

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Application of
BNSF RAILWAY COMPANY
for an Exemption from the
Requirements of WAC 480-60-060

Docket No.

BNSF Railway Company (“BNSF” or the “Applicant”) hereby submits this application for an order from the Washington Utilities and Transportation Commission (the “Commission”) granting BNSF an exemption from the requirements of WAC 480-60-060.

In support of this Application, BNSF states the following:

1. The full name and address of the Applicant is:

BNSF Railway Company
2650 Lou Menk Drive, MOB-2
P.O. Box 961057
Fort Worth, Texas 76161-0057

2. BNSF is a common carrier by rail engaged in the transportation of freight across the western two-thirds of the United States, including Washington.

3. BNSF wishes to install Trackside Acoustic Detection System (“TADS”) equipment adjacent to its Seattle Subdivision at approximately Mile Post 30.0, in the vicinity of Kyro, Washington. The two main tracks at this location are tangent. An average of roughly 49 trains per day, which includes 10 passenger trains per day pass by the site of the proposed installation.

4. The purpose of TADS is to provide early detection of defective wheel bearings on railcars passing by it at normal operating speeds. This is accomplished through use of an arrangement of multiple microphones on both sides of the track that records the sound produced by each wheel bearing that passes by the TADS installation. These recordings are analyzed by computer equipment programmed to detect sound patterns indicative of a number of common wheel bearing defects.

5. In the event that the TADS detects a defective wheel bearing on a train passing by it, the TADS will issue an alert notice to the appropriate Mechanical Department location based on the alarm's severity and confidence levels. For reference, the inspection points nearest the proposed installation site are Tacoma, WA (northbound) and Centralia, WA (southbound). Upon the train's arrival at the inspection location chosen by BNSF, the wheel bearing(s) that led to the alert being issued will be manually inspected by Mechanical Department personnel, with appropriate action to be taken based on the results of manual inspection.

6. In order to perform its function properly, the TADS must be installed at a distance of 6 feet 5 inches from the center line of the track, on both sides of the target track. The height of the entire TADS assembly (including the support structure) is approximately 20.5 inches above the top of the rail nearest the TADS. The centers of main track number one and main track number two are spaced 14 feet apart at this location. As a result, the back side of the TADS equipment placed between the two tracks will be located approximately 5 feet 10 inches from the center line of the non-target track. Diagrams depicting these dimensions are attached hereto as Exhibit A.

7. WAC 480-60-050(1) prescribes a general minimum side clearance of 8 feet 6 inches from the center line of the track to trackside structures. A number of exceptions exist for specific trackside structures such as platforms, switch machines, signal equipment and bridges, but none of these clearly encompass trackside mechanical detector equipment like the TADS equipment. Therefore, the general clearance requirement of 8 feet 6 inches prescribed in WAC 480-60-050(1) applies.

8. Pursuant to WAC 480-60-020(3), the Commission has authority to grant exemptions from any rule in Chapter 480-60 WAC, if consistent with the public interest, the purposes underlying the regulation, and applicable statutes.

9. When positioned closer than 6 feet 5 inches from the center line of the target track, the performance of the TADS equipment diminishes greatly. Additionally, the distance between the two tracks at this location also limits the distance at which the TADS equipment can be installed from the track. Therefore, BNSF respectfully requests that the Commission grant this exemption in order to allow for the installation of the TADS equipment approximately 6 feet 5 inches from the center line of the target track and approximately 5 feet 10 inches from the center line of the non-target track. This exemption will serve the public interest by supporting the continued safety of BNSF's operations in this region. Further, this exemption would not adversely affect the safety of railroad personnel and operations, the protection of which is the primary underlying purpose of the regulations in Chapter 480-60 WAC. The area for which BNSF seeks this exemption is limited in scope (principally, the proposed installation site for the TADS equipment). BNSF therefore asserts that this exemption would improve, not adversely affect, safety.

10. BNSF is committed to the safe operation of its railroad network, and the TADS technology is one of a number of trackside detector systems available to BNSF for the purpose of detecting railcar problems and preventing en route failures. Other trackside detectors in use by BNSF are designed to evaluate brake shoe status, truck performance, and wheel performance, but the TADS equipment is one of few technologies available to BNSF to effectively, automatically evaluate wheel bearing status on moving trains.

11. This portion of track is an integral part of BNSF's interstate rail system. Under the ICC Termination Act, 49 U.S.C. § 10501(b), the Surface Transportation Board has exclusive jurisdiction over railroad operations and facilities. Although state and local agencies do not have jurisdiction to compel railroads to submit to state or local permitting requirements as a condition of improving the railroads' interstate facilities, BNSF and other railroads can and often do voluntarily agree to comply with reasonable state and local requirements in connection with railroad construction projects. This voluntary cooperation in no way is meant to confer jurisdiction on the state or local regulator but instead is a byproduct of BNSF's commitment to partnership with the communities in which it operates. BNSF is committed to working with the Commission as set forth herein.

