

---

Government of Nepal  
Ministry of Physical Infrastructure and Transport

**Department of Roads**  
**Planning and Design Branch**  
**Planning Monitoring and Evaluation Unit**  
Babarmahal, Kathmandu

## **Request for Proposal**

for

**Consulting Services**

for

**Detailed Engineering Survey, Design of Road and Report  
preparation of**



**Contract No. : PMEU/337159/071/72 DPR 2~9**

**Consultant's Name and address:**

---

---

## Table of Contents

Section 1.	Letter of Invitation .....	1
Section 2.	Information to Consultants .....	2
Section 3.	Technical Proposal - Standard Forms .....	15
Section 4.	Financial Proposal - Standard Forms .....	23
Section 5:	Terms of Reference.....	26
Section 6:	Standard Form of Contract .....	40



---

## Section1. Letter of Invitation

As per Attached



---

## Section2. 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:
    - i. "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
    - ii. "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.
  - b. 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;
  - c. 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;
  - d. 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
  - e. 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**

**Technical Proposal**

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

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.

**Financial Proposal**

- 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.
- 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,**
- 4.1 The original proposal (TP and FP) shall be prepared in indelible

<p><b>Receipt, and Opening of Proposals</b></p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked “<b>Technical Proposal,</b>” and the original and all copies of the Financial Proposal in a sealed envelope clearly marked “<b>FINANCIAL PROPOSAL</b>” and warning: “<b>Do NOT OPEN WITH THE TECHNICAL PROPOSAL.</b>” 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, “<b>Do NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE.</b>”</p> <p>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.</p> <p>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.</p>
<p><b>5. Proposal Evaluation</b></p> <p><b>General</b></p> <p><b>Evaluation of Technical Proposals (QCBS,QBS,FBS, LCBS))</b></p>	<p>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.</p> <p>5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, is concluded.</p> <p>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</p>



---

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

- 5.6 After the evaluation of quality is completed, the Client shall notify those 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:  $S = St \times T\% + Sf \times P\%$ . 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 fulfil 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 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
- 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	<p>The name of the Client is:</p> <p>Government of Nepal          Ministry of Physical Infrastructure and Transport          Department of Roads  <b>Planning and Design Branch</b>  <b>Planning Monitoring and Evaluation Unit</b></p> <p>The method of selection is: <b>Quality- and Cost-Based Selection (QCBS)</b></p>
1.2	<p>The name, objectives, and description of the assignment are:</p> <p>Name : <b>Road as given in the BOQ</b></p> <p>Objectives: <b>Detailed Project Report Preparation of Road</b></p>
1.3	<p>A pre-proposal conference will be held on <b>15<sup>th</sup> day of issue of letter of invitation at</b> 1:00 p.m. at the PMEUnit, Babarmahal, Kathmandu</p> <p>The name(s), address(es), and telephone numbers of the Client's official(s) are:</p> <p><b>Name: Laxmi Dutt Bhatta</b></p> <p><b>Address : Unit Chief, Government of Nepal</b></p> <p><b>Ministry of Physical Infrastructure and Transport</b></p> <p><b>Department of Roads</b></p> <p><b>Planning and Design Branch</b></p> <p><b>Planning Monitoring and Evaluation Unit</b></p> <p><b>e-mail:pmeunit@dor.gov.np</b></p>
1.4	<p>The Client will provide the following inputs: <b>NA</b></p>
1.10	<p>The clauses on fraud and corruption in the Contract are: <b>NA</b></p>
2.1	<p>Clarifications may be requested <b>7 days</b> before the submission date</p> <p>The address for requesting clarifications is:          Government of Nepal          Ministry of Physical Planning , Works and Transport Management          Department of Roads  <b>Planning and Design Branch</b>  <b>Planning Monitoring and Evaluation Unit</b></p>
3.1	<p>Proposals should be submitted in the following language(s): <b>English</b></p>
3.3	<p>(i) Short listed consultants/entity <b>may not</b> associate with other short listed consultants:</p> <p>(ii) The estimated number of professional staff-months required for the assignment is: <b>NA</b></p> <p>(iii) Available Budget for Fixed Budget Assignment : <b>NA</b></p> <p>(iv) Reports that are part of the assignment must be written in the following language(s): <b>English</b></p>

