10. To maintain and use properly and effectively that the facilities constructed and equipment puchased under the Grant.

11. To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and the installation of the equipment.

SOLOMON ISLANDS GOVERNMENT

Telegrams:

Ministry of Transport, Works and Utilities
Works Division
P.O. Box G8
HONIARA
Solomon Islands

Telephone: 21141

The Team Leader,
Mr.Yorimichi Maekawa,
Leader,
Basic Design Study Team,
JICA

Your Ref:

Our Ref: 426/10/20

Date: 10 December 1992

Dear Mr.Maekawa,

I am pleased indeed with the work of your Basic Design Study Team, the work that will enable the construction of the much needed White River bridge, Matepona bridge, Mbonege Bridge and Tanaemba bridge. There is a vital transportation bridge at Aligator Creek. This Bridge is now old and may collapse to completely cut off transport of the major export of oil palm, timber, cocoa and copra from the Guadalcanal plains. The Creek is too long and swampy and does not allow diversion for access roads. This Aligator Creek bridge need is well above any other bridges that are within your Terms of Reference. I therefore request that the need be brought to the attention of your Government so that if it is acceptable by your Government that the Aligator Creek Bridge be included with the four bridges under your study teams Terms of Reference.

Also being very vital for the economy of Solomon Islands that Aligator Creek bridge be rated first priority for construction. May I ask your team to also do a study of Aligator Creek bridge while you are here now and I will be pleased if you would kindly relay my special concern and request on behalf of the Solomon Islands Government to your Government in Tokyo, Japan.

I have the pleasure of meeting you and your Team in Solomon Islands.

Hon.Ben Gale Fa'aitoa,
Minister for Transport, Works & Utilities,
Solomon Islands Government

SOLOMON ISLANDS GOVERNMENT

Telegrams:

Ministry of Transport, Works and Utilities
P.O. Box G8
HONIARA
Solomon Islands

Telephone. 21141

Mr.Katsuhiro Sasaki
Deputy Director
Second Basic Design Study Division
Grant Aid Study & Design Department
Japan International Cooperation Agency
(JICA)

Your Ref:

Our Ref: 426/10/20

Date: 11 December 1992

Dear Mr.Sasaki,

RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES IN SOLOMON ISLANDS

The Ministry of Transport, Works & Utilities fully assure the land acquisition and related issues which is necessary for smooth implementation of the project.

The above action will be undertaken prior to the commencement of the Project.

Yours faithfully,

Hon.Ben Gale Fa'aitoa,
Minister for Transport, Works & Utilities

MEMORANDUM OF MEETING

ON

THE PROGRESS OF THE FIELD SURVEY

Basic Design Study on the Project for Reconstruction of Guadalcanal Plains Bridges in Solomon Islands

The Consultant Team explained to MTWU the locations of the bridges which the Team considers the most suitable for the reconstruction, however, which were not final decisions, and the land acquisition areas including approach roads caused by the reconstruction based on the results of the field survey.

MTWU and the Team exchanged opinions and confirmed as follows:-

1. The Consultant Team explained the bridge locations as attached drawings. The locations were examined on the proposed sites attended by the Solomon Islands side on December 8, 1992.

2. Topographic survey is now proceeding and the exact topographic map is not presented, therefore the Team cannot submit the exact land acquisition areas related to the reconstruction of five (5) bridges.

   The following land acquisition areas are estimated approximately by the field reconnaissance. The detailed estimate can be made after the completion of the topographic survey.

			Reference
1).	White River Bridge	0 m2	Inside of Existing Right of Way
2).	Metapona River Bridge	2500 m2	Government Land
3).	Mbonege River Bridge	2500 m2	Mission Land
4).	Tanaemba River Bridge	1000 m2 1500 m2	Mission Land Customary Land
5).	Alligator Creek Bridge	3500 m2	Government Land

.../2

3. The Solomon Islands side confirmed that the land acquisition/property can be cleared prior to the commencement of the Project.

Honiara, December 18, 1992

Presented by
S. WATABE
Pacific Consultant International

Confirmed by
DANIEL HO'OTA
Permanent Secretary
MTWU

MINUTES OF DISCUSSIONS
BASIC DESIGN STUDY ON THE PROJECT FOR
RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES
IN SOLOMON ISLANDS
(CONSULTATION ON DRAFT REPORT)

In April,1993,the Japan International Cooperation Agency(JICA) dispatched a Basic Design Study Team on the Project for Reconstruction of Guadalcanal Plains bridges in Solomon Islands (hereinafter referred to as "the Project") to the Government of the Independent State of Solomon Islands, and through discussions, field survey, and technical examination of the results in Japan, has prepared the draft report of the study.

In order to explain and to consult the Government of the Independent State of Solomon Islands on the components on the draft report, JICA sent to the Government of the Independent State of Solomons a Study team, which is headed by Mr Yorimichi Maekawa, Advisory Officer, Construction Division, Hanshin Expressway Public Cooperation, and is scheduled to stay in the country from April 7, 1993 to April 18, 1993.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

Honiara, April 16, 1993

Yorimichi MAEKAWA
Leader
Basic Design Study Team
JICA

Daniel Ho'ota
Permanent Secretary
Ministry of Transport,
Works, and Utilities

ATTACHMENT

(1) Components of Draft Report

The Government of the Independent State of Solomon Islands has agreed and accepted in principal the components of the Draft Report proposed by the Team.

(2) Japan's Grant Aid System

(1) The Government of the Independent State of Solomon Islands has understood the system of Japanese Grant Aid explained by the Team.

(2) The Government of the Independent State of Solomon Islands will take the necessary measures, described in Annex for smooth implementation of the Project on condition that the Grant Aid assistance by the Government of Japan is extended to the project.

(3) Further Schedule

The Team will make the final report in accordance with the confirmed items and send it to the Government of the Independent State of Solomon Islands by the end of June,1993.

(4) Exemption of Tax

The Solomon Islands side ensured to take necessary measures to exempt General Sales Tax (GST), which has come into force in April 1993, imposed to raw materials and fuels purchased in the Solomon Islands for the Project.

ANNEX I PARTICULAR UNDERSTANDINGS TO BE TAKEN BY THE SOLOMON ISLANDS SIDE FOR THE PROJECT

(1) Land acquisition and property compensation for the reconstruction of bridges prior to the commencement of the Project.

(2) Land lease/acquisition of the spaces for the base camps (office, quarters,stock yard and motor pool), aggregates processing and mixing plant and other necessary temporary works.

(3) Demolition and clearing of inhabitant's properties within the right-of-way area along the approach roads, as required.

(4) Control of road traffic during the reconstruction.

(5) To inform the objective of the Project to inhabitant around project site and obtain consent from them before implementation of the Project.

(6) Removal of the existing bridge.

(7) To rearrange the public utilities, such as city water line and telephone line, etc..

(8) To sweep underground miss-fired explosives on the project area and secure the safety of the implementation of the Project.

ANNEX II NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE SOLOMON ISLANDS IN CASE JAPAN'S GRANT AID IS EXECUTED

1. To secure the site for the Project.

2. To clear the site prior to the commencement of the construction.

3. To provide facilities for distribution of electricity, water supply, incidental facilities to the Project site.

   1) Electricity distribution line to the site

   2) City water distribution main to the site

4. To bear commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement.

5. To exempt taxes and take necessary measures for customs clearance of the material and equipment brought for the project at the port of disembarkation.

6. To ensure prompt unloading and customs clearance at port of disembarkation and internal transportation therein of the products purchased under the Grant.

7. To accord Japanese Nationals whose services may be required in connection with the supply of products and the services under the verified contract such facilities as may be necessary for their entry into the Solomon Islands and stay therein for the performance of their work.

8. To maintain and use properly and effectively the facilities constructed under the Grant.

9. To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and the installation of the equipment.

SOLOMON ISLANDS GOVERNMENT

Telegrams:

Ministry of Transport, Works and Utilities
P.O. Box G8
HONIARA
Solomon Islands

Telephone. 21141

The Team Leader
Mr. Yorimichi Maekawa,
Leader,
Basic Design Study Team,
JICA

Your Ref:

Our Ref: 426/10/20

Date: 14/04/93

Dear Mr. Maekawa,

Subject: LAND ACQUISITION:
BASIC DESIGN STUDY ON THE PROJECT FOR RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGE IN SOLOMON ISLANDS

Further to our confirmation letter of even reference dated 11th December 1992, regarding the above together with related issues; we hereby wish to re-assure your good Office that the necessary activities had since been set in train and we are confident that the respective land areas would be acquired prior to the actual commencement of the Project.

2 Meanwhile, the Basic Design Team currently visiting the Capital: had availed us with further data that should assist us in our endeavours as we accelerate the process of land acquisition.

3. Please accept the assurances of our highest consideration.

Yours faithfully

D. Ho'ota
Permanent Secretary
MINISTRY OF TRANSPORT, WORKS & UTILITIES

J. Riogano
Commissioner of Lands
MINISTRY OF AGRICULTURE AND LANDS

Inland Revenue Division
MINISTRY OF HOUSING & GOVERNMENT SERVICES, MENDANA AVENUE, HONIARA.

Please address all correspondence to: The COMMISSIONER of INLAND REVENUE, P.O. BOX G9, HONIARA, SOLOMON ISLANDS

Our ref: Your ref: Telephone: 21602 Telex:

16 April 1993

The Team Leader
Mr. Yorimichi Maekawa
Leader
Basic Design Study Team
JICA

Dear Sir,

GOODS TAX – JAPAN FUNDED AID PROJECTS

I refer to the discussions we had in my office concerning the implications of the goods tax on goods purchased in connection with any Japanese government funded aid projects in Solomon Islands.

I confirm that the Solomon Islands government is committed to exempt such goods (materials). This commitment is specifically provided for under item 31 of the Goods Tax Act 1992.

Finally I would like to assure your government of Solomon Islands government's committment to see the completion of the projects without any fiscal encumberances.

Yours faithfully,

M. Sogavare
Commissioner of Inland Revenue

A - 5 REVENUE and EXPENDITURE from 1980 until 1991 in Solomon Islands

Central government revenue, 1980–91 (SI$ million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991[a]
Taxes on income and profits	7.4	9.6	10.8	10.6	14.2	17.1	17.7	22.7	25.5	24.0	33.0	39.0
Companies	4.3	4.9	4.2	4.5	5.8	6.8	5.7	5.8	5.1	6.0	6.5	n.a.
Individual	3.1	4.7	6.6	6.1	8.4	10.3	12.0	16.9	20.4	18.0	26.5	n.a.
Taxes on goods and services	0.9	1.2	1.2	1.2	1.1	2.1	1.7	1.8	3.0	3.0	3.6	3.6
Excise duties	0.2	0.3	0.2	0.3	0.2	0.4	0.4	0.4	0.5	0.5	n.a.	n.a.
Other[b]	0.7	0.9	1.0	0.9	0.9	1.7	1.3	1.4	2.5	2.5	n.a.	n.a.
Taxes on international trade	10.0	13.8	17.3	17.1	28.4	28.3	32.7	39.4	52.4	60.8	63.5	75.0
Import duties	5.6	9.3	13.1	12.5	17.3	20.4	25.8	31.4	39.8	44.4	47.7	n.a.
Export duties	4.4	4.5	4.2	4.6	11.1	7.9	6.9	8.0	12.6	16.4	15.8	n.a.
Total tax revenue	18.3	24.6	29.3	28.9	43.7	47.5	52.1	63.9	80.9	87.8	100.1	117.6
Nontax revenue	4.5	5.1	3.8	5.3	3.5	4.9	5.0	5.9	9.1	13.6	11.7	32.4
Property income[c]	2.8	3.1	1.9	3.4	1.7	1.8	2.7	3.7	5.6	n.a.	n.a.	n.a.
Fees and charges	1.6	1.9	1.8	1.9	1.7	2.5	2.0	2.0	2.9	n.a.	n.a.	n.a.
Other	0.1	0.1	0.1	0.0	0.1	0.6	0.3	0.2	0.6	n.a.	n.a.	n.a.
Total current revenue	22.8	29.7	33.1	34.2	47.2	52.4	57.1	69.8	90.0	101.4	111.8	150.0
Capital revenue	0.6	0.2	0.2	0.1	0.5	0.7	0.0	0.0	0.0	0.2	1.7	0.0
Total revenue	23.4	29.9	33.3	34.3	47.7	53.1	57.1	69.8	90.0	101.6	113.5	150.0

[a] Provisional analysis by Central Bank of Solomon Islands; increases in tax revenues are predicated on the successful implementation.

[b] Includes business licences and stamp duties.

[c] Includes surpluses of public enterprises.

Sources: World Bank, *Toward Higher Growth in Pacific Island Economies: Lessons from the 1980s*, Vol. 2, Country Surveys, Washington D.C., 1991; Central Bank of Solomon Islands, *Annual Report 1990*, Honiara, 1991a.

Central government expenditure, 1980–91 (SI$ million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 budget[a]	1990 budget[a]	1991 budget[b]
Current expenditure	24.4	30.9	34.5	39.2	46.1	59.2	65.7	77.1	100.7	102.8	128.0	176.0
Wages and salaries	10.8	13.1	15.6	18.0	21.4	26.0	30.8	34.9	47.5	47.0	63.0	69.0
Purchases of goods and services	7.6	9.1	8.9	10.1	11.3	14.9	11.9	15.0	20.1	21.8	n.a.	n.a.
Interest payments	0.2	0.6	0.8	1.0	2.1	3.9	4.3	7.5	11.3	13.0	13.0	14.0
Subsidies and current transfers	5.8	8.1	9.2	10.1	11.3	14.4	18.7	19.7	21.8	21.0	n.a.	n.a.
Capital expenditure	11.8	11.0	11.9	10.7	10.1	13.7	30.3	57.0	43.0	52.0	60.0	76.0
Purchase of fixed capital assets	10.5	9.8	10.1	9.4	9.2	13.0	29.6	55.6	n.a.	n.a.	n.a.	n.a.
Capital transfers	1.3	1.2	1.8	1.3	0.9	0.7	0.7	1.4	n.a.	n.a.	n.a.	n.a.
To nonfinancial public enterprises	0.5	0.5	0.7	0.7	0.5	0.7	0.7	1.4	n.a.	n.a.	n.a.	n.a.
Other	0.8	0.7	1.1	0.6	0.4	-	-	-	n.a.	n.a.	n.a.	n.a.
Total expenditure	36.2	41.9	46.4	49.9	56.2	72.9	96.0	134.1	143.7	154.8	188.0	252.0

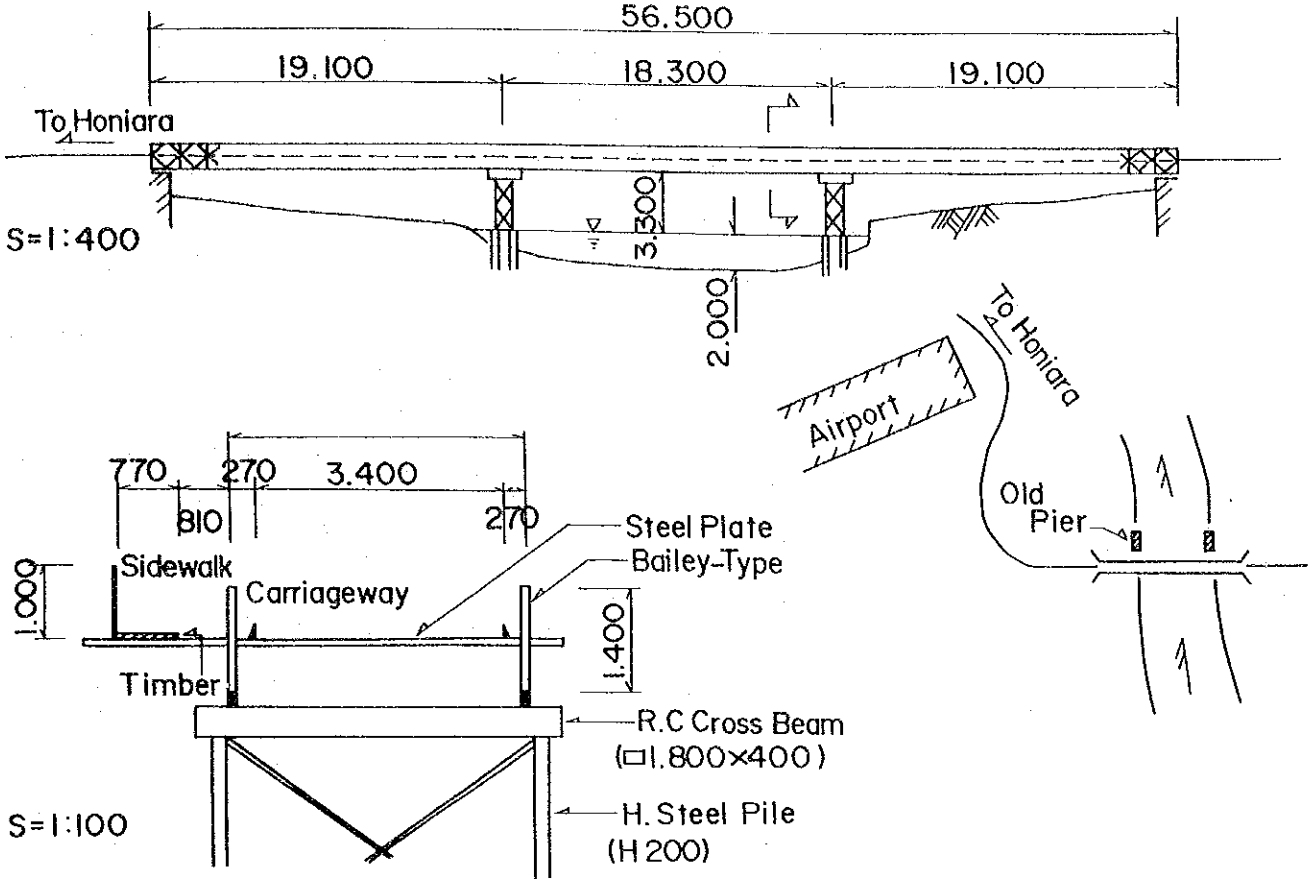
[a] 1989 actual and 1990 actual not available in this format.

[b] Provisional analysis by Central Bank of Solomon Islands.

Source: World Bank, *Toward Higher Growth in Pacific Island Economies: Lessons from the 1980s*, Vol. 2, Country Surveys, Washington D.C., 1991; Central Bank of Solomon Islands, *Annual Report 1990*, Honiara, 1991a.

