Term of Reference (TOR)

PROJECT MANAGEMENT UNIT (PMU) COMMUNICATION & WORKS DEPARTMENT PESHAWAR
“Khyber Pakhtunkhwa Integrated Tourism Development Project (KITE)”

TORs for Engineering, Social & Environmental Studies of Infrastructure Work under “Khyber Pakhtunkhwa Integrated Tourism Development Project (KITE)”

<table>
<thead>
<tr>
<th>Country:</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultancy Services:</td>
<td>Feasibility Study, Social &amp; Environmental Assessment, Preliminary and Detailed Engineering Design &amp; Construction Supervision.</td>
</tr>
<tr>
<td>Project ID:</td>
<td>P 163562</td>
</tr>
</tbody>
</table>

A. INTRODUCTION:

The Govt. of Khyber Pakhtunkhwa (KP) has received a loan from the International Development Association (IDA) for the development of tourism sector in KP, and part of the loan will be used for development of infrastructures that are enabling and contributing to the development of the tourism sector. For this purpose, the Department of Communication and Works of KP would like to engage a consultant to provide services related to the preparatory activities of the infrastructure component of the project namely feasibility study, social and environmental assessment, detailed engineering design and construction supervision for the proposed roads under this component.

The KP Communication & Works Department through Project Management Unit (PMU) is one of the executing agencies for the project, headed by the Project Director (Client Representative) will be implementing agency for this assignment.

B. BACKGROUND:

The project has been conceived under International Development Association (IDA) assistance to enable the development of an inclusive and sustainable tourism sector in KP. The infrastructure component of the project comprises the includes upgrading/rehabilitation of road, road side or nearby tourist facilities. Accordingly, the following proposed roads are selected for rehabilitation or upgrading under the project.
Proposed Roads:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Section</th>
<th>Length (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supat Valley Road (Dist: Mansehra)</td>
<td>40.0</td>
</tr>
<tr>
<td>2</td>
<td>Rehabilitation and upgrading of Thandiani Road in district Abbottabad</td>
<td>24.0</td>
</tr>
<tr>
<td>3</td>
<td>Upgrading of Mankial Bada Serai Road in district Swat</td>
<td>23.0</td>
</tr>
<tr>
<td>4</td>
<td>Upgrading of Shishikoh - Madaklust Road in district Chitral</td>
<td>45.0</td>
</tr>
</tbody>
</table>

C. OBJECTIVE

The objective of the assignment is to carry out the technical, economic, social & environmental assessment of the above proposed roads to be financed under the Integrated Tourism and Enterprise Development Project of KP in accordance with World Bank operational policies and applicable national and provincial legislation in a timely manner with adequate quality. The selected roads which are passing the selection criteria would then be detailed designed and supervised during the construction stage. There is a likelihood to add other roads that may be proposed later. Therefore, the current engagement would be made on Framework concept where scope of engagement would be enhanced based on the pre-agreed terms and conditions of the contract signed with the winning consultant.

D. SCOPE OF WORK OF THE PROPOSED ASSIGNMENT

This assignment has three main phases as follow:

Phase 1: Technical, Economic, Social and Environmental Feasibility Study

The consultant is required to carry out initial preparatory assessment of the above selected roads. The expected activities and outputs in this phase are listed below:

(i). Social & Environmental Screening: the expected activities to be carried out are as follow:

   a. Initial Environmental & Social Screening of the of the proposed road to determine the category of the proposed roads in-terms of social and environmental impact has been carried out by the Client. Further detailed screening for the purpose of feasibility study of the road should be carried out building on and using the information available from the initial screening.

(ii). Technical and Economic Feasibility Study and Assessment of the proposed roads: the expected activities to be carried out by the consultant are included but limited to the followings:

   b. Origin Destination Survey
   c. Traffic Count data (12 Hours, 24 Hours 7 Days)
   d. Economic Feasibility Survey
   e. Detailed Topographic Survey of the proposed roads and selection/finalization of the road alignment
   f. Geotechnical Test and Investigations
   g. Hydrological survey and report
   h. Identification of location for the rest areas along the road;
i. Identification and assessment of tourism facilities along or nearby the road;

j. Preparation of PC1 document based on the requirements of KP government.

k. Other necessary activities that may be deemed necessary by the consultant;

(iii). Preparing preliminary engineering design and cost estimates: The consultant is expected to prepare preliminary engineering design including cost estimates for the proposed roads and associated facilities including road furniture such as the rest areas and tourism facilitates. The preliminary design should include all necessary information to help the project management team for decision making for sequencing the packaging based on initial cost and timeline needed for the construction phase. The cost estimates so prepared at this stage would form basis for the respective PC-I. The KP government may add more roads and road furniture and other nearby tourist facilities and investments (identified through other assessments and scoping activities sponsored through other means) depending upon the outcome of the initial screening and the performance of the selected consultant.

(iv). Preparation of the PC1 as per the requirements and format of KP government.

