



**SURVEY OF PAKISTAN**  
**Rawalpindi**

**INVITATION TO BID**

Survey of Pakistan, a National Surveying & Mapping Agency invites sealed bids under the Project titled "Cadastral Mapping" under **Single Stage- Two Envelop procedure** from the firms registered with Income Tax & Sales Tax Departments for followings:

- i) Cadastral Mapping of Karachi City Zone-A
- ii) Cadastral Mapping of Karachi City Zone-B
- iii) Cadastral Mapping of Lahore City Zone-A
- iv) Cadastral Mapping of Lahore City Zone-B
- v) Cadastral Mapping of Statelands Sindh (Division Wise)
- vi) Cadastral Mapping of Statelands Khyber Pakhtunkhwa (Division Wise)
- vii) Cadastral Mapping of Statelands Punjab (Division Wise)
- viii) Cadastral Mapping of Sectors in CDA Islamabad

2). For Cadastral mapping of Statelands, the bids will be submitted for each Division of Provinces separately. Firms can apply for Cadastral Mapping of Statelands in one or Division depending upon their capacity. Bidding documents, containing detailed terms and conditions, technical specifications, method of procurement, procedure for submission of bids, bid security, evaluation criteria, performance guarantee etc., are available for the interested bidders at website of Public Procurement Regulatory Authority, which can be downloaded.

3). The bids, prepared in accordance with the instructions in the bidding documents, must reach at Survey of Pakistan, Faizabad Rawalpindi duly addressed to the Chairman Purchase Committee on or before **24-02-2021 at 10:30 hrs.** Bids will be opened on the same day at **11:00 hrs.** This advertisement is also available on PPRA's website at [www.ppra.org.pk](http://www.ppra.org.pk) and Survey of Pakistan website [www.sop.gov.pk](http://www.sop.gov.pk).

(Muhammad Tanvir)  
Director  
Directorate of Photogrammetry  
Chairman Purchase Committee  
051-9290217

# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF CDA

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	1
2.2	Brief Description Of The Selection Process .....	1
2.3	Bid Security .....	1
2.4	Schedule Of Selection Process .....	2
2.5	Pre-Bid Conference .....	2
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>9</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>10</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>11</b>
8.1	Score: .....	11
8.2	Firm Profile: .....	12
8.3	Evaluation and Financial Proposals .....	13
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>17</b>
9.3	Substitution of Key Personnel .....	16
<b>10</b>	<b>Award of Work</b> .....	<b>16</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>16</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms Of References for Cadastral Mapping – CDA (19 X Developed Sectors &amp; 22 Un-Developed Sectors)</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	19
14.3	Digitization Using Parcel Fabric Dataset Model .....	19
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>

<b>16. Technical Forms</b> .....	<b>21</b>
<b>17. Monitoring of Work</b> .....	<b>21</b>
<b>18. Deliverables</b> .....	<b>21</b>
Form TECH-1:.....	22
Form TECH-2:.....	25
Form TECH-3:.....	26
Form TECH-4:.....	28
Form Tech-5.....	29
Form TECH-6:.....	32
Form TECH-7 .....	34
Form TECH-8:.....	35
<b>Financial Forms</b> .....	<b>37</b>
Form FIN-1 .....	37
Form FIN-2.....	38
Form FIN-3:.....	39

# **BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF CDA (19 X DEVELOPED SECTORS & 22 UN-DEVELOPED SECTORS)**

## **1 PROJECT OVERVIEW**

Major challenges are associated with current land record of CDA which at best can only be described as old arrangement. The existing Records have not been updated since long , creating problems for the users.

### **REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of CDA (19 X DEVELOPED SECTORS & 22 UN-DEVELOPED SECTORS)**”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein. RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator***  
***Survey of Pakistan, Rawalpindi***  
***Contact No. 051-9290217***

#### **2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

#### **2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure**. In the first phase, a technical evaluation will be carried out as specified in **Clause 8**. Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

#### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director,

Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

#### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
06.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

#### **2.5. Pre-Bid Conference**

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of CDA (19 X DEVELOPED SECTORS & 22 UN-DEVELOPED SECTORS)”** on the top of the envelope.

### **3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS**

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client's representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.
- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.
- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by

the Bidder themselves. The person who signed the proposal must initial such corrections.

- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.
- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.
- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be



rejected at this stage if it does not respond to meet evaluation criteria.

- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.
- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution unavoidable.
- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out

only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.

- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.
- 3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.
- 3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.
- 3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.
- 3.24. **Pre-Bid Conference**
  - 3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

##### Paragraph Reference

Name of the Client: Survey of Pakistan

Name of the Assignment: Cadastral Mapping of CDA (19 X DEVELOPED SECTORS & 22 UN-DEVELOPED SECTORS)

Method of Procurement: Single Stage – Two Envelop Procedure

##### Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at **11:00 Hrs** on the same day in presence of bidders who wish to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.

- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed Implementation Plan is to be prepared by the Firm and be part of the proposal.
- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23 The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.
- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29 The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-I (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3. The proposed team shall be composed of experts and specialists (the "Professional Personnel") in their respective areas of expertise and managerial/support staff (the "Support Personnel") such that the Firm should be able to complete the Project within the specified time schedule. The Key

Personnel specified in TOR's shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.

- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## **6. Financial Proposal / Bid**

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the "Financial Proposal") clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder's Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR's and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- 6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be

included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.

6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR's Active Tax Payers List	Certificate of Registration
02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

### 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20
W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score,  $S_t$  will then be obtained by the following formula:

$$St = (EC1 *W1/100) + (EC2 *W2/400) + (EC3 *W3/200) + (EC4 *W4/60)+ (EC5 *W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

## 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1 Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	



### 8.2.2 Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
<b>Sub Total (B)</b>		<b>30</b>	

$$EC (1) = A + B$$

### 8.2.3 Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.3. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.4 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

### 8.4.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.4.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	

3	Describe your management expertise and processes required to develop a coherent program to complete the activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

#### 8.5. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

$$\text{EC 5} = G + H$$

$$\text{TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5}$$

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile
- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.6 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

### **9.3 Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

### **10. Award of Work**

After selection, a Letter of Award ("LOA") shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

### **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall

not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – CDA (19 X DEVELOPED SECTORS & 22 UN-DEVELOPED SECTORS)**

### **14.1 SCOPE OF WORK**

The scope of work is Digital Cadastral Mapping of CDA Sectors.

### **14.2 OBJECTIVES**

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 3) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 4) The firm will be responsible for collection of record of the properties.

### **14.3. Digitization Using Parcel Fabric Dataset Model**

#### **14.3.1 Scanning and Indexing of Record**

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record shall be stored in high resolution tiff format.

#### **14.3.2 Mosaicking and Stitching of Record**

The Firm will be responsible for the stitching and mosaicking of *record*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images and field data points.

### 14.3.3 Ortho-rectification of images

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

### 14.3.4 Digitization Using Parcel Fabric Dataset Model

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the *parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property of the project area within the project duration.

## 14.4 Field Data Collection/ Verification:

The firm will be responsible for field verification of digitized data using RTK.

## 14.5 Quality Control:

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.3.5 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

### a. Local Accuracy Standards:

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements



**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Tiime:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

## Technical Forms

### Form TECH-1 Technical Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [Insert title of assignment] for (Package) 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.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Project Management Consultant]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## **B – Experience of Firm**

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

**Form TECH-2**  
**Comments and Suggestions on the Terms of**  
**Reference**

---

**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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned



## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in  
months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input

## Form TECH-8

Work schedule and planning for deliverable

N°	Activities	Months											
		1	2	3	4	5	6	7	8	9	.....	n	TOTAL

- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch



# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

## Form FIN-3

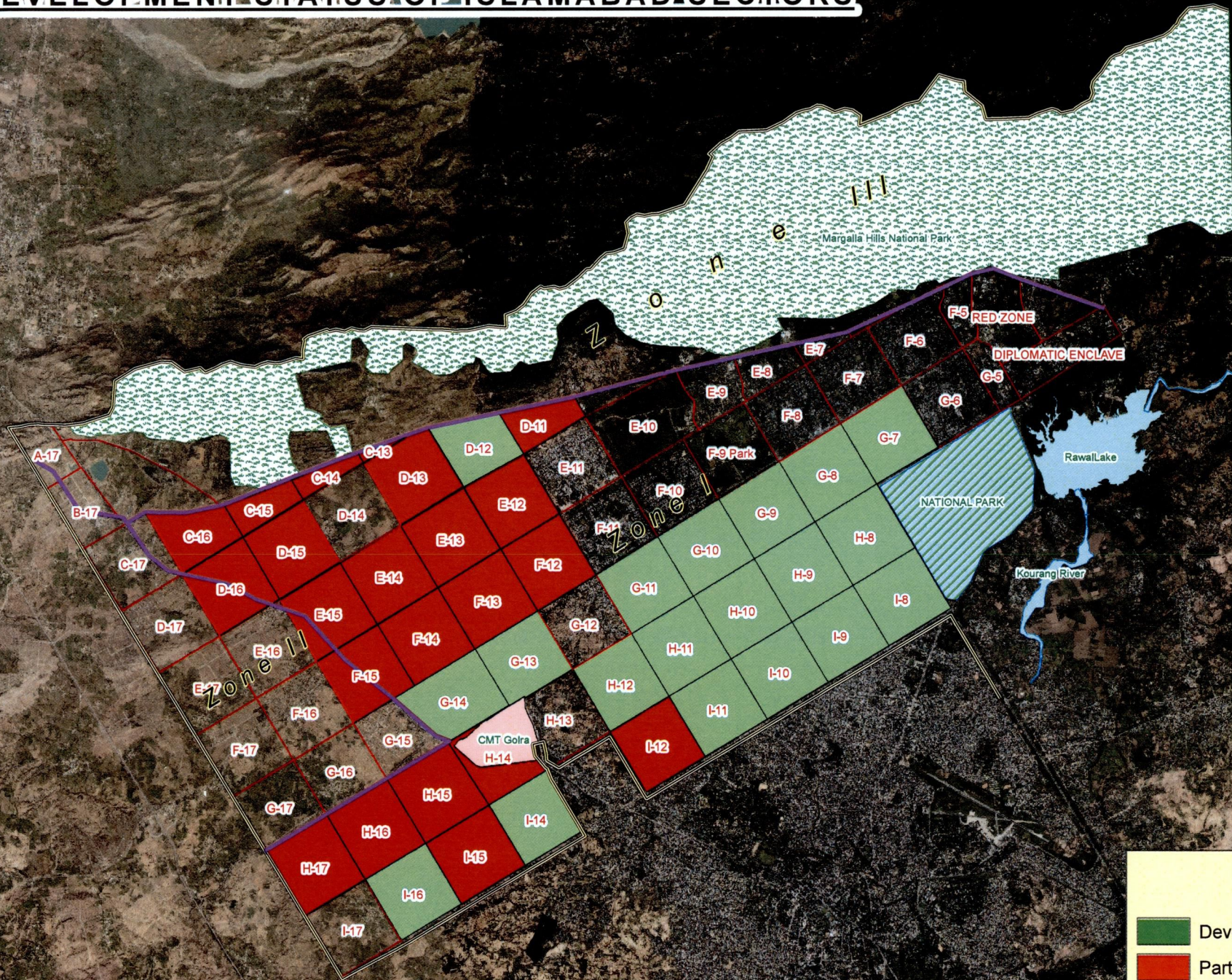
### Summary of Cost

---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviabale taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sector/Sq Km	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

# DEVELOPMENT STATUS OF ISLAMABAD SECTORS



**Legend**

- Developed
- Partial & Un-Developed

# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF KARACHI CITY (ZONE-A)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms Of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

# **BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF KARACHI CITY (ZONE-A)(122 Sq Km)**

## **1 PROJECT OVERVIEW**

The land record system in Sindh is century old with its scope limited to recording of data for rural lands only and its purpose was originally confined to collection of annual taxes. The current system of land records focuses on administration of landholdings which groups a set of land parcels together for recording of their collective ownership information. This scheme, however, becomes highly inefficient when applied to urban properties. No standard system of recording rights in urban areas exists in Sindh where gap is being filled by other agencies working in their own respective jurisdictions in isolation from others. Sindh has, therefore, no single repository of land records which would otherwise play a critical role in the planning and administration processes of government.