A-6 General Views of Bridges in the Study Area

ALLIGATOR BRIDGE (NO. 1)



METAPONO BRIDGE(NO. 2)

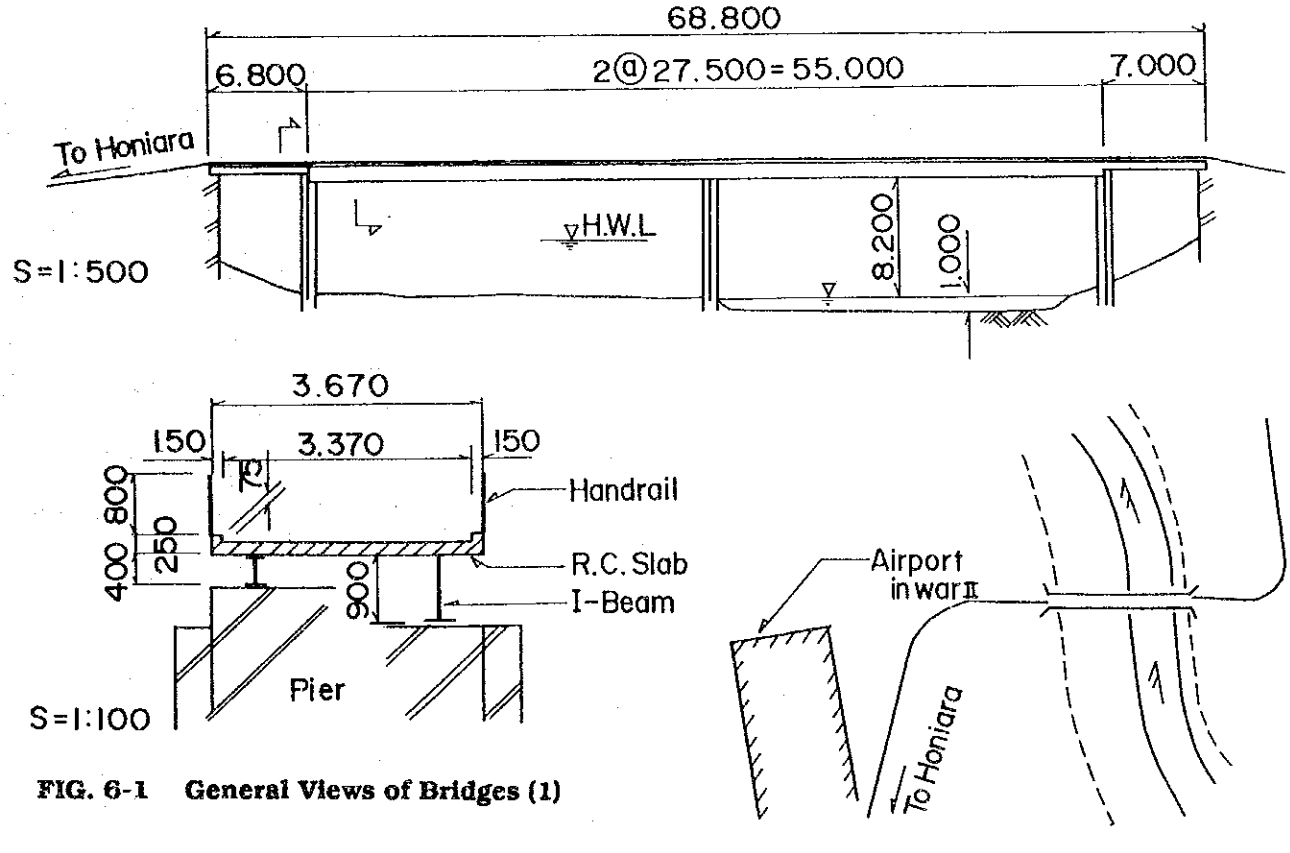
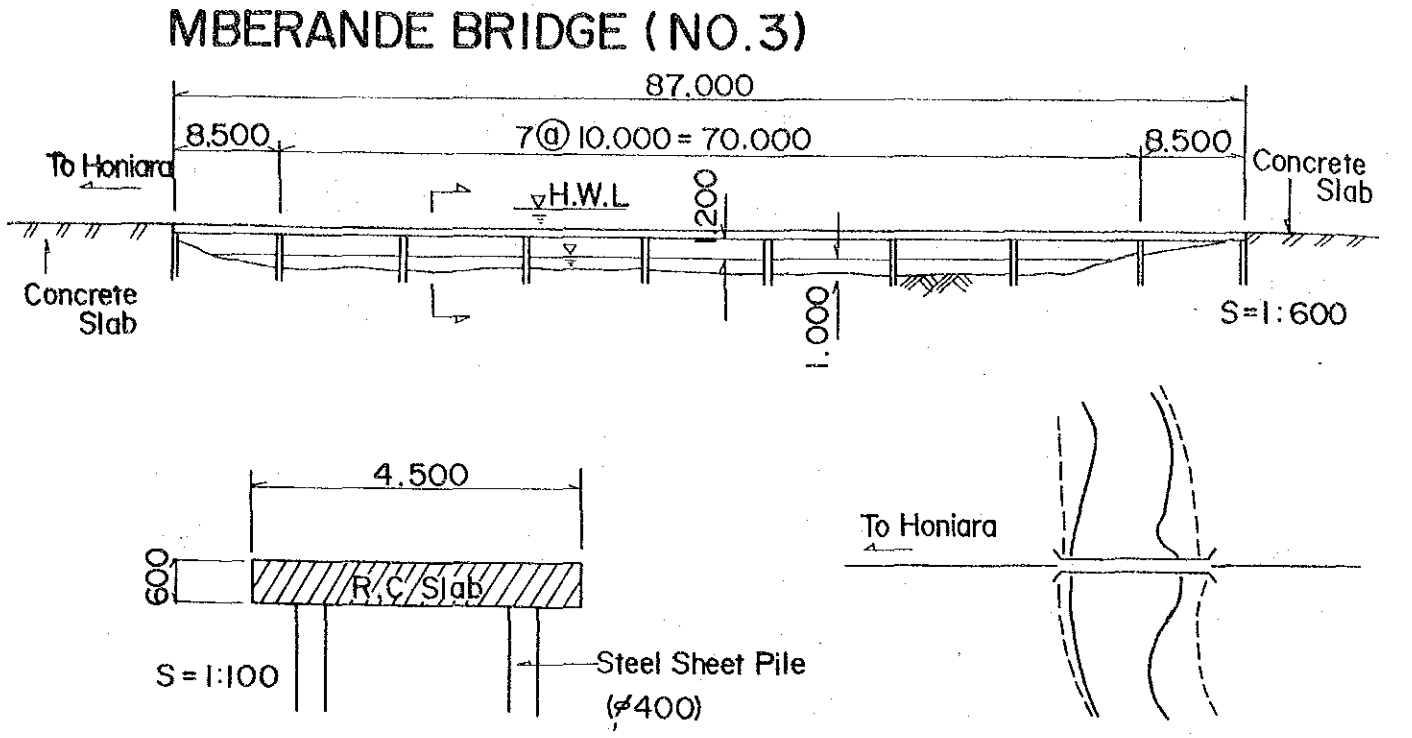


FIG. 6-1 General Views of Bridges (1)



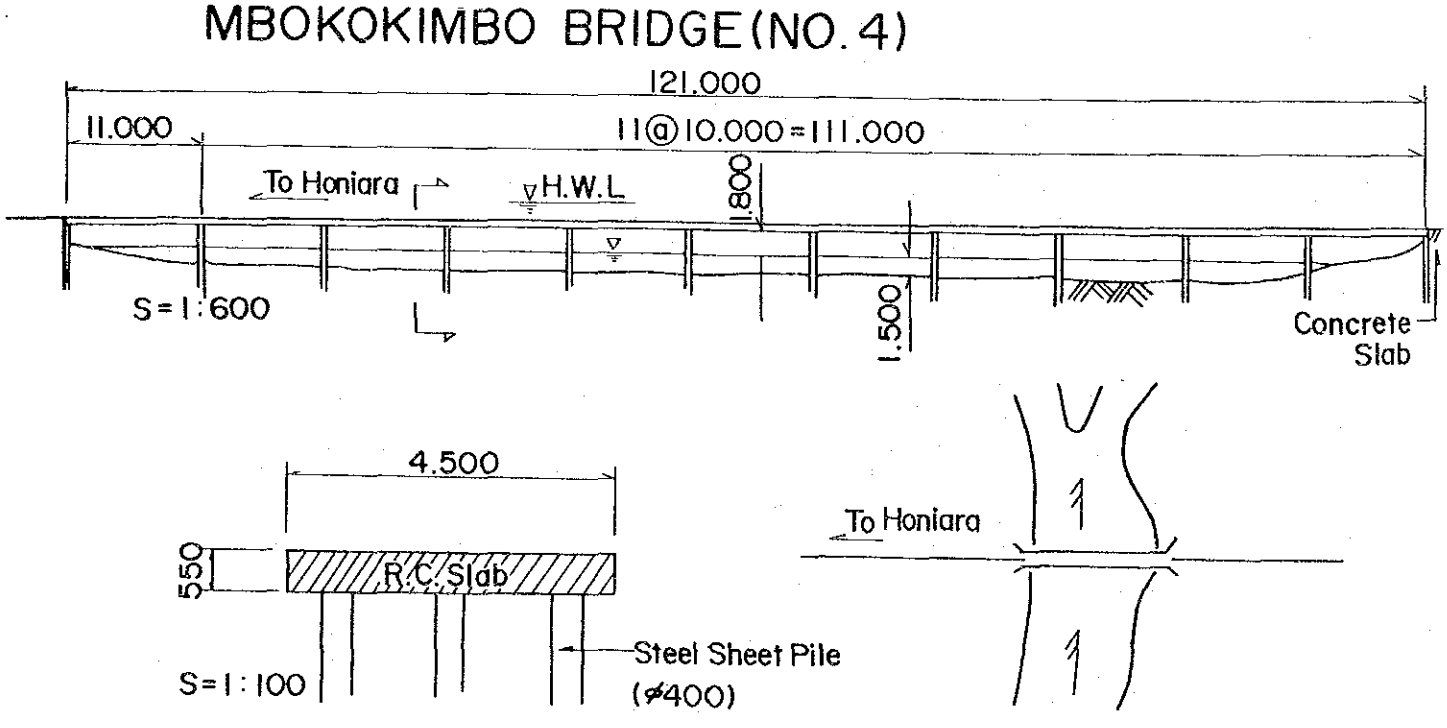


FIG. 6-2 General Views of Bridges (2)

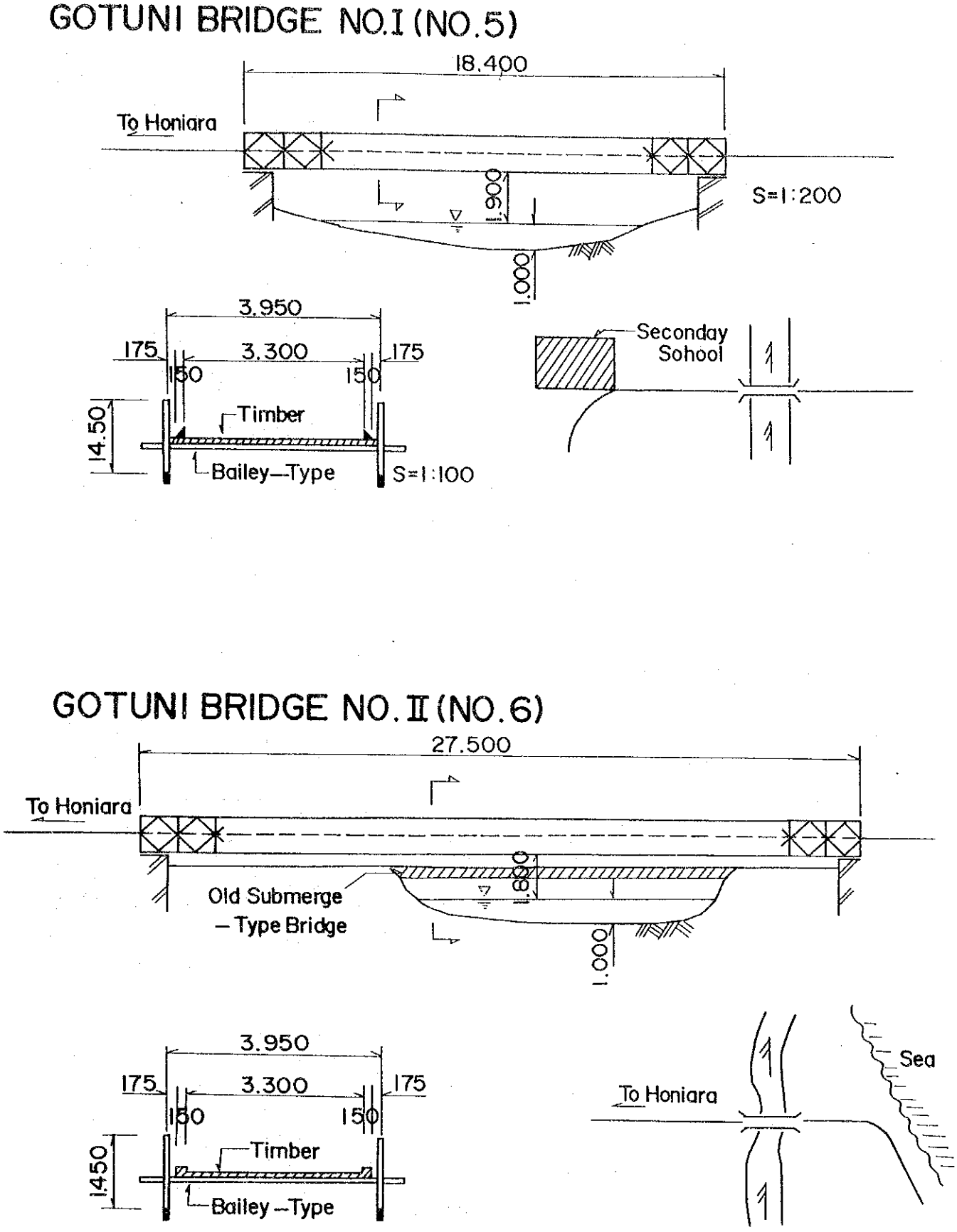
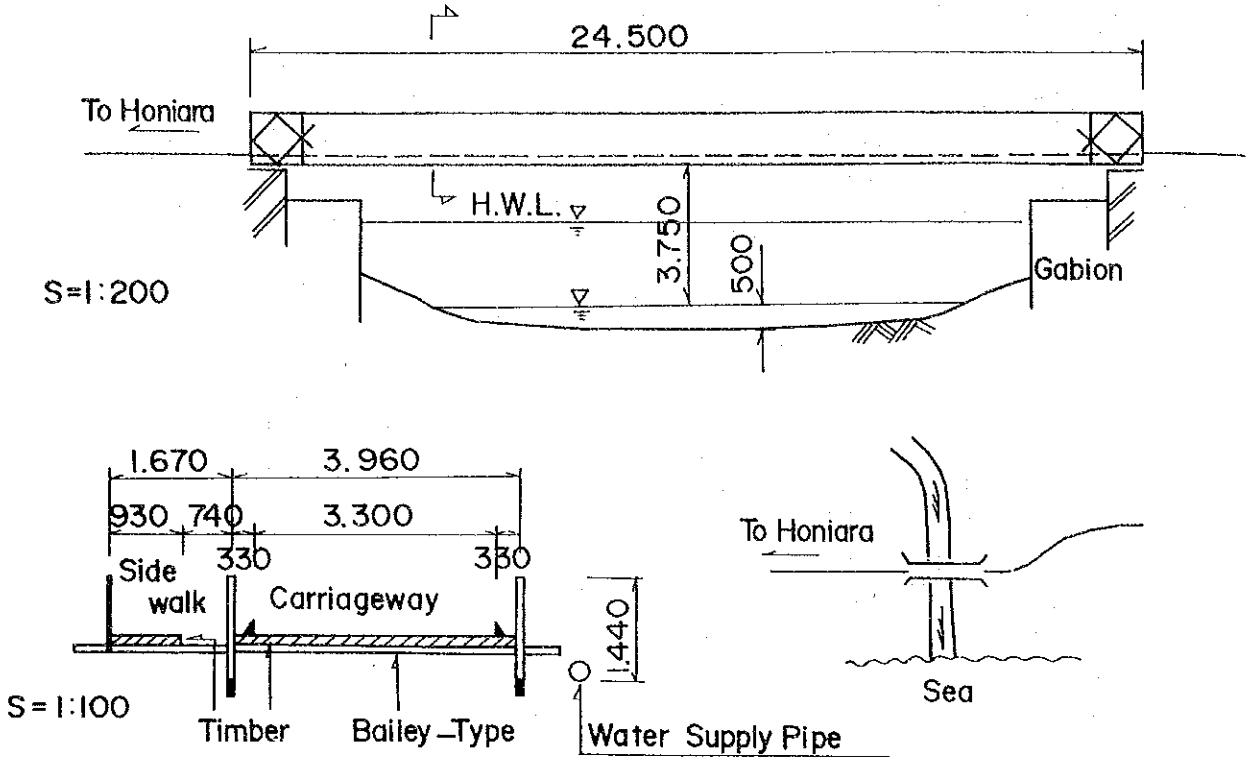


FIG. 6-3 General Views of Bridges (3)

WHITE BRIDGE (NO. 7)



POHA BRIDGE (NO. 8)

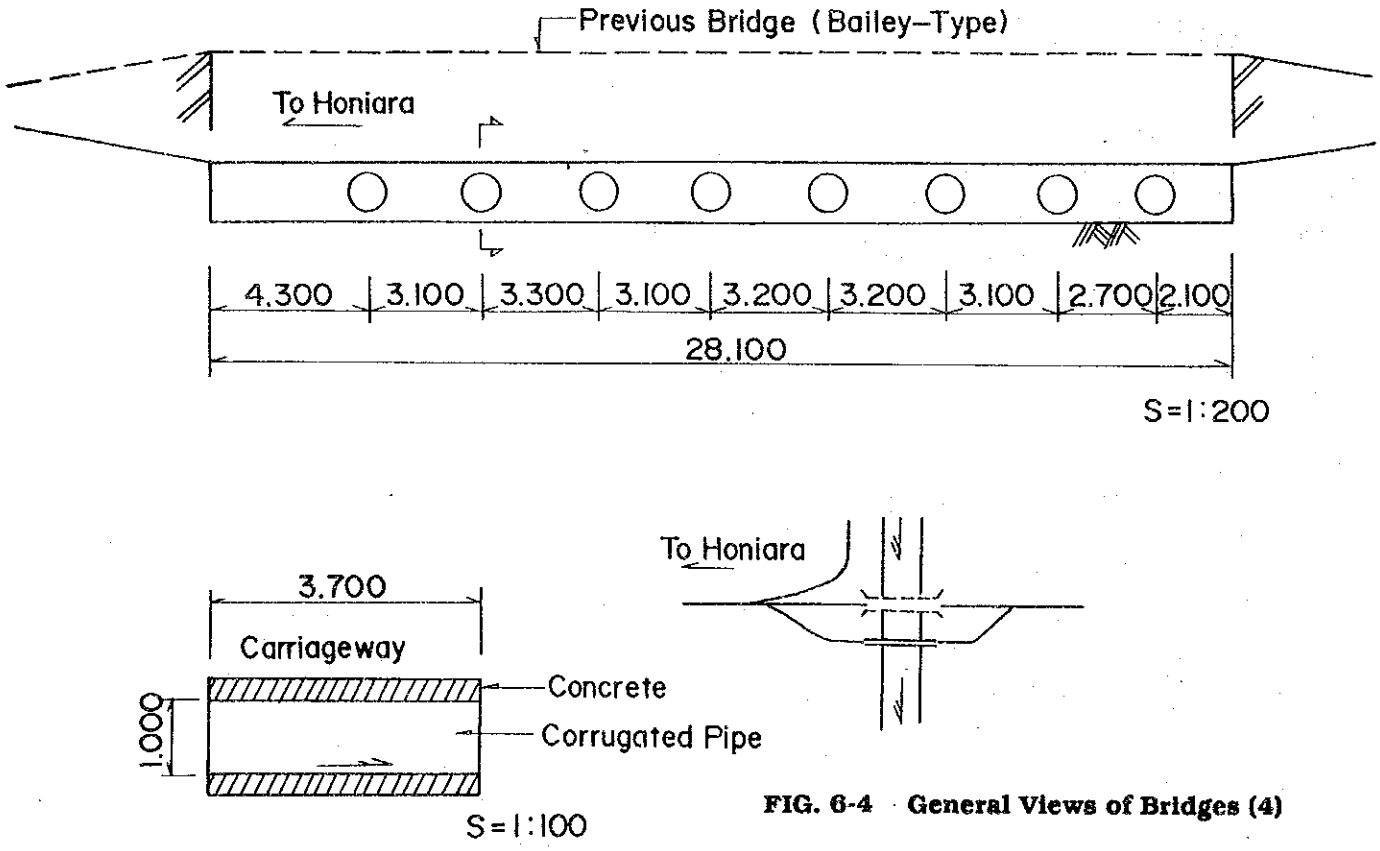
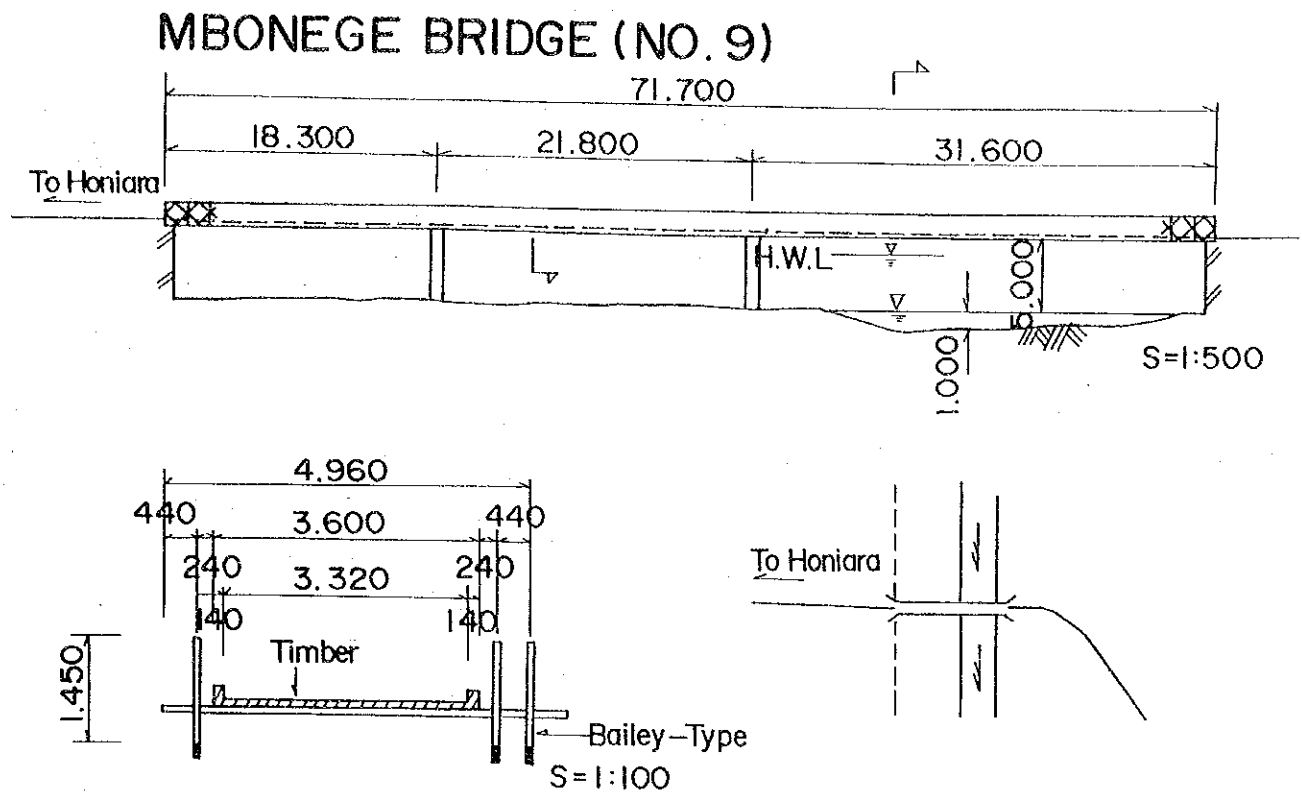