Phase 2: Preparation of Detailed Engineering Design and Safeguard Documents

In this phase, the consultant is required to complete and prepare the detailed technical engineering designs, bill of quantities, detailed engineering specifications, social and environmental safeguard documents. Main expected outputs in this phase are listed below:

(i). Detailed technical and engineering design. The specific tasks for the preparation of the detailed design of the feasible roads and road furniture including rest areas and tourist facilities as selected in the phase 1 are included but not limited to the following:

a. To develop the full detailed engineering design of the roads, bridges and other relevant structures including provision for fiber optics cable installation along the road side, road site rest areas as per the requirements of the KP C&W and national standards and specifications. This will include all necessary drawing, cross sections, plans and profile, etc;

b. The consultant is encouraged to propose climate smart engineering approaches to the overall design methodologies to ensure climate resilience and sustainable infrastructure development.

c. To develop the full detailed engineering design for each proposed tourist facilities including landscaping, water and sanitation, electricity and power supply, ICT connectivity, parking areas and other necessary requirements in consultation with Department of Tourism of KP. The designs of the facilities should incorporate all necessary elements for facilitating females, handicaps and children.

d. To prepare inventory of the roads & bridges, including their geometric features, type and condition of drainage structures, load carrying capacity, pavements, and other major features. Assess / quantify potential problems that relate to land acquisition, cutting of trees, relocation of utilities etc.

e. To update topographic surveys from phase 1, including horizontal and vertical alignments and cross-sections, establishment of horizontal control points, bench marks, and permanent reference beacons required for detailed engineering designs to enable construction quantities to be calculated to an accuracy of (+) (-) 5 percent.

f. To prepare designs based on relevant standards proposed by KP C&W, including typical cross-sections, long sections and the pavement and geometric design.
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g. To assure that the road designs incorporate measures to mitigate adverse environmental impacts, including those encountered during construction, based on the findings of environmental assessments.

h. To examine materials found along the road alignments, taken at suitable intervals. Pay particular attention to subsurface conditions at bridge site (if any) through appropriate geo-technical surveys.

i. To test soil samples by classification, liquid limits, plastic limit, California Bearing Ratio and suitability of stabilization. Test undistributed samples to determine the main mechanical characteristics. Test construction materials for grains-size distribution and plasticity characteristics, unit weight, and water absorption, and any other tests deemed necessary.

j. To study the existing hydrological regime, based on an analysis of rainfall and flood records, including subsurface water characteristics, supplemented by detailed filed investigations, to establish the adequacy of road embankment levels. Culverts, and side ditches.

k. The consultant should consider road safety aspects of the road infrastructure and use design for safety approaches.

l. To assess cross drainage requirements and propose new structures (bridges, culverts, and causeways as appropriate) or improvements to existing structures where these are otherwise structurally sound.

m. To determine the most cost-effective improvement option for each project and section on the basis of traffic count and projected traffic levels pavement structure studies, and axle load considerations.

n. To develop unit costs of construction for roads, bridges and other structure.

o. To prepare detailed engineering designs and bills of quantities, and calculate detailed cost estimate for civil works, broken down into foreign (direct and indirect) and local components as well as taxes and customs duties.

p. To prepare appropriate contract packages, taking into account the location of the project and size of the contracts.

q. To update realistic construction schedules showing the anticipated progress

(ii). Preparation of Environmental and Social Management Plan (ESMPs) and Resettlement Action Plans (RAPs) and other relevant documents (for example Physical and Cultural Resource Plan, PCRP) for each road and associated facilities

- **ESMPs**—The Consultant shall prepare the site specific Environmental and Social Management Plan (ESMP) including detailed Mitigation Plan and a Monitoring Plan per the Bank requirements and environmental safeguard policies OP / BP 4.01 Environmental Assessment, OP / BP 4.04 Natural Habitats, OP / BP 4.11, Physical Cultural Resources and OP/BP 4.36 Forests for each sub project of road construction. The ESMP will also comply with the national environmental requirements defined through Pakistan Environmental Protection Act of 1997 and subsequent provincial acts, regulations, and guidelines. The consultant will make sure to document the impacts on wildlife movement and crossing during construction and operation phase. Appropriate mitigation measures for the concept of green highways and roads should be adopted as per international best practices. The consultant will propose the environment and wildlife friendly engineering design and road structures during engineering surveys and technical designs.

The consultants will also make use of the WBG Environmental, Health, and Safety and Labor influx “Managing the Risks of Adverse Impacts on Communities from...
Temporary Project Induced Labor Influx” Guidelines. The subproject-specific ESMPs will be prepared using the standard methodology as per ESMF.

- **RAPs** - The RAPs will provide a description of the road and identification of the project area. It will identify project impacts, the project activities that give rise to resettlement, the zone of impact of such activities, the alternatives considered to avoid or minimize resettlement, and the mechanisms established to minimize resettlement, to the extent possible, during project implementation. The RAP preparation shall be prepared in accordance with the Project RPF, following the requirements of the World Bank’s Operational Policy on Involuntary Resettlement, OP 4.12 and its Annex A - Involuntary Resettlement Instructions. The RAP shall also refer to Government of Pakistan’s legal and institutional requirements related to land acquisition. Any identified gaps between these two requirements are to be clearly captured, explaining how these gaps will be filled, and which should take precedence and why. The following tasks will be undertaken by the consultant for the RAPs:

  a) **Impacts**: Identify the key social impacts that will be associated with the involuntary resettlement process, the magnitude of such impacts, and the main categories of project affected persons (PAPs), men and women, that will experience these impacts.

  b) **Inventory & Census**: Prepare a socioeconomic inventory and census of the PAPs to establish a basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance. The census will identify and quantify different categories of PAPs who would require some form of assistance, compensation, rehabilitation or relocation. Information on vulnerable groups or persons for whom special provisions may be needed should be provided.

