



NATIONAL HIGHWAY AUTHORITY

Procurement & Contract Administration Section
28 Mauve Area, G-9/I, Islamabad ☎ 051-9032727, 📠 051-9260419

No. 6(447)/DIR-III(P&CA)/NHA/17/179

18th December, 2017


Director General

Public Procurement Regulatory Authority
1st Floor FBC Building near State Bank,
Sector G-5/2, **Islamabad**

Subject: **ANNOUNCEMENT OF EVALUATION REPORT (PPRA Rule-35):
Consultancy Services for Feasibility Study and Preliminary
Design for Construction of 4-Lane Facility of Expressway from
Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 Km) .**

Reference: *PPRA Rule-35*

Kindly find attached the duly filled and signed Evaluation Report along with Bid Evaluation Criteria (Annex-I) pertaining to the procurement of subject services in view of above referred PPRA Rule-35 for uploading on PPRA website at the earliest, please.


(Muhammad Azam)
Director (P&CA)

Encl: Evaluation Report along with **Annex-I**

Copy for kind information to:

- Member (Engineering-Coord), NHA;
- Member (Planning), NHA;
- General Manager (P&CA), NHA;
- S.O. (Tech.) to Chairman, NHA.

EVALUATION REPORT

(As Per Rule 35 of PP Rules, 2004)

1.	Name of Procuring Agency:	National Highway Authority
2.	Method of Procurement:	Single Stage Two Envelop Procedure
3.	Title of Procurement:	Consultancy Services for Feasibility Study and Preliminary Design for Construction of 4-Lane Facility of Expressway from Kotli Satian to Kalyari (upto Dhalkot Bridge) (82 Km)
4.	Tender Inquiry No.:	6(447)
5.	PPRA Ref. No. (TSE):	TS320230E
6.	Date & Time of Bid Closing:	18 th July, 2017 at 1130 hours local time
7.	Date & Time of Bid Opening:	18 th July, 2017 at 1200 hours local time
8.	No of Bids Received:	Five (05) Proposals were received
9.	Criteria for Bid Evaluation:	Criteria of Bid Evaluation is attached at Annex-I
10.	Details of Bid(s) Evaluation:	As below


Name of Bidder	Marks		Evaluated Cost (PKR)	Rule/Regulation/SBD*/ Policy/ Basis for Rejection / Acceptance as per Rule 35 of PP Rules, 2004.
	Technical (80%)	Financial (20%)		
1) M/s ABM Engineers – Karachi in JV with M/s Northern Engineering Consultants	615	200	13,458,320	Top scoring firm in combined evaluation (PPRA Rule 36(b) (ix))
2) M/s NESPAK (Pvt.) Ltd. in JV with M/s Finite Engineering (Pvt.) Ltd. and M/s CPM Engineering Consultants	610	180	14,928,272	2 nd
3) M/s Asif Ali & Associates (Pvt.) Ltd. in JV with M/s A.A. Associates and M/s TurkPak International (Pvt.) Ltd.	598	176	15,311,312	3 rd
4) M/s Associated Consultancy Center (Pvt.) Ltd. in JV with M/s Prime Engineering & Testing Consultants (Pvt.) Ltd. and M/s Assign Engineering Consultant Intl. (Pvt.) Ltd.	618	153	17,645,007	4 th
5) M/s Engineering General Consultants (Pvt.) Ltd. in JV with M/s Associated Consulting Engineers – ACE (Pvt.) Ltd. and M/s CECON Civil Engineers & Consultants	622	109	24,598,095	5 th

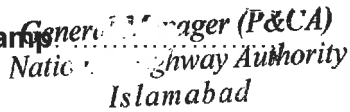
EVALUATION REPORT

(As Per Rule 35 of PP Rules, 2004)

Top Ranked Bidder: M/s ABM Engineers – Karachi in JV with M/s Northern Engineering Consultants

11. **Any other additional / supporting information, the procuring agency may like to share:** The Procurement was carried out in line with PPRA Rules & Regulations. The bidding was done on QCBS method with 80:20 Technical to Financial Proposals ratio.

Signature: 

Official Stamp: 
General Manager (P&CA)
National Highway Authority
Islamabad

***Standard Bidding Documents (SBD).**

National Highway Authority



Annex-I

Criteria

FOR

Bid Evaluation

**CONSULTANCY SERVICES FOR FEASIBILITY STUDY
AND PRELIMINARY DESIGN FOR CONSTRUCTION
OF 4-LANE FACILITY OF EXPRESSWAY FROM
KOTLI SATIAN TO KALYARI (UPTO DHALKOT
BRIDGE) (82 KM)**

December, 2017



NATIONAL HIGHWAY AUTHORITY

Procurement & Contract Administration Section
28-Mauve Area, G-9/1, Islamabad Tel: 9032727, Fax: 9260419

Ref: 6(447)/GM (P&CA)/NHA/17/1053

11th July, 2017

All Prospective Consultants

Subject: **Minutes of Pre-Proposal Meeting for:
Consultancy Services for Feasibility Study and Preliminary
Design for Construction of 4-Lane Facility of Expressway from
Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 Km)**

Reference: *Request for Proposal Notice for subject Services appeared in daily newspapers on 21st June, 2017*

The Minutes of Pre-Proposal Meeting for subject Services being integral part of the Request for Proposal are enclosed herewith for necessary action, please.


(Muhammad Azam)
Director (P&CA)

Enclosure:

- **Minutes of Pre-Proposal Meeting (01 Page),**

Copy for kind information to:

- Member (Planning), NHA, Islamabad;
- Member (Engg. Coord.), NHA, Islamabad;
- General Manager (P&CA), NHA, Islamabad;
- General Manager (Planning), NHA, Islamabad.

MINUTES OF PRE-PROPOSAL
MEETING HELD ON 4th July 2017

Consultancy Services for Feasibility Study and Preliminary Design for Construction of 4-Lane Facility of Expressway from Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 Km)

A Pre-Proposal Meeting was held in NHA Auditorium at 1100 hours on 4th July, 2017 to discuss the Request for Proposal (RFP) for subject Services. Following NHA officers and representatives of prospective consultants attended the meeting:

▪ **National Highway Authority**

- | | | | |
|---|--------------------|-----|-----------------------------|
| ➤ | Mr. Parkash Lohano | ... | General Manager (Planning) |
| ➤ | Mr. Asim Amin | ... | General Manager (Design) |
| ➤ | Mr. Muhammad Azam | ... | Director (P&CA) - III |
| ➤ | Mr. Dawood Khan | ... | Deputy Director (P&CA) - II |

▪ **Consultants**

- | | | | |
|---|-----------------------------------|-----|---------------------------------|
| ➤ | Mr. Jamal Ahsan | ... | M/s NESPAK (Pvt.) Ltd. |
| ➤ | Mr. Haris Aqil | ... | M/s EA Consulting (Pvt.) Ltd. |
| ➤ | Mr. Nasim Ahmad | ... | M/s PEAS Consulting (Pvt.) Ltd. |
| ➤ | Lt. Col. ® Muhammad Hanif
Awan | ... | M/s AA Associates |
| ➤ | Mr. Niaz Ahmed Sheikh | ... | M/s ABM Engineers Karachi |

2. Four queries were submitted during the above mentioned pre-proposal meeting and its clarification/ reply is given below for information of all prospective bidders:



Subject: **Feasibility Study & Preliminary Design for Construction of a 4-Lane Facility of Expressway from Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 KM).**

Sr. No	Questions / Queries	Replies of Queries
1.	<p>Data Sheet Clause 1.7 sub-clause (iii) at page 09 states that "Quote" The Consultant may please note not to suggest names of Key Staff already proposed in other Proposals with the Client or awarded recently. This will affect adversely marking of these professionals in evaluation of Technical Proposal. Their secured points are liable to be reduced by 50% if their names appear in more than 1 previous Proposal in which they are ranked No. 1. Also the existing load of work with a firm shall be considered as one of the factor for the consideration in the award of the work "Unquote".</p> <p>This is not realistic in view of series of Proposals being invited by NHA. Proposing separate staff for every Proposal is not possible for almost any consulting firm in the country. Moreover, assignment under discussion is limited to Feasibility Study and Detailed Design i.e. entire work, excluding survey and investigations, is desktop based, to be carried out at Design Office where an expert can simultaneously work on more than one assignment / project.</p> <p>Existing work load is also not an issue at Design Office being necessary resources are available to carry out this project.</p> <p>As such this condition is requested to be waived in its entirety.</p>	<p>Para 2.5 of ToR provides time period to complete the services within four (04) months. Proposed Man months at the end of ToR indicate:</p> <p>(a) 4 months duration Team Leader/Sr.Highway Engineer and Senior Structural Engineer; and</p> <p>(b) 2 months or/month duration for all other (8) key personel.</p> <p>Please note that Conditions under Data Sheet clause 1.7 sub-clause (iii) at page 9 of the RFP shall prevail for the two positions namely Team Leader/SR.Highway Engineer and Senior Structural Engineer; whereas, the said condition is waived off in case of other positious/key personels for the Assignment/services.</p>
2.	<p>Geotechnical Investigation does not form part of TOR. However, Task-5 at page 53 & 54 provides for Limited Soil Investigation at every 5 Km interval by means of boring and test pits for Pavement Design.</p> <p>Please indicate depth of boring required.</p>	<p>The depth of pit for roadway is 2m and for the SPT, it will be 3 - 5 m.</p>
3.	<p>Proposed Man-Months at Page 58.</p> <p>Are the provided Key Staff Positions and their respective number / duration is fixed? Please clarify.</p>	<p>Yes. Numbers/duration and total Man-Months are fixed.</p>
4.	<p>There is ambiguity in the subject projects alignment and length. RFP is not clear on project alignment . RFP is issued for Feasiblity Study and Preliminary Design for Construction of 4-Lane Expressway from Kotli Satian to Kalyari (upto Dhalkot Bridge) (82 Km), but the alignment inserted on RFP is of 22-24 Km. Therefore, clarification on the project length and alignment is requested, alongwith start and end point of the project.</p>	<p>The length is 82 Km as per Google Earth Image.</p>



[Handwritten Signature]
10/7/17

[Handwritten Signature]
10/7/2017

National Highway Authority



REQUEST FOR PROPOSAL

for

Consultancy Services

for

**Construction of 4-Lane Facility
of Expressway from Kotli Satian to Kalyari
(Upto Dhalkot Bridge) (82 Km)**

Tender No.6(447)

Pages (1 to 99)

June, 2017

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**GOVERNMENT OF PAKISTAN
NATIONAL HIGHWAY AUTHORITY**

**27-Mauve Area, G-9/1,
Post Box No. 1205,
ISLAMABAD**

**Dated the _____
Ref No. _____**

LETTER OF INVITATION (LOI)

To,

All prospective consultants

Gentlemen!

