

Government of Punjab

(Department of Revenue),
Office of Special Secretary
III rd floor Civil Secretariat, Chandigarh, Punjab



OBSERVATION AND PROCESSING OF CONTROL POINTS

TENDER NO – 68.

PRICE: Rs.5000/- (non-refundable)

TO BE SUBMITTED BY: 09 - 09- 2010 by 1000 HRS.

SECTION 1

Tender Notice

Department of Revenue

TENDER NOTICE

OBSERVATION AND PROCESSING OF CONTROL POINTS

Description and Scope of Contract

The Punjab Land Record Society under Government of Punjab has planned to complete the resurvey of the State in a time bound manner using DGPS, total stations and Aerial photogrammetry for cadastral survey. Currently, the Punjab Land Record Society is engaged in conversion of old graphical records into digital records. It is proposed to provide control points in a network having leg ranging from 3 Km to 5 km distance using Dual Frequency Global Positioning System. The Society has planned the position of control points, the pre fabricated pillars shall be supplied to the successful vendor, these pillars have to be installed first at site earmarked for the control point and description written on the proforma which will be supplied by PLRS. The tenderer can install pillar with in 100m of location defined by the PLRS depending upon the feasibility of the point required for GPS Observation.

On behalf of the Governor of Punjab, the Special Secretary Revenue, Room No. 7 IIIrd floor Civil Secretariat, Chandigarh Telephone 091-0172-2740173, Fax 091-01722747798, E-mail: www.punjabrevenue@nic.in invites sealed tender for observation of Control points for 1:1000 scale Survey using Total Station OR combination of both Total Station and Aerial photographs.

The tenders must be submitted in two sealed covers separately for technical bids as well as commercial bids, which are to be super scribed as “**Technical Bid for Observation and Processing of Control Points**” and “**Commercial Bid for Observation and Processing of Control Points**”(Please indicate District Name for which it is quoted) respectively. Both the documents should be sealed and kept in another sealed cover to be super scribed as “**Bid for Observation and Processing of Control Points** ”.

Note: Commercial bids shall be quoted separately for each district. If a company is quoting for all the districts it must submit 20 Commercial bids clearly indicating the name of District on outer cover of commercial bid.

The successful vendor is required to prepare a plan for observation schedule depending upon the best possible time for observation and get it approved from PLRS before the commencement of observations and shall abide by the plan thereafter. If there is any change in the plan of observation it has to be got officially approved after discussion with Project Director land Survey & GIS. The data shall be processed at one location in the State. The data shall be prepared on WGS84 Datum and Universal Transverse Mercator projection for Spherical Co-ordinates and as per Punjab State origin on WGS 84 Datum and Transverse Mercator projection for rectangular Co-ordinates.

The commercial bids shall be opened only for those companies who have been found technically qualified as per laid down Criteria. If after opening of commercial bid it is found that the L1 vendor does not have the capacity to complete the job with in 180 days the L2 company can be asked to take up the job along with L1 company at L1 rates. As overlap of observations of both the companies shall be critical for calculation of co-ordinates therefore In this case companies shall be asked to plan the schedule of observation together and shall restrict to the observation schedule as per approved plan. Any company failing to adhere to schedule can be penalized and may be asked to re observe some observations in addition penalty of 2%per effected point shall be levied. Processing of complete data shall be done as if only one company has carried out the observations. In case two companies do not have the capacity then L3 company shall also be asked to Join in at L1 rates. The conditions explained above shall apply to this company also. Maximum up to 4 companies can be added if companies defined above do not have the capacity.

The tenderer can be individual firm or can be a consortium of firms as per the clauses defined in the tender. Only DGPS instruments shall be used by the successful firm up to phase III but however in case of phase IV Single frequency GPS with post processing facility can be used as Rover. The processing shall be done in a network and all vectors should be within the permissible limits particularly loop of each triangle must close within 3 cms.

The Control points are to be drawn from Survey of India GCP's available in the State. The positions of Survey of India GCP's are shown in the **Annexure 'A'**. All the control points must be computed minimum from 3 points. All points should be derived from the points having the better accuracy than the point whose co-ordinates are being calculated.

