नेपाल सरकार
भौतिक पूर्वाधार तथा यातायात मन्त्रालय
सडक विभाग
पुल महाशाखा

ई-मेल :
वेव :
फ्याक्स :
फोन :
पाटनढोका, ललितपुर
नेपाल

पत्र संख्या : ०७३/७४
चलानी नम्बर :

मिति : २०७३/१२/२०

RFP Notice No. ०१/०७३/७४ (पुलहरुको विस्तृत सर्वेक्षण तथा डिजाईन इष्टिमेट तयार गर्ने) मा संशोधन गरिएको बारे ।

उपरोक्त विषयमा यस पुल महाशाखाको सुचना नं. ०१/०७३/७४, मिति २०७३/११/२२ मा प्रकाशित सुचना अनुसारको RFP Document मा विद्यमान ऐन नियमावली अनुसार केही संशोधन गर्नु पर्ने भएकोले RFP बुझाउने अन्तिम मिति २०७३/१२/२१ बाट २०७३/१२/२८ मा कायम गरिएको छ । साथै संशोधित RFP Document, DoR website, www.dor.gov.np/new मा प्रकाशित गरिएको सम्बन्धित सबैलाई जानकारी गराईन्छ ।

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Bridge Branch
Chakupat, Lalitpur
Notice No: 01/073/74

मिति २०७३/११/२२

Request for Proposal

पुलहरुको विस्तृत सर्भेक्षण तथा डिजाइन, ईष्टिमेट तयार गर्न, यस महाशाखाको EOI सूचना नं. ०१/०७३/७४ सडक विभागको Website: www.dor.gov.np तथा नागरिक पत्रिकामा सूचना प्रकाशित गरि माग गरिएको Expression of Interest (EOI) अनुसार प्राप्त हुन आएका EOI हरु सार्वजनिक खरिद ऐन, २०६३ को दफा ३० बमोजिम मूल्याङ्कन गरी Packaging सहितको short list तयार गरि श्री सडक विभाग, पुल महाशाखाको सूचना पाटी तथा DoR website: www.dor.gov.np/news मा प्रकाशित गरिएको सम्बन्धित सबैलाई जानकारी गराईन्छ ।

Short List मा परेका परामर्शदाता फर्महरु बाट सार्वजनिक खरिद ऐन २०६३ दफा ३१ बमोजिम Technical तथा Financial Proposal (RFP) तोकिएको ढाँचामा भरी पेश गर्न यसै सूचना मार्फत अनुरोध छ । उपरोक्त RFP Document श्री सडक विभाग, चाकुपाट, ललितपुरबाट प्राप्त गर्न सकिने छ र ३० (तीस) दिन भित्र बुझाउनु पर्नेछ । उपरोक्त RFP सडक विभागको Website: www.dor.gov.np बाट पनि Download गरी Submit गर्न सकिने व्यहोरा सम्बन्धित सबैको जानकारीको लागि यो सूचना प्रकाशित गरिएको छ ।

Pkg No. BB-DSD-159-073/74-01

S. No.	Firms Name
1	GOEC Nepal P. Ltd. JV RARA Eng. Consultannt P. Ltd. Buddhanagar, Ktm. Tel: 4783060
2	GRID Nepal Design Associates P. Ltd. JV Engineering Support Consult P. Ltd. & Design Eng. Consultant P. Ltd. Dhobighat, Lalitpur. Tel: 5522916
3	DIGICON Eng. Consult P. Ltd. JV Executive Consulting Eng. & Planners & IDEAL Solution P. Ltd. Kupondole, Lalitpur.
4	Pyramid Design Associates P. Ltd. JV Design Forum P. Ltd. & Geospatial System P. Ltd. Bhaktapur Tel: 4239772
5	BEAM Consultant P. Ltd. JV ARC Eng. Consultant P. Ltd. Sanepa, Lalitpur. Tel: 5542783
6	CARD CONSULT P. Ltd, Babarmahal, Ktm Tel: 4224141

Pkg No. BB-DSD-159-073/74-02

S. No.	Firms Name
1	GIDA Nepal JV RIDARC Nepal in association with United Eng. Solution P. Ltd. Ktm. Tel: 4781896
2	ERMC P. Ltd JV ERMCs International P. Ltd. And ERMC Geo-Tech Services P. Ltd. Baneshwor, Ktm. Tel: 4483064
3	TECHNOCRAT Consultancy JV CAGE Consult P. Ltd. & Diplomatic Eng. Consultant P. Ltd. Lalitpur. Tel: 9851131006
	Premium Consultants P. Ltd. JV Shree RS Eng. Solution P. Ltd. & Shrestha Consultant P. Ltd. Kupondole, Lalitpur Tel: 6915719
5	CARD CONSULT P. Ltd, Babarmahal, Ktm Tel: 4224141
6	BEAM Consultant P. Ltd. JV ARC Eng. Consultant P. Ltd. Sanepa, Lalitpur. Tel: 5542783

Pkg No. BB-DSD-159-073/74-03

S. No.	Firms Name
1	Building Design Authority P. Ltd. JV Geotech & Structure Lab P. Ltd. And Creative Eng. Consultancy, Kamaladi, Ktm.
2	Elite Civil Design Consultants P. Ltd. (ECDC) JV MRB and Home Eng. Consultant P. Ltd. Lalitpur Tel: 5203175
3	Kalika Eng. Consultancy JV Research Eng. Consultant & APEX Eng. & Mgmt ConsultantP. Ltd. Bainsepati, Lalitpur. Tel: 6924156
4	Multi Disciplinary Consultants P. Ltd. (MULTI) JV Multi Lab P. Ltd. Kupondole, Lalitpur. Tel: 5529304
5	SCI-SAKHUWA-RISHIKESH JV Imadole-6, Lalitpur. Tel: 5202473
6	MEH Consultants P. Ltd. JV MEH Geo-Engineering Services P. Ltd. Baneshwor, Ktm. Tel: 4477634

Pkg No. BB-DSD-159-073/74-04

S. No.	Firms Name
1	MEH Consultants P. Ltd. JV MEH Geo-Engineering Services P. Ltd. Baneshwor, Ktm. Tel: 4477634
2	Naya Rastriya Eng. Consultancy P. Ltd. JV Plush Engineers and Architechs P. Ltd. & Green Innovative P. Ltd. Jwagal-10, Lalitpur.
3	Total Management Services P. Ltd. JV Pashupati Drilling & Geo-Technical Services P. Ltd. Kamalpokhari, Ktm. Tel: 4439182
4	SITARA CONSULT P. Ltd and CIS P. Ltd JV P.O. Box 8973, Pulchowk, Lalitpur Tel: 5549045
5	Hydrotrans P. Ltd. JV Aviyaan Consulting P. Ltd. & Welink Associates P. Ltd. Sanepa-10, Lalitpur. Tel: 5520486
6	Building Design Authority P. Ltd. JV Geotech & Structure Lab P. Ltd. And Creative Eng. Consultancy, Kamaladi, Ktm.

Pkg No. BB-DSD-159-073/74-05

S. No.	Firms Name
1	BEAM Consultant P. Ltd. JV ARC Eng. Consultant P. Ltd. Sanepa, Lalitpur. Tel: 5542783
2	Welink Consultants P. Ltd. JV SLATE Consultants P. Ltd. & PERTINENT Eng. Consultants P. Ltd. Lalitpur. Tel: 5520022
3	GRID Nepal Design Associates P. Ltd. JV Engineering Support Consult P. Ltd. & Design Eng. Consultant P. Ltd. Dhobighat, Lalitpur. Tel: 5522916
4	Bridge Consultantcy JV Prestige Consulting P. Ltd. & Great Nepal P. Ltd. Jhamsikhel, Lalitpur. Tel: 5528486
5	SILT Consultants P. Ltd. JV Civil Engineering Research and Consultancy P. Ltd. Ratopul, Ktm. Tel: 4473573
6	GIDA Nepal JV RIDARC Nepal in association with United Eng. Solution P. Ltd. Ktm. Tel: 4781896

Pkg No. BB-DSD-159-073/74-06

S. No.	Firms Name
1	CARD CONSULT P. Ltd, Babarmahal, Ktm Tel: 4224141
2	Civil Informatics and Solutions P. Ltd. (CIAS). Chakupat, Lalitpur Tel: 5260314
3	ERMC P. Ltd JV ERMCs International P. Ltd. And ERMC Geo-Tech Services P. Ltd. Baneshwor, Ktm. Tel: 4483064
4	Global Eng. Associates P. Ltd. JV NEDECON P. Ltd. & Ropeway and Cable Car P. Ltd. Balkhu, Ktm. Tel: 4036338
5	Shyam International Eng. Consultancy P. Ltd. (SIEC) JV ADMC & Bangalamukhi. Patan Tel: 5260332
6	GOEC Nepal P. Ltd. JV RARA Eng. Consultannt P. Ltd. Buddhanagar, Ktm. Tel: 4783060

Pkg No. BB-DSD-159-073/74-07

S. No.	Firms Name
1	SCI-SAKHUWA-RISHIKESH JV Imadole-6, Lalitpur. Tel: 5202473
2	TACE Consult P. Ltd. JV COEMANCO-Nepon P. Ltd. & Raj Devi Eng. Consultant P. Ltd. Ktm. Tel: 4781446
3	Elite Civil Design Consultants P. Ltd. (ECDC) JV MRB and Home Eng. Consultant P. Ltd. Lalitpur Tel: 5203175
4	ECOCODE Nepal JV Vishwa Drilling P. Ltd. & Milestone Design and Planning Consult P. Ltd. Jwagal-10, Lalitpur. Tel: 5261016
5	National Consultant JV Full Bright Consultancy P. Ltd & National Eng. Research and Mgmt. Services P. Ltd. Samakhusi, Ktm.
6	Integrated Development & Research Services P. Ltd. JV Remote Soil Lab P. Ltd. Baneshwor, Ktm. Tel: 4109185

Pkg No. BB-DSD-159-073/74-08

S. No.	Firms Name
1	Hydrotrans P. Ltd. JV Aviyaan Consulting P. Ltd. & Welink Associates P. Ltd. Sanepa-10, Lalitpur. Tel: 5520486
2	Eastern Eng. Consultant (EEC) JV SPICE Eng. Consultancy P. Ltd. & Civil Silt Eng. Consultancy P. Ltd. In association with MADINA Eng. Consultancy P. Ltd. Sainbu, Lalitpur.
3	Naya Rastriya Eng. Consultancy P. Ltd. JV Plush Engineers and Architechs P. Ltd. & Green Innovative P. Ltd. Jwagal-10, Lalitpur.
4	North Star Eng. Consultant P. Ltd. JV ITECO Nepal P. Ltd. & N.S. Eng and Geo-Technical Services P. Ltd. Bakhundole, Lalitpur
5	Everest Eng. Consultant JV RITU Consultants & OM Consultant, Baneshwor, Ktm. Tel: 4481449
6	Extreme Eng. Solutions P. Ltd. JV Prism Consults International Lab P. Ltd. & JADE Consult P. Ltd. Kupandole, Lalitpur. Tel: 5523677

Pkg No. BB-DSD-159-073/74-09

S. No.	Firms Name
1	SILT Consultants P. Ltd. JV Civil Engineering Research and Consultancy P. Ltd. Ratopul, Ktm. Tel: 4473573
2	Fuji International Design Associates (FIDA) JV LEASER Consultant and EAGLE Consultant. Shankhamul, Ktm. Tel: 4781863
3	Welink Consultants P. Ltd. JV SLATE Consultants P. Ltd. & PERTINENT Eng. Consultants P. Ltd. Lalitpur. Tel: 5520022
4	Geocom International P. Ltd. JV Home Land Eng. Consultancy P. Ltd. & B.N. Consultancy P. Ltd. Dhobighar, Lalitpur Tel: 45153049
5	BDA Nepal P. Ltd. JV GIDAN & Shubham Eng. Consultancy P. Ltd.Baluwatar, Ktm. Tel: 4440364
6	CEMECA Consultant P. Ltd. JV Subway Nepal Eng. Consultant and Bardan Nepal P. Ltd. Baneshwor, Ktm. Tel: 44645441

Pkg No. BB-DSD-159-073/74-10

S. No.	Firms Name
1	National Consultant JV Full Bright Consultancy P. Ltd & National Eng. Research and Mgmt. Services P. Ltd. Samakhusi, Ktm.
2	Rural Infrastructure Developers Consultants P. Ltd. (RIDC) Baneshwor, Ktm. Tel: 4781740
3	Civil Informatics and Solutions P. Ltd. (CIAS). Chakupat, Lalitpur Tel: 5260314
4	Everest Eng. Consultant JV RITU Consultants & OM Consultant, Baneshwor, Ktm. Tel: 4481449
5	Geocom International P. Ltd. JV Home Land Eng. Consultancy P. Ltd. & B.N. Consultancy P. Ltd. Dhobighar, Lalitpur Tel: 45153049
6	Material Test P. Ltd. JV GRID Consult / Civil Design & Foundation Engineering Consult P. Ltd. Baneshwor, Ktm. Tel: 4486092

Pkg No. BB-DSD-159-073/74-11

S. No.	Firms Name
1	Shyam International Eng. Consultancy P. Ltd. (SIEC) JV ADMC & Bangalamukhi. Patan Tel: 5260332
2	NEPAL CONSULT P. Ltd JV Pees CONSULTANT P. Ltd and SITU CONSULT
3	TACE Consult P. Ltd. JV COEMANCO-Nepon P. Ltd. & Raj Devi Eng. Consultant P. Ltd. Ktm. Tel: 4781446
4	National Consultant JV Full Bright Consultancy P. Ltd & National Eng. Research and Mgmt. Services P. Ltd. Samakhusi, Ktm.
5	North Star Eng. Consultant P. Ltd. JV ITECO Nepal P. Ltd. & N.S. Eng and Geo-Technical Services P. Ltd. Bakhundole, Lalitpur
6	SIDEF JV RIDARC Drillink & Geo-Technical P. Ltd. & HEGINA Eng. Consultancy P. Ltd. Sinamangal, Ktm. Tel: 468879

Pkg No. BB-DSD-159-073/74-12

S. No.	Firms Name
1	Everest Eng. Consultant JV RITU Consultants & OM Consultant, Baneshwor, Ktm. Tel: 4481449
2	Remote Area Development Eng. Consultancy P. Ltd. JV Royal Democratic Eng. Consultantcy P. Ltd. (RDEC) & SSMS Geo Lab P. Ltd. (SSMSGL) in association with Shana Eng. Consult P. Ltd. Sanepa, Lalitpur. Tel: 5549493
3	Eastern Eng. Consultant (EEC) JV SPICE Eng. Consultancy P. Ltd. & Civil Silt Eng. Consultancy P. Ltd. In association with MADINA Eng. Consultancy P. Ltd. Sainbu, Lalitpur.
4	BDA Nepal P. Ltd. JV GIDAN & Shubham Eng. Consultancy P. Ltd.Baluwatar, Ktm. Tel: 4440364
5	ECOCODE Nepal JV Vishwa Drilling P. Ltd. & Milestone Design and Planning Consult P. Ltd. Jwagal-10, Lalitpur. Tel: 5261016
6	UNIQUE Eng P. Ltd. JV Envision Consultant P. Ltd. Lalitpur. Tel: 5549332

Pkg No. BB-DSD-159-073/74-13

S. No.	Firms Name
1	BDA Nepal P. Ltd. JV GIDAN & Shubham Eng. Consultancy P. Ltd.Baluwatar, Ktm. Tel: 4440364
2	Material Test P. Ltd. JV GRID Consult / Civil Design & Foundation Engineering Consult P. Ltd. Baneshwor, Ktm. Tel: 4486092
3	Fuji International Design Associates (FIDA) JV LEASER Consultant and EAGLE Consultant. Shankhamul, Ktm. Tel: 4781863
4	Shyam International Eng. Consultancy P. Ltd. (SIEC) JV ADMC & Bangalamukhi. Patan Tel: 5260332
5	Global Eng. Associates P. Ltd. JV NEDECON P. Ltd. & Ropeway and Cable Car P. Ltd. Balkhu, Ktm. Tel: 4036338
6	SOIL TEST P. Ltd JV CONSOLIDATED MGMT.Services Nepal P. Ltd (CMS), Sanepa, Lalitpur. Tel: 5520486

Pkg No. BB-DSD-159-073/74-14

S. No.	Firms Name
1	Geocom International P. Ltd. JV Home Land Eng. Consultancy P. Ltd. & B.N. Consultancy P. Ltd. Dhobighar, Lalitpur Tel: 45153049
2	PDA Nepal P. Ltd. JV CIA Nepal P. Ltd. & Design Point P. Ltd. Jhamsikhel, Lalitpur. Tel: 9863637934
3	Rural Infrastructure Developers Consultants P. Ltd. (RIDC) Baneshwor, Ktm. Tel: 4781740
4	SILT Consultants P. Ltd. JV Civil Engineering Research and Consultancy P. Ltd. Ratopul, Ktm. Tel: 4473573
5	Bridge Consultantcy JV Prestige Consulting P. Ltd. & Great Nepal P. Ltd. Jhamsikhel, Lalitpur. Tel: 5528486
6	TSE JV Dream Geo Lab P. Ltd. (DGL) Dillibazar, Ktm Tel: 4433828

Pkg No. BB-DSD-159-073/74-15

S. No.	Firms Name
1	North Star Eng. Consultant P. Ltd. JV ITECO Nepal P. Ltd. & N.S. Eng and Geo-Technical Services P. Ltd. Bakhundole, Lalitpur
2	Inclusive Consultants P. Ltd. JV J & R Consult P. Ltd and G.S. Soil and Materials Engineers P/ Ltd. Sitapaila, Ktm. Tel: 4034880
3	NEPAL CONSULT P. Ltd JV Pees CONSULTANT P. Ltd and SITU CONSULT
4	Hydrotrans P. Ltd. JV Aviyaan Consulting P. Ltd. & Welink Associates P. Ltd. Sanepa-10, Lalitpur. Tel: 5520486
5	SITARA CONSULT P. Ltd and CIS P. Ltd JV P.O. Box 8973, Pulchowk, Lalitpur Tel: 5549045
6	GEOCE Consultants P. Ltd., Ktm. Association with Technovation Eng. Services P. Ltd. Kupondole, Lalitpur. Tel: 5521175

Pkg No. BB-DSD-159-073/74-16

S. No.	Firms Name
1	Pyramid Design Associates P. Ltd. JV Design Forum P. Ltd. & Geospatial System P. Ltd. Bhaktapur Tel: 4239772
2	GEOCE Consultants P. Ltd., Ktm. Association with Technovation Eng. Services P. Ltd. Kupondole, Lalitpur. Tel: 5521175
3	PDA Nepal P. Ltd. JV CIA Nepal P. Ltd. & Design Point P. Ltd. Jhamsikhel, Lalitpur. Tel: 9863637934
4	SCI-SAKHUWA-RISHIKESH JV Imadole-6, Lalitpur. Tel: 5202473
5	Multi Disciplinary Consultants P. Ltd. (MULTI) JV Multi Lab P. Ltd. Kupondole, Lalitpur. Tel: 5529304
6	Inclusive Consultants P. Ltd. JV J & R Consult P. Ltd and G.S. Soil and Materials Engineers P/ Ltd. Sitapaila, Ktm. Tel: 4034880

Pkg No. BB-DSD-159-073/74-17

S. No.	Firms Name
1	Global Eng. Associates P. Ltd. JV NEDECON P. Ltd. & Ropeway and Cable Car P. Ltd. Balkhu, Ktm. Tel: 4036338
2	TSE JV Dream Geo Lab P. Ltd. (DGL) Dillibazar, Ktm Tel: 4433828
3	Material Test P. Ltd. JV GRID Consult / Civil Design & Foundation Engineering Consult P. Ltd. Baneshwor, Ktm. Tel: 4486092
4	CARD CONSULT P. Ltd, Babarmahal, Ktm Tel: 4224141
5	Premium Consultants P. Ltd. JV Shree RS Eng. Solution P. Ltd. & Shrestha Consultant P. Ltd. Kupondole, Lalitpur Tel: 6915719
6	Civil GeoLab P. Ltd. JV GEC P. Ltd. & CHC P. Ltd. Kupondole, Lalitpur. Tel: 5549332

Pkg No. BB-DSD-159-073/74-18

S. No.	Firms Name
1	Bridge Consultantcy JV Prestige Consulting P. Ltd. & Great Nepal P. Ltd. Jhamsikhel, Lalitpur. Tel: 5528486
2	SOIL TEST P. Ltd JV CONSOLIDATED MGMT.Services Nepal P. Ltd (CMS), Sanepa, Lalitpur. Tel: 5520486
3	Civil GeoLab P. Ltd. JV GEC P. Ltd. & CHC P. Ltd. Kupondole, Lalitpur. Tel: 5549332
4	BEAM Consultant P. Ltd. JV ARC Eng. Consultant P. Ltd. Sanepa, Lalitpur. Tel: 5542783
5	Pyramid Design Associates P. Ltd. JV Design Forum P. Ltd. & Geospatial System P. Ltd. Bhaktapur Tel: 4239772
6	PDA Nepal P. Ltd. JV CIA Nepal P. Ltd. & Design Point P. Ltd. Jhamsikhel, Lalitpur. Tel: 9863637934

Pkg No. BB-DSD-159-073/74-19

S. No.	Firms Name
1	SITARA CONSULT P. Ltd and CIS P. Ltd JV, P.O. Box 8973, Pulchowk, Lalitpur Tel: 5549045
2	UNIQUE Eng P. Ltd. JV Envision Consultant P. Ltd. Lalitpur. Tel: 5549332
3	Inclusive Consultants P. Ltd. JV J & R Consult P. Ltd and G.S. Soil and Materials Engineers P/ Ltd. Sitapaila, Ktm. Tel: 4034880
4	MEH Consultants P. Ltd. JV MEH Geo-Engineering Services P. Ltd. Baneshwor, Ktm. Tel: 4477634
5	DIGICON Eng. Consult P. Ltd. JV Executive Consulting Eng. & Planners & IDEAL Solution P. Ltd. Kupondole, Lalitpur. Tel: 55234028
6	Remote Area Development Eng. Consultancy P. Ltd. JV Royal Democratic Eng. Consultantcy P. Ltd. (RDEC) & SSMS Geo Lab P. Ltd. (SSMSGL) in association with Shana Eng. Consult P. Ltd. Sanepa, Lalitpur. Tel: 5549493

Pkg No. BB-DSD-159-073/74-20

S. No.	Firms Name
1	Multi Disciplinary Consultants P. Ltd. (MULTI) JV Multi Lab P. Ltd. Kupondole, Lalitpur. Tel: 5529304
2	SIDEF JV RIDARC Drillink & Geo-Technical P. Ltd. & HEGINA Eng. Consultancy P. Ltd. Sinamangal, Ktm. Tel: 468879
3	GEOCE Consultants P. Ltd., Ktm. Association with Technovation Eng. Services P. Ltd. Kupondole, Lalitpur. Tel: 5521175
4	Building Design Authority P. Ltd. JV Geotech & Structure Lab P. Ltd. And Creative Eng. Consultancy, Kamaladi, Ktm. Tel: 9851164372
5	TECHNOCRAT Consultancy JV CAGE Consult P. Ltd. & Diplomatic Eng. Consultant P. Ltd. Lalitpur. Tel: 9851131006
6	NEPAL CONSULT P. Ltd JV Pees CONSULTANT P. Ltd and SITU CONSULT

Pkg No. BB-DSD-159-073/74-21

S. No.	Firms Name
1	Premium Consultants P. Ltd. JV Shree RS Eng. Solution P. Ltd. & Shrestha Consultant P. Ltd. Kupondole, Lalitpur Tel: 6915719
2	Civil GeoLab P. Ltd. JV GEC P. Ltd. & GHC P. Ltd. Kupondole, Lalitpur. Tel: 5549332
3	TSE JV Dream Geo Lab P. Ltd. (DGL) Dillibazar, Ktm Tel: 4433828
4	GIDA Nepal JV RIDARC Nepal in association with United Eng. Solution P. Ltd. Ktm. Tel: 4781896
5	Kalika Eng. Consultancy JV Research Eng. Consultant & APEX Eng. & Mgmt ConsultantP. Ltd. Bainsepati, Lalitpur. Tel: 6924156
6	Rural Infrastructure Developers Consultants P. Ltd. (RIDC) Baneshwor, Ktm. Tel: 4781740

Pkg No. BB-DSD-159-073/74-22

S. No.	Firms Name
1	ECOCODE Nepal JV Vishwa Drilling P. Ltd. & Milestone Design and Planning Consult P. Ltd. Jwagal-10, Lalitpur. Tel: 5261016
2	CEMECA Consultant P. Ltd. JV Subway Nepal Eng. Consultant and Bardan Nepal P. Ltd. Baneshwor, Ktm. Tel: 44645441
3	SOIL TEST P. Ltd JV CONSOLIDATED MGMT.Services Nepal P. Ltd (CMS), Sanepa, Lalitpur. Tel: 5520486

4	GOEC Nepal P. Ltd. JV RARA Eng. Consultannt P. Ltd. Buddhanagar, Ktm. Tel: 4783060
5	Total Management Services P. Ltd. JV Pashupati Drilling & Geo-Technical Services P. Ltd. Kamalpokhari, Ktm. Tel: 4439182
6	Fuji International Design Associates (FIDA) JV LEASER Consultant and EAGLE Consultant. Shankhamul, Ktm. Tel: 4781863

Pkg No. BB-DSD-159-073/74-23

S. No.	Firms Name
1	DIGICON Eng. Consult P. Ltd. JV Executive Consulting Eng. & Planners & IDEAL Solution P. Ltd. Kupondole, Lalitpur. Tel: 55234028
2	Extreme Eng. Solutions P. Ltd. JV Prism Consults International Lab P. Ltd. & JADE Consult P. Ltd. Kupandole, Lalitpur. Tel: 5523677
3	UNIQUE Eng P. Ltd. JV Envision Consultant P. Ltd. Lalitpur. Tel: 5549332
4	GOEC Nepal P. Ltd. JV RARA Eng. Consultannt P. Ltd. Buddhanagar, Ktm. Tel: 4783060
5	GRID Nepal Design Associates P. Ltd. JV Engineering Support Consult P. Ltd. & Design Eng. Consultant P. Ltd. Dhobighat, Lalitpur. Tel: 5522916
6	Remote Area Development Eng. Consultancy P. Ltd. JV Royal Democratic Eng. Consultantcy P. Ltd. (RDEC) & SSMS Geo Lab P. Ltd. (SSMSGL) in association with Shana Eng. Consult P. Ltd. Sanepa, Lalitpur. Tel: 5549493

Pkg No. BB-DSD-159-073/74-24

S. No.	Firms Name
1	TECHNOCRAT Consultancy JV CAGE Consult P. Ltd. & Diplomatic Eng. Consultant P. Ltd. Lalitpur. Tel: 9851131006
2	Integrated Development & Research Services P. Ltd. JV Remote Soil Lab P. Ltd. Baneshwor, Ktm. Tel: 4109185
3	SIDEF JV RIDARC Drillink & Geo-Technical P. Ltd. & HEGINA Eng. Consultancy P. Ltd. Sinamangal, Ktm. Tel: 468879
4	GIDA Nepal JV RIDARC Nepal in association with United Eng. Solution P. Ltd. Ktm. Tel: 4781896
5	ERMC P. Ltd JV ERMCs International P. Ltd. And ERMC Geo-Tech Services P. Ltd. Baneshwor, Ktm. Tel: 4483064
6	Eastern Eng. Consultant (EEC) JV SPICE Eng. Consultancy P. Ltd. & Civil Silt Eng. Consultancy P. Ltd. In association with MADINA Eng. Consultancy P. Ltd. Sainbu, Lalitpur. Tel: 5591060

Pkg No. BB-DSD-159-073/74-25

S. No.	Firms Name
1	Kalika Eng. Consultancy JV Research Eng. Consultant & APEX Eng. & Mgmt ConsultantP. Ltd. Bainsepati, Lalitpur. Tel: 6924156
2	Integrated Development & Research Services P. Ltd. JV Remote Soil Lab P. Ltd. Baneshwor, Ktm. Tel: 4109185
3	TACE Consult P. Ltd. JV COEMANCO-Nepon P. Ltd. & Raj Devi Eng. Consultant P. Ltd. Ktm. Tel: 4781446
4	Building Design Authority P. Ltd. JV Geotech & Structure Lab P. Ltd. And Creative Eng. Consultancy, Kamaladi, Ktm. Tel: 9851164372
5	Elite Civil Design Consultants P. Ltd. (ECDC) JV MRB and Home Eng. Consultant P. Ltd. Lalitpur Tel: 5203175
6	Civil Informatics and Solutions P. Ltd. (CIAS). Chakupat, Lalitpur Tel: 5260314

Pkg No. BB-DSD-159-073/74-26

S. No.	Firms Name
1	Total Management Services P. Ltd. JV Pashupati Drilling & Geo-Technical Services P. Ltd. Kamalpokhari, Ktm. Tel: 4439182
2	Extreme Eng. Solutions P. Ltd. JV Prism Consults International Lab P. Ltd. & JADE Consult P. Ltd. Kupandole, Lalitpur. Tel: 5523677
3	CEMECA Consultant P. Ltd. JV Subway Nepal Eng. Consultant and Bardan Nepal P. Ltd. Baneshwor, Ktm. Tel: 44645441
4	MEH Consultants P. Ltd. JV MEH Geo-Engineering Services P. Ltd. Baneshwor, Ktm. Tel: 4477634
5	Naya Rastriya Eng. Consultancy P. Ltd. JV Plush Engineers and Architechs P. Ltd. & Green Innovative P. Ltd. Jwagal-10, Lalitpur. Tel: 6923372
6	Welink Consultants P. Ltd. JV SLATE Consultants P. Ltd. & PERTINENT Eng. Consultants P. Ltd. Lalitpur. Tel: 5520022

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tamor Khola	Tamor Panchami 8 - Aathrai	Taplejung	11	Baghmara Khola	Baghmara-Banjho 8	Ilam
2	Iwa Khola Bridge	phalaiya 5 - sadawa 8	Taplejung	12	Mai Khola pakki Bridge	Pyang - Sukumbe	Illam
3	Nibu Khola Bridge	nawamidada 2 - phaktapa 9	Panchthar	13	Pakki Bridge	Shantipur 4 tilare - kolbung 9 kauseṭar - pokharitar Road	Illam
4	Sawa Khola Bridge	arubot limba durdimba Road	Panchthar	14	Siddhikhola pakki Bridge	Suryodaya na.Pa.Ko harkate phanjiggau - samalbung Shree Anju Road"	Illam
5	Sawa Khola Bridge	Yasok Mayiawa Road	Panchthar	15	Chanjo Khola pakki Bridge	0	Illam
6	Nibukhola Bridge	Nawamidanda Phaktep Road	Panchthar	16	Chisapani pakki Bridge	Ibhang 8 - jitpur 7 deumai Khola	Illam
7	Amarpur Singapur Lumbini Bridge	Nighuradin	Panchthar	17	Ruluk Maikhola pakki Bridge	0	Illam
8	Feme khola Bridge	Phidim-Ranitar-Lungrupa Road	Panchthar	18	Lewakhola lokmaṇima pakki Bridge	jitpur 5 - Deumai na.Pa. Gajurmukhi Road	Illam
9	Kabeli Khola	Panchthar-Taplejung	Ilam	19	Ratuwa Khola pakki Bridge	bajho 1–8 ratuwa besi	Illam
10	Gharti Khola	Gharti Dovan-Banjho 8	Ilam	20	pakki Bridge	Hanspokhari Irauṭar 4 Majhuwa - Sarupakha	Illam

