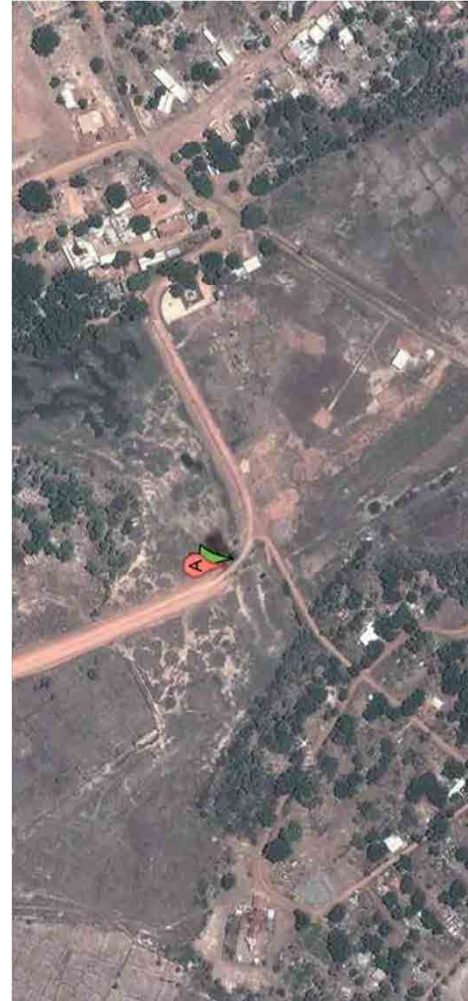


Bridge Inventory No. 170	Road No. AA035	Road Name Parantan - Mulaitive Highway		Province Northern	District Mulaitive	AADT (No./Day)	No. of Lanes of Road Proposed by RDA 2	Construction Plan of Road to/ from Bridge Road improvement by foreign fund		Environmental Condition ok
	Bridge No. (33/3)	Bridge Length (m) 22.00	Bridge Width (m) Overall 8.00 Curb-to-Curb 6.00	No. of Lane 2	Bridge Type Abutment Stone Masonry Pier Stone Masonry	No. of Span 3	Comple- tion Year	Bridge Soundness Sub- structure Poor Loading Capacity Insufficient	Flood Records	



< PRESENT CONDITIONS >

[BRIDGE ]  
Narrow for 2-lane traffic  
Insufficient causeway elevation for floods  
[ SOUNDNESS ]\*\*  
- Superstructure  
Re-bar rusted severely  
RATE 4  
- Substructure  
Poor  
RATE 3  
- Others  
[ SURROUNDING AREA ]



< PROPOSAL >

(New bridge at the R-side of the existing bridge)  
Eliminated by LOT size

Bridge Length:  
Superstructure:  
Substructure:  
Foundation:  
Resettlement:  
Approach Length:

\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No. 171	Road No. AA002	Road Name Colombo - Galle - Hambantota - Wellawaya (CGHW)		Province Western	District Kaluthara	AADT (No./Day) 25,350	No. of Lanes of Road Proposed by RDA 4	Construction Plan of Road to/from Bridge		Environmental Condition ok
	Bridge No. 52/1	Bridge Name Maggona	Bridge Length (m) 24.30	No. of Lane 2	Super-structure RC Slab	Bridge Type RC Wall Type	Completion Year	Bridge Soundness Sub-structure Fair	Loading Capacity Insufficient	Flood Records none
		Bridge Width (m) Overall 12.70	Curb-to-Curb 9.80		Pier Pile Bent Type	No. of Span 3				



< PRESENT CONDITIONS >

[BRIDGE ]

Curb-to-Curb of 9.80m wide is sufficient for 2-lane traffic of Class A Road.  
Insufficient soffit level for floods

[ SOUNDNESS ]\*\*

- Superstructure RATE 4
- Critical
- Re-bar of RC Slab corroded seriously
- Substructure RATE 2
- Fair
- Others

[ SURROUNDING AREA ]



< PROPOSAL >

**Reconstruction at R-side of the existing bridge**

- Bridge Length: 2@20.0 = 40m
- Approach Length: NS: 250m FS: 250m
- Superstructure: Pos I-Girder
- Substructure: Wall Type Abutment Wall Type Pier
- Foundation: Cast-in-place concrete pile foundation

Resettlement: A few

\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No.	Road No.	Road Name				Province	District	AADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition
	AA002	Colombo - Galle - Hambantota - Wellawaya (CGHW)	Western	Colombo	80,000	6	Bridge		ok			
172	Bridge No.	Bridge Name	Bridge Length (m)	No. of Lane	Super-structure	Bridge Type		Completion Year	Super-structure	Sub-structure	Loading Capacity	Flood Records
	1/1	Baira Lake	36.60	6	Steel I Beam/ RC Slab	Abutment	Pier					
			Overall	Curb-to-Curb								
			30.00	18.47								



< PRESENT CONDITIONS >

[BRIDGE ]

Curb-to-Curb of 18.47m wide is sufficient for 6-lane traffic of Class A Road.  
Insufficient soffit level for floods

[ SOUNDNESS ]\*\*

- Superstructure RATE 4
- Steel I Beams corroded seriously
- Re-bars of RC Slab exposed and corroded seriously
- Substructure RATE 3
- Poor
- Others

[ SURROUNDING AREA ]



< PROPOSAL >

**Reconstruction on the existing alignment**  
**The existing stonework retaining walls to be remained**

- Bridge Length: 3@15.0 =45m
- Approach Length: NS: 100m FS: 100m
- Superstructure: Precast PC Girder
- Substructure: SRC Pile Bent Abutment / SRC Pile Bent Pier
- Foundation: Cast-in-place concrete pile foundation
- Resettlement: No

\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No. 173	Road No. AA002	Road Name Colombo - Galle - Hambantota - Wellawaya (CGHW)		Province Western	District Kaluthara	AAADT (No./Day) 24,775	No. of Lanes of Road Proposed by RDA 4		Construction Plan of Road to/ from Bridge		Environmental Condition ok
	Bridge No. 53/1	Bridge Length (m) 22.20	Bridge Width (m) Overall 13.70 Curb-to-Curb 9.70	No. of Lane 2	Super-structure PC I Girder	Bridge Type Abutment RC Wall Type	Completion Year	Super-structure Poor	Sub-structure Poor	Loading Capacity Sufficient	Flood Records none



< PRESENT CONDITIONS >

[BRIDGE ]

Curb-to-Curb of 9.70m wide is sufficient for 2-lane traffic of Class A Road.  
Insufficient soffit level for floods

[ SOUNDNESS ]\*\*

- Superstructure Poor RATE 3
- Substructure Poor RATE 3
- Others

[ SURROUNDING AREA ]

< PROPOSAL >

**Reconstruction at R-side of the existing bridge**

- Bridge Length: 2@20.0 =40m
- Approach Length: NS: 150m FS: 200m
- Superstructure: Pos I Girder
- Substructure: Wall Type Abutment Wall Type Pier
- Foundation: Cast-in-place concrete pile foundation
- Resettlement: A few



\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No. 174	Road No. AA004	Road Name Colombo - Ratnapura - Wellawaya - Batticaloa		Province Western	District Colombo	AA DT (No./Day)	No. of Lanes of Road Proposed by RDA 2 Additional		Construction Plan of Road to/ from Bridge		Environmental Condition ok
	Bridge No. 42/1	Bridge Name Wak Oya	Bridge Length (m) 27.00	Bridge Width (m) Overall 11.10 Curb-to-Curb 9.00	No. of Lane 2	Super-structure Precast PC Girder	Bridge Type Abutment Stonework	Pier RC Wall Type	Completion Year	Bridge Soundness Sub-structure Good	Loading Capacity Sufficient

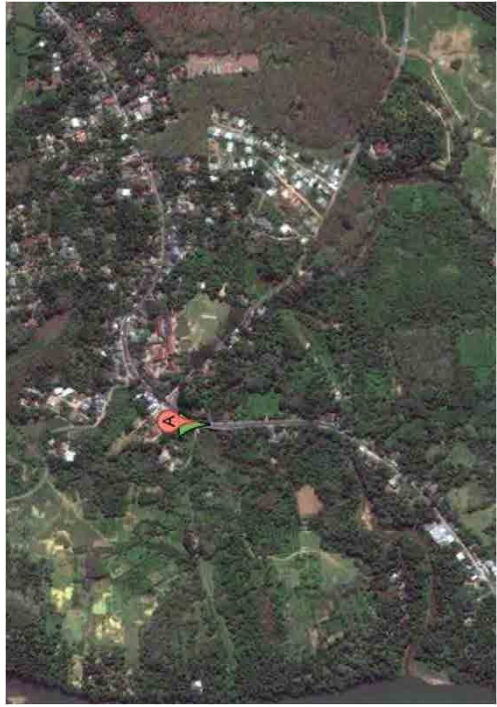


< PRESENT CONDITIONS >

[BRIDGE ]  
Curb-to-Curb of 9.00m wide is sufficient for 2-lane traffic of Class A Road.