We extend warm welcome to you and invite you for participating in this project. We hope that you will live up to your reputation and provide us accurate information so that the evaluation is carried out "just and transparent". Please understand that the contents of this RFP, where applicable, shall be deemed part of the contract agreement. An example to this affect can be the contents of your work plan and methodology which you shall be submitting in your technical proposal. Since that is the basis of the selection, therefore, it shall become part of the contract agreement subject to approval/revisions of the same by NHA during the negotiations. Similarly, all other services and the content contributing to services shall be deemed part of the contract agreement unless it is specified for any particular item up-front in your technical proposal which obviously will make your proposal a conditional proposal whereby, authorizing NHA to may or may not consider to evaluate your proposal. Please understand that if no such mention appears up-front (i.e. on front page of technical proposal) then it shall be deemed that the consultant is in 100% agreement to the above. You are also advised to kindly read the RFP thoroughly as it can drastically affect the price structure for various services which may not be appearing directly in the terms of reference. In the end, we appreciate your participation and hope that you will feed a good proposal to merit consideration by NHA.



General Manager (P&CA)
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E-mail: gmpca.nha@gmail.com,
Website: www.nha.gov.pk

ATTACHMENTS

1. Instructions to Consultants (Annex A)
2. Data Sheet (Annex B)
3. Checklist for Completeness of Proposal
4. Summary Evaluation Sheet
4. Personnel Evaluation Sheet
5. Technical Proposal Forms
6. Financial Proposal Forms
7. Appendix A (Terms of Reference)
8. Appendix B (Person-Months and Activity Schedule)
9. Appendix C (Client's Requirements from the Consultants)
10. Appendix D (Personnel, Equipment, Facilities and other services to be provided by the Client).
11. Appendix E (Copy of Model Agreement)



INSTRUCTIONS TO CONSULTANTS**1. INTRODUCTION**

- 1.1 You are hereby invited to submit a technical and a financial proposal for consulting services required for the assignment named in the attached Data Sheet (referred to as "Data Sheet" hereafter) annexed with this letter. Your proposal could form the basis for future negotiations and ultimately a Contract between your firm and the Client named in the Data Sheet.
- 1.2 A brief description of the assignment and its objectives are given in the Data Sheet. Details are provided in the attached RFP for design services provided in the Documents, and will become part of agreement subsequently.
- 1.3 The assignment shall be implemented in accordance with the phasing specified in the Data Sheet.
- 1.4 The Client has been entrusted the duty to implement the Project as Executing Agency by Government of Pakistan (GoP) and funds for the project shall be arranged by the Client.
- 1.5 To obtain first-hand information on the assignment and on the local conditions, you are encouraged to pay a visit to the Client before submitting a proposal and attend a pre-proposal conference if specified in the Data Sheet. Your representative shall meet the named officials on the date and time specified in the Data Sheet. Please ensure that these officials are advised of the visit in advance to allow adequate time for them to make appropriate arrangements. You must fully inform yourself of local conditions and take them into account in preparing your proposal.
- 1.6 The Client shall provide the inputs specified in the Data Sheet, assist the Consultants in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.7 Please note that:
- i. The cost 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.
- 1.8 The names of the invited consultants are given in the Data Sheet.
- 1.9 We wish to remind you that in order to avoid conflicts of interest:
- a. Any firm providing goods, works, or services with which you are affiliated or associated is not eligible to participate in bidding for any goods, works, or services (other than the services and any continuation thereof) resulting from or associated with the project of which this assignment forms a part; and
 - b. Any previous or ongoing participation in relation with the project by your firm, its



professional staff, its affiliates or associates under a Contract may result in rejection of your proposal. You should clarify your situation in that respect with the Client before preparing the proposal.

2. DOCUMENTS

- 2.1 To prepare a proposal, please use the Documents specified in the Data Sheet.
- 2.2 Consultants requiring a clarification of the Documents must notify the Client, in writing, not later than twenty one (21) days before the proposal submission date. Any request for clarification in writing, or by cable, telex or tele-fax shall be sent to the Client's address specified in the Data Sheet. The Client shall respond by cable, telex or tele-fax to such requests and copies of the response shall be sent to all invited Consultants.
- 2.3 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 consulting firm, modify the Documents by amendment. The amendment shall be sent in writing or by cable, telex or tele-fax to all invited consulting firms and will be binding on them. The Client may at its discretion extend the deadlines for the submission of proposals.

3. PREPARATION OF PROPOSAL

It will consist of two parts – Technical and Financial

3.1 Technical Proposal

- 3.1.1 The Technical Proposal should be submitted using the format specified and shall include duly signed and stamped forms appended with the RFP. This is a mandatory requirement for evaluation of proposals and needs to be filled up carefully.
- 3.1.2 For Technical Proposal, the general approach and methodology which you propose for carrying out the services covered in the TOR, including such detailed information as you deem relevant, together with your appreciation of the Project from provided details and
- a. A detailed overall work program to be provided with timing of the assignment of each expert or other staff member assigned to the project. This will also provide the Client an opportunity to effectively monitor work progress.
 - b. Total number of man-months and project duration as per TOR.
 - c. Clear description of the responsibilities of each expert staff member within the overall work program.
 - d. The Curriculum Vitae (CV) of all Key Staff members and an affidavit that proposed staff shall be available for the assignment during the project duration and their present place of duty may also be specified. The Consultants are advised to suggest such names that shall be available for the Assignment.

The technical proposal shall include duly filled in forms provided with this RFP. The name, background and professional experience of each expert staff member to be assigned to the project, with particular reference to his experience of work of a nature similar to that of the proposed assignment.

- f. Current commitments and past performance are the basic criteria of technical



proposal. You are required to provide the details of present commitments/on- going jobs as referred in the Form A-10 of technical proposal. Further, the basis for the past performance is the report from Design Section and Construction Wing of the Client.

3.1.3 In preparing the technical proposal, you are expected to examine all terms and instructions included in the Documents. Failure to provide all requested information shall be at your own risk and may result adversely in the scoring of your proposal. The proposal should be prepared as per RFP and any suggestion or review of staff etc. should be clearly spelt out in form A-4. This will be discussed at the time of negotiation meeting as and when called.

3.1.4 During preparation of the technical proposal, you must give particular attention to the following:

- a. The Firm needs to be registered with Pakistan Engineering Council (PEC).
- b. If you consider that your firm does not have all the expertise for the assignment you may obtain a full range of experience by associating with other firms or entities. You may also utilize the services of expatriate experts but only to the extent for which the requisite expertise is not available in any Pakistani firm. In case of Joint Venture, the proposal should state clearly partners will be “Jointly and Severally” responsible for performance under the Contract and one (Representative) partner will be responsible for all dealings with the Client on behalf of the Joint Venture. Its “Power of Attorney” on this account is to be enclosed. The representative partner shall retain the responsibility for the performance of obligations and satisfactory completion of the consultancy services. PEC registers a foreign consulting firm for issuing license to provide consultancy services in Pakistan, which is based on formation of JV with the condition that the foreign consulting firm shall provide only that share of consultancy services by the JV for which expertise is not available with Pakistani consulting firms. A copy of JV agreement to be provided at the time of finalizing the contract documents with specific responsibilities and assignments to be looked after by each partner.

c. Subcontracting part of the assignment to the other Consultants is not discouraged and Specialist Sub-Consultants may be included.

d. The key professional staff proposed shall be permanent employees of the firm unless otherwise specified in the Data Sheet. The minimum stay with the firm for such persons is Six months. No alternative to key professional staff may be proposed and only one CV may be submitted for each position. The minimum required experience of proposed Key Staff is specified in the Data Sheet.

e. The training shall be imparted during the currency of the contract if specified in the Data Sheet.

3.1.5 The technical proposal shall not include any financial information. The Consultant’s comments, if any, on the data, services and facilities to be provided by the Client and specified in the TOR shall be included in the technical proposal.

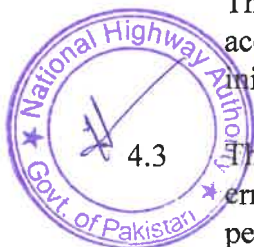


3.2 Financial Proposal

- 3.2.1 The financial proposal should be submitted using the format specified and enclosed with this RFP. This is a mandatory requirement for evaluation of proposals and needs to be filled up carefully. The total cost is to be specified in the Form A-17 and accordingly also in Form A-11.
- 3.2.2 The financial proposal should list the costs associated with the Assignment. These normally cover remuneration for staff in the field and at headquarters, per diem, housing, transportation for mobilization and demobilization, services and equipment (vehicles, office equipment furniture and supplies), printing of documents, surveys and investigations. These costs should be broken into foreign (if applicable) and local costs. Your financial proposal should be prepared using the formats attached as forms A-11 to A-17.
- 3.2.3 The financial proposal shall also take into account the professional liability as provided under the relevant PEC Bye-Laws and cost of insurances specified in the Data Sheet.
- 3.2.4 Costs may be expressed in currency (s) listed in the Data Sheet.
- 3.2.5 The evaluation committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, activities and items described in the Technical Proposals but not priced, in the Financial Proposals shall be assumed to be included in the prices of other activities or items. In case an activity or item is quantified in the Financial Proposal differently from the Technical Proposal, the evaluation committee shall correct the quantification specified in the Financial Proposal so as to make it consistent with that specified in the Technical Proposal.

4. SUBMISSION OF PROPOSALS

- 4.1 You shall submit one original technical proposal and one original financial proposal and the number of copies of each specified in the Data Sheet. Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All technical proposals shall be placed in an envelope clearly marked "Technical Proposal" and the financial proposals in the one marked "Financial Proposal". These two envelopes, in turn, shall be sealed in an outer envelope bearing the address and information specified in the Data Sheet. The envelope shall be clearly marked, "DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE."
- 4.2 In the event of any discrepancy between the copies of the proposal, the original shall govern. The original and each copy of the technical and financial proposals shall be prepared in indelible ink and shall be signed by the authorized Consultant's representative. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposals. All pages of the technical and financial proposals shall be initialed by the person or persons signing the proposal.
- 4.3 The proposal shall contain no interlineations or overwriting except as necessary to correct errors made by the Consultants themselves. Any such corrections shall be initialed by the person or persons signing the proposal.



- 4.4 The completed technical and financial proposals shall be delivered on or before the time, date, and the location specified in the Data Sheet.
- 4.5 The proposals shall be valid for the number of days stated in the Data Sheet from the date of its submission. During this period, you shall keep available the professional staff proposed for the assignment. The Client shall make its best effort to complete negotiations at the location stated in the Data Sheet within this period.

5. PROPOSAL EVALUATION

- 5.1 A Single-Stage-Two-Envelope procedures shall be adopted in ranking of the proposals. The technical evaluation shall be carried out first, followed by the financial evaluation. The Consultants shall be ranked using a combined technical/financial score.

5.2 Technical Proposal

- 5.2.1 The evaluation committee appointed by the Client shall carry out its evaluation for all the projects as listed in Para 1.1, applying the evaluation criteria and point system specified in the Data Sheet. Each responsive proposal shall be given a technical score: S_t . The Consultants scoring less than seventy (70) percent points shall be rejected and their financial proposals returned un-opened.

5.3 Financial Proposal

- 5.3.1 The financial proposals of the three top-ranking qualifying Consultants on the basis of evaluation of technical proposals shall be opened in the presence of the representatives of these Consultants, who shall be invited for the occasion and who care to attend. The Client shall inform the date, time and address for opening of financial proposals as specified in the Data Sheet. The total cost and major components of each proposal shall be publicly announced to the attending representatives of the firms.
- 5.3.2 The evaluation committee shall determine whether the financial proposals are complete and without computational errors. The lowest financial proposal (F_m) among all shall be given a financial score: S_f of 1000 points. The financial scores of the proposals shall be computed as follows:

$$S_f = (1000 \times F_m) / F$$

(F = amount of specific financial proposal)

- 5.3.3 Proposals, in the Quality Cum Cost Based Selection (QCBS) shall finally be ranked according to their combined technical (S_t) and financial (S_f) scores using the weights (T- the weight given to the technical proposal, P = the weight given to the financial proposal, and $T+P=1$) stated in the Data Sheet:

$$S = S_t \times T \% + S_f \times P \%$$

6. NEGOTIATION

- 6.1 Prior to the expiration of proposal validity, the Client shall notify the successful Consultant who submitted the highest ranking proposal in writing, by registered letter, cable telex or



facsimile and invite it to negotiate the Contract.

- 6.2 Negotiations normally take from two to five days. The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- 6.3 Negotiations shall commence with a discussion of your technical proposal. The proposed methodology, work plan, staffing and any suggestions you may have made to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the bar charts, which shall indicate activities, staff, and periods in the field and in the home office, staff months, logistics and reporting.
- 6.4 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates (no negotiation of the staff month rates).
- 6.5 Having selected Consultants 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 staff named in the proposal. Prior to contract negotiations, the Client shall require assurances that the staff members will be actually available. The Client shall not consider substitutions of key staff except in cases of un-expected delays in the starting date or incapacity of key professional staff for reasons of health.
- 6.6 The negotiations shall be concluded with a review of the draft form of the contract. The Client and the Consultants shall finalize the contract to conclude negotiations. If negotiations fail, the Client shall invite the Consultants that received the second highest score in ranking to Contract negotiations. The procedure will continue with the third in case the negotiation process is not successful with the second ranked consultants.

7. AWARD OF CONTRACT

- 7.1 The contract shall be awarded after successful negotiations with the selected Consultants and approved by the competent authority. Upon successful completion of negotiations/initialing of the draft contract, the Client shall promptly inform the other Consultants that their proposals have not been selected.
- 7.2 The selected Consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

8. CONFIRMATION OF RECEIPT


- 8.1 Please inform the Client by telex/facsimile courier or any other means:
- (i) That you received the letter of invitation;
 - (ii) Whether you will submit a proposal; and
 - (iii) If you plan to submit a proposal, when and how you will transmit it.



DATA SHEET

LOI Clause No.	DESCRIPTION OF CLAUSE
1.1	<p>The name of Assignment is:- Consultancy Services for “Feasibility Study and Preliminary Design for Construction of 4-Lane Facility of Expressway from Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 Km)”.</p> <p>The Client’s Name is:- National Highway Authority</p>
1.2	<p>The description and the objectives of the assignment are: As per TOR</p>
1.3	<p>Phasing of the Assignment (if any): Nil</p> <p>The Consultant shall commence the assignment upon signing of Contract Agreement between NHA and the successful Consultant.</p>
1.5	<p>Pre-Proposal Conference: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>The name(s) and address(es) of the Official(s) is (are):</p> <p>General Manager (P&CA) National Highway Authority 28, Mauve Area, G-9/1 Islamabad</p> <p>Date, Time and Venue for Pre-proposal Conference:</p> <p>Date: 4th July, 2017 Time: 1100 hours Venue: NHA Auditorium (HQ) National Highway Authority 28, Mauve Area, G-9/1 Islamabad.</p>
1.6	<p>The Client shall provide the following inputs:</p> <p>As per TOR and Appendix D.</p>
1.7	<p>Following sub-clauses are added:</p> <p>iii. The Consultant may please note not to suggest names of key staff already proposed in other proposals with the Client or awarded recently. This will affect adversely marking of these professionals in evaluation of the technical proposal. Their secured points are liable to be reduced by 50% if their name appears in more than 1 previous proposal in which they are ranked No.1. Also the existing load of work with a firm shall be considered as one of the factors for the consideration in the award of the work.</p>



	<p>iv. Form A-4 is meant for comments on provision contained in RFP and Terms of Reference (TOR) and unless the observations are noted in this particular form, anything written elsewhere on this account including financial implications, if any, shall be considered of no consequence in the evaluation process.</p> <p>iv. Consultants may form a Joint Venture (JV) to qualify for the Assignment in which case the contract will be signed between the Client and all members of the JV on the prescribed Form included in Appendix E (copy of Model Agreement) subject to the ranking and successful negotiations. A JV may include at the most four members. To promote the consultancy industry in the country, 50 marks (out of 1000 for Evaluation) are allocated for Transfer of Knowledge in the form of JV with a new / less experienced firm by sharing at least 20% of Assignment with them.</p>
<p>1.8</p>	<p>The Invited Consultants / Eligible Consultants are:</p> <p>Any firm meeting the following requirements:</p> <p>(a) Valid Registration Certificate of Pakistan Engineering Council with relevant Project Profile Codes. Foreign consulting firms shall make JV in accordance with Bye-Law 6(2) and Bye-Law 9 of the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-Laws 1986. Failure to provide valid Registration Certificate (license) of the firm (each member in case of JV) by the PEC will entitle the Client to reject the proposal.</p> <p>(b) Affidavit in original bearing the subject with project name on stamp paper duly attested by the Oath Commissioner to the effect that the firm has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations (By all member firms in case of JV and/or sub-consultant).</p> <p>(c) Facilities available with the Consultant to perform their functions effectively (proper office premises, software, hardware, record keeping etc.)</p> <p>(d) Client's satisfaction certificates (Performance Reports) for the last three relevant assignments from the respective Clients. Moreover any adverse report regarding performance of Consultant on NHA projects received from NHA's any relevant quarter may become basis for its disqualification from the services above named in clause 1.1.</p> <p>(e) Signing and certification of the Checklist for Completeness of the Proposal as per attachment at the end of Data Sheet.</p> <p>(f) Man-months of staff and Project Duration as per TOR.</p>
<p>2.1</p>	<p>The Documents are:</p> <p>(a) Letter of Invitation (LOI).</p> <p>(b) Instructions to Consultants (ITC).</p> <p>(c) Data Sheet.</p> 

	<p>(d) Technical Proposal Forms.</p> <p>(e) Financial Proposal Forms</p> <p>(f) Appendix – A: TOR and Background Information.</p> <p>(g) Appendix – B: Man-Months and Activity Schedule</p> <p>(h) Appendix – C: Client’s Requirements from the Consultant.</p> <p>(i) Appendix – D: Personnel Equipment, Facilities and Other Services to be Provided by the Client.</p> <p>(j) Appendix – E: Copy of Model Agreement/ Draft Form of Contract & Appendices etc.</p> <p>(k) Form of Contract <i>(For Consultants to perform services as a Joint Venture)</i></p>
2.2	<p>The words “Twenty one (21)” is deleted in its entirety and replaced with “Five (05)”</p> <p>The address for seeking clarification is:</p> <p>General Manager (P&CA) National Highway Authority 28, Mauve Area, G-9/1, Islamabad E-mail: gmpca.nha@gmail.com</p>
3.1.1	<p>Add following:</p> <p>The proposals should be bound in the hard book binding form to deny the possibility of removal or addition of page(s). All the pages of proposal must be signed and stamped in original by authorized representative of the firm/JV. All the pages must be numbered starting from first page to last. Any proposal found not adhering to these requirements will be rejected at the time opening.</p>
3.1.4	<p>d. Proposed key staff shall preferably be permanent employees who are employed with the consultants at least six months prior to submission of Proposal.</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>The minimum required experience of proposed Key staff is given below:</p>
FOR KEY STAFF	
Team Leader/ Sr. Highway Engineer	<p>Minimum B.Sc. (Civil Engineering) with minimum twenty (20) years’ relevant experience (proven fifteen (15) years’ design experience as Highway/ Geometric Design Engineer on National Highways Projects);</p> <p>-OR-</p> <p>M.Sc. (Transportation Engineering) with minimum eighteen (18) years relevant experience (proven thirteen (13) years’ design experience as Highway/ Geometric Design Engineer on National Highways</p>




	Projects) He/she must also have performed as Team Leader for at least three (03) major Highway Design Projects
Senior Structural Engineer	Minimum B.Sc. (Civil Engineering) with minimum twenty (20) years' relevant experience [proven fifteen (15) years' design experience as Structural Engineer on major Highways/ Bridge Projects]; -OR- M.Sc. (Structure Engineering) with minimum eighteen (18) years' relevant experience [proven thirteen (13) years' design experience as Structural Engineer on major Highways/Bridge Projects]
Traffic/ Pavement Engineer	Minimum B.Sc. (Civil Engineering) with minimum twenty (20) years' relevant experience [proven fifteen (15) years' design experience as Traffic/ Pavement Engineer on major Highways Projects]; -OR- M.Sc. (Highway Engg./ Transportation Engg.) with minimum eighteen (18) years' relevant experience [proven thirteen (13) years' design experience as Traffic/ Pavement Engineer on major Highways Projects];
Material/ Geo Technical Engineer	Minimum B.Sc. (Civil Engg./Geo-Tech Engg.) with minimum twenty (20) years' relevant experience [proven fifteen (15) years' design experience as Material/ Geo Technical Engineer on major Highways and Bridges Projects]; -OR- M.Sc. (Geo-Tech Engg.) with minimum eighteen (18) years' relevant experience [proven thirteen (13) years' design experience as Material/ Geo Technical Engineer on major Highways and Bridges Projects];
Contract Engineer	Minimum B.Sc. in (Civil Engineering) with minimum fifteen (15) years relevant experience (proven ten (10) years' experience of Bidding/ Contract Documents; OR- M.Sc. in (Contracts/ Procurement or Contracts Management) with minimum thirteen (13) years relevant (proven eight (08) years' experience of Bidding/ Contract Documents.
Hydraulic/ Hydrology Engineer	Minimum B.Sc. (Civil Engineering) with minimum twenty (20) years relevant experience (proven eighteen (18) years' design experience as Hydraulic/ Hydrology