Contract No. **BB-159-DSD-073/74-01**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tamor Khola	Iwa Khola Bridge	Nibu Khola Bridge	Sawa Khola Bridge	Sawa Khola Bridge	Nibukhola Bridge	Amarpur Singapur Lumbini Bridge	Feme khola Bridge	Kabeli Khola	Gharti Khola	Baghmara Khola	Mai Khola pakki Bridge	Pakki Bridge	Siddhikhola pakki Bridge	Chanjo Khola pakki Bridge	Chisapani pakki Bridge	Ruluk Maikhola pakki Bridge	Lewakhola lokmaṇima pakki Bridge	Ratuwa Khola pakki Bridge	pakki Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	43			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	60			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	48	48	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	0	32	640			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tamor Khola	Tamor Panchami 8 - Aathrai	Taplejung	11	Baghmara Khola	Baghmara-Banjho 8	Ilam
2	Iwa Khola Bridge	phalaiya 5 - sadawa 8	Taplejung	12	Mai Khola pakki Bridge	Pyang - Sukumbe	Illam
3	Nibu Khola Bridge	nawamidada 2 - phaktapa 9	Panchthar	13	Pakki Bridge	Shantipur 4 tilare - kolbung 9 kauseṭar - pokharitar Road	Illam
4	Sawa Khola Bridge	arubot limba durdimba Road	Panchthar	14	Siddhikhola pakki Bridge	Suryodaya na.Pa.Ko harkate phanjiggau - samalbung Shree Anju Road"	Illam
5	Sawa Khola Bridge	Yasok Mayiawa Road	Panchthar	15	Chanjo Khola pakki Bridge	0	Illam
6	Nibukhola Bridge	Nawamidanda Phaktep Road	Panchthar	16	Chisapani pakki Bridge	Ibhang 8 - jitpur 7 deumai Khola	Illam
7	Amarpur Singapur Lumbini Bridge	Nighuradin	Panchthar	17	Ruluk Maikhola pakki Bridge	0	Illam
8	Feme khola Bridge	Phidim-Ranitar-Lungrupa Road	Panchthar	18	Lewakhola lokmaṇima pakki Bridge	jitpur 5 - Deumai na.Pa. Gajurmukhi Road	Illam
9	Kabeli Khola	Panchthar-Taplejung	Ilam	19	Ratuwa Khola pakki Bridge	bajho 1–8 ratuwa besi	Illam
10	Gharti Khola	Gharti Dovan-Banjho 8	Ilam	20	pakki Bridge	Hanspokhari Irauṭar 4 Majhuwa - Sarupakha	Illam

Contract No. **BB-159-DSD-073/74-01**

SN	Particulars	Unit	Quantity																			Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tamor Khola	Iwa Khola Bridge	Nibu Khola Bridge	Sawa Khola Bridge	Sawa Khola Bridge	Nibukhola Bridge	Amarpur Singapur Lumbini Bridge	Feme khola Bridge	Kabeli Khola	Gharti Khola	Baghmara Khola	Mai Khola pakki Bridge	Pakki Bridge	Siddhikhola pakki Bridge	Chanjo Khola pakki Bridge	Chisapani pakki Bridge	Ruluk Maikhola pakki Bridge	Lewakhola lokmaṇima pakki Bridge	Ratuwa Khola pakki Bridge	pakki Bridge				
5	***Detailed design and preparation of reports***																								
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
	Total																									
	VAT @ 13% of total																									
	Grand Total																									

In words:

Signature:

Name and title:

Date:

Seal:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Lalpaini Khola Bridge	Gauradaha–Topgachi Road (40m.)	Jhapa	11	Bhatkeko Bridge nirman	Baigundhara 5 Gachhi Road	Jhapa
2	Ramchandre Khola Bridge	Damuna–khajurgachi Road (40 m.)	Jhapa	12	Gairiya Khola Bridge nirman	0	Jhapa
3	Adhuwa Khola Bridge	"Chakchaki Dangibari Garamani Katardangi Budhabarebazar purwa	Jhapa	13	Sano Kamal Khola Bridge Nirman	0	Jhapa
4	Hadiya Khola Bridge	Shantinagar 1 - budhabare 1 Namuna	Jhapa	14	Netramarga (ka) Adhikari Chowk South	0	Jhapa
5	Deuniya Khola Bridge	Bhadrapur na.Pa. wada na. 13 - 15, near Kafle Tol	Jhapa	15	Bhusudi Khola Bridge Nirman	Jalthal Haldiwari Border	Jhapa
6	Bhuteni Khola Bridge	Goldhap 6 Indreni purwa	Jhapa	16	Triveni khahare Khola Niyentran & Bric	0	Jhapa
7	Netramarga Road Jalthal sector Adhikaric	0	Jhapa	17	Khar Khola Bridge	Shantinagar 3	Jhapa
8	Dhyangri Khola Bridge	Topgachi 7 Kerkha- Goskhan - Topgachi Lakhanpur Road	Jhapa	18	Bhusudi Khola–Kajali Khola & Bhuteni	Hulaki Road	Jhapa
9	Bhutlung Khola Bridge	Topgachi 3/4 - Sitapur Krishni dobhan Road Sector	Jhapa	19	Netramarga (ka) Adhikari Chowk South	0	Jhapa
10	Geuria Khola Bridge	Lakhanpur 8 rangpur bazar east road	Jhapa	20	Baniyani Khola Bridge	Dudamari-Himali-Kunjibari Road	Jhapa

Contract No. **BB-159-DSD-073/74-02**

SN	Particulars	Unit	Quantity																			Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Lalpaini Khola Bridge	Ramchandre Khola Bridge	Adhuwa Khola Bridge	Hadiya Khola Bridge	Deuniya Khola Bridge	Bhuteni Khola Bridge	Netramarga Road Jalthal sector Adhikarichowk uttaradakshin 2	Dhyangri Khola Bridge	Bhutlung Khola Bridge	Geuria Khola Bridge	Bhatkeko Bridge nirman	Gairiya Khola Bridge nirman	Sano Kamal Khola Bridge Nirman	Netramarga (ka) Adhikari Chowk South Khola Bridge	Bhusudi Khola Bridge Nirman	Triveni khahare Khola Niyentran & Bridge Construction	Khar Khola Bridge	Bhusudi Khola–Kajali Khola & Bhuteni Khola Bakki Bridge	Netramarga (ka) Adhikari Chowk South Khola Bridge Jalthal 7 & 8	Baniyani Khola Bridge				
	Desk study and field works																								
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																								
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																							
3	***Soil investigation***																								
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																								
	Number of boreholes		2	2	2	3	2	2	2	2	3	3	2	2	3	2	2	3	2	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	40	0	40	0	40	40	40	0	60	60	0	40	60	40	0	60	40	0	40	40	640			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	32	0	48	0	0	0	32	0	0	32	0	0	0	32	0	0	32	0	0	208			
	Subtotal of drilling works, field tests and laboratory tests																								
4	***Transportation***																								
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																								

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Lalpaini Khola Bridge	Gauradaha–Topgachi Road (40m.)	Jhapa	11	Bhatkeko Bridge nirman	Baigundhara 5 Gachhi Road	Jhapa
2	Ramchandre Khola Bridge	Damuna–khajurgachi Road (40 m.)	Jhapa	12	Gairiya Khola Bridge nirman	0	Jhapa
3	Adhuwa Khola Bridge	"Chakchaki Dangibari Garamani Katardangi Budhabarebazar purwa	Jhapa	13	Sano Kamal Khola Bridge Nirman	0	Jhapa
4	Hadiya Khola Bridge	Shantinagar 1 - budhabare 1 Namuna	Jhapa	14	Netramarga (ka) Adhikari Chowk South	0	Jhapa
5	Deuniya Khola Bridge	Bhadrapur na.Pa. wada na. 13 - 15, near Kafle Tol	Jhapa	15	Bhusudi Khola Bridge Nirman	Jalthal Haldiwari Border	Jhapa
6	Bhuteni Khola Bridge	Goldhap 6 Indreni purwa	Jhapa	16	Triveni khahare Khola Niyentran & Bric	0	Jhapa
7	Netramarga Road Jalthal sector Adhikaric	0	Jhapa	17	Khar Khola Bridge	Shantinagar 3	Jhapa
8	Dhyangri Khola Bridge	Topgachi 7 Kerkha- Goskhan - Topgachi Lakhanpur Road	Jhapa	18	Bhusudi Khola–Kajali Khola & Bhuteni	Hulaki Road	Jhapa
9	Bhutlung Khola Bridge	Topgachi 3/4 - Sitapur Krishni dobhan Road Sector	Jhapa	19	Netramarga (ka) Adhikari Chowk South	0	Jhapa
10	Geuria Khola Bridge	Lakhanpur 8 rangpur bazar east road	Jhapa	20	Baniyani Khola Bridge	Dudamari-Himali-Kunjibari Road	Jhapa

Contract No. **BB-159-DSD-073/74-02**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Lalpaini Khola Bridge	Ramchandre Khola Bridge	Adhuwa Khola Bridge	Hadiya Khola Bridge	Deuniya Khola Bridge	Bhuteni Khola Bridge	Netramarga Road Jalthal sector Adhikarichowk uttaradakshin 2	Dhyangri Khola Bridge	Bhutlung Khola Bridge	Geuria Khola Bridge	Bhatkeko Bridge nirman	Gairiya Khola Bridge nirman	Sano Kamal Khola Bridge Nirman	Netramarga (ka) Adhikari Chowk South Khola Bridge	Bhusudi Khola Bridge Nirman	Triveni khahare Khola Niyentran & Bridge Construction	Khar Khola Bridge	Bhusudi Khola–Kajali Khola & Bhuteni Khola Bakki Bridge	Netramarga (ka) Adhikari Chowk South Khola Bridge Jalthal 7 & 8	Baniyani Khola Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Seal:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Ratuwa Khola Bridge	Damak 15 18- Lakhanpur	Jhapa	11	Timai Khola Bridge	Khanigauda-Pharegauda, Shantinagar 1 & 2	Jhapa
2	Sano Kamal Khola Bridge	Baigundhara-Panchgachi Road (40 meter)	Jhapa	12	Biring Khola Bridge	Budhabare 1 Sukhwani Kuineto - Khudunabari	Jhapa
3	Chadu Khola Bridge	Baluwathan-Chapramari Road (40 Meter)	Jhapa	13	Chisang Khola Pakki Bridge	Letang Bazar 6 & 7	Jhapa
4	Damuna kholsa Culvert	Gauradaha Ma.Pa. 6- Ward No. 9 Dalit Basti Road	Jhapa	14	Maya Khola Pakki Bridge	Madi Rombeni - Okharbote Road	Sankhuwasabha
5	Dheruwa Khola Culvert	Police Chauki West	Jhapa	15	Tapuwa Khola Pakki Bridge	Nundhaki Bihibare	Sankhuwasabha
6	Chadu Khola Culvert	Balubathan Chapramari Road Kohabhara	Jhapa	16	Thute Khola Pakki Bridge	Mangling Tirtire - Aakhibhari - Dharmadevi Temple Road	Sankhuwasabha
7	Ramchandre Khola Bridge	Jorghare-Majhuwa Road (Maharanijhada)	Jhapa	17	Maya Khola Bridge	Mamling VDC 1 - Madi Na.Pa. 8	Sankhuwasabha
8	Sukeninda Khola Bridge	Bahundangi	Jhapa	18	Arun River Bridge	Kartikeghat Sankhuwasabha/Bhojpur	Sankhuwasabha
9	Raisingh Khola Bridge	0	Jhapa	19	Arun River feri	Sadananda Na.Pa. - Sital Pati VDC	Bhojpur
10	Ninda Khola Bridge	Bhrikuti Bhawana Chowk- Telpani - Banhundandi 4 & 5	Jhapa	20	Yakchanaghat Tamor River	Tribeni-Yakchana Road - Mulghat Kabeli Road	Dhankuta

Contract No. **BB-159-DSD-073/74-03**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Ratuwa Khola Bridge	Sano Kamal Khola Bridge	Chadu Khola Bridge	Damuna kholsa Culvert	Dheruwa Khola Culvert	Chadu Khola Culvert	Ramchandre Khola Bridge	Sukeninda Khola Bridge	Raisingh Khola Bridge	Ninda Khola Bridge	Timai Khola Bridge	Biring Khola Bridge	Chisang Khola Pakki Bridge	Maya Khola Pakki Bridge	Tapuwa Khola Pakki Bridge	Thute Khola Pakki Bridge	Maya Khola Bridge	Arun River Bridge	Arun River feri	Yakchanaghat Tamor River				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	3	2	2	2	2	2	2	3	2	2	4	3	2	2	2	2	3	3	2	48			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	60	60	40	40	40	40	40	40	60	40	40	80	60	0	0	0	0	0	0	0	640			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	32	32	48	48	32	256			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Ratuwa Khola Bridge	Damak 15 18- Lakhanpur	Jhapa	11	Timai Khola Bridge	Khanigauda-Pharegauda, Shantinagar 1 & 2	Jhapa
2	Sano Kamal Khola Bridge	Baigundhara-Panchgachi Road (40 meter)	Jhapa	12	Biring Khola Bridge	Budhabare 1 Sukhwani Kuineto - Khudunabari	Jhapa
3	Chadu Khola Bridge	Baluwathan-Chapramari Road (40 Meter)	Jhapa	13	Chisang Khola Pakki Bridge	Letang Bazar 6 & 7	Jhapa
4	Damuna kholsa Culvert	Gauradaha Ma.Pa. 6- Ward No. 9 Dalit Basti Road	Jhapa	14	Maya Khola Pakki Bridge	Madi Rombeni - Okharbote Road	Sankhuwasabha
5	Dheruwa Khola Culvert	Police Chauki West	Jhapa	15	Tapuwa Khola Pakki Bridge	Nundhaki Bihibare	Sankhuwasabha
6	Chadu Khola Culvert	Balubathan Chapramari Road Kohabhara	Jhapa	16	Thute Khola Pakki Bridge	Mangling Tirtire - Aakhibhari - Dharmadevi Temple Road	Sankhuwasabha
7	Ramchandre Khola Bridge	Jorghare-Majhuwa Road (Maharanijhada)	Jhapa	17	Maya Khola Bridge	Mamling VDC 1 - Madi Na.Pa. 8	Sankhuwasabha
8	Sukeninda Khola Bridge	Bahundangi	Jhapa	18	Arun River Bridge	Kartikeghat Sankhuwasabha/Bhojpur	Sankhuwasabha
9	Raisingh Khola Bridge	0	Jhapa	19	Arun River feri	Sadananda Na.Pa. - Sital Pati VDC	Bhojpur
10	Ninda Khola Bridge	Bhrikuti Bhawana Chowk- Telpani - Banhundandi 4 & 5	Jhapa	20	Yakchanaghat Tamor River	Tribeni-Yakchana Road - Mulghat Kabeli Road	Dhankuta

Contract No. **BB-159-DSD-073/74-03**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Ratuwa Khola Bridge	Sano Kamal Khola Bridge	Chadu Khola Bridge	Damuna kholsa Culvert	Dheruwa Khola Culvert	Chadu Khola Culvert	Ramchandre Khola Bridge	Sukeninda Khola Bridge	Raisingh Khola Bridge	Ninda Khola Bridge	Timai Khola Bridge	Biring Khola Bridge	Chisang Khola Pakki Bridge	Maya Khola Pakki Bridge	Tapuwa Khola Pakki Bridge	Thute Khola Pakki Bridge	Maya Khola Bridge	Arun River Bridge	Arun River feri	Yakchanaghat Tamor River				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chimahaghat Tamor River	Chandibazar-Ahale-Chintang Road - Mulghat-Falametar-Kabeli Road	Dhankuta	11	Thalaha Khola Bridge	Madheli VDC Ward No. 3 Doda Tol Chandbela	Sunsari
2	Safaitar Tamor River	Bishnupaduka-Ahale-Chhintang Road & Mulghat-Falametar-Kabeli Road	Dhankuta	12	Seuti Khola Bridge	Baklauri VDC Ward No. 2 Tetariya tol - Dharan Sub-Metropolitian Road	Sunsari
3	Leuti Khola Bridge	Simsuwa–Budhi Morang Khuwaphoka Kuruletenupa madhyachaubise Road Sector	Dhankuta	13	Tengra Khola Bridge	Chimadi VDC Ward No. 5- Miya Tol East	Sunsari
4	Sunbalawa Khola Bridge	Bhojapur Hamtang Pakhribas	Dhankuta	14	Khadra (Khadam) Khola Bridge	Amdhuwa Sugarmill	Sunsari
5	Tengra Khola Saretoki Bridge	Chhitaha 2 Simariya 8 Tanmuna 5 Border	Sunsari	15	Suwa Khola Bridge	Itahari U.Na.Pa 6 Malawang Tol Bikas Sanstha - Nawaprativa tol Bikas Sanstha	Sunsari
6	Thalaha Khola Bridge	Sattarjhoda Ward No. 7 & 8 Border (East Road of No. 7 Devisthan)	Sunsari	16	Andheri Khola Bridge	Kshtra No. 1 Dharan Submetropolitian Ward No 22 Dharan Panbari Road Panch	Sunsari
7	Seuti Khola Bridge	Jhumka Laguna Chowk - Baklauri 2 Kumankhat - Dharan Road	Sunsari	17	Kathale Khola Bridge, between Gautam	0	Sunsari
8	Sardu Khola Bridge	Dharan - Chatara Road	Sunsari	18	Altai Holi Bridge	Gobindapur-4 (Morang Larikatta Damrabhitta Road)	Morang
9	Patnali Khola Bridge	Dharan - Chatara Road	Sunsari	19	Katnu Khola Multicell Culvert	Itahari VDC 9 (Damrabhitta-Gadhighar Road)	Morang
10	Thalaha Khola Bridge	Aurabani VDC Ward No. 5 - Chandbela VDC Ward No. 8 Bantar tol	Sunsari	20	Altai Holi Bridge	Gobindapur 4	Morang

Contract No. **BB-159-DSD-073/74-04**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chimahaghat Tamor River	Safaitar Tamor River	Leuti Khola Bridge	Sunbalawa Khola Bridge	Tengra Khola Saretoki Bridge	Thalaha Khola Bridge	Seuti Khola Bridge	Sardu Khola Bridge	Patnali Khola Bridge	Thalaha Khola Bridge	Thalaha Khola Bridge	Seuti Khola Bridge	Tengra Khola Bridge	Khadra (Khadam) Khola Bridge	Suwa Khola Bridge	Andheri Khola Bridge	Kathale Khola Bridge, between Gautamapur VDC &	Altai Holi Bridge	Katnu Khola Multicell Culvert	Altai Holi Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	3	3	2	2	2	2	3	2	2	2	3	2	2	2	3	2	2	3	2	47			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	40	40	40	60	40	40	40	60	40	40	40	60	40	40	60	40	720			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	48	48	48	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chimahaghat Tamor River	Chandibazar-Ahale-Chintang Road - Mulghat-Falametar-Kabeli Road	Dhankuta	11	Thalaha Khola Bridge	Madheli VDC Ward No. 3 Doda Tol Chandbela	Sunsari
2	Safaitar Tamor River	Bishnupaduka-Ahale-Chhintang Road & Mulghat-Falametar-Kabeli Road	Dhankuta	12	Seuti Khola Bridge	Baklauri VDC Ward No. 2 Tetariya tol - Dharan Sub-Metropolitian Road	Sunsari
3	Leuti Khola Bridge	Simsuwa–Budhi Morang Khuwaphoka Kuruletenupa madhyachaubise Road Sector	Dhankuta	13	Tengra Khola Bridge	Chimadi VDC Ward No. 5- Miya Tol East	Sunsari
4	Sunbalawa Khola Bridge	Bhojapur Hamtang Pakhribas	Dhankuta	14	Khadra (Khadam) Khola Bridge	Amdhuwa Sugarmill	Sunsari
5	Tengra Khola Saretoki Bridge	Chhitaha 2 Simariya 8 Tanmuna 5 Border	Sunsari	15	Suwa Khola Bridge	Itahari U.Na.Pa 6 Malawang Tol Bikas Sanstha - Nawaprativa tol Bikas Sanstha	Sunsari
6	Thalaha Khola Bridge	Sattarjhoda Ward No. 7 & 8 Border (East Road of No. 7 Devisthan)	Sunsari	16	Andheri Khola Bridge	Kshtra No. 1 Dharan Submetropolitian Ward No 22 Dharan Panbari Road Panch	Sunsari
7	Seuti Khola Bridge	Jhumka Laguna Chowk - Baklauri 2 Kumankhat - Dharan Road	Sunsari	17	Kathale Khola Bridge, between Gautam	0	Sunsari
8	Sardu Khola Bridge	Dharan - Chatara Road	Sunsari	18	Altai Holi Bridge	Gobindapur-4 (Morang Larikatta Damrabhitta Road)	Morang
9	Patnali Khola Bridge	Dharan - Chatara Road	Sunsari	19	Katnu Khola Multicell Culvert	Itahari VDC 9 (Damrabhitta-Gadhighar Road)	Morang
10	Thalaha Khola Bridge	Aurabani VDC Ward No. 5 - Chandbela VDC Ward No. 8 Bantar tol	Sunsari	20	Altai Holi Bridge	Gobindapur 4	Morang

Contract No. **BB-159-DSD-073/74-04**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chimahaghat Tamor River	Safaitar Tamor River	Leuti Khola Bridge	Sunbalawa Khola Bridge	Tengra Khola Saretoki Bridge	Thalaha Khola Bridge	Seuti Khola Bridge	Sardu Khola Bridge	Patnali Khola Bridge	Thalaha Khola Bridge	Thalaha Khola Bridge	Seuti Khola Bridge	Tengra Khola Bridge	Khadra (Khadam) Khola Bridge	Suwa Khola Bridge	Andheri Khola Bridge	Kathale Khola Bridge, between Gautamapur VDC &	Altai Holi Bridge	Katnu Khola Multicell Culvert	Altai Holi Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kuljhora Holi Bridge	(Rajghat VDC 7 & 8)	Morang	11	SikuKhola Road Bridge	between Nele 9 & Mukali 9	Solukhumbu
2	Sabhari Khola Bridge	Bhadhubhalla Ward No 3 - Sakfara Ward 12	Morang	12	Dudhkoshi River Motorable Bridge	Diplighat	Solukhumbu
3	Bhiklu Khola Bridge	Madhumalla Ward 5	Morang	13	Dudhkoshi River Bridge	Juminghat Road	Solukhumbu
4	RCC Culvert in place of Bhaluwa Khola 6	0	Morang	14	Taap Khola Pakki Bridge	Khatomchha 7 - Pathekha 7	Khotang
5	Lohandra Khola	between Katahari VDC Ward No 5 & Shiswani Jahada Ward No	Morang	15	Taap Khola Pakki Bridge	Fedi 5 & 2	Khotang
6	Kinja Khola Kinja bazar	Chaulakharka - Bhamkaje	Solukhumbu	16	Sawa Khola Pakki Bridge	Dambarkhu Siwalaya 1 - Badkadiyale 2	Khotang
7	SisaKhola Chattyanghat	Kerung 1 & 6	Solukhumbu	17	Taap Khola Pakki Bridge	Kharmi 9 - Baspani 1	Khotang
8	Dudhkoshi River Bridge	Kayaghat Road	Solukhumbu	18	Sisubari Khola Pakki Bridge	Triyuga Na.Pa. Ward No. 11 Lalpatta Chowk North	Udaypur
9	Dudhkoshi River Bridge	Barkhughat Road	Solukhumbu	19	Baidanath Khola Pakki Bridge	Risku Sombare	Udaypur
10	Bridge	Kholukhola Kagel 9 & Salyan 1 Road	Solukhumbu	20	Katarbot Kanchira Khola Bridge	Rampur Thoksila 8 & 9, Dandagau	Udaypur

Contract No. **BB-159-DSD-073/74-05**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Kuljhora Holi Bridge	Sabhari Khola Bridge	Bhiklu Khola Bridge	RCC Culvert in place of Bhaluwa Khola 6 & 8 ma Kathe	Lohandra Khola	Kinja Khola Kinja bazar	SisaKhola Chattyanghat	Dudhkoshi River Bridge	Dudhkoshi River Bridge	Bridge	SikuKhola Road Bridge	Dudhkoshi River Motorable Bridge	Dudhkoshi River Bridge	Taap Khola Pakki Bridge	Taap Khola Pakki Bridge	Sawa Khola Pakki Bridge	Taap Khola Pakki Bridge	Sisubari Khola Pakki Bridge	Baidanath Khola Pakki Bridge	Katarbot Kanchira Khola Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	3	2	2	3	3	2	2	3	3	2	2	2	2	2	3	2	46			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	40	40	40	40	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	0	0	0	32	32	48	48	32	32	48	48	32	32	32	32	32	48	32	560			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kuljhora Holi Bridge	(Rajghat VDC 7 & 8)	Morang	11	SikuKhola Road Bridge	between Nele 9 & Mukali 9	Solukhumbu
2	Sabhari Khola Bridge	Bhadhubhalla Ward No 3 - Sakfara Ward 12	Morang	12	Dudhkoshi River Motorable Bridge	Diplighat	Solukhumbu
3	Bhiklu Khola Bridge	Madhumalla Ward 5	Morang	13	Dudhkoshi River Bridge	Juminghat Road	Solukhumbu
4	RCC Culvert in place of Bhaluwa Khola 6	0	Morang	14	Taap Khola Pakki Bridge	Khatomchha 7 - Pathekha 7	Khotang
5	Lohandra Khola	between Katahari VDC Ward No 5 & Shiswani Jahada Ward No	Morang	15	Taap Khola Pakki Bridge	Fedi 5 & 2	Khotang
6	Kinja Khola Kinja bazar	Chaulakharka - Bhamkaje	Solukhumbu	16	Sawa Khola Pakki Bridge	Dambarkhu Siwalaya 1 - Badkadiyale 2	Khotang
7	SisaKhola Chattyanghat	Kerung 1 & 6	Solukhumbu	17	Taap Khola Pakki Bridge	Kharmi 9 - Baspani 1	Khotang
8	Dudhkoshi River Bridge	Kayaghat Road	Solukhumbu	18	Sisubari Khola Pakki Bridge	Triyuga Na.Pa. Ward No. 11 Lalpatta Chowk North	Udaypur
9	Dudhkoshi River Bridge	Barkhughat Road	Solukhumbu	19	Baidanath Khola Pakki Bridge	Risku Sombare	Udaypur
10	Bridge	Kholukhola Kagel 9 & Salyan 1 Road	Solukhumbu	20	Katarbot Kanchira Khola Bridge	Rampur Thoksila 8 & 9, Dandagau	Udaypur

Contract No. **BB-159-DSD-073/74-05**

5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kalikhola Bridge	Beltar Basaha Na.Pa. Ward No. 3	Udaypur	11	Dudhkoshi River (Diplighat Motorbridg	Deusa & Pawai Road	Okhaldhunga
2	Sisawari Khola Bridge	Between Tri. Na. Pa. 11 Lalpatta Pattchakanya Ma. Vi. Patlebas & Ranichaur	Udaypur	12	Churpughat Motorbridge	Nechweghari Panchan Road - Dudhkoshi River	Okhaldhunga
3	Kosovha Khola Bridge	Mainamaini 9 Baghdakha & Ward No. 2 Khudi Gaun bich	Udaypur	13	Chatyanghat Motor Bridge	Sisakhala-Kerung-Chyangsar MotorRoad Solkhola	Okhaldhunga
4	Dudhkosi–Taksindu Kayaghat Bridge	0	Okhaldhunga	14	Thotna Khola Bridge	Rumjatara–Thotne–Khanibhanjyang–Kuibhi	Okhaldhunga
5	Dipli ghat Motorable Bridge, Pawai - Deu	0	Okhaldhunga	15	Damaged Motor Bridge between Rumja	Rumjatar–Mamakhadeurali–Ratamata, Okhaldhunga	Okhaldhunga
6	Sisakhola–Kerungchyngsar Chatyanghat M	0	Okhaldhunga	16	Barnalu & Mamakha Odare Thotna Kho	Barnalu Odare Lakkharka Chisapani Pokhari Bhanjyang Nachabiihibare Solu Rd	Okhaldhunga
7	Dudekhola Motor Bridge	Sirise Tarkerabari Gamnangtar Motor Road, Dudekhola	Okhaldhunga	17	Amashrot Khola Bridge	Saptari VDC Sitapur Ward No 8	Saptari
8	Dhad Khola Motor Bridge	Madhavpur Sisneri Road, Molung Khola	Okhaldhunga	18	Kaliya Khola Bridge	Praswani Ward No 8 Dihawarthan	Saptari
9	Kholakhraka Motor bridge	Tarkerabari Gamnangtar Yasam Motor Road - Kaya Khola Motor Bridge	Okhaldhunga	19	Tengraha Khola Bridge	Saptakoshi Na.Pa. Bolardaha	Saptari
10	Kaya Khola Motor Bridge	Dudhkoshi Taksindu Motor Road	Okhaldhunga	20	Lakshan Patti Bridge	Kanchanrup Na.Pa. Ward No. 11 Malik Tol	Saptari

Contract No. **BB-159-DSD-073/74-06**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Kalikhola Bridge	Sisawari Khola Bridge	Kosovha Khola Bridge	Dudhkosi–Taksindu Kayaghat Bridge	Dipli ghat Motorable Bridge, Pawai - Deusa	Sisakhola–Kerungchyngsar Chatyanghat Motorable Bridge	Dudekhola Motor Bridge	Dhad Khola Motor Bridge	Kholakhraka Motor bridge	Kaya Khola Motor Bridge	Dudhkoshi River (Diplighat Motorbridge)	Churpughat Motorbridge	Chatyanghat Motor Bridge	Thotna Khola Bridge	Damaged Motor Bridge between Rumjatar & Mamakha in	Barnalu & Mamakha Odare Thotna Khola Motor Bridge	Amashrot Khola Bridge	Kaliya Khola Bridge	Tengraha Khola Bridge	Lakshan Patti Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	3	3	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	40	40	160			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	48	48	32	32	32	32	32	48	48	48	32	32	32	0	0	0	0	592			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kalikhola Bridge	Beltar Basaha Na.Pa. Ward No. 3	Udaypur	11	Dudhkoshi River (Diplighat Motorbridg	Deusa & Pawai Road	Okhaldhunga
2	Sisawari Khola Bridge	Between Tri. Na. Pa. 11 Lalpatta Pattchakanya Ma. Vi. Patlebas & Ranichaur	Udaypur	12	Churpughat Motorbridge	Nechweghari Panchan Road - Dudhkoshi River	Okhaldhunga
3	Kosovha Khola Bridge	Mainamaini 9 Baghdakha & Ward No. 2 Khudi Gaun bich	Udaypur	13	Chatyanghat Motor Bridge	Sisakhala-Kerung-Chyangsar MotorRoad Solkhola	Okhaldhunga
4	Dudhkosi–Taksindu Kayaghat Bridge	0	Okhaldhunga	14	Thotna Khola Bridge	Rumjatara–Thotne–Khanibhanjyang–Kuibhi	Okhaldhunga
5	Dipli ghat Motorable Bridge, Pawai - Deu	0	Okhaldhunga	15	Damaged Motor Bridge between Rumja	Rumjatar–Mamakhadeurali–Ratamata, Okhaldhunga	Okhaldhunga
6	Sisakhola–Kerungchyngsar Chatyanghat M	0	Okhaldhunga	16	Barnalu & Mamakha Odare Thotna Kho	Barnalu Odare Lakkharka Chisapani Pokhari Bhanjyang Nachabiihibare Solu Ro	Okhaldhunga
7	Dudekhola Motor Bridge	Sirise Tarkerabari Gamnangtar Motor Road, Dudekhola	Okhaldhunga	17	Amashrot Khola Bridge	Saptari VDC Sitapur Ward No 8	Saptari
8	Dhad Khola Motor Bridge	Madhavpur Sisneri Road, Molung Khola	Okhaldhunga	18	Kaliya Khola Bridge	Praswani Ward No 8 Dihawarthan	Saptari
9	Kholakhraka Motor bridge	Tarkerabari Gamnangtar Yasam Motor Road - Kaya Khola Motor Bridge	Okhaldhunga	19	Tengraha Khola Bridge	Saptakoshi Na.Pa. Bolardaha	Saptari
10	Kaya Khola Motor Bridge	Dudhkoshi Taksindu Motor Road	Okhaldhunga	20	Lakshan Patti Bridge	Kanchanrup Na.Pa. Ward No. 11 Malik Tol	Saptari

