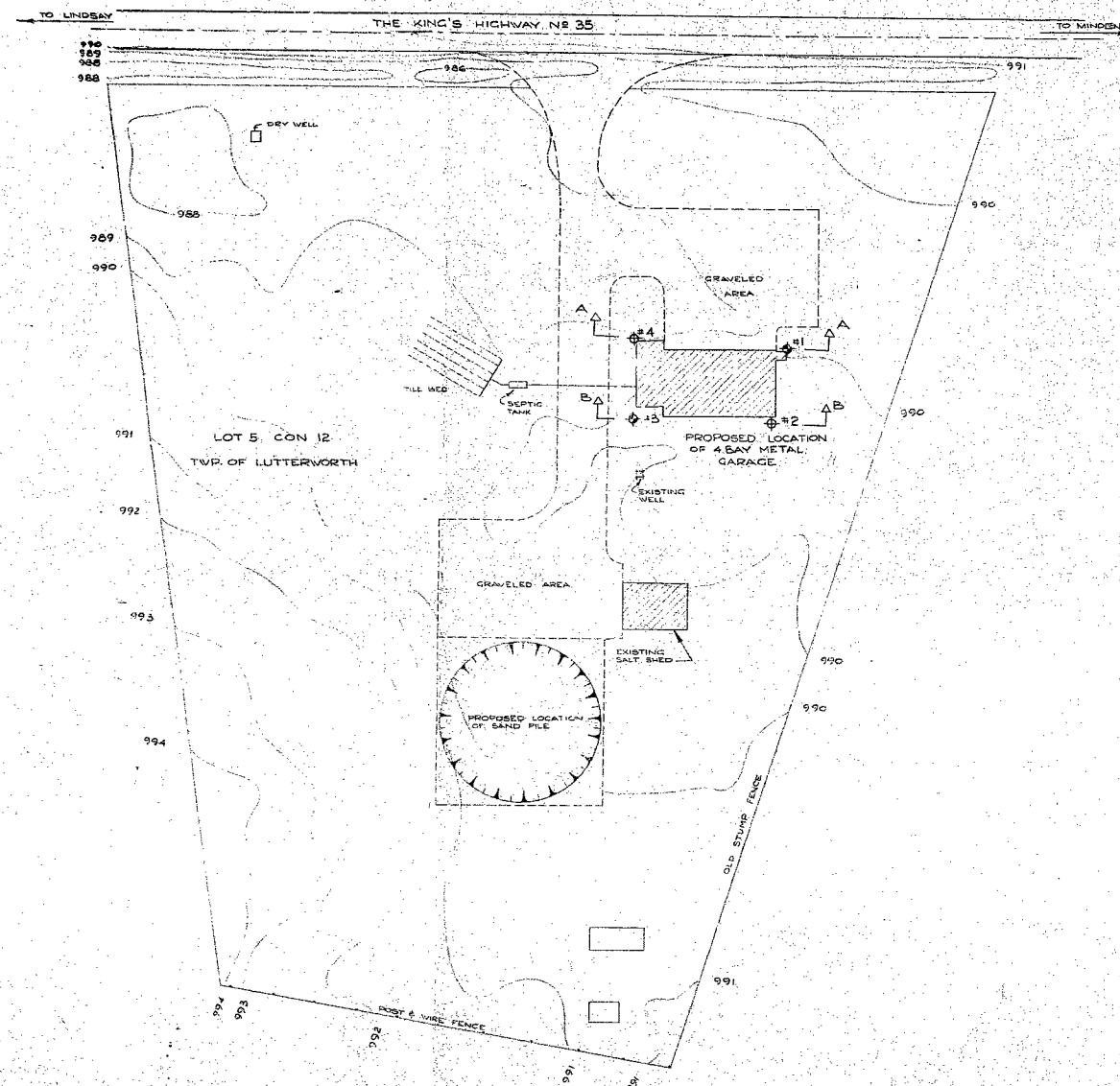


61-F-50

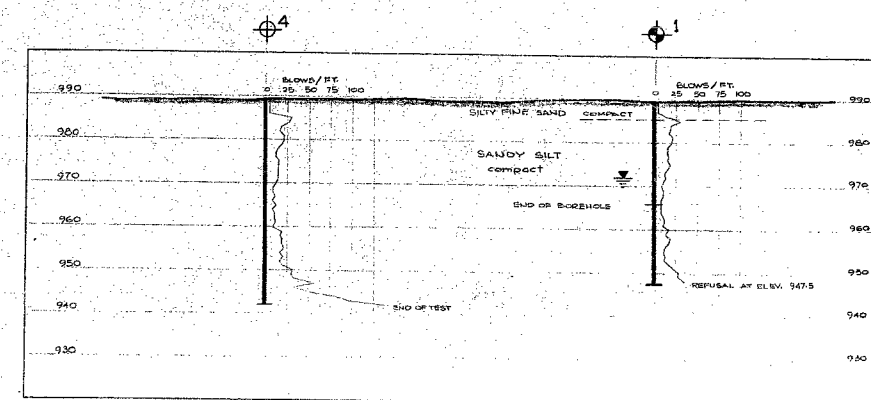
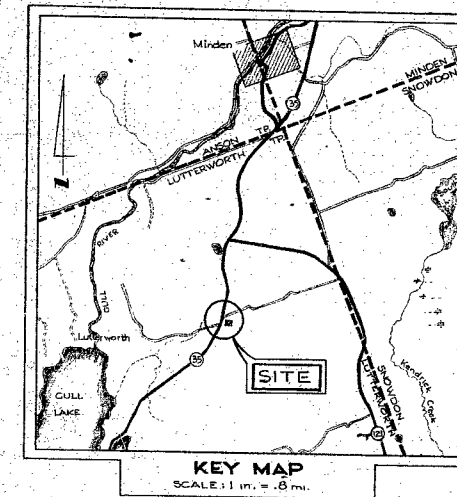
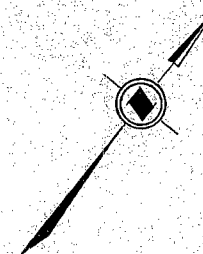
PROP. PATROL

YD. - 4 MILES

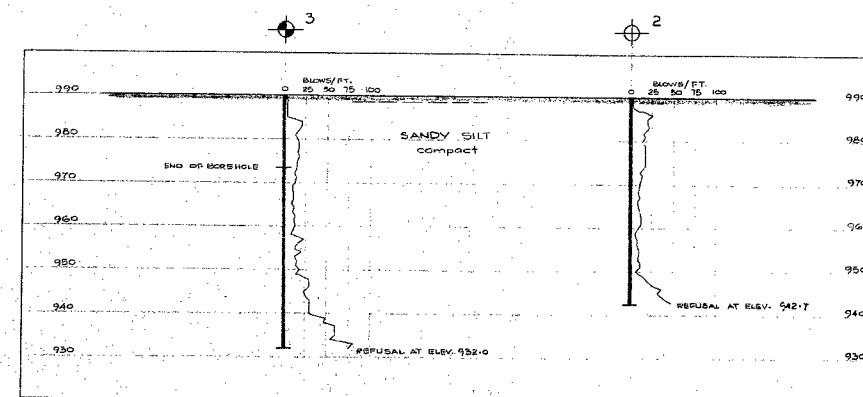
S. OF MINDEN



PLAN
SCALE: 1 in. = 50 ft.



A - A
SCALE FOR SECTIONS 1 in. = 20 ft.



B - B

LEGEND

- ⊕ PENETRATION HOLE
- ⊕ BORE & PENETRATION HOLE

DEPARTMENT OF HIGHWAYS - ONTARIO
MATERIALS & RESEARCH SECTION

PROPOSED GARAGE
at
MINDEN

ORIGINATED K. SELBY	DISTRICT NO. 11	DATE JUNE 12, 1961
DRAWN G. M. ZELING	W.P. NO. —	JOB NO. 61-F-50
CHECKED <i>40 K. G.</i>	SCALE as shown	DRAWING NO.
APPROVED <i>W. J. M.</i>		61-F-50A

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

June 8, 1961.

D.H.O. FOUNDATION INVESTIGATION

Materials & Research Section.

W.J. 61-F-50.

Attention: Mr. J. Hamilton.

Re: Proposed New Patrol Yard
4 miles south of Minden.
District #11.

At the above location, it is proposed to construct a new four-bay metal garage, together with a driveway, two gravelled parking areas, and one paved area. A sand storage pile will be located on the future paved area.

An investigation was carried out on May 31, 1961, by this Section, to determine subsoil conditions existing over the general area of the site, and in particular, at the location of the proposed new garage. At the garage location a total of two boreholes and four penetration tests, was carried out. The boreholes were advanced to depths of 16.5' and 24.0'. Penetration tests were carried to refusal which occurred at depths ranging from 42.5' to 58.0'. The locations of the boreholes are shown on the accompanying drawing No. 61-F-50A. Various shallow boreholes were carried out at other locations to determine the uniformity of the upper subsoil over the general site area. Elevations of boreholes were determined from the contoured plan No. 5-27 showing the proposed layout.

In general, site conditions were found to be fairly uniform. Below the topsoil, which averaged about 12", there is a layer of fine brown sand in a loose to compact state. The depth of this layer varies from 3.0' to about 8.0'. This stratum is underlain by a layer of compact sandy silt, grey in colour which extends to beyond a depth of 24.0'. In B.H. #1 and B.H. #3 the material was observed to be saturated below a depth of about 15.0', but it is estimated that the water table is about 18.0' below

groundlevel. This level is expected to fluctuate seasonally but not to such a degree that might cause constructional difficulties.

It is recommended that the garage be supported on spread footings founded at El. 984.0. A design load of 1.0 T.S.F. may be used. This will involve an excavation of about 6.0' in depth.

For the driveway, gravelled and paved areas, the following construction procedure is recommended. All topsoil (about 12") should be removed. Fill material to within 6" of profile grade should consist of acceptable sand cushion compacted in 6" layers. The top 6" should consist of G.B.C. class 'A' material. For the paved area, a 2" layer of HL 4 is recommended.

KS/tt

c.c. F. E. Cavell (2)
J. Hamilton
H. A. Tregaskes
H. D. McMillan
H. A. Tackaberry
H. C. Dernier
T. J. Kovich
J. Roy
J. E. Gruspier
E. R. Saint
F. Norman
Foundations Office
General Files ✓

L. G. Soderman
Principal Foundation Engineer

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