



TERMS OF REFERENCE FOR

WALKING TRAILS AND WETLANDS CONSTRUCTION WORK UNDER THE “INSTILLING GREEN LUMBINI INITIATIVE”

A collaborative effort of WWF Nepal and Lumbini Development Trust (LDT) to promote
Lumbini Crane Sanctuary

1. BACKGROUND

The Terai Arc Landscape (TAL) is an important transboundary conservation area that stretches from Nepal’s Bagmati River in the east to India’s Yamuna River in the west. In Nepal, TAL covers 24,710 km² area and spreads across 18 districts. The TAL encompasses six protected areas that harbor endangered species such as rhinos and tigers. TAL is an exemplary model in conservation, marking the shift from site-based conservation to a landscape one. It has successfully engaged diverse stakeholders from local communities and the government to conserve biodiversity.

Lumbini, the birthplace of Lord Buddha and UNESCO World Heritage site, is located in Rupandehi district and lies at the alluvial flood plains of TAL. With Lumbini situated in the heart of the Terai Arc, it is often referred to as the “Soul of TAL”. Apart from being an important Buddhist pilgrimage site, Lumbini holds significant archeological, cultural, and natural importance. The area supports a rich and diverse natural ecosystem and represents one of the few remaining habitats for endangered birds such as the Sarus Crane (*Grus antigone*) and other critical flora and fauna. Lumbini farmlands have been identified as an Important Bird Area (IBA) by Bird Life International (BLI) due to their conservation significance for large avifauna such as lesser adjutant stork, white-rumped vulture, and sarus crane. Due to its forest cover, Lumbini Garden also serves as an important carbon sink.

Though once densely forested, Lumbini Garden is now experiencing reduced vegetation cover. Sarus crane, the official bird of Lumbini Cultural Municipality and one of the nine protected species of Nepal is also under threat due to habitat loss and degradation, illegal hunting and collection of eggs, due to lack of awareness among locals. Sarus cranes use wetlands to feed and nest on, however the wetlands in Lumbini farmlands are deteriorating due to encroachment and pollution caused by untreated effluents.

Recognizing the multi-faceted importance of Lumbini and the imminent challenges it faces, WWF Nepal partnered with Lumbini Development Trust (LDT) in 2010 to develop Lumbini as a model site in which conservation finds a close connection with the philosophy of interconnectedness and inter-dependence. International Crane Foundation (ICF) also initiated the concept of Lumbini Crane Sanctuary in 1994 to demonstrate wetland management for sarus



crane conservation. This project entitled “Instilling Green Lumbini Initiative” is aligned with LDT’s and ICF’s concept and aims to promote responsible environmental practices and sustainable development processes in the sacred site of Lumbini. The main features of the project are establishment and management of wetlands and other habitats along with the Peace Garden, promotion of environmental, cultural and philosophical values, sarus crane conservation, and raising awareness on nature conservation. The goal of this project is to improve the ecological integrity of Lumbini and enhance benefits to biodiversity and human well-being. The project aims to do this by engaging non-conventional stakeholders to promote “trees outside of forests” to restore degraded lands, conserve sarus crane and its habitat through wetland restoration, and create accessible trails. The section below details out the interventions that will be carried out under the project.

2. OBJECTIVES

- To create and/or rehabilitate wetlands through earthwork excavation and construct walking trails from the excavated soil within the Lumbini Crane Sanctuary area (refer to **Appendix 2**).

