

Below are the detailed geological logs of all bores drilled. Characteristic river alluvium consisting of sands, clays and some thin gravel bands was penetrated and most bores finished in bedrock consisting of more or less fresh hard blue-grey slate which should provide adequate foundations for the proposed bridge footings. Geological profiles based on these logs are shown in the accompanying plan (Sections A-B, C-D).

LINCOLN BRIDGE.

BORE NO. 1

Bore Serial No. P.D. 689/52.

Drilling commenced 30/10/52 Completed 7/11/52.

Driller: H. Norris.

0 - 1'	Sand
1' - 6'	Sandy loam
6' - 8'	Sandy clay
8' - 9'	Clay
9' - 10'	Clay, sand
10' - 16'	Silty Clay-sand
16' - 20'	Silty Clay
20' - 24'	Plastic brown clay
24' - 26'	Sandy Clay
26' - 29'	Sand and gravel

End of bore at 29ft.

BORE NO. 2

Bore Serial No. P.D. 519/53

Drilling commenced 1/5/53 Completed 1/5/53.

Driller: D.H. Atkins

0 - 3'	Brown sandy loam
3' - 9'	Brown sandy calcareous clay with broken partly decomposed slate.
9' - 14'	Brown sandy clay.
14' - 24'	Plastic brown clay with some nodules of limestone.
24' - 30'	Brown clay, gravel and sand with broken slates.

End of bore at 30ft.

BORE NO. 3

Bore Serial No. P.D. 697/52

Drilling commenced 20/12/52 Completed 20/12/52.

Driller: H. Norris.

0' - 3'	Brown loamy sand.
3' - 12'	" sandy loam.
12' - 21'	" very sandy clay
21' - 21'6"	Fine river gravel
21'6" - 22'	Slate

End of bore at 22ft.

BORE NO. 4

Bore Serial No. P.D. 520/53

Drilling commenced 4/5/53 Completed 4/5/53.

Driller D. Atkins.

0 - 1'	Brown sand
1' - 4'	Brown sandy loam with a few small limestone nodules.
4' - 10'	Sandy brown calcareous clay
10' - 28'	Brown clay in part calcareous and becoming sandy
28' - 30'	Plastic brown clay sandy in parts with gravel and broken slate.

End of bore at 30ft.

BORE NO. 5

Bore Serial No. P.D. 690/52

Drilling commenced 7/11/52 Completed 10/11/52.

Driller: H. Norris.

0' - 3'	brown sand
3' - 12'	" loamy sand
12' - 14'	Sandy clay
14' - 18'	Clayey sand and coarse gravel
18' - 21'	Brown sandy clay loam and sand
21' - 21'9"	Coarse river gravel and slate

End of Bore at 21ft.9in.

BORE NO. 6

Bore Serial No. P.D. 521/53

Drilling commenced 5/5/53 Completed 5/5/53.

Driller: D. Atkins.

0 - 2'	Brown sandy loam
2' - 4'	Sandy brown clay
4' - 8'	Brown clay sandy and calcareous
8' - 15'	Sandy brown clay containing limestone nodules
15' - 22'	Plastic brown clay
22' - 26'	Brown clay, gravel and sand and broken slates.
26' - 30'	Mainly sand and gravel, with clay and slate fragments

End of Bore at 30ft.

BORE NO. 7

Bore Serial No. P.D. 698/52.

Drilling commenced 21/11/52 Completed 21/11/52

Driller: H. Norris.

0 - 6' Brown sand (loamy)
6 - 13' Brown sandy clay
13' - 19' Yellow-brown clay sand
19' - 20'6" River gravel
20'6"- 21' Slate

End of Bore at 21ft.

BORE NO. 8

Bore Serial No. P.D. 693/52.

Drilling commenced 12/11/52 Completed 13/11/52.

Driller: H. Norris.

0 - 5' Brown slightly loamy medium coarse sand
5' - 7' Sandy loam and gravel
7' - 15' Red brown sandy clay-loam
15' - 18' Red sandy to silty clay
18' - 21' Silty clay
21' - 25' Sandy clay and gravel (grey rock reported, 24-25')

End of Bore at 25ft.

