

**ROADS AND HIGHWAYS DEPARTMENT
MINISTRY OF ROAD TRANSPORTATION AND BRIDGES
THE PEOPLE'S REPUBLIC OF BANGLADESH**

**PREPARATORY SURVEY
ON
WESTERN BANGLADESH
BRIDGES IMPROVEMENT PROJECT**

**FINAL REPORT
VOLUME 3: APPENDIX 1**

APRIL 2015

JAPAN INTERNATIONAL COOPERATION AGENCY

ORIENTAL CONSULTANTS GLOBAL CO., LTD.

KATAHIRA & ENGINEERS INTERNATIONAL

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People's Republic of Bangladesh
Preparatory Survey on Western Bangladesh Bridges Improvement
Project

Final Report Volume 3

List of Appendix

APPENDIX 1 (Final Report Volume 3)

- Appendix 1.1 The Result of Site Survey for 200 Bridges
- Appendix 1.2 Minutes of Discussion (M/D) with RHD at 26th January
- Appendix 1.3 List of 105 Bridges with Score and Photos
- Appendix 1.4 Geological Survey Works
- Appendix 1.5 Additional investigation for application of weathering steel

APPENDIX 2 (Final Report Volume 4)

- Appendix 2.1 EIA Report (For 105 Bridges)
- Appendix 2.2 ARP Report (For 105 Bridges)
- Appendix 2.3 EIA Report (For EZ bridge)
- Appendix 2.4 ARP Report (For EZ Bridge)
- Appendix 2.5 Form of Monitoring
- Appendix 2.6 TOR for IA for ARP Implementation
- Appendix 2.7 TOR for External Monitoring Consultant

APPENDIX 1.1

The Result of Site Survey for 200 Bridges

Bridge and Road Specifications

Zone: BARISAL	Division(Subdivision): BARISAL	LRP: 182a	Chainage: 180.819 km
1) Bridge Name/no:01-Bakergonj Steel Bridge	2) Road Name: Dhaka - Barisal-Patuakhali	3) Date : 01.12.2013.	4) GPS Data :Lat. 22°32'26.884" Lon. 90°19'59.9"
5) Road Category: N 8	6) Bridge Width: 4.00m Carriageway Width: 3.40m	7) Bridge Type: Bailey with Steel Deck	8) Bridge length: 33.60m
9) Bridge Span Arrangement: Single Span	10) Approach Road Width: 5.70m	11) Sub structure information	12) River information:
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):	-Type:	-Approx river width: 19.00m
		-Approx. height:	-Approx. river water level: 4.50m from deck
			-Approx. river depth: 6.50m from deck

NORTH

Consultant: Oriental Consultants Co. Ltd.	Scale: 1:1400	Name of Engineer/Surveyor: Md. Azad	Surveyed by: SURVEY2000
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Photo Sheet of the Bridge 1/3

Zone : Barisal	Division (Sub-division) Barisal:	LRP : 182a	Chainage : 180.819 km
1) Bridge Name : 1_Bakergonj steel bridge	2) Road Name : Dhaka, Barisal Patuakhali	3) Date & Time : 01/12/2013 9.00 am.	4) GPS Data : Latitude 22° 2'26.884" Longitude 90° 19'59.9"

Photo of the Bridge

Photo ①

Photo ②

Photo ③

Photo ④

River flow

Photo ⑤

Photo Sheet of the Bridge 2/3





Zone : Barisal	Division (Sub-division) Barisal:	LRP : 182a	Chainage : 180.819 km
1) Bridge Name: 1_Bakergonj steel bridge	2) Road Name : Dhaka, Barisal Patuakhali	3) Date & Time: 01/12/2013 9.00 am.	4) GPS Data : Latitude 22° 2'26.884" Longitude 90° 19'59.9"
Photo of the Bridge			
			
			

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) Barisal:		LRP : 182a		Chainage : 180.819 km	
1) Bridge Name: 1_Bakergonj steel bridge		2) Road Name : Dhaka, Barisal Patuakhali		3) Date & Time: 01/12/2013 9.00 am.		4) GPS Data : Latitude 22° 2'26.884" Longitude 90° 19'59.9"	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()
							

Bridge and Road Specifications

Zone: BARISAL	Division(Subdivision): BARISAL	LRP: 178a	Chainage: 176.88 km
1) Bridge Name/ no: 02 - Boalia Bazar Bridge	2) Road Name: Dhaka - Barisal - Patuakhali	3) Date : 01.12.2013.	4) GPS Data :Lat. 22°34'30.833" Lon.90°20'11.932"
5) Road Category: N 8	6) Bridge Width:4.00m Carriageway Width:3.40m	7) BridgeType:Bailey with Steel Deck	8) Bridge length: 39.70m
9) Bridge Span Arrangement: Three Span	10) Approach Road Width: 5.50m	11) Sub structure information -Type: -Approx. height:	12) River information: -Approx river width:32.00m -Approx.river water level: 5.20m from deck -Approx.river depth: 13.80m from deck
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):		

The site plan map shows the bridge crossing the Bish-khali-Khal river. The bridge is a Bailey bridge with a steel deck, supported by three spans. The approach roads are 5.50m wide. The bridge width is 4.00m, and the carriageway width is 3.40m. The map shows the river flow direction, tin sheds along the riverbank, and surrounding land use including paddy land and dense trees. The scale is 1:1400.

