

RWC-1015 2023 Inspection

Tamihi 3.4km



RWIP Offline v7 TEST 2

Retaining Wall Inventory Data

Existing Data

Updated Data

Structure Number RWC-1015

User km 3.4

Project File # 5127.06

FSR Name Tamihi

District Chilliwack

Road Responsibility DCK (Chilliwack)

Design Function Fill Slope

Design Function Other

Structure Type GRS

Structure Type Other

Facing Type Welded Wire Mesh

Facing Type Other

Year Installed 2012

Last Inspection 2021

Design Info Available Yes

Latitude 49.053902

Longitude -121.824404

Measurements

Max. Length (m) 50

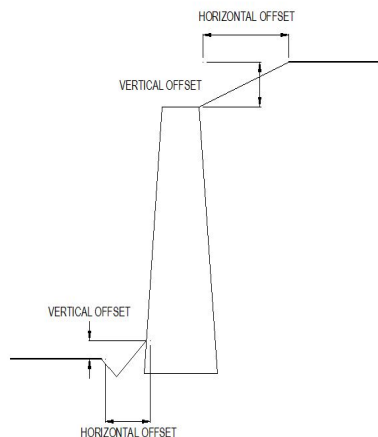
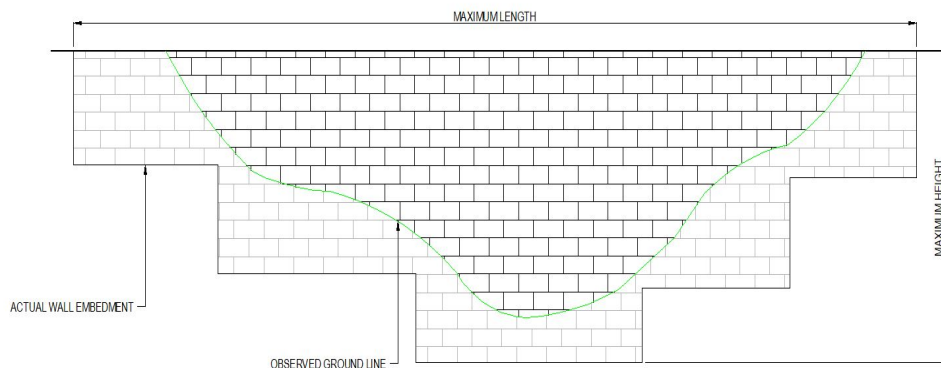
Max. Height (m) 10

Vertical Offset (m)

Horizontal Offset (m) 10

Barrier Length (m)

Road Width (m)



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Primary Elements

	Rating	Comments
Retaining Wall Structure	Fair	Largely good except woods side which has failed elements resulting from eroded foundation.
Drainage System	Fair	Two culverts but water pooling at inlet without being drained indicating culvert inlets are too high.
Foundation Material	Poor	Woods side eroding and causing wall failure with fill spilling out to downslope.
Wall Movement Indicators	Fair	Wall is eroding away but no evidence of curves or bends indicating wall failure.

Secondary Elements

	Rating	Comments
Surface Drainage	Fair	Ditch doesn't properly drain water into culverts and results in residual ponds which keep the wall saturated for longer than optimal. This water could be causing the pre mature foundation erosion.
Road	Good	
Lateral Slope	Fair	Slope showing signs of sloughing.
Upslope	Fair	Unstable rock slope however catch ditch and catch berm are present to mitigate the hazard.
Downslope	Poor	Foundation eroding on woods side.
Traffic Barrier	Poor	Road fill material up to bottom 1/3 of traffic barrier.
Signage Delineators	Poor	Does not exist.
Vegetation	Yes	

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Retaining Wall Inspection Report

Name of Inspector	Daniel Stein
Inspection Company	Ministry of Forests
Date of Inspection	2023-05-02 3:00 PM
Professional Inspection Required	Yes
Overall Wall Condition Rating	Poor
Failure Consequence	<u>Moderate: Some loss of road prism intermittent or low exposure of people to constant exposure. May require some wall repair.</u>
Road Status	Active

Inspector Summary Comments

Prior to providing comments review previous inspection reports and design/construction information where available.

Despite the fact majority of wall is good, the woods foundation is compromised and will result in consistent deterioration of the wall here. Also the culvert inlets are ineffective at draining the wall.

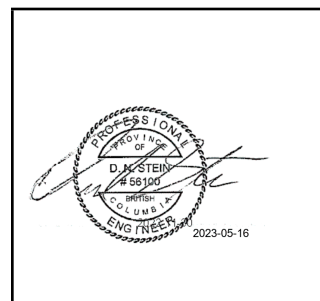
Sketch (Select Signature)

Provide sketch if required.

Inspector's Authentication:

The inspector is responsible for the quality and completeness of the inspection, unless working under direct supervision of a Professional Engineer.

Permit to practice number
(where applicable).



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Monitoring, Maintenance & Repair Recommendations

Monitoring, maintenance and repair recommendations are provided by the inspector and finalized by the reviewing Ministry Engineer.

Monitoring, maintenance and repair items carry forward until completed (refer to previous inspection records).

Maintenance/Repair

Item	Status	Priority	Description	Ministry Engineer Comment
1	Suggested	Medium	Repair barriers so they are full height on the road prism.	

Monitoring

Item	Frequency	Description	Ministry Engineer Comment
1	1 year	Annual inspection due to foundation erodibility.	

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Ministry Engineer Review

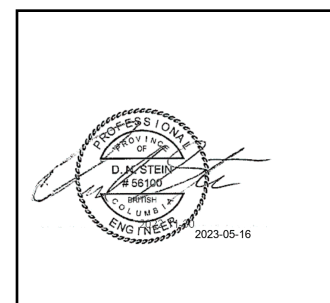
Name of Professional Engineer	<u>Daniel Stein P.Eng.</u>
Recommended inspection frequency	<u>1 year</u>
Recommended year of next inspection	<u>2024</u>

Professional Engineer Comments

Wall to be inspected annually due to failing foundation.

Professional Engineer's Authentication:

The reviewing Professional Engineer is responsible for the review of the inspection report and any arising recommendations. The undersigned does not warrant or guarantee, nor accept any responsibility for the accuracy or completeness of the inspection or supervision of the inspector. Furthermore, the undersigned does not warrant or guarantee construction record information supplied or created by others not under the undersigned's direct supervision. By authenticating this report, the undersigned accepts responsibility for review of the report and information and recommendations provided by the undersigned.



1003022

Permit to practice number

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Approach from town, unstable slope above



Woods culvert has limited flow. Pool from town culvert should get here.



Town culvert inlet high.



Woods culvert outlet. Failed wall below culvert. Seepage below culvert evident.



Road material scours down



Town side of wall performing well

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