Contract No. **BB-159-DSD-073/74-06**

5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																										
																								Total			
																								VAT @ 13% of total			
																								Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bridge	Kanchanrup Na.Pa. Ward No. 11 Musahari Gidaha Tol	Saptari	11	Kaji Paini Bridge	Teraha VDC Hathmunda VDC Link Road	Dhanusha
2	Jita Khola Pakki Bridge	Barasain VDC Ward No. 5	Saptari	12	Bridge	Harine VDC Sakhuwa VDC Link Road	Dhanusha
3	Jita Khola Bridge	Mahadeva 6 VDC	Saptari	13	Pakki Bridge	VDC Chorakolpur Ward 1	Dhanusha
4	Mahuli Khola Bridge	Dimal Postal Highway - Southeast Gaithi Ward No 9 -Goithi Ward No 4 Trikaul VDC Ward 3,4,5 -	Saptari	14	Dumariya River Bridge	Duhabi Harusaha Dhanusha	Dhanusha
5	Bauka River Bridge	Sarsora VDC Ward No 34 - Nengra VDC Chowk Road	Saptari	15	Bridge	Chora Koyalpur - Yadukuha VDC Road	Dhanusha
6	Mahulidhara Bridge	Baramjhaiya VDC - Suwatol - Baramjhaiya	Saptari	16	Bridge	Harine VDC Sakhuwa Maran VDC Link Road	Dhanusha
7	Hakarahi River Bridge	Madar Bazar - Lagadi Goth- Lagadi Gidayani	Saptari	17	Bridge	Lakkad VDC - Hatletawa VDC	Dhanusha
8	VDC Tulsipur 6 Deuripatti Road River Br	0	Saptari	18	Dumariya Khola	Aaurahi & Gowarahi Gau	Dhanusha
9	Bachharaja River Bridge	Yadukuha-Nathpati-Maran Road	Dhanusha	19	Maraha Khola Bridge	VDC Sunderpur Gau Singhasani - Katughar Bazar	Mahottari
10	Kaji Paini Bridge	Chorakoyalpur-Yadukuha Road	Dhanusha	20	Gurung Khola Bridge	Khayarmara VDC Ward No 1	Mahottari

Contract No. **BB-159-DSD-073/74-07**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Bridge	Jita Khola Pakki Bridge	Jita Khola Bridge	Mahuli Khola Bridge	Bauka River Bridge	Mahulidhara Bridge	Hakarahi River Bridge	VDC Tulsipur 6 Deuripatti Road River Bridge	Bachharaja River Bridge	Kaji Paini Bridge	Kaji Paini Bridge	Bridge	Pakki Bridge	Dumariya River Bridge	Bridge	Bridge	Bridge	Dumariya Khola	Maraha Khola Bridge	Gurung Khola Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	4	2	4	2	3	2	2	2	2	2	3	2	2	2	4	4	2	50			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	40	40	0	80	40	80	40	60	40	40	40	40	40	60	40	40	40	0	80	40	880			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	0	0	96			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bridge	Kanchanrup Na.Pa. Ward No. 11 Musahari Gidaha Tol	Saptari	11	Kaji Paini Bridge	Teraha VDC Hathmunda VDC Link Road	Dhanusha
2	Jita Khola Pakki Bridge	Barasain VDC Ward No. 5	Saptari	12	Bridge	Harine VDC Sakhuwa VDC Link Road	Dhanusha
3	Jita Khola Bridge	Mahadeva 6 VDC	Saptari	13	Pakki Bridge	VDC Chorakolpur Ward 1	Dhanusha
4	Mahuli Khola Bridge	Dimal Postal Highway - Southeast Gaithi Ward No 9 -Goithi Ward No 4 Trikaul VDC Ward 3,4,5 -	Saptari	14	Dumariya River Bridge	Duhabi Harusaha Dhanusha	Dhanusha
5	Bauka River Bridge	Sarsora VDC Ward No 34 - Nengra VDC Chowk Road	Saptari	15	Bridge	Chora Koyalpur - Yadukuha VDC Road	Dhanusha
6	Mahulidhara Bridge	Baramjhaiya VDC - Suwatol - Baramjhaiya	Saptari	16	Bridge	Harine VDC Sakhuwa Maran VDC Link Road	Dhanusha
7	Hakarahi River Bridge	Madar Bazar - Lagadi Goth- Lagadi Gidayani	Saptari	17	Bridge	Lakkad VDC - Hatletawa VDC	Dhanusha
8	VDC Tulsipur 6 Deuripatti Road River Br	0	Saptari	18	Dumariya Khola	Aaurahi & Gowarahi Gau	Dhanusha
9	Bachharaja River Bridge	Yadukuha-Nathpati-Maran Road	Dhanusha	19	Maraha Khola Bridge	VDC Sunderpur Gau Singhasani - Katughar Bazar	Mahottari
10	Kaji Paini Bridge	Chorakoyalpur-Yadukuha Road	Dhanusha	20	Gurung Khola Bridge	Khayarmara VDC Ward No 1	Mahottari

Contract No. **BB-159-DSD-073/74-07**

5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chodke Khola Bridge	Khayarmara VDC Ward No 1	Mahottari	11	Soti Khola Bridge	Balara 8 Jamuniya Tol	Sarlahi
2	Banke Khola Bridge	between Khayarmara VDC Ward No 1 Chhodke & Sarlahi District Kalinjor VDC Ward No 9 Pipalda	Mahottari	12	Naika Khola Bridge	Sarlahi VDC Karmaiya 6	Sarlahi
3	Maraha Khola Bridge	Belgachi VDC Ward No 3 - Laxminiya VDC Ward No 1	Mahottari	13	Ekadasi Bridge	VDC Sundarpur Chuhadawa Ward No 1	Sarlahi
4	Soni Khola Bridge	Belgachi VDC Ward No 2 & 3	Mahottari	14	Bridge	VDC Dhungrukhola Ward No 1 Dungahor Amelam Padamtol Road	Sarlahi
5	Khayaraara Khola Bridge	Khayarmara VDC Ward No 7 & 3	Mahottari	15	Ekadasikhola Bridge	VDC Sundarpur Chuhadawa Ward No 9	Sarlahi
6	Lakhandehi River Bridge	Kshtra No 5 Belhi Bazar VDC Ward No. 8 - Chakraghata Bazar Road	Sarlahi	16	Naika Bridge	Karmaya Ward No 6	Sarlahi
7	Adamara Khola Bhaktipur Thanachowk W	Ishworpur Na.pa Ward No 3	Sarlahi	17	Tawa River Bridge	Dudhauli Na.Pa. Ward No 5 Dudhauli Bazar - Udaypur District Katari Na.Pa 5 K	Sindhuli
8	Manusmara River Bridge	Gadahiya Kharawa	Sarlahi	18	Kumara Khola Bridge	0	Sindhuli
9	Ekadasi Khola Bridge	Hajariya 6 Chaurasi	Sarlahi	19	Bhalukhola Pakki Bridge	Lampantar Ward No 3 & 4	Sindhuli
10	Manusmara River Bridge	Harkathuwa Dhawa Tol	Sarlahi	20	Kara Kanapa Ward 6 & 4 Pakki Bridge	0	Sindhuli

Contract No. **BB-159-DSD-073/74-08**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chodke Khola Bridge	Banke Khola Bridge	Maraha Khola Bridge	Soni Khola Bridge	Khayaraara Khola Bridge	Lakhandehi River Bridge	Adamara Khola Bhaktipur Thanachowk West	Manusmara River Bridge	Ekadasi Khola Bridge	Manusmara River Bridge	Soti Khola Bridge	Naika Khola Bridge	Ekadasi Bridge	Bridge	Ekadasikhola Bridge	Naika Bridge	Tawa River Bridge	Kumara Khola Bridge	Bhalukhola Pakki Bridge	Kara Kanapa Ward 6 & 4 Pakki Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	3	2	2	2	3	2	3	2	3	2	2	2	2	3	2	3	2	2	2	46			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	40	60	40	40	40	60	40	60	40	60	40	40	40	40	60	40	0	0	0	0	740			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	32	32	32	144			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chodke Khola Bridge	Khayarmara VDC Ward No 1	Mahottari	11	Soti Khola Bridge	Balara 8 Jamuniya Tol	Sarlahi
2	Banke Khola Bridge	between Khayarmara VDC Ward No 1 Chhodke & Sarlahi District Kalinjor VDC Ward No 9 Pipald	Mahottari	12	Naika Khola Bridge	Sarlahi VDC Karmaiya 6	Sarlahi
3	Maraha Khola Bridge	Belgachi VDC Ward No 3 - Laxminiya VDC Ward No 1	Mahottari	13	Ekadasi Bridge	VDC Sundarpur Chuhadawa Ward No 1	Sarlahi
4	Soni Khola Bridge	Belgachi VDC Ward No 2 & 3	Mahottari	14	Bridge	VDC Dhungrukhola Ward No 1 Dungahor Amelam Padamtol Road	Sarlahi
5	Khayaraara Khola Bridge	Khayarmara VDC Ward No 7 & 3	Mahottari	15	Ekadasikhola Bridge	VDC Sundarpur Chuhadawa Ward No 9	Sarlahi
6	Lakhandehi River Bridge	Kshtra No 5 Belhi Bazar VDC Ward No. 8 - Chakraghata Bazar Road	Sarlahi	16	Naika Bridge	Karmaya Ward No 6	Sarlahi
7	Adamara Khola Bhaktipur Thanachowk W	Ishworpur Na.pa Ward No 3	Sarlahi	17	Tawa River Bridge	Dudhauli Na.Pa. Ward No 5 Dudhauli Bazar - Udaypur District Katari Na.Pa 5 K	Sindhuli
8	Manusmara River Bridge	Gadahiya Kharawa	Sarlahi	18	Kumara Khola Bridge	0	Sindhuli
9	Ekadasi Khola Bridge	Hajariya 6 Chaurasi	Sarlahi	19	Bhalukhola Pakki Bridge	Lampantar Ward No 3 & 4	Sindhuli
10	Manusmara River Bridge	Harkathuwa Dhawa Tol	Sarlahi	20	Kara Kanapa Ward 6 & 4 Pakki Bridge	0	Sindhuli

Contract No. **BB-159-DSD-073/74-08**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chodke Khola Bridge	Banke Khola Bridge	Maraha Khola Bridge	Soni Khola Bridge	Khayaraara Khola Bridge	Lakhandehi River Bridge	Adamara Khola Bhaktipur Thanachowk West	Manusmara River Bridge	Ekadasi Khola Bridge	Manusmara River Bridge	Soti Khola Bridge	Naika Khola Bridge	Ekadasi Bridge	Bridge	Ekadasikhola Bridge	Naika Bridge	Tawa River Bridge	Kumara Khola Bridge	Bhalukhola Pakki Bridge	Kara Kanapa Ward 6 & 4 Pakki Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Thakur Khola Bridge	Sanitar, Bagchaur (Jinakhu-Sirthauli Road)	Sindhuli	11	Basamchi Khola Bridge	0	Sindhupalchok
2	Kamala River Dakaha Pakki Bridge	E/W Highway, Godhar-Dakaha-Chakamake-Bahun Tilbang-NawalPur Midhill Highway Link Road	Sindhuli	12	Sunkoshi Bridge	Araniko - Puspalal Marga	Sindhupalchowk
3	Kamala River Utrayani Ghat Bridge	Siraha Badaharamal 1 & Dhanusha Ganeshman Na.Pa. 6 - Keshardamar Bridge	Sindhuli	13	Mahesh Khola Bridge	Baubise2-Jiwanpur 9 (Syauli Bazar)	Dhading
4	Khimti Khola Pakki Bridge	Lamatar Betali Road Manadi VDC, Ramechhap - Sahare VDC Maisthan, Dolakha (Ramechhap/Dola	Ramechhap	14	Mahesh Khola Bridge (Gogan Bridge)	Bhumesthan 6 - Goganpani 6	Dhading
5	Sunkoshi River Bridge	Shankharkhola Dovan Rampur -1	Ramechhap	15	Kalidaha Thopalkhola Bridge	Nalang 9 - Kumpur 8	Dhading
6	Likhu Khola Bridge	Chhipchhipa, Ramechhap - Brahasiga, Okhaldhunga	Ramechhap	16	Belbote–Lamachira Pakki Bridge	0	Dhading
7	Bampti Khola Bridge	Bampti Bhandar Solu Road	Ramechhap	17	Hanumante Khola Bridge	Gathaghar Balkot Road	Bhaktapur
8	Hadi Khola Bridge	Gunsa Thangpalkot	Sindhupalcho	18	Manohara Khola Bridge	Changunarayan Na.Pa. Ward No 14 & 15 Besi Gaun	Bhaktapur
9	Gaurang Khola	Attarpur Thulo Dhading	Sindhupalcho	19	Kaya Khola Pakki Bridge	Nagregarche VDC Ward No 2 Wangthali - Nageggarche VDC	Kavrepalanchowk
10	Balefi Khola	Baramchi-Selang	Sindhupalcho	20	Rosi River Bridge	Mangaltar 4 - Chhapokhari 1	Kavrepalanchowk

Contract No. **BB-159-DSD-073/74-09**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Thakur Khola Bridge	Kamala River Dakaha Pakki Bridge	Kamala River Utrayani Ghat Bridge	Khimti Khola Pakki Bridge	Sunkoshi River Bridge	Likhu Khola Bridge	Bampti Khola Bridge	Hadi Khola Bridge	Gaurang Khola	Balefi Khola	Basamchi Khola Bridge	Sunkoshi Bridge	Mahesh Khola Bridge	Mahesh Khola Bridge (Gogan Bridge)	Kalidaha Thopalkhola Bridge	Belbote–Lamachira Pakki Bridge	Hanumante Khola Bridge	Manohara Khola Bridge	Kaya Khola Pakki Bridge	Rosi River Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	3	3	2	3	2	2	2	2	2	2	3	2	2	2	2	3	3	2	2	46			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60	0	0	180			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	0	48	32	48	32	32	32	32	32	32	48	32	32	32	32	0	0	32	32	592			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Thakur Khola Bridge	Sanitar, Bagchaur (Jinakhu-Sirthauli Road)	Sindhuli	11	Basamchi Khola Bridge	0	Sindhupalchok
2	Kamala River Dakaha Pakki Bridge	E/W Highway, Godhar-Dakaha-Chakamake-Bahun Tilbang-NawalPur Midhill Highway Link Road	Sindhuli	12	Sunkoshi Bridge	Araniko - Puspalal Marga	Sindhupalchowk
3	Kamala River Utrayani Ghat Bridge	Siraha Badaharamal 1 & Dhanusha Ganeshman Na.Pa. 6 - Keshardamar Bridge	Sindhuli	13	Mahesh Khola Bridge	Baubise2-Jiwanpur 9 (Syauli Bazar)	Dhading
4	Khimti Khola Pakki Bridge	Lamatar Betali Road Manadi VDC, Ramechhap - Sahare VDC Maisthan, Dolakha (Ramechhap/Dola	Ramechhap	14	Mahesh Khola Bridge (Gogan Bridge)	Bhumesthan 6 - Goganpani 6	Dhading
5	Sunkoshi River Bridge	Shankharkhola Dovan Rampur -1	Ramechhap	15	Kalidaha Thopalkhola Bridge	Nalang 9 - Kumpur 8	Dhading
6	Likhu Khola Bridge	Chhipchhipa, Ramechhap - Brahasiga, Okhaldhunga	Ramechhap	16	Belbote–Lamachira Pakki Bridge	0	Dhading
7	Bampti Khola Bridge	Bampti Bhandar Solu Road	Ramechhap	17	Hanumante Khola Bridge	Gathaghar Balkot Road	Bhaktapur
8	Hadi Khola Bridge	Gunsa Thangpalkot	Sindhupalcho	18	Manohara Khola Bridge	Changunarayan Na.Pa. Ward No 14 & 15 Besi Gaun	Bhaktapur
9	Gaurang Khola	Attarpur Thulo Dhading	Sindhupalcho	19	Kaya Khola Pakki Bridge	Nagregarche VDC Ward No 2 Wangthali - Nageggarche VDC	Kavrepalanchowk
10	Balefi Khola	Baramchi-Selang	Sindhupalcho	20	Rosi River Bridge	Mangaltar 4 - Chhapokhari 1	Kavrepalanchowk

Contract No. **BB-159-DSD-073/74-09**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Thakur Khola Bridge	Kamala River Dakaha Pakki Bridge	Kamala River Utrayani Ghat Bridge	Khimti Khola Pakki Bridge	Sunkoshi River Bridge	Likhu Khola Bridge	Bampti Khola Bridge	Hadi Khola Bridge	Gaurang Khola	Balefi Khola	Basamchi Khola Bridge	Sunkoshi Bridge	Mahesh Khola Bridge	Mahesh Khola Bridge (Gogan Bridge)	Kalidaha Thopalkhola Bridge	Belbote–Lamachira Pakki Bridge	Hanumante Khola Bridge	Manohara Khola Bridge	Kaya Khola Pakki Bridge	Rosi River Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Banakhu Khola Bridge	Tribenighat	Kavrepalanc	11	Bridge & Culvert Construction, near Ra	Kaudena VDC Ward No 6 Chhapkahiya - Khutona Link Road Martigachi	Bara
2	Ophal Khola Bridge	Kilpu Bagar Dhansar Road	Kavrepalanc	12	Malakhandehi River Bridge	Kaudena VDC Ward No 6 & 7 Chhapkahiya - Bhandsar VDC Link Road	Bara
3	Kotte Khola	Kogate Ipa Sisneri Road Bridge	Makwanpur	13	Phuljor Khola Bridge	East Ishworpru Na.Pa - Ranijanj Road	Bara
4	Deujar Khola	Phaparbari Betini Road Bridge	Makwanpur	14	Jamuni River Bridge	Bara Bazar - Bachhanpurwa Barawa	Bara
5	'Sisneri Khola Bridge	Madan Bhandari Marga	Makwanpur	15	Pragana Bridge	Karaiya School - West Galopatti Road	Bara
6	Jhanjh River Bridge	Garuda Na. Pa. Ward No. 8 Jaynagar - Manpur Road	Rautahat	16	Jamuni River Bridge	Baiji Jogbuda Mahadevsthan Amajan VDC - Amawa Vdc	Bara
7	Bridge	Basantapur VDC Ward no. 7 Gandak Nahar Sono Kopawa - Narstiya Link Road, Basantapatti	Rautahat	17	Dudhaura Khola Bridge	Badaharawaghat Buniyad	Bara
8	Lakhandehi River Bridge	VDC Simara - Bhandsar VDC Link Road	Bara	18	Kudiya River Bridge	Bara - Parsa	Bara
9	Chakawa Khola Bridge	VDC Simara Naya Road near Sima Prahari Chauki	Bara	19	Imirti Bridge	East Sahajanpur - North Supauli	Parsa
10	Murangi Khola Bridge	Kaudena VDC Ward No 5 Chhapkahiya - Mursauli Link Road	Bara	20	Chandrawati River Bridge	Jagarnathpur - Laxmipur	Parsa

Contract No. **BB-159-DSD-073/74-10**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Banakhu Khola Bridge	Ophal Khola Bridge	Kotte Khola	Deujar Khola	'Sisneri Khola Bridge	Jhanjh River Bridge	Bridge	Lakhandehi River Bridge	Chakawa Khola Bridge	Murangi Khola Bridge	Bridge & Culvert Construction, near Rabhuranai	Malakhandehi River Bridge	Phuljor Khola Bridge	Jamuni River Bridge	Pragana Bridge	Jamuni River Bridge	Dudhaura Khola Bridge	Kudiya River Bridge	Imirti Bridge	Chandrawati River Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	3	2	3	2	2	2	3	2	2	2	2	3	2	2	3	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	60	40	40	40	60	40	40	40	40	60	40	40	60	600			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	32	32	48	32	0	0	0	0	0	0	0	0	0	0	0	0	0	240			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Banakhu Khola Bridge	Tribenighat	Kavrepalanc	11	Bridge & Culvert Construction, near Ra	Kaudena VDC Ward No 6 Chhapkahiya - Khutona Link Road Martigachi	Bara
2	Ophal Khola Bridge	Kilpu Bagar Dhansar Road	Kavrepalanc	12	Malakhandehi River Bridge	Kaudena VDC Ward No 6 & 7 Chhapkahiya - Bhandsar VDC Link Road	Bara
3	Kotte Khola	Kogate Ipa Sisneri Road Bridge	Makwanpur	13	Phuljor Khola Bridge	East Ishworpru Na.Pa - Ranijanj Road	Bara
4	Deujar Khola	Phaparbari Betini Road Bridge	Makwanpur	14	Jamuni River Bridge	Bara Bazar - Bachhanpurwa Barawa	Bara
5	'Sisneri Khola Bridge	Madan Bhandari Marga	Makwanpur	15	Pragana Bridge	Karaiya School - West Galopatti Road	Bara
6	Jhanjh River Bridge	Garuda Na. Pa. Ward No. 8 Jaynagar - Manpur Road	Rautahat	16	Jamuni River Bridge	Baiji Jogbuda Mahadevsthan Amajan VDC - Amawa Vdc	Bara
7	Bridge	Basantapur VDC Ward no. 7 Gandak Nahar Sono Kopawa - Narstiya Link Road, Basantapatti	Rautahat	17	Dudhaura Khola Bridge	Badaharawaghat Buniyad	Bara
8	Lakhandehi River Bridge	VDC Simara - Bhandsar VDC Link Road	Bara	18	Kudiya River Bridge	Bara - Parsa	Bara
9	Chakawa Khola Bridge	VDC Simara Naya Road near Sima Prahari Chauki	Bara	19	Imirti Bridge	East Sahajanpur - North Supauli	Parsa
10	Murangi Khola Bridge	Kaudena VDC Ward No 5 Chhapkahiya - Mursauli Link Road	Bara	20	Chandrawati River Bridge	Jagarnathpur - Laxmipur	Parsa

Contract No. **BB-159-DSD-073/74-10**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Banakhu Khola Bridge	Ophal Khola Bridge	Kotte Khola	Deujar Khola	'Sisneri Khola Bridge	Jhanjh River Bridge	Bridge	Lakhandehi River Bridge	Chakawa Khola Bridge	Murangi Khola Bridge	Bridge & Culvert Construction, near Rabhuranji	Malakhandehi River Bridge	Phuljor Khola Bridge	Jamuni River Bridge	Pragana Bridge	Jamuni River Bridge	Dudhaura Khola Bridge	Kudiya River Bridge	Imirti Bridge	Chandrawati River Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Hadahi River Bridge	Shankarsaraiya - Sakhuwaniya	Parsa	11	Bekhaura River Bridge	Surpauli 2 (Smriti Bridge)	Parsa
2	Oriya River Bridge	Aashwari & Mirjapur	Parsa	12	Imirti River Bridge Construction	Jitpur 9	Parsa
3	Chamari River Bridge	Pirdadhi - Parsawa	Parsa	13	Thuthe Khola Bridge	Thori 9 Ichhanagar Road	Parsa
4	Chandrawati Khola Bridge	Jitpur 2	Parsa	14	Chhatre Khola Bridge, Buddhisinga 2	0	Nuwakot
5	Imirti Bridge Sajanpur –Surpauli	0	Parsa	15	Trisuli River	Muglin Bazar-Tribeni Temple (Chitwan/Gorkha)	Chitwan
6	Mirjapur Ward 8 - Jhalmahiya Ward 1 Ro	0	Parsa	16	Patare Khola Bridge	Madi Ringroad Devendrapur - Syaulibas	Chitwan
7	Phanti Khola Bridge	Rampur - Udaypur UP - Birgunj Na.Pa 30	Parsa	17	Ratani Khola Bridge	Madi Basantapur Bazar - Inarawaruwa Dhobaha Road	Chitwan
8	Lumgau Patravi Himal Road Bridge	0	Parsa	18	Merodha Khola Bridge	Madi-Botepur Pandapnagar Goldak Mahadev Temple Road	Chitwan
9	Attauli Khola Bridge	Bairanabtol Lalkilla Hatiya	Parsa	19	Bandarmude Khola Bridge	Madi Bramhapuri Ramrajyapur	Chitwan
10	Hadahi River Bridge	Sadi - Kodhauli	Parsa	20	Pampa Khola Bridge	Rapti Na.Pa ward No 6/10 Bridge, Paharanwari	Chitwan

Contract No. **BB-159-DSD-073/74-11**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Hadahi River Bridge	Oriya River Bridge	Chamari River Bridge	Chandrawati Khola Bridge	Imirti Bridge Sajanpur –Surpauli	Mirjapur Ward 8 - Jhalmahiya Ward 1 Road Pokharinirako 10 m Bridge	Phanti Khola Bridge	Lumgau Patravi Himal Road Bridge	Attauli Khola Bridge	Hadahi River Bridge	Bekhaura River Bridge	Imirti River Bridge Construction	Thuthe Khola Bridge	Chhatre Khola Bridge, Buddhisinga 2	Trisuli River	Patare Khola Bridge	Ratani Khola Bridge	Merodha Khola Bridge	Bandarmude Khola Bridge	Pampa Khola Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	2	2	3	2	2	2	2	2	2	2	3	2	2	3	3	2	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	60	40	40	60	40	40	40	40	40	40	40	60	40	0	0	0	0	0	0	0	580			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	0	0	0	0	0	0	0	0	0	0	0	32	48	48	32	32	32	32	256			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Hadahi River Bridge	Shankarsaraiya - Sakhuwaniya	Parsa	11	Bekhaura River Bridge	Surpauli 2 (Smriti Bridge)	Parsa
2	Oriya River Bridge	Aashwari & Mirjapur	Parsa	12	Imirti River Bridge Construction	Jitpur 9	Parsa
3	Chamari River Bridge	Pirdadhi - Parsawa	Parsa	13	Thuthe Khola Bridge	Thori 9 Ichhanagar Road	Parsa
4	Chandrawati Khola Bridge	Jitpur 2	Parsa	14	Chhatre Khola Bridge, Buddhisinga 2	0	Nuwakot
5	Imirti Bridge Sajanpur –Surpauli	0	Parsa	15	Trisuli River	Muglin Bazar-Tribeni Temple (Chitwan/Gorkha)	Chitwan
6	Mirjapur Ward 8 - Jhalmahiya Ward 1 Ro	0	Parsa	16	Patare Khola Bridge	Madi Ringroad Devendrapur - Syaulibas	Chitwan
7	Phanti Khola Bridge	Rampur - Udaypur UP - Birgunj Na.Pa 30	Parsa	17	Ratani Khola Bridge	Madi Basantapur Bazar - Inarawaruwa Dhobaha Road	Chitwan
8	Lumgau Patravi Himal Road Bridge	0	Parsa	18	Merodha Khola Bridge	Madi-Botepur Pandapnagar Goldak Mahadev Temple Road	Chitwan
9	Attauli Khola Bridge	Bairanabtol Lalkilla Hatiya	Parsa	19	Bandarmude Khola Bridge	Madi Bramhapuri Ramrajyapur	Chitwan
10	Hadahi River Bridge	Sadi - Kodhauli	Parsa	20	Pampa Khola Bridge	Rapti Na.Pa ward No 6/10 Bridge, Paharanwari	Chitwan

Contract No. **BB-159-DSD-073/74-11**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Hadahi River Bridge	Oriya River Bridge	Chamari River Bridge	Chandrawati Khola Bridge	Imirti Bridge Sajanpur –Surpauli	Mirjapur Ward 8 - Jhalmahiya Ward 1 Road Pokharinirako 10 m Bridge	Phanti Khola Bridge	Lumgau Patravi Himal Road Bridge	Attauli Khola Bridge	Hadahi River Bridge	Bekhaura River Bridge	Imirti River Bridge Construction	Thuthe Khola Bridge	Chhatre Khola Bridge, Buddhisinga 2	'Trisuli River	Patare Khola Bridge	Ratani Khola Bridge	Merodha Khola Bridge	Bandarmude Khola Bridge	Pampa Khola Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chyatra Khola Bridge	Rapti Napa Ward No 11 (Uttarakhanda)	Chitwan	11	Jayshree Khola Bridge	Gaidakot Na.Pa. 7 & 9	Nawalpursi
2	Gobuighat Bridge	Khairahani Napa Kumroj	Chitwan	12	Tinau River Bridge	Siddartha highway Lakhanchowk - Tikuligadh Mangalpur Harnaiya Mainahiya	Rupandehi
3	Jhawanighat Bridge	Khairahani Napa Kumroj-Bachhauli	Chitwan	13	Kochahada Khola Bridge	Tikuligadh-Rabarganj- South Bhairahawa Road	Rupandehi
4	Pampa Khola Bridge	Khairahani 2 - 3	Chitwan	14	Mudawari Khola Bridge	Karahiya VDC 8/9 Siddhartha path-Bishwashanti P.S, Tilottma Na.Pa	Rupandehi
5	Betani Khola Pakki Bridge	Na. Na.Pa 2 - 3, Meghauli	Chitwan	15	Sukhali, Tinau Darawahawa Khola Brid	Manpakadi VDC 4/5	Rupandehi
6	Rapti Khola Pakki Bridge	Jagatpur, Dhurbaghat	Chitwan	16	Bridge over Danab River	Marchawar - Lumbini	Rupandehi
7	Kerunga Khola Bridge	Narayani Na.pa. Laxmi H.S.S, Madi Thori- Jagatpur Road	Chitwan	17	Sano Bridge	Sainamaina Na.Pa 6 Sewar - Dogahara	Rupandehi
8	Kathebridge	Tribeni Susta VDC Ward No 5 Bankatti	Nawalpursi	18	Kanchan River Bridge	Gajedi 3 Danachaur Bimcha	Rupandehi
9	Lokaha Khola Bridge	Devchuli Na.Pa. 10 Prithvinagar - Kawasoti Na.pa 1 Lokaha	Nawalpursi	19	Iguriya River	Suryapara 1 Dhusuwa 4 khadawa Bangad	Rupandehi
10	Abichhek Khola Bridge	Gaidakot Na.Pa. 13 & 16	Nawalpursi	20	Tinau River Bridge	Bhalwari Bazar West Pahuni Betahi Farsatikar	Rupandehi

Contract No. **BB-159-DSD-073/74-12**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chyatra Khola Bridge	Gobuighat Bridge	Jhawanighat Bridge	Pampa Khola Bridge	Betani Khola Pakki Bridge	Rapti Khola Pakki Bridge	Kerunga Khola Bridge	Kathebridge	Lokaha Khola Bridge	Abichhek Khola Bridge	Jayshree Khola Bridge	Tinau River Bridge	Kochahada Khola Bridge	Mudawari Khola Bridge	Sukhali, Tinau Darawahawa Khola Bridge	Bridge over Danab River	Sano Bridge	Kanchan River Bridge	Iguriya River	Tinau River Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	4	2	2	2	2	2	3	2	2	3	2	2	3	2	3	46			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	40	0	40	40	80	40	40	40	40	40	60	40	0	0	40	40	60	0	60	700			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	0	32	0	0	0	0	0	0	0	0	0	0	32	48	0	0	0	32	0	176			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Chyatra Khola Bridge	Rapti Napa Ward No 11 (Uttarakhanda)	Chitwan	11	Jayshree Khola Bridge	Gaidakot Na.Pa. 7 & 9	Nawalpursi
2	Gobuighat Bridge	Khairahani Napa Kumroj	Chitwan	12	Tinau River Bridge	Siddartha highway Lakhanchowk - Tikuligadh Mangalpur Harnaiya Mainahiya	Rupandehi
3	Jhawanighat Bridge	Khairahani Napa Kumroj-Bachhauli	Chitwan	13	Kochahada Khola Bridge	Tikuligadh-Rabarganj- South Bhairahawa Road	Rupandehi
4	Pampa Khola Bridge	Khairahani 2 - 3	Chitwan	14	Mudawari Khola Bridge	Karahiya VDC 8/9 Siddhartha path-Bishwashanti P.S, Tilottma Na.Pa	Rupandehi
5	Betani Khola Pakki Bridge	Na. Na.Pa 2 - 3, Meghauli	Chitwan	15	Sukhali, Tinau Darawahawa Khola Brid	Manpakadi VDC 4/5	Rupandehi
6	Rapti Khola Pakki Bridge	Jagatpur, Dhurbaghat	Chitwan	16	Bridge over Danab River	Marchawar - Lumbini	Rupandehi
7	Kerunga Khola Bridge	Narayani Na.pa. Laxmi H.S.S, Madi Thori- Jagatpur Road	Chitwan	17	Sano Bridge	Sainamaina Na.Pa 6 Sewar - Dogahara	Rupandehi
8	Kathebridge	Tribeni Susta VDC Ward No 5 Bankatti	Nawalpursi	18	Kanchan River Bridge	Gajedi 3 Danachaur Bimcha	Rupandehi
9	Lokaha Khola Bridge	Devchuli Na.Pa. 10 Prithvinagar - Kawasoti Na.pa 1 Lokaha	Nawalpursi	19	Iguriya River	Suryapara 1 Dhusuwa 4 khadawa Bangad	Rupandehi
10	Abichhek Khola Bridge	Gaidakot Na.Pa. 13 & 16	Nawalpursi	20	Tinau River Bridge	Bhalwari Bazar West Pahuni Betahi Farsatikar	Rupandehi