Formatted: Bullets and Numbering

3.9	Proposals must remain valid for <b>90 days</b> after the submission date.																																											
4.3	Consultants must submit an original and <b>no</b> additional copies of each proposal:																																											
4.4	The proposal submission address: <b>Same as in 2.1</b> Information on the outer envelope should also include : <b>Contract ID.</b>																																											
4.5	Proposals must be submitted no later than: as per letter of invitation																																											
5.1	The address to send information to the Client is : <b>Same as in 2.1</b>																																											
5.3	<p>The number of points to be given under each of the evaluation criteria are:</p> <p><b>1. EVALUATION OF TECHNICAL PROPOSALS</b></p> <p><b>The Technical Proposal will be evaluated on the following grounds:</b></p> <table border="1"> <thead> <tr> <th>S.N</th> <th>Particulars</th> <th>Maximum points</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Relevant experience of the firm</td> <td>10</td> </tr> <tr> <td>2</td> <td>Methodology of Service Delivery</td> <td>40</td> </tr> <tr> <td>3</td> <td>Technology Transfer</td> <td>5</td> </tr> <tr> <td>4</td> <td>Professional Key Personnel</td> <td>45</td> </tr> </tbody> </table> <p><b>Total marks as a whole 70% of the total maximum points</b></p> <p><b>1) Relevant experience of the firm</b> <i>Maximum 10 Marks</i></p> <table border="1"> <thead> <tr> <th>Work Experience</th> <th>As consultant</th> </tr> </thead> <tbody> <tr> <td>Completion of work of "Detailed Engineering Survey and Design" or "DPR" or "Construction Survey, Design and Supervision" of a Road (Road Length more than 30KM)</td> <td>1.0 points for each job</td> </tr> </tbody> </table> <p><b>2) Methodology of Service Delivery</b> <i>Maximum 40 Marks</i></p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Evaluation Remarks</th> <th>Total Marks</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Comments or suggestions on ToR and services</td> <td>Not Significant</td> <td rowspan="3">4.0</td> </tr> <tr> <td>General</td> </tr> <tr> <td>Significant</td> </tr> <tr> <td rowspan="3">Description and review any relevant documents like Design standards</td> <td>Not Significant</td> <td rowspan="3">5.0</td> </tr> <tr> <td>General Review</td> </tr> <tr> <td>Critical review</td> </tr> <tr> <td rowspan="4">If any of the key personnel has visited the site and has attached a photograph, described the site and has attached a photograph, described the site.</td> <td>General Description</td> <td rowspan="4">8.0</td> </tr> <tr> <td>General Description only</td> </tr> <tr> <td>General Description with site photograph</td> </tr> <tr> <td>Technical Description with site photograph</td> </tr> <tr> <td rowspan="3">Methodology to perform Socio-economic &amp; Traffic Study</td> <td>Not Significant</td> <td rowspan="3">3.0</td> </tr> <tr> <td>General</td> </tr> <tr> <td>Clear Methodology with</td> </tr> </tbody> </table>	S.N	Particulars	Maximum points	1	Relevant experience of the firm	10	2	Methodology of Service Delivery	40	3	Technology Transfer	5	4	Professional Key Personnel	45	Work Experience	As consultant	Completion of work of "Detailed Engineering Survey and Design" or "DPR" or "Construction Survey, Design and Supervision" of a Road (Road Length more than 30KM)	1.0 points for each job	Particulars	Evaluation Remarks	Total Marks	Comments or suggestions on ToR and services	Not Significant	4.0	General	Significant	Description and review any relevant documents like Design standards	Not Significant	5.0	General Review	Critical review	If any of the key personnel has visited the site and has attached a photograph, described the site and has attached a photograph, described the site.	General Description	8.0	General Description only	General Description with site photograph	Technical Description with site photograph	Methodology to perform Socio-economic & Traffic Study	Not Significant	3.0	General	Clear Methodology with
S.N	Particulars	Maximum points																																										
1	Relevant experience of the firm	10																																										
2	Methodology of Service Delivery	40																																										
3	Technology Transfer	5																																										
4	Professional Key Personnel	45																																										
Work Experience	As consultant																																											
Completion of work of "Detailed Engineering Survey and Design" or "DPR" or "Construction Survey, Design and Supervision" of a Road (Road Length more than 30KM)	1.0 points for each job																																											
Particulars	Evaluation Remarks	Total Marks																																										
Comments or suggestions on ToR and services	Not Significant	4.0																																										
	General																																											
	Significant																																											
Description and review any relevant documents like Design standards	Not Significant	5.0																																										
	General Review																																											
	Critical review																																											
If any of the key personnel has visited the site and has attached a photograph, described the site and has attached a photograph, described the site.	General Description	8.0																																										
	General Description only																																											
	General Description with site photograph																																											
	Technical Description with site photograph																																											
Methodology to perform Socio-economic & Traffic Study	Not Significant	3.0																																										
	General																																											
	Clear Methodology with																																											