  c) **Entitlement Matrix**: Prepare an entitlements matrix based on a detailed measurement survey listing all likely effects as per relevant typologies to be developed for assets and resources.

  d) **Compensation Package**: Prepare a compensation and restoration package for each category of PAP aimed at replacing/compensating for all types of losses, as appropriate;

  e) **Implementation Schedule**: Develop clear timeline and implementation schedule for RAP implementation linking the various steps to project components and execution plan, including institutional responsibilities, and monitoring parameters.

  f) **Stakeholder Consultation**: Document the various consultation activities to be conducted as part of the RAP while ensuring that information has been shared transparently through an active and informative consultation process.

  g) **Grievance Redress Mechanism**: Provide a framework of an easily accessible and robust site-specific grievance redress mechanism which is synchronized with the Project GRM.

  h) **Communication Plan**: Develop communication and consultation plan to be adopted by the project for consulting and maintaining information flow with the PAPs.

  i) **Institutional Arrangements**: Identify institutional responsibility for RAP implementation and monitoring, identifying staff responsible for land acquisition within C&W Department and the other institutions participating in

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the arrangement of resettlement activities and clearly define their roles and activities in RAP implementation.

**Budget:** Provide a detailed budget for resettlement compensation and livelihood restorations measures proposed in the RAP.

The suggested RAP report structure is attached at Annex 2. Also, KP has recently prepared a RAP for Makhniyal-Changal-Gali (MCG) road that can be used by the consultant as reference and for the use of general content.

- **Translation & Editing**-the Executive Summary of the ESMPs and RAPs will be translated into Urdu and made available to stakeholders and disclosed as described below. English language reports will be professionally edited to ensure quality of language/grammar.

- **Clearance and Disclosure**- the ESMP and RAPs will be reviewed and cleared by the Client and the World Bank. The Consultant will organize meetings with C&W, DoT and World Bank to present the final draft reports and seek clearance/approval. After clearance is received, the ESMP and RAPs will be made available on the C&W and DoT websites, in hard copy in the two PMUs, and in hard copy at the sub-project sites. After client website disclosure, the ESMPs and RAPs will be disclosed in the local language and in English on the World Bank website, before civil works commence.

(iii). **Development of Complete Standard Bidding Documents and Procurement Strategy for the procurement of the proposed roads:** the bidding documents and procurement strategy will be developed in accordance with the World Bank Procurement Framework and in close consultation with the World Bank Procurement Specialist.

**Phase 3: Construction Supervision**

In the phase 3 of this assignment, the consultant is required to perform the role of the Engineer in accordance with the contract. The responsibility of the consultant will include, but not limited to the following:

- Notice to commence works will be issued by the consultants with due consultation of the Client.
- Variation orders will be issued by the consultants with due consultation with the client.
- Approval of construction works schedule and its monitoring using an agreed construction management/monitoring IT tool (like MS Project, Primavera etc.).
- Approval of construction materials to be used for the project.
- Issuance of construction drawings, checking of layout of structures and road network.
- To check as-built drawings prepared by the contractor.
- Joint measurements will be taken with the contractor and recorded in compute-based form.
- Maintain daily progress reports.
- Maintain record of correspondence between the client, consultants and contractors etc.
- Check requests will be submitted by the contractor before execution of any activity and will be approved / disapproved by the site supervisory staff on the basis of quality of work performed by the contractor.
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- To guide the contractor for maintaining safety measures & care of works.
- To direct the contractor to carry out all such work as may be necessary in the opinion of the Engineer to avoid or to reduce the risk in case of an emergency affecting the safety of life or of the works or of adjoining property and advise the client thereof as soon thereafter as is reasonably practicable.
- Arrange progress review meetings with the client and contractors.
- Examine and attend the measurement of any work which is about to be covered or put out of view before permanent work is placed thereon and to examine and attend the measurement of the completed works in the prescribed form.
- Performance of all the duties of the Engineer as specified in the construction contract.
- Issuance of necessary notices to the contractor during construction period.
- Inspection of completed works at appropriate intervals during the defect liability period and issuing defects liability certificate.
- Processing of contractor’s possible claims of the construction contracts.
- Informing the client about the status of works if the consultants feel that the works will not be completed as per the original works programme due inadequate manpower, equipment, materials or other resources which may indicate that the contractor may be delayed in the completion of any part of the project.
- To monitor environmental issues during the construction period ensured minimum disruption / damage to the environment and local settlements and providing information to the client in the Monthly Progress Reports.
- To issue a variation order which has financial implications except in emergency situation as reasonably determined by the Engineer subject prior approval in writing of the client.
- To approve subletting any part of the works subject to prior approval in writing of the client.
- Recommendation of extension of time subject to prior approval of the client.
- Checking of contractors’ Interim Payment Certificates, escalation bills, claims and other statements with respect to arithmetical error and compliance with the contract and if required make corrections thereto.
- To advise the client on all matters relating to the execution of the contract including providing advice on processing of contractor’s claims, if any.
- Recommendation of liquidate damages against the contractor or other actions which should be taken against the contractor under the construction contract.
- Inspection of works to check the workmanship and inspect that the work is carried out according to the specifications. Supervise tests performed by the contractor on materials. Approval and disapproval of contractor’s work and, if appropriate, his plant and equipment.
- Approval of materials and the conformity of the works to the contract specifications.
- Verification & recommendation of contractors Interim Payment Certificates for payments.
- Certify completion part or all the works and preparation of punch list.
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- Testing of materials and of completed works and giving instructions for removal of unspecified materials from the site.
- To order, if required, the uncovering of completed work and or the removal and substitution of proper materials and/or work.
- Inspection of works during maintenance period and issuance of maintenance certificate.
- Assistance in taking over / handing over of Project from contractor to the Client.