Contract No. **BB-159-DSD-073/74-12**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Chyatra Khola Bridge	Gobuighat Bridge	Jhawanighat Bridge	Pampa Khola Bridge	Betani Khola Pakki Bridge	Rapti Khola Pakki Bridge	Kerunga Khola Bridge	Kathebridge	Lokaha Khola Bridge	Abichhek Khola Bridge	Jayshree Khola Bridge	Tinau River Bridge	Kochahada Khola Bridge	Mudawari Khola Bridge	Sukhali, Tinau Darawahawa Khola Bridge	Bridge over Danab River	Sano Bridge	Kanchan River Bridge	Iguriya River	Tinau River Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tinau River Bridge	Shankar Nagar Jogikuti Rajiganj Motipur	Rupandehi	11	Arji Khola Bridge	0	Gulmi
2	Inguriya Nida Bridge	Sainamaina 9 Bikhatti-Dewapari	Rupandehi	12	Ghamir Khola Bridge	0	Gulmi
3	Marthikhola Bridge	Manaharapur Materiya Thanti Gajehada Road	Kapilbastu	13	Rodi Khola Bridge	0	Gulmi
4	Gadarunga River Pakki Bridge	Bhrikuti Na.Pa. ward No. 2 Amahawa - Ward No. 8 Karnauliya Paschimtol	Kapilbastu	14	Chhaldi Khola Bridge	Tamghas-Paralchi-Indragauda Road	Gulmi
5	Tinau Khola Bridge	Badbari Palpa	Palpa	15	Kaligandaki Pakki Bridge	Harmichaur Gulmi-Mirmi Syangja	Gulmi
6	Tinau River Bridge	Madiphant Ringroad	Palpa	16	Gaighat Bridge	Righa-Arlangkot	Gulmi
7	Dahare Khola Bridge (Johang)	Rudrabeni Wami Daramkhola Road	Gulmi	17	Nisdi Khola Bridge	Doili-Amarai	Gulmi
8	Bharse Khola (Juniya)	0	Gulmi	18	Ullikhola Motorable Bridge	(Hunga-Woletaksar 6	Gulmi
9	Hunga Satyawati Paga Bridge	0	Gulmi	19	Aakhi Khola Bridge	Hulaske Tamghas	Gulmi
10	Araudi Khola Bridge	0	Gulmi	20	Jhyadi River Bridge	Badgaun Wamitaksar	Gulmi

Contract No. **BB-159-DSD-073/74-13**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tinau River Bridge	Inguriya Nida Bridge	Marthikhola Bridge	Gadarunga River Pakki Bridge	Tinau Khola Bridge	Tinau River Bridge	Dahare Khola Bridge (Johang)	Bharse Khola (Juniya)	Hunga Satyawati Paga Bridge	Araudi Khola Bridge	Arji Khola Bridge	Ghamir Khola Bridge	Rodi Khola Bridge	Chhaldi Khola Bridge	Kaligandaki Pakki Bridge	Gaighat Bridge	Nisdi Khola Bridge	Ullikhola Motorable Bridge	Aakhi Khola Bridge	Jhyadi River Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	2	2	2	3	3	2	2	2	2	2	2	2	2	4	2	2	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	60	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	0	0	0	48	48	32	32	32	32	32	32	32	32	64	32	32	32	32	32	576			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tinau River Bridge	Shankar Nagar Jogikuti Rajiganj Motipur	Rupandehi	11	Arji Khola Bridge	0	Gulmi
2	Inguriya Nida Bridge	Sainamaina 9 Bikhatti-Dewapari	Rupandehi	12	Ghamir Khola Bridge	0	Gulmi
3	Marthikhola Bridge	Manaharapur Materiya Thanti Gajehada Road	Kapilbastu	13	Rodi Khola Bridge	0	Gulmi
4	Gadarunga River Pakki Bridge	Bhrikuti Na.Pa. ward No. 2 Amahawa - Ward No. 8 Karnauliya Paschimtol	Kapilbastu	14	Chhaldi Khola Bridge	Tamghas-Paralchi-Indragauda Road	Gulmi
5	Tinau Khola Bridge	Badbari Palpa	Palpa	15	Kaligandaki Pakki Bridge	Harmichaur Gulmi-Mirmi Syangja	Gulmi
6	Tinau River Bridge	Madiphant Ringroad	Palpa	16	Gaighat Bridge	Righa-Arlangkot	Gulmi
7	Dahare Khola Bridge (Johang)	Rudrabeni Wami Daramkhola Road	Gulmi	17	Nisdi Khola Bridge	Doili-Amarai	Gulmi
8	Bharse Khola (Juniya)	0	Gulmi	18	Ullikhola Motorable Bridge	(Hunga-Woletaksar 6	Gulmi
9	Hunga Satyawati Paga Bridge	0	Gulmi	19	Aakhi Khola Bridge	Hulaske Tamghas	Gulmi
10	Araudi Khola Bridge	0	Gulmi	20	Jhyadi River Bridge	Badgaun Wamitaksar	Gulmi

Contract No. **BB-159-DSD-073/74-13**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tinau River Bridge	Inguriya Nida Bridge	Marthikhola Bridge	Gadarunga River Pakki Bridge	Tinau Khola Bridge	Tinau River Bridge	Dahare Khola Bridge (Johang)	Bharse Khola (Juniya)	Hunga Satyawati Paga Bridge	Araudi Khola Bridge	Arji Khola Bridge	Ghamir Khola Bridge	Rodi Khola Bridge	Chhaldi Khola Bridge	Kaligandaki Pakki Bridge	Gaighat Bridge	Nisdi Khola Bridge	Ullikhola Motorable Bridge	Aakhi Khola Bridge	Jhyadi River Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Dhobikhola (Panahako Shir)	Banjhkateri VDC	Gulmi	11	Ramadi Khola Dude Chaupari Phedi Pal	Triyasi Ratni Dude Chaupari Eladi Talathok Methabhurung Biruwa Rural Road	Syangja
2	Rayangdi Khola	Hwangdi-9 & Arkhabang 8	Gulmi	12	Andhi Khola Bridge	Sorek VDC Ward No. 8 - ChangChangdi VDC Ward No. 3	Syangja
3	Nisti Khola	Hwangdi-8 & 9	Gulmi	13	Heure Khola Bridge, Deurali 9 Arjun Ch	0	Syangja
4	Sare Khola	Hwangdi-8	Gulmi	14	Kaligandaki River Bridge	Andhighat-Bardale, Syangja, Palpa	Syangja
5	Badhakhola Bridge	Putalibazar Na.Pa. 4	Syangja	15	Kaligandaki – Sundhara Rokuwa (Tanal	0	Tanahun
6	Pauwakhola Motorable Bridge	Badkhola Dulegauda Road Section, Pauwaigaude VDC 1 - Thuladihi VDC 1	Syangja	16	Kulin Khola Pakki Bridge	0	Tanahun
7	Andhi Khola Bridge	Dahathum-9 & Swarek-7	Syangja	17	Suraudi Khola Motorable Bridge	Su.Ga.Na.Pa. 16 & Firfire 7 Bich	Tanahun
8	Daraukhola Kalika Campus Motorable Bri	Putali 10 & Bhirkhot Khilung 6	Syangja	18	Seti River Pakki Bridge	Koidimghat Kanhu - Bya. Na. Pa.	Tanahun
9	Sundar Bazar Motorable Bridge	Bhirkot Na.Pa. 2 & Swarek 7	Syangja	19	Badahare Khola Bridge	Abuwa Turture Road	Gorkha
10	Arjun Chaupari (Sahare Khola Bridge)	Arghauri-Panchapul Wayele (Syangja-Parbat) Themiya Road	Syangja	20	Badahare Khola Bridge	Paluntar Na.pa. - Bimalnagar Chyagli Paluntar Dudhpokhari Road	Gorkha

Contract No. **BB-159-DSD-073/74-14**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Dhobikhola (Panahako Shir)	Rayangdi Khola	Nisti Khola	Sare Khola	Badhakhola Bridge	Pauwakhola Motorable Bridge	Andhi Khola Bridge	Daraukhola Kalika Campus Motorable Bridge	Sundar Bazar Motorable Bridge	Arjun Chaupari (Sahare Khola Bridge)	Ramadi Khola Dude Chaupari Phedi Pakki Motorable	Andhi Khola Bridge	Heure Khola Bridge, Deurali 9 Arjun Chaupari 5	Kaligandaki River Bridge	Kaligandaki – Sundhara Rokuwa (Tanahun–Nawalparasi)	Kulin Khola Pakki Bridge	Suraudi Khola Motorable Bridge	Seti River Pakki Bridge	Badahare Khola Bridge	Badahare Khola Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	3	2	2	2	3	2	2	2	3	3	2	4	4	2	4	3	2	2	51			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	48	32	32	0	48	32	32	32	48	48	32	64	64	32	64	48	32	32	784			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Dhobikhola (Panahako Shir)	Banjhkateri VDC	Gulmi	11	Ramadi Khola Dude Chaupari Phedi Pal	Triyasi Ratni Dude Chaupari Eladi Talathok Methabhurung Biruwa Rural Road	Syangja
2	Rayangdi Khola	Hwangdi-9 & Arkhabang 8	Gulmi	12	Andhi Khola Bridge	Sorek VDC Ward No. 8 - ChangChangdi VDC Ward No. 3	Syangja
3	Nisti Khola	Hwangdi-8 & 9	Gulmi	13	Heure Khola Bridge, Deurali 9 Arjun Ch	0	Syangja
4	Sare Khola	Hwangdi-8	Gulmi	14	Kaligandaki River Bridge	Andhighat-Bardale, Syangja, Palpa	Syangja
5	Badhakhola Bridge	Putalibazar Na.Pa. 4	Syangja	15	Kaligandaki – Sundhara Rokuwa (Tanal	0	Tanahun
6	Pauwakhola Motorable Bridge	Badkhola Dulegauda Road Section, Pauwaigaude VDC 1 - Thuladihi VDC 1	Syangja	16	Kulin Khola Pakki Bridge	0	Tanahun
7	Andhi Khola Bridge	Dahathum-9 & Swarek-7	Syangja	17	Suraudi Khola Motorable Bridge	Su.Ga.Na.Pa. 16 & Firfire 7 Bich	Tanahun
8	Daraukhola Kalika Campus Motorable Bri	Putali 10 & Bhirkhot Khilung 6	Syangja	18	Seti River Pakki Bridge	Koidimghat Kanhu - Bya. Na. Pa.	Tanahun
9	Sundar Bazar Motorable Bridge	Bhirkot Na.Pa. 2 & Swarek 7	Syangja	19	Badahare Khola Bridge	Abuwa Turture Road	Gorkha
10	Arjun Chaupari (Sahare Khola Bridge)	Arghauri-Panchapul Wayele (Syangja-Parbat) Themiya Road	Syangja	20	Badahare Khola Bridge	Paluntar Na.pa. - Bimalnagar Chyagli Paluntar Dudhpokhari Road	Gorkha

Contract No. **BB-159-DSD-073/74-14**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Dhobikhola (Panahako Shir)	Rayangdi Khola	Nisti Khola	Sare Khola	Badhakhola Bridge	Pauwakhola Motorable Bridge	Andhi Khola Bridge	Daraukhola Kalika Campus Motorable Bridge	Sundar Bazar Motorable Bridge	Arjun Chaupari (Sahare Khola Bridge)	Ramadi Khola Dude Chaupari Phedi Pakki Motorable	Andhi Khola Bridge	Heure Khola Bridge, Deurali 9 Arjun Chaupari 5	Kaligandaki River Bridge	Kaligandaki – Sundhara Rokuwa (Tanahun–Nawalparasi)	Kulin Khola Pakki Bridge	Suraudi Khola Motorable Bridge	Seti River Pakki Bridge	Badahare Khola Bridge	Badahare Khola Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																								Total		
																								VAT @ 13% of total		
																								Grand Total		

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Dhodeni Daraudi River Motorable Bridge	Simjung VDC - Saurpani VDC	Gorkha	11	Madi River Bridge	Koileni Hanspokhari Road Hansapur VDC	Kaski
2	Ajuwa Khola Bridge	(Chhepare Bhir) Benighat-Arughat-Larke-Bhanjyang Road	Gorkha	12	Ridi Khola Bridge	Mijuredanda-Lamjung Karapu	Kaski
3	Belauti Bisauna Lete Bridge, Marsyangdi	0	Lamjung	13	Midam Khola Bridge	Karapu-Daduwa-Maling VDC	Kaski
4	Hadikhola Ramchowk Besi Bridge, Dordi	0	Lamjung	14	Motorable Bridge	Pokhara 29 Hemja Suikhet - Dhumsu Kaskibot Dhital	Kaski
5	Motorable Bridge	Chiti 7 Ramchowk VDC - Shreebhyanjang VDC Ward No 2	Lamjung	15	Sahela Bridge	Mahendra Cave- Kalo Mudha Road	Kaski
6	Kamere Dhara Pakki Bridge, (Paudi Khola	0	Lamjung	16	Majhkuna Bridge	Mahendra Cave- Kalo Mudha Road	Kaski
7	Sera Bridge	Thulo Besi-Tarachok Dadi	Lamjung	17	Dhunge Sangu Bridge	Pokhara 17 - Pokhara 15	Kaski
8	Bhachowk Khola Bridge	Bajhakhet	Lamjung	18	Pataneri Bridge	Patneri Bharat Pokhari Road	Kaski
9	Dordi Khola (Lama Bagar) Motorable Bri	Chiti VDC Ward No 7 & Shreebhanjyang VDC Ward No 2	Lamjung	19	Seti River Bridge	Dungre Saghu Pokhara	Kaski
10	Majhakuna Armal Bridge	0	Kaski	20	Bijayapur Khola	Seudiko Mukh Kahukhola Dudhpokhari Road	Kaski

Contract No. **BB-159-DSD-073/74-15**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Dhodeni Daraudi River Motorable Bridge	Ajuwa Khola Bridge	Belauti Bisauna Lete Bridge, Marsyangdi River	Hadikhola Ramchowk Besi Bridge, Dordi Khola	Motorable Bridge	Kamere Dhara Pakki Bridge, (Paudi Khola)	Sera Bridge	Bhachowk Khola Bridge	Dordi Khola (Lama Bagar) Motorable Bridge	Majhakuna Armal Bridge	Madi River Bridge	Ridi Khola Bridge	Midam Khola Bridge	Motorable Bridge	Sahela Bridge	Majhkuna Bridge	Dhunge Sangu Bridge	Pataneri Bridge	Seti River Bridge	Bijayapur Khola				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20				
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20				
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	3	3	4	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	32	32	32	32	0	32	32	32	48	32	32	32	32	48	48	64	32	688			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Dhodeni Daraudi River Motorable Bridge	Simjung VDC - Saurpani VDC	Gorkha	11	Madi River Bridge	Koileni Hanspokhari Road Hansapur VDC	Kaski
2	Ajuwa Khola Bridge	(Chhepare Bhir) Benighat-Arughat-Larke-Bhanjyang Road	Gorkha	12	Ridi Khola Bridge	Mijuredanda-Lamjung Karapu	Kaski
3	Belauti Bisauna Lete Bridge, Marsyangdi	0	Lamjung	13	Midam Khola Bridge	Karapu-Daduwa-Maling VDC	Kaski
4	Hadikhola Ramchowk Besi Bridge, Dordi	0	Lamjung	14	Motorable Bridge	Pokhara 29 Hemja Suikhet - Dhumsu Kaskibot Dhital	Kaski
5	Motorable Bridge	Chiti 7 Ramchowk VDC - Shreebhyanjang VDC Ward No 2	Lamjung	15	Sahela Bridge	Mahendra Cave- Kalo Mudha Road	Kaski
6	Kamere Dhara Pakki Bridge, (Paudi Khola	0	Lamjung	16	Majhkuna Bridge	Mahendra Cave- Kalo Mudha Road	Kaski
7	Sera Bridge	Thulo Besi-Tarachok Dadi	Lamjung	17	Dhunge Sangu Bridge	Pokhara 17 - Pokhara 15	Kaski
8	Bhachowk Khola Bridge	Bajhakhet	Lamjung	18	Pataneri Bridge	Patneri Bharat Pokhari Road	Kaski
9	Dordi Khola (Lama Bagar) Motorable Bri	Chiti VDC Ward No 7 & Shreebhanjyang VDC Ward No 2	Lamjung	19	Seti River Bridge	Dungre Saghu Pokhara	Kaski
10	Majhakuna Armal Bridge	0	Kaski	20	Bijayapur Khola	Seudiko Mukh Kahukhola Dudhpokhari Road	Kaski

Contract No. **BB-159-DSD-073/74-15**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Dhodeni Daraudi River Motorable Bridge	Ajuwa Khola Bridge	Belauti Bisauna Lete Bridge, Marsyangdi River	Hadikhola Ramchowk Besi Bridge, Dordi Khola	Motorable Bridge	Kamere Dhara Pakki Bridge, (Paudi Khola)	Sera Bridge	Bhachowk Khola Bridge	Dordi Khola (Lama Bagar) Motorable Bridge	Majhakuna Armal Bridge	Madi River Bridge	Ridi Khola Bridge	Midam Khola Bridge	Motorable Bridge	Sahela Bridge	Majhkuna Bridge	Dhunge Sangu Bridge	Pataneri Bridge	Seti River Bridge	Bijayapur Khola				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20				
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20				
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Suraudi Khola Bridge	Chisapani- Singarebas-Taksar Road	Kaski	11	Modi Khola pul	Serabesi naya pul sadakko	Baglung
2	Dumsadighat Bridge	Fhusre Khola Pokhara Nirmalpokhari hundai Syangja jodne	Kaski	12	Khola Kharka 6 armal pakki pul	Myagdi	Baglung
3	Badkhola Bridge	Single dekhi putalibajar na.pa.4 & 5 Syangja	Kaski	13	silikhet chanaute kathekhola sigana mot	0	Baglung
4	Dhunge Sangu (seti Nadi) Bridge	Kaski chetra No. 2 & 3 jodne Baikalpik batoko Bridge	Kaski	14	daram Khola ghusmeli ghat motorable p	0	Baglung
5	Baniyapath - yamdi seti nadi Bridge	Pokhara 16 lamachaur	Kaski	15	Chhundrafedighat luwankholama pul	0	Baglung
6	fusre Khola (damsadi ghatma Pakki pul	damsadighat nirmalpokhari hudai taksar Syangja District Jodine sadak	Kaski	16	Baulaha Khola	Rajkut VDC	Baglung
7	Madi Nadiko Koilenima bhanne thauma P	Kaskiko hansapur VDC 1 tatha lamjung karaputar na.pa. 7 sabik isaneshwor VDC 7 bichma	Kaski	17	Dobal Khola	Bobang VDC	Baglung
8	fewabaadh talako jholunge Bridge Bhatke	Pokhara upa–mahanagarapailaka 17 antargat dyam site dhorpatan jane sadak	Kaski	18	Yeklekhetghat pul	Bihu ra resh jodne	Baglung
9	Jhuk Deurali parbat ra salyan VDC bichm	Jhuksera Besi Naya pul Pokhara sadak	Kaski	19	Lamabagarghat pul	Bihu ra Bhimpokhara Jodne	Baglung
10	chandi khola dobhan pul	Sishuwa - Syankhuri -bhurtelgaun sari Manakamna sadak	Kaski	20	Rumtaghat Pul	Paiyu ra Rangkhani sadak	Baglung

Contract No. **BB-159-DSD-073/74-16**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Suraudi Khola Bridge	Dumsadighat Bridge	Badkhola Bridge	Dhunge Sangu (seti Nadi) Bridge	Baniyapath - yamdi seti nadi Bridge	fusre Khola (damsadi ghatma Pakki pul	Madi Nadiko Koilenima bhanne thauma Pakki motorable pul	fewabaadh talako jholunge Bridge Bhatkeko Sthanma	Jhuk Deurali parbat ra salyan VDC bichma modi Khola Motorable	chandi khola dobhan pul	Modi Khola pul	Khola Kharka 6 armal pakki pul	silikhet chanaute kathekhola sigana motorable pul	daram Khola ghusmeli ghat motorable pul	Chhundrafedighat luwankholama pul	Baulaha Khola	Dobal Khola	Yeklekhetghat pul	Lamabagarghat pul	Rumtaghat Pul				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	2	2	2	2	3	3	3	2	2	3	3	2	2	2	3	3	3	3	2	50			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	48	0	32	32	32	48	48	48	32	32	48	48	32	32	32	48	48	48	48	32	768			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Suraudi Khola Bridge	Chisapani- Singarebas-Taksar Road	Kaski	11	Modi Khola pul	Serabesi naya pul sadakko	Baglung
2	Dumsadighat Bridge	Fhusre Khola Pokhara Nirmalpokhari hundai Syangja jodne	Kaski	12	Khola Kharka 6 armal pakki pul	Myagdi	Baglung
3	Badkhola Bridge	Single dekhi putalibajar na.pa.4 & 5 Syangja	Kaski	13	silikhet chanaute kathekhola sigana mot	0	Baglung
4	Dhunge Sangu (seti Nadi) Bridge	Kaski chetra No. 2 & 3 jodne Baikalpik batoko Bridge	Kaski	14	daram Khola ghusmeli ghat motorable p	0	Baglung
5	Baniyapath - yamdi seti nadi Bridge	Pokhara 16 lamachaur	Kaski	15	Chhundrafedighat luwankholama pul	0	Baglung
6	fusre Khola (damsadi ghatma Pakki pul	damsadighat nirmalpokhari hudai taksar Syangja District Jodine sadak	Kaski	16	Baulaha Khola	Rajkut VDC	Baglung
7	Madi Nadiko Koilenima bhanne thauma P	Kaskiko hansapur VDC 1 tatha lamjung karaputar na.pa. 7 sabik isaneshwor VDC 7 bichma	Kaski	17	Dobal Khola	Bobang VDC	Baglung
8	fewabaadh talako jholunge Bridge Bhatke	Pokhara upa–mahanagarapailaka 17 antargat dyam site dhorpatan jane sadak	Kaski	18	Yeklekhetghat pul	Bihu ra resh jodne	Baglung
9	Jhuk Deurali parbat ra salyan VDC bichm	Jhuksera Besi Naya pul Pokhara sadak	Kaski	19	Lamabagarghat pul	Bihu ra Bhimpokhara Jodne	Baglung
10	chandi khola dobhan pul	Sishuwa - Syankhuri -bhurtelgaun sari Manakamna sadak	Kaski	20	Rumtaghat Pul	Paiyu ra Rangkhani sadak	Baglung

Contract No. **BB-159-DSD-073/74-16**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Suraudi Khola Bridge	Dumsadighat Bridge	Badkhola Bridge	Dhunge Sangu (seti Nadi) Bridge	Baniyapath - yamdi seti nadi Bridge	fusre Khola (damsadi ghatma Pakki pul	Madi Nadiko Koilenima bhanne thauma Pakki motorable pul	fewabaadh talako jholunge Bridge Bhatkeko Sthanma	Jhuk Deurali parbat ra salyan VDC bichma modi Khola Motorable	chandi khola dobhan pul	Modi Khola pul	Khola Kharka 6 armal pakki pul	silikhet chanaute kathekhola sigana motorable pul	daram Khola ghusmeli ghat motorable pul	Chhundrafedighat luwankholama pul	Baulaha Khola	Dobal Khola	Yeklekhetghat pul	Lamabagarghat pul	Rumtaghat Pul				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Professional Liability Insurance (@ 0.5% of total)			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kitenighatma Pul	Righa-sisakhani sadak	Baglung	11	Kimchaur Pakki pul	Kholakharka	Myagdi
2	Bhaliwangghat tamamkhola motorable pul	Khunga ra bangedobhan jone	Baglung	12	Pipalbot Khola pakki pul	0	Myagdi
3	Chachalghat motorable pul	burtibang- 1 dekhi 7,8,9 jodne	Baglung	13	Kharpani khola pakki pul	Arman Pankhu	Myagdi
4	Burtibang Ghosakhani motorable pul	Burtibang	Baglung	14	Khopti Khola Pakki pul	Chhiswang Arman	Myagdi
5	Bongaa Dobhan Bajar Bongkhani Khola B	0	Baglung	15	Seraarman Pipalbot Kholama Motorable	0	Myagdi
6	BhujiKhola Motorable Bridge	Dogadi Maranghat Adhikarichaur	Baglung	16	Myagdi Nadi Pul	be.na.pa 13 barjga 2 pakhare	Myagdi
7	Chundraphedighat Motorable Bridge Luka	0	Baglung	17	Myagdi Khola Motorable Pakki Bridge	Arman 6 Masanghat	Myagdi
8	Bonga Dobhan Bazar Bongkhani Khola B	0	Baglung	18	Karnali pul	Mugu Jillako ra bajura jillako simana Jhungala	Mugu
9	Myagdi Kholama motorable Pakki pul	Arman VDC 6 masanghat	Myagdi	19	Pul	Shreenagar VDC ra Ruga VDC ko Bhattechaur	Mugu
10	Kholakharka 6 arman pakki pul Nirman	0	Myagdi	20	Hima Nadi Pul	Birat VDC 7 & 3	Jumla

Contract No. **BB-159-DSD-073/74-17**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Kitenighatma Pul	Bhaliwangghat tamamkhola motorable pul	Chachalghat motorable pul	Burtibang Ghosakhani motorable pul	Bongaa Dobhan Bajar Bongkhani Khola Bhotekhola pul	BhujiKhola Motorable Bridge	Chundraphedighat Motorable Bridge Lukarban Khola	Bonga Dobhan Bazar Bongkhani Khola Bhotekhola	Myagdi Kholama motorable Pakki pul	Kholakharka 6 arman pakki pul Nirman	Kimchaur Pakki pul	Pipalbot Khola pakki pul	Kharpani khola pakki pul	Khopti Khola Pakki pul	Seraarman Pipalbot Kholama Motorable pul	Myagdi Nadi Pul	Myagdi Khola Motorable Pakki Bridge	Karnali pul	Pul	Hima Nadi Pul				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	3	2	2	43			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	60			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	32	32	32	32	0	48	32	32	32	32	32	32	32	32	48	32	32	640			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Kitenighatma Pul	Righa-sisakhani sadak	Baglung	11	Kimchaur Pakki pul	Kholakharka	Myagdi
2	Bhaliwangghat tamamkhola motorable pul	Khunga ra bangedobhan jone	Baglung	12	Pipalbot Khola pakki pul	0	Myagdi
3	Chachalghat motorable pul	burtibang- 1 dekhi 7,8,9 jodne	Baglung	13	Kharpani khola pakki pul	Arman Pankhu	Myagdi
4	Burtibang Ghosakhani motorable pul	Burtibang	Baglung	14	Khopti Khola Pakki pul	Chhiswang Arman	Myagdi
5	Bongaa Dobhan Bajar Bongkhani Khola B	0	Baglung	15	Seraarman Pipalbot Kholama Motorable	0	Myagdi
6	BhujiKhola Motorable Bridge	Dogadi Maranghat Adhikarichaur	Baglung	16	Myagdi Nadi Pul	be.na.pa 13 barjga 2 pakhare	Myagdi
7	Chundraphedighat Motorable Bridge Luka	0	Baglung	17	Myagdi Khola Motorable Pakki Bridge	Arman 6 Masanghat	Myagdi
8	Bonga Dobhan Bazar Bongkhani Khola B	0	Baglung	18	Karnali pul	Mugu Jillako ra bajura jillako simana Jhungala	Mugu
9	Myagdi Kholama motorable Pakki pul	Arman VDC 6 masanghat	Myagdi	19	Pul	Shreenagar VDC ra Ruga VDC ko Bhattechaur	Mugu
10	Kholakharka 6 arman pakki pul Nirman	0	Myagdi	20	Hima Nadi Pul	Birat VDC 7 & 3	Jumla

Contract No. **BB-159-DSD-073/74-17**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Kitenighatma Pul	Bhaliwangghat tamamkhola motorable pul	Chachalghat motorable pul	Burtibang Ghosakhani motorable pul	Bongaa Dobhan Bajar Bongkhani Khola Bhotekhola pul	BhujiKhola Motorable Bridge	Chundraphedighat Motorable Bridge Lukarban Khola	Bonga Dobhan Bazar Bongkhani Khola Bhotekhola	Myagdi Kholama motorable Pakki pul	Kholakharka 6 arman pakki pul Nirman	Kimchaur Pakki pul	Pipalbot Khola pakki pul	Kharpani khola pakki pul	Khopti Khola Pakki pul	Seraarman Pipalbot Kholama Motorable pul	Myagdi Nadi Pul	Myagdi Khola Motorable Pakki Bridge	Karnali pul	Pul	Hima Nadi Pul				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Adgar Khola	Hilsa-Simikot Road section	Humla	11	Sahakari Kholagau Jaharikhola Bridge	0	Rukum
2	Kalekhola Karnali Nadima pul	0	Kalikot	12	Satkhola Hudungachhara (Sankhkhola) I	0	Rukum
3	Motorable Pul Survey ra Nirman	Nanikot VDC ra Ramgakot VDC ko Jajarkotma	Kalikot	13	Uttarganga Motorable Bridge	Taksera	Rukum
4	Jijagad Road Bridge	Radi–Aathbiskot, Aathbis dadagau	Rukum	14	Melai Nauli sadak pul	0	Rukum
5	Sibhrutu Road Bridge	Rugha	Rukum	15	Chhipkhola Motorable pul	0	Rukum
6	Sani Bheri River Kuna Khet Bridge	Pipal VDC - Syalapakha VDC	Rukum	16	Puma Khola Motarable pul	0	Rukum
7	Ekauli-Bharungkhola Motorable Bridge	0	Rukum	17	Chiura Khola Motorable pul	0	Rukum
8	Dopaikhola Motorable Bridge	0	Rukum	18	Chaukhawang Galam pati Motorable pu	0	Rukum
9	Melainauli-Chaharikhola Motorable Bridg	0	Rukum	19	Nathigad Khola Motorable pul	0	Rukum
10	Maichukhola Causeway	0	Rukum	20	Rukumgaad Khola Baluwa Motorable p	0	Rukum

Contract No. **BB-159-DSD-073/74-18**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Adgar Khola	Kalekhola Karnali Nadima pul	Motorable Pul Survey ra Nirman	Jijagad Road Bridge	Sibhrutu Road Bridge	Sani Bheri River Kuna Khet Bridge	Ekauli-Bharungkhola Motorable Bridge	Dopaikhola Motorable Bridge	Melainauli-Chaharikhola Motorable Bridge	Maichukhola Causeway	Sahakari Kholagau Jaharikhola Bridge	Satkhola Hudungachhara (Sankhkhola) Bridge	Uttarganga Motorable Bridge	Melai Nauli sadak pul	Chhipkhola Motorable pul	Puma Khola Motarable pul	Chiura Khola Motorable pul	Chaukhawang Galam pati Motorable pul	Nathigad Khola Motorable pul	Rukumgaad Khola Baluwa Motorable pul				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		3	2	2	3	2	4	2	2	3	2	2	3	3	2	3	3	2	2	3	3	51			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	48	32	32	48	32	64	32	0	48	32	32	48	48	32	48	48	32	32	48	48	784			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Adgar Khola	Hilsa-Simikot Road section	Humla	11	Sahakari Kholagau Jaharikhola Bridge	0	Rukum
2	Kalekhola Karnali Nadima pul	0	Kalikot	12	Satkhola Hudungachhara (Sankhkhola) I	0	Rukum
3	Motorable Pul Survey ra Nirman	Nanikot VDC ra Ramgakot VDC ko Jajarkotma	Kalikot	13	Uttarganga Motorable Bridge	Taksera	Rukum
4	Jijagad Road Bridge	Radi–Aathbiskot, Aathbis dadagau	Rukum	14	Melai Nauli sadak pul	0	Rukum
5	Sibhrutu Road Bridge	Rugha	Rukum	15	Chhipkhola Motorable pul	0	Rukum
6	Sani Bheri River Kuna Khet Bridge	Pipal VDC - Syalapakha VDC	Rukum	16	Puma Khola Motarable pul	0	Rukum
7	Ekauli-Bharungkhola Motorable Bridge	0	Rukum	17	Chiura Khola Motorable pul	0	Rukum
8	Dopaikhola Motorable Bridge	0	Rukum	18	Chaukhawang Galam pati Motorable pu	0	Rukum
9	Melainauli-Chaharikhola Motorable Bridg	0	Rukum	19	Nathigad Khola Motorable pul	0	Rukum
10	Maichukhola Causeway	0	Rukum	20	Rukumgaad Khola Baluwa Motorable p	0	Rukum

