In July 2015, Brian Chow, P.Eng, retained Gary McClelland, P.Eng, to provide recommendations to the Ministry of Forests, Lands and Natural Resource Operations as to guidelines for Professional Practitioners pertaining to Bridge Approach Barriers (BAB) for Forest Service Roads.

Presently, the ministry has no specific guidelines or standards in regards to Bridge Approach Barriers as to when they are required, as to their types and configurations and as to their placement.

This report will be directed to the development of a Ministry Philosophy for BABs and seeks to provide a reasonable rationale for developing guidelines for BABs on Forest Service Roads. It is expected that this document will be used as framework on which discussions will be held to develop Ministry direction and then applied to development of standards in subsequent work.

BACKGROUND - PREVIOUS WORK

Associated Engineering (BC) Ltd (AE) provided the Ministry with the following reports:

1. Development of Curb Design Parameters- January 2011
2. Development of MFR Standard Curb Design Parameter-Barrier Selection and Design Philosophy-March 2011
3. Guidelines for Barrier Selection and Design –August 2011

The work investigated how similar jurisdictions are dealing with Bridge Barriers on roads similar to FSRs, investigated the current state of research and suggested decision matrices for Ministry Bridge Barrier design. AE's work primarily focused on the barriers mounted on the actual bridge decks but did touch on Bridge Approach Barriers. This report is to carry on with BABs where that work left off.

AE's work present many recommendation but a key one that this report will follow is that **it is reasonable for the Ministry to not address the containment of large industrial vehicles but rather to use light traffic as the primary parameter in traffic volumes and vehicle loading for bridge barriers.**

Another key recommendation by AE is that the Ministry consider 3 classes of containment with respect to Bridge Barriers:

- Containment Level I
    - Exclusively industrial traffic and minimal public traffic.
    - Relatively low height above water/hazard.
    - Good vertical and horizontal alignment.
    - No pedestrian traffic.
    - Normal operating speeds.
    - Use Standard MFLNRO Bridge Barriers including the top and side mounted timber barriers and the side mounted HSS and W-Beam barriers.