

MEMORANDUM

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

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

DATE: October 23, 1963

OUR FILE REF.

IN REPLY TO

SUBJECT:

FOUNDATION INVESTIGATION REPORT

For
Delaware Patrol Yard
Lot 1, Conc. III, 4 Miles West of
Lambeth, Hwy. 2, District 2
W.J. 63-F-107 -- W.P. (Nil)

At the request of the Special Services Section, memo dated September 12, 1963, a foundation investigation was carried out at this site.

The field investigation consisted of three sampled boreholes driven to a depth of 20 ft. Adjacent to each borehole, a dynamic cone penetration test was also done. The subsoil was found to consist of clayey silt with gravel (till) followed by silty sand. The thickness of clayey silt with gravel and silty sand varies considerably within the area investigated. The stratigraphy of the subsoil, together with locations of the boreholes, are shown on Drawing 63-F-107A.

The subsoil, in general, is dense to very dense.

The water level observed in the boreholes was 8.5 ft. below ground surface.

It is recommended that the garage be placed on footings as near to the surface as the local frost conditions would allow.

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October 23, 1963

A safe bearing value of 2 t.s.f. may be used.

Attention is drawn to the drainage situation at this site. There are two shallow wells located in the vicinity of the site. One is about 200 ft. to the West, the second about 300 ft. to the West. The water levels in these wells is steady throughout the year, and about 18 to 28 ft. below ground surface. They are at present, the source of water supply for the nearby houses. In view of this, adequate measures should be taken to prevent any possible salt contamination in this area.

For all service roads, parking and other areas to be paved or gravelled, the topsoil should be stripped and replaced with 18 inches of G.B.C. class 'B' material, topped with 6 inches of G.B.C. class 'A' material.

A 2-inch thickness of HL-6 is recommended for all paved areas as a base course, with a 1½-inch thickness of HL-3 as a wearing surface. The above recommendations pertaining to gravelled and paved areas were obtained from Mr. J. Roy, Regional Materials Engineer, London.

The field work was carried out during September 23 - 24, 1963, under the supervision of Mr. V. Korlu, Project Foundation Engineer, who also wrote this report. This report was reviewed by Mr. M. Devata, Sr. Foundation Engineer.

We believe that you will find the factual data and recommendations in this report, adequate for your future design work. However, should additional information be required, please feel free to contact our Office.

VK/MdeF
Attach.

cc: Messrs. C. S. Moase (4)
E. J. Orr
H. D. McMillan
H. C. Dernier
J. Roy

A. Watt
Foundations Office
Gen. Files

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

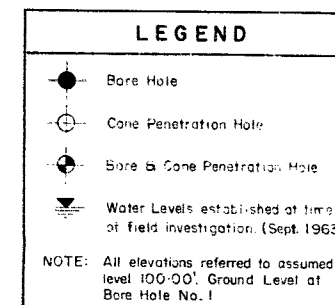
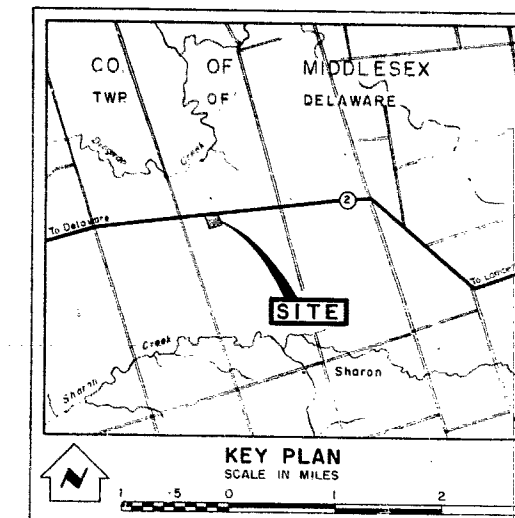
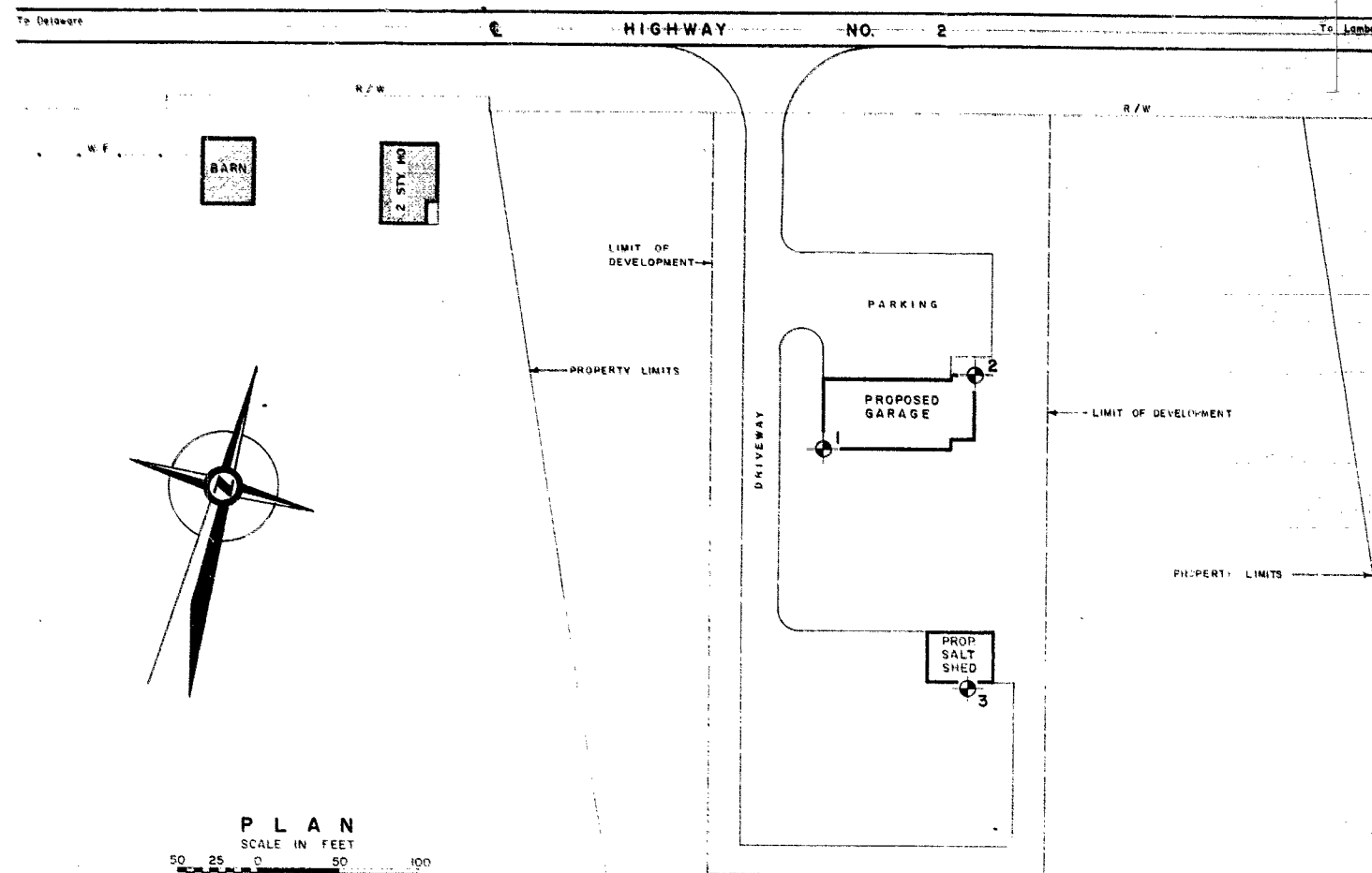
APPENDIX I.

#63-F-107

HWY #2

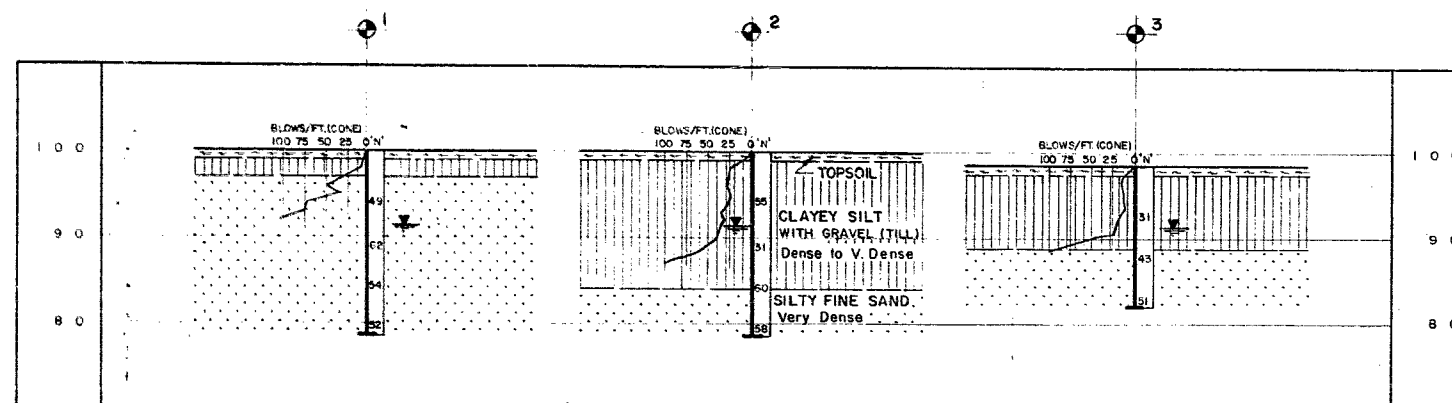
DELAWARE

PATROL YARD



NOTE

THE BOUNDARIES BETWEEN SOIL STRATA HAVE BEEN ESTABLISHED ONLY AT BORE HOLE LOCATIONS. BETWEEN BORE HOLES THE BOUNDARIES ARE ASSUMED FROM GEOLOGICAL EVIDENCE AND MAY BE SUBJECT TO CONSIDERABLE ERROR



DEPARTMENT OF HIGHWAYS - ONTARIO		
MATERIALS & RESEARCH SECTION		
DELaware PATROL YARD		
ORIGINATED V. KORLU	DISTRICT NO. 2	DATE 17 OCTOBER 1963
DRAWN D. MUMFORD	WP. NO.	JOB NO. 63-F-107
CHECKED	SCALE	DRAWING NO.
APPROVED	AS SHOWN	63-F-107 A

REF. NO. B-96-3