OVERALL PROJECT MONITORING

- To support establishment and management of the Project Management Unit (PMU) of C&W.
- To support the Client to carry out the overall project monitoring.
- To conduct socio-economic baseline and monitoring survey on the final selected roads for designing to assess the impacts of the project, in accordance with the project performance management system developed during project processing.
- To establish systems for recording data and statistics for such monitoring.
- To collect required data and undertake other relevant surveys before construction and immediately after completion of construction of each road for monitoring.
- To prepare quarterly progress reports in accordance with the format agreed between the Client and World Bank.
- To prepare monthly progress report.
- To provide the Client with complete records and approve the contractor’s As built drawings for the works.
- To prepare completion report for the Project including information on a contract wise basis in a form acceptable to the client and to World Bank and in carrying out Project Benefit Monitoring and Evaluation before and after civil works construction in accordance with the format agreed upon between the Client and the World Bank.

E. Deliverables and Timelines:

Phase 1: the timeline for the completion of all activities under phase one is maximum 6 months. The consultant shall complete the whole scope of phase 1 assignment within the stipulated timeline and plan the work in logical sequence to allow the Client to plan the implementation in smooth and timely manner. The key deliverables under phase 1 are:

1. Environmental and Social Screening Report;
2. A complete technical & economic feasibility report for each road to include at the minimum the following:
   - Origin Destination Survey report;
   - Traffic Count Survey report;
   - Socio-economic and demographic report including the number and location of socio-economic centres such as clinics, schools, touristic destination, archaeological locations;
   - Topographic survey and road alignments;
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- Preliminary geotechnical report;
- Preliminary hydrological report;
- Economic evaluation report to include the economic internal rate of return (EIRR), and NPV

3. Preliminary Engineering Design package to include all necessary information including cost estimates for each proposed road;
4. Draft PC1 as per the requirements and format of the KP government

**Phase 2:** the timeline for the completion of all activities under phase 2 is maximum 6 months. The key deliverable under this phase are as follow:

1. Detailed Engineering Design packages for the feasible roads selected/identified in the phase 1 and for the tourism infrastructure (road side and nearby facilities identified by the client);
2. Final ESMPs and RAPs for each designed road and identified facilities, where applicable, as per the requirements and guidelines of the World Bank;
3. Final draft of Standard Bidding Documents for each road package and identified infrastructure.

**Phase 3:** the timeline for phase 3 is expected to be 2 years starting from contract award. The consultant under this phase will assume the role of the Engineer on a time-based contract.

The consultant is expected to submit the inception report for each phase within the 15 days of the start of the assignment and present a work plan to lay out the consultant approach and methodologies to complete the assignment under each phase.

**F. Reporting and Payments to the Consultant:**

The Reporting and Payment would be phased in accordance with the deliverables. The deliverables would be paid on lump-sum basis under Phase 1 & 2 whereas the Phase 3 activities concerning with the supervision of the field construction work would be on monthly basis.

**Phase 1:** The consultant team is expected to submit the following reports for phase 1:

1. Inception Report;
2. Draft Reports for each deliverable;
3. Final Reports for each deliverable;
4. Ad-Hoc reports as per the client’s request

The contract for the phase 1 will be Lump Sum and payments to the consultant will be linked to deliverables and processed as follow:

<table>
<thead>
<tr>
<th>No.</th>
<th>Deliverables</th>
<th>Timeline</th>
<th>Payment Terms (upon approval of deliverable by Project Director)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Draft technical and economic</td>
<td>8 weeks</td>
<td>10%</td>
</tr>
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</table>
Term of Reference (TOR)

<table>
<thead>
<tr>
<th>No.</th>
<th>Deliverables</th>
<th>Payments</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Draft Environmental and Social screening report</td>
<td>8 weeks</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from inception</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Draft preliminary design package</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Draft PC1 as per the requirement of KP government</td>
<td>10 weeks</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from inception</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Final technical and economic feasibility report</td>
<td>20 weeks</td>
<td>15%</td>
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<tr>
<td></td>
<td></td>
<td>from inception</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Final Environmental and Social screening report</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>7</td>
<td>Final preliminary design package</td>
<td>20 weeks</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from inception</td>
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</tr>
<tr>
<td>8</td>
<td>Final PC1 package</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

Phase 2: The consultant team is expected to submit the following reports for phase 1:

5. Inception Report;
6. Draft Reports for each deliverable;
7. Final Reports for each deliverable;
8. Ad-Hoc reports as per the client’s request

The contract for the phase 2 will be Lump Sum and payments to the consultant will be linked to deliverables and processed as follow:

