

Site 29 – Picklejar Creek

Picklejar Creek flows across the highway right-of-way via a large culvert (oval shaped, major and minor axes both greater than 2 m) with a well-armored inlet area (Photo 1). The culvert was completely clear of debris of the time of the inspection in August 2005.

The creek channel upstream of the culvert is braided and meandering within a broader floodplain area incised approximately 2.5 to 3 m below surrounding areas and bordered by levees of rocky debris. Photo 2 shows a typical view of the channel upstream of the culvert inlet. The floodplain shows signs of frequent channel shifting under varying flow volumes. There is abundant wood, soil and rock debris along the segment of the channel extending approximately 400 to 500 m upstream of the highway. The channel gradient in this area is approximately 5°.

AMEC recommends the following Risk Level factors for this site using the debris flow frequency-severity matrix:

- Probability Factor of 5 based on the channel morphology and presence of debris along the channel upstream of the highway.
- Consequence Factor of 1 based on the size of the existing culvert.

Therefore, the recommended Risk Level for this site is 5.

No further assessment work is recommended for this site.

It is recommended that any future debris accumulation around the inlet of the culvert be cleaned out as necessary by the maintenance contractor. The maintenance contractor may already be doing this as routine work.

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Photo 1 (top) – Facing downstream towards the culvert inlet at the Picklejar Creek crossing.



Photo 2 (bottom) – Typical view of the segment of the creek channel approximately 100 m upstream of the highway. The existing channel is incised approximately 2.5 to 3 m below surrounding areas and bordered by debris levees. It appears that the channel has shifted within the area bounded by the levees many times in the past under varying flow volumes. The channel gradient in this area is approximately 5°. There is abundant wood, soil and rock debris within this segment of the channel.