Contract No. **BB-159-DSD-073/74-18**

SN	Particulars	Unit	Quantity																			Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Adgar Khola	Kalekhola Karnali Nadima pul	Motorable Pul Survey ra Nirman	Jijagad Road Bridge	Sibhrutu Road Bridge	Sani Bheri River Kuna Khet Bridge	Ekauli-Bharungkhola Motorable Bridge	Dopaikhola Motorable Bridge	Melainauli-Chaharikhola Motorable Bridge	Maichukhola Causeway	Sahakari Kholagau Jaharikhola Bridge	Satkhola Hudungachhara (Sankhkhola) Bridge	Uttarganga Motorable Bridge	Melai Nauli sadak pul	Chhipkhola Motorable pul	Puma Khola Motarable pul	Chiura Khola Motorable pul	Chaukhawang Galam pati Motorable pul	Nathigad Khola Motorable pul	Rukumgaad Khola Baluwa Motorable pul				
5	***Detailed design and preparation of reports***																								
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																								
																						Total			
																						VAT @ 13% of total			
																						Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Khabang bagar pul	0	Rukum	11	Tarkewang Madi Motor pul	0	Rolpa
2	Rukum gaad baluwa pul	0	Rukum	12	Durgakhola	Khidim	Argakhanchi
3	bakhmaa khola sadak pul	0	Rukum	13	Banganga Nadiko pawama Pakki pul	Simalpani VDC Antargat	Arghakhanchi
4	Nayagaad Motorable pul	0	Rukum	14	Damakhesiko sit Kholamapul	Gachhe Bhaluwang sadak Antargat	Arghakhanchi
5	Fosochaur–Fatramkhola Bridge	Sulichaur	Rolpa	15	Malawang (Baraula) - Arlawang (Bijuli)	0	Pyuthan
6	Lungri Kholama Motorable pul	Powang Gaambibang Motor bato	Rolpa	16	Sandhekhola Rajwara Bridge	0	Pyuthan
7	Pariwang Kholama Motorable pul	Liwang ghartigaun Jinawang motor Bato	Rolpa	17	Rapti River Bridge	Bhiliwang, Bangesal Pyuthan - Arlawang Bijuli	Pyuthan
8	Obangma Pakki pul	Ransi VDC ra Iruwang VDC lai jodne Iriwang 1	Rolpa	18	Siruwa Khola	Rajwara	Pyuthan
9	Sulichaur Lungri Khola Motor pul	Aresh Pyuthan motor bato	Rolpa	19	Jumri kholama Pakki pul	Jumri buspark sapdanda sadak	Pyuthan
10	Dhangsi Khola Motor pul	Homa Motor bato khola	Rolpa	20	Khabang Mulghatma pakki pul	bahane syauliwang sadak	Pyuthan

Contract No. **BB-159-DSD-073/74-19**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Khabang bagar pul	Rukum gaad baluwa pul	bakhmaa khola sadak pul	Nayagaad Motorable pul	Fosochaur–Fatramkhola Bridge	Lungri Kholama Motorable pul	Pariwang Kholama Motorable pul	Obangma Pakki pul	Sulichaur Lungri Khola Motor pul	Dhangsi Khola Motor pul	Tarkewang Madi Motor pul	Durgakhola	Banganga Nadiko pawama Pakki pul	Damakhesiko sit Kholamapul	Malawang (Baraula) - Arlawang (Bijuli) Ibimrak River	Sandhekhola Rajwara Bridge	Rapti River Bridge	Siruwa Khola	Jumri kholama Pakki pul	Khabang Mulghatma pakki pul				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	41			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	32	32	32	32	0	32	32	32	32	32	32	32	32	48	32	32	32	624			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Khabang bagar pul	0	Rukum	11	Tarkewang Madi Motor pul	0	Rolpa
2	Rukum gaad baluwa pul	0	Rukum	12	Durgakhola	Khidim	Argakhanchi
3	bakhmaa khola sadak pul	0	Rukum	13	Banganga Nadiko pawama Pakki pul	Simalpani VDC Antargat	Arghakhanchi
4	Nayagaad Motorable pul	0	Rukum	14	Damakhesiko sit Kholamapul	Gachhe Bhaluwang sadak Antargat	Arghakhanchi
5	Fosochaur–Fatramkhola Bridge	Sulichaur	Rolpa	15	Malawang (Baraula) - Arlawang (Bijuli)	0	Pyuthan
6	Lungri Kholama Motorable pul	Powang Gaambibang Motor bato	Rolpa	16	Sandhekhola Rajwara Bridge	0	Pyuthan
7	Pariwang Kholama Motorable pul	Liwang ghartigaun Jinawang motor Bato	Rolpa	17	Rapti River Bridge	Bhiliwang, Bangesal Pyuthan - Arlawang Bijuli	Pyuthan
8	Obangma Pakki pul	Ransi VDC ra Iruwang VDC lai jodne Iriwang 1	Rolpa	18	Siruwa Khola	Rajwara	Pyuthan
9	Sulichaur Lungri Khola Motor pul	Aresh Pyuthan motor bato	Rolpa	19	Jumri kholama Pakki pul	Jumri buspark sapdanda sadak	Pyuthan
10	Dhangsi Khola Motor pul	Homa Motor bato khola	Rolpa	20	Khabang Mulghatma pakki pul	bahane syauliwang sadak	Pyuthan

Contract No. **BB-159-DSD-073/74-19**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Khabang bagar pul	Rukum gaad baluwa pul	bakhmaa khola sadak pul	Nayagaad Motorable pul	Fosochaur–Fatramkhola Bridge	Lungri Kholama Motorable pul	Pariwang Kholama Motorable pul	Obangma Pakki pul	Sulichaur Lungri Khola Motor pul	Dhangsi Khola Motor pul	Tarkewang Madi Motor pul	Durgakhola	Banganga Nadiko pawama Pakki pul	Damakhesiko sit Kholamapul	Malawang (Baraula) - Arlawang (Bijuli) Bhimrak River	Sandhekhola Rajwara Bridge	Rapti River Bridge	Siruwa Khola	Jumri kholama Pakki pul	Khabang Mulghatma pakki pul				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Gabai Kholama pakki pul	Bahane Ligha sadak	Pyuthan	11	Babai Nadima Motorable pul	sodiyarko gurau ra dhanau VDC ko dharpani Mandir jane sadak	Dang
2	Pakki pul	Pyuthan rajbaat 9 lamibagar	Pyuthan	12	Rapti Nadi damara ghat Pakki pul	Damara ghat Dekhi Jangrahawa School hudai NAusahara Samma 5 K.M.grewal	Dang
3	Lamachaur Mandabi Nadima pul	0	Pyuthan	13	Hapur Kholama pul	Duruwa 4 Kothari ra daruwa 1 jodne damodar	Dang
4	Rapti Nadima pul	Jhilliwang (bangesal Pyuthan) ra lamatal (Jhukena Arghakhanchi	Pyuthan	14	Gohar Kholama pul	duruwa 8 karanga ra Tulsipur nf. pa. 18 gargarwa jodne	Dang
5	Rapti River Pakki Bridge	Sataviraya - Kaliparuwa	Dang	15	Sewar Kholama pul	Ghorahi 11 Jhidaura ra Ghorahi 9 bahundanda	Dang
6	Janguwa Kholama Pul	Tripur na. pa. ward no. 11 Dundra dekhi saudiyaar VDC ko Sukrabar Jodne	Dang	16	Babai Nadima Pul	Tripur 11 Katuki ra dakelpur Jodne Bahundanda jodne sadak	Dang
7	Patu kholama Motorable pul	tu. na.pa. 4 Gairapatu ra tu. na.pa. 10 Damagaunko bichma	Dang	17	Rapti Nadima pul	Ghadi kHola VDC 5 basmadi VDC 2	Dang
8	Patu kholama Motorable pul	tu. na.pa. 1 Ranagaun ra tu. na.pa. 10 harebasko bichma	Dang	18	Kapurkot - Luhama - Aringalfed Motor	0	Salyan
9	Pedikhola Motorable pul	Bagmare 8 pedikhola ra bagkhorko bichma	Dang	19	Langkini Khola Charange Motor Bridge	Tribeni VDC Jiula	Salyan
10	Katuwa kholama Motorable pul	Masinasaigha hudai swargadwari jane sadakko sotiyaghatma	Dang	20	Langkini Khola Shankhamul Motor Brid	0	Salyan

Contract No. **BB-159-DSD-073/74-20**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Gabai Kholama pakki pul	Pakki pul	Lamachaur Mandabi Nadima pul	Rapti Nadima pul	Rapti River Pakki Bridge	Janguwa Kholama Pul	Patu kholama Motorable pul	Patu kholama Motorable pul	Pedikhola Motorable pul	Katuwa kholama Motorable pul	Babai Nadima Motorable pul	Rapti Nadi damara ghat Pakki pul	Hapur Kholama pul	Gohar Kholama pul	Sewar Kholama pul	Babai Nadima Pul	Rapti Nadima pul	Kapurkot - Luhama - Aringalfed Motor Bridge	Langkini Khola Charange Motor Bridge	Langkini Khola Shankhamul Motor Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	3	2	2	2	2	2	2	3	2	3	2	2	3	3	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	40	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	200			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	48	0	0	0	0	0	32	48	32	48	32	32	48	48	32	32	32	560			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Gabai Kholama pakki pul	Bahane Ligha sadak	Pyuthan	11	Babai Nadima Motorable pul	sodiyarko gurau ra dhanau VDC ko dharpani Mandir jane sadak	Dang
2	Pakki pul	Pyuthan rajbaat 9 lamibagar	Pyuthan	12	Rapti Nadi damara ghat Pakki pul	Damara ghat Dekhi Jangrahawa School hudai NAusahara Samma 5 K.M.grewal	Dang
3	Lamachaur Mandabi Nadima pul	0	Pyuthan	13	Hapur Kholama pul	Duruwa 4 Kothari ra daruwa 1 jodne damodar	Dang
4	Rapti Nadima pul	Jhilliwang (bangesal Pyuthan) ra lamatal (Jhukena Arghakhanchi	Pyuthan	14	Gohar Kholama pul	duruwa 8 karanga ra Tulsipur nf. pa. 18 gargarwa jodne	Dang
5	Rapti River Pakki Bridge	Sataviraya - Kaliparuwa	Dang	15	Sewar Kholama pul	Ghorahi 11 Jhidaura ra Ghorahi 9 bahundanda	Dang
6	Janguwa Kholama Pul	Tripur na. pa. ward no. 11 Dundra dekhi saudiyaar VDC ko Sukrabar Jodne	Dang	16	Babai Nadima Pul	Tripur 11 Katuki ra dakelpur Jodne Bahundanda jodne sadak	Dang
7	Patu kholama Motorable pul	tu. na.pa. 4 Gairapatu ra tu. na.pa. 10 Damagaunko bichma	Dang	17	Rapti Nadima pul	Ghadi kHola VDC 5 basmadi VDC 2	Dang
8	Patu kholama Motorable pul	tu. na.pa. 1 Ranagaun ra tu. na.pa. 10 harebasko bichma	Dang	18	Kapurkot - Luhama - Aringalfed Motor	0	Salyan
9	Pedikhola Motorable pul	Bagmare 8 pedikhola ra bagkhorko bichma	Dang	19	Langkini Khola Charange Motor Bridge	Tribeni VDC Jiula	Salyan
10	Katuwa kholama Motorable pul	Masinasaigha hudai swargadwari jane sadakko sotiyaghatma	Dang	20	Langkini Khola Shankhamul Motor Brid	0	Salyan

Contract No. **BB-159-DSD-073/74-20**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Gabai Kholama pakki pul	Pakki pul	Lamachaur Mandabi Nadima pul	Rapti Nadima pul	Rapti River Pakki Bridge	Janguwa Kholama Pul	Patu kholama Motorable pul	Patu kholama Motorable pul	Pedikhola Motorable pul	Katuwa kholama Motorable pul	Babai Nadima Motorable pul	Rapti Nadi damara ghat Pakki pul	Hapur Kholama pul	Gohar Kholama pul	Sewar Kholama pul	Babai Nadima Pul	Rapti Nadima pul	Kapurkot - Luhama - Aringalfed Motor Bridge	Langkini Khola Charange Motor Bridge	Langkini Khola Shankhamul Motor Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Guhar Kholama Pakki pul	Ghorahi Tulsipur sadak Antargat	Salyan	11	Jethinalama pakki pul	Naubasta 6 & 7 sutaiya bairahawa jodne	Banke
2	Babai Nadi Motor BAto	Dhuiyabari kaprechaur	Salyan	12	Kirannalama pul nirman	B.P chowkbat karmona Banjaregaun sahabtpu Dhaulagiri gaunnko gasulmi tole h	Banke
3	Sarada Nadi Pul	Mokhla Rapti Rajmargabata	Salyan	13	Maila kholama pul	Sabik nayagaun VDC ward no. 5 ra hal Rajapur na. pa. ward no. 4	Bardiya
4	Sarada Nadi Pul	Shreenagar Rapti Rajmargabata Mudanda Sthanikhal sadak	Salyan	14	Budi kulo pul	RAjapur na. pa, 13 a 14 jodne lahure tole	Bardiya
5	Jamu kHola motor pul	Salyan Banke sadak	Salyan	15	Murkuta pul	Rajapur na. pa. 13	Banke
6	Sarada Nadi Pul	KAlakhet (Rapti Rajmargako Link sadak	Salyan	16	Jahade motorable pul Bheri Nadi	Bheri Ganga 3 ra subhaghat 9	Surkhet
7	Sarada Nadi Pul	Mokhla Rapti Rajmargabata mokhla pipanneta damachaur sadak	Salyan	17	simalchawok chanabari khahare kholam	Birendranagar 1	Surkhet
8	Rapti River Motarabato Bridge	Machebas Dhampur	Banke	18	Bangesimalkholama Motorable pul	Birendranagar 2	Surkhet
9	culvert	Naubasta VDC ward no. 2 makaibari tole	Banke	19	Sirpakholama motorable pul	kafalkot VDC	Surkhet
10	Jethinalama pakki pul	Bankatawa 4 bankhet ra rampurko	Banke	20	Nahagaun Kholama motorable pul	Kafalkot 1 ra 3	Surkhet

Contract No. **BB-159-DSD-073/74-21**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Guhar Kholama Pakki pul	Babai Nadi Motor BAto	Sarada Nadi Pul	Sarada Nadi Pul	Jamu kHola motor pul	Sarada Nadi Pul	Sarada Nadi Pul	Rapti River Motarabato Bridge	culvert	Jethinalama pakki pul	Jethinalama pakki pul	Kirannalama pul nirman	Maila kholama pul	Budi kulo pul	Murkuta pul	Jahade motorable pul Bheri Nadi	simalchawok chanabari khahare kholama motorable pul	Bangesimalkholama Motorable pul	Sirpakholama motorable pul	Nahagaun Kholama motorable pul				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	3	3	3	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	60	40	40	40	40	40	40	40	0	0	0	0	0	340			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	48	48	48	32	48	32	0	0	0	0	0	0	0	0	32	32	32	32	32	448			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Guhar Kholama Pakki pul	Ghorahi Tulsipur sadak Antargat	Salyan	11	Jethinalama pakki pul	Naubasta 6 & 7 sutaiya bairahawa jodne	Banke
2	Babai Nadi Motor BAto	Dhuiyabari kaprechaur	Salyan	12	Kirannalama pul nirman	B.P chowkbat karmona Banjaregaun sahabtpu Dhaulagiri gaunnko gasulmi tole h	Banke
3	Sarada Nadi Pul	Mokhla Rapti Rajmargabata	Salyan	13	Maila kholama pul	Sabik nayagaun VDC ward no. 5 ra hal Rajapur na. pa. ward no. 4	Bardiya
4	Sarada Nadi Pul	Shreenagar Rapti Rajmargabata Mudanda Sthanikhal sadak	Salyan	14	Budi kulo pul	RAjapur na. pa, 13 a 14 jodne lahure tole	Bardiya
5	Jamu kHola motor pul	Salyan Banke sadak	Salyan	15	Murkuta pul	Rajapur na. pa. 13	Banke
6	Sarada Nadi Pul	KAlakhet (Rapti Rajmargako Link sadak	Salyan	16	Jahade motorable pul Bheri Nadi	Bheri Ganga 3 ra subhaghat 9	Surkhet
7	Sarada Nadi Pul	Mokhla Rapti Rajmargabata mokhla pipanneta damachaur sadak	Salyan	17	simalchawok chanabari khahare kholam	Birendranagar 1	Surkhet
8	Rapti River Motarabato Bridge	Machebas Dhampur	Banke	18	Bangesimalkholama Motorable pul	Birendranagar 2	Surkhet
9	culvert	Naubasta VDC ward no. 2 makaibari tole	Banke	19	Sirpakholama motorable pul	kafalkot VDC	Surkhet
10	Jethinalama pakki pul	Bankatawa 4 bankhet ra rampurko	Banke	20	Nahagaun Kholama motorable pul	Kafalkot 1 ra 3	Surkhet

Contract No. **BB-159-DSD-073/74-21**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Guhar Kholama Pakki pul	Babai Nadi Motor BAto	Sarada Nadi Pul	Sarada Nadi Pul	Jamu kHola motor pul	Sarada Nadi Pul	Sarada Nadi Pul	Rapti River Motarabato Bridge	culvert	Jethinalama pakki pul	Jethinalama pakki pul	Kirannalama pul nirman	Maila kholama pul	Budi kulo pul	Murkuta pul	Jahade motorable pul Bheri Nadi	simalchawok chanabari khahare kholama motorable pul	Bangesimalkholama Motorable pul	Sirpakholama motorable pul	Nahagaun Kholama motorable pul				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Babiyachaur Khola sadak pul	0	Surkhet	11	Patharaiya Nadima pakki pul	Pratappur VDC ko sonpur gaun ra Bainiya VDC simrana gaunko bichma	Kailali
2	Chinggaad Khola sadak pul	Matela 2 ra 9	Surkhet	12	Kadha Nadima pakki pul	Joshipur VDC ward No . 3 Banjariya gaunko agadi	Kailali
3	Khorje khola pul	birendra chok ra IRichok jodne	Surkhet	13	Ghaila Nalama pakki pul	Joshipur VDC ward No . 4 bhabahi ra ward no. 5 hasanapur ko bichma	Kailali
4	Jhupa Khika	Biredran Na. pa. 13 Mangaghari	Surkhet	14	Baadikuloma Pakki pul	Bauraniya VDC ko ward no. 1 Daharberiya	Kailali
5	Itram Khola pul	Kalungchowk bata Airport jane sadak	Surkhet	15	Jharnaiya Nalama pakki pul	Chuha Mariyaghat Link roadma Khaira gaunko Agadi	Kailali
6	Gharowan Khola pul	Chinchu Kalche sadak	Surkhet	16	kandra nadima pakki pul	Bhajani Trisakti na.pa. kudigaun ra pahalwal gaunko bich	Kailali
7	Surugad Bridge Dhime 1 Batule Bridge	0	Jajarkot	17	Doda Nadima Pakki pul	Ghodaghodi Na. pa. Narayanpur ra saraiya gaunko bich	Kailali
8	Chhinchu Khola Pul	Lekh Parajuli sadak	Jajarkot	18	Kataini Nadima pakki pul	Ratnapur VDC ko basanta gaunko Dakshinma parne	Kailali
9	Ghaila Nalama pakki pul	BAuniya VDC ward no. 3 ko mainpokhari gaun ra Joshipurko Badariyako bichma	Kailali	19	Bhadeli nalama Pakki pul	Pahanmanpur ward no. 5 tilakhanipur	Kailali
10	Kateni Nalama Pakki pul	pabaira ward No. 7 balaraiya gaudi hasuliya ward no. 8 hasuliyako damara gaunko bichma	Kailali	20	Patharaiya Nadima pakki pul	Bainiya Pratapur tikapur Road, Near Lohagadh Temple	Kailali

Contract No. **BB-159-DSD-073/74-22**

SN	Particulars	Unit	Quantity																			Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Babiyachaur Khola sadak pul	Chinggaad Khola sadak pul	Khorje khola pul	Jhupa Khika	Itram Khola pul	Gharowan Khola pul	Surugad Bridge Dhime 1 Batule Bridge	Chhinchu Khola Pul	Ghaila Nalama pakki pul	Kateni Nalama Pakki pul	Patharaiya Nadima pakki pul	Kadha Nadima pakki pul	Ghaila Nalama pakki pul	Baadikuloma Pakki pul	Jharnaiya Nalama pakki pul	kandra nadima pakki pul	Doda Nadima Pakki pul	Kataini Nadima pakki pul	Bhadeli nalama Pakki pul	Patharaiya Nadima pakki pul				
	Desk study and field works																								
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																								
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																							
3	***Soil investigation***																								
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																								
	Number of boreholes		2	2	2	3	2	2	2	3	3	3	2	2	2	2	2	2	3	2	2	2	45			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	0	0	0	0	0	60	60	40	40	40	40	40	40	60	40	40	40	540			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	48	32	32	32	48	0	0	0	0	0	0	0	0	0	0	0	0	288			
	Subtotal of drilling works, field tests and laboratory tests																								
4	***Transportation***																								
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																								

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Babiyachaur Khola sadak pul	0	Surkhet	11	Patharaiya Nadima pakki pul	Pratappur VDC ko sonpur gaun ra Bainiya VDC simrana gaunko bichma	Kailali
2	Chinggaad Khola sadak pul	Matela 2 ra 9	Surkhet	12	Kadha Nadima pakki pul	Joshipur VDC ward No . 3 Banjariya gaunko agadi	Kailali
3	Khorje khola pul	birendra chok ra IRichok jodne	Surkhet	13	Ghaila Nalama pakki pul	Joshipur VDC ward No . 4 bhabahi ra ward no. 5 hasanapur ko bichma	Kailali
4	Jhupa Khika	Biredran Na. pa. 13 Mangaghari	Surkhet	14	Baadikuloma Pakki pul	Bauraniya VDC ko ward no. 1 Daharberiya	Kailali
5	Itram Khola pul	Kalungchowk bata Airport jane sadak	Surkhet	15	Jharnaiya Nalama pakki pul	Chuha Mariyaghat Link roadma Khaira gaunko Agadi	Kailali
6	Gharowan Khola pul	Chinchu Kalche sadak	Surkhet	16	kandra nadima pakki pul	Bhajani Trisakti na.pa. kudigaun ra pahalwal gaunko bich	Kailali
7	Surugad Bridge Dhime 1 Batule Bridge	0	Jajarkot	17	Doda Nadima Pakki pul	Ghodaghodi Na. pa. Narayanpur ra saraiya gaunko bich	Kailali
8	Chhinchu Khola Pul	Lekh Parajuli sadak	Jajarkot	18	Kataini Nadima pakki pul	Ratnapur VDC ko basanta gaunko Dakshinma parne	Kailali
9	Ghaila Nalama pakki pul	BAuniya VDC ward no. 3 ko mainpokhari gaun ra Joshipurko Badariyako bichma	Kailali	19	Bhadeli nalama Pakki pul	Pahanmanpur ward no. 5 tilakhanipur	Kailali
10	Kateni Nalama Pakki pul	pabaira ward No. 7 balaraiya gaudi hasuliya ward no. 8 hasuliyako damara gaunko bichma	Kailali	20	Patharaiya Nadima pakki pul	Bainiya Pratapur tikapur Road, Near Lohagadh Temple	Kailali

Contract No. **BB-159-DSD-073/74-22**

SN	Particulars	Unit	Quantity																			Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Babiyachaur Khola sadak pul	Chinggaad Khola sadak pul	Khorje khola pul	Jhupa Khika	Itram Khola pul	Gharowan Khola pul	Surugad Bridge Dhime 1 Batule Bridge	Chhinchu Khola Pul	Ghaila Nalama pakki pul	Kateni Nalama Pakki pul	Patharaiya Nadima pakki pul	Kadha Nadima pakki pul	Ghaila Nalama pakki pul	Baadikuloma Pakki pul	Jharnaiya Nalama pakki pul	kandra nadima pakki pul	Doda Nadima Pakki pul	Kataini Nadima pakki pul	Bhadeli nalama Pakki pul	Patharaiya Nadima pakki pul				
5	***Detailed design and preparation of reports***																								
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tudela Khola pul	Godawari - Malakheti sadak	Kailali	11	Lungraligad Bridge	Jaruki, Seti Lokmarga	Achham
2	Patalkhet Satphari VDC	0	Doti	12	Khadigaada khola jugaada pakki pul	0	Bajura
3	Khaigad Pakki Bridge Laxminara 3	0	Doti	13	Bhaunera Khola kramagat Pakki pul	0	Bajura
4	Galagard Pakki Bridge Kedaraakhada 3	0	Doti	14	Anai Khola Road Bridge	Badimalika na.pa.	Bajura
5	Sainali Bridge	Bachhain 2	Doti	15	Dan saghu Road Bridge	Kolti	Bajura
6	Chaur Khola	Barchaina VDC ward No. 2 ra Ghaghal VDC ward No. 5 ma parne	Doti	16	Sera Aatichaur Road Bridge	Aatichaur	Bajura
7	Gogani gaad pul	Saraswotinagar 5	Doti	17	Bhaunera Khola Pakki Bridge Nirman (K	0	Bajura
8	Tekule Khola pul	Saraswotinagar 2	Doti	18	Dhikgad & Jamadi Khola	Shreekot-Sillegada-Katoujpani-Redreshwor-Dethala-Khalanga-Darchula Road s	Bajura
9	Pakki pul	Sanfebagar Airport Bajar ra Hatbajar Jodne	Achham	19	Gadkhet Baulikhola Pakki Bridge	0	Bajura
10	Lodeghat (Seti Nadi)	Sanfebagar-Martadi-Kolti-Sukhadhik	Achham	20	Bauli Khola Road Bridge	Badimalika Na.Pa.	Bajura

Contract No. **BB-159-DSD-073/74-23**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tudela Khola pul	Patalkhet Satphari VDC	Khaigad Pakki Bridge Laxminara 3	Galagard Pakki Bridge Kedaraakhada 3	Sainali Bridge	Chaur Khola	Gogani gaad pul	Tekule Khola pul	Pakki pul	Lodeghat (Seti Nadi)	Lungraligad Bridge	Khadigaada khola jugaada pakki pul	Bhaunera Khola kramagat Pakki pul	Anai Khola Road Bridge	Dan saghu Road Bridge	Sera Aatichaur Road Bridge	Bhaunera Khola Pakki Bridge Nirman (Kramagat)	Dhikgad & Jamadi Khola	Gadkhet Baulikhola Pakki Bridge	Bauli Khola Road Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	40			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	0	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	608			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Tudela Khola pul	Godawari - Malakheti sadak	Kailali	11	Lungraligad Bridge	Jaruki, Seti Lokmarga	Achham
2	Patalkhet Satphari VDC	0	Doti	12	Khadigaada khola jugaada pakki pul	0	Bajura
3	Khaigad Pakki Bridge Laxminara 3	0	Doti	13	Bhaunera Khola kramagat Pakki pul	0	Bajura
4	Galagard Pakki Bridge Kedaraakhada 3	0	Doti	14	Anai Khola Road Bridge	Badimalika na.pa.	Bajura
5	Sainali Bridge	Bachhain 2	Doti	15	Dan saghu Road Bridge	Kolti	Bajura
6	Chaur Khola	Barchaina VDC ward No. 2 ra Ghaghal VDC ward No. 5 ma parne	Doti	16	Sera Aatichaur Road Bridge	Aatichaur	Bajura
7	Gogani gaad pul	Saraswotinagar 5	Doti	17	Bhaunera Khola Pakki Bridge Nirman (K	0	Bajura
8	Tekule Khola pul	Saraswotinagar 2	Doti	18	Dhikgad & Jamadi Khola	Shreekot-Sillegada-Katoujpani-Redreshwor-Dethala-Khalanga-Darchula Road s	Bajura
9	Pakki pul	Sanfebagar Airport Bajar ra Hatbajar Jodne	Achham	19	Gadkhet Baulikhola Pakki Bridge	0	Bajura
10	Lodeghat (Seti Nadi)	Sanfebagar-Martadi-Kolti-Sukhadhik	Achham	20	Bauli Khola Road Bridge	Badimalika Na.Pa.	Bajura

Contract No. **BB-159-DSD-073/74-23**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Tudela Khola pul	Patalkhet Satphari VDC	Khaigad Pakki Bridge Laxminara 3	Galagard Pakki Bridge Kedaraakhada 3	Sainali Bridge	Chaur Khola	Gogani gaad pul	Tekule Khola pul	Pakki pul	Lodeghat (Seti Nadi)	Lungraligad Bridge	Khadigaada khola jugaada pakki pul	Bhaunera Khola kramagat Pakki pul	Anai Khola Road Bridge	Dan saghu Road Bridge	Sera Aatichaur Road Bridge	Bhaunera Khola Pakki Bridge Nirman (Kramagat)	Dhikgad & Jamadi Khola	Gadkhet Baulikhola Pakki Bridge	Bauli Khola Road Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Thalari Gad Dudiktamandu Pakki Bridge	Kotbhairab	Bajhang	11	Bankugad Bridge	0	Darchula
2	Kalipuchhai jasadigad Pakki Bridge	Lamatola	Bajhang	12	Dadeldhura Bhageshwor Bridge	0	Baitadi
3	Seti River Bridge	Jhota Lamital Odar Road	Bajhang	13	Surnaya Khola Bridge	Khal-Dehimadau-Sharmali Road, Radil	Baitadi
4	Jhapa Sanigad Pakki Bridge	Khitaldi	Bajhang	14	Surnaya Radil Motorable Bridge	0	Baitadi
5	Ayaradi Bridge	Pouwagadhi-Jadar	Bajhang	15	Sarnaya Bridge	Khalsadamali Road	Baitadi
6	Kali Pachai Jadari Bridge	Lama tole	Bajhang	16	Shele Khola Road Bridge	Jogbuda Daiji Road	Dadeldhura
7	Bidigad Bridge	Gadraya	Bajhang	17	Baghkholi Khola Road Bridge	Budar Gogaprudak Road	Dadeldhura
8	Chameliya River Bridge	Shera-Ratauda	Darchula	18	Pantura Khola Road Bridge	Siddasthan Sahargauda Jogbuda Sadani Road	Dadeldhura
9	Ukugad Bridge	0	Darchula	19	Nauli Khola Road Bridge	Sani Ghati Beldangi (Kurmalya Road)	Dadeldhura
10	Laligad Bridg	0	Darchula	20	Kafalgaira Khola Road Bridge	Gaibaghe Sadani Road	Dadeldhura

Contract No. **BB-159-DSD-073/74-24**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Thalari Gad Dudiktamandu Pakki Bridge	Kalipuchhai jasadigad Pakki Bridge	Seti River Bridge	Jhapa Sanigad Pakki Bridge	Ayaradi Bridge	Kali Pachai Jadari Bridge	Bidigad Bridge	Chameliya River Bridge	Ukugad Bridge	Laligad Bridg	Bankugad Bridge	Dadeldhura Bhageshwor Bridge	Surnaya Khola Bridge	Surnaya Radil Motorable Bridge	Sarnaya Bridge	Shele Khola Road Bridge	Baghkholi Khola Road Bridge	Pantura Khola Road Bridge	Nauli Khola Road Bridge	Kafalgaira Khola Road Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	2	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	42			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	0	32	48	32	32	32	48	32	32	32	32	32	32	32	32	32	32	32	32	32	640			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Thalari Gad Dudiktamandu Pakki Bridge	Kotbhairab	Bajhang	11	Bankugad Bridge	0	Darchula
2	Kalipuchhai jasadigad Pakki Bridge	Lamatola	Bajhang	12	Dadeldhura Bhageshwor Bridge	0	Baitadi
3	Seti River Bridge	Jhota Lamital Odar Road	Bajhang	13	Surnaya Khola Bridge	Khal-Dehimadau-Sharmali Road, Radil	Baitadi
4	Jhapa Sanigad Pakki Bridge	Khitaldi	Bajhang	14	Surnaya Radil Motorable Bridge	0	Baitadi
5	Ayaradi Bridge	Pouwagadhi-Jadar	Bajhang	15	Sarnaya Bridge	Khalsadamali Road	Baitadi
6	Kali Pachai Jadari Bridge	Lama tole	Bajhang	16	Shele Khola Road Bridge	Jogbuda Daiji Road	Dadeldhura
7	Bidigad Bridge	Gadraya	Bajhang	17	Baghkholi Khola Road Bridge	Budar Gogaprudak Road	Dadeldhura
8	Chameliya River Bridge	Shera-Ratauda	Darchula	18	Pantura Khola Road Bridge	Siddasthan Sahargauda Jogbuda Sadani Road	Dadeldhura
9	Ukugad Bridge	0	Darchula	19	Nauli Khola Road Bridge	Sani Ghati Beldangi (Kurmalya Road)	Dadeldhura
10	Laligad Bridg	0	Darchula	20	Kafalgaira Khola Road Bridge	Gaibaghe Sadani Road	Dadeldhura

