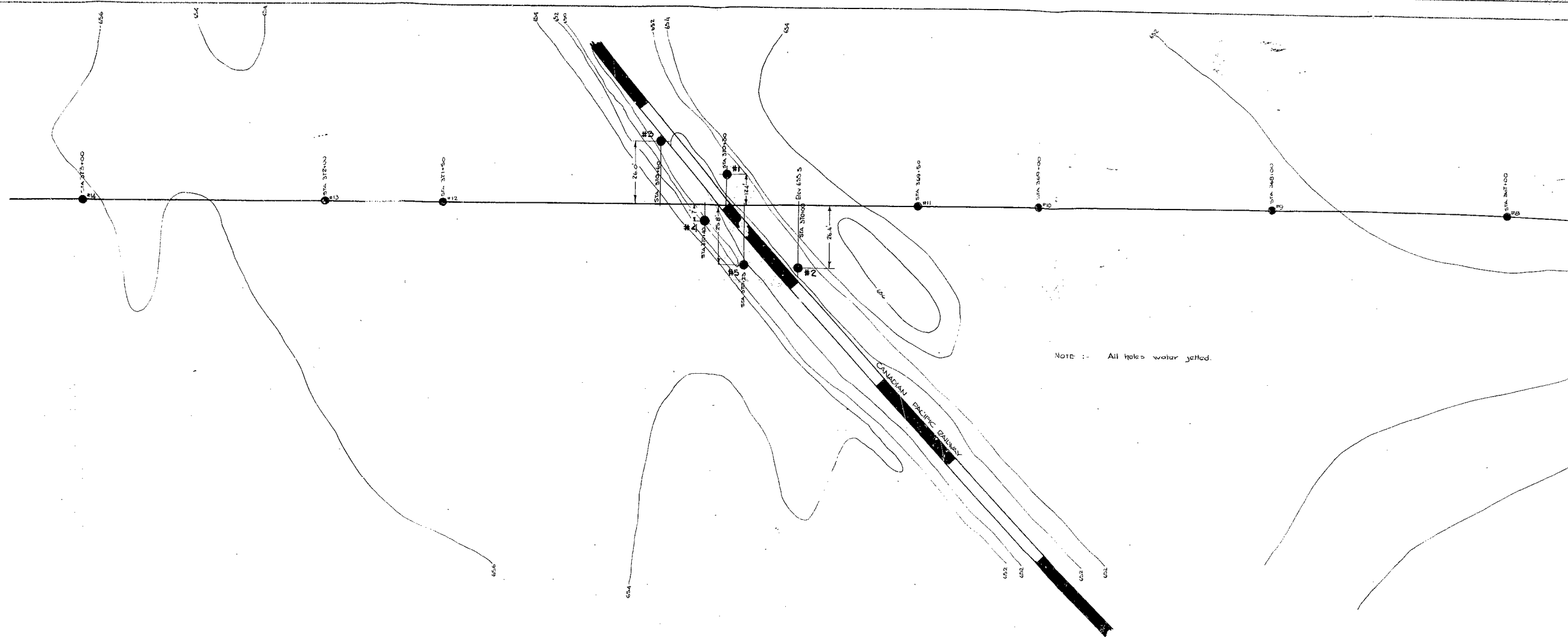
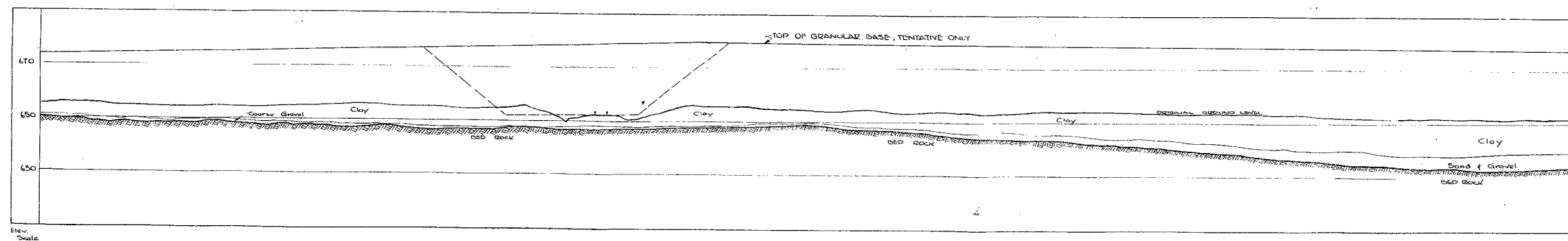


#55-F-33
W.P.#185-55
Hwy. #17
THESSALON
BYPASS OVER
C.P.R.

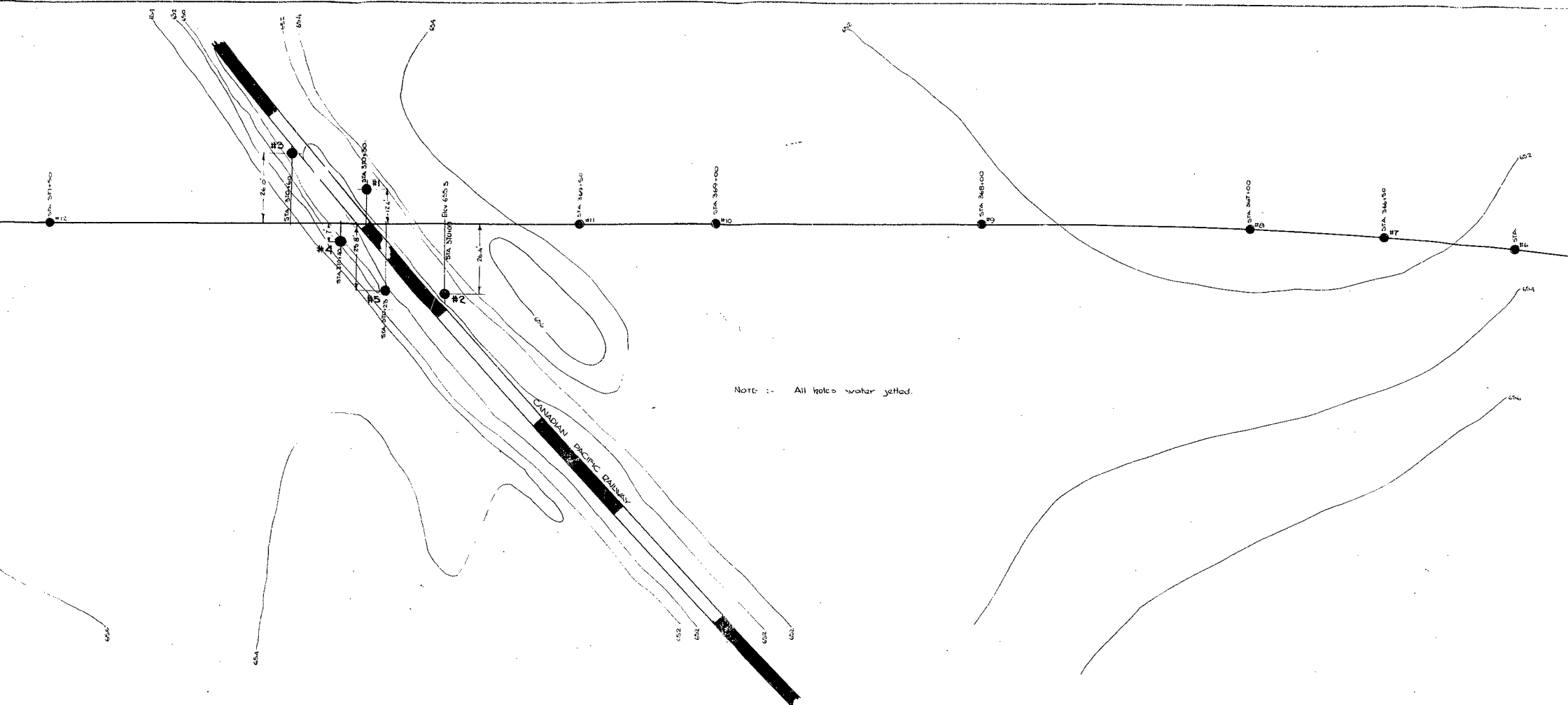
EDITED
FOR MICROFILMING
BY *K.T.* DATE *3/10*



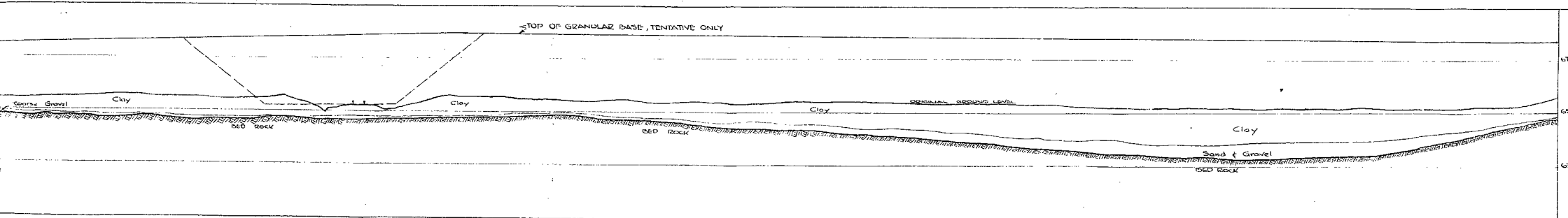
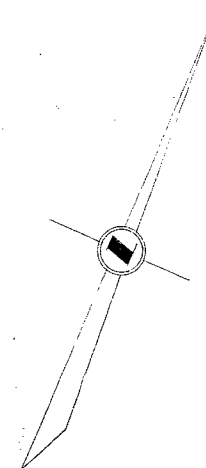
PLAN
Scale 1 inch = 20 feet



ROCK PROFILE FROM JET SOUNDINGS
Scale 1 inch = 20 feet Horizontal / Vertical



PLAN
Scale: 1 inch = 20 feet



ROCK PROFILE FROM JET SOUNDINGS
Scale: 1 inch = 20 feet Horizontal / Vertical

LINE C
E 3051-1
3233-3
W.P. 101-55

MINISTRY OF HIGHWAYS, ONTARIO DRAINAGE OFFICE			
THESSALON OVERHEAD BRIDGE OVER THE C.P.R. ON THE THESSALON BY-PASS			
THE KING'S HIGHWAY NO. 17		DIV. NO.	
DISTRICT OF ALGOMA			
TWP. THESSALON		LOD.	
LOCATION of HOLES & PROFILE			
APPROVED			
CHIEF ENGINEER			
DATE			
BY			
S.T.B.			
JANUARY 20, 1956			
55-F-33-A			

Mr. H. Toye
Bridge Engineer

Re: Foundation Investigation
Hwy #19 Sheslay By-Pass and C.P.R.
Line C E 3051-1
-2
F 3233-3
W.P. 185-55
Project 55-F-33

We are forwarding herewith two copies of the report re the above. Since bedrock was found at shallow depths, the work was largely confined to establishing the bedrock profile. Sufficient soil samples were procured and tested to establish that the proposed approach fills will be adequately supported.

Copies to

J.T.
F.C.B.
with M.

H. Toye, Bridge Engineer (2)
R. Ungaske, Const Eng (1)
J. Hunter, Design Eng (1)
D. Collins, Dist Eng Blind River (1)
L. Tarantatos (1)

File (1)

Note: Please correct title page ^{preparato} D. Collins, Dist
Eng Blind Rivers.

A REPORT ON FOUNDATION INVESTIGATION
OF PROPOSED THESSALON OVERHEAD BRIDGE
OVER
C.P.R. ON PROPOSED THESSALON
BY-PASS
HIGHWAY #17 NEAR THESSALON

LINE C
E 3051-1
-2
F 3233-3
W.P.-185-55

Copies to:

Mr. A. Toye, Bridge Engineer (2)
Mr. J. Walter, Design Engineer (1)
Mr. H. Tregaskes, Const. Engineer (1)
Mr. D. Cole, Div. Engineer, Blind River (1)
Mr. Farantatos (1)
File (1)

INTRODUCTION:

The following report is concerned with a soil investigation for the proposed C.P.R. overhead bridge on by-pass highway #17 near Thessalon. The soils conditions have been explored in order to recommend the type of foundation for the overpass and to examine the stability of the approach fills.

PROCEDURE:

The general topography of the locality gave the impression that only a shallow mantle of soil covered bedrock. It was therefore decided to make a preliminary exploration with jet soundings from Station 366/00. This was carried out using a taper cut "A" rod with water supplied through the water swivel driving forced down through the clay and gravel strata to bedrock.

Three undisturbed samples were obtained for unconfined compression tests.

It was found that a layer of clay having shear strength of 825 to 1500 lbs. per sq. foot, and from 5 to 12 feet in thickness overlies 0.5 to 6 feet thick layer of sandy gravel which overlies bedrock.

Generally bedrock was found at the depth from 5.5 to 18 feet below ground level.

Slope stability for the approach fill at Station 367/00 has been investigated and it was found that fill of 32 feet in height and slope of 1:2 should be stable.

RECOMMENDATIONS:

1. The spread footing foundation for the overhead C.P.R. bridge can be founded directly on bedrock at an approximate elevation of 648.0', and it should be properly secured to bedrock by using dowel bars.

2. The approach fill of approx. 32 feet in height and 1:2 slope can be considered safe from the slope stability point of view.

G. V. Karantatos,
Foundation Engineer.