

TOR for Detailed Survey and Design of Jaljala

1. Background

Thabang Rural Municipality, Rolpa invites sealed bids from eligible bidders for the Detailed Engineering Survey and Design (listed below) of Jaljala Region which is located at the south-east part of Rolpa district. Jaljala is famous for its natural beauty and religious importance. To develop it as a main religious and natural tourist point, we invite the Detailed Engineering Survey and Design.

2. Objectives and Scope of work

The objectives of the consulting services is to conduct a Detailed Survey of the proposed road, prepare Detailed Design and Cost Estimate for the project with appropriate packaging. The Consultant is required is to perform the following jobs.

- a) Detailed Engineering Survey of the project(Jaljala project)
- b) Design the project Details co-operating with Thabang Municipality, Rolpa
- c) Prepare working drawings
- d) Prepare quantity and Cost estimates with analysis of rates
- e) Prepare Survey and Design reports

3. Executives of Consulting Services

3.1. General

Jaljala is famous for its religious and spiritual importance in some districts around Rolpa. The main objectives of this Survey is to develop Jaljala as a tourist hub and upgrade its infrastructural side as well.

The consultant shall carry out the necessary field works. The team personnel to be mobilized for field works and schedule of field work should be included in the proposal. The consultant shall then carry out further survey works necessary for detailed design of the project. The consultant shall be responsible for the analysis and interpretation of the data.

3.2. Working teams

The working team for field work should necessarily consist of the following key personnel/personal together with adequate supporting manpower.

1. Civil Engineer/ Architect Engineer
2. Engineering Geologist
3. Hydrologist
4. Senior Surveyor
5. Environmentalist

3.3. Engineering Details

3.3.1. Infrastructure Establishment

Jaljala now lacks proper stay facility and road access to reach. It has no proper temples management for worshippers and also a lack of well managed drinking water. People are disputing to reach the road access.

Because Jaljala has sufficient water resources, so it would be better to construct artificial lake to make an attractive scene with the boating facility. At the highest point of Jaljala, the well managed view tower should be constructed. Survey Design and Preparation of estimate shall be done as per of “Technical Guidelines on Planning Design and Constructions of Rural Roads 2005 and Environmental and Social Management Framework 2004” published by DoLIDAR.

3.3.2. Consideration of Environment protection

While designing the project, the consultants are required to predict damages to the environment and attempt to mitigate or minimize such damages and suggesting appropriate measures in design.

3.3.3. Liaison with engineer in charge

The consultants are required to maintain close liaison with the engineer-in-charge. The consultant should coordinate with the engineer in charge prior to commencement of detailed survey. Draft design proposals with other aspects of the design shall be discussed with the Engineer in charge for approval prior to proceeding with the detailed design and drawings.

3.3.4. Engineering Drawings

The consultant will prepare the following plans and working drawings on suitable reproducible materials using the format and title sheets as required by the engineer-in-charge.

- a) Map of district demarcation showing location of the area.
- b) Map showing complete drawings, names of area, land use, markets, villages, RM, Municipality, name of natural drainage, obligatory points etc.
- c) Location map showing linkage of the road network with the nearby tourist area.
- d) Map showing survey and design status of the complete road linkage, stay area, temples, lake, drinking water management, trading areas (in worshipping time) and other reference points.
- e) Resource Map showing the location of proposed quarry sites for the locally available construction materials like sub-base material, gravel, sand, stone, clips etc.
- f) The consultant should provide all above-mentioned documents in both hard and soft copy/ies.
- g) The consultant should consult with the local people and members of local government and submit the minutes of meetings and attach supporting photographs too.

3.3.5. Engineering design Calculation

All engineering design must be shown with calculation. The format should be described properly declaring the meaning and source of variables. Constants and multiplication factors should be referenced and justified.

4. Report

The consultant shall submit hard and soft copy/ies of the reports required as follows:

Draft Report-2(Two) Copies

Final Report-4(Four) Copies

The format of the reports should be as prescribed in the TOR (Annex I). However, the consultant must take prior approval of the outline of report from the engineer-in-charge.