	<p>Engineer on major Highway and Bridge Projects);</p> <p>-OR-</p> <p>M.Sc. (Hydrology/ Drainage/ Hydraulic Engineering) with minimum eighteen (18) years relevant experience (proven sixteen (16) years' design experience as Hydraulic/ Hydrology Engineer on major Highway and Bridge Projects);</p>
Environmental Engineer	<p>Minimum B.Sc. (Civil Engineering/Environmental Engineering) or M.Sc. (Environmental Sciences) with minimum fifteen (15) years' relevant experience (proven ten (10) years' experience as Environmental Engineer on mega Civil Engineering preferably Highway Projects);</p> <p>-OR-</p> <p>M.Sc. (Civil Engineering/ Environmental Engineering) with minimum thirteen (13) years' relevant experience (proven eight (08) years' experience as Environmental Engineer on mega Civil Engineering preferably Highway Projects);</p>
GIS Specialist	<p>Minimum M.Sc. GIS with minimum 18 years relevant experience (proven thirteen (13) years' experience as GIS Specialist in Design of major Highway and Bridges projects);</p>
Quantity Surveyor	<p>DAE (Civil); preferably having Bachelor's in Civil Engineering;</p> <p>In case of DAE having minimum eighteen (18) years post-qualification experience in Highway Sector which includes proven ten (10) years' experience as Quantity Surveyor on Highway Projects;</p> <p>-OR-</p> <p>In case of Bachelor's Degree having minimum fifteen (15) years post-qualification experience in Highway Sector including seven (7) years' experience as Quantity Surveyor on Highway Projects.</p>
<p><u>Note: The Consultants are advised to submit updated CV's strictly in compliance with the format of CVs given in Technical Proposal Form A-5. CVs submitted without regard to the said format may score low.</u></p>	
<p>e. Training is an important feature of this Assignment:</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If Yes, details of training are given in TOR</p>	
3.2.3	Professional liability, insurances (description or reference to appropriate



	<p>documentation):</p> <p>i. The Consultants shall be responsible for Professional Indemnity Bond of the required amount at their own cost. This bond shall be in the joint name of Consultant and the Client.</p> <p>ii. The Consultants are required to insure their Employees and Professionals for Hospitalization/ Medical, Travel and Accident Cover for the duration of the Contract. The details provided in Para 3.5 of Special Conditions of Contract in Model Contract.</p>
4.1	<p>The number of copies of the Proposal required is:</p> <p>Technical Proposal: One Original and Three copies with CD (soft form of complete Technical Proposal in PDF Form) in sealed envelope.</p> <p>Financial Proposal: One Original with CD (soft form of complete Financial Proposal in PDF as well as MS Word/Excel Forms) in sealed envelope.</p> <p>The address for writing on the proposal is:</p> <p>General Manager (P&CA) National Highway Authority 28, Mauve Area G-9/1 Islamabad Telephone: +92-51-9032727 Facsimile: +92-51-9260419</p>
4.4	<p>The date and time of proposal submission is:</p> <p>Date: 18th July, 2017 Time: 1130 hours Location of Submission : NHA Main Auditorium National Highway Authority 27, Mauve Area G-9/1 Islamabad.</p>
4.5	<p>Validity period of the proposal is: 180 days The bid shall remain valid up to 14th January, 2018</p> <p>The location for negotiation of proposal is:</p> <p>General Manager (P&CA) National Highway Authority 28, Mauve Area G-9/1 Islamabad Telephone: +92-51-9032727 Facsimile: +92-51-9260419</p> 
5.2	<p>The evaluation of technical proposal shall be based on following criteria:</p>

Description / Items	Points
1. Experience of the Firm	100
1-a) General Experience in road Transport Sector (25)	(25)
1-b) Specific Experience related to particular Assignment (75)	(75)
2. Approach & Methodology	250
2-a Appreciation of the Project	(70)
(i). Evidence of Site Visit with Photographs	(30)
(ii). Clarity of appreciation	(20)
(iii). Comprehensiveness of appreciation	(20)
2-b Problem Statement/ Understanding of Objectives	(50)
(i). Identification of Problems/ Objectives	(30)
(ii). Components of Proposed Services	(20)
2-c Methodology	(80)
(i). Proposed Solutions for this Project	(30)
(ii). Quality of Methodology	(20)
(iii). Conciseness, clarity and completeness of proposal	(30)
2-d Suggested changes for improvement in TOR	(10)
2-e Work Program	(20)
2-f Staffing Schedule	(20)
3. Key Staff	450
4. Performance Certification from clients	100
5. Present Commitments (current engagement and available strength – justification)	50
6. Transfer of Knowledge * (Methodology/ Plans)	50
Total Points:	1000
Minimum qualifying technical score:	700
* Transfer of knowledge would be in the form of joint venture with new/ less experienced firm(s) by sharing at least 20% of Assignment with them for promoting the consultancy industry in the country.	
The points earmarked for evaluation sub-criteria (3) for suitability of Key Staff are:-	
Description / Items	Points (%)
i. Academic and General Qualifications	30
ii. Professional experience related to the Project	60
iii. Status with the firm (Permanent & duration with Firm as per LOI Clause 3.1.4 (d))	10
Total Points:	100



5.3.1	<p>Following is added:</p> <p>The words “three top-ranking qualifying consulting firms” is deleted in its entirety and replaced with the words “qualifying consultants”</p> <p>The date, time, and address of the financial proposal opening are:</p> <p>After evaluation and approval of technical proposals (TO BE INFORMED LATER).</p>
5.3.3	<p>The weights given to the Technical and Financial Proposals are:</p> <p>Technical: 80%</p> <p>Financial: 20%</p>
6.3	<p>Add following at the end of this Para:</p> <p>The final person-months of each expert are subject to adjustment at the stage of contract negotiation in line with demonstrated approaches methodology and need bases.</p>
7.2	<p>The assignment is expected to commence in: October, 2017</p>
8	<p>The Clause is deleted in its entirety</p>



Checklist for Completeness of Proposal

S. No.	Description	Must attach Documents	
		In case of Single Entity	In case of JV/ Sub-Consultants
1.	Power of Attorney to submit the Proposal (Original, scanned copy is not acceptable)	a. By the owner/owners of Firm to authorized representative. b. In case of more than one owner, legal authority of issuing Power of Attorney of Executant itself.	a. By the owner/owners of each Firm to authorized representative. b. In case of more than one owner, legal authority of issuing Power of Attorney of Executant itself. c. Power of Attorney by the duly authorized representative(s) of member firm(s)/sub-consultant(s) to the authorized representative of Lead Firm
2.	Power of Attorney to sign the Proposal (Original, scanned copy is not acceptable) 	a. By the owner/owners of Firm to authorized representative. b. In case of more than one owner, legal authority of issuing Power of Attorney of Executant itself.	a. By the owner/owners of each Firm to authorized representative. b. In case of more than one owner, legal authority of issuing Power of Attorney of Executants itself. c. Power of Attorney by the duly authorized representative(s) of member firm(s)/sub-consultant(s) to the authorized representative of Lead Firm
3.	Letter of Intent to form JV on firm's letterhead/ JV agreement on stamp paper (Original, scanned copy is not acceptable)	N.A	Each Firm (all JV members), including the Lead Firm, to sign through its authorized representative (along with authorization)
4.	TECHNICAL PROPOSAL FORMS TECH-1 to TECH-9 duly completed as per Instructions to Consultants/ Data Sheet and requirements of TOR (To be attached with Technical Proposal)	Must provide	Must provide
5.	Valid Registration Certificate of Pakistan Engineering Council with relevant Project Profile Codes	Must provide	Must provide
6.	Foreign consulting firms shall make JV in accordance with Bye-Law 6(2) and Bye-Law 9 of the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-Laws 1986	Ineligible	PEC License(s) must be provided at the time of proposal submission
7.	Affidavit on stamp paper duly attested by the Oath Commissioner to the effect that the firm has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations	Must provide	Must be provided by all member firm(s) including the Lead firm (and sub-consultant(s) if applicable)
8.	Lists of facilities available with the Consultant to perform their functions effectively (proper office premises, software, hardware, record keeping etc.)	Must provide	Must be provided for each JV member including the Lead firm separately. In case of involvement of sub-consultant(s), will also be provided
9.	Affidavit on stamp paper duly attested by the Oath Commissioner to the effect that the proposed Personnel shall be available as per their proposed inputs in the Personnel Schedule and TOR	Must provide	Must be provided for each JV member including the Lead firm separately who has proposed Personnel. In case of involvement of Specialist sub-consultant(s), the affidavit will be signed by the individual himself
10.	Performance Certificate/ Assignment Completion Certificate (All completed projects mentioned under TECHNICAL PROPOSAL FORM A-2 CLIENT'S	Must provide	Must be provided for completed projects of each member including Lead firm

S. No.	Description	Must attach Documents	
		In case of Single Entity	In case of JV/ Sub-Consultants
	REFERENCE Note: Any project mentioned completed under Form TEC-2B will not be considered for evaluation unless Performance Certificate/ Assignment Completion Certificate with satisfactory remarks by the client's representative is not attached. The Client NHA reserves the right to verify the Performance/Assignment Completion Certificates.		
11.	Integrity Pact Document duly filled in the blank spaces with requisite information and signed/ stamped	Must provide	Must provide
12.	FINANCIAL PROPOSAL FORMS FIN-1 to FIN-7 duly completed as per Instructions to Consultants/ Data Sheet and requirements of TOR (To be attached with Financial Proposal)	Must provide	Must provide
13.	Audit Reports of the firm for past three years duly certified by Chartered Accountant (To be attached with Financial Proposal)	Must provide	Must be provided for each firm who proposes Personnel for the Assignment
14.	Sequential page numbering of Proposal. Signing and stamping of proposal (Technical and Financial) wherever indicated as well as initial/ signature and seal on all other pages of proposals. The Proposal is bound as hard book to deny addition/ removal of pages	Must fulfill the requirement	Must fulfill the requirement

Certification:-

I, the undersigned, certify to the best of my knowledge and belief that all above mentioned documents (as applicable), Sr. No.1 to 11 have been attached to our proposal and signed and stamped as per requirement mentioned at Sr. No.12. In the event of any sort of falsification of this certification, the Client NHA may at its sole discretion disqualify our firm from bidding for the Assignment named under Data Sheet Sub-Clause 1.1.