<table>
<thead>
<tr>
<th>No.</th>
<th>Deliverables</th>
<th>Payments</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Draft 30% detailed design package after approval by the Client</td>
<td>10%</td>
<td>8 weeks from inception report</td>
</tr>
<tr>
<td>2</td>
<td>Draft ESMPs and RAPs upon submission with adequate quality</td>
<td>10%</td>
<td>8 weeks from inception report</td>
</tr>
<tr>
<td>3</td>
<td>Draft standard bidding documents upon submission with adequate quality</td>
<td>5%</td>
<td>10 weeks after the inception report</td>
</tr>
<tr>
<td>4</td>
<td>Draft 60% detailed design package after approval by the Client</td>
<td>10%</td>
<td>10 weeks from inception</td>
</tr>
<tr>
<td>5</td>
<td>Final 100 % detailed design package after the approval by the Client</td>
<td>40%</td>
<td>20 week from inception report</td>
</tr>
<tr>
<td>6</td>
<td>Final ESMPs and RAPs after the approval by the Client and the World Bank</td>
<td>20%</td>
<td>20 weeks from inception report</td>
</tr>
<tr>
<td>7</td>
<td>Final standard bidding documents after approval by the Client and World Bank</td>
<td>5%</td>
<td>20 weeks from inception report</td>
</tr>
</tbody>
</table>

Phase 3: The contract for phase 3 would be time-based and payment will be made on monthly basis. Following reporting requirements are expected from the consultant:
1. Monthly Progress Reports
2. Quarterly Progress Report
3. Annual Progress Report

G. Focal Person/Institutional Setup

The consultant will report to the Project Director Khyber Pakhtunkhwa Integrated Tourism Development Project (KITE), PMU / C & W Department or any other staff that he designates. All work must be approved by him or his designated representative. The consultant should raise all the necessary support and facilities that needs to be provided by the Client during the presentation of their inception report.

H. Expected Personnel to be Mobilized by the Consultant

Phase 1 and 2: The proposed or expected specialized personnel and expertise that are deemed necessary to perform the assignment in phase 1 and phase 2 are listed below. It is up to the consultant to propose the right size of specialization, unit rates and man-month inputs as part of their proposals.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team Leader</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Highway Design Engineer</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Geometric Design Engineer</td>
<td></td>
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<tr>
<td>4</td>
<td>Transportation Planner</td>
<td></td>
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<tr>
<td>5</td>
<td>Traffic Engineer</td>
<td></td>
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<tr>
<td>6</td>
<td>Geo Technical Engineer</td>
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<tr>
<td>7</td>
<td>Bridge Design Engineer</td>
<td></td>
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<tr>
<td>8</td>
<td>Structure Engineer</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Resettlement/Social Specialist</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Road Safety Specialist</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Hydrologist</td>
<td></td>
</tr>
</tbody>
</table>
### Term of Reference (TOR)

<table>
<thead>
<tr>
<th></th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Survey Engineer</td>
</tr>
<tr>
<td>14</td>
<td>Senior Environmental Engineer</td>
</tr>
<tr>
<td>15</td>
<td>Senior Architect</td>
</tr>
<tr>
<td>16</td>
<td>Gender Specialist</td>
</tr>
<tr>
<td>17</td>
<td>Field Assistant</td>
</tr>
<tr>
<td>18</td>
<td>Data Analyst/Enumerator</td>
</tr>
</tbody>
</table>

### Phase 3: Construction Supervision

<table>
<thead>
<tr>
<th></th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team Leader/CRE</td>
</tr>
<tr>
<td>2</td>
<td>Resident Engineers</td>
</tr>
<tr>
<td>3</td>
<td>Assistant Resident Engineers</td>
</tr>
<tr>
<td>4</td>
<td>Material Engineer</td>
</tr>
<tr>
<td>5</td>
<td>Road Safety Engineers</td>
</tr>
<tr>
<td>6</td>
<td>Resettlement Expert /Social Expert</td>
</tr>
<tr>
<td>7</td>
<td>Gender Specialist</td>
</tr>
<tr>
<td>8</td>
<td>Contract Engineer</td>
</tr>
<tr>
<td>9</td>
<td>Environmental Engineer</td>
</tr>
<tr>
<td>10</td>
<td>Geo Technical Engineer</td>
</tr>
<tr>
<td>11</td>
<td>Site Inspectors</td>
</tr>
<tr>
<td>12</td>
<td>Quantity Surveyors</td>
</tr>
<tr>
<td>13</td>
<td>Senior Lab Technicians</td>
</tr>
<tr>
<td>14</td>
<td>Surveyors</td>
</tr>
<tr>
<td>15</td>
<td>Other Supporting Staff</td>
</tr>
</tbody>
</table>

The Client expects that for all specialist positions, the consultant’s personnel must have at least master’s degree in their respective field and for all support staff/junior specialist the consultant’s proposed personnel must have at least bachelor’s degree from credible universities in Pakistan or overseas.

I. **Procurement Method and Timeline**
This consultancy will be procured based on Quality and Cost Based Selection (QCBS) method of World Bank procurement Regulations. The request for expression of interest (REOI) is scheduled to be launched during November 2019. Further details will be provided in the REOI. The final RFP (request for proposal) will be issued to the shortlisted firms only which will be non-transferable.

J. **Collaboration and Coordination**
   The consultant is expected to coordinate with all relevant stakeholders in a professional manner. Also, the consultant is expected to work in collaboration with other consultant/contractors mobilized or will be mobilized under the project. This is specifically important when it comes to the collaboration needed with consultant for feasibility study of Integrated Tourism Zones (ITZs) and Destination Investment and Management Plans (DIMPs) since the scope of these three consultancies are very relevant and in some extend there is potential overlap that needs to be aligned by the consultants.
Indicative structure of the ESMP report are as follows:

Executive Summary (two languages English and Urdu translation)
Concisely discusses significant findings and recommended actions, summary of consolations, budget etc.