FIG. 6-4 General Views of Bridges (4)



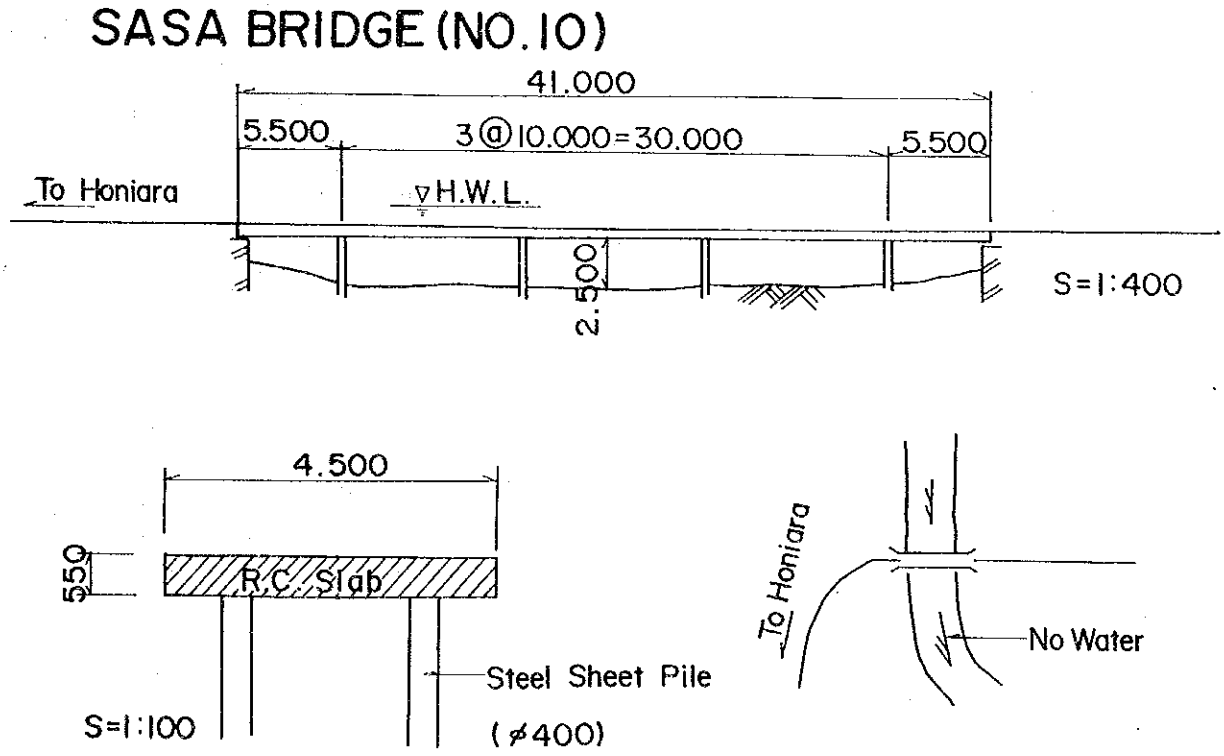


FIG. 6-5 General Views of Bridges (5)

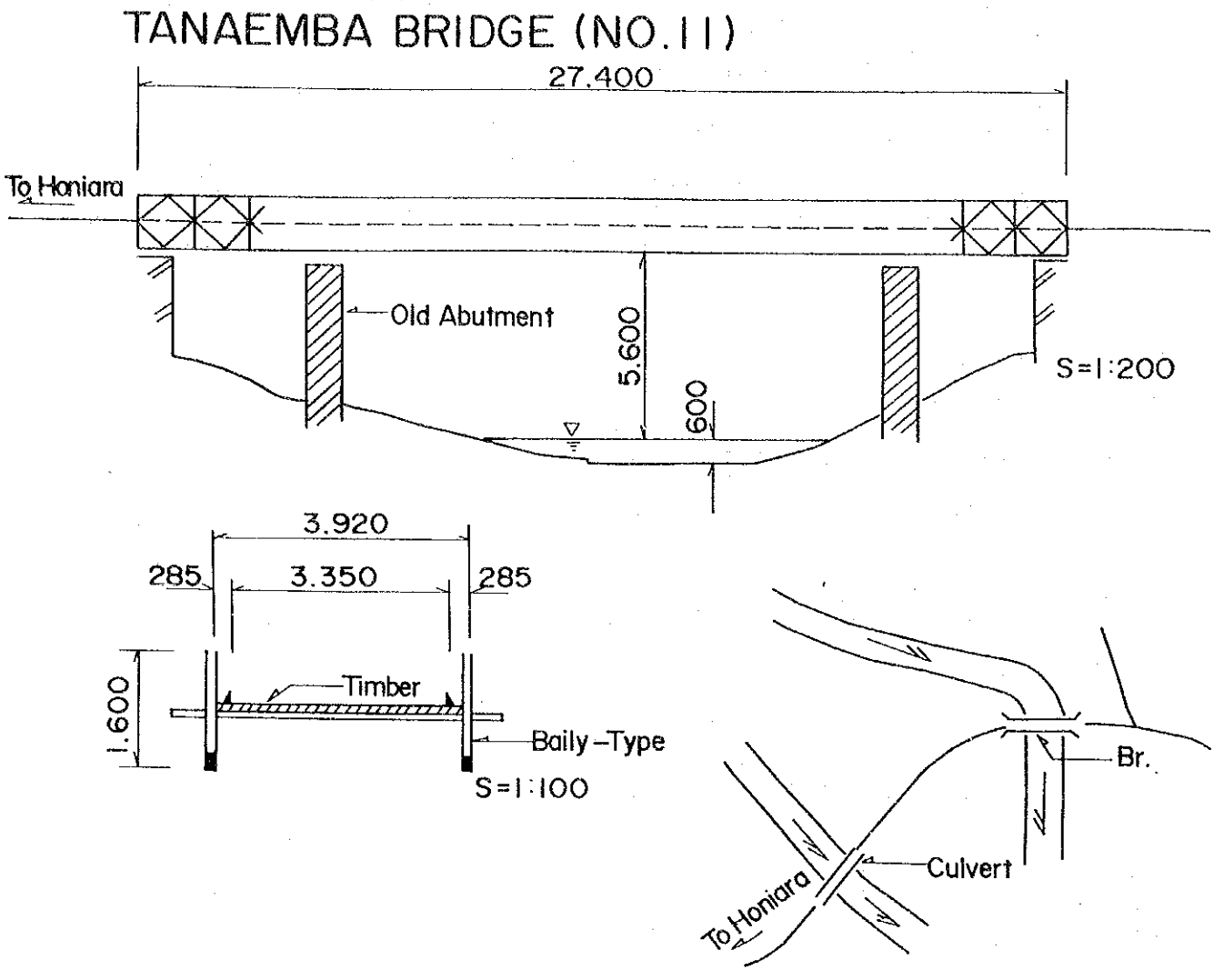


FIG. 6-6 General Views of Bridges (6)

A - 7 Boring Log

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES

GROUND ELEVATION 2.955 m

DATE 14 Th JAN 1993 ~ 18 Th JAN 1993

HOLE NO. ALLIGATOR CREEK BH-1

GROUNDWATER LEVEL GL -3.03 m.

SURVEYED BY S. TAKADA , NICK FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION
1							SANDY CLAY WITH
						LIGHT BROWN	CORAL FRAGMENT
2	-0.96	2.00	2.00		CLAY		
3							WITH SOME CORAL FRAGMENT AND
4	-1.04	4.00	2.00		CLAY	BROWNISH GREY	SOME FINE GRAVEL
5							
6							
7							
8							
9							
10							ALTERNATION
11							OF LAYER OR
12							LAMINA OF SILT
13							AND FINE GRAIN
14							SAND
15							WITH WOOD
16							AND SHELL
17	-14.04	17.00	13.00		SILT	DARK GREY	FRAGMENT
18							FINE TO MEDIUM
19	-16.04	19.00	2.00		SAND	DARK GREY	GRAIN SAND
20							WITH LAMINA OF
21	-18.04	21.00	2.00		CLAY	DARK GREY	SAND AND SILT COHESION: HIGH
22	-19.04	22.00	1.00		SAND	DARK GREY	FINE TO MEDIUM GRAIN SAND
23	-20.04	23.00	1.00		CLAY	DARK GREY	COHESION: HIGH
24							
25							
26							
27							STIFF SANDY
28							SILT
29							
30	-27.04	30.00	7.00		SILT	DARK GREY	

STANDARD PENETRATION TESTS

DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10 cm: 15 cm	30 cm	45 cm
1.15 - 1.60	2 / 30	1	1	1
2.15 - 2.60	0.5 / 30	1/4	1/4	1/4
3.15 - 3.60	3.5 / 30	3	2	1.5
4.15 - 4.60	2 / 30	1	1	1
5.15 - 5.60	7 / 30	2.5	4	3
6.15 - 6.60	4 / 30	1.5	2	2
7.15 - 7.60	8 / 30	2.5	4	4
8.15 - 8.60	12 / 30	6	5	7
9.15 - 9.60	13 / 30	2	5	8
10.15 - 10.60	5.5 / 30	2.5	2.5	3
11.15 - 11.60	17 / 30	3.5	7	10
12.15 - 12.60	8 / 30	1.5	3.5	4.5
13.15 - 13.60	10 / 30	2.5	3	7
14.15 - 14.60	8 / 30	3	3	5
15.15 - 15.60	10 / 30	2.5	4	6
16.15 - 16.60	8 / 30	4	4	4
17.15 - 17.60	22 / 30	6	10	12
18.15 - 18.60	20 / 30	5	10	10
19.15 - 19.60	11.5 / 30	6	5	6.5
20.15 - 20.60	13.5 / 30	2.5	4.5	9
21.15 - 21.60	21 / 30	7	9	12
22.15 - 22.60	75 / 30	3	3	4.5
23.15 - 23.60	10 / 30	3.5	4	6
24.15 - 24.60	11 / 30	4	5	6
25.15 - 25.60	14 / 30	5	6	8
26.15 - 26.60	13 / 30	5	6	7
27.15 - 27.60	12 / 30	4	5	7
28.15 - 28.60	12 / 30	5.5	5	7
29.15 - 29.60	18 / 30	4	8	10
30.15 - 30.60	24 / 30	9	11	13

N VALUE: 0 10 20 30 40 50 60

SOIL SAMPLES

NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLE
S-1	1.15 - 1.60	○
S-2	2.15 - 2.60	○
S-3	3.15 - 3.60	○
S-4	4.15 - 4.60	○
S-5	5.15 - 5.60	○
S-6	6.15 - 6.60	○
S-7	7.15 - 7.60	○
S-8	8.15 - 8.60	○
S-9	9.15 - 9.60	○
S-10	10.15 - 10.60	○
S-11	11.15 - 11.60	○
S-12	12.15 - 12.60	○
S-13	13.15 - 13.60	○
S-14	14.15 - 14.60	○
S-15	15.15 - 15.60	○
S-16	16.15 - 16.60	○
S-17	17.15 - 17.60	○
S-18	18.15 - 18.60	○
S-19	19.15 - 19.60	○
S-20	20.15 - 20.60	○
S-21	21.15 - 21.60	○
S-22	22.15 - 22.60	○
S-23	23.15 - 23.60	○
S-24	24.15 - 24.60	○
S-25	25.15 - 25.60	○
S-26	26.15 - 26.60	○
S-27	27.15 - 27.60	○
S-28	28.15 - 28.60	○
S-29	29.15 - 29.60	○
S-30	30.15 - 30.60	○

REMARKS :

SYMBOLS OF SAMPLER

- ● THINWALL SAMPLER
- ○ SPLIT-SPOON SAMPLER
- ◉ DENISON-TYPE SAMPLER
- ⊕ FOIL SAMPLER
- × OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES

GROUND ELEVATION 2.955 m.

DATE 14 Th JAN.1993 ~ 18 Th JAN 1993

HOLE NO. ALLIGATOR CREEK BH-1

GROUNDWATER LEVEL GL - 3.03 m.

SURVEYED BY S. TAKADA , NICK FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	STANDARD PENETRATION TESTS: DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10 cm: 15 cm	30 cm	45 cm	N VALUE	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLE
31								30.15							30.15	
								30.60	24/30	9	11	13		S-30	30.60	○
								31.15							31.15	
								31.60	36/30	10	18	18		S-31	31.60	○
32								32.15							32.15	
								32.60	32/30	10	14	18		S-32	32.60	○
33								33.15							33.15	
								33.60	52/30	13	27	25		S-33	33.60	○
34								34.15							34.15	
								34.60	54/30	13	27	27		S-34	34.60	○
35								35.15							35.15	
								35.60	37/30	8	15	22		S-35	35.60	○
36								36.15							36.15	
							FINE TO MEDIUM	36.60	34/30	13	15	19		S-36	36.60	○
37							GRAIN SAND	37.15							37.15	
						DARK		37.60	31/30	9	13	18		S-37	37.60	○
38	35.04	38.00	8.00		SAND	GREY		38.15							38.15	
								38.60	13.5/30	5.5	3.5	10		S-38	38.60	○
39								39.15							39.15	
								39.60	17.5/30	4	6.5	11		S-39	39.60	○
40								40.15							40.15	
								40.60	16/30	3.5	7	9		S-40	40.60	○
41							CLAYEY SICT	41.15							41.15	
						DARK	COHESION MEDIUM	41.60	25/30	12	12	13		S-41	41.60	○
42	39.04	42.00	4.00		SILT	GREY		42.15							42.15	
								42.60	61/30	6	18	43		S-42	42.60	○
43								43.15							43.15	
						DARK	COMPACTED SILTY	43.60	44/30	6	17	27		S-43	43.60	○
44	41.04	44.00	2.00		SAND	GREY	FINE SAND	44.15							44.15	
								44.60	66/30	13	33	33		S-44	44.60	○
45								45.15							45.15	
								45.60	34/30	6	11	23		S-45	45.60	○
46								46.15							46.15	
								46.60	110/30	19	50	60		S-46	46.60	○
47								47.15							47.15	
								47.60	59/30	7	19	40		S-47	47.60	○
48								48.15							48.15	
							SILTY FINE	48.60	55/30	14	15	40		S-48	48.60	○
49							GRAIN SAND	49.15							49.15	
							OF SOLID	49.60	100/30	14	38	62		S-49	49.60	○
50						DARK	STATUS	50.15							50.15	
	47.64	50.60	6.60		SAND	GREY		50.60	120/30	27	60	60		S-50	50.60	○
51																
52																
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REMARKS :

SYMBOLS OF SAMPLER

- ● THINWALL SAMPLER
- ○ SPLIT-SPOON SAMPLER
- ● DENISON-TYPE SAMPLE
- ⊕ FOIL SAMPLER
- × OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES — GROUND ELEVATION 1.823 m — DATE 19TH JAN 1993 ~ 22TH JAN 1993

HOLE NO. ALLIGATOR CREEK BH - 2 — GROUNDWATER LEVEL GL - 1.40 m. — SURVEYED BY S. TAKADA, NICK. FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	DEPTH	NO OF BLOWS / LENGTH OF PENETRATION	NO OF BLOWS AT EACH 10 cm: 15 cm	30 cm	45 cm	N VALUE (0 10 20 30 40 50 60)	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	TYPE OF SAMPLER
1							WITH MANY CORAL FRAGMENT	-1.15	17 / 30						1.15	
2	-0.18	2.00	2.00		SAND	LIGHT BROWN		-1.60		2.5	9	8		S-1	1.60	○
								-2.15	10 / 30						2.15	
3	-1.18	3.00	1.00		CLAY	BROWN	ORGANIC CLAY WITH CORAL FRAGMENT	-2.60		5	5	5		S-2	2.60	○
								-3.15	17 / 30						3.15	
4	-2.18	4.00	1.00		CORAL SAND	GREENSH BROWN	CORAL FRAGMENT	-3.60		13	8	9		S-3	3.60	○
								-4.15	1 / 30						4.15	
5								-4.60		0.5	0.5	0.5		S-4	4.60	○
								-5.15	8 / 30						5.15	
6								-5.60		1	2	6		S-5	5.60	○
								-6.15	3 / 30						6.15	
7								-6.60		2	1.5	1.5		S-6	6.60	○
								-7.15	9.5 / 30						7.15	
8								-7.60		2	4	5.5		S-7	7.60	○
								-8.15	11 / 30						8.15	
9								-8.60		3.5	5	6		S-8	8.60	○
								-9.15	13.5 / 30						9.15	
10								-9.60		4.5	6	7.5		S-9	9.60	○
								-10.15	17 / 30						10.15	
11								-10.60		5	8	9		S-10	10.60	○
								-11.15	17.5 / 30						11.15	
12								-11.60		5.5	8.5	11		S-11	11.60	○
							ALTERNATION OF LAYER OR LAMINA OF SILT AND FINE GRAIN SAND WITH WOOD AND SHELL FRAGMENT	-12.15	17 / 30						12.15	
13								-12.60		5.5	7.5	9.5		S-12	12.60	○
								-13.15	11 / 30						13.15	
14								-13.60		3	5	6		S-13	13.60	○
								-14.15	17 / 30						14.15	
15								-14.60		4.5	6	11		S-14	14.60	○
								-15.15	17 / 30						15.15	
16								-15.60		5	7	10		S-15	15.60	○
								-16.15	21 / 30						16.15	
17								-16.40		6	10	11		S-16	16.60	○
								-17.15	12 / 30						17.15	
18	-16.18	18.00	14.00		SILT	DARK GREY		-17.60		4	5	7		S-17	17.60	○
								-18.15	21 / 30						18.15	
19								-18.60		1	8	13		S-18	18.60	○
								-19.15	26 / 30						19.15	
20							ORGANIC CLAY WITH LAMINA OF SILT AND SAND	-19.60		7	12	14		S-19	19.60	○
								-20.15	18 / 30						20.15	
21								-20.60		3.5	6.5	9.5		S-20	20.60	○
								-21.15	13 / 30						21.15	
22	-20.18	22.00	4.00		CLAY	DARK GREY		-21.60		6	6	7		S-21	21.60	○
								-22.15	31 / 30						22.15	
23	-21.18	23.00	1.00		SAND	DARK GREY	FINE TO MEDIUM GRAIN SAND	-22.60		7.5	14	17		S-22	22.60	○
								-23.15	11 / 30						23.15	
24								-23.60		3	6	6		S-23	23.60	○
								-24.15	17 / 30						24.15	
25								-24.60		4	7	10		S-24	24.60	○
								-25.15	17 / 30						25.15	
26								-25.60		6	7	10		S-25	25.60	○
								-26.15	24 / 30						26.15	
27								-26.60		7	10	14		S-26	26.60	○
								-27.15	13.5 / 30						27.15	
28							PREDOMINATELY STIFF TO VERY STIFF SANDY SILT	-27.60		3.5	5.5	8		S-27	27.60	○
								-28.15	13 / 30						28.15	
29								-28.60		5.5	6	7		S-28	28.60	○
								-29.15	18 / 30						29.15	
30	-28.18	30.00	7.00		SILT	DARK GREY		-29.60		6	9	9		S-29	29.60	○
								-30.15	27 / 30						30.15	
31								-30.60		7	11	16		S-30	30.60	○
							FINE TO MEDIUM GRAIN SAND	-31.15	27 / 30						31.15	
32	-30.18	32.00	2.00		SAND	DARK GREY		-31.60		7	12	15		S-31	31.60	○
								-32.15	46 / 30						32.15	
33	-31.18	33.00	1.00		CLAY	DARK GREY	SILTY CLAY	-32.60		12	20	26		S-32	32.60	○
								-33.15	17 / 30						33.15	
34								-33.60		6	10	7		S-33	33.60	○
								-34.15	41 / 30						34.15	
35							FINE TO MEDIUM GRAIN SAND WITH MANY SHELL FRAGMENT	-34.60		12	17	24		S-34	34.60	○
								-35.15	28 / 30						35.15	
36	-34.18	36.00	3.00		SAND	DARK GREY		-35.60		7	13	15		S-35	35.60	○
								-36.15	28 / 30						36.15	
37	-35.18	37.00	1.00		SILT	DARK GREY	CLAYEY SILT COHESION : MEDIUM	-36.60		10	13	15		S-36	36.60	○
								-37.15	43 / 30						37.15	
38								-37.60		13	16	27		S-37	37.60	○
								-38.15	41 / 30						38.15	
39							FINE TO MEDIUM GRAIN SANDO WITH MANY SHELL FRAGMENT	-39.60		13	17	24		S-38	38.60	○
								-39.15	51 / 30						39.15	
40	-38.18	40.00	3.00		SAND	DARK GREY		-39.60		12	26	25		S-39	39.60	○
	-38.78	40.60	0.60		SILT	DARK GREY	CLAYEY SILT	-40.15	18 / 30						40.15	
								-40.60		5	8	10		S-40	40.60	○

REMARKS :

SYMBOLS OF SAMPLER

- ● THINWALL SAMPLER
- ○ SPLIT - SPOON SAMPLER
- ⊕ DENISON - TYPE SAMPLER
- ⊕ FOIL SAMPLER
- × OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES

GROUND ELEVATION 21.146 m (17.23)

DATE 8TH JAN, 1993 ~ 13TH JAN, 1993

HOLE NO. NETAPONO RIVER BH-1

GROUNDWATER LEVEL GL-0.62 m.