Signature of authorized representative of the firm(s) Date: _____
Day/Month/Year

Full name of authorized representative: _____

For and on behalf of: _____ {Name of the bidder} _____

(Seal)

Note: copy or scanned signatures are not allowed



SUMMARY EVALUATION SHEET FOR FULL TECHNICAL PROPOSALS (QCBS)

EVALUATION CRITERIA		Max. Weight	Firm 1		Firm 2	
			Rating	Score	Rating	Score
1. Firms Experience		100				
a)	General Experience in road Transport Sector	25				
b)	Specific Experience related to particular Assignment	75				
2. Approach and Methodology		250				
<i>2-a. Appreciation of the Project</i>		70				
(i)	Evidence of Site Visit with Photographs	(30)				
(ii)	Clarity of appreciation	(20)				
(iii)	Comprehensiveness of appreciation	(20)				
<i>2-b. Quality of Methodology</i>		50				
(i)	Identification of Problems/ Objectives	(30)				
(ii)	Components of Proposed Services	(20)				
<i>2-c. Methodology</i>		80				
(i)	Proposed Solutions for this Project	(30)				
(ii)	Quality of Methodology	(20)				
(iii)	Conciseness, clarity and completeness of proposal	(30)				
<i>2-d. Suggested Changes for Improvement in TOR</i>		10				
<i>2-e. Work Program</i>		20				
<i>2-f. Staffing Schedule</i>		20				
3. Key Personnel		450				
a)	Team Leader/ Sr. Highway Engineer	110				
b)	Senior Structural Engineer	100				
c)	Traffic/ Pavement Engineer	50				
d)	Material/ Geo Technical Engineer	45				
e)	Contract Engineer	25				
f)	Hydraulic/ Hydrology Engineer	40				
g)	Environmental Engineer	20				
h)	GIS Specialist	20				
i)	Quantity Surveyors – I & II	2x20				
4. Performance Certification from clients		100				
5. Present Commitments (current engagement and available strength – justification)		50				
6. Transfer of Knowledge (Methodology/ Plans)		50				
TOTAL		1000				

Excellent - 100% Very Good - 90-99% Above Average - 80-89% Average - 70-79% Below Average - 1-69% Non-complying - 0%
 Score: Maximum Weight x rating / 100.
 Minimum qualifying score is 70% or 700 marks.



PERSONNEL EVALUATION SHEET

POSITION / AREA OF EXPERTISE	Name	Academic and General Qualification* Weight 30%		Project related Experience Weight 60%		Status with the Firm** 10%		OVERALL RATING (Sum of Weighted Ratings) (A+B+C)
		Percentage Rating	Weighted Rating (A)	Percentage Rating	Weighted Rating (B)	Percentage Rating	Weighted Rating (C)	
(Show all experts to be evaluated)								
a) Team Leader/ Sr. Highway Engineer								
b) Senior Structural Engineer								
c) Traffic/ Pavement Engineer								
d) Material/ Geo Technical Engineer								
e) Contract Engineer								
f) Hydraulic/ Hydrology Engineer								
g) Environmental Engineer								
h) GIS Specialist								
i) Quantity Surveyors – I								
j) Quantity Surveyors – II								

Rating: - Excellent - 100% Very good – 90-99% Above Average – 80-89% Average – 70-79% Below Average – 1-69% Non-complying - 0%

Score: Maximum Weight X rating / 100.

* For Team Leader/ Sr. Highway Engineer, Senior Structure Engineer, Traffic/ Pavement Engineer, Material/ Geo Technical Engineer, Contract Engineer, Hydraulic/ Hydrology Engineer and Environmental Engineer: M.Sc. with additional trainings/ courses relevant to assignment -100%; M.Sc. - 90%, B.Sc. with additional trainings/ courses relevant to assignment - 80%, B.Sc. - 70%
 For GIS Specialist: M.Sc. with additional trainings/ courses relevant to assignment -100%; M.Sc. - 80%
 For Quantity Surveyors: B.Sc. -100%; DAE - 70%

** Regular Employee - 100%;
 First time for this assignment - 0%



TECHNICAL PROPOSAL FORMS

Say No to Corruption



TECHNICAL PROPOSAL SUBMISSION FORM

{Location, Date}

To: [Name and address of Client]

Dear Sirs:

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

[{If the Consultant is a joint venture, insert the following: We are submitting our Proposal in a joint venture with: {Insert a list with full name and the legal address of each member, and indicate the lead member}. We have attached a copy {insert: "of our letter of intent to form a joint venture" or, if a JV is already formed, "of the JV agreement"} signed by every participating member, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture.

OR

If the Consultant's Proposal includes Sub-consultants, insert the following: We are submitting our Proposal with the following firm(s) as Sub-consultants: {Insert a list with full name and country of each Sub-consultant.}]

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification and/or may be sanctioned by the Client.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 4.5.
- (c) We have no conflict of interest in accordance with LOI Clause 1.9.
- (d) We meet the eligibility requirements as stated in Data Sheet Clause 1.8.
- (e) Neither we, nor our JV Partner(s)/sub-consultant(s) or any of the proposed experts prepared the TOR for this consulting assignment.
- (f) Within the time limit stated in the Data Sheet, Clause 4.5, we undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in Letter of Invitation, Clause 6.5 may lead to the termination of Contract negotiations.



- (g) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the Assignment not later than the date mentioned in Data Sheet 4.5 (or the date extended with the written consent of Consultant in case of delay in procurement process)

We understand that the Client is not bound to accept any or all Proposal(s) that the Client receives.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}: _____

Name and Title of Signatory: _____

Name of Consultant (company's name or JV's name): _____

In the capacity of: _____

Address: _____

Contact information (phone and e-mail): _____

{For a joint venture, either all members shall sign or only the representative member, in which case the power of attorney to sign on behalf of all members shall be attached}



CLIENT'S REFERENCE

**Relevant Services (as per RFP notice) Carried Out in the Last Ten Years
Which Best Illustrate Qualifications**

Using in the format below, provide information on each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was largely contracted.

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm:
Name of Client:		No of Staff:
Address:		No of Staff Months:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current US\$ /Rs.)
Name of Associated Firm (s), if any:		No. of Months of Professional Staff Provided by Associated Firm(s)
Name of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:		
Narrative Description of Project		
Description of Actual Services Provided by Your Staff		

Consultants' Name: _____



Form A-3

APPROACH PAPER ON METHODOLOGY PROPOSED FOR PERFORMING THE
ASSIGNMENT

Say No to Corruption



COMMENTS/SUGGESTIONS OF CONSULTANT

On the Terms of Reference (TOR)

1.

2.

3.

4.

5.

6.

Etc.

On the data, services and facilities to be provided by the Client specified in the TOR.

1.

2.

3.

4.

5.

Etc.



Form A-5

FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY STAFF

1. Proposed Position: _____
2. Name of Firm: _____
3. Name of Staff: _____
4. Profession: _____
5. Date of Birth: _____
6. Years with Firm: _____
7. Nationality: _____
8. N.I.C Number: _____
9. Cell Number: _____
10. Membership in Professional Societies: _____
(Membership of PEC is Mandatory)
10. Detailed Tasks Assigned on the Project: _____

◆ 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 up to one page].

◆ Education

[Summarize college/university and other specialized education of staff member, giving names of institutions, dates attended and degrees obtained].

◆ 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, title of positions held and location of assignments. For experience in last ten years, also give types of activities performed and Client references, where appropriate].



◆ Languages

[Indicate proficiency in speaking, reading and writing of each language: excellent, good, fair, or poor].

◆ Certification

I, the undersigned, certify to the best of my knowledge and belief that

- (i) This CV correctly describes my qualifications and experience
- (ii) I am not a current employee of the Executing or the Implementing Agency
- (iii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in Form A-9 provided team mobilization takes place within the validity of this proposal.
- (iv) I was not part of the team who wrote the terms of reference for this consulting services assignment
- (v) I am not currently debarred by any department/organization/ (semi-autonomous / autonomous) bodies or such like institutions in Pakistan.
- (vi) I certify that I have been informed by the firm that it is including my CV in the Proposal for the {name of project and contract}. I confirm that I will be available to carry out the assignment for which my CV has been submitted in accordance with the implementation arrangements and schedule set out in the Proposal.

If CV is signed by the firm's authorized representative:

- (vii) I, as the authorized representative of the firm submitting this Proposal for the {name of project and contract}, certify that I have obtained the consent of the named expert to submit his/her CV, and that s/he will be available to carry out the assignment in accordance with the implementation arrangements and schedule set out in the Proposal, and confirm his/her compliance with paras (i) to (v) above.

- (viii) Latest colored attested photograph stapled attached with the CV.

I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of expert or authorized
representative of the firm

Date: _____
Day/Month/Year

Full name of authorized representative: _____

Note: copy or scanned signatures are not allowed



Form A-6

COMPLETION AND SUBMISSION OF REPORTS AS PER TOR

Reports	Date
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	



Form A-7

COMPOSITION OF THE TEAM PERSONNEL AND THE TASKS TO BE ASSIGNED TO EACH TEAM MEMBER

1. Technical / Managerial Staff

Name	Position	Tasks Assignment	Present location	Name of assignment involved and clients name



WORK PLAN / ACTIVITY SCHEDULE

Items of Work/Activities	Monthly Program from date of assignment (in the form of a Bar Chart)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15



Form A-9

WORK PLAN AND TIME SCHEDULE FOR KEY PERSONNEL

Name	Position	Months (in the form of a Bar Chart)															Number of Months	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		

Full Time: _____
 Part Time: _____

Activities Duration _____

Yours faithfully,

Signature _____
 (Authorized Representative)

Full Name _____
 Designation _____
 Address _____



Form A-10

CURRENT COMMITMENTS OF THE FIRM

(List MUST be comprehensive including projects from clients other than NHA as well)

Name of project	Single or JV	Task Assignment	Start date of the project	Expected date of completion



FINANCIAL PROPOSAL FORMS

Say No to Corruption



FINANCIAL PROPOSAL SUBMISSION FORM

{Location, Date}

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for **[Insert the Project Name]** in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal.