Consultant: Oriental Consultants Co. Ltd. Scale: 1:1400 Name of Engineer/Surveyor: Md. Azad Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

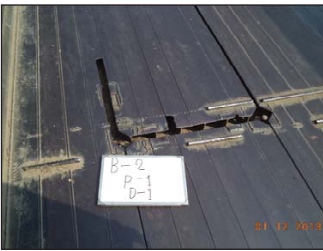



APPENDIX 3-1

Zone : Barisal	Division (Sub-division) : Barisal	LRP : 178 a	Chainage : 176.880 km
1) Bridge Name :2_ Boalia Bridge	2) Road Name : Dhaka,Barisal,Patuakhali	3) Date & Time : 01.12.2013. 9.35 am	4) GPS Data : Latitude 22° 34'30.833" Longitude 90° 20'11.932"
Photo of the Bridge			
 Photo ①	 Photo ②	 Photo ③	
 Photo ④	 River flow direction is indicated by arrow ⑤. The diagram shows the bridge spans and approach roads with numbered arrows ① through ⑩ indicating the locations of the photos.	 Photo ⑤	

Zone : Barisal	Division (Sub-division) : Barisal	LRP : 178 a	Chainage : 176.880 km
1) Bridge Name : 2_ Boalia Bridge	2) Road Name : Dhaka,Barisal,Patuakhali	3) Date & Time : 01.12.2013. 9.35 am	4) GPS Data : Latitude 22° 34'30.833" Longitude 90° 20'11.932"
Photo of the Bridge			
			
			

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Barisal		LRP : 178 a		Chainage : 176.880 km	
1) Bridge Name : 2_ Boalia Bridge		2) Road Name : Dhaka,Barisal,Patuakhali		3) Date & Time : 01.12.2013. 9.35 am		4) GPS Data : Latitude 22° 34'30.833" Longitude 90° 20'11.932"	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	vSlab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, vDeformed section Others ()
							
