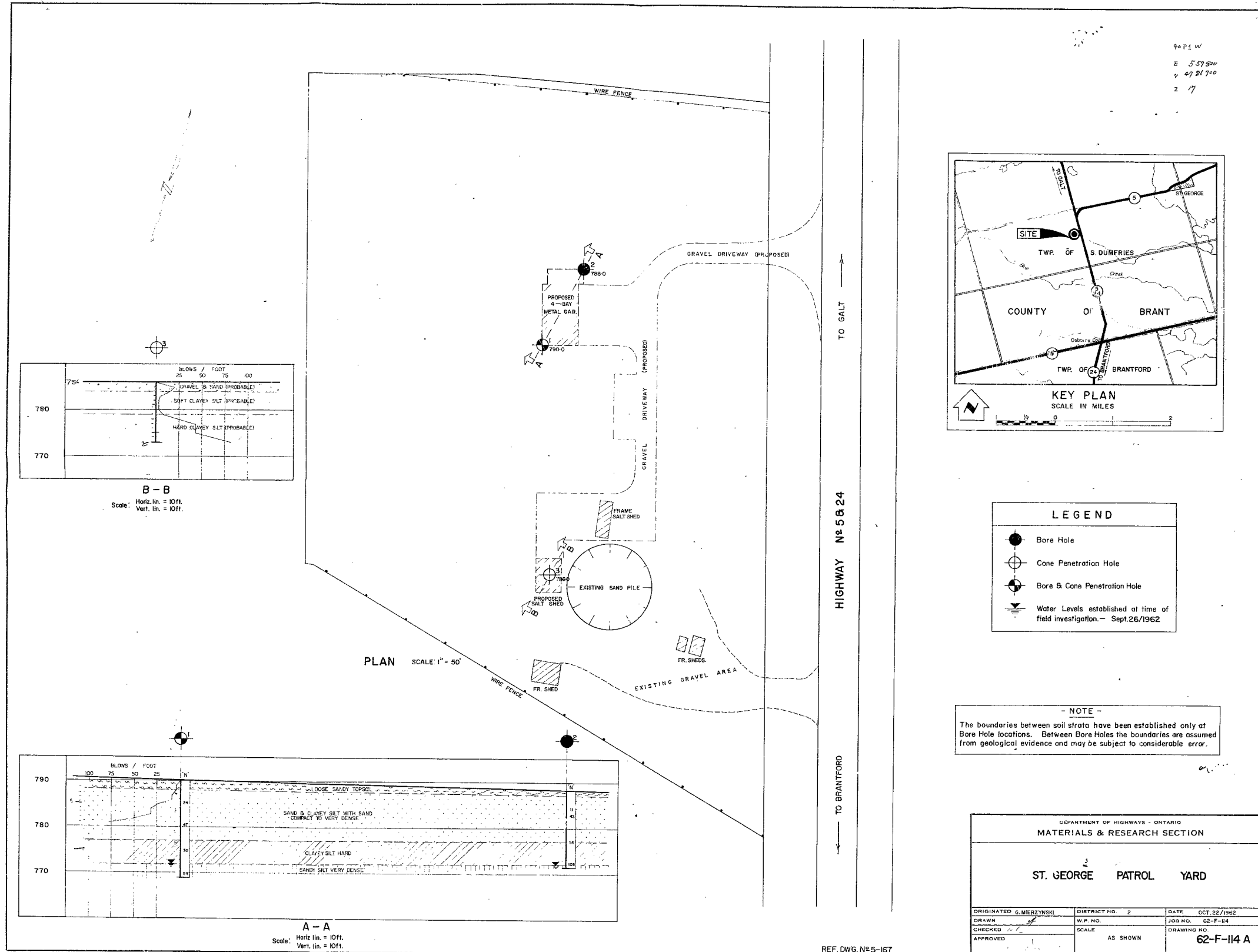


# 62-F-114

ST. GEORGE

PATROL YD.



Mr. F. E. Cavell,  
Superintendent,  
Special Services Section.

*Dist. 78-2,*

Mr. A. G. Stermac,  
Principal Foundation Engr.,  
Foundation Section,  
Materials & Research Division.

October 1, 1962.

Re: D.H.O. FOUNDATION INVESTIGATION REPORT -  
St. George - Patrol Yard, Part Lot 13,  
Con. 2, Twp. S. Dumfries, Hwy's #5 & #24,  
District #2.  
W.J. 62-F-114 -- W.P. (N11).

Attached, we are sending you the report for  
the above-mentioned garage site.

We believe that the information contained  
in the report will be adequate for your further work.  
However, should there be any additional information that  
you would require, please feel free to contact our Office.

KYL/MdeF  
Attach.

cc: Messrs. F. E. Cavell (4)  
H. A. Tregaskes  
H. D. McMillan  
W. L. Fraser

Foundations Office  
Gen. Files.

*K.Y. Lo*  
K. Y. Lo,  
SUPERVISING FOUNDATION ENGR.  
For:

A. G. Stermac,  
PRINCIPAL FOUNDATION ENGR.

# FOUNDATION INVESTIGATION

For

St. George - Patrol Yard, Part Lot 13,  
Con. 2, Twp. S. Purifies, Hwy's #5 & #24  
District #2.  
W.J. 62-F-114                      --                      W.P. (Nil).

It is proposed to erect a 4-bay metal garage and a frame salt-shed at the D.H.O. Patrol Yard near the junction of Highways #5 and #24. A request for a foundation investigation was received from Mr. F. E. Cavell, Superintendent of Special Services Section, dated September 11, 1962.

The requested investigation was carried out by this Section and presented in this report are the field findings, together with the necessary recommendations pertaining to the foundations for the proposed buildings.

The field investigation was confined to two sampled boreholes and two dynamic cone penetration tests. Samples were recovered by means of a 2-inch O.D. split-spoon sampler driven into the soil with an energy of 350 ft.-lbs. per blow. Each sample of the subsoil was visually classified in the field.

The locations and elevations of the boreholes are shown on the attached Drawing No. 62-F-114A.

Conditions at the site were found to be generally uniform and are as follows: The upper 1'-0 to 2'-0 consist of loose sandy topsoil followed by compact to very dense sand and clayey-silt with sand and traces of fine gravel. Underlying this deposit, a hard grey clayey-silt was found at elevation 777.0 followed by a very dense, grey sandy-silt at elevation 772.0.

At the time of the investigation, the water table was found to coincide with the surface of the sandy-silt, at elevation 772.0 (approx. 18'-0 below G.L.).

The sand pile, at the indicated location, has already been built, and appears to be stable.

The safe soil pressure for a spread footing foundation, 2 to 2½ feet wide, is estimated to be 0.75 tons per square foot. The footings may be placed as close to the ground surface as frost conditions will allow.

Access roads, driveways and parking areas may be built on the clayey-silt layer; topsoil stripping should be carried out according to current D.H.O. standards. A minimum thickness of 18" of acceptable granular material is recommended, the upper 6" of which, should consist of Class 'A' G.B.C. The soil at the site, may be suitable, in places, for use as sand cushion.

Surface material should consist of 2" HL-6 binder course, the top 1½" of HL-3 which may be modified to allow the use of a sandier mix.

The field work, performed September 27, 1962, together with the preparation of this report, was carried out by Mr. G. Mierzynski, under the general supervision of Mr. M. Devata of the Foundation Section.

Equipment was owned and operated by Dominion Soil Investigation, Ltd. of London.

APPENDIX I.