

ACTIVE

H-3  
Sept 10

BC Ministry of  
Forests and Range

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

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| GENERAL                                                                                                                                                                                                                                                                |                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *Structure #: <u>CK-2419</u>                                                                                                                                                                                                                                           | *Site #:                                                                                                                                                              |
| *Type/Class:<br><input type="checkbox"/> Major Culvert<br><input checked="" type="checkbox"/> Woodbox/Log Culvert                                                                                                                                                      | Crossing Name:                                                                                                                                                        |
| *Forest District: <u>CHILLWACK</u>                                                                                                                                                                                                                                     | Management Area:                                                                                                                                                      |
| *Forest Service Road: <u>CHILLWACK</u>                                                                                                                                                                                                                                 | Kilometres: <u>17.0</u>                                                                                                                                               |
| *Project File ID#: <u>8013</u>                                                                                                                                                                                                                                         | *Br. <u>01</u>                                                                                                                                                        |
| Built For:<br><input type="checkbox"/> BC Timber Sales<br><input type="checkbox"/> Other Commercial Users<br><input type="checkbox"/> Road Use Permit Holder                                                                                                           | <input type="checkbox"/> Operations Division<br><input type="checkbox"/> Road Permit Holder                                                                           |
| *Source:<br><input type="checkbox"/> Inherited: Found Structure<br><input type="checkbox"/> Inherited: Non-Status Road<br><input type="checkbox"/> Inherited: Reallocation<br><input type="checkbox"/> New Structure<br><input type="checkbox"/> Replacement Structure | <input type="checkbox"/> Inherited: From Oil & Gas/<br>Other Ministry<br><input type="checkbox"/> Inherited: Transfers from<br>Other Ministries                       |
| Year Built:                                                                                                                                                                                                                                                            | Year Added to Inventory:                                                                                                                                              |
| Current Load Rating GVW (tonnes):<br>(PEng to enter / update this value on structure details screen in CBR)                                                                                                                                                            | Design Load Rating GVW (tonnes):<br>(Typically obtained from design drawings)                                                                                         |
| Design Vehicle Configuration:                                                                                                                                                                                                                                          |                                                                                                                                                                       |
| <input type="checkbox"/> BCL625 <input type="checkbox"/> CL625 <input type="checkbox"/> L100 <input type="checkbox"/> L120 <input type="checkbox"/> L150 <input type="checkbox"/> L165                                                                                 | <input type="checkbox"/> L45 <input type="checkbox"/> L60 <input type="checkbox"/> L75 <input type="checkbox"/> L90 <input type="checkbox"/> Other                    |
| *Primary User Client Number:                                                                                                                                                                                                                                           | *Client Location Code:                                                                                                                                                |
| Primary User Name:                                                                                                                                                                                                                                                     |                                                                                                                                                                       |
| As Built Information on File? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                 | Material Cost (\$):                                                                                                                                                   |
| Installation Cost (\$):                                                                                                                                                                                                                                                | Material Cost (\$):                                                                                                                                                   |
| Portable Structure? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                           | <input type="checkbox"/> No                                                                                                                                           |
| REPLACEMENT DETAILS                                                                                                                                                                                                                                                    |                                                                                                                                                                       |
| Original Replacement (year):                                                                                                                                                                                                                                           | Estimated Closure (year):                                                                                                                                             |
| Light Vehicle Traffic Replacement (year):                                                                                                                                                                                                                              | *Full Log Haul Traffic Replacement (year):<br>(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:                                                                                                                                                                                                                                             |                                                                                                                                                                       |

\* Denotes Mandatory Information for Corporate Bridge Register



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"CULVERTS"

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| STRUCTURAL DETAILS                                                                                                                                                                                         |                               |                                                                                                                                                                                                                                                                                                             |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| *Culvert Number: 1 of 1                                                                                                                                                                                    | *Culvert Length (metres): 9.1 | Gradient: -1%                                                                                                                                                                                                                                                                                               |  |
| <b>*Culvert Type (not required for woodbox/log):</b><br><input checked="" type="checkbox"/> Box <input type="checkbox"/> Elliptical<br><input type="checkbox"/> Open Bottom <input type="checkbox"/> Round |                               | <b>*Culvert Material:</b><br><input type="checkbox"/> Concrete <input type="checkbox"/> Corrugated Steel<br><input checked="" type="checkbox"/> Log <input type="checkbox"/> Other<br><input type="checkbox"/> Steel Non-Corrugated                                                                         |  |
| Inlet Cover Depth (mm): 200                                                                                                                                                                                |                               | Outlet Cover Depth (mm): 200                                                                                                                                                                                                                                                                                |  |
| <b>*Opening Height (mm): 900</b>                                                                                                                                                                           |                               | <b>*Opening Width (mm): 1500</b>                                                                                                                                                                                                                                                                            |  |
| Headwall Location:<br><input type="checkbox"/> Both <input type="checkbox"/> Inlet<br><input checked="" type="checkbox"/> None <input type="checkbox"/> Outlet                                             |                               | Open Bottom Substructure (not required for woodbox/log culvert):<br><input type="checkbox"/> Cast in Place Concrete Footing<br><input type="checkbox"/> Lock-Block Footing<br><input type="checkbox"/> Piles<br><input type="checkbox"/> Precast Concrete Footing<br><input type="checkbox"/> Steel Footing |  |
| Comments:                                                                                                                                                                                                  |                               |                                                                                                                                                                                                                                                                                                             |  |



