

**BC Ministry of
Forests and Range**

GENERAL					
*Structure #:	Ck2349	*Site #:			
*Type/Class:	☒ Major Culvert ☐ Woodbox/Log Culvert	Crossing Name:			
*Forest District:	CH ILLWACI	Management Area:			
*Forest Service Road:	STAVE RIVER	Kilometres:	5.2		
*Project File ID#:	B013	*Br.	01		
Built For:	☐ BC Timber Sales ☐ Other Commercial Users ☐ Road Use Permit Holder	☐ Operations Division ☐ Road Permit Holder			
*Source:	☐ Inherited: Found Structure ☐ Inherited: Non-Status Road ☐ Inherited: Reallocation ☐ New Structure ☐ Replacement Structure	☐ Inherited: From Oil & Gas/ Other Ministry ☐ Inherited: Transfers from Other Ministries			
Year Built:	Year Added to Inventory:				
Current Load Rating GVW (tonnes): (PEng to enter / update this value on structure details screen in CBR)	Design Load Rating GVW (tonnes): (Typically obtained from design drawings) _____				
Design Vehicle Configuration: ☐ BCL625 ☐ CL625 ☐ L100 ☐ L120 ☐ L150 ☐ L165 ☐ L45 ☐ L60 ☐ L75 ☐ L90 ☐ Other					
*Primary User Client Number:	*Client Location Code:				
Primary User Name:					
As Built Information on File?	☐ Yes ☐ No				
Installation Cost (\$):	Material Cost (\$):				
Portable Structure?	☐ Yes ☐ No				
REPLACEMENT DETAILS					
Original Replacement (year):	Estimated Closure (year):				
Light Vehicle Traffic Replacement (year):	*Full Log Haul Traffic Replacement (year): (PEng to review and evaluate inspector's estimate, and to enter /update this value on structure details screen in CBR).				
Estimated Replacement Cost (\$):					
Replacement Cost Comments:					

FS1343 HEG Aug 3, 2010



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STRUCTURAL DETAILS			
*Culvert Number: <u>1</u> of <u>1</u>	*Culvert Length (metres): <u>20.1</u>	Gradient: <u>2.1</u>	
*Culvert Type (not required for woodbox/log): ☒ Box ☐ Elliptical ☐ Open Bottom ☐ Round		*Culvert Material: ☐ Concrete ☒ Corrugated Steel ☐ Log ☐ Other ☐ Steel Non-Corrugated	
Inlet Cover Depth (mm): <u>600</u>	Outlet Cover Depth (mm): <u>900</u>		
*Opening Height (mm): <u>3300</u>	*Opening Width (mm): <u>5100</u>		
Headwall Location: ☐ Both ☐ Inlet ☒ None ☐ Outlet		Open Bottom Substructure (not required for woodbox/log culvert): ☐ Cast in Place Concrete Footing ☐ Lock-Block Footing ☐ Piles ☐ Precast Concrete Footing ☐ Steel Footing	
Comments:			

#2

Sketch of pipe

Sketch of pipe

1.8m

1.2m

0.6m

pipe

hole

hole

hole



BC Ministry of
Forests and Range

Corporate Bridge Register (CBR)
Structure Inventory Data Form
"CULVERTS"

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STRUCTURAL DETAILS		
*Culvert Number: <u>22 of 2</u>	*Culvert Length (metres): <u>20m</u>	Gradient: <u>2%</u>
*Culvert Type (not required for woodbox/log): ☐ Box ☐ Elliptical ☐ Open Bottom ☒ Round		
*Culvert Material: ☐ Concrete ☐ Corrugated Steel ☐ Log ☐ Other ☐ Steel Non-Corrugated		
Inlet Cover Depth (mm): <u>800</u>	Outlet Cover Depth (mm): <u>1200</u>	
*Opening Height (mm): <u>2200</u>	*Opening Width (mm): <u>2200</u>	
Headwall Location: ☐ Both ☐ Inlet ☒ None ☐ Outlet		
Open Bottom Substructure (not required for woodbox/log culvert): ☐ Cast in Place Concrete Footing ☐ Lock-Block Footing ☐ Piles ☐ Precast Concrete Footing ☐ Steel Footing		
Comments:		



Routine Condition Culvert Inspection Form

GENERAL INFORMATION

*Site #: CK 2249

*Crossing Name:

*Project File ID# B013

*Structure #:

*Type/Class: Major Culvert

*Br: 01

*FSR Name: STAVE RIVER

*Forest District: CHILLIWICK

User km:

Longitude: (ddd / mm / ss.s) 49 27 22.2

Latitude: (ddd / mm / ss.s) 122 13 05.5

UTM Easting

UTM Northing

*Kilometres: 5.2

UTM Zone

LEFT/RIGHT APPROACHES (as seen facing downstream) E = excellent; G = good; F = fair; P = poor; N/A = not appl., UR = Unrated

Item

Present Condition (circle or fill-in)

Comments (a comment is mandatory if condition "Poor" is selected)

Alignment

E (G) F P UR

Bridge Ahead Signs Missing

0 1 (2)

Brushing Required

Yes (No)

Delineator Missing Left

0 1 (2)

Delineator Missing Right

0 1 (2)

Fender Condition

E G F P (None) UR

Posted Load Rating

(tonnes) or (None)

Road Surface

E G (F) P UR

GENERAL CULVERT ITEMS

Item

Present Condition (circle)

Comments (a comment is mandatory if condition "Poor" is selected)

Baffles (N/A to woodbox/log culvert)

E G F P (N/A) UR

Bolted Connections (N/A to woodbox/log culvert)

E G (F) P N/A UR

Coupled Connections (N/A to woodbox/log culvert)

E G F P (N/A) UR

Coating (N/A to woodbox/log culvert)

E G (F) P N/A UR

Minor rust

Embedment Materials (N/A to woodbox/log culvert)

E G F P (N/A) UR

Fill

E G (F) P UR

Roof

E G (F) P UR

Side Walls

E G (F) P UR

Floor

E G (F) P N/A UR

Head Walls

E G F P (N/A) UR

Wing Walls

E G F P (N/A) UR

Inlet

E G (F) P UR

Outlet

E G (F) P UR

Erosion on downstream left corner (p.d)

Overall

E G F P UR

Riprap

E G F P N/A UR

rocksteep and falling into stream

Trash Rack

E G F P (N/A) UR

on upstream left side

Wells/Backwater Structures

E G F P (N/A) UR

emission valve in downstream left corner allowing exposed soil

Footings (N/A to woodbox/log culvert)

E G F P (N/A) UR

LOG CULVERTS ONLY

Stringer #

Stringer Rot Depth (mm)

Diameter (mm)

Stringer Species

Comments (a comment is mandatory if condition "Poor" is selected)

1

2

3

4

5

6

7

8

9

10

11

12

FS1337C HEG Aug 3, 2010



BC Ministry of Forests and Range
Routine Condition Culvert Inspection Form

GENERAL INFORMATION

*Site #:	(enter either long/lat or UTM below— not both)		
*Structure #:	*Crossing Name:	*Type/Class: ☐ Major Culvert ☐ Woodbox/Log Culvert	*Project File ID# 0013
*FSR Name:	*Forest District:	*Kilometres:	User km:
STAVE RIVER	CHILLIWALK	5.2	
Longitude: (ddd / mm / ss.s)	UTM Easting	UTM Northing	
Latitude: (ddd / mm / ss.s)	UTM Zone		
	OR		
	49 23 22.2		
	122 13 05.5		

LEFT/RIGHT APPROACHES (as seen facing downstream) E = excellent; G = good; F = fair; P = poor; N/A = not appl., UR = Unrated

Item	Present Condition (circle or fill-in)	Comments (a comment is mandatory if condition "Poor" is selected)
Alignment	E G F P UR	
Bridge Ahead Signs Missing	0 1 2	
Brushing Required	Yes No	
Delineator Missing Left	0 1 2	
Delineator Missing Right	0 1 2	
Fender Condition	E G F P None UR	
Posted Load Rating	(tonnes) or None	
Road Surface	E G F P UR	

GENERAL CULVERT ITEMS

Item	Present Condition (circle)	Comments (a comment is mandatory if condition "Poor" is selected)
Baffles (N/A to woodbox/log culvert)	E G F P N/A UR	
Bolted Connections (N/A to woodbox/log culvert)	E G F P N/A UR	
Coupled Connections (N/A to woodbox/log culvert)	E G F P N/A UR	
Coating (N/A to woodbox/log culvert)	E G F P N/A UR	
Embedment Materials (N/A to woodbox/log culvert)	E G F P N/A UR	
Fill	E G F P UR	
Roof	E G F P UR	
Side Walls	E G F P UR	
Floor	E G F P N/A UR	
Head Walls	E G F P N/A UR	
Wing Walls	E G F P N/A UR	
Inlet	E G F P UR	
Outlet	E G F P UR	
Overall	E G F P UR	
Riprap	E G F P N/A UR	
Trash Rack	E G F P N/A UR	
Weirs/Backwater Structures	E G F P N/A UR	
Footing (N/A to woodbox/log culvert)	E G F P N/A UR	

LOG CULVERTS ONLY

Stringer #	Stringer Rot Depth (mm)	Diameter (mm)	Stringer Species	Comments (a comment is mandatory if condition "Poor" is selected)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				



Routine Condition Culvert Inspection Form

GENERAL INFORMATION

*Site #: _____ *Structure #: _____

LOG CULVERTS ONLY (continued)

Stringer #	Stringer Rot Depth (mm)	Diameter (mm)	Stringer Species	Comments (a comment is mandatory if condition "Poor" is selected)
13				
14				
15				
16				
17				
18				
19				
20				
21				

Comments

Stream CHANNEL

*Est. Present Water Level Depth 0 (m) *Est. Present Water Level Depth 0 (m) *Est. Present Water Level Depth 2.5 (m)

HAZARDS (circle yes or no for each item))

High Water? Yes ☒ No ☒ Scour? Yes ☒ No ☒ Ice? Yes ☒ No ☒ Debris? Yes ☒ No ☒ Aggradation? Yes ☒ No ☒

Comments

REPAIRS:

☐ Recommended ☐ Not required (H = High, M = Medium, L = Low)

Repair Item # *Priority (circle) *Estimate (\$) *Repair Description

1	H	M	L		
2	H	M	L		
3	H	M	L		

*Monitoring Status: ☐ Recommended ☐ Not required

Monitor Item # *Monitor Description

1		
2		

PHOTO LOG

Photo #	Description	Photo #	Description
	Right to left		Downstream left corner station CSP #2
	Left to right		8 ft. X 4 ft. side.
	Right CSP #1		Right CSP #1
	Right CSP #2		Right CSP #2

INSPECTOR TO COMPLETE THIS SECTION

As-built Drawings Checked? Yes ☒ No ☒ P Eng Inspection Required? Yes ☒ No ☒ Inspector's Estimate of Full Log Haul Traffic Replacement Date (year): _____ (P Eng to review and evaluate Inspector's estimate, and to update "Full Log Haul Traffic Replacement (year)" on structure details screen in CBR)

*Date of Inspection (yyyy/mm/dd) 2010-09-10 *Inspector's Company Name Onsite Engineering Ltd. *Inspector's Name (print) Ali Loeleghe *Inspector's Signature

Inspector's Comments

PROFESSIONAL ENGINEER (PENG) TO COMPLETE THIS SECTION

Current Load Rating GW (tonnes): 68 Date of Next Planned Inspection (yyyy/mm/dd) 2013/09/01

Reviewed by - P Eng's Name (print) G. Dohm Date Reviewed (yyyy/mm/dd) 2010/12/09

P Eng Reviewer's Comments

* Denotes Mandatory Information for Corporate Bridge Register



BC Ministry of Forests and Range
Routine Condition Culvert Inspection Form

GENERAL INFORMATION														
*Site #:		*Structure #:												
LOG CULVERTS ONLY (continued)														
Stringer #	Stringer Rot Depth (mm)	Diameter (mm)	Stringer Species	Comments (a comment is mandatory if condition "Poor" is selected)										
13														
14														
15														
16														
17														
18														
19														
20														
21														
Comments														
Stream CHANNEL														
*Est. Present Water Level Depth		/ (m)		*Est. Present Water Level Depth		/ (m)		*Est. Present Water Level Depth						
HAZARDS (circle yes or no for each item))														
High Water?	Yes	No	Scour?	Yes	No	Ice?	Yes	No	Debris?	Yes	No	Aggradation?	Yes	No
Comments														
REPAIRS: ☐ Recommended ☐ Not required (H = High, M = Medium, L = Low)														
Repair Item #	*Priority (circle)	☐ Recommended ☐ Not required		*Estimate (\$)		*Repair Description								
1	H M L													
2	H M L													
3	H M L													
*Monitoring Status: ☐ Recommended ☐ Not required														
Monitor Item #	*Monitor Description													
1														
2														
PHOTO LOG														
Photo #	Description					Photo #		Description						
INSPECTOR TO COMPLETE THIS SECTION														
As-built Drawings Checked?		Yes		No		P Eng Inspection Required?		Yes		No		Inspector's Estimate of Full Log Haul Traffic Replacement Date (year):		
(P Eng to review and evaluate inspector's estimate and to update "Full Log Haul Traffic Replacement (year)" on structure details section in CBR)														
*Date of Inspection (yyyy/mm/dd)		*Inspection Company Name				*Inspector's Name (print)				Inspector's Signature				
Inspector's Comments														
PROFESSIONAL ENGINEER (PEng) TO COMPLETE THIS SECTION														
Current Load Rating GVW (tonnes):										Date of Next Planned Inspection (yyyy/mm/dd)				
(PEng to update structure details section in CBR as necessary)														
Reviewer Company Name		Reviewed by - PEng's Name (print)				Reviewed by - PEng's Signature				Date Reviewed (yyyy/mm/dd)				
PEng Reviewer's Comments														

* Denotes Mandatory Information for Corporate Bridge Register



CK2349 Right to left



CK2349 Left to right



CK2349 Inlet CSP 1



CK2349 Outlet CSP 1



CK2349 Erosion downstream csp1



CK2349 InletCSP 2



CK2349 Outlet CSP 2