	flow charts	
Methodology to perform Detailed Engineering Survey	Not Significant	12.0
	General Methodology only	
	General Methodology with flow chart	
	Clear Methodology with flow charts	
Work schedule with description	Not Significant	4.0
	Fairly justify the proposed methodology	
	Relevant to proposed methodology	
Manning schedule as per Work Schedule	Not Significant	4.0
	Fairly justify the proposed Work Schedule	
	Relevant to proposed Work Schedule	
Total Marks		40.0

### 3) Technology Transfer

Maximum 5 Marks

Particulars	Evaluation Remarks	Total Marks
The idea of sharing know-how of the works highlights on dissemination of knowledge and training proposed by the consultant.	Not Significant	5.0
	General (only standard method description)	
	Significant	

### 3) Professional Key Personnels

Maximum 45 Marks

Professional Key Personnel	Maximum Marks	Minimum experience after Bachelor Degree	Education required	Marks for Specific Job Experience
<b>Team Leader (Highway/Transport Engineer)</b>	<b>15</b>	10	M.Sc. in Highway/Transportation /Civil Engineering	1.5 marks for each job
<b>Geotechnical Engineer</b>	<b>10</b>	7	M.Sc. in Geotechnical Engineering	1 marks for each job
<b>Hydrologist</b>	<b>10</b>	7	M.Sc. In Water Resource/Hydrology/ Hydraulics Engineering	1 marks for each job
<b>Transport Economist/Sociologist</b>	<b>10</b>	7	M.A. In Economics/ Sociology	1 marks for each job

	<p>Note 1: The services for Govt of Nepal (GoN) organizations (Fully or Semi/Partially Owned ) shall only be evaluated as firm/jv experiences for the Proposal. Any experience by the firm as "in association with" shall evaluate with only 25% mark of each service.</p> <p>Note 2: Any sublated Service for Govt of Nepal (GoN) organizations (Fully or Semi/Partially Owned ) by a firm or JV from another private firm/jv shall not be evaluated as firm/JV experience for the Proposal.</p> <p>Note 3: Any service experience older than 10 year (counted from the last date of submission of EOI) shall not be evaluated as firm/JV experience for the Proposal</p> <p>Note 4: CV of each professional key professional shall be submitted with signature of professional and authorized representative of the firm/JV. The Signature shall be in Blue Ink. Scan signature , or signed in ink other than Blue Ink shall cause to rejection of CV for Proposal evaluation</p> <p>Note 5: Proposed professional key personnel shall not be repeated by the same firm/ JV and/or another firm/ JV. Incase of repetition of professional key personnel, the Unit shall ask via email the person for physical presence within seven days to declare him/herself the firm/ JV to whom he/she shall want to be associated.</p> <p>Note 6: CV of personnel shall clearly mention him/her e-mail address and mobile no.</p> <p>Note 7: The firm/jv shall have to submit the NEC registration certificate for engineer professionals(except Transport Economist/Sociologist)</p> <p>Note 8: The firm/jv shall also have to submit the any certificate as evidence of his/her education(degree) as required above.</p> <p>Note 9: Anything not mentioned in the above paragraphs shall be as per the Public Procurement Act-2063 and Public Procurement Regulation-2064.</p>
5.9	The fixed Budget Ceiling for the assignment is : <b>NA</b>
5.11	<p>The formula for determining the financial scores is the following:  <math>Sf = 100 \times Fm/F</math>, in which <i>Sf</i> is the financial score, <i>Fm</i> is the lowest price and <i>F</i> the price of the proposal under consideration,  The weights given to the technical and Financial Proposals are:  T (Technical Proposal) = <b>0.8</b>  P (Financial Proposal) = <b>0.2</b></p>
6.1	The address for negotiations is: <b>Same as in 2.1</b>
7.8	The assignment is expected to commence <b>on or before 7 days from the date of signing of the contract</b>



---

### 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.
- 3I. Transfer of Technology



---

### 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 Ten 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.

Consultant's Name:	
Assignment name:	
Location:	
Name of Client:	
Address:	
Start Date (Month/Year):	Completion Date (Month/Year):
Approx. Value of Services [in Nepali Rupees]:	
Names of <i>Key Technical Staff</i> (Project Director/Coordinator, Team Leader) involved: 1. 2. 3. 4. etc.	
Description of Services Provided:	

#### Notes:

1. Please provide the documentary evidence (e.g. completion certificate) clearly showing the name of the job/service, value of service and completion date. **Any information without such evidence shall not be entertained.**
2. Please **DO NOT** provide information on other projects which are not relevant to the proposed job.

---

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

---

Please study the Terms of Reference thoroughly and provide your views, findings, comments and suggestions 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**

---



---

### 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:  
E-mail:  
Mobile No.:  
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.

Date:

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

Full name of staff member: \_\_\_\_\_

Full name of authorized representative: \_\_\_\_\_

---

***The Consultant shall have to submit the CV of professionals with signature and authorized representative of the consultant. The Signature must be in Blue Ink. If signature is scan and colour print, or signed in ink other than Blue Ink shall cause rejection of the Proposal.***

---

**3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL**

**3H. ACTIVITY (WORK) SCHEDULE**

**3I. TRANSFER OF TECHNOLOGY**

Please provide your commitment, method and plan/schedule of Transfer of Technology.





---

## Section 4. Financial Proposal - Standard Forms

4A. Financial Proposal submission form.

4B. Bill of Quantity

**(Attached)**



---

#### 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:



---

**4B. BOQ**

**BILL OF QUANTITIES :**

**(Attached)**



---

## Section 5: Terms of Reference

### 1.0 BACKGROUND

The Department of Roads, Design and Planning Branch, Planning, Monitoring and Evaluation Unit, Babarmahal (herein after referred as "the Unit" or as "the Office"), intends to utilize services of engineering consulting firms well experienced in the fields of survey and design of roads, bridge engineering, river training works, environment aspects etc. for providing engineering consulting services for detailed project report preparation of proposed roads.

Name of road: As per BOQ

Existing road-head to be connected to: As per BOQ

District: As per BOQ

Development Region: As per BOQ

Proposed Class of Road : Feeder Road

### 2.0 OBJECTIVES OF THE WORK

The main objective of the consulting services are :

- to perform alignment detailed survey and design
- to perform socio-economic and traffic study
- to suggest option of upgrading and design accordingly
- to prepare detailed report of the stated road(s) based on sound techno-economical approach.
- to develop project implementation plan

### 3.0 SCOPE OF WORK

The firm shall carry out the necessary field works along the alignment. The firm shall be responsible for accuracy, interpretation, analysis of all data received and for the conclusion and recommendations in their report. The scope of work to be carried out by the firm shall include but may not be limited to the following:

#### Phase A

##### 3.1 Desk Study

A desk study shall be carried out, collecting all data, political & geological map, hazard map, road network map, map of earthquake zoning, land use map, aerial photo and information relevant to survey and design of the road and reviewing for planning of field survey and investigation works. After the desk study , the firm shall submit the inception report.

---

### 3.2 Preliminary Site Visit

The firm shall perform preliminary site visit by a walk-over survey to get information about :

- Existing Road Condition
- Tentative road length as new road section

### 3.3 Socio-economic studies of influence area with maps and sketches

- Demographic picture:
  - (a) Influenced population/economic activity of influenced population
  - (b) Structure of population
  - (c) Nature of migration and outside influx etc.
- Land use pattern:
  - (a) Wild life sanctuary
  - (b) Forest
  - (c) Production in influenced area and surplus in influenced area
  - (d) Settlement pattern etc.
- Trade, Industry and Commerce (existing & planned):
  - (a) Local produces and other resources
  - (b) Export and import
  - (c) Major industries and cottage industries
  - (d) Market development
  - (e) Tourism potential etc.
  - (f) Major development works (hydro power project, irrigation project, other governmental/no-governmental development programs etc.)
- Health (existing & planned):
  - (a) Hospital
  - (b) Health post
  - (c) Ayurvedic clinic etc.
- Education (existing & planned):