Contract No. **BB-159-DSD-073/74-24**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Thalari Gad Dudiktamandu Pakki Bridge	Kalipuchhai jasadigad Pakki Bridge	Seti River Bridge	Jhapa Sanigad Pakki Bridge	Ayaradi Bridge	Kali Pachai Jadari Bridge	Bidigad Bridge	Chameliya River Bridge	Ukugad Bridge	Laligad Bridg	Bankugad Bridge	Dadeldhura Bhageshwor Bridge	Surnaya Khola Bridge	Surnaya Radil Motorable Bridge	Sarnaya Bridge	Shele Khola Road Bridge	Baghkholi Khola Road Bridge	Pantura Khola Road Bridge	Nauli Khola Road Bridge	Kafalgaira Khola Road Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bhaltadi Road Bridge	Asigram 8	Dadeldhura	11	Lamoya nala Bridge	(Bikash Basti) waise bichawa 2	Kanchanpur
2	Kafalgaira Khola Bridge Pa.Na.Pa. 8	0	Dadeldhura	12	Bhogala River Pakki Bridge	Simaldadi & Khairani jodne Road (Belauri na.pa.2)	Kanchanpur
3	Bhujela Khola Bridge	Bhimdatta na.pa. ward no. 11 mata kutiya	Kanchanpur	13	Kharra nalama Pakki Bridge	Bhanka 3 ward no. 4 bichama parne	Kanchanpur
4	Kamikate Khola Bridge	Bhimdatta na.pa. ward no. 9 Siddanath Mandir kholako dobhan najik	Kanchanpur	14	Sunartol Bagun Pakki Bridge	Bhamka 3 / ward no. 4 bichma parne	Kanchanpur
5	Maleriya nala Bridge	Dhodhara Chandani na.pa. ward no. 1 Purnagiri pa.bi. west kathepul najik	Kanchanpur	15	Sundartol Bagun Bagamka River Bridge	0	Kanchanpur
6	Panthariya nala Bridge	Dhodhara Chandani na.pa. ward no. 6	Kanchanpur	16	Nepal Indira sima Jhulaghat Pakki Bridg	0	Kanchanpur
7	Maleriya nalama Pakki Bridge	Dhodhara Chandani na.pa. ward no. 3 Pipal chautara jane Road	Kanchanpur	17	Sunbara River Pakki Bridge	Jhalari Pipaladi na.pa. 4 & 2 (Simalpatta Laxmipur jodne)	Kanchanpur
8	Maleriya nala Bridge	Dhodhara Chandani na.pa. ward no. 1 Mahakali ma.bi. west Gaurishankar Samudayik ban kathepul b	Kanchanpur	18	Chaudhara River Pakki Bridge	Bedkot na.pa.5 & 6 (Polkhari jodne)	Kanchanpur
9	Jogbudha Nadima Pakki Bridge	hodhara Chandani na.pa. ward no. 7 Panchbhoj	Kanchanpur	19	Kankatti River Rakki Bridge	Bhi na.pa.2 & 19 (naya gaun jodne)	Kanchanpur
10	Baluwa nala Bridge	(Chaugaja Gaudi jodne) Raikawar bichawa 2	Kanchanpur	20	Kanighatma parne Pakki Bridge	Beldadi VDC. ward no. 2 & 3 ko simanama	Kanchanpur

Contract No. **BB-159-DSD-073/74-25**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Bhaltadi Road Bridge	Kafalgaira Khola Bridge Pa.Na.Pa. 8	Bhujela Khola Bridge	Kamikate Khola Bridge	Maleriya nala Bridge	Panthariya nala Bridge	Maleriya nalama Pakki Bridge	Maleriya nala Bridge	Jogbudha Nadima Pakki Bridge	Baluwa nala Bridge	Lamoya nala Bridge	Bhogala River Pakki Bridge	Kharra nalama Pakki Bridge	Sunartol Bagun Pakki Bridge	Sundartol Bagun Bagamka River Bridge	Nepal Indira sima Jhulaghat Pakki Bridge	Sunbara River Pakki Bridge	Chaudhara River Pakki Bridge	Kankatti River Rakki Bridge	Kanighatma parne Pakki Bridge				
	Desk study and field works																									
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of desk study & field works																									
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																								
3	***Soil investigation***																									
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																									
	Number of boreholes		2	3	3	2	3	3	3	2	3	3	2	2	2	3	2	3	2	2	3	2	50			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	40	60	60	60	0	60	60	40	40	40	60	40	60	40	40	60	40	800			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	48	48	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	160			
	Subtotal of drilling works, field tests and laboratory tests																									
4	***Transportation***																									
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of transportation																									

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bhaltadi Road Bridge	Asigram 8	Dadeldhura	11	Lamoya nala Bridge	(Bikash Basti) waise bichawa 2	Kanchanpur
2	Kafalgaira Khola Bridge Pa.Na.Pa. 8	0	Dadeldhura	12	Bhogala River Pakki Bridge	Simaldadi & Khairani jodne Road (Belauri na.pa.2)	Kanchanpur
3	Bhujela Khola Bridge	Bhimdatta na.pa. ward no. 11 mata kutiya	Kanchanpur	13	Kharra nalama Pakki Bridge	Bhanka 3 ward no. 4 bichama parne	Kanchanpur
4	Kamikate Khola Bridge	Bhimdatta na.pa. ward no. 9 Siddanath Mandir kholako dobhan najik	Kanchanpur	14	Sunartol Bagun Pakki Bridge	Bhamka 3 / ward no. 4 bichma parne	Kanchanpur
5	Maleriya nala Bridge	Dhodhara Chandani na.pa. ward no. 1 Purnagiri pa.bi. west kathepul najik	Kanchanpur	15	Sundartol Bagun Bagamka River Bridge	0	Kanchanpur
6	Panthariya nala Bridge	Dhodhara Chandani na.pa. ward no. 6	Kanchanpur	16	Nepal Indira sima Jhulaghat Pakki Bridg	0	Kanchanpur
7	Maleriya nalama Pakki Bridge	Dhodhara Chandani na.pa. ward no. 3 Pipal chautara jane Road	Kanchanpur	17	Sunbara River Pakki Bridge	Jhalari Pipaladi na.pa. 4 & 2 (Simalpatta Laxmipur jodne)	Kanchanpur
8	Maleriya nala Bridge	Dhodhara Chandani na.pa. ward no. 1 Mahakali ma.bi. west Gaurishankar Samudayik ban kathepul b	Kanchanpur	18	Chaudhara River Pakki Bridge	Bedkot na.pa.5 & 6 (Polkhari jodne)	Kanchanpur
9	Jogbudha Nadima Pakki Bridge	hodhara Chandani na.pa. ward no. 7 Panchbhoj	Kanchanpur	19	Kankatti River Rakki Bridge	Bhi na.pa.2 & 19 (naya gaun jodne)	Kanchanpur
10	Baluwa nala Bridge	(Chaugaja Gaudi jodne) Raikawar bichawa 2	Kanchanpur	20	Kanighatma parne Pakki Bridge	Beldadi VDC. ward no. 2 & 3 ko simanama	Kanchanpur

Contract No. **BB-159-DSD-073/74-25**

SN	Particulars	Unit	Quantity																				Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Bhaltadi Road Bridge	Kafalgaira Khola Bridge Pa.Na.Pa. 8	Bhujela Khola Bridge	Kamikate Khola Bridge	Maleriya nala Bridge	Panthariya nala Bridge	Maleriya nalama Pakki Bridge	Maleriya nala Bridge	Jogbudha Nadima Pakki Bridge	Baluwa nala Bridge	Lamoya nala Bridge	Bhogala River Pakki Bridge	Kharra nalama Pakki Bridge	Sunartol Bagun Pakki Bridge	Sundartol Bagun Bagamka River Bridge	Nepal Indira sima Jhulaghat Pakki Bridge	Sunbara River Pakki Bridge	Chaudhara River Pakki Bridge	Kankatti River Rakki Bridge	Kanighatma parne Pakki Bridge				
5	***Detailed design and preparation of reports***																									
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20			
	Subtotal of detailed design and preparation of reports																									
																							Total			
																							VAT @ 13% of total			
																							Grand Total			

In words:

Signature:

Name and title:

Date:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads

BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bhogla nalama Pakki Bridge	Beldadi VDC ward no. 2 & 6 jodne	Kanchanpur	11	Kani Khola Pakki Bridge	Kalakatta bata Sisautaparako bich (Belauri na.pa.)	Kanchanpur
2	Khairighat River Bridge	Rampur Bilaspur 1 Babarla dekhi Beldandi VDC bich	Kanchanpur	12	Odal Khola Pakki Bridge	Bhetghat Sibir & Sundarifaant jodne Road (Krishnapur na.pa. 1)	Kanchanpur
3	Pathariya River Bridge	Rampur Bilaspur 8 & 9 bich	Kanchanpur	13	Banara River pakki Bridge	Sundarifaant & Beldadi jodne Road (Krishnapur na.pa. 1)	Kanchanpur
4	Musepani River Pakki Bridge	Bedkot na.pa.6 & 7 jodne	Kanchanpur	14	Ghalghale Khola Rajghat	Pratappur Sahanpur Raikawar	Kanchanpur
5	Doda River Pakki Bridge	Nanda Gaun & Balmi jodne Road	Kanchanpur	15	Ujara Khola Bridge	Pratappur Paltuwa 6 Satabaiya Mawarasaa najik	Kanchanpur
6	Gandanala Pakki Bridge	Birkhabahadur Sunarko ghar agadi Jhimila jodne (Beldadi na.pa.8 & 7)	Kanchanpur	16	Kataini nala Pakki Bridge	Bhurakot & Katan Gaun jodne (Belauri na.pa.3)	Kanchanpur
7	Bhogala nalama Pakki Bridge	Sangaghat Dhakaniya jodne (Beldadi na.pa.)	Kanchanpur	0	0	0	0
8	Bhetghat Sibir Pakki Rajmarga jodne Brid	Chisapani Khola (Krishnapur na.pa.)	Kanchanpur	0	0	0	0
9	Rani Khola Bridge	Dinapur & Ghushra jodne (Belauri na.pa.2)	Kanchanpur	0	0	0	0
10	Sutiya River Pakki Bridge	Kanpur dekhi Shivnagar jane Road	Kanchanpur	0	0	0	0

Contract No. **BB-159-DSD-073/74-26**

SN	Particulars	Unit	Quantity																Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Bhogla nalama Pakki Bridge	Khairighat River Bridge	Pathariya River Bridge	Musepani River Pakki Bridge	Doda River Pakki Bridge	Gandanala Pakki Bridge	Bhogala nalama Pakki Bridge	Bhetghat Sibir Pakki Rajmarga jodne Bridge	Rani Khola Bridge	Sutiya River Pakki Bridge	Kani Khola Pakki Bridge	Odal Khola Pakki Bridge	Banara River pakki Bridge	Ghalghale Khola Rajghat	Ujara Khola Bridge	Kataini nala Pakki Bridge				
	Desk study and field works																					
1	Desk Study including collection of data, maps and other information; planning of the works	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
2	Field works including general reconnaisance, feasibility study, detailed engineering survey of the site, geological & geomorphologic study, field survey, topographic survey, site selection and environmental study, detailed hydrometric and hydrological study and preliminary soil investigation in test pits	Job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
	Subtotal of desk study & field works																					
	Submission of Feasibility Study Report	**If the any of the bridge(s) is found to be unfeasible then the work(s) of that bridge(s) will be terminated at this stage and payment shall be made according to SCC Clause no. 6.4 (a) NOTE.**																				
3	***Soil investigation***																					
3.1	**Drilling of boreholes and carryout specified Field and Laboratory tests as per the TOR**																					
	Number of boreholes		2	2	2	2	4	2	2	2	2	2	2	2	2	3	2	2	35			
a	Drilling 0 to 20 m in clayey,sandy soils,& gravel mixed soils (Type_1)	RM	0	0	0	40	80	40	40	40	40	40	40	40	40	60	40	40	580			
b	Drilling 0 to 16 m in gravel,pebbles,cobbles & boulders, soft and hard rock (Type_2)	RM	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	96			
	Subtotal of drilling works, field tests and laboratory tests																					
4	***Transportation***																					
4.1	Transportation of personnel	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
4.2	Transportation of equipment	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
	Subtotal of transportation																					

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
BRIDGE BRANCH

BILL OF QUANTITIES

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of the bridge(s):

S. N.	Name of Bridge	Name of Road	District	S. N.	Name of Bridge	Name of Road	District
1	Bhogla nalama Pakki Bridge	Beldadi VDC ward no. 2 & 6 jodne	Kanchanpur	11	Kani Khola Pakki Bridge	Kalakatta bata Sisautaparako bich (Belauri na.pa.)	Kanchanpur
2	Khairighat River Bridge	Rampur Bilaspur 1 Babarla dekhi Beldandi VDC bich	Kanchanpur	12	Odal Khola Pakki Bridge	Bhetghat Sibir & Sundarifaant jodne Road (Krishnapur na.pa. 1)	Kanchanpur
3	Pathariya River Bridge	Rampur Bilaspur 8 & 9 bich	Kanchanpur	13	Banara River pakki Bridge	Sundarifaant & Beldadi jodne Road (Krishnapur na.pa. 1)	Kanchanpur
4	Musepani River Pakki Bridge	Bedkot na.pa.6 & 7 jodne	Kanchanpur	14	Ghalghale Khola Rajghat	Pratappur Sahanpur Raikawar	Kanchanpur
5	Doda River Pakki Bridge	Nanda Gaun & Balmi jodne Road	Kanchanpur	15	Ujara Khola Bridge	Pratappur Paltuwa 6 Satabaiya Mawarasaa najik	Kanchanpur
6	Gandanala Pakki Bridge	Birkhabahadur Sunarko ghar agadi Jhimila jodne (Beldadi na.pa.8 & 7)	Kanchanpur	16	Kataini nala Pakki Bridge	Bhurakot & Katan Gaun jodne (Belauri na.pa.3)	Kanchanpur
7	Bhogala nalama Pakki Bridge	Sangaghat Dhakaniya jodne (Beldadi na.pa.)	Kanchanpur	0	0	0	0
8	Bhetghat Sibir Pakki Rajmarga jodne Brid	Chisapani Khola (Krishnapur na.pa.)	Kanchanpur	0	0	0	0
9	Rani Khola Bridge	Dinapur & Ghushra jodne (Belauri na.pa.2)	Kanchanpur	0	0	0	0
10	Sutiya River Pakki Bridge	Kanpur dekhi Shivnagar jane Road	Kanchanpur	0	0	0	0

Contract No. **BB-159-DSD-073/74-26**

SN	Particulars	Unit	Quantity																Total quantity	Rate (excl. VAT)	Rate in words	Amount (excl. VAT)
			Bhogla nalama Pakki Bridge	Khairighat River Bridge	Pathariya River Bridge	Musepani River Pakki Bridge	Doda River Pakki Bridge	Gandanala Pakki Bridge	Bhogala nalama Pakki Bridge	Bhetghat Sibir Pakki Rajmarga jodne Bridge	Rani Khola Bridge	Sutiya River Pakki Bridge	Kani Khola Pakki Bridge	Odal Khola Pakki Bridge	Banara River pakki Bridge	Ghalghale Khola Rajghat	Ujara Khola Bridge	Kataini nala Pakki Bridge				
5	***Detailed design and preparation of reports***																					
5.1	Detailed design works, preparation of cost estimates including bridge type selection, design of bridge, approach roads and river training works and preparation of drawing works as per TOR	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
5.2	Submission and presentation of of the works as per TOR including 2 copies in electronic formats (CD-ROM) and **(separate sets for each bridge)**	job	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16			
	Subtotal of detailed design and preparation of reports																					
																			Total			
																			VAT @ 13% of total			
																			Grand Total			
In words:																						

Signature:

Name and title:

Date:

Seal:

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Bridge Branch

Request for Proposal

for
Consulting Services
for

Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of Bridges

Part – I
TECHNICAL PROPOSAL

Notice No.: _____

Contract No. :

Consultant's Name and address:

March..... 2017

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Section 1. Letter of Invitation

2073/9/12

Dear,

1. Government of Nepal (GoN) has allocated fund toward the cost of cost of Consulting Services for the Design of Bridges and intends to apply a portion of this fund to eligible payments under this Contract.

2. The Department of Roads, Bridge Branch now invites proposals to provide the following consulting services: **Feasibility Study, Detailed Engineering Survey, Soil Investigation and Detailed Design of Bridges** in corresponding. More details on the services are provided in the attached Terms of Reference.

3. The Request for Proposal (RFP) has been addressed to the following shortlisted consultants:

[*insert: List of Shortlisted Consultants*]

4. A consultant will be selected under Quality- and Cost-Based Selection (QCBS), and procedures described in this RFP.

5. The RFP includes the following documents:

   Section 1 - Letter of Invitation

   Section 2 - Information to Consultants

   Section 3 - Technical Proposal - Standard Forms

   Section 4 - Financial Proposal - Standard Forms

   Section 5 - Terms of Reference

   Section 6 - Standard Forms of Contract.

6. Please inform us, upon receipt:

   (a) that you received the letter of invitation; and

   (b) whether you will submit a proposal alone or in association.

Yours sincerely,

Saroj Kumar Pradhan
DDG, Bridge Branch,
Department of Roads
Chakupat, Lalitpur

Section 2. Information to Consultants

1. Introduction

1.1 The Client named in the Data Sheet will select a consultant among those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.

1.2 The consultants are invited to submit a Technical Proposal and a Financial Proposal, for services as specified in the Data Sheet The proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected consultant.

1.3 The consultants must familiarize themselves with local conditions and take them into account in preparing their proposals. To obtain first hand information on the assignment and on the local conditions, consultants are encouraged to visit the Client before submitting a proposal and are advised to attend a pre-proposal conference if one is specified in the Data Sheet.

1.4 The Client will provide the inputs specified in the Data Sheet, assist the consultant in obtaining licences and permits needed to carry out the services, and make available relevant project data and reports.

1.5 Please note that (i) the costs of preparing the proposal and of negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost of the assignment; and (ii) the Client is not bound to accept any of the proposals submitted.

1.6 GoN (or Donor Agency) policy requires that consultants provide professional, objective, and impartial advice and at all times hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflicts with other assignments or their own corporate interests. Consultants shall not be hired for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of not being able to carry out the assignment in the best interest of the Client.

1.7.1 Without limitation on the generality of this rule, consultants shall not be hired under the circumstances set forth below:

a. A consultant, which has been engaged by the Client to provide goods or works for a project, and any of their affiliates, shall be disqualified from providing consulting services for the same project. Conversely, consultants hired to provide consulting services for the preparation or implementation of a project, and any of their affiliates, shall be disqualified from subsequently providing goods or works or services related to the initial assignment (other than a continuation of the consultant's earlier consulting services) for the same project.

b. Consultants or any of their affiliates shall not be hired for any assignment which, by its nature, may be in conflict with another assignment of the consultants.

1.7.2 Any previous or ongoing participation in relation to the assignment by the consultant, its professional staff or affiliates or associates under a contract with the GoN may result in rejection of the proposal. Consultants should clarify their situation in that respect with the Client before preparing the proposal.

1.8 It is the GoN's policy to require its implementing agencies, as well as

consultants under GoN (or Donor Agency) financed contracts, to observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the GoN:

a. defines, for the purposes of this provision, the terms set forth below as follows:

b. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution; and

c. "fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Client, and includes collusive practices among consultants (prior to or after submission of proposals) designed to establish prices at artificial, non-competitive levels and to deprive the borrower of the benefits of free and open competition.

d. will reject a proposal for award if it determines that the consultant recommended for award has engaged in corrupt or fraudulent activities in competing for the contract in question;

e. will cancel the consultant's contract if it at any time determines that corrupt or fraudulent practices were engaged in by representatives of the consultant or the Client during the selection process or the execution of that contract;

f. will debar a consultant for a stated period of time, to be awarded a contract if it at any time determines that the consultant has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract; and

g. will have the right to require that, a provision be included requiring consultants to permit the Client inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by the Client.

1.9 Consultants shall not be under a debarment for corrupt and fraudulent practices issued by GoN accordance with the above sub para. 1.8 (d).

1.10 Consultants shall be aware of the provisions on fraud and corruption stated in the Standard Contract under the clauses indicated in the Data Sheet.

2. Clarification and Amendment of RFP Documents

2.1 Consultants may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the proposal submission date. Any request for clarification must be sent in writing by paper mail, cable, telex, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by cable, telex, facsimile, or electronic mail to such requests and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit

proposals.

2.2 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by an invited consultant, amend the RFP. Any amendment shall be issued in writing through addenda. Addenda shall be sent by mail, cable, telex, facsimile, or electronic mail to all invited consultants and will be binding on them. The Client may at its discretion extend the deadline for the submission of proposals.

3. Preparation of Proposal

3.1 Consultants are requested to submit a proposal Sub - Clause 1.2 written in the language(s) specified in the Data Sheet.

Technical Proposal

3.2 In preparing the Technical Proposal (TP), consultants are expected to examine the documents constituting this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a proposal.

3.3 While preparing the Technical Proposal, consultants must give particular attention to the following:

i. If a consultant considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) and/or other consultants or entities in a joint venture or sub-consultancy, as appropriate. Consultants may associate with the other consultants invited for this assignment only with approval of the Client as indicated in the Data Sheet. Consultants must obtain the approval of the Client to enter into a joint venture with consultants not invited for this assignment.

ii. For assignments on a staff-time basis, the estimated number of professional staff-months is given in the Data Sheet. The proposal shall, however, be based on the number of professional staff-months estimated by the consultant. For fixed-budget-based assignments, the available budget is given in the Data Sheet, and the Financial Proposal shall not exceed this budget.

iii. It is desirable that the majority of the key professional staff proposed be permanent employees of the consultant or have an extended and stable working relationship with it.

iv. Proposed professional staff must, at a minimum, have the experience indicated in the Data Sheet, preferably working under conditions similar to those prevailing in Nepal.

v. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.

vi. Reports to be issued by the consultants as part of this assignment must be in the language(s) as specified in the Data Sheet.

3.4 The Technical Proposal shall provide the following information using the attached Standard Forms (Section 3):

i. A brief description of the consultant's organization and an outline of recent experience on assignments (Section 3B) of a similar nature. For each assignment, the outline should indicate, *inter alia*, the client, location and duration of the assignment, contract amount, and consultant's involvement.

ii. Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Client (Section 3C).

iii. A description of the methodology and work plan for performing the assignment (Section 3D).

iv. The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing (Section 3E).

v. CVs recently signed by the proposed professional staff and the authorised representative submitting the proposal (Section 3F). Key information should include number of years working for the consultant/entity and degree of responsibility held in various assignments during the last ten (10) years.

vi. Estimates of the total staff input (professional and support staff; staff time) needed to carry out the assignment, supported by bar chart diagrams showing the time proposed for each professional staff team member (Sections 3E and 3G).

vii. A detailed description of the proposed methodology, staffing, and monitoring of training, if the Data Sheet specifies training as a major component of the assignment.

viii. Any additional information requested in the Data Sheet.

3.5 The Technical Proposal shall not include any financial information.

Financial Proposal

3.6 In preparing the Financial Proposal (FP), consultants are expected to take into account the requirements and conditions outlined in the RFP documents. The Financial Proposal should follow Standard Forms (Section 4). It lists all costs associated with the assignment, including (a) remuneration for staff (, in the field and at headquarters), and (b) reimbursable expenses such as subsistence (per diem, housing), transportation (mobilization and demobilization), services and equipment (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents, communication(Telephone, Fax etc.) surveys, and training, if it is a major component of the assignment. If appropriate, these costs should be broken down by activity.

3.7 The Financial Proposal should include all duties, taxes and other levies , and other charges imposed under the applicable law payable by the Consultant under the Contract or for any other cause.

3.8 Consultants shall express the price of their services in Nepalese Rupees.

3.9 The Data Sheet indicates the required validity period of the proposals. During this period, the consultant is expected to keep available the professional staff proposed for the assignment. The Client will make its best effort to complete negotiations within this period. If the Client wishes to extend the validity period of the proposals, the consultants who do not agree have the right not to extend the validity of their proposals.

4. Submission, Receipt, and Opening of Proposals

4.1 The original proposal (TP and FP) shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the consultant itself. Any such corrections must be initialled by the persons or person who sign(s) the proposals.

4.2 An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal.

4.3 For each proposal, the consultants shall prepare the number of copies

indicated in the Data Sheet. Each Technical Proposal and Financial Proposal shall be marked "**ORIGINAL**" or "**COPY**" as appropriate. If there are any discrepancies between the original and the copies of the proposal, the original governs.

4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "**Technical Proposal**," and the original and all copies of the Financial Proposal in a sealed envelope clearly marked "**FINANCIAL PROPOSAL**" and warning: "**DO NOT OPEN WITH THE TECHNICAL PROPOSAL**." Both envelopes shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and other information indicated in the Data Sheet and be clearly marked, "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE**."

4.5 The completed Technical and Financial Proposals must be delivered at the submission address on or before the time and date stated in the Data Sheet. Any proposal received after the closing time for submission of proposals shall be returned unopened.

4.6 After the deadline for submission of proposals, the Technical Proposal shall be opened immediately by the evaluation committee. The Financial Proposal shall remain sealed and deposited with the Client's Procurement Unit until all submitted proposals are opened publicly.

5. Proposal Evaluation

General

5.1 From the time the bids are opened to the time the contract is awarded, if any consultant wishes to contact the Client on any matter related to its proposal, it should do so in writing at the address indicated in the Data Sheet. Any effort by the consultant to influence the Client in the Client's proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the consultant's proposal.

5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, is concluded.

Evaluation of Technical Proposals (QCBS,QBS,FBS, LCBS))

5.3 The evaluation committee, appointed by the Client as a whole, and each of its members individually, evaluates the proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria and point system specified in the Data Sheet. The evaluation committee shall compute the score obtained by each proposal by taking the average of the scores given by each member to the particular proposal. Each responsive proposal will be given a technical score (St). A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.

5.4 In the case of Quality-Based Selection, the highest ranked consultant is invited to negotiate its proposal and the contract on the basis of the Technical Proposal and the Financial Proposal submitted in accordance with the instructions given in para. 1.2 and the Data Sheet.

Public Opening and Evaluation of Financial Proposals (CBS Only)

5.5. The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant and the proposed prices shall be read aloud and recorded. The Client shall prepare minutes of the public opening.

Public Opening

5.6 After the evaluation of quality is completed, the Client shall notify those

and Evaluation of Financial Proposals (QCBS , FBS,LCBS)

consultants whose proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall be 7 after the notification date. The notification may be sent by registered letter, cable, telex, facsimile, or electronic mail.

5.7 The Financial Proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of the consultant, the technical scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the public opening.

5.8 The evaluation committee will determine whether the Financial Proposals are complete (i.e., whether they have costed all items of the corresponding Technical Proposals; if not, the Client will cost them and add their cost to the initial price), correct any computational errors.

5.9 In case of Fixed Budget Selection (FBS), the consultant's Financial Proposals with cost more than the specified fixed budget ceiling by the Client in Data Sheet shall be rejected.

5.10 In case of Least Cost Based Selection (LCBS), the consultant's proposal which has scored the minimum pass mark in the Technical proposal and is of the least cost in the financial proposal shall be invited for negotiation.

5.11 In case of QCBS and FBS with financial proposal within specified fixed budget ceiling, the lowest Financial Proposal (Fm) will be given a financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the Data Sheet. Proposals will be ranked according to their combined technical (*St*) and financial (*Sf*) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; $T + P = 1$) indicated in the Data Sheet: S = St x T% + Sf x P%. The consultant achieving the highest combined technical and financial score will be invited for negotiations.

6. Negotiations

6.1 Negotiations will be held at the address indicated in the Data Sheet. The aim is to reach agreement on all points and sign a contract.

6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the consultant to improve the Terms of Reference. The Client and consultant will then work out final Terms of Reference, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the "Description of Services" and form part of the contract. Special attention will be paid to getting the most the consultant can offer within the available budget and to clearly defining the inputs required from the Client to ensure satisfactory implementation of the assignment.

6.3 Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff (no breakdown of fees) nor other proposed unit rates in the cases of QCBS methods. For QBS, the consultant should provide the information on remuneration rates described in the Appendix to this information.

6.4 Having selected the consultant on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the experts named in the proposal. Before contract negotiations, the Client will require assurances that the experts will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If substitution is considered then the proposed alternative candidate shall be evaluated as per the original criteria. The qualification and experience of the substitute candidate shall equal to or higher than the originally proposed candidate. If this is not the case and if it is established that key staff were offered in the proposal without confirming their availability, the consultant may be disqualified.

6.5 The negotiations will conclude with a review of the draft form of the contract. . If negotiations fail, the Client will invite the consultant whose proposal received the second highest score to negotiate a Contract.

7. Award of Contract

7.1 Pursuant to Sub-Clause 6.5, the consultant, with whom agreement is reached following negotiation, shall be selected for approval of his proposal and the Client shall notify it's intention to accept the proposal to the selected consultant and other short-listed consultants within 7 days of selection of the winning proposal.

7.2 Any consultant, who has submitted a proposal and is not satisfied with the procurement process or Client's decision provided as per Sub - Clause 7.1 and believes that the Client has committed an error or breach of duty which has or will result in loss to him then the consultant may give an application for review of the decision to the Client with reference to the error or breach of duty committed by the Client. The review application should be given within 7 days of receipt of information regarding the issue of letter by the Client notifying it's intention to accept the winning proposal pursuant to Sub Clause 7.1.

7.3 If the review application is not received by the Client pursuant to Sub-Clause 7.2 then the proposal of the Consultant, selected as per Sub-Clause 7.1 shall be accepted and the successful consultant shall be notified to come for signing the Agreement within 15 days.

7.4 If the Consultant fails to sign an agreement pursuant to Sub-Clause 7.3 then the Client will invite the consultant whose proposal received the next highest score to negotiate a contract.

7.5 If a review application is received by the Client pursuant to Clause 7.1 then the Client will clarify and respond within 5 days of receiving such application

7.6 If the applicant is not satisfied with the decision given by the procuring entity and/ or the decision is not given by the Procuring Entity Chief within 5 days then the applicant can file a complaint to the Review committee within 7 days.

7.7 The Client shall return the unopened Financial Proposals of those consultants who did not pass the technical evaluation.

7.8 The consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

8. Confidentiality

8.1 Information relating to evaluation of proposals and recommendations

concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the letter of intention to accept the proposal is not issued to the selected consultant pursuant to Sub- Clause 7.1.

9. Conduct of Consultants

9.1 The Consultant shall be responsible to fulfill his obligations as per the requirement of the Contract Agreement, RFP documents and GoN's Public Procurement Act and Regulations.

9.2 The consultant shall not carry out or cause to carryout the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :

a. give or propose improper inducement directly or indirectly,

b. distortion or misrepresentation of facts

c. engaging or being involved in corrupt or fraudulent practice

d. interference in participation of other prospective bidders.

e. coercion or threatening directly or indirectly to impair or harm, any party or the property of the party involved in the procurement proceedings,

f. collusive practice among consultants before or after submission of proposals for distribution of works among consultnts or fixing artificial/uncompetitive proposal price with an intention to deprive the Client the benefit of open competitive proposal price.

g. contacting the Client with an intention to influence the Client with regards to the proposals or interference of any kind in examination and evaluation of the proposals during the period after opening of proposals up to the notification of award of contract

10. Blacklisting Consultant

10.1 Without prejudice to any other rights of the Employer under this Contract , the Public Procurement Monitoring Office may blacklist a Consultant for his conduct up to three years on the following grounds and seriousness of the act committed by the consultant:

a) if it is proved that the bidder committed acts pursuant to the Information to Consultants clause 9.2,

b) if the bidder fails to sign an agreement pursuant to Information to Consultants clause 7.3,

c) if it is proved later that the bidder/contractor has committed substantial defect in implementation of the contract or has not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract

d) if convicted by a court of law in a criminal offence which disqualifies the consultant from participating in the contract.

e) if it is proved that the contract agreement signed by the consultant was based on false or misrepresentation of consultant's qualification information,

f) other acts mentioned in the Data Sheet or SCC

10.2 A Consultant declared blacklisted and ineligible by the Non-Public procurement Office and or concerned Donor Agency in case of donor funded project shall be ineligible to bid for a contract during the period of time determined by the GON and or the concerned donor agency.