SURVEYED BY S. TAKADA NICK FERNANDO

SCALE	SOIL: ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	STANDARD PENETRATION TESTS: DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10cm: 15 cm	30 cm	45 cm	N VALUE (0 10 20 30 40 50 60)	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLER
1							SOME ORGANIC MATTER IN UPPER LAYER Wn : MEDIUM COHESION : LOW TO MEDIUM	1.15	12/30							
								1.60		4	4	6		S-1	1.60	○
2								2.15	10/30						2.15	
								2.60		3	4	6		S-2	2.60	○
3	18.15	3.00	3.00		CLAY	BROWN		3.15	9/30						3.15	
							ORGANIC CLAY COHESION: MEDIUM	3.60		4	4	5		S-3	3.60	○
4	17.15	4.00	1.00		CLAY	LIGHT BROWN		4.15	3.5/30						4.15	
								4.60		1.5	1.5	2		S-4	4.60	○
5							SOFT SILTY	5.15	10/30						5.15	
							CLAY	5.60		3	4	6		S-5	5.60	○
6	15.15	6.00	2.00		CLAY	GREENISH GREY		6.15	9/30						6.15	
							SOFT TO MEDIUM ORGANIC SILTY CLAY COHESION : MEDIUM	6.60		4	4	5		S-6	6.60	○
7								7.15	45/30						7.15	
								7.60		1	1.5	3		S-7	7.60	○
8								8.15	6.5/30						8.15	
								8.60		2	3	3.5		S-8	8.60	○
9	12.15	9.00	3.00		CLAY	LIGHT GREEN		9.15	6/30						9.15	
							SILTY CLAY WITH SOME ORGANIC MATTER COHESION : MEDIUM	9.60		1.5	3	3		S-9	9.60	○
10								10.15	5/30						10.15	
								10.60		1	2	3		S-10	10.60	○
11	10.15	11.00	2.00		CLAY	DARK GREY		11.15	25/30						11.15	
								11.60		10	12	13		S-11	11.60	○
12	9.15	12.00	1.00		SAND	DARK GREY	MEDIUM GRAIN SAND	12.15	38/30						12.15	
								12.60		18	19	19		S-12	12.60	○
13								13.15	44/30						13.15	
								13.60		17	21	23		S-13	13.60	○
14							COARSE GRAIN SAND AND FINE GRAIN GRAVEL ϕ = 2~4mm	14.15	27/30						14.15	
								14.60		12	11	16		S-14	14.60	○
15								15.15	14/30						15.15	
								15.60		10	6	8		S-15	15.60	○
16	5.15	16.00	4.00		SAND	DARK GREY		16.15	11/30						16.15	
								16.60		4	5	6		S-16	16.60	○
17							ORGANIC SILTY CLAY COHESION : HIGH	17.15	14/30						17.15	
								17.60		5	7	7		S-17	17.60	○
18	3.15	18.00	2.00		CLAY	GREY		18.15	7.5/30						18.15	
							ORGANIC CLAY COHESION : HIGH	18.60		3	4	3.5		S-18	18.60	○
19	2.15	19.00	1.00		CLAY	GREY		19.15	6/30						19.15	
								19.60		3	4	4		S-19	19.60	○
20							SILTY CLAY WITH SOME ORGANIC CLAY AND SHELL FRAGMENT	20.15	6/30						20.15	
								20.60		2.5	3	3		S-20	20.60	○
21								21.15	8.5/30						21.15	
								21.60		3	3.5	5		S-21	21.60	○
22	-0.85	22.00	3.00		CLAY	DARK GREY		22.15	2/30						22.15	
							CLAYEY SILT WITH SOME FINE GRANVEL	22.60		1	1	1		S-22	22.60	○
23	-1.85	23.00	1.00		SILT	GREY		23.15	23/30						23.15	
								23.60		10	14	9		S-23	23.60	○
24								24.15	33/30						24.15	
								24.60		8	14	19		S-24	24.60	○
25								25.15	66/30						25.15	
								25.60		15	21	45		S-25	25.60	○
26								26.15	116/30						26.15	
								26.60		16	26	90		S-26	26.60	○
27																
28								28.15	82/30						28.15	
							SANDY SILT OF SOLID STATUS	28.60		9	20	62		S-27	28.60	○
29																
30						LIGHT BROWN		30.15	65/30						30.15	
	-9.45	30.60	7.60		SILT			30.60		4	9	56		S-28	30.60	○

REMARKS :

SYMBOLS OF SAMPLER

- ● THINWALL SAMPLER
- ○ SPLIT-SPOON SAMPLER
- ◉ DENISON-TYPE SAMPLER
- ⊕ FOIL SAMPLER
- × OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES

GROUND ELEVATION 19.373 m (18.76)

DATE 4 Th SAN. 1993 ~ 7 Th JAN. 1993

HOLE NO. METAPONO RIVER BH-2

GROUNDWATER LEVEL GL-3.92 m.

SURVEYED BY S. TAKADA ... NICK. FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10cm: 15 cm	30 cm	45 cm	N VALUE (0 10 20 30 40 50 60)	NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLE
1							WITH ORGANIC CLAY- COHESION: LOW TO MEDIUM	1.15	5 /						1.15	
2	17.37	2.00	2.00		CLAY	DARK BROWN		1.60	30	2	2	3		S-1	1.60	○
								2.15	3 /						2.15	
3								2.60	30	1	1	2		S-2	2.60	○
							SILTY FINE GRAIN SAND	3.15	15 /						3.15	
4	13.37	4.00	2.00		SAND	BROWN		3.60	30	0.5	0.5	1		S-3	3.60	○
								4.15	25 /						4.15	
5								4.60	30	10	10	15		S-4	4.60	○
							COARSE GRAIN SAND AND FINE TO MEDIUM GRAIN GRAVEL	5.15	19 /						5.15	
6								5.60	30	11	9	10		S-5	5.60	○
								6.15	38 /						6.15	
7								6.60	30	16	18	20		S-6	6.60	○
					SAND AND GRAVEL			7.15	37 /						7.15	
8	9.57	7.80	3.80			GREY		7.60	30	16	19	18		S-7	7.60	○
								8.15	3 /						8.15	
9							WITH ORGANIC CLAY	8.60	30	1	1	2		S-8	8.60	○
								9.15	7.5 /						9.15	
10	7.37	10.00	2.20		CLAY	GREYISH BROWN	COHESION: HIGH	9.60	30	2	3	4.5		S-9	9.60	○
								10.15	41 /						10.15	
11								10.60	30	14	20	21		S-10	10.60	○
								11.15	60 /						11.15	
12								11.60	30	19	22	38		S-11	11.60	○
								12.15	44 /						12.15	
13							COARSE GRAIN SAND WITH FINE GRAIN GRAVEL	12.60	30	15	18	26		S-12	12.60	○
								13.15	36 /						13.15	
14	3.37	14.00	4.00		SAND	GREY		13.45	30	14	16	20		S-13	13.60	○
								14.15	21 /						14.15	
15	2.37	15.00	1.00		SAND	GREY	FINE GRAIN SAND	14.60	30	12	10	11		S-14	14.60	○
							WITH ORGANIC CLAY	15.15	18 /						15.15	
16	1.37	16.60	1.00		CLAY	GREY	COHESION: HIGH	15.60	30	3.5	6	12		S-15	15.60	○
								16.15	14.5 /						16.15	
17								16.60	30	9.5	8.5	6		S-16	16.60	○
								17.15	13 /						17.15	
18	-0.63	18.00	2.00		SILT	GREY	CLAYEY SILT	17.60	30	5	6	8		S-17	17.60	○
								18.15	7.5 /						18.15	
19								18.60	30	2.5	3.5	4		S-18	18.60	○
							WITH ORGANIC CLAY	19.15	4.5 /						19.15	
20								19.60	30	1	2	2.5		S-19	19.60	○
							COHESION: HIGH	20.15	6 /						20.15	
21	-3.63	21.00	3.00		CLAY	GREY		20.60	30	2.5	3	3		S-20	20.60	○
								21.15	11 /						21.15	
22	-4.63	22.00	1.00		SAND	GREY	FINE GRAIN SAND	21.60	30	1.5	2	9		S-21	21.60	○
								22.15	7 /						22.15	
23						GREY TO GREENISH BROWN		22.60	30	1.5	2	5		S-22	22.60	○
							WITH ORGANIC CLAY	23.15	15 /						23.15	
24	-6.63	24.00	2.00		CLAY			23.60	30	3	7	8		S-23	23.60	○
								24.15	20 /						24.15	
25	-7.63	25.00	1.00		CLAY	GREY	SILTY CLAY	24.60	30	5	7	13		S-24	24.60	○
								25.15	65 /						25.15	
26								25.60	30	20	26	39		S-25	25.60	○
								26.15	55 /						26.15	
27								26.60	30	6	15	40		S-26	26.60	○
								27.15	61 /						27.15	
28								27.60	30	12	30	31		S-27	27.60	○
								28.15	60 /						28.15	
29								28.60	15	19	60	—		S-28	28.60	○
								29.15	132 /						29.15	
30							SANDY SILT OF SOLID STATUS	29.60	30	11	32	100		S-29	29.60	○
31						LIGHT BROWN		31.15	115 /						31.15	
	-14.23	31.60	6.60		SILT			31.60	30	12	25	90		S-30	31.60	○
32																

REMARKS:

A - 7 - 6

SYMBOLS OF SAMPLER

DENISON-TYPE SAMPLER

THINWALL SAMPLER

FOIL SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES — GROUND ELEVATION 2.651 m — DATE 30 Th NOV. 1992 ~ 4 Th DEC. 1992

HOLE NO. WHITE RIVER BH-1 — GROUNDWATER LEVEL GL. - 2.32 m. — SURVEYED BY S. TAKADA NICK FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	STANDARD PENETRATION TESTS: DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10cm: 15 cm	30 cm	45 cm	N VALUE (0 10 20 30 40 50 60)	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	TYPE OF SAMPLER
1							COARSE SAND WITH CORAL FRAGMENT AND ROUNDED GRAVEL ø = 1.0 cm	-1.15	4 / 30	1	2	2		S - 1	1.15	O
								1.60							1.60	
2								-2.15	1 / 30	2	0.5	0.6			2.15	
								2.60						S - 2	2.60	O
3								-3.15	6 / 30	4	3	3			3.15	
						BROWNISH GREY		3.60						S - 3	3.60	O
4								-4.15	11.5 / 30	3	2.5	9			4.15	
								4.60						S - 4	4.60	O
5							DEPTH ON UNDER WITH CORAL GRAVEL ø = 0.5 ~ 1.0 cm AND SLIGHTLY SILT	-5.15	21 / 30	17	16	5			5.15	
								5.60						S - 5	5.60	O
6								-6.15	11.5 / 30	5	5	6.5			6.15	
						WHITISH GREY		6.60						S - 6	6.60	O
7								-7.15	6 / 30	7	4	2			7.15	
								7.60						S - 7	7.60	O
8	-5.35	8.00	8.00		SAND			-8.15	10 / 30	8	5	5			8.15	
								8.60						S - 8	8.60	O
9								-9.15	6.5 / 30	5	3	3.5			9.15	
							SILTY COARSE SAND WITH CORAL PEBBLE GRAVEL ø = 0.5 ~ 2.0 cm	9.60						S - 9	9.60	O
10								-10.15	12 / 30	15	3.5	6.5			10.15	
								10.60						S-10	10.60	O
11								-11.15	8.5 / 30	3.5	4.5	4			11.15	
						WHITISH GREY		11.60						S-11	11.60	O
12								-12.15	8 / 30	4	3	3			12.15	
								12.60						S-12	12.60	O
13	-10.35	13.00	5.00		SAND			-13.15	11 / 30	7	4	7			13.15	
						WHITISH GREY	SILTY MEDIUM TO COARSE GRAIN SAND WITH CORA GRAVEL	13.60						S-13	13.60	O
14	-11.35	14.00	1.00		SAND			-14.15	9 / 30	5	4	5			14.15	
							SILTY COARSE SAND WITH CORAL GRAVEL ø = 1 ~ 8 cm	14.60						S-14	14.60	O
15						WHITISH GREY		-15.15	40 / 30	7	30	10			15.15	
								15.60						S-15	15.60	O
16	-13.35	16.00	2.00		SAND			-16.15	13 / 30	2	5	8			16.15	
								16.60						S-16	16.60	O
17							MEDIUM TO COARSE GRAIN SAND WITH CORAL GRAVEL ø = 0.5 ~ 3.0 cm	-17.15	21 / 30	9	9	12			17.15	
								17.60						S-17	17.60	O
18						WHITISH GREY		-18.15	17 / 30	3	9	8			18.15	
								18.60						S-18	18.60	O
19	-16.35	19.00	3.00		SAND			-19.15	7 / 30	4	3.5	3.5			19.15	
								19.60						S-19	19.60	O
20							SILTY COARSE GRAIN SAND WITH CORAL GRAVEL ø = 1 ~ 5 cm	20.15	14 / 30	6	7	7			20.15	
								20.60						S-20	20.60	O
21								21.15	16 / 30	13	7	9			21.15	
								21.60						S-21	21.60	O
22						WHITISH GREY		22.15	17 / 30	8	8	9			22.15	
								22.60						S-22	22.60	O
23	-20.35	23.00	4.00		SAND			23.15	28 / 30	8	13	15			23.15	
							SILTY FINE GRAIN SAND WITH CORAL GRAVEL ø = 5 cm	23.60						S-23	23.60	O
24						WHITISH GREY		24.15	16 / 30	8	4	12			24.15	
								24.60						S-24	24.60	O
25	-22.35	25.00	2.00		SAND			25.15	40 / 30	15	16	24			25.15	
								25.60						S-25	25.60	O
26							CORAL GRAVEL ø = 2 ~ 4 cm WITH COARSE GRAIN SAND	26.15	50 / 15	3	50				26.15	
								26.60						S-26	26.60	O
27						WHITISH GREY		27.15	32 / 30	20	17	15			27.15	
								27.60						S-27	27.60	O
28	-25.35	28.00	3.00		GRAVEL			28.15	60 / 30	17	18	42			28.15	
								28.60						S-28	28.60	
29						WHITISH GREY	CORAL GRAVEL ø = 1 ~ 4 cm									
30																
31																
32																
33							CORAL GRAVEL AND CORAL LIME STONE WITH COMPACT SILTY SAND (SOLID STATUS) CORE LENGTH 5 ~ 10 cm									
34																
35																
36																
37																
38						WHITISH GREY TO WHITE										
39					CORAL AND GRAVEL											
40	-37.35	40.00	12.00													

REMARKS :

SYMBOLS OF SAMPLER: ● THINWALL SAMPLER — ○ SPLIT-SPOON SAMPLER — ◉ DENISON-TYPE SAMPLER — ⊕ FOIL SAMPLER — × OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES — GROUND ELEVATION 3.192 m — DATE 4 Th DEC, 1992 ~ 8 Th DEC, 1992

HOLE NO. WHITE RIVER BH-2 — GROUNDWATER LEVEL 0L - 3.10 m — SURVEYED BY S. TAKADA, NICK, FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 30cm 15 cm	30 cm	45 cm	N VALUE 0 10 20 30 40 50 60	SOIL SAMPLES NO OF SAMPLE	DEPTH m	NUMBER OF SAMPLER
1								1.10	10 / 30						1.10	
2						WHITISH BROWN	SILTY FINE TO COARSE GRAIN SAND WITH CORAL GRAVEL ø =0.5 ~ 3.0cm	1.60		4	5	5		S-1	1.60	O
3	0.19	3.00	3.00		SAND			2.15	14 / 30	10	8	6		S-2	2.15 2.60	O
4								3.15	15 / 30	2.6	4	11		S-3	3.15 3.60	O
5								4.15	4 / 30	3.5	2	2		S-4	4.15 4.60	O
6								5.15	7.5 / 30	2.5	2.5	5		S-5	5.15 5.60	O
7								6.15	7.5 / 30	3	3	4.5		S-6	6.15 6.60	O
8							SILTY CORAL SAND AND GRAVEL ø =1 ~ 4cm	7.15	5 / 30	2	2	3		S-7	7.15 7.60	O
9								8.15	14.5 / 30	1.5	7	7.5		S-8	8.15 8.60	O
10								9.15	10 / 30	3	5	5		S-9	9.15 9.60	O
11						WHITISH GREY		10.15	11 / 30	6	5	6		S-10	10.15 10.60	O
12	-8.31	12.00	9.00		SAND AND GRAVEL			11.15	7.5 / 30	10	6	2.5		S-11	11.15 11.60	O
13								13.15	14 / 30	8	7	7		S-12	13.15 13.60	O
14							SILTY FINE TO COARSE GRAIN SAND WITH MANY SHELL FRAGMENT AND CORAL GRAVEL ø =0.5 ~ 3.0cm	14.15	18 / 30	5	6	9		S-13	14.15 14.60	O
15						WHITISH GREY		15.15	13 / 30	6	6	7		S-14	15.15 15.60	O
16	-12.81	15.00	4.00		SAND			16.15	07 / 30	6	7	60		S-15	16.15 16.60	O
17							CORAL GRAVEL ø =1 ~ 5cm	17.15	69 / 30	24	45			S-16	17.15 17.60	O
18	-14.81	18.00	2.00		GRAVEL	WHITE		18.15	19 / 30	13	10	9		S-17	18.15 18.60	O
19								19.15	15 / 30	7	6	9		S-18	19.15 19.60	O
20								20.15	12 / 30	6	6	6		S-19	20.15 20.60	O
21							FINE TO MEDIUM GRAIN SAND WITH CORAL GRAVEL ø =1 ~ 5cm AND SHELL FRAGMENT	21.15	28 / 30	14	16	10		S-20	21.15 21.60	O
22						WHITISH GREY		22.15	36 / 30	12	14	21		S-21	22.15 22.60	O
23	-19.81	23.00	5.00		SAND			23.15	58 / 30	7	8	50		S-22	23.15 23.60	O
24								24.15	24 / 30	14	14	10		S-23	24.15 24.60	O
25								25.15	45 / 30	6	10	35		S-24	25.15 25.60	O
26								26.15	33 / 30	11	16	17		S-25	26.15 26.60	O
27							SILTY FINE TO MEDIUM GRAIN SAND WITH SHELL FRAGMENT AND CORAL GRAVEL ø = 0.5 ~ 3cm SOLID STATUS	27.15	34 / 30	12	12	22		S-26	27.15 27.60	O
28								28.15	30.5 / 30	9.5	17.5	13		S-27	28.15 28.60	O
29						WHITISH GREY		29.15	28 / 30	14	13	13		S-28	29.15 29.60	O
30	-26.81	30.00	7.00		SAND			30.15	150 / 15	150				S-29	30.15 30.30	O
31								30.30								
32	-28.8	32.00	2.00		SAND	WHITISH GREY	SILTY FINE TO MEDIUM SAND WITH SHELL FRAGMENT AND CORAL GRAVEL ø =1 3cm SOLID STATUS	31.15	60 / 30	25	30	–		S-30	31.15 31.45	O
33								33.15	60 /						33.15	
34								33.60	30	16	18	42		S-31	33.60	O
35																
36							CORAL GRAVEL AND CORAL LIMESTONE CORE LENGHT 10 ~ 15cm	36.15	60 / 30	28	30	–		S-32	36.15 36.45	O
37																
38																
39						WHITISH GREY TO WHITE										
40	-37.26	40.45	8.45		CORAL			40.15 40.45	76 / 30	18	38	–		S-33	40.15 40.46	O

REMARKS :

SYMBOLS OF SAMPLER: THINWALL SAMPLER; SPLIT-SPOON SAMPLER; DENISON-TYPE SAMPLER; FOIL SAMPLER; OTHER SAMPLER

A - 7 - 8

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES

GROUND ELEVATION 2.264 m.

DATE Th 16 DEC, 1992 ~ Th 20 DEC, 1992

HOLE NO MBONEGE RIVER BH-1

GROUNDWATER LEVEL GL - 0.67 m.

