D. M. 310/53 RB 35/71 DEPARTMENT OF MINES. SOUTH AUSTRALIA.

## BORING AT PROPERT OF SITE, CARACINEA CREEK. SECTION 420, HUNDRED OF MYPONGA.

A new bridge is to be constructed by the Highways and Local Government Department across the Carrickalinga Creek, at Tettle Flat, on the main read between Mypongs and Yantalilla, and two bereholes have been completed adjacent to the existing bridge in order to test the foundation soils. There are no rock outcrops in the area, but water boring in the vicinity has revealed that the surface soil is underlain at shallow depth by Permian glacigene sediments consisting mainly of siliceous sands.

The logs of both boreholes are similar, showing a few feet of surface clay rich in decomposed woody matter, and underlain to a depth of 13 feet by Recent fluviatile deposits consisting mainly of gravel and sand. Below 13 feet, both bores encountered fine glacial sands with some minor clay partings to the bottom of the holes at 45 feet.

The fluviatile gravels and glacial sands below 10 feet are sufficiently compact to withstand a considerable load, and despite their water-saturated condition, they should provide a satisfactory footing for the bridge foundations.

Samples from the borcholes are being retained at the Mines Department Works Depot until advice is received that they are no longer required. Detailed logs of the bores are attached to this report.

TNG.

DK/GC '5/53



## BORING AT BRIDGE SITE, CARRICKALINGA ORVEK.

Bore No.1.

Hore Seriel No. P.D.510/53 Started 8.3.53 Completed 10.3.53 Driller. Aikins.

BORE LOG.

Frem	L	To	
Ft.	18.	Ft. in	• A second s
0 2 3 4 7 3 2 3 9 41		2 0 3 0 4 0 7 0 13 0 23 0 39 0 41 0	Black peaty clay soil Variceloured clay and fine sand. Black peaty clay and fine sand Clayey sand and grit Fine gravel, sand and a little clay Fine sand with some clay and gravel Fine white silecous sand Thite clay
59 41	0	41 0 45 0	Fine white siliceous send and some grit.

End of bore at 45 feet.

Water struck at 7 fest

Water stands at 5 feet from surface.

Bore Logged by

D. KING. GEOLOGIST.

DK/@C 1/5/53

i

BORING AT BRIDGE SITE. CARNICHALINGA CREEK.

## BORT NO.2.

Bore Serial No. P.D. 515/53 Started 14.1.53 Completed 15.1.53 Driller. Aikins.

## BORE LOG.

• •

Fre	n.	To		
Ít.	in.	Pt.	in.	
0	0	1	0	Black peaty clay soil
1	0	3	0	Brown sendy soll
3	Ó	3 5	. <b>O</b>	Slack sandy clay and peat.
Ĩ,	0	9	0	Sand and grit.
<b>9</b>	õ	11	Ď	Black clayey sand.
ıí	ō			Black clayey sand and fine gravel.
0 1 5 9 11 13	ŏ	13 19	0	Fine white glacial sand, some gravel and pebbles.
19	.0	23	0	Fine white clayey sand.
23	ō	23 31	0	Fine white sand with small patches of white clay.
31	0	39	0	Medium white sand and grit.
39	Ō	41	0	Pale grey plastic clay.
Ĺí	õ	43	0	White plastic clay.
31 39 41 43	· Õ	45	Ō	White sandy clay.

3nd of Bore at 45'

Water struck at 13 feet

Water stands at 5 feet from surface.

Bere Logged by

KING. D. GEOLOGIST.

DK/GC 1/5/53