NO. 158 existing bridge condition

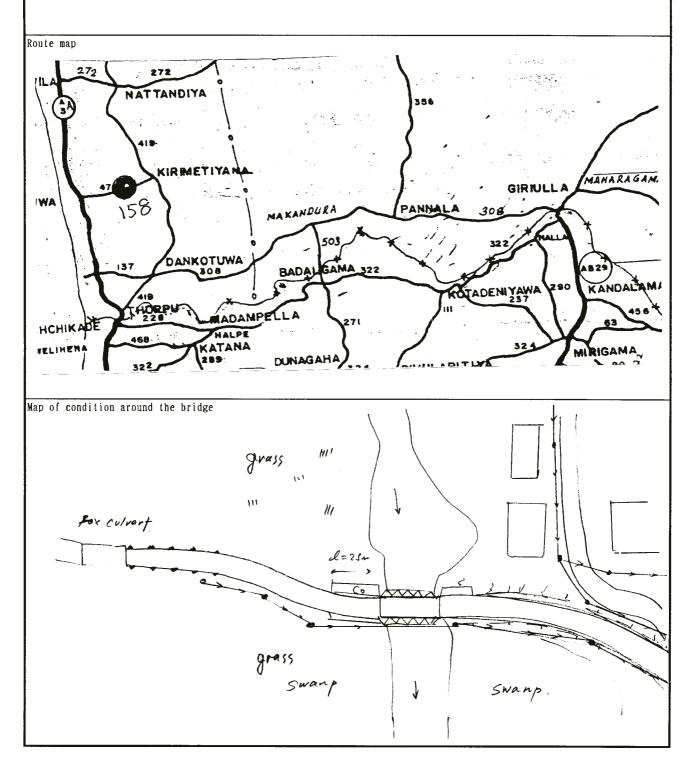
Location		Road No.	Name of road	Km Post
Province	District	Road No.	Name of foad	KIII POST
North-west	Chilaw	B473	Vennappuwa-Kirimetiyana	3/3

Outline of route

The B473 road is a B-class National Highway that branches at Wennappuwa at a 47 km point of the A-class National Highway 3 (A3) and connects to Lunuwila.

Lunuwila is located approximately midway between Negombo and Chilaw and distanced only about 3 km from the A3 road. The road is distanced about 30 km from Negombo and 40 km from Chilaw. In Lunuwila, there is a railway station on a line connecting Colombo and Puttalam. There is also a canal constructed during the German reign. It appeares that this town has been a strategic point of traffic for a long time. This bridge crosses over the canal.

Principal industrial products of this area are agricultural products, such as rice and coconuts.



The general view (longitudinal direction to the bridge axis)



The side view (perpendicular direction to the bridge axis)



Structure type:

(Superstructure) Simple steel truss half-through bridge (deck slab)

Span split: -

<Abutment>

Reinforced concrete structure None

(Pier>

19.71m

Bridge length: Width composition:

Effective width 4.24m

Alignment:

Straight bridge

Year of construction: -

Damage condition

Superstructure:

Heavy corrosion of steel truss members

Substructure: Accessories:

Concrete deterioration and crack Heavy damage of guardrails

Others:

Insufficient road width

Traffic volume

(): Pedestrians

1995

3. 660 vehicles/day

2000

6, 081 vehicles/day (105)

Natural conditions

Topographical features Flatland relatively near the seacoast

Geological features: Ground in which the clayey soft stratum exists.

River

Canal that is said to be constructed during the reign of Germany and its water level is about 1 m below the road surface. Twice a year, the road is covered with water so that the people

use boats to cross the canal. (Hearing on site)

Others:

None in particular

Surrounding environment

The population of Lunuwila where the bridge is located is 25,000, and there is a middle-sized hospital. For large hospitals, the people have to go to Marawila or Negombo, Tirau on A3 Road.

There is a primary school, but the secondary school is in Marawila. There is Lunuwila Central College in Lunuwila. The police station is in Wenabua or Koswatta.

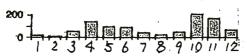
Site condition

Utilities to be transf Five telephone lines are installed.

Bypass exists a few kolometers to the north.