2.4. The offer should be made as per the specified tender Performa only, contained in the tender document and should be addressed to: **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat Chandigarh Punjab.**

The Special Secretary Revenue expects successful bidder to undertake provision of control points using Dual frequency GPS and as per the observation schedule and plan prepared in consultation with Project Director land Survey & GIS. The processing of data shall be done by the bidder and observation must agree with in specified technical limits. The control points have been divided into **V-Phases**

Phase I

There are about 34 points well spread over whole state which will not be observed as their co-ordinates have been provided by Survey of India and their Co-ordinates as per observed accuracy are available. These points are of 1:100,000 accuracy. These points have to be taken as masters for IInd Phase observation. **(AnnexureVII)**

Phase II

There points are well distributed across the state which would be required to be observed for 12 hrs, using Dual frequency GPS, the approximate position can be supplied to the successful vendor. These points are at about 30 to 35 km apart. Their approximate position has been indicated on attached as **Annexure IX**. While observing these points it would be mandatory to have minimum 3 masters and base lines should be processed using bases of phase I points. The base lines processed must have an accuracy above 1:50,000. The bases of these points must be processed using the bases of phase I points. It should be ensured that minimum three nearer points of higher accuracy act as masters while these points are being observed

Phase III

The approximate position can be supplied to the successful vendor. These points shall be observed for 6 hrs. These points are about 10 to 15 km apart. The computed bases must have an accuracy of more than 20,000. The bases of these points must be processed using the bases of phase I or phase II points. It should be ensured that minimum three nearer points of higher accuracy act as masters while these points are being observed. Masters and rovers have to be DGPS machines.

Phase IV

The approximate position can be supplied to the successful vendor These points shall be observed for 4 hrs. These points are about 3 to 5 km apart. The computed bases must have an accuracy of more than 10,000. The bases of these points must be processed using the bases of phase I, phase II or phase III points. It should be ensured that minimum three nearer points of higher accuracy act as masters while these points are being observed. The master instruments have to be DGPS where as Rovers can be Single frequency GPS with post processing facility machines.

For Phase II, Phase III and Phase IV the pre fabricated Feno Markers along with engraved discs shall be provided to the successful tenderer who has to first select a site approximately within 100 m radius of tentative position indicated by the PLRS and install the pillar. The sketch of Feno marker is shown as **Annexure VIII**

The description of each point has to be written on the proforma which shall be supplied by the PLRS.

Phase V

This phase is primarily meant for checking of accuracies of points which have been provided above. In this phase only total Station can be used to check the consistency of co-ordinates. About 25% control points shall be checked by providing the traverse. While carrying out this phase the position of points have to be marked on ground by selecting permanent features. The traverse carried out between two points must agree with in 1: 5000 accuracy. The marks will be drilled using hand drill. The traverse station marks have to be on permanent details/features like Km stone, parapet of any building. The markers like bolts and washers shall

be used (Sample can be supplied by PLRS to the successful tenderer) for this purpose which tenderer has to arrange by itself. In case traverse does not agree with in the permissible limits as defined above it has to be repeated. And in case even after repetition also, required accuracy is not achieved ,the GPS points provided by the company connecting the traverse have to be re-observed with GPS at its own cost. Since to start a total station traverse, co-ordinates of starting station and back station also would be required therefore company at their discretion can make a back station using GPS but its cost will not be paid however its distance can be added for charging against the traverse length. In case of repeat of traverse the traverse length can be added for cost

The payment shall be made for only those points which qualify the approval criteria prepared by a technical team for this purpose. Payment shall be made only after the Completion of processing and approval of points by a technical team committee constituted for this purpose.

The tenderer can bid for whole District or a cluster of Districts depending on availability of resources with him. Minimum task which can be awarded is a District. Special Secretary Revenue at his discretion can award the task for District or cluster of Districts depending on the capacity of the firm. Each tenderer must quote for each district separately.

In case the tenderer is unable to meet the assigned schedule of observation he is likely to pay a penalty of 2% per point per 15 days maximum upto 5% . If the observation schedule is delayed beyond 45 days from the allotted time schedule, The Special Secretary Revenue at her discretion can withdraw the allotted task and allotted to L2. And in case companies upto L4 are already assigned the task then in this case L5 can be considered for allotment at L1 rates.

Commercial bid should be quoted separately for each District, cluster of Districts or as case may be.

The tender must be submitted in a sealed covers. Bid should be for each District, should be placed in separate sealed cover and name of the district should be super scribed in bold letters. All the sealed covers shall be kept in another sealed cover. The outer cover should be super-scribed as "**TENDER FOR OBSERVATION AND PROCESSING OF CONTROL POINTS**"

The L1 shall be calculated separately for each District/Cluster depending on the response.