- [ SOUNDNESS ]\*\*  
- Superstructure Good RATE 1  
- Substructure Good RATE 1  
- Others

[ SURROUNDING AREA ]



< PROPOSAL >

**Reconstruction is not recommended.**

Bridge Length: Approach Length:  
Superstructure:  
Substructure:  
Foundation:  
Resettlement:

\*\* SOUNDNESS RATE

- RATE 1: Good condition  
RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.  
RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.  
RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No. 175	Road No. AA004	Road Name Colombo - Ratnapura - Wellawaya - Batticaloa		Province Western	District Colombo	AA DT (No./Day)	No. of Lanes of Road Proposed by RDA 2 Additional		Construction Plan of Road to/ from Bridge		Environmental Condition ok
	Bridge No. 49/1	Bridge Name Rubbur Kade	Bridge Length (m) 21.80	No. of Lane 2	Bridge Type Abutment RC Wall Type	No. of Span 2	Completion Year	Super-structure Fair	Sub-structure Fair	Loading Capacity Sufficient	Flood Records
		Bridge Width (m) Overall 8.30	Curb-to-Curb 7.30	Super-structure Precast PC Girder	Pier Pile Bent Type						



< PRESENT CONDITIONS >

[ BRIDGE ]

Curb-to-Curb of 7.30m wide is sufficient for 2-lane traffic of Class A Road.

[ SOUNDNESS ]\*\*

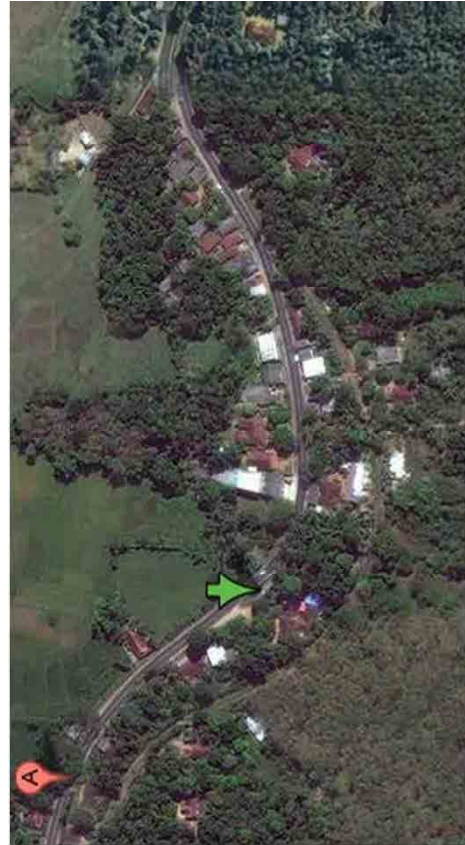
- Superstructure Fair RATE 2
- Substructure Fair RATE 2
- Others

[ SURROUNDING AREA ]

< PROPOSAL >

**Reconstruction is not recommended.**

- Bridge Length: Approach Length:
- Superstructure:
- Substructure:
- Foundation:
- Resettlement:



\*\* SOUNDNESS RATE

RATE 1: Good condition

RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.

RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.

RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No. 176	Road No. AA004	Road Name Colombo - Ratnapura - Wellawaya - Batticaloa		Province Western	District Ratnapura	AADT (No./Day) 21,119	No. of Lanes of Road Proposed by RDA 2 Additional		Construction Plan of Road to/ from Bridge		Environmental Condition ok
	Bridge No. 64/1	Bridge Length (m) 24.50	Bridge Width (m) Overall 8.46 Curb-to-Curb 6.50	No. of Lane 2	Bridge Type Abutment Stone/RC Wall Pier RC Wall Type	No. of Span 2	Completion Year	Superstructure Good	Bridge Soundness Sub-structure Good Loading Capacity Sufficient	Flood Records none	



< PRESENT CONDITIONS >

[BRIDGE ]

Curb-to-Curb of 6.50m wide is sufficient for the time being for 2-lane traffic of Class A Road.

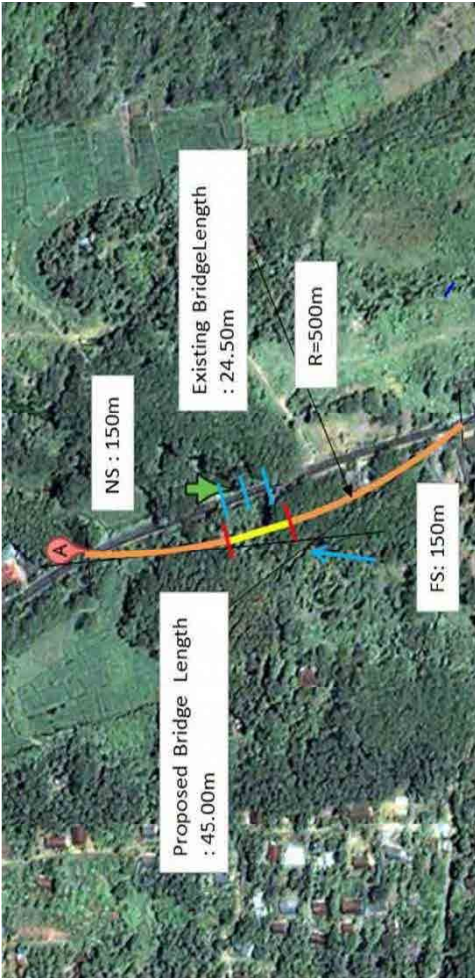
[ SOUNDNESS ]\*\*

- Superstructure  
Good  
RATE 1

- Substructure  
Good  
RATE 1

- Others

[ SURROUNDING AREA ]



< PROPOSAL >

**Additional 2-lane bridge at R-side of the existing bridge**  
**The existing bridge to be used for the time being**

Bridge Length: 1@45.0m = 45m  
 Approach Length: NS: 150m FS: 150m  
 Superstructure: Steel Girder  
 Substructure: Wall Type Abutment Wall Type Pier  
 Foundation: Cast-in-place concrete pile foundation

Resettlement: No

\*\* SOUNDNESS RATE

RATE 1: Good condition

RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.

RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.

RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No.	Road No.	Road Name				Province	District	AADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition	
	B435	Orugodawata-Ambatale				Northern	Vavuniya		2			ok	
177	Bridge No.	Bridge Name	Bridge Length (m)	Bridge Width (m)		No. of Lane	Bridge Type		Completion Year	Bridge Soundness		Flood Records	
	3/1	WALLAMPITIYA Bridge	40.10	Overall	Curb-to-Curb		Super-structure	Abutment		Pier	Super-structure		Sub-structure
				13.50	10.30	2	Precast PC beam	RC Wall Type	Column Type	Good	Fair	Insufficient	Flood water level is 0.6m below the soffit.



< PRESENT CONDITIONS >

[BRIDGE ]

Busy condition for 2-lane traffic

[ SOUNDNESS ]\*\*

- Superstructure

RATE 1

- Substructure

Horizontal crack at A2

Sufficient condition at present

- Others

RATE 2

[ SURROUNDING AREA ]

Bus stop on L-side of bridge

< PROPOSAL >

**Reconstruction is not recommended.**

Bridge Length:

Superstructure:

Substructure:

Foundation:

Resettlement:

Approach Length:

\*\* SOUNDNESS RATE

RATE 1: Good condition

RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.

RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.

RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.





Bridge Inventory No.	Road No.	Road Name				Province	District	AA DT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition
178	AA001	Colombo-Kandy				Western	Colombo		4			ok
	Bridge No.	Bridge Name	Bridge Length (m)	Bridge Width (m)	No. of Lane	Super-structure	Bridge Type	No. of Span	Completion Year	Super-structure	Sub-structure	
	6/1	Doguru Kacle Bridge	17.30	Overall Curb-to-Curb 24.60	4	Precast girder	RC wall Type	1		Fair	Fair	Insufficient
							Pier					Flood Records
							RC Wall Type					Flood water level is enough below the soffit.



< PRESENT CONDITIONS >

[ BRIDGE ]

Busy condition for 4-lane traffic

[ SOUNDNESS ]\*\*

- Superstructure RATE 2  
Visually polluted bottom face of precast girders
- Substructure RATE 2  
Sufficient condition for structure
- Others  
Vertical crack on the surface of abutments  
Sufficient condition for structure

[ SURROUNDING AREA ]

< PROPOSAL >

**Reconstruction is not recommended.**

- Bridge Length: Approach Length:
- Superstructure:
- Substructure:
- Foundation:
- Resettlement:



\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No.	Road No.	Road Name				Province	District	AADT (No./Day)		No. of Lanes of Road Proposed by RDA		Construction Plan of Road to/ from		Environmental Condition
	B416	Thihariya - Warapalana				Western	Gampaha	2,206		2		Bridge		
179	Bridge No.	Bridge Length (m)	Bridge Width (m)		No. of Lane	Bridge Type		No. of Span	Completion Year	Bridge Soundness		Flood Records		
	2/6	KALATUJAWA Bridge	Overall	Curb-to-Curb		Super-structure	Abutment			Sub-structure	Sub-structure	Loading Capacity	Good	Insufficient



< PRESENT CONDITIONS >

- [ BRIDGE ]  
Narrow for 2-lane traffic
- [ SOUNDNESS ]\*\*  
- Superstructure Fair RATE 3
- Substructure RATE 1
- Others
- [ SURROUNDING AREA ]

< PROPOSAL >

Reconstruction at the existing bridge  
Using temporary bridge at R-side under reconstruction

- Bridge Length: 1@45.0 = 45m
- Approach Length: NS: 100m FS: 100m
- Superstructure: Steel I-Girder
- Substructure: Wall Type Abutment Wall Type Pier
- Foundation: Spread Foundation

Resettlement: a few

\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.