Comments							

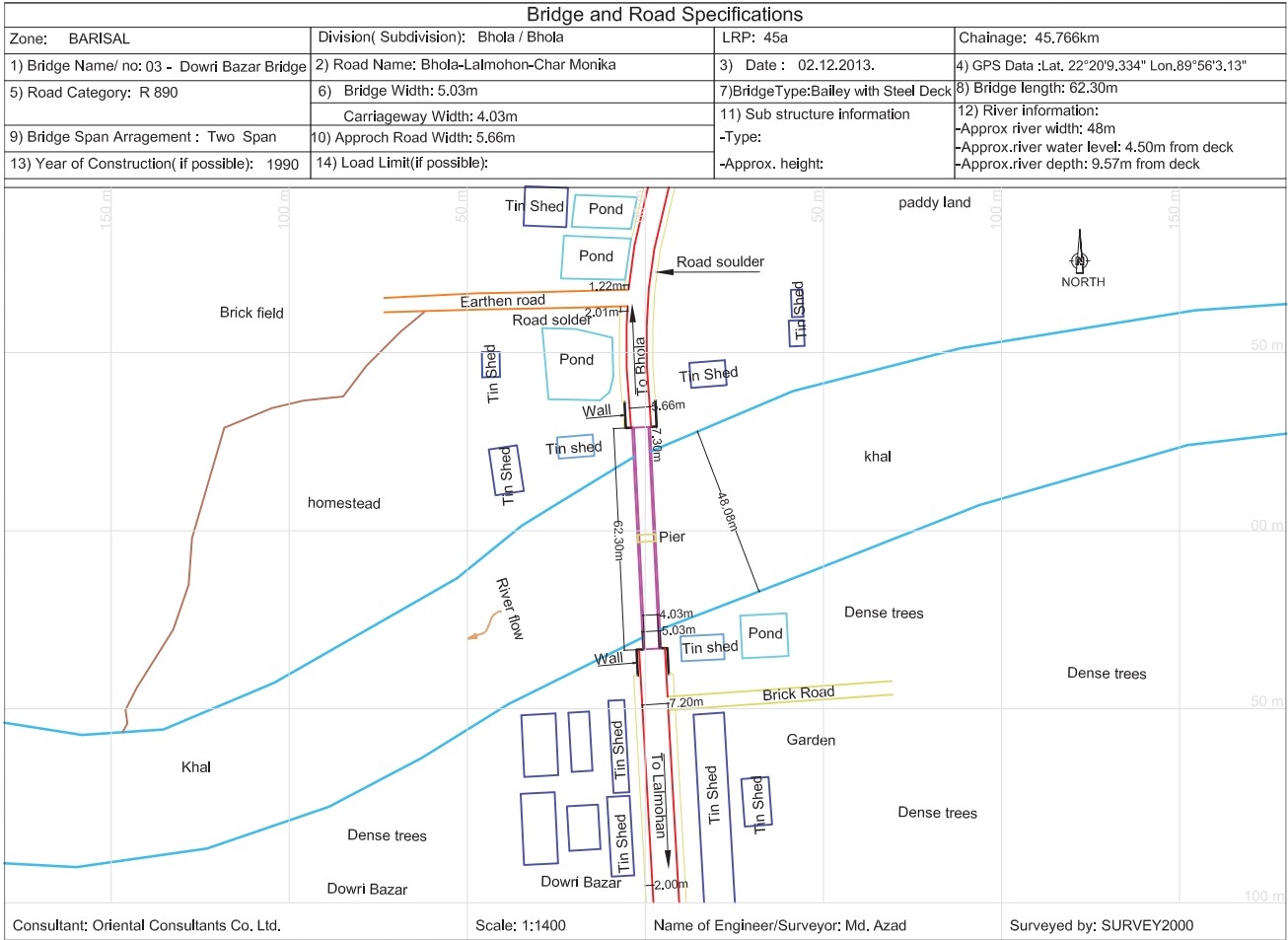


Photo Sheet of the Bridge 1/3

APPENDIX 3-1

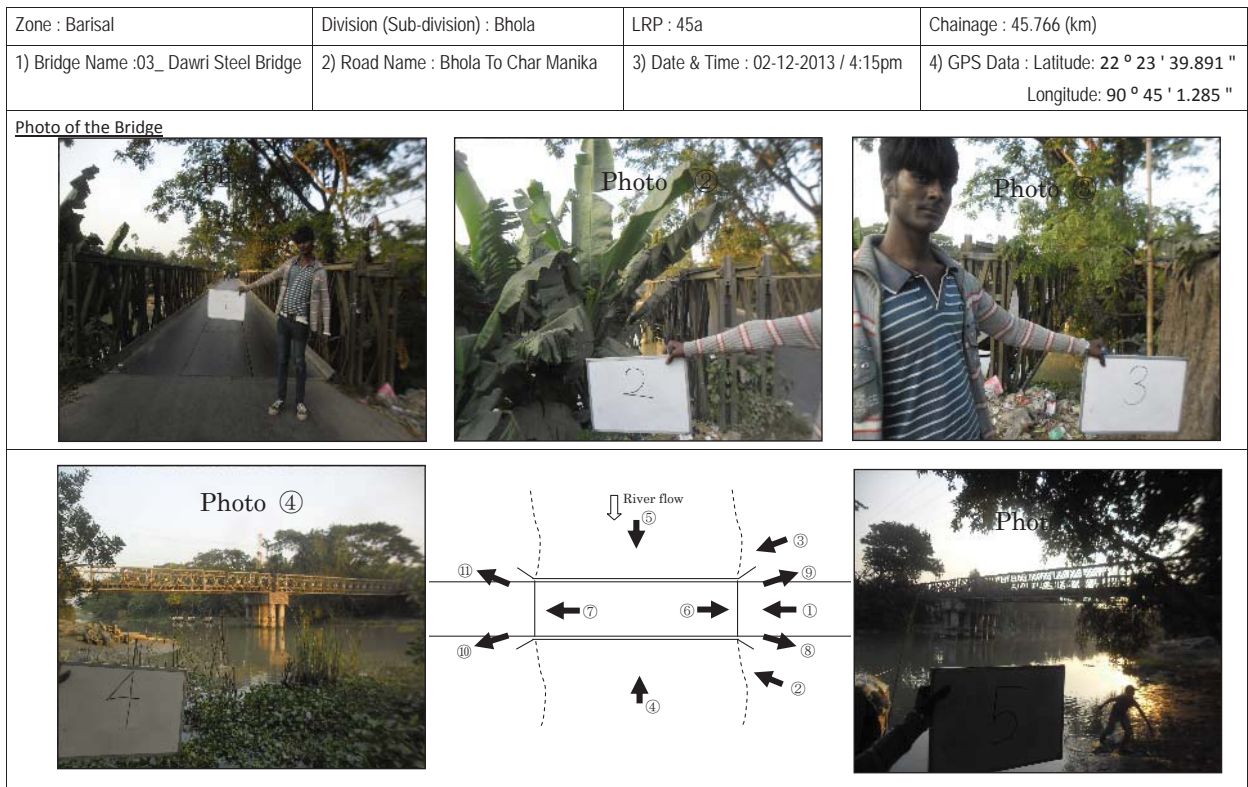


Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 45a	Chainage : 45.766 (km)
1) Bridge Name :03_ Dawri Steel Bridge	2) Road Name : Bhola To Char Manika	3) Date & Time : 02-12-2013 / 4:15pm	4) GPS Data : Latitude: 22 ° 23 ' 39.891 " Longitude: 90 ° 45 ' 1.285 "

Photo of the Bridge



Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Bhola		LRP : 45a		Chainage : 45.766 (km)	
1) Bridge Name :03_ Dawri Steel Bridge		2) Road Name : Bhola To Char Manika		3) Date & Time : 02-12-2013 / 4:15pm		4) GPS Data : Latitude: 22 ° 23 ' 39.891 " Longitude: 90 ° 45 ' 1.285 "	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()
Comments							

Bridge and Road Specifications

Zone: BARISAL	Division(Subdivision): Pirojpur / Kawkhali	LRP: 8b	Chainage: 8.371 km
1) Bridge Name/ no: 04 - Beltola Bridge	2) Road Name: Kawkhali - Bhandaria	3) Date : 28.11.2013.	4) GPS Data :Lat, 22°33'35.322" Lon,90°3'20.54"
5) Road Category: Z 8713	6) Bridge Width:3.80m Carriageway Width:3.30m	7) BridgeType : R.C.C.Girder Bridge	8) Bridge length: 33.60m
9) Bridge Span Arrangement : Single Span	10) Approach Road Width: 3.90m	11) Sub structure information	12) River information: -Approx river width:26m -Approx.river water level: 5.10m from deck -Approx.river depth: 7.90m from deck
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):	-Type: -Approx. height:	

Consultant: Oriental Consultants Co. Ltd.	Scale: 1:1400	Name of Engineer/Surveyor: Md. Azad	Surveyed by: SURVEY2000
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Photo Sheet of the Bridge 1/3





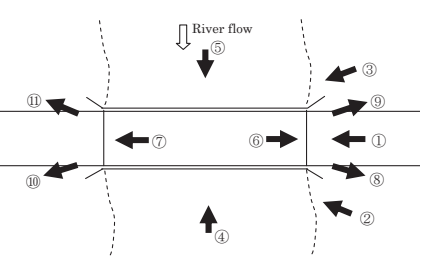

Zone : Barisal	Division (Sub-division) : Pirojpur,Kawkhali	LRP : 8 b	Chainage : 8.371 km
1) Bridge Name : 4_Beltola Bridge	2) Road Name : Kawkhali-Chirapara-Bhitabaria-Bhandaria	3) Date & Time :28.11.2013 8.15 am	4) GPS Data : Latitude 22° 33'35.322" Longitude 90° 3'20.54"
Photo of the Bridge			
			
			

Photo Sheet of the Bridge 2/3

Zone : Barisal	Division (Sub-division) : Pirojpur,Kawkhali	LRP : 8 b	Chainage : 8.371 km
1) Bridge Name : 4_Beltola Bridge	2) Road Name : Kawkhali-Chirapara-Bhitabaria-Bhandaria	3) Date & Time :28.11.2013 8.15 am	4) GPS Data : Latitude 22° 33'35.322" Longitude 90° 3'20.54"

Photo of the Bridge



APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Pirojpur,Kawkhali		LRP : 8 b		Chainage : 8.371 km	
1) Bridge Name : 4_Beltola Bridge		2) Road Name : Kawkhali-Chirapara-Bhitabaria-Bhandaria		3) Date & Time :28.11.2013 8.15 am		4) GPS Data : Latitude 22° 33'35.322" Longitude 90° 3'20.54"	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	vSlab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment, vRailing
Damage Type	<u>For Concrete Structure</u> vCrack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> vCrack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> vCrack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> vCrack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()

Photo Sheet of the Bridge 2/3

APPENDIX 3-2







Zone : Barisal	Division (Sub-division) :Pirojpur,Kawkhali	LRP :21 a	Chainage : 21.085 km
1) Bridge Name: 5 Gutheghata Bridge	2) Road Name : Charkhali Patharghata	3) Date & Time : 27.11.2013.9.25 am	4) GPS Data : Latitude 22° 20'9.334" Longitude 89° 56'3.13"
Photo of the Bridge			
			
			





Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal	Division (Sub-division) :Pirojpur,Kawkhali	LRP :21 a	Chainage : 21.085 km
1) Bridge Name: 5 Gutheghata Bridge	2) Road Name : Charkhali Patharghata	3) Date & Time : 27.11.2013.9.25 am	4) GPS Data : Latitude 22° 20'9.334" Longitude 89° 56'3.13"
Damage 1		Damage 2	
Damage 3		Damage 4	
Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()
			
Comments			

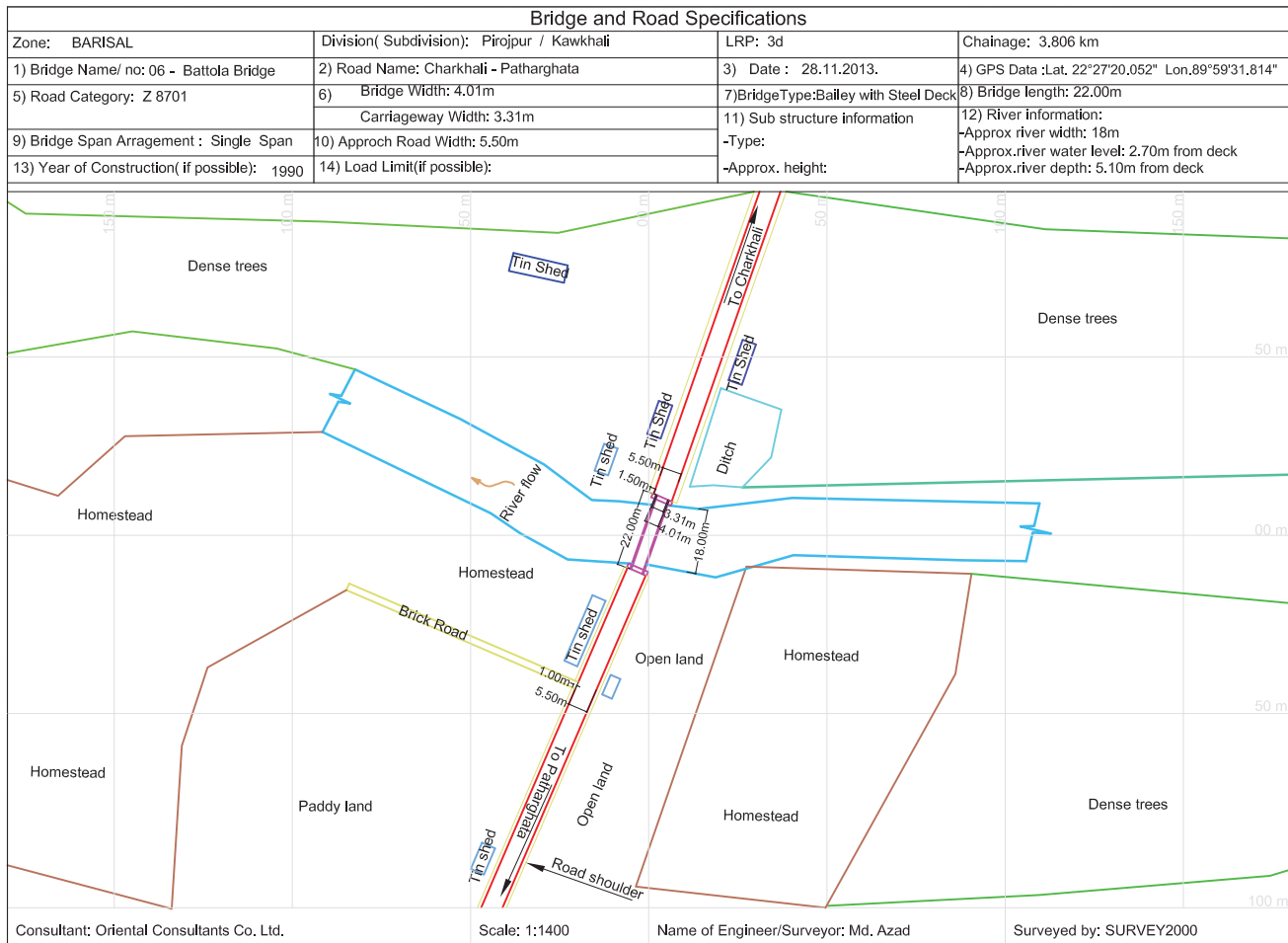


Photo Sheet of the Bridge 1/3

APPENDIX 3-1

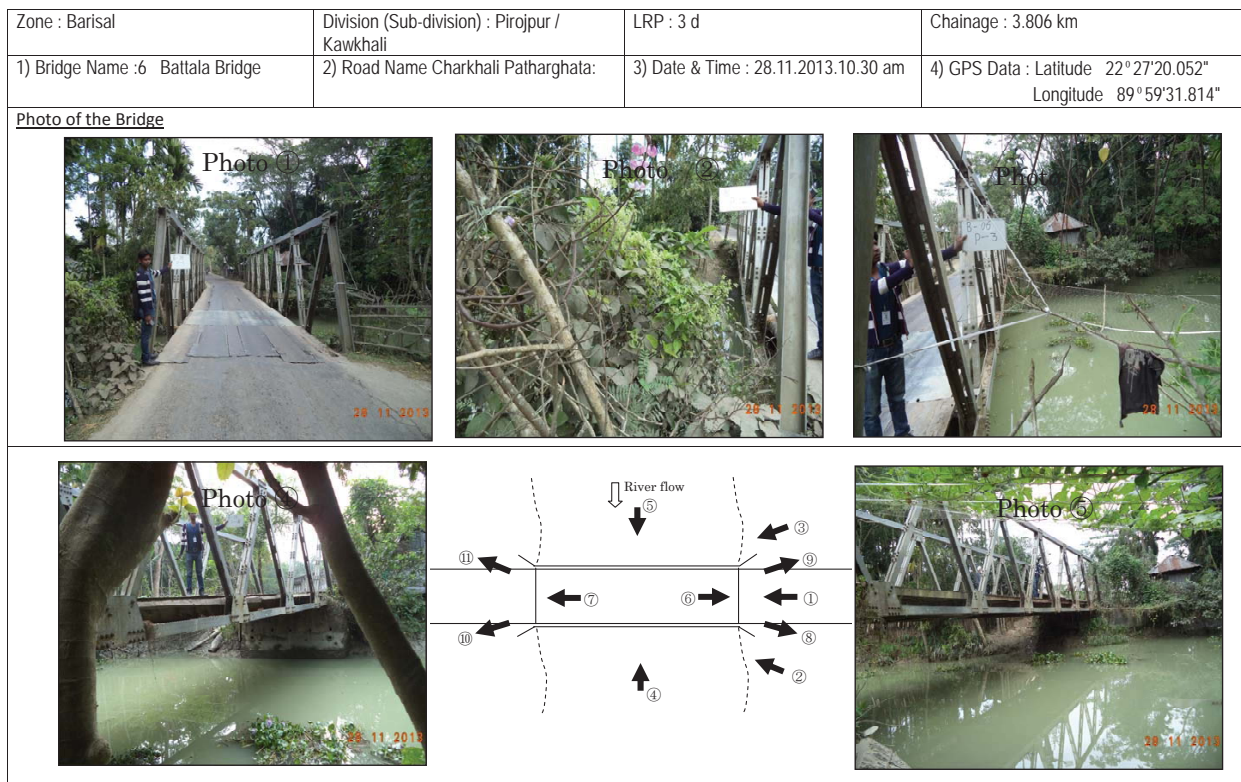


Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Pirojpur / Kawkhali	LRP : 3 d	Chainage : 3.806 km
1) Bridge Name :6 Battala Bridge	2) Road Name Charkhali Patharghata:	3) Date & Time : 28.11.2013.10.30 am	4) GPS Data : Latitude 22°27'20.052" Longitude 89°59'31.814"

Photo of the Bridge



Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Pirojpur / Kawkhali		LRP : 3 d		Chainage : 3.806 km	
1) Bridge Name :6 Battala Bridge		2) Road Name Charkhali Patharghata:		3) Date & Time : 28.11.2013.10.30 am		4) GPS Data : Latitude 22°27'20.052" Longitude 89°59'31.814"	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	Slab, Girder, Pier, Abutment, √Iron	Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment	Damage Location	√Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others (√Iron)	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, √Deformed section Others ()
Comments							

Bridge and Road Specifications			
Zone: BARISAL	Division(Subdivision): Barisal(Barisal)	LRP: 123a	Chainage: 121.734 km
1) Bridge Name/ no: 07 - Souder-khal Bridge	2) Road Name: Charkhali - Bhandaria	3) Date : 04.12.2013.	4) GPS Data :Lat, 23°0'53.976" Lon,90°12'56.636"
5) Road Category: N - 8	6) Bridge Width: 8.60m Carriageway Width: 6.80m	7) Bridge Type :R.C.C.Girder Bridge	8) Bridge length: 30.80m
9) Bridge Span Arrangement : Three Span	10) Approach Road Width: 6.50m	11) Sub structure information	12) River information:
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):	-Type:	-Approx river width: 20m -Approx.river water level: 5.60m from deck -Approx.river depth:6.90m from deck
Consultant: Oriental Consultants Co. Ltd.	Scale: 1:1400	Name of Engineer/Surveyor: Md. Azad	Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

APPENDIX 3-1

Zone :Barisal	Division(Sub-division) :Barisal -Barisal-1	LRP : 123a	Chainage : 121.734
1) Bridge Name : 07_Souberkhal Bridge	2) Road Name : Dhaka -Patuakhali	3) Date & Time : 04.12.2013._11.12 am	4) GPS Data : Latitude 23°0'53.976" Longitude 90° 12'56.636"