SURVEYED BY S. TAKADA NICK FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION
	-0.74	3.00	3.00		GRAVEL	BROWN	RIVER BED GRAVEL WITH SMALL SAND
	-1.74	4.00	1.00		GRAVEL	DARK GREY	SEMI ROUNDED GRAVEL ϕ =1~2 cm
	-4.74	7.00	3.00		SAND	DARK GREY	FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL ϕ =0.5~1.0 cm
	-9.74	12.00	5.00		SAND	GREY TO GREENISH GREY	COARSE GRAIN SAND WITH PARMICE; FINE GRAIN SAND WITH SHELL FRAGMENT AND SLIGHTLY SILT
	-13.74	16.00	4.00		SAND	GREY	SILTY FINE GRAIN SAND
	-17.74	20.00	4.00		SAND	GREY	FINE TO MEDIUM GRAIN SAND WITH FINE ROUNDED GRAVEL ϕ =0.5~1.0 cm
	-18.74	21.00	1.00		SAND	GREY	ϕ =0.5 ~3.0 cm
	-19.74	22.00	1.00		SAND	GREY	FINE TO MEDIUM GRAIN. SAND WITH FINE ROUNDED GRAVEL ϕ =0.5 cm AND BLACK ORGANIC MATTER
	-25.74	28.00	6.00		SILT	BROWNISH GREY TO GREY	SANDY SILT TO SILT WITH ORGANIC SOIL NATURAL WATER CONTENT : LOW TO MEDIUM COHESION : LOW TO MEDIUM

STANDARD PENETRATION TESTS

DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10 cm 15 cm	30 cm	45 cm
1.15	31 /			
1.60	30	17	13	18
2.15	29 /			
2.60	30	11	13	16
3.15	15 /			
3.60	30	8	8	7
4.15	13 /			
4.60	30	7	7	6
5.15	31 /			
5.60	30	11	15	16
6.15	36 /			
6.60	30	10	16	20
7.15	27 /			
7.60	30	16	14	13
8.15	22 /			
8.60	30	10	11	11
9.15	16 /			
9.60	30	6	6	10
10.15	19 /			
10.60	30	4	7	12
11.15	35 /			
11.60	30	7	13	22
12.15	54 /			
12.60	30	15	24	30
13.15	34 /			
13.60	30	10	14	20
14.15	42 /			
14.60	30	6	14	28
15.15	38 /			
15.60	30	15	18	20
16.15	65 /			
16.60	30	26	25	40
17.15	24 /			
17.60	30	15	15	9
18.15	41 /			
18.60	30	10	16	25
19.15	50 /			
19.60	30	7	16	34
20.15	55 /			
20.60	30	18	25	30
21.15	79 /			
21.60	30	8	24	55
23.15	14 /			
23.60	30	6	7	7
24.15	12 /			
24.60	30	5	6	6
25.15	25 /			
25.60	30	5	11	14
26.15	22 /			
26.60	30	5	7	15
27.15	8.5 /			
27.60	30	5	4	4.5

N VALUE: 0 10 20 30 40 50 60

SOIL SAMPLES

NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLER
S-1	1.15 ~ 1.60	○
S-2	2.15 ~ 2.60	○
S-3	3.15 ~ 3.60	○
S-4	4.15 ~ 4.60	○
S-5	5.15 ~ 5.60	○
S-6	6.15 ~ 6.60	○
S-7	7.15 ~ 7.60	○
S-8	8.15 ~ 8.60	○
S-9	9.15 ~ 9.60	○
S-10	10.15 ~ 10.60	○
S-11	11.15 ~ 11.60	○
S-12	12.15 ~ 12.60	○
S-13	13.15 ~ 13.60	○
S-14	14.15 ~ 14.60	○
S-15	15.15 ~ 15.60	○
S-16	16.15 ~ 16.60	○
S-17	17.15 ~ 17.60	○
S-18	18.15 ~ 18.60	○
S-19	19.15 ~ 19.60	○
S-20	20.15 ~ 20.60	○
S-21	21.15 ~ 21.60	○
S-22	23.15 ~ 23.60	○
S-23	24.15 ~ 24.60	○
S-24	25.15 ~ 25.60	○
S-25	26.15 ~ 26.60	○
S-26	27.15 ~ 27.60	○

REMARKS :

Machine boring stopped because of jamming at depth 28 meters

SYMBOLS OF SAMPLER

● THINWALL SAMPLER

○ SPLIT-SPOON SAMPLER

◉ DENISON-TYPE SAMPLER

⊕ FOIL SAMPLER

× OTHER SAMPLER

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES — GROUND ELEVATION 3.749 m — DATE 20TH DEC, 1992 ~ 4TH JAN, 1993

HOLE NO MBONEGE RIVER BH-2 — GROUNDWATER LEVEL GL- 2.11 m. — SURVEYED BY S. TAKADA / NICK FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	DEPTH	BLOWS/PENETRATION cm	NO OF BLOWS AT EACH 10cm 15 cm	30 cm	45 cm	N VALUE 0 10 20 30 40 50 60	SOIL SAMPLES NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLE
1						LIGHT BROWN	SANDY SILT WITH GRAVEL Φ =1 ~ 3cm	1.15	3/30	1	1.5	1.5			1.15	
2	-1.75	2.00	2.00		SILT			1.60						S-1	1.60	O
3						GREENISH GREY		2.15	18/30	7.5	9	9			2.15	
4							SILTY FINE TO COARSE GRAIN SAND	3.15	26/30	9	11	16		S-2	2.60	O
5						LIGHT GREY	WITH ROUNDED AND SEMI ROUNDED GRAVEL Φ =0.5 ~ 3.0cm	4.15	40/30	19	17	23		S-3	3.60	O
6	-2.25	6.00	4.00		SAND			5.15	43/30	14	21	22		S-4	4.60	O
7								6.15	22/30	9	7	15		S-5	5.60	O
8								7.15	45/30	20	22	23		S-6	6.60	O
9							COARSE GRAIN SAND WITH SOME GRAVEL Φ =0.5 ~ 5.0 cm	8.15	28/30	15	14	14		S-7	7.60	O
10								9.15	44/30	17	22	22		S-8	8.60	O
11	-7.25	11.00	5.00		SAND	GREY		10.15	25/30	10	13	12		S-9	9.60	O
12	-8.25	12.00	1.00		SAND	GREY	FINE GRAIN SAND	11.15	24/30	7	11	13		S-10	10.60	O
13								12.15	95/30	2.5	4.5	5		S-11	11.60	O
14	-10.25	14.00	2.00		SAND	GREY	COARSE GRAIN SAND	13.15	27/30	7	9	18		S-12	12.60	O
15								14.15	26/30	13	15	11		S-13	13.60	O
16								15.15	33/30	14	15	18		S-14	14.60	O
17							SILTY FINE GRAIN SAND	16.15	65/30	30	35	--		S-15	15.60	O
18	-14.25	18.00	4.00		SAND	GREY		17.15	60/30	15	21	45		S-16	16.60	O
19								18.15	65/30	19	35	30		S-17	17.60	O
20	-16.25	20.00	2.00		SAND	GREY	COARSE GRAIN SAND WITH FINE TO MEDIUM GRAIN GRAVEL	19.15	43/30	18	20	23		S-18	18.60	O
21								20.15	37/30	13	16	22		S-19	19.60	O
22								21.15	34/30	9	12	22		S-20	20.60	O
23							COARSE GRAIN SAND	22.15	45/30	5	8	37		S-21	21.60	O
24	-20.25	24.00	4.00		SAND	GREY		23.15	64/30	17	34	30		S-22	22.60	O
25								24.15	20/30	6	10	10		S-23	23.60	O
26								25.15	20/30	9	9	11		S-24	24.60	O
27							CLAYEY SILT NATURAL WATER CONTENT : LOW TO MEDIUM	26.15	18/30	6	7	11		S-25	25.60	O
28								27.15	19.5/30	7.5	9.5	10		S-26	26.60	O
29						BROWNISH GREY	COHESION : LOW TO MEDIUM	28.15	28.5/30	6.5	9.5	17		S-27	27.60	O
30	-26.25	30.00	6.00		SILT			29.15	51/30	9	18	33		S-28	28.60	O
31								30.15	37/30	8	16	21		S-29	29.60	O
32							CLAYEY SILT NATURAL WATER CONTENT : LOW TO MEDIUM	31.15	21.5/30	4	7	14.5		S-30	30.60	O
33						BROWNISH GREY	COHESION : LOW TO MEDIUM	32.15	17/30	7	9	8		S-31	31.60	O
34	-30.25	34.00	4.00		SILT			33.15	46/30	7.5	15	31		S-32	32.60	O
35	-31.25	35.00	1.00		SAND	GREY	COARSE GRAIN SAND	34.15	28.5/30	9	11	17.5		S-33	33.60	O
36								35.15	23/30	4	8	15		S-34	34.60	O
37								36.15	22/30	3	7	15		S-35	35.60	O
38								37.15	45/30	6	15	30		S-36	36.60	O
39							SILT WITH SOME FINE GRAIN SAND	38.15	40/30	10	15	25		S-37	37.60	O
40	-36.85	40.60	5.60		SILT	GREY		39.15	38/30	9	14	24		S-38	38.60	O
								40.15	60/30	10	19	45		S-39	39.60	O
								40.60						S-40	40.60	O

REMARKS :

SYMBOLS OF SAMPLER
- ● THINWALL SAMPLER
- ○ SPLIT-SPOON SAMPLER
- ◉ DENISON-TYPE SAMPLER
- ⊕ FOIL SAMPLER
- × OTHER SAMPLER

A - 7 - 10

BORING LOG

PROJECT : RECONSTRUCTION OF GUADALCANAL PRAINS BRIDGES — GROUND ELEVATION 7.58 m — DATE 9 Th DEC, 1992 ~ 11 Th DEC 1992

HOLE NO. TANAENBA RIVE BH-1 — GROUNDWATER LEVEL 01. - 2.03 m. — SURVEYED BY S.TAKADA , NICK, FERNANDO

SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10 cm: 15 cm	30 cm	45 cm	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLER
1	6.08	1.50	1.50		SILT	DARK GREY	SOFT SANDY SILT Wn : HIGH COHESION: MEDIUM	1.15	4 / 30	2	2	2		1.15	
								1.60					S-1	1.60	○
2								2.15	15 /					2.15	
3	4.58	3.00	1.50		SAND	DARK BROWN	FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL ø =0.5 ~ 1.0cm	2.60	30	3	8	7	S-2	2.60	○
								3.15	10 /					3.15	
4	3.58	4.00	1.00		GRAVEL	BROWNISH GREY	ROUNDED GRAVEL WITH SAND ø =1.0 ~ 3.0cm	3.60	30	6	3	7	S-3	3.60	○
								4.15	19 /					4.15	
5							FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL ø =0.5 ~ 2cm	4.60	30	10	10	9	S-4	4.60	○
								5.15	16 /					5.15	
6	1.58	6.00	2.00		SAND	DARK GREY		5.60	30	7	8	8	S-5	5.60	○
								6.15	16 /					6.15	
7	0.58	7.00	1.00		GRAVEL	BROWNISH GREY	ROUNDED GRAVEL WITH SAND ø =1 ~ 3cm	6.60	30	11	8	8	S-6	6.60	○
								7.15	17 /					7.15	
8						BROWNISH GREY		7.60	30	6	7	10	S-7	7.60	○
								8.15	13 /					8.15	
9						TO	FINE TO MEDIUM GRAIN SAND WITH SMALL ROUNDED GRAVEL	8.60	30	10	7	6	S-8	8.60	○
								9.15	20 /					9.15	
10						DARK GREY	ø =0.5 cm	9.60	30	12	10	10	S-9	9.60	○
								10.15	46 /					10.15	
11	-3.42	11.00	4.00		SAND			10.60	30	10	20	26	S-10	10.60	○
								11.15	37 /					11.15	
12	-4.42	12.00	1.00		GRAVEL	DARK GREY	ROUNDED GRAVEL WITH SAND ø =0.5 ~ 3cm	11.60	30	22	20	17	S-11	11.60	○
								12.15	45 /					12.15	
13						BROWNISH GREY		12.60	30	13	20	25	S-12	12.60	○
								13.15	25 /					13.15	
14							FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVE ø =0.5 ~ 1.0m	13.60	30	7	11	14	S-13	13.60	○
								14.15	26 /					14.15	
15								14.60	30	11	13	13	S-14	14.60	○
								15.15	25 /					15.15	
16								15.60	30	9	10	15	S-15	15.60	○
								16.15	35 /					16.15	
17								16.60	30	9	15	21	S-16	16.60	○
						GREY		17.15	52 /					17.15	
18								17.60	30	20	23	29	S-17	17.60	○
								18.15	22 /					18.15	
19								18.60	30	4.5	10	12	S-18	18.60	○
						LIGHT GREY	FINE GRAIN SAND	19.15	26 /					19.15	
20	-12.42	20.00	8.00		SAND			19.90	30	6	10	13	S-19	19.90	○
								20.15	23 /					20.15	
21						DARK GREY	SILTY FINE GRAIN SAND	20.60	30	7	8	15	S-20	20.60	○
								21.15	33 /					21.15	
22	-14.42	22.00	2.00		SAND			21.60	30	5	12	21	S-21	21.60	○
								22.15	60 /					22.15	
23								22.60	30	13	18	32	S-22	22.60	○
								23.15	23 /					23.15	
24							ROUNDED GRAVEL OF ø =0.5 ~ 4cm WITH COARSE SAND	23.60	30	14	13	10	S-23	23.60	○
								24.15	32 /					24.15	
25						LIGHT GREY TO GREY		24.60	30	17	18	14	S-24	24.60	○
								25.15	44 /					25.15	
26	-18.42	26.00	4.00		GRAVEL			25.60	30	13	20	24	S-25	25.60	○
								26.15	44 /					26.15	
27						LIGHT GREY	SANDY SILT WITH FINE GRAVEL ø =1 ~ 2 cm	26.60	30	13	17	27	S-26	26.60	○
								27.15	52 /					27.15	
28						TO		27.60	30	9	17	35	S-27	27.60	○
								28.15	52 /					28.15	
29	-21.42	29.00	3.00		SILT	BROWNISH GREY		28.60	30	15	25	27	S-28	28.60	○
								29.15	46 /					29.15	
30						BROWNISH GREY		29.60	30	12	19	27	S-29	29.60	○
								30.15	88 /					30.15	
31								30.60	30	15	24	64	S-30	30.60	○
								31.15	72 /					31.15	
32								31.60	30	20	22	50	S-31	31.60	○
33							SILTY FINE GRAIN SAND WITH ROUNDED AND SEMI ROUNDED GRAVEL ø =0.5 ~ 2.0cm SOLIDS TATAS	33.15	60 /					33.15	
34						LIGHT GREY		33.60	30	6	19	50	S-32	33.60	○
35															
36						BROWNISH GREY		36.15	114 /					36.15	
	-29.92	36.60	7.60		SAND			35.60	30	3	24	90	S-33	36.60	○
37															
38															
39															
40															

N VALUE: 0 10 20 30 40 50 60

REMARKS :

SYMBOLS OF SAMPLER: ● THINWALL SAMPLER ○ SPLIT-SPOON SAMPLER ● DENISON-TYPE SAMPLER ⊕ FOIL SAMPLER × OTHER SAMPLER

BORING LOG

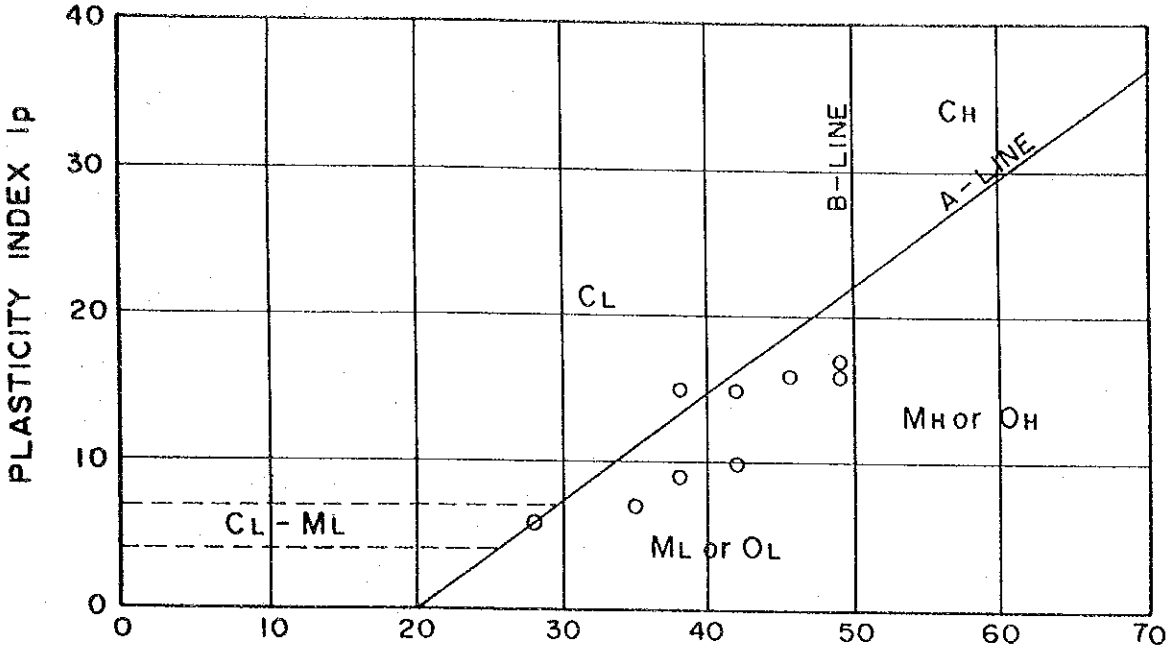
PROJECT : RECONSTRUCTION OF GUADALCANAL PLAINS BRIDGES — GROUND ELEVATION 5.981 m — DATE 12 Th DEC, 1992 ~ 15 Th DEC, 1992

HOLE NO. TANAENBA RIVER BH-2 — GROUNDWATER LEVEL GL - 0.40 m — SURVEYED BY S. TAKADA, NICK FERNANDO

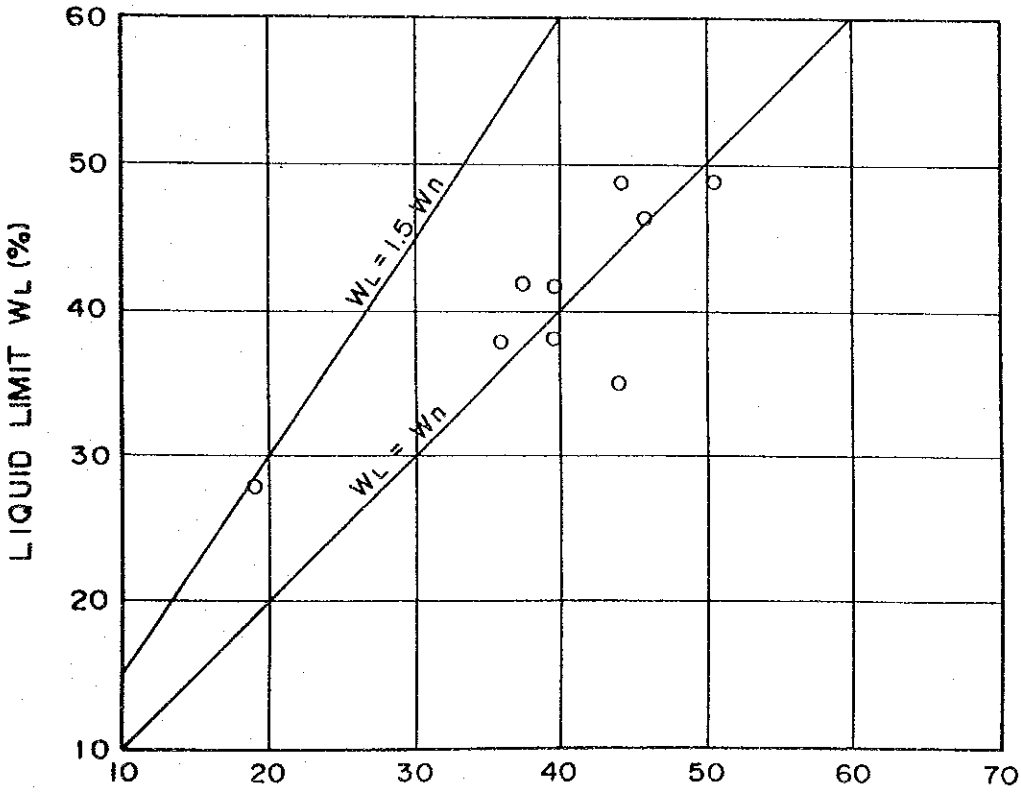
SCALE	ELEVATION m	DEPTH m	THICKNESS OF STRATUM m	SOIL: SYMBOL	VISUAL CLASSIFICATION	COLOR	DESCRIPTION	STANDARD PENETRATION TESTS: DEPTH	NO OF BLOWS / LENGTH OF PENETRATION cm	NO OF BLOWS AT EACH 10cm: 15 cm	30 cm	45 cm	N VALUE	SOIL SAMPLES: NO OF SAMPLE	DEPTH m	SYMBOL OF SAMPLES
1							ROUNDED AND SEMI ROUNDED GRAVEL Ø =0.5 ~ 3.0cm	-1.15	22 / 30						1.15	
2	3.98	2.00	2.00		GRAVEL	GREY		-1.60		16	11	11		S-1	1.60	○
3							MEDIUM GRAIN SAND WITH MANY ROUNDED AND SEMI ROUDED GRAVEL	-2.15	30 / 30						2.15	
4	1.98	4.00	2.00		SAND	GREY		-2.60		15	15	15		S-2	2.60	○
5								-3.15	29 / 30						3.15	
6								-3.60		12	16	13		S-3	3.60	○
7	-1.02	7.00	3.00		SAND	DARK GREY	MEDIUM TO COARSE GRAIN SAND WITH MANY ROUNDED GRAVEL Ø =0.5 ~ 3.0cm	-4.15	23 / 30						4.15	
8								-4.60		18	13	10		S-4	4.60	○
9								-5.15	16 / 30						5.15	
10								-5.60		7	8	8		S-5	5.60	○
11								-6.15	16 / 30						6.15	
12								-6.60		10	9	9		S-6	6.60	○
13	-2.02	8.00	1.00		SAND	DARK GREY	FINE TO MEDIUM GRAIN SAND WITH ROUNDED FINE GRAVEL Ø =0.5 cm	-7.15	28 / 30						7.15	
14								-7.60		12	13	15		S-7	7.60	○
15								-8.15	21 / 30						8.15	
16								-8.60		6	9	12		S-8	8.60	○
17						BLACKISH TO DARK GREY	FINE TO MEDIUM GRAIN SAND	-9.15	14 / 30						9.15	
18	-4.02	10.00	2.00		SAND			-9.60		6	6	8		S-9	9.60	○
19							FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL Ø = 1 ~ 3cm	10.15	24 / 30						10.15	
20								10.60		12	11	13		S-10	10.60	○
21								11.15	25 / 30						11.15	
22	-6.02	12.00	2.00		SAND	DARK GREY		11.60		8	10	15		S-11	11.60	○
23								12.15	21 / 30						12.15	
24								12.60		9	10	11		S-12	12.60	○
25								13.15	23 / 30						13.15	
26								13.60		8	10	13		S-13	13.60	○
27								14.15	19 / 30						14.15	
28								14.60		6	9	10		S-14	14.60	○
29								15.15	20 / 30						15.15	
30							FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL Ø =1.0 ~ 3.0cm	15.60		4	10	10		S-15	15.60	○
31								16.15	37 / 30						16.15	
32								16.60		8	16	21		S-16	16.60	○
33								17.15	42 / 30						17.15	
34								17.60		9	18	24		S-17	17.60	○
35								18.15	21 / 30						18.15	
36	-13.02	19.00	7.00		SAND	DARK GREY		18.60		4	10	11		S-18	18.60	○
37								19.15	29 / 30						19.15	
38	-14.02	20.00	1.00		SAND	BROWNISH GREY	SILTY FINE GRAIN SAND WITH ROUNDED GRAVEL Ø =0.5 cm	19.60		7	14	15		S-19	19.60	○
39								20.15	31 / 30						20.15	
40	-15.02	21.00	1.00		SAND	LIGHT BROWN	MEDIUM TO COARSE SAND WITH BLACK ORGANIC SOIL	20.60		7	14	17		S-20	20.60	○
41								21.15	24 / 30						21.15	
42								21.60		6	12	12		S-21	21.60	○
43								22.15	30 / 30						22.15	
44						LIGHT TO DARK GREY	FINE TO MEDIUM GRAIN SAND WITH ROUNDED GRAVEL Ø =0.5 ~ 1.0cm	22.60		6	10	20		S-22	22.60	○
45								24.15	47.5 / 30						24.15	
46	-19.02	25.00	4.00		SAND			24.60		6.5	21.5	26		S-23	24.60	○
47								25.15	30 / 30						25.15	
48								25.60		17	14	16		S-24	25.60	○
49								26.15	31 / 30						26.15	
50						LIGHT TO WHITISH GREY	SANDYSILT WITH SEMI-ROUNDED GRAVEL Ø =1 ~ 3cm	26.60		18	15	16		S-25	26.80	○
51								27.15	54 / 30						27.15	
52	-22.02	28.00	3.00		SILT			27.60		18	36	18		S-26	27.80	○
53								28.15	66 / 30						28.15	
54								28.60		19	30	36		S-27	28.60	○
55								29.15	61 / 30						29.15	
56							SILTY FINE TO MEDIUM GRAIN SAND WITH SEMI ROUNDED GRAVEL Ø =0.5 ~ 3.0cm	29.60		18	27	34		S-28	29.80	○
57																
58																
59						LIGHT GREY		31.15	53 / 15	23	53	–			31.15	
60	-25.47	31.45	3.45		SAND			31.45						S-29	31.45	○

