



**Government of the Punjab, Pakistan**

# **REQUEST FOR PROPOSALS**

**CONSULTANCY SERVICES**

**FOR**

**PREPARATION OF MASTER PLAN FOR WATER SUPPLY,  
SEWERAGE AND DRAINAGE SYSTEM  
FOR LAHORE**

**July 21, 2014**

**Water & Sanitation Agency (WASA)  
Lahore Development Authority**

## Section 1: Letter of Invitation

Letter No: \_\_\_\_\_

Date: \_\_\_\_\_

- a. M/s Artelia in Association with M/S ECSP, M/s Enviro Consult and M/s Indus consultants**  
Add: 83-A E/1, Main Boulevard Gulberg-III, Lahore, Pakistan  
Tel: 042-35717681, Fax: 042-35717685  
Web: [www.ecsp.com.pk](http://www.ecsp.com.pk), Email: [info@ecsp.com.pk](mailto:info@ecsp.com.pk)
- b. M/s MEINHARDT (Singapore) in association with MEINHARDT Pakistan Pvt. Ltd.**  
House#2-A, Street#49 F-6/4, Islamabad - Ph: 051-2273385-7,
- c. M/s NESPAK in association with Speikerman and LAHMEYER Germany**  
Add: 1-C, Block N, Model Town Extension, Lahore  
Tel: 92-42-99090000, Fax: 92-42-99231926, 99231950  
web: [www.nespak.com.pk](http://www.nespak.com.pk),  
Email: [ephe@nespak.com.pk](mailto:ephe@nespak.com.pk), [ephe@wol.net.pk](mailto:ephe@wol.net.pk)
- d. M/s MM Pakistan in association with Mott McDonald UK and M/s JERS**  
Add: 17-A/1, Zafar Road, Lahore Cantt.  
Tel: 92-42-36662595, Fax: 92-42-36665049  
web: [www.mmpakistan.com](http://www.mmpakistan.com), Email: [corporate@mmpakistan.com](mailto:corporate@mmpakistan.com)
- e. M/s DOLSAR in association with Development & Management Consultants (DMC).**  
Add: 67-L, Model Town (Ext.), Lahore, Pakistan.  
Tel: 92-42-35168457, 35168944, 35218944, Fax: 92-42-35178591  
Email: [dmc@wol.net.pk](mailto:dmc@wol.net.pk) , [dmc\\_lhr@yahoo.com](mailto:dmc_lhr@yahoo.com)
- f. M/s Louis Berger Group Inc, USA in association with Louis Berger SAS, France Techno Consult Pakistan and NEC Consultants (Pvt.) Ltd.**  
Add: Mr. Ivan Keogh, Sr. Vice President, The Louis Berger Group, Inc.  
1250, 23<sup>rd</sup> Street, NW Washington DC 20037, USA  
Tel: +1.202.331.7775, +1.202.303.2791, Fax: +1.202.293.0787  
Email: [lkeogh@louisberger.com](mailto:lkeogh@louisberger.com) , [rdelacruz@louisberger.com](mailto:rdelacruz@louisberger.com)
- C/o: TECHNO CONSULT**  
Add: TECHNO – HOUSE, 37-K, Block-6, PECHS, Karachi 75400 Pakistan.  
Tel: (92-21) 453-0630/31/32  
Fax: (92-21) 454-6606  
Email: [email@techno-consult.com](mailto:email@techno-consult.com)  
Web: [www.techno-consult.com](http://www.techno-consult.com)

## **SUBJECT: LETTER OF INVITATION**

**Dear Mr./Ms.:**

1.....T  
The Water & Sanitation Agency (WASA), Lahore Development Authority invites proposals to provide the consulting services for *Preparation of Master Plan for Water Supply, Sewerage and Drainage System for Lahore*. Details on the services are provided in the Terms of Reference.

2.....  
This Request for Proposal (RFP) has been addressed to the following Firms whose EOIs have been shortlisted:

- a. M/s Artelia in Association with M/S ECSP, M/s Enviro Consult and M/s Indus consultants.
- b. M/s MEINHARDT (Singapore) in assoc. with MEINHARDT Pakistan Pvt. Ltd.
- c. M/s NESPAK in association with Speikerman and LAHMEYER Germany.
- d. M/s MM Pakistan in association with Mott McDonald UK and M/s JERS.
- e. M/s DOLSAR in association with Development & Management Consultants.
- f. M/s Louis Berger Group Inc, USA in association with Louis Berger SAS, France Techno Consult Pakistan and NEC Consultants (Pvt.) Ltd.

It is not permissible to transfer this invitation to any other firm.

3. The Consultant will be selected under the Quality and Cost Based Selection (QCBS) and procedures described in this RFP, in accordance with the Punjab Procurements Rules 2014 (under Punjab Procurement Regulatory Authority Act 2009).
4. The RFP includes the following additional documents:
  - Section 2 - Instructions to Consultants (including Data Sheet)
  - Section 3 - Technical Proposal - Standard Forms
  - Section 4 - Financial Proposal - Standard Forms
  - Section 5 - Terms of Reference
  - Section 6 - Standard Form of Contract
5. It is mandatory for proposals to be made using the Standard Forms of the RFP. Proposals that are not in the prescribed format may be discarded. If any information required in the forms is found missing or written elsewhere, no credit will be given in the relevant section of the evaluation.
6. Firms should submit details of 5 of their most relevant assignments for technical evaluation using the prescribed format. Assignments submitted beyond the given number will not be considered.
7. CVs of key personnel corresponding to the list given in the Data Sheet should provide details of 5 relevant assignments done by the individual.

8. As per PPRA Rule 30, Technical Bids will be opened on the last date of submission of bids. So therefore you are invited to attend submission of Technical and Financial Bids and opening of Technical Bid on 08.09.2014 at 03:00 PM.
9. Please inform us in writing about the following upon receipt of this letter:
  - a) that this Letter of Invitation has been received; and
  - b) whether the proposal will be submitted as a firm/consortium/joint venture as provided in the EOIs, or in association with additional firms (which shall not include already shortlisted firms).

This information should be sent to the following address:

Name: Mr. Aftab Ahmad  
Designation: Dy. Managing Director (Engineering),  
Water & Sanitation Agency  
Lahore Development Authority  
Address: Zahoor Elahi Road, Gulberg-II, Lahore, Pakistan  
E-mail: [dhillonaftab@gmail.com](mailto:dhillonaftab@gmail.com)

If no acknowledgment is received, it will be presumed that the firm is not interested in undertaking the assignment.

Yours sincerely,

***Aftab Ahmad,***  
Dy. Managing Director (Engineering),  
Water & Sanitation Agency  
Lahore Development Authority

## Section 2: Instructions to Firms

### Definitions

- (a) “Assignment” means the consultancy services for ‘*Preparation of Master Plan for Water Supply, Sewerage and Drainage for Lahore*’.
- (b) “Client” means the ‘Water & Sanitation Agency (WASA), Lahore Development Authority, Government of the Punjab’, with which the selected Consultant signs the Contract.
- (c) “Consultant Selection Committee” means the committee formed for the selection of Consultant for this Assignment as per Guidelines.
- (d) “Consultant” means any firm/consortium/joint venture that provides the Services to the Client under the Contract.
- (e) “Contract” means the Contract included in this RFP as Section 6, when signed by the Parties, and all attached documents.
- (f) “Data Sheet” means such part of the Instructions to Firms used to reflect specific conditions.
- (g) “Day” means calendar day.
- (h) “Firms” means any firms, consortiums and joint ventures whose EOIs have been shortlisted and to whom this RFP has been issued.
- (i) “Instructions to Firms” means the document, which provides Firms with information needed to prepare their Proposals.
- (j) “LOI” means the Letter of Invitation included in the RFP as Section 1 being sent by the Client to the Firms.
- (k) “Personnel” means professionals and support staff provided by the Firms or by any sub-consultant and assigned to perform the Services or any part thereof; “Foreign Personnel” means such professionals and support staff who at the time of being so provided had their domicile outside Pakistan; “Local Personnel” means such professionals and support staff who at the time of being so provided had their domicile inside Pakistan.
- (l) “Proposal” means the Technical Proposal and the Financial Proposal.
- (m) “Services” means the Assignment to be performed by the Consultant pursuant to the Contract.

- (n) “Rules” means the Punjab Procurement Rules-2014 notified in Provision of Punjab Procurement Regulatory.
- (o) “Sub-Consultant” means any person or entity with whom the Consultant sub-contracts any part of the Services.
- (p) “Terms of Reference” (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

## **1. Introduction**

- 1.1 The Client shall select the Consultant from the Firms listed in the Letter of Invitation, in accordance with the method of Quality Cost Based Selection.
- 1.2 Firms are invited to submit a Technical Proposal and a Financial Proposal for Services required for the Assignment. The proposals should be in separate marked and sealed envelopes. The Proposal will be the basis for a signed Contract with the selected Firm.
- 1.3 Firms should familiarize themselves with Assignment conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment, Firms are encouraged to visit the Client before submitting a proposal and to attend a pre-proposal conference at the time, date and location specified in the Data Sheet. Attending the pre-proposal conference is optional. Firms should contact the Client’s representative named in the Data Sheet to obtain additional information on the pre-proposal conference. Firms should ensure the representative is informed well-ahead of time in case they wish to visit the Client.
- 1.4 The Client will assist the Consultant in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.5 Firms shall bear all costs associated with the preparation and submission of their Proposals and finalization of Contract. The Client is not bound to accept any Proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Firms.

## **Conflict of Interest**

- 1.6 Government of Punjab requires that Consultant provides professional, objective, and impartial advice and at all times, hold the Client’s interests paramount, strictly avoid conflicts with other assignments or their own corporate interests, and act without any consideration for future

work.

1.6.1 Without limitation on the generality of the foregoing, Firms, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

**Conflicting activities**

(i) A firm that has been engaged by the Client to provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.

**Conflicting assignments**

(ii) A firm (including its Personnel and sub-consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the firm to be executed for the same or for another Client.

**Conflicting relationships**

(iii) A firm (including its Personnel and sub-consultants) that has a business or family relationship with a member of the Client's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the contract, may not be awarded a contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Government of Punjab throughout the selection process and the execution of the

contract.

1.6.2 Firms / Consultant have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.

1.6.3 No agency or current employees of the Client shall work as Consultant under their own ministries, departments or agencies. Recruiting former government employees of the Client to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. When the Firm nominates any government employee as Personnel in their technical proposal, such Personnel must have written certification from their government or employer confirming that they are on leave without pay from their official position and allowed to work full-time outside of their previous official position. Such certification shall be provided to the Client by the Firm as part of his technical proposal.

**Fraud and  
Corruption**

1.7 The Government of Punjab requires Firms and the Consultant participating in this Assignment to adhere to the highest ethical standards, both during the selection process and throughout the execution of the Contract. In pursuance of this policy, the Government of Punjab:

- (b) defines, for the purpose of this paragraph, the terms set forth below as follows:
  - (i) “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in execution of a contract;
  - (ii) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
  - (iii) “collusive practices” means a scheme or arrangement between two or more firms with or without the knowledge of the Client, designed to establish prices at artificial, noncompetitive levels;



(iv) “Coercive practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.

(c) will reject a Proposal for award if it determines that the Firm recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract;

(d) will sanction a Firm, including declaring the Firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government of Punjab contract if at any time it determines that the Firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Government of Punjab contract; and

(e) Will have the right to require Firms to permit the Government of Punjab to inspect their accounts and records and other documents relating to the submission of proposals and contract performance, and have them audited by auditors appointed by the Government of Punjab.

1.8 Firms, their sub-consultants, and their associates shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Punjab in accordance with the above para. 1.7. Furthermore, the Firms shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.

**Only one Proposal**

1.9 Firms may only submit one Proposal. If a Firm submits or participates in more than one Proposal, such Proposals shall be disqualified.

**Proposal Validity**

1.10 The Data Sheet indicates how long Firms’ Proposals must remain valid after the submission date. During this period, Firms shall maintain the availability of professional staff nominated in the Proposal. The Client will make its best effort to complete award of Contract within this period. Should the need arise, however, the Client may request Firms to extend the validity period of their Proposals. Firms who agree to such extension shall confirm that they maintain the availability of the professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Firms may submit new staff in replacement, who would be considered in the

final evaluation for Contract award. Firms who do not agree have the right to refuse to extend the validity of their Proposals.

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| <b>Eligibility of Sub-Consultants</b>                  | 1.11 | In case a Firm intends to associate with firms who have not been shortlisted and/or individual expert(s), such other firms and/or individual expert(s) shall be subject to the eligibility criteria set forth.   |
| <b>2. Clarification and Amendment of RFP Documents</b> | 2.1  | Firms may request a clarification of any of the RFP documents till the date indicated in the Data Sheet. Any request for clarification must be sent in writing, or by standard electronic means to the Client's address indicated in the Data Sheet. The Client will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Firms. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under para. 2.2. |
|  | 2.2  | At any time before the submission of Proposals, the Client may amend the RFP by issuing an addendum in writing or by standard electronic means. The addendum shall be sent to all Firms and will be binding on them. Firms shall acknowledge receipt of all amendments. To give Firms reasonable time in which to take an amendment into account in their Proposals the Client may, if the amendment is substantial, extend the deadline for the submission of Proposals.  |
| <b>3. Preparation of Proposals</b>                     | 3.1  | The Proposal (see para. 1.2), as well as all related correspondence exchanged by the Firms and the Client, shall be written in English.  |
|  | 3.2  | In preparing their Proposal, Firms are expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.   |
|  | 3.3  | While preparing the Technical Proposal, Firms must give particular attention to the following:<br><br>(a) If a Firm considers that it may enhance its expertise for the Assignment by associating with other firms in a joint venture or sub-consultancy, it may associate with non-shortlisted firm(s). In case of association with non-shortlisted Firm(s), the Firm shall act as association leader. Any associations must be clearly indicated in the Technical Proposal. In case of a joint venture, all partners shall be jointly and severally liable and   |

shall indicate who will act as the leader of the joint venture.

- (b) Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.

**Technical  
Proposal  
Format and  
Content**

3.4 The Technical Proposal shall provide the information indicated in the following paras from (a) to (g) using the attached Form TECH-4 of Section 3, which indicates the recommended number of pages for the description of the approach, methodology and work plan of the Technical Proposal. A page is considered to be one printed side of A4 or letter size paper.

- (a) A brief description of the Firms' organization and an outline of recent experience of the Firm (each partner in case of joint venture) on assignments of a similar nature are required in Form TECH-2 of Section 3. For each assignment, the outline should indicate the names of sub-consultants/ professional staff who participated, duration of the assignment, contract amount, and Firm's involvement. Information should be provided only for those assignments for which the Firm was legally engaged by the Client as a firm or as one of the major firms within a joint venture. Assignments completed by individual professional staff working privately or through other consulting firms cannot be claimed as the experience of the Firm, or that of the Firm's associates, but can be claimed by the professional staff themselves in their CVs. Firms should be prepared to substantiate the claimed experience, if so requested by the Client.
- (b) Comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the Assignment; and facilities such as administrative support, equipment, data, etc. desired from the Client (Form TECH-3 of Section 3).
- (c) A description of the approach, methodology and work plan for performing the Assignment, covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposals is provided under Form TECH-4 of Section 3. The work plan should be consistent with the Work Schedule (Form TECH-8 of Section 3), which shall show in

the form of a bar chart the timing proposed for each activity.