1. Introduction
1.1 Overview
1.2 Background of the project
1.3 Objective of ESMP
1.4 Approach to work
1.5 Area/Corridor of Impact
1.6 Composition study team

2. Legal and administrative framework
2.1 GoP/GoKP requirements (legislation; guidelines and rules; policies; international treaties signed by Pakistan; national and provincial authorities; environmental procedures), their applicability, and compliance status for the Project.
2.2 World Bank requirements (Operational Policies and safeguard requirements; and WBG Environmental, Health and safety guidelines, Environmental Code of Practices- World Bank; World Bank Guidance on Managing the Risks of Adverse Impacts on Communities from Temporary Project Induced Labor Influx) and their triggering and compliance status for the Project. Website for guidance note on Labor influx:

3. Project description
3.1 Need and purpose of project
3.2 Project location
3.3 Salient features
3.4 Description of project and its components (pavement, permanent facilities; temporary facilities -location, size, type, etc.; others)
3.5 Scope of the construction activities
3.6 Construction machinery, materials and other supplies (including estimated numbers/quantities)
3.7 Waste generation and disposal (including estimated quantities)
3.8 Manpower requirements
3.8 Operation and maintenance (supplies; waste generation and management; manpower requirements; others).

4. Baseline description/analysis
4.1 Study area
4.2 Physical environment (physiography; climate; geology and seismology; soils; hydrology; groundwater; patterns of natural drainage, flooding; sedimentation; water quality; air quality; noise; others).
4.3 Biological environment (flora including natural vegetation; fauna including mammals, birds including migratory birds, reptiles, amphibians, fish and red listed species; biodiversity; protected and non-protected areas including hunting,
poaching, illegal fishing; wetlands; and fisheries) Specifically the wildlife movement and crossing areas, forested habitat.

4.4 Social and economic environment (population and demography; land use and natural resources including agriculture, livestock, grazing, and forestry; other economic activities e.g. quarrying, tourism, fishing, trade, services; social infrastructure and services including education, health, communications; access and security; community organizations; vulnerable groups and poverty situation; gender aspects/impacts on women & girls; recreation areas/potential).

4.5 Cultural aspects (cultural heritage; archaeology; and other objects of special interest, e.g. graveyards, monuments).

5. Project alternatives
   5.1 Without project alternative
   5.4 Construction Camp
   5.5 Material Sourcing
   5.6 Other temporary and permanent facilities

6. Other relevant issues
   6.1 Risk of earthquakes
   6.2 Risk of flooding
   6.3 Climate change

7. Public Consultation and Information Disclosure
   7.1 Scoping sessions
   7.2 Focused group discussions
   7.3 Public consultations
   7.4 Information disclosure

8. Environmental and Social Management Plan
   Potential environmental impacts and their mitigations
   ○ 8.1 Impact assessment, prediction, and characterization method.
   8.2 Impacts and their mitigations during construction phase (including but not limited to natural habitats, creation of barriers to movement in habitats; disposal areas; air quality; water quality (surface and groundwater); vehicular traffic; noise levels for residential areas and wildlife; soil erosion and slope stability; safety hazards; public health; cultural heritage; occupational hazards; waste disposal; damage to infrastructure; and others).
   8.3 Impacts and their mitigations during operational phase (including changes in local climate, presence of suspended particles, smoke, noise and light pollution, reconfigured landforms and alteration of natural pattern of drainage, changes in original topography and stability of terrain, soil/surface water/groundwater contamination due to accidents and spills).
   8.4 Impacts and their mitigations during decommissioning phase.
   8.5 Listing all the impacts, their mitigation measures, assigning responsibility of implementing these measures, and also assigning responsibility for monitoring See Annex 3 ,Table A.

9. Potential social impacts and their mitigations
   9.1 Land acquisition, resettlement and compensation
   9.2 Impacts and their mitigations during construction phase (land requirement for temporary and permanent facilities; noise; increased traffic: pressure on local infrastructure and services; influx of labor; employment opportunities; social and cultural issues; privacy of local population; gender issues; others).
9.4 Impacts and their mitigations during operational phase (including but not limited to employment opportunities; additional pressure on local resources and services; damage to infrastructure; and others).

10. The above environmental and social Monitoring plan, describing the monitoring requirements, frequency, and responsibility of conducting the monitoring. See Annex 3, Table B.

11. Training plan, describing the training requirements, contents, frequency, training recipients, and responsibility of conducting these trainings. See Annex 3, Table C.

12. Documentation and reporting, describing the requirement, frequency, and responsibility of documentation and reporting.

13. ESMP implementation budget, providing the cost estimate of its implementation.

14. REFERENCES

ANNEXES
- Flora red list
- Mammals, reptiles red list
- Fishes red list
- Documentation on Public consultations etc.
- Any other related reports
- Photographs

○
Annex 2

Indicative Structure of Resettlement Action Plan

A resettlement plan is required for all projects with involuntary resettlement impacts. Its level of detail and comprehensiveness is commensurate with the significance of potential involuntary resettlement impacts and risks. The substantive aspects of the outline will guide the preparation of the resettlement plans, although not necessarily in the order shown.

1. Executive Summary

This section provides a concise statement of project scope, key survey findings, entitlements and recommended actions.