BORE NO. 9

Bore Serial No. P.D. 694/52.

Drilling commenced 14/11/52 Completed 14/11/52

Driller: H. Norris.

0 - 3' Fine loamy sand
3' - 6' Medium Loamy sand
6' - 9' Sandy loam and gravel
9' - 14' Sand and dark clay
14' - 18' Dark red brown sandy clay
18' - 21' Brown clayey sand
21' - 23' Gravelly clay
23' - 24' Clay and river gravel

End of Bore at 24ft.

BORE NO. 10

Bore Serial No. 694/52.

Driller: D. Atkins

Drilling commenced 21/4/53 Completed 23/4/53

Originally drilled to 24ft. on 14/11/52.

Redrilled to 31ft. on 21/4/53.

0 - 2'	Fine sand
2' - 6'	Brown sandy loam
6' - 10'	Brown sandy clay and fine gravel
10' - 15'	Plastic red brown clay
15' - 17'	Sandy yellow brown clay
17' - 19'	Plastic " " "
19' - 21'	Sand gravel and clay with fragments of slate.
21' - 23'	Fine clayey sand
23' - 27'	Sand, fine gravel and clay
27' - 31'	Brown clay with sand, fine gravel and broken slate.

End of Bore at 31ft.

BORE NO. 11

Bore Serial No. P.D. 687/52.

Drilling commenced 28/10/52 Completed 18/11/52.

Driller: H. Norris

0 - 6'	Brown sand grading to sandy loam
6' - 9'	Red sandy clay
9' - 12'	Red brown sandy clay
12' - 13'	Black sandy clay with pebbles
13' - 14'	Dark clayey river gravel
14' - 16'	Clay and gravel
16' - 18'	Sandy gravel
18' - 20'	Coarse gravel
20' - 21'	Broken slate

End of Bore at 21ft.

BORE NO. 12

Bore Serial No. P.D. 688/52

Drilling commenced 29/10/52 Completed 17/11/52

Driller: H. Norris.

0 - 2'	Fine to medium brown sand
2 - 5'	Brown sandy loam
5' - 6'	Sand
6' - 9'	Clayey brown sand
9' - 11'	Coarse sand
13' - 14'	Grit sand and gravel
14' - 15'	Black sand mud and gravel
15' - 18'	Sand and gravel
18' - 21'	Clay and gravel
21' - 25'	Coarse sand clay and gravel - broken slate at 25ft.

End of Bore at 25ft.

BORE NO. 13

Bore Serial No. P.D. 518/53.

Drilling commenced 29/4/53 Completed 30/4/53

Driller: D. Aikins

0 - 2'	Brown sand
2' - 5'	Brown sandy loam
5' - 9'	" " clay
9' - 15'	Dark grey silt clay and grit
15' - 19'	Fine gravel, ^{sand} and clay
19' - 23'	Sandy brown clay

End of Bore at 23ft.

BORE NO. 14

Bore Serial No. P.D. 517/53.

Drilling commenced 27/4/53 Completed 29/4/53.

Driller: D. Aikins

0 - 1'	Brown sand
1' - 9'	Brown sandy loam
9' - 14'	Plastic brown clay with sand, gravel & broken slate.
14' - 18'	Mainly gravel with sand and clay
18' - 22'	Brown clayey sand
22' - 24'	Fine gravel sand and clay
24' - 27'	Gravel and silty clay with broken slate

End of Bore at 27ft.

BORE NO. 17

Bore Serial No. P.D. 526/53.

Drilling commenced 11/5/53 Completed 12/5/53.

Driller: D. Aikins

- 0 - 4' Brown sandy loam
- 4' - 7' Sandy light brown clay, in part calcareous
- 7' - 10' Dark brown plastic clay and sand
- 10' - 12' Brown sandy clay
- 12' - 14' Fine grey silt, sand and gravel

End of Bore at 14ft.

