

GEOCRES No. _____

DIST. 32 REGION _____

W.P. No. _____

CONT. No. _____

W. O. No. 97-11003STR. SITE No. 14-34HWY. No. 7LOCATION Ausable River BridgeNo of PAGES -OVERSIZE DRAWINGS TO BE INCLUDED WITH THIS REPORT.

REMARKS: _____



MEMORANDUM

Engineering Materials Office
Room 313, Central Building, Downsview
Tel. (416) 235-3732 Fax. (416) 235-5240

To: Alfred. Ho, P. Eng.
Head, Structural Section
Southwestern Region, London

Date: October 03, 1997

Attn.: J. Schaefer, P. Eng.
Senior Structural Engineer

From: Pavements and Foundations Section
Room 223, Central Building

Re: Sylvan Bridge, Ausable River
W. O. 97 - 11003; Site 14 - 34
Highway 7, District 32, Chatham

Further to our site visit on October 02, 1997, and the discussions we had on the above subject. The following comments are submitted.

1) West Approach:

The drainage water directed via 600 mm diameter pipe toward the river is causing erosion at the toe of the embankment. In addition, the outlet is located in an area where potential for undercutting by the river action. Erosion or undercutting may result in the failure of the approach.

To prevent further deterioration of the approach, we suggest that the embankment be protected with rip-rap to a height of at least 1.0 m above the annual high flood level. The rip-rap should extend to a distance of 10 m from the wing wall on both sides. Further, the drainage pipe should be extended to the river bed level.

2) East Approach:

This approach embankment was restored in the summer of 1988 after a major slope failure. Forward and the side slope on the south side shows the sign of distress. Cracks on the slope suggest that the failure be progressive in nature. However, the road does not appear to be in an immediate danger or any catastrophic failure is anticipated. However, we recommend continuous monitoring of the slope by visual inspection. If any cracks appear on the road or progress further, the approach may have to be repaired.

If you have any questions or clarification, please contact this office.

A handwritten signature in black ink, appearing to read 'M. Vasavithasan'.

M. Vasavithasan, P. Eng.
Foundation Engineer
For
Tae C. Kim, P.Eng.
Sr. Foundation Engineer