The bids of the short-listed /qualified tenderer(s) will be opened only after evaluation of capability of firm to provide control points. The short-listing of the tenderer(s) will be carried out on the basis of the evaluation and on the basis of documents submitted by the tenderer.

The unopened bids of unqualified tenderer will be returned to the Tenderers.

The tender documents could be down loaded from the official website www.punjabrevenue.nic.in or www.plrs.org.in

**The Special Secretary Revenue,
Room No 7, IIIrd floor, Civil Secretariat
Chandigarh Punjab**

2 PARTICULARS OF THE TENDER

The tender document can be purchased from the Office of “The Special Secretary Revenue, Room No 7, Illrd floor, Civil Secretariat, Chandigarh, with a request letter against payment of Rs. 5000/- (non-refundable) per tender by Demand Draft drawn on any Nationalised/ Scheduled Bank payable at Chandigarh in favour of “**Under Secretary Revenue**” on all working days (Monday to Friday) between 0930 hrs and 1700 hrs. Tender document will be made available from 30th July 2010 to 9th September 2010. Last date for receipt for Tender is 1000 hrs 9th September 2010. The tender document can also be downloaded from www.punjabrevenue.nic.in/ www.plrs.org.in website, in which case, while submitting the tenders, the fee of tender document should be enclosed in the form of a demand draft as per the particulars given above, without which the tender will be treated as invalid.

The offer should be made on the original specified Tender Proforma only, contained in the Schedule of Tender document. All offers should be made in English. The cover should be addressed to “**The Special Secretary Revenue, Room No 7, Illrd floor, Civil Secretariat, Chandigarh Punjab.**”

| | | |
|---|---|---|
| Tender No. | : | 68. |
| Total No. of pages in this Tender Document | : | 44 |
| Sale of Tender Document Commences | | 30-07-2010(1000hrs) |
| Last date for Sale of Tender Document | : | 09-09-2010 (1000 hrs) |
| Pre-bid Conference at | : | |
| Punjab State Planning Board, SCO Number 70-72, Sector-17-D Chandigarh. | : | 19-08-2010(1030 hrs) |
| Last date of submission of Technical & Price Bids | : | 09-09-2010(1000 hrs.) |
| Opening of Technical Bids at Sector 17,Chandigarh | : | 09-09-2010(1100 hrs.) |
| Opening of Price Bids | : | will be intimated to all the participant after the completion of Pilot. |

In case tender is being submitted on last Date it should be at **Punjab State Planning Board, SCO Number 70-72,Sector-17-D Chandigarh**

Tender documents will be available at 1: www.punjabrevenue.nic.in/
www.plrs.org.in

2. The Special Secretary Revenue,

Room No 7, IIIrd floor, Civil Secretariat,
Chandigarh (Punjab)

Phone: 0172-2740173

| | |
|--|--|
| Cost of Tender | : Rs. 5,000 /- (Non refundable) |
| Amount of EMD | : Rs.20,000/- For one District in case of more than one District the EMD will be Rs 50,000 |
| Address for submission of Tender | : The Special Secretary Revenue Room No 7, IIIrd Floor, Civil Secretaraite Chandigarh, Punjab, |
| Address for submission of Tender on last day | Punjab State Planning Board, SCO Number 70-72, Sector-17-D Chandigarh |

3. **ELIGIBILITY FOR PARTICIPATION IN TENDER**

The Tenderer should meet the following criteria as on the date of submission of the bid:

- (i) The Company/firm/partnership must be well established and must have been rendering related services as mentioned in the bid document for at least last 3years (Attach documentary proof).
- (ii) Bidder will have to give the Registration No. of the firm, CST No., Sales/ Service Tax/ VAT documents in their respective bid document.
- (iii) The bidder should have credential for execution of geospatial projects. The work completion certificate/ performance certificate should be enclosed in the Technical Bid.
- (iv) Turnover of the firm in geospatial works must exceed Rs.1 crore in each of the last 3 financial years. The bidder should submit Income Tax return statement and auditor's report duly signed copies of orders (along with work completion certificate) in support of Turnover details.
- (v) Should have carried out a project on Control point provisioning using Dual frequency GPS for more than 5 lakh in a year.(Submit documentary evidence)
- (vi) Should have min 20 DGPS on their inventory.