- 
- (a) Primary schools
  - (b) Secondary schools
  - (c) High schools
  - (d) Colleges/institutions etc.
  - (e) Universities
  - o Transport and communications network (existing & planned):
    - (a) Trail network and trail bridges
    - (b) Airport, STOL strips, helipad etc.
    - (c) Water transport
    - (d) Rope-ways
    - (e) Road network
    - (f) Telecommunication, postal service & other communication networks etc.
  - o Administrative facilities:
    - (a) Government offices
    - (b) Co-operation offices
    - (c) Banks etc.
    - (d) Police station



### 3.4 Traffic Study

To determine the type and volume of future traffic for the proposed roads, the firm shall analyze all existing statistical data affecting traffic within influence area. The firm shall carry out traffic counts and origin/destination surveys or any other surveys as necessary to determine the nature of traffic and the present volume of goods, animal and pedestrian movements (motorized as well as non-motorized traffic) within the influence area. Traffic data shall be co-related to the influenced population (or economically active population) and production (surplus or deficit in agriculture/industry etc.)

Threshold traffic value for construction and upgrading of the road, for the reduction of total transport cost, judgment shall be applied considering all possible method.

In broad terms, the firm shall also identify, describe and quantify existing and probable future traffic generating sources, based on the probable future development of the influence area on relevant factors, such as;

- 
- (a) Population growth and changes in population distribution.
  - (b) Regional economic growth.
  - (c) Development of agriculture, forestry, mineral and other resources.

Anticipated domestic trade in agriculture and non-agriculture commodities. A second traffic forecast shall be made assuming that an appropriate accelerated development program within the zone of influence is undertaken by the Government.

### **3.5 Feasibility Study of New Road Section**

The preliminary engineering design shall establish the technical feasibility and initial cost estimate of viable alternatives. The following guidelines apply:

- Plans of each alternative may be expanded to show all the key components and their connections with one another.
- Typical cross-sections and details may be developed to demonstrate the technical feasibility of the project component and to enable a quick estimate of quantities.
- Key engineering calculations shall be carried out to prove technical feasibility.
- Any deviations from standards shall be identified. The implications and effects shall be discussed and agreed with stakeholders while comparing alternatives.
- The preliminary engineering design shall be in sufficient detail to permit costs to be estimated +/-25%.
- The preliminary engineering shall identify sources, suitability and costs of materials for construction. As a minimum it shall include a survey of materials sources in the project vicinity.

Preliminary cost estimates shall be prepared based on the following:

- The quantities of the civil works shall be computed on the basis of the schematic plan, profiles and typical sections following standard methods of measurement.
- The rate analysis for civil engineering items shall follow the norms and market prices of construction materials, labour and equipment hiring rates.
- The rate analysis for civil engineering items may be verified using the mean rates from contracts in the last 5 years as much possible.
- The costs shall be broken down into local and foreign currency components, direct cost, overheads, taxes, physical and price contingencies.

The cost components shall be :

---

### Construction

Each alternative alignment shall be included in the cost estimate. If necessary the cost of a road system which will be necessary to connect existing population concentrations and develop the economic potential of the region, preliminary cost estimate may be based on typical construction cost of road, highway and bridge etc. recently constructed by the Department of Roads but shall take into account recent increases in the cost of construction, materials and labor prevalent in the districts. Cost estimate for stage construction shall be considered possibility starting with a low cost solution with initially a dry season road. Estimate of the local and foreign cost components, if applicable shall also be made.

### Maintenance

The cost of maintenance of road for design period shall also be considered. The Firm shall have to analyze and suggest the sources of income and the possibilities in which funds for the maintenance could be mobilized viz.: from local levels, toll taxes, vehicle registration fees or fines and transport equipment and spare parts taxes or through Road Board.

### Road user cost

Cost of vehicle operating cost, accident cost etc. shall be included in existing & proposed conditions. Vehicle operating cost of the proposed road shall be mentioned in terms of roughness verses required pavement cost, which is dominating cost of vehicle operation.

### Comparison

Comparison shall be made between different alignments taking into consideration of construction, maintenance, road user costs and other costs into consideration. While recommending the most feasible alignment in terms of construction cost, comparison shall be made with the operating cost as well as to determine the period during which the extra construction cost will be compensated. The ranking of alternatives shall be as recommendations given in manual of mountain risk engineering (MRE).

The following guidelines shall be applied:

- The life of the proposed works, and the residual value at the end of the life, shall be determined.
- The economic and financial analyses shall compare the benefits and costs of the project alternatives (the “with project” case) over the project life against projected conditions if no project were implemented (the “without project” case). Careful analysis is needed to define both cases.