BC Ministry of Forests and Range  
Routine Condition Culvert Inspection Form

| GENERAL INFORMATION                            |                                       |                                                                                                                   |                               |              |
|------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------|
| *Site #: <u>CK-2419</u>                        |                                       | (enter either long/lat or UTM below— not both)                                                                    |                               |              |
| *Structure #:                                  | *Crossing Name:                       | *Type/Class:<br><input type="checkbox"/> Major Culvert<br><input checked="" type="checkbox"/> Woodbox/Log Culvert | *Project File ID# <u>8013</u> |              |
| *FSR Name:<br><u>CHILLWACK</u>                 | *Forest District:<br><u>CHILLWACK</u> | *Kilometres:<br><u>17.0</u>                                                                                       | User km: <u>16.0</u>          |              |
| Longitude: (ddd / mm / ss.s) <u>49 31 56.4</u> |                                       | UTM Zone <u>OR</u>                                                                                                | UTM Easting                   | UTM Northing |
| Latitude: (ddd / mm / ss.s) <u>122 16 45.2</u> |                                       |                                                                                                                   |                               |              |

| LEFT/RIGHT APPROACHES (as seen facing downstream) E = excellent; G = good; F = fair; P = poor; N/A = not appl.; UR = Unrated |                                          |             |            |                     |
|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------|------------|---------------------|
| Item                                                                                                                         | Present Condition<br>(circle or fill-in) |             |            |                     |
| Alignment                                                                                                                    | E <u>(G)</u>                             | F           | P          | UR                  |
| Bridge Ahead Signs Missing                                                                                                   | 0                                        | 1           | <u>(2)</u> |                     |
| Brushing Required                                                                                                            | Yes                                      | <u>(NO)</u> |            |                     |
| Delineator Missing Left                                                                                                      | 0                                        | 1           | <u>(2)</u> | <u>NOT REQUIRED</u> |
| Delineator Missing Right                                                                                                     | 0                                        | 1           | <u>(2)</u> |                     |
| Fender Condition                                                                                                             | E                                        | G           | F          | P <u>(None)</u> UR  |
| Posted Load Rating                                                                                                           | (tonnes) or <u>(None)</u>                |             |            |                     |
| Road Surface                                                                                                                 | E <u>(G)</u>                             | F           | P          | UR                  |

| GENERAL CULVERT ITEMS                            |                               |   |            |                   |
|--------------------------------------------------|-------------------------------|---|------------|-------------------|
| Item                                             | Present Condition<br>(circle) |   |            |                   |
| Baffles (N/A to woodbox/log culvert)             | E                             | G | F          | P <u>(N/A)</u> UR |
| Bolted Connections (N/A to woodbox/log culvert)  | E                             | G | F          | P <u>(N/A)</u> UR |
| Coupled Connections (N/A to woodbox/log culvert) | E                             | G | F          | P <u>(N/A)</u> UR |
| Coating (N/A to woodbox/log culvert)             | E                             | G | F          | P <u>(N/A)</u> UR |
| Embedment Materials (N/A to woodbox/log culvert) | E                             | G | F          | P <u>(N/A)</u> UR |
| Fill                                             | E                             | G | F          | <u>(P)</u> UR     |
| Roof                                             | E                             | G | <u>(P)</u> | P UR              |
| Side Walls                                       | E                             | G | <u>(F)</u> | P UR              |
| Floor                                            | E                             | G | F          | P <u>(N/A)</u> UR |
| Head Walls                                       | E                             | G | F          | P <u>(N/A)</u> UR |
| Wing Walls                                       | E                             | G | F          | P <u>(N/A)</u> UR |
| Inlet                                            | E                             | G | <u>(F)</u> | P UR              |
| Outlet                                           | E                             | G | <u>(F)</u> | P UR              |
| Overall                                          | E                             | G | <u>(F)</u> | P UR              |
| Riprap                                           | E                             | G | F          | P <u>(N/A)</u> UR |
| Trash Rack                                       | E                             | G | F          | P <u>(N/A)</u> UR |
| Wells/Backwater Structures                       | E                             | G | F          | P <u>(N/A)</u> UR |
| Footings (N/A to woodbox/log culvert)            | E                             | G | F          | P <u>(N/A)</u> UR |