Photo of the Bridge

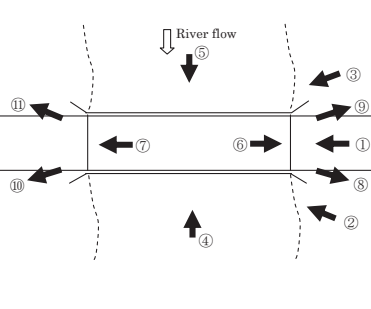


Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone :Barisal	Division(Sub-division) :Barisal -Barisal-1	LRP : 123a	Chainage : 121.734
1) Bridge Name : 07_Souberkhal Bridge	2) Road Name : Dhaka-Patuakhali	3) Date & Time : 04.12.2013_11.12 am	4) GPS Data : Latitude 23°0'53.976" Longitude 90°12'56.636"
Photo of the Bridge			
			
			





Photo Sheet of the Bridge 3/3

APPENDIX 3-3



APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/2)

Zone :Barisal	Division(Sub-division) :Barisal -Barisal-1	LRP : 123a	Chainage : 121.734
1) Bridge Name : 07_Souberkhal Bridge	2) Road Name : Dhaka-Patuakhali	3) Date & Time : 04.12.2013_11.12 am	4) GPS Data : Latitude 23°0'53.976" Longitude 90°12'56.636"
Damage 1		Damage 2	
Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment, √Railing
Damage Type	For Concrete Structure Crack, Spalling, √Rebar exposure Others () For Steel Structure Corrosion, Missing bolt, Deformed section Others ()	Damage Type	For Concrete Structure Crack, Spalling, √Rebar exposure Others () For Steel Structure Corrosion, Missing bolt, Deformed section Others ()
			
			
Comments			

Damage of the Bridge (2/2)

Zone :Barisal		Division(Sub-division) :Barisal -Barisal-1		LRP : 123a		Chainage : 121.734	
1) Bridge Name : 07_Souberkhal Bridge		2) Road Name : Dhaka -Patuakhali		3) Date & Time : 04.12.2013_11.12 am		4) GPS Data : Latitude 23°0'53.976" Longitude 90°12'56.636"	
Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()
							
Comments							

Bridge and Road Specifications			
Zone: BARISAL	Division(Subdivision): Patuakhali / Patuakhali	LRP: 200c	Chainage: 199,222 km
1) Bridge Name/ no: 08 - Sheyali Bailey Bridge	2) Road Name: Dhaka - Patuakhali	3) Date : 27.11.2013.	4) GPS Data :Lat, 22°22'52.349" Lon,90°19'13.97"
5) Road Category: N - 8	6) Bridge Width: 4.11m	7)BridgeType:Bailey with Steel Deck	8) Bridge length: 23.15m
	Carriageway Width: 3.61m	11) Sub structure information	12) River information: -Approx river width: 12m -Approx.river water level: 3.40m from deck -Approx.river depth:7.20m from deck
9) Bridge Span Arrangement : Single Span	10) Approach Road Width: 7.30m	-Type:	
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):	-Approx. height:	

Consultant: Oriental Consultants Co. Ltd. Scale: 1:1400 Name of Engineer/Surveyor: Md. Tutul Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

APPENDIX 3-1

Zone : Barisal	Division (Sub-division) : Patuakhali	LRP : 200c	Chainage : 199.222(km)
1) Bridge Name: 08 Sheyali Bailey Bridge	2) Road Name : Dhaka To Patuakhali	3) Date & Time : 27-11-13 2:23pm	4) GPS Data : Latitude: 22 ° 22 ' 52.349 " Longitude: 90 ° 19 ' 13.97 "

Photo of the Bridge

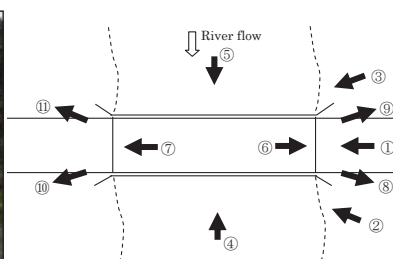


Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Patuakhali	LRP : 200c	Chainage : 199.222(km)
1) Bridge Name: 08 Sheyali Bailey Bridge	2) Road Name : Dhaka To Patuakhali	3) Date & Time : 27-11-13 2:23pm	4) GPS Data : Latitude: 22 ° 22 ' 52.349 " Longitude: 90 ° 19 ' 13.97 "
Photo of the Bridge			
 <p>Photo ⑥</p>		 <p>Photo ⑦</p>	
 <p>Photo ⑧</p>		 <p>Photo ⑨</p>	
 <p>Photo ⑩</p>		 <p>Photo ⑪</p>	





Photo Sheet of the Bridge 3/3

APPENDIX 3-3




APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge





Damage of the Bridge (1/3)

Zone : Barisal		Division (Sub-division) : Patuakhali		LRP : 200c		Chainage : 199.222(km)	
1) Bridge Name: 08 Sheyali Bailey Bridge		2) Road Name : Dhaka To Patuakhali		3) Date & Time : 27-11-13 2:23pm		4) GPS Data : Latitude: 22 ° 22 ' 52.349 " Longitude: 90 ° 19 ' 13.97 "	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment, /Railing
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> /Corrosion, Missing bolt, Deformed section Others ()
 <p>B-8 D-1</p>		 <p>B-8 D-2</p>		 <p>B-8 D-3</p>		 <p>B-8 D-4</p>	
Comments							

Damage of the Bridge (3/2)

Zone : Barisal		Division (Sub-division) : Patuakhali		LRP : 200c		Chainage : 199.222(km)	
1) Bridge Name: 08 Sheyali Bailey Bridge		2) Road Name : Dhaka To Patuakhali		3) Date & Time : 27-11-13 2:23pm		4) GPS Data : Latitude: 22 ° 22 ' 52.349 " Longitude: 90 ° 19 ' 13.97 "	
Damage 5		Damage 6		Damage 7		Damage 8	
Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment, /Railing
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, /Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> /Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others (Whole)			
							
Coments							

Damage of the Bridge (3/3)