- (vii) Company can be individual or consortium, in case of consortium each partner company should have turn over of at least 1 Crore. (Submit documentary evidence)
- (viii) The bidder should have at least 50 geospatial Professionals on their payroll for the activities related Field surveying activity (Attach the list of Employees with exposure to Projects and Technologies)
- (ix) Due to confidentiality of the data no further outsourcing of work would be allowed. An affidavit on Non-Judicial stamp paper duly attested by 1st Class Executive Magistrate / Notary Public should be submitted to this effect.
- (x) The bidder should not have been blacklisted by central/state Government departments or should not found indulge in any unethical practice. (A notarized undertaking on Rs. 100/- stamp paper should be submitted to this effect).
- (xi) Bidder having ISO 9001:2000 or better Quality certificates and or ISO 27001 data security certified in its company's name will be preferred over non ISO certified company in case there is a small variation in the rates.
- (xii) The bidder should furnish a certificate from Nationalized/Scheduled bank/Chartered Accountant in support of its positive net worth equivalent to Rs. 5 Crores.
- (xiii) The Tenderer should provide an undertaking on letterhead of owning the hardware to be required for executing the work and should have premises and necessary infrastructural facilities to perform the functions required in Jalandhar or it should establish such facility within 15 working days of award of Work Order.
- (xiv) The Bidder must have qualified and experienced person in geospatial field who is capable to execute projects related to Cadastral Information Systems. The overall employee strength of the company should not be less than 50 (The agency shall submit a copy of the return submitted to EPF/PF Commissioner in support). The details of top level management along with their qualification must be attached with bid document.

4 GUIDELINES FOR PREPARATION OF TENDER

- (i) The technical bid must be accompanied by a photocopy of the receipt obtained for the purchase of the tender document. In case tender document is down loaded from website, a Demand Draft for Rs.5000/- payable at Chandigarh, drawn in favour of "**Under Secretary Revenue**" should be enclosed with the Technical bid of the tender. Otherwise the offer will be summarily rejected without assigning any reason.

- (ii) The tender bid must be submitted in two proformae: Proforma 2 of part (B) for technical bid and Proforma 3 of part (B) for commercial bid separately.
- (iii) Ambiguous and Incomplete tender(s) will be summarily rejected. Amendments and addition to tender after opening the tender will not be accepted.
- (iv) For all purposes of the contract including arbitration there under, the address of the contractor (tenderer) mentioned in the tender shall be the address to which all communication addressed to the tenderer will be sent, unless the contractor has notified a change by a separate letter containing any other information and got it acknowledged by **“The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat, Chandigarh Punjab.**
- (v) Each page of the tender submitted for bid should be signed by the tenderer himself or a person duly authorized by the tenderer(s). The tender should be a complete document and should preferably be bound as a Volume.
- (vi) Cost of preparation of tender offers, attending the tender opening, meetings of the Negotiation Committee, Prospective tenderer(s) meet and arrangements for demonstration/presentation will be the responsibility of the tenderer(s). **“The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat, Chandigarh Punjab shall not be responsible to meet any such expenditure.**

5 PROBABLE WORK SITES FOR OBSERVATIONS

Observation shall be carried out all over the State but processing shall be done at PLRS Jalandhar. The Punjab Land Record Society will provide site at PLRS Jalandhar where processing can take place. The Software for such purpose shall have to be arranged by the tenderer.

The complete work shall be carried out by the Tenderers using their own HW / SW / Manpower/Instruments. No extra cost to this effect shall be paid by the Punjab Land Record Society..

Technical guidance or clarification if any can be had from the chief consultant at any time on phone No 09419725712 Email shamsher.jamwal@gmail.com.

6 SUBMISSION OF TENDER

- (i) The schedule of the tender document (PART 'B') contains Checklist, Application form (Performa 1), Questionnaire (Performa 2 for Technical Bid), Pricing Schedule (Commercial Bid - on Performa 3), Bid particulars (Performa 4), Format of Warranty (Performa 5) and Data Security (Performa 6). The tender must be completed in all respects as per the check-list.
- (ii) The schedule to the tender form should be returned intact after completion, in original, whether tenderer(s) are quoting for any item or not. Pages should not be detached from the Schedule of the Tender Document or omit any entry for any item(s) not tendered for and, in such case the corresponding space for item(s) should be reflected by words '**not quoted**'.
- (iii) In case of insufficient space in the Performa for the required purpose, additional pages may be added. In such case, additional page(s) duly signed by the tenderer(s) must be numbered consecutively, at the end with cross reference of appropriate paras of the tender document.

Tenders can be either dropped in the tender box or they can be sent by Registered Post or Courier/Speed Post so as to reach one day before the day of close to **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat, Chandigarh Punjab**. Before the specified date and time. The Special Secretary Revenue shall not be responsible for any postal delay. The tenderer(s) may get it confirmed in their own interest, about the submission of tender(s) from The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat, Chandigarh Punjab. In case the tender is to be submitted on last date of submission, it should be personally submitted at **Punjab State Planning Board, SCO Number 70-72, Sector-17-D Chandigarh**

7. TERMS AND CONDITIONS

(a) Essential Requirements:

Any tender (Technical Bid) not accompanied by the following documents will be summarily rejected: -

- (i) Registration No. of the firm with validity
- (ii) Income Tax return for the last three years with income tax certificate issued by the competent authority.
- (iii) Registration No. of the firm, CST No., Sales/ Service Tax/ VAT documents in their respective bid document
- (iv) Amount of EMD : Rs. 20,000/- For one District
: Rs. 50,000/- For more than one District
- (iv) Receipt for purchase of tender document or Demand Draft for Rs.5000/- in case the tender document is down loaded from the website.

Note: If any modification of the schedule is considered necessary, the tenderer(s) should communicate by means of a separate letter and send the same with the tender bid.

(b) Rates

- (i) The rates for one point in each category of observations must be quoted. In case of traverse,(Phase V) rate per linear Kilometer must be indicated. The prices must be firm and no escalation in prices during the period of validity of the offer will be accepted.
- (ii) The L1 shall be calculated separately for each District/Cluster depending on the response.
- (iii) The bids of the short-listed /qualified tenderer(s) will be opened only after evaluation of capability of firm to provide control points. The short-listing of the tenderer(s) will be carried out on the basis of the evaluation and on the basis of documents submitted by the tenderer and the unopened bids of unqualified

tenderer will be returned to the Tenderers. The tender documents could be downloaded from the official website PLRS/revenue department as indicated above.

ARBITRATION AND JURISDICTION

If any dispute or difference arises between the parties hereto as to the construction, interpretation, effect and implication of any provision of this contract, including the rights or liabilities or any claim or demand of any party (or its extent) against the other party or its subcontractor or in regard to any matter under these presents but excluding any matters, decisions or determination of which is expressly provided in this contract, such disputes or differences shall be referred to an arbitrator to be appointed by mutual consent of both parties. If the parties cannot agree on the appointment of the arbitrator within a period of one month from the notification by one party to the other of existence of such dispute, then the arbitrator shall be nominated by the Financial Commissioner Revenue, Govt. of Punjab. A reference to the arbitration under this clause shall be deemed to be submission with the meaning of the Arbitration and Conciliation Act 1996 and any modification or re-enactment thereof and the rules framed there under for the time being in force.

Any dispute arising out of the contract should be within the jurisdiction of Chandigarh only.

Minor cases of redressal, if any, can be referred to the Secretary Revenue, Govt of Punjab.

(f) **SIGNING OF TENDER**

The individual signing the tender or other documents in connection with the tender must specify whether he signs as :-

- (i) A 'sole proprietor' of the firm or constituted attorney of such sole proprietor;
- (ii) A 'partner' of the firm if it be a partnership, in which case he must have the authority to refer to arbitration in case of disputes concerning the contract.
- (iii) 'Appropriate authority with delegated powers', if it is a company.

In case of (ii) above, a copy of the partnership agreement or general power of attorney in either case, attested by a Notary Public, should be furnished, or affidavit of the partnership agreement or the general power of attorney of all the partners admitting execution should be furnished.

In the case of partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.

A person signing the Tender or any documents forming part of the contract and on behalf of another shall be deemed to warrant that he has authority to bind the other. In such case he should supplement legal document with the tender.

Each page of schedule to tender and Annexure thereof, or additional pages if any, should be signed by the Tenderer(s).

(g) **FORCE MAJEURE**

If, at any time, during the continuance of this agreement, the performance in whole or in part by either party of an obligation under this agreement shall be prevented or delayed by reason of *force majeure*, which shall mean war, hostility, acts of the public enemy, commotion, sabotage, fires, floods, explosions, epidemics, terrorisms, government orders or restriction, strikes, lockouts and acts of God (herein-after referred to as an “event”), then the contractor shall promptly notify Punjab Land Record Society in writing specifying the nature of the event and of the anticipated delay in the performance of the activity and consequent milestone of the contract. Based on the application, The Special Secretary Revenue may at its discretion grant extension of time for completion of the task without any change in the schedule of the price. The decision of The Special Secretary Revenue in this matter shall be final.

If at the expiry of such period of extension, any of the reasons for the delay still remain, The Special Secretary Revenue may either agree for a further period of extension or suspend the contract or treat the contract as terminated.

In the event of the contract being terminated by reason of force *majeure*, the contractor shall take such steps as are necessary to bring the services to an end, (including terminating any subcontracts placed by the contractor) in a cost effective, timely and orderly manner.

(h) **DELIVERY OF TENDERS**

The tenders must be submitted in two sealed covers separately for technical bids as well as commercial bids, which are to be super scribed as “**Technical Bid for Observation and Processing of Control Points**” “**Commercial Bid for Observation and Processing of Control Points**”, respectively. Both these covers should be sealed and kept in another sealed cover to be super scribed as “**Bid for Observation and Processing of Control Points**” Tenders can be either dropped in the tender box or they can be sent by Registered Post or Courier/Speed Post so as to reach **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat Chandigarh Punjab**. on or before the specified date and time. **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat Chandigarh Punjab**. shall not be responsible for any postal delay. The tenderer(s) may get it confirmed in their own interest, about the submission of tender(s) from the Office of **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat Chandigarh Punjab**

(i) **BID SECURITY / EARNEST MONEY:**

Each tenderer must furnish the Earnest Money @ specified in Para 7, in the form of Demand Draft / Bankers Cheque /“Deposit at Call’ Receipt from any Nationalized Bank in the name of “**Under Secretary Revenue**” Payable at Chandigarh.

Any bid submitted without earnest money will be rejected.

(j) **LATEST HOUR FOR RECEIPT OF TENDER**

The tender must reach **The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat Chandigarh Punjab** not later than 1030 hrs on 9th September 2010. Tender(s) received after this time will not be considered.

(k) **PERIOD FOR WHICH OFFER WILL REMAIN OPEN**

Tenders shall remain valid for acceptance for the minimum period of six months which is not likely to be extended further.

(l) **OPENING OF TENDER**

Tenders will be opened in public on 9th September 2010 at 1100 hrs. in the **Conference Hall of Punjab State Planning Board, SCO Number 70-72, Sector-17-D Chandigarh** in the presence of such tenderer(s) or one of their authorized representatives who may wish to attend.

(m) **RIGHTS OF ACCEPTANCE OF TENDERS**

The Governor of Punjab or his nominee does not bind himself to accept any tender and reserves the right of accepting the whole or any part of the tender or portion of the quantity offered.

The Governor of Punjab or his nominee reserves the right to reject any or all offers received in response to this tender or cancel/withdraw the tender notice without assigning any reason prior to the award of contract.

(n) **PRESENTATION**

A pre-bid conference shall be held on 19th August 2010 at Punjab Planning Board conference Hall at SCO 71-72 Sector 17 Chandigarh. During a pre bid conference a presentation shall be given to all participating vendors where complete procedure shall be explained and records required to be prepared shall be listed out. Doubts if any can be clarified.

(o) **Visit**

A team of officers of Punjab Land Records Society may visit the tenderer(s) at their site to evaluate the infrastructure and resources available with them.

(p) **SECURITY DEPOSIT**

A Security Deposit @ of 10% (Ten percent) of the value of total job-order in the form of Bank Guarantee, valid for 6 months from the date of job-order, with a provision of further extension/revalidation till the data produced is published and quality control job is completed in all respects in terms of Indian Rupees, shall be submitted by the successful tenderer(s) on the proforma attached at Annexure - III before the balance 10% is returned to the tenderer. EMD also will only be returned after receipt of security deposit.

(q) **AVAILABILITY OF EQUIPMENT / ENVIRONMENT AND SECURITY MAINTENANCE**

The processing job has to be carried out at PLRS Jalandhar. The tenderer(s) are requested to quote their rates inclusive with hiring charges of HW/SW, which will be removed by the tenderer after completion of the job. The space for data acquisition and processing shall be at mutually agreed location which can be made available by the Punjab Land Record Society if available else it shall be hired by the Tenderer. Systems installation at these sites and expenditure on other related jobs such as AMC of Equipment, Telephone, Computer Stationary, Computer Furniture, Storage Media, UPS etc. are to be borne by tenderer(s) himself/themselves.

(r) **INDEMINITY**

The Tenderer who is awarded the contract will be deemed to have indemnified Punjab Land Records and its employees for any or all damages and claims arising out of damage, destruction and death caused to personnel, equipment & stores employed by the contractor.

(s) **ASSIGNING TO OTHERS**

The firm shall not, without the prior written permission of The Special Secretary Revenue, assign or transfer or cause to be assigned or transferred, whether actually or as the result of take over, merger or other change of identity or character of the firm, any of its rights or obligations under the contract or any part, share or interest therein. Upon any such assignment or transfer, this agreement may forthwith be terminated by The Special Secretary Revenue.

(t) **INTELECTUAL PROPERTY RIGHTS**

All the data products would be the intellectual properties of Punjab Land Record Society.

8. **RIGHTS TO REVISE THE JOB SPECIFICATIONS**

The Special Secretary Revenue, reserves the right to revise and / or alter job specifications before the acceptance of any tender. After acceptance of tender, job specifications can be altered/revised with mutual agreement between Punjab Land Record Society and the tenderer(s).

9. **CLARIFICATIONS ABOUT TENDER DOCUMENT:**

Further clarification, if any, about this tender document can be sought from The Special Secretary Revenue, Room No 7, IIIrd floor, Civil Secretariat, Chandigarh Punjab. Telephone 0172- 2740173. On technical matters contact on mob No 09419725712 email shamsher.jamwal@gmail.com

10. **OTHER NOTES:**

Exceptions :

Please describe any exceptions taken to the scope of services described later in this section.

Additional information requirements: Please list any other information required by you from Punjab Land Records Society before commencing contract negotiations.

**The Special Secretary Revenue,
Room No 7, IIIrd floor, Civil Secretariat,
Chandigarh Punjab**

ANNEXURE - I

TERM OF REFERENCE

1. **TASK:**

- a) Installation of Fenue Markers at the site of Control points their Numbering has been given in *Annexure VI*
- b) Planning of scheme of observation and working out schedule of observation
- c) Writing of Description of control points
- d) Observation of control points for Phase II, Phase III, Phase IV and Phase V as explained above using Dual frequency GPS.
- e) Processing of Control points
- f) Preparation of Control volumes for each District
- g) Cutting DVD's containing Data

2. **TIME FRAME**

Task has to be completed within a period of 6 months of commencement of contract.

3. **HARDWARE / SOFTWARE**

The tenderer(s) will have to arrange the required hardware and software and suitable trained manpower for carrying out the tasks mentioned in para 1 above. Accordingly rates may be quoted by the tenderer(s).

4. **INPUT DATA**

The following input material/data will be supplied by PLRS to the tenderer(s):

- (a) Co-ordinates and description of Control points of Phase I
- (b) Approximate location of Phase II, Phase III and Phase IV

5. **OUTPUT REQUIRED**

- A) *Control Volume duly bounded
Containing*

- a) Description sheet filled up for each station constructed /observed
 - b) Log sheet for each station
 - c) One print out giving co-ordinates of all control points in spherical and rectangular Co-ordinates.
- B) *Soft Copies*
- a) Raw Data on 2 DVD's and third copy on hard disc for each station
 - b) Processed data in a Excel sheet
 - c) Description of each station on excel sheet

Soft Copy (One copy on DVD and second copy on hard disc)

- i) Raw data of Total Station as well as processed data of Total Station for each Traverse line for Phase V
- ii) Log file of each line
- iii) Raw Data down loaded from GPS duly indexed.
- iv) Processed data
- v) Co-ordinates in UTM as well as Rectangular Co-ordinates in different folders

The control points must be post pointed on a satellite image print The soft copy satellite image can be supplied if required. Else Google print should be used.

6. ACCEPTANCE PROCEDURE

The committee constituted for this purpose will go through each and every figure formed and will check the loop closure for each figure and if closure is more than 3 cms the effected control points shall be rejected. These points shall be checked from other points also if found not with in permissible limits shall be considered rejected and firm shall be asked to repeat the observation.

The committee will also check the traverse, if not found with in permissible limits of 1:5000 company responsible for the purpose shall be asked to repeat the observation.

7. **ACCEPTANCE SITES**

All