRACK PROJECT
CUSTER, WA

BROWN ROAD (STATION 1882+36.91)

DWG NO GC04
SHEET 45 OF 57 SHEETS

16-JUN-2014 15:25
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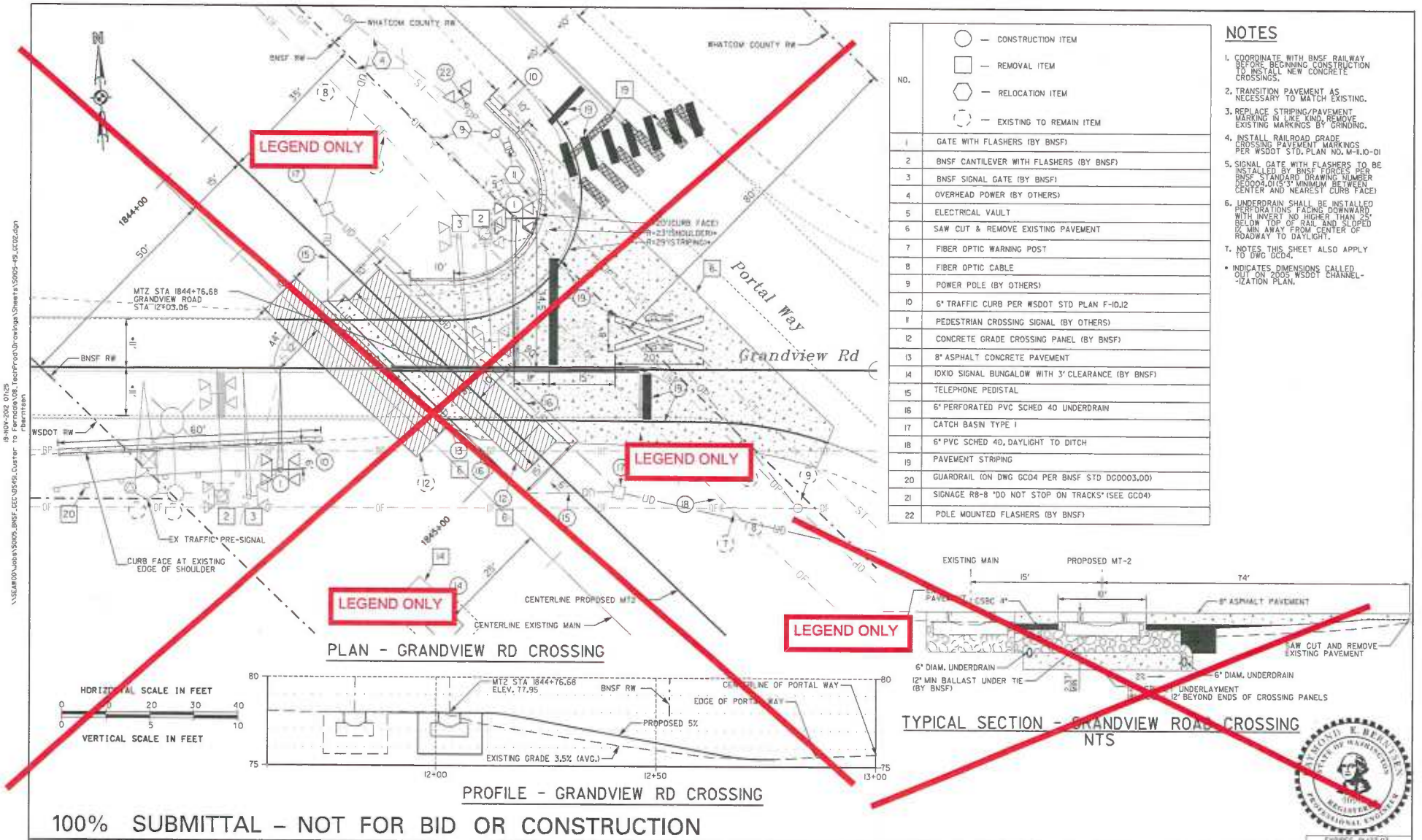