(Unit:mm)

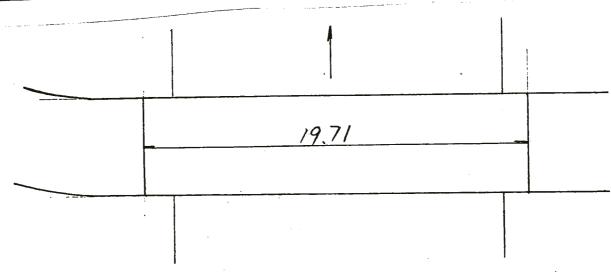
Precipitation



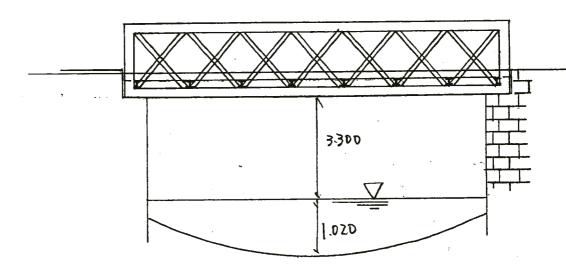
Annual rainfall 1.020 mm Monthly maximum rainfall 200 Month with maximum rainfall October

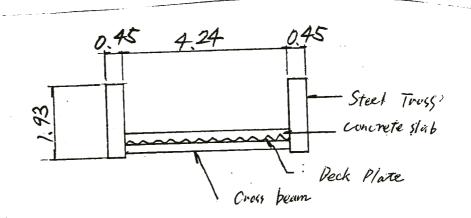
Current site map

No. 158



<u>-403</u>





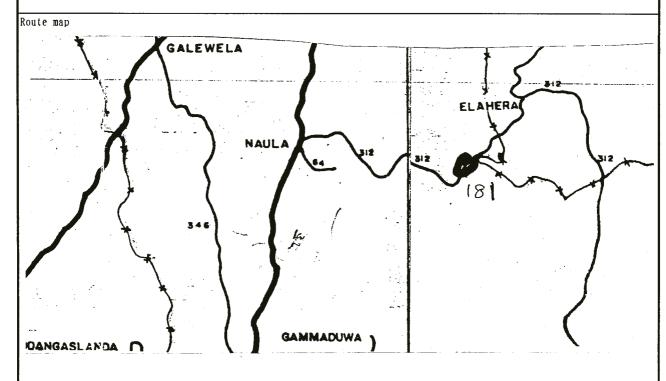
NO. 181 existing bridge condition

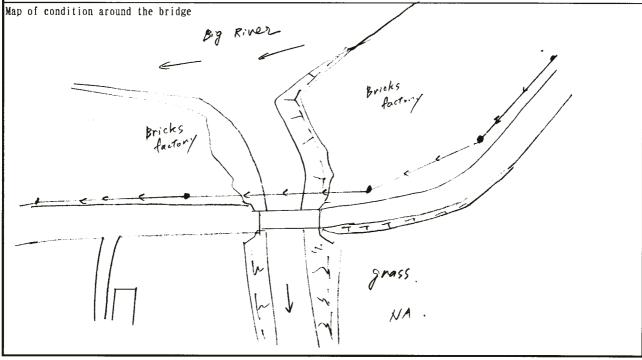
Location		Road No.	Name of road	Km Post
Province	District	Koad No.	Mame of Load	Kill FUST
Middle	Matale	B312	Naula-Elahera-Kaluganga	11/5

Outline of route

This road branches from the A-class Road 9 (A9) at Naula and runs toward Polnnaruwa via Kongahawela and Elahera. Though there are not any large towns along this road, there is an apparel-related factory at a point about 9 km from Naula. The road section from Naula to a point near this factory is well paved, but the pavement condition deteriorates gradually after that.

Along the route, there are houses of settlers engaged in agricultural development pushed forward by the Mahaweri Authority (according to the report of RDA). It appears however that full-scale development is not yet started.





The general view (longitudinal direction to the bridge axis)



The side view (perpendicular direction to the bridge axis)



Structure type:

(Superstructure) Continuous I-girder bridge (RC slab)

(Abutment)

Stone masonry block structure

<Pier>

Stone masonry block structure

Bridge length:

18 5m

Span split: 209.25m

Width composition:

Effective width 3.55m Straight bridge

Alignment: Year of construction:

1960 (It appears that only the superstructure was replaced. The substructure is thought to

be much older.)

Damage condition

Superstructure:

Corrosion of main girder (steel I-girder) and crack in slab concrte

Substructure:

Damage in stone masonry block Shoe seat surface fixed with bricks

Accessories: Others:

Insufficient road width

Traffic volume

(): Pedestrians

1996 2000 363 vehicles/day 660 vehicles/day (196)

Natural conditions

Topographical features Relative flat land without much undulation

Geological features:

Rock mass observed in riverbed, which may indicate that the bearing stratum is at a relatively shallow level.

River:

Details will be understood through in-situ survey. The runoff coefficient at a time of flood is considered to be high.

Others:

None in particular

Surrounding environment

The bridge crosses over a small tributary of the Amban Ganga. Houses of settlers are dotted before and after the bridge. It is said that the population from this bridge to Erahera is 2000 households (5000 people). There is only a primary school. The secondary school is in Naura. Hospital, police stations, and other agencies are only in Naura.

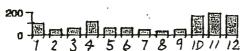
Site condition

Utilities to be transfeNone in particular

Bypass:

Precipitation

(Unit;mm)



Annual rainf: 900

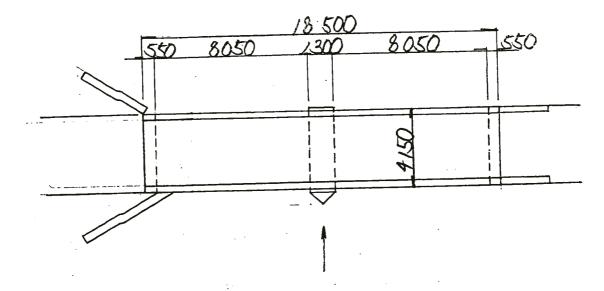
מתמו mm

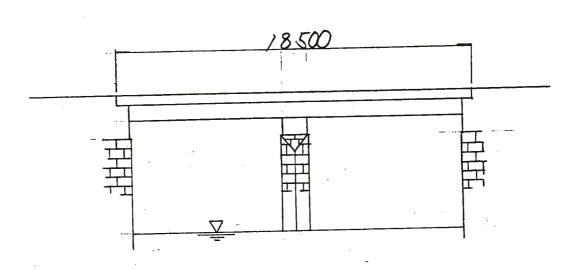
Monthly maxii 200

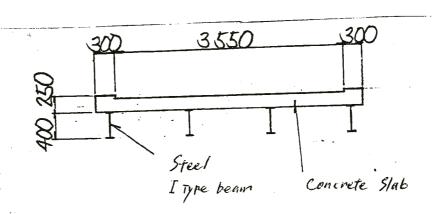
Month with m: November

Current site map

No. 181







NO. 200 existing bridge condition

Location		Road No.	Name of road	V= Doot
Province	District	Road No.	Name of foad	Km Post
North-west	Kurunegala	B478	Wilakatupotha-Ganewattha-Kubukgete	10/1

Outline of route

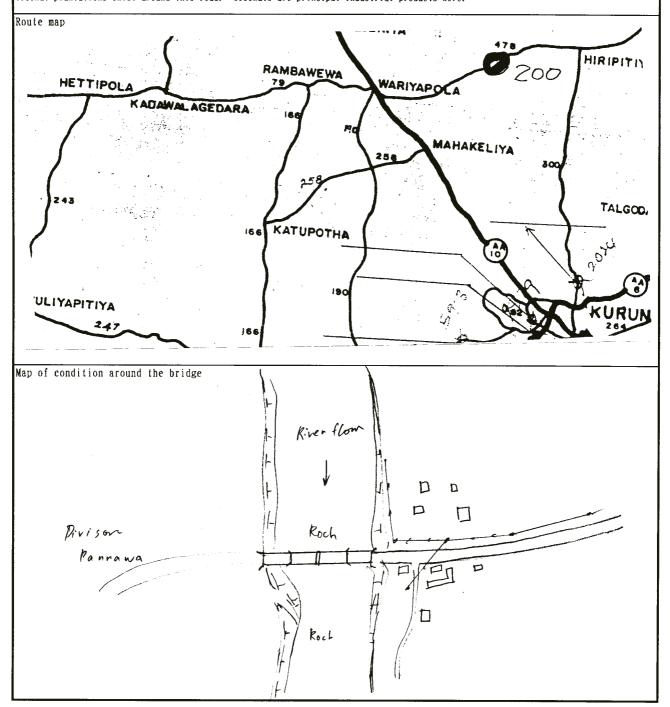
This road is a part of ring road starting from Kurunegala, connecting principal towns in the suburb of Kurunegala, including Wariyapola, Ganewattha, and Hiripitiya. Kurunegala connects to Wariyapola via the A-class National Highway 10 (A10), while Kurunegala connects to Hiripitiya via B300.