- (d) The list of the proposed professional staff team by area of expertise, the position that would be assigned to each staff team member, and their tasks (Form TECH-5 of Section 3).
- (e) Estimates of the staff input (staff-months of foreign and local professionals) needed to carry out the Assignment (Form TECH-7 of Section 3). The staff-months input should be indicated separately for home office and field activities, and for foreign and local Professional staff.
- (f) CVs of the professional staff signed by the staff themselves or by the authorized representative of the professional staff (Form TECH-6 of Section 3) along with their Computerized National Identity Card numbers (if local) or passport numbers (if foreign).

3.5 The Technical Proposal shall not include any financial information. A Technical Proposal containing financial information shall be declared non responsive.

**Financial Proposals**

3.6 The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the Assignment, including (a) remuneration for staff (foreign and local, in the field and at the Firms' home office), and (b) reimbursable expenses indicated in the Data Sheet. These costs should be broken down by activity and, if appropriate, into foreign and local expenditures. All activities and items described in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. The Firm shall provide the Client with breakdown of remuneration rates as detailed in Form FIN-6 of Section 4.

**Taxes**

3.7 The Consultant shall be subject to local taxes (such as: value added or sales tax or income taxes on non resident Foreign Personnel, duties, fees, levies) on amounts payable by the Client under the Contract. The Client may pay taxes on behalf of Consultant.

3.8 Consultants should express the price of their Services in Pakistan Rupees.

**4. Submission,**

4.1 The original Proposal (Technical Proposal and, if required,

## Receipt, and Opening of Proposals

Financial Proposal; see para. 1.2) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Firms themselves. The person who signed the Proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of Form TECH-1 of Section 3, and Form FIN-1 of Section 4.

- 4.2 An authorized representative of the Firm shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been duly authorized to sign. The signed Technical and Financial Proposals shall be marked “Original”.
- 4.3 The Technical Proposal shall be marked “Original” or “Copy” as appropriate. The Technical Proposals shall be sent to the addresses referred to in para. 4.5 and in the number of copies indicated in the Data Sheet. All required copies of the Technical Proposal are to be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original prevails.
- 4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked “Technical Proposal” Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked “Financial Proposal” followed by the name of the Assignment, and with a warning “**Do Not Open with The Technical Proposal.**” The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and title of the Assignment, clearly marked “**Do Not Open, Except In Presence Of The Official Appointed, Before Submission Deadline**”. The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may constitute a case for rejecting the Proposal. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
- 4.5 The Proposals must be sent to the address/addresses indicated in the Data Sheet and received by the Client no later than the time and the date indicated in the Data Sheet, or any extension to this date in accordance with para. 2.2. Any Proposal received by the Client after the deadline for submission shall be returned unopened.

- 4.6 The Client shall open the Technical Proposal immediately after the deadline for their submission. The envelopes with the Financial Proposal shall remain sealed and securely stored.
- 5. Proposal Evaluation**
- 5.1 From the time the Proposals are opened to the time the Contract is awarded, the Firms should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Firms to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Firms' Proposal.
- The Consultant Selection Committee, while evaluating Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.
- Evaluation of Technical Proposals**
- 5.2 The Consultant Selection Committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP, and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.
- Public Opening and Evaluation of Financial Proposals**
- 5.3 After the technical evaluation is completed, the Client shall inform the Firms who have submitted Proposals the technical scores obtained by their Technical Proposals, and shall notify those Firms whose Proposals did not meet the minimum qualifying mark or were considered non responsive to the RFP and TOR, that their Financial Proposals shall be returned unopened after completing the selection process. The Client shall simultaneously notify in writing Firms that have secured the minimum qualifying mark, the date, time and location for opening the Financial Proposals. Firms' attendance at the opening of Financial Proposals is optional. The opening date shall be set so as to allow interested Firms sufficient time to make arrangements for attending the opening.
- 5.4 Financial Proposals shall be opened publicly in the presence of the Firms' representatives who choose to attend. The name of the Firms, and the technical scores of the Firms shall be read aloud. The Financial Proposal of the Firms who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded.

- 5.5 The Consultant Selection Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures, the formers will prevail. In addition to the above corrections, as indicated under para. 3.6, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items. In case an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal, no corrections are applied to the Financial Proposal in this respect.
- 5.6 The lowest evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the Data Sheet. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Data Sheet:  $S = St \times T\% + Sf \times P\%$ . The Firm achieving the highest combined technical and financial score will be invited for finalization of Contract.
- 6. Finalization of Contract**
- 6.1 Contract finalization meeting shall be held at the date and address indicated in the Data Sheet. The invited Firm will, as a pre-requisite for attendance at the meeting, confirm availability of all professional staff. Failure in satisfying such requirements may result in the Firm being disqualified on the grounds of wilful misrepresentation, and the Client proceeding to the next-ranked Firm. Representatives finalizing on behalf of the Firm must have written authority to conclude a Contract.
- Description of Services**
- 6.2 Finalization of Contract will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the invited Firm regarding the Terms of Reference. Once the Client and the Firm finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting, these documents shall be incorporated in the Contract as “Description of Services”. Special attention shall be paid to clearly defining the inputs and facilities required from the Client to ensure satisfactory implementation of the Assignment.
- Finalization of Taxes**
- 6.3 It is the responsibility of the Firm, when finalizing the Contract, to indicate the exact tax amount to be paid by the Consultant under the Contract.

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|---|-----|---|
| <b>Availability of Professional Staff</b> | 6.4 | Having selected the Firm on the basis of, among other things, an evaluation of proposed professional staff, the Client expects to finalize a Contract on the basis of the professional staff named in the Proposal. Before contract finalization, the Client shall require assurances that the professional staff will actually be available. The Client shall not consider substitutions during contract finalization unless both parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity. If this is not the case and if it is established that professional staff were offered in the proposal without confirming their availability, the Firm may be disqualified on the grounds of wilful misrepresentation. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate. |
| <b>Signing of Contract</b>                | 6.5 | Contract finalization will conclude with a review of the Contract to correct any computational and typographical errors. The Client and the Firm will initial the agreed Contract before proceeding to sign the Contract.   |
| <b>7. Award of Contract</b>               | 7.1 | Once the Contract is awarded to the Consultant, the Client shall publish details on the websites of Planning & Development Department and Punjab Procurement Regulatory Authority, promptly notify all Firms which submitted proposals, and return unopened Financial Proposals to Firms that were disqualified or failed to achieve the minimum technical score.   |
|   | 7.2 | After award of Contract, the Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.   |
| <b>8. Confidentiality</b>                 | 8.1 | Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Firms, which submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Firm of confidential information related to the process may result in the rejection of its Proposal and may be subject to the provisions of the Consultant Selection Guidelines relating to fraud and corruption.  |



# INSTRUCTIONS TO FIRMS

## DATA SHEET

Paragraph Reference	
1.1	<p>Name of the Client: <b><u>Water &amp; Sanitation Agency (WASA), Lahore Development Authority (LDA), Government of Punjab</u></b></p> <hr/> <p>Method of selection: <b><u>Quality and Cost Based Selection Method (QCBS)</u></b></p>
1.2	<p>Financial Proposal to be submitted together with Technical Proposal:  <b>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></b></p> <p>Name of the assignment is: <b><u>Consultancy Services for Preparation of Master Plan for Water Supply, Sewerage and Drainage System for Lahore.</u></b></p>
1.3	<p>A pre-proposal conference will be held: <b>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></b>  <u>on Friday the 18<sup>th</sup> August 2014 at 11.00am PST in the Office of DMD(Engg) WASA, Zahoor Elahi Road, Gulberg, Lahore.</u></p> <p>Water &amp; Sanitation Agency  Lahore Development Authority  Zahoor Elahi Road  Gulberg-II, Lahore, Pakistan</p> <p>The Client's representative is:  Mr. Aftab Ahmad  Dy. Managing Director (Engineering),  Water &amp; Sanitation Agency  Lahore Development Authority  Zahoor Elahi Road  Gulberg-II, Lahore, Pakistan  <i>E-mail: <a href="mailto:dhillonaftab@gmail.com">dhillonaftab@gmail.com</a></i>  Phone: ++92 42 35750946, + 92 42 35757425  Facsimile: ++ 92 42 35750946</p>
1.4	<p>The Client will provide at no cost to the Consultants assistance in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.</p>
1.6.1 (a)	<p>The Client envisages the need for continuity for downstream work:  <b>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></b></p>

<b>1.12</b>	Proposals must remain valid <i>90</i> days after the submission date, i.e. until: 8 <sup>th</sup> December – 2014.
<b>2.1</b>	Clarifications may be requested not later than 22 <sup>nd</sup> August 2014.  The address for requesting clarifications is: Water & Sanitation Agency Lahore Development Authority Zahoor Elahi Road Gulberg-II, Lahore, Pakistan <i>E-mail: <a href="mailto:dhillonaftab@gmail.com">dhillonaftab@gmail.com</a></i> Phone: ++92 42 35750946, + +92 42 35757425 Facsimile:++ 92 42 35750946
<b>3.3 (a)</b>	Shortlisted Firms may associate with other shortlisted Firms: Yes ___No <input checked="" type="checkbox"/>
<b>3.4 (a)</b>	Firms should submit details of 5 relevant assignments completed by them.
<b>3.4 (f)</b>	CVs should contain details on 5 relevant assignments done by the individual in the past.
	Training is a specific component of this assignment: Yes ___No <input checked="" type="checkbox"/>
<b>3.6</b>	<i>Applicable Reimbursable expenses in local currency</i>  (1) cost of necessary travel, including transportation of the Personnel by the private vehicle, bus or economy class by air and the most direct practicable route;  (2) cost, rental and freight of any instruments or equipment required to be provided by the Consultants for the purposes of the Services (if any);
<b>3.7</b>	Amounts payable by the Client to the Consultant under the Contract to be subject to local taxation: <b>Yes</b> <input checked="" type="checkbox"/> No _____  The Client will pay such taxes on behalf of the Consultant: [ <b>Yes</b> ] No _____
<b>3.8</b>	<i>Firm to state Financial proposal in the national currency i.e. PKR: <b>Yes</b> <input checked="" type="checkbox"/></i> <i>No</i>
<b>4.3</b>	Firm must submit the <b>original and 2 copies</b> of the Technical Proposal, and the <b>original</b> of the Financial Proposal.
<b>4.5</b>	The Proposal submission address is: Water & Sanitation Agency Lahore Development Authority Zahoor Elahi Road

	<p>Gulberg-II, Lahore, Pakistan  <i>E-mail: <a href="mailto:dhillonaftab@gmail.com">dhillonaftab@gmail.com</a></i>  Phone: ++92 42 35750946, + +92 42 35757425  Facsimile:++ 92 42 35750946</p> <p>Proposals must be submitted no later than the following date and time:  <b>8<sup>th</sup> of September 2014 by 3:00 pm PST.</b></p>																																																																				
<p><b>5.2 (a)</b></p>	<p>Criteria, sub-criteria, and point system for the evaluation of Technical Proposals are:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: right; width: 20%;"><u>Points</u></th> </tr> </thead> <tbody> <tr> <td>(i) Company Profile:</td> <td style="text-align: right;">[100]</td> </tr> <tr> <td>    a) Number of 5 similar assignments</td> <td style="text-align: right;">[40]</td> </tr> <tr> <td>    b) Value of similar assignments</td> <td style="text-align: right;">[40]</td> </tr> <tr> <td>    c) Financial Capability</td> <td style="text-align: right;">[10]</td> </tr> <tr> <td>    d) Quality Management System (QMS)/Organization Structure</td> <td style="text-align: right;">[10]</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total = <u>          </u></td> </tr> <tr> <td></td> <td style="text-align: right;">(A<sub>1</sub>)</td> </tr> <tr> <td>(ii) Project Team:</td> <td style="text-align: right;">[100]</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tbody> <tr><td>a) Team Leader</td><td style="text-align: right;">15</td></tr> <tr><td>b) Water Supply Expert</td><td style="text-align: right;">10</td></tr> <tr><td>c) Ground Water Expert</td><td style="text-align: right;">12</td></tr> <tr><td>d) Ground Water Modeling Engineer</td><td style="text-align: right;">6</td></tr> <tr><td>e) Surface Water Treatment Expert</td><td style="text-align: right;">4</td></tr> <tr><td>f) Wastewater Expert</td><td style="text-align: right;">9</td></tr> <tr><td>g) Drainage Expert</td><td style="text-align: right;">4</td></tr> <tr><td>h) GIS Expert</td><td style="text-align: right;">6</td></tr> <tr><td>i) Electrical Expert</td><td style="text-align: right;">2</td></tr> <tr><td>j) Mechanical Expert</td><td style="text-align: right;">3</td></tr> <tr><td>k) Structure Expert</td><td style="text-align: right;">4</td></tr> <tr><td>l) Environmental Expert</td><td style="text-align: right;">3</td></tr> <tr><td>m) Institutional Expert</td><td style="text-align: right;">4</td></tr> <tr><td>n) Sociologist / Customer Services Expert</td><td style="text-align: right;">2</td></tr> <tr><td>o) Financial Management Expert</td><td style="text-align: right;">8</td></tr> <tr><td>p) Geo Technical Expert</td><td style="text-align: right;">3</td></tr> <tr><td>q) SCADA Expert</td><td style="text-align: right;">3</td></tr> <tr><td>r) Pumping Station Expert</td><td style="text-align: right;">2</td></tr> <tr><td colspan="2" style="text-align: right;"><b>TOTAL (A<sub>2</sub>)</b></td></tr> <tr><td colspan="2" style="text-align: right;"><b>100</b></td></tr> </tbody> </table> <p>The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three sub-criteria and relevant score:</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 80%;">1) Education and qualifications</td> <td style="text-align: right;">[25]</td> </tr> <tr> <td>2) Relevant background</td> <td style="text-align: right;">[70]</td> </tr> <tr> <td>3) Time with firm</td> <td style="text-align: right;">[5]</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total score: <u>          </u></td> </tr> <tr> <td></td> <td style="text-align: right;">100</td> </tr> </tbody> </table>		<u>Points</u>	(i) Company Profile:	[100]	a) Number of 5 similar assignments	[40]	b) Value of similar assignments	[40]	c) Financial Capability	[10]	d) Quality Management System (QMS)/Organization Structure	[10]	Total = <u>          </u>			(A <sub>1</sub> )	(ii) Project Team:	[100]	a) Team Leader	15	b) Water Supply Expert	10	c) Ground Water Expert	12	d) Ground Water Modeling Engineer	6	e) Surface Water Treatment Expert	4	f) Wastewater Expert	9	g) Drainage Expert	4	h) GIS Expert	6	i) Electrical Expert	2	j) Mechanical Expert	3	k) Structure Expert	4	l) Environmental Expert	3	m) Institutional Expert	4	n) Sociologist / Customer Services Expert	2	o) Financial Management Expert	8	p) Geo Technical Expert	3	q) SCADA Expert	3	r) Pumping Station Expert	2	<b>TOTAL (A<sub>2</sub>)</b>		<b>100</b>		1) Education and qualifications	[25]	2) Relevant background	[70]	3) Time with firm	[5]	Total score: <u>          </u>			100
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	<p>(ii) Approach &amp; Methodology: [100]</p> <p>a) Understanding &amp; Innovativeness [40]</p> <p>b) Methodology &amp; Work Plan [60]</p> <p style="text-align: right;">Total = <math>\overline{(A_3)}</math></p> $\text{Technical Score}^* = \frac{A_1[20]}{100} + \frac{A_2[60]}{100} + \frac{A_3[20]}{100}$ <p>The minimum technical score <math>S_t</math> required to pass is: <u>65</u> Points</p>
<b>5.7</b>	<p>The formula for determining the financial scores is the following:</p> <p><math>S_f = 100 \times F_m / F</math>, in which <math>S_f</math> is the financial score, <math>F_m</math> is the lowest price and <math>F</math> the price of the proposal under consideration.</p> <p>The weights given to the Technical (T) and Financial Proposals (F) are:  <math>T = \underline{80}</math>, and  <math>P = \underline{20}</math></p>
<b>6.1</b>	<p>Expected date and address for contract finalization: <b>1<sup>st</sup> October 2014</b></p> <hr/>
<b>7.2</b>	<p>Expected date for commencement of consulting services  <b><u>16<sup>th</sup> October 2014</u></b> at: <b><u>Lahore</u></b></p>

### **Section 3: Technical Proposal - Standard Forms**

Refer to Reference Paragraph 3.4 of the Data Sheet for format of Technical Proposal to be submitted, and paragraph 3.4 of Section 2 of the RFP for Standard Forms required and number of pages recommended.