Major challenges are associated with current urban land records system in Karachi (Zone-A) which at best can only be described as a make shift arrangement. Despite multitude of records, some 20 – 25 % of urban properties are considered to not having been registered anywhere. As a result, land use planning/development is seriously hampered and land rights litigation is widespread. The existing Revenue Records have not been updated in areas that have been converted to urban areas. Moreover, the record does not cover the historical urban areas at all. Several records registries are maintained by multiple agencies. There is widespread litigations over the title chain, transfer of property, partition of inheritance, gift, and demarcation of land etc. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

## **2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of Karachi City (Zone-A)** approximate area(122 Sq Km)”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:



**Project Coordinator**  
**Survey of Pakistan, Rawalpindi**  
**Contact No. 051-9290217**

**2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

**2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

**2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

**2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021

04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

## 2.5. Pre-Bid Conference

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of Karachi City (Zone-A) approximate area (122 Sq Km)”** on the top of the envelope.

## 3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the

assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client's representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.

- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.
- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper accompanying the Proposal or in any other form demonstrating that the representative has been fully authorized to sign. The signed Technical and Financial Proposals shall be marked "**ORIGINAL**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked “**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**”. The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.

- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.
- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder

will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.

- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution unavoidable.
- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the

provision that total liquidation damages thus levied will not exceed 10% of the total contract price.

3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.

3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.

3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.

3.24. **Pre-Bid Conference**

3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

**Paragraph Reference**

**Name of the Client:** Survey of Pakistan

**Name of the Assignment:** Cadastral Mapping of Karachi City (Zone-A)(122 Sq Km)

**Method of Procurement:** Single Stage – Two Envelop Procedure

## Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this

affect must be submitted by the bidder.

- 4.15. Implementation Plan is critical to the success of the project. A detailed Implementation Plan is to be prepared by the Firm and be part of the proposal.
- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**ProjectCoordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.



- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.
- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29 The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-1 (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3. The proposed team shall be composed of experts and specialists (the "Professional Personnel") in their respective areas of expertise and managerial/support staff (the "Support Personnel") such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR's shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.

5.5. In case it is found during the evaluation or at any time before signing of the agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## 6. Financial Proposal / Bid

6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.

6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.

6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.

6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must	Certificate of Registration

	be on FBR's Active Tax Payers List	
02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20
W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score,  $S_t$  will then be obtained by the following formula:

$$S_t = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

## 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.2. Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.3 Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
<b>Sub Total (B)</b>		<b>30</b>	

$$EC (1) = A + B$$

### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

#### 8.5.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.5.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"><li>▪ Your Vision for the Land Record Digitization.</li><li>▪ Project Team Structure</li><li>▪ Field survey and data integration methodology</li><li>▪ Parcel fabrication details</li><li>▪ Quality Assurance and Quality Control</li></ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

**EC 5 = G+H**

***TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5***

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile
- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.



## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

### **9.3 Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered

and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – KARACHI CITY (ZONE-A) (122 Sq Km)**

### **14.1 SCOPE OF WORK**

The proposed Land Records Management and Information System – Urban would include Digital Cadastral Mapping of Karachi City (Zone-A) (122 Sq Km).

## 14.2 OBJECTIVES

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and mussavies data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of ownership record of the properties.

### 14.3. Digitization Using Parcel Fabric Dataset Model

#### 14.3.1 Scanning and Indexing of Record

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### 14.3.2 Mosaicking and Stitching of mussavies

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10cm so that it supports accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points. The images must cover area within the boundary of the project of Karachi City (Zone-A) having area 122 Sq Km.

#### 14.3.3 Ortho-rectification of images

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### 14.3.4 Digitization Using Parcel Fabric Dataset Model

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the

*parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property/ownership documents of the project area within the project duration.

#### **14.4 Field Data Collection/ Verification:**

The firm will be responsible for door to door survey for the collection of property/ownership documents. It is required to design and submit survey plan and comprehensive survey form to client which include information of registered deed, PTD, PT1, Fard, PTO, lessee, tenant etc.

#### **14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.5.1 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

##### **a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

##### **b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

#### **15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Tiime:** 6 month from date of signing of Contract Agreement

#### **17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [*Insert title of assignment*] for (Package) 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.

We are submitting our Proposal in association with: [*Insert a list with full name and address of each associated Project Management Consultant*]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_



## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in  
months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							



6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input

# Form TECH-8

## Work schedule and planning for deliverable

---

N°	Activities	Months											TOTAL
		1	2	3	4	5	6	7	8	9	.....	n	

- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch

# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

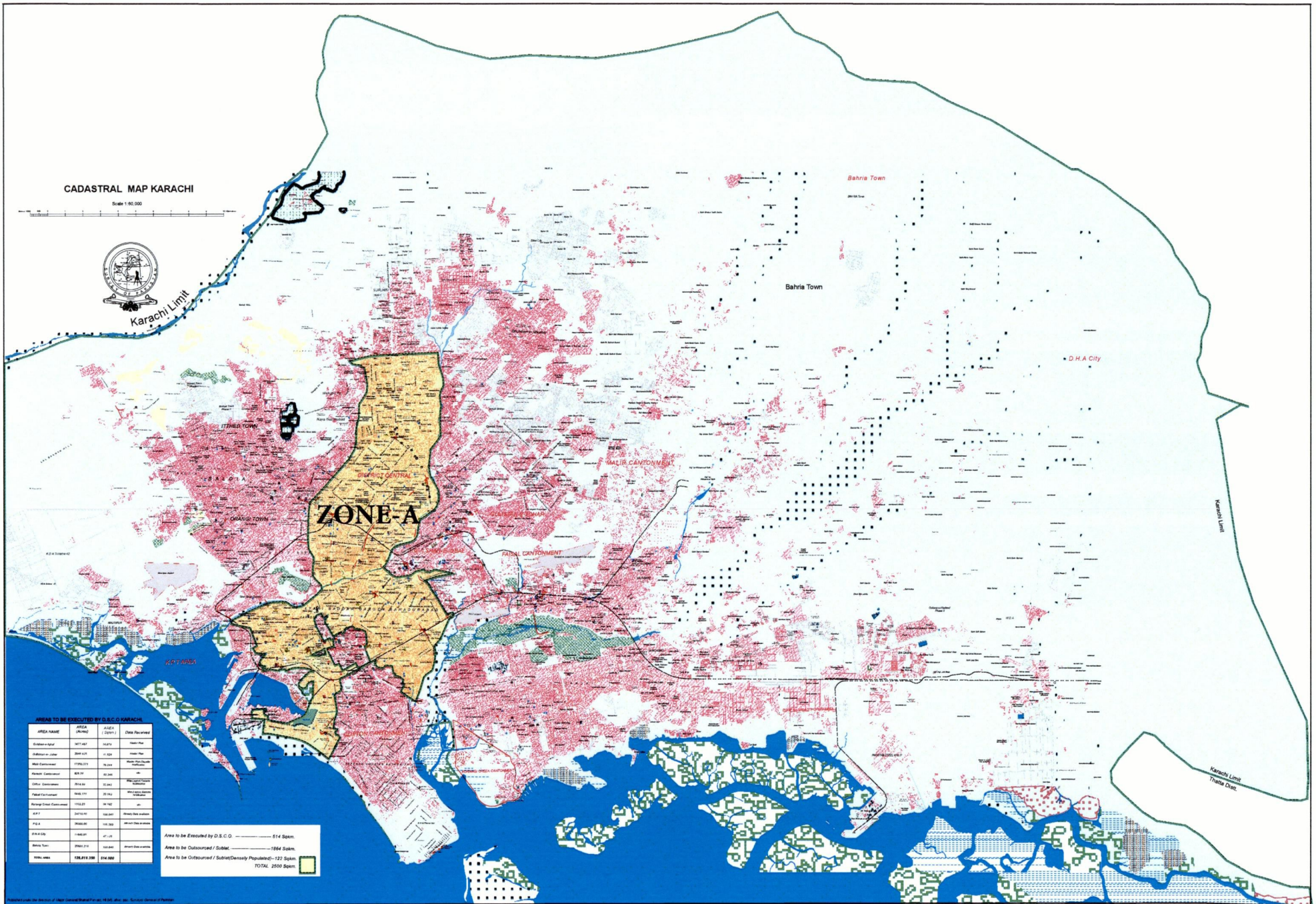
**Form FIN-3:**  
Summary of Cost

---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

# ZONE-A





# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF KARACHI CITY (ZONE-B)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms Of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

# **BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF KARACHI CITY (ZONE-B)(1870 Sq Km)**

## **1 PROJECT OVERVIEW**

The land record system in Sindh is century old with its scope limited to recording of data for rural lands only and its purpose was originally confined to collection of annual taxes. The current system of land records focuses on administration of landholdings which groups a set of land parcels together for recording of their collective ownership information. This scheme, however, becomes highly inefficient when applied to urban properties. No standard system of recording rights in urban areas exists in Sindh where gap is being filled by other agencies working in their own respective jurisdictions in isolation from others. Sindh has, therefore, no single repository of land records which would otherwise play a critical role in the planning and administration processes of government.

Major challenges are associated with current urban land records system in Karachi (Zone-B) which at best can only be described as a make shift arrangement. Despite multitude of records, some 20 – 25 % of urban properties are considered to not having been registered anywhere. As a result, land use planning/development is seriously hampered and land rights litigation is widespread. The existing Revenue Records have not been updated in areas that have been converted to urban areas. Moreover, the record does not cover the historical urban areas at all. Several records registries are maintained by multiple agencies. There is widespread litigations over the title chain, transfer of property, partition of inheritance, gift, and demarcation of land etc. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

## **2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of Karachi City (Zone-B)** approximate area(1870 Sq Km)”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator***

## ***Survey of Pakistan, Rawalpindi***

**Contact No. 051-9290217**

### **2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

### **2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021

05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

## 2.5. Pre-Bid Conference

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of Karachi City (Zone-B) approximate area (1870 Sq Km)”** on the top of the envelope.

## 3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified

in the schedule. Bidders should contact the Client's representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.

- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.
- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT**

**OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.

- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.
- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, "the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened." The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and



time of opening of Financial Bid.

- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution unavoidable.
- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.

3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.

3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.

3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.

#### 3.24. **Pre-Bid Conference**

3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

## 4. DATA SHEET

### Paragraph Reference

Name of the Client: Survey of Pakistan

Name of the Assignment: Cadastral Mapping of Karachi City (Zone-B)(1870 Sq Km)

Method of Procurement: Single Stage – Two Envelop Procedure

## Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed

Implementation Plan is to be prepared by the Firm and be part of the proposal.

- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**ProjectCoordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan, Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.

- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29 The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-1 (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3. The proposed team shall be composed of experts and specialists (the "Professional Personnel") in their respective areas of expertise and managerial/support staff (the "Support Personnel") such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR's shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the

agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## 6. Financial Proposal / Bid

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- 6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.
- 6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR’s Active Tax Payers List	Certificate of Registration

02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20
W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score,  $S_t$  will then be obtained by the following formula:

$$S_t = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

### 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1 Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2 Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
	<b>Sub Total (B)</b>	<b>30</b>	

<b>EC (1) = A + B</b>
-----------------------



### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/ Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

#### 8.5.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.5.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = \text{L} + \text{M}$$

## 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

$$EC 5 = G+H$$

$$TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5$$

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile
- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

## 8.7 Evaluation of Financial Proposals / Bids

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of

the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. Appointment Of Vendor**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

### **9.3 Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key

Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – KARACHICITY (ZONE-B)**

### **14.1 SCOPE OF WORK**

The proposed Land Records Management and Information System – Urban would include Digital Cadastral Mapping of Karachi City (Zone-B) (1870 Sq Km).

### **14.2 OBJECTIVES**

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and mussavies data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of ownership record of the properties.

### **14.3. Digitization Using Parcel Fabric Dataset Model**

#### **14.3.1 Scanning and Indexing of Record**

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### **14.3.2 Mosaicking and Stitching of mussavies**

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points. The images must cover area within the boundary of the project of Karachi City (Zone-B) having area 1870 Sq Km.

#### **14.3.3 Ortho-rectification of images**

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### **14.3.4 Digitization Using Parcel Fabric Dataset Model**

The Firm shall perform digitization at *parcel* level; through parcel fabrication

dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the *parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property/ownership documents of the project area within the project duration.

**14.4 Field Data Collection/ Verification:**

The firm will be responsible for door to door survey for the collection of property/ownership documents. It is required to design and submit survey plan and comprehensive survey form to client which include information of registered deed, PTD, PT1, Fard, PTO, lessee, tenant etc.

**14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.5.1 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

**a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control



**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Time:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [*Insert title of assignment*] for (Package) 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.

We are submitting our Proposal in association with: [*Insert a list with full name and address of each associated Project Management Consultant*]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned



## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in  
months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input

# Form TECH-8

Work schedule and planning for deliverable

---

N°	Activities	Months											TOTAL
		1	2	3	4	5	6	7	8	9	....	n	

- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch



# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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**

Financial Capacity of the Bidder

---

<b>S. No.</b>	<b>Financial Year</b>	<b>Annual Revenue (PKR)</b>
1.		
2.		
3.		

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

---

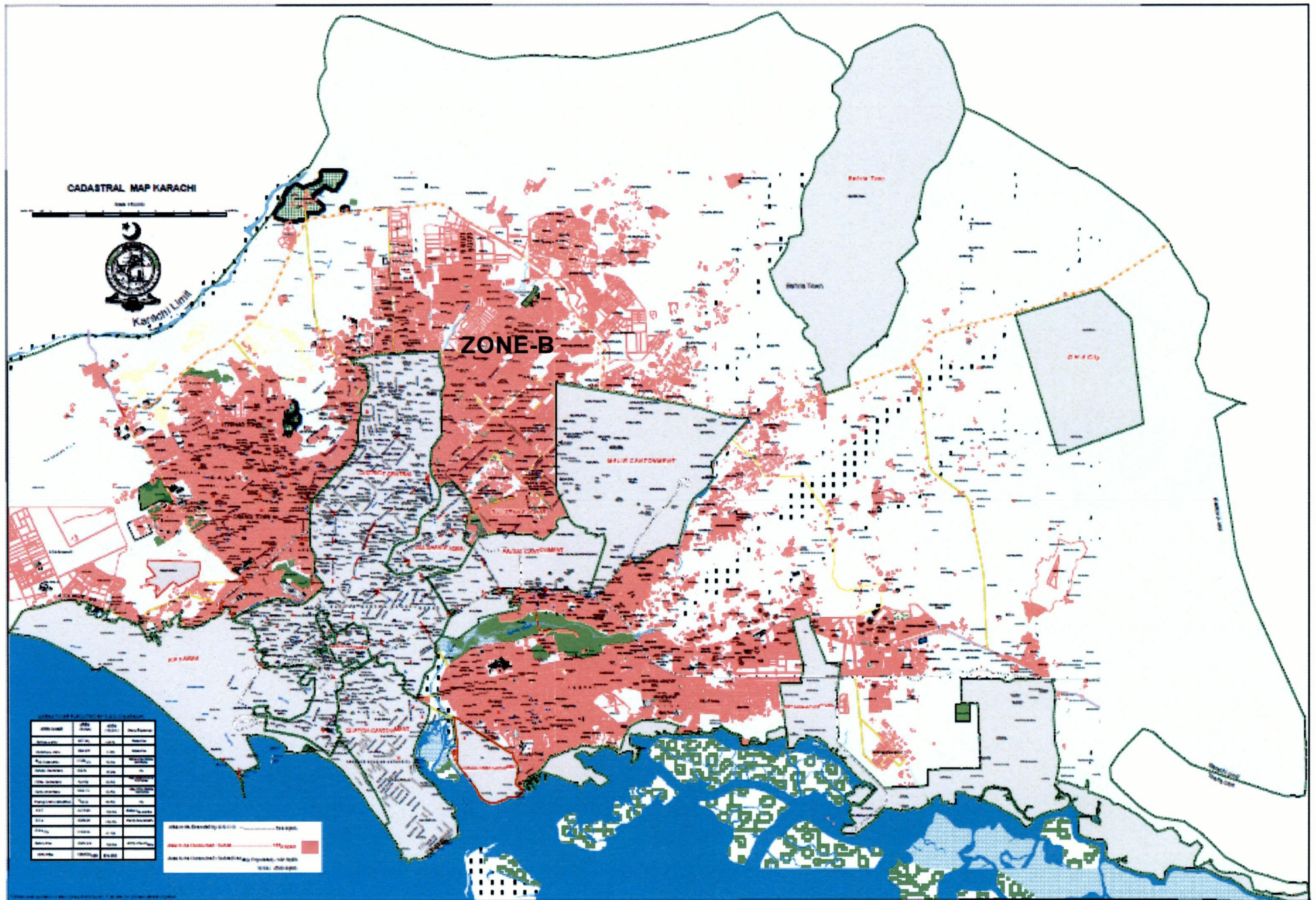
**Form FIN-3**  
Summary of Cost

---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

# ZONE-B



# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF LAHORE CITY (ZONE-A)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms Of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

# **BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF LAHORE CITY (ZONE-A)(240 Sq Km)**

## **1 PROJECT OVERVIEW**

The land record system in Punjab is century old with its scope limited to recording of data for rural lands only and its purpose was originally confined to collection of annual taxes. The current system of land records focuses on administration of landholdings which groups a set of land parcels together for recording of their collective ownership information. This scheme, however, becomes highly inefficient when applied to urban properties. No standard system of recording rights in urban areas exists in Punjab where gap is being filled by other agencies working in their own respective jurisdictions in isolation from others. Punjab has, therefore, no single repository of land records which would otherwise play a critical role in the planning and administration processes of government.

Major challenges are associated with current urban land records system in Lahore city (Zone-A) which at best can only be described as a make shift arrangement. Despite multitude of records, some 20 – 25 % of urban properties are considered to not having been registered anywhere. As a result, land use planning/development is seriously hampered and land rights litigation is widespread. The existing Revenue Records have not been updated in areas that have been converted to urban areas. Moreover, the record does not cover the historical urban areas at all. Several records registries are maintained by multiple agencies. There is widespread litigations over the title chain, transfer of property, partition of inheritance, gift, and demarcation of land etc. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

## **2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of Lahore City (Zone-A)** approximate area **(240 Sq Km)**”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator***



## ***Survey of Pakistan, Rawalpindi***

**Contact No. 051-9290217**

### **2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

### **2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021

05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

## 2.5. Pre-Bid Conference

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of Lahore City (Zone-A) approximate area (240 Sq Km)”** on the top of the envelope.

## 3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified

in the schedule. Bidders should contact the Client's representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.

- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.
- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT**

**OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.

- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.
- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, "the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened." The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and

time of opening of Financial Bid.

- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution unavoidable.
- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.

- 3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.
- 3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.
- 3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.
- 3.24. **Pre-Bid Conference**
- 3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.
- 3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

##### Paragraph Reference

<b>Name of the Client:</b>	<b><u>Survey of Pakistan</u></b>
<b>Name of the Assignment:</b>	<b><u>Cadastral Mapping of Lahore City (Zone-A)(240 Sq Km)</u></b>
<b>Method of Procurement:</b>	<b><u>Single Stage – Two Envelop Procedure</u></b>

## Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed

Implementation Plan is to be prepared by the Firm and be part of the proposal.

- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**ProjectCoordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.



- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29 The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-1 (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3. The proposed team shall be composed of experts and specialists (the "Professional Personnel") in their respective areas of expertise and managerial/support staff (the "Support Personnel") such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR's shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the

agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## 6. Financial Proposal / Bid

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- 6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.
- 6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR’s Active Tax Payers List	Certificate of Registration

02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20
W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score,  $S_t$  will then be obtained by the following formula:

$$S_t = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

### 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1 Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2 Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
	<b>Sub Total (B)</b>	<b>30</b>	

$$EC (1) = A + B$$

### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/ Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

a) Understanding & Innovativeness

b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

**8.5.1 Understanding and Innovativeness (L)**

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

**8.5.2 Methodology (M)**

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of	

	work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

**EC 5 = G+H**

***TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5***

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile
- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.



## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

### **9.3 Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered

and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – LAHORE CITY (ZONE-A)**

### **14.1 SCOPE OF WORK**

The proposed Land Records Management and Information System – Urban would include Digital Cadastral Mapping of Lahore City (Zone-A) (240 Sq Km).

## 14.2 OBJECTIVES

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and mussavies data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of ownership record of the properties.

### 14.3. Digitization Using Parcel Fabric Dataset Model

#### 14.3.1 Scanning and Indexing of Record

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### 14.3.2 Mosaicking and Stitching of mussavies

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10cm so that it supports accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points. The images must cover area within the boundary of the project of Lahore City (Zone-A) having area 240 Sq Km.

#### 14.3.3 Ortho-rectification of images

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### 13.3.4 Digitization Using Parcel Fabric Dataset Model

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the

*parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property/ownership documents of the project area within the project duration.

**14.4 Field Data Collection/ Verification:**

The firm will be responsible for door to door survey for the collection of property/ownership documents. It is required to design and submit survey plan and comprehensive survey form to client which include information of registered deed, PTD, PT1, Fard, PTO, lessee, tenant etc.

**14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.5.1 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

**a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Tiime:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [*Insert title of assignment*] for (Package) 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.