Bridge Inventory No.	Road No.	Road Name				Province	District	AAADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition
	B304	Nagoa-Kalawaellawa-Bellapitiya				Western	Kaluthana	3,572	2	Road improvement by foreign fund		ok
180	Bridge No.	Bridge Length (m)	Bridge Width (m)		No. of Lane	Bridge Type		Completion Year	Bridge Soundness			Flood Records
	35/4	42.20	Overall	Curb-to-Curb		Super-structure	Abutment		Pier	Super-structure	Sub-structure	
		ALLUKATIYA Bridge	5.80	4.60	1	Pre RC Girder	Stone work Type	1984	Fair	Fair	Insufficient	none



< PRESENT CONDITIONS >

[ BRIDGE ]  
Narrow for 2-lane traffic

- [ SOUNDNESS ]\*\*
- Superstructure RATE 2  
Re-bar of girders corroded.
  - Substructure RATE 2  
Fair
  - Others

[ SURROUNDING AREA ]

< PROPOSAL >

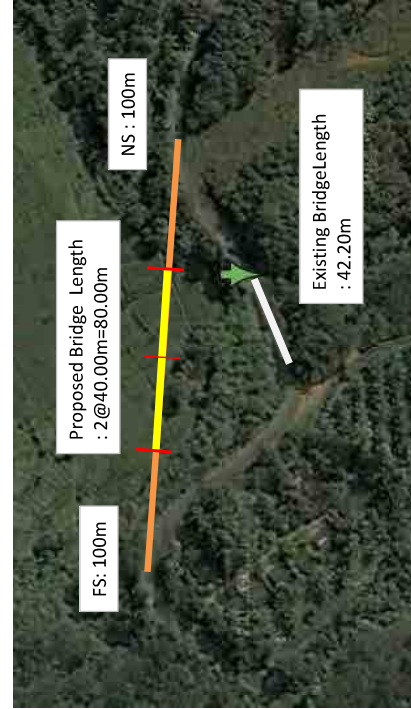
**Reconstruction at L-side of the existing bridge**

- Bridge Length: 2@40.0 = 80m
- Approach Length: NS: 100m FS: 100m
- Superstructure: Steel I-Girder
- Substructure: Wall Type Abutment Wall Type Pier
- Foundation: Spread Foundation

Resettlement: a few

\*\* SOUNDNESS RATE

- RATE 1: Good condition
- RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.
- RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.
- RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.



Bridge Inventory No.	Road No.	Road Name		Province	District	AAADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition
	AA001	Colombo - Kandy	Sabaragamuwa	Kegalle		2				
181	Bridge No.	Bridge Length (m)	Bridge Width (m)	No. of Lane	Bridge Type		Completion Year	Bridge Soundness		Flood Records
	60/1	Ambepussa Junction Bridge	32.20		Overall	Abutment		Pier	Super-structure	
			14.00	2	Precast PC beam+Brick arch	Column + Stone work Type	Good	Fair	Insufficient	none
		11.00								



< PRESENT CONDITIONS >

[BRIDGE ]

Busy condition for 2-lane traffic

[ SOUNDNESS ]\*\*

- Superstructure

RATE 1

- Substructure

L-side arch structure is old.

Sufficient for present service

- Others

RATE 2

[ SURROUNDING AREA ]



< PROPOSAL >

**Reconstruction is not recommended.**

Bridge Length:

Superstructure:

Substructure:

Foundation:

Resettlement:

Approach Length:

many

\*\* SOUNDNESS RATE

RATE 1: Good condition

RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.

RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.

RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.

Bridge Inventory No.	Road No.	Road Name				Province	District	AADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition
	B279	Mawanella - Hemmathagama - Gampala	Sabaragamuwa		Kegalle	2,751	2	Bridge			ok	
183	Bridge No.	Bridge Name	Bridge Length (m)	Bridge Width (m)	No. of Lane	Super-structure	Bridge Type	Completion Year	Super-structure	Sub-structure	Loading Capacity	Flood Records
	12/2	Waglla	20.40	Overall Curb-to-Curb 4.00	1	RC Slab	RC Wall Type	4	Fair	Fair	Insufficient	none



< PRESENT CONDITIONS >

[ BRIDGE ]  
 Narrow for 2-lane traffic , Insufficient alignment Causeway  
 [ SOUNDNESS ]\*\*  
 - Superstructure RATE 2  
 Causeway Sufficient for present service  
 - Substructure RATE 2  
 Causeway Sufficient for present service  
 - Others  
 [ SURROUNDING AREA ]

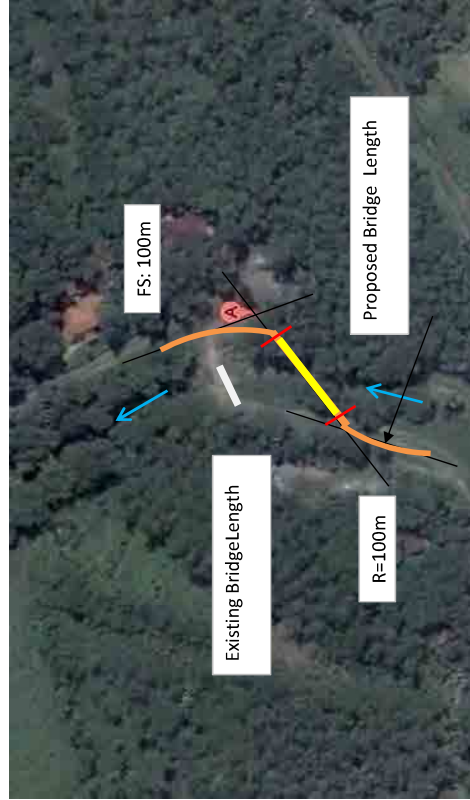
< PROPOSAL >

**New construction L-side at the existing bridge**  
**Improving alignment**

Bridge Length: 1@45.0 = 45m  
 Approach Length: NS: 100m FS: 100m  
 Superstructure: Steel I-Girder  
 Substructure: Wall Type Abutment Wall Type Pier  
 Foundation: Spread Foundation  
 Resettlement: a few

\*\* SOUNDNESS RATE

RATE 1: Good condition  
 RATE 2: Fair condition with minor natures: Periodical maintenance is required. No urgent repair is needed.  
 RATE 3: Significant damages: Damaged portion(s) are to be repaired immediately.  
 RATE 4: Critical damages: Urgent improvement, reconstruction or restriction of heavy vehicles is required.



Bridge Inventory No.	Road No.	Road Name		Province	District	AADT (No./Day)	No. of Lanes of Road Proposed by RDA	Construction Plan of Road to/ from Bridge		Environmental Condition	
	B279	Mawanella - Hemmathagama - Gampala	Sabaragamuwa	Kegalle	2,751	2				ok	
184	Bridge No.	Bridge Name	Bridge Length (m)	No. of Lane	Bridge Type	No. of Span	Completion Year	Super-structure	Sub-structure	Loading Capacity	Flood Records
	11/2	Wagoilla Bridge	36.00	1	Bailey Bridge	1	2010	Fair	Fair	Insufficient	none
		Bridge Width (m)	Overall	Curb-to-Curb	RC Wall Type						
		6.00	4.20								



< PRESENT CONDITIONS >

[BRIDGE ]

- Narrow for 2-lane traffic
- Temporary bridge
- [ SOUNDNESS ]\*\*
- Superstructure RATE 2
- Temporary bridge Sufficient condition at present
- Substructure RATE 2
- Others

[ SURROUNDING AREA ]

< PROPOSAL >

**Reconstruction at L-side of the existing bridge**

- Bridge Length: 1@45.00 = 45m
- Approach Length: NS: 100m FS: 100m
- Superstructure: Steel I-Girder
- Substructure: Wall Type Abutment
- Foundation: Spread Foundation

Resettlement: A few

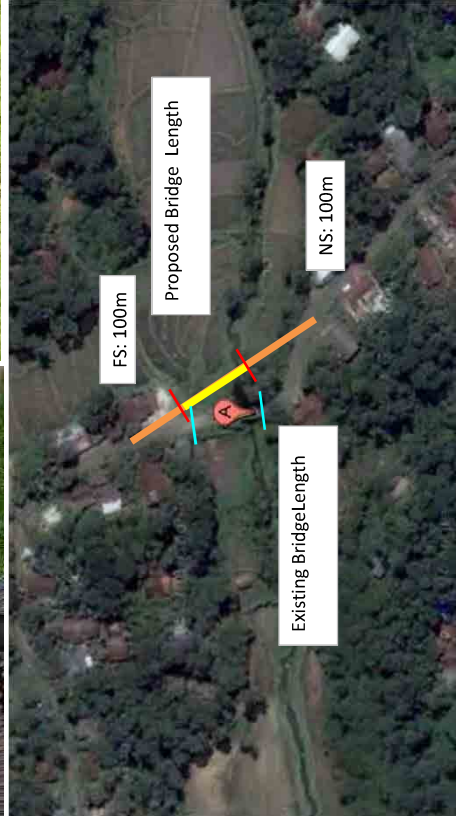
\*\* SOUNDNESS RATE

RATE 1: Good condition

RATE 2: Fair condition with minor natures. Periodical maintenance is required. No urgent repair is needed.

RATE 3: Significant damages. Damaged portion(s) are to be repaired immediately.

RATE 4: Urgent damages. Urgent improvement, reconstruction or restriction of heavy vehicles is required.



## 第 4 章 橋梁建設等に係る環境社会配慮関連法案・制度について

### 4.2 用地取得及び非自発的移転

#### 4.2.2 JICA の移転施策

非自発的移転に対する ICA の方針について重要な原則事項を以下に示す。

I. Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.

II. When, population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken.

III. People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels

IV. Compensation must be based on the full replacement cost as much as possible

V. Compensation and other kinds of assistance must be provided prior to displacement.

VI. For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan include elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.

VII. In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.

VIII. Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.

IX. Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.

「JICA が世界銀行のセーフガードポリシーから逸脱していないことを確認した」ことが JICA ガイドラインに記載されているため、上記の原則事項は世界銀行 OP4.12 によって補完される。世界銀行 OP4.1.2 に基づいた追加原則事項は以下の通りである。

X. Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits.

XI. Eligibility of Benefits include, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying.

XII. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.

XIII. Provide support for the transition period (between displacement and livelihood restoration).

XIV. Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.

XV. For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared.

#### 4.2.3 JICA ガイドラインと「ス」国施策のギャップ

表 4.2.3-1 ガイドラインと「ス」国施策のギャップ

No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
1.	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)	No specification under LAA. However, LAA is invoked only after the minister responsible decides that the land is needed for a public purpose. NIRP states: "Involuntary resettlement should be avoided or reduced as much as possible by reviewing alternatives to as well as alternatives within the project".	LAA is to acquire lands for the public purpose and does not mention about involuntary resettlement. However, LAA has provisions even to compensate any damage to any land or anything thereon during investigations carried out on any land. NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
2.	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)	There is no specific statement in LAA describing "minimizing the impact". However, LAA has provisions to consider "all interested parties" to such land to be compensated. This includes damages to land or anything thereon during investigations. NIRP states: "where involuntary resettlement is unavoidable, affected people should be assisted to reestablish themselves and improve their quality of life".	Provisions in LAA to consider all interested parties to such land for compensation and NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.



No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
3.	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. (JICA GL)	LAA states that compensation will be paid to land or the servitude which is to be acquired at "Market value" NIRP policy states: "where involuntary resettlement is unavoidable, affected people should be assisted to re-establish themselves and improve their quality of life".	LAA is to acquire lands for public purpose and does not mention about involuntary resettlement. Payment of compensation to land and servitude which is to be acquired at "Market value" under LAA and NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
4.	Compensation must be based on the full replacement cost as much as possible. (JICA GL)	Section 3 of LAA provides compensation for damages done during investigations carried out on any land. LAA new regulations (2008) have provisions, in case of buildings to pay difference between "reconstruction cost and the value of the buildings" based on market value. In addition, LAA has provisions for compensation for disturbances based on the 'value to owner'. NIRP policy principles states: "compensation for loss of land, structures, other assets and income should be based on full replacement cost and should be paid promptly".	LAA as a whole attempts to pay replacement cost of properties, especially with revisions of 2008. Due to its legal phenomena, the LAA has limitations in making resettlement focused approach which is covered by NIRP. NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
5.	Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)	Possession of land to be taken under section 38 of LAA, where under normal circumstances the possession of land to be taken at any time after an award is made under section 17. However under section 38 (a) proviso, the minister may take an order where it becomes necessary to take immediate possession of any land on the ground of any urgency, at any time after a notice under section 2 is exhibited for the first time in the area in which that land is situated or at any time after a notice under section 4 is exhibited for the first time on or near that land is all three languages.	There's no provision to bridge the gap between JICA policy and legal regulations of Sri Lanka in this regard. It is suggested that a clause to be included in the loan agreement stating that adequate compensation to be paid with other kinds of assistance before displacement of any affected person to fill the existing gap in this regard.

No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
6.		<p>LAA also expedites (discourages delays) compensation payments by imposing 'payment of interests' (under section 35 of LAA) in addition to principle amount of compensation if payment is delayed.</p> <p>There is no provision under NIRP stating that compensation and other kind of assistance should be provided prior to displacement.</p> <p>RDA's general customary practice is not to remove APs before paying compensation and other concessions. But there is no assurance on this depending on urgncies.</p>	
7.	<p>For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. (JICA GL)</p>	<p>No reference in LAA.</p> <p>NIRP requires a comprehensive Resettlement Plan if project exceeds displacement of 20 or more families.</p> <p>If number of families displaced is less than 20, NIRP requires a lesser detail Resettlement Plan.</p> <p>Under the National Environmental Act (NEA) there is another provision on resettlement which is described as follows;</p> <p>"Involuntary resettlement exceeding 100 families other than resettlement effected under emergency situations." Such project is considered as a prescribed project which requires undergoing EIA process. Under the TOR for EIA the project approving agency may request a Resettlement Plan as part of the EIA study (but not mandatory).</p>	<p>LAA is to acquire lands and does not mention about involuntary resettlement.</p> <p>NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.</p>

No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
8.	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. (JICA GL)	<p>Under section 4 of LAA the minister is empowered to call “objections to intended acquisition”. But this is limited to the owner/s of the land to be acquired.</p> <p>NIRP policy principles states: “affected persons should be fully involved in the selection of resettlement sites, livelihood compensation and development options at the earliest opportunity”.</p> <p>As per NIRP, consultative, transparent and accountable involuntary resettlement process needs to be put in place.</p>	<p>LAA only provides an opportunity for the owner/s of the land to object the intended acquisition. It does not have provisions to view public opinion on the intended acquisition or suggestions of alternates.</p> <p>NIRP Provides a window for the public and all stakeholders (including affected people) to express their views on the intended development project and resettlement matters which arise due it.</p> <p>Therefore, <b>provisions</b> in NIRP on consultation will bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.</p>
9.	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. (JICA GL)	<p>Section 2 of LAA ( in the opening of the process) clearly states that the acquiring officer of the district where the intended land is located should display/ exhibit a notice in some conspicuous places in that area in Sinhala, Tamil and English. LAA statutorily imposes all communication to be made in all three languages, publicly announce legal notifications in print media, and through home to home deliveries of announcements by GN officers. NIRP guides to have participatory approaches in all stages of resettlement planning.</p> <p>Under the National Environmental Act (NEA) there is another provision on public consultation; i.e. as per the regulations of to carry out EIA process for prescribed projects, an EIA report which is in line with the TOR (for the study) should be kept open to the public and any interested party/ies for a time period of 30 working days in order to express their views and concerns about the project.</p>	<p>LAA has provisions to inform the public about the intended land acquisition and the need of such acquisition. However, this initial notice does not provide any information on compensation and resettlement. And subsequent sections of LAA cover compensation but not resettlement.</p> <p>For legal announcements, LAA emphasizes use of all three languages in the country and promotes formal communication with all concerned parties in inquiries, discussions and meetings.</p> <p>NIRP guidelines focus attention on resettlement planning, implementation and monitoring following participatory approaches which encourage continuous dialogue between APs and officers, promoting undisturbed understanding of problems, issues and situations faced by APs. NIRP emphasis the need of using all three languages in the consultation approach (in different media).</p>

No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
10.	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. (JICA GL)	This scope is outside to LAA. This area is covered by NIRP strongly; as stated in NIRP “affected persons should be fully involved in the selection of resettlement sites, livelihood compensation and development options at the earliest opportunity” and participatory measures should have to be designed and implemented to integrate affected people in to host communities. In monitoring and evaluation, displaced persons need to be consulted.	This scope is outside to LAA. NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
11.	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities. (JICA GL)	LAA has provisions for formal appeals in the country’s legal system. One of the objectives of NIRP is to “make all affected people aware of processes available for the redress of grievances that are easily accessible and immediately responsive.” Establishment of a project based GRM is an explicit objective of NIRP.	Both LAA and NIRP go in line with JICA policy.
12.	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits. (WB OP4.12 Para.6)	Under LAA, the identification of title owners starts with the land acquisition process and non title owners can apply for their rights under section 9 inquiries. LAA process includes identification of APs, assets and ownership of properties formally in its process. After Section 2 notice of LAA (cut –off date), an influx of encroachers is not considered. This is an early phase of the process. NIRP states the need of the resettlement plan which has to be based on a comprehensive census on APs, and detail on land and structures, and socioeconomic status of them which is the baseline for future assessments.	Both LAA and NIRP go in line with JICA policy.
13.	Eligibility of benefits includes, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP4.12 Para.15)	LAA consider only titleholders and tenants protected under Rent Act 1972. NIRP policy principles states that affected persons who do not have documented titles to land should receive fair and just treatment.	Both LAA and NIRP go in line with JICA policy.

No.	JICA Guidelines	Stipulation by LAA and NIRP With Section Nos.	Identified Gaps between JICA Guidelines and LAA/NIRP
14.	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP4.12 Para.11)	No specification under LAA. NIRP policy principles states: "Replacement land should be an option for compensation in the case of loss of land".	This is not within the scope of LAA. NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
15.	Provide support for the transition period (between displacement and livelihood restoration). (WB OP4.12 Para.6)	New revision to LAA has considerations for transition period, like paying expenses for finding alternative accommodation etc and other payments for disturbances. NIRP does not specifically mention of transition period, but provides provision for livelihood restoration.	LAA and NIRP go in line with JICA policy.
16.	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB OP4.12 Para.8)	The scope is outside the LAA. NIRP policy principles states: "vulnerable groups should be identified and given appropriate assistance to substantially improve their living standards."	NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.
17.	For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared. (WB OP4.12 Para.25)	No specification under LAA. NIRP states that a resettlement plan needs to be prepared to a lesser level of detail if less than 20 people are affected.	NIRP guidelines bridge the gap between JICA policy and Sri Lankan legislation on involuntary resettlement.

出典：調査団

## 4.2.5 プロジェクトによる被影響者への補償

表 4.2.5-1 プロジェクトによる被影響者への補償

Item No.	Type of loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Implementation issues/Guidelines
1.	Permanent loss of agricultural land	Legal owner(s) of land	<ul style="list-style-type: none"> <li>i Land-for-land or cash-for-land and other assets lost at replacement cost.</li> <li>ii Livelihood / income improvement / restoration.</li> <li>iii Grant/skills and vocational training.</li> <li>iv Living allowance until livelihood or income sources are restored.</li> <li>v Land registration expenses and taxes, if any.</li> <li>vi If opted by AP, the remainder land will be acquired at replacement cost.</li> </ul>	<ul style="list-style-type: none"> <li>a. Assessment of quantity and quality of land by the Survey Department</li> <li>b. Assessment of Compensation at replacement cost by Valuation Department</li> <li>c. Verification of title of the affected persons</li> <li>d. APs will be fully informed of the entitlements and procedures regarding payments</li> <li>e. Payment of Statutory Compensation under LAA</li> <li>f. Additional cash grant to be paid to cover the current market price of land compensation based new regulations of LAA and NIRP</li> </ul>
2.	Loss of access to cultivable land by owner cultivator/s	Legal owner(s) of land	<ul style="list-style-type: none"> <li>vii Livelihood / income improvement / restoration.</li> <li>viii Grant/skills and vocational training.</li> <li>ix Living allowance until livelihood or income sources are restored.</li> <li>x Land registration expenses and taxes, if any.</li> <li>xi If opted by AP, the remainder land will be acquired at replacement cost.</li> </ul>	<ul style="list-style-type: none"> <li>g. Assessment of Compensation at replacement cost by Valuation Department</li> <li>h. Verification of title of the affected persons</li> <li>i. APs will be fully informed of the entitlements and procedures regarding payments</li> <li>j. Payment of Statutory Compensation under LAA</li> <li>k. Additional cash grant to be paid to cover the current market price of land compensation based new regulations of LAA and NIRP</li> </ul>
3.	Loss of access to cultivable land by tenant/ sharecropper	Tenant/s, sharecropper/s, grower/s, socially recognized owner/s, lessee/s, unauthorized occupant of land	<ul style="list-style-type: none"> <li>xii No payment for the land</li> <li>xiii Cash payment for loss of standing crops, trees or any other development on land at market prices, if cultivated by tenant or user with lease;</li> <li>xiv AND Cash payment for loss of net income for portion of land affected for the remaining leased/ assigned period.</li> <li>xv For sharecroppers, Transition subsistence (in cash or kind) allowance equivalent to loss of crop or harvest for portion of land affected for the remaining period of sharecropping agreement.</li> </ul>	<ul style="list-style-type: none"> <li>l. Lack of documentation/ records</li> <li>m. AP to request compensation at section 9 inquiries</li> </ul>

Item No.	Type of loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Implementation issues/Guidelines
4.	Loss of homestead/ residential/ commercial/ CPR plots by owners/Authorities	Legal owner(s) of the land	<p>xvi Payment of compensation at replacement cost.</p> <p>xvii If remaining portion of plot is not sufficient/ stable for residing, the remainder plot will be acquired at replacement cost (with the consent of AP).</p> <p>xviii Moving/shifting allowance, if displaced (even setback in same land)</p> <p>xix Salvageable materials belong to the establishment owner.</p> <p>xx Additional grant to cover the market value of land at market price to be determined.</p>	n.Valuation Department to decide compensation as per the provisions of LAA.
5.	Loss of Trees/ Perennials / livestock	<p>i. Person with Legal Ownership of the land</p> <p>ii. Socially recognized owner/ Unauthorized occupant of the trees/ livestock (cattle, goats)</p>	<p>xxi For owner, payment for crops and trees at market prices;</p> <p>xxii For tenant, payment for crops (Development to the land) shall be paid to tenant;</p> <p>xxiii For sharecropper, payment for crops (Development to the land) shall be shared between owner and sharecropper according to the sharecropping agreement;</p> <p>xxiv An advance notice will be made to all entitled persons to harvest crop; AND</p> <p>xxv Payment for net value of crops where harvesting is not possible; AND</p> <p>xxvi Cash payment for loss of trees and standing crops at market prices; AND</p> <p>xxvii Rights to resources from privately owned trees (i.e. timber or firewood)</p> <p>xxviii Payment of compensation for the loss of income due to loss of any livestock</p>	<p>o.Valuation Department to decide compensation as per the provisions of LAA.</p> <p>p.AP to request compensation at section 9 inquiries</p> <p>q.Lack of documentation</p>

Item No.	Type of loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Implementation issues/Guidelines
6.	Loss of residential /commercial structure by owner(s)	Legal Titleholder Owner(s) of structures	<p>xxix Payment for the structure at replacement cost</p> <p>xxx For commercial owners compensation for the loss of earning from business and advertising cost (based on the provisions of LAA)</p> <p>xxxi If remaining portion of structure is not sufficient/stable for residing or to carry out the commercial activity, the remainder of the structure will be acquired at replacement cost (with the consent of AP).</p> <p>xxxii Moving/shifting allowance, if displaced (even setback in same land)</p> <p>xxxiii Salvageable materials belong to the establishment owner.</p> <p>xxxiv Payment for any other expenses incurred due to acquisition.</p>	r.Valuation Department to decide compensation as per the provisions of LAA.
7.	Loss of residential /commercial structure by squatters and unauthorized occupants	Informal settlers / squatters / non-tilted APs occupying public land without title/ or squatting on Government or private land	<p>xxxv No compensation for the land</p> <p>xxxvi Payment for the structure/ development to land at replacement cost</p> <p>xxxvii For commercial owners payment of compensation for the loss of earning from business and advertising cost</p> <p>xxxviii Payment for the expenses incurred for transport and all other expenses due to acquisition</p>	<p>s.Lack of documentation (issue)</p> <p>t.Valuation Department to decide compensation as per the provisions of LAA.</p>
8.	Loss of access to Residential houses/ commercial structures (Owners/rented or leased)	Tenants of rented/ leased properties	<p>xxxix Cash payment for the expenses incurred for shifting to an alternate accommodation</p> <p>xl Cash payment for the expenses incurred for transport and all other expenses due to acquisition.</p>	<p>u.Lack of documentation (issue)</p> <p>v.Valuation Department to decide compensation as per the provisions of LAA.</p>
9.	Loss of business by CBEs due to dislocation	Owner/operator of the business	xli Payment of compensation for the loss of earning from business and advertising cost	<p>w.Lack of documentation (issue)</p> <p>x.Valuation Department to decide compensation as per the provisions of LAA.</p>
10.	Loss of Income and work days due to displacement	Household head / Employees of different commercial activities	xlii Payment of compensation for three months for loss of salary	y.Valuation Department to decide compensation as per the provisions of LAA.



Item No.	Type of loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Implementation issues/Guidelines
11.	Poor and vulnerable households	Poor and vulnerable households including informal settler, squatters / women headed household, households without elderly son, households with aged household heads	<p>xliii A special grant to the household to improve living standard.</p> <p>xliv Any non monetary assistance required.</p>	z.Valuation Department to decide compensation as per the provisions of LAA.
12.	Displacement of community structure (CPR)	Community structure representative as identified RDA, Valuation officer and Divisional Secretary	<p>xliv Restoration in existing location of affected community buildings, structures, infrastructure and common property resources to original or better condition, in consultation with relevant representatives of the community or local authority.</p> <p>xlviOR replacement in alternative location identified in consultation with affected communities and relevant authorities;</p> <p>xlviior (Cash) Payment at full replacement cost; AND restoration of buildings, structures, infrastructure, services or other community resources.</p>	aa. Valuation Department to decide compensation as per the provisions of LAA.
13.	Removal of tombs and tomb stones	Relatives of the deceased person	<p>xlviiorRemoval and restoring the tomb/ tombstone at a location acceptable to the relatives of the deceased person.</p> <p>xlviiorPayment of compensation for removing of tombstone.</p>	bb.Valuation Department to decide compensation as per the provisions of LAA.
14.	Temporary impact during construction	Community / Individual affected	<p>liPayment of compensation repairing lost assets as agreed between the owner/ care taker</p> <p>liiPayment of damages under the provisions of third party insurance obtained by contractor</p>	cc.Carryout a property condition survey of structures located within close proximity of construction site/ material extraction site
15.	Unforeseen impact	Concerned APs	Any unanticipated consequence of the project will be documented and mitigated based on the spirit of the principles agreed upon in this policy framework and advised by the Supervision Consultant and RDA.	

