

Fact sheet

Since 2019, the Vancouver Fraser Port Authority has been studying existing noise levels and modelling future noise levels with BKL, an independent acoustical consultant.

In summer 2021, the City of Pitt Meadows engaged RWDI to complete a peer review of BKL's noise study. Since then, we have worked with BKL to consider and incorporate feedback from the community, the city, and RWDI.

The BKL assessment was done in accordance with:

- For noise – [Health Canada's Guidance for Evaluating Human Health Impacts in Environmental Assessment](#) (2017)
- For vibration – [US Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual](#) (2018)

The following table summarizes:

- Feedback received from the community, the city, and RWDI relative to the BKL study
- Additional work completed in response
- The implications of the additional work and how feedback was considered as part of the updated report

More information is also available in the summer 2022 noise and vibration FAQ.

What we heard	Additional work we completed	Implications
Additional baseline noise monitoring should be conducted along and adjacent to the rail corridor.	Based on community feedback, BKL assessed the existing noise conditions again in October 2021 at six residences, including two monitors at repeat locations to compare to the noise data collected in 2019, for a total of 10 unique locations monitored between 2019 and 2021.	Existing noise levels in 2021 were observed to be lower than noise levels captured in 2019. The previously collected data will continue to be used in the analysis to ensure a conservative approach.
Additional field surveys should be conducted to confirm locations and condition of existing noise walls.	In July 2021, site surveys were conducted to confirm locations, heights and conditions of existing barriers and walls.	Our consultant, BKL, has updated their analysis to reflect this new information and ensure the model accurately depicts existing conditions
Additional investigations should be conducted on ground and soil conditions along and adjacent to the rail corridor.	General geotechnical work is a standard part of any large-scale infrastructure project like this one. As part of this process, the port authority continues relevant ground investigation for the project. Completed geotechnical work shows that the water table is high and that standard ground conditions are typical of this area.	Additional investigations will be completed to inform technical designs and construction planning. As this supplemental information is collected, the BKL assessment and recommendations may be updated accordingly, to capture any significant changes to assumed soil and site conditions.
The BKL analysis should be updated to reflect outcomes of additional noise monitoring and existing condition assessments, and to respond to the city's peer review (conducted by RWDI).	BKL conducted an updated analysis in response to the RWDI report findings and additional noise monitoring results, and confirmed existing noise wall locations and conditions. More details on how RWDI's findings were incorporated are available in the summer 2022 noise and vibration FAQ.	Some supplementary walls became part of the warranted scope due to changes in predicted noise impacts associated with the new Harris Road underpass alignment (i.e. the underpass location has shifted west of its current alignment). Overall wall heights have also changed with the revised assessment, so the total wall length was changed to fit within the same mitigation budgets. Updates in noise modelling also had some effect on wall locations. This tweak in proposed mitigation length and height of walls is expected as key project elements change as the design work progresses (eg. the change in alignment for Harris Road).

What we heard	Additional work we completed	Implications
<p>The BKL report and recommendations for warranted noise and vibration mitigation should be updated to reflect the outcomes of the updated analysis (see above).</p>	<p>The BKL report and recommendations for warranted noise and vibration mitigation has been updated to reflect the updated analysis</p>	<p>The project now proposes a \$3 million investment commitment for noise and vibration mitigation at no cost to the city. There is an additional opportunity to expand this mitigation to a cumulative investment of \$5 million if the city contributes \$1 million in funding (with the other \$1 million contribution provided by other parties), with further details outlined in the project partnering agreement. Final wall heights and locations would be determined in collaboration with the city to maximize community benefit.</p>
<p>Additional analysis of construction phase noise and vibration impacts should be completed, with proposed mitigation updated accordingly.</p>	<p>The port authority will work with its contractor to ensure that construction activities comply with relevant industry requirements, as it relates to construction-related noise and vibration.</p>	<p>It is expected that construction related noise and vibration considerations and mitigation will be developed and progressed with our contractor through the balance of 2022. Details of this construction related noise and vibration plan will be shared with the city and in future community updates prior to construction starting.</p>
<p>For the identified/proposed new noise walls, more information on potential materials/aesthetics and location relative to residential private property should be provided.</p>	<p>Designs are progressing with an aim to avoid any impacts to private residential properties with the construction of the proposed noise walls. Precast concrete retaining walls are anticipated to be installed as they maximize durability and minimize long-term maintenance requirements.</p>	
<p>The project should commit to conducting post-construction noise monitoring.</p>	<p>The project will collect post construction noise and vibration data to compare with the BKL analysis and if large discrepancies exist, opportunities to address will be discussed between the project partners.</p>	



The fully updated BKL assessment report is available at portvancouver.com/pittmeadowsroadandrail, including a Q&A outlining the updates completed in response to feedback from the community, the city and the peer review conducted by RWDI



The assessment continues to identify up to about \$1.5 million of noise and vibration mitigation that is warranted along the corridor to comply with Health Canada and FTA guidelines



In response to community feedback and to demonstrate our commitment to providing mitigation that is above and beyond the minimum warranted, the project will provide \$3 million of noise and vibration mitigation at no cost to the city, with an opportunity to obtain an additional \$1 million project funding if the city matches \$1 million, for a combined total of \$5 million that may be allocated to noise and vibration mitigation



Subject to additional Transport Canada funding as per the project partnering agreement



Wall locations and heights will be determined in consultation with the city, and with the technical expertise of BKL and RWDI, to maximize community benefit

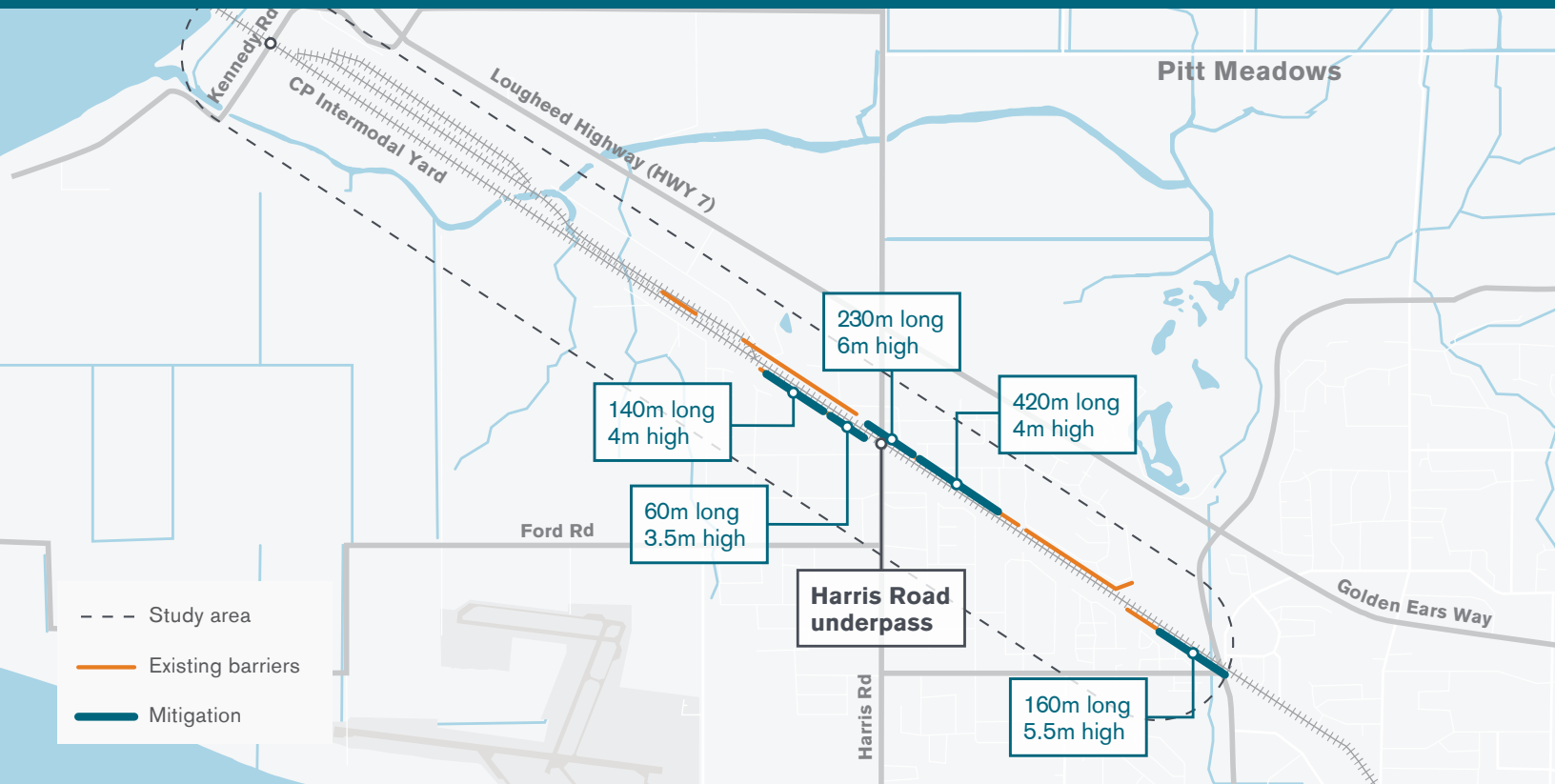


A key objective of further design work will be to select noise walls which will require minimal ongoing maintenance and that can be constructed while avoiding any private residential property impacts

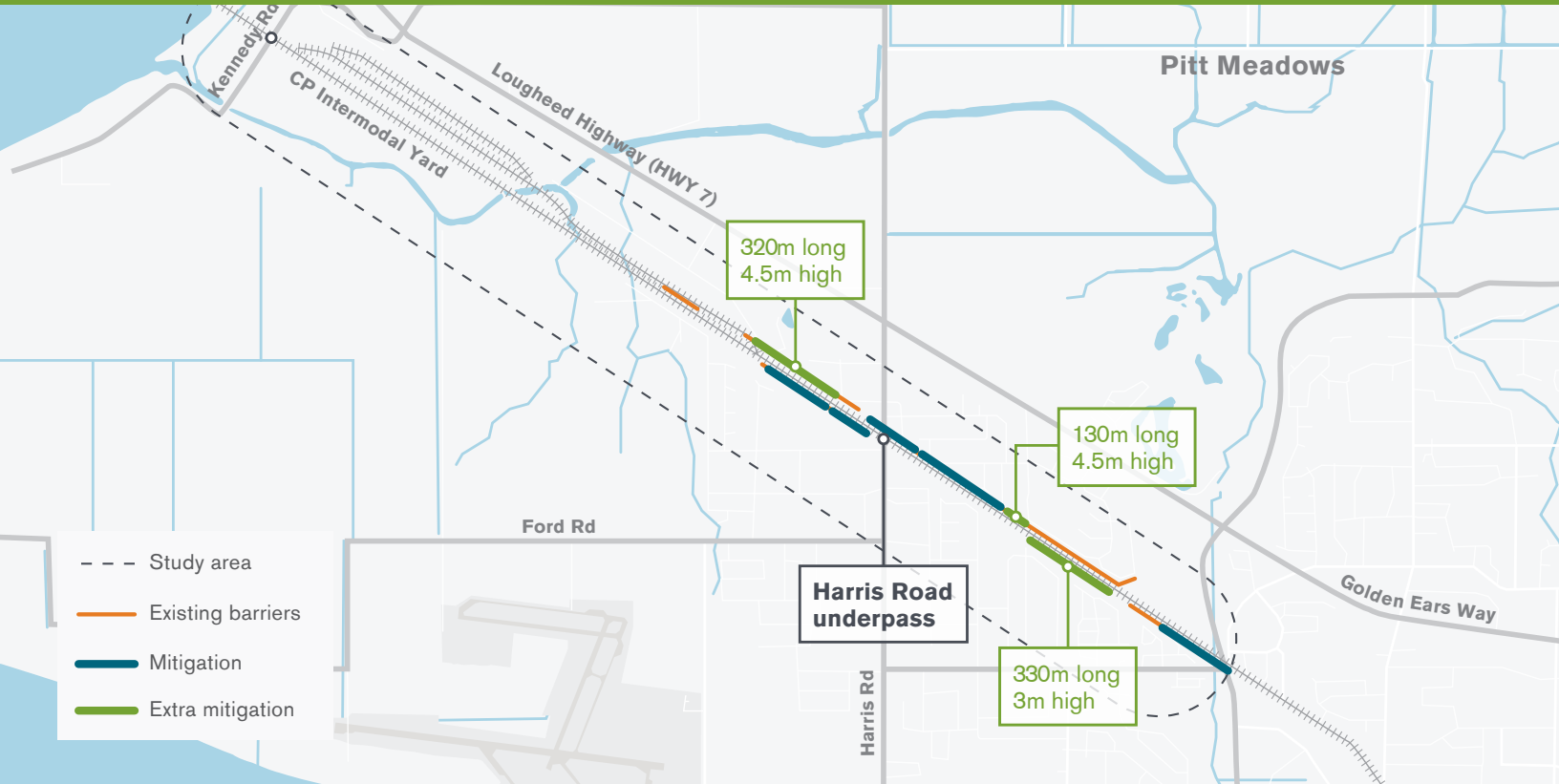
Existing barriers



\$3M mitigation investment



\$5M mitigation investment



Designs for the walls are advancing with the objective of avoiding the requirement for any of the walls to be located on private residential land.

** Subject to additional Transport Canada funding and \$1 million contribution from the City of Pitt Meadows*