- 
- For economic analysis, nominal costs and benefits shall be converted to an economic basis by removing taxes and duties and applying shadow prices where appropriate.
  - The construction cost, O&M cost, safety cost etc. shall be calculated over the construction and operating life of the project to generate the cost stream.
  - Benefits shall be calculated over the operating life of the project to generate the benefit stream.
  - Both cost and benefit streams shall be discounted and converted into present values using the discount rate specified by GoN.
  - The economic indicators normally used to evaluate and compare alternatives shall be economic internal rate of return (EIRR), benefit-cost ratio (B/C), net present value (NPV) and incremental NPV.
  - Where there shall be uncertainty on cost and benefit streams, sensitivity analyses shall be carried out for 25% increase in construction costs, 100% increase in maintenance cost, 20% reduction in user costs, 30% reduction in growth of benefits

#### Economic and Financial Analyses

The following guidelines shall be applied:

- The life of the proposed works, and the residual value at the end of the life, shall be determined.
- The economic and financial analyses shall compare the benefits and costs of the project alternatives (the “with project” case) over the project life against projected conditions if no project were implemented (the “without project” case). Careful analysis is needed to define both cases.
- For economic analysis, nominal costs and benefits shall be converted to an economic basis by removing taxes and duties and applying shadow prices where appropriate.
- The construction cost, O&M cost, safety cost etc. shall be calculated over the construction and operating life of the project to generate the cost stream.
- Benefits shall be calculated over the operating life of the project to generate the benefit stream.
- Both cost and benefit streams shall be discounted and converted into present values using the discount rate specified by GoN.

- 
- The economic indicators normally used to evaluate and compare alternatives shall be economic internal rate of return (EIRR), benefit-cost ratio (B/C), net present value (NPV) and incremental NPV.

### **3.6 Report submission of Phase A**

The consultant shall have to submit a report covering socio-economic study, traffic study and feasibility study of new Road Section. After necessary correction and suggestions issued by the Unit, the firm shall start phase B.

## **Phase B**

### **3.7 Detailed Engineering Study**

#### **3.7.1 Topography Survey**

The detailed Topographic survey of road corridor covering a width of 25m on either side of centreline will be carried out. The density of survey points will be atleast 1 point per 25 square metres. Topographic map in 1:1000 should contain details of Survey control points. Settlement with starting and end points, Landslide/Slope instabilities, natural stream and structures.

For existing & new road section, the firm shall perform the task as below, but may not be limited to the following:

- Fixing of road alignment by setting out intersection point (IP) and intermediates points.
- Establishment of Bench Marks (BM) and other reference points
- Cross Section shall be taken at LS 15-25 m interval depending upon the terrain and 2.5m interval across the alignment, minimum 25 m both side from the centreline.
- Topographical survey of road in minimum 30m wide strip on either side of the centre line.

#### **3.7.2 Engineering Study and Inventory Survey**

- Road Inventory Survey
  - + Sub grade Condition Survey (Visual Survey)
  - + Existing structure Survey
  - + Side drains requirements Survey

- 
- + Cross drainage requirements Survey
  - + Retaining and protection work requirements Survey
  - + Land use Survey
  - + The locations of settlements off the road structures electric poles, streams, and water taps within the area of the plan.

- Construction Materials Survey

- + Identification of potential sources (query sites, min 2 site)
- + Investigation of existing road materials on sites.

The firm shall perform the 2 set of Los Angeles Abrasion Test and Impact value test of the potential quarry material proposed for sub-base, base and chips.

- Geological and Geotechnical Survey

- + General geology of the region, project area and the proposed road corridor shall be described and a geological map of the area be presented along with identification of major features, pertinent to the project.
- + Nature, type and structure and surface soil of the area need to be clearly identified and further required investigations listed.
- + Whenever applicable, slope stability analyses of the representative site need to be carried out and the finding and recommendation be given
- + The location of debris flow and other possible obstruction to the road alignment.
- + For existing road section, the firm shall perform DCP test of existing subgrade at 250m interval.

- Hydrological and Meteorological Studies

- + All relevant meteorological (Rainfall and Temperature) data and recommendation shall be presented.
- + Study of the river and river system: The river system of the area shall be described in the report. Preferably a river system map of the catchment's area and beyond (whenever applicable) shall be produced.
- + At least one cross-section of river at each crossing shall be produced. In the cross section all bed and bank characteristics shall be mentioned.

