

Materials and Research Division

July 23, 1963

Mr. A. K. Watt,  
Ontario Water Resources Commission,  
67 College Street,  
Toronto, Ontario.

Re: Calabogie Patrol Yard,  
Dist. #9 -- W.J. 63-F-55.

Dear Mr. Watt:

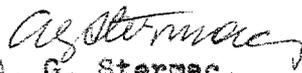
Attached, we are forwarding to you, a copy of  
the above-mentioned report for your use.

In accordance with the conclusions reached at  
the meeting on March 5, 1963, we would appreciate it if you  
would let us know of your opinion concerning the possible  
danger of well contamination by salt from the respective yard.

AGS/MdeF  
Attach. (1)

cc: Foundations Office  
Gen. Files ✓

Yours very truly,

  
A. G. Sternac,  
PRINCIPAL FOUNDATION ENGR.  
For:  
A. Rutka,  
MATERIALS & RESEARCH ENGR.

Mr. C. S. Moase,  
Manager,  
Special Services Section.

Mr. A. G. Stermac,  
Principal Foundation Engr.,  
Foundation Section,  
Materials & Research Division.  
July 23, 1963

D.H.O. FOUNDATION INVESTIGATION REPORT --  
Proposed D.H.O. Patrol Yard at Hwy. #508,  
Lot 18, Con. 11, County of Renfrew, Twp.  
of Bagot, Dist. #9 - W.J. 63-F-55, W.P.(N11).

It is proposed to erect a D.H.O. Patrol Garage on Hwy. #508, approximately 1.5 miles south-west of the Village of Calabogie. A request for a foundation investigation was received from Mr. F. E. Cavell, dated April 29, 1963.

In order to determine the properties of the soil and decide on the type of foundations, an investigation was carried out by this Section. The field investigation was confined to 12 auger holes. All auger holes were taken down to bedrock.

The elevations, as well as the locations of the auger holes, are shown on Dwg. No. 63-F-55A, attached to this report.

The stratigraphy of the soil, throughout the site, was found to be quite uniform. The upper 3'-0" to 5'-0" consists of black, organic topsoil, followed by 1'-0" to 3'-0" of stiff, silty clay, which in turn, is underlain by bedrock.

The safe bearing pressure for footings formed directly on bedrock, is estimated to be 20 tons/sq.ft.

At the time of the investigation, the water level was approximately 1'-0" to 3'-0" below existing ground levels.

cont'd. /2 ...

The recommendations given to us by the Regional Materials Engineer for grading and drainage, are as follows:

The overburden should be excavated to firm bottom and backfilled with the local sandy materials through the driveway, stockpile and building areas, as required. The limit of excavation should be as set by a 1:1 slope from the outside of the proposed roadbed.

The proposed septic tile bed area should be backfilled with Sand Cushion materials. Subsurface drainage should be acceptable through the local overburden. Care should be taken in landscaping the surface to ensure that surface water is not allowed to pond and saturate the tile bed.

Granular materials should be placed to a depth of 18" throughout the site, as required, and should consist of 6" G.B.C. 'A' over Sand Cushion. Material suitable for Sand Cushion is available in a sandy terrace west of the site at the intersection of Hwy. #508 and Ashdad Road, a one-mile haul distance, and at a one-to-two-mile haul east of Calabogie.

Surfacing material should consist of 3½" base and top HL-4. The top may be modified to allow the use of a sandier mix.

The estimated distance from the Patrol Yard site to the nearest well is 1½ mile.

The field work, performed during May 29, 1963, together with the preparation of this report, was undertaken by Mr. W. W. Kulmatickas, Project Foundation Engineer. The investigation was carried out under the general supervision of Mr. K. G. Selby,

July 23, 1963

Senior Foundation Engineer, who reviewed this report.

We believe the information contained in this report will suffice for your future design work. However, should further information be required, please do not hesitate to contact our Office.

WWK/MdeF  
Attach.  
cc: Messrs. C. S. Moase (4)  
E. J. Orr  
H. D. McMillan  
L. E. Walker  
A. Watt

*A. G. Stermac*  
A. G. Stermac,  
PRINCIPAL FOUNDATION ENGINEER

Foundations Office  
Gen. Files

APPENDIX I.



ONTARIO

DEPARTMENT OF HIGHWAYS

*FOWS*  
*63-F-58*

Memo to Mr. A. Stermac Date June 28, 1963  
Principal Foundation Engineer Subject Re: Patrol Yard., Hwy. 508  
From M. & R. Division, Kingston Calabogie.

The above site was reviewed on June 12. The existing groundline is gently rolling, rising slightly to the north. Approximately two-thirds of the property is covered by dense bush. Local materials consist of fine sands and sandy loams with precambrian rock outcrops.

It is understood that the foundation borings located a deposit of muskeg up to 5'  $\frac{1}{2}$  in depth over clay or rock in the vicinity of the proposed garage. This should be excavated to firm bottom and backfilled with the local sandy materials through the driveway, stockpile and building areas as required. The limit of excavation should be as set by a 1:1 slope from the outside of the proposed roadbed.

The proposed septic tile bed area should be backfilled with sand cushion materials. Subsurface drainage should be acceptable through the local overburden. Care should be taken in landscaping the surface to ensure that surface water is not allowed to pond and saturate the tile bed.

Granular materials should be placed to a depth of 18" throughout the site as required and should consist of 6" GBC "A" over sand cushion. Material suitable for sand cushion is available in a sandy terrace west of the site at the intersection of Hwy. 508 and the Ashdad Road, a one mile haul distance, and at a one to two mile haul east of Calabogie.

T. G. Smith

for J. E. Gruspier  
Regional Materials Engineer

File.  
TGS/ec

08459

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OTTA DOWN 3 MAY 24/63 2:20P VR

L E WALKER DIST ENGR

ATTN: G G SPENCER MICE ENGR

FOR YOUR INFORMATION ONLY.

FOUNDATION SECTION WILL COMMENCE FIELD WORK FOR PROPOSED

D H O PATROL YARD AT CALABOGIE, LOT 18, CONCESSION X-1,

TOWNSHIP OF BAGOT, HIGHWAY 508,

DURING WEEK BEGINNING MAY 27TH, 1963.

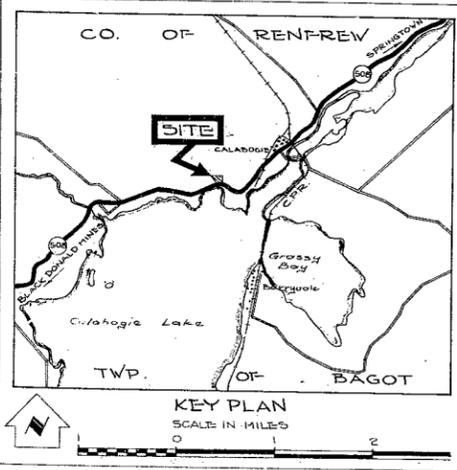
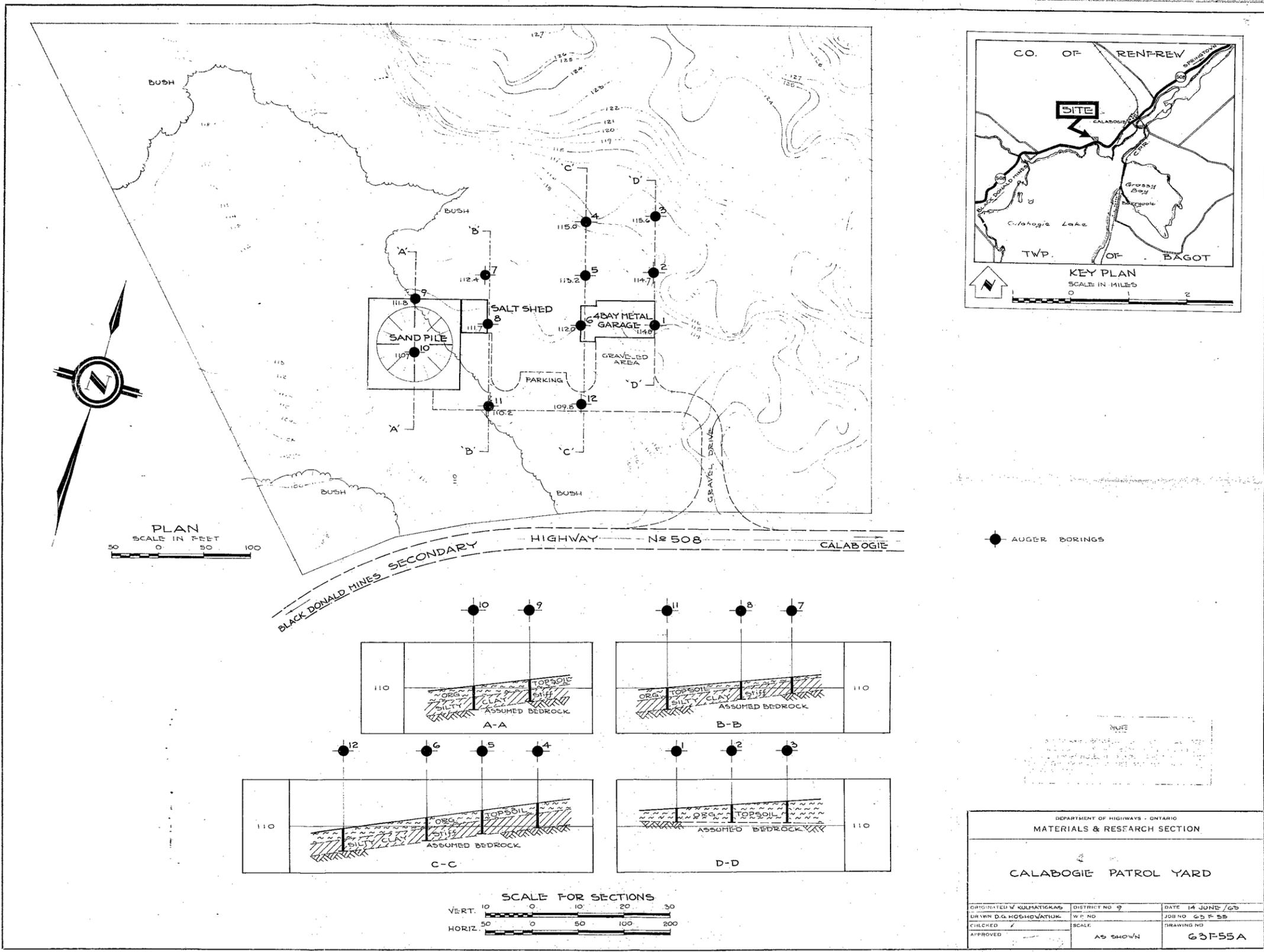
K G SELBY MAT & RES

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# 63-F-55  
CALABOGIE  
PATROL YARD



● AUGER BORINGS

NOTE  
 ALL DISTANCES ARE APPROXIMATE  
 AND SHOULD BE CHECKED IN THE FIELD  
 BEFORE CONSTRUCTION OF THE YARD

|                                  |               |                  |
|----------------------------------|---------------|------------------|
| DEPARTMENT OF HIGHWAYS - ONTARIO |               |                  |
| MATERIALS & RESEARCH SECTION     |               |                  |
| CALABOGIE PATROL YARD            |               |                  |
| ORIGINATED BY KULHATIGKAM        | DISTRICT NO 9 | DATE 14 JUNE /65 |
| DRAWN D.G. HOSHOVATUK            | W.P. NO       | JOB NO G3 F 55   |
| CHECKED /                        | SCALE         | DRAWING NO       |
| APPROVED                         | AS SHOWN      | G3F55A           |

SOME DEFECTS IN NEGATIVE DUE  
 TO CONDITION OF ORIGINAL DOCUMENTS