

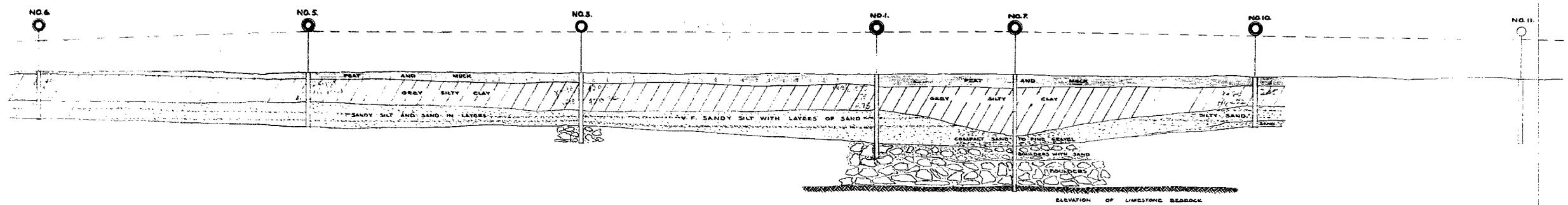
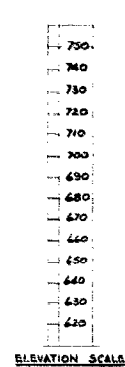
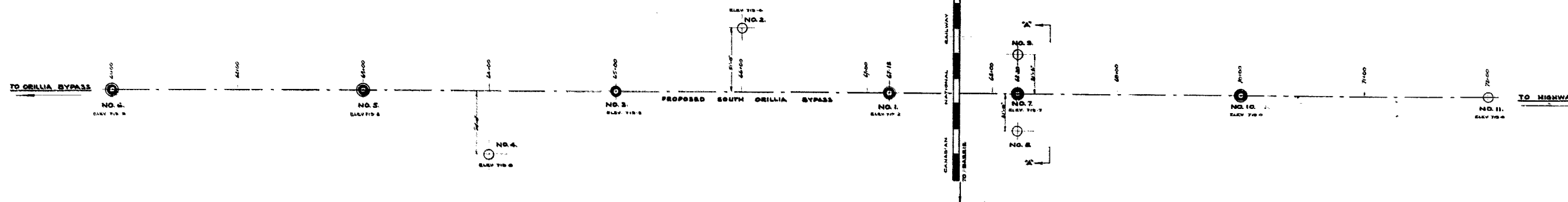
55-F-23

SOUTH ORILLIA

BY-PASS

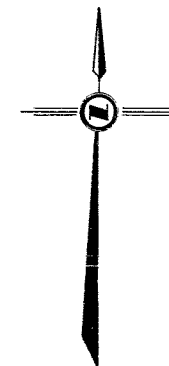
LINE "D"

31D-41

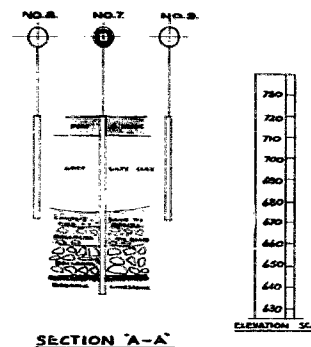
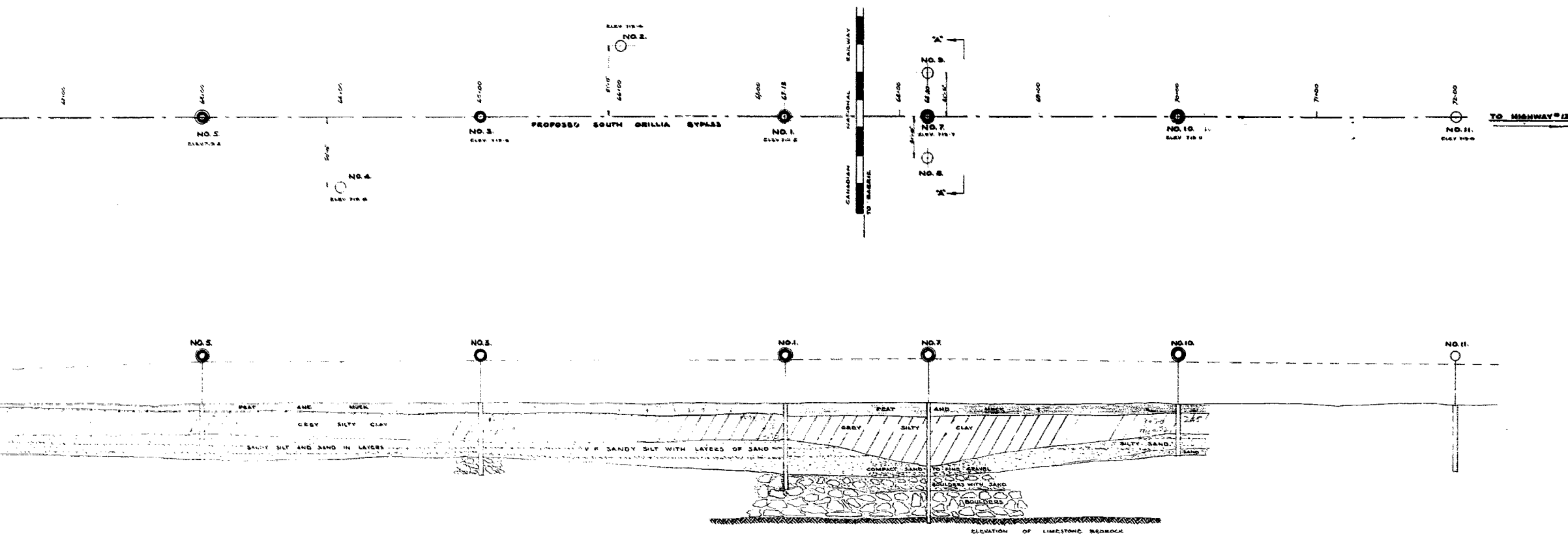


- LEGEND**
- ⊕ PENETRATION HOLE
 - ⊙ BORE HOLE
 - ⊕ BORE HOLE
 - ⊕ PENETRATION & BORE HOLE

SCALE 1IN = 30 FT



1



- LEGEND**
- PENETRATION HOLE
 - BORE HOLE
 - PENETRATION & BORE HOLE

SCALE 1 IN = 30 FT



2

REVISIONS	DATE	BY

DEPARTMENT OF HIGHWAYS, ONTARIO
MATERIALS LABORATORY - TORONTO

SOUTH ORILLIA BYPASS
LINE "B"

SOILS EXPLORATIONS BETWEEN STA 64+00-STA 72+00
FOR C.N.R. OVERPASS AND APPROACH FILL.

THE KING'S HIGHWAY NO. 12 DIV. NO. 6
CO. SIMCOO

EXP. ORILLIA S. DIV. 12+11 CON IV

PLAN SHOWING SECTIONS OF STRATA & LOCATIONS OF BORE-HOLES

APPROVED

CHIEF ENGINEER

DATE

PROJECT NO. F-55-23

GEODESIC N° 310-41

MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31 D-41
GLOCKES No.

DRILL RIG ~~C-45~~ ~~DEMI~~ S4-1

CASING - 8" (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT - 300 DROP - 24 INCHES

JOB E-56-23

JOB _____
 DATUM _____ STN _____ 67 + 18
 COMPILED BY _____ J.B. _____ CHL

BORING No. 1

DATE REPORT 1 AUG '55
BORING DATE 27 JULY '55

COMPILED BY J.B. CHECKED BY W. Von

SAMPLE CONDITION



SAMPLE TYPES

CS - CHUCK
DO - DRIVE OPEN
DF - DRIVE FOOT VALVE
TO - THIN WALLED OPEN

WS - WASHED SAMPLE
RC - ROCK CORE

ABBREVIATIONS

ABBREVIATIONS

V-INSITU VANE SHEAR TEST	γ - UNIT WEIGHT
M-MECHANICAL ANALYSIS	K - PERMEABILITY
U-UNCONFINED COMPRESSION	C - CONSOLIDATION
Qc- TRIAXIAL CONSOLIDATED QUICK	CA - CASING
S - TRIAXIAL QUICK	WL- WATER LEVEL IN CASING
S - TRIAXIAL SLOW	WT- WATER TABLE IN SOIL