2. Project Description

This section provides a general description of the project, discusses project components that result in land acquisition, involuntary resettlement, or both and identify the project area. It also describes the alternatives considered to avoid or minimize resettlement. Include a table with quantified data and provide a rationale for the final decision.

3. Information Disclosure, Consultation, and Participation

This section:

i). identifies project stakeholders, especially primary stakeholders;
ii). describes the consultation and participation mechanisms to be used during the different stages of the project cycle;
iii). describes the activities undertaken to disseminate project and resettlement information during project design and preparation for engaging stakeholders;
iv). summarizes the results of consultations with affected persons (including host communities), and discusses how concerns raised and recommendations made were addressed in the resettlement plan;
v). confirms disclosure of the draft resettlement plan to affected persons and includes arrangements to disclose any subsequent plans; and
vi). describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for consultation with affected persons during project implementation.

4. Socioeconomic Baseline and Profile of Sub-project Area

This section outlines the results of the baseline survey, the census survey, and other studies, with information and/or data disaggregated by gender, vulnerability, and other social groupings, including:

i). define, identify, and enumerate the people and communities to be affected;
ii). describe the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account;
iii). discuss the project’s impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups; and
iv). identify gender and resettlement impacts, and the socioeconomic situation, impacts, needs, and priorities of women.

5. **Grievance Redress Mechanism**

This section describes mechanisms to receive and facilitate the resolution of affected persons’ concerns and grievances. It explains how the procedures are accessible to affected persons and are gender sensitive. It will identify the institutional responsibility and procedures for grievance redress, and arrangements for monitoring of RAP implementation. Moreover, it will provide a framework of an easily accessible, robust, and multi-tiered grievance redress mechanism.

6. **Legal Framework**

This section:

i). describes national and local laws and regulations that apply to the project and identify gaps between local laws and World Bank's policy requirements; and discuss how any gaps will be addressed.

ii). describes the legal and policy commitments from the executing agency for all types of displaced persons;

iii). outlines the principles and methodologies used for determining valuations and compensation rates at replacement cost for assets, incomes, and livelihoods; and set out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided.

iv). describes the land acquisition process and prepare a schedule for meeting key procedural requirements.

7. **Entitlements, Assistance and Benefits**

This section:

i). defines displaced persons’ entitlements and eligibility, and describes all resettlement assistance measures (includes an entitlement matrix);

ii). specifies all assistance to vulnerable groups, including women, and other special groups; and.

iii). outlines opportunities for affected persons to derive appropriate development benefits from the project.

8. **Impact of the Sub-Project and Proposed Mitigation Measures**

This section:

i). discusses the project’s potential impacts, and includes maps of the areas or zone of impact of project components or activities;

ii). describes the scope of land acquisition (provide maps) and explains why it is necessary for the main investment project;

iii). summarizes the key effects in terms of assets acquired and displaced persons;

iv). project impact on gender and vulnerable groups

v). provides details of any common property resources that will be acquired.

vi). proposed mitigation measures to minimize the impacts
9. **Relocation of Housing and Settlements**

If the Project necessitates relocation of housing or settlements, this section:

i). describes options for relocating housing and other structures, including replacement housing, replacement cash compensation, and/or self-selection (ensure that gender concerns and support to vulnerable groups are identified);

ii). describes alternative relocation sites considered; community consultations conducted; and justification for selected sites, including details about location, environmental assessment of sites, and development needs;

iii). provides timetables for site preparation and transfer;

iv). describes the legal arrangements to regularize tenure and transfer titles to resettled persons;

v). outlines measures to assist displaced persons with their transfer and establishment at new sites;

vi). describes plans to provide civic infrastructure; and

vii). explains how integration with host populations will be carried out.

10. **Income Restoration and Rehabilitation**

This section:

i). identifies livelihood risks and prepare disaggregated tables based on demographic data and livelihood sources;

ii). describes income restoration programs, including multiple options for restoring all types of livelihoods (examples include project benefit sharing, revenue sharing arrangements, joint stock for equity contributions such as land, discuss sustainability and safety nets);

iii). outlines measures to provide social safety net through social insurance and/or project special funds;

iv). describes special measures to support vulnerable groups;

v). explains gender considerations; and

vi). describes training programs.

11. **Resettlement Budget and Financing Plan**

This section:

i). provides an itemized budget for all resettlement activities, including for the resettlement unit, staff training, monitoring and evaluation, and preparation of resettlement plans during loan implementation.

ii). describes the flow of funds (the annual resettlement budget should show the budget-scheduled expenditure for key items).

iii). includes a justification for all assumptions made in calculating compensation rates and other cost estimates (taking into account both physical and cost contingencies), plus replacement costs.

iv). includes information about the source of funding for the resettlement plan budget.
12. Institutional Arrangements

This section:

i). describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan;
ii). assesses the institutional capacity of the implementing agency and other relevant parties, includes institutional capacity building program, including technical assistance, if required; describes role of NGOs, if involved, and organizations of affected persons (including women) in resettlement planning and management;

13. Implementation Schedule

This section includes a detailed, time bound, implementation schedule for all key resettlement and rehabilitation activities. The implementation schedule should cover all aspects of resettlement activities synchronized with the project schedule of civil works construction and provide land acquisition process and timeline.

14. Monitoring and Reporting

This section describes the mechanisms and benchmarks appropriate to the project for monitoring and evaluating the implementation of the resettlement plan. It specifies arrangements for participation of affected persons in the monitoring process. This section will also describe reporting procedures.

Annex 3

Table A- Mitigation plan will be presented in the following tabular form in the ESMPs.

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Potential Environmental Impacts</th>
<th>Proposed Mitigation Measures</th>
<th>Institutional Responsibilities (Implementation AND Supervision)</th>
<th>Cost Estimates</th>
<th>Comments (e.g. secondary impacts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Construction Phase</td>
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<tr>
<td>Construction Phase</td>
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<tr>
<td>Operation and Maintenance Phase</td>
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</tbody>
</table>
Table B: Summary of Monitoring plan (Tabular form)

<table>
<thead>
<tr>
<th>Proposed Mitigation Measure</th>
<th>Parameter(s) to be monitored</th>
<th>Location(s) (incl. methods &amp; equipment)</th>
<th>Frequency of Measurement</th>
<th>Responsibilities (incl. review and reporting)</th>
<th>Cost (equipment &amp; individuals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Construction Phase</td>
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<tr>
<td>Construction Phase</td>
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<tr>
<td>O&amp;M Phase</td>
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Table C: Institutional Strengthening and Training for Implementation. (Summary Table)

<table>
<thead>
<tr>
<th>Institutional Strengthening Activity</th>
<th>Position(s)</th>
<th>Scheduling</th>
<th>Responsibility(ies)</th>
<th>Cost Estimates</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Participants</th>
<th>Types of Training</th>
<th>Content (modules, etc.)</th>
<th>Scheduling</th>
<th>Cost Estimates</th>
</tr>
</thead>
</table>
SELECTION OF CONSULTANT

Selection will be made in accordance with the QCBS method set out in the World Bank Procurement Regulations (Procurement in Investment Project Financing, Works, Non-Consulting and Consulting Services. July 2016 Revised November 2017 and August 2018). The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank’s “Procurement Regulations for IPF Borrowers”, setting forth the World Bank’s policy on conflict of interest. In addition, please refer to the paragraph 3.17 of the Procurement Regulations regarding specific information on conflict of interest related to this assignment. The Firms/Consultants should have demonstrated experience in relevant assignments and scope of work involved. Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications. If consultants intend to associate with other firms, they are advised to clearly identify the lead partner and state the composition and nature of the association (JV/sub-consultant) in their EOI. In case the EOI is submitted in form of Joint Venture, each partner in the association shall meet the minimum requirements under the short-listing criteria. However, the short-listing criteria will not be applied and considered for sub-consultants.

SHORTLISTING CRITERIA

<table>
<thead>
<tr>
<th>Evaluation Head</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific experience of the Consultant (as a firm) relevant to the Assignment during the past 07 years:</td>
<td>30</td>
</tr>
<tr>
<td>1) <strong>Specific</strong>: (5 Projects of similar magnitude and complexity) (15 marks)</td>
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<tr>
<td>2) <strong>General</strong>: (10 Projects) (in all Fields but not completely relevant) (10 marks)</td>
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<tr>
<td>3) Firm has established track record of five (05) timely service provision (5 Marks)</td>
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</table>
**Financial turn over/ Capital of consultant**

1) Funds Management Capacity of Major Project Handled in the last two years *(10 Marks)*

2) Return Certificates till December, 2019 *(5 marks)*

3) Audit reports for last 3 years *(5 marks)*

<table>
<thead>
<tr>
<th>Available Logistics Support Facilities</th>
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<tr>
<td>IT infrastructure</td>
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<table>
<thead>
<tr>
<th>Proposed Team: PROFESSIONAL EXPERIENCE RELATED TO ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Highway Designer /Team leader (minimum 10 years of specific same nature experience with donor <em>(10 Marks)</em></td>
</tr>
<tr>
<td>II. Bridge design Engineer (minimum 10 years of relevant experience with donor <em>(10 Marks)</em></td>
</tr>
<tr>
<td>III. Architects and design related engineer <em>(5 Marks)</em></td>
</tr>
<tr>
<td>IV. Structural engineer <em>(5 Marks)</em></td>
</tr>
<tr>
<td>V. Supervision related engineers and staff <em>(10 Marks)</em></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration with Professional Bodies</th>
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<tbody>
<tr>
<td>Certificate of registration with legal/recognized professional bodies e.g. Pakistan Engineering Council, registration with KP Revenue Authority.</td>
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<tr>
<th>Minimum qualifying score</th>
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<tr>
<td>60</td>
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<table>
<thead>
<tr>
<th>Minimum qualifying score</th>
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<tbody>
<tr>
<td>100</td>
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# Term of Reference (TOR)

## MANDATORY REQUIREMENTS

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Officials Registration documents / documents with Government of Pakistan.</td>
</tr>
<tr>
<td>2</td>
<td>NTN Registration Certificate and Clearance Certificate for 3 years</td>
</tr>
<tr>
<td>3</td>
<td>Creditworthiness Certificate Issued by a Schedule Bank</td>
</tr>
<tr>
<td>4</td>
<td>Undertaking on Judicial Paper that the firm has never been blacklisted by any Government/Semi-Government Organization</td>
</tr>
<tr>
<td>5</td>
<td>Financial Turnover for the last three years PKR 200 Million the firm have to produce documentary evidence to substantiate their claim.</td>
</tr>
</tbody>
</table>