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58-F-224-C

OTTAWA,

QUEENSWAY &

CLYDE AVE.

Def.

Toronto 2, June 27th, 1958.

58-F-224C

Memorandum to
Mr. F. C. Brownridge,
Materials & Research Engineer,
Department of Highways,
Downsview, Ontario.

Re: BA 752- Clyde Ave., Br. # 4.
Ottawa Queensway, Dist. # 9.

Attached please find soil report BA 752
for your file.

Encl.
JCM*DW.

J. C. McALLISTER
FOR S. McCOMBIE
BRIDGE PLANNING ENGINEER.

DE LEUW, CATHER & COMPANY
OF CANADA LIMITED
CONSULTING ENGINEERS
TORONTO OTTAWA

226 SPARKS STREET
OTTAWA 4, ONTARIO
CENTRAL 3-9663

June 23rd, 1958.

Mr. F.I. Hewson,
Consultant Liaison Engineer,
Bridge Design Office
Department of Highways,
280 Davenport Road,
Toronto 2, Ontario.

Dear Sir:

Re: Bridge No. 4 at Clyde Ave. W.P. No. 931-58
Queensway Ottawa, District 9

We enclose herewith 3 copies of McRostie and
Associates soils foundation report No. S344 for the
above structure.

Yours sincerely,

DE LEUW, CATHER & COMPANY OF CANADA LIMITED,



Leon J. Marshall, P.Eng.,
Senior Structural Engineer.

LJM/PM

MCROSTIE & ASSOCIATES

CONSULTING ENGINEERS AND SURVEYORS

OTTAWA 1
CANADA

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393 BELL STREET
TELEPHONE CE. 2-5334

FOUNDATION REPORT - BRIDGE No. 41. FIELD WORK

Four borholes were completed at the site in the locations shown on Plate 1. Two inch split barrel samples were recovered for visual classification and standard penetration tests were performed in the borholes. The underlying rock was diamond drilled, cores recovered for inspection, and a record kept of core recovery percentages. A careful watch was kept for drops or discontinuities in the rock during drilling.

Groundwater levels were observed during the drilling programme.

2. DESCRIPTION

Limestone rock occurs at elevation 249 to 250. At the northerly limit of the Queenway right-of-way, the limestone is overlain with from 3 to 5 feet of loose to dense till. At the southerly limit the limestone is covered by one foot of loose sandy to dense till; above this is 2 to 3 feet of clay. Fill varying from 3 to 60 feet is the covering material to the ground surface over the site except at borhole No. 4, where there is no fill. The Ottawa Formation limestone has "shaly" characteristics, containing partings and layers which have a considerable shale content. Core recovery percentages were

2.

generally high (above 75%) indicating a fairly sound rock broken only by bedding planes and vertical joints.

No groundwater was observed in the holes during the drilling programme, but groundwater should be expected at wet seasons of the year.

3. RECOMMENDATIONS

Foundation conditions at the site are quite straightforward. With good rock at shallow depths there should be no difficulty in supporting any structures contemplated.

Recommended bearing pressures -

Below Bl. 248 40,000 pounds per sq. ft.

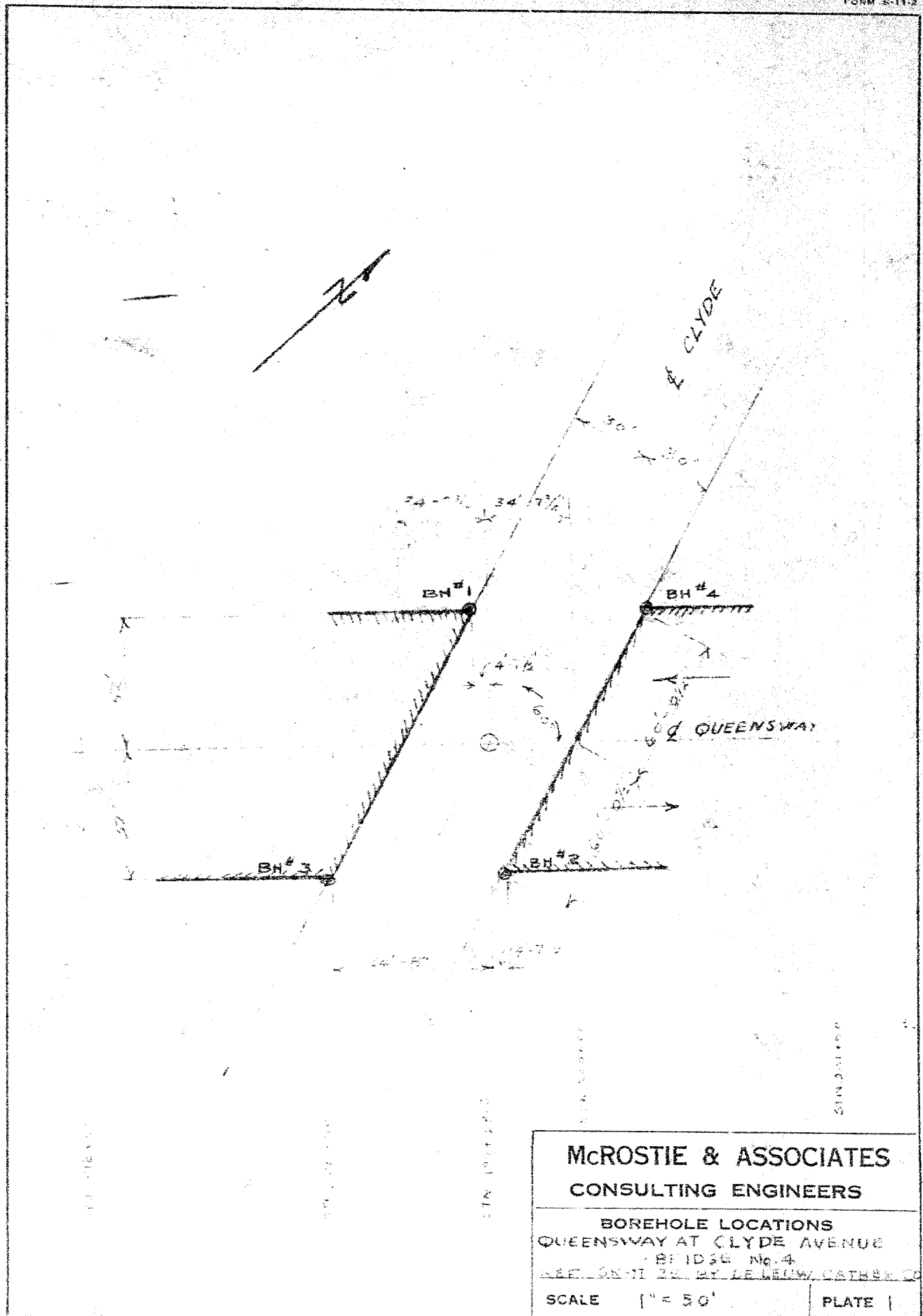


PLATE I

SOIL PROFILE AND SUMMARY OF LABORATORY TESTS

QUEENSWAY AT CLYDE AVE.
BRIDGE No. 4

ELEVATION OF GROUND SURFACE (ZERO DEPTH) 250.3 - GEODETIC

HOLE NO.

REMARKS REF. BN. EL. 275.34 AT QUEENSWAY & MAITLAND

DATE MAY 5 1966

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