SOIL PROFILE

[illegible]

DATE REPORT 12 AUG 55
BORING DATE 3 AUG '55

ABBREVIATIONS

V-INSITU VANE SHEAR TEST	γ - UNIT WEIGHT
M-MECHANICAL ANALYSIS	K - PERMEABILITY
U-UNCONFINED COMPRESSION	C - CONSOLIDATION
Q _c - TRIAXIAL CONSOLIDATED QUICK	CA.- CASING
Q - TRIAXIAL QUICK	WL-WATER LEVEL IN CASING.
S - TRIAXIAL SLOW	WT- WATER TABLE IN SOIL

REFUSAL AT
122 BLOWS

TL 110
34-96

MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31D-41
GEOTECH N°

DRILL RIG CORE DAW 64-1
CASING BK (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT 250 # DROP 24 INCHES

JOB E-55-28
DATUM STN 65+00
COMPILED BY J.B. CHECKED BY W. J. H.

BORING N° 3
DATE REPORT 13 AUG 55
BORING DATE 4 AUG 55

SAMPLE CONDITION



DISTURBED
GOOD
LOST

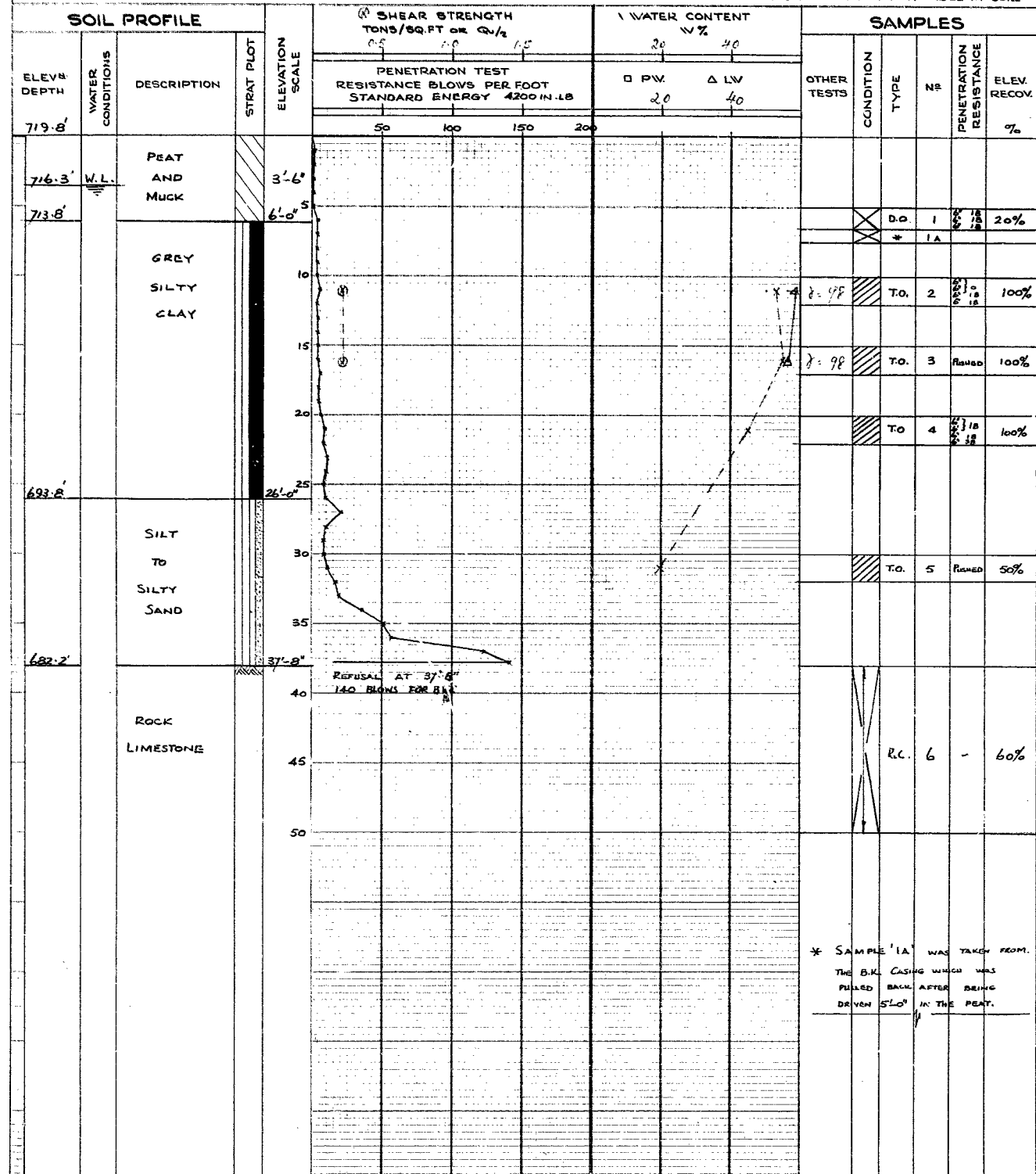
SAMPLE TYPES

C.B - CHUNK
D.O - DRIVE OPEN
D.F - DRIVE FOOT VALVE
T.O - THIN WALLED OPEN

W.S - WASHED SAMPLE
R.C - ROCK CORE

ABBREVIATIONS

V - INSITU VANE SHEAR TEST
M - MECHANICAL ANALYSIS
U - UNCONFINED COMPRESSION
Q_c - TRIAXIAL CONSOLIDATED QUICK
Q - TRIAXIAL QUICK
S - TRIAXIAL SLOW
γ - UNIT WEIGHT
K - PERMEABILITY
C - CONSOLIDATION
CA - CASING
VL - WATER LEVEL IN CASING
WT - WATER TABLE IN SOIL



PENETRATION TEST
ONLY

DRILL RIG 222 2066 54-1
CASING 3X (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT 250 LB * DROP 24 INCHES

JOB F-53-23 BORING NO. 4
 DATUM STN. 64100 So. of RIGHT DATE REPORT 15 AUG '65
 COMPILED BY J.B. CHECKED BY --- BORING DATE 5 AUG '65

SAMPLE CONDITION



SAMPLE TYPES

C.B - CHUNK
DO - DRIVE OPEN
DF - DRIVE FOOT VALVE
TO - THIN WALLED OPEN

WS - WASHED SAMPLE
RC - ROCK CORE

ABBREVIATIONS

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M-MECHANICAL ANALYSIS K - PERMEABILITY
U-UNCONFINED COMPRESSION C-CONSOLIDATION
Q_c- TRIAXIAL CONSOLIDATED QUICK CA - CASING
Q - TRIAXIAL QUICK WL- WATER LEVEL IN CASING;
S - TRIAXIAL SLOW WT- WATER TABLE IN SOIL

SOIL PROFILE

[illegible]

YL 109
54-90

MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31D-41
CIRCULAR No.

DRILL RIG - CORE DRILL 54-1
CASING - 8 X (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT - 250 LB *
JOB - F-55-23
DATUM - STN 63+00
BORING NO - 5
DATE REPORT - 15 AUG '66
BORING DATE - 5 AUG '66
COMPILED BY - J.B. - CHECKED BY - W. WONG

SAMPLE CONDITION



DISTURBED
GOOD
LOST

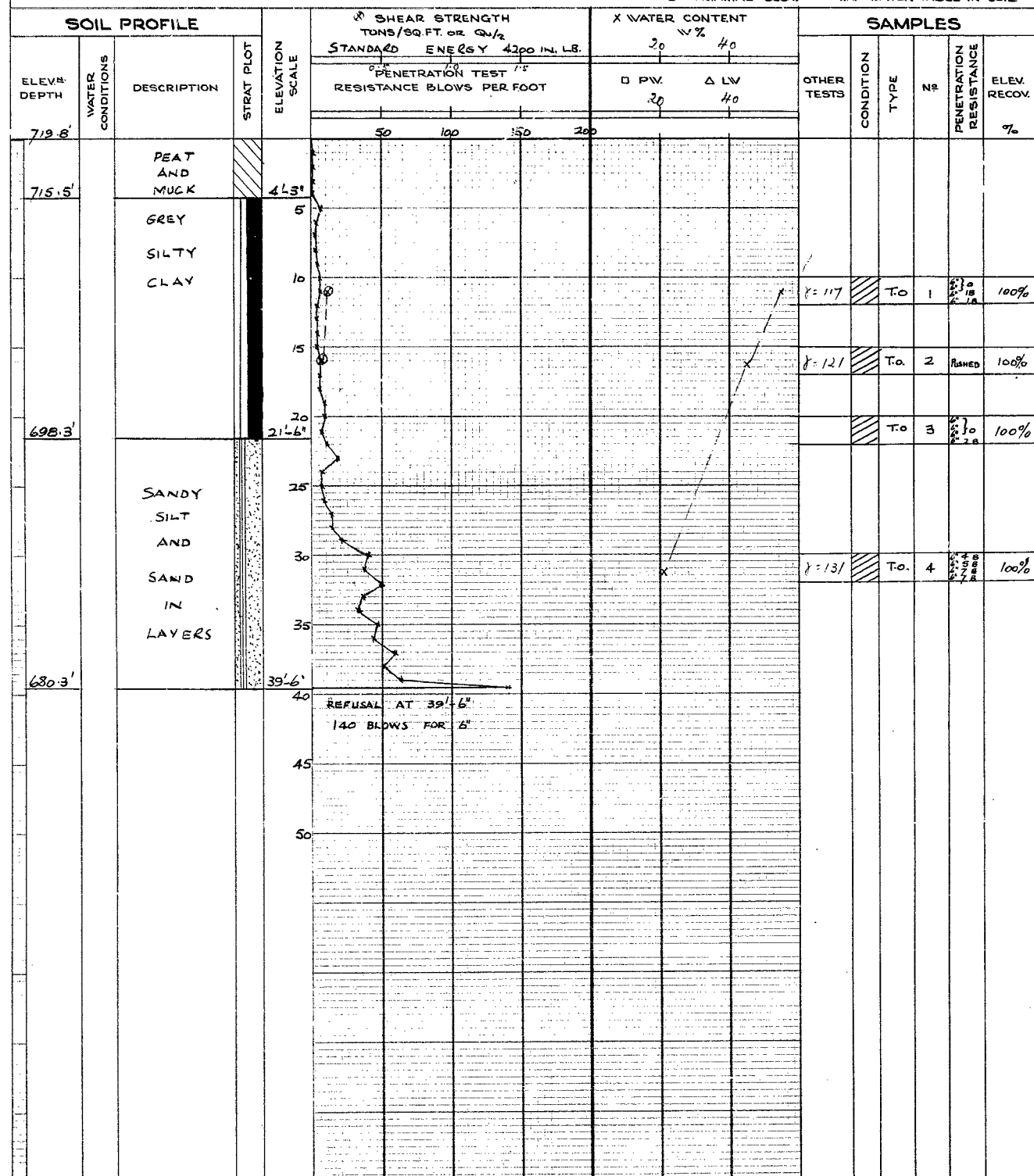
CS - CHUNK
DO - DRIVE OPEN
DF - DRIVE FOOT VALVE
TO - THIN WALLED OPEN

SAMPLE TYPES

WS - WASHED SAMPLE
RC - ROCK CORE

ABBREVIATIONS

V - INSITU VANE SHEAR TEST
M - MECHANICAL ANALYSIS
U - UNCONFINED COMPRESSION
Qc - TRIAXIAL CONSOLIDATED QUICK
Q - TRIAXIAL QUICK
S - TRIAXIAL SLOW
γ - UNIT WEIGHT
K - PERMEABILITY
C - CONSOLIDATION
CA - CASING
WL - WATER LEVEL IN CASING
WT - WATER TABLE IN SOIL



MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31D-41

GEORGES No

DRILL RIG 24-J
CASING 3X (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT 250 # DROP 24 INCHES

JOB SS-F-23 BORING NO. 6
 DATUM STA 6+00 DATE REPORT _____
 COMPILED BY P.B. CHECKED BY V. Yang BORING DATE AUG 25

SAMPLE CONDITION



SAMPLE TYPES

C.B - CHUNK
D.O - DRIVE OPEN
D.F - DRIVE FOOT VALVE
T.O - THIN WALLED OPEN

WS - WASHED SAMPLE
RC - ROCK CORE

ABBREVIATIONS

V-INSITU VANE SHEAR TEST	γ - UNIT WEIGHT
M-MECHANICAL ANALYSIS	K - PERMEABILITY
U-UNCONFINED COMPRESSION	C - CONSOLIDATION
Q _u -TRIAXIAL CONSOLIDATED QUICK	CA - CASING
Q - TRIAXIAL QUICK	WL-WATER LEVEL IN CASING.
S - TRIAXIAL SLOW	WT-WATER TABLE IN SOIL

SOIL PROFILE

[illegible]

MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31 D-41

DRILL RIG 54-1
CASING BK (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT 350 * DROP 24 INCHES

JOB 25-F-23
 DATUM STA 68+20.5, ELEV 719.7
 COMPILED BY P.B. CHECKED

BORING NO. 7
DATE REPORT _____
BORING DATE AUG 10, 1955

SAMPLE CONDITION



SAMPLE TYPES

SAMPLE TYPES

CS - CHUCK	VS - WASHED SAMPLE
DQ - DRIVE OPEN	RC - ROCK CORE
DF - DRIVE FOOT VALVE	
TO - THIN WALLED OPEN	

ABBREVIATIONS

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 Q - TRIAXIAL QUICK WL - WATER LEVEL IN CASING
 S - TRIAXIAL SLOW WT - WATER TABLE IN SOIL

SOIL PROFILE

[illegible]

MATERIALS LABORATORY-DEPARTMENT OF HIGHWAYS - ONTARIO
OFFICE REPORT ON SOIL EXPLORATION

31 D-41

$$\text{GeCl}_4 \text{ and } \text{SnCl}_4$$

DRILL RIG 5-1
CASING 5/8" (STANDARD SAMPLERS TO FIT UNLESS NOTED)
SAMPLER HAMMER WT 250 # DROP 34 INCHES

JOB SS-F-23
 DATUM STA 68+20 E. ELEV. 710.7
 COMPILED BY CHECKED BY

BORING NO. 7
DATE REPORT _____
BORING DATE AUG 10/68

SAMPLE CONDITION



SAMPLE TYPES

CS - CHUCK
DO - DRIVE OPEN
DF - DRIVE FOOT VALVE
TO - THIN WALLED OPEN
WS - WASHED SAMPLE
RC - ROCK CORE

ABBREVIATIONS

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Q - TRIAXIAL QUICK	WL - WATER LEVEL IN CASING
S - TRIAXIAL SLOW	WT - WATER TABLE IN SOIL

SOIL PROFILE

[illegible]

ABBREVIATIONS

ABBREVIATIONS

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U-UNCONFINED COMPRESSION	C-CONSOLIDATION
Qc- TRIAXIAL CONSOLIDATED QUICK	CA.-CASING
S - TRIAXIAL, QUICK	WL.-WATER LEVEL IN CASING
S - TRIAXIAL SLOW	WT.-WATER TABLE IN SOIL

[illegible]



ONTARIO

DEPARTMENT OF HIGHWAYS

Memo to Mr. F. C. Brownridge
Materials & Research Engineer
From G. Farantatos

Date January 26th, 1956.
Subject South Orillia By-Pass
F 55-23 - Fill Construction

With reference to the above matter, I wish to make the following recommendations:

- (1) Maximum fill height - 25'
- (2) If the fill is raised to 30 or 32' berms 50' wide by 20' in height should be constructed on each side of the fill.

The above recommendations apply to the old location - line D.

G. Farantatos

Mr. F. C. Brownridge
Materials & Research Engineer
G. Farantatos

January 26th, 1956.


South Orillia By-Pass

F 55-23 - Fill Construction

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G. Farantatos