8. Soil Data

FIG. 8.1 CONSISTENCY CHART



LIQUID LIMIT WL (%)
PLASTICITY CHART



NATURAL WATER CONTENT Wn (%)
RELATIVE CHART OF (Wn) AND (WL)

FIG. 8.2 RELATIVE CHART OF (Wn) AND (Gs)

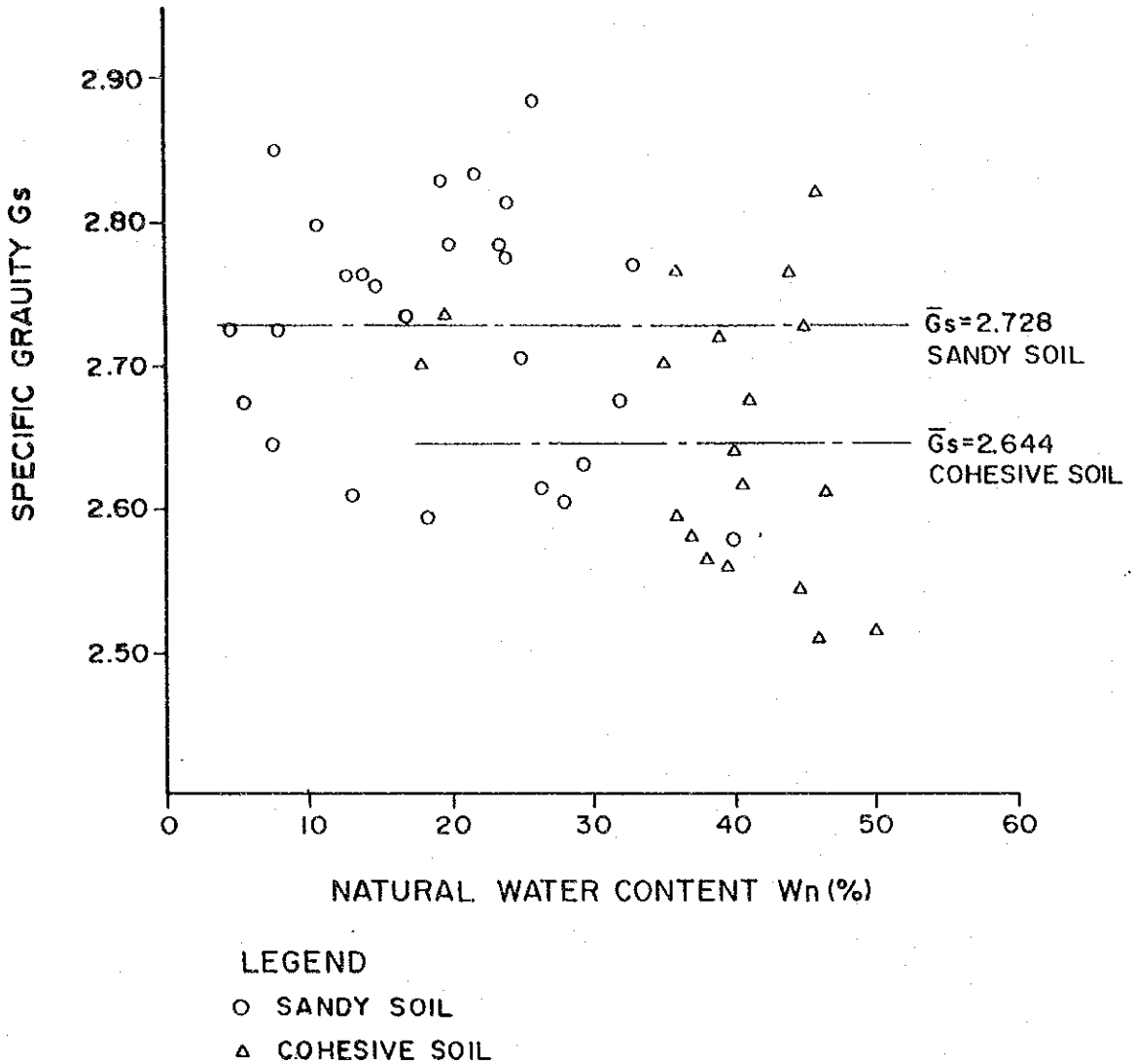
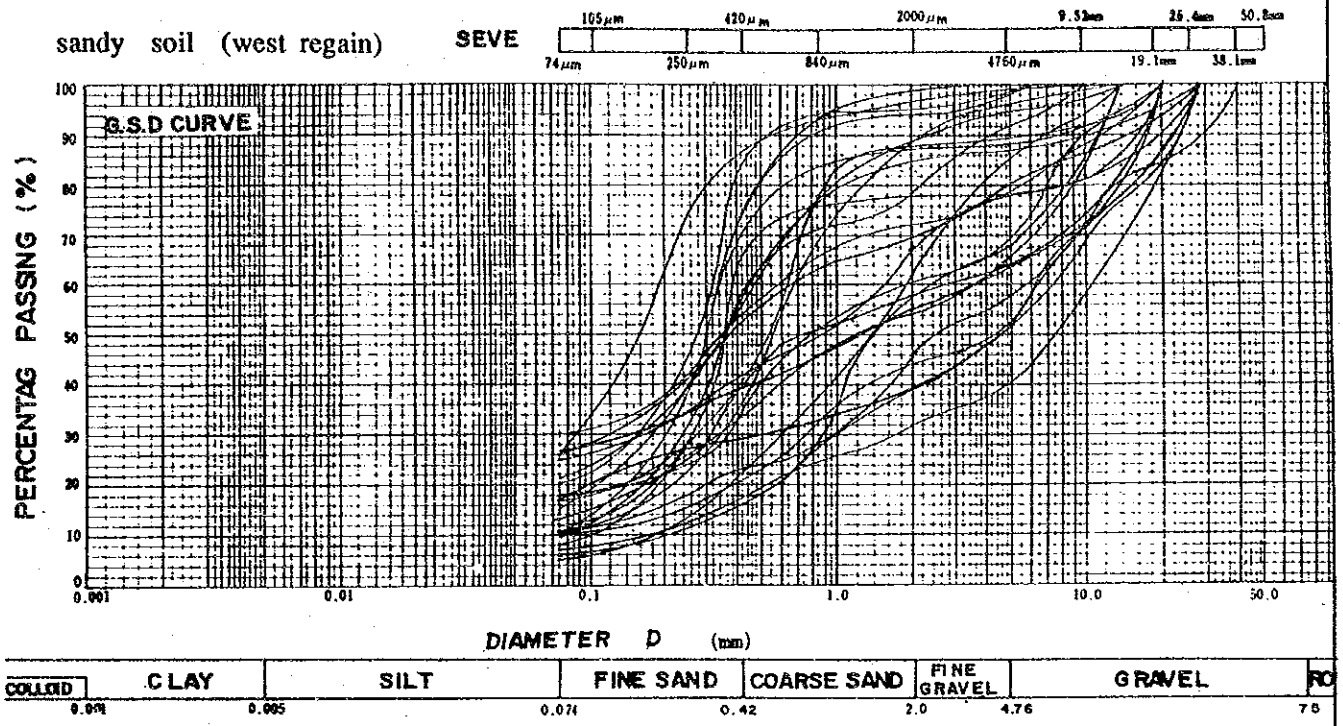
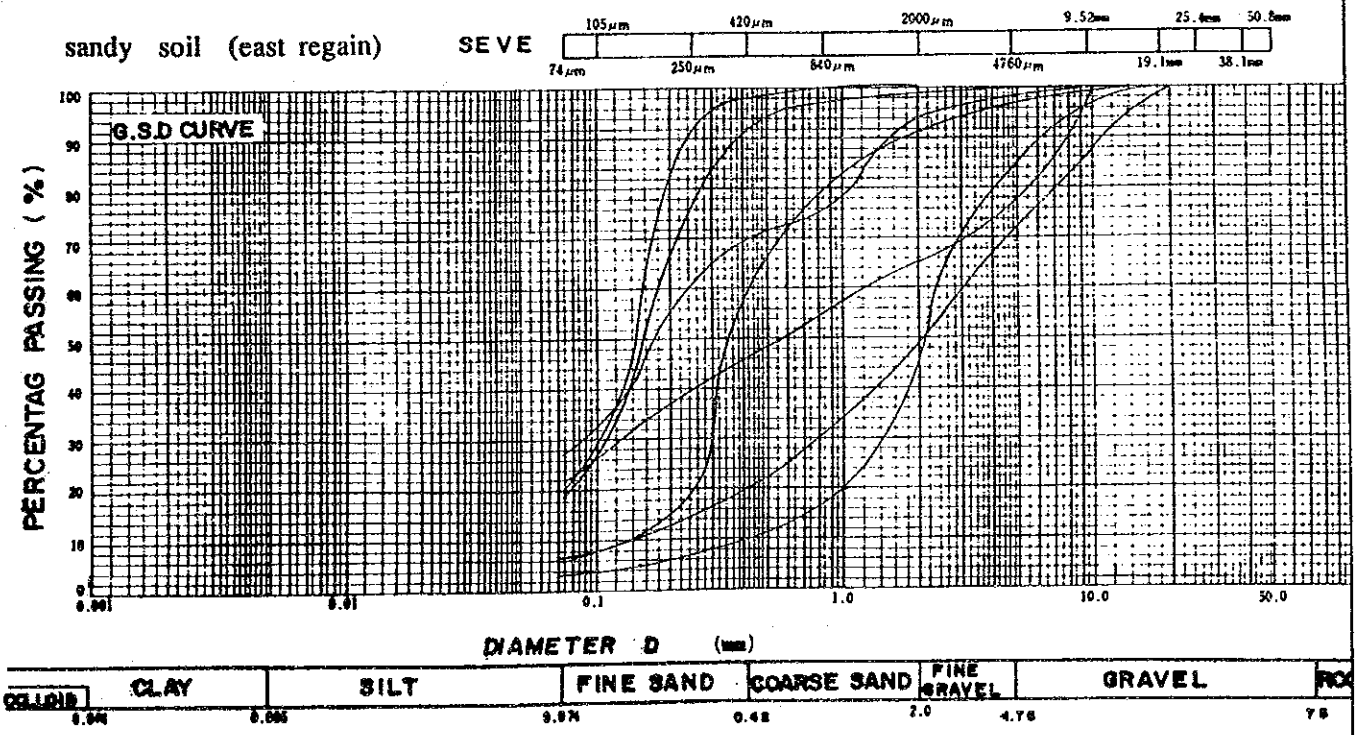
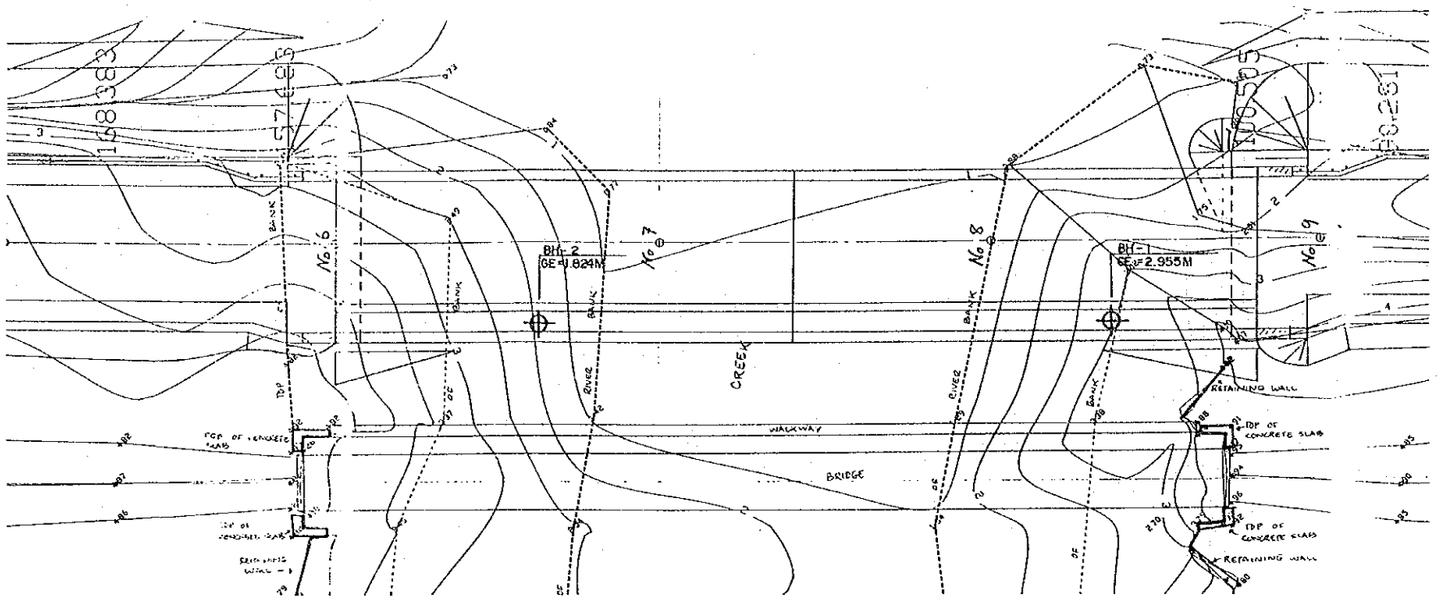