12. Therefore, in light of the foregoing, BNSF respectfully submits that it is in the public interest that BNSF be permitted to install the TADS equipment as proposed herein. Further, BNSF requests the Commission approve BNSF's Application for an exemption from the clearance requirements of WAC 480-60-050 in order to allow for

installation of the installation of the TADS equipment at a distance of 6 feet 5 inches from the target track and 5 feet 10 inches from the non-target track.

Respectfully submitted this 19th day of March 2015,

/s/

Zachary T. Abel

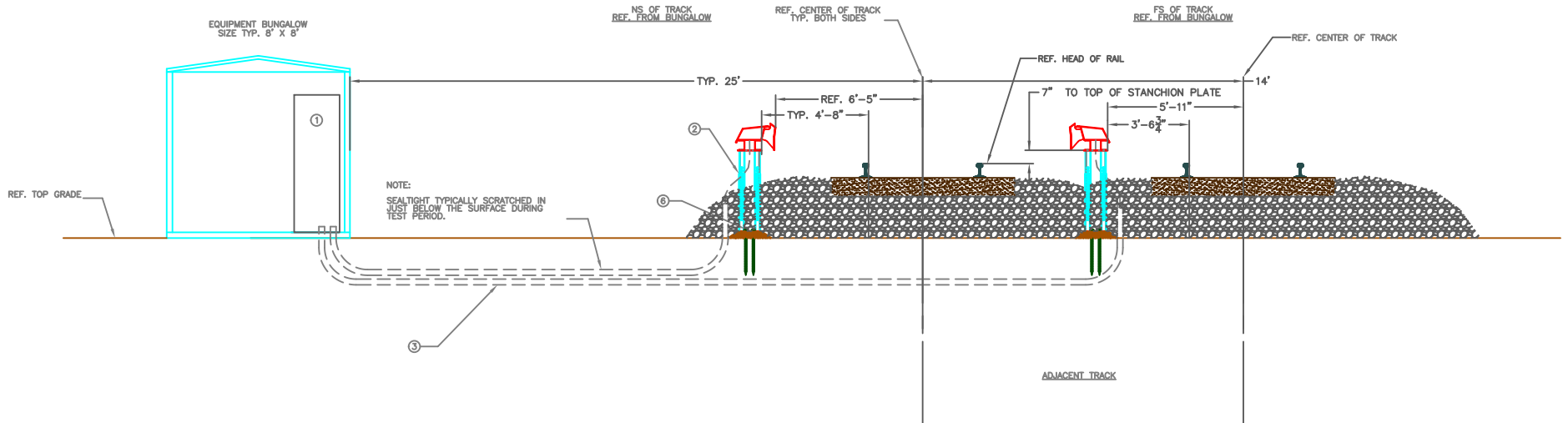
Attorney for Applicant BNSF Railway Company

Exhibit A

Diagram of Proposed Installation of TADS Equipment

REVISIONS				
ZONE	REV	DESCRIPTION	Date	APPROVED
	1	ADDED CL OF TRACK DIM TO ARRAY FACE	08/14	

- ① TADS EQUIPMENT RACK EXT. RACK DIMENSIONS [6' H X 2' W X 3'-3 5/16" D]
- ② ADJUSTABLE TADS STANCHION TYP. 8 PLACES.
- ③ 2" METALLIC SEALTIGHT.
- ④ ANCHOR STAKE TYP. 16 PLACES.



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 Loveland, CO 80537
 www.datatraks.com

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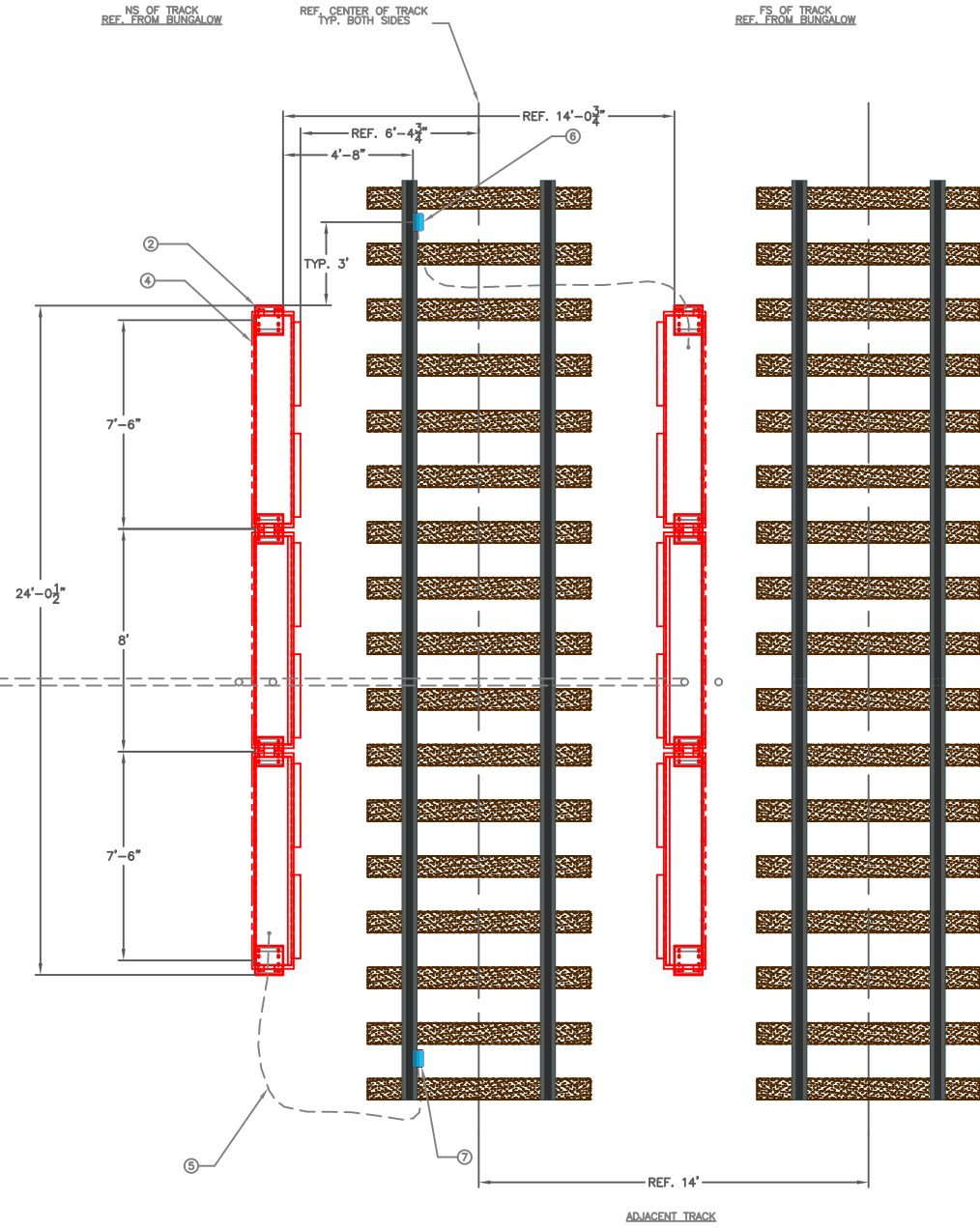
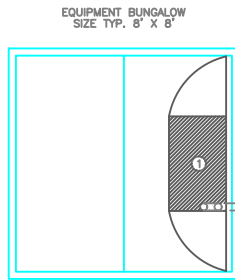
UNLESS OTHERWISE SPECIFIED	DESIGNED:	DATE	07/01/14
DIMENSIONS ARE IN INCHES	DRAWN:	DJG	
TOLERANCES:	CHECKED:		
ANGULAR: ±0.5	APPROVED:	KRC	
TWO PLACE DECIMAL ±0.050			
THREE PLACE DECIMAL ±0.010			

COMMENTS:
 TADS INSTALL WITHOUT CANTILEVERS.

DRAWING INFO.			
PRELIMINARY TADS LAYOUT (KYRO)			
SIZE	DATE	DWG NO.	REV
C	08/13/14		1
SCALE	NTS	DAD FILE	SHEET

REVISIONS				
ZONE	REV	DESCRIPTION	Date	APPROVED
	1	ADDED CL. OF TRACK DIM TO ARRAY FACE	08/14	

- ① TADS EQUIPMENT RACK EXT. RACK DIMENSIONS [6' H X 2' W X 3'-3 5/16" D]
- ② ADJUSTABLE TADS STANCHION TYP. 8 PLACES.
- ③ 2" METALLIC SEALTIGHT.
- ④ TADS ARRAY TYP. 6 PLACES.
- ⑤ 3/4" METALLIC SEALTIGHT.
- ⑥ WHEEL SENSOR ONE.
- ⑦ WHEEL SENSOR TWO.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±0.5 TWO PLACE DECIMAL ±0.050 THREE PLACE DECIMAL ±0.010	DESIGNED:	DATE	07/01/14	DRAWING INFO. PRELIMINARY TADS LAYOUT (KYRO)	
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