

GEOCREs No. _____

DIST. _____ REGION _____

W.P. No. _____

CONT. No. _____

W. O. No. 92-11001

STR. SITE No. _____

HWY. No. 3

LOCATION Hwy 3 - Between Port
Alma & Wheatley ; Twp of Romney
No of PAGES - 60 + 193

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OVERSIZE DRAWINGS TO BE INCLUDED WITH THIS REPORT. _____

REMARKS: _____



Action Memo

Time

Date

Year

Month

Day

To

From (Name and City)

I.C.N. No.	Area Code	Telephone No.	Ext.	Message Taken By
<input type="checkbox"/> Phoned On Hold	<input type="checkbox"/> Please Call Returned <input type="checkbox"/> Your Call	<input type="checkbox"/> Will Call Back <input type="checkbox"/> Wishes Appointment	<input type="checkbox"/> Waiting in Person <input type="checkbox"/> Was Here	<input type="checkbox"/> Will Return

<input checked="" type="checkbox"/> File	<input checked="" type="checkbox"/> Draft Reply For My Signature	<input checked="" type="checkbox"/> Provide More Details	<input checked="" type="checkbox"/> For Your Information
<input checked="" type="checkbox"/> Type Draft	<input checked="" type="checkbox"/> For Your Approval and Signature	<input checked="" type="checkbox"/> Keep Me Informed	<input checked="" type="checkbox"/> Per Discussion
<input checked="" type="checkbox"/> Type Final	<input checked="" type="checkbox"/> Circulate, Initial and Return	<input checked="" type="checkbox"/> Take Appropriate Action	<input checked="" type="checkbox"/> Per Your Request
<input checked="" type="checkbox"/> Make Copies	<input checked="" type="checkbox"/> Return With Comments	<input checked="" type="checkbox"/> Note and See Me	<input checked="" type="checkbox"/> Returned With Thanks
<input checked="" type="checkbox"/> Please Answer	<input checked="" type="checkbox"/> Investigate and Report	<input checked="" type="checkbox"/> Note and Return	<input type="checkbox"/>

Comments:

meet @ 9:00am
Mark Campbell at Yard Dpu.
689-4344.
Post Anna Petrol.

1-800-265-
S265

memorandum



To: P. Bryar
District Engineer
District 1, Chatham

Date: 1992 09 28

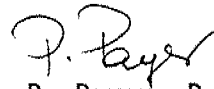
From: Foundation Design Section
Room 315, Central Building
Downsview

Re: Slip Areas Close to Highway 3 Between
Port Alma and Wheatly, Township of Romney
W.O. 92-11001

The above site was inspected on 92 09 22 along with Mr. Mark Campbell, Patrol Yard Supervisor and M. Vasavithasan, Foundation Design Section.

Since the last inspection (92 01 08), no major changes have been noticed. However, some isolated minor slips along the shore have been noted but the highway is not in any immediate danger.

It is understood that planning is already initiated for the relocation of the highway in the event of an accelerated recession of the shoreline.


P. Payer, P. Eng.
Sr. Foundation Engineer

PP/jb

memorandum



To: P. Bryar
District Engineer
District 1, Chatham

Date: 1992 01 20

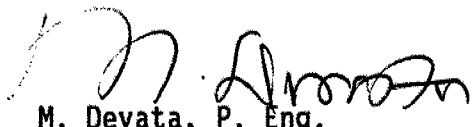
From: Foundation Design Section
Room 315, Central Building
Downsview

Re: Slip Areas Close to Highway 3 Between
Port Alma and Wheatly, Township of Romney

The above site was inspected on 92 01 08 by M. Vasavithasan of this Section along with Mr. Mark Campbell, Supervisor, Port Alma Patrol Yard.

It appears that the failure was triggered by a number of minor localized slides due to toe erosion caused by the wave action. The subsoil conditions at this site are such that they are very susceptible for erosion. The highway is not in an immediate danger, however, further erosion could be prevented by some remedial actions. In our opinion, one method of remedial action to prevent erosion is to build breakwater berms consisting of rock fill or pre-cast concrete units. Since there is not enough level ground in the beach area, this type of construction may be very expensive. Further, approval may require between various Federal and Provincial authorities, in order to allocate funding for this type of measures.

It is proposed that another site inspection will be made along with your presence in late spring to assess the stability of the banks along the shores of Lake Erie where Highway 3 is situated in the problem area. For your information, we have enclosed a copy of the field inspection report prepared by M. Vasavithasan, Foundation Engineer.


M. Devata, P. Eng.
Chief Foundation Engineer

MD/jb

cc: Mark Campbell

Slip Areas Close to Highway 3 between
Port Alma and Wheatly, Township of Romney

The above site was inspected on 92 01 08 by the undersigned along with Mr. Mark Campbell, Supervisor, Port Alma Patrol Yard.

The topography of the area is generally flat. However, the shores of Lake Erie is almost vertical (approximately 70° to 80°) and approximately 15 m to 18 m high above the lake water level.

The failed area adjacent to MTO right-of-way extent to a distance of approximately 250 m along Highway #3 and the slipped surface closest to the highway is about 29 m from the edge of the pavement. In other areas, the failed surface is about 35 m to 40 m from the edge of the pavement.

Several surface cracks varying in width from a few millimetres to a maximum of 1.0 m were observed. The failed portion is displaced by approximately 0.25 m to 0.75 m vertically and 0.5 m to 1.0 m horizontally. Seepage of water from the failed area was also observed at various locations.

It was learnt from the Patrol Yard Supervisor that water from farmers field tiles used to seep into the lake through the failed area. In addition, the lake water level varies by about 1.0 m to 3.0 m throughout the year depending on the direction and velocity of wind.

The subsoil conditions in the failed area appears to be silt to low plastic silt with varying proportions of sand & gravel.

In the failed area, the indications are that several minor failures had taken place before the recent major failure which was reported by the District Engineer. Also, the subsoil conditions at this location is very susceptible to erosion.

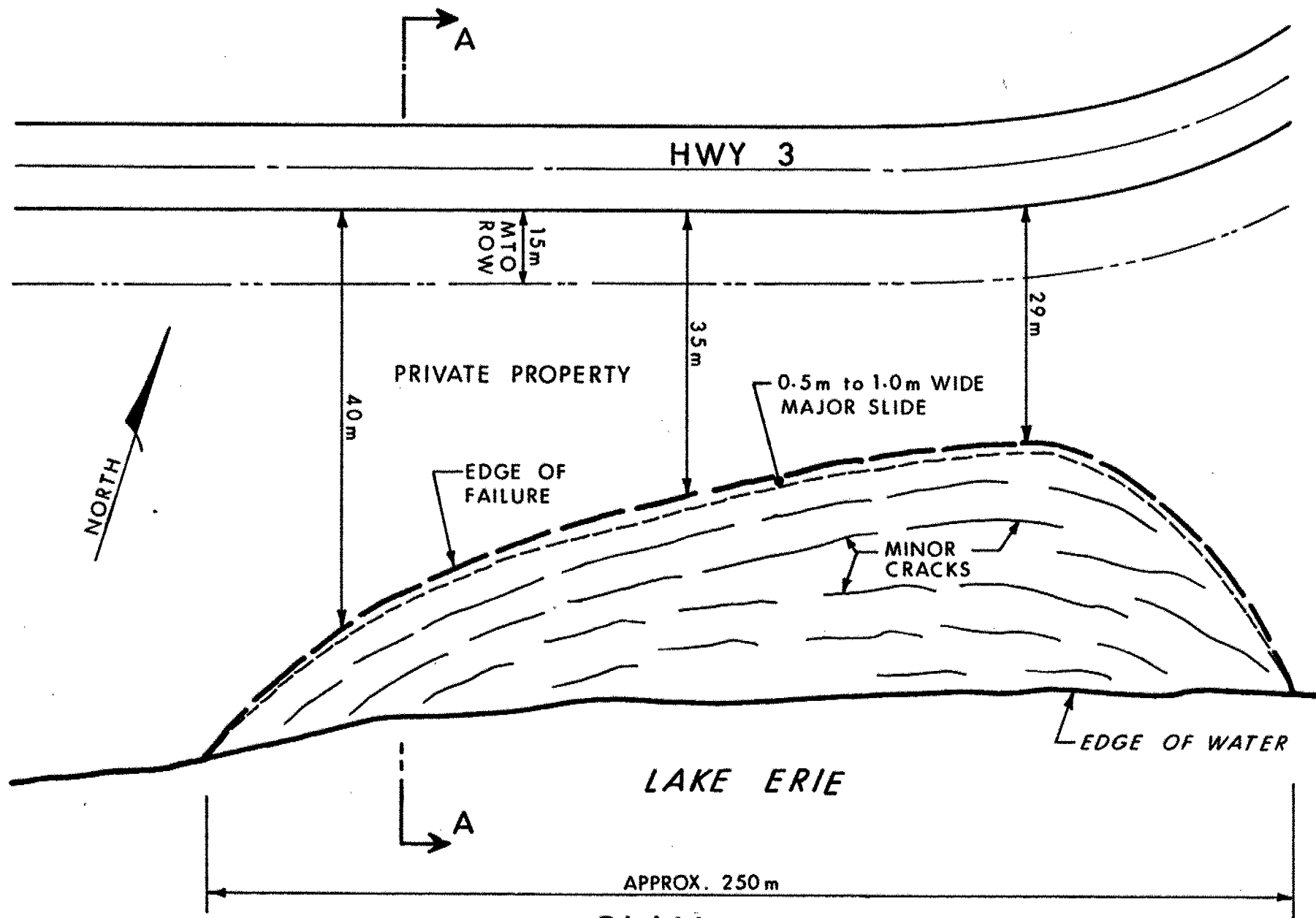
Based on the information gathered, it appears that initially, a number of minor localized movements due to toe erosion had developed gradually and spread backward along a common basal failure surface. These multiple slides triggered the recent major failure at this site.

It is understood from the Yard Supervisor that the MTO right-of-way in this area is only 15 m and the failed area belongs to a private individual. The highway is not in an immediate danger, however, further erosion of this area may endanger the highway and some form of protection against erosion will be necessary to prevent any damage to the highway.

The height as well as the direction of the wave that propagates from the lake will depend on the wind velocity and its direction. In my opinion, a breakwater berm consisting of rock fill or pre-cast concrete units may be built to prevent further erosion.

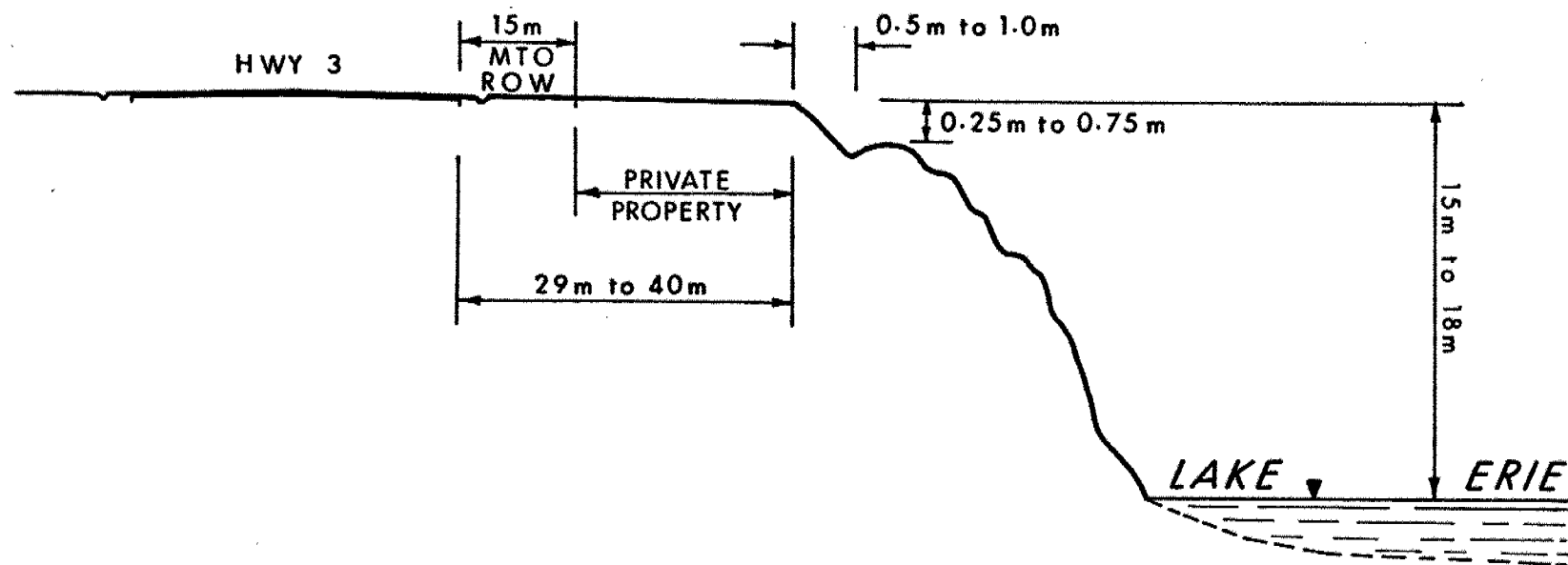
M. Vasavithasan

M. Vasavithasan, P. Eng.
Foundation Engineer



PLAN
(NTS)

DIST 1
WO 92-11001



SECTION A-A
(NTS)

DIST 1
WO 92-11001