Fig. 8.3 **SUMMARY OF GRAIN SIZE DISTRIBUTION CURVE**

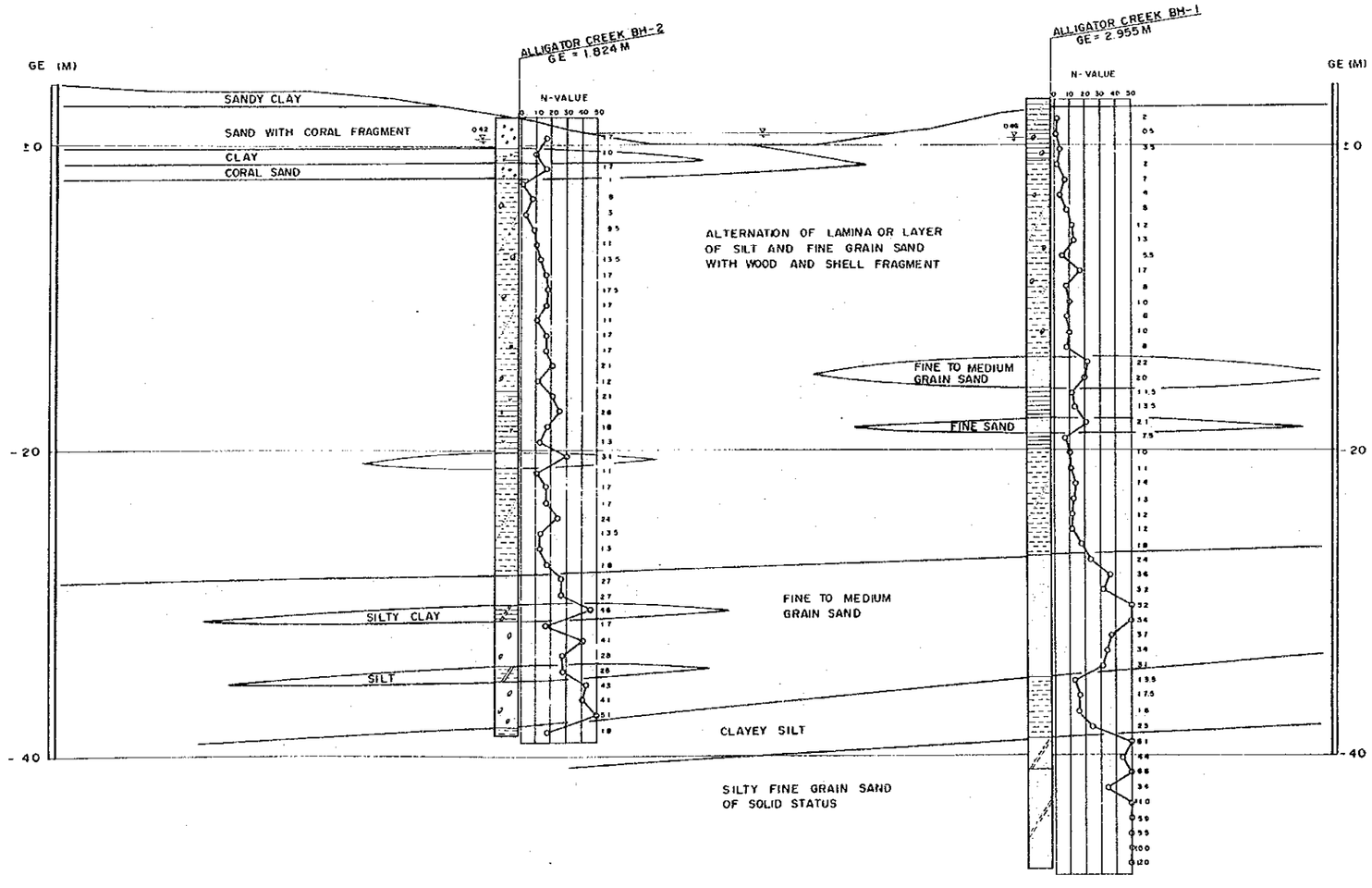


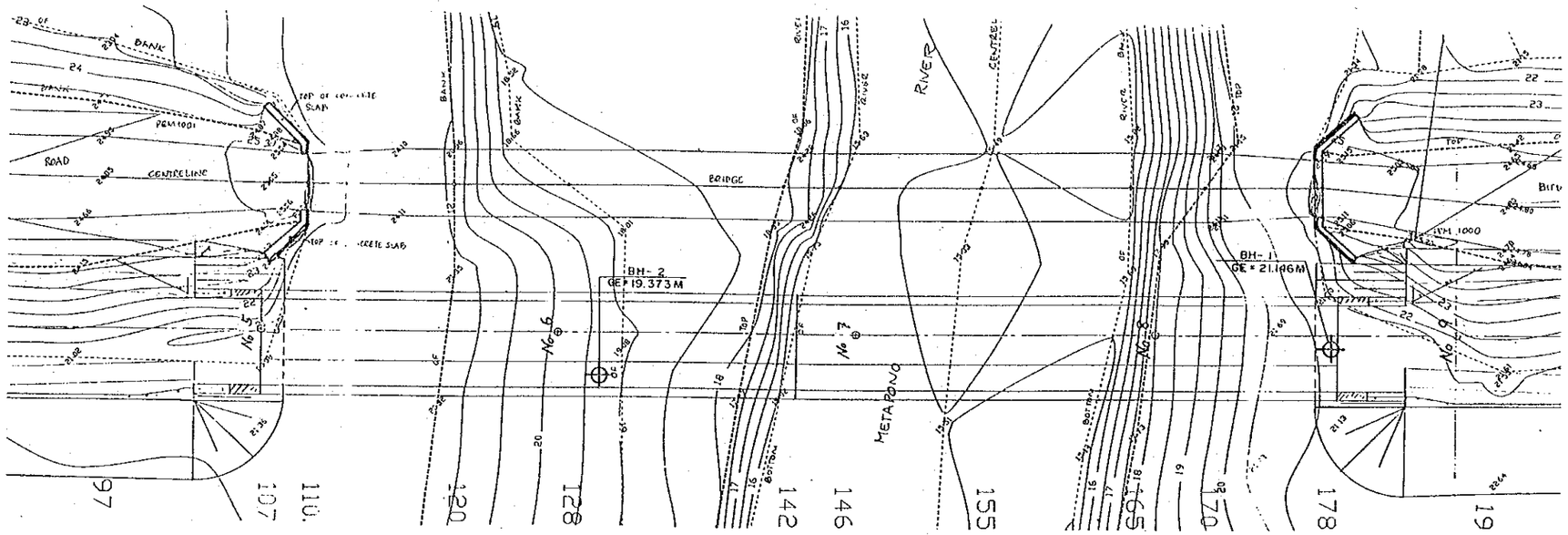




SOIL PROFILE OF ALLIGATOR CREEK

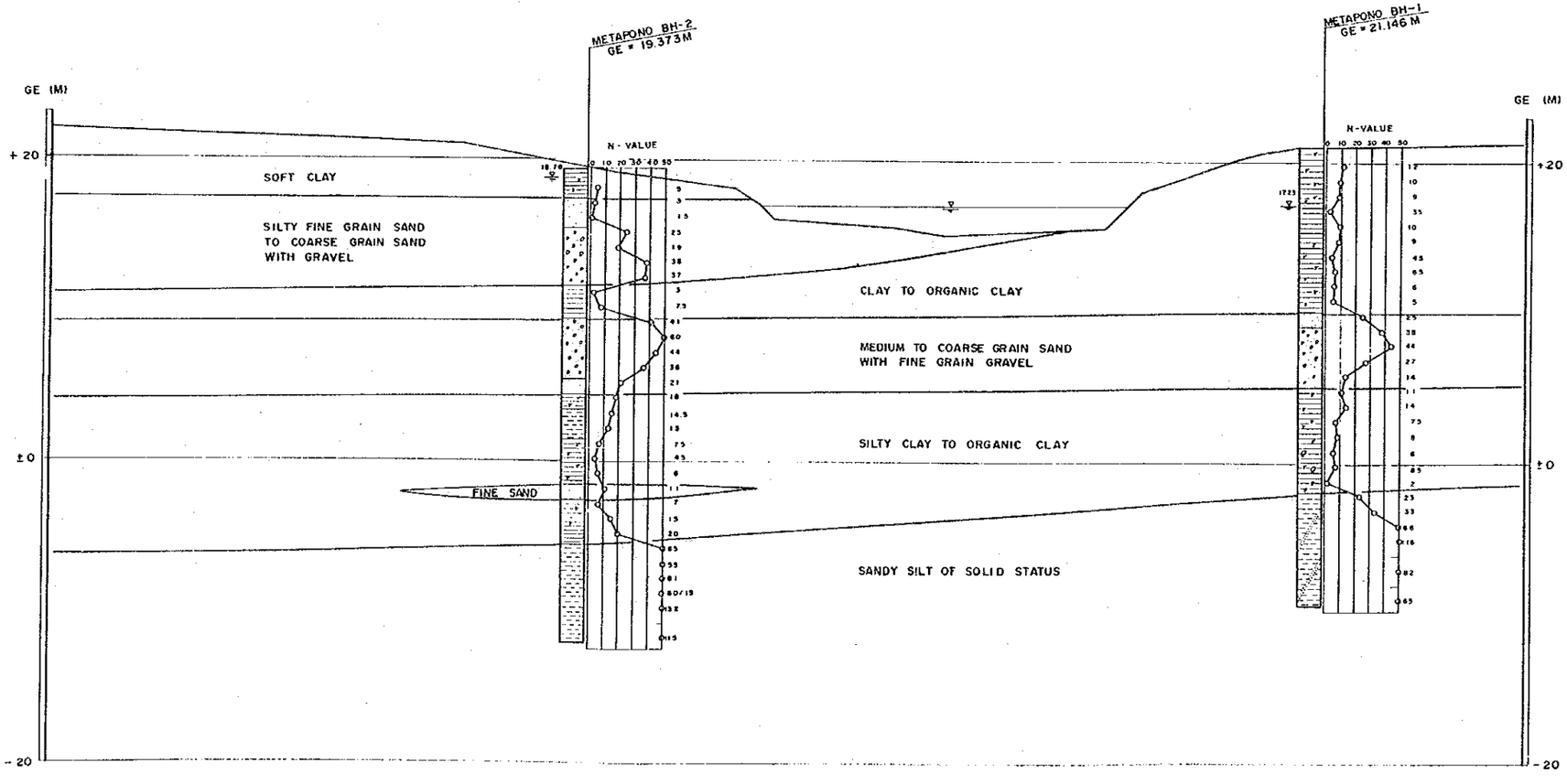
SCALE 1 : 200

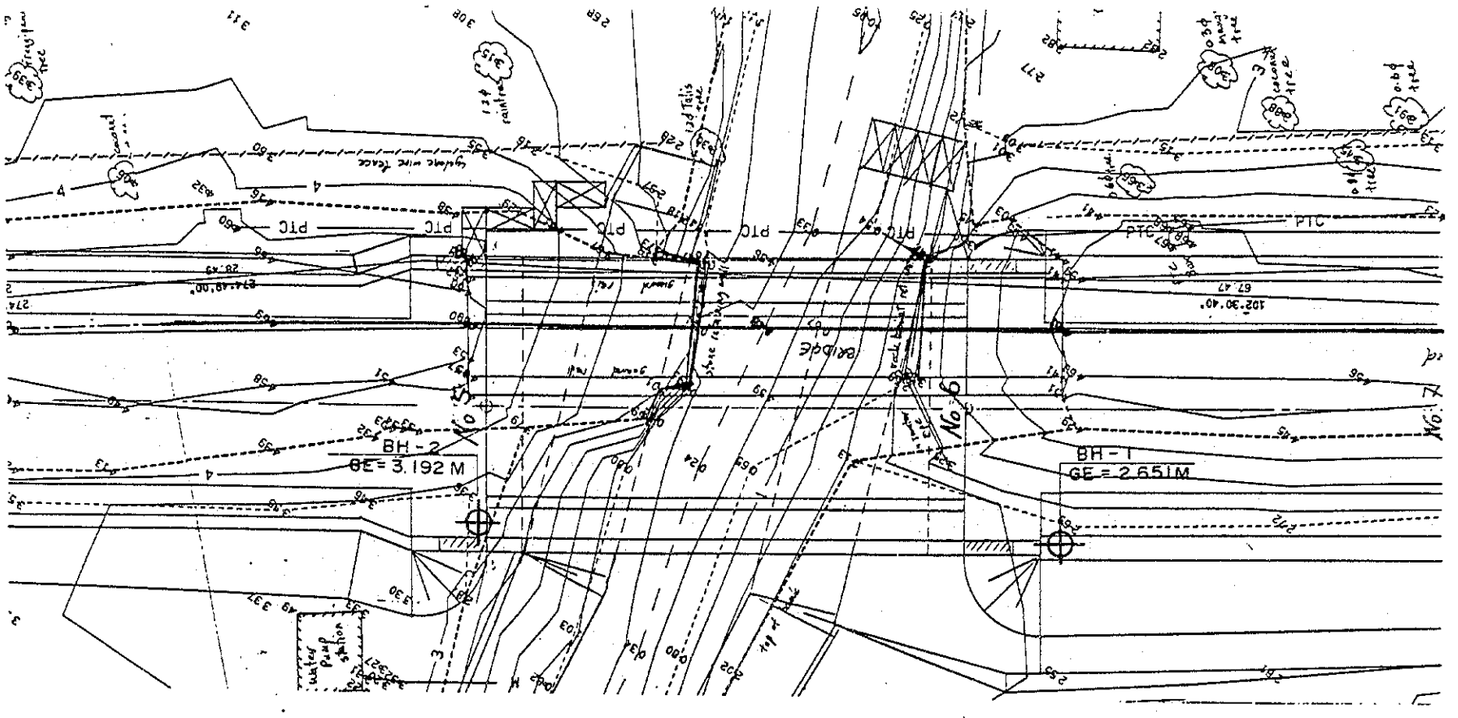




SOIL PROFILE OF METAPONO RIVER

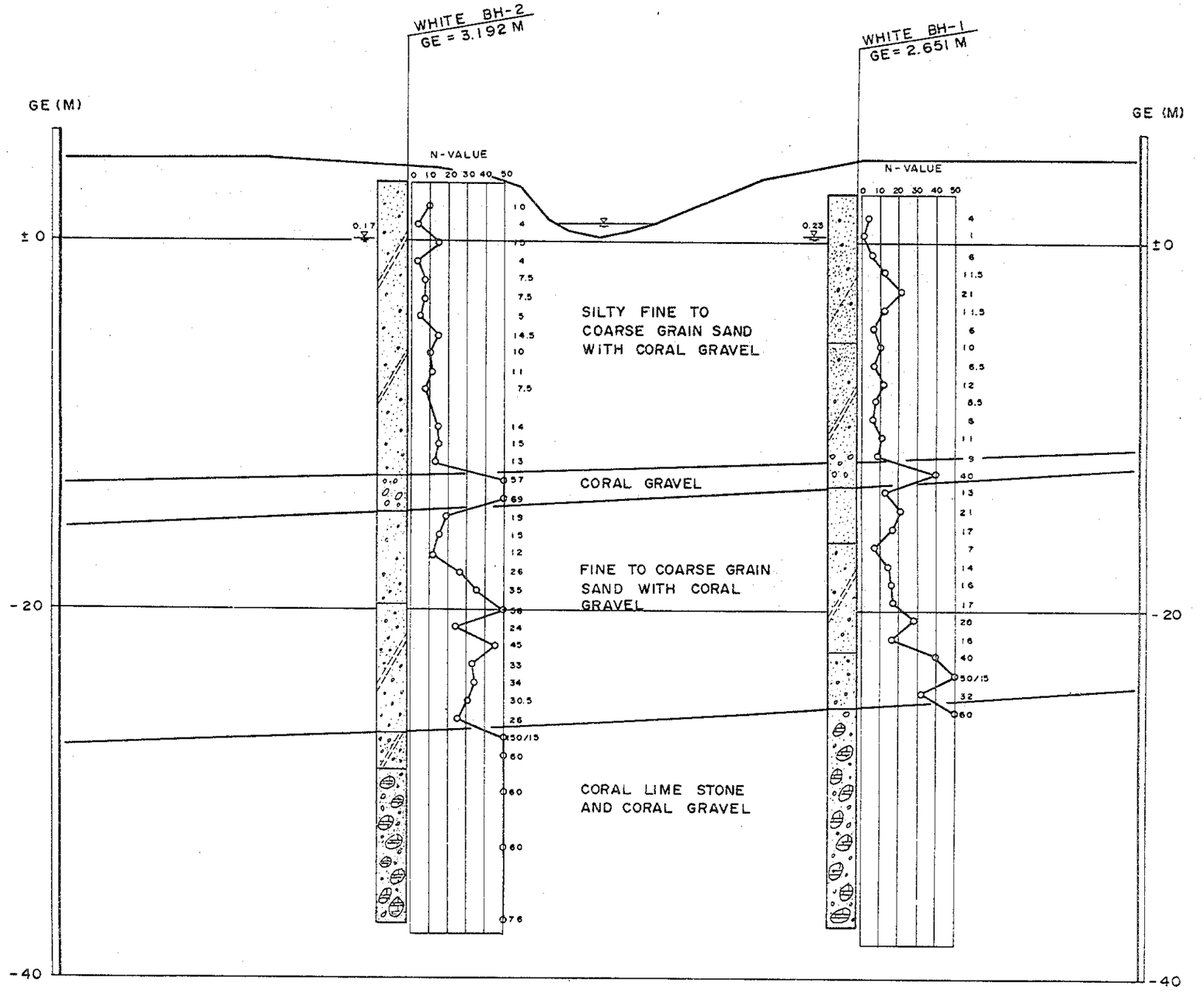
SCALE 1 : 200

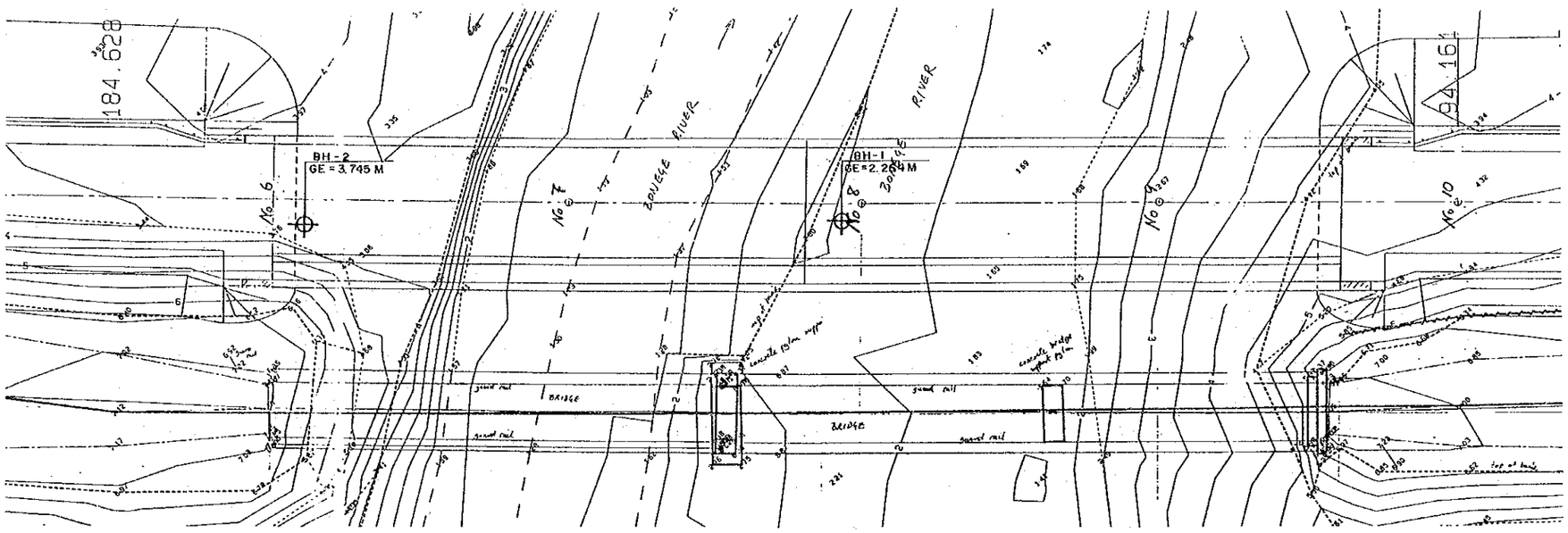




SOIL PROFILE OF WHITE RIVER

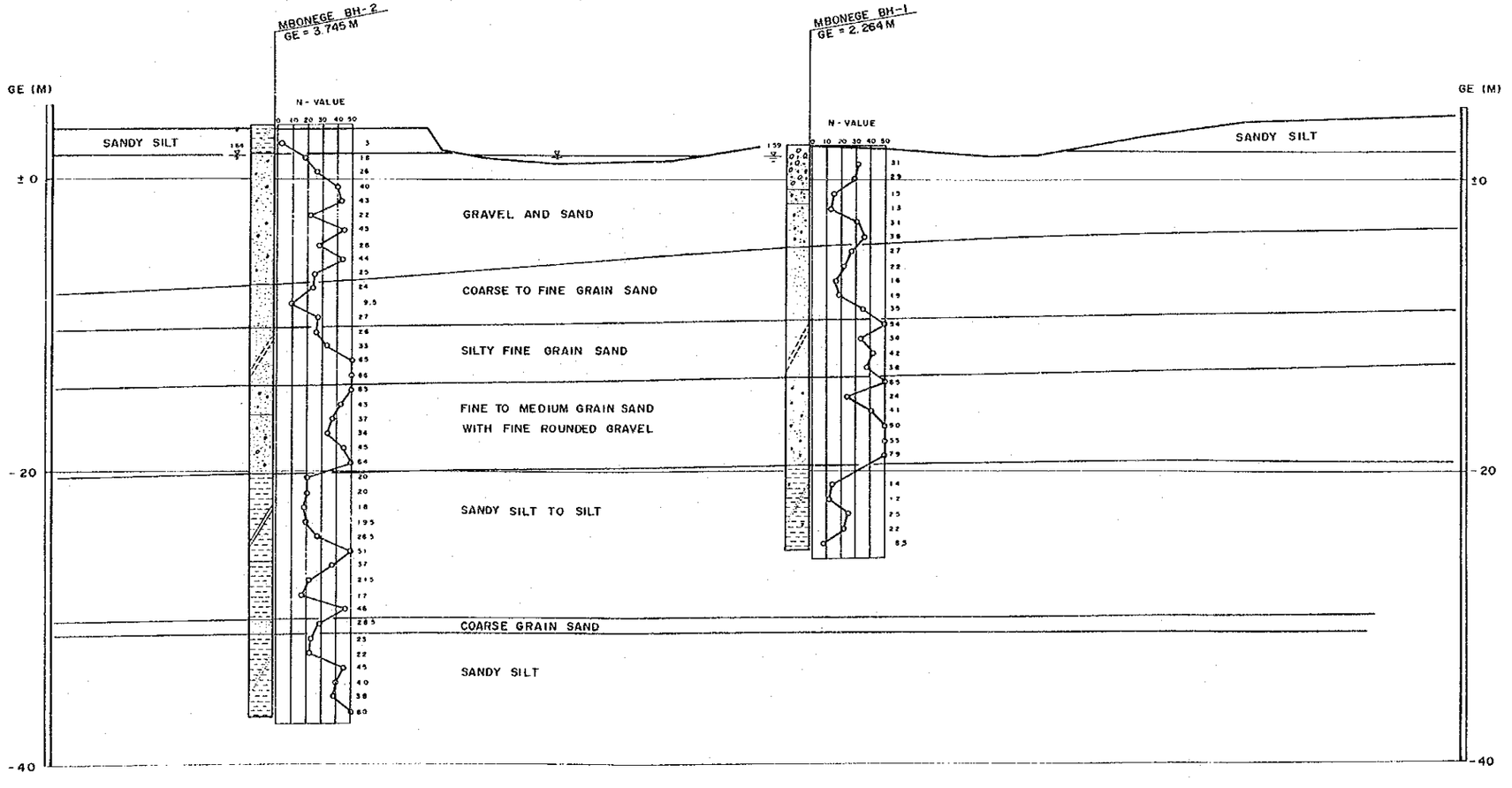
SCALE 1 : 200

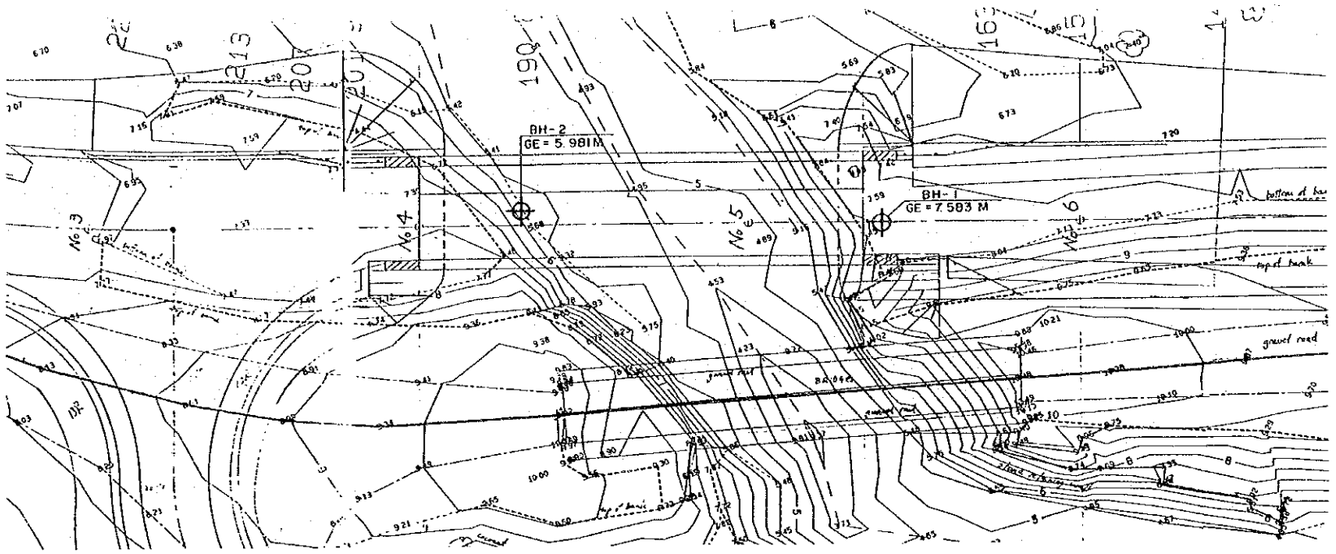




SOIL PROFILE OF MBONEGE RIVER

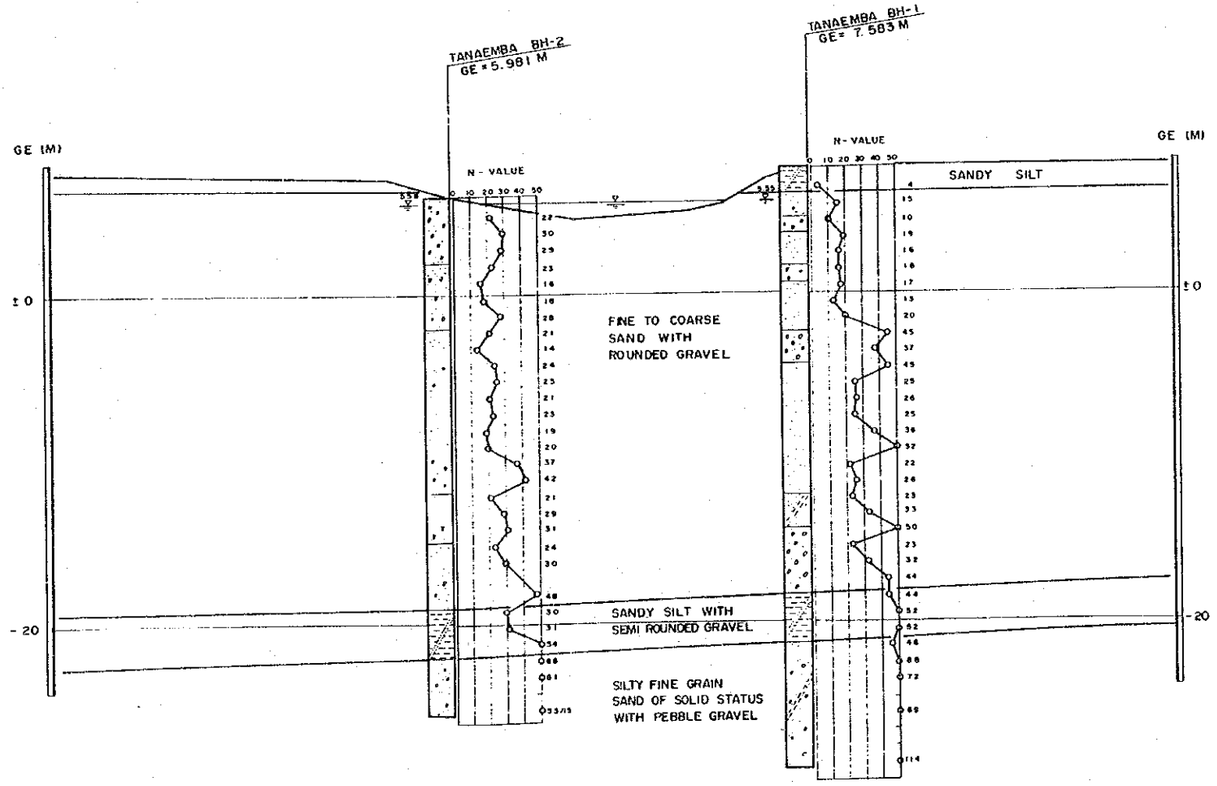
SCALE 1 : 200



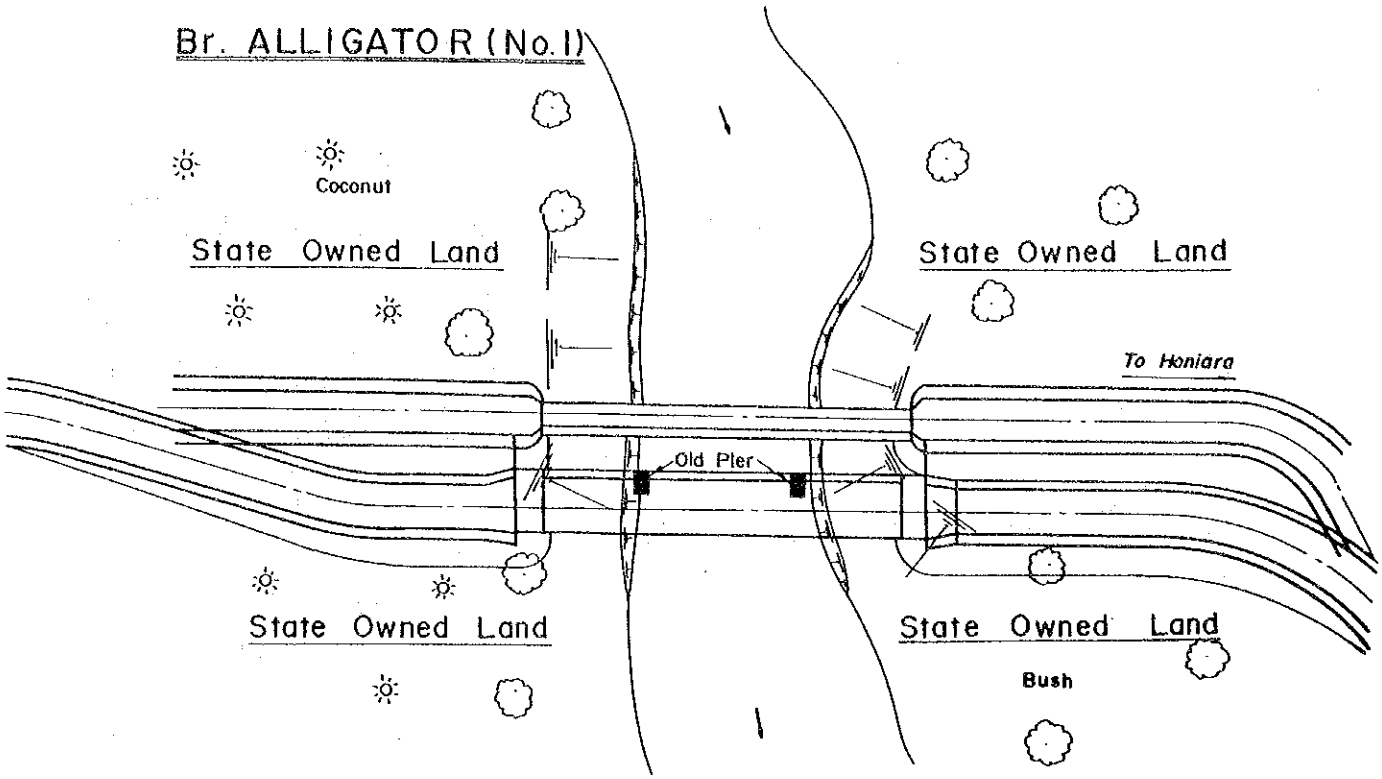


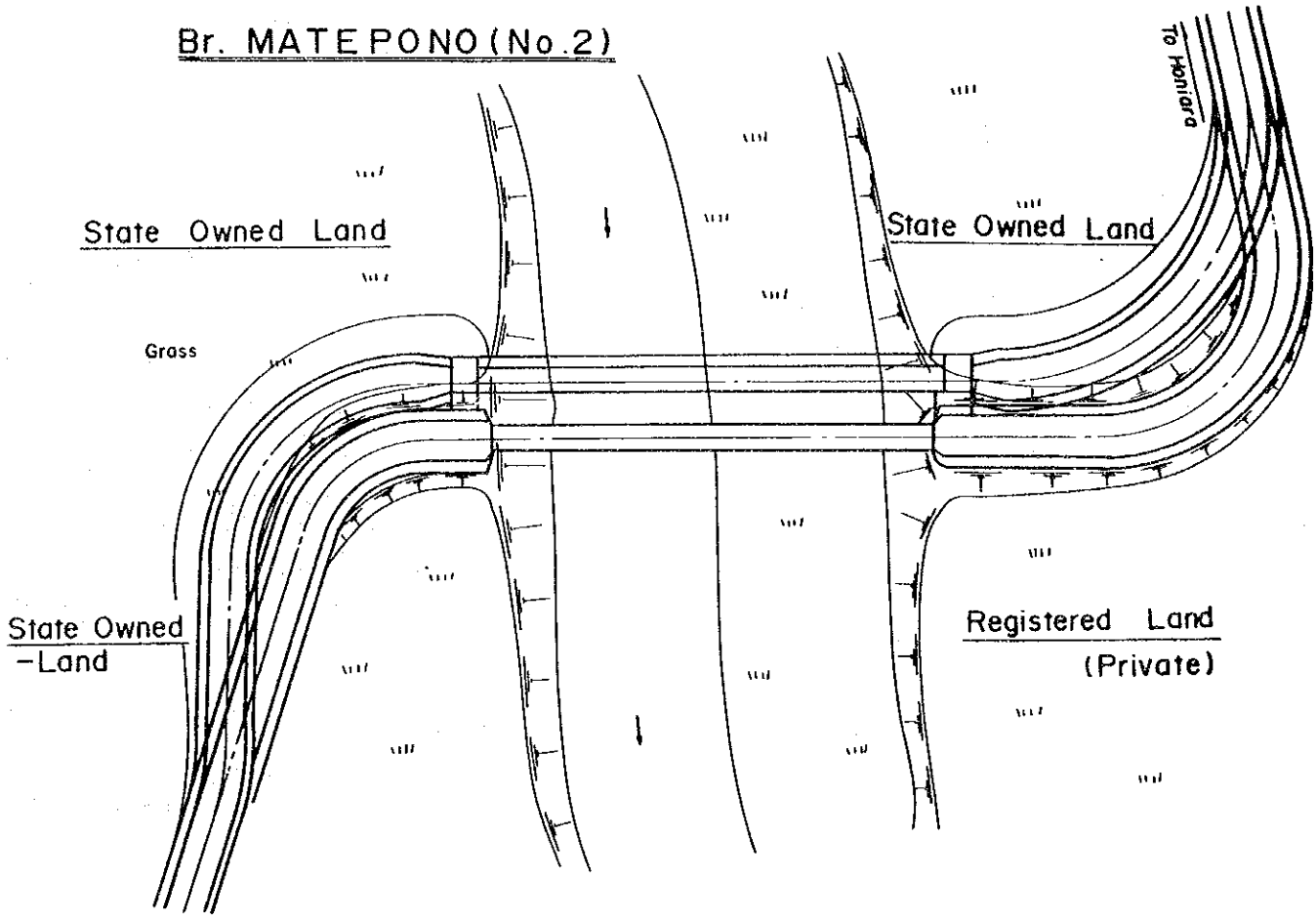