- TECH-1 Technical Proposal Submission Form
- TECH-2 Firm's Organization and Experience
  - A Firm's Organization
  - B Firm's Experience
- TECH-3 Comments or Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be provided by the Client
  - A On the Terms of Reference
  - B On the Counterpart Staff and Facilities
- TECH-4 Description of the Approach, Methodology and Work Plan for Performing the Assignment
- TECH-5 Team Composition and Task Assignments
- TECH-6 Curriculum Vitae (CV) for Proposed Professional Staff
- TECH-7 Staffing Schedule
- TECH-8 Work Schedule

## FORM TECH-1 TECHNICAL PROPOSAL SUBMISSION FORM

---

[Location, Date]

To: [Name and address of Client]

Dear Sir,

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope<sup>1</sup>.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Firm]<sup>2</sup>

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If contract negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in Paragraph Reference 1.12 of the Data Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in Paragraph Reference 7.2 of the Data Sheet.

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

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

## FORM TECH-2 FIRM'S ORGANIZATION AND EXPERIENCE

---

### **A - Firm's Organization**

*[Provide here a brief (two pages) description of the background and organization of your firm/entity (including organogram) and each associate for this assignment.]*

Firm Background:

Chief Executive Officer:

Chief Financial Officer:

Chief Technical Officer (or equivalent):

## B - Firm's Experience

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this Assignment. Use maximum 20 pages. Please provide Client's certification and/or evidence of the contract agreement.]*

Assignment name:	Value of the contract (in current PKR or US\$):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total N <sup>o</sup> of staff-months (by your firm) on the assignment:
Start date (month/year): Completion date (month/year):	Value of consultancy services provided by your firm under the contract (in current PKR or US\$):
Name of associated Firms, if any:	N <sup>o</sup> of professional staff-months provided by associated Firms:
Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):	
Narrative description of Project:	
Description of actual services provided by your staff within the assignment:	



**FORM TECH-3 COMMENTS AND SUGGESTIONS ON THE TERMS OF  
REFERENCE AND ON COUNTERPART STAFF AND FACILITIES TO BE PROVIDED  
BY THE CLIENT**

---

**A - On the Terms of Reference**

*[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]*

## **B - On Counterpart Staff and Facilities**

*[Comment here on counterpart staff and facilities desired from the Client]*

## FORM TECH-4 DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

---

*[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (50 pages, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,
- b) Work Plan,
- c) Organization & Staffing and
- d) Presentation

a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.

c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

d) Presentation.

**FORM TECH-5 TEAM COMPOSITION AND TASK ASSIGNMENTS**

Professional Staff						
Name of Staff	CNIC No./Passport No.	Firm	Area of Expertise	Position Assigned	Task Assigned	

**FORM TECH-6 CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF**

**1. Proposed Position** [*only one candidate shall be nominated for each position*]: \_\_\_\_\_

**2. Name of Firm** [*Insert name of firm proposing the staff*]: \_\_\_\_\_

\_\_\_\_\_

**3. Name of Staff** [*Insert full name*]: \_\_\_\_\_

**4. Date of Birth:** \_\_\_\_\_ **Nationality:** \_\_\_\_\_

**5. CNIC No (if Pakistani):** \_\_\_\_\_ **or Passport No:** \_\_\_\_\_

**6. Education :**

<i>Degree</i>	<i>Major/Minor</i>	<i>Institution</i>	<i>Date (MM/YYYY)</i>

**7. Membership of Professional Associations:** \_\_\_\_\_

\_\_\_\_\_

**8. Other Training**[*Indicate significant training since degrees under 6 - Education were obtained*]: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**9. Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]: \_\_\_\_\_

\_\_\_\_\_

**10. Employment Record**[*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

<i>Employer</i>	<i>Position</i>	<i>From (MM/YYYY)</i>	<i>To (MM/YYYY)</i>

## 11. Detailed Tasks Assigned

*[List all tasks to be performed under this assignment]*

## 12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

*[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]*

- 1) Name of assignment or project: \_\_\_\_\_  
Year: \_\_\_\_\_  
Location: \_\_\_\_\_  
Client: \_\_\_\_\_  
Main project features: \_\_\_\_\_  
Positions held: \_\_\_\_\_  
Activities performed: \_\_\_\_\_
  
- 2) Name of assignment or project: \_\_\_\_\_  
Year: \_\_\_\_\_  
Location: \_\_\_\_\_  
Client: \_\_\_\_\_  
Main project features: \_\_\_\_\_  
Positions held: \_\_\_\_\_  
Activities performed: \_\_\_\_\_

3) Name of assignment or project: _____
Year: _____
Location: _____
Client: _____
Main project features: _____
Positions held: _____
Activities performed: _____
 <i>[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]</i>

**13. Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes my qualifications, my experience, and myself. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

\_\_\_\_\_ Date: \_\_\_\_\_  
*[Signature of staff member or authorized representative of the staff]* *Day/Month/Year*

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

# FORMTECH-7 STAFFING SCHEDULE<sup>1</sup>

Full time input  
 Part time input

Year: _____		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input			
N°	Name of Staff	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Home	Field <sup>3</sup>	Total	
<b>Foreign</b>																	
1	[Home] [Field]																
2																	
3																	
n																	
														<b>Subtotal</b>			
<b>Local</b>																	
1	[Home] [Field]																
2																	
n																	
														<b>Subtotal</b>			
														<b>Total</b>			

- 1 For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- 2 Months are counted from the start of the assignment. For each staff indicate separately staff input for home and fieldwork.
- 3 Fieldwork means work carried out at a place other than the Firm's home office.



**FORMTECH-8WORK SCHEDULE**

**Year:** \_\_\_\_\_

N°	Activity <sup>1</sup>	Months <sup>2</sup>												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1														
2														
3														
4														
5														

1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals.  
For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.  
2 Duration of activities shall be indicated in the form of a bar chart.

## **Section 4: Financial Proposal - Standard Forms**

*[Comments in brackets [ ] provide guidance to the shortlisted Firms for the preparation of their Financial Proposals; they should not appear on the Financial Proposals to be submitted.]*

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under para. 3.6 of Section 2. Such Forms are to be used whichever is the selection method indicated in para. 4 of the Letter of Invitation.

- FIN-1 Financial Proposal Submission Form
- FIN-2 Summary of Costs
- FIN-3 Breakdown of Costs by Activity
- FIN-4 Breakdown of Remuneration
- FIN-5 Reimbursable expenses

**FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM**

---

[Location, Date]

To: [Name and address of Client]

Dear Sir,

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures<sup>1</sup>]. This amount is inclusive of all the applicable taxes.

Our Financial Proposal shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in Paragraph Reference 1.12 of the Data Sheet.

No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Contract execution.

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

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

## FORM FIN-2 SUMMARY OF COSTS

---

Item	Costs
	Pak Rupees
Total Costs of Financial Proposal <sup>2</sup>	

- 1 Indicate the total costs, including of local taxes, to be paid by the Client in local currency. Such total costs must coincide with the sum of the relevant Subtotals indicated in all Forms FIN-3 provided with the Proposal.

## FORM FIN-3 BREAKDOWN OF COSTS BY ACTIVITY<sup>1</sup>

<b>Group of Activities (Phase):</b> <sup>2</sup>	<b>Description:</b> <sup>3</sup>
_____	_____
_____	_____
<i>Cost component</i>	<b>Costs</b>
	Pak Rupees
Remuneration <sup>5</sup>	
Reimbursable Expenses <sup>5</sup>	
Subtotals	

- 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 Firm shall fill a separate Form FIN-3 for each group of activities. 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 local currency.
- 5 Remuneration and Reimbursable Expenses must respectively coincide with relevant Total Costs indicated in Forms FIN-4, and FIN-5.

**FORM FIN-4 BREAKDOWN OF REMUNERATION<sup>1</sup>**

---

Name <sup>2</sup>	Position <sup>3</sup>	Staff-month Rate <sup>4</sup>
<b>Local Staff</b>		
		[Home]
		[Field]
<b>Foreign Staff</b>		
		[Home]
		[Field]

- 1 Form FIN-4 shall be filled in for the same Professional and Support Staff listed in Form TECH-7.
- 2 Professional Staff should be indicated individually; Support Staff should be indicated per category (e.g.: draftsmen, clerical staff).
- 3 Positions of the Professional Staff shall coincide with the ones indicated in Form TECH-5.
- 4 Indicate separately staff-month rate and currency for home and fieldwork

## FORM FIN-5 BREAKDOWN OF REIMBURSABLE EXPENSES

---

N°	Description <sup>1</sup>	Unit	Unit Cost <sup>2</sup>
	International flights <sup>3</sup>	Trip	
	Miscellaneous travel expenses	Trip	
	Communication costs between [ <i>Insert place</i> ] and [ <i>Insert place</i> ]		
	Drafting, reproduction of reports		
	Equipment, instruments, materials, supplies, etc.		
	Shipment of personal effects	Trip	
	Use of computers, software		
	Laboratory tests.		
	Sub-contracts		
	Local transportation costs		
	Office rent, clerical assistance		

- 1 Delete items that are not applicable or add other items according to Paragraph Reference 3.6 of the Data Sheet.
- 2 Indicate unit cost and local currency.
- 3 Indicate route of each flight, and if the trip is one- or two-ways.

**FORM FIN-6 – CONSULTANT’S REPRESENTATIONS REGARDING COSTS AND CHARGES**

**A - Undertaking**

Consulting Firm:

Assignment:

Date:

We hereby confirm that:

- (a) the basic salaries indicated in the attached table are taken from the firm’s payroll records and reflect the current salaries of the staff members listed which have not been raised other than within the normal annual salary increase policy as applied to all the firm’s staff;
- (b) attached are true copies of the latest salary slips of the staff members listed;
- (c) the away from headquarters allowances indicated below are those that the Firms have agreed to pay for this assignment to the staff members listed;
- (d) the factors listed in the attached table for social charges and overhead are based on the firm’s average cost experiences for the latest three years as represented by the firm’s financial statements; and
- (e) said factors for overhead and social charges do not include any bonuses or other means of profit-sharing.

\_\_\_\_\_  
*[Name of Consulting Firm]*

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

Name: \_\_\_\_\_

Title: \_\_\_\_\_



**B – Firm’s Breakdown Regarding Costs and Charges**

(Expressed in [PKR Local currency])

Personnel		1	2	3	4	5	6	7	8
Name	Position	Basic Salary per Working Month/Day/Year	Social Charges <sup>1</sup>	Overhead <sup>1</sup>	Subtotal	Fee <sup>2</sup>	Away from Headquarters Allowance	Proposed Fixed Rate per Working Month/Day/Hour	Proposed Fixed Rate per Working Month/Day/Hour <sup>1</sup>
	Home Office								
	Field								

1. Expressed as percentage of 1
2. Expressed as percentage of 4

## SECTION 5: TERMS OF REFERENCE

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**Project:** Preparation of Master Plan for Water Supply, Sewerage and Drainage for Lahore

**Contract:** Consultancy Services for “Preparation of Master Plan for Water Supply, Sewerage and Drainage for Lahore”.

**Client:** Water & Sanitation Agency (WASA), Lahore Development Authority

# 1 BACKGROUND INFORMATION

## 1.1 Beneficiary

All the inhabitants of Lahore District.

## 1.2 Contracting Authority

Water and Sanitation Agency (WASA), Lahore Development Authority (LDA)

## 1.3 Relevant Background

### 1.3.1 Project Description

Urbanization presents one of the key challenges and, at the same time, opportunities in the new millennium. Urbanization is taking place at a rapid pace and is beyond the effective control of most government across the world. The scale and complexity of urban problems are increasing everywhere and out of those most challenging is to meet the water and sanitation demands. All cities must plan ahead to enable a sustainable future in the rapidly changing urban environment. Cities must review their strategic plans to develop better economic, social and environmental future. Those cities that fail to plan ahead and execute the plans will not be competitive in the globalized world.

In the same context, Water and Sanitation Agency (WASA), Lahore Development Authority intends to hire consultants for preparation of Master Plan with 25-year planning horizon and identification/prioritization of projects for provision of physical infrastructure for water supply, sewerage, storm water drainage and waste water treatment with detailed designing and costing for the **Lahore District** to meet the present & future requirements for efficient and effective service delivery.

The consultant shall consider, as appropriate, alternative options and analyze these in terms of their institutional, technical and financial merits.

### 1.3.2 Geographical Area to be Covered

Lahore is the capital of the province of Punjab and the second largest city of Pakistan. Major portion of the city lies towards east and south of River Ravi, a tributary of

mighty River Indus. The average elevation of the city is 700 ft. above mean sea level. Lahore is situated on the flood plain of River Ravi which has a gradual slope towards South West.

At the time of independence, Lahore had an estimated population of about 0.775 million. After independence in 1947, the growth of city further accelerated. Lahore continued to grow and by 1998, Lahore was transferred into a metropolis city. The current WASA Lahore service area is about 350 Sq. Km with an estimated population of 6.152 million. However for the Master Planning purpose, whole of the district is the study area.

## **1.4 Previous Master Plan and Studies Conducted**

The consultants should study and review the previous Master Plan suggestions, provisions and their implementation during 1975 to 2011, the physical targets achieved, deviations from the plan, shortcomings and suggestion about works being executed at present as briefly described below:

### ***1.4.1 Master Plan for Water Supply, Sewerage & Drainage System of Lahore (1975)***

Previous Master Plan for WASA Lahore was prepared in 1975 with World Bank Assistance with 25-year planning horizon. Major interventions made under the previous plan were:

- a) Direct pumping through the network of main well centres along the River Ravi Bed. Construction of Old Ravi, National Ravi, Bhogiwala, and Salamat Pura Well Centres.
- b) Water supply to the city through big feeder mains of Ductile Iron Pipes.
- c) Provision of main sewerage pumping stations and trunk sewers
- d) Laying of 12” to 32” dia Ductile Iron feeder mains from well centres to inside city.
- e) Construction of Disposal Stations at Mahmood Booti, Sadbagh, Khokhar Road, Gulshan-e-Ravi, Farrukhabad, Multan Road and Main Outfall.

### ***1.4.2 Sewerage and Drainage System for Central Lahore (2002)***

Comprehensive engineering study for sewerage & drainage system of Central Lahore was conducted with planning horizon upto year 2027.

### ***1.4.3 Sewerage and Drainage System for South Lahore (2007)***

Comprehensive engineering study for sewerage & drainage system of South Lahore was conducted with planning horizon upto year 2057.

### ***1.4.4 Sewerage and Drainage System for Southwest Lahore (2008)***

Comprehensive engineering study for sewerage & drainage system of Southwest Lahore was conducted with planning horizon up to year 2058.

## **1.5 Current State of Affairs in the Relevant Sector**

### **1.5.1 General**

Master Plan for water, waste water and storm water drainage services was last prepared by M/s Camp, Dresser & Mckee (CDM) in 1975. The city has since grown many times in size and population. LDA now wants to assess not just the current situation but to forecast future needs, which calls for exhaustive studies and planning on several counts to make water supply, sewerage & storm water drainage system sustainable. It includes:

- To recycle the wastewater after its treatment and its use for arboricultural / irrigation purposes.
- To use the rainwater for recharging the ground water.

Investment in the sector over many years has been at a level well below that needed for sustainability and consequently the infrastructure cannot meet the standards needed to achieve compliance with the environmental requirements. The standards of service have declined to a point where a large proportion of the population receives water on an intermittent basis and of a quality which is not up to the standards of potability. Wastewater is discharged without licenses thus causing significant environmental risks.

### **1.5.2 Drinking water sector**

Lahore District, its main 9 towns and surroundings areas are located over water aquifer. The water supply in the city is purely based on the ground water. The water is abstracted through a number of tubewells installed in all parts of the district which is generally pumped directly into the distribution system. Due to ever increasing number of tubewells, the water table is depleting rapidly. The organization and management of the services lacks coherence, and investment has been far below the level needed both for long term sustainability of the existing assets, and to bring the systems up to modern standards in terms of water conveyance, storage, level of losses and treatment.

In addition to these general statements about the service, the other problems of the water supply sector includes the following:

- Regulations are weak in terms of the definition of responsibilities and the allocation of them.
- Monitoring, inspection and enforcement powers are also very weak.
- There is no clear separation of the regulatory functions and the service provision functions after the devolution and 18<sup>th</sup> amendment.
- Water supply is on an intermittent basis.
- Study and review the existing levels of service
- The resource situation is not exactly known because there are no recent and detailed hydrological and hydro-geological studies of sustainable yields.

- Main traditional source is under increasing threat from saline intrusion (due to over-pumping) and pollution (due to absence of sewerage and sewage treatment over an unconfined aquifer, and the intensive use over many years of agro-chemicals such as nitrogenous fertilizers and pesticides).
- The levels of non-revenue water are considerable, and the components (physical leakage, technical and commercial losses) are not separately estimated
- There isn't a clear policy on the allocation of water resources between the competing needs for drinking water and those of irrigated agriculture.
- The pricing policy for the drinking water service is not sufficiently in line with the scarcity of water. Tariffs are not explicitly set at cost recovery levels – either to cover resource costs and operation and maintenance, or asset depreciation and any investment financing charges.
- All water services are not metered, and there is no policy on periodic re-calibration of meters. Bill collection rates are very poor. Continuation of the services is dependent solely on central and local annual budgets.
- No records are kept of assets, their condition, book value or remaining service life. No asset management (business) planning is carried out. Recent investments in the sector have been mainly on pipe replacements.

### ***1.5.3 Wastewater sector***

Presently, no waste water treatment services exist and the raw waste water is directly discharged into the River Ravi which creates environmental problems especially when significant dilution is not available in the river. The sewerage service generally suffers from:

- Failure to keep up with the development of the district or because of piecemeal extensions. The result is that capacity is inadequate in many places and leading to overflowing on to the surface and hence drainage to low lying (ponded) areas with resultant contamination of near surface groundwater
- No records are kept of assets, their condition, book value or remaining service life. No asset management (business) planning is carried out. Recent investments in the sector have been mainly on pipe replacements
- Lack of effluent standards and enforcement
- Poor maintenance of pumping stations – no preventive maintenance
- Combined systems of sewerage and storm water, which can't cope with heavy rainfall, which leads to surface flooding and ponding.
- Absence of any sewage treatment

### ***1.5.4 Storm-water Sector***

Storm water drainage has also become a major environmental concern particularly in urban areas of the Lahore where mostly partially combined drainage/sewerage systems are in use. The situation becomes worse in the monsoon which normally extends from July to September. It is not only an issue for low lying areas but also for some developed localities. The other related issues are:

- Poor maintenance of pumping stations again leading to overflows and ponding
- Combined systems of sewerage and stormwater, which can't cope with heavy rainfall, which leads to surface flooding and ponding
- Dumping of Solid Waste into drains.

### ***1.5.5 Waste Water Treatment Sector***

A greater area of concern is the lack of waste water treatment which could not meet the requirements of national Environmental Quality Standards. With very few exceptions the problem of safe disposal of domestic and other industrial effluents has not been addressed. The ground situation is that bulk of the waste water (domestic/industrial) is discharged untreated into natural water bodies (streams, canals, rivers, seepage drains, and other channels) and /or used for irrigation purposes.

## **2 OBJECTIVES**

### **2.1 Overall objective**

The overall objective of preparation of new Master Plan for water supply, sewerage & storm water drainage of Lahore District is to improve Lahore's water supply, sewerage, and drainage services and enhance environment and public health. This broader goal will be achieved through the following specific objectives and activities.

### **2.2 Specific objectives**

- To review the legal and regulatory frame work and suggest improvements.
- To assess the existing and proposed institutional arrangements and human resource requirements and to make recommendations for making the organization efficient and self-sustaining.
- To assess the state of the physical infrastructure and make recommendations for rehabilitation and expansion.
- To develop GIS based asset inventory on freshly acquired satellite imagery of at least 0.6 meter resolution along with thematic maps.
- To review tariff, introduce sound financial management practices and based on that develop Financial MIS
- To prepare specific master plans for water supply, wastewater & its treatment and storm-water and
- To develop implementation plan and phasing of measures

## 3 SCOPE OF WORK

### 3.1 General

#### 3.1.1 *Project description*

The consultant will be responsible for preparing comprehensive master plans for water, waste water & its treatment and storm water drainage within the context of meeting the requirements of the environment and public health. The consultant is to take into account the opinion of relevant authorities and shall seek to reach agreement with them on the proposals. This means working closely with all relevant stakeholders to ensure that all reports and plans reflect the needs and priorities of the District. The consultant shall consider, as appropriate, alternative options and analyze these in terms of their legal, institutional, technical and financial merits.

#### 3.1.2 *Geographical area to be covered*

The whole of the Lahore District is to be included for the study.

### 3.2 Specific activities

The scope of consulting services to be rendered by the consultant would comprise (*but not limited to*) the following Specific Activities:

- Review of the Master Plan(s) of LDA and WASA for Lahore and various studies already undertaken for Lahore District.
- Review of Institutional and legal Framework in the context of Organizational setup of WASA Lahore and propose new institutional arrangements for efficient service provision in the context of new master plan.
- Description and inventory of existing water, wastewater and storm water drainage systems.
- Preparation of GIS based maps for existing water supply, sewerage and drainage services in multi-layer system for whole district.
- Diagnostic analysis & surveys, data collection and carrying out requisite studies regarding water supply, sewerage & storm water drainage and waste water treatment system for master planning horizon up to the year 2040.
- Population projections, service area projections, present and planned land use, water demand projections and new source identification, and future sewerage & storm water drainage demand; and waste water treatment requirement for Lahore District with short, medium and long term goals, objectives, strategy and projects.
- Master Plan for Surface Water as alternative water source: Study & preparation of master plan for alternative water source(s), all possible sites / locations of surface water (BRB, Ravi Syphon & Marala etc.)
- **Ground Water:** Hydrological and hydro geological study for the whole District regarding ground water aquifer which is being depleted rapidly due to over-exploitation and reduction in recharge.
- Identification of areas of over-exploitation of ground water.
- **Arsenic Contamination:** Arsenic Contamination and identification of zones of Arsenic contamination.

- **Water Supply Network:** Zoning of water supply distribution areas. Evaluation of NRW level for each zone. Pilot project for one water supply distribution zone.
- **Comparative analysis of water supply distribution system through water storage tanks Vs direct pumping:**
- Engineering Design of sewerage system (left over areas / not covered in the studies recently conducted) including North Lahore, North East & East (Upto BRB Canal), Shahdara, South East, etc. and detailed design required in Phase-I or urgently required.
- Preparation of proposal for integration of sanitation of non WASA areas like Cantonment Boards, DHA, Railways, Model Town, Universities, Private Housing Schemes etc.
- Alternative material for RCC pipes due to crown failure incidences in RCC pipes.
- Quantity of storm water likely to be generated in the planning horizon at different stages of development with reference to 2 year & 5 years recurrence intervals.
- Study and evaluate the capacity of existing drains with reference to 2 year & 5 years recurrence intervals.
- Comprehensive engineering proposal for separation of sewage from open / storm water drains.
- Engineering Design of drainage system (left over areas / not covered in the studies recently conducted) including North Lahore, North East & East (Upto BRB Canal), Shahdara, South East, etc. and detailed design required in Phase-I or urgently required.
- Design of primary secondary and tertiary drainage network alongwith identification of new routes of primary drains in the city and in the district.
- Review of sites for waste water treatment plants proposed by M/s Balfour Maunsell and not covered by M/s NESPAK under the current study. Study and identification of new sites for WWTP in the remaining districts of Lahore.
- Engineering designing (and detailed design wherever urgently required / or required in Phase-I) and costing of water supply, sewerage & storm water drainage and waste water treatment projects for whole **Lahore District** and detailed design required in Phase-I or urgently required.
- Engineering designing (and detailed design wherever urgently required / or required in Phase-I) and costing for rehabilitation of existing water supply, sewerage & storm water drainage infrastructure and detailed design required in Phase-I or urgently required.
- Justification of selection of particular system improvement (based on needs, cost effectiveness, constructability, reliability, operation, maintenance, etc).
- Maps showing improvement components and service areas.
- Master plans must include Short term Infrastructure Investment Programmes (SIPs) and Long term Investment Programmes (LIPs).
- Prepare terms of reference for the preparation of priority investment projects.
- Prepare detailed sound financial practices strategies.
- Prepare detailed procurement strategies.
- Conduct Environmental impact assessments (EIAs).
- Prepare viable outsourcing proposals for operation & maintenance of tubewells, disposal stations and revenue collection.
- Improvement in customer services including establishment of Centralized Customer Center linked with Field Customer Centers. Conduction of exercise for Citizen Report Card (CRC) and devise Citizen Feedback Mechanism.



- Develop action plan for Master Plan implementation.

### **3.3 Scope of Work – Main elements**

The following sections describe the specific activities to be undertaken by the consultant.

#### ***3.3.1 Review of Existing Documentation and Data to Develop Water, Sewerage and Storm Water Drainage Profile of District Lahore***

The consultant would analyze and assess the quality of existing documentation and data in terms of its relevance to the current studies and identify data gaps to develop Water, Sewerage and Storm Water Drainage Profile of District Lahore.

The consultant would also suggest how these gaps might be overcome and collection of additional data that would be of benefit both to the present studies and subsequent studies that will be needed to prepare the investment projects.

#### ***3.3.2 Assess the Existing Institutional Arrangements***

The 1973 Constitution assigns responsibility for the sector to provinces and service provision to local governments. The 18th Amendment (April 19, 2010) has resulted in fiscal, administrative and functional decentralization of the sector to the province. Urban water supply operations are managed by Tehsil Municipal Administrations (TMAs) for small and medium sized towns and by Water and Sanitation Agencies (WASAs) in five large cities that includes Lahore.

In rural areas, with the reinforcement of the Local Government Ordinance (LGO) of 2001 urban – rural divide has been abolished and as a consequence prescribed the dissolution of rural water and sanitation institutions i.e. PHED at all levels.

The consultant would assess the effects of the decentralization process and bring clarity among roles of different departments involved in the sector through legal and regulatory framework and how these agencies would interact with each other to improve over all governance and administration.

#### ***3.3.3 Prepare a Study for Restructuring Water/Wastewater Service Provision***

The consultant is to prepare a study for restructuring the organizations that provide water and wastewater services. The study should consider and advise on *inter alia*:

- Governance arrangements
- Management and organizational structure
- Manning and resources
- Financial matters including budgets, accounts and funding as described at Section 3.3.4
- Contractual arrangements with administrative departments
- Responsibility for capital investment

### ***3.3.4 Prepare Financial Management Plan***

Financial Management Plan should cover the following areas:

- I. Revenues/Resource mobilization
  - a) User fee and such other sources of income
  - b) Transfers, grants and loans
  - c) Collection mechanisms and gaps
  - d) Political economy of the subsidies
  - e) Recommendations
  
- II. Expenditures
  - a) development schemes
  - b) operational expenditures
  - c) capital investments
  - d) utility bills
  - e) liabilities
  
- III. Accounting and reporting
  - a) accounting systems
  - b) monitoring and reporting systems of finances
  - c) automation of the system and recommendations etc
  
- IV. Budget
  - a) Budget formulation process
  - b) Estimates and allocations of past three years
  - c) Medium Term frameworks
  - d) Gaps
  - e) Recommendations
  
- V. Financial Analysis
  - a) Complete Financial Analysis of each zone operating expenditures vs operating income

### ***3.3.5 Assess the state of water supply, water quality and wastewater infrastructure assets***

The consultant will describe and assess the present water and wastewater systems throughout the district. This is to be done with reference to all relevant directives and other legal documents. For the water supply systems (including water quality) the assessment will include:

- Water sources, water treatment plants, conveyance, pumping, storage and distribution. Details to be shown on GIS based maps and presented schematically
- For the main components determine the capacity, condition and serviceability, age, materials etc. so far as this can be deduced from existing data and from field observations
- Identify bottlenecks, assess the level of leakage and the detection and repair policy
- From basic hydraulic modelling of the networks assess performance of the systems in terms of existing and future levels of service

- Water quality as delivered and investment needed to meet the requirements of the drinking water directive
- Consumption per capita per day for different consumer groups
- Scope for reducing operational costs including those of labour, materials, energy etc.

For the wastewater systems the assessment will include:

- Areas served by piped drainage systems whether separate or combined. Details to be shown on GIS based maps and schematics
- Industrial areas discharging wastewater to sewerage systems, flows and loads and describe any pre-treatment systems. Disposal systems used when there is no connection to sewerage
- For the main components determine the capacity, condition and serviceability, age, materials etc. so far as this can be deduced from existing data and from field observations
- From basic hydraulic modelling of the networks assess performance of the systems in terms of existing and future levels of service. Identify existing and potential bottlenecks
- Analyze compliance with applicable water quality and effluent standards and regulations. Describe the environmental impact of current systems of wastewater disposal, including sludges and toxic wastes

### **3.3.6 Preparation of GIS Based Maps:**

- i) Preparation of GIS based maps for existing water supply, sewerage and drainage services along with road network and important POIs in multi-layer system for whole district.
- ii) Consultants would also develop GIS Based Asset Management System for the district and provide GIS based complete inventory of assets regarding water supply, sewerage and storm water drainage system and infrastructure to the scales as required by WASA. It would facilitate WASA-L in tracking of asset at design, construction, repair, or replacement stages.
- iii) GIS mapping of the existing water supply, sewerages and drainage infrastructure of various private and public sector housing schemes including areas served by other agencies like Railways, Cantonment Boards, DHA, Model Town Society, other private housing schemes and villages covering the whole District Lahore for purpose of their proper integration.
- iv) Preparation of Contour Map (Contour interval 2 feet) for the Lahore District (on scale 1:2000 for urban areas (530 Sq.Km) and 1:5000 for rural areas (1070 Sq.Km).
- v) Procure and process latest Satellite Imageries (Quick bird) for Base/GIS mapping.
- vi) GIS maps should be in such a way that zone or sub division may act as a complete unit. Zone wise boundary may be marked on the plan.

### **3.3.7 Master Plan for Surface Water:**

- i) Study and evaluate the other potential water sources especially surface water alongwith their technical, economic and financial comparison with suggestions for their effective utilization for the district Lahore outside the project area of “Feasibility Study for Surface Water Induction and Construction of Water Treatment Plan, Lahore (PC-II) falling at ADP G.Sr.No.1357”.

- ii) Consultant would look into various options / sources with locations for induction of surface water in water supply system for the district Lahore outside the project area of “Feasibility Study for Surface Water Induction and Construction of Water Treatment Plan, Lahore (PC-II) falling at ADP G.Sr.No.1357” and make recommendations for the most viable proposal alongwith cost estimates. The consultant will carry out the feasibility study regarding use of surface water with special reference to the spread basin, study the water quality of surface water and examine the possibility of using the surface water from sources like Lahore Branch Canal at Jallo, BRB Canal near Ravi Siphon or Marala or installation of battery shallow pumps along the said sources.
- iii) Storm and Rain Water Harvesting Pilot Project in various areas of the district Lahore outside the project area of “Feasibility Study for Surface Water Induction and Construction of Water Treatment Plan, Lahore (PC-II) falling at ADP G.Sr.No.1357” including creation of storage capacities of raw water.

### 3.3.8 *Ground Water:*

Consultant would carry out hydrological and hydro geological study for the whole District Lahore regarding ground water aquifer.

- i) Consultant would carry out hydrological and hydro geological study for the whole District Lahore regarding ground water aquifer which is being depleted rapidly due to over-exploitation and reduction in recharge. The consultant will workout & recommend safe sustainable yield of aquifer and submit detailed report alongwith consideration and implication for sustainable water supply and ground water recharge from the rain water/storm water for the study area (Lahore District) by considering (but not limited to) the following parameters:
  - Prevention: To prevent run off and pollution.
  - Source Control: Control of run off for ground water recharge.
  - Site Control: Management of storm water towards large soak away or infiltration basin for the catchments.
  - Management of runoff from several sites / areas.
- ii) Consultants would also work out and recommend safe sustainable yield of aquifer for the design of Water Supply system. The consultant will carry out:
  - Identification of different strata(s) at different depth horizon (stratification) upto the required depth. The change in lithology will exactly be marked and will be presented in the form of lithological logs. The consultant will study the water behavior in boreholes and carry out the exercise throughout their period and prepare the guidelines for WASA staff to continue the study in selected strata(s).
  - Review geological, hydro-chemical data. The review should include previous studies carried out so far.
  - Make inventory of all the existing tubewells of WASA and other agencies i.e. PHA, Pakistan Railways, MES, Cantonment Boards, DHA, Hospitals, GORs, Government Buildings, PHED, TMAs & tubewells installed for agriculture & industrial purposes, giving their discharge and water level observations in order to assess the abstraction from the aquifer of Lahore district and stress on the same. Inventory of tubewells operated by

agencies other than WASA must include level of service delivery in terms of both quality and quantity.

- On site hydro-chemical testing regarding  $p^H$ , EC, Dissolved Oxygen etc.
- Prepare a ground water flow model and solute transport model for forecasting the flow path, potential, sustainability from deep aquifer and sites of new tubewells for safe and good quality large scale exploitation.
- Training of the Hydrology Directorate staff of WASA to run the ground water flow and solute transport models in future including provision of training materials.
- Analysis of strata samples and water samples with special reference to the variation of arsenic.
- Analysis and examination of geological formation and water samples collected from the bore holes for arsenic contamination under the investigation phase.
- Determination of interaction / hydraulic linkage between fresh water and arsenic contaminated water.
- Determination of interaction / hydraulic linkages between fresh water and saline ground water from other sides like Kasur Raiwind, etc.
- Study on the sources and Arsenic contamination levels and requisite mitigation measures to address water quality issues. Determination of source of arsenic in different zones (aquifer system) with the help of isotopic analysis and mobilization of arsenic in deep aquifer.
- Identification of arsenic affected areas by confirmative test.
- Assessment and identification of arsenic free areas for future exploitation production wells.
- Determination of sustainability from deep aquifer in case of large scale exploitation. It must incorporate expected draw down in case of:
  - Current extraction rate.
  - Expected extraction rate during the planning horizon.
  - Improved ground water recharge.
- The quantification of surface run-off and pollution load besides identification of impacts on receiving bodies.
- Zoning of Lahore District on the basis of quality, quantity of available water, preparation of future plans, design criteria and standards on the basis of zonal attributes.

iii) Consultant would professionally analyze the results of the hydro-geological & hydro-chemical, studies to provide a conclusive assessment regarding sustainability and arsenic free ground water availability. This is also required to assess the safe and adequate supply of good quality potable water free of odour & taste to the inhabitants

in the study area in planning horizon. The consultant shall analyze and write reports on the following, however, the consultant may suggest / use other sound engineering practices, techniques / equipments to achieve the desired results:

- Ground water flow model and solute transport model.
- Hydraulic and chemical characteristics of the aquifer of Lahore district.
- Water quality from test holes and its suitability for human beings.
- Consumption with special reference to the variation of arsenic.
- Source of arsenic contamination.
- Interaction between arsenic contaminated aquifer zones.
- Mobilization of arsenic in different zones / aquifer system.
  
- Assessment of potable water quality which may include but not limited to the following:
  - Inventory of water pints to demarcate polluted ground water zone between Mehmood Booti and Babu Sabu on both sides of River Ravi.
  - Analysis of water sample from the River Ravi at different locations to know the concentration of pollutants and heavy metals in the water of the River Ravi, which is infiltrating into the aquifer of Lahore.
  - **Drilling of required test bore holes in selected areas (not less than 20)**, collection of water samples at specified depth horizon for ascertaining water table/aquifer levels and water quality with reference to taste, odour, and heavy metals including arsenic and fluoride.
  
- Sustainability of the deep aquifer as a result of large scale exploitation.
- Based upon the results of the hydrological / hydro-geological study, technical concepts shall be reviewed and recommendations be made of the most economic alternatives in the development of water source, future tubewell requirements, distribution and transmission system.
- Identify the different zones of fluoride contamination of ground water, its affect on water abstraction and its vertical & lateral variations.

Prepare proposals with approved alternatives including design of new well centres, tubewells and reservoirs etc.

iv) Identification of areas of over-exploitation of ground water.

### **3.3.9 Comparative analysis of water supply distribution system through water storage tanks Vs direct pumping:**

- The original water supply system was based on supply through Overhead Reservoirs (OHRs). During the implementation of World Bank Project the major part of the capital investment was spent on sewerage disposal stations and construction of new Reservoirs was proposed to be delayed upto 1980. With the passage of time the most of the existing Reservoirs have outlived their lives and at present are not in use. The present water supply is generally & mostly based on direct pumping of water by the tubewells into the distribution system. The consultant will map and analyze the present direct pumping system, examine its flaws, pros & cons with respect to financial impact, water quality and pressure. The consultant will compare the present system with the supply through Overhead Reservoirs (OHRs) and will prepare a proposal for induction of Overhead Reservoirs in the system, if found feasible.
- While exploring the use of OHRs, study the use of existing OHRs (functional / non functional) and location of new OHRs may be determined through the detailed computer modeling of the distribution system considering the available water sources, their location, pipe network and water demand etc.
- Study the shortcomings of distribution network through computer aided analysis and prepare proposals for replacement of inadequate water lines, additional linking and looping to improve the system for equitable/ balanced supply distribution to all service areas.

Overdue study of the comparative analysis of water distribution system through water storage tanks at water source / tubewell and water treatment plant (ground level and overhead reservoirs) instead of direct pumping.

### **3.3.10 Water Supply Network:**

Zoning of water supply distribution areas, evaluation of NRW level for each zone, proposal for Pilot project for one water supply distribution zone. Each sub division will be dealt as one zone with isolated water supply network.

- i) Zoning of WASA Served areas into WASA Districts / Sub Districts with Isolated Service Delivery Networks instead of Comprehensive Water Supply System as per detailed requirements given in Section 3.3.10.1.
  - ii) Preparation of detailed engineering design/cost estimates for the whole district for improvement of water supply system.
  - iii) Carryout network analysis and development of water supply computer model for proposing implementable / feasible / operational sub division (zones) of Lahore district for further examination. Each sub division / zone may be divided into metered districts and sub districts.
- Each sub division / zone would comprise a number of District Management Areas (DMAs) through which the supply of water, evaluation of losses and control on unaccounted for water (UFW) would be managed. The DMAs should have a size between 2000 to 5000 water connections, further divided into sub DMAs.
  - Design each water district keeping in view the following parameters for each water district:

- Define the area and periphery of water districts.
  - Define the O&M standards and procedures.
  - Define the location of water district meters.
  - Prepare functional and administrative scope for water districts working and their interaction with WASA as a central command and control.
- The design of DMAs would include but not limited to:
- Proposal for existing OHRs in Lahore to make them functional and usable in the planning horizon after studying and carrying out proper tests to ensure their structural stability, proposal for new OHRs as per design requirement, combination of OHRs with well centers and isolated wells pumping into elevated storage feeding the distribution system.
  - Proposals for re-structuring the network of isolated DMAs which could easily be manageable, operative and maintainable.
  - Mapping of network for isolated DMAs on GIS including location of flow and pressure equipments etc.
  - Proposal for leak detection and management programme.
  - Proposals for 100% consumer and bulk water metering.

The consultant will analyze the financial sustainability of each zone. They will examine the water balance of each zone i.e. water production vs water consumption and will suggest remedial measure to improve the situation. The consultant will workout the cost of creation of zones along with detailed drawings for implementation.

- Duration of Water Supply to the consumers: Consultant would be required to study viability and chalk out detailed plan/ proposals to achieve internationally accepted 24/7 water supply service level alongwith detailed engineering design and cost estimates for the city area in phases and the supply of water for fixed durations a day in short term keeping in view the energy crisis and depleting water aquifer. He will also give recommendations for both the systems.
- Study and prepare the proposal for Pilot Project for one of WASA Districts / Zone with isolated water supply system with 100% metering at source and consumers level with complete command and control of single authority for construction & maintenance of the infrastructure for production of water, its supply and collection of water and sanitation charges. Consultant will also describe the assessment and complete methodology for preparation of proposal.

### **3.3.10.1 Zoning of Water Supply Distribution System:**

WASA intends to split the entire water supply system into small, feasible, isolated, manageable and sustainable units, which will be called “Zones”. Each zone will be



fully administered by Sub Divisional Officer (SDO) who will be responsible for its operation & maintenance. Activities in zones will also be looked after by concerned Executive Engineer (XEN), Director (O&M) and Dy. Managing Director (O&M). Zoning of water supply distribution system would be made keeping in view the following factors and requirements:

- i. Boundaries of each zone would be proposed / marked in such a way that each zone would be isolated from the other zones easily and can perform its function regarding water supply independently and in sustainable manner.
- ii. Existing infrastructure of each zone will be recorded and marked on the plan.
- iii. Workout the water requirement of each zone at different stages of development upto the planning horizon. The upper limit of water requirements per person would be 50gpcd (227-lpcd), which will be gradually reduced with efficient use of water, metering practices and by adoption of reduction of Non Revenue Water (NRW) strategies & practices.
- iv. Workout the tubewells requirement of each zone keeping in view the discharge & life of each tubewell and possibility of rehabilitation of bore during planning horizon.
- v. Workout the storage requirements (Overhead / Ground Reservoirs) of each zone. The possibility of rehabilitation / reuse of existing reservoirs may also be explored.
- vi. Workout the metering requirement for each zone. This will include domestic, commercial and Bulk Flow Meters (BFM). The existing meters and net requirements may be recorded.
- vii. Workout the lengths, sizes & material of each existing and proposed water supply pipe. GIS based map may also be prepared showing proper scale, sizes and material of each water supply pipe. The requirements for the replacement of pipelines may be worked out and same may be shown on GIS based maps. The consultant will prepare / chalk out, replacement of outlived water supply lines for each zone to address the water quality issues or water borne diseases. (The information collected / prepared will be used for the preparation of project Gastroenteritis-III).
- viii. Carry out water supply distribution system network analysis for each Zone. Prepare proposal for replacement / augmentation of undersized lines and induction of new lines as per results of water supply distribution network.
- ix. Chalk out the complete and comprehensive plan for carrying out exercises for Water Audit / Water Balance, Unaccounted for Water (UFW) & Non Revenue Water (NRW), etc.
- x. Water entering / leaving a zone from the other areas, if required, may be recorded through installation of Bulk Flow Meters (BFM).

### **3.3.11 Sewerage System:**

- i. Prepare comprehensive schemes for leftover areas not included in Central, South West and South Districts (this may include but not limited to North Lahore, North East & East (Upto BRB Canal), Shahdara, South East, etc.) in addition to the all remaining areas of the district outside present WASA's jurisdiction. This will also include rehabilitation proposals of existing system, proposals of additional trunk sewers, rehabilitation and augmentation of existing pumping stations and proposals for additional pumping stations in the district. The sewerage deficient areas will be critically examined. The proposals will include detailed engineering design and estimates of all the schemes, including Bhogiwal pumping station and sewerage scheme for areas on both sides of Lahore Branch Canal between BRB canal and Harbanspura Bridge for elimination of sewage inlets in the canal.
- ii. Proposals alongwith detailed engineering design / cost estimates for the remaining whole district outside present WASA area.
- iii. The proposals conceived for remaining District should be such that it can be integrated in future, if required.
- iv. Evaluate the use of RCC sewer pipes in the planning horizon after studying their on-site conditions at different age stages, behavior of concrete against foul gases especially to the upper half of sewer pipes. Provision of ventilating shafts for emission of foul gases may be examined. Study other pipe materials and suggest their use for future works with technical and financial comparison. Study the design of manholes, other appurtenances and bedding materials under pipelines presently in vogue and suggest changes and improvements.
- v. Study and review the precast RCC pipes and cast in situ RCC conduit sewer laying techniques presently in practice and recommend other sophisticated methods of construction keeping in view the latest advancement and technology. Trench-less technology may be examined for busy city areas.

### **3.3.12 Drainage System**

- i. Study and evaluate the capacity of existing drains viz-a-viz their design capacities for 2-years and 5-years frequency storm. Special emphasis may be given on right of ways (*ROWS*) on both sides of drains, encroachments and existing drainage stations.
- ii. Identify & study all the ponding areas, suggest the measures for their elimination and include in the overall proposals. The consultant will prepare comprehensive proposals for elimination or minimization of ponding time after detailed engineering study for all ponding areas of the city.
- iii. Study the use of off-line storage and seepage wells in formulation of new drainage schemes. The possibility of underground storage tanks may be examined especially for depression areas like Lakshmi etc.
- iv. Study, review and evaluate merits/demerits of covering of storm water drains in the present scenario with sewage inflows in drains and in the future scenario after separation of the sewage. Maintenance difficulties with mechanical means may be kept in view.
- v. Study core issue of dumping solid waste / plastic bags in drains and suggest remedial measures including fencing and plantation.

- vi. Study the existing drainage system regarding encroachments, reduction of water ways and inadequate clearance for water passage underneath bridges/culverts. Suggest and prepare the appropriate proposals to conduct the future design flows effectively.
- vii. Study sewage inflows in storm water drains, the effect on their performance during conduction of storm flows, environmental problems with other related issues and prepare proposals for complete separation of sewage from the drains.
- viii. Study and chalk out proposal for draining the flows of Cantonment Drain in the river under gravity during high floods at some downstream location of the river.
- ix. Prepare proposals for primary, secondary and tertiary drainage network with cost estimates capable of conducting designed storm water flows anticipated in the planning horizon. This will include remodeling and rehabilitation of existing drainage system to cope with the increased storm flows in the coming times effectively and efficiently. This will also include provision of new drainage stations, if required. Already prepared proposals in different districts will be studied, integrated and made part of the overall plan.
- x. Prepare the detailed engineering design for proposals of separation of sewage from drains.
- xi. Prepare proposals along with detailed engineering design/cost estimates for the whole district.

### ***3.3.13 Integration of WASA area with the Non-WASA areas:***

Preparation of proposal for integration of sanitation of present non WASA areas like Cantonment Boards, DHA, Railways, Model Town, Universities, Private Housing Schemes, other towns, colonies, villages, etc.

### ***3.3.14 Waste Water Treatment Plants:***

Consultant will study and identify new sites for WWTP in the remaining district of Lahore outside the project area of Ravi River Front.

- i. Study and evaluate the waste water treatment needs of the area of the remaining district of Lahore outside the project area of Ravi River Front in different stages of planning horizon. Study the mixed domestic and industrial waste water flows, their effects on the working and performance of proposed treatment plants and suggestions for their separation. In case of non separation of these flows, suggest the necessary modifications in design of treatment plants.
- ii. Study and review all the treatment methods and workout their technical and financial comparisons, merits / demerits with environment problems and sustainability with least O&M cost in the remaining district of Lahore outside

the project area of Ravi River Front. Suggest means to attract financing for construction of treatment plants and arrangement of recurring expenditures, as there is no likelihood of generation of any revenue in this regard. Production of electricity, fuel gases and bi-products such as fertilizers etc., may be examined in order to meet O&M expenditures.

- iii. Study the existing industrial areas in the remaining district of Lahore outside the project area of Ravi River Front keeping in view the future industrial growth, explore and prepare an action plan for industrial waste water disposal, treatment and management.
- iv. Detailed engineering design of identified waste water treatment plants alongwith cost estimates required for the remaining district of Lahore outside the project area of Ravi River Front
- v. Study of the waste water discharges of industrial units and hospitals in the remaining district of Lahore outside the project area of Ravi River Front (unit wise breakup), status of their treatment plants and their untreated sewage flows to WASAs System with necessary mitigation plans.

#### ***3.3.15 Operation & Maintenance of Water Supply, Sewerage & Storm Water Drainage System:***

- i) Study and review the performance of existing Water Supply, Sewerage and Storm Water Drainage System in the study area at micro level.
- ii) Determine the future needs for betterment of operation & maintenance of water supply, sewerage & storm water drainage system in the planning horizon. Prepare proposals to ensure adequate operation and maintenance of existing and proposed facilities.
- iii) Suggest and develop a planned preventive maintenance programme for all electrical, mechanical and other installations.
- iv) Study and suggest a phased action plan for automization of tubewells, disposal stations, drainage stations and other such installations in the planning horizon alongwith cost estimates.
- v) Evaluate the efficiency and skill level of existing O&M field staff and suggest optional requirements of human resources and their training modules alongwith tentative cost.
- vi) Preparation of training materials for better operation & maintenance.
- vii) After examining and reviewing the current operational and maintenance practices in WASA, consultant will suggest improvements for betterment of operation and maintenance through MIS facilities. Study and suggest the introduction of telemetry & SCADA system in WASA O&M in phased manner keeping in view the latest developments in IT field and to use it in

Energy Audit of tubewells and sewerage and drainage pumping installations alongwith cost estimates.

- viii) Preparation of maintenance proposal including desilting of sewers and drains, SOPs, mechanical & procedural improvements and other innovations to minimize the man entry in sewers & manholes and to minimize the threat to human lives.

### ***3.3.16 Improvement in Customer's Services:***

- i) Prepare work plan for WASA to run as a utility, with primary focus at customer satisfaction, preparation of Citizen's Charter for service delivery,
- ii) Prepare design, drawings, cost estimates & working schedule of a centrally located Customer Services Centre compatible to the customer services centre of good water utilities in the region and in the world. The proposal should also include the setup of One Window Operation System.
- iii) Linkage of centrally located customer centre with all field complaint centers.
- iv) The proposal should contain the improvement in the service delivery level for satisfaction of Government, customers and other stake holders.
- v) Prepare the comprehensive proposal for establishing the citizen feedback mechanism. This may include but not limited to:
  - Instituting periodic consumer surveys using tolls like citizen report cards and citizen score cards; induction of complaint boxes at Head Office, Directorate and Division level.
  - Establishing call centers for feedback;
  - Establishing website for online citizen feedback;
- vi) Explore the possibility of free basic water for poor people to be covered with multiple levels of service & Tariff or through subsidy from the Government of Punjab.
- vii) Prepare the proposal for mechanism of access to information and public record by the customers. This may also include provision of requisite information to public if not restricted under the prevalent law. Standard forms may be developed which may include payment/fees, as may be levied from time to time. Time frame for each type of application may also be prescribed. Cost may be worked out alongwith implementable plan.

### ***3.3.17 Prepare water, wastewater and storm water drainage Master Plans including short term infrastructure investment programmes (SIPs) and long term investment programmes (LIPs)***

The demand for water should be assessed on a component basis to 2040. The components are to include the drinking water (piped water supplies), industrial demand, commercial business demand and irrigation demand placed on those sources currently used conjunctively for

drinking water. The assumptions made are to be clearly explained and high, median and low demand estimates prepared for each component. Consideration is to be given to demand management measures such as stepped tariffs and leakage reduction strategies.

The consultant will concentrate on an assessment of the investments needed to achieve compliance with the existing rules, regulations and directives regarding drinking water, waste water treatment and the levels of service (frequency of supply, flooding incidences from sewers etc.) set by the administration for a time horizon of 25 years for LIPs.

Investments are to be prioritized and costed. The most urgent needs should be included in the SIPs with a time horizon of 5 years. Investments are to be prioritized using an approach which considers all key issues such as urgency of need, cost effectiveness, health and environmental benefits etc.

Further, the consultant is to prepare a master plan for the storm-water drainage for 1) the urban areas 2) for the entire district. The consultant will identify low lying ponding areas and shall also assess possibility of reuse of the storm-water and will provide alternatives for reuse and or disposal.

The consultant would submit complete engineering design drawings and their costing for all the rehabilitation works of existing infrastructure, new SIPs/ LIPs projects and their components mentioned in the Master Plan.

### ***3.3.18 Environmental Impact Assessment (EIAs)***

The consultant will determine whether there is a requirement for EIAs for any or all of the investment projects. Where this requirement exists, the consultant will undertake EIA studies.

### ***3.3.19 Outsourcing of Functions:***

Prepare viable outsourcing proposals for operation & maintenance of tubewells, disposal stations and revenue collection.

### ***3.3.20 Advise on Implementation and Procurement Strategies***

As an integral part of the work to develop an affordable investment programme, the consultant shall prepare an implementation plan and a procurement strategy for the investment measures and their supervision accordance to applicable laws and existing legal framework.

### ***3.3.21 Terms of Reference for the Preparation of Priority Investment Projects***

The consultant is to prepare terms of reference for preparation of the priority investment projects in the SIPs and LIPs. The preparation of those projects will include inter alia the collection of additional data (if needed), designs, drawings and specifications, EIAs, bills of quantities, financial appraisals and tender dossiers including conditions of contract etc.

### 3.4 Communication & Consultation Plan

The water, waste water & its treatment and storm water drainage Master Plan needs to be well communicated to all stakeholders for their ownership as well as successful implementation. The consultants are therefore required to prepare a comprehensive communication plan. The consultants are required to have extensive stakeholder's consultations before and during preparations of the Master Plan. The stakeholders include but not limited to government officials, elected representatives, professionals, practitioners, civil society members, builders & developers, academia, students and citizens of Lahore Region.

- i. The consultants are required to carry out at least the following consultative sessions:

Name of Workshop	No. of Workshops
<b>Inception Workshop</b>	<b>01</b>
<b>Consultation Workshops on:</b>	<b>08</b>
• <i>Finalization of District's Profile</i>	<i>01</i>
• <i>SWOT Analysis</i>	<i>02</i>
• <i>Finalization of Assessment Report</i>	<i>02</i>
• <i>Draft Master Plan</i>	<i>02</i>
• <i>Finalization of Master Plan</i>	<i>01</i>

- ii. The consultants will be required to include wide dissemination of findings and recommendations from time to time during plan preparation in their communication plan.

## 4 LOGISTICS AND TIMING

### 4.1 Project location

The study areas comprises of Lahore District as a whole. The consultant shall make his own arrangements in terms of arranging offices and equipment including computers, printers, photocopiers etc.

The relevant departments of the administration, municipalities, district offices and their water and wastewater departments will provide assistance to the consultant throughout the assignment in respect of data collection; however the consultant shall provide all necessary office equipment and supplies and arrange for any translation of documents.

### 4.2 Commencement date and period of execution

1. Commencement date\* Oct-2014
2. Completion period\* 12-months from the date of commencement.

Within one month of signature of the contract, the consultant will mobilize and start work.

*\*Actual dates to be agreed at time of contract signature.*

## INDICATIVE TIME FRAME

Indicative timeframe for services to be provided by the consultants:

Sr. No.	Scope of Services	Time
1.	Inception report	1/2 Months
2.	Water, Sewerage and Storm Water Drainage and Ground Water Profile of District Lahore (including all data collected and analyses in soft format). This includes maps and drawings mentioned at Sr.No.3 & 4 of Article 6.2 (Reports) Sectoral Assessment Report (Water, Sewerage, Drainage, Institutional Arrangement, Organizational Structure, Legal and Regulatory Framework, Financial Management etc.)	2-1/2 Months
3.	Draft Water, Sewerage, Storm Water Drainage, Ground Water Management Master Plan & Priority Investment Projects along with supporting maps and drawings. This includes updated WASA Design Criteria.	3 Months
4.	a) Environmental Impact Assessment b) Implementation and Procurement Framework/ Strategies c) Monitoring and Evaluation Framework d) Communication Plan, Consultation Plan & Workshops Report	2 Month
5.	Final Water, Sewerage, Storm Water Drainage, Ground Water Management Master Plan 2040 for District Lahore including maps of existing and proposed Infrastructure, Architectural & Engineering Design as per Sr.No.14, 15 & 16 of Article No.6.2 (Reports)	3-1/2 Months
6.	Cost Estimates, Drawings and Executive Summary.	1/2 Month

### Note:

- a) Total time period to complete the job for the assignment is **12** months.
- b) Time of approval of the documents shall not be included in the above time schedule.
- c) Approved TORs shall be an integral part of the contract agreement to be executed between the client and the Bidder.

## 5 CONSULTANT'S EXPERTISE

### 5.1 General

### 5.2 Personnel



### 5.2.1 Key experts

Key experts are individuals that have a crucial role in implementing the contract. The key experts required for this project are:

- Team leader / Project Manager
- Water Supply Expert
- Ground Water Expert
- Surface Water Treatment Expert
- Wastewater Expert
- Drainage Expert
- GIS Expert
- Electrical Expert
- Mechanical Expert
- Structure Expert
- Environmental Expert
- Sociologist / Customer Services Expert
- Institutional Expert
- Financial Management Expert

Details of the requirements and the indicative inputs of the key experts are set out in the following table and the consultant is to include a full CV of his nomination for each position, with his proposal.

Key Position	Experience (indicative)
Team Leader	At least 15 years of experience
Water Supply Expert	At least 15 years of experience
Ground Water Expert	At least 15 years of experience
Surface Water Treatment Expert	At least 15 years of experience
Wastewater Expert	At least 15 years of experience
Drainage Expert	At least 15 years of experience
GIS Expert	At least 15 years of experience
Electrical Expert	At least 15 years of experience
Mechanical Expert	At least 15 years of experience
Structure Expert	At least 15 years of experience
Environmental Expert	At least 15 years of experience
Institutional Expert	At least 15 years of experience
Sociologist / Customer Services Expert	At least 15 years of experience
Financial Management Expert	At least 15 years of experience

### 5.2.2 Short Term Experts

The following expertise is to be provided by short term experts (7 to 10 years experience) unless the nominated long term experts can demonstrate that they have this expertise:

- Drinking Water Quality and Treatment
- Wastewater Treatment

- Civil Engineering – pipelines and structures
- Mechanical Engineering – waste water treatment
- Geotechnical Engineering
- Environment Expert
- Urban Planning
- Information Management System
- Financial Management
- Human Resource
- Monitoring and Evaluation
- Communication
- Environmental/EIA
- Hydraulics
- Financial and Economics
- Contracts and Procurement
- Operation & Management

## 6 REPORTS

### 6.1 Reporting Requirements

The consultant shall prepare the reports detailed in the following sections. They will be prepared in both hard copy and electronic formats.

The reports are to be submitted to the contracting authority (WASA-LDA) only and not distributed to other parties. Language of the reports is English.

### 6.2 Reports to be submitted (deliverables)

The consultant will describe the situation as found at the start of the assignment, discuss key issues and suggest any revisions to the approach presented in his proposal including the schedule of tasks and programme.

The final report should be submitted two weeks before the completion date. It should describe the activities carried out under the assignment and the extent to which the consultant has delivered the expected results. It will identify further TA needs to carry the priority projects forward to implementation.

Sr. No.	Scope of Services	No. of copies / Deliverables
1.	Inception report	<b>20 Hard Copies + 10 Sets of CDs.</b>
2.	(A) Water, Sewerage, Storm Water Drainage and Ground Water Profile of District Lahore (including all data collected and analyses in soft format)	<b>10 Hard Copies + 10 Sets of CDs.</b>
	(B) Sectoral Assessment Report (Water, Sewerage,	<b>10 Hard Copies + 10 Sets of CDs.</b>

Sr. No.	Scope of Services	No. of copies / Deliverables
	Drainage, Ground Water, Institutional Arrangement, Organizational Structure, Legal and Regulatory Framework, Financial Management etc.) <ul style="list-style-type: none"> <li>• Institutional &amp; Organizational</li> <li>• Legal &amp; Regulatory Guidelines.</li> <li>• Financial Management.</li> </ul>	
3.	Maps of Lahore District (Base Map-along with GIS vector and raster data base) @ scale of 1:10,000 & 1:2400 including Plan on A0 size. Contour Map at 2-foot contour interval with scale 1:2000 for Urban areas and 1:5000 for Rural areas.	<b>10 Hard Copies + 10 Sets of CDs.</b>
4.	Engineering Drawings (along with AutoCAD files) of Existing Infrastructure @ scale of 1:10,000 & 1:2400 including one sheet each on A0 size for complete existing water supply, sewerage and storm water drainage system. (Separate sheets for City area and District Area alongwith Index Sheets)	<b>10 Hard Copies + 10 Sets of CDs.</b>
5.	Updated WASA Design Criteria	<b>50 Hard Copies + 10 Sets of CDs.</b>
6.	Preliminary Design Report and Draft Water, Sewerage Storm Water Drainage, Ground Water Master Plan & Priority Investment Projects along with supporting maps and drawings ( <i>This includes the zoning of water supply distribution system</i> )	<b>10 Hard Copies + 10 Sets of CDs.</b>
7.	Environmental Impact Assessment	<b>10 Hard Copies + 10 Sets of CDs.</b>
8.	Implementation and Procurement Framework/ Strategies	<b>10 Hard Copies + 10 Sets of CDs.</b>
9.	Monitoring and Evaluation Framework	<b>10 Hard Copies + 10 Sets of CDs.</b>
10.	Communication Plan & Workshops Report	<b>10 Hard Copies + 10 Sets of CDs.</b>
11.	Consultation / Workshop Report	<b>10 Hard Copies + 10 Sets of CDs.</b>
12.	Final Water, Sewerage Storm Water Drainage and Ground Water Master Plan 2040 for District Lahore	<b>10 Hard Copies + 10 Sets of CDs.</b>
13.	Map for existing & proposed Infrastructure (along with GIS vector and raster data base) of District Lahore @ scale of 1:10,000 & 1:2400 including one sheet each on A0 size for complete existing & proposed water supply, sewerage and storm water drainage system. (Separate sheets for City area and District Area alongwith Index Sheets.)	<b>20 Hard Copies + 10 Sets of CDs.</b>
14.	Architectural & Engineering Drawings (along with AutoCAD files) of Proposed Infrastructure suggested for rehabilitated or new construction respectively. Index Sheet may be added.	<b>20 Hard Copies + 10 Sets of CDs.</b>
15.	All collected processed and unprocessed data (along with GIS vector and raster database) and analysis models in CDs / DVDs	<b>05 Sets of CDs / DVDs.</b>
16.	Executive Summary	<b>100 Hard Copies + 10 Sets of CDs.</b>

**Ownership:** All data, models, softwares, soft & hard files of all design, supporting data and documents etc. which were used for this study will be handed over to WASA.

## **7 MEETINGS**

### **7.1 General**

For the success of the project it is important that the stakeholders are closely involved in the progress of the study and the development of proposals. Therefore, throughout the assignment the team leader and other experts should be available for meetings called by the contracting authority and for *ad-hoc* telephone consultations on any matter concerning the contract.

### **7.2 Presentation of Master Plans**

The consultant is to prepare a formal presentation on the results of assignment. This should be based on the draft final reports. The audience for the presentation will be decided by the contracting authority and may include funding agencies and the press.

## **8 MONITORING AND EVALUATION**

### **8.1 Definition of indicators**

The primary indicator used for monitoring the project will be progress achieved against the programme prepared by the consultant in his proposal and as modified (if at all) in contract negotiations.

Secondary indicators will be the timely submission of the required outputs of an acceptable quality standard and the minutes of progress meetings.

### **8.2 Special requirements**

The scope of work may be increased and the associated budget as well, at the request of the contracting authority. In such a case a contract addendum, justifying the change in scope will be issued.

## **9 BIDDING**

Selection of consulting firm will be carried out using “One Stage - Two Envelope Bidding Procedure” as per Consultants Selection Guidelines of the Planning & Development Department, GoPb.

## 10 GENERAL CONDITIONS

- i. Selection of consultant would be through transparent and international competitive bidding under Consultants Selection Guidelines (Article 2.5.1) of P&D Department, Government of the Punjab. International / foreign consultant would, however, be required to associate local consultant or form a consortia as per instructions / guidelines of Federal Government for capacity building of the local expertise and vice versa (local firm's association / consortium with international consultant). In case if the Local consultant has the leading role then they would, however, be required to associate International / foreign consultant or form a consortium as per the instructions / guidelines of Federal Government for capacity building of the local expertise and vice versa (local firm's association / consortia with international consultant).
- ii. The time period for the completion of the study shall be 18 months from signing the contract.
- iii. All documents shall be prepared in English and submitted on electronic media as Adobe PDF files.
- iv. All documents produced / software used in the consultancy service shall be the property of the LDA and Consultant shall not use for any other purpose without the permission of the DG LDA.
- v. All Engineering Drawing and Maps shall be submitted in hard and soft formats (compatible with AutoCAD and ESRI's ArcGIS respectively)
- vi. The Consultants may be required to perform any other services deemed necessary by the Client during the execution of this Contract towards the achievement of general objectives as given above.
- vii. The consultant will be required to work in close coordination with the LDA & other Government Department / Agencies.
- viii. The Consultant will be required to hold extensive consultations and presentations with the stakeholders.



# **Standard Form of Contract– Lump-Sum Payments**

**CONTRACT FOR CONSULTANCY SERVICES**

**between**

**WATER AND SANITATION AGENCY  
LAHORE DEVELOPMENT AUTHORITY**

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**and**

**(NAME OF THE CONSULTANTS)**

---

**for**

**“Preparation of Master Plan for Water Supply, Sewerage and Drainage  
for Lahore”**

**Date Month and Year**

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## FORM OF CONTRACT

- [Notes: 1. Use this Form of Contract when the Consultants perform Services as Sole Consultants.*
- 2. In case the Consultants perform Services as a Member of the joint venture, use the Form included at the end.*
- 3. All notes should be deleted in the final text.]*

This CONTRACT (hereinafter called the "Contract") is made on the \_\_ day of \_\_ month)of \_\_\_\_ (year), between, on the one hand \_\_\_\_\_ (hereinafter called the "Client" which expression shall include the successors, legal representatives and permitted assigns) and, on the other hand, \_\_\_\_\_ (hereinafter called the "Consultants" which expression shall include the successors, legal representatives and permitted assigns).

### WHEREAS

- (a) the Client has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services"); and
- (b) the Consultants, having represented to the Client that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the Parties hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
- (a) the General Conditions of Contract;
- (b) the Special Conditions of Contract;
- (c) the following Appendices:

*[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below/next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.]*

Appendix A : Description of the Services  
Appendix B : Reporting Requirements  
Appendix C : Key Personnel and Sub consultants  
Appendix D : Breakdown of Contract Price in Foreign Currency(**Not Used**)  
Appendix E : Breakdown of Contract Price in Local Currency  
Appendix F : Services & Facilities to be Provided by the Client

Appendix G: Integrity Pact (for Services above Rs. 10 million)

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract, in particular:
- (a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and
  - (b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names in two identical counterparts, each of which shall be deemed as the original, as of the day, month and year first above written.

	For and on behalf of
	_____
Witness	(CLIENT)
Signatures _____	Signatures _____
Name _____	Name _____
Title _____	Title _____
	(Seal)

	For and on behalf of
	_____
Witness	(CONSULTANTS)
Signatures _____	Signatures _____
Name _____	Name _____
Title _____	Title _____
	(Seal)

## 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 laws and any other instruments having the force of law in the Islamic Republic of Pakistan, as those may be issued and in force from time to time;
- (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (c) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (d) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Sub-Clause 2.1;
- (e) "GC" means these General Conditions of Contract;
- (f) "Government" means the Government of the Islamic Republic of Pakistan and/or Provincial Government(s);
- (g) "Foreign Currency" means currency other than the currency of Islamic Republic of Pakistan.;
- (h) "Local Currency" means the currency of the Islamic Republic of Pakistan;
- (i) "Member" in case the Consultants consist of a joint venture of more than one entity, means any of the entities, and "Members" means all of these entities;
- (j) "Party" means the Client or the Consultants, as the case may be, and "Parties" means both of them;
- (k) "Personnel" means persons hired by the Consultants or by any Sub-Consultant as employees and assigned to the performance of the Services or any part thereof;
- (l) "SC" means the Special Conditions of Contract by which the GC are amended or supplemented;

- (m) "Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A;
- (n) "Sub-Consultant" means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Sub-Clause 3.6;
- (o) "Third Party" means any person or entity other than the Client, the Consultants or a Sub-Consultant; and
- (p) "Project" means the work specified in SC for which consultancy services are desired.

## **1.2 Law Governing the Contract**

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law of Pakistan.

## **1.3 Language**

This Contract has been executed in the English language which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All the reports and communications shall be in the English language.

## **1.4 Notices**

Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an Authorized Representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, or facsimile to such Party at the address of the Authorized Representatives specified under Sub-Clause SC 1.6. A Party may change its address for notice hereunder by giving the other Party notice of such change.

## **1.5 Location**

The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations as mutually agreed by the Parties.

## **1.6 Authorized Representatives**

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants shall be taken or executed by the Authorized Representatives specified in the SC.

## **1.7 Taxes and Duties**

Unless specified in the SC, the Consultants, Sub-Consultants, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the

Applicable Law of Pakistan, the amount of which is deemed to have been included in the Contract Price.

### **1.8 Leader of Joint Venture**

In case the Consultants consist of a joint venture of more than one entity, the Consultants shall be jointly and severally bound to the Client for fulfillment of the terms of the Contract and designate the Member named in the SC to act as leader of the Joint Venture, for the purpose of receiving instructions from the Client.

## **2. COMMENCEMENT, COMPLETION, MODIFICATION, AND TERMINATION OF CONTRACT**

### **2.1 Effectiveness of Contract**

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

### **2.2 Termination of Contract for Failure to Become Effective**

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than twenty eight (28) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party except for the work (if any) already done or costs already incurred by a Party at the request of the other Party.

### **2.3 Commencement of Services**

The Consultants shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the SC.

### **2.4 Expiration of Contract**

Unless terminated earlier pursuant to Sub-Clause 2.9, this Contract shall expire when, pursuant to the provisions hereof, the Services have been completed and the payments of remunerations including the direct costs if any, have been made. The Services shall be completed within a period as is specified in the SC, or such extended time as may be allowed under Sub-Clause 2.6.

The term "Completion of Services" is as specified in the SC.

### **2.5 Modification**

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made in writing, which shall be signed by both the Parties.

## **2.6 Extension of Time for Completion**

If the scope or duration of the Services is increased:

- (a) the Consultants shall inform the Client of the circumstances and probable effects;
- (b) the increase shall be regarded as Additional Services; and
- (c) the Client shall extend the time for Completion of the Services accordingly.

## **2.7 Force Majeure**

### **2.7.1 Definition**

- (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial actions (except where such strikes, lockouts or other industrial actions are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub-Consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

### **2.7.2 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 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 in writing not later than fifteen (15) days following the occurrence of such an event.

### **2.7.3 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.

### **2.7.4 Payments**

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants 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 purpose of the Services and in reactivating the Services after the end of such period.

### **2.8 Suspension of Payments by the Client**

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

### **2.9 Termination**

#### **2.9.1 By the Client**

The Client may terminate this Contract, by not less than thirty (30) days written notice of termination to the Consultants, to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this Sub-Clause 2.9.1 and sixty (60) days' in the case of the event referred to in paragraph (f):

- (a) if the Consultants do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 7 hereof;



- (d) if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;
- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (f) if the Client, in its sole discretion, decides to terminate this Contract.

### **2.9.2 By the Consultants**

The Consultants may terminate this Contract, by not less than thirty (30) days written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Sub-Clause 2.9.2:

- (a) if the Client fails to pay any monies due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 7 within forty-five (45) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;
- (c) if, as a result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (d) if the Client fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 7 hereof.

### **2.9.3 Cessation of Services**

Upon receipt of notice of termination under Sub-Clause 2.9.1, or giving of notice of termination under Sub-Clause 2.9.2, the Consultants shall take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants, and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Sub-Clauses 3.8 or 3.9.

### **2.9.4 Payment upon Termination**

Upon termination of this Contract pursuant to Sub-Clauses 2.9.1 or 2.9.2, the Client shall make the following payments to the Consultants:

- (a) remuneration and reimbursable direct costs expenditure pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination. Effective date of termination for purposes of this Sub-Clause means the date when the prescribed notice period would expire;
- (b) except in the case of termination pursuant to paragraphs (a) through (d) of Sub-Clause 2.9.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel, according to Consultants Traveling Allowance Rules.

In order to compute the remuneration for the part of the Services satisfactorily performed prior to the effective date of termination, the respective remunerations shall be proportioned.

### **2.9.5 Disputes about Events of Termination**

If either Party disputes whether an event specified in paragraphs (a) through (e) of Sub-Clause 2.9.1 or in paragraph (a) through (d) of Sub-Clause 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause 7 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

## **3. OBLIGATIONS OF THE CONSULTANTS**

### **3.1 General**

The Consultants shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services,

as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-Consultants or third parties.

### **3.2 Consultants Not to Benefit from Commissions, Discounts, etc.**

The remuneration of the Consultants pursuant to Clause 6 shall constitute the Consultants' sole remuneration in connection with this Contract or the Services, and the Consultants 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 Consultants 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 remuneration.

### **3.3 Confidentiality**

The Consultants, their Sub-Consultants, and the Personnel of either of them shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client.

### **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 their employees in so far as the design of the Project is concerned to the extent and with the limitations as mentioned herein below.

If the Client 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 Consultants shall, at the request of the Client, indemnify the Client against any or all risks arising out of the furnishing of professional services by the Consultants to the Client, not covered by the provisions contained in the first para above and exceeding the limits set forth in second para above provided the actual cost of procuring such

indemnity as well as costs exceeding the limits set forth in fourth para above shall be borne by the Client.

### **3.5 Other Insurance to be Taken out by the Consultants**

The Consultants (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 Client, insurance against the risks, and for the coverage, as are specified in the SC; and (b) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

### **3.6 Consultants' Actions Requiring Client's Prior Approval**

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

- (a) appointing such Personnel as are listed in Appendix-C merely by title but not by name;
- (b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of Sub-consultants and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub-consultants and its Personnel pursuant to this Contract;
- (c) any other action that may be specified in the SC.

### **3.7 Reporting Obligations**

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

### **3.8 Documents Prepared by the Consultants to be the Property of the Client**

All plans, drawings, specifications, reports, and other documents and software prepared by the Consultants in accordance with Sub-Clause 3.7 shall become and remain the property of the Client, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver (if not already delivered) all such documents and software to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software.

Restriction(s) about the future use of these documents is specified in the SC.

### **3.9 Equipment and Materials Furnished by the Client**

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided exclusively for this purpose by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Client's instructions or afford salvage value of the same. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.

### **3.10 Accounting, Inspection and Auditing**

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges, and cost, and the basis thereof, and (ii) shall permit the Client or its designated representatives periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client.

## **4. CONSULTANTS' PERSONNEL AND SUBCONSULTANTS**

### **4.1 Description of Personnel**

The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultants' Key Personnel are described in Appendix C. The Key Personnel and Sub-Consultants listed by title and/or by name, as the case may be, in Appendix C are deemed to be approved by the Client.

### **4.2 Removal and/or Replacement of Personnel**

- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Key Personnel, the Consultants shall provide as a replacement a person of equivalent or better qualifications;
- (b) If the Client, (i) finds that any of the Personnel have committed serious misconduct or have been charged with having committed a criminal action; or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Client's written request specifying the grounds therefore, provide as a replacement a person with qualifications and experience acceptable to the Client.
- (c) Except as the Client may otherwise agree, the Consultants shall; (i) bear all the additional travel and other costs arising out of or incidental to any removal and/or replacement; and (ii) bear any additional remuneration, to be paid for

any of the Personnel provided as a replacement to that of the Personnel being replaced.

## **5. OBLIGATIONS OF THE CLIENT**

### **5.1 Assistance, Coordination and Approvals**

#### **5.1.1 Assistance**

The Client shall use its best efforts to ensure that the Client shall:

- (a) provide at no cost to the Consultants, Sub-Consultants and Personnel such documents prepared by the Client or other consulting appointed by the Client as shall be necessary to enable the Consultants, Sub-Consultants or Personnel to perform the Services. The documents and the time within which such documents shall be made available, are as specified in the SC;
- (b) assist to obtain the existing data pertaining or relevant to the carrying out of the Services, with various Government and other organizations. Such items unless paid for by the Consultants without reimbursement by the Client, shall be returned by the Consultants upon completion of the Services under this Contact;
- (c) issue to officials, agents and representatives of the concerned organizations, all such instructions as may be necessary or appropriate for prompt and effective implementation of the Services;
- (d) assist to obtain permits which may be required for right-of-way, entry upon the lands and properties for the purposes of this Contract;
- (e) provide to the Consultants, Sub-consultants, and Personnel any such other assistance and exemptions as may be specified in the SC.

#### **5.1.2 Co-ordination**

The Client shall:

- (a) coordinate and get or expedite any necessary approval and clearances relating to the assignment from any Government or Semi-Government Agency, Department or Authority, and other concerned organization named in the SC.
- (b) coordinate with any other consultants employed by the Client.

#### **5.1.3 Approvals**

The Client shall accord approval of the documents within such time as specified in the SC, whenever these are applied for by the Consultants.

## **5.2 Access to Land**

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all land of which access is required for the performance of the Services.

## **5.3 Change in the Applicable Law**

If, after the date of this Contract, there is any change in the Applicable Law of Pakistan which increases or decreases the cost of the Services rendered by the Consultants, then the remunerations and direct costs otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly, and corresponding adjustment shall be made to the amounts referred to in Sub-Clause 6.2 (a) or (b), as the case may be.

## **5.4 Services and Facilities**

The Client shall make available to the Consultants, Sub-consultants and the Personnel, for the purpose of the Services and free of any charge, the services, facilities and property described in Appendix F at the times and in the manner specified in said Appendix F, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on; (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services; (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources; and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Clause 6 hereinafter.

## **5.5 Payments**

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause 6 of this Contract.

# **6. PAYMENTS TO THE CONSULTANTS**

## **6.1 Lump Sum Remuneration**

The Consultants' total remuneration shall not exceed the Contract Price and shall be a fixed lump sum including all staff costs, incurred by the Consultants in carrying out the Services described in Appendix A. Other reimbursable direct costs expenditure, if any, are specified in the SC. Except as provided in Sub-Clause 5.3, the Contract Price may only be increased above the amounts stated in Sub-Clause 6.2 if the Parties have agreed to additional payments in accordance with Sub-Clauses 2.5, 2.6, 5.4 or 6.6.

## **6.2 Contract Price**

- (a) Local currency payment shall be made in Pakistani Rupees.
- (b) The SC shall specify the break up of remuneration to be paid, respectively, in local currencies.

## **6.3 Terms and Conditions of Payment**

Payment will be made to the account of the Consultants and according to the payment schedule stated in the SC. Payments shall be made after the conditions listed in the SC for such payments have been met, and the Consultants have submitted an invoice to the Client specifying the amount due.

## **6.4 Period of Payment**

- (a) Advance payment to the Consultants shall be affected within the period specified in the SC, after signing of the Contract agreement between the Parties.
- (b) Any other amount due to the Consultants shall be paid by the Client to the Consultants within twenty-eight (28) days in local currency after the Consultants' invoice has been delivered to the Client.

## **6.5 Delayed Payments**

If the Client has delayed payments beyond the period stated in paragraph (b) of Sub-Clause 6.4, financing charges shall be paid to the Consultants for each day of delay at the rate specified in the SC.

## **6.6 Additional Services**

Additional Services means:

- (a) Services as approved by the Client outside the Scope of Services described in Appendix A;
- (b) Services to be performed during the period extended pursuant to Sub-Clause 2.6, beyond the original schedule time for completion of the Services; and
- (c) any re-doing of any part of the Services as a result of Client's instructions.

If, in the opinion of the Client, it is necessary to perform Additional Services during the currency of the Contract for the purpose of the Project, such Additional Services shall be performed with the prior concurrence of both the Parties. The Consultants shall inform the Client of the additional time (if any), and the additional remuneration and reimbursable direct costs expenditure for such Additional Services. If there is no disagreement by the Client within two weeks of this intimation, such additional time, remuneration and reimbursable direct costs expenditure shall be deemed to become



part of the Contract. Such remuneration and reimbursable direct costs expenditure shall be determined on the basis of rates provided in Appendices E, in case the Additional Services are performed during the scheduled period of the Services, otherwise remuneration for Additional Services shall be determined on the basis of Consultants' billing rates prevailing at the time of performing the Additional Services.

#### **6.7 Consultants' Entitlement to Suspend Services**

If the Client fails to make the payment of any of the Consultants' invoice (excluding the advance payment), within twenty-eight (28) days after the expiry of the time stated in paragraph (b) of Sub-Clause 6.4, within which payment is to be made, the Consultants may after giving not less than fourteen (14) days' prior notice to the Client, suspend the Services or reduce the rate of carrying out the Services, unless and until the Consultants have received the payment.

This action will not prejudice the Consultants entitlement to financing charges under Sub-Clause 6.5.

### **7. SETTLEMENT OF DISPUTES**

#### **7.1 Amicable Settlement**

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

#### **7.2 Dispute Settlement**

Any dispute between the Parties as to matters arising pursuant to this Contract which 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 of the Arbitration Act, 1940 (Act No.X of 1940) and of the Rules made there under and any statutory modifications thereto. The Arbitration shall be held in Pakistan.

Services under the Contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due to or by the Client shall be withheld on account of such proceedings.

### **8. INTEGRITY PACT**

**8.1** 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 Client 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 Client 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 2.9.3. Payment upon such termination shall be made under Sub-Clause 2.9.4 (a) after having deducted the amounts due to the Client under Sub-Para (a) and (c) of this Sub-Clause.

### III. SPECIAL CONDITIONS OF CONTRACT

No. Amendments of, and Supplements to, Clauses in the General Conditions  
of GC of Contract  
Clause

---

#### 1.1 Definitions

(p) "Project" means .....

#### 1.6 Authorized Representatives

The Authorized Representatives are the following:

For the Client:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Telephone : \_\_\_\_\_  
Facsimile : \_\_\_\_\_  
E.Mail : \_\_\_\_\_

For the Consultants:

\_\_\_\_\_ (Name of Team Leader)  
\_\_\_\_\_ (Project)  
\_\_\_\_\_ (Address)  
\_\_\_\_\_  
\_\_\_\_\_  
Telephone : \_\_\_\_\_  
Facsimile : \_\_\_\_\_  
E.Mail : \_\_\_\_\_

#### 1.7 Taxes and Duties

[Note: To be included in this Sub-Clause as agreed with the Client.]

---

*[All notes should be deleted in final text. All blanks should be filled in.]*

**1.8 Leader of the Joint Venture**

The leader of the Joint Venture is ..... (name of the Member of the Joint Venture).

*[Note: If the Consultants do not consist of more than one entity, the Sub-Clause 1.8 should be deleted.]*

**2.1 Effectiveness of Contract**

The date on which this Contract shall come into effect is the date when the Contract is signed by both the Parties and the amount of advance payment due upon signing of the Contract is received by the Consultants.

**2.2 Termination of Contract for Failure to Become Effective**

The time period shall be ..... days, or such other period as the Parties may agree in writing.

*[Note: Fill in the time period e.g one hundred twenty (120) days.]*

**2.3 Commencement of Services**

The Consultants shall commence the Services within twenty-one (21) days after the date of signing of Contract Agreement, or such other time period as the Parties may agree in writing.

**2.4 Expiration of Contract**

The period of completion of Services shall be ----- days from the Commencement Date of the Services or such other period as the Parties may agree in writing. The Services are estimated to be completed before ..... 20...

"Completion of Services" means.....  
.....  
.....

**3.5 Insurance to be Taken out by the Consultants**

The risks and the coverages shall be as follows:

- (a) Third Party motor vehicle liability insurance in respect of motor vehicles operated in Pakistan by the Consultants or their Personnel or any Sub-Consultants or their Personnel, with a minimum coverage of Rs.....
- (b) Insurance against loss of or damage to equipment purchased in whole or in part with funds provided under the Contract.

### 3.6 Consultants' Actions Requiring Client's Prior Approval

The Consultants shall require written approval from the Client before committing to any action under the following:

- i) variations orders in respect of:
  - additional items of Assignment as determined by the Client to be necessary for the execution of Assignment.
  - any new item of the Assignment not envisaged in the Contract Documents and which is determined by the Client to be necessary for the execution of Assignment.
  - any item of Assignment covered under Provisional Sums
- ii) terms of Performance Guarantee or Insurance Policy.
- iii) affecting the costs under the following clauses of Conditions of Contract.
  - Adverse Physical Conditions and Artificial Obstructions
  - Suspension of Assignments
  - Forfeiture
  - Special Risks
  - Frustration
- vi) final Assignment deliverable statement
- vii) release of retention money

### 3.8 Documents Prepared by the Consultants to be the Property of the Client

The Client and the Consultants shall not use these documents for purposes unrelated to this Contract without the prior written approval of the other Party.

#### 5.1.1 Assistance

- (a) The Client shall make available within ..... days from the Commencement Date, the documents namely  
.....  
.....

This list if warranted shall be supplemented subsequently.

- (e) Other assistance and exemptions to be provided by the Client are.....  
.....

## 5.1.2 Coordination

(a) The departments and agencies include .....

.....

.....

## 5.1.3 Approvals

The Client shall accord approval of the documents immediately but not later than fourteen (14) days from the date of their submission by the Consultants.

## 6.1 Lump Sum Remuneration

*[Note: In case there are other expenditures in respect of which reimbursement is allowed in addition to the lump sum remuneration, details of such reimbursable direct costs expenditure which may include Sub-Consultants' travel, accommodation etc., may be indicated herein. Each item shall be specified whether it is payable on the basis of (a) lump sum monthly rate; or (b) reimbursement of actual expenditures.]*

## 6.2 Contract Price

The amount in local currency is Pakistani Rupees.....

## 6.3 Terms and Conditions of Payment

*[Note: Terms and Conditions of Payment provided below is meant for sample reference. This should be edited on case to case basis as per scope of work of the consultancy services of the specific project.]*

A lump sum amount in local currencies against referred under SC 6.2 shall be paid to the Consultants for the Services to be completed within the period specified in SC 2.4.

Payments shall be made according to the following schedule:

Ten (10) percent of the Contract Price shall be paid on the commencement date against the submission of a demand/ bank guarantee for the same. For every phase tentative payment schedule shall be as follows for each of phase cost.

S#	Description	%age Payment
1.	Inception Report	10%
2.	Sectoral Analysis Report and exiting system	20%
3.	Preliminary Design Report	20%
4.	Communication Plan, EIA, Procurement Strategies & Consultative workshops etc.	10%
5.	Final Design Report	30%
6.	Cost Estimates + Drawings and Estimates	10%

An advance payment of 10% of the Contract Price referred under SC 6.2(a) shall be paid to the Consultants upon signing of the Contract Agreement, after receipt of acceptable bank guarantee for advance payment. The advance payment shall be adjusted by retaining 10% of each payment made to the Consultant.

**6.4 Period of Payment**

- (a) The time period for advance payment shall be .....( ) days after signing of Contract Agreement by both the Parties. (Fill in the time period e.g. thirty (30) days).

## **IV APPENDICES**



## **Appendix A**

### **Description of the Services**

[Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Client, etc.]

## **Appendix B**

### **Reporting Requirements**

Pursuant to Sub-Clause GC-3.7, the Consultants shall submit the following reports:

[List format, frequency, and contents of reports; persons to receive them; dates of submission and the number of copies of each submittal; etc.]

## **Appendix C**

### **Key Personnel and Subconsultants**

- [List under:
- C-1 Title [and names, if already available], activities of job descriptions of key Personnel to be assigned to work and staff-months for each.
  - C-2 List of approved Sub-Consultants (if already available); same information with respect to their Personnel as in C-1.]

## **Appendix D(Not Used)**

### **Breakdown of Contract Price in Foreign Currency**

[List here the elements of cost used to arrive at the breakdown of the Contract Price-foreign currency portion:

1. Remuneration for various items on the basis of rates as mutually agreed.
2. Other reimbursable direct costs expenditure.
3. Total, remuneration and reimbursable direct costs expenditure = (1 + 2)

**Note:**

*This appendix will exclusively be used for determining remuneration for Additional Services in accordance with Sub-Clause GC 6.6.]*

## Appendix E

### Breakdown of Contract Price in Local Currency

[List here the elements of cost used to arrive at the breakdown of the Contract Price-local currency portion:

1. Remuneration for various items on the basis of rates as mutually agreed.
2. Other reimbursable direct costs expenditure related to:
  - (a) Support staff, and work charged staff;
  - (b) Office expenditures related to:
    - (i) rentals;
    - (ii) furnishing and equipment;
    - (iii) operation and maintenance of office, office equipment and furniture, office supplies.
  - (c) Transport including running and maintenance, and other associated costs;
  - (d) Travelling etc.
  - (e) Other costs
3. Total, remuneration and reimbursable direct costs expenditure = (1 + 2).

*Note:*

1. *Each item of reimbursable direct costs expenditure shall be specified whether it is payable on the basis of (a) lump sum monthly rate; or (b) reimbursement of actual expenditures.*
2. *This appendix will exclusively be used for determining remuneration for Additional Services in accordance with Sub-Clause GC 6.6.]*

## Appendix F

### Services and Facilities to be Provided by the Client

The Client shall make available the following Services and Facilities:

1. Services and Facilities of the Client

The Client shall make available to the Consultants, Sub-Consultants and the Personnel, for the purposes of the Services and free of any charge, the services, facilities and property, at the times and in the manner specified hereunder:

(a) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Appendix G**

**(INTEGRITY PACT)**

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.  
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN  
CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. \_\_\_\_\_ Dated \_\_\_\_\_  
Contract Value: \_\_\_\_\_  
Contract Title: \_\_\_\_\_

..... [name of Consultant] 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 Punjab (GoPb) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoPb through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Consultant] 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 GoPb, except that which has been expressly declared pursuant hereto.

[name of Consultant] 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 GoPb and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Consultant] 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 GoPb under any law, contract or other instrument, be voidable at the option of GoPb.

Notwithstanding any rights and remedies exercised by GoPb in this regard, [name of Consultant] agrees to indemnify GoPb for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoPb in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Consultant] 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 GoPb.

Name of Client: .....  
Signature: .....  
[Seal]

Name of Consultant: .....  
Signature: .....  
[Seal]

**CONTRACT FOR CONSULTANCY SERVICES**

**LUMP SUM REMUNERATION**

**between**

\_\_\_\_\_  
**(NAME OF THE CLIENT)**

**and**

\_\_\_\_\_  
**(NAME OF THE JOINT VENTURE OF THE CONSULTANTS)**

**for**

\_\_\_\_\_  
**(BRIEF SCOPE OF SERVICES)**

**OF** \_\_\_\_\_  
**(NAME OF PROJECT)**

\_\_\_\_\_  
**Month and Year**

\_\_\_\_\_  
**(NAME OF THE JOINT VENTURE OF THE CONSULTANTS)**

\_\_\_\_\_  
**(Name of Individual Consultants)**

\_\_\_\_\_  
**(Name of Individual Consultants)**



**FORM OF CONTRACT**

*[Note: Use this Form of Contract when the Consultants performs Services as Joint Venture.*

This CONTRACT (hereinafter called the "Contract") is made on the \_\_\_\_\_ day of \_\_\_\_  
[month] of \_\_\_\_ [year], between, on the one hand, \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(hereinafter called the "Client" which expression shall include the successors, legal representatives and permitted assigns) and, on the other hand, a joint venture consisting of the following entities, each of which will be jointly and severally liable to the Client for all the Consultants' obligations under this Contract, namely:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(hereinafter collectively called the "Consultants" which expression shall include its successors, legal representatives and permitted assigns).

**WHEREAS**

- (a) the Client has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services"); and
- (b) the Consultants, having represented to the Client that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the Parties hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
  - (a) the General Conditions of Contract;
  - (b) the Special Conditions of Contract;
  - (c) the following Appendices:

*[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.]*

- Appendix A: Description of Services
- Appendix B: Reporting Requirements
- Appendix C: Key Personnel and Sub-Consultants
- Appendix D: Breakdown of Contract Price in Foreign Currency(**Not Used**)
- Appendix E: Breakdown of Contract Price in Local Currency
- Appendix F: Services & Facilities to be Provided By the Client
- Appendix G: Integrity Pact (for Services above Rs. 10 Million)

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract, in particular:
- (a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and
  - (b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names in two identical parts each of which shall be deemed as the original, as of the day, month and year first above written.

For and on behalf of

\_\_\_\_\_

CLIENT'S NAME

Witness

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

(Seal)

For and on behalf of

\_\_\_\_\_  
NAME OF THE JOINT VENTURE OF THE CONSULTANTS

\_\_\_\_\_  
Name of Member No. 1

Witness

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_  
(Seal)

\_\_\_\_\_  
Name of Member No. 2

Witness

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_  
(Seal)

\_\_\_\_\_  
Name of Member No. 3

Witness

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_  
(Seal)