Information to Consultants

DATA SHEET

Clause Reference

1.1	The name of the Client is: **The Department of Roads** **Bridge Branch** The method of selection is: **Quality- and Cost-Based Selection (QCBS)**
1.2	The name, objectives, and description of the assignment are: Name :**Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of Bridges** Objectives: **Detailed Design of Bridges** Description: **Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of Bridges**
1.3	A pre-proposal conference will be held: ***Yes (on 2073/ 12/06 at* Chakupat, Lalitpur, *2 PM)*** The name(s), address(es), and telephone numbers of the Client's official(s) are: Name: **Saroj Kumar Pradhan** Address: **Bridge Branch, Department of Roads** Contact Telephone No.: Saurabh Bajracharya (9851190440) Anju Pariyar (9849220843) Manda Pant (9851141720) Mahendra Majhi (9851039239) Bimala Dhami (9851129221)
1.4	The Client will provide the following inputs: NA
1.10	The clauses on fraud and corruption in the Contract are: ***As per prevailing laws of Nepal***
2.1	Clarifications may be requested **7** days before the submission date The address for requesting clarifications is: ***Department of Roads*** ***Bridge Branch*** Chakupat, Lalitpur ***Nepal***

3.1	Proposals should be submitted in the following language(s***):*** ***English***
3.3	(i) Short listed consultants/entity ***may not*** associate with other short listed consultants: (ii) The estimated number of professional staff-months required for the assignment is: ***NA*** Available Budget for Fixed Budget Assignment : ***NA*** (iv) The minimum required experience of proposed professional staff is: ***As indicated in the TOR*** (vi) Reports that are part of the assignment must be written in the following language(s): ***English***
3.4	(vii) Training is a specific component of this assignment: ***No*** (viii) Additional information in the Technical Proposal includes: ***See TOR***
3.9	Proposals must remain valid ***90*** after the submission date.
4.3	Consultants must submit an original and no additional copies of each proposal:
4.4	The proposal submission address: ***Department of Roads*** ***Bridge Branch*** Chakupat, Lalitpur ***Nepal*** Information on the outer envelope should also include : ***Name of the Project or consulting services***
4.5	Proposals must be submitted no later than: ***As mentioned in the Letter of Invitation***
5.1	The address to send information to the Client is***:*** ***Department of Roads*** ***Bridge Branch*** Chakupat, Lalitpur ***Nepal***
5.3	The number of points to be given under each of the evaluation criteria are: Points (i) Relevant experience of the consultants 20 (ii) Understanding of the TOR and Methodology of work 30 (iii) Qualifications and competence of the proposed key personals 45 (iv) Technology transfer and training 5 Total Points 100 Minimum total technical score required to pass is ***70%*** The number of points to be given under each evaluation sub criteria for qualifications of

	staffs are: Points **1. Relevant experience of the consultants** **20** **2. Understanding of the TOR and Methodology of work** **30** a. Technical approach and methodology 15 b. Specific work Plan 5 c. Equipment schedule 5 d. Innovativeness 5 **3. Qualification and competence of the proposed personnel** **45** a. Team Leader(Bridge/Structural engineer) 20 Education 2 General Experience 3 Specific Experience 15 b. Geotechnical engineer 10 Education 2 General Experience 3 Specific Experience 5 c. Hydrologist 10 Education 2 General Experience 3 Specific Experience 5 d. Civil Engineer 5 Education 1 General Experience 1 Specific Experience 3 **4. Technology Transfer and Training** **5**
5.8	The fixed Budget Ceiling for the assignment is : ***NA***
5.11	The formula for determining the financial scores is the following: Sf = 100 x Fm/F, in which Sf is the financial score, Fm is the lowest price and F the price of the proposal under consideration The weights given to the technical and Financial Proposals are: T (Technical Proposal) = **0.85** P (Financial Proposal) = **0.15**
6.1	The address for negotiations is: ***Department of Roads*** ***Bridge Branch*** Chakupat, Lalitpur ***Nepal***
7.8	The assignment is expected to commence on 7th day from the ***signing of the contract***

8.1 If the CV of same person is found in previous work in hand of the consulting firm/JV and schedule of work of such personnel overlaps the CV will be rejected.

Section 3. Technical Proposal - Standard Forms

3A. Technical Proposal submission form.

3B. Consultant's references.

3C. Comments and suggestions of consultants on the Terms of Reference and on data, services, and facilities to be provided by the Client.

3D. Description of the methodology and work plan for performing the assignment.

3E. Team composition and task assignments.

3F. Format of curriculum vitae (CV) for proposed professional staff.

3G. Time schedule for professional personnel.

3H. Activity (work) schedule.

3A. TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [*Name and address of Client*]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for [*Title of consulting services*] in accordance with your Request for Proposal dated..... [*Date*] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

If negotiations are held during the period of validity of the Proposal, i.e., before [*Date*] we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Consultant:
Address:

3B. CONSULTANT'S REFERENCES

Relevant Services Carried Out in the Last Five Years
That Best Illustrate Qualifications

Using the format below, provide information on each assignment for which your Consultant/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Consultant/Entity(profiles):
Name of Client:		No.of Staff:
Address:		No. of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services NRs
Name of Associated Consultants, If Any:		No. of Months of Professional Staff Provided by Associated Consultants:
Name of Senior Staff, Designation (Project Director/Coordinator, Team Leader etc.) Involved and Functions Performed:		
Narrative Description of Project: :(Actual assignment, nature of activities performed and location)		
Description of Actual Services Provided by Your Staff:		

Consultant's Name: _____

3C. COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY THE CLIENT

On the Terms of Reference:

1.

2.

3.

4.

5.

On the data, services, and facilities to be provided by the Client:

1.

2.

3.

4.

5.

3D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT-SEE TOR

3E. TEAM COMPOSITION AND TASK ASSIGNMENTS

1. Technical/Managerial Staff		
Name	Position	Task

2. Support Staff		
Name	Position	Task

3F. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position: _____

Name of Consultant: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Consultant/Entity: _____Nationality: _____

Membership in Professional Societies: _____

_____

Detailed Tasks Assigned: _____

_____

Key Qualifications:

[*Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use about half a page.*]

_____

Education:

[*Summarize college/university and other specialized education of staff member, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.*]

_____

Employment Record:

[*Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.*]

_____

Languages:

[*For each language indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.*]

_____

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience. I also declared that, my proposed work schedule has not been overlapped with any other in hand work schedule.

_____Date: _____

[Signature of staff member and authorized representative of the consultant] *Day/Month/Year*

Full name of staff member:_____

Full name of authorized representative: _____

3 F(A). PARTICULAR OF PROPOSED PERSONALS

(CURRENT CONTRACT COMMITMENTS/WORK IN HANDS)

S. N.	Key personal current position/proposed position	Name of key personnel	Name of clients (Address, Contract No., Fax)	Name of Contract (Contract No:/Job Description)	Commencement date	Intended completion date	Period of Involvement (Date: From ----to----	Remarks
1	Team Leader (Bridge/Structural engineer)							
2	Geotechnical engineer							
3	Hydrologist							
4	Civil Engineer							

Note: Above mentioned Details of Proposed key personal shall be submitted by Firm/JV.

3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL- SEE TOR

3H. ACTIVITY (WORK) SCHEDULE

A. Field Investigation and Study Items

	[1st, 2nd, etc. are months from the start of assignment.]												
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Activity (Work)													
_____													
_____													
_____													
_____													

B. Completion and Submission of Reports

Reports	Date
1.	
2.	
3.	
4.	

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Bridge Branch

Request for Proposal

for
Consulting Services
for

Feasibility Study, Detailed Engineering Survey,Soil Investigation, Hydrological Study and Detailed Design of Bridges

Part – II
FINANCIAL PROPOSAL

Notice No.:

Contract No. :

Consultant's Name and address:

March **2017**

Section 4. Financial Proposal - Standard Forms

4A. Financial Proposal submission form.

4B. Summary of costs.

4C. Breakdown of price per activity.

4D. Breakdown of remuneration per activity.

4E. Reimbursables per activity.

4F. Miscellaneous expenses.

4A. FINANCIAL PROPOSAL SUBMISSION FORM

[*Location, Date*]

To: [*Name and address of Client*]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for [*Title of consulting services*] in accordance with your Request for Proposal dated [*Date*] and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [*Amount in words and figures*]. This amount is inclusive of the local taxes except Value Added Tax(VAT), which we have estimated at [*Amount(s) in words and figures*].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., [*Date*].

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Consultant:
Address:

Ministry of Physical Infrastructure & Transport
Department of Road
Bangladesh

4B. SUMMARY OF COSTS

SEE ATTACHED BILL OF QUANTITIES(PLEASE SELECT AND FILL ONLY THE APPROPRIATE BILL OF QUANTITIES FROM THE PROVIDED LIST IN WHICH YOU ARE SHORTLISTED FOR SUBMISSION OF RFP)

4C. BREAKDOWN OF PRICE PER ACTIVITY (NOT APPLICABLE)

4D. BREAKDOWN OF REMUNERATION PER ACTIVITY (NOT APPLICABLE)

4E. REIMBURSABLES PER ACTIVITY (NOT APPLICABLE)

4F. MISCELLANEOUS EXPENSES (NOT APPLICABLE)

Section 5. Terms of Reference

For Feasibility Study, Detailed Engineering Survey, Soil Investigation, Hydrological Study and Detailed Design of Bridges

Name of Bridges: Refer attached package list
Name of Road: Refer attached package list
Location: Refer attached package list

1. INTRODUCTION

The Department of Roads, Bridge Branch (herein after referred as "the DOR" or as "the Department"), intends to utilize services of engineering consulting firms well experienced in the fields of soil investigation, hydrological studies, bridge engineering, river training works, environment aspects etc. for providing engineering consulting services for detail design work of proposed Bridge(s) including river training works, and approach roads.

2. OBJECTIVE

Objective of this job is to design a ***safe***, ***reliable*** and ***cost effective*** bridge using the appropriate technology. The bridge is to be designed considering the availability of skilled manpower, construction material, condition of accessibility and other prevailing working conditions.

3. SCOPE OF WORK

The scope of work to be carried out by the consultant shall include but may not be limited to the following:

3.1. Desk study:

A desk study should be carried out, collecting all data, maps and information relevant to bridge design and reviewing for planning of further field survey and investigation works as well as detailed design.

3.2. Feasibility Study :

Feasibility Study shall include the following:

3.2.1. Technical Feasibility study:

It should include reviewing the available data, collecting, reviewing and analysis of field data to be used in the study and conducting analysis to decide upon the technical feasibility of the bridge site(s). A cost comparison of different types of bridge shall be made and discussed with the DOR before proceeding to bridge site for soil investigation.

In this study the following points related to the river, its catchment area and all the considered bridge sites should be studied in detail.

(i) Topography
(ii) Nature and structure of the surface soil
(iii) Nature and structure of local as well as regional geology
(iv) Other information as needed.

3.2.2. Bridge Site Selection

Alternative bridge sites shall be studied based on 3.2.1 and the most suitable site for the bridge based on the above criteria of the site as well as the catchment area shall be selected. The selected site should be clearly

indicated in the map and all the characteristic features of the chosen bridge site shall be given, in order to facilitate easy reference while designing the bridge.

3.2.3. Topographical Survey

The topographical survey of the area should cover a minimum distance of **500 m** upstream, **200 m**. downstream and **200 m** from the river banks on either sides of the river at the proposed bridge site. The Topographic map should show the following:

(i) Contours at 1(one) m. intervals in hilly area and at 0.25 m in plain area.
(ii) Flood lines on either sides of the river in the entire area surveyed.
(iii) Lines with spot levels along which the bed slope of the river is taken
(iv) Both banks of the river
(v) Lines along which cross section of the river is taken
(vi) Govt. and/or public establishments
(vii) Traverse lines, benchmarks reference lines and/or points with respect to which the present topo map is prepared.
(viii) The angle and direction of skew, if the bridge is proposed to be aligned skew.
(ix) The Names of the nearest identifiable villages/towns etc. in either ends of the bridge.
(x) Other information relevant to design, construction and/or maintenance of the bridge.
(xi) Bridge axis cross section should be taken by level machine and R. L. computation should be checked with conventional Rise/Fall or Height of Instrument method.

3.2.4. Hydrological Study

For determination of all design data the consultant shall carry out a detailed hydrometrical survey and hydrological study of the river and bridge site, which shall include the following:

(i) Catchment area of the river up to bridge site
(ii) Length of the river from origin up to bridge site
(iii) Possibility of change of catchment
(iv) Nature, size and quantities of debris carried by the river
(v) Intensity, duration and distribution of rain in the catchment
(vi) Vegetation, cultivation etc. of the catchment.
(vii) Existence of reservoir's, Lakes etc. in the catchment.
(viii) Existing bridge or other hydraulic structures across the river in the vicinity of the proposed bridge site with their details as much as possible.
(ix) General slope of the river from the critical point (origin) of the river up to bridge site and general slope of the catchment in both sides of the river.
(x) Cross sections covering 200m.beyond flood lines of the river at proposed bridge site, at about 500m. u/s and about 200m d/s. wherein HFL, LWL,LBL, area of the cross section, wetted perimeter and geological profile with silt factor of each strata (at proposed bridge site only) shall be indicated. (Horizontal and vertical scale of the cross section shall be the same)
(xi) Bed slope of the river which must start from 100m. up of the U/S cross section and end at 100 m. down of the d/s. cross section.
(xii) Maximum discharge calculated by established formulas with different return periods and the peak discharge observed over a period of 100 years.
(xiii) Velocity and depth of flow at the time of survey.

(xiv) Shifting of the river in the past at proposed bridge site and in its vicinity.

(xv) Other information required for river control, design, construction and maintenance of the bridge.

3.2.5. Seismological Study:

The consultants shall collect and refer to the available data regarding the seismic records of the area. Seismic Forces: According to the Indian Standard Criteria for Earthquake Resistant Design of Structures, IRC: 6 may be followed.

3.2.6. Environmental Study

The consultant shall predict damages to the Environment and attempt to mitigate or minimize the damages by choosing appropriate site, cross-section, type of structures etc. and suggest appropriate measures in the design for protection of surrounding Environment. The Environmental Protection Act, Environmental Protections Rules and the DOR environmental policies including Environmental and Social Management Framework (ESMF), modified by GESU/DOR for bridges should be followed.

3.3. Preliminary Design of Bridge

After the selection of the proposed bridge site with alternatives and preparation of topographic maps, the Consultant shall prepare a Preliminary Design Report including feasibility report and discuss with concerned Project In-charge of the DOR on the overall feasibility of the site, boring numbers and locations, concept design and other aspects as listed below for the detailed survey and design of the bridge:

i. Design discharge
ii. Scour depth, Maximum Scour depth
iii. Linear waterway needed to be provided
iv. Anticipated soil condition for foundation
v. The most feasible proposed bridge site
vi. River- training & approach roads.
vii. Type of proposed foundation, substructure and superstructure.

The discussion will be done on the basis of the topographic maps, preliminary findings of the parameters (i to vii) above, location of the bridge with respect to the complete road network of the district. After discussion and finalizing of the bridge site/axis the consultant shall carry out subsurface exploration which shall include the followings:

3.3.1. Test pits and auguring

Test pits and auger-holes in the riverbed to a depth as mentioned in the BOQ for determining the mean particle size of riverbed materials in each layer.

3.3.2. Bore-holes, field tests and laboratory tests

The properties of the underlying soil are determined by field and laboratory tests of the soil samples obtained from the bore holes drilled to a depth as mentioned in the next section and/or the Bill of Quantities. As far as possible, the locations of the boreholes shall be under each abutment and piers. Generally the following tests are conducted for determination of soil properties:

S.N.	Type of test	Frequency
1	Undisturbed Soil Sampling	at least 2 at each borehole
2	Standard Penetration Test	as required but the interval not less than 1.5 m and every change of soil strata

3	Grain size analysis	at least 2 at each borehole
4	Hydrometer analysis	at least 2 at each borehole
5	Moisture content	at least 2 at each borehole
6	Bulk and dry density	at least 2 at each borehole
7	Unconfined compression test	at least 2 at each borehole
8	Consolidation test	at least 2 at each borehole
9	Direct shear test	at least 2 at each borehole

If required by the field condition, the Consultant shall conduct other types of tests. Similarly the frequency of the above tests can be increased if required. The cost of all the field and laboratory tests shall be incorporated in the cost of soil investigation works. No separate payment shall be made for the tests.

3.3.3. Depth of soil exploration`

The depth of soil exploration from ground level shall be as follows:

SN	Type of soil	Governing depth
1	Silty, sandy, clayey soil	3 times the design scour depth, or 1.5 times the least dimension of the foundation footing, or 20 m, whichever is maximum
2	Granular soil (gravels, boulders	2 times the design scour depth, or 1.5 times the least dimension of the foundation footing, or 16 m, whichever is maximum
3	Rocks (soft or hard)	Not exceeding 8 m.

The above mentioned depths are indicative. The Consultant shall decide the actual required depth of soil investigation according to the field condition and design parameters. But in any case the Consultant shall be paid only up to the depth mentioned in the Bill of Quantities. If rock is found at the beginning or at mid-depth then the drilling works shall not exceed the depth as mentioned in the table above. In such case the payment shall be made only for the actual depth.

For example, if rock is found at a depth of 12 m. and if the maximum required depth is 16 m, then drilling shall continue only for further 4 m., and the payment shall be done for 16 m. If rock is exposed on the surface then drilling shall be done up to a depth of 8 m., and the payment shall be done for 8 m. But if the thickness of rock at the surface is 6 m then the drilling shall continue further to the required maximum depth.

3.3.4. Changes in soil strata

N/A

3.3.5. Soil exploration works to be certified

The Department, if required, may ask the Consultant lto submit the soil/rock samples obtained from the drilling works in core boxes and/or a bore-log certified by the concerned Division/Project Office and/or visual certification by using Bridge Site Monitoring (BSM) System software.

3.3.6. Other information

Availability of construction materials like, sand gravel boulders, timber, etc. with their engineering properties, quantities and lead up to the bridge site, quarry site of materials with their available quantities should be shown on a sketch plan with reference to Bridge site.

3.4. Analysis of Data, Conclusion and Recommendation of Design Parameters.

Based upon the above mentioned studies and investigations the consultants shall make the best use of their technical know-how and professional skill to arrive at and recommend the most cost effective design parameters. The consultant shall discuss in detail at least three different options and shall recommend the most appropriate option.

The consultants are required to design the bridges keeping in view of the introduction of modern construction materials and technology into bridge construction industry. It is highly recommended to use pre-stressed concrete in their design. Ordinary RCC or Steel superstructures shall only be accepted if there is sufficient ground in favour of them as compared with the pre-stressed concrete.

3.5. Miscellaneous

If not covered by aforesaid, the Consultants shall perform other studies, explorations, tests surveys, calculations, etc. required to produce full and complete set of working drawings, specifications, bills of quantities, requirement of materials and complete cost estimates for the bridge/s including related works based upon which construction activities can be started to complete without further study and/or reference to them.

3.6. Detailed design and quantity/cost estimates

Based on the collected information and results of the discussions mentioned above the consultants shall design the bridge following the standard codes of practice, norms and guidelines. The relevant **codes of IRC for the design of bridges and Nepal Bridge Standards-2067** shall be followed. The list of all reference literature and materials shall be provided on the report.

The consultants shall produce detailed quantity estimate of the bridge and its accessories. They shall collect information on sources of materials and their lead distances and prepare rate schedules and cost estimates based on the standard norms and prevailing district rates.

3.7. Use of Standard Design(s)

Depending upon the site condition and other factors the Consultants can use the Standard Design of the part(s) of the bridge, which shall be made available by the DOR. This matter will be discussed and finalized during the presentation of the Preliminary Design or at a later stage convenient to both parties. If such Standard Design is used the Consultants shall adjust the design of other parts of the bridge to incorporate the parameters of the Standard Design.

If it is decided to use any Standard Design, the Payments shall be adjusted according to the Conditions of Contract and/or as mentioned in the BOQ.

3.8. The checklist

The detailed requirements of the design report are given in the checklist at the end of this TOR. Before submitting the report the consultants should verify whether it complies with the checklist.

4. SUBMISSION OF REPORTS AND PRESENTATION OF THE WORKS

In accordance with DOR's standard and procedures the consultant shall submit his reports as under:

4.1. Inception Report

This report shall contain bridge location with alternatives, **cross-section of bridge axis of each alternatives showing hydrological and geological elements**, bank conditions, general geology, general hydrology, location plan, social acceptability, tentative bridge type with length, span arrangement etc. This shall contain Index map as well as location map of the bridge with respect to main road network. Inception report shall be submitted to DOR in one copy and shall be presented in Bridge Branch, DOR.

4.2. Field Report & Preliminary Design Report

This report will contain bridge site plan showing alignment of bridge foundations and locations of bore holes, logs with description of samples taken at every change of strata. Preliminary field report shall be submitted to DOR in two copies and should be discussed with DOR.

This report shall contain the preliminary design concepts and short descriptions relating to the proposed structure and its major components, e.g. superstructure, pier, foundations river training/ bank protection structures, approach road etc. It shall include location of proposed foundations and arrangement of the bridge components along with comparison between the possible alternative types. **(Please also see Clause 3.7, Use of Standard Designs).** This report shall be submitted in **three** copies and the content shall be discussed with DOR **before proceeding to the detailed design of the bridge**. **The DOR may also ask to present the Preliminary Design Report to the DOR audience.** The cost of such presentation shall be borne by the Consultants.

4.3. Draft Report

This report shall in all respect be complete, containing all the required components of the design and be presented in clear and easy to refer formats as per the general design guidance attached. The complete set of the report shall consist of:

(i) Volume I – Main Report
(ii) Volume II – Drawings
(iii) Volume III – Design Calculations
(iv) Volume IV – BOQ and Special Provisions to Standard Specifications, if any
(v) Appendices

Please refer to the checklist provided with this TOR for number of copies and detailed requirements of the reports. The Report shall also include the drawings, quantity and cost estimate of any Standard Design that is used in the Design.

4.4. Presentation of the Draft Report

The Consultants shall present the design report in specified format and defend it to the DOR audience prior to the submission of the final report. They shall review the issues raised during the presentation while finalizing the report and make necessary amendments/corrections if needed. The date and venue of the presentation shall be determined by mutual agreement between the Bridge Branch and the consultants. The cost of such presentation shall be borne by the consultants.

4.5. Final Report

Apart from the presentation, the DOR/Bridge Branch will verify the content of the report against the Terms of Reference and the checklist. The DOR may also discuss upon the technical content of the report and may suggest some changes if thought necessary. While preparing the Final Report the consultants shall consider the comments/suggestions and make corrections or amendments if required. It does not, however, relieve the consultants of their responsibility over the technical content of the design. The final report shall be submitted in stipulated number of copies as indicated in the checklist.

4.6. Soft copy (electronic copy) of the design report

Apart from the bound report the consultants shall submit soft copies (electronic copies) of the final report in suitable tool as specified in the checklist.

5. TIME SCHEDULE

If not indicated otherwise in the contract documents the consultant shall complete the assigned works as per the following schedule:

(i) Inception Report within 4 (Four) weeks started from the date of signing of the Agreement.

(ii) Field Report & Preliminary Design Report within 12 (Twelve) weeks started from the date of signing of the Agreement.

(ii) Draft Report within 24 (Twenty four) weeks started from the date of signing of the Agreement.

(iii) Final Report within 4 (Four) weeks after receiving DoR's Comments and suggestions on the draft report.

6. WORKING TEAM

The working team for field and office works should necessarily consist of the following Key Personnel together with adequate supporting manpower.

SN	Personnel	Preferred academic qualification	Minimum years of general experience
1	Team Leader (Bridge/Structural Engineer)	Master's in Bridge/Structural Engineering	10 years
2	Geotechnical Engineer / Engineer Geologist / Geologist	Master's in Geotechnical Engineering / Engineering Geology / Geology	5 years
3	Hydrologist	Master's degree in Hydrology/Water Resources	5 years
4	Civil Engineer	BE in Civil Engineering	3 years

If a consulting firm/s is selected for more than 1 package, a separate team of key personnel with equivalent or better qualification shall be proposed for other package prior to signing of the contract. Upon failure to do so, the next consultant securing high combined score will be called for agreement.

DEFECT LIABILITY

6.1. Responsibility for survey and design

Submission of the final reports does not relieve the consultant from their responsibility to the design. They shall bear full responsibility for:

(i) Authenticity of all the field data including socio-economic, environmental, topographic, hydrological and geological information;

(ii) Correctness of the design and all the calculations (except for the Standard Design, if used);

(iii) Correctness of the drawings;

(iv) Correctness of any other details related to construction

6.2. Assistance during construction phase

During construction the consultants, upon written request from the DOR, shall visit the bridge site and provide necessary technical assistance. The consultants shall be paid for such visits (travel cost and daily allowances) as per the approved norms. But if any changes in the design are required **as per ToR**, the consultants shall furnish it free of cost as per the Condition of Contract.

6.3. Acceptance of responsibility

The Consultants may be asked to submit signed Statement of Acceptance of Responsibility as mentioned above in sections 8.1 and 8.2 attached together with the final report.

Checklist for Detailed survey and design of bridges

This paper serves as a guideline for checking the detailed engineering survey and design of bridges, received from the consultants.

General procedure for checking the design report:

Checklist for content of the package:

Particulars	Required information / number / range / value(s)
Volume I - Main report	Draft – 2 copies; Final – 3 copies
Volume II – Drawings	Draft – 2 copies; Final – 3 copies
Volume III – Design calculations	Draft – 2 copies; Final – 3 copies
Volume IV – BOQ and Special Provisions to Standard Specifications (if required)	Draft – 2 copies; Final – 3 copies
Soft (electronic) copies of the report	2 copies in CD-ROM with hard plastic case

1. Content of Main Report (Volume I)

1.1 Statement of acceptance of responsibility

A signed acceptance of responsibility to the authenticity of field data and correctness of design shall be attached to each copy of the main report.

1.2 Salient features:

Particulars	Required information / number / range / value(s)
Name of the Project :	Job description as mentioned in the work-order
Location :	
Development Region	Name of the development region
Zone	Name of the zone
District	Name of the district
Village/town	Name of the surrounding VDC/town/municipality or any pertinent landmark in the vicinity of the bridge.
Name of the Road :	Popular / formal name of the road (e.g. Prithvi Rajmarg) and road reference number from the SRN data (if applicable)
Origin and Destination of the Road	Origin and destination (e.g. Naubise – Pokhara)
Chainage of the Bridge Site	chainage from the origin of the road
Geographical Location :	
Easting	East coordinate
Northing	North coordinate
Classification of the Road	NH / FRN / FRO / DR / UR / Other
Type of the road surface	BT / GR / ER / Track only
Terrain / Geology	General terrain (Hill, mountain or plain) and general geology
Information on structure:	
Total length of the bridge	Total length between edges of the end decks
Span arrangement	Number x effective lengths of spans

Total width of the bridge:	Total width between edges of the deck
Width of:	
Carriageway:	Clear width available to vehicles
Footpath(s):	Clear width available to pedestrians
Kerbs	Width at the bottom of the kerb
Type of superstructure:	Overall system (e.g. Three girder RCC T-beam & deck / <Type> Steel truss & RCC deck / Four Steel plate I-girders & RCC deck,arch, prestressed etc. etc.)
Type of bearings:	Type of bearings with their dimensions
Type of abutments:	Shape and material in the abutment (e.g. Rectangular RCC with cantilever return wall, or RCC isolated columns with stone pitched slope and wing walls, etc.)
Type of pier(s):	Shape and material (e.g. Rectangular solid / hollow RCC wall, or RCC Hammer-head with solid circular body, etc.)
Type and depth of foundations:	Type and depth from the maximum scour level. Separately for each, if type and depth of foundations for different units are varying
Sketches:	Sketches of the general arrangement of the bridge with gross dimensions (plan, elevation and cross section) in a reduced scale from the main drawings to be attached in A4 or A3 size sheet.
Design data:	
Live load:	Load classes considered
Net bearing capacity of soil	Net bearing capacity applied in design
Design discharge	
Linear waterway	
Summary of quantities of materials:	
Grade and quantity of concrete:	
In superstructure:	Grade and total quantity including girders, deck, parapet, kerb, footpath, railings and approach slab
In substructure:	Grade and total quantity including pier/abutment cap, stoppers, abutment return-walls, ballast wall, pier/abutment stem above pile/well cap and in case of open foundation above base-plate.
In foundation:	Grade and total quantities of pile/well cap, well steining and curb, piles, foundation base-plate and other accessories.
Grade and quantity of structural steel:	
In superstructure:	Steel grade and quantities of truss members, gusset plates and nut-bolts, plate girders including accessories,
In substructure:	Grade and quantity (if any) in abutment/piers
In foundation:	Grade and quantity in foundation (e.g. well-shoe, pile tips etc.)
Grade and quantity of reinforcing steel:	
In superstructure:	Grade and total quantity as in quantity of concrete
In substructure:	Grade and total quantity as in quantity of concrete
In foundation:	Grade and total quantity as in quantity of concrete
Quantities of other materials:	
Stone masonry:	Total quantity (e.g. in wing walls, foundation base, river protection works etc.)
Gabion works:	Total quantity (e.g. in wing walls, river training and riverbed protection works etc.)

Formworks:	Quantities in superstructure, substructure, foundation and others if any.
Timber:	Total quantity excluding formwork and staging.
Other:	
Summary of cost:	
Superstructure:	
Substructure:	
Foundation:	
Approach road:	
River training works:	
Total net cost of the bridge:	
Total gross cost of the bridge:	

1.3 Field works:

The following should be complied with at the proposed bridge site.

Centreline of the proposed bridge	Three R.C.C. posts (1:2:4) of 15cm x 15cm in section and 1m length each should be installed minimum 30m apart and projecting 15cm above the ground in the centre line of the bridge. Iron rods of not less than 15cm in length and 8mm in dia fixed in centre and flushing top surface of the each post shall form the centreline of the bridge. All posts shall be installed beyond the zone of inundation and there should be at least one post on each bank of the river.
Bench Marks	Similar posts (at least one post in each bank) should be fixed in the right of way and beyond the zone of inundation's as Bench Marks, whereon B.M. No. and elevation must be written in fast colour paint on two opposite faces of the post. If permanent structures are available, they can be used for B.M. in lieu of the posts. All central line and Bench Mark posts should be connected with sufficient permanent reference points.
Bore/drill logs	Bore/drill logs should be certified by the engineer of the DOR/Division Road Office/Project.

1.4 Detailed Engineering Study and Survey:

Geology and topography	General description of geologic and topographic parameters as per section 3.2.2 and 3.2.4. of the TOR. Specific geo-technical and topographic parameters shall appear in the design calculations and drawings, respectively.
Hydrology	General description of hydrological aspects as per section 3.2.5 of the TOR. Detailed hydrological parameters shall appear in the design

	calculations and drawings.
	
	The main report should have information on:
	
	• Catchment area characteristics
	• Summary of rainfall data
	• Stream / channel characteristics including :
	  ▪ Type of river
	  ▪ Flood characteristics
	  ▪ HFL, LWL and afflux
	  ▪ Depth of scour
	• Summary of discharge calculation by various methods and determination of design discharge
	• Determination of effective linear waterway, bridge span arrangements and freeboard.
	• Summary of required river training works with their justification

Feasibility/selection of the bridge site	The report should review existing studies (if available) and field data to decide upon the technical feasibility of the bridge site. The bridge site should be selected among at least three locations. Selection criteria shall incorporate geo-physical, topographic, hydrological, social, environmental and economic parameters. The bridge site is discussed with the DOR (Division office / Bridge Unit) representatives. The report should present a gist of the discussion and conclusion.
Selection of bridge type, length and span arrangement	The type of bridge, its length and span arrangement is determined after desk study and field works except detailed subsoil exploration on the basis of the following parameters: • Design discharge • General and maximum scour depth • Linear waterway to be provided • Anticipated soil condition • Selected bridge site • River training and approach road • Construction/maintenance cost • Availability of material and labour The report should present a comparative evaluation of different types of bridges on the basis of the above parameters. The type of bridge is discussed with the DOR before proceeding to soil investigation and detailed design. The report should include the gist of discussion and conclusion.
Environmental study	The report should review the project as per the Environmental Protection Act, Environment Protection Rules and DOR environmental policies including Environmental and Social Management Framework (ESMF), modified by GESU/DOR for bridges .