NO.	
	○ — CONSTRUCTION ITEM □ — REMOVAL ITEM ⬡ — RELOCATION ITEM (○) — EXISTING TO REMAIN ITEM
1	GATE WITH FLASHERS (BY BNSF)
2	BNSF CANTILEVER WITH FLASHERS (BY BNSF)
3	BNSF SIGNAL GATE (BY BNSF)
4	OVERHEAD POWER (BY OTHERS)
5	ELECTRICAL VAULT
6	SAW CUT & REMOVE EXISTING PAVEMENT
7	FIBER OPTIC WARNING POST
8	FIBER OPTIC CABLE
9	POWER POLE (BY OTHERS)
10	6" TRAFFIC CURB PER WSDOT STD PLAN F-10.12
11	PEDESTRIAN CROSSING SIGNAL (BY OTHERS)
12	CONCRETE GRADE CROSSING PANEL (BY BNSF)
13	8" ASPHALT CONCRETE PAVEMENT
14	10X10 SIGNAL BUNGALOW WITH 3' CLEARANCE (BY BNSF)
15	TELEPHONE PEDISTAL
16	6" PERFORATED PVC SCHED 40 UNDERDRAIN
17	CATCH BASIN TYPE I
18	6" PVC SCHED 40, DAYLIGHT TO DITCH
19	PAVEMENT STRIPING
20	GUARDRAIL (ON DWG GC04 PER BNSF STD DC0003.00)
21	SIGNAGE R8-8 "DO NOT STOP ON TRACKS" (SEE GC04)
22	POLE MOUNTED FLASHERS (BY BNSF)

NOTES

1. COORDINATE WITH BNSF RAILWAY BEFORE BEGINNING CONSTRUCTION TO INSTALL NEW CONCRETE CROSSINGS.
2. TRANSITION PAVEMENT AS NECESSARY TO MATCH EXISTING.
3. REPLACE STRIPING/PAVEMENT MARKING IN LIKE KIND. REMOVE EXISTING MARKINGS BY GRINDING.
4. INSTALL RAILROAD GRADE CROSSING PAVEMENT MARKINGS PER WSDOT STD. PLAN NO. M-II.10-01
5. SIGNAL GATE WITH FLASHERS TO BE INSTALLED BY BNSF FORCES PER BNSF STANDARD DRAWING NUMBER DE0004.01 (5'3" MINIMUM BETWEEN CENTER AND NEAREST CURB FACE)
6. UNDERDRAIN SHALL BE INSTALLED PERFORATIONS FACING DOWNWARD WITH INVERT NO HIGHER THAN 25" BELOW TOP OF RAIL AND SLOPED ½ MIN. AWAY FROM CENTER OF ROADWAY TO DAYLIGHT.
7. NOTES THIS SHEET ALSO APPLY TO DWG GC04.
- INDICATES DIMENSIONS CALLED OUT ON 2005 WSDOT CHANNELIZATION PLAN.

100% SUBMITTAL – NOT FOR BID OR CONSTRUCTION

CONSULTANT	DATE
DESIGNED BY R E BERNTSEN	11-13-12
ENTERED BY R E BERNTSEN	11-13-12
CHECKED BY J M McCULLOCH	11-16-12
PROJ. MGR. R E BERNTSEN	11-19-12

ISSUE				BNSF APPROVALS		
NO.	DATE	BY	DESCRIPTION	DEPARTMENT	SIGNATURE	DATE

HNTB Corporation
500 108th Avenue NE, Suite 500
Bellevue, Washington 98004
Tel (425) 455-3555

BNSF RAILWAY

FINAL DESIGN FOR
CUSTER TO FERNDALE
DOUBLE TRACK PROJECT
CUSTER, WA

GRANDVIEW ROAD

DWG NO. GC02
SHEET 40 OF 52 SHEETS

EXPIRES 04/23/13

Google Earth Pro

feet 800
meters 200