出典：調査団

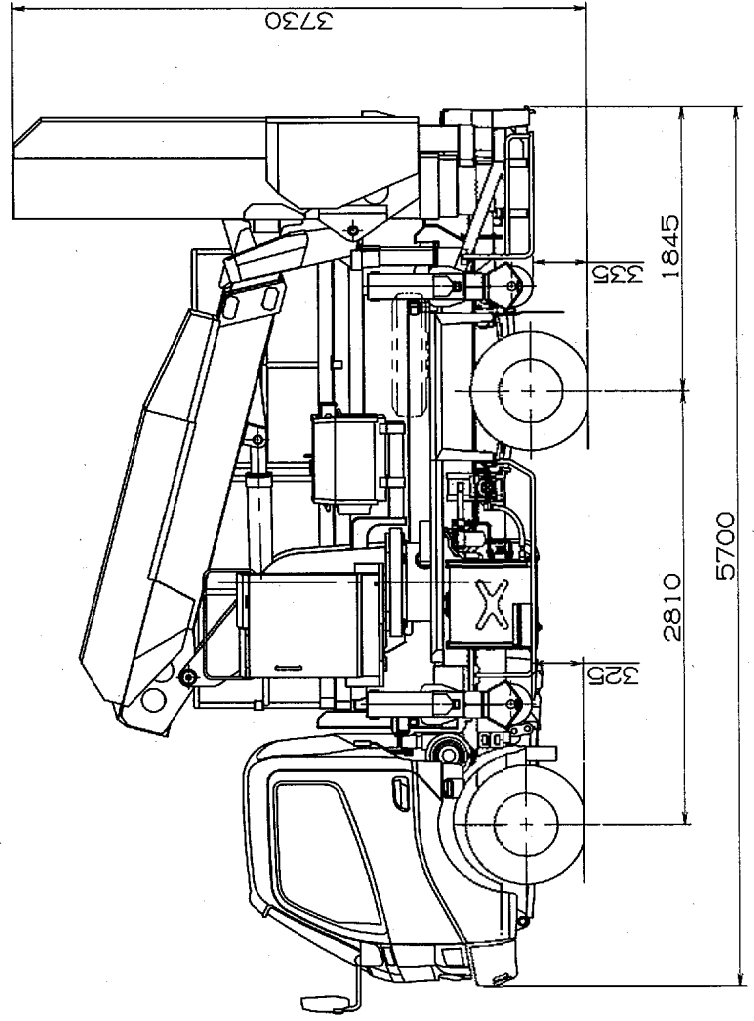
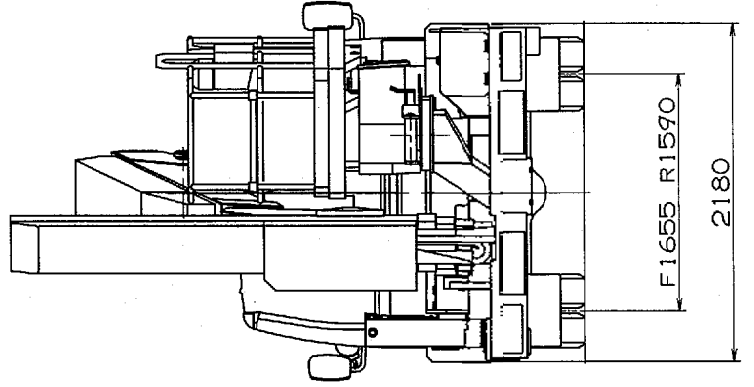
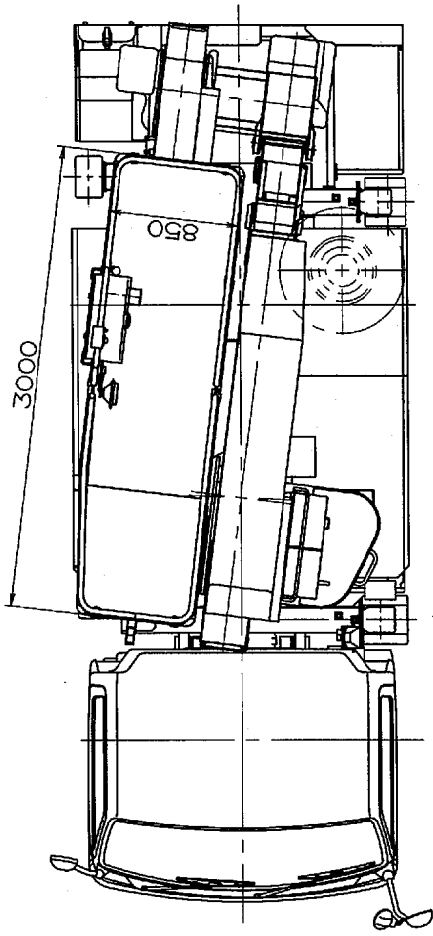


## 第 10 章 橋梁維持管理



10.6.4 技術協力プロジェクト (案)

APPENDIX-1 橋梁点検車両





10.6.7 技術協力プロジェクト（案）に対するRDAの考え

APPENDIX-2 要請書（案）

PROJECT CONCEPT FORMAT

**ERD Reference Number**  
*(for ERD use only)*  
**Concept ID**  
*(For ERD use only)*  
**Previous Concept ID (if any)**  
*(For ERD use only)*


Please refer “Project Concept Format Filling Guidelines” before continue.

**1. Project Information**

1.1) **Concept Date** : 14<sup>th</sup> September 2012

1.2) **Project Title**

Major Bridges Construction Project of National Road Network

1.3) **Thematic Area**

Rehabilitation and Reconstruction

Human Resources Development, Capacity Building and Institutional Strengthening
Poverty Reduction
<b>Rehabilitation &amp; Reconstruction</b>
Rural & Regional Development
Women & Children Differently Able

1.4) **Total Project Cost** = Rs. 26, 927 Mn (US\$ 207 Mn)

1.5) **Proposed Duration of the Project**

(a) **Unit** : years

(b) **Duration** : 7 (including maintenance period)

## 1.6) Sector and Sub sector

Main Sector	Sub Sector	Main Sector	Sub Sector			
Agriculture	Plantation	Information and Communication	Postal Services			
	Food Crop Development		Telecommunications			
	Minor Export Crops		Media			
	Livestock Development		Information Technology			
Budgetary/ Balance of Payments Support	Horticulture Agriculture Extension / Research Irrigation	Industrial Development				
		Labour and Employment				
Culture and Heritage		Power and Energy	Power Generation			
Education	General Education	Private sector Development	Power Transmission & Distribution			
	Higher Education		Energy Conservation			
	Technical/Vocational Education		Oil and Gas			
	Non-formal Education		Renewable Energy Source			
Environment and Natural Resources	Forestry	Tourism				
	Wild Life / Conversation					
	Water Resource					
	Protected Area					
	Coastal Resources					
	Land Development					
	Industrial Pollution					
	Marine Pollution					
	Disaster Management					
	Urban Environment					
	Flood Protection					
	Solid Waste Management					
	Banking			Trade		
Capital Market & Funds						
SME Financing						
Micro Financing						
Fisheries and Aquatic Resources	Marine Fisheries	<b>Transportation</b>	<b>Roads &amp; Highways</b>			
	Inland Fisheries		Railways			
Fisheries Harbour		Aviation	Ports & Shipping			
			<b>Land Transport</b>			
General	Economic Management Public Administration Law and Order Human Rights Foreign Affairs	Water Sanitation and Drainage	Water / Sea Transport			
			Water Supply			
			Sewerage			
			Strom Water Drainage			
			Governance	Health Care Nutrition Social Protection Public Health Indigenous Medicine	Local Government	
			Health , Nutrition and Social Protection		Youth Affairs	
			Housing		Sports	
			Urban Development			



## 1.7) Type of the Proposal

(Tick one project type only. In case where more than one is involved, indicate the type with the largest component)

- i. Project Type Assistance
  - Goods, Services and Equipment Supply
  - Facilities Construction
  - Both
- ii. Feasibility Study
  - Pre-feasibility / Basic study
  - Feasibility
- iii. Technical Assistance
  - Master Plan for Development
  - Training and Human Resources Development
  - Project Development

## 2. Applicant's Information .

(Consist of brief introduction of the agency that creates and owns the project concept /forwarding ministry/Provincial Councils/stand alone organizations covering Organizational and personnel details)

**2.1) Host Country /Applicant** : Government of Sri Lanka

### 2.2) Project Proponent

2.2a) Name of the Agency : Road Development Authority

2.2b) Address : Road Development Authority, 1<sup>st</sup> Floor, Sethsiripaya, Battaramulla.

2.2c) Phone : 011-2862795

2.2d) Fax : 011-2872272

#### 2.2e) Contact Person 1

- i.) Title : Dr / Rev / Mr / Mrs / Miss
- ii.) Name : W.A.S. Weerasinghe
- iii.) Designation : Director General, Road Development Authority.
- iv.) Phone : 011-2862795
- v.) Fax : 011-2872272
- vi.) E-mail id : gmo@rda.gov.lk

#### 2.2f) Contact Person 2

- i.) Title : Dr / Rev / Mr / Mrs / Miss
- ii.) Name : H.M.K.G.G. Bandara
- iii.) Designation : Director (Planning), Road Development Authority
- iv.) Phone : 011-2882995
- v.) Fax : 011-2882990
- vi.) E-mail id : plann@rda.gov.lk

### 2.3) Forwarding Ministry / Provincial Council

- 2.3a) Name of the Agency : Road Development Authority  
2.2b) Address : Road Development Authority, 1<sup>st</sup> Floor, “Sethsiripaya”, Battaramulla.  
2.2c) Phone : 011-2862795  
2.2d) Fax : 011-2872272

2.3e) Contact Person 1

- i.) Title : Dr / Rev / Mr / Mrs / Miss  
ii.) Name : R.W.R.Pemasiri  
iii.) Designation : Secretary, Ministry of Ports and Highways  
iv.) Phone : 011 – 2887462 / 011- 2862739  
v.) Fax : 011 - 2862705  
vi.) E-mail id : hiwaysec@sltnet.lk

2.3f) Contact Person 2

- i.) Title : Dr / Rev / Mr / Mrs / Miss / Ms  
ii.) Name : G.J.C. Gunathilaka  
iii.) Designation: Additional Secretary (Engineering), Ministry of Ports and Highways  
iv.) Phone : 011 - 2868703  
v.) Fax : 011 - 2864958  
vi.) E-mail id : addleng@mohsl.gov.lk

## 3. Project Rationale

(Do not indicate/explain the objective of the project. Answer to each sub section should be in brief.)

