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4	BEFORE THE WASHINGTON STATE UTILITIES		
5	AND TRANSPORTATION COMMISSION		
6	In the matter of the petition of Whatcom ) Docket No: TR -180466		
7	County to install median barriers at a ) highway-grade crossing )		
9	<ul><li>) Petitioner Whatcom County's Post-Hearing</li><li>) Brief in Support of Whatcom County's</li></ul>		
10	<ul> <li>Petition for Installation of Median Barriers at</li> <li>a Highway-Grade Crossing</li> </ul>		
11			
12	Respondent Whatcom County, 311 Grand Ave, Bellingham, WA 98225, by and		
13	through its attorney, Senior Civil Deputy Christopher Quinn, submits the following post-		
14	hearing brief in support of its May 30, 2018 petition for installation of median barriers at a		
15 16	highway-grade crossing.		
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2 Petitions for alterations to existing rail crossings and their approaches are properly granted by the Washington Utilities and Transportation Commission ("Commission") pursuant to RCW 81.53.060 when public safety so requires. Whatcom County ("County") has petitioned to install mountable median-barriers on its roadway approaches to a highway gradecrossing at Cliffside Drive. This alteration will reduce the existing risk level to motorists at this crossing by more than 50%. Commission staff supports the County's petition and recommends it be granted. Should the Commission grant Whatcom County's petition?

## RELIEF REQUESTED

Whatcom County respectfully requests the Washington Utilities and Transportation 3 Commission grant its petition to install mountable median-barriers with channelization devices at the highway rail-grade crossing located at Cliffside Drive (USDOT#084821L) in Whatcom County, Washington.

## **FACTS**

4 The small residential neighborhood of Cliffside Drive lies outside the City of Bellingham in Whatcom County, Washington. Forty-four homes are situated in this community, which overlooks Bellingham Bay to the east.<sup>2</sup> There are no schools or businesses

<sup>1</sup> Exhibit No. CS-1T at 2:19-23

located in this neighborhood.<sup>3</sup> Motor vehicle ingress and egress can only be had via Cliffside Drive.<sup>4</sup> This county road crosses a single active railroad track at a public highway-rail grade crossing on the west side of the neighborhood (USDOT#084821L).<sup>5</sup>

The current configuration of the Cliffside Drive public crossing includes two entrance gates with eight signal mast mounted warning lights and bells.<sup>6</sup> The posted speed limit on the road approaches to the Cliffside crossing is 25 mph.<sup>7</sup> Warning signs posted on approaches from both sides of the tracks alert motorists to the crossing.<sup>8</sup> Neither school busses nor city/county busses use this crossing.<sup>9</sup> Currently, approaching trains sound their horns as a warning to motorists at Cliffside Drive.<sup>10</sup>

In response to community requests for relief from the horns, Whatcom County started the process of establishing a Quiet Zone at the Cliffside Drive crossing pursuant to the Federal Railroad Administration's Train Horn Rule ("Train Horn Rule"), 49 Code of Federal Regulation ("CFR") Part 222. 11 As part of this process the County convened a diagnostics team consisting of representatives from BNSF, the Federal Railroad Administration, and the Washington Utilities and Transportation Commission. 12 The team met on site to discuss feasibility and potential improvements to the crossing area for purposes of establishing a quiet zone. 13

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21  $\begin{bmatrix} 3 & Id. \\ 4 & Id. \end{bmatrix}$ 

<sup>5</sup> Petition (Exhibit No. CS-3)

22  $\int_{0.7}^{6} Exhibit No. CS-1T at 2:19-23$ 

<sup>7</sup> Petition

 $^{23}$  |  $^{8}$  Exhibit No. CS-2

Petition

<sup>10</sup> Exhibit No. CS-2

<sup>11</sup> Exhibit CS-1T at 2:9-15

<sup>12</sup> *Id.* at 3:4-19

 $25 || ^{13}Id.$ 

On March 16, 2018 Whatcom County issued its Notice of Intent to Establish a Quiet Zone in the area of Cliffside Drive. The County informed BNSF, Amtrak, and the Washington Utilities and Transportation Committee of its intentions. To

As part of the plan to establish a quiet zone at Cliffside Drive, Whatcom County committed to installing mountable median-barriers with channelization devices on their roadway approaches to the crossing. These proposed median-barriers are Federal Railroad Administration ("FRA") -approved Supplemental Safety Measures ("SSMs") recognized by 49 CFR 222 as an effective means for reducing risk measures at rail crossings.

On May 30, 2018 the County filed its Petition for Installation of Median Barriers at Highway-Rail Grade Crossing with the Commission pursuant to RCW 81.53.060.<sup>18</sup> FRA Quiet Zone calculations demonstrate the proposed improvements would reduce the risk index at Cliffside Drive -as a quiet zone- by 75% and would reduce the existing risk index *-with horns sounding-* by more than 50%.<sup>19</sup> Commission staff supports the County's petition and recommends it be granted.<sup>20</sup>

BNSF opposes the County's petition.<sup>21</sup> The railroad suggests that the mountable medians are not the safest option available and therefore the petition should be denied.<sup>22</sup> Also, although BNSF did not file its own petition for alteration of the approaches under RCW 81.53.060, the railroad asks the Commission to order the installation of concrete medians

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15 CS-1T at 2 16 Exhibit No. CS-2

<sup>14</sup> Exhibit No. CS-2

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18 Patition

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<sup>19</sup> See: Petition, Exhibit No. CS-2, and Exhibit No. CS-9

<sup>20</sup> Exhibit No. BY-1T at 11: 8-11.

<sup>21</sup> See: Exhibit SS-1T

<sup>22</sup> See: Exhibit SS-1T and Transcript Vol. II, Semenick, S. 98-126

311 Grand Ave Suite 201 Bellingham, WA 98225 360,778,5710 increases the risk to motorists at the Cliffside Drive public rail crossing,<sup>29</sup> Therefore the County must take steps to mitigate this additional potential risk related to this specific project in order to address public safety needs. Installation of mountable median-barriers with channelization devices accomplishes this goal by a significant degree.<sup>30</sup>

- A. By all measures, the installation of mountable median-barriers with channelization devices on the roadway approaches will significantly reduce the risk of injury and death at Cliffside Drive.
- 15 The evidence before the Commission establishes that Whatcom County's proposed improvements to the Cliffside Drive crossing approaches will make Cliffside Drive a much safer rail crossing:
  - The installation of mountable medians reduces the existing risk to the public with train horns sounding- by more than 50%. It will reduce the NSRT for this crossing by 75%. 31
  - The installation of the medians will provide a physical barrier and highly visible deterrent to motorists who may consider driving around deployed gates.<sup>32</sup>
  - The Federal Rail Administration specifically recognizes mountable medianbarriers with channelization devices as a highly-effective system for reducing risks at highway-rail grade crossings.<sup>33</sup>
  - Washington Utilities and Transportation Commission, the state agency whose mission includes ensuring safe transportation services, recommends through its staff that Whatcom County's petition to install the mountable medians be granted.<sup>34</sup>
  - Whatcom County's ability to install and maintain the mountable median system at this location with its readily available resources will better ensure the continued integrity of the road improvement.<sup>35</sup>

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<sup>&</sup>lt;sup>29</sup> See: 49 CFR Part 222

<sup>&</sup>lt;sup>30</sup> *Id.* at Appendix A

<sup>&</sup>lt;sup>31</sup> Exhibit No. CS-1T at 4:4-15;5:1-9

<sup>&</sup>lt;sup>32</sup> Transcript Volume II, Swan, C. 63:1-25

<sup>&</sup>lt;sup>33</sup> See: 49 CFR Part 222 at Appendix A

<sup>&</sup>lt;sup>34</sup> Exhibit No. BY-1Y at 11:8-11

<sup>&</sup>lt;sup>35</sup> See: Exhibit No. CS-1T; Transcript Vol. II, Swan, C. 17-76

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• The community members of Cliffside Drive voiced their appreciation for the characteristics of mountable medians with channelization devices, and they believe the County's choice of this SSM best serves their safety.<sup>36</sup>

- The installation of mountable median barriers, unlike other proposed improvements, will not hinder or delay emergency vehicle access to the community served by the crossing.<sup>37</sup>
- BNSF does not contest this evidence.<sup>38</sup> In fact, the railroad expressly acknowledges the effectiveness of the mountable medians with channelization devices as a means for reducing risks to motorists at rail crossings by 75%.<sup>39</sup>

Based on the undisputed evidence, the Commission should therefore find that the proposed installation of mountable medians at Cliffside Drive best serves the interests of public safety and grant Whatcom County's petition.

- B. Since Whatcom County seeks to establish a quiet zone at Cliffside Drive, public safety requires granting Whatcom County's petition to install mountable median devices with channelization devices.
- 17 The forty-four households of the Cliffside Drive neighborhood asked their county government to establish a quiet zone on behalf of the community. 40 In response, Whatcom County has taken necessary action under the Train Horn Rule to accomplish this task while seeking to maintain public safety at the crossing. 41

<sup>&</sup>lt;sup>36</sup> See: Transcript Vol. III at 141-150.

<sup>&</sup>lt;sup>37</sup> Exhibit No. CS-1T at 6:1-9

<sup>&</sup>lt;sup>38</sup> See: Transcript Volume II, Semenick, S. 98-126

<sup>&</sup>lt;sup>39</sup> Transcript Volume II, Semenick, S. 116:3-8

<sup>&</sup>lt;sup>40</sup> Exhibit No. CS-1T at 2:9-15

<sup>&</sup>lt;sup>41</sup> See: Exhibit No. CS-1T; Transcript Volume II, Swan, C. 17-76

An essential part of establishing a quiet zone and protecting the public requires
mitigation of the increased risk that comes with the removal of train horns. To accomplish this
necessary mitigation the Train Horn Rule specifies authorized and approved SSMs to protect
the motoring public. <sup>42</sup> Implementing any of these approved SSMs at all of the crossings in a
proposed area is one means for establishing the requisite mitigation necessary to establish a
proposed quiet zone. <sup>43</sup> Employing mountable median-barriers with channelization devices at
crossings in a proposed quiet zone is one such approved SSM. <sup>44</sup>
Although the evidence shows that Whatcom County is not required to install these
additional SSMs to establish the quiet zone at Cliffside Drive, the County nevertheless elects to
install these FRA-approved median-barriers to provide additional protections to the public. <sup>45</sup>
Ironically, denial of Whatcom County's petition could theoretically result in Cliffside Drive
crossing remaining a statistically greater risk to motorists with approaching trains continuing to
sound their horns. 46

Whatcom County is expressly authorized to seek establishment of a quiet zone under the Train Horn Rule.<sup>47</sup> As part of this process they have petitioned to install a FRA-approved SSM that will make the crossing at Cliffside Drive safer –regardless of whether it may be necessary under the Federal Code. Under these circumstances, the question for the Commission becomes: *How can public safety not require granting Whatcom County's petition to install mountable median-barriers with channelization devices?* 

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<sup>45</sup> See: Exhibit No. CS-1T; Exhibit No. CS-4; and Transcript Volume II, Swan, C. 17-76

<sup>46</sup> Exhibit No. CS-1T at 5:1-9

<sup>42</sup> 49 CFR Part 222, Appendix A

25 | 47 49 CFR Part 222

21 Since public safety requires the installation of the medians as part of a quiet zone establishment, the Commission should grant Whatcom County's petition.

## II. The Commission should deny BNSF's request that Whatcom County be required to install non-mountable median barriers at Cliffside Drive.

- As part of its objection to Whatcom County's petition, BNSF urges the Commission to order the installation of an alternative type of median barrier at Cliffside Drive: a six-inch tall poured concrete median barrier.<sup>48</sup> This request is neither properly before the Commission as a petition pursuant to RCW 81.53.060, nor is the proposed alternative median required under the circumstances of the case. In either case, Respondent's request should be denied.
  - A. BNSF's request for an order of alteration to highway-rail grade approaches is not properly before the Commission under RCW 81.53.060.
- BNSF objects to Whatcom County's petition for alteration of the Cliffside Drive roadway approaches and suggests that the proposed installation of mountable median-barriers and the accompanying risk reduction to motorist is insufficient. Instead, the railroad asks that the Commission order Whatcom County to use an alternative median-barrier: a non-mountable concrete median-barrier, which would further reduce statistical risk by five percent.
- A party seeking to alter a rail crossing approach must file a petition with the Commission pursuant to RCW 81.53.060.<sup>51</sup> The petition must allege that public safety requires the alteration sought.<sup>52</sup> Notice shall be provided to interested parties and a hearing on the petition shall be set.<sup>53</sup>

<sup>50</sup> Exhibit No. SS-1T at 9:1-4

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<sup>&</sup>lt;sup>48</sup> See: Exhibit No. SS-1T at 9:1-4; Transcript Volume II, Semenick, S. 98-126

<sup>&</sup>lt;sup>49</sup> *Id*.at 3-6

<sup>&</sup>lt;sup>51</sup> RCW 81.53.060

<sup>&</sup>lt;sup>52</sup> *Id*.

 $<sup>|</sup>_{53}$  *Id*.

- In this case, BNSF seeks alteration of the roadway approaches without having complied with any of the statutory requirements. No petition has been filed; no notice has been provided (to the County, to the Commission, or to the public); and no hearing has been set. Under these circumstances, BNSF's request for an alternative alteration of the Cliffside Drive railway approaches is not properly before the Commission for consideration. The Commission should therefore deny BNSF's request for an order requiring Whatcom County to install non-mountable median-barriers.
  - B. Should the Commission consider BNSF's request for installation of non-mountable median-barriers at Cliffside Drive, the record does not support a finding that public safety requires the installation of the BNSF's proposed alternative.
- BNSF asks the Commission to order Whatcom County to install a non-mountable median barrier on the Cliffside Drive approaches.<sup>54</sup> The railroad suggests that the slight statistical reduction of risk attributed to this alternative requires that the Commission deny Whatcom County's petition and order a different improvement.<sup>55</sup> However, in this case public safety does not require this alternative at Cliffside Drive.
- 27 Similar to the mountable versions, the cement median-barriers serve primarily as a visual deterrent to motorists approaching the crossing. Statistically, these non-mountable medians are only 5% more effective at reducing risk.<sup>56</sup> In the case of Cliffside Drive, the comparative effectiveness rates of the two proposed medians are 75% (mountable) versus 80% (non-mountable).<sup>57</sup> As a practical matter, there is little difference between the two, and the

57 Id

<sup>&</sup>lt;sup>54</sup> Exhibit No. SS-1T at 9:1-4

<sup>&</sup>lt;sup>55</sup> Transcript Volume II, Semenick, S. 106:18-25

<sup>&</sup>lt;sup>56</sup> See: 49 CFR Part 222, Appendix A; Transcript Vol. II, Semenick, S. 98-126

parties agree and the record shows that both options significantly and effectively reduce risk to motorists at rail crossings.<sup>58</sup> This is not disputed.<sup>59</sup>

What is less clear from the record, however, is why public safety would require the Commission to order installation of a median that is only nominally more effective at reducing risk. Since there is no requirement that the most effective alteration be used under RCW 81.53, the Commission should focus on the characteristics of Cliffside Drive and the neighborhood it serves when deciding on what option best fulfills public safety needs in this situation.

The crossing. Cliffside Drive provides no-outlet access across a single rail line to a small community of approximately forty-four homes. Cliffside Drive traffic consists primarily of residents living in the neighborhood and their invitees. It is a low-traffic public crossing.

The highway-rail grade crossing in this location is equipped with gates, lights, and bells. The speed limit on the county road approaches is posted at 25 mph. The Average Daily Traffic at this crossing has been calculated at approximately 300 vehicles. Neither school busses nor city/county busses access the Cliffside neighborhood. The record does not identify any unique or notable safety concerns related to the Cliffside crossing that may require special consideration.

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60 Exhibit No. CS-1T at 2:21-23

<sup>63</sup> Petition

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<sup>&</sup>lt;sup>58</sup> See: Transcript Vol. II (testimony of Swan and Semenick)

<sup>&</sup>lt;sup>59</sup> Id

<sup>&</sup>lt;sup>61</sup> Transcript Vol. II, Swan, C. 61-62

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<sup>&</sup>lt;sup>64</sup> Exhibit No. CS-1T at 3:1-2

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31 There has only been one vehicle-train accident at this rail crossing since its establishment in 1971.<sup>66</sup> It was the result of a car stalling on the tracks, and it does not appear to be attributed to driver disregard for downed gates. Medians of any type would not have prevented this type of accident. This single accident also fails to establish the Cliffside crossing as particularly dangerous.

32 The Cliffside Drive neighborhood. Cliffside drive is a small residential neighborhood situated on a bluff overlooking Bellingham Bay. 67 The homeowners are described as "upper-middle class" and "affluent." It was these community members who joined together and requested that Whatcom County consider establishing a quiet zone at Cliffside Drive. <sup>69</sup> They are committed to establishing and maintaining the quiet zone, and they are particularly aware of the nature of a quiet zone and its associated risks. <sup>70</sup> Public comments to the Commission support this conclusion.<sup>71</sup>

34 Furthermore, nothing in the record suggests that Cliffside residents, the Cliffside neighborhood, or the highway-rail grade crossing itself make for a particular risky public rail crossing under any circumstances. If it was otherwise, perhaps the Commission would be swayed that the additional 5% reduction of risk is necessary to ensure public safety. But this just isn't the case. Instead, everything in the record indicates that Cliffside Drive is a very low risk highway-rail grade to begin with. In fact, the current statistical risk level is so low according to FRA measures that SSMs are not required at all to establish a quiet zone. 72 Still,

<sup>&</sup>lt;sup>66</sup> Exhibit No. BR-1; Exhibit No. BR-2 (inventory identifies date crossing was established) <sup>67</sup> Site visit by Commission

<sup>&</sup>lt;sup>68</sup> Transcript Volume II, Swan, C. 62:6-7

<sup>&</sup>lt;sup>69</sup> *Id* at 61:16-21

<sup>&</sup>lt;sup>70</sup> See: Transcript Volume III 140:24- 150:4 (public hearing testimony, Cliffside residents)

<sup>&</sup>lt;sup>72</sup> Exhibit No. CS-1T at 8:7-10.

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