

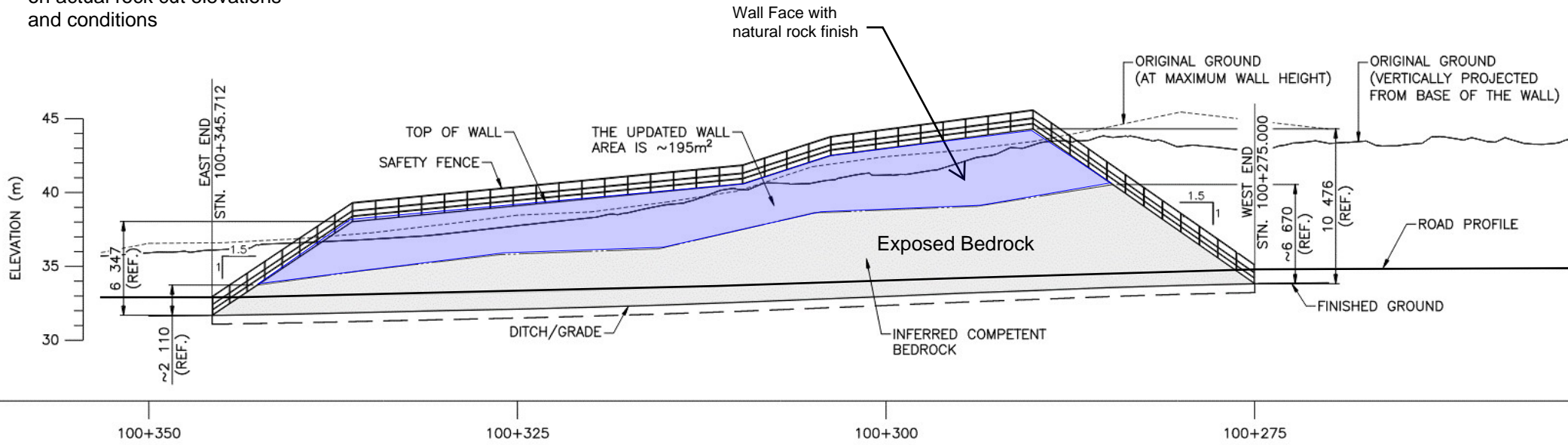
Canal Road Dip Slide Project – FAQ July 3, 2024

1. Why is this work happening? What are the details of this project?
 - a. After the November 2021 atmospheric river event, abnormal road deformation occurred at the Canal Rd Dip Slide. The slide was investigated in early 2018, but this event triggered road deformation enough to enact an emergency response/recovery disaster project. This included transitioning to single lane alternating traffic and closing off the outside lane. Geotechnical monitoring devices were installed and showed that heavy rainfall events add additional movement within the active landslide, in which, during these times, load restrictions were enacted. The proposed project is designed to a climate resiliency standard that will provide a long-term safe solution for this only connecting route between North and South Pender Island.
 - b. The project consists of realigning the existing roadway onto a solid bedrock foundation. This includes excavation and blasting rock to carve the new alignment. A retaining wall is required at the eastern end of the project to retain the soils and earth above the rock of that specified section. Additionally, upgraded culverts and drainage ditches are to be constructed. The existing roadway will be offloaded and revegetated with grass, trees and shrubs, as well as the remaining disturbed areas where applicable.
2. How was the "Preserve and Protect" Gulf Islands mandate taken into account when designing this solution?
 - a. The Ministry of Transportation and Infrastructure (MOTI)'s number one priority is safety of the public. Being the only route that connects North and South Pender, it is crucial to use an option that solves the on-going active landslide issue at the Canal Rd Dip. The design parameters for the solution are standard across the province in order to ensure a safe, long-term solution. Another important priority was to preserve the natural environment as much as possible. The team worked extensively with Parks Canada and designed a project that will minimize impacts to Parks Canada as much as possible and preserve the Park.
3. Why is the rail required on the wall? If the wall or railing get's graffitied, who is responsible for removing it?
 - a. The railing is a requirement for safety of Ministry Maintenance staff and to protect public/animals away from the wall edge. The railing itself is only 1m high and will be surrounded by revegetation rather quickly once the project is completed.
 - b. MoTI is responsible for the wall's maintenance, which would be carried out by the Maintenance Contractor.

4. Have any other alternatives been considered instead of using concrete for the retaining wall?
 - a. No other approved alternatives have been considered. The vegetation surrounding the wall will help reduce potential noise and the imbedded bedrock will encompass approximately 60% of the wall area.
5. Are there any other island that has had this level of cautionary road repairs? If not, is there a greener solution that could be used.
 - a. As the roadway is on an active landslide, in order to maintain this active route between North and South Pender island, these additional measures were required from a safety standpoint so that this wasn't just a band-aid repair that could cause future catastrophic failures, losing all connection for businesses and residents. The alignment was built to the Ministry standard that is compliant with all Ministry roads and highways. Other options considered were along the existing alignment, which included a bridge option over the active landslide, or soil anchors and retaining wall downslope. Both of these options were considerably expensive, and the road would've had to be shut down for an extensive period of time. Being the only route for public and emergency vehicles, this was deemed a top priority to leave the existing alignment in use.
6. When will there be a community information meeting about this project? When will the plans become public? What Consultation or outreach has taken place?
 - a. This FAQ is designed to provide requested clarity and reach a wider audience, additional information will be made available through the project website at:
<https://www2.gov.bc.ca/gov/content/transportation-projects/bc-highway-flood-recovery/canal-road-dip-slide-pender-island>
 - b. The project website has been available since the event in early 2022, and an email account has been available to answer public concerns, with signs posted at the site with this information. This is a Disaster mitigated project and it was deemed to be in the best interest of the community to proceed with an option that could be constructed without disrupting the existing route.
7. What is the plan for replanting the trees after the road is finished? If it's not fully re-treed, then who will be responsible for removing the invasive species, such as broom and gorse.
 - a. An extensive revegetation plan is proposed, which includes replanting of trees, shrubs and seeding all necessary areas that were disturbed. This includes the area behind the proposed wall, and along the new road alignment. The existing roadway will be offloaded and additional tree planting will be offset there as well. There is also a guarantee period for these species of 5 years that will be managed by the maintenance contractor after the initial 1 year contract period.
8. Were the plans confirmed prior to going to tender and if not, why not?
 - a. Consultations occurred with First Nations and approvals were received from MOTI and Parks Canada to proceed



Note: Pre-construction drawing,
subject to change in field based
on actual rock cut elevations
and conditions



9. Have local traffic conditions been considered (number of vehicles, weight of vehicles, speed, etc...), and if so, have they been incorporated into the plans?
 - a. Yes, the existing road (ambient) conditions were used as a standard for the road width and requirements. The necessity of the wall was due to the upland slope with realignment of the roadway into solid bedrock. Geotechnical monitors were installed in the existing roadway and the slide movement has been monitored since the project began. Load restrictions have been implemented when rainfall events occur. Realigning the roadway into solid bedrock removes the weight restrictions.
10. Is the plan set in stone, or are options still under consideration?
 - a. The project is currently in construction and moving ahead with the plans in place.
11. What is the scale of the retaining wall, and what will it look like once it's complete?
 - a. The highest point of the wall would be 10.5m from the roadway. Roughly 7m of that height will be bedrock itself. The wall is built top down from the existing ground, once the bedrock is encountered, the wall construction stops, and the bedrock is benched and cut down to the roadway ditch.
 - b. There is an included image with an example natural rock wall finish
12. Where can we find additional information or ask follow-up questions?
 - a. The below project website will provide additional information and images of the walls. Follow up questions can be sent to the email address on the website (TRAN.CanalRdDIP@gov.bc.ca)
<https://www2.gov.bc.ca/gov/content/transportation-projects/bc-highway-flood-recovery/canal-road-dip-slide-pender-island>