### 3.1) Introduction to the Project (General sector information and information specific to the area)

In Sri Lanka, road transport is the pre-dominant mode of transport with the road transport catering for about 92% of the passenger demand and 98% of freight demand. However, the transport system of the country is far from satisfactory level with poor operating speeds, delays, accidents, and high operating costs due to the poor condition of the road infrastructures and inadequate capacity of the transport system.

An efficient transport system is a prerequisite for the rapid economic development of the country and for improving quality of life of people. To maintain economic growth at about 8%, the country has its policies in order to develop and expand the national road network across the country.

There are around 4, 200 bridges on the National Road Network and the poor condition of the bridges will affect the road transportation system. Some of the existing bridges are presently in structurally weak condition while some having inadequate capacity to cater to the present demand. Due to the weak & narrow condition of these bridges it is required to restrict the movement of heavy vehicles, long containers with heavy loads and industrial and construction equipments across these bridges resulting negative effects to the economy of the country to a substantial degree.

Attachments (if any): None

### 3.2) Specific Problem to be Addressed by the Project

These 40 bridges have been selected from Western, Southern, Northern, Eastern, North Western, North Central & Uva provinces and 39 bridges are on National Roads while one is on a provincial road. At present, actions have already been taken to take over this provincial road also to National Road Network considering its national importance. All these roads are carrying high volume of traffic with high percentage of heavy vehicles.

Replacements of most of these existing bridges are required due to their dilapidated or weak structural condition and inadequacy in width to cater to present traffic demand.

Once the roads are improved, these narrow bridge locations become the traffic bottlenecks and black spot locations. Most of the selected bridges are more than 50 years old. Hence these old bridges have limitations in load carrying capacity and inadequacies in width. Particularly heavy containers, industrial & construction equipment are unable to travel on most of these bridges, resulting unfavourable economic impact to the country.

Hence reconstruction of these bridges is a prime requirement to maintain the flow of traffic on the National Highway Network at substantial level of service.

Attachments (if any): None

### 3.3) Mode of Intervention in Terms of this Project (Justification)

This project is to construct or replace 40 bridges on the National road network with improved facilities such as foot walks, utility ducts etc. and safety standards.

### 3.4) Composition of Target Beneficiaries/Stakeholders (indicate Gender Ratio)

	Beneficiary / Stakeholder	Description	Gender Ratio	
			Male	Female
1	All road users		50	50

### 3.5) Relationship of the Project to Government Policy Framework /Plan

The road rehabilitation, improvement and bridge construction is one of the top priorities of the government policy, which can provide acceptable level of mobility and low vehicle operating cost. During the past two decades the sectoral development policy of the government was to rehabilitate the existing roads, road structures etc. In providing enhanced transport facilities to the people. During the period, several bridge construction projects were undertaken in addition to the new road construction projects which are aiming to improve the transport system of the country with efficient mobility.

#### Name of the Government Policy Framework /Plan :

In the “Mahinda Chinthana : Vision of New Sri Lanka” – A Ten year Horizon Development Framework 2006 – 2016

### 3.6) Coherence with Sectoral Policies and Strategies

Some of the government objectives in this sector are:

- Improve the quality of road by using cost effective and innovative techniques of design for construction, maintenance, and rehabilitation of roads and bridges.
- Eliminate traffic congestion through proper traffic management.
- Provide easy accessibility and faster mobility.
- Adequately meet the transport needs of the country, both of passenger and freight, taking into consideration of current and projected future transport demands.
- Improve the Traffic management measures of the existing roads
- An ambitious program for traffic management and increasing road safety will be launched
- The road sector development will continue to assist the nation's poverty reduction effort.

### 3.7) Considered Project Alternatives and Reasons for Rejection

(Indicate the identified possible alternatives to achieve the project objectives and explain the reasons for rejecting them)

As this is a project for the reconstruction of bridges, the alternatives can be considered in design stage.

### 3.8) Whether a Feasibility Study for the Project has been carried out

Yes  No

## 4 Project Objective & Purpose

(Indicate the main objective and the purpose of the project without adding project justification)

### 4.1) Goal of the Proposed Project

No ...1.... is the Primary Objective

No ....2. & .3 is the Secondary Objectives

(Select and Indicate the Number(s) Pertaining to the Primary Objective and the Secondary Objective from List below)

1. Economic Development/ Reform for Economic Growth
2. Poverty Alleviation
3. Social Development
4. Environmental Management
5. Capacity Building/ Institutional Strengthening

### 4.2) Purpose of the Project

The purpose of the project is to provide efficient, comfortable & safer transport service and thereby

1. Enhance the connectivity between two main towns
2. Facilitate the development of other sectors such as health, education etc.
3. Reduce the vehicle operating cost
4. Reduce the travel time, travel cost of road users

5. Increase the load carrying capacity
6. Giving more opportunities to the investors to invest on agricultural and industrial based projects
7. Provide connectivity across rivers, streams and lagoons by way of constructing new bridges instead of operating ferries

Attachments (if any): None

## 5. Project Outputs, Activities and Duration

### 5.1) Expected Project Outputs

	Output	Unit of Measure	Quantity
1	Construction/ Replacement of bridges	No.	40

Attachments (if any): None

### 5.2) Project Activities

	Activity	Unit of Measure	Quantity
1	Investigation and Detail design	No.	40
2	Construction bridges (substructure & superstructure)	No.	40
3	Supervision	No.	40

### 5.3) Proposed Duration of the Project

4.3.a) Unit : years

4.3.b) Duration : 07 (including maintenance period)

## 6. Project Location & Land Requirement

### 6.1) Is the Project Location in Island wide or Area Specific:

Island wide

Area Specific

6.2) Total Land Requirement : Not relevant for this stage.  
Unit of Measurement :

### 6.3) Specify the Project Location

(Indicate the place(s) where project activities take place.)

Provide additional description if boundary cannot be demarcated clearly:

Site	Province	District	DS Division	No of Bridges	Land Required? (Y/N)	Extent
1	Eastern	Ampara, Trincomalee	Maha – Oya, Karativu, Samanturai, Thambalagamuwa	05 Bridges	Yes	Approximately 42,000 m <sup>2</sup>
5	Northern	Kilinochchi, Mannar, Vavuniya, Mulativu	Pooneryn, Mantai West, Musali, Nanaddan, Vengala Cheddikulam, Martitime pattu	08 Bridges	Yes	
10	North Central	Anuradhapura, Polonnaruwa	Nochchiyagama, Dehiattakandiya	02 Bridges	Yes	
12	North Western	Kurunegala, Puttalam	Mahawa & Wariyapola, Ridigama, Arachchikattuwa	03 Bridges	Yes	
15	Uva	Monaragala	Thanamalwila	01 Bridges	No	
16	Sabaragamuwa	Ratnapura	Imbulpe	01 Bridges	Yes	
17	Southern	Galle, Matara	Baddegama, Bope Poddala, Habaraduwa, Hakmana, Weligama, Welipitiya	09 Bridges	Yes	
23	Western	Colombo, Kalutara	Colombo, Hanwella, Homagama, Kaduwela, Kolonnawa, Beruwela, Madurawela, Moratuwa	11 Bridges	Yes	

Attachments (if any): List of bridges is attached as Annex – 01  
Location map is attached as Annex – 02

## 7. Environment and Environment Impact

### 7.1) Please Indicate if any of the Following Land Uses are Within the Project Site or Within 1 km Distance from any Boundary of the Project Site :

National reserves, Sanctuaries, Forest reserves and proposed forest reserves, National Heritage wilderness areas, Coastal zones, flood areas and flood protection areas, Reserves, Ancient protected monuments, Schools, Religious places and Hospitals

Yes, one or more of the above land uses are within the site boundary

Yes, one of more of the above land uses are within 1 km of the site boundary

No, none of the above land uses are within the project boundary or within a 1 km distance from any boundary of the project site.

If the answer to this question is affirmative, please list land use(s) and provide a map (1:50,000 or smaller scale) showing the project boundary and a distance of 1 km from each boundary.

Attachments (if any): None

### 7.2) What are the Possible Environment and Natural Resources Constraints to the Existing Activities due to the Proposed Project?

Not Applicable

7.3) **Indicate which of the Following Resources may be required for the Project.** If possible, specify quantities and from what sources (i.e., name of source or location if available).

Resource	Required for this Project	Unit of measurement	Extent (if known)	Location (if known)
Surface Water	No			
Groundwater	No			
Quarry Stone or Earth fill	Yes			
Energy:	No			
Forests	No			
Other(Specify).....				

7.4) **Will the Project Require Relocating 100 or more Families?** Yes ..... No

7.5) **Whether the Project Location is Inside the Costal Buffer Zone?** Yes..... No

7.6) **Is the Proposed Project a Prescribed Project?** (Please refer to Sri Lanka Government Gazette Extraordinary – 772/22 of 1993.06.24. and the Gazette Extraordinary No 1104/22 of 1999.11.05 You are advised to consult CEA to verify the Prescribed status).

Yes  No

## 8. Gender Perspective

8.1) **Does the Project Identify any Gender Gaps? If so Describe.**

Not applicable

8.2) **Is there any Strategy in the Project to Address the Gender Imbalances**

Not applicable

8.3) **Which Project Activities are Designed to Bridge such Gender Gaps and What will be their Impact on Gender Imbalance?**

Not applicable

## 9. Cost & Financing

9.1) Total Project Cost in LKR (Mn) : Rs. 26, 927 Mn (US\$ 207 Mn)

9.2) Cost Components :

Component	Activity	Cost in Local Currency (LKR mn)
1	Construction Cost	20, 861
2	Land acquisition & utility service Cost	450
3	Administration Cost	1, 638
4	Tax & VAT	3, 978
	<b>Total</b>	<b>26, 927</b>

9.3) Financing Plan

Financial Source	Cost
	Local Currency (LKR mn)
External Source	20, 861
Proponent (Implementing Agency) Funding	-
Beneficiary Contribution	-
Consolidated Fund	6, 066
Other (Specify).....	-
<b>Total</b>	<b>26, 927</b>

9.3.1) Prospective Donors for the Proposed Project

Japan International Co-operation Agency

9.4) Details of Already Offered External Assistance to Projects in the Related Sector in the Last Five Years

Donor	Related Field	Project Title: Assistance Already Offered	Amount USD (mn)	Year of Commencement	State whether Completed or Ongoing
JICA	Bridge	Construction of new highway bridge at Manampitiya	10	2006	Completed
JICA	Bridge	Construction of new Mannar bridge and Improvement of Causeway	22	2007	Completed
JICA	Roads & Bridge	Pro – Poor Eastern Infrastructure Development Project	39	2007	Road works completed, bridge Ongoing
JICA	Bridge	Reconstruction of five bridges in Eastern Province	13	2011	Ongoing



## 10. Project Implementation

(If the Project Proponent is the Implementing Agency the Information at 2.2 should Appear Here)

### 10.1) Implementing Agency with Overall Responsibility.

10.1a) Name of the Agency: Road Development Authority

10.1b) Address: Road Development Authority, 1<sup>st</sup> Floor, Sethsiripaya, Battaramulla

10.1c) Phone: 011-2862795

10.1d) Fax: 011-2872272

10.1e) Contact Person 1:

- i.) Title : Dr / Rev / Mr / Mrs / Miss
- ii.) Name : W.A.S. Weerasinghe
- iii.) Designation : Director General, Road Development Authority
- iv.) Phone : 011-2862795
- v.) Fax : 011-2872272
- vi.) E-mail id : gmo@rda.gov.lk

10.1f) Contact Person 2:

- i.) Title : Dr / Rev / Mr / Mrs / Miss
- ii.) Name : H.M.K.G.G. Bandara
- iii.) Designation : Director (Planning), Road Development Authority
- iv.) Phone : 011-2882995
- v.) Fax : 011-2882990
- vi.) E-mail id : plann@rda.gov.lk

### 10.2) Functions of the Implementing Agency with Overall Responsibility

The implementation organization is the Road Development Authority (RDA), which is a statutory body incorporated under the RDA Act No. 73, of 1981 under Ministry of Highways & Road Development.

The RDA is the premier highway authority in the country and is entrusted with the responsibility to maintaining and developing the national highway network, which comes under the purview of central government. The National Highway Network consists of 4,221 km of "A" class roads and 7,944 km of "B" class roads and around 4,200 bridges. The functions performed by the RDA consist mainly maintenance and development of roads and bridges in the National Highway Network including planning, design and construction of new highways, bridges and expressways to augment the existing network.

**10.3) Implementing Agency / Agencies and Their Functions and Prior Experience with Similar Projects / Activities**

	<b>Implementing Agency/Agencies</b>	<b>Functions</b>	<b>Prior Experience</b>
1	RDA	Implementation	Prior experience in construction bridges
2	Ministry of Ports and Highways	Overall responsibility	-do-

**10.4) Responsibilities of Other Entities (Other Relevant Agency)**

10.4.a) Applicable / ~~Not applicable~~

Other relevant agencies are responsible to shift their utility services such as water supply lines, telecommunication lines, electricity lines and poles etc. where they are required.

10.4.b) Narration: Not Applicable

**10.5) Staff Availability for Implementing the Proposed Project (Specify any Additional Staff Required)**

<b>Implementing Agency</b>	<b>No of Staff Members Available</b>
RDA	Available
	<b>Additional Staff Required</b>
	No additional staff are required

.....  
**H M K G G Bandara**  
 Director (Planning)  
 Road Development Authority

.....  
**W A S Weerasinghe**  
 Director General  
 Road Development Authority

APPENDIX-3 PDM (案)

スリランカ国 橋梁維持管理能力向上プロジェクト (仮称) PDM

2年案(点検作業が主体)

02/07 2013

プロジェクトの要約	指標	入手手段	外部条件
<b>上位目標</b> ・ スリランカ国において橋梁維持管理が適切に実施されこれによって橋梁健全度が向上する。	・ 橋梁維持管理予算額の要求額と配分額の比率 (予算充足率) が 50% 以上となる。	・ 橋梁維持管理予算の要求額、配分額、執行額の結果	・ 橋梁維持管理予算が確保される。(道路維持管理信託基金制度が充実される。)
<b>プロジェクト目標</b> ・ RDA の橋梁維持管理能力が向上する。	・ プロジェクト終了時まで国道上の主要橋梁の点検が実施される。	・ 橋梁の点検結果記録	
<b>成果</b> 成果 1) RDA 本部の橋梁維持管理能力が向上する (点検結果の整理、評価) 成果 2) RDA 地方事務所の橋梁維持管理能力が向上する (点検作業) 成果 3) 橋梁維持管理マニュアルの内容が改善される 成果 4) 橋梁点検管理に関する使用機材が改善される。 <b>活動</b> <b>成果 1) RDA 本部の橋梁維持管理能力が向上する</b> -1 維持管理マニュアルに基づく点検結果の整理、データベース作成作業 -2 点検結果の評価 -3 上記作業に係る OJT 実施 <b>成果 2) RDA 地方事務所の橋梁維持管理能力(点検作業能力)が向上する</b> -1 現場における、点検作業および点検シートの作成 -2 点検結果の適正な本部への報告 -3 上記作業に係る OJT 実施 <b>成果 3) 橋梁維持管理マニュアルの内容が改善される</b> -1 現状マニュアルのレビュー、現状把握 -2 マニュアル改定案の作成 -3 RDA におけるマニュアルの制度化 -4 全国に普及を図るためのセミナー <b>成果 4) 橋梁維持管理に関する使用機材の運用が改善される</b> -1 維持管理マニュアルに基づいた必要機材の選定 -2 使用機材の調達 -3 使用機材の OJT 実施 -4 機材台帳の作成	成果 1) 本部の担当者が OJT に参加し、点検結果の整理が実践できる。 成果 2) 地方事務所の担当者が OJT に参加 成果 3) 橋梁維持管理マニュアルが現場で活用される。 成果 4) 贈与した点検機材が活用される。	成果 1) OJT 受講記録および実作業の実施記録 成果 2) OJT 受講記録および実作業の実施記録 成果 3) 橋梁維持管理に関する OJT 受講記録。実作業の実態を踏まえ担当者にマニュアルに対するコメントを提出させる。 成果 4) 点検実施記録	
	<b>投入</b> 日本 <b>【専門家】</b> 長期専門家：1 名 ・ 道路/橋梁維持管理 24 M/M ・ 短期専門家：5 名 ・ 橋梁維持管理計画 21 M/M ・ 橋梁点検技術 12 M/M 計 57 MM <b>【機材】</b> 橋梁点検車 約 25,000 千円 橋梁点検機材 コア抜き機・鉄筋探査器 3 セット(3PD 事務所毎) シュミットハンマ・中性化試験キット 9 セット(各 PD 事務所毎) <b>【本邦研修・留学】</b> 研修：橋梁点検、	スリランカ国 <b>【カウンターパート】</b> 「Bridge Assessment Unit」：13 名 (予定) ・ ユニット長：1 名 ・ ユニット次長：2 名 (点検、施工監理) ・ チーム担当：10 名 (点検、アセットマネージメント、データ分析、維持管理計画、施工計画、施工監理、完了検査チーム) <b>【便宜供与】</b> 執務室	前提条件 ・ プロジェクトにおいて RDA の C/P 組織となる「Bridge Assessment Unit」が創設される。 ・ プロジェクト実施において RDA の C/P 組織となる「Bridge Assessment Unit」と関連部署 (計画部、エンジニアリングサービス部、維持管理部、PD 事務所、CE 事務所、EE 事務所) が適切に連携が図れる。 ・ C/P 組織となる「Bridge Assessment Unit」のメンバーがプロジェクト期間中に変更されない ・ 橋梁点検用機材が確実に調達されて、適切に使用される。