

Birendranagar Municipality
Office Of The Municipal Executive
Birendranagar, Surkhet
Karnali Province, Nepal



Terms of Reference(TOR)

For



DPR of
Steel Structure Pedestrian Flyover
at Mangalgadhi Chowk.



1. Background

Birendranagar Municipality in the fiscal year 2081/082 in its annual planning and budgeting has proposed the construction **Pedestrian Flyover**. In line with the proposed plan, Birendranagar Municipality seeks to outsource the consulting services for preparation of design drawing and estimate of **Pedestrian Flyover** project. In order to outsource the competent Consulting firm this TOR has been prepared for the preparation of design drawing and estimate of **Pedestrian Flyover** project.

2. Objectives

The objectives of the assignment are to prepare the DPR, Drawings, Cost Estimate & Report for the **Pedestrian Flyover**. However, following objective fulfill the proposed study:

- To carry out detail topographic survey and map of the areas (in appropriate scale)
- To carry out structural design.
- To carry out geotechnical soil investigation.
- Drawing of infrastructures should include Plan, Section, Elevation.
- To prepare Cost Estimate, Bidding Documents and Specification of the project.

3. Scope of The Work

The Consulting service is required for the preparation of architectural design, structural design, drawings, detail cost estimate, specification and bid documents. The **Pedestrian Flyover** should be safe, reliable, cost effective, energy saving (aiming zero energy loss).

3.1. Desk Study

A desk Study should be carried out, collecting all data, maps (GIS map, Google map) and other information relevant to **Flyover design** for planning of further field survey as well as detailed design.

3.2. Detail Engineering Study and Survey

3.2.1. Technical Feasibility Study

It should include reviewing the available data, collecting, reviewing and analysis field data including topographic survey. The Consultant should recommend the **size of Pedestrian Flyover**.

3.2.2. Geotechnical Soil Investigation

It should include 2 number of borehole of depth 10m each.

3.3. Detail Design and Quantity/Cost Estimates

Based on collected information and results of the discussion mentioned above the consultants shall design the **Pedestrian Flyover**, following the standard codes of practice, norms and guidelines. The consultants shall produce details and all structural drawing as per Municipality Norms. The consultants shall produce detailed quantity estimate of the **Pedestrian Flyover** and its accessories including provisions of demolition of existing Structures if there are any. The consultants shall collect information on sources of materials and their lead distances and prepare rate schedules and cost estimate based on the standard norms and prevailing district rates.

Laxmi Prasad Baskota
chief administrative officer

3.4. Preparation of the Document

- a) The consultants shall prepare detailed design and drawing for:
- Architectural
 - Structural
- b) The Consultant Shall Prepare Detailed Rate Analysis, Cost Estimate, Work Specifications and Complete set of Bidding Documents.

3.5. List of the Drawing Requirements

- a) Plan; scale 1:100/1:50/1:25
b) The Sections; scale 1:100/1:50/1:25
c) The Elevations; scale 1:100
d) Construction Details; scale: 1:20/1:10/1:5
e) Structural Drawing; scale 1:100/1:50
If scale of the drawing can be changed as per requirement.



3.6. Engineering Consulting During Construction Phase

- a) The consultants shall have to provide aid and assist during construction process to the Municipality Technical Team.

4. Personnel Requirement

The consultant should provide and manage a work team comprising of the following professionals to accomplish the proposed assignment. The required number of manpower and man-month should be in accordance with work schedule and manning schedule:

Personnel	General Experience
Structural Engineer	5 Years Experience
Civil Engineer	5 Years Experience
Highway Engineer	5 Years Experience
Geotechnical Engineer	5 Years Experience
Socio-Economist	5 Years Experience

The team should also consist of supporting technical and non-technical staffs.

5. Submissions of Reports and Presentation of the Works

- a) Draft Report

Consultant Should Submit **1 copies of Draft Report Within 30 days** from the work order date.

The complete set of the report should consist of:

Volume I- Main Report

Volume II- Drawings (Structural/Architectural etc)

Volume III- Geotechnical Soil Investigation Report.

Volume IV- Design Calculations and Structural Analysis Report.

Volume V- Rate Analysis, Cost Estimate, Bill of Quantity and Specifications.

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Volume VI- Bid Document

b) Presentation of the Draft Report

Consultant should present the design draft report within municipality and make amendment and corrections if there are any. The date and venue of the presentation shall be determined by mutual agreement between the Municipality and the consultants.

c) Final Report

Consultant Should Submit **2 copies** of Final Report in hardcopy and **softcopy within 45** days from the work order date.

The complete set of the report should consist of:

Volume I-Main Report

Volume II- Drawings (Structural/Architectural etc)

Volume III- Geotechnical Soil Investigation Report.

Volume IV-Design Calculations and Structural Analysis Report.

Volume V- Rate Analysis, Cost Estimate, Bill of Quantity and Specifications.

Volume VI- Bid Document

6. Payment Schedule

If not indicated otherwise, the payment shall be made as mentioned below:

- 100 % of payment shall be made after submission of final report by the consultant.

Laxmi Prasad Baskota
chief administrative officer