

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

To: Mr. A. M. Teye,
Bridge Engineer,
Bridge Division.

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

Attention: Mr. S. McCombie

DATE: August 7, 1963

OUR FILE REF.

IN REPLY TO

SUBJECT:

D.H.O. FOUNDATION INVESTIGATION REPORT --
Proposed Culvert at Brandy Lake and Realigned
Hwy. #118, District #11, Huntsville, Ontario.
W.J. 63-F-78 -- W.P. 222-59.

A request dated July 10, 1963, to carry out a foundation investigation at the proposed culvert at Brandy Lake and realigned Hwy. #118, was received from Mr. J. McAllister of the Bridge Division.

It is proposed to replace the existing 32' x 30' structure with a 24' x 72' rigid frame open culvert.

The existing structure is founded on exposed bedrock which drops off rather steeply south of the centre line. Therefore, this investigation consists of ascertaining the elevation of the bedrock south of the centre line of Hwy. #118, only.

The investigation consists of 3 sampled boreholes. Rock core samples were recovered by means of an AXT core barrel. The locations and elevations of all boreholes, together with the inferred stratigraphical profiles, are shown on Drawing No. 63-F-78A attached to this report.

Sound granite-gneiss bedrock was observed over the entire site. At the west side of the proposed culvert, the bedrock is overlain by 2.5 ft. to 7 ft. of boulders, ranging in size from 1 cu. ft. to 3 cu. ft. approximately, with some fine to coarse sand.

cont'd. /2 ...

August 7, 1963

At the east side of the proposed culvert the bedrock was found exposed.

Because of the presence of bedrock very close to the surface, it is recommended that the footings for the proposed culvert be supported on spread footings founded on bedrock.

For design purposes, a safe design load of 20 T.S.F. may be used.

The field work, performed in July 1963, together with the preparation of this report, was carried out by Mr. R. Magi, Project Foundation Engineer, under the general supervision of Mr. M. Devata, Sr. Foundation Engineer.


The equipment was owned and operated by Johnston Drilling Co. of Ottawa.

If there are any queries in connection with this project, please feel free to contact our Office.

RM/MdeF
Attach.

cc: Messrs. A. M. Toye (2)
H. A. Tregaskes
H. D. McMillan
H. McArthur
E. H. Jones
T. J. Kovich
A. Watt

Foundations Office
Gen. Files


K. Y. Lo,
SUPERVISING FOUNDATION ENGR.
For:
A. G. Stermac,
PRINCIPAL FOUNDATION ENGR.

APPENDIX I.

63-F-78

W.P. #222-59

Hwy. #118 E

BRANDY LAKE