Seismological study	The report should review the information and past seismic records of the project area as per section 3.2.6 of the TOR.
Sub-surface exploration	The subsurface exploration shall proceed after final selection of the bridge type and axis conforming to the requirement as per section 3.3 of the TOR. The main report should include the following: • General description of the subsoil strata • Bore logs • Sectional elevation of the subsoil strata showing locations of bore-holes and proposed foundations • Net bearing capacity, selection of foundation and its depth on the basis of the above parameters. Detailed analysis of subsoil strata and test results shall appear in Design Calculations and Appendix-1

1.5 Design of bridge

Design parameters and concepts	The detailed design of the different parts shall appear in Design Calculations. The **main report** should include the following: • Design parameters: Discharge, HFL, LBL, free board, scour depth, waterway, loads considered. • Design concepts of superstructure, sub structure and foundation. • Determination of design standards; methods adopted and codes followed. • Requirement of river training and bed protection works concepts of design of such structures.
Summary of design	• Summary of design should include the followings: ▪ Type and length of spans, ▪ Effective cross section, design forces and reinforcement of slab, main girders, cross girder; ▪ Type, sections and reinforcement of elements of substructures; ▪ Type and details of bearings; ▪ Type, depth, sections, reinforcement of foundation body and footings, ▪ Dimension and reinforcement of approach slab. ▪ Design parameters of approach road: width, surface type, maximum and average gradient, minimum radius of curves

1.6 Cost estimates

Summary of cost	▪ Total cost including cost of bridge, approach roads, river training works, other accessories ▪ Net cost per running meter of bridge only

	▪ Total cost per running meter ▪ Abstract of quantity and cost
Rate analysis	The rate analysis should be done following the current norms on the basis of comparative cost of materials such as boulders, stone aggregates, sand, river / quarry gravel collected at sources and direct market price. The report should include: ▪ A short description of material sources ▪ Lead distances from sources and market ▪ Comparison of cost of material collected at sources and purchased at market. ▪ Labour rate ▪ Summary of unit rates Detailed rate analysis and a copy of certified district rates should be submitted in Appendix – 2 and 3 respectively.

2. Content of Drawings (Volume II)

General	Size: • All the working drawings are presented in size A2 sheets, bound properly. However, if convenient the drawings in Draft Report can be submitted in A3 size sheets.
Format of cover page	The cover page should show the following: ▪ Name and address of client, ▪ Contract number, work description, volume ▪ Consultant's name and address ▪ Month and year of completion
Format of other pages	All other pages should show the followings at the bottom of the sheet: ▪ Name of the client; ▪ Work description ▪ Drawing title ▪ Designation & signature columns for consultant: designed by, checked by, Approved by ▪ Designation & signature columns for the client: checked by, recommended by, Accepted by ▪ Consultant's name and address ▪ Scale of the drawing ▪ Drawing no./sheet no. The size of letters anywhere in all sheets shall not be less than 2 mm.

Content of the drawings (Volume II)	1.1 Contents 1.2 General notes a. list of concrete grades used with respect to the components/locations b. concrete covers with respect to the components/locations c. reinforcement design properties d. bar mark designation system 1.3 Index map Map of country (length 8 to 10 inches) with location highlighted, location plan showing road network, river system and names of places. 1.4 Topographical map Plan of bridge site (scale not exceeding 1:1000) covering a minimum distance of 500 m u/s, 200 m d/s, 200 m from the river banks on either sides of the river at proposed bridge site showing: a. contour intervals of 1m & 0.25 m for plain and hilly area respectively b. Flood lines on either sides of the river in the entire area surveyed. c. Lines with spot levels along which the bed slope of the river is taken d. Both banks of the river e. Locations of bore-holes and bench marks f. Plan of the bridge g. Bridge axis reference index h. Govt/public establishments. i. Traverse lines, benchmarks reference lines and/or points with respect to which the present topomap is prepared j. The angle and direction of skew, if the bridge is proposed to be aligned skew k. The names of the nearest identifiable-village/towns etc in either ends of the bridge l. Other information pertinent to design, construction and/or maintenance of the bridge. 1.5 Catchment area map in suitable scale a. Catchment area of the river up to bridge site b. Length of the river from origin up to bridge site c. Slope of the river from the critical point (origin) of the river up to bridge site and general slope of the catchment in both sides of the river. d. Maximum discharge calculated by established formulas with different return periods e. Maximum discharge during highest flood, at each cross section. (By x section area & slope method). The peak discharges as observed over a period of 100 years (for important bridges) or 50 yrs (ordinary bridges) as the use may be an average of peaks is taken f. Velocity and depth of flow at the time of survey at the bridge location g. Shifting of the river in the past at proposed bridge site and in vicinity of it. h. Other information required for river control, design,

	construction and/or maintenance of the bridge. 1.6 L-section of river & C/S of river 1.7 Genral arrangement a. Plan, Elevation and Side elevation b. Bore logs presented on Elevation 2. Structural Drawings with bar bending schedules included in the respective sheets 2.1 Main girder(s) details 2.2 Cross girders details 2.3 Deck slab details 2.4 Abutment and approach slab details 2.5 Pier details 2.6 Foundation details 2.7 Details on bearings, railings, drainage systems, expansion joints etc. 3. Plan, profile and cross sections of the approach roads on both sides of the bridge 4. Details of river training works 5. Miscellaneous

3. Content of Design Calculations (Volume III)

Detailed analysis and design calculation of following elements should be provided.
The design calculations should mention the governing design code or guideline wherever they are applied.

Hydrology	
Hydrological data	• Catchment area characteristics: - The catchment area size, shape (classified as fan, pear, long or narrow), slopes (Longitudinal and Cross-sectional). - Surface characteristics (whether sandy, clayey etc. including percolation and interception characteristics. - Whether land is under afforestation, deforestation or is dotted with urban areas, cultivated areas or storage areas, e.g. lakes, swamps, tanks, reservoirs etc. shall be determined. • Rainfall Data: - Maximum in 24 hours. - Maximum in any one hours. - Rainfall distribution in the catchment area. - Duration and frequency of the rain. - Raingauge data of the storms along with the corresponding stream gauss data (data for unit hydrograph). - Average annual rainfall characteristics (from relevant meteorological records). - Probability plotting (a graph plotted between the flood magnitude against its return period). • Stream / channel characteristics 1. Type of river - Seasonal or Perennial. - Meandering or Straight. - Other classification, e.g. boulderly, flashy, well defined, tidy etc. - Length, slope, cross-sections of the river. 2. Water Level - Highest flood in living memory and other major floods before start of investigation. - Highest flood level and year of its occurrence, showing the areas flooded. - Records of flood gauging stations. - Lowest Water Level (LWL).

	- Afflux, if observed. - Observed maximum depth of scour and scour level, indicating what obstruction if any, and other special causes, which can be responsible for the scour at site. - Sediment Data, indicating bed material particle size, aggradation (degradation of bed, bank erosion (reference to flood stage) etc. - Erodibility of riverbanks and river bed. - Scour Data (as observed, particularly downstream of any obstructions to the flood flow).
Analysis of hydrological data and determination of associated elements	▪ Discharge calculation by various methods including WECS method, comparison of discharges, determination of design discharge expected to pass under the bridge and justification for adapting the design discharge, natural stream velocity and flood velocity. ▪ Maximum mean or maximum velocity of flood flow. ▪ Effective linear waterway required under the bridge (after allowing for average thickness of each pier and its foundation, between High Flood Level and Normal Scour Level, ignoring the earth fills in front of the abutment). ▪ High Flood Level, Afflux and Water Level. ▪ Freeboard required between the affluxed High Flood Level and soffit of deck from the considerations of unobstructed flow of floating debris with the flood discharge. ▪ Normal and Design (maximum) scour levels at piers and abutments (Consider higher watermarks in the area and at and near the site). ▪ Minimum founding levels at piers and abutments from consideration of maximum scour etc.
Sub-soil investigation.	
Investigation data	▪ Bore-log of each bore-hole showing: Depth gauge, soil description of encountered layers with depth marks, sample collection points, depth and types of tests performed, Ground water table, number of blows for SPT/CPT, N-values ▪ Certificate of sub-soil investigation from respective Division / project office indicating depth of each bore-hole and confirming that soil-samples of each strata in each borehole are deposited in core boxes for the record. ▪ Laboratory test result of the samples as specified in section 3.3 of the TOR. ▪
Analysis of sub-soil data	▪ Determination of bearing capacity and other parameters at different depths required for different types of foundations, determination of

	design bearing capacity. ▪ Comparison and determination of type(s) of foundation for abutments and piers. ▪ Summary of subsoil characteristics and types of foundations.
Design of bridge elements	On the basis of the topographic survey, hydrological, sub-soil and seismological analysis the report should present detailed design of the following parts of the bridge: ▪ Design of superstructure and its parts: deck, main and cross girders, bearings, railing posts, bracings, stiffeners, joints etc. as applicable. ▪ Design of substructure: pier/abutment cap, substructure body ▪ Design of foundation and its part: foundation base, well/pile cap, well steining, pile grouping, individual pile body, pile head, cutting edge, top/bottom plug as applicable. ▪ Design of river training works ▪ Design of approach roads

5. Soft (electronic) copies of the part of the report

Two copies of the report in electronic files should be submitted in suitable tool, which shall include the following:

- Text of main report (in MS Word format)
- Rate analysis and cost estimates (in MS Excel format)
- All the drawings in format compatible to AutoCAD.

6. Appendices

The following should be submitted as appendices to the main report:

1. Laboratory test results of subsoil strata as specified in section 3.3 of the TOR
2. Detailed rate analysis
3. Certified district rates

Section 6. Standard Form of Contract

A. Form of contract

THIS AGREEMENT, made on the *(Date)*.....between Government of Nepal, Department of Roads, Bridge Branch (herein after called as "the Department" or "the DOR") of the one part and the Consulting Firm or JV .... …… (herein after called as "the Firm" or "the Consultants") the other part.

WHEREAS, the Department is desirous that certain Professional Engineering Services should be performed viz. _____ the following work and has accepted a proposal by the firm for the performance of such services for the total amount of NRs....., excluding VAT.
In words NRs. .....

Contract No.	Name of the Work

The whole services comprised in the Agreement shall be completed and Draft Report submitted before (***Date***).....and shall perform the services in conformity in all respects with the provisions of the Agreement.

Now this Agreement witness as follows

1. In this Agreement words and expressions shall have the same meaning as are respectively assigned to them in the Condition of Engagement hereinafter, referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
   (a) The said proposal
   (b) Terms of Reference
   (d) Bill of Quantities
   (e) Memorandum of Agreement
   (f) Special provisions (if any)
   (g) Appendices (if any)
   (h) Checklists (if any)
   (i) Addenda (if any) to the documents (a) through (h)
   (j) Instructions to consultant (if any)

3. The Firm shall commence the Services from the date of signing of the Agreement and the services shall be completed on or before (***Date***).....

4. In consideration of the payments to be made by the Department to the Firm as hereinafter mentioned, the Firm hereby covenants with the Department to perform the services in conformity in all respects with the provisions of the Agreement.

5. The Department hereby convents to pay the Firm in consideration of the performance of the services and amount at the manner prescribed by the Agreement.

IN WITNESS : whereas the parties here have made and executed this Agreement as of the day, month and year first above written.

_____ _____

On behalf of the Department

_____

Witness

1 ----------

2 ----------

On behalf of the Firm

_____

Witness

1 ----------

2 ----------

B. General Conditions of Contract

1. General Provisions

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

"Applicable Law" means the laws and any other instruments having the force of law in Nepal, as they may be issued and in force from time to time;

"Government" means Government of Nepal.

"Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GCC) are attached, together with all the documents listed in Clause 1 of such signed Contract;

"Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GCC 2.1;

"GCC" means these General Conditions of Contract;

"Donor" means the organization offering loan, credit or grant to GoN

"Local Currency" means the currency of the Government;

"Member," in case the Consultants consist of a joint venture of more than one entity, means any of these entities; and "Members" means all these entities;

"Party" means the Client or the Consultants, as the case may be, and "Parties" means both of them;

"Personnel" means persons hired by the Consultants or by any Sub consultant as employees and assigned to the performance of the Services or any part thereof; "Foreign Personnel" means such persons who at the time of being so hired had their domicile outside Nepal; "Local Personnel" means such persons who at the time of being so hired had their domicile inside Nepal; and "Key Personnel" means the Personnel referred to in Clause GCC 4.2(a);

"SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented;

"Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A hereto;

"Sub consultant" means any person or entity to whom/which the Consultants subcontract any part of the Services in accordance with the provisions of Clause GCC 3.7;

"Third Party" means any person or entity other than the Government, the Client, the Consultants or a Sub consultant.

1.2 Relation between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Client and the Consultants. The Consultants, subject to this Contract, have complete charge of Personnel and Sub consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.3 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law of Nepal.

1.4 Language

This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.5 Headings

The headings shall not limit, alter or affect the meaning of this Contract.

1.6 Notices

1.6.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the SCC.

1.6.2 Notice will be deemed to be effective as specified in the SCC.

1.6.3 A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the SCC with respect to Clause GCC 1.6.2.

1.7 Location

The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, whether in Nepal or elsewhere, as the Client may approve.

1.8 Authority of Member in Charge

In case the Consultants consist of a joint venture of more than one entity, the Members hereby authorize the entity specified in the SCC to act on their behalf in exercising all the Consultants' rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

1.9 Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants may be taken or executed by the officials specified in the SCC.

1.10 Taxes and Duties

Unless otherwise specified in the SCC, the Consultants, Sub consultants and Personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Law.

2. Commencement, Completion, Modification and Termination of Contract

2.1 Effectiveness of Contract

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SCC have been met.

2.2 Termination of Contract for Failure to Become Effective

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SCC, either Party may, by not less than thirty (30) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

2.3 Commencement of Services

The Consultants shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the SCC.

2.4 Expiration of Contract

Unless terminated earlier pursuant to Clause GCC 2.9 hereof, this Contract shall terminate at the end of such time period after the Effective Date as

shall be specified in the SCC.

2.5 Variation

Variation of the terms and conditions of this Contract, including any variation of the scope of the Services, may only be made by written agreement between the Parties however, each Party shall give due consideration to any proposals for variation made by the other Party.

2.6 Force Majeure

2.6.1 Definition

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.

Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Subconsultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.

Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.6.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.6.3 Measures to be Taken

A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.

A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than fifteen (15) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.

The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

2.6.4 Extension of Time (EoT)

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure or Client's failure to provide facilities in time as per the contract

The Consultant shall submit an application to the Client for extension of time, stating the causes for delay with supporting evidence within7 days before the expiry of the Contract completion date. The approval of EoT shall be subject to verification by the Client weather:

a. the consultant had made the best possible efforts to complete the work in due time ,
b. the facilities to be provided by the Client as per the contract to the Consultant was made in time or not,
c. the delay was as a result of Force Majeure or not.

2.6.5 Consultation

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

2.7 Suspension

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

2.8 Termination

2.8.1 By the Client

The Client may, by not less than thirty (30) days' written notice of termination to the Consultants. (except in the event listed in paragraph (f) below, for which there shall be a written notice of not less than sixty (60) days), such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (g) of this Clause GCC 2.8.1, terminate this Contract:

if the Consultants fail to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to Clause 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing;

if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GCC 8 hereof;

if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;

if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or

if the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

if the Consultant, in the judgment of the Client, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this clause:

"corrupt practice" means the offering, giving, receiving or

soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Client, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Client of the benefits of free and open competition.

2.8.2 By the Consultants

The Consultants may, by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause GC 2.8.2, terminate this Contract:

if the Client fails to pay any money due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause GCC 8 hereof within forty-five (45) days after receiving written notice from the Consultants that such payment is overdue;

if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;

if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or

if the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GCC 8 hereof.

2.8.3 Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clauses GCC 2.2 or GCC 2.9 hereof, or upon expiration of this Contract pursuant to Clause GCC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GCC 3.3 hereof, (iii) the Consultants' obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GCC 3.6(ii) hereof, and (iv) any right which a Party may have under the Applicable Law.

2.8.4 Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GCC 2.9.1 or GCC 2.9.2 hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Clauses GCC 3.9 or GCC 3.10 hereof.

2.8.5 Payment upon Termination

Upon termination of this Contract pursuant to Clauses GCC 2.8.1 or GCC 2.9.2 hereof, the Client shall make the following payments to the Consultants:

remuneration pursuant to Clause GCC 6 hereof for Services satisfactorily performed prior to the effective date of termination;

reimbursable expenditures pursuant to Clause GCC 6 hereof for expenditures actually incurred prior to the effective date of termination; and

except in the case of termination pursuant to paragraphs (a) through (d) of Clause GCC 2.8.1 hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract including the cost of the return travel of the Personnel and their eligible dependents.

2.8.6 Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (e) of Clause GCC 2.8.1 or in Clause GCC 2.9.2 hereof has occurred, such Party may, within thirty (30) days after receipt of notice of termination from the other Party, shall settle the dispute pursuant to Clause GCC 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3. Obligations of the Consultants

3.1 General

3.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub consultants or Third Parties.

3.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub consultants, as well as the Personnel of the Consultants and any Sub consultants, comply with the Applicable Law. The Client shall notify the Consultants in writing of relevant local customs, and the Consultants shall, after such notification, respect such customs.

3.1.3 Application of Procurement Law

If the Consultants, as part of the Services, have the responsibility of advising the Client on the procurement of goods, works or services, the Consultants shall comply with any applicable procurement guidelines as per the prevailing Public Procurement Act and Regulations of the GoN (or of the Donors/funding agencies) and shall at all times exercise such responsibility in the best interest of the Client. Any discounts or commissions obtained by the Consultants in the exercise of such procurement responsibility shall be for the account of the Client.

3.2 Conflict of Interests

3.2.1 Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause GC 6 hereof shall constitute the Consultants' sole remuneration in connection with this Contract or the Services and, subject to Clause GCC 3.2.2 hereof, the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any Sub consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

3.2.2 Consultants and Affiliates Not to

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultants, as

Engage in Certain Activities

well as any Sub consultant and any entity affiliated with such Sub consultant, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

3.2.3 Prohibition of Conflicting Activities

The Consultants shall not engage, and shall cause their Personnel as well as their Sub consultants and their Personnel not to engage, either directly or indirectly, in any of the following activities:

during the term of this Contract, any business or professional activities in Nepal which would conflict with the activities assigned to them under this Contract; and

after the termination of this Contract, such other activities as may be specified in the SCC.

3.3Confidentiality

The Consultants, their Sub consultants, and the Personnel of either of them shall not, either during the term of within two (2) years after the expiration of this Contract, disclose any proprietary of confidential information relating to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client.

3.4 Liability of the Consultants

Subject to additional provisions, if any, set forth in the SCC, the Consultants' liability under this Contract shall be as provided by the Applicable Law.

3.5 Insurance to be Taken Out by the Consultants

The Consultants (i) shall take out and maintain, and shall cause any Sub consultants to take out and maintain, at their (or the Sub consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverages, as shall be specified in the SCC, and (ii) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

3.6 Accounting, Inspection and Auditing

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof (including such bases as may be specifically referred to in the SCC), and (ii) shall permit the Client or its designated representative periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client and, where applicable

3.7 Consultants' Actions Requiring Client's Prior Approval

The Consultants shall obtain the Client's prior approval in writing before taking any of the following actions:

a. appointing such members of the Personnel as are listed in Appendix C merely by title but not by name;

b. entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the Sub consultant and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub consultant and its Personnel pursuant to this Contract;

c. any other action that may be specified in the SCC.

3.8 Reporting Obligations

The Consultants shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.

3.9 Documents Prepared by the Consultants to be the Property of the Client

All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultants for the Client under this Contract shall become and remain the property of the Client, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software. Restrictions about the future use of these documents and software, if any, shall be specified in the SCC.

3.10 Equipment and Materials Furnished by the Client

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Client's instructions. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.

4. Consultants' Personnel and Sub consultant

4.1 General

The Consultants shall employ and provide such qualified and experienced Personnel and Sub consultants as are required to carry out the Services.

4.2 Description of Personnel

a. The title, agreed job description, minimum qualification and estimated period of engagement in the carrying out of the Services of each of the Consultants' Key Personnel are described in Appendix C. If any of the Key Personnel has already been approved by the Client, his/her name is listed as well.

b. If required to comply with the provisions of Clause GCC 3.1.1 hereof, adjustments with respect to the estimated periods of engagement of Key Personnel set forth in Appendix C may be made by the Consultants by written notice to the Client, provided (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GCC 6.1(b) of this Contract. Any other such adjustments shall only be made with the Client's written approval.

c. If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the Client and the Consultants, provided that any such increase shall not, except as otherwise agreed in writing, cause payments under this Contract to exceed the ceilings set forth in Clause GCC 6.1(b) of this Contract.

4.3 Approval of Personnel

The Key Personnel and Sub consultants listed by title as well as by name in Appendix C are hereby approved by the Client. In respect of other Key Personnel which the Consultants propose to use in the carrying out of the Services, the Consultants shall submit to the Client for review and approval a copy of their biographical data. If the Client does not object in writing (stating the reasons for the objection) within twenty-one (21) calendar days from the date of receipt of such biographical data .

4.4 Removal and/or Replacement of Personnel

a. Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Personnel, the Consultants shall forthwith provide as a replacement a person of equivalent or better qualifications.

b. If the Client (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Client's written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the Client.

c. Any of the Personnel provided as a replacement under Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Client. Except as the Client may otherwise agree, (i) the Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (ii) the remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

5. Obligations of the Client

5.1 Access to Site

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all sites in Nepal in respect of which access is required for the performance of the Services. .

5.2 Change in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultants in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause GCC 6.1(b).

5.3 Services, Facilities and Property of the Client

The Client shall make available to the Consultants and the Personnel, for the purposes of the Services and free of any charge, the services, facilities and property described in Appendix D at the times and in the manner specified in said Appendix D, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services, (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Clause GCC 6.1(c) hereinafter.

5.4 Payment

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause GCC 6 of this Contract.

6. Payments to The Consultants

6.1 Cost Estimates; Ceiling Amount

a. An estimate of the cost of the Services payable in local currency is set forth in Appendix E.

b. Except as may be otherwise agreed under Clause GCC 2.6 and subject to Clause GCC 6.1(c), payments under this Contract shall not exceed the ceilings in local currency specified in the SCC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.

c. Notwithstanding Clause GCC 6.1(b) hereof, if pursuant to any of the Clauses GCC 5.3 or 5.4 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultants in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GCC 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GCC 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

6.2 Remuneration and Reimbursable Expenditures

a. Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Clause GCC 2.3 and Clause SCC 2.3 (or such other date as the Parties shall agree in writing) (including time for necessary travel via the most direct route) at the rates referred to, and subject to such additional provisions as are set forth, in the SCC.

b. Reimbursable expenditures actually and reasonably incurred by the Consultants in the performance of the Services, as specified in Clause SCC 6.3.

6.3 Currency of Payment

a. All payments to the Consultant for the performance of the services shall be made in the currency of the GoN.

6.4 Mode of Billing and Payment

Billings and payments in respect of the Services shall be made as follows:

a. The Client shall cause to be paid to the Consultants an advance payment as specified in the SC, and as otherwise set forth below. The advance payment will be due after provision by the Consultants to the Client of a bank guarantee by a bank acceptable to the Client in an amount specified in the SCC, such bank guarantee (i) to remain effective additional one month after the advance payment has been fully set off as provided in the SCC, and (ii) to be in the form set forth in Appendix I hereto or in such other form as the Client shall have approved in writing.

b. As soon as practicable and not later than fifteen (15) days after the end of each calendar month during the period of the Services or on completion of the task on which the payment is based , the Consultants shall submit to the Client, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Clauses GCC 6.3 and 6.4 for such month or completed task.

c. The invoice format shall be as agreed between the client and the

consultants.

d. The Client shall cause the payment of the Consultants' monthly statements less retention money 5% within *thirty (30)* days after the receipt by the Client of such statements with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorised to be incurred by the Consultants, the Client may add or subtract the difference from any subsequent payments. Interest at the annual rate specified in the SCC shall become payable as from the above due date on any amount due by, but not paid on, such due date.

e. The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory *forty-five (45)* calendar days after receipt of the final report and final statement by the Client unless the Client, within such *forty-five (45)* day period, gives written notice to the Consultants specifying in detail deficiencies in the Services, the final report or final statement. The Consultants shall thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Client has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultants to the Client within thirty (30) days after receipt by the Consultants of notice thereof. Any such claim by the Client for reimbursement must be made within *ninety (90) calendar days* after receipt by the Client of a final report and a final statement approved by the Client in accordance with the above.

f. e. All payments under this Contract shall be made to the account of the Consultant specified in the SCC.

6.5 Retention

a. The Client shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.

b. One half of the retention shall be repaid by the Client to the consultant at the time of the payment of the Final Bill pursuant to GCC Clause 6.4 (d)

c. The remainder of the retention shall be paid by the Client to the consultnt within 15 days after submission of an evidence document issued by the concerned Internal Revenue Office that the consultant has submitted his Income Returns.

6.6 Liquidated Damages

The Consultant shall pay liquidated damages to the Client at the rate per day stated in the SCC for each day that the completion services is later than the Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. Beyond this limit the contract may be terminated by the Client. The Client may deduct liquidated damages from any payments due to the Consultant. Payment of liquidated damages shall not affect the Consultant's liabilities.

7. Fairness and Good Faith

7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

7.2 Operation of the Contract

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause GCC 8 hereof.

8. Settlement of Disputes

8.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.

8.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be referred to the Adjudicator by either Party within 15 days after the amicable settlement period of 30 days.

8.3. Appointment of the Adjudicator

a. The Adjudicator, shall be appointed jointly by the Client and the Consultant within 30 days of the commencement date of the contract. If the parties cannot reach an agreement on the appointment of the Adjudicator, the Client will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 15 days of receipt of such request.

b. Should the Adjudicator resign or die, or should the Client and the Consultant agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Client and the Consultant. In case of disagreement between the Client and the Consultant, within 30 days, the Adjudicator shall be designated by the Appointing Authority at the request of either party, within 15 days of receipt of such request

8.4. Procedures for Disputes

a. If a dispute is referred to the Adjudicator pursuant to GCC Clause 8,2 then the Adjudicator shall give a decision in writing within 30 days of receipt of a reference of the dispute.

b. The Adjudicator shall be paid by the hour at the rate specified in the SCC, together with reimbursable expenses of the types specified in the SCC, and the cost shall be divided equally between the Client and the Consultant, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 30 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 30 days, the Adjudicator's decision will be final and binding.

c. In case of arbitration, the arbitration shall be conducted in accordance with the arbitration procedures published by Nepal Council of Arbitration .

9. Remedies for Breach of Contract

Without prejudice to ny other right of the Client under this Contract, the remedies available to the Client in the event of breach of the Contract by the Consultant are as follows:

a. rejection of defective performance,

b. prompt replacement and correction of defective services,

c. application of liquidated damages for delay as per the provision of the Contrct,

d. termination of the contract and correction of the services, not performed as per the requirement of the contract, at the expense of the consultant,

e. recovery for consequential damages;

f. such other remedies as may be available pursuant to the contract or to applicable law.

10. Conduct of Consultants

10.1 The Consultant shall be responsible to fulfill his obligations as per the requirement of the Contract Agreement, RFP documents and GoN's Procurement Act and Regulations.

10.2 The consultant shall not carry out or cause to carryout the following acts with an intention to influence the implementation of the procurement process or the contract agreement :

a. give or propose improper inducement directly or indirectly,

b. distortion or misrepresentation of facts

c. engaging or being involved in corrupt or fraudulent practice

d. interference in participation of other prospective bidders.

e. coercion or threatening directly or indirectly to impair or harm, any party or the property of the party involved in the procurement proceeding

f. collusive practice among consultants before or after submission of proposals for distribution of works among consultants or fixing artificial/uncompetitive proposal price with an intention to deprive the Client the benefit of open competitive proposal price.

g. contacting the Client with an intention to influence the Client with regards to the proposals or interference of any kind in examination and evaluation of the proposals during the period after opening of proposals up to the notification of award of contract

11.Blacklisting Consultant

11.1 Without prejudice to any other right of the Client under this Contract, Public Procurement Monitoring Office may blacklist a Consultant for his conduct up to three years on the following grounds and seriousness of the act committed by the consultant without prejudice to any other rights of the Client under rights under this Contract:

a) if it is proved that the bidder committed acts pursuant to the Information to Consultants GCC 10.2,

b) if the consultant fails to sign an agreement pursuant to Information to Consultants clause 7.3,

c) if it is proved later that the consultant has committed substantial defect in implementation of the contract or has not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract ,

d) if convicted by a court of law in a criminal offence which disqualifies the bidder from participating in the contract.

11.2 A Consultant declared blacklisted and ineligible by the Public procurement Office and or concerned Donor Agency in case of donor funded project shall be ineligible to bid for a contract during the period of time determined by the PPMO and or the concerned donor agency.

C. Special Conditions of Contract

Number Of GCC Clause	Amendments Of, And Supplements To, Clauses In The General Conditions Of Contract
1.6.1	The addresses are : Client: Address: **The Bridge Branch, Chakupat, Lalitpur** Attention: **DDG, Department of Roads** Cable address: NA Telex: NA Facsimile: Consultants: Address: … … … … … … … … … … … Attention: … … … … … … … … … … … Cable address: … … … … … … … … … … … Telex: … … … … … … … … … … … Facsimile: … … … … … … … … … … … E-mail: … … … … … … … … … … …
1.6.2	Notice will be deemed to be effective as follows: (a) in the case of personal delivery or registered mail, on delivery; (d) in the case of facsimiles, *6* hours following confirmed transmission.
1.8	The Member in Charge is *[To be named during contract]*.
1.9	The Authorized Representatives are: For the Client: The Project Manager(to be named during agreement) For the Consultants: [to be named during agreement]
2.2	The time period shall be ***6 months*** or such other time period as the parties may agree in writing.
2.3	The time period shall be *immediately after the effective date* or such other time period as the parties may agree in writing.
2.4	The time period shall be *[to be specified during agreement]* or such other time period as the parties may agree in writing.
3.4	"**3.4 Limitation of the Consultants' Liability towards the Client** (a) Except in case of gross negligence or willful misconduct on the part of the Consultants or on the part of any person or firm acting on behalf of the Consultants in carrying out the

Services, the Consultants, with respect to damage caused by the Consultants to the Client's property, shall not be liable to the Client:

(i) for any indirect or consequential loss or damage; and

(ii) for any direct loss or damage that exceeds (A) the total payments for professional fees and reimbursable expenditures made or expected to be made to the Consultants hereunder, or (B) the proceeds the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability, whichever of (A) or (B) is higher.

(iii) This limitation of liability shall not affect the Consultants' liability, if any, for damage to Third Parties caused by the Consultants or any person or firm acting on behalf of the Consultants in carrying out the Services."

3.5 NA

3.7(c) NA

3.9 ***NA***

6.4(a)

Replace the whole clause 6.4 of the GCC by the following:

No advance payments shall be made to the consultants. This service is based on the agreed bill of quantities and payment to the consultants shall be made as follows:

i) 30% of the contract amount after submission and acceptance of the Inception Report.

ii) 10% of the contract amount after submission and acceptance of the Field Report/Preliminary Design Report.

iii) 20% of the contract amount after submission of the Draft Report

iv) Remaining Final Payment after submission and acceptance of the Final Report and after returning all the documents, maps and reports, if borrowed from the DOR.

Note:

a) For the bridge(s) package fount to be unfeasible/Service not Required, the bridge(s) in the package need not undergo detailed design or feasibility due to reasons like already existing by close to it or at the is located, is planned for construction by other agency, no access to bridge site is found or any valid reason & attested by respective DRO/DoR Project/DDC further study shall not be carried out & the payment to Consultant shall paid 5% of the quoted amount for that bridge(s) which found to be unfeasible/Service not required, and in case replacement is made full payment for the bridge(s) as in the agreement shall be made.

if the Consultant uses any Standard Design provided by the DOR then the payment shall be adjusted by deducting the following amounts as follows:

Minor bridge	Rs 47,303.25 per bridge (excl. VAT) with proportional adjustment for reduction of BOQ amount wrt departmental estimate amount.
Medium bridge	Rs 64,400.28 per bridge (excl. VAT) with proportional adjustment for reduction of BOQ amount wrt departmental estimate amount.
Major bridge	Rs 68,465.79 per bridge (excl. VAT) with proportional adjustment for reduction of BOQ amount wrt departmental estimate amount.

6.4(d) The interest rate is: *0%*

6.4(f) Directly paid in the name of the consultant.

6.5 (a) No retention money shall be deducted

6.6 Liquidated Damages : at the rate of 0.05 % of contract price per day to a maximum of 10% of the sum stated in the Agreement

8.3 Appointment of the Adjudicator The appointing authority is NEPCA.

8.4(b) Per hour rate of Adjustor is NRs. 2,000.00

Signature of witness:
Name (in bold letters):
Address:
Date:

Seal

Signature of Consultant:
Name (in bold letters):
Name and address of the firm:
Date: