

II. General Conditions of Contract

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the Khyber Pakhtunkhwa Public Procurement Act, thereunder Rules 2014.
- (b) "Procuring Entity PE" means the implementing department which signs the contract
- (c) "Consultant" means a professional who can study, design, organize, evaluate and manage projects or assess, evaluate and provide specialist advice or give technical assistance for making or drafting policies, institutional reforms and includes private entities, consulting firms, legal advisors, engineering firms, construction managers, management firms, procurement agents, inspection agents, auditors, international and multinational organizations, investment and merchant banks, universities, research institutions, government agencies, nongovernmental organizations, and individuals.
- (d) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is General Conditions (GC), the Special Conditions (SC), and the Appendices.
- (e) "Contract Price" means the price to be Paid for the Performance of the Services, in accordance with Clause 6;
- (f) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (g) "Foreign Currency" means any currency other than the currency of the PE's country.
- (h) "GC" means these General Conditions of Contract.
- (i) "Government" means the Government of Khyber Pakhtunkhwa.
- (j) "Local Currency" means Pak Rupees.
- (k) "Member" means any of the entities that make up the joint venture/consortium/association, and "Members" means all these entities.
- (l) "Party" means the PE or the Consultant, as the case may be, and "Parties" means both of them.
- (m) "Personnel" means Persons hired by the Consultant or by any Sub Consultants and assigned to the Performance of the Services or any Part thereof.
- (n) "SC" means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (o) "Services" means the consulting services to be performed by the Consultant pursuant to this Contract, as described in the Terms of References.
- (p) "Sub-Consultants" means any Person or entity to whom/which the Consultant subcontracts any Part of the Services.
- (q) "In writing" means communicated in written form with proof of receipt.

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1.2 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the applicable law.

1.3 Language

This Contract is executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.4 Notices

1.4.1. Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in Person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.

1.4.2 A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

1.5 Location

The Services shall be performed at such locations as are specified in special condition of contract and, where the location of a Particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the PE may approve.

1.6 Authority of Member in Charge

In case the Consultant consists of a joint venture/ consortium/ association of more than one individual firms, the Members hereby authorize the individual firms or specified in the SC to act on their behalf in exercising all the Consultant's rights and obligations towards the PE under this Contract, including without limitation the receiving of instructions and Payments from the PE.

1.7 Authorized Representative

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the PE or the Consultant may be taken or executed by the officials specified in the SC.

1.8 Taxes & Duties

The Consultant, Sub-Consultants, and their Personnel shall Pay such direct or indirect taxes, duties, fees, and other impositions levied under the Applicable Law as specified in the SC, the amount of which is deemed to have been included in the Contract Price.

1.9 Fraud / Corruption

A. If the PE determines that the Consultant and/or its Personnel, sub-contractors, sub-consultants, services providers and suppliers has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, in competing for or in executing the Contract, then the PE may, after giving 14 days' notice to the Consultant, terminate the Consultant's employment under the Contract, and may resort to other remedies including blacklisting/disqualification as provided in KPPR 2014.

Any Personnel of the Consultant who engages in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Contract, shall be removed in accordance with Sub-Clause 4.2.

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Integrity Pact

B. If the Consultant or any of his Sub-consultants, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Consultant as Appendix-G to this Form of Contract, then the PE shall be entitled to:

- (a) recover from the Consultant an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Consultant or any of his Sub-consultant, agents or servants;
- (b) terminate the Contract; and
- (c) Recover from the Consultant any loss or damage to the PE as a result of such termination or of any other corrupt business practices of the Consultant or any of his Sub-consultant, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub Clause, the Consultant shall proceed in accordance with Sub Clause 1.9 A. Payment upon such termination shall be made under Sub-Clause 1.9 A after having deducted the amounts due to the PE under 19 B Sub-Para (a) and (c).

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by either Parties or such other later date as may be stated in the SC. The date the Contract comes into effect is defined as the Effective Date.

2.2 Commencement of Services

This Contract shall come into effect on the date the Contract is signed by either Parties or such other later date as may be stated in the SC. The date the Contract comes into effect is defined as the Effective Date.

2.3 Expiration of Contract

Unless terminated earlier pursuant to Clause GC 2.6 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

2.4 Modifications or Variations

Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

2.5 Force Majeure

The failure on the Part of the Parties to Perform their obligation under the contract will not be considered a default if such failure is the result of natural calamities, disasters and circumstances beyond the control of the parties.

2.5.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach

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of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.3 Extension of Time

Any period within which a party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such party was unable to Perform such action as a result of Force Majeure.

2.5.4 Payments

During the period of their inability to Perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be Paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period

2.6 Termination

2.6.1 By the PE

The PE may terminate this Contract in case of the occurrence of any of the events specified in Paragraphs (a) through (f) of this Clause GC 2.6.1. In such an occurrence the PE shall give a not less than thirty (30) days' written notice of termination to the Consultant, and sixty (60) days' in the case of the event referred to in (e).

(a) If the Consultant does not remedy the failure in the Performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the PE may have subsequently approved in writing.

(b) If the Consultant becomes insolvent or bankrupt.

(c) If the Consultant, in the judgment of the PE has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

(d) If, as the result of Force Majeure, the Consultant(s) are unable to perform a material portion of the Services for a period of not less than sixty (60) days.

(e) If the PE, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

(f) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.

2.6.2 By the Consultant

The Consultants may terminate this Contract, by not less than thirty (30) days' written notice to the PE, such notice to be given after the occurrence of any of the events specified in Paragraphs (a) through (c) of this Clause GC 2.6.2:

(a) If the PE fails to pay any money due to the Consultant pursuant to this Contract without consultants fault.

(b) Pursuant to Clause GC 7 hereof within forty-five (45) days after receiving written notice from the Consultant that such Payment is overdue.

(c) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

(d) If the PA fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

2.6.3. Payment Upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.6.1 or GC 2.6.2, the PE shall make the following Payments to the Consultant:

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- (a) Payment pursuant to Clause GC 6 for Services satisfactorily Performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to Paragraphs (a) through, and (f) of Clause GC 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependent's.

3. OBLIGATIONS OF THE CONSULTANT

3.1 General

3.1.1 Standard of Performance

The Consultant shall Perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the PE, and shall at all times support and safeguard the PE's legitimate interests in any dealings with Sub-Consultants or third parties.

3.2 Conflict of Interests

The Consultant shall hold the PE's interests Paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

3.2.1 Consultants not to Benefit from Commissions, Discounts, etc.

The Payment of the Consultant pursuant to Clause GC 6 shall constitute the Consultant's only Payment in connection with this Contract or the Services, and the Consultant shall not accept for their own benefit any trade commission, discount, or similar Payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub-Consultants, and agents of either of them similarly shall not receive any such additional Payment.

3.2.2 Consultant and Affiliates not to be Otherwise Interested in Project

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.

3.2.3 Prohibition of Conflicting Activities

The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract

3.3 Confidentiality

Except with the prior written consent of the PE, the Consultant and the Personnel shall not at any time communicate to any Person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

3.4 Insurance to be Taken Out by the Consultant

Rule 29(2), The Consultant (a) shall take out and maintain, and shall cause any Sub Consultants to take out and maintain, at their (or the Sub-Consultants', as the case may be) own cost but on terms and conditions approved by the PE, insurance against the risks, and for the coverage, as shall be specified in the SC; and

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(b) at the PE's request, shall provide evidence to the PE showing that such insurance has been taken out and maintained and that the current premiums have been Paid.

3.5 Consultant's Actions Requiring PE's Prior Approval

The Consultant shall obtain the PE's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the Performance of any Part of the Services,
- (b) appointing such members of the Personnel not listed by name in Appendix C, and
- (c) any other action that may be specified in the SC.

3.6 Reporting Obligations

(a) The Consultant shall submit to the PE the reports and documents specified in (PE may insert appendix) hereto, in the form, in the numbers and within the time Period set forth in the said Appendix.

(b) Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.

3.7 Documents Prepared by the Consultant to be the Property of the PE

(a) All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the PE, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the PE, together with a detailed inventory thereof.

(b) The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.

3.8 Accounting, Inspection and Auditing

3.8.1 The Consultant shall keep, and shall cause its Sub-consultants to keep, accurate and systematic accounts and records in respect of the Contract, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify relevant time changes and costs.

The Consultant shall Permit, and shall cause its Sub-consultants to Permit, the PE and/or Persons appointed by the PE to inspect its accounts and records relating to the Performance of the Contract and the submission of the Proposal to provide the Services, and to have such accounts and records audited by auditors appointed by the PE if requested by the PE. The Consultant's attention is drawn to Clause 1.9.1 which provides, inter alia, that acts intended to materially impede the exercise of the PE's inspection and audit rights provided for under Clause 3.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the PE's prevailing sanctions procedures.)

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4. CONSULTANT'S PERSONNEL

4.1 Description of Personnel

The Consultant shall employ and provide such qualified and Personnel experienced Personnel and Sub-Consultants as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated Period of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Appendix C. The Key Personnel and Sub-Consultants listed by title as well as by name in Appendix C are hereby approved by the PE.

4.2 Removal and/or Replacement of Personnel

(a) Except as the PE may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a Person of equivalent or better qualifications.

(b) If the PE finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the Performance of any of the Personnel, then the Consultant shall, at the PE's written request specifying the grounds thereof, provide as a replacement a Person with qualifications and experience acceptable to the PE.

(c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

5. OBLIGATIONS OF THE PE

5.1 Assistance and Exemptions

The PE shall use its best efforts to ensure that the Government shall provide the Consultant such assistance and exemptions as specified in the SC.

5.2 Change in the Applicable Law Related to Taxes and Duties

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in Performing the Services, then the remuneration and reimbursable expenses otherwise Payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2 or (b), as the case may be.

5.3 Services and Facilities

The PE shall make available free of charge to the Consultant the Services and Facilities listed under Appendix F.

6. PAYMENTS TO THE CONSULTANT

6.1 Lump-sum Payment

The total Payment due to the Consultant shall not exceed the Contract Price which is an all-inclusive fixed lump-sum covering all costs required to carry out the Services described in Appendix A. Except as

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provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause If the Parties have agreed to additional Payments in accordance with Clause 2.4.

6.2 Contract Price

The price Payable in Pak Rupees/foreign currency/ is set forth in the SC.

6.3 Payment for Additional services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump sum price is provided in Appendices D and E.

6.4 Terms and Conditions of Payment

Payments will be made to the account of the Consultant and according to the Payment schedule stated in the SC. Unless otherwise stated in the SC, the first Payment shall be made against the provision by the Consultant of an advance Payment guarantee for the same amount, and shall be valid for the period stated in the SC. Such guarantee shall be in the form set forth in Appendix G hereto, or in such other form, as the PE shall have approved in writing. Any other Payment shall be made after the conditions listed in the SC for such Payment have been met, and the Consultant has submitted an invoice to the PE specifying the amount due.

7. GOOD FAITH

7.1 Good Faith

The parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

8. SETTLEMENT OF DISPUTES

8.1 Amicable Settlement

The parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

8.2 Dispute Resolution

Any dispute between the parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one party of the other Party's request for such amicable settlement may be submitted by either party for settlement in accordance with the provisions specified in the SC

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III. Special Conditions of Contract

(Clauses in brackets { } are optional; all notes should be deleted in final text)

Number of Amendments of, and Supplementsto, Clauses in the GC ClauseGeneralConditions of Contract

{1.1} Khyber Pakhtunkhwa Public Procurement Act and Khyber Pakhtunkhwa Public Procurement Rules

2014.

1.3 The language is English.

1.4 Theaddresses are:

Procuring Entity: _____

Attention: _____

Facsimile: _____

E-mail: _____

Consultant:

Attention:

Facsimile:

E-mail:

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{1.6}

{The Member in Charge is *[insert name of member]*}

Note: *If the Consultant consists of a joint venture/ consortium/ association of more than one entity, the name of the entity whose address is specified in Clause SC 1.6 should be inserted here. If the Consultant consists only of one entity, this Clause SC 1.8 should be deleted from the SC.*

1.7

The Authorized Representatives are:

For the PE: _____

For the Consultant: _____

1.8

PE shall specify all relevant taxes including stamp duty and service charges to be borne by the consultant. In case there is exemption from any rates, taxes, the same shall be mentioned here.

The Consultant must be informed in Clause Reference 3.7 of the Data Sheet about which alternative the PE wishes to apply.

The PE warrants that the Consultant, the Sub-Consultants and the Personnel shall be exempt from (or that the PE shall Pay on behalf of the Consultant, the Sub-Consultants and the Personnel, or shall reimburse the Consultant, the Sub-Consultants and the Personnel for) any indirect taxes, duties, fees, levies and other impositions imposed, under the Applicable Law, on the Consultant, the Sub-Consultants and the Personnel in respect of:

- (a) any Payments whatsoever made to the Consultant, Sub-Consultants and the Personnel (other than nationals or Permanent residents of Pakistan), in connection with the carrying out of the Services;
- (b) any equipment, materials and supplies brought into the Government's country by the Consultant or Sub-Consultants for the purpose of carrying out the Services and which, after having been brought into such territories, will be subsequently withdrawn there from by them;
- (c) any equipment imported for the purpose of carrying out the Services and Paid for out of funds provided by the PE and which is treated as property of the PE;
- (d) any property brought into the province by the international Consultant, any Sub-Consultants or the Personnel or the eligible dependents of such Personnel for their Personal use and which will subsequently be withdrawn there from by them upon their respective departure from the Government's country, provided that:

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- (1) the Consultant, Sub-Consultants and Personnel, and their eligible dependents, shall follow the usual customs procedures of the Government's country in importing property into the Government's country; and
- (2) if the Consultant, Sub-Consultants or Personnel, or their eligible dependents, do not withdraw but dispose of any property in the Pakistan for which customs duties and taxes have been exempted, the Consultant, Sub-Consultants or Personnel, as the case may be, (i) shall bear such customs duties and taxes in conformity with the regulations of the Government's country, or (ii) shall reimburse them to the PE if they were Paid by the PE at the time the property in question was brought into the Government's country.

2.2 The date for the commencement of Services is *[insert date]*.

2.3 The time period shall be *[insert time period, e.g.: twelve months, eighteen months]*

3.4 The risks and the coverage shall be as follows:

- (a) Third party motor vehicle liability insurance in respect of motor vehicles operated by the Consultant or its Personnel or any Sub Consultants or their Personnel, with a minimum coverage of *[insert amount and currency]*;
- (b) Third party liability insurance, with a minimum coverage of *[insert amount and currency]*;
- (c) professional liability insurance, with a minimum coverage of *[insert amount and currency]*;
- (d) employer's liability and workers' compensation insurance in respect of the Personnel of the Consultant and of any Sub-Consultants, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and
- (e) insurance against loss of or damage to (i) equipment purchased in whole or in Part with funds provided under this Contract, (ii) the Consultant's property used in the Performance of the Services, and (iii) any documents prepared by the Consultant in the Performance of the Services.

Note: Delete what is not applicable

3.4.1 Liability of the Consultants

The Consultants are liable for the consequence of errors and omissions on their part or on the part of the P.E in so far as the design of the Project is concerned to the extent and with the limitations as mentioned herein below.

If the PE suffers any losses or damages as a result of proven faults, errors or omissions in the design of a project, the Consultants shall make good such losses or damages, subject to the conditions that the maximum liability as aforesaid shall not exceed twice the total remuneration of the Consultants for design phase in accordance with the terms of the Contract.

The liability of the Consultants expires after one (1) year from the stipulated date of completion of construction or after three (3) years from the date of final completion of the design whichever is earlier.

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The Consultants may, to protect themselves, insure themselves against their liabilities but this is not obligatory. The extent of the insurance shall be up to the limit specified in second Para above. The Consultants shall procure the necessary cover before commencing the Services and the cost of procuring such cover shall be borne by the Consultants up to a limit of one percent of the total remuneration of the Consultants for the design phase for every year of keeping such cover effective.

The PE is obliged to rely on the information's, submissions, reporting, recommendations and advices made by the Consultants or their sub Consultants, for the consequences thereof, the Consultants shall be responsible and they shall make the PE harmless.

The Consultant shall be responsible for, and shall indemnify the PE of the furnishing of professional their services and against any and all risks, claims liabilities, obligations, losses, damages, penalties, action, judgment, suites, proceedings, demands, cost, expenses and disbursement whatsoever nature that may be imposed on, incurred by or asserted against the PE arising from the negligent acts of the Consultants in the performance of professional services under this Agreement.

The Consultant shall afford response and defense to any question, observation, loss, damages and claims arising out of their workings, performance, act and proceedings, in any forum and shall be held responsible to bear the consequences of such transactions, proceedings and approvals.

Performance Security: The Consultant shall furnish performance security equal to ten (05) % of the Contract Price stated in the Letter of Acceptance (LOA) in the form of irrevocable bank guarantee in favor of the MD-PKHA valid till completion of the works.

Retention Money: 10% of the amount of invoices of the Consultants will be retained and will be released by the PE after satisfactory completion of the services as per TOR.

{3.5(c)} {The other actions are: *[insert actions]*;}

Note: *If there are no other actions, delete this Clause SC 3.5 (c).*

Note: *If there is to be no restriction on the future use of these documents by either party, this Clause SC 3.7 should be deleted. If the parties wish to restrict such use, any of the following options, or any other option agreed to by the parties, may be used:*

{3.7(b)} {The Consultant shall not use these documents and software for purposes unrelated to this Contract without the prior written approval of the PE.}

{The PE shall not use these documents and software for purposes unrelated to this Contract without the prior written approval of the Consultant.}

3.9 The Consultants shall submit to the PE the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix

4.1.1 The Key Personnel and Sub-consultants listed by title as well as by name in Appendix C are deemed to be approved by the PE. In respect of other Key Personnel which the Consultants propose to use in carrying out of the Services, the Consultants shall submit to the PE for review and approval a copy of their biographical data.

However, in no case the consultant staff be deployed to site till formal approval and written notification / order of the P.E to the consultant against such deployment.

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{5.1} {Neither party shall use these documents and software for purposes unrelated to this Contract without the prior written approval of the other party.}

Note: *List here any assistance or exemptions that the PE may provide under Clause 5.1. If there is no such assistance or exemptions, state "not applicable."*

6.1 Performance security shall not exceed 10% of contract amount

6.3 The amount in Pak Rupees or in foreign Currency *[insert amount]*.

8.2 Disputes shall be settled by complaint redressal committee define in SPPR 2010 or through arbitration Act of 1940.in accordance with the following provisions:

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Appendix G

(INTEGRITY PACT)

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS. 2.500 MILLION OR MORE

Contract No. _____ Dated _____

Contract Value: _____

Contract Title: _____

[name of Supplier] hereby declares that it has not obtained or

induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Khyber Pakhtunkhwa (GoKP) or any administrative subdivision or Entity thereof or any other entity owned or controlled by GoKP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. Paid or Payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoKP, except that which has been expressly declared pursuant hereto.

[name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoKP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoKP under any law, contract or other instrument, be voidable at the option of GoKP.

Notwithstanding any rights and remedies exercised by GoKP in this regard, [name of Supplier] agrees to indemnify GoKP for any loss or damage incurred by it on account of its corrupt business practices and further Pay compensation to GoKP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoKP.

Name of Buyer:

Signature:

[Seal]

Name of Seller/Supplier:

Signature:

[Seal]

CONTRACT

THIS CONTRACT ("Contract") is entered into this *[insert starting date of assignment]*, by and between *[insert PE 's name]* ("the PE") having its principal place of business at *[insert PE 's address]*, and *[insert Consultant's name]* ("the Consultant") having its principal office located at *[insert Consultant's address]*.

WHEREAS, the PE wishes to have the Consultant Performing the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services,

NOW THEREFORE THE PARTIES hereby agree as follows:

- 1. Services**
- (i) The Consultant shall perform the services specified in Annex A, "Terms of Reference and Scope of Services," which is made an integral Part of this Contract ("the Services").
 - (ii) The Consultant shall provide the reports listed in Annex B, "Consultant's Reporting Obligations," within the time Period listed in such Annex, and the Personnel listed in Annex C, "Cost Estimate of Services, List of Personnel and Schedule of Rates" to Perform the Services.

2. Term

The Consultant shall perform the Services during the period commencing *[insert start date]* and continuing through *[insert completion date]* or any other period as may be subsequently agreed by the parties in writing.

3. Payment

A. Ceiling

For Services rendered pursuant to Annex A, the PE shall pay the Consultant an amount not to exceed *[insert amount]*. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant.

C. Payment Conditions

Payment shall be made in *[specify currency]*, no later than 30 days following submission by the Consultant of invoices in duplicate to the Coordinator designated in Paragraph 4.

**4. Economic
Price
Adjustment**

In order to adjust the remuneration for inflation, a price adjustment provision has been included if the contract has duration of more than 18 months or if the inflation is expected to exceed —% Per annum. The adjustment will be made every 12 months after the date of the contract for remuneration. Remuneration will be adjusted by using the relevant index as Per following provision:
"Payments for remuneration made in accordance with Clause 3 shall be adjusted as follows:

Remuneration pursuant to the rates set forth in Annex C shall be adjusted every 12 months (and, for the first time, with effect for the remuneration earned in the *[13] the* calendar month after the date of the Contract) by

applying the following formula:

$$RI = RIo \times \frac{I}{I_0}$$

where *RI* is the adjusted remuneration, *RIo* is the remuneration Payable on the basis of the rates set forth in Annex C for Payable remuneration, *I* is the official rate of inflation for the first month for which the adjustment is to have effect and, *I₀* is the official rate of inflation for the month of the date of the Contract.”]

5. Project Administration

A. Coordinator

The PE designates Mr./Ms. *[insert name]* as PE’s Coordinator; the Coordinator shall be responsible for the coordination of activities under the Contract, for receiving and approving invoices for Payment, and for acceptance of the deliverables by the PE.

B. Timesheets

During the course of their work under this Contract the Consultant’s employees providing services under this Contract may be required to complete timesheets or any other document used to identify time spent, as instructed by the Coordinator.

C. Records and Accounts

The Consultant shall keep accurate and systematic records and accounts in respect of the Services, which will clearly identify all charges and expenses. The PE reserves the right to audit, or to nominate a reputable accounting firm to audit, the Consultant’s records relating to amounts claimed under this Contract during its term and any extension, and for a period of three months thereafter.

6. Performance Standard

The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the PE considers unsatisfactory.

7. Confidentiality

The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the PE’s business or operations without the prior written consent of the PE.

8. Ownership of Material

Any studies, reports or other material, graphic, software or otherwise, prepared by the Consultant for the PE under the Contract shall belong to and remain the property of the PE. The Consultant may retain a copy of such documents and software.

- 9. Consultant Not to be Engaged in Certain Activities** The Consultant agrees that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than the Services or any continuation thereof) for any project resulting from or closely related to the Services.
- 10. Insurance** The Consultant will be responsible for taking out any appropriate insurance coverage for their Personnel and equipments.
- 11. Assignment** The Consultant shall not assign this Contract or Subcontract any portion thereof it without the PE's prior written consent.
- 12. Law Governing Contract and Language** The Contract shall be governed by the laws of Islamic Republic of Pakistan or the Provincial Government and the language of the Contract shall be English.
- 13. Dispute Resolution** Any dispute arising out of this Contract, which cannot be amicably settled between the Parties, shall be referred to adjudication/arbitration in accordance with the Arbitration Act of 1940

FOR THE PE

FOR THE CONSULTANT

Signed by

Signed by

Title:

Title:

- 1 Form FIN-3 shall be filled at least for the whole assignment. In case some of the activities require different modes of billing and Payment (e.g.: the assignment is phased, and each phase has a different Payment schedule), the Consultant shall fill a separate Form FIN-3 for each group of activities. For each currency, the sum of the relevant Subtotals of all Forms FIN-3 provided must coincide with the Total Costs of Financial Proposal indicated in Form FIN-2.
- 2 Names of activities (phase) should be the same as, or correspond to the ones indicated in the second column of Form TECH-8.
- 3 Short description of the activities whose cost breakdown is provided in this Form.
- 4 Indicate between brackets the name of the foreign currency. Use the same columns and currencies of Form FIN-2.
- 5 For each currency, Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-4, and FIN-5.
 - 1 Form FIN-4 shall be filled for each of the Forms FIN-3 provided.
 - 2 Professional Staff should be indicated individually; Support Staff should be indicated Per category (e.g.: draftsmen, clerical staff).

PART – I OF APPENDIX A: DESCRIPTION OF THE SERVICES

Terms of Reference

(i) Objectives

The objectives of consulting services are to assist PE to implement the Project through the following activities :

- (a) Detailed Survey of the Projects
- (b) Test and Investigations
- (c) Detailed Designing & Drawings
- (d) Submission of Complete Bidding Documents
- (e) Tender Assistance
- (f) Contractor's Bid Evaluation
- (g) Reporting and Responding

(ii) Scope of Consulting Services

The Employer will be the Government of Khyber Pakhtunkhwa through the Managing Director, Pakhtunkhwa Highways Authority, Peshawar and the Employer's Representative will be the Director Construction, Pakhtunkhwa Highways Authority, Peshawar. The Engineer will be team leader / chief executive of the consultant or as nominated by the consultant. _____.

The Engineer's role is to administer the contract and to ensure that its clauses are respected. The consultant will be fully responsible for quality assurance, quantities, rates and payments to the contractor. The Engineer will make engineering decisions whenever required during the implementation of the contracts. When these decisions require variations in work quantities or sanction of additional items the Engineer will seek the prior approval of PE before issuing the order. The Engineer's Representative(i.e. RE) and his staff are under the overall control of the Engineer, and shall carry out such duties and exercise such authority as may be delegated to them by the Engineer. The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to PE and the contractor

Specific Scope of Consulting Services is described in this section, Services other than these and other than minor extras, which do not materially affect the scope of the Consultant's Agreement, will be authorized by PE at rates and under conditions to be mutually agreed.

(A) Design of Road & Bridges

(a) Detailed Survey of Road and Bridge Projects

- (i) To carry out condition survey.
- (ii) To carry out environmental examination for the candidate roads and prepare required environmental reports (Initial Environmental Examination (IEE) and other reports as necessary) in accordance with Environmental Protection Agency (EPA) guidelines
- (iii) To prepare land acquisition plans, if there is any land acquisition required for the Project.
- (iii) To prepare reports for submission to PE.

(b) Detailed Designing

- (i) To design the roads and bridges.
- (ii) 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.
- (iii) To carry out topographic surveys, 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.
- (iv) To prepare designs based on relevant standards, including typical cross-sections, long sections and the pavement and geometric design.

- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) To assesses cross drainage requirements and propose new structures (bridges, culverts, and causeways as appropriate) or improvements to existing structures where these are otherwise structurally sound.
- (x) 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.
- (xi) To develop unit costs of construction for roads and bridges.
- (xii) 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.
- (xiii) To prepare appropriate contract packages, taking into account the location of the project and size of the contracts.
- (xiv) To update realistic construction schedules showing the anticipated progress of works and expenditures for the contract package in conjunction with PE. The schedules will reflect seasonal climatic effects at the work site.

(c) Tender Assistance

- (i) To prepare bid documents for each package, with specific provisions to minimize disruption / damage to the environment and local settlements dues to construction.
- (ii) To prepare contract drawings, including road plans (1:1,000), longitudinal profiles (1:1,000 horizontal, 1:100 vertical), cross-sections, structural plans and others. Road plans should include all existing features, expected land-take based on plotted earthwork limits and further right-of-ways where different from existing ones.
- (iii) To assist PE in pre-qualification of contractors, if required.
- (iv) To prepare invitations to bid and evaluate bids (Technical & Financial) received, with preparation of evaluation reports.

3.4 Liability of the Consultants

The Consultants are liable for the consequence of errors and omissions on their part or on the part of the P.E in so far as the design of the Project is concerned to the extent and with the limitations as mentioned herein below.

If the PE suffers any losses or damages as a result of proven faults, errors or omissions in the design of a project, the Consultants shall make good such losses or damages, subject to the conditions that the maximum liability as aforesaid shall not exceed twice the total remuneration of the Consultants for design phase in accordance with the terms of the Contract.

The liability of the Consultants expires after one (1) year from the stipulated date of completion of construction or after three (3) years from the date of final completion of the design whichever is earlier.

The Consultants may, to protect themselves, insure themselves against their liabilities but this is not obligatory. The extent of the insurance shall be up to the limit specified in second Para above. The

Consultants shall procure the necessary cover before commencing the Services and the cost of procuring such cover shall be borne by the Consultants up to a limit of one percent of the total remuneration of the Consultants for the design phase for every year of keeping such cover effective.

The PE is obliged to rely on the information's, submissions, reporting, recommendations and advices made by the Consultants or their sub Consultants, for the consequences thereof, the Consultants shall be responsible and they shall make the PE harmless.

The Consultant shall be responsible for, and shall indemnify the PE of the furnishing of professional their services and against any and all risks, claims liabilities, obligations, losses, damages, penalties, action, judgment, suites, proceedings, demands, cost, expenses and disbursement whatsoever nature that may be imposed on, incurred by or asserted against the PE arising from the negligent acts of the Consultants in the performance of professional services under this Agreement.

The Consultant shall afford response and defense to any question, observation, loss, damages and claims arising out of their workings, performance, act and proceedings, in any forum and shall be held responsible to bear the consequences of such transactions, proceedings and approvals.

Performance Security: The Consultant shall furnish performance security equal to ten (05) % of the Contract Price stated in the Letter of Acceptance (LOA) in the form of irrevocable bank guarantee in favor of the MD-PKHA valid till completion of the works.

Retention Money: 10% of the amount of invoices of the Consultants will be retained and will be released by the PE after satisfactory completion of the services as per TOR.

PART – II OF APPENDIX A: DESCRIPTION OF THE SERVICES

TERMS OF REFERENCE FEASIBILITY STUDY AND DETAIL ENGINEERING DESIGN OF

GENERAL

The services of qualified consultancy firms having sufficient experience in the relevant field are required by Pakhtunkhwa Highways Authority (PKHA) for _____”.

The consultancy work includes but not limited to the planning, detailed surveys / studies, hydrological studies, soil investigation, detailed engineering design, preparation of estimates, PC-I, tender documents, implementation programme with details as under: -

2. Engineering Principles:

The consultancy work shall be carried out in accordance with the standard engineering principles followed in construction of roads/ highways & Bridges in the country.

3. Coordination with other Agencies

The consultant will co-ordinate the design of the road with any government agencies or other consultants who are responsible for the planning, design implementation, or operation of any road or bridge facilities being executed in the project area that may be affected by or have an impact on the proposed road .

4. Specific Tasks

The work of consultants will fall into four broad stages

- Stage 1: Detailed Planning.
- Stage 2: Surveys.
- Stage 3: Preliminary Engineering.
- Stage 4: Detailed Engineering.
- Stage 5: Highway Safety Audit

At the end of each stage the consultants will submit his report, design, recommendations and other pertinent documents to PKHA for review.

PKHA will undertake the review in accordance with the programme of the work of terms of reference; the consultants shall not proceed with the next stage of work until PKHA gives them approval for the previous stage.

5. **Stage 1: Detailed Planning**

i. Route Alignment Studies

The consultants will undertake detailed route planning studies leading to the optimum alignment of the road and to ensure that the following criteria are met:

- To avoid any traffic congestion and reduction of speed.
- Acceptable horizontal and vertical geometric standards suitable for a design speed of 80 kph (50mph) can be achieved.
- Demolition of existing property is minimized.
- The requirements for earthwork are minimized and an approximate balance between cut and fill can be achieved.

Besides, prior to the Survey and Detailed Engineering Design, consultant will submit various options for Feasibility along with merit & demerit of each one in detail and then they will proceed further on the most feasible and economical option approved by the PE.

ii. Right of Way Acquisition Plans.

In case of proposed improvement, the consultants shall submit one set of Right-of-Way and acquisition plans on reproducible stable medium, and five copies thereof to PKHA as soon as the horizontal alignment of the road is finalized .The plans shall be made available to the PKHA as the work progresses to facilitate timely action for acquisition of the necessary Right-of-way.

6. **Stage 2: Surveys.**

General

The consultants shall limit all survey work to the optimum that is necessary to enable them to adequately perform the services. It is expected that four broad types of surveys may be required.

- a) Topographic surveys.
- b) Soil Survey.
- c) Traffic Counts
- d) Environmental Impact Study.

a) Topographic survey

Topographic survey should be undertaken to update the maps and verify the location of major buildings, structures and other physical features that are likely to be affected by the road.

Detailed topographic surveys should be undertaken at the scale of 1:500 along the alignment of the proposed road. This survey should extend to 100 meters on either side of the centre line of the proposed road. The survey done through Total Station (TS) should be verified through Level Machine, with X-Section taken at 25-meter interval for more authenticity and avoiding variation in Earth work quantities at the construction stage.

b) Soil Survey and Geotechnical Investigation

(i) Road and approaches.

Detailed soil survey should be undertaken along the alignment of the road to determine the general soil condition, bearing capacity, CBR & MR, moisture content, water table level and type of soil etc. Particular emphasis should be given to those locations where structures such as piles, back walls etc. will be situated. The soil investigations for structure (sub-structures) would be got done by the Consultant and results would be provided to the PE.

The consultant is required to investigate the soil through pits at 1000 meter interval or what so ever required for geotechnical profile. The consultant will have to study the following properties:

- i) Sieve Analysis
- ii) Passing No. 200
- iii) Atterburg Limits
- iv) P.I.
- v) Moisture Content
- vi) CBR
- vii) M_R Value if $CBR > 10\%$
- viii) Pile capacity in case of Bridge etc.

A bore log should also be submitted to PKHA for approval. The consultant is also required to coordinate with the field staff of PKHA during the soil investigation and also declare their pits location to the Field Deputy Director PKHA as well.

(ii) Bridge / Flyover.

Geotechnical investigation for Structures / Bridges

Sub-surface investigations consisting of boreholes / drill holes / test pits of required depth, supplemented by field and laboratory testing to accurately assess the engineering properties of the underlying soil strata for detailed design of foundations, substructures and roads shall be undertaken.

Bore logs shall be included in the Soil Investigation Report along with the laboratory results. Testing of samples collected from site shall be carried out in a reputed laboratory, under strict quality control and adherence to relevant ASTM procedures / standards. Depth of boring shall be decided by the geological formation at site and the type of foundations proposed for the structures. Standard penetration tests shall be started from the ground surface and carried out in accordance with ASTM D1586 Penetration Test and Split Barrel sampling of soils. Where clayey soils are encountered, undisturbed samples shall be obtained in accordance with ASTM thin-walled sampling of soils.

A separate report will be prepared to this effect and will be submitted to PKHA for approval. Original lab reports shall be attached in the soil report along with colored photographs.

- Submission of proper site investigation report comprising all relevant notes and pertinent information required by this Specification together with laboratory test results. The above scope of work may be varied or deleted depending on the findings as the investigations proceeds. All Sections in this Specification and the Bill of Quantities, which relate to work or materials not required shall be deemed not to apply.

- The scope of work and specifications for handling of undisturbed samples shall be developed by the Consultant. The qualified / experienced geotechnical engineer of the consultant (or hired) shall supervise the work at site who will be responsible for the quality and accuracy at site.

All the process and steps be carried out with proper liason and under supervision of Deputy Director concerned. The detailed scope of work developed by the Consultant shall include but not limited to the following:

- No. of Bore holes Minimum two per 50 meter length of the Bridge or as recommended by the Design Consultant and agreed by PKHA
- Depth of Bore 30 m
- To prevent the sand collapse of bore hole, Bentonite solution will be maintained to the top of the bore hole.
- SPT will be carried out starting from 1.5 m below the surface at an interval of 1.5 m till the complete depth of bore hole. After 75 blows if penetration is not achieved the refusal shall be recorded.
- Undisturbed sample after 10-15 m depth for carrying out index property test, Atterberg limits, unconfined compression test, direct shear test and grain size analysis.
- SPT result compilation and working out of pile capacity.

(iii) Hydrological Study.

The Consultant shall collect fresh hydrological data for the Feasibility report and detailed design of the bridge. The hydrological study shall include but not limited to:

- a. Location and extents of catchments area.
- b. High flood levels.
- c. Maximum Peak Flood Discharge.
- d. Maximum Velocity.
- e. Type of Bed Material (Manning's n).
- f. Waterway.
- g. Scour depth.
- h. Clearance.
- i. Structure Profile.
- j. Bed slope.
- k. Encroachment in the natural stream (if any).

c) Traffic Count

Consultants are required to conduct detailed traffic study, however they shall use the state of the art equipment i.e. turtle. These equipment are available with PKHA and are under the control of RMU. PKHA will charge the hiring rates. The consultant will furnish an agreement with (RMU) PKHA for hiring purpose.

The details of task to be furnished by the consultant are as follow:

- 0 – D surveys at each approach of the road.
- 7 - days classified traffic counts at the locations approved by PKHA.
- Estimation of ESAL based on latest Axle load surveys conducted by NHA / NTRC.
- Based upon traffic survey, peak hour and ADT traffic volume shall be established.
- Make forecast for next 10 and 20 years.
- Where required, capacity analysis, weaving analysis, signal and intersection capacity and delay shall be conducted using computer models.
- Level of service, volumes to capacity ratio, queue length on each approach, time space diagram to plan the road. (wherever required)

During the course of traffic count the consultant will have to coordinate with field Deputy Director (PKHA) and will also declare the count section to that office.

d) **Environmental Impact Study**

The Consultants will carry out studies to assess the negative effects on environment that may be caused by construction of the road. To mitigate the negative impacts on the environment the Consultants will propose suitable mitigation measures and reflect the cost thereof in the PC-1/BOQ.

7. **Stage 3: Preliminary Engineering Design**

i. **General**

Based on traffic forecast, topographic surveys, soil investigations and conceptual framework for the road, the Consultants shall submit a preliminary design of the facility to the PKHA for approval. The preliminary design will include route alignment studies, right of way plans Pavement Design, Structural Design, Intersection Design (where required) and Cost Estimates.

ii. **Geometric Design**

The Consultants will prepare geometric design of the road as per standard with the design speed of 80 KPH (50 MPH). Based on these standards in the route alignment study, the Consultants will produce preliminary horizontal, vertical and typical road cross sections. The topographic survey done through Total Station should also be verified through Level Machine with X-Sections taken at 25-meter interval, so as to avoid quantitative variation at the construction stage.

The Consultant will also clearly mention the grade and in case grades are more than (5-6)%, they will have to quote the specification reference and length i.e. upto how much length we can maintain that excessive grade.

The consultant will also submit details for super elevation run off, transition curve etc. A presentation will be given on geometric design and FRL to the competent authority.

iii. **Pavement**

Pavement designs based on different design methods and different materials are to be prepared for selection of a suitable and economical option. An economical pavement design for ten years so selected is to be adopted for estimation of quantities of various pavement layers involved in the project. A presentation on the pavement design to be adopted for the scheme is to be made to the employer for approval. The consultants will also recommend a stage construction technique for pavement design life of 20 years based on axle-load data and soil investigation. The consultant are also required to submit a detailed analysis for the actual Axle Load encountered and recommendation for the sustainability of pavement layers in the light of actual Axle Load.

iv. **Drainage**

The consultants will investigate the existing drainage system of the project area including canals, rivers, streams and seasonal water courses and prepare out-line proposals for protecting the same in those areas where it is affected by the improvement/widening etc of the road. The consultants will also prepare complete drainage plan comprising of culverts, drains and other drainage structures with out-line design for the road-drainage system based on rainfall statistics.

v. **Structure**

The consultants will provide structural design of all the cross-drainage structure including bridges / flyovers or any other, their location, type and level etc. with 50 years design life.

The consultants will also identify the existing structures that will need protection, strengthening modification or replacement.

vi. Benefit Analysis

The consultant will undertake an evaluation of the benefits, expected from the road. These could include but not necessarily be limited to time saving, reduce accidents, enhance land values, reduce vehicles operating cost etc. the cost and benefits should be quantified as far as possible.

vii. Economic and Financial Analysis

A detailed economic and financial analysis based on the cost estimates, EIRR and benefits analysis should be prepared.

viii. Feasibility Report

Feasibility report summarizing all the technical investigations and studies, engineering analysis and design, costs and benefits and the economic evaluation of the project and recommendations etc. should be prepared.

ix. Implementation Programme

An outline of implementation programme should be prepared on Microsoft Project / Primavera.

8. Stage 4: Detailed Engineering Design

The Consultants shall furnish copies of all engineering drawings, specifications and bid documents including geo-technical and material reports and bill of quantities to PKHA as mentioned below. The Consultants will also submit originals of all engineering drawings, detailed cost estimates and design calculations to PKHA. All final documents shall be submitted by the Consultants within 30 days of receipt of consolidated comments from PKHA. Additional copies shall be provided at mutually agreed rates.

9. Stage 5: Highway Safety Audit

Highway Safety Audit should be carried out in various stages as per requirement of International standard. The study shall be carried out along the approved alignment and shall conclude with the submission of final report for Road Safety Audit.

Miscellaneous task:

1. The consultant will identify places to be developed in future as a commercial assets for provincial government or PKHA in the vicinity.

DOCUMENTS:

1.	Topographic Survey Report i/c alignment of various option	3	Sets
2.	Geometric Design Report of the approved alignment	3	Sets
3.	Plan and Profile Drawings	5	Sets
4.	Structure Design Report	3	Sets
5.	Structure Drawings	3	Sets
6.	Tender Drawings	20	Sets
7.	Construction Drawings	4	Sets
8.	Highway Safety Audit Report	3	Sets

9.	Bill of Quantities	20	Sets
10.	Engineer Estimate, C-Factor, Special Provision	3	Sets.
11.	Technical Specifications for each payable item comprising of	20	Sets
-	Description		
-	Material Requirement		
-	Construction Requirement/Method of Working (Techniques)		
-	Equipments to be used		
-	Testing and quality control		
-	Method of measurement & payment		
12.	Tender/ Contract Documents Comprising of	20	Sets
-	Invitation to Bid		
-	Instruction to Bidder		
-	Form of Contract		
-	General Conditions of Contract (GCC)		
-	Particular Conditions of Contract (PCC)		
-	Rate Analysis of Non-Schedule Items		
-	Bill of Quantities/ Bid Schedules		
13.	PC – I Proforma including;	10	Sets
-	Engineer's Estimate		
-	EIA Report		
-	Geotechnical Investigation		
-	Hydrology and Hydraulic Study Report		
-	Economic Analysis		
-	Traffic Study Report		
-	Pavement Design Report		
14.	Detailed Cost Estimate for Technical Sanction	5	Sets
15.	Design Calculation for Road Pavement, Road Structure and Bridges / Flyover's (if any)	2	Sets
16.	Land Acquisition Plan showing boundaries of land to be acquired for road construction (5 Prints with Sepia print). Identify separately the road with high development potential adjacent to the road.		
17.	Back-up calculation of BOQs:	2	Sets
18.	Soft copies of all documents mentioned above	3	CDs each

10. Work Schedule

The completion time of the studies is 45-days from the date of commencement and excluding time required for approvals by the Pakhtunkhwa Highways Authority (PKHA). PKHA shall charge penalty @Rs.1000/- per day in case of delayed completion up to a maximum of 10% of the cost of the consultancy.

Reporting Requirements

The Consultant shall submit the following reports (in both hard and soft copies).

SUBMISSION / REPORT	NUMBER OF COPIES	DUE DATE
1. PC-I Performa including Engineer's Cost Estimate	10	After Three Weeks of issuance of Letter of Acceptance.
2. Traffic Study Report	01	After Four Weeks of issuance of Letter of Acceptance.
3. Geotechnical Investigation and Pavement Design Report	01	After Four Weeks of issuance of Letter of Acceptance.
4. Tender Documents, Tender Drawings with BOQ, Backup Calculation of BOQ and Technical Specifications	20	After Five Weeks of issuance of Letter of Acceptance.
5. Detail Cost Estimate for Technical Sanction	04	After Five Weeks of issuance of Letter of Acceptance.
6. Construction Drawings	04	After Six Weeks of issuance of Letter of Acceptance.
7. Revised PC-I Performa	11	One Month after completion of project

Key Personnel and Sub-consultants

Breakdown of Contract Price in Foreign Currency

Appendix E

Breakdown of Contract Price in Local Currency and Mode of Payment

S#	Description	Fees	Amount (Rs.)
On Submission of:			
1	Submission of Inception and alignment Report with alignment plan of various options.	5%	
2	Submission of Preliminary design report including scope of work, design parameters including preliminary drawing on A3 size and hydrological report etc with PPT presentation to PKHA.	10%	
3	Soil Investigation along the Alignment of Road including detailed report of Geo Technical Investigation regarding bridges / flyover (if any) and Construction Material and query report, EIA or IEE what so ever is required.	20%	
4	Topographic Survey and Traffic Survey Report, Economic Analysis and Pavement Design Report.	15%	
5	PC-I Proforma including Engineer's Cost Estimate	15%	
6	Tender Documents, Tender Drawings with BOQ (Package – wise), Backup Calculation of BOQ, Technical Specifications and Special Provision.	15%	
7	Construction Drawings.	10%	
8	Detailed Cost Estimate for technical sanction based on joint X-Section and Establishment of the survey control points to the supervisory consultant (BM&TBM etc)	10%	
Total Contract Price		100%	