- 
- + Assessment of flood pattern and preliminary estimation of discharges shall be carried out. Similarly, expected HFL shall be fixed as far as applicable
  - + Information necessary for the design of the side drain and protection works as well as preliminary design of cross drainage structure shall be produced.

### **3.7.3 Design and Drawings**

The design standard to be adopted for the detailed design, shall be "Nepal Road Standard (2070)" & based on traffic volume and possible network importance. The design standard shall be finalized in close coordination with the Unit.

#### **Design of Road**

- Calculate and plot the reduced ground level of longitudinal and cross section.
- Design the most economical road profile by balancing the volume of cut and fill to the nearest.
- Design Horizontal and Vertical Curves.
- Design of grade and geometry of existing road that needed to be improved
- Design of sub-base for earthen road section based on DCP value.
- Design of Pavement (DBST) layers for existing gravel road using minimum three standard methods and recommendation can be done for any other wearing course if required.
- Design of appropriate road side structures

#### **Engineering Drawings Details**

The firm will prepare the following plans and working drawings on suitable reports material using the format and title sheets as required by the engineer in charge.

- + Locality map (sometimes called a "key map") showing the location of the works in relation to the region/district/municipality/VDC commonly at a scale of 1:2,500,000.
- + Site plan (sometimes called "index map") showing the project and its immediate neighborhood including the important physical features such as hills, rivers, tracks, etc. It may be to a scale of 1:50,000. The locality map and site plan are commonly drawn on a single sheet.

- 
- + Map showing complete alignment with Kilometre, names of area, land use, village, VDC, municipalities, name of natural drainage etc.
  - + Location Map showing linkage of road the road with surrounding road network.
  - + Map showing survey and design status of the complete road, intersection points, Benchmarks and other references points.
  - + Plan, Profile (Longitudinal Section) and Cross- Section in the following Scale.
    - Plan - 1:1000
    - Horizontal Profile - 1:1000
    - Vertical Profile - 1:200
    - Cross Section - 1: 200
  - + Plans and profile of the road shall contain details of geometry viz. horizontal alignment with coordinates of IP, deflection angle, Ip to IP distances, Chainage of IP, curve data etc. names of VDC or municipalities, forest, land use pattern, cross drainage structure, retaining and protection structure required or as directed by Engineer in charge.
  - + Standard charts of mentioned cross drainage structures, retaining/Brest wall and protection works, side drain, typical cross-section of the road according to types of soil, passing zone(if provided), hairpin bend (If provided)

### **3.7.4 Preparation of Engineering Cost Estimate**

- o The quantities of the civil works shall be computed on the basis of the detailed plan, design profiles and cross-sections following the standard methods of measurement.
- o The rate analysis for the civil engineering items will be made following the unified norms and market prices of construction materials, labour and equipment hiring rates.
- o The cost shall also incorporate the cost for implementation of Environmental Mitigation Measures.
- o The rates for civil engineering items shall be verified with the mean rates of prevailing contract prices of the last 5 years in the sector and geographical region.
- o The costs will be broken down into local and foreign currency components. It will also be further broken down into direct cost, taxes, physical and price contingencies.
- o The work may require a range of skills and expertise that a single contractor may not have.

- 
- The firm and implementing agency shall consider all practical combinations of contract packages and decide the preferred combination based on their expert judgment and consideration of supervision and administration costs.

### **3.7.5 Bill of Quantities (BOQ)**

Each item shall be clearly described and corresponding clauses of the standard and special specifications shall be referenced to allow the contractor to easily find the corresponding specification. The BOQ may be broken down into different types of works and shall clearly provide for VAT and contingencies.

### **3.7.6 Preparation of the Programme**

The programme shall include the duration of activities and critical milestones on the following activities:

- Pre-construction activities of the implementing agency
- Consultancy services
- Construction of works.

For each construction package, detailed work schedules shall be developed which shall include the durations and milestones for the following activities:

Depending on the number of work packages, there may exist a number of parallel activities to be undertaken simultaneously and hence a critical path network may be developed which will include the following aspects:

- Definition of tasks/activities and their types
- Estimated duration of each of the task/activity
- Definition of task dependency relations
- Assignment of lead and lags on such dependencies
- Built in slack
- Identification of critical and near-critical paths.

The critical path network shall be drawn indicating all the tasks along with their durations and floats and highlighting the critical path.