| LOG CULVERTS ONLY |                         |               |                  |                                                                      |
|-------------------|-------------------------|---------------|------------------|----------------------------------------------------------------------|
| Stringer #        | Stringer Rot Depth (mm) | Diameter (mm) | Stringer Species | Comments<br>(a comment is mandatory if condition "Poor" is selected) |
| 1                 | 100                     | 570           | CW               | } SLAB                                                               |
| 2                 | 50                      | 640           | CW               |                                                                      |
| 3                 | "                       | 720           | CW               |                                                                      |
| 4                 | "                       | 970           | CW               |                                                                      |
| 5                 | "                       | 760           | CW               |                                                                      |
| 6                 | "                       | 580           | CW               |                                                                      |
| 7                 | "                       | 570           | CW               |                                                                      |
| 8                 | "                       | 540           | CW               | ROUND                                                                |
| 9                 | "                       | 490           | "                | SLAB                                                                 |
| 10                | "                       | 620           | "                | SLAB                                                                 |
| 11                | 150                     | 480           | "                | ROAD = POOR LOG                                                      |
| 12                | 50                      | 570           | "                |                                                                      |



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|                                                                                                |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
|------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------|---------------------------------------|--------|--------------|--------|
| GENERAL INFORMATION                                                                            |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| *Site #: CK-249                                                                                |                                                   | *Structure #:                                                                                              |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| LOG CULVERTS ONLY (continued)                                                                  |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Stringer #                                                                                     | Stringer Rot Depth (mm)                           | Diameter (mm)                                                                                              | Stringer Species                                                                                                                                 | Comments<br>(a comment is mandatory if condition "Poor" is selected) |        |                                       |        |              |        |
| 13                                                                                             | 50                                                | 440                                                                                                        | "                                                                                                                                                | ROUND                                                                |        |                                       |        |              |        |
| 14                                                                                             | 100                                               | 800                                                                                                        | "                                                                                                                                                | ROUND                                                                |        |                                       |        |              |        |
| 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 0 (m)                                |        | *Est. Present Water Level Depth 0 (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 WBC IS UNDERSIZED, SMALL SCOUR CLOSE TO INLET 7 FOOTING                               |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| REPAIRS:                                                                                       |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Repair Item #                                                                                  | *Priority (circle)                                | <input type="checkbox"/> Recommended <input type="checkbox"/> Not required (H = High, M = Medium, L = Low) |                                                                                                                                                  | *Repair Description                                                  |        |                                       |        |              |        |
| 1                                                                                              | H M L                                             |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| 2                                                                                              | H M L                                             |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| 3                                                                                              | H M L                                             |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| *Monitoring Status: <input type="checkbox"/> Recommended <input type="checkbox"/> Not required |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Monitor Item #                                                                                 | *Monitor Description                              |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| 1                                                                                              |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| 2                                                                                              |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| PHOTO LOG                                                                                      |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Photo #                                                                                        | Description                                       | Photo #                                                                                                    | Description                                                                                                                                      |                                                                      |        |                                       |        |              |        |
|                                                                                                | RIGHT TO LEFT                                     |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
|                                                                                                | LEFT TO RIGHT                                     |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
|                                                                                                | UP STREAM                                         |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
|                                                                                                | DOWN STREAM                                       |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| INSPECTOR TO COMPLETE THIS SECTION                                                             |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| As-built Drawings Checked?                                                                     | P Eng Inspection Required?                        | Yes No                                                                                                     | Inspector's Estimate of Full Log Haul Traffic Replacement Date (year):                                                                           |                                                                      |        |                                       |        |              |        |
| Yes No                                                                                         |                                                   |                                                                                                            | (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)                                                               | *Inspection Company Name                          | *Inspector's Name (print)                                                                                  | Inspector's Signature                                                                                                                            |                                                                      |        |                                       |        |              |        |
| 2010-09-10                                                                                     | Davis Engineering Ltd.                            | Ali Sadeghi                                                                                                |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Inspector's Comments                                                                           |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| STRUCTURE UNDERSIZED, and requires more f.u.                                                   |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| PROFESSIONAL ENGINEER (P Eng) TO COMPLETE THIS SECTION                                         |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Current Load Rating GWV (tonnes):                                                              | Date of Next Planned Inspection (yyyy/mm/dd)      |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| (P Eng to update structure details screen in CBR as necessary)                                 | 62                                                | NA                                                                                                         |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Reviewer Company Name                                                                          | Reviewed by - P Eng's Name (print)                | Reviewed by - P Eng's Signature                                                                            |                                                                                                                                                  | Date Reviewed (yyyy/mm/dd)                                           |        |                                       |        |              |        |
| MNRO                                                                                           | G. Dohm                                           | [Signature]                                                                                                |                                                                                                                                                  | 2010/12/10                                                           |        |                                       |        |              |        |
| P Eng Reviewer's Comments                                                                      | This is a WBC. Debris restricting flow at outlet. |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |
| Remove from CBR.                                                                               |                                                   |                                                                                                            |                                                                                                                                                  |                                                                      |        |                                       |        |              |        |

\* Denotes Mandatory Information for Corporate Bridge Register



CK2419 Right to left



CK2419 Left to right



CK2419 Inlet



CK2419 Outlet