

BALMORAL GRIST MILL DAM | DAM SAFETY REVIEW

Nova Scotia Department of Transportation and Infrastructure Renewal



Description of Services Provided:

Mitchelmore Engineering Company (Meco) Ltd was retained by the Department of Transportation and Infrastructure Renewal (DTIR) to provide engineering services for reconstruction of the grist mill dam structure and dredging or reinstatement of the mill pond.

The work included development of forth general criteria for loading conditions used in design of a replacement dam and reinstatement of the mill pond. It includes criteria and design methods for the selection of stable geometries, an assessment of hydrology and hydraulics, scour protection methods and cost of construction. The work is in general agreement with the Canadian Dam Association Dam Safety Guidelines, 2007 (CDA Guidelines) and other industry reference documents.

The work included the design and preparation of a tender document for the reconstruction of the dam. The new dam was designed as a concrete gravity dam with a timber facade to match the architecture of the mill.

Comments on Budget/Schedule Difficulties: On budget and schedule.

Responsibility on Project: Meco was responsible for the dam safety review.

Relevance of Project: This project allowed Meco to demonstrate competence in dam safety reviews and the preparation of design and tender documents for refurbished/replacement of dams in compliance with Canadian Dam Safety Guidelines.