3. SCOPE OF WORK

- Civil work for mud-filled trail with stabilized slope for walking purpose
- Civil work to create and/or rehabilitate wetlands to provide suitable habitat for endangered sarus cranes, storks and other wetland species

4. NATURE OF WORK

- The work comprises of earth cutting and filling activities in a defined pattern (refer to annex 2) to create walking trails while constructing wetlands. No earth material shall be transferred or taken away from the Lumbini Crane Sanctuary premises while working
- Earthwork should be done under full-time technical supervision of LDT and WWF Nepal officials. Earthwork excavation shall be done in 6 different locations within Lumbini Crane Sanctuary area. Locations are mentioned in the **Appendix 2** below
- The average depth to which soil can be excavated is half a meter
- Tentative earthwork excavation quantity is as follows:
 1. 4000 sq.m area x 0.5 m depth = 2000 cu.m
 2. 6000 sq.m area x 0.5m = 3000 cu.m
 3. 6000 sq.m area x 0.5m = 3000 cu.m
 4. 1000 sq.m area x 0.5 = 500 cu.m

As a part of the earth work, a tentative area of 8,500 cu.m is to be excavated



5. Eligibility Criteria

- Any VAT registered Nepali Contractor duly following the construction rules is eligible to bid with accurately filled Bill of Quantity (BoQ) attached in the **Appendix 1**
- Eligible contractors must produce duly filled Bill of Quantity (BoQ) along with a company profile, certificates that show the completion of work carried out in the last 3 years Detailed registration certificates including recent Tax Clearance Certificate for FY 2074/75 is a must

The technical team shall be fully liable in awarding the contract

6. Equipment and Manpower Requirement

Eligible bidders must submit required human resources and equipment schedule with a minimum of following requirements;

Equipment

- a. Excavator - 1 no.
- b. Backhoe loader - 2 nos.
- c. Tripper / Tractor - 4 nos.

Manpower:

- a. Civil Engineer - 1 no.
- b. Supervisor - 1 no.
- c. Operators - as required
- d. Required human resources to stabilize slopes and landscaping

7. TIME FRAME

- The time frame for the construction of walking trails and wetlands is 2 months from the date of project agreement
- The bidder must submit a work and manning schedule for successful completion of work within the stipulated time frame
- A pre-bid meeting will be held at **2 PM on 20th May 2019** at the Lumbini Development Trust Office, Lumbini. Those interested contractor, upon registration at info@wwfnepal.org by **5 PM on 19th May 2019** are eligible to attend pre-bid meeting
- The bidder should send the proposal by **5 PM on 24th May 2019**. Any proposal received after this time will not be entertained

8. EXPECTED OUTCOMES

The expected outcomes of the assignment are:

1. Construction of walking trails of 2600 meters length with 4 m width at base, 3 m width on top and 2 m height within Lumbini Crane Sanctuary area
2. Construction of wetlands (4 major, 2 minor) on site



9. DELIVERABLES

- An inception report including methodology and a work plan within 7 days of contract signing
- Earthwork quantity performed on ground as per technical supervision of WWF/LDT
- Final project reports including financial report at the end of the contract period
- Other relevant documents, photographs, data, maps produced under this assignment
- Soil stabilization report by maintaining slopes

10. Project cost limitation

The total cost of the project is NPR 30 lakhs including VAT and applicable taxes.

11. DOCUMENTS REQUIRED

In addition to the application, the following documents are required:

- Copy of Organization Registration and Latest Renewal
- Copy of VAT registration
- Copy of latest tax clearance certificate for FY 2074 / 2075
- Detailed Proposal and budget and accurately filled BoQ

You can put both the technical and the financial proposal in a single envelope



APPENDIX 1. Bill of Quantities (BoQ)

WWF Nepal Instilling Green Lumbini Initiative Bill of Quantity

Project :- Walking Trail and Watersheds construction by Earthwork Excavation for Lumbini Crane Sanctuary under Instilling Green Lumbini Initiative

S. N.	Description of works	Unit	Quantity	Rate		Amount [in NPR]	Remarks
				In Figure	In Words		
1	Excavation in Roadway, Drain and foundation in Ordinary Soil including removal and satisfactory disposal of the materials upto a lead of 50m.	M ³	8500.00				
	Sub total						
	VAT 13%						
	Total Amount						

Name of Bidder :-

Seal of Bidder :-

Signature :-

Contact No :-



APPENDIX 2: Picture showing expected work to be performed at Lumbini Crane Sanctuary site

