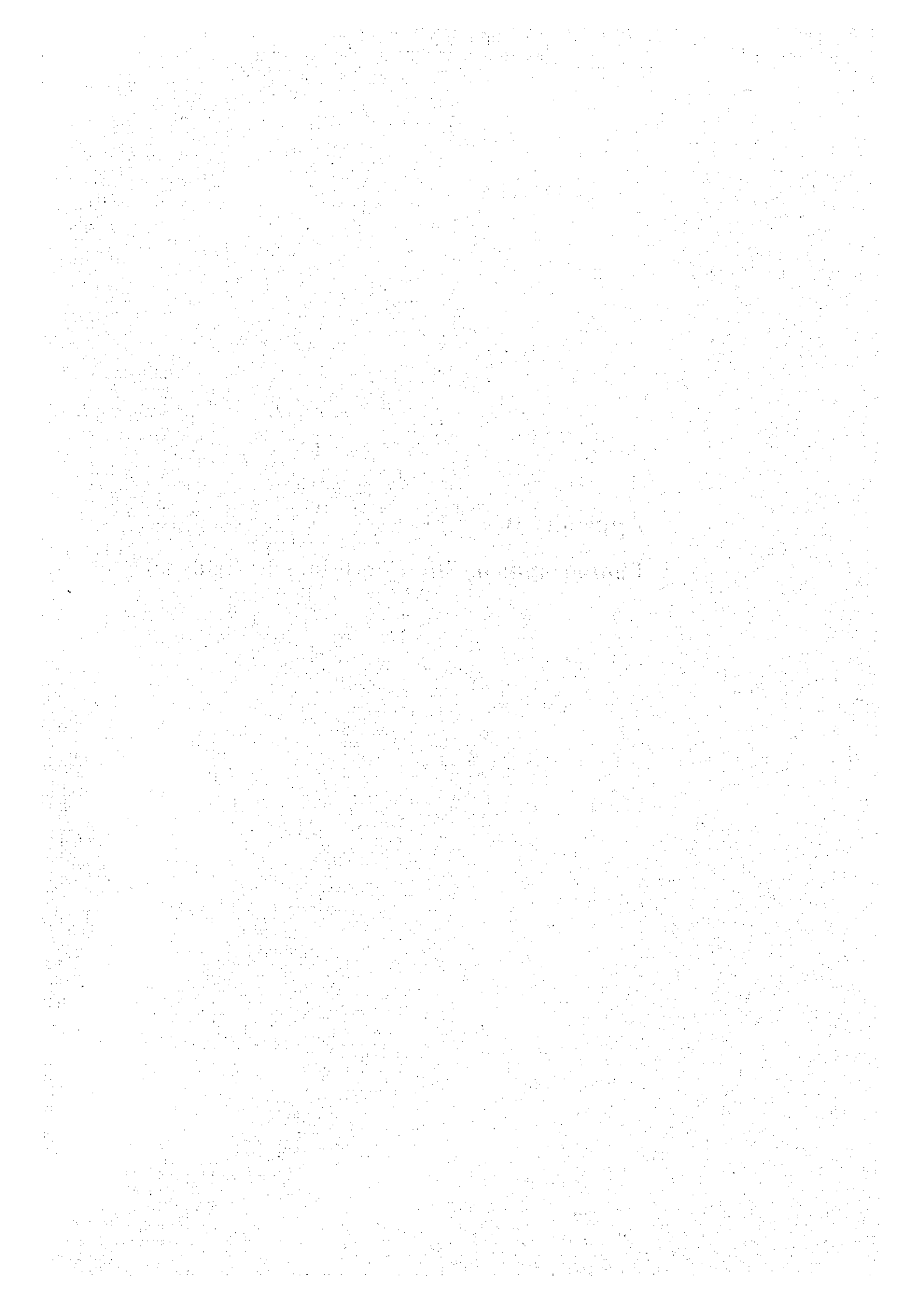
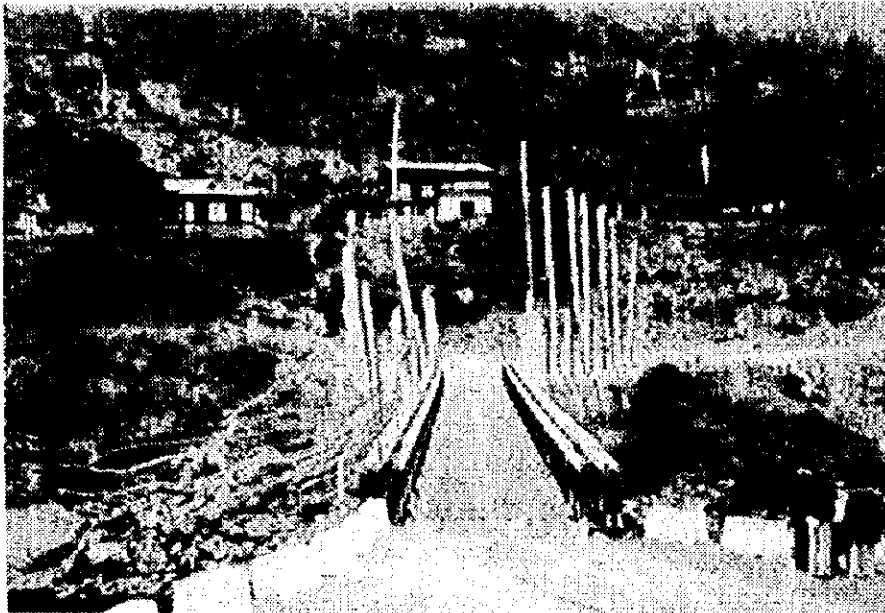


Appendix-B

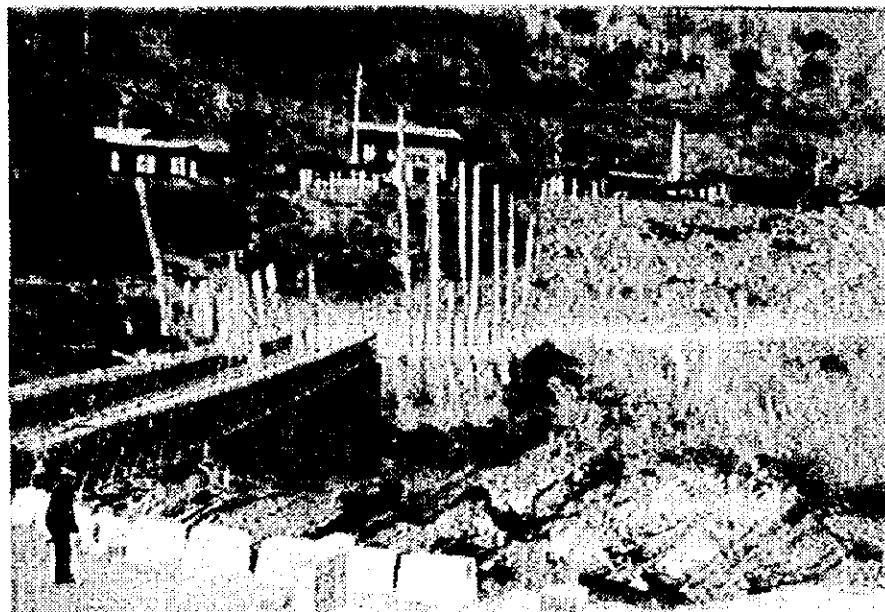
Photographs of Site Conditions (5 Bridges)



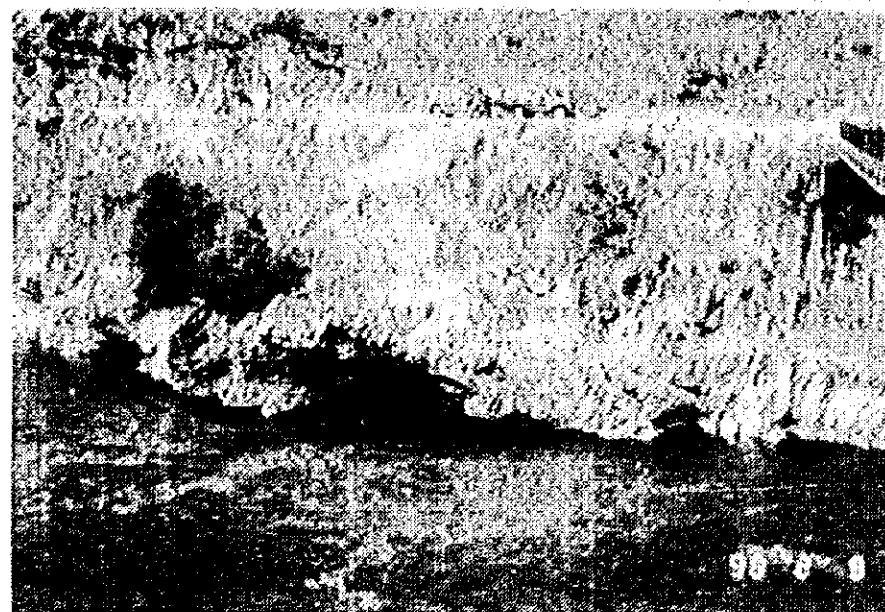
BR.NO.1 KURIZAMPA BRIDGE



Whole bridge
(looking from
right bank)

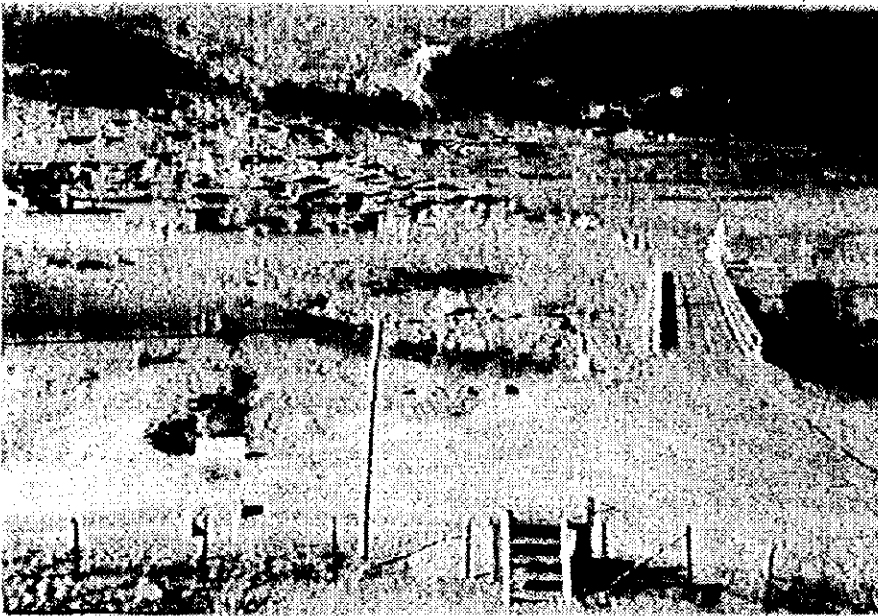


Left bank
Rock is
outcropping.



Right bank
Rock was scored
at lower part.

BR.NO.2 CHAMKAR ZAM BRIDGE



Whole bridge and
right bank
(looking from
left bank)

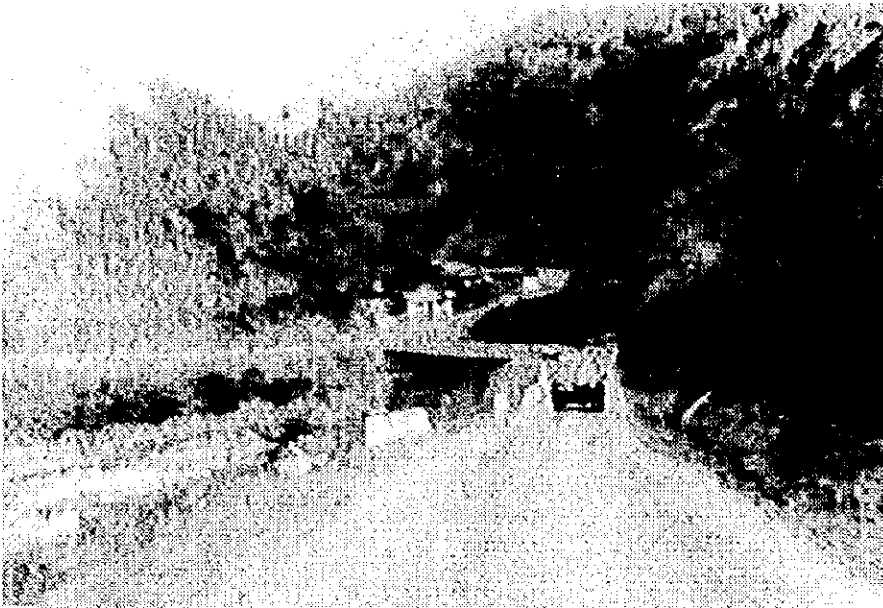


Left bank
Rock is
outcropping.

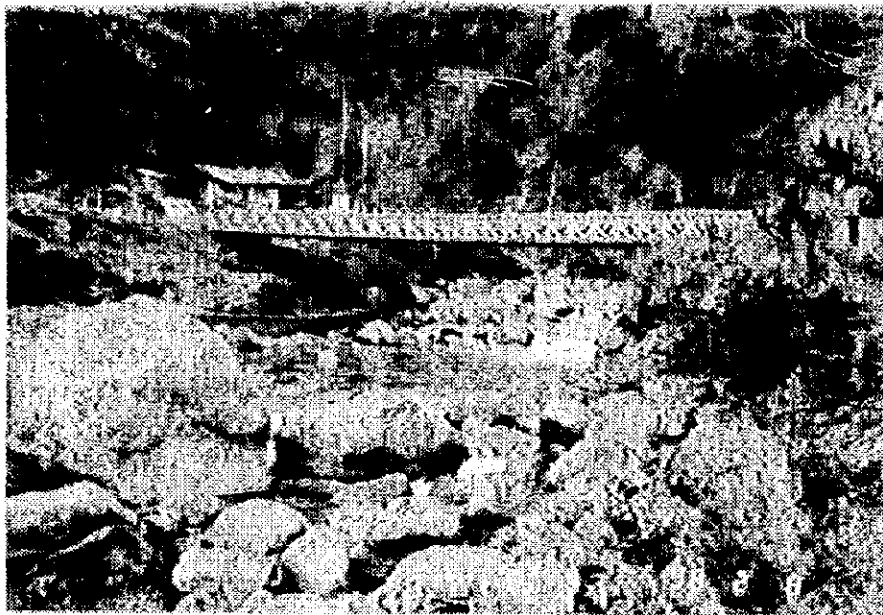


Approach road
on right bank
(Jakar side)

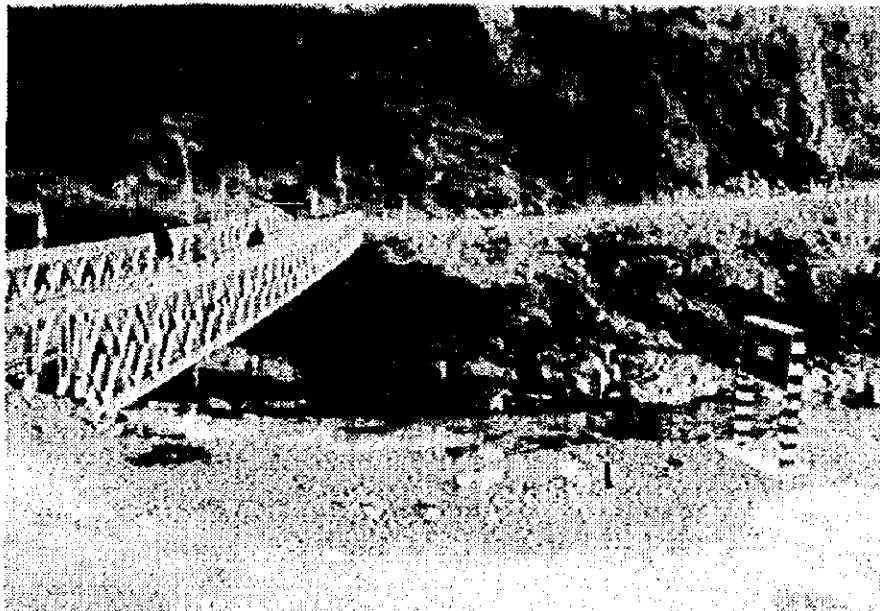
BR.NO.3 BJEE BRIDGE



Whole bridge
(Looking from
approach road
on left bank
from Trongsá
side)



Whole bridge and
right bank
(looking from
left bank)

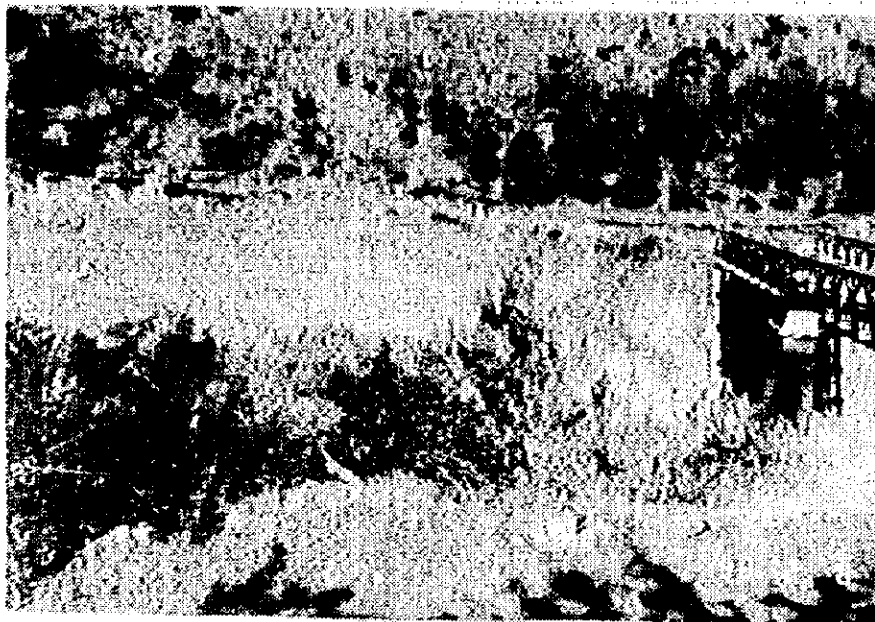


Left bank
Rock is
outcropping.

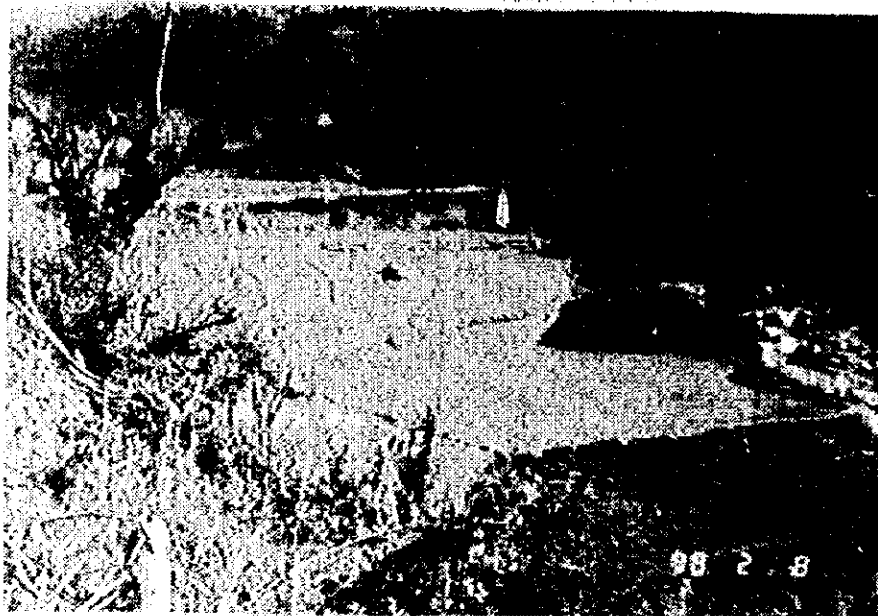
BR.NO.4 WACHY ZAM BRIDGE



**Whole bridge
(Looking from
upstream, Trongsa
side)**



Right bank



**Approach road
on right bank
(Looking from
Wangdue side)**

BR.NO.5 MANGDICHU BRIDGE



Whole bridge
(Looking from
downstream,
right bank)



Rock on right
bank (cave and
fracture)



Left bank

Appendix-C

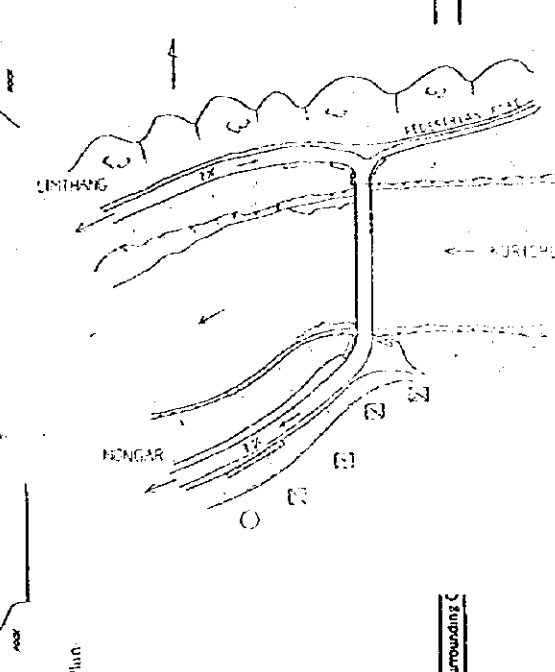
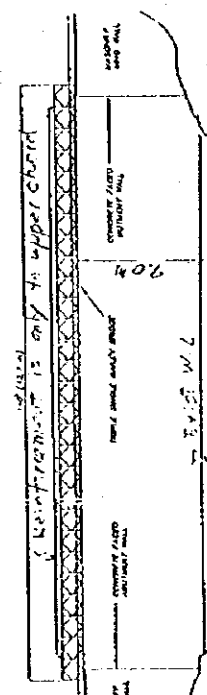
Bridges Survey Results (22 Bridges)

Bridge Inventory

SER No. **1** Elevation **116.16m**

NAME OF BRIDGE Kuri, Z. C. M. P. A.		CLASS OF ROAD N.H. R. No. 1		CROSSING, NAME OF RIVER OR ROAD Kuri, Chit		MAINTENANCE BY	
Design Information		Yes		No		COMPLETED 1971	
Type of Bridge		Superstructure Raily T/SR		Abutment Masonry		Date of Preparation 13/9/1971	
Length of Bridge		42.7		Skew of Bridge		Prepared by M. S. Z. C. M. P. A.	
Width of Bridge		5.44		Condition of Crossing		Load Limitation No	
Allied Articles		Overall		Stew		No	
Traffic Volume		(Year)		Width of River		deg. Re	
Final Record of Repair		Deck Slab		Width of Crossing		m	
Others		Main Beam		Clearance		m	
Pavement		Painting		Stew		deg. Re	
Others		Ratio of Heavy Vehicle %		Road		m	
Elevation		42.5		Cover		m	
Pavement		5.36		Repair etc.		m	
Others		Podestway m		Beam		m	
Final Record of Repair		N on P		Drainage		m	
Others		5.36		Curb		m	
Pavement		5.36		Railing		m	
Others		5.36		Affixed Articles		m	

1. Sag of main girder is 17cm.
2. Lateral displacement is 4cm.
3. Kurichid hydro power project is on going at down stream about 10km. Maximum Reservoir Level: 534m A.M.S.L. Existing bridge deck level: 580m. No influence.



Result of Visual Inspection	Date of Inspection	Abutment
Pavement & slab	3	Pier
Curb	1	Wing Wall
Railing	3	Substructure
Deck Truss	3	Approaches
Main Beam	3	Others
Others	—	Substructure
Superstructure	3.0	Substructure
Br. Damage Rating	3.0	Substructure
Rating	3.0	Substructure

Comment:
1. Minor of painting is neglected. To remove soil, moss prior to repair.
2. Repainted on 12/1/71.
3. Light replacement required.
4. G.S. of T/SR is just limit.

Bridge Inspection Form

NAME OF BRIDGE *Kabi Zainda* CLASS OF ROAD *A1* CROSSING NAME OF RIVER OR ROAD *COMPLETED* MAINTENANCE BY

SER No. *1*



Sketch and Comments on major damage



Comments on rehabilitation method

Component	Condition of Damage	Rating
Pavement	Type <i>Steel plate</i> Good, Waving, Raining, Crack, Pot hole, Others	Condition <i>Nil</i>
Curb	Type <i>Steel plate</i> Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <i>D. 1 to 2</i>
Railing	Type <i>Barilley</i> Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <i>Fair</i>
Deck Slab	Type <i>Steel plate on stringers</i> Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <i>Nil</i>
Main Beam	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Main Structure	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Drainage	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Expansion Joint	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Roaming	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Drainage	Type <i>Barilley</i> Good, Rust, Corrosion, Buckling, Excessive deformation, Rivet off, Others	Condition <i>Nil</i>
Abutment A1	Type <i>Masonry on rock</i> Body broken (Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, wear of surfaces), Others	Condition <i>Leaning, Settlement, Sliding</i>
Abutment A2	Type <i>DTG</i> Body broken (Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, wear of surfaces), Others	Condition <i>Leaning, Settlement, Sliding</i>
Pier	Type <i>DTG</i> Body broken (Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, wear of surfaces), Others	Condition <i>Leaning, Settlement, Sliding</i>
Pier	Type <i>DTG</i> Body broken (Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, wear of surfaces), Others	Condition <i>Leaning, Settlement, Sliding</i>
Foundation	Type <i>DTG</i> Settlement, Leaning, Moving, Crack, Scouring, Others	Condition
Wing Wall	Type <i>Masonry</i> Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition
Embankment	Type <i>Barilley</i> River Bank, Scouring, Back Filling	Condition
Affixed Apron	Type <i>Barilley</i> River Bank, Scouring, Back Filling	Condition
Traffic Sign	Type <i>Barilley</i> River Bank, Scouring, Back Filling	Condition
Approaches	Type <i>Barilley</i> River Bank, Scouring, Back Filling	Condition
Others	Type <i>Barilley</i> River Bank, Scouring, Back Filling	Condition

Components of photographs taken


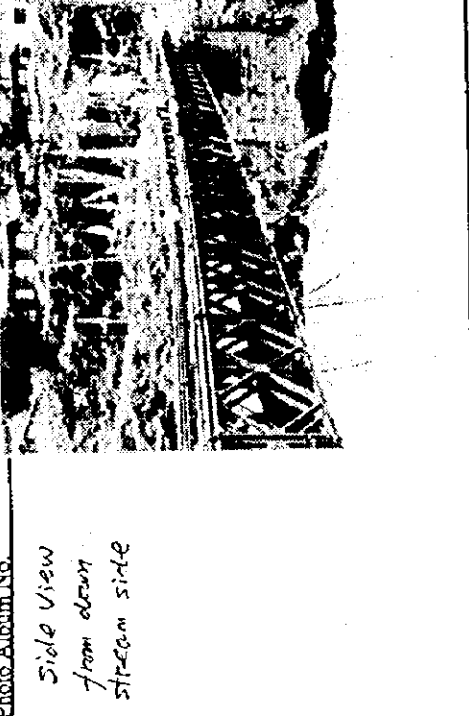
0 Black Board (Name of Bridge)	5 Main Beam	10 Abutment	15 Main Damage	20
1 Front	6 Sway Bracing	11 Abutment	16 Main Damage	21
2 Road Surface	7 Drainage	12 Pier	17 Main Damage	22
3 Expansion Joint	8 Bearing	13 Pier	18	23
4 Deck Slab (Underface)	9 Elevation	14 Pier	19	24

Note: Further inspection shall be carried out on the "major damage" detected in this inspection.

Rating

- No damage detected on the basis of the inspection results.
- Damage has been detected and a follow-up survey is required.
- There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
- There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight to be imposed.


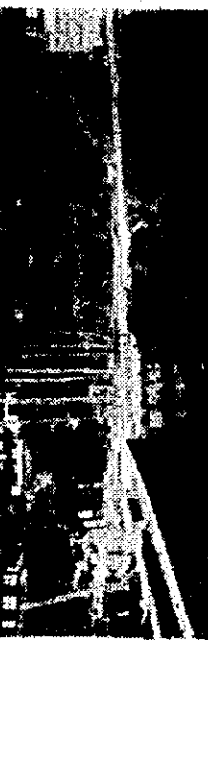
Photographs

NAME OF BRIDGE <i>Kurizompa</i>	SER. No. <i>1</i>	Date of Inspection
Front		
Photo Album No.	<i>Front View</i>	<i>Side View from down stream side</i>

Elevation _____

Photo Album No. _____

Photographs

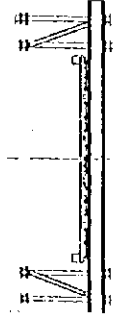
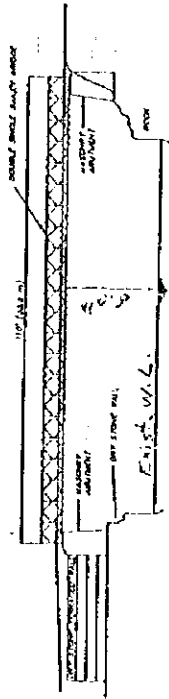
NAME OF BRIDGE	KURIZAMA	SER No.	2	Date of Inspection
Front	Photo Album No.	3		Photo Album No.
				<i>No seen. However, it may be secured.</i>
Elevation	Photo Album No.			
				

Bridge Inventory

SER NO. Z 283515m Next to Jakar Town

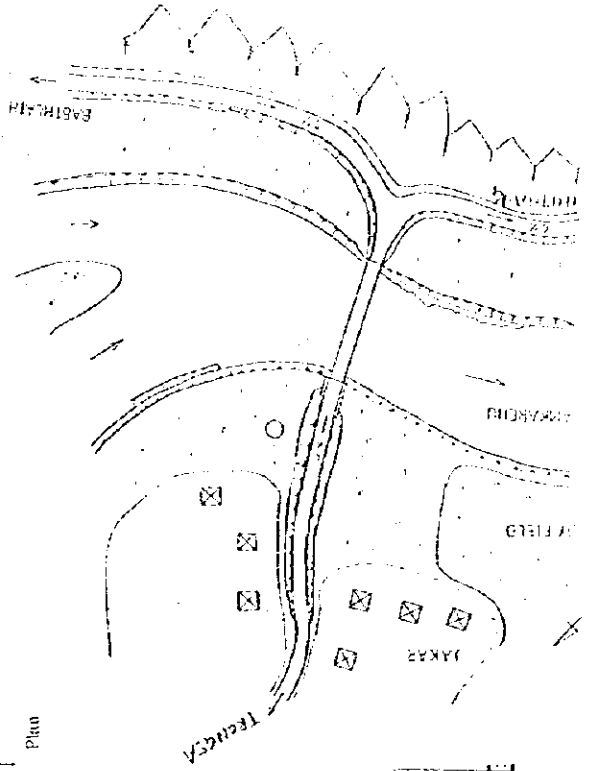
NAME OF BRIDGE Chankor Zam		CLASS OF ROAD N.H. Rt. No. 1		CROSSING: NAME OF RIVER OR ROAD Chankor Kocul		MAINTENANCE BY	
Design Information		COMPLETED 1973		Date of Preparation 12/9/97 # 26/9/97		Prepared by [Signature]	
Type of Bridge		Design Loading BS		Load Limitation NO		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 5T	
Superstructure Bailey DS		Design Standard		Slew		Slew No.	
Substructure Abutment Masonry		Slew of Bridge		Road		Clearance m Skew deg.	
Pier		Condition of Crossing		River		Width of River m Depth m	
Length of Bridge 33.7		m Span 33.5		Repair etc.		Free Board m m	
Width of Bridge 5.0		m Carriageway 3.22		Expansion Joint		Design Quality	
Allied Articles		m Footway		Substructure		m/Yes	
Traffic Volume		Ratio of Heavy Vehicle (year)		Others			
Final Report of Repair		Main Beam		Bearing		Curb	
Pavement		Deck Slab		Drainage		Railing	
Others		Paving 12/9/97		Substructure		Affixed Articles	

Elevation:



1. Sag of main girder 12 cm at span center
2. Lateral displacement 0 cm
3. Members were bent at 4 locations.
4. Maintenance on bearings are not satisfactory.

Plan



Result of Visual Inspection	Count	Category	Date of Inspection	Abatement
Pavement	2	Bearing	3	Pier
Curb	1	Expansion Joint		Wing Wall
Railing	1	Drainage		River Bank
Deck Slab	2	Affixed Articles		Approaches
Main Beam	4	Others		Substructure
Others		Bridge Accessory	2.0	
Substructure	3.3			1.0
Overall Rating	3.3			

Comment

1. Both abutments good.
2. Void is found in masonry abutment.
3. In right bank, abutment was secured, and gabion installed.

1. No damage detected on the basis of the inspection results.
2. Damage has been detected and a follow-up survey is required.
3. There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
4. There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight have to be imposed.

Bridge Inspection Form

SR No 2

COMPLETED DATE OF INSPECTION MAINTENANCE BY

NAME OF BRIDGE Chikmagalur CLASS OF ROAD CLASS OF ROAD CROSSING NAME OF RIVER OR ROAD Condition of Damage



Rating Sketch and Comments on major damage
Members were best at 5 location



Comments on rehabilitation method
Soft is very rusty

Component	Type	Condition	Rating
Pavement	Good, waving, rutting, crack, pot hole, Others	Condition <u>Good</u>	
Substructure	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>Not good</u>	
Deck Slab	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Main Beam	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Main Structure	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Diaphragm	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Sway Bracing	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Lateral Bracing	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Piling	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Expansion Joint	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Beaming	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Drainage	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Abutment	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Abutment	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Pier	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Pier	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Foundation	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Wing Wall	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Embankment	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Articled Abutle	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Traffic Sign	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Approaches	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	
Others	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	Condition <u>So so</u>	

Components of photographs taken	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Black Board (Name of Bridge)																						
1. Front																						
2. Road Surface																						
3. Expansion Joint																						
4. Deck Slab (Underface)																						

Note: Further inspection shall be carried out on the "major damage" detected in this inspection.

Photographs

NAME OF BRIDGE *Chaukey Zam*

SER No. *2*

Date of Inspection

Front

Photo Album No. _____

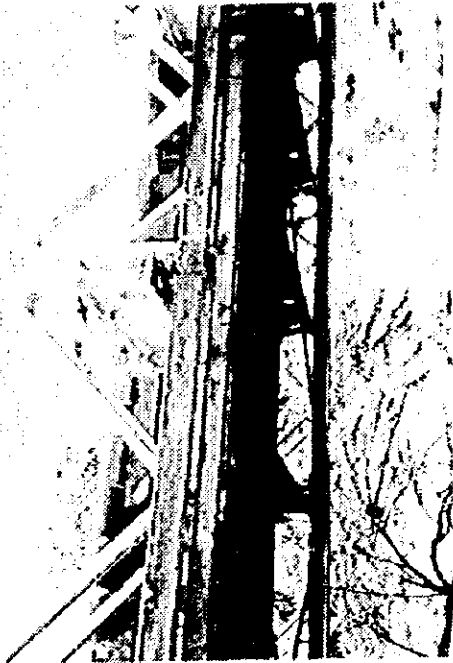


Photo Album No. _____

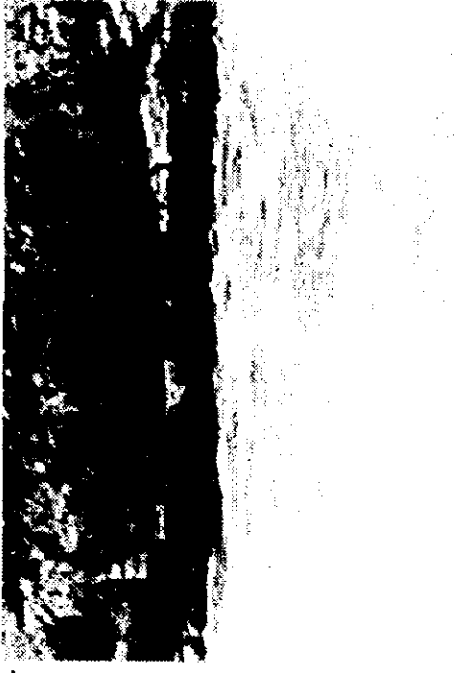

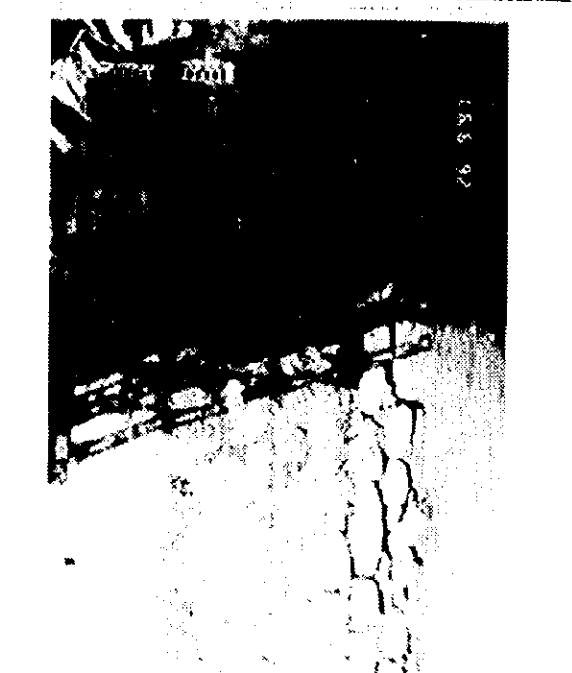



Elevation

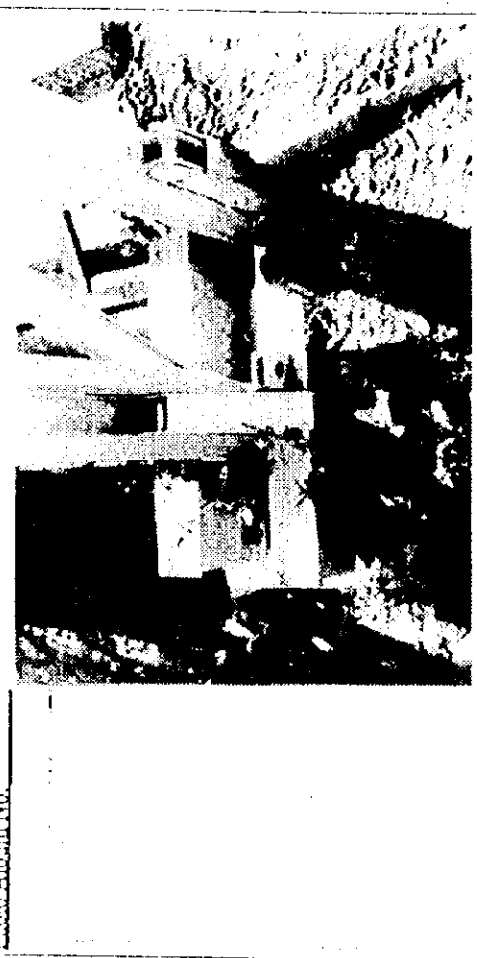

Photo Album No. _____



Photographs

NAME OF BRIDGE <i>Chambers Row</i>	SER No. <i>2</i>	Date of Inspection
Front	Photo Album No.	Photo Album No.
		
Elevation	Photo Album No.	Photo Album No.
		

PHOTOGRAPHS

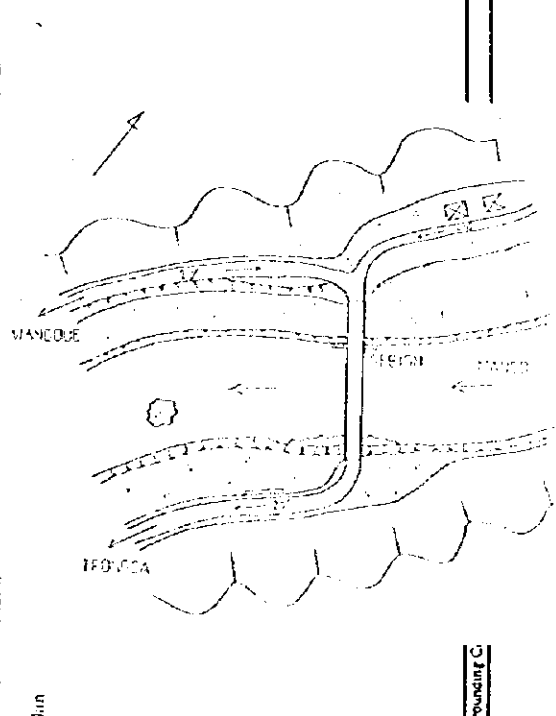
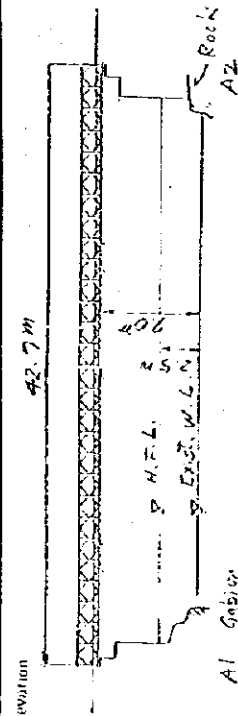
NAME OF BRIDGE <i>Cherokee Falls</i>	SER No. <i>Z</i>	Date of Inspection
Front	Photo Album No.	Photo Album No.
		
Elevation	Photo Album No.	Photo Album No.

Bridge Inventory

SER. No. 3 358.6 km

NAME OF BRIDGE <i>Bjed</i>		CLASS OF ROAD <i>M.H. R. No. 2</i>		CROSSING NAME OR NEIGHBOUR ROAD <i>Manj d'ichal</i>		COMPLETED <i>1989</i>		MAINTENANCE BY	
Design Information		No		Manufacture		Date of Preparation <i>11/9/97</i>		Prepared by <i>18+</i>	
Type of Bridge		Superstructure <i>Br. I. Y. TSR</i>		Deck <i>Timber</i>		Design Loading		Load Limitation <i>100 kN</i>	
Substructure		Abutment <i>Masonry</i>		Pier		Skew of Bridge		SKEW ANGLE	
Length of Bridge		42.7 m		Span		Skew		SKEW ANGLE	
Width of Bridge		5.44 m		Carriageway		Width		SKEW ANGLE	
Allied Articles		Overall		Ratio of Heavy Vehicle		Width of River		SKEW ANGLE	
Traffic Volume		(year)		%		Depth		SKEW ANGLE	
Final Nature of Repair		Deck Slab		Main Beam		Railing		SKEW ANGLE	
Others		Painting		Others		Drainage		SKEW ANGLE	
Expansion Joint		Substructure		Bearing		Curb		SKEW ANGLE	
Alined Articles		Reinforcement		Others		Alined Articles		SKEW ANGLE	

1. Sag of main girder is 19 CM.
2. Lateral displacement is 3 CM.
3. Members were crushed and bent at 24 locations.
4. Sway bracing was damaged at 1.
5. Repainting in manner was poor.
6. Maintenance of bearings are poor.



Result of Visual Inspection	Date of Inspection	Abutment
Pavement	2	1
Curb	2	1
Railing	3	1
Deck Slab	4	1
Main Beam	4	1
Others	—	—
Superstructure	4.0	1.0
Overall Rating	4.0	—

Comment
 1. Reinforcement bars attached in 1991.
 2. Bearing is to be cleaned.
 3. Steel girders bent due to crash. (20 points)
 4. 28 years old. To be replaced.
 5. Repainting done in 2005, other maintenance

1. No damage detected on the basis of the inspection results.
2. Damage has been detected and a follow-up survey is required.
3. There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
4. There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight have to be imposed.

Surrounding C

Bridge Inspection Form

SER No. 3

NAME OF BRIDGE		CLASS OF ROAD		CROSSING NAME OF RIVER OR ROAD		COMPLETED		DATE OF INSPECTION		MAINTENANCE BY	
Bile						Rating		Sketch and Comments on major damage			
Component		Condition of Damage									
Pavement		Type	Condition								
Curb		Type	Condition								
Railings		Type	Condition								
Deck Slab		Type	Condition								
Main Beam		Type	Condition								
Main Structure		Type	Condition								
Diaphragm		Type	Condition								
Sway Bracing		Type	Condition								
Lateral Bracing		Type	Condition								
Expansion Joint		Type	Condition								
Bearing		Type	Condition								
Drainage		Type	Condition								
Abutment		Type	Condition								
Abutment		Type	Condition								
Pier		Type	Condition								
Pier		Type	Condition								
Foundation		Type	Condition								
Wing Wall		Type	Condition								
Embankment		Type	Condition								
Affiliated Structure		Type	Condition								
Traffic Sign		Type	Condition								
Approaches		Type	Condition								
Other		Type	Condition								

Comments on major damage: Turn outside buckle was broken. wasn't very bc.
 Comments on repair: Main bolts were crushed.



Components of photographs taken

0	Black Board (Name of Bridge)	15	Main Beam	10	Abutment	15	Main Damage	20
1	Front	16	Sway Bracing	11	Abutment	16	Main Damage	21
2	Road Surface	17	Drainage	12	Pier	17	Main Damage	22
3	Expansion Joint	18	Bearing	13	Pier	18	Main Damage	23
4	Deck Slab (Underface)	19	Elevation	14	Pier	19	Main Damage	24

Note: Further inspection shall be carried out on the "major damage" detected in this inspection.

Photographs

NAME OF BRIDGE *Blue* SER No. *3* Date of Inspection _____

Front

Photo Album No. _____

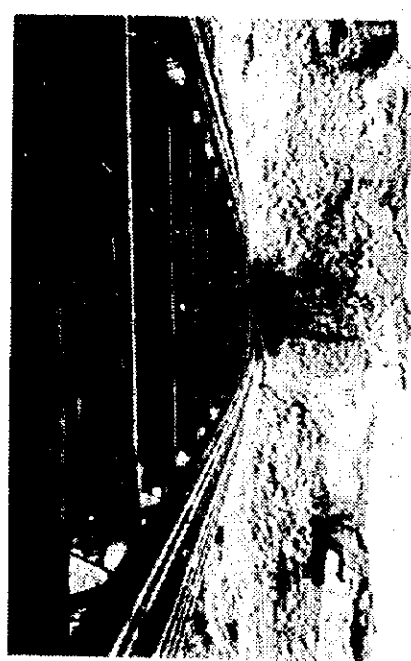


Photo Album No. _____



Elevation

Photo Album No. _____



Photographs

NAME OF BRIDGE B/EE

ISER No. 3

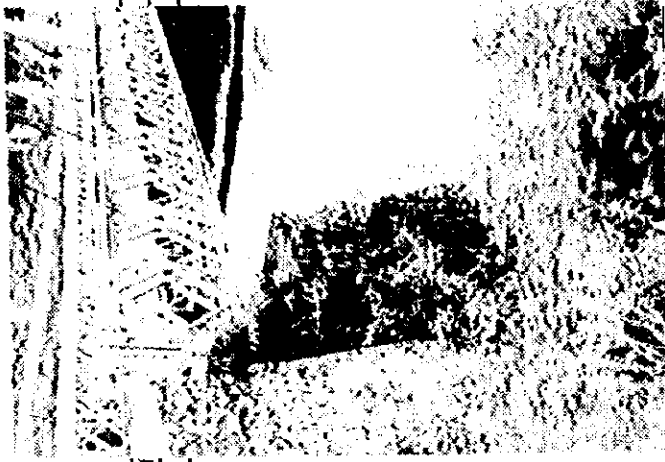
Date of

Front

Photo Album No.

Photo Album No.


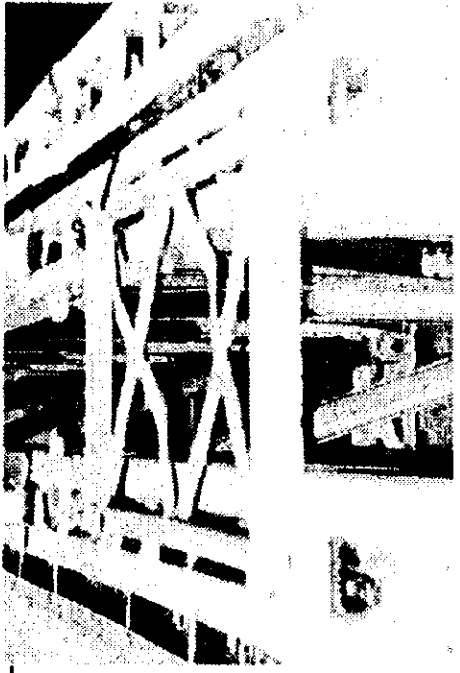
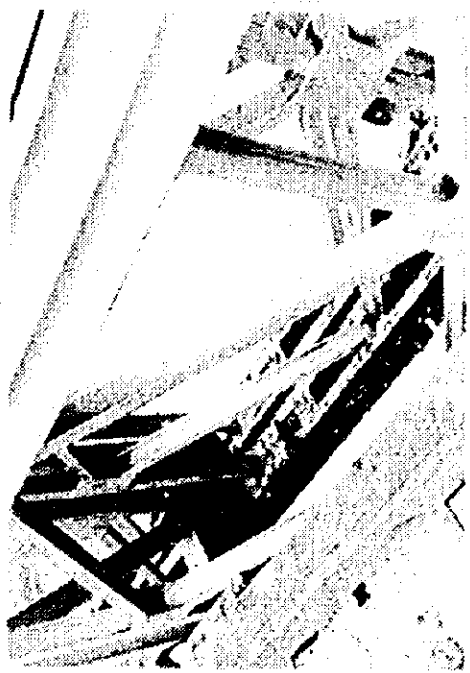
Date of



Elevation

Photo Album No.

Photographs

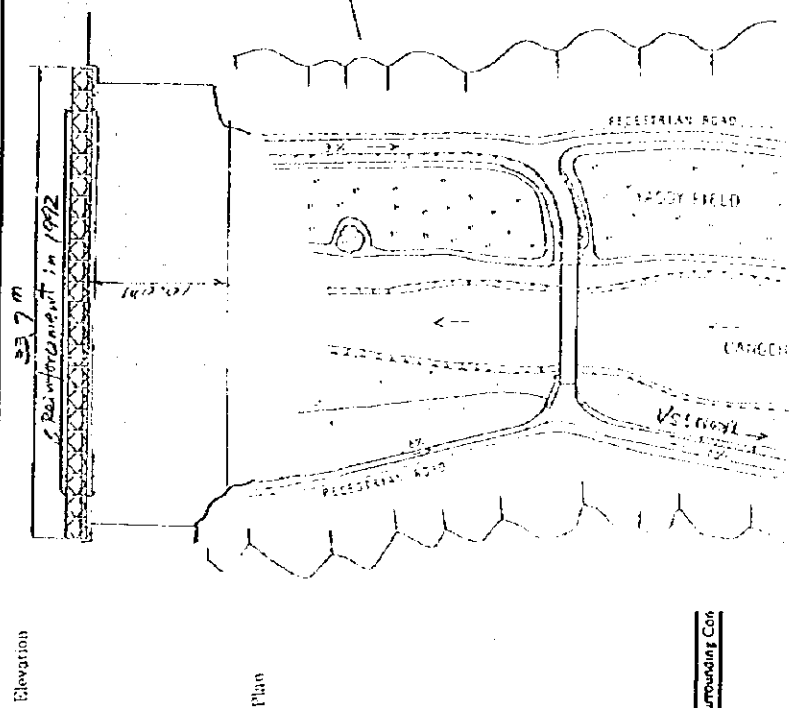
NAME OF BRIDGE <i>Lee</i>		SER No. <i>3</i>	Date of Inspection
Front			
Photo Album No.	<i>Port members on bearings.</i>	Photo Album No.	
Elevation			
Photo Album No.			

Bridge Inventory

SER NO. 4 469 km

NAME OF BRIDGE Wachay Zemi		CLASS OF ROAD M.H.R. NO. 1		CROSSING: NAME OF RIVER/Road Dangochu		COMPLETED 1989		MAINTENANCE BY	
Design Information		No		Manufacture		Date of Preparation 11/9/97, 22/9/97 & 25/9/97		Prepared by 18f	
Type of Bridge		Superstructure Bailey DSR		Abutment Masonry		Design Loading		Load Limitation Yes	
Length of Bridge		Substructure Pier		Stew of Bridge		Condition of Crossing		Design Quality	
Width of Bridge		m Span 33.7		m Camberway 3.15		Road		m	
Ailixed Anciles		Overall 5.0		Ratio of Heavy Vehicle %		River		m	
Traffic Volume		Pavement 11/9/97		Deck Slab 11/9/97		Repair etc.		m/sec	
Final Record of Repair		Others		Painting		Bearing		m	
Elevation		33.7 m		Reinforcement in 1992		Expansion Joint		m	
						Substructure		m	

1. Sag of main girder is 16cm. ← 11/1/97.
2. Lateral displacement is 4.0cm.
3. Main Beam was crushed and bent at 1 location.
4. End post was damaged.
5. River training is not stable.
6. Boring has no space to move.



Result of Visual Inspection	Count	Date of Inspection	Abutment
Pavement	1	3	Pier
Curb	1		Walt Wall
Railing	2		River Bank
Deck Slab	4		Approaches
Main Beam	4		Others
Others			Substructure
Superstructure	40		4.0
Overall Rating	49		

Comments

1. No grouting of abutments.
2. Damage has been detected and a follow-up survey is required.
3. There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
4. There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight have to be imposed.

Counted

1. No grouting of abutments.
2. Steel has much rust.
3. Brick-timber and cast-iron parts are now. Done on 11/9/97

- H.W.L. Exist. → 2.0 m

Bridge Inspection Form

SER No. 12
 CROSSING NAME WICHITA OVER OK ROAD

DATE OF INSPECTION

COMPLETED

MAINTENANCE BY



Rating: 3
 Sketch and Comments on major damage:
Steels are very rusty.



Comments on rehabilitation method:
Turn buckle doesn't work, underside especially very rusty.

Component	Condition of Damage	Rating
Pavement	Type <u>Timber with asphalt</u> Condition <u>Good</u>	
Curbs	Type <u>Timber</u> Condition <u>Good</u>	
Railings	Type <u>Timber</u> Condition <u>Good</u>	
Deck Slab	Type <u>Timber on stringers</u> Condition <u>Good</u>	
Main Beam	Type <u>Timber</u> Condition <u>Good</u>	
Main Structure	Type <u>Timber</u> Condition <u>Good</u>	
Expansion Joint	Type <u>None</u> Condition <u>None</u>	
Bearing	Type <u>None</u> Condition <u>None</u>	
Drainage	Type <u>None</u> Condition <u>None</u>	
Abutment A1	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Abutment A2	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Pier	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Foundation	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Wing Wall	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Embankment	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Fixed Abutle	Type <u>Masonry on rock</u> Condition <u>Good</u>	
Traffic Sign Approaches	Type <u>None</u> Condition <u>None</u>	
Others	Type <u>None</u> Condition <u>None</u>	

Components of photographs taken

0 Black Board (Name of Bridge)	5 Main Beam	10 Abutment	15 Main Damage	20
1 Front	6 Sway Bracing	11 Abutment	16 Main Damage	21
2 Road Surface	7 Drainage	12 Pier	17 Main Damage	22
3 Expansion Joint	8 Bearing	13 Pier	18	23
4 Deck Slab (Underties)	9 Elevation	14 Pier	19	24

Note: Further inspection shall be carried out on the "major damage" detected in this inspection.

Photographs

NAME OF BRIDGE *Wacky Beam*

SER. No. *4*

Date of Inspection

Front

Photo Album No. _____



Photo Album No. _____





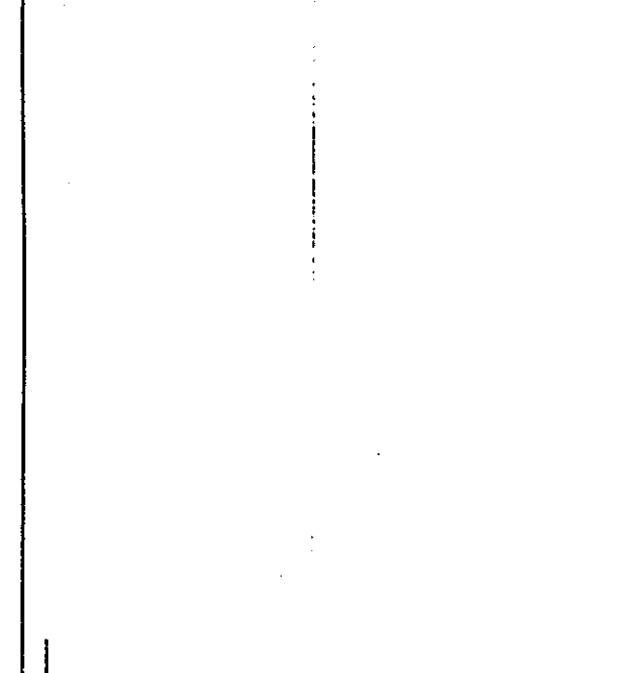
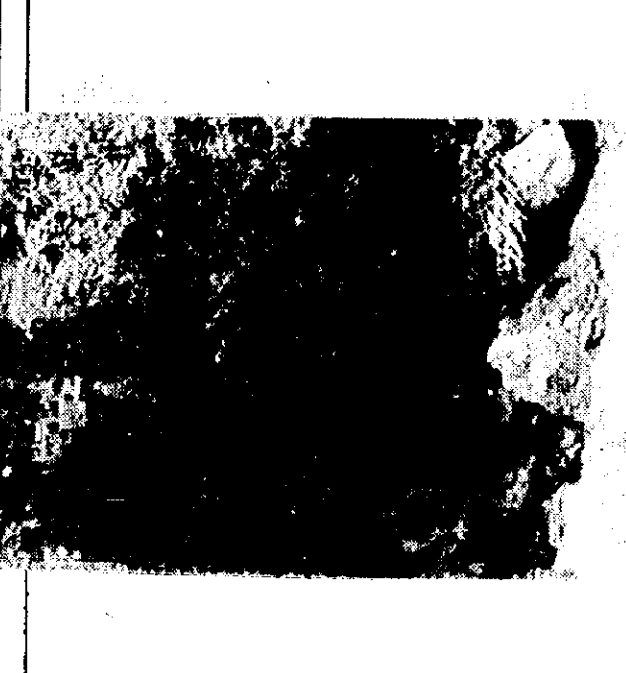
Elevation

Photo Album No. _____

Rust



Photographs

NAME OF BRIDGE	INARBY 2 am	SER No.	4	Date of Inspection		
Front	Photo Album No.	A2 Abutment		Photo Album No.	Detail	
Elevation	Photo Album No.	A1 Abutment		Photo Album No.	Detail	

Photographs

NAME OF BRIDGE

Wachy Zam

SER No. 4

Date of Inspection

Front

Photo Album No.



Photo Album No.

End post was
crushed.



Elevation

Photo Album No.

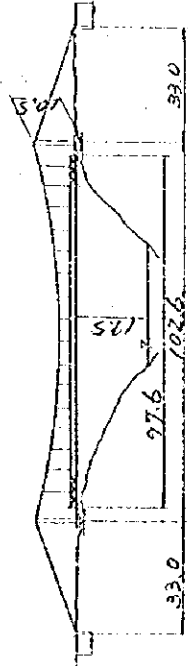


Bridge Inventory

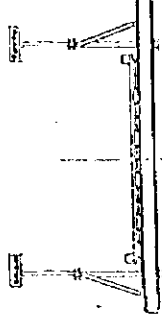
SER No. **5** 98k w/

NAME OF BRIDGE Mangdichu		CLASS OF ROAD N.H. Rt. No. 4		COMPLETED 1985		MAINTENANCE BY	
Design Information		MANUFACTURE		Date of Preparation 15/9/97		Prepared by 4/10/91	
Type of Bridge		Boiler Suspension		Design Loading		Load Intension 12t	
Substructure		Abutment MASON		Design Standard BS		NO. 2	
Pier		Per		Skew		DEPT. No.	
Length of Bridge		m. Span 97.6		Condition of Crossing		Clearance m 97.4	
Width of Bridge		m. Carriageway 4.02		Others		Stew deg. 97.4	
Affixed Articles		Ratio of Heavy Vehicle %		Expansion Joint		Free Board 1.0	
Traffic Volume		(year)		Substructure		Design Quantity m	
Final Record of Repair		Deck Slab		Painting		m	
Pavement		Main Beam		Drainage		m	
Others		Curb		Repair etc.		m	
		Affixed Articles				m	

Elevation

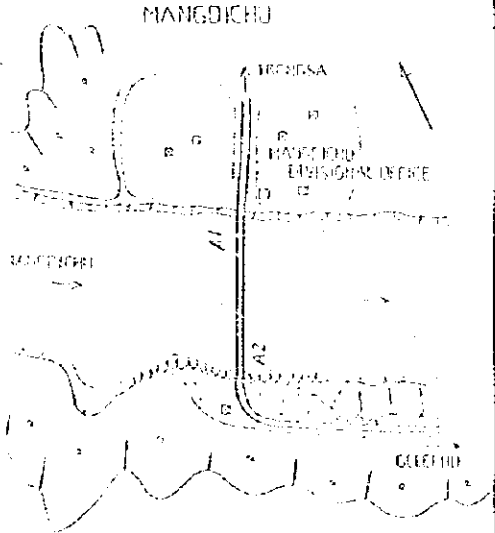


Cross Section



1. Sag of main girder is 510m.
2. Lateral displacement is 20m.
3. Bearing plate is sliding properly.
4. Bailey girder is out of good sag, because of hanger adjustment is not proper.
5. Some wires of main cable were cut.

Plan



Result of Visual Inspection	Date of Inspection	
Pavement	1	Abutment
Curb	1	Pier
Railing	1	Wing Wall
Deck Slab	3	River Bank
Main Beam / Cable Tower	4	Approaches
Others	—	Others
Substructure	2.7	Substructure
Overall Rating	3.7	Substructure

Comment

1. No damage detected on the basis of the inspection results.
2. Damage has been detected and a follow-up survey is required.
3. There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
4. There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight have to be imposed.

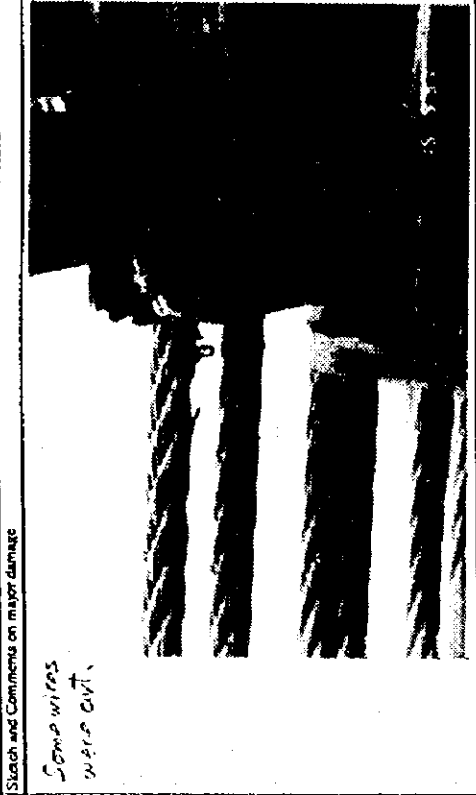
1. Average is not kept just for main wire stress.
2. Bottleneck of N.H. Rt. No 5 due to only 2t capacity

Supervising Engr.

Bridge Inspection Form

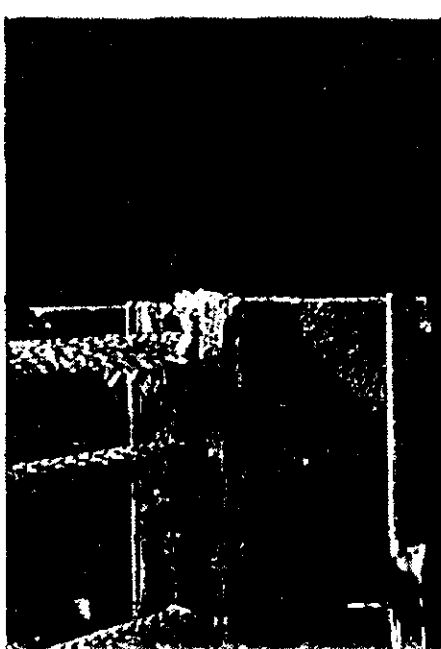
NAME OF BRIDGE *Maple Hill* CLASS OF ROAD *5* SER. No. *5* DATE OF INSPECTION _____ MAINTENANCE BY _____

COMPLETED _____



Some wires were cut.

Comments on rehabilitation method



Ditto

Component	Type	Condition of Damage	Conduction	Remarks
Bridge Surface	Pavement	Good, Waving, Rutting, Cracks, Pot hole, Others	FAIR	
	Curb	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	FAIR	
	Railing	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	FAIR	
	Dock Slab	Good, Scaling, Cracking, Spalling, Exposure and corrosion of reinforcement, Wear of surfaces	FAIR	
Substructure	Main Beam	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Main Structure	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Chapirain	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Sway Bracing	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Lateral Bracing	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Painting	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Expansion Joints	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Bearing	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Drainage	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Abutment	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
Accessories	Abutment A1	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Abutment A2	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Pier	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Pier	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Foundation	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Wing Wall	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Umbilicium	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Affixed Arcade	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Traffic Sign	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Approaches	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
Others	Other	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Other	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Other	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	
	Other	Good, Rust, Corrosion, Buckling, Excessive deformation, Rivets off, Others	FAIR	

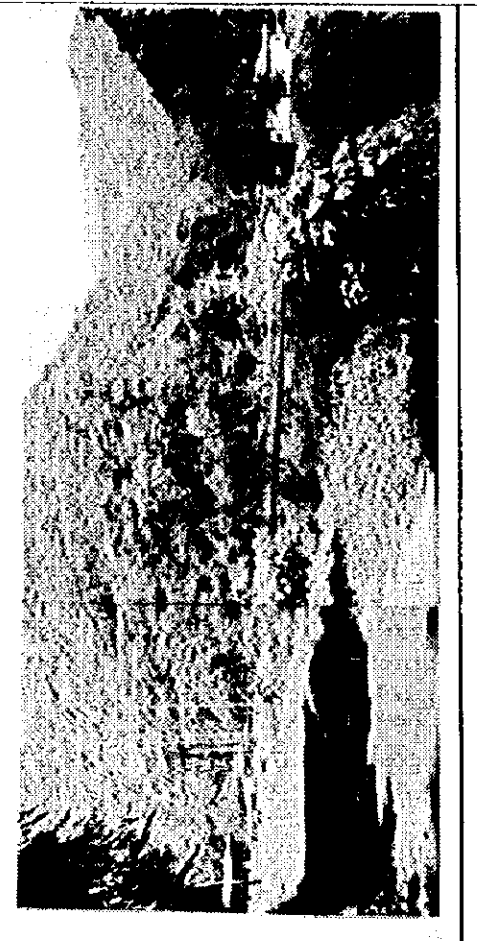

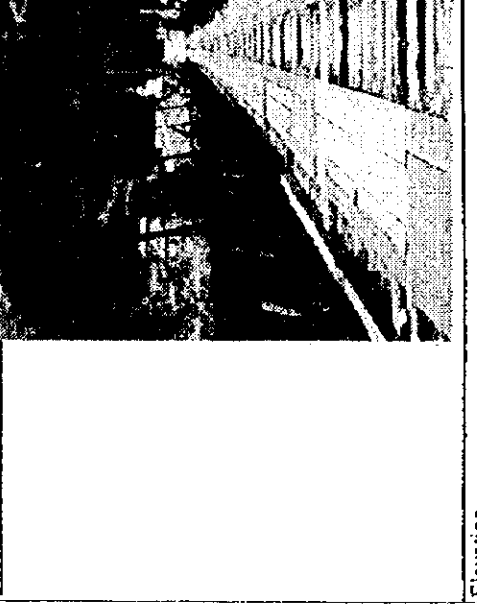



Main cables, tower and anchorage O.R. Hangers are not straight down.

- No damage detected on the basis of the inspection results.
- Damage has been detected and a follow-up survey is required.
- There is significant damage and a detailed survey needs to be carried out to establish whether repair work is to be carried out or not.
- There is significant damage and urgent repair is required or the bridge has to be closed to traffic or restriction on vehicle weight to be imposed.

Component of photographs taken	5 Main Beam	10 Abutment	15 Main Damage	20
0 Black Board (Name of Bridge)				
1 Front				
2 Road Surface				
3 Expansion Joints				
4 Dock Slab (Underfaces)				
5 Main Beam				
6 Sway Bracing				
7 Drainage				
8 Bearing				
9 Elevation				
10 Abutment				
11 Abutment				
12 Pier				
13 Pier				
14 Pier				
15 Main Damage				
16 Main Damage				
17 Main Damage				
18				
19				
20				

Note: Further inspection shall be carried out on the "major damage" detected in this inspection.

Photographs

NAME OF BRIDGE	SER No. 5	Date of Inspection
Front	Photo Album No.	Photo Album No.
		
Elevation	Photo Album No.	
		<p>Bearings are missing properly.</p>

Photographs

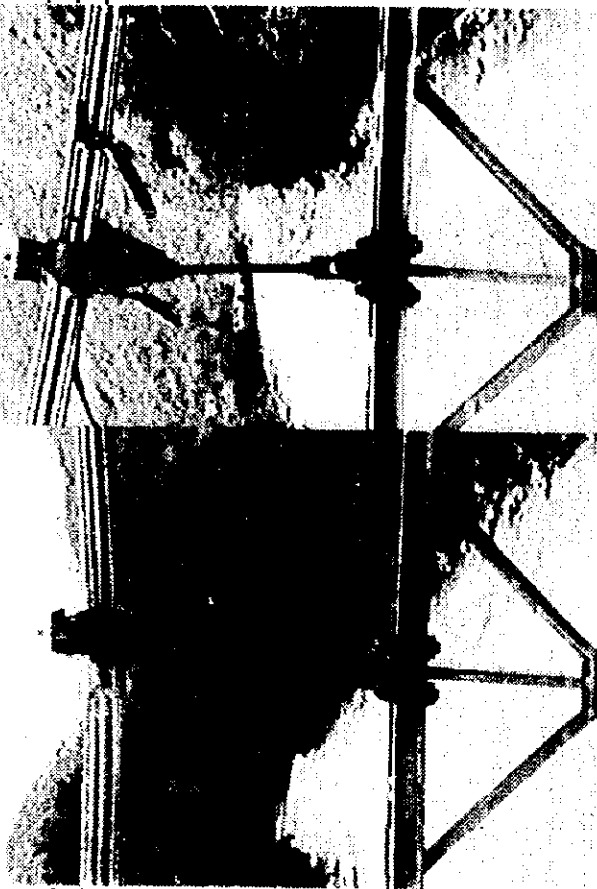
NAME OF BRIDGE Mandichill SER No. 5

Front

Photo Album No. 0



Photo

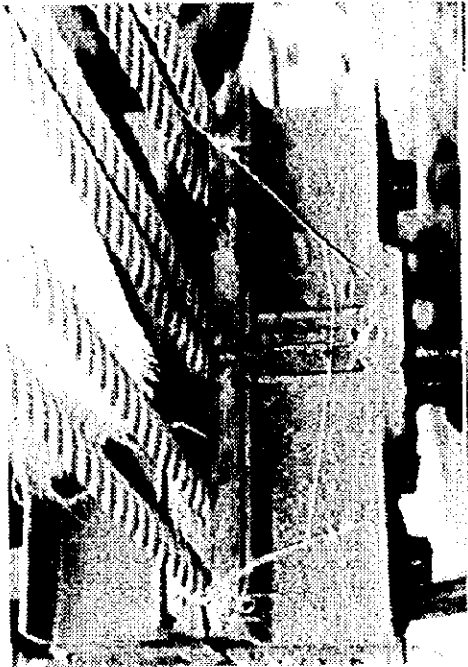


Hanger ropes on side vertical

Elevation

Photo Album No.

*Main rope
725 mm x 6 x 2*



Photographs

NAME OF BRIDGE *Musfield*

ISER No. *5*

Date of Inspection

Front

Photo Album No. *(6)*

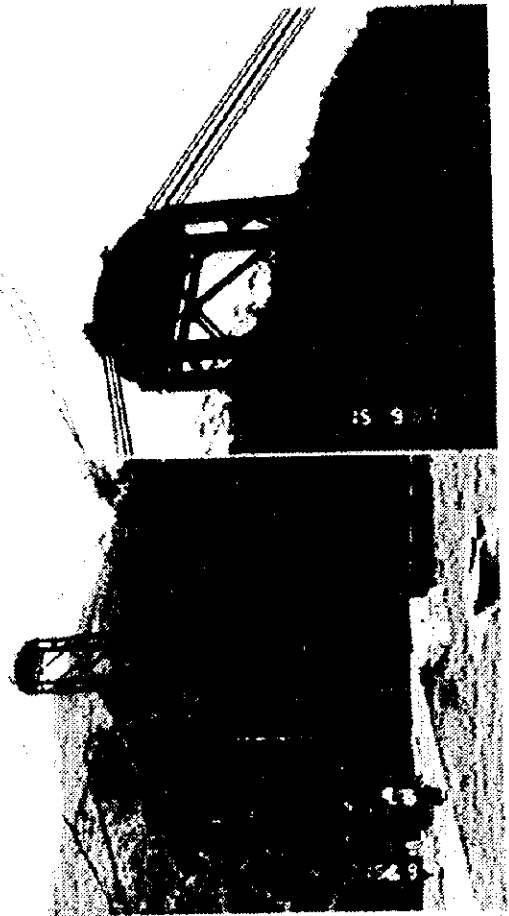


Photo Album No.





Elevation

Ph



Photographs

NAME OF BRIDGE	Mangalchu	SER. No.	5	Date of Inspection	
Front					
Photo Album No.	Abutment A2				
					
Photo Album No.	Abutment A1				
					

Elevation					
Photo Album No.	Anchor block				
	3 m x 6 m long				
	x 3 m deep.				
	