SOIL PROFILE OF TANAEMBA RIVER

SCALE 1 : 200

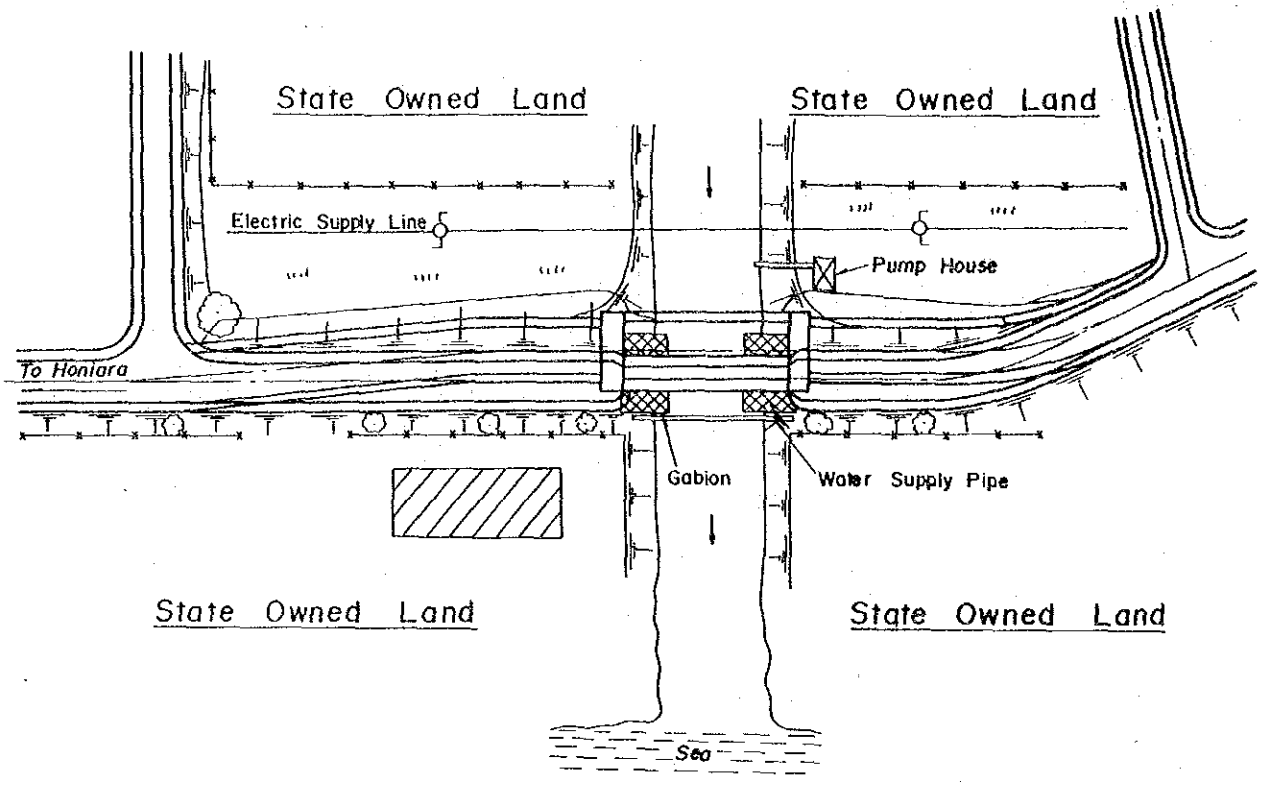


9. Land Ownership Adjacent to the Bridges

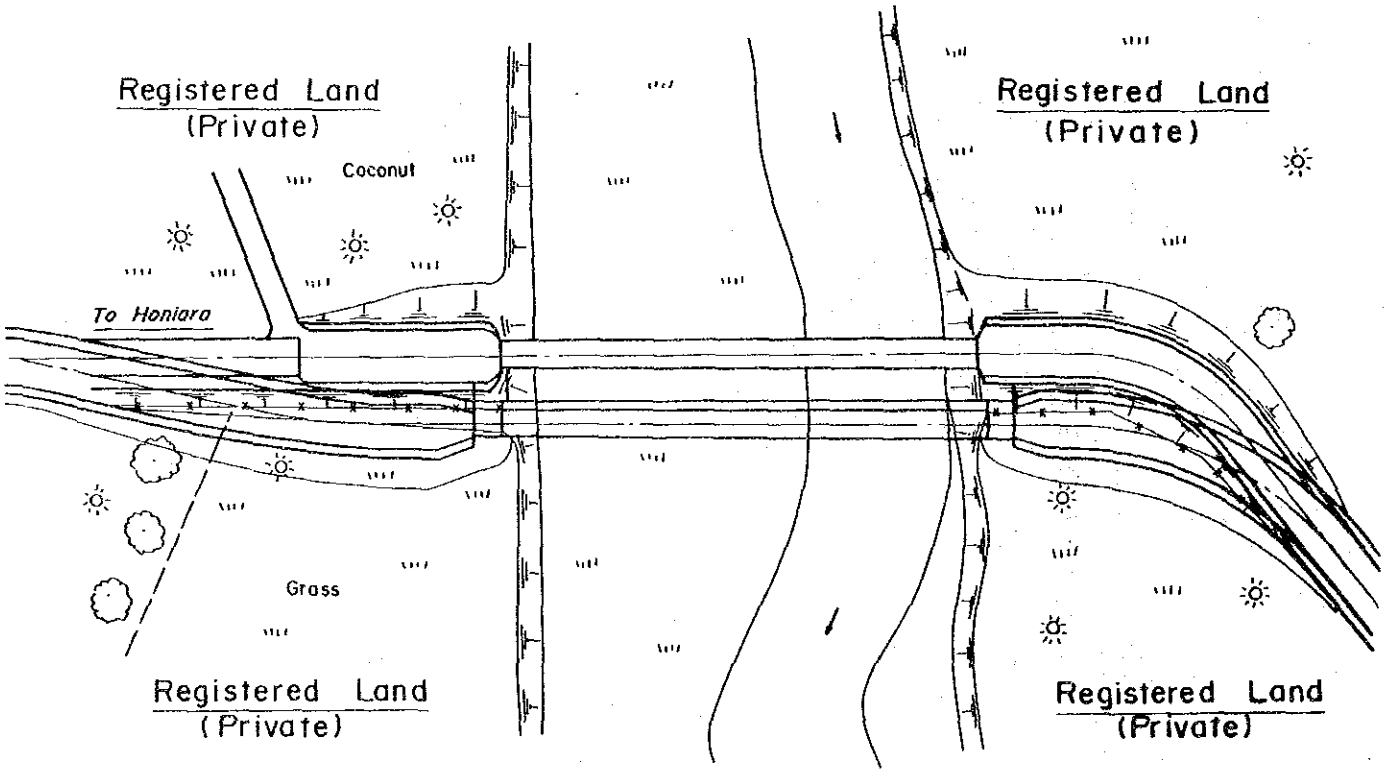

Br. ALLIGATOR (No.1)
Coconut
State Owned Land
State Owned Land
To Honiara
Old Pier
State Owned Land
State Owned Land
Bush

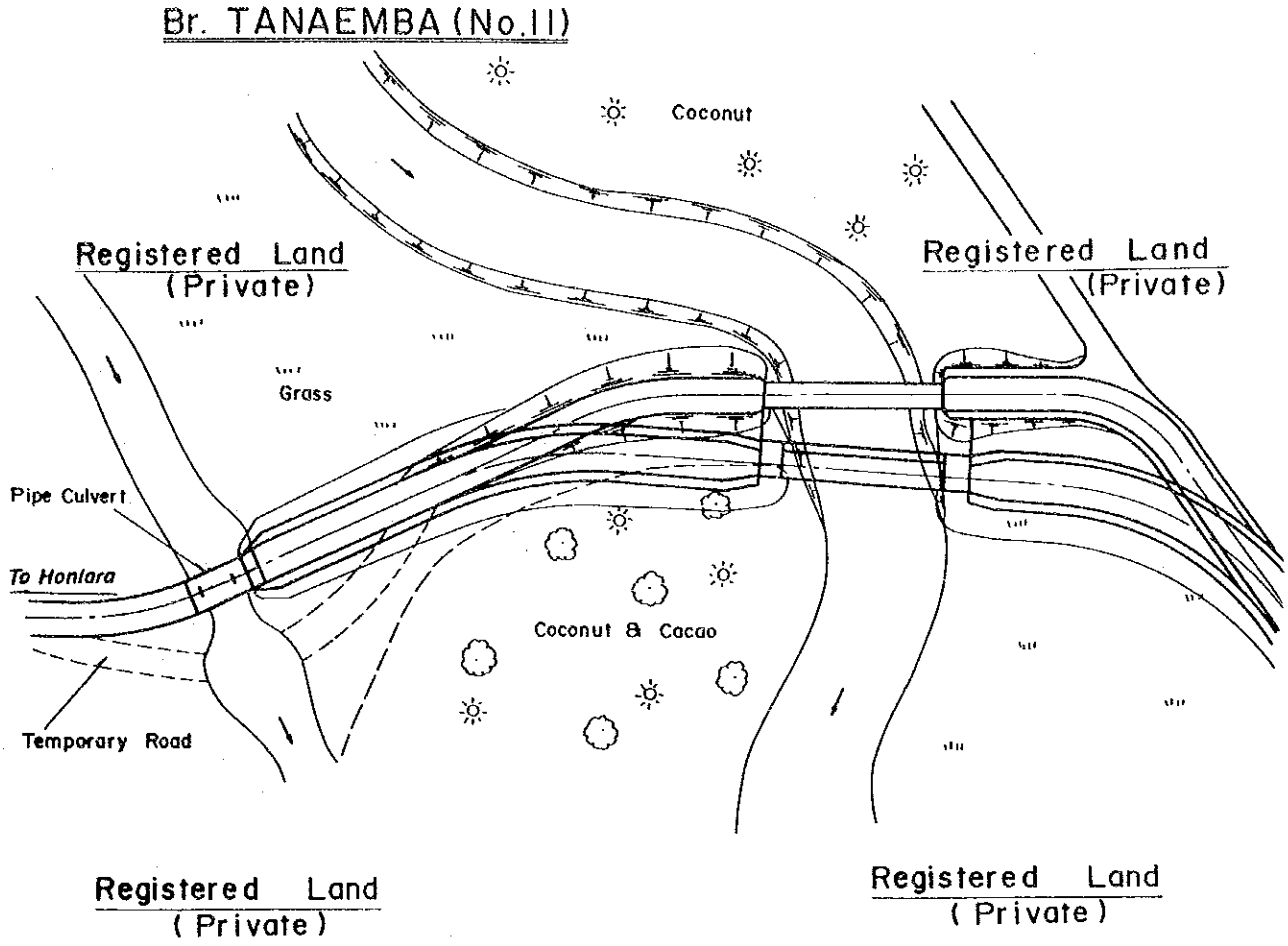

Br. MATEPONO (No.2)
To Honiara
State Owned Land
State Owned Land
Grass
State Owned
-Land
Registered Land
(Private)

Br. WHITE (No.7)



Br. MBONEGE (No.9)




Br. TANAEMBA (No.II)
Coconut
Registered Land
(Private)
Registered Land
(Private)
Grass
Pipe Culvert
To Honiara
Coconut & Cacao
Temporary Road
Registered Land
(Private)
Registered Land
(Private)