### **3.7.7 Development of Project Objectives and Scope**

The development of the project objectives shall be based on the sector policies of GoN requirements. Usually a single principal objective shall be stated with a number of specific sub-objectives. A logical framework approach shall be used to develop the goals and objectives for the project. While developing the objectives of the project, it is useful to refer to ex-post evaluation reports of similar projects in order to benefit from the lessons learned and recommendations coming out of earlier projects. The policy statement of the NPC states that “all proposals for all new development projects funded by foreign donor agencies and all central level development projects funded by GoN shall include a logical framework from the beginning of fiscal year 2000/2001”. An example of the proposed logical framework is presented below:

<b>Project Title</b>			
<b>Narrative Summary</b>	<b>Indicators (OVI)</b>	<b>Means of Verification (MOV)</b>	<b>Key Assumptions</b>
Goal :			
Purpose :			
Outputs :			
Activities :			
Inputs:			

The key elements of the logical framework approach are briefly discussed below:

**Goal :** The ultimate goal or rationale of the project to which the specific project will contribute.

The goal may be sectoral or area specific.

**Purpose :** The immediate objectives of the project. It is recommended that each project component shall have only one primary objective.

**Outputs:** The specific result to be produced by each project component i.e. the project “deliverables”.

**Activities:** The activities that have to be undertaken by the project in order to produce the outputs.

**Inputs:** The resources needed to implement activities. The inputs of a project are people, budget, materials and information.

**Objectively Verifiable Indicators (OVI) :** A set of criteria presented in terms of quantity, quality, time and cost which will indicate in concrete terms that the expected results are achieved. The indicators shall be presented in measurable terms stating baseline and target values as well as the time frame for their achievement.

**Means of Verification (MOV) :** The monitoring mechanism in a project such as specific reports and site visits by the Project Manager, donor or other monitoring agencies.

Key Assumptions: External conditions that could affect the progress or success of the project and which are outside of the control of the project. If these conditions change, they may adversely affect the delivery of project objectives. They shall be considered as the risk associated with the project and shall be evaluated separately.

### 3.7.8 Submission of Detailed Report

The firm shall submit draft report covering the entire task performed in details. The minimum volume of the report shall be:

- o Volume 1 : Main Report
- o Volume 2 : Drawing

All the photograph of BM, IP references, specific features shall be clearly mentioned in the report.

The Firms shall present the report, 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 PMEU and the firms. Maximum 10 no. of DoR personnel shall attend the presentation. The cost of such presentation shall be born by the firms.

## 4. REPORT OBLIGATIONS

The whole work shall be completed within time frame as mentioned below:

S. No.	Particulars	Time required		
		Up to 20	20 to 50 KM	50-100 KM
1	Desk study	1 weeks	1 weeks	1 weeks
2	Field works	3 weeks	6 weeks	8 weeks
3	Phase A report submission	3 weeks	4 weeks	4 weeks
4	Phase B report submission	4 weeks	5 week	6 weeks
5	Final Report submission	2 weeks	2 weeks	3 weeks
	Total time from the date of signing the agreement	13 weeks	18 weeks	22 weeks

The firm shall submit the following reports in English.

- (a) one copy of monthly progress report;
- (b) two copies of Inception report;
- (c) two copies of Report of Phase A ;
- (d) two copies of draft report; (min. 1 copy colour report).
- (e) five copies of final report with original photos and maps all coloured.



---

## 5. WORKING TEAM

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

- (1) Highway / Transport Engineer
- (2) Geotechnical Engineer
- (3) Transport Economist/Sociologist
- (4) Hydrologist

## 6. MODE OF PAYMENT

Payment shall be made as follows:

- 10% of the contract amount after completion after submission and approval of Inception report.
- 20% of the contract amount after completion after submission and approval of Phase A report.
- 40% of the contract amount after submission of the Draft Report
- 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.

## Section 6: Standard Form of Contract

### MEMORANDUM OF AGREEMENT

(To be filled up after the Contract is awarded)

**THIS AGREEMENT**, made on the *(Date)*.....between Government of Nepal, Department of Roads, Planning and Design Branch, Planning Monitoring and Evaluation Unit (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. **Detailed Project Report Preparation .... Road** the following road(s) 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 road

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) Conditions of Contract
  - (c) 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 consents 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	On behalf of the Firm
Witness	Witness
1    -----	1    -----
2    -----	2    -----