Our attached Financial Proposal is for the amount of {Insert amount in words and figures}, *including all Federal, Provincial & Local taxes applicable as per law of the land.* {Please note that all amounts shall be the same as in Financial Proposal Form A-17}.

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. before the date indicated in Clause 4.5 of the Data Sheet.

We confirm that we have no condition to state that may have financial implications over and above the amount quoted above.

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

We remain,

Yours sincerely,

Authorized Signature {In full and initials}: _____

Name and Title of Signatory: _____

In the capacity of: _____

Address: _____

E-mail: _____

{For a joint venture, either all members shall sign or only the representative member/consultant, in which case the power of attorney to sign on behalf of all members shall be attached.}



Form A-12**BREAKDOWN OF RATES FOR CONSULTANCY CONTRACT**

Project: _____ Consultant: _____

Name	Position	Basic Salary per Cal. Month	Social Charges (%age of 1)	Overhead (%age of 1+2)	Sub-Total (1+2+3)	Fee (%age of 4)	Rate per Month for project Office	Field Allow. (%age of 1)	Rate per Month for Field Work
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Notes:

- Item No. 1 Basic salary shall include actual gross salary before deduction of taxes. Payroll sheet for each proposed personnel should be submitted at the time of negotiations.
- Item No. 2 Social charges shall include Client's contribution to social security, paid vacation, average sick leave and other standard benefits paid by the company to the employee. Breakdown of proposed percentage charges should be submitted and supported (see Form A-13).
- Item No. 3 Overhead shall include general administration cost, rent, clerical and junior professional staff and business getting expenses, etc. Breakdown of proposed percentage charges for overhead should be submitted and supported (see Form A-14).
- Item No. 5 Fee shall include company profit and share of salary of partners and directors (if not billed individually for the project) or specified in overhead costs of the Company.
- Item No. 7 Normally payable only in case of field work under hard and arduous conditions.
- Note 1 The minimum percentage of item (1) should preferably be 50% of (8).
- Note 2 The consultant is to provide appointment letter and affidavit/undertaking duly signed by each of the individual staff members showing salary rates as above. Further during execution each invoice will also be provided showing that the professionals have been paid their salaries as per basic rates specified therein. Failing to which, the Client will take punitive action against the consultant and shall deduct the deficient amount from his monthly invoice. Moreover, it will be considered as a negative mark on his performance that will be considered for future projects.

Full Name: _____

Signature: _____

Title: _____



ESTIMATED LOCAL CURRENCY SALARY COSTS/REMUNERATION

Sr. No.	Position	Name	Staff-Months	Monthly Billing Rate	Total Estimated Amount (Rs.)
I. Professional / Key Staff					
Sub-Total:					



ESTIMATED LOCAL CURRENCY SALARY COSTS/REMUNERATION

Sr. No.	Position	Staff-Months	Monthly Billing Rate	Total Estimated Amount (Rs.)
II. Non-Key / Support Staff				
Sub-Total:				

Note: The bidders are required to quote the rates of Non Key/ Support Staff given in the TOR in above table. The bidder(s) may propose Non Key/ Support Staff Person-Months in addition to those given in TOR; however, in such a case tenable reasons must be given in the Technical Proposal Submission Form A-4 "Comments on TOR". The Client's negotiation committee will deliberate on the requirement of additional staff during negotiation meeting. It is also to be noted that the Client is not bound to agree to the reasons given in Form A-4.



DIRECT (NON-SALARY) COSTS

Sr. No.	Nomenclature	Unit	Qty.	Unit Price (Rs.)	Total Amount (Rs.)
1.	Rent for Office Accommodation	L.S			
2.	Office Utilities Costs	L.S			
3.	Cost / rental of Furniture / Furnishings	L.S			
4.	Cost (rentals) of Office/Other Equipment i. Computers and accessories ii. Photo copy machines iii. Communication equipment iv. Drafting / Engineering equipment v. Surveying instruments (rentals) vi. Transport Vehicles (Rentals) vii. Site visits and Meetings in Islamabad during currency of Project and coordination during supervision	L.S			
5.	Communication expenses	P.Month			
6.	Drafting/ Reproduction of Reports	L.S			
7.	Office/ Drafting Supplies	L.S			
8.	Others not covered above to comply with TOR requirement*				
Total					

* Any additional item/ cost quoted against this line item must be supported by solid/ tenable justification(s) detailed in Technical Proposal Submission Form A-4 "Comments on TOR" without indicating financial value therein. The negotiation committee of the Client may negotiate this cost on the basis of justification provided in the form A-4 with the prospective successful bidder in the light of Clause ITC 6.6 of RFP. Moreover, if no justification is given or Client does not agree to the justifications, the Client in both the cases **shall not** include this cost in the total cost offered by the Consultants for this assignment, particularly in case any amount against this line item is deemed to have been covered in other pay items.



SUMMARY OF COST

Sr. No.	Description	Amount (Rs.)
1.	Salary Cost / Remuneration	
2.	Direct (Non-Salary) Cost	
3.	Sub Total (1+2):	
4.	Sales Tax @ 16% on item S.No.3 above which shall be kept as Provisional Sum in the Contract Agreement	
5.	Grand Total:	

Note: 1- This cost is supposed to be built up in bid price and if anything is left blank it shall be deemed to be included in the cost.

- 2- The dues and salaries of staff are payable by the consultant in time and not later than 10th of the following month positively. In case of failure to do so Client shall intervene and pay these dues and salaries of the concerned Personnel and recover from the invoice of the consultant at actual charges paid plus 1% of the amount. This will also be accounted for adversely in making assessment of the Consultant in the next evaluation process for selection of consultants with report of such defaults.
- 3- The grand total is inclusive of all the applicable Federal, Provincial and Local taxes. All these taxes (except the Sales Tax) are required to be built in the quoted rates and not be mentioned separately.
- 4- Any Omission or arithmetical error made by the Consultants in entering the amount against item 4 above shall also be rectified during evaluation of the Financial Proposal.



APPENDIX-A

TERMS OF REFERENCE

(TOR)



CHAPTER NO. 1

INTRODUCTION

1.1 Background

Dhalkot is one of the entry points of AJK with Pakistan. On Pakistan side, the road from Dhalkot leads to Rawalpindi/Islamabad via Kotli Sattian, Lehtrar and joins Expressway on Khanna Bridge. This road stretch is 82 km long lying in jurisdiction of Punjab Highway Department and NHA. While on the AJK side, it links Dhalkot with Araj- Bagh 48 km long lying with AJK Highway department. On AJK side, out of 48 km road Bagh to Arja cross 22 km have been upgraded in the reconstruction program after the earthquake of October 2005. The remaining portion of 26 km from Arja cross to Dhalkot is being upgraded by Govt. of AJK and will be completed before June 2015.

This issue was raised with the Honorable Prime Minister of Pakistan during his visit of Bagh city AJK in September 2015. The Honorable Prime Minister graciously announced for up-gradation of this road and also directed concerned quarter for immediate action.

National Highway Authority intends to appoint Consultants for Feasibility Study and Preliminary Design for Construction of 4-Lane Expressway from Kotli Satian to Kalyari (upto Dhalkot Bridge) (82 KM).

1.2 Need Assessment

Existing road from Bagh –Arja –Dhalkot –Kotli-Satian –Lehtrar Islamabad is 130 km long and serves two main districts of AJK Bagh & Rawalkot. There are two other alternate routes from Bagh to Islamabad which are Bagh-Rawalakot – Islamabad 158 km and Bagh –kohala – Islamabad 155 km. As such the alternate routes are quite long as compare to Bagh –Arja – Dhalkot –Kotli- Satian – Lehtrar Islamabad road and consequently major volume of traffic runs along this route. Unfortunately, existing road geometry and pavement condition of this route is not satisfactory. Road users have to bear very high transport cost by using this road alignment or opting alternate long routes. Generally commodities prices are quite high due to high transport cost as compare to other areas lying at same distances from Islamabad. Therefore, there is any immediate need to improve this road to minimize transport cost for wellbeing of population of Bagh and Rawalakot District of AJK as well as adjoin population of Punjab lying on this road.

1.3 Project Definition

The project includes Feasibility Study and Preliminary Design for Construction of of a 4 - lane facility of Expressway from Kotli Satian to Kalyari (Up to Dhalkot Bridge) (82 KM). The Consultant will study the settlement problems. Detailed hydrologic survey will also be conducted for all minor and major water channels. Proper design for slope protection is necessary to be conducted in the study. Consultant has to prepare the separate Bidding



documents for undertaking project on EPC mode and item based mode. Consultant may also study the financial viability for undertaking project on BOT basis.

1.4 Project Objectives

The Project provides major tangible and intangible benefits enumerated below:

- i. The planned 4-lane expressway will provide effective road communication for AJK and major population of Rawalpindi district (Kotli-Satian, Lehtrar & adjoining areas) to reduce total transport cost for trade and tourism development.
- ii. This expressway will boost up the defense of AJK and Pakistan through efficient road network communication.
- iii. This expressway will largely contribute to the economic and social development of the AJ&K.
- iv. It will bring more population into the stream of benefits, which in turn will change the social complexion of people around this road.
- v. This expressway will bring about further revolution in road transport and time saving journey for passengers. It will also contribute to ensure smooth and efficient movement of trade, goods and traffic in relatively shorter time.

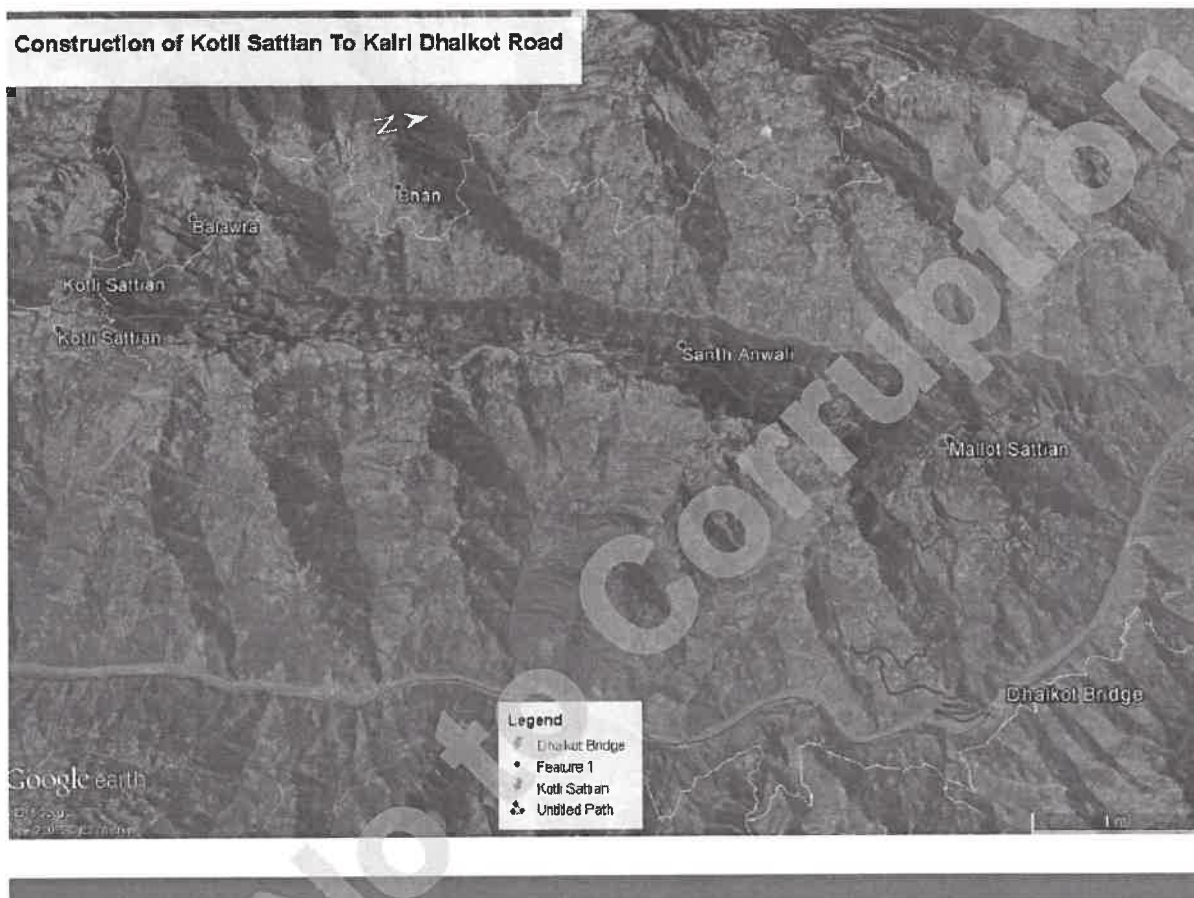


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CHAPTER NO. 2 DESCRIPTION OF PROJECT

2.1 Location of Project

Dhalkot is one of the entry points of AJK with Pakistan. The road from Dhalkot leads to Rawalpindi/Islamabad via Kotli Satian, Lehtrar and joins Expressway on Khanna Bridge.

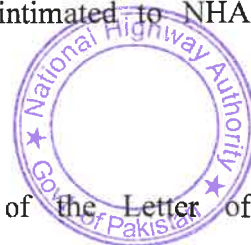


2.2 Project Works

The project includes Construction of a 4 -lane facility Expressway from Kotli Satian to Kalyari (Upto Dhalkot Bridge) (82 KM). For this purpose NHA intends to appoint consultant for feasibility study and preliminary design of the subject project along with all other requirements described in the “TOR”. However, if there is any other scheme launched by the concerned local government on the subject road will be intimated to NHA immediately without any delay.

2.4 Time of Start

The Services shall be commenced immediately after issuance of the Letter of Commencement by the Client.



Handwritten signature

2.5 Time Period

The Services specified in the TOR shall be completed and all the relevant reports submitted in the form and format acceptable to the Client, within **four (04) months** from the Date of Commencement.

Say No to Corruption



Asma

Completion of the design, SOP maps and imageries shall be returned back to the Client in Original and un-damaged. In case any authorization is required by the concerned office for delivering the required information, same shall be provided by NHA in the form of Authority letter. The Consultant should inform the local police and administration before conducting all types of filed surveys. Before planning the field reconnaissance, the consultant should co-ordinate meeting with the local city development / Highway Department to know any future plans for city expansion and provincial roads etc. Tips for design of Bypasses shall be obtained as per local requirements.

Task 2:	Reconnaissance Visit, Inception Report and Alignment Report
Approximate Duration:	20 days
Outcome:	Consultants should submit Inception and Alignment Report. Approval of alignment in presentation to the Client shall be accorded

2.1 Reconnaissance Visit with Alignment Study

After the completion of the Task 1, the consultant shall carry out the desk study of the existing alignment, using maps and imageries. Same shall then be investigated in the field reconnaissance. The site visits shall be carried out by a senior highway engineer of not less than 15 years of experience. Coordinated meetings with local departments shall be done and minutes recorded (same shall be made part of the Alignment report).

During the reconnaissance visit, particular requirements of project shall be identified that will be addressed in the detailed design. Other requirement of Task-2 is the submission of Inception Report. Inception Report should elaborate the methodologies for Preliminary design for requirements spelled out in the TOR and observations made in the site visit supplemented with photographs showing the project area.

After submission of Alignment report and Inception report, **the Consultant will give his presentation to the Competent Authority in NHA Auditorium for approval of alignment.**

In the reconnaissance visit, consultant should record some Geographic Co-ordinates of physical features on ground using GPS (Dual Frequency high accuracy). It shall be used in geo-referencing/ortho-rectification of the satellite imageries.

At the reconnaissance stage social, economic and environmental aspects shall be considered. The resulting information will form part of the recommendations for adoption of a particular corridor.

Data from various sources shall be collected at this stage:

- ◆ Topographic Maps
- ◆ Geological reports available if any (from local departments, adjacent projects)
- ◆ Use of Satellite imagery



- ◆ Agriculture soil reports
- ◆ Soil survey maps (Soil survey of Pakistan)

Task 3:	RTK Survey of the alignment using GNSS
Approximate Duration:	30 days
Outcome:	Survey Drawings along with map of route-sections, changes in ground elevation

3.0 RTK Survey (Pre-requisites)

Topographic survey forms the basis for the detailed design. Poor quality of survey work produces not only incorrect designs but also results in post construction problems with variations in cost and claims. It is desired that the Survey work is of top most order.

As per recent "Surveying & Mapping Act 2014" The Survey company must comply with the requirement of the Act.

It is therefore recommended that consultant should use the latest technology for the topographic surveys, which include at least 4 (four) GPSDF for establishment of high accuracy control points (as per required plan, specified herein). In case the consultant does not have the requisite number of GPSDF, he is advised to hire services of professional survey companies having the required expertise.

NHA reserves the right interview the surveyor if required. Upon request, the consultant should change the surveyor. *If consultant wants to outsource the Survey work, it will be mandatory to take prior approval of the Client.* NHA will ensure that the survey firm is not black listed and has sufficient resources and compliance of Surveying and Mapping ACT 2014.

The survey will be carried out in UTM Co-ordinate system and starting point will be observed from a known SOP control point. If no such point is available, average position of GPS Base will be taken.

3.1 X-SECTION SURVEY

The X-Section survey shall be carried out at every 5km up to the corridor (100m), using FOIF A30 GNSS RTK System or 'EQUIVALENT'. The Base shall be established on a higher ground and moving as close to the center line of the route. All the spot heights will be recorded in autonomous mode. The base will be shifted at each end of the UHF Radio range.

At the end, the GPS survey shall be connected to a known SOP Point. If not available average will be taken.



After the completing the field work a drawing will be submitted along with map of Route, Profile, and X-Section at every 5km and at changes in ground elevations. Reasonably accurate cost estimate shall also be prepared using these x-sections.

3.1.1 Design Standards

Design standards conforming to 120 KPH in plain and 80 KPH in hilly areas shall be used:

S.No	Design element	Unit	Plains	Mountainous
1.	Design speed	Km/hr	120	80
2.	Min. stopping sight distance*	m	250	130
3.	Max rate of supper elevation.	%	6	6
5.	Horizontal curvature:			
	i) Absolute min. radius	m	756	252
	ii) Radius above which no Super-elevation is required	m	3,510	1,710
10.	Max. grade	%	3	6% ruling;
11	Min. grade.	In fill 0.3% In cut 0.5%		
12.	Rate of vertical curvature:			
	i) 'K' value for crest curves: Stopping sight distance.	K/%A	>95	>26
	ii) 'K' value for Sag curves:	K/%A	>63	>30
13.	(a) Fill Slopes:	H:V	2:1	
	(b) Cut Slopes**			
	(i) 1.5 m-3.0 m cut	H:V	0.5:1	0.5:1
	ii) 0-1.5 m cut	H:V	0.5:1	0.5:1
	iii) >3.0 m	H:V	As per site conditions	
14.	Min. vertical clearance over road	m	5.2	
15	Min. vertical clearance over railway line.	m	6.5	
* Value is for Level grade, in case of vertical grade appropriate length to be added				
** Values shall be adjusted as per soil parameters determined after required testing.				
Note: Benching shall be provided if cut exceeds 6 m				

3.1.2 Design Standards

Following design standards and Codes Shall be followed:

Standards for Structures

Codes And Standards:

For analysis and design of structures following codes, standards and loads will be adopted.



- **AASHTO-(LRFD): -**
For analysis and design for all loads and load combinations.
- **Pakistan Highway Code of practice for Bridges 1967: -**
For vehicular loads, and their spacings
- **PBC: -**
For seismic zoning in addition to the revised seismic risk map of Pakistan.
- **ASTM & AASHTO -**
For material specifications & testing
- **ACI: -**
For analysis, design and detailing, only in case such details are not specified in AASHTO.

Vehicles live load

West Pakistan Code of Practice for Highway Bridges 1967 (WPCHB) specifies more severe loads to be considered in combination with other loads such as dead load etc. As follows:

- **Class AA loading:**
The 70-Ton tracked military vehicle to be placed in accordance with WPCHB to give maximum stresses.
- **Class A loading:**
The 54.5 Ton train of trailers (with different axle loads) to be placed in accordance with WPCHB to give maximum stresses.
- **Check Deck Slab for Punching Shear:**
The compressive strength of Deck Concrete should not be less than 4000Psi and the thickness of Deck slab should not be less than 200mm

Other loads

- **Side walk live load**
A load of 5 KN/m² (100 psf) of walkway between side barrier/railing and shoulder, applied continuously or discontinuously over both lengths and width of structure in order to produce maximum stresses in the member under consideration.
- **Horizontal live load on railing/posts of side barrier**
These depend upon the configuration of the railing/posts/ barrier system. The position and the magnitude of the horizontal loads are taken according to Article 2.7 of AASHTO.
- **Impact load**



Impact loading on the bridge superstructure is taken in accordance with AASHTO.

- **Wind loads**
Wind loads are taken in accordance with the provision of AASHTO
- **Seismic design**
Earthquake forces are calculated according to AASHTO, keeping in view the recent earthquake of October 8, 2005, the earth quake zones will be considered accordingly.

Task 4:	Traffic Survey
Approximate Duration:	07 Days
Outcome:	Classified Traffic Surveys after approval of Client. Submit Traffic & Axle load survey report

4.0 Traffic Count

Consultant shall obtain relevant traffic data from concerned agencies such as NTRC, C&W department, concerned Departments prior to conducting the traffic counts. Traffic counts for three (03) days at selected nodes shall be carried out.

Traffic volume at count station to be forecast for 20 years design period. Various alternative growth rates from various agencies or based on historical increases in fuel consumptions, vehicle registration etc., shall be utilized. After review of the various growth rates and resulting traffic volume, the consultant will recommend the growth rate to be adopted as basis for design and coordinate the same with NHA.

The traffic forecast will be made individually for each vehicle category including cars, buses, wagons, dual axle and multi axle trucks and tailors according to NTRC format. The traffic forecast will also include the traffic, which will divert to new link road. Generated traffic if any shall also be assessed and included in the traffic forecast along with the international trade traffic likely to use this facility.

Projected traffic from fresh traffic survey conducted will be used for pavement design. Fresh 24 Hrs traffic count shall be made on selected locations and using the growth factors, projected traffic shall be re-validated.

Task5:	Limited Soil Investigation
Approximate Duration:	15 Days
Outcome:	Soil & Material Investigation along with equipment machinery Report

5.1 Limited Soil & Material Investigation

Consultant shall carry out the limited soil investigation at every 5 km interval of the proposed alignments for pavement design by means of boring and by test pits to determine the soil parameters.

Consultant shall carry out the survey of the construction materials for embankment as well as for pavement and structures. Location of the quarries shall be properly identified and



marked. A report covering naturally occurring construction materials such as fill, aggregates, sands, etc. as well as the manufactured material like asphalt, cement, reinforcing steel shall be included in feasibility report.

5.2 Machinery and Equipment

In case, specialized equipment is envisaged to be used for construction, the same may be highlighted in the Feasibility Report. Due attention to this aspect shall be given while preparing cost estimates

Task 6:	Environmental Impact Assessment
Approximate Duration:	30 Days
Outcome:	EIA Report submission

6.0 EIA

Consultants shall identify the problematic areas. Particular attention is to be given to debris flow. Seismic and environmental influence, rock fall, debris and mudflow shall also be looked into in the study.

For EIA, Consultant shall directly coordinate with GM (EALS) office. The Consultancy fee against the EIA shall be verified and Processed by the office of GM (EALS).

Task 7: Structures Condition Report

7.0 Structures Condition Report

Consultants shall assess the condition of existing structures and prepare a detailed report encompassing the critical physical aspects along with remedial measures.

Task 8: Highway Safety Audit

8.0 Highway Safety Audit (HSA)

Pakistan is among those countries, where the road accidents and fatalities are high. One of the major components about 28% relating to road accidents is attributed to the road environment factors. It is therefore, essential that the highway safety audit (third party) should be carried out by a certified HSA, at various stages, as per requirements of international standards.

Since the project in hand is selected for Feasibility Study and preliminary design, the HSA shall be carried out with the submission of alignment report and shall conclude with the submission of final design report. In this regard, consultant shall quote a facilitation charges as LS.

Detailed Audit shall be carried out under the supervision of NHA HAS. Other members of Highway Audit team may include third party experts (at least two). An Engineer from NHA Design section shall be made part of the Audit team. Consultant is required to arrange the Audit visit, collection of required data, field visit expenses, coordinate meetings and



compilation of final Audit report including proceedings. Appropriate remuneration to be paid to Audit team from quoted amount.

Task 9:	Hydrology Study and Hydraulics of Major Rivers
Approximate Duration:	20 Days
Outcome:	Hydrology Study Report

9.0 Hydrology

The consultant shall collect fresh hydrological data for the feasibility study of the project. The hydrology study shall include:

- a. Location and extents of the catchments area
- b. High Flood Levels
- c. Maximum Peak Flood Discharge
- d. Maximum Velocity
- e. Type of Bed Material
- f. Waterway
- g. Scour Estimates
- h. Clearance
- j. Structure Profile

Task 10:	Reasonably Accurate Cost Estimate
Approximate Duration:	10 Days
Outcome:	Rough Cost Estimates

10.0 Reasonably Accurate Cost Estimates

The consultants shall prepare reasonably accurate cost estimates based on x-sections taken during RTK survey and NHA latest CSR rates including construction costs, design and construction supervision costs, establishment costs, escalation, utility relocation costs, land acquisition costs and miscellaneous items.

Task 11:	Feasibility Report
Approximate Duration:	30 days
Outcome:	Consultant should submit a Feasibility Study Report

11.0 Feasibility Report

Consultant shall prepare a comprehensive Feasibility Study Report which shall cover following aspects for the Expressway section:

- i) Technical part
- ii) Financial & Economics part



Scope of services required to be covered under each Part is elaborated under respective headings in the above paragraphs. However, the Technical area shall cover all the activities under clause 'H' i.e. scope of work. All tasks shall be wisely covered in the feasibility Report.

12.0 Submission of Documents

All the Reports associated with each Task shall be submitted in hard and soft format. In the technical proposal, consultant shall develop a Work programme Task wise with submission dates. Failing to provide the same, the proposal shall not be evaluated.

All documents/ drawings shall be subject to review by NHA's Experts. Consultants will incorporate any comments/ modifications made by the Experts (if agreed, The Responsibility for correctness of design lies with the Consultants).

Consultants will provide two additional sets of the tender documents and reports to the Client at a later stage at no extra cost to the Client. Additional number of sets (if required) shall be provided at a cost of Rs.5,000/- per set.

13.0 Submission of Data on Compact Discs

The Consultants shall submit complete set of documents and drawings listed above on three (03) digital CD-ROMs and hard format (3 Hard copies). Files (Word, Excel, Auto Cad editable format, Graphical Images, Photographs etc.) shall be properly indexed/ catalogued for record purposes and use/ reproduction at a later stage by NHA. List of Deliverables/Reports are as hereunder:

- i) Inception Report
- ii) Alignment Study Report
- iii) Traffic Study Report
- iv) Topographic Survey Report (RTK Survey)
- v) Limited Soil and Material Investigation Report
- vi) Machinery And Equipment Report
- vii) EIA Report
- viii) Highway Safety Audit Report
- ix) Hydrology and Hydraulics Report
- x) Reasonably Accurate Cost Estimate
- xi) Preliminary Design Drawings of highways Structures including Outline Design Drawings of Surface Drainage
- xii) Feasibility Study Report (including technical, financial and economics part)
- xiii) PC-1



14.0 Training Opportunity

The Consultants shall impart training to fresh graduates in respect of designing of bridges and highways; for that purpose it will employ two (02) fresh graduates as Trainee Engineers on the project for the complete project duration. The Consultants shall bear the emolument

On

expenses due to each Trainee Engineer; however boarding and lodging is not admissible to the Trainee Engineers. The minimum stipend carried home by each Trainee Engineer per month after deducting all applicable taxes and Consultant's overheads shall not be less than Pak. Rs.40,000/-.

Moreover, the Client may also designate its own staff to work with the consultants for the purpose of on the job training (at no cost to the consultants).

15.0 Mode of Payment:

“A” is the Contract Price, excluding the Provisional Sum amounts.

S. No.	Activity	%age of “A”
1.	Task 2:Inception Report	10%
2.	Task 2:Alignment Report	10%
3.	Task 3: Topographic Survey Report (RTK Survey)	5%
4.	Task 4: Traffic Survey Report	5%
5.	Task 5:Soil and Material Investigation Report	5%
6.	Task 5: Machinery and Equipment Report	5%
7.	Task 6: EIA Report	5%
8.	Task 7: Structures Condition Report	5%
9.	Task 8: Highway Safety Audit Report	5%
10.	Task 9: Hydrology and Hydraulics Report	5%
11.	Task 10: Reasonably Accurate Cost Estimate	5%
12.	Preliminary Design Drawings of Highway and Structures	10%
13.	Outline Design Report of Surface Drainage	5%
14.	Task 11: Feasibility Study Report	10%
15.	PC-1	10%
Total:		100%

- i) Upon submission of Reports, 50% payment shall be released. Remaining shall be released upon acceptable quality is ensured. Upon initial submission, a checklist correlating to TOR requirement shall be attached and checked for requirement spelled out.
- ii) Final payment shall not be cleared until formality of section 13.0 of TOR is ensured and Consultants gives an undertaking that all drawings in editable format and reports in word and excel format is submitted.



Proposed Man-Months

S. No.	Position	No.	Duration (months)	Total Man Months ¹
Key Personnel				
1.	Team Leader/ Sr. Highway Engineer	1	4	4
2.	Senior Structure Engineer	1	4	4
3.	Traffic/ Pavement Engineer	1	2	2
4.	Materials/ Geotechnical Engineer	1	2	2
5.	Contract Engineer	1	1	1
6.	Hydraulic/ Hydrology Engineer	1	2	2
7.	Environmental Engineer	1	1	1
8.	GIS Specialist	1	1	1
9.	Quantity Surveyor - I	1	2	2
10.	Quantity Surveyor - II	1	2	2
<i>Sub-Total</i>		10	-	21
Non Key Personnel				
11.	CAD Operator - I	1	4	4
12.	CAD Operator - II	1	4	4
<i>Sub-Total</i>		2	-	8
Support Staff				
13.	Computer Operators	2	4	8
14.	Office Boys	2	4	8
<i>Sub-Total</i>		4	-	16
Total		16	-	45



¹ The proposed man-months are as per Clients assessment; if the consultant has reservation/opinion/suggestion regarding proposed man-months it may convey same in writing during Pre-Proposal Meeting or even after Pre-Proposal Meeting but before the last date for seeking clarification, for review and decision of NHA which will be communicated to all the prospective bidders.