BORE NO. 19

Bore Serial No. P.D. 524/53.

Drilling commenced 8/5/53 Completed 13/5/53.

Driller: D. Aikins

- 0 - 1' Brown sand
- 1' - 3' Brown sandy loam
- 3' - 5' Friable brown sandy clay
- 6' - 9' Plastic brown clay and sand
- 9' - 13' Brown sandy clay with broken slates
- 13' - 14' Mottled grey and brown plastic clay with broken and partly decomposed slate.
- 14' - 16' Fine grey silty clay and grit and broken slates.

End of Bore at 16ft.

BORE NO. 20

Bore Serial No. P.D. 529/53.

Drilling commenced 15/5/53 Completed 18/5/53

Driller: D.H. Aikins

- 0 - 4' Brown sandy loam
- 4' - 5' Brown sandy clay
- 5' - 9' Dark brown clay with sand calcareous in part
- 7' - 8' " " sandy clay with a little gravel
- 8' - 10' Friable brown sandy clay with some fragments of slate.
- 10' - 12' Brown plastic clay with slate fragments
- 12' - 14' Dense mottled brown and grey clay with slate fragments
- 14' - 16' Fine silt and grit.

End of Bore at 16ft.

BORE NO. 21

Bore Serial No. P.D. 523/53.

Drilling commenced 7/5/53 Completed 8/5/53 Driller D. Atkins

0 - 1' Brown sand
1' - 6' Brown sandy loam
6' - 11' Brown sandy clay with some broken and decomposed
 slates.
11' - 14'6" Fine gravel, sand and clay
14'6" - 15'6" Fine silty clay and gravel
15'6" - 16'6" Hard blue-grey slate reported - (drillers' log)

End of Bore at 16ft. 6in.

BORE NO. 22

Bore Serial No. P.D. 527/53.

Drilling commenced 13/5/53 Completed 13/5/53 Driller D. Atkins

0 - 3' Sand	}	Drillers' log Bore abandoned.
3' - 6' Sand clay		
6' - 10' Silty clay		

End of Bore at 10ft.

BORE NO. 22A.

Bore Serial No. P.D. 528/53.

Drilling commenced 14/5/53 Completed 14/5/53

Driller: D. Atkins

0 - 3' Brown sandy loam
3' - 5' " " clay
5' - 10' Bottled grey brown calcareous clay with broken
 slates and gravel
10' - 13' Brown sandy clay, gravel and broken slate - partly
 decomposed.
13' - 15' Blue grey slate reported - (drillers log).

End of Bore at 15ft.

BORE NO. 23

Bore Serial No. P.D. 522/53.

Drilling commenced 6/5/53 Completed 6/5/53

Driller: D. Atkins.

- 0 - 1' Brown sand
- 1' - 3' Brown sandy loam
- 3' - 6' Brownish grey sandy clay, some broken slate
- 6' - 8' Plastic brown clay in part calcareous with broken slate
- 8' - 13' Brown clay with broken and partly decomposed slates and quartz pebbles.
- 13' - 15' Mainly broken and decomposed slates and clay
- 15' - 18' Fine grey silty clay and sand and gravel; broken slate
(15'6" - 18' grey blue rock - Drillers log)

End of bore at 18ft.