We are submitting our Proposal in association with: [*Insert a list with full name and address of each associated Project Management Consultant*]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_



## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							



6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input

---

## Form TECH-8

Work schedule and planning for deliverable

---

N°	Activities	Months											TOTAL
		1	2	3	4	5	6	7	8	9	.....	n	

- 
- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
  - 2 Duration of activities shall be indicated in a form of a bar chart.
  3. Include a legend, if necessary, to help read the ch

# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

---

---

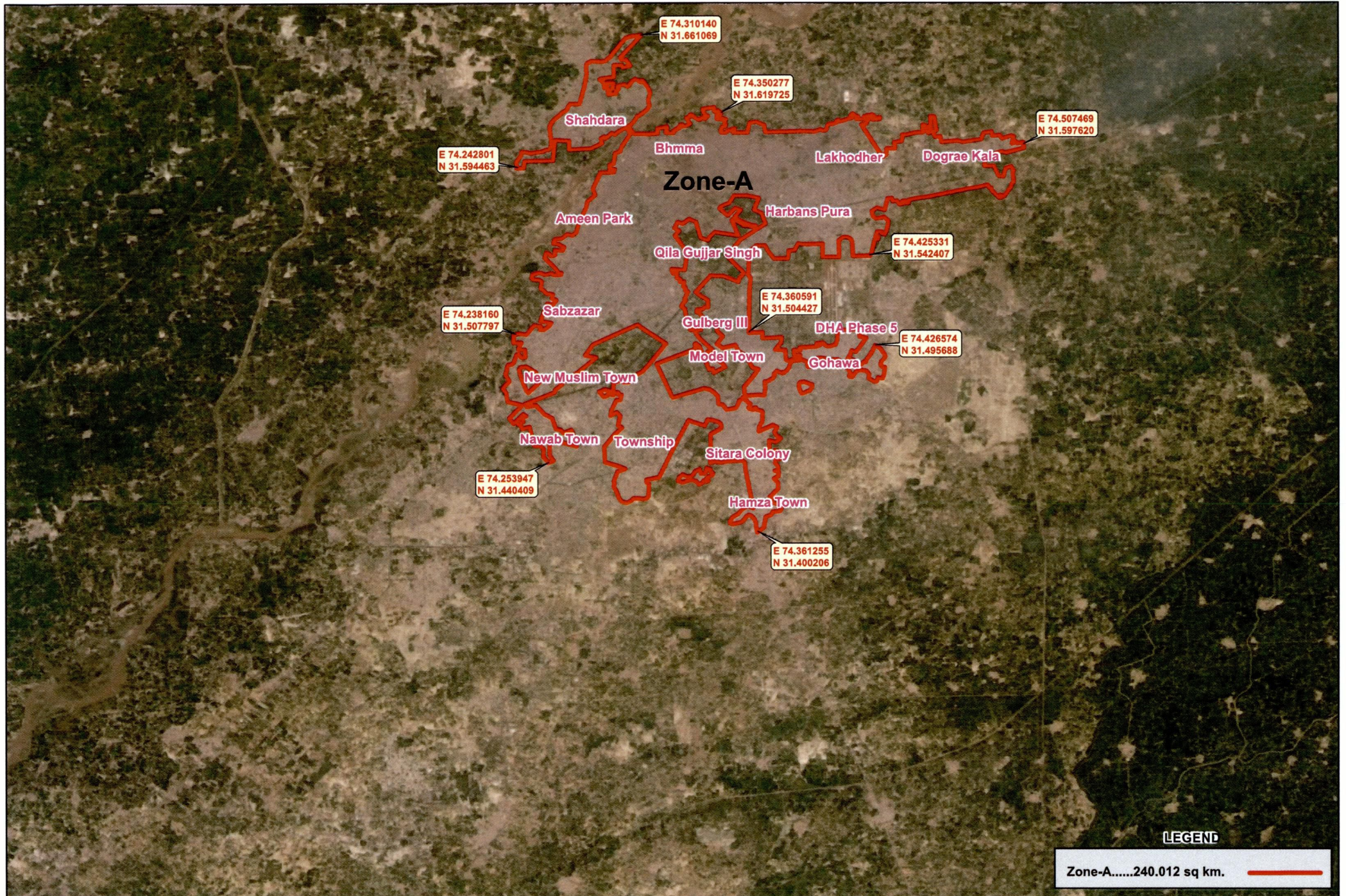
**Form FIN-3:**  
**Summary of Cost**

---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

# ZONE-A AREA





# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF LAHORE CITY (ZONE-B)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms Of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

# **BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF LAHORE CITY (ZONE-B)(360 Sq Km)**

## **1 PROJECT OVERVIEW**

The land record system in Punjab is century old with its scope limited to recording of data for rural lands only and its purpose was originally confined to collection of annual taxes. The current system of land records focuses on administration of landholdings which groups a set of land parcels together for recording of their collective ownership information. This scheme, however, becomes highly inefficient when applied to urban properties. No standard system of recording rights in urban areas exists in Punjab where gap is being filled by other agencies working in their own respective jurisdictions in isolation from others. Punjab has, therefore, no single repository of land records which would otherwise play a critical role in the planning and administration processes of government.

Major challenges are associated with current urban land records system in Lahore city (Zone-B) which at best can only be described as a make shift arrangement. Despite multitude of records, some 20 – 25 % of urban properties are considered to not having been registered anywhere. As a result, land use planning/development is seriously hampered and land rights litigation is widespread. The existing Revenue Records have not been updated in areas that have been converted to urban areas. Moreover, the record does not cover the historical urban areas at all. Several records registries are maintained by multiple agencies. There is widespread litigations over the title chain, transfer of property, partition of inheritance, gift, and demarcation of land etc. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

## **2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of Lahore City (Zone-B)** approximate area(**360 Sq Km**)”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi**  
**Contact No. 051-9290217**

**2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

**2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

**2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

**2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021

04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

## 2.5. Pre-Bid Conference

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of Lahore City (Zone-B) approximate area (360 Sq Km)”** on the top of the envelope.

## 3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the

assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client's representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.

- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.
- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked “**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**”. The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.

- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.
- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder



will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.

- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution unavoidable.
- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the

provision that total liquidation damages thus levied will not exceed 10% of the total contract price.

3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.

3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.

3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.

3.24. **Pre-Bid Conference**

3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

**Paragraph Reference**

**Name of the Client:** Survey of Pakistan

**Name of the Assignment:** Cadastral Mapping of Lahore City (Zone-B)(360 Sq Km)

**Method of Procurement:** Single Stage – Two Envelop Procedure

## Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed

Implementation Plan is to be prepared by the Firm and be part of the proposal.

- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**ProjectCoordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.

- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29 The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-1 (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3. The proposed team shall be composed of experts and specialists (the "Professional Personnel") in their respective areas of expertise and managerial/support staff (the "Support Personnel") such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR's shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the

agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## 6. Financial Proposal / Bid

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- 6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.
- 6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR’s Active Tax Payers List	Certificate of Registration

02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20
W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score,  $S_t$  will then be obtained by the following formula:

$$S_t = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

### 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1. Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2. Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
	<b>Sub Total (B)</b>	<b>30</b>	

<b>EC (1) = A + B</b>
-----------------------



### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.4.1. Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/ Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

a) Understanding & Innovativeness

b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

**8.5.1 Understanding and Innovativeness (L)**

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

**8.5.2 Methodology (M)**

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of	

	work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

**EC 5 = G+H**

***TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5***

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile
- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

### **9.3 Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered

and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – LAHORE CITY (ZONE-B)**

### **14.1 SCOPE OF WORK**

The proposed Land Records Management and Information System – Urban would include Digital Cadastral Mapping of Lahore City (Zone-B) (360 Sq Km).

## 14.2 OBJECTIVES

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and mussavies data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of ownership record of the properties.

### 14.3. Digitization Using Parcel Fabric Dataset Model

#### 14.3.1 Scanning and Indexing of Record

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### 14.3.2 Mosaicking and Stitching of mussavies

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points. The images must cover area within the boundary of the project of Lahore City (Zone-B) having area 360 Sq Km.

#### 14.3.3 Ortho-rectification of images

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### 14.3.4 Digitization Using Parcel Fabric Dataset Model

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the

*parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property/ownership documents of the project area within the project duration.

#### **14.4 Field Data Collection/ Verification:**

The firm will be responsible for door to door survey for the collection of property/ownership documents. It is required to design and submit survey plan and comprehensive survey form to client which include information of registered deed, PTD, PT1, Fard, PTO, lessee, tenant etc.

#### **14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.3.5 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

##### **a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

##### **b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

#### **15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Tiime:** 6 month from date of signing of Contract Agreement

#### **17. Monitoring of Work:**



The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [*Insert title of assignment*] for (Package) 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.

We are submitting our Proposal in association with: [*Insert a list with full name and address of each associated Project Management Consultant*]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## **B – Experience of Firm**

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4:

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned



## FORM TECH-5 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in  
months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input

## Form TECH-8

Work schedule and planning for deliverable

N°	Activities	Months											
		1	2	3	4	5	6	7	8	9	.....	n	TOTAL

- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch



# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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**

Financial Capacity of the Bidder

---

<b>S. No.</b>	<b>Financial Year</b>	<b>Annual Revenue (PKR)</b>
1.		
2.		
3.		

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

## Form FIN-3

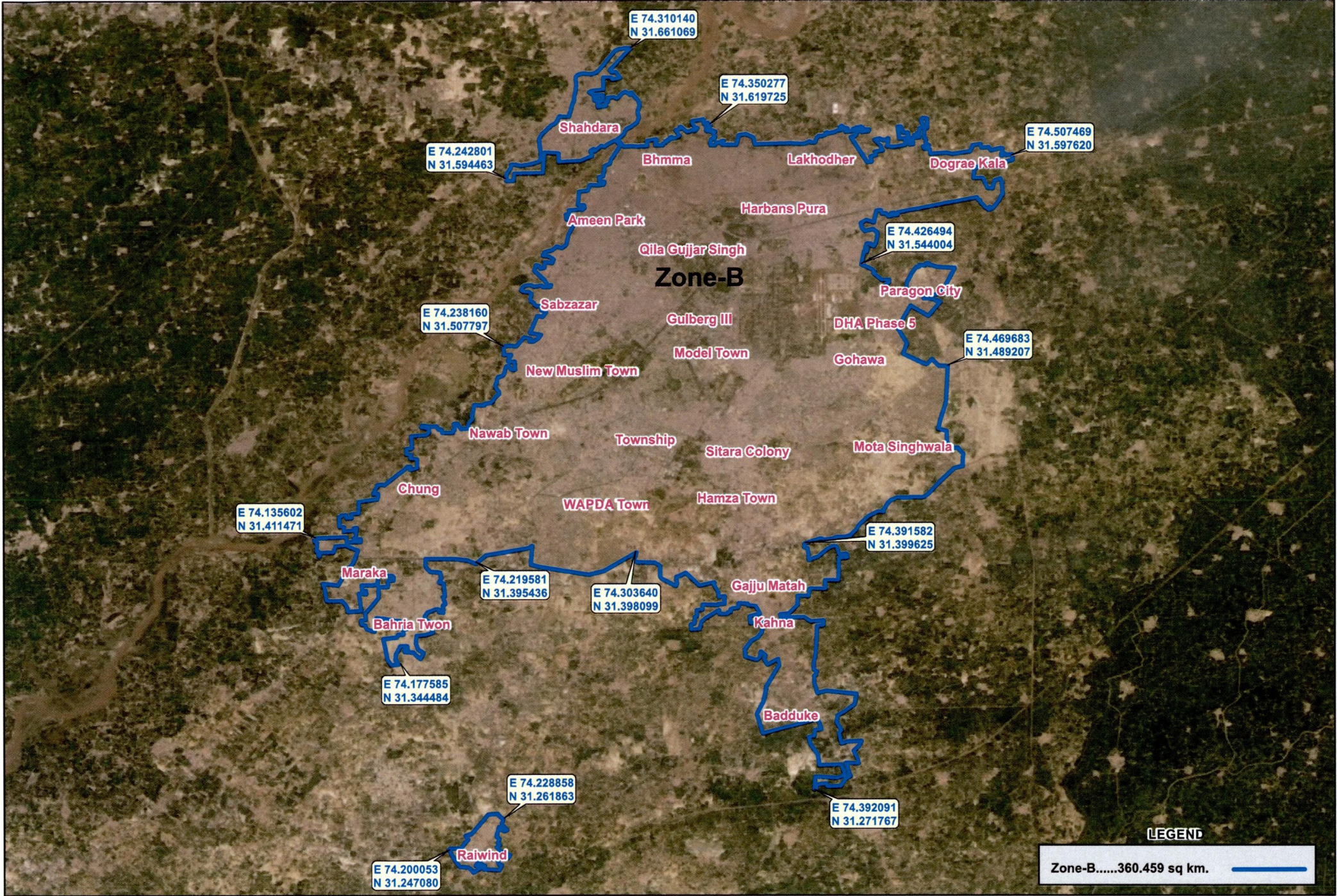
### Summary of Cost

---

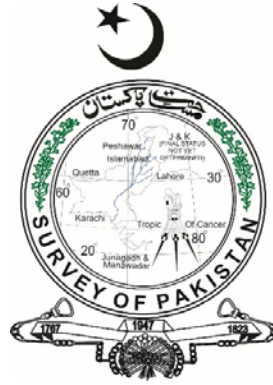
<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq.Km	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

# ZONE-B AREA



# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF STATELANDS KHYBER PAKHTUNKHWA (DIVISION WISE)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

**BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF**  
**CADASTRAL MAPPING OF State Land KPK (Division Wise)**

**1 PROJECT OVERVIEW**

Major challenges are associated with current Stateland record of KPK province which at best can only be described as a make shift arrangement. The existing Revenue Records have not been updated since long. Land acquisition for development is severely hampered by unclear land records. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

**2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of State Land KPK (Division Wise)**”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator***  
***Survey of Pakistan, Rawalpindi***  
***Contact No. 051-9290217***

**2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

**2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.



### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

### **2.5. Pre-Bid Conference**

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of State Land KPK (Division Wise)”** on the top of the envelope.

### **3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS**

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client’s representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.
- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.

- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.
- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.

- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.
- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution

unavoidable.

- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.
- 3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.
- 3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.
- 3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.
- 3.24. **Pre-Bid Conference**
- 3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP

document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

##### Paragraph Reference

Name of the Client: Survey of Pakistan

Name of the Assignment: Cadastral Mapping of State Land KPK (Division Wise)

Method of Procurement: Single Stage – Two Envelop Procedure

##### Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish

- to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed Implementation Plan is to be prepared by the Firm and be part of the proposal.
- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.
- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29. The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-I (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the



Financial Proposal.

- 5.3. The proposed team shall be composed of experts and specialists (the “Professional Personnel”) in their respective areas of expertise and managerial/support staff (the “Support Personnel”) such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR’s shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## **6. Financial Proposal / Bid**

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition

attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.

6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.

6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR's Active Tax Payers List	Certificate of Registration
02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20

W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score, St will then be obtained by the following formula:

$$St = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

## 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1. Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2. Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
<b>Sub Total (B)</b>		<b>30</b>	

$$EC (1) = A + B$$

### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
------	----------	------------------	---------------

01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

### 8.5.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.5.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the	

	activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

$$\text{EC 5} = G + H$$

$$\text{TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5}$$

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile

- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

9.3 **Substitution of Key Personnel**



9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – State Land KPK (Division Wise)**

### **14.1 SCOPE OF WORK**

The scope of work is Digital Cadastral Mapping of State Land of KPK (Division Wise).

### **14.2 OBJECTIVES**

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and *mussavies* data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of record of the properties.

### **14.3. Digitization Using Parcel Fabric Dataset Model**

#### **14.3.1 Scanning and Indexing of Record**

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### **14.3.2 Mosaicking and Stitching of mussavies**

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports

accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points.

#### **14.3.3 Ortho-rectification of images**

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### **14.3.4 Digitization Using Parcel Fabric Dataset Model**

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the *parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property of the project area within the project duration.

#### **14.4 Field Data Collection/ Verification:**

The firm will be responsible for field verification of digitized data using RTK.

#### **14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.3.5 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

##### **a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Time:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [*Insert title of assignment*] for (Package) 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.

We are submitting our Proposal in association with: [*Insert a list with full name and address of each associated Project Management Consultant*]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*



## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in  
months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"



## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input



- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch

# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

---

**Form FIN-3**  
Summary of Cost

---

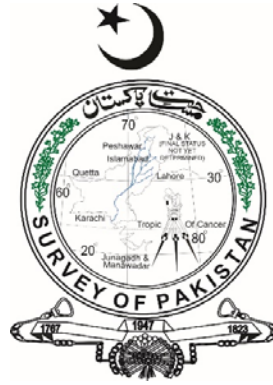
<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km of Statelands	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

## DIVISIONS OF KPK



# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF STATELANDS PUNJAB (DIVISION WISE)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi



## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

**BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF  
CADASTRAL MAPPING OF State Land Punjab (Division Wise)**

**1 PROJECT OVERVIEW**

Major challenges are associated with current Stateland record of Punjab province which at best can only be described as a make shift arrangement. The existing Revenue Records have not been updated since long. Land acquisition for development is severely hampered by unclear land records. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

**2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of State Land Punjab (Division Wise)**”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator  
Survey of Pakistan, Rawalpindi  
Contact No. 051-9290217***

**2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

**2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

### **2.5. Pre-Bid Conference**

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217** Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of State Land Punjab (Division Wise)”** on the top of the envelope.

### **3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS**

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client’s representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.
- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.

- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.
- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.

- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.
- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution

unavoidable.

- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.
- 3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.
- 3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.
- 3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.
- 3.24. **Pre-Bid Conference**
- 3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP



document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

##### Paragraph Reference

Name of the Client: Survey of Pakistan

Name of the Assignment: Cadastral Mapping of State Land Punjab (Division Wise)

Method of Procurement: Single Stage – Two Envelop Procedure

##### Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish

- to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed Implementation Plan is to be prepared by the Firm and be part of the proposal.
- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.
- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29. The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-I (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the

Financial Proposal.

- 5.3. The proposed team shall be composed of experts and specialists (the “Professional Personnel”) in their respective areas of expertise and managerial/support staff (the “Support Personnel”) such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR’s shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## **6. Financial Proposal / Bid**

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition

attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.

6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.

6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR's Active Tax Payers List	Certificate of Registration
02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20

W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score, St will then be obtained by the following formula:

$$St = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

## 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1. Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2. Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
<b>Sub Total (B)</b>		<b>30</b>	

$$EC (1) = A + B$$

### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks

01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0



### 8.5.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.5.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the	

	activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

$$\text{EC 5} = G + H$$

$$\text{TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5}$$

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile

- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

9.3 **Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – State Land Punjab (Division Wise)**

### **14.1 SCOPE OF WORK**

The scope of work is Digital Cadastral Mapping of State Land of Punjab (Division Wise).

### **14.2 OBJECTIVES**

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and *mussavies* data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of record of the properties.

### **14.3. Digitization Using Parcel Fabric Dataset Model**

#### **14.3.1 Scanning and Indexing of Record**

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### **14.3.2 Mosaicking and Stitching of *mussavies***

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports

accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points.

#### **14.3.3 Ortho-rectification of images**

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### **14.3.4 Digitization Using Parcel Fabric Dataset Model**

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the *parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property of the project area within the project duration.

#### **14.4 Field Data Collection/ Verification:**

The firm will be responsible for field verification of digitized data using RTK.

#### **14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.3.5 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

#### **a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Time:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [Insert title of assignment] for (Package) 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.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Project Management Consultant]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_



## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*

## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_



[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input



- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch

# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.



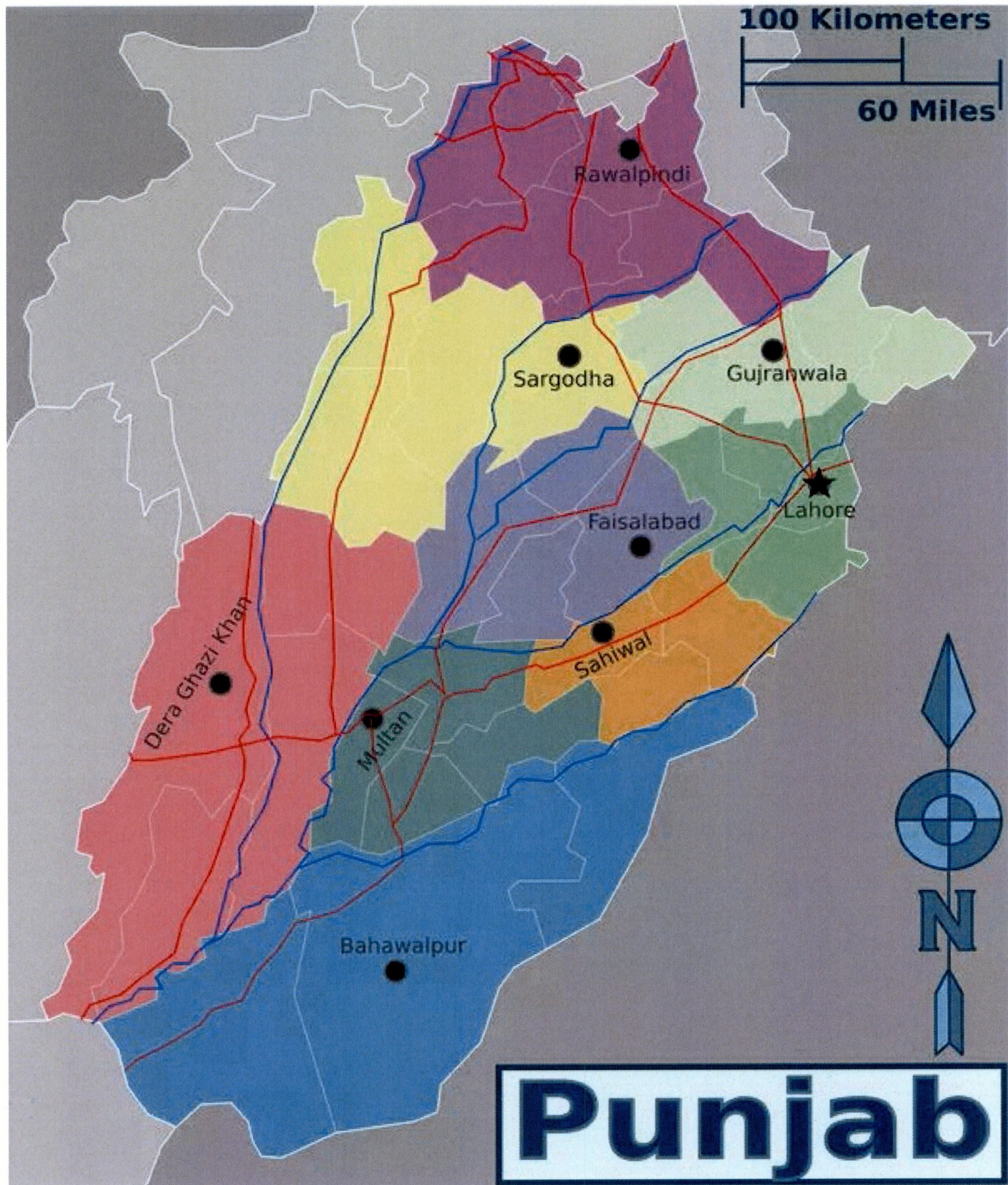
---

**Form FIN-3**  
Summary of Cost

---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km.of Statelands	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .



# Punjab

# SURVEY OF PAKISTAN



## BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF CADASTRAL MAPPING OF STATELANDS SINDH (DIVISION WISE)

Survey of Pakistan,  
Faizabad, Murree Road,  
Rawalpindi

## **Table of Contents**

<b>1</b>	<b>Project Overview</b> .....	<b>1</b>
2.	Request For Proposal .....	1
2.1	Validity Of The Proposal / Bid .....	2
2.2	Brief Description Of The Selection Process .....	2
2.3	Bid Security .....	2
2.4	Schedule Of Selection Process .....	3
2.5	Pre-Bid Conference .....	3
3.	Instructions To The Prospective Bidders .....	3
<b>4.</b>	<b>Data Sheet</b> .....	<b>7</b>
<b>5.</b>	<b>Technical Proposal</b> .....	<b>10</b>
<b>6.</b>	<b>Financial Proposal / Bid</b> .....	<b>11</b>
<b>7.</b>	<b>Evaluation Process</b> .....	<b>11</b>
<b>8.</b>	<b>Technical Evaluation Criteria</b> .....	<b>12</b>
8.1	Score: .....	12
8.2	Firm Profile: .....	13
8.3	Evaluation and Financial Proposals .....	14
<b>9.</b>	<b>Appointment of Vendor</b> .....	<b>18</b>
9.3	Substitution of Key Personnel .....	18
<b>10</b>	<b>Award of Work</b> .....	<b>19</b>
<b>11</b>	<b>Execution of Agreement</b> .....	<b>19</b>
<b>12</b>	<b>Commencement of Assignment</b> .....	<b>19</b>
<b>13.</b>	<b>Proprietary Data/Ownership</b> .....	<b>19</b>
<b>14.</b>	<b>Terms of References for Cadastral Mapping</b> .....	<b>19</b>
14.1	Scope of Work .....	19
14.2	Objectives .....	20
14.3	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.1	Scanning and Indexing of Record .....	20
14.3.2	Mosaicking and Stitching of mussavies .....	20
14.3.3	Ortho-rectification of UAV images/aerial photography / Satellite Images .....	20
14.3.4	Digitization Using Parcel Fabric Dataset Model .....	20
14.3.5	Standards for Positional Accuracy .....	20
<b>15.</b>	<b>Support Period</b> .....	<b>21</b>
<b>16.</b>	<b>Technical Forms</b> .....	<b>21</b>

<b>17. Monitoring of Work .....</b>	<b>21</b>
<b>18. Deliverables .....</b>	<b>22</b>
Form TECH-1:.....	23
Form TECH-2:.....	26
Form TECH-3:.....	27
Form TECH-4:.....	29
Form Tech-5.....	30
Form TECH-6:.....	33
Form TECH-7 .....	35
Form TECH-8:.....	36
<b>Financial Forms.....</b>	<b>38</b>
Form FIN-1 .....	38
Form FIN-2.....	39
Form FIN-3:.....	40

**BID SOLICITATION DOCUMENT FOR AWARD OF CONTRACT OF  
CADASTRAL MAPPING OF State Land Sindh (Division Wise)**

**1 PROJECT OVERVIEW**

Major challenges are associated with current Stateland record of Sindh province which at best can only be described as a make shift arrangement. The existing Revenue Records have not been updated since long. Land acquisition for development is severely hampered by unclear land records. Negative impacts to economic growth, fiscal balance, poverty reduction and good urban development are apparent and significant.

**2. REQUEST FOR PROPOSAL**

Survey of Pakistan Invites Proposals from eligible bidders/firms for “**Cadastral Mapping of State Land Sindh (Division Wise)**”. Survey of Pakistan intends to select the Firm through a competitive bidding process in accordance with the procedure set out herein.

RFP document can be downloaded from the Website of the Public Procurement Regulatory Authority (PPRA), and can also be obtained on the following address on payment:

***Project Coordinator  
Survey of Pakistan, Rawalpindi  
Contact No. 051-9290217***

**2.1. Validity of the Proposal / Bid**

The Proposal shall be valid up to 90 days as per PPRA Rule

**2.2. Brief description of the Selection Process**

The Bidders will send their Proposals in two sealed envelopes as mentioned in clause 3. **Single Stage- Two Envelop Procedure as per PPRA Rule 41 (3) will be adopted.** The selection process in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in **two separate sealed envelopes** **Single stage two envelopes procedure.** In the first phase, a technical evaluation will be carried out as specified in **Clause 8.** Based on this technical evaluation, in the second phase, a financial evaluation will be carried out. On the basis of Financial Proposal, the most advantageous bid will be awarded contract.

### **2.3. Bid Security**

All bidders are required to submit 2% earnest money in financial proposal envelop in the form of a bank guarantee or Bank draft/pay order. The Earnest Money should be furnished by a reputable bank in favor of Project Director, Survey of Pakistan, Rawalpindi and shall be valid for a period of three (3) months. The bank guarantee / pay order for earnest money will be returned to the responsive bidders on signing of the contract with the successful bidder and the earnest money of technically non-responsive bidder will be returned within 30 days. Bidders submitting a proposal without acceptable earnest money would be immediately disqualified.

### **2.4. Schedule of Selection Process**

<b>S.NO</b>	<b>ACTIVITIES</b>	<b>SCHEDULE</b>
01.	Date of issue	09-02-2021
02.	Last date for receiving queries/clarifications	15-02-2021
03.	Pre-Bid Conference	17-02-2021
04.	Client response to queries	17-02-2021
05.	Proposal Due Date for submission and Opening of Technical bids	24-02-2021
07.	Opening of Financial Bid	03-03-2021

(Above dates may be changed, if circumstances warrant so.)

### **2.5. Pre-Bid Conference**

The date, time and venue of Pre-Bid Conference shall be: Date: **February 17, 2021** Time: **12:00 hrs.** Venue: **Project Coordinator Survey of Pakistan, Rawalpindi.** All communications including the submission of Proposal should be addressed to:

Project Coordinator, Survey of Pakistan Muree Road, Rawalpindi

Phone: **051-9290217**

Fax: **051-9290212**

All communications related to the project should clearly be marked as **“Cadastral Mappings of State Land Sindh (Division Wise)”** on the top of the envelope.

### **3. INSTRUCTIONS TO THE PROSPECTIVE BIDDERS**

- 3.1. Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP.
- 3.2. The Bidder shall submit its Proposal in the form and manner specified in the RFP. The Technical Bid shall be submitted in line with the respective form at TECH-I and the Financial Bid shall be submitted in the form at FIN-I. Upon selection, the Bidder shall be required to enter into an agreement with the Client on finalization of bidding process. However, some clauses may be modified on mutually agree-able terms.
- 3.3. Bidder should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Bidders are encouraged to visit the Client before submitting a proposal and to attend a pre-bid conference as specified in the schedule. Bidders should contact the Client’s representative to obtain additional information on the pre-bid conference, and should ensure that these officials are advised in advance of the visit with adequate time to allow Project Director to make appropriate arrangements.
- 3.4. Bidder may request a clarification on the RFP documents up to the number of days indicated above before the proposal submission date. 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 Bidders.
- 3.5. 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 bidders and will be binding on them. The Bidders shall acknowledge receipt of all amendments. To give Bidder 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.

- 3.6. The original proposals (Technical and Financial) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder themselves. The person who signed the proposal must initial such corrections.
- 3.7. An authorized representative of the Bidder shall sign all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney on stamp paper 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**".
- 3.8. 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**" and clearly mentioning 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 be clearly marked "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE APOINTED OFFICIAL**". The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. Such an occurrence may be the case for Proposal rejection. 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.
- 3.9. 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 above, or any extension to this date in accordance with rules. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 3.10. From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Bidder to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidder Proposal.

- 3.11. The technical evaluation 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 RFP. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to meet evaluation criteria.
- 3.12. After the technical evaluation is completed, the Client may inform the Bidders who have submitted proposals that the technical scores obtained by their Technical Proposals, and shall notify those Bidder whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and TOR, that their Financial Proposals will be returned unopened after completing the selection process.
- 3.13. According to PPRA rule, “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.
- 3.14. Financial Proposals shall be opened publicly in the presence of the qualified bidders or their representatives who choose to attend. The name of the Bidders, and their technical scores shall be read aloud. The Financial Proposal of the Bidder who meet the minimum qualifying marks will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall then be opened, and the total rate/prices/cost read aloud and recorded.
- 3.15. All documents relevant to data entry including the prints prepared by the Firm shall become and remain the property of the procuring Client; Any restrictions on the future use of these documents by the Firm shall be specified in the conditions of the contract.
- 3.16. Procuring Client may negotiate with the most advantageous bidder regarding methodology, work plan, staffing and special conditions of the contract. The procuring Client shall not permit substitution of key staff, unless both parties agree that undue delay in selection process makes such substitution

unavoidable.

- 3.17. Bidders should note the Proposal Due Date (PDD), for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Client and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Client reserves the right to seek clarifications under and in accordance with the provisions of Clauses.
- 3.18. Bidder shall not submit any document after PDD except in response to any clarification sought by Project Director and in response to clarifications no change shall be made.
- 3.19. The TOR's mentioned in the RFP and Technical Proposal received from the bidder will be integral part of agreement.
- 3.20. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.
- 3.21. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.
- 3.22. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.
- 3.23. **Litigation:** In case any dispute, only court of law at Rawalpindi/Islamabad have jurisdiction to decide the matter.
- 3.24. **Pre-Bid Conference**
- 3.22.1 Pre-Bid Conference of the Bidders shall be held on the designated date, time and place. Only those Bidders, who have purchased the RFP

document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorization Letter from the Bidder.

3.22.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration, however, that the bidders have previously expressed those points in writing. It shall be endeavored to provide clarifications for facilitating a fair, transparent and competitive Selection Process.

#### 4. DATA SHEET

##### Paragraph Reference

Name of the Client: Survey of Pakistan

Name of the Assignment: Cadastral Mapping of State Land Sindh (Division Wise)

Method of Procurement: Single Stage – Two Envelop Procedure

##### Special Terms & Conditions of Contract

- 4.1 Survey of Pakistan invites sealed bids containing One Original Technical and Financial Proposal from all interested Bidders for this RFP.
- 4.2 The Bidder must quote for the complete scope of work as per TORs. The bid offering partial scope of work shall be rejected as non-responsive.
- 4.3 The Technical Proposal should contain all the bid items/solutions without quoting the price and must list firm's clientele, details of past projects, equipments, items specification etc.
- 4.4 Interested bidders may obtain further information on the bid and inspect the bidding documents at the office of Project Director.
- 4.5 All interested bidders can receive RFP from the office of Project Director, by submitting an application on their letterhead on payment of Rs. 2000.
- 4.6 All bids must be delivered to the office of the Project Director, on or **before February 24, 2021 at 10:30 hrs**. The bids will be publicly opened in the office of Project Director, at 11.00 Hrs on the same day in presence of bidders who wish

- to attend bid opening for official confirmation of the participating bidders.
- 4.7 The client will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 4.8 Bidders shall submit bids, which comply with the bidding documents, alternative bids will not be considered.
- 4.9 **Conditional bids will not be acceptable.**
- 4.10 Authority Letter from Principal Company for product and vendor authentication is to be provided by the bidder.
- 4.11 Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.
- 4.12 Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
- 4.13 The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
- 4.15. Implementation Plan is critical to the success of the project. A detailed Implementation Plan is to be prepared by the Firm and be part of the proposal.
- 4.16. Payment Schedule shall be based on the deliverables and will be detailed at the time of the contract.
- 4.17. Acceptance Criteria: Bidding is open to all Bidders that meet the eligibility criteria and minimum qualification criteria relating to previous experience, delivery capability, firms standing, etc., as stated in the RFP. Interested Bidders may obtain further information from the office of the Project Director and inspect the Bidding Documents during working hours by contacting at the address given below:-

**Project Coordinator**  
**Survey of Pakistan, Rawalpindi.**  
**Tel # 051-9290217**  
**Fax # 051-9290212**

- 4.18. Evaluation criteria are given below for the selection of the Firm.
- 4.20. The pre-bid Conference will be held on **February 17, 2021 at 12:00 pm** at Survey of Pakistan Rawalpindi.
- 4.21. In case of questions regarding pre-bid conference please contact:

- 4.22. The validity period i.e. validity of proposals within period of Award of Contract, would be 90 days. The financial & Technical Proposal of the bid can be considered for variation subject to significant change in the agreed upon scope of work.
- 4.23. The Firm has to submit documentary evidence (sufficient & acceptable) to the client and subject to approval of the client which will deem to have the final say on this subject.
- 4.24. Proposals shall be submitted in English language.
- 4.25. Amounts payable by the Client to the Firm hired under the contract would be subject to all local taxation.
- 4.26. Taxes shall be deducted from each payment made to the Firm as per Income Tax Rules and Regulations prescribed by Government of Pakistan.
- 4.27. Each party shall be liable for its own taxes. The prices quoted by the Firm in its financial proposal will be considered inclusive of all applicable taxes.
- 4.28. Firm is to state local cost in the national currency.
- 4.29. The Employer at its sole discretion may terminate the bidding process and cancel the bids for any packages at any time without effecting the bidding process of other packages

## **BID PROPOSALS**

### **5. TECHNICAL PROPOSAL:**

- 5.1. Bidders shall submit the technical proposal in the formats at TECH-I (the "Technical Proposal"). While submitting the Technical Proposal, the Bidder shall in particular, ensure that all forms are submitted in the prescribed formats and signed by the prescribed signatories. CVs of all Professional Personnel must be incorporated in the proposal.
- 5.2. The Technical Proposal shall not include any financial information relating to the

Financial Proposal.

- 5.3. The proposed team shall be composed of experts and specialists (the “Professional Personnel”) in their respective areas of expertise and managerial/support staff (the “Support Personnel”) such that the Firm should be able to complete the Project within the specified time schedule. The Key Personnel specified in TOR’s shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at TECH-4, TECH-5 & TECH-6.
- 5.4. The Client reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Client shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Client there-under.
- 5.5. In case it is found during the evaluation or at any time before signing of the agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.

## **6. Financial Proposal / Bid**

- 6.1 Bidders shall submit the financial proposal in the formats at FIN-I (the “Financial Proposal”) clearly indicating the rate/ total cost of the services both in figures and words, in PKR, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 6.2 All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work mentioned in TOR’s and remuneration related to digital cadastral mapping through full fledged GIS Labs, extensive GNSS/DGPS survey, transportation, deployment of Human Resources and other services necessary for proper digitization of record. The total amount indicated in the Financial Proposal shall be without any condition

attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.

6.3 The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.

6.4 Rates/costs shall be expressed in PKR.

## 7. EVALUATION PROCESS

### ELIGIBILITY CRITERIA

S.No	PRE-QUALIFICATION CRITERIA	DOCUMENTARY EVIDENCE
01.	Registered with FBR for Income tax and must be on FBR's Active Tax Payers List	Certificate of Registration
02.	Registered with Survey of Pakistan	Certificate of Registration
03.	Financial Capability of Firm 10 Million	Certificate of turnover
04.	Submit a self-declaration for not being under legal action for corrupt or fraudulent practices(blacklisted) by any Government Organizations.	Declaration signed and stamped by bidder
05.	Successfully accomplished at least Three Surveying and Mapping/GIS Projects	Attach copies of Supply Orders with relevant completion certificate or Signed Agreement with the procuring agency

## 8. Technical Evaluation Criteria

8.1. Bidders scoring **60%** or more in the technical evaluation will be technically qualified otherwise considered disqualified. Relative Weights given to the different evaluation criteria are shown in the table below:

Weight	Evaluation Criteria	Weightage
W1	Company/Firm Profile (EC1)	10
W2	Experience of the Firm (EC2)	20



W3	Project Team (EC3)	20
W4	Approach and Methodology (EC4)	35
W5	Equipment Available (EC5)	15

The Technical Score, St will then be obtained by the following formula:

$$St = (EC1 * W1/100) + (EC2 * W2/400) + (EC3 * W3/200) + (EC4 * W4/60) + (EC5 * W5/65)$$

where, EC1, EC2, EC3, EC4 & EC5 are the total component scores against Company profile, Experience of the Firm, Project team and Approach & Methodology criteria and equipment respectively. The technical criteria and their details are given below:

## 8.2. Firm Profile (EC1):

Profile of each bidder will be evaluated on the basis of the following three factors:

S.No	Item	Score
A.	Registration with Survey of Pakistan	50
B.	Financial Capability	30
C.	Certifications of the Firm	20
	<b>Total (A+B+C)</b>	<b>100</b>

### 8.2.1. Registration with Survey of Pakistan (A)

The firm requires to be registered with the Survey of Pakistan under Mapping Act 2014, Government of Pakistan.

Registration Category	Marks Assigned (C)	Parameter
S1 Category	50	Attach Registration Certificate from Survey of Pakistan
S2 Category	40	
S3 Category	30	
S4 Category	20	
<b>Sub Total (A)</b>	<b>50</b>	

### 8.2.2. Financial Capability of the Firm (B)

S.No.	Financial Strength	Marks Assigned	Documentary Evidence
01.	Over all average turn over of the Company in past three Consecutive Financial years e.gFY 2017-18, FY 2018-19, FY 2019-2020,		Certificate from the statutory auditor should be attached determining the combined turnover of the company in past three fiscal years
	10 to 20 Million	20	
	20 to 50 Million	25	
	50 Million or above	30	
<b>Sub Total (B)</b>		<b>30</b>	

$$EC (1) = A + B$$

### 8.3. Experience of the Firm (EC2):

The experience of each firm will be evaluated on the following factors:

S.No	Item	Score
1.	Surveying and Mapping / GIS Projects	
	More than 5 projects	400
	3-5 projects	300
	Less than 3 projects	200
	<b>Total</b>	<b>400</b>

### 8.4. Project Team (EC 3):

This section of the evaluation rates the team nominated by the firm to execute the assignment. For this, each CV of following Human Resource will be evaluated separately on the basis of education and past experience.

#### 8.3.1 Human Resource Capability: -

S.No	Position	No. of Resources	Maximum Marks
------	----------	------------------	---------------

01.	Project Manager (MS Degree in GIS / Geoinformatics/RS)	01	20
02.	GIS Specialist (Bachelor/Master Degree in GIS/Geoinformatics/RS)	04	40
03.	Land Revenue Specialist (Retired Revenue Officer in BS-16 or higher with domain knowledge)	02	20
04.	GIS Application Development Manager (Bachelor Degree in CS/IT/Software Engineering)	02	20
05.	GIS Development Officer (Bachelor Degree in CS/IT/Software Engineering)	01	10
06.	I.T Specialist (Bachelor Degree in CS/IT)	03	20
07.	DGPS Survey Specialist (Diploma/Certificate/DAE (civil))	04	20
08	Surveyors (Diploma/ Certificate)	10	50
<b>Total Marks</b>			<b>200</b>

### 8.5 Approach & Methodology (EC 4):

This section will evaluate the firm's solution to the TOR's. This section comprises two sub sections, i.e.

- a) Understanding & Innovativeness
- b) Methodology

Item	Weighted Score
Understanding and Innovativeness	30
Methodology	30

Each section contains several questions that can be given either of the following grades depending on the content of the technical proposal:

Grade (G)	Quality (Q)	Weight (W)
A	Excellent	5
B	Good	3
C	Average	2
D	Absent	0

### 8.5.1 Understanding and Innovativeness (L)

S. No.	Criteria	Grade
1	Experience of firms in Field of Surveying & Mapping	
2	Experience of firms in GIS Projects	
3	Demonstrate your proven track record regarding the issues/problems raised in the project and measures taken to mitigate the problem.	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 3, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/3) \times 30$$

### 8.5.2 Methodology (M)

S. No.	Criteria	Grade
1	Outline your Methodology for Designing, managing and implementation of this project keeping in mind the scope of work and the unique nature of the records. Include the following in your Project Management Methodology: - <ul style="list-style-type: none"> <li>▪ Your Vision for the Land Record Digitization.</li> <li>▪ Project Team Structure</li> <li>▪ Field survey and data integration methodology</li> <li>▪ Parcel fabrication details</li> <li>▪ Quality Assurance and Quality Control</li> </ul>	
2	Detail how you intend to prepare records for scanning (include unbinding, repairing, cleaning, rebinding as necessary) and highlight the manpower and time required for this process & strategy for missing musavees and unsettled areas.	
3	Describe your management expertise and processes required to develop a coherent program to complete the	

	activity, and to keep the project on track, on time and within the specified cost. (Detailed Work Plan)	
4	Explain how the information security will be ensured and the storage, backups and retrievals are disaster proof	

**Step 1:** Each grade is converted into its weight (W) and added up to get a total score (N).

**Step 2:** N is divided by 4, i.e. the maximum attainable score, and multiplied with the component weight to get the component score:

$$\text{Component score} = (N/4) \times 30$$

$$\text{EC 4} = L + M$$

### 8.6. Equipment Available (EC 5):

This section will evaluate the firm's resources in the form of equipment available with the firm.

SI No.	Equipment	Minimum Qty	Weighted Score
1	GPS	03	20
2	Total Station	03	15
3	Workstation/computers	10	30
Total			65

$$\text{EC 5} = G + H$$

$$\text{TOTAL TECHNICAL SCORE: EC1+EC2+EC3+EC4+EC5}$$

**Note:** Minimum 60 % is required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Department shall be final and binding on all the bidders. Keeping in view the availability of time, the vendors may also be asked to provide presentation on the following:

- Company Profile

- Understanding of scope of work and requirements
- Approach & Methodology (AM) for operations/execution, maintenance and Quality of service
- Proposed data entry plan and quality management.
- Risk Identification & Mitigation Plan

### **8.7 Evaluation of Financial Proposals / Bids**

- For financial evaluation, the total cost indicated in the Financial Proposal will be considered.
- The Selection Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToRs within the total quoted price shall be that of the Vendor. The lowest Financial Proposal will be considered as the most advantageous bid.

## **9. APPOINTMENT OF VENDOR**

9.1 Verification of Infrastructure by the Board / Committee members on vendor's site. The Vendor will provide the under mentioned details as part of Technical Bid:

9.1.1 Number of hardware with make, model and technical specs to be used in establishment of Lab.

9.1.2 Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract).

9.1.3 Before the award of the contract, user may visit the facilities of the short-listed Vendor / company and verify the plan as submitted.

9.2 The Client will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Department.

9.3 **Substitution of Key Personnel**

9.3.1 The Client will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any inability or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.2 The Client expects all the Key Personnel to be available during execution of the Project. The Client will not consider substitution of Key Personnel except for reasons of any inability or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Client.

9.3.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

## **10. Award of Work**

After selection, a Letter of Award (“LOA”) shall be issued, in duplicate, by the Client to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Client may, unless it consents to extension of time for submission thereof, appropriate the Earnest Money of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Client on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

## **11. Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the selected Bidder, it shall execute the Agreement within the specified period. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

## **12. Commencement of Assignment**

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

## **13. Proprietary Data/Ownership**

SoP has the intellectual Property Rights for all the Requirement Analysis Report, Proforma /templates, Digitized Map and Applications. Bidders are not authorized to use these documents for any other purpose without the express written permission of SoP.

## **14. TERMS OF REFERENCES FOR CADASTRAL MAPPING – State Land Sindh (Division Wise)**

### **14.1 SCOPE OF WORK**

The scope of work is Digital Cadastral Mapping of State Land of Sindh (Division Wise).

### **14.2 OBJECTIVES**

- 1) The Firm shall perform digitization at *parcel* level; through parcel fabric dataset model.
- 2) The firm is responsible to develop *mouza* boundaries using notifications and *mussavies* data.
- 3) High precision RTK GNSS based field surveys should be conducted by the firm for the collection of reference data and verification of the digitized work.
- 4) The firm will complete all the associated datasets with parcels / administrative boundaries by following given Data Model.
- 5) The firm will be responsible for collection of record of the properties.

### **14.3. Digitization Using Parcel Fabric Dataset Model**

#### **14.3.1 Scanning and Indexing of Record**

Scanning and indexing will be carried out of cadastral maps of Project Area. The scanned record *Mussavie* shall be stored in high resolution tiff format.

#### **14.3.2 Mosaicking and Stitching of *mussavies***

The Firm will be responsible for the stitching and mosaicking of *mussavies*. High resolution latest images shall be used for project. The images shall be geo-referenced with accuracy for Urban areas better than 10 cm so that it supports



accurate measurements and referencing. This is an essential step as will lead to the accurate overlay analysis of images/*mouza* boundaries and field data points.

#### **14.3.3 Ortho-rectification of images**

The images provided will be precisely corrected geometrically and radiometrically to make orthorectified. The firm shall send the surveyors to the field to collect reference points for main features identifiable through images.

#### **14.3.4 Digitization Using Parcel Fabric Dataset Model**

The Firm shall perform digitization at *parcel* level; through parcel fabrication dataset model by preserving all features and attribute data of vertices, lines, polygons and dimensions with units in the geo-database for Desktop with all the attribute information related to the parcel of land in WGS-84 with UTM Projection System.

The Firm shall be responsible to digitize all the features i.e. parcel boundaries, roads, water channels, graveyards, and other similar features by following given data Model. Parcel fabrication model shall incorporate data in a way that the *parcel* is stored as polygon and also separate lines with details of sides, dimensions and numeric values.

The firm will be responsible for the scanning and attribute entry of all the property of the project area within the project duration.

#### **14.4 Field Data Collection/ Verification:**

The firm will be responsible for field verification of digitized data using RTK.

#### **14.5 Quality Control:**

All type of errors such as connectivity, nodes, missing linkages, duplicate lines/data entry, mismatching of vertices, badly shaped vector, missing knots at intersection, too many vertices in line, switchbacks and topological errors as overshoot, knots, loops, undershoot and dangle, etc. shall be checked and corrected in GIS environment.

After the development of base data and integration of secondary information with base data, all the digitized vector data (points, lines and polygons) shall be checked for Quality Assurance in the field.

**14.3.5 Standards for Positional Accuracy:** The following standards will be used to define minimally acceptable levels of differential relative positional accuracy required for Cadastral Survey.

#### **a. Local Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.050 (m)	Cadastral Project Control
Less than 0.100 (m)	Cadastral Measurements

**b. Network Accuracy Standards:**

95% Confidence Circle	Application
Less than 0.100 (m)	Cadastral Project Control
Less than 0.200 (m)	Cadastral Measurements

**15. Support Period**

The Firm has to provide support for a period of one year after the completion of Project.

**16. Project Time:** 6 month from date of signing of Contract Agreement

**17. Monitoring of Work:**

The monitoring to check quality / progress of work will be carried out by SoP team on monthly basis.

**18. Deliverables**

- a. Parcel level vector layer superimposed on Geo-rectified/ortho-rectified images.
- b. Geo-database of *complete project area* on portable storage media with proper indexing.
- c. Raster and Vector data with complete set of information as mentioned in this document.
- d. Hard copy of all the documents / record used in the project.
- e. Monthly progress reports and final project report.
- f. Miscellaneous

# Technical Forms

## Form TECH-1

### Technical Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sir:

We, the undersigned, offer to provide the Project Management consulting services for [Insert title of assignment] for (Package) 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.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Project Management Consultant]

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.

We undertake, if our Proposal is accepted, to initiate the Project Management consulting services related to the assignment not later than the date indicated in the schedule.

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: \_\_\_\_\_

## B – Experience of Firm

*[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually 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.]*

Assignment name:	Approx. value of the contract (in PKR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in PKR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Firm:
Name of associated Firm, if any:	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:

Firm's Name: \_\_\_\_\_

## **Form TECH-2**

### **Comments and Suggestions on the Terms of Reference**

---

#### **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.]*

## **Form TECH-3**

### **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 (descriptive, inclusive of charts and diagrams) divided into the following three chapters:*

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

*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.]*



## Form TECH-4

### Team Composition and Task Assignments

---

<b>Professional Staff</b>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

## FORM TECH-5

### 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 : \_\_\_\_\_

6. Education:

Degree	Major/Minor	Institution	Date (MM/YYYY)

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 on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

## 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: \_\_\_\_\_

Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

2) Name of assignment or project: Cost: \_\_\_\_\_

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

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

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

Positions held: \_\_\_\_\_

Actual time spent on the project: \_\_\_\_\_ in months.

Location: \_\_\_\_\_

Client: \_\_\_\_\_

Main project features: \_\_\_\_\_

Activities performed: \_\_\_\_\_

[Unroll the project details group and continue numbering (4, 5, ...) as many times as is required]

**13. Certification:**

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

[Signature of staff member or authorized representative of the staff]

\_\_\_\_\_

Full name of authorized representative (attach authority letter):

\_\_\_\_\_

Date: (Day/Month/Year)\_\_\_\_\_

## Form TECH-6

### Abstract of Eligible Assignments of Key Personnel

---

<b>S.No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of project (PKR)</b>	<b>Name of firm for which the Key Person worked</b>	<b>Designation of the Key Person for the assignment</b>	<b>Date of compensation of assignment</b>	<b>Mandays spent</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							

6		"		"	"		"
7							
8		"		"	"		"

## Form TECH-7

### Staffing Schedule

	Name of Staff		Staff input (in the form of a bar chart) <sup>2</sup>												Total staff-month input
			First Quarter			Second Quarter			Third Quarter			Fourth Quarter			
		Qtr	1	2	3	1	2	3	1	2	3	1	2	3	
1															
2															
3															
4															
5															
n															
												<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.

Full time input

Part time input





- 1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in a form of a bar chart.
3. Include a legend, if necessary, to help read the ch

# Financial Forms

## Form FIN-1

### Financial Proposal Submission Form

---

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Project Management Consultancy 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 exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

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

### Financial Capacity of the Bidder

---

S. No.	Financial Year	Annual Revenue (PKR)
1.		.
2.		.
3.		.

**Certificate from the Statutory Auditor #**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of Professional Services/Consultancy Fees.

Name of the audit firm: Seal of the audit firm: Date:

(Signature, name and designation of the authorized signatory)

# In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

**Note:** Please do not attach any printed Annual Financial Statement.

---

**Form FIN-3**  
Summary of Cost

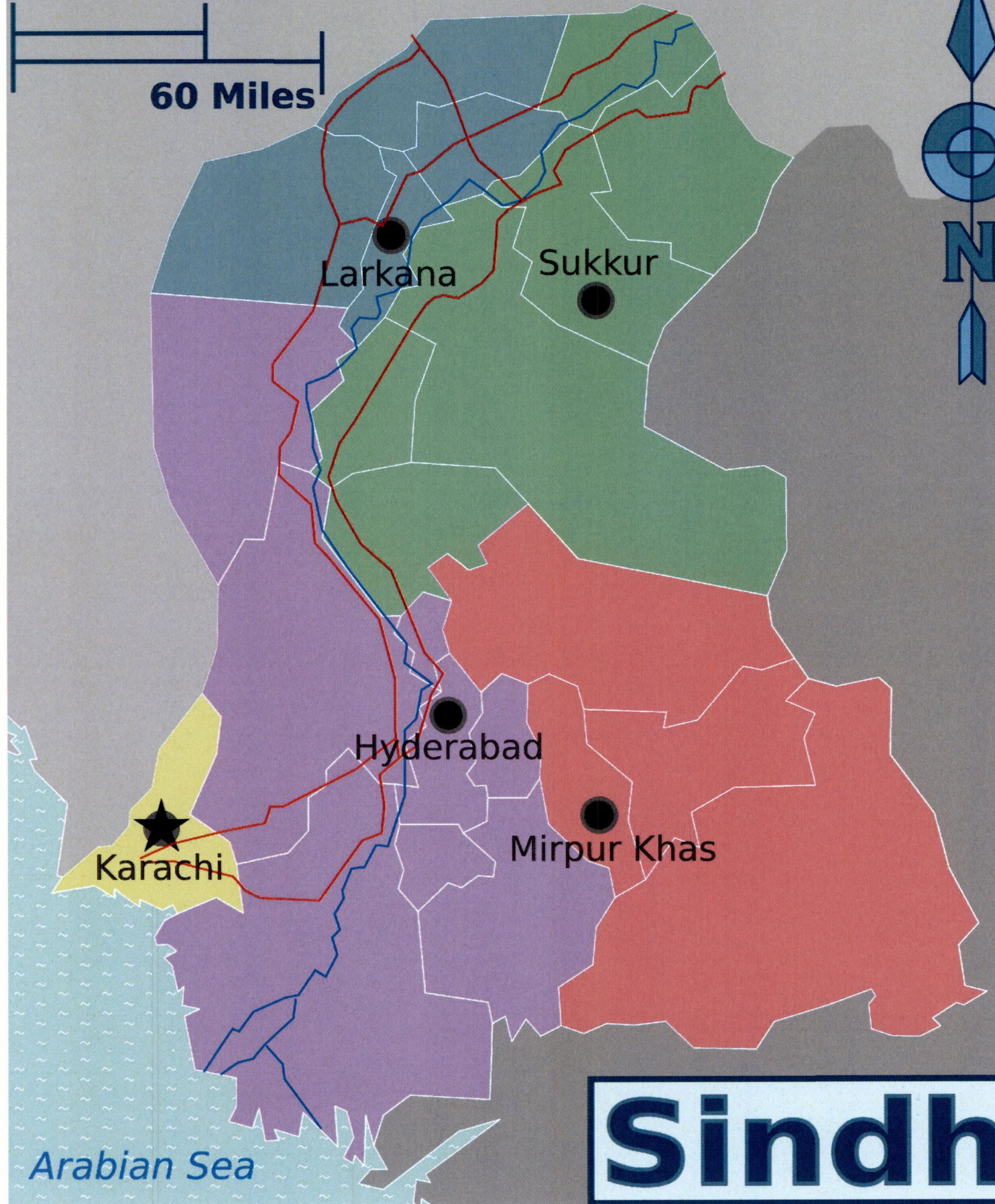
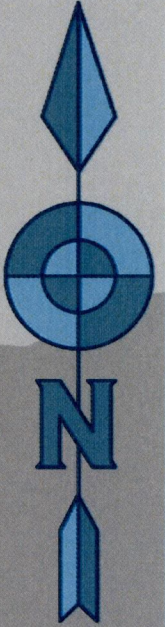
---

<b>S.No.</b>	<b>Deliverables</b>	<b>Unit</b>	<b>Total Price inclusive of all leviable taxes and duties (Rs.)</b>
<b>1</b>	<b>Cadastral Mapping</b>	Per Sq. Km of Statelands	
<b>2.</b>	<b>Minimum 14000 Ground Control Points (GCP) using DGPS equipment</b>	Per Point	
<b>3.</b>	<b>Support Period for One Year</b>		

1 Indicate the total costs, inclusive of all taxes i.e. ( Income Tax , Services Tax of BRA etc) .

100 Kilometers

60 Miles



Larkana

Sukkur

Hyderabad

Mirpur Khas

Karachi

Arabian Sea

**Sindh**