

#64-F-208C

HWY #2

PIKE CREEK

PATROL

YARD

SOIL INVESTIGATION FOR
PROPOSED PIKE CREEK PATROL YARD
LOTS 19 AND 20, CONCESSION XI,
TOWNSHIP OF SANDWICH SOUTH,
CHATHAM, ONTARIO

note: Ken Jennings noticed for recoverable
change

FILE

DOMINION SOIL INVESTIGATION LIMITED

77 CROCKFORD BOULEVARD

SCARBOROUGH, ONTARIO

TELEPHONE 421-2567

BRANCH

363 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 3-3821



FOUNDATION ENGINEERS

P.O. BOX 933

SAULT STE. MARIE

ONTARIO

TELEPHONE AL. 4-2615

London, June 25th, 1964

4-5-L8

Report

Department of Highways,
Materials & Research Division,
DOWNSVIEW, Ontario.

Attention: Mr. A. Rutka

Gentlemen:

Soil Investigation for Proposed Pike Creek
Patrol Yard, Lots 19 and 20, Concession XI
Township of Sandwich South/District 1,
Chatham, Ontario

We have completed this project in accordance with your letter of authorization dated 26th May, 1964. This report is a record of our findings and recommendations.

The borings revealed favourable subsurface conditions. Below the topsoil is a deposit of glacial till consisting of clayey silt with traces of sand and gravel. The upper 4 to 5 feet is weathered and gave N-values ranging from 5 to 14. Below 5 feet the material is hard giving N-values in the range of 26 to 32. The depth of the boreholes varied from 10 to 14 feet.

Groundwater was encountered only in borehole 1 where it reached a level of 6 feet below the ground surface 10 hours after completion of the borehole. The source of the water appeared to be a fine silt seam at a depth of 8.5 feet.

It is recommended that the structure should be supported on spread footings using a soil pressure not greater than 5000 pounds per square foot. The footings should be placed 5 feet below ground surface to provide adequate frost protection and to avoid bearing on the upper soil strata whose physical properties are variable and uncertain.

Tentative recommendations concerning paved areas have been received from Mr. J. R. Roy, Regional Materials Engineer, and are as follows:

Department of Highways,
June 25th, 1964

(1) Granular Depth

Provide for 21 inches (15" GBC "A" / 6" sand cushion.)

(2) Topsoil

Remove any topsoil within 4 feet of profile grade and replace with acceptable borrow up to the subgrade level. An average 10 inch depth of topsoil is estimated.

(3) Compaction

If a compaction equipment rental item is required, it should be placed at 100 percent for a sheepsfoot roller and tractor.

(4) Pavement

The asphalt pavement should consist of 2" HL6 binder course and 1-1/2" HL3 surface course.

In view of the low permeability of the subsoil the danger of salt contamination of domestic water supplies is probably small.

The field work was carried out on the 29th and 30th of May, 1964 under the supervision of Mr. I. P. Lieszkowszky, P. Eng., this report was prepared by Mr. J. Park, P. Eng., and has been reviewed by Mr. K. H. King, P. Eng.



Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

J. Park
James Park, B. Sc., P. Eng.

Materials and Research Division

May 26, 1964

Dominion Soil Investigation, Ltd.,
77 Crockford Blvd.,
Scarborough, Ontario.

Attention: Mr. A. Bousa

Re: W.P. 130-64, Hwy. 401, County Rd. #7 Interchange; and
Proposed Pike Creek Patrol Yard, Lots 19 & 20,
Sandwich S. Twp., District 1, Chatham, Ontario.

Dear Sir:

Please consider this your authority to carry out foundation investigations at the above sites. Plans and profiles were provided to your representative.

It is understood that a qualified Soils Engineer will be in charge of the field work at all times.

Eleven copies of each completed foundation report, with one additional copy of each subsoil profile, should be submitted to the Foundation Section prior to July 2, 1964. Previous requirements as to preliminary borehole information and laboratory testing program, should be followed.

Because the drawings accompanying the foundation reports, showing the location of borings, the inferred subsoil conditions, etc., are to become contract drawings, you are requested to prepare them in accordance with the D.H.C. standards. To enable you to do this, we are supplying you with sample drawings with all the necessary explanations, together with linen sheets for your drawings. You are also requested to provide the D.H.C. with Cronaflex copies of the drawings.

Charges for the work performed will be in accordance with your Schedule of Rates, dated February 17, 1959, except that the drilling rates will be in accordance with the Contract Agreement signed November 1, 1963, and invoices to be addressed to the attention of the undersigned.

HTG/mie

cc: Messrs. S. McCombie

A. Gater

F. C. Brown

J. Roy

H. D. Smith (2)

H. Konings

Foundations (2)

Gen. Files (2)

Yours very truly,

A. Rutka

A. Rutka

MATERIALS & RESEARCH ENGINEER

THIS COPY TO VENDOR

Mr. C. S. Moase, Mgr.,
Special Services Section,
Admin. Bldg.

Foundation Section,
Materials & Testing Div.,
Room 107, Lab. Bldg.

July 9, 1964

FOUNDATION INVESTIGATION REPORT BY:
Dominion Soil Investigation Limited.
Proposed Pike Creek Patrol Yard, Lots
19 and 20, Concession XI, Township of
Sandwich South, Chatham, Ontario.
W.P. (H11)

Attached, please find the above-mentioned report submitted by Dominion Soil Investigation Ltd. We have reviewed this report and found the factual information adequate and well presented. We are also in agreement with the conclusions and recommendations put forward by the Consultant.

Should additional information be required, please feel free to call on our office.

RYL/ndef
attach.

cc: Messrs. C. S. Moase (4)
E. J. Orr
H. D. McMillan
F. C. Brown
J. Roy
A. Watt

Kyph
J. A. C. Starnac,
PRINCIPAL FOUNDATION ENGINEER

Foundations Office
Gen. Files