BORE NO. 24


Drilling commenced 12/5/53 Completed 13/5/53

Driller: D. Atkins

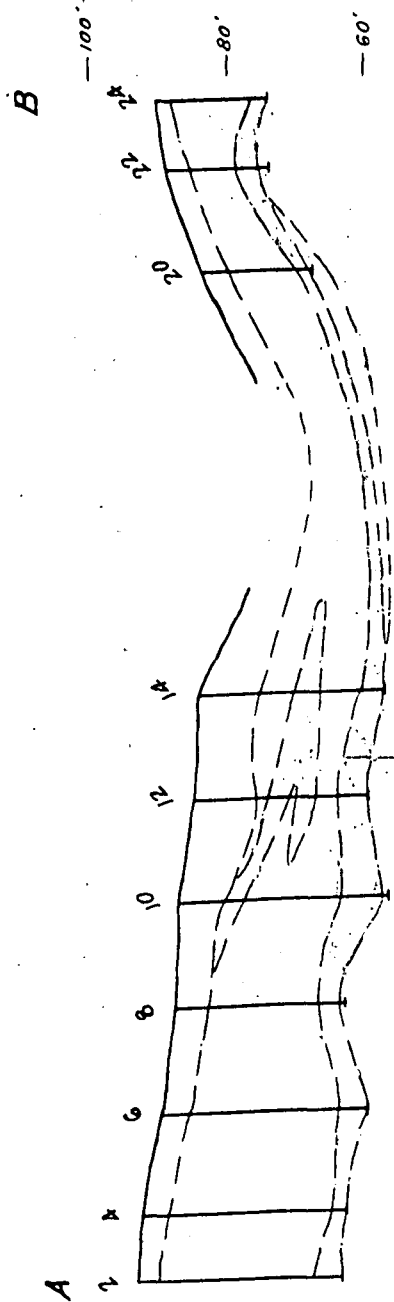
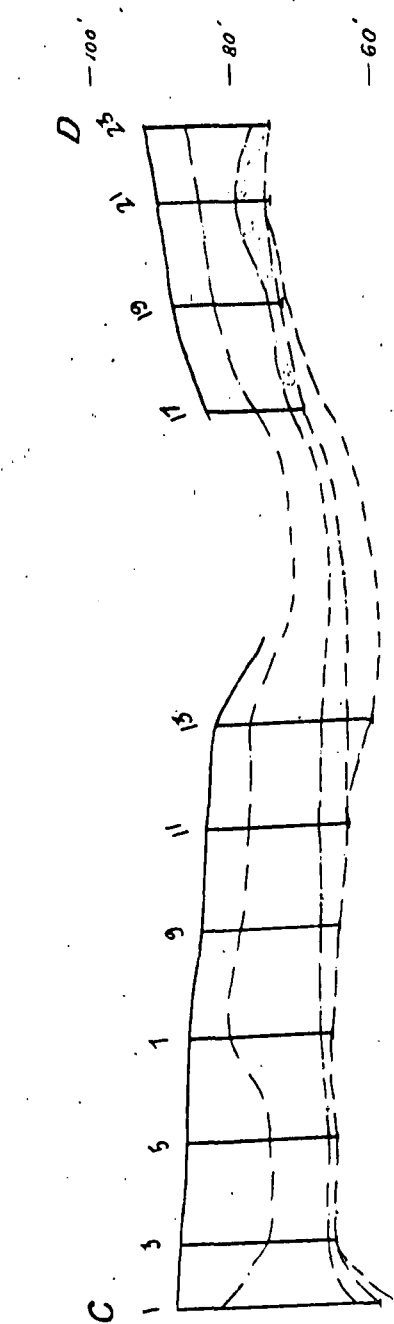
- 0 - 1' Brown sand
- 1' - 2' Brown sandy loam
- 2' - 5' Brown sandy clay in part calcareous with gravel
in broken slate
- 5' - 9' Mainly broken and partly decomposed slates with brown
clay.
- 9' - 14' Brown plastic clay with broken slate and gravel
- 14' - 16' Fine silty clay, grit and broken slate

End of bore at 16ft.

The samples have been forwarded direct to the Highways
and Local Government Department laboratories at Keswick.


(K. R. MILES)

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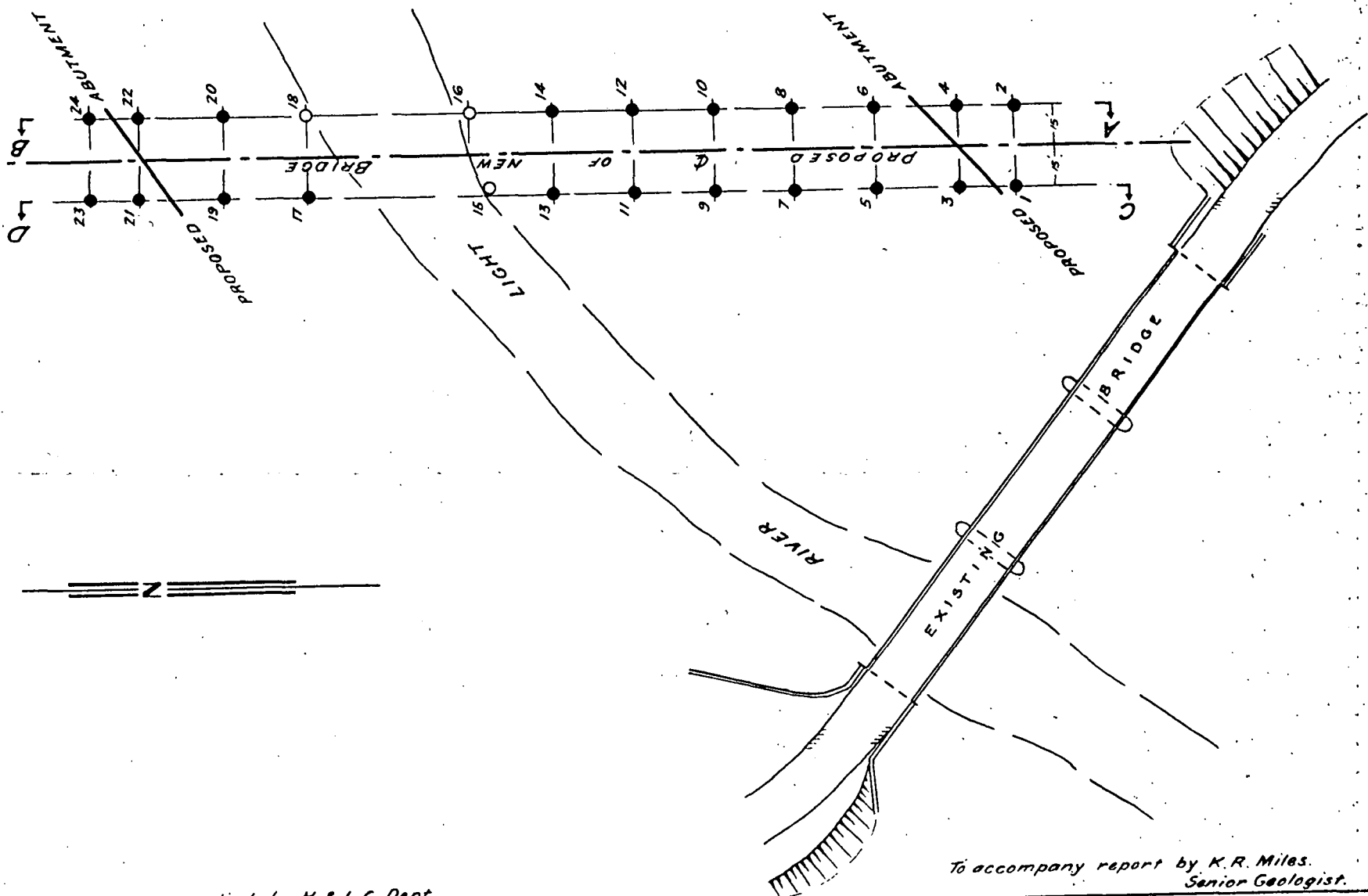


LONGITUDINAL SECTIONS

SCALES: HOR. 40' TO 1" VERT. 20' TO 1"

LEGEND

- Sandy loam
- Clays and sandy clays
- Sand and gravel
- Bedrock (slates)
- Bores
- Sites selected but not bored



Compiled from plan supplied by H. & L. G. Dept.

To accompany report by K. R. Miles.
Senior Geologist.

S. A. DEPT. OF MINES

LINWOOD BRIDGE BORE LOCATION PLAN AND SECTIONS

Approved	Passed	R. R.	53-155 Gk7 24.6.53