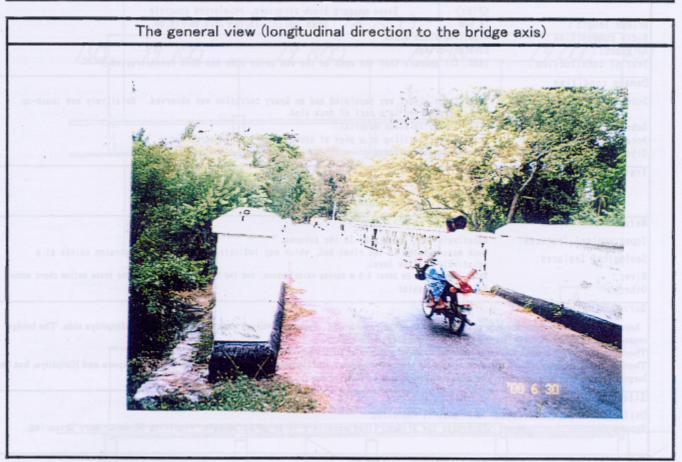
The AlO Road section up to Wariyapola is of sufficient width and is well paved. For the B300 section up to Hiripitiya, road improvement is under way.

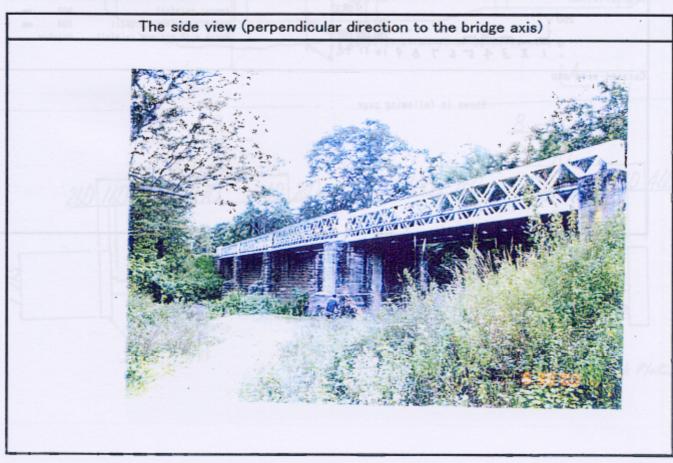
Though no improvement work is made for B478 on which the bridge to be surveyed exists, the width was increased in certain bridges. It appears that improvement of the bridge has been started.

This road intersects with the railway at Ganewattha where there is a station.

Coconut plantations exist around this road. Coconuts are principal industrial products here.







Structure type:

(Superstructure) 4-span simple steel truss girder bridge (deck slab for three spans and RC slab for

(Ahutment)

Stone masonry block structure, reinforced concrete Stone masonry block structure, reinforced concrete

(Pier)

78.60m

Span split: 19.7m+2019.8m+19.0m

Bridge length: Width composition:

Effective width 4.27m

Alignment:

Year of construction:

Straight bridge

Damage condition

1930 (It appears that the span on the end point side has been reconstructed.)

Superstructure:

Steel truss girder was repainted and no heavy corrosion was observed. Relatively new touch-up

painting observed in a part of deck slab.

Substructure:

Minor damage in stone material

Accessories:

Truss girder settling in a pier of stone masonry block structure.

Others: Insufficient road width

Traffic volume

() · Pedestrians

1993 2000

240 vehicles/day 972 vehicles/day (66)

Natural conditions

Topographical features:

Relatively flat topography in the savanna.

Geological features:

Rock mass exposed in the river bed, which may indicate that the bearing stratum exists at a

relatively shallow level

River: Others: Water level rises by about 5.5 m during rainy season, and the bridge is flooded to the truss bottom chord member.

None in particular

Surrounding environment

Amunuguma village is on one side of the bridge, the Wariyapora side. Pannawa village is on the other side, the Hiripitiya side. The bridge crosses over the Dadulu river flowing along the boundary of the village.

There are about 250 households (1000 people) in small villages on both sides of the bridge.

There is only a primary school. Secondary schools are in Wariyapora and Hiripitiya. There is a hospital in Wariyapora and Hiripitiya, but the larger hospital is in Kurunegala. The police station is only in Wariyapora.

Site condition

Utilities to be transferred Water pipe is installed.

Bypass:

To bypass the bridge, it is necessary to go to Kurunegala, requiring 50 km or more detouring.

Precipitation

(Unit;mm)

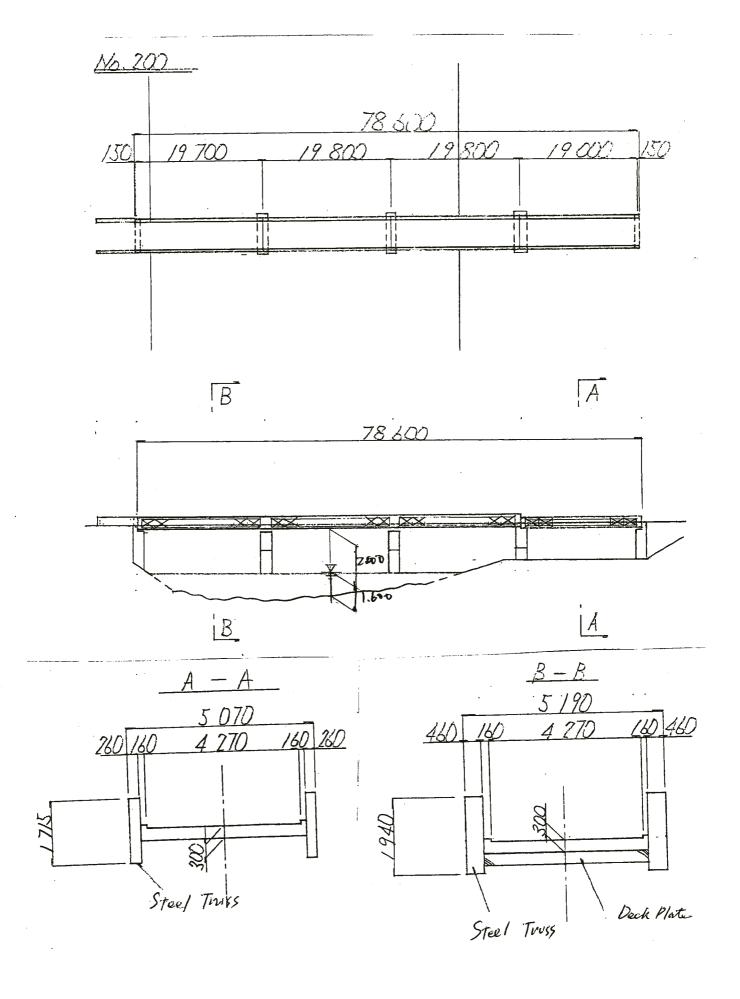


Annual rainfall

900 mm

Monthly maximum rainfall Month with maximum rainfall 200 mm October

Current site map



NO. 239 existing road condition

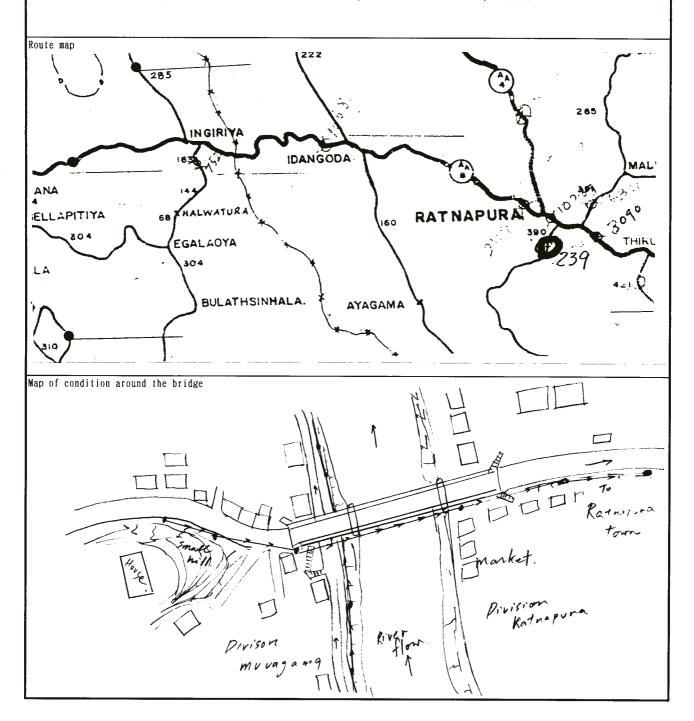
ı					
1	Location		Road No.	Nome of road	V- D4
	Province	District	Road No.	Name of road	Km Post
	Sabaragamuwa	Ratnapura	B390	Ratnapura-Palawela-Karawita	1/3

Outline of route

The B369 road branches from the A-class National Highway 4 (A4) in the approximate center of Ratnapura, passing through the Muvagama

Division that is divided into halves by Kalu Ganga, then connects to Palawela and Karawita. From Karawita, the road passes through Nivitigala and connects to A4 Road. The roads passing through towns such as Kotamulla and

Prom Marawita, the road passes through Mythigala and connects to A4 Ruad. The roads passing infough towns such as Adjamulia and Parawela provide short cut to Rathapura or A4 Road.
Rubber plantations exist between Kotamulla and Parawela, while 15 tea factories are located in the mountainous area to the west of Parawela. These products are considered to be transported via this road to Rathapura or via A4 Road to Colombo.
In the Muvagama Division on the bank opposite Rathapura, there are many residential houses, government buildings, and schools along B369 and urbanization is in progress. Markets and stores are densely constructed on the Rathaputra side.



