DOCUMENT INFORMATIVE SHEET

G.I.-30 · SEPT. 1976

GEOCRES No. _____

DIST. 31 REGION _____

W.P. No. _____

CONT. No. _____

W. O. No. 97-11005

STR. SITE No. _____

HWY. No. 4

LOCATION Crack / Slope Slippage on Hwy 4, St. Thomas

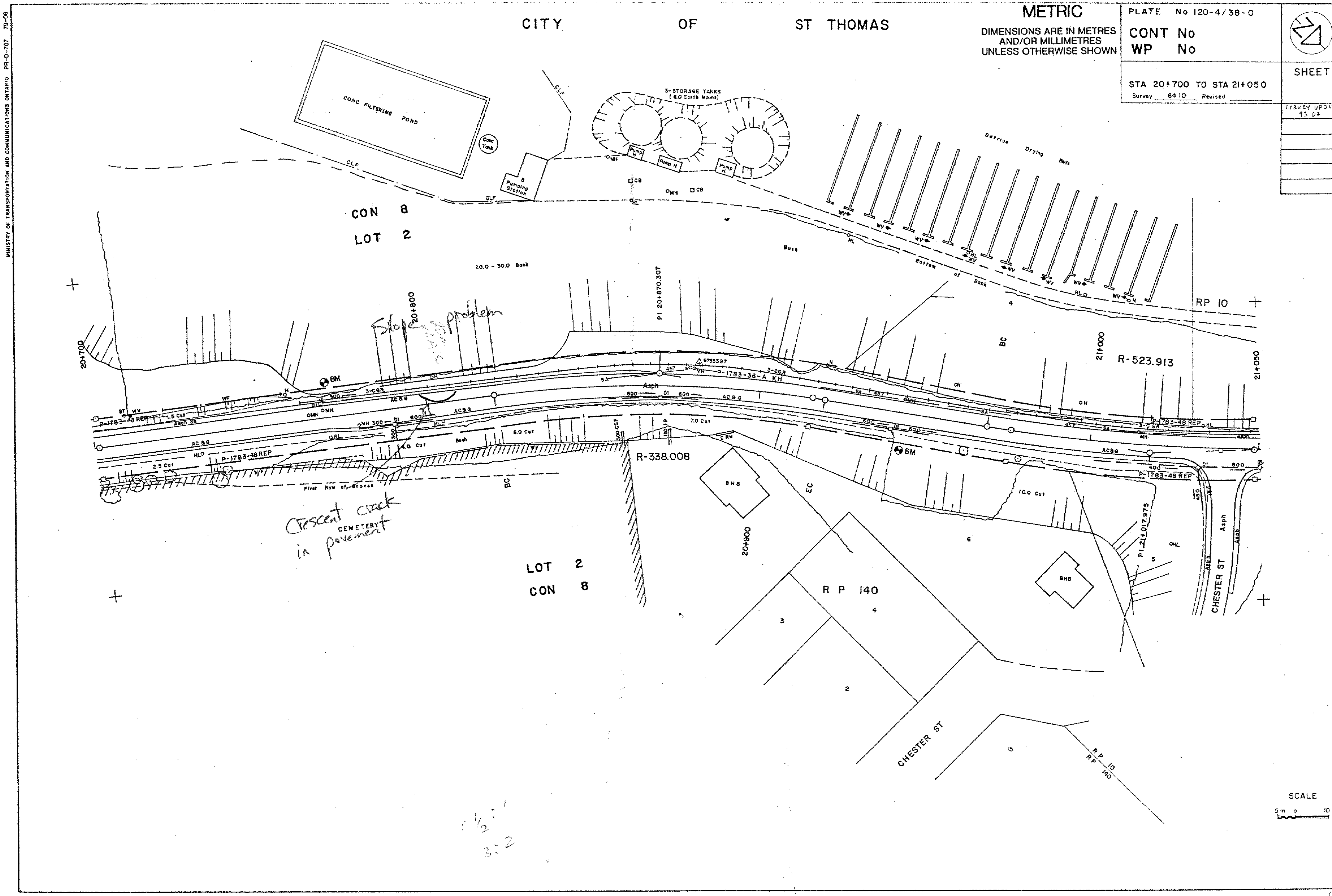
No of PAGES - _____

OVERSIZE DRAWINGS TO BE INCLUDED WITH THIS REPORT. _____

REMARKS: _____

120
38

MINISTRY OF TRANSPORTATION AND COMMUNICATIONS ONTARIO PR-D-707 79-06


CITY OF ST THOMAS
METRIC
DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN
PLATE No 120-4/38-0
CONT No
WP No
SHEET
STA 20+700 TO STA 21+050
Survey 84 10 Revised
SURVEY UPDATE 93 07
CONC FILTERING POND
Conc Tank
B Pumping Station
3-STORAGE TANKS (6.0 Earth Mound)
Pump H
Detritus Drying Beds
CON 8
LOT 2
20.0 - 30.0 Bank
Bush
Bottom of Bank
RP 10
PI 20+870.307
20+700
20+800
20+900
21+000
21+050
R-523.913
R-338.008
P-1783-38-A KH
P-1783-48 REP
BM
First Row of Graves
CEMETERY
LOT 2
CON 8
SHB
EC
BC
10.0 Cut
7.0 Cut
6.0 Cut
4.0 Cut
2.5 Cut
1.5 Cut
PI 21+017.975
CHESTER ST
R P 140
RP 10
RP 140
SCALE
5 m 0 10 m
Slope problem
Crescent crack in pavement
1½:1
3:2

120-39

MINISTRY OF TRANSPORTATION AND COMMUNICATIONS ONTARIO PR-D-709 79-06

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

CONT No
WP No

STA 20+700 TO STA 21+050
Survey 84 10 Revised

SHEET

83-27

QUANTITIES

EC
St
ED
ME
MBE
EF
RC
Sh
RD
MBR
RF
GB
GSB

EC
St
ED
ME
MBE
EF
RC
Sh
RD
MBR
RF
GB
GSB

QUANTITIES

Sta Sta
EC
St
ED
ME
MBE
EF
RC
Sh
RD
MBR
RF
GB
GSB

Sta Sta
EC
St
ED
ME
MBE
EF
RC
Sh
RD
MBR
RF
GB
GSB

MH+764.5 TC 1.60 Lt 223.975
DI+768.4 TG 4.50 Lt 223.540
MH+768.7 TC 2.20 Lt 223.765
MH+779.0 TC 3.50 Rt 223.245
DI+788.7 TG 4.40 Rt 222.710
DI+870.1 TG 4.50 Rt 218.825
MH+880.0 TG 6.60 Lt 219.855
DI+940.7 TG 4.90 Rt 217.590
MH+943.2 TC 4.00 Lt 217.605
MH+1014.2 TC 3.60 Lt 214.140
DI+1032.5 TG 6.20 Rt 213.100

CHESTER ST

R-338.009
R-523.913

BC
EC
BC

227
226
225
224
223
222
221
220
219
218
217
216
215
214
213
212

20+700
20+800
20+900
21+000
21+050

SCALES

5 m 0 10
Horizontal

0.5 m 0 1.0
Vertical

MEMORANDUM

Ontario

Engineering Materials Office
Room 233, Central Building, Downsview
Tel. (416) 235-3732 Fax. (416) 235-5240

To: Eric Magni, P. Eng.
Head, Geotechnical Section
Southwestern Region, London

Date: May 4, 1998

From: Pavements and Foundations Section
Room 223, Central Building

Re: Embankment Instability Around Sta. 20 + 800, St. Thomas
W. O - 97 - 11005, Highway 4, District 31, London

The above site was inspected on April 30, 1998 with Mr. Nick Gilbert of Geotechnical Section, Southwestern Region. The concerns at the site are crack on the road and associated stability of the slope.

The information provided to us reveals that the crack was repaired in early 1990's and has since reappeared. At the time of repair, an asphalt curb and gutter were placed to direct the water to the catch-basin.

It appears that the existing road was constructed by a combination of cutting and filling through the slope area. This created a fill slope on the west side and a cut slope on the east side. The height of the fill at this location appears to be about 2.4 to 3.0 metres. In addition, there is evidence of water from the runoff infiltrating into the fill and seeping out of the slope. This may lead to loss of fines from the fill and cause temporary slippage or instability problems.

The slippage or instability at this location is relatively shallow in nature and confined to the fill only. This problem may have been caused by the seepage of water through the fill. In order to prevent repeated occurrence of the slippage, the runoff should be redirected away from this location by providing an asphalt curb and gutter.

cc.: N. Gilbert

Vasavithasan

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