

Self-Screening Registration Criteria

T07: Technical Bridge and Major Culvert Condition Inspection

The Ministry of Forests and Range will only contract with technical services consultants to carry out inspections of bridges and major culverts on forest roads. Consultants providing technical services under service category T07 must have the mandatory knowledge and experience as detailed below.

Mandatory Knowledge Requirements

1. have considerable recognized specialization within the discipline of routine bridge and major culvert inspection services as required by the ministry, including:
 - carrying out visual inspections and physical (non-destructive) testing log stringer, steel, concrete, or glulam bridge components, and concrete, log, or steel major culverts and verifying the testing as the inspection progressed
 - in the case of wood components, assessing the significance of any rot to the structure's integrity
 - establishing whether structural deficiencies require evaluation by professional engineers or can be simply rectified by specifying suitable minor repairs
2. have considerable knowledge of:
 - bridge and major culvert materials and methods of bridge and major culvert condition inspection
 - forest road bridge and major culvert configurations and material types including log, timber, steel and concrete elements
3. have a working knowledge of:
 - typical details and arrangements described in the Ministry of Forests publication entitled, *Forest Service Bridge Design and Construction Manual* available at the following web site: http://www.for.gov.bc.ca/hth/engineering/publications_guidebooks.htm.
 - forest road and bridge planning, bridge construction techniques and bridge maintenance activities (with emphasis on routine bridge condition inspection)
4. be familiar with Provincial legislation such as the *Forest Practices Code of British Columbia Act*, *Forest and Range Practices Act*, and *Water Act*, and associated regulations under those acts, including the Water Regulation, Forest Road Regulation, and the Forest Planning and Practices Regulation, among other legislation relevant to maintenance of bridges and major culverts;
5. have knowledge and understanding of the principles and best management practices relevant to maintenance of bridges and major culverts provided in publications such as:

- Forest Practices Code of BC Fish-stream Crossing Guidebook (March 2002)
 - Forest Practices Code of BC Forest Road Engineering Guidebook (June 2002)
 - Forest Practices Code of BC Riparian Management Area Guidebook
 - Forest Practices Code of BC Fish-stream Identification Guidebook
6. in the case of projects that come under the control and administration of BC Timber Sales (BCTS), obtain BCTS Environmental Management System (EMS) Level 3 training prior to commencing work on any BCTS Worksite.

Mandatory Experience Requirements

1. Consultants providing services for inspection of bridges and major culvert require a minimum of 5 years of demonstrated relevant experience in forestry or related resource industries in British Columbia. Consultants must have specific work experience in providing:
- visual inspection and physical (non-destructive) testing of log stringer and other log and timber bridge components, and provide options for action (restriction, repair, upgrade, repair)
 - general visual examinations of steel, concrete, and glulam bridge components, and major culverts, including working under the direct supervision of a qualified registered professional engineer
 - completion of inspection reports in a format acceptable to the Ministry
 - general visual examinations of bridge substructures to evaluate structural integrity and assess for scour, concrete deterioration, pile rot or corrosion; and provide options for action (restriction, repair, upgrade, replacement)