The general view (longitudinal direction to the bridge axis)



The side view (perpendicular direction to the bridge axis)



Structure type:

(Superstructure) 3-span simple steel truss bridge (Existing bridge drawing made available from RDA)

<Abutment>

Stone masonry block structure

(Pier)

Stone masonry block structure

Bridge length: Width composition: 95.70m

Span split: 20.00m+55.70m+20.00m Driveway 4.25m, Sidewalk 1.25m×2 (constructed later)

Alignment:

Straight bridge

Year of construction:

1920

Damage condition

Superstructure ⊥:

Steel truss girder has been repainted. No heavy corrosion was observed.

Aging of steel material

Substructure: Accessories: Others:

Sidewalk on the downstream side was not available for passage due to damage.

Insufficient road width

Traffic volume

O: Pedestrians

1997

5, 709 vehicles/day

2000

8, 209 vehic (4,645)

Natural conditions

Topographical features: Geological features:

A volley in the mountainous terrain, but not so steep. In particular, the Ratnapura side is a basin-like flatland. Details will be understood through in-situ survey. It is presumed that the crushed rock mass is distributed over a wide area. River width about 100 m. Water level increased by 4 m during rainy season, but does not cause innundation.

River Others:

None in particular

Surrounding environment

Around the bridge, the Ratnapura area on the right bank of Kalu Ganga is a center of commercial activities of Ratnapura District , with hospitals and city offices. In particular, there is a grocery market near the bridge.

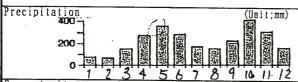
In the Muvagama area on the opposite bank, there are Education Ministry offices and schools. The number of ordinary residential houses is increasing.

RDA said that the sidewalk was constructed to cope with growing pedestrian traffic. Utilities, such as water pipes and telephone cables of Sri Lanka Telecom are installed to this bridge. Ther are powr transmission lines on the upstream side of the bridge.

Site condition

Utilities to be transferred:Water pipes (φ300, φ400), telephone lines (3φ150mm) are installed. There is a bypass, but it causes a detour of 20 km or more.

Bypass:



Annual rainfall Monthly maximum rainfall 400

Month with maximum rainfa October

mm

mm

Current site map