5. Time Schedule

The consultant shall commence the work within a week from the date of signing an agreement. The reports should be submitted to the office as under:

Draft Report-Within 60(Sixty) days from the date of signing an agreement

Final Report-Within 10 days after receiving of office comments on the draft report

6. Use of Computer

Consultants are encouraged to use computers and appropriate software. But the software to be used in the engineering design works must be approved in advance by the District Technical Office. Further prepared reports should contain adequate information on methodology adopted in the program, summarized flow diagram, description of formula used in the program, data required for input and the results obtained in the output etc. The consultant should submit the soft copy of data of the total project.

7. Mode of Payment

- 20% of contract amount payment shall be made upon submission of field report and field data.
- 50% of contract amount shall be made after submission of Draft report.
- 30% of contract amount payment shall be made after submission of final report incorporating all the comments from the local people, local government, and other stakeholders.

ANNEXES

ANNEX I: Report Format

- Acknowledgement
- Synopsis
- Salient Features (**ANNEX III**)
- Contents
- List of Tables
- List of Figures
- Chapter
 1. Introduction
 - 1.1.Introduction
 - 1.2.Geomorphology and Geology
 - 1.3.Hydrology and Metrology
 2. Geometric Design Standards
 - 2.1.Road Access from the nearest road network
 - 2.2.Design Speed
 3. Design
 - 3.1.Artificial lake design
 - 3.2.Temples and their location
 - 3.3.View point design and location
 - 3.4.Visitor's residential Builds and Design and Location
 - 3.5.Drinking Water Supply
 - 3.6.Road Access and Parkings
 - 3.7.Measures for environmental protection
 - 3.8.Bio Engineering Measures

ANNEX II: Summary of Salient Features

1. Name of Project
2. Location
 - 2.1.Geographical Location
 - 2.2.Geographical features
 - 2.3.Terrain
 - 2.4.Climate
 - 2.5.Geology
3. Structure
 - 3.1.View Tower
 - 3.2.Drinking water supply
 - 3.3.Resident Building for visitors
 - 3.4.Rest Room
 - 3.5.Artificial Lake
 - 3.6.Road Access and Parking Area
 - 3.7.Temples location

4. Volume of Construction
 - 4.1. Earth work-Cutting and filling
 - 4.2. Pavement-Volume of sub-base E-wearing course
5. Project Cost
 - 5.1. Net Cost Total Cost and rate (in per unit)
 - 5.2. Gross Cost Total Cost and rate (in per unit)
6. Quantity Survey and Cost Estimate
 - 6.1. Project Cost
 - 6.2. Summary of Cost
 - 6.3. Cost of Earth work
 - 6.4. Cost of Pavement Constructions
 - 6.5. Details of measurement
 - 6.6. Bill of Quantity and tender documents
 - 6.7. Quantity of estimate of materials and equipments
 - 6.8. Manpower Estimate
 - 6.9. Analysis of rates
 - 6.10. Availability of materials
 - 6.11. Availability of manpower
7. Conclusion
 - 7.1. General Conclusion
 - 7.2. Specific Conclusion
8. Discussions
9. Quality Assurance Plan
10. Recommendation
11. References
12. Appendices
13. Team Detail/used equipments/software/spreadsheets etc.

ANNEX III: Project Cost Summary Format

S.N.	Major Headings	Unit	Quantity	Cost in NRs	Remarks
1.	Construction Cost a. Earth Work i. Cutting ii. Filling b. Retaining Structure c. Pavement i. Sub-base course with design ii. Otta-Seal d. Environmental Management cost as per EMAP e. Equipment and Spare parts f. Insurance cost g. Quality Assurance cost h. Project Implementation supporting logistic cost i. Provisional sum for additional material testing				
2.	Sub-total				
3.	VAT @ 13%				
4.	Grant Total				

ANNEX IV: Format for Social E-Environmental Action Plan Name of Project

S.N.	Location	Issues/Problems/Difficulties	Mitigation measures recommended	Remarks

ANNEX V: Financial Proposal for Detailed Survey and Design works

Logo
Thabang Rural Municipality
Office of Executive Rural Municipal, Rolpa
Financial Proposal for Detailed Survey and Design works

Name of Project-
F/Y- 075/076

S.N.	Description	Unit	Quantity	Rate(NRs)		Amount	Remarks
				In figures	In words		
1.	Detailed survey, Design and Cost Estimate						
Total							
VAT@13%							
Grant Total							

Name of the firm:

Address:

Name of the Authorized person:

Authorized Sign and Seal of the firm
Date: