

NOVA SCOTIA WATERCOURSE ALTERATION SPECIFICATIONS (2006)

Clear Span Permanent Bridges

- B1. Bridge installations must entirely span the watercourse. The bridge abutments or any other part of the structure, including stabilization material, shall be aligned with the existing banks and not extend into the watercourse or in any way constrict the natural width of the channel.
- B2. Bridges must be designed with a hydraulic capacity large enough to pass a peak flow with a 100 year return period and a maximum velocity of 1.8 m/s unless otherwise Approved by the Minister or Administrator.
- B3. All machine work is to be carried out from the watercourse banks. Machinery is not permitted to enter the watercourse.
- B4. Grubbing on watercourse banks is limited to the area required for the construction of abutments and for adjacent backfills to reach slope stability unless otherwise authorized in writing by the Minister or Administrator.
- B5. No fresh concrete, lime, or cement is allowed to enter a watercourse.
- B6. Lumber treated with creosote must not be used in the construction or maintenance of any part of the structure. Untreated hemlock, tamarack/ juniper, or cedar, pre-cast concrete, corrosion resistant steel or plastic; or ACQ (Alkaline Copper Quaternary) or CCA (Chromated Copper Arsenate treated wood, if treated in accordance with Best Management Practices (BMPs) as outlined in the 1997 industry guide published jointly by the Canadian Institute of Treated Wood (CITW) and the US based Western Wood Preservers Institute are considered acceptable materials.
- B7. The Department's "Guidelines for the Application and Removal of Structural Steel Protective Coatings" shall be adhered to during maintenance or construction activities.
- B8. All instream work shall be carried out in isolation of the watercourse flow ("in the dry").
- B9. Water control devices such as cofferdams or aquadams are to be used to separate the entire work area from the flowing watercourse. Cofferdams must be constructed of sandbags faced with plastic, sheet piling or other material authorized in writing by the Minister or Administrator.

If Cofferdams are to be used, there must be of sufficient height and strength to hold back the 1:2 year return rainfall event (bank full conditions).

- B10. No excavation shall take place within the dammed area until the cofferdam is completely isolated from the flowing watercourse.
- B11. Placement and removal of cofferdams shall be conducted in a manner as to prevent cofferdam material and silted water from entering the watercourse.
- B12. Excavation of the bed or banks of a watercourse outside the cofferdam limits is not permitted.
- B13. No temporary infilling of the watercourse is to take place to provide access during the bridge construction.
- B14. Not more than 1/3 of the watercourse channel width is to be blocked by the cofferdam at any one time during construction unless otherwise authorized in writing by the Minister or Administrator.
- B15. The approval holder shall ensure the materials for this project, i.e. aggregate, etc., have the appropriate authority and the material is suitable for the purpose intended. Compliance with the Department's Activities Designation Regulations and the Sulphide Bearing Material Disposal Regulations, is required.
- B16. During the replacement of the bridge decking, the approval holder shall ensure a tarp or collection device is used to prevent any debris from entering the watercourse.