Zone : Barisal		Division (Sub-division) : Patuakhali		LRP : 200c		Chainage : 199.222(km)	
1) Bridge Name: 08 Sheyali Bailey Bridge		2) Road Name : Dhaka To Patuakhali		3) Date & Time : 27-11-13 2:23pm		4) GPS Data : Latitude: 22 ° 22 ' 52.349 " Longitude: 90 ° 19 ' 13.97 "	
Damage		Damage 1		Damage 11		Damage 12	
Damage Location	Slab, Girder, Pier, Abutment, /Railing	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment	Damage Location	/Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, /Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, /Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> /Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> /Corrosion, Missing bolt, Deformed section Others ()			
							
Coments							

Bridge and Road Specifications

Zone: BARISAL	Division(Subdivision): Bhola / Bhola	LRP: 28a	Chainage: 28.699 km
1) Bridge Name/ no: 09 -Sheyali Bailey Bridge	2) Road Name: Bhola - Charmanika	3) Date : 27.11.2013.	4) GPS Data :Lat, 22°30'9.483 " Lon, 90°43 ' 5.012 "
5) Road Category: R - 890	6) Bridge Width: 4.22m Carriageway Width: 3.62m	7) Bridge Type: Bailey with Steel Deck	8) Bridge length: 30.85m
9) Bridge Span Arrangement : Single Span	10) Approach Road Width: 5.62m at east & 5.44m at west side	11) Sub structure information -Type: -Approx. height:	12) River information: -Approx river width: 23.07m -Approx. river water level: 3.80m from deck -Approx. river depth: 9.90m from deck
13) Year of Construction(if possible):	14) Load Limit(if possible):		

Consultant: Oriental Consultants Co. Ltd. Scale: 1:1400 Name of Engineer/Surveyor: Md. Tutul Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

APPENDIX 3-1

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 28a	Chainage : 28.699 (km)
1) Bridge Name : 09 Burhanuddin Road	2) Road Name : Burhanuddin To Bhola	3) Date & Time : 03-12-2013 8:00am	4) GPS Data : Latitude : 22 ° 30 ' 9.483 " Longitude : 90 ° 43 ' 5.012 "

Photo of the Bridge

Photo ①

Photo ②

Photo ③

Photo ④

River flow

Photo ⑤

Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 28a	Chainage : 28.699 (km)
1) Bridge Name :09 Burhanuddin Road	2) Road Name : Burhanuddin To Bhola	3) Date & Time : 03-12-2013 8:00am	4) GPS Data : Latitude: 22 ° 30 ' 9.483 " Longitude: 90 ° 43 ' 5.012 "
Photo of the Bridge			
			
			


Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Bhola		LRP : 28a		Chainage : 28.699 (km)	
1) Bridge Name :09 Burhanuddin Road		2) Road Name : Burhanuddin To Bhola		3) Date & Time : 03-12-2013 8:00am		4) GPS Data : Latitude: 22 ° 30 ' 9.483 " Longitude: 90 ° 43 ' 5.012 "	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()
							
Comments							

Bridge and Road Specifications			
Zone: BARISAL	Division(Subdivision): Bhola / Bhola	LRP: 21a	Chainage: 21.584 km
1) Bridge Name/ no: 10 - Khasherhat Bridge	2) Road Name: Bhola - Charmanika	3) Date : 03.12.2013.	4) GPS Data :Lat, 22°33'23.299" Lon, 90°41'6.483"
5) Road Category: R - 890	6) Bridge Width: 4.15m Carriageway Width: 3.55m	7) BridgeType:Bailey with SteelDeck	8) Bridge length: 24.55m
9) Bridge Span Arrangement : Single Span	10) Approach Road Width: 5.10m at north & 5.40m at south side	11) Sub structure information -Type: -Approx. height:	12) River information: -Approx river width: 16m -Approx.river water level: 2.90m from deck -Approx.river depth: 8.40m from deck
13) Year of Construction(if possible):	14) Load Limit(if possible):		

Consultant: Oriental Consultants Co. Ltd.	Scale: 1:1400	Name of Engineer/Surveyor: Md. Tutul	Surveyed by: SURVEY2000
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Photo Sheet of the Bridge 1/3

APPENDIX 3-1

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 21a	Chainage : 21.584 km
1) Bridge Name : 10 Bokshar Ali Kheyar Hat Bridge	2) Road Name : Bhola To Char Manika	3) Date & Time : 03-12-2013 11:30am	4) GPS Data : Latitude : 22 ° 33 ' 23.299 " Longitude : 90 ° 41 ' 6.483 "
Photo of the Bridge			

Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 21a	Chainage : 21.584 km
1) Bridge Name : 10 Bokshar Ali Kheyar Hat Bridge	2) Road Name : Bhola To Char Manika	3) Date & Time : 03-12-2013 11:30am	4) GPS Data : Latitude: 22 ° 33 ' 23.299 " Longitude: 90 ° 41 ' 6.483 "
Photo of the Bridge			
			
			



Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Bhola		LRP : 21a		Chainage : 21.584 km	
1) Bridge Name : 10 Bokshar Ali Kheyar Hat Bridge		2) Road Name : Bhola To Char Manika		3) Date & Time : 03-12-2013 11:30am		4) GPS Data : Latitude: 22 ° 33 ' 23.299 " Longitude: 90 ° 41 ' 6.483 "	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	Slab, Girder, Pier, Abutment, /Railing	Damage Location	Slab, Girder, Pier, Abutment, /Angle	Damage Location	Slab, Girder, Pier, Abutment	Damage Location	Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, /Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, /Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type	<u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()
							
Comments							

Bridge and Road Specifications			
Zone: BARISAL	Division(Subdivision): Bhola / Bhola	LRP: 16a	Chainage: 16.347 km
1) Bridge Name/ no: 11 - Bangla Bazar Bridge	2) Road Name: Bhola - Charmanika	3) Date : 03.12.2013.	4) GPS Data :Lat, 22°35'36.75" Lon, 90°39'29.637"
5) Road Category: R - 890	6) Bridge Width: 4.10m Carriageway Width: 3.40m	7) BridgeType:Bailey with SteelDeck	8) Bridge length: 37.70m
9) Bridge Span Arrangement : Single Span	10) Approach Road Width: 6.00m at north & 6.20m at south side	11) Sub structure information -Type:	12) River information: -Approx river width: 28,00m -Approx.river water level: 4.10m from deck -Approx.river depth: 11.70m from deck
13) Year of Construction(if possible): 1990	14) Load Limit(if possible):	-Approx. height:	

Consultant: Oriental Consultants Co. Ltd. Scale: 1:1400 Name of Engineer/Surveyor: Md.Tutul Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

APPENDIX 3-1





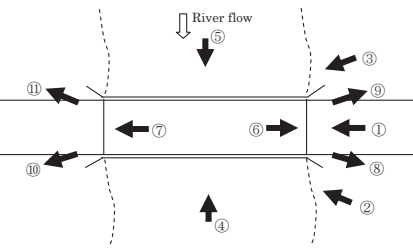

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 16a	Chainage : 16.347 km
1) Bridge Name :11-Bangla Bazar Bridge	2) Road Name : Bhola To Char Manika	3) Date & Time : 03-12-2013 / 01:30pm	4) GPS Data : Latitude : 22 °35 '36.75 " Longitude : 90 °39 '29.637 "
Photo of the Bridge			
			
			

Photo Sheet of the Bridge 2/3

APPENDIX 3-2

Zone : Barisal	Division (Sub-division) : Bhola	LRP : 16a	Chainage : 16.347 km
1) Bridge Name : 11-Bangla Bazar Bridge	2) Road Name : Bhola To Char Manika	3) Date & Time : 03-12-2013 / 01:30pm	4) GPS Data : Latitude: 22 °35 '36.75 " Longitude: 90 °39 '29.637 "

Photo of the Bridge



Bridge and Road Specifications

Zone: BARISAL	Division(Subdivision): BARISAL	LRP: 129a	Chainage: 127.737 km
1) Bridge Name/ no: 12- Asokati Bridge	2) Road Name: Dhaka - Patuakhali	3) Date : 05.12.2013.	4) GPS Data :Lat, 22°57'46.023" Lon,90°13'29.405"
5) Road Category: N - 8	6) Bridge Width:7.20m Carriageway Width:6.60m	7) Bridge Type:R.C.C Girder Bridge	8) Bridge length: 27.40m
9) Bridge Span Arrangement: Single Span	10) Approach Road Width: 7.00m	11) Sub structure information -Type: -Approx. height:	12) River information: -Approx river width:24m -Approx.river water level: 5.10m from deck -Approx.river depth: 7.35m from deck
13) Year of Construction(if possible):	14) Load Limit(if possible):		

Consultant: Oriental Consultants Co. Ltd. Scale: 1:1400 Name of Engineer/Surveyor: Md. Tutul Surveyed by: SURVEY2000

Photo Sheet of the Bridge 1/3

APPENDIX 3-1





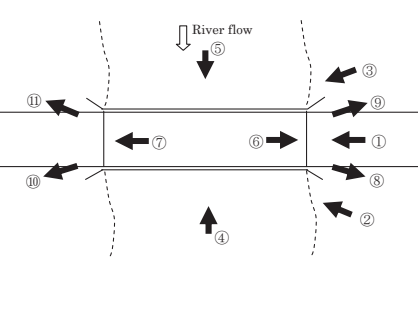
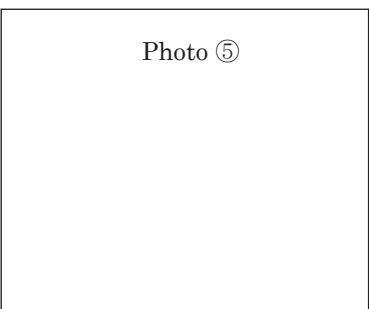
Zone : Barisal	Division (Sub-division) : Barisal I	LRP : 129a	Chainage : 127.737 km
1) Bridge Name :12- Asokati Bridge	2) Road Name : Dhaka Patuakhali	3) Date & Time : 05.12.2013-10:20 am	4) GPS Data : Latitude 22° 57'46.023" Longitude 90° 13'29.405"
Photo of the Bridge			
			
			

Photo Sheet of the Bridge 2/3

APPENDIX 3-2







Zone : Barisal	Division (Sub-division) : Barisal I	LRP : 129a	Chainage : 127.737 km
1) Bridge Name :12- Asokoti Bridge	2) Road Name : Dhaka Patuakhali	3) Date & Time : 05.12.2013-10:20 am	4) GPS Data : Latitude 22°57'46.023" Longitude 90°13'29.405"
Photo of the Bridge			
			
			




Photo Sheet of the Bridge 3/3

APPENDIX 3-3

APPENDIX 4

1. Description of Damages (Present Condition) of the Bridge

Damage of the Bridge (1/1)

Zone : Barisal		Division (Sub-division) : Barisal I		LRP : 129a		Chainage : 127.737 km	
1) Bridge Name :12- Asokoti Bridge		2) Road Name : Dhaka Patuakhali		3) Date & Time : 05.12.2013-10:20 am		4) GPS Data : Latitude 22°57'46.023" Longitude 90°13'29.405"	
Damage 1		Damage 2		Damage 3		Damage 4	
Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment, √Railing	Damage Location	Slab, Girder, Pier, Abutment
Damage Type	<u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, √Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()	Damage Type <u>For Concrete Structure</u> Crack, Spalling, Rebar exposure Others () <u>For Steel Structure</u> Corrosion, Missing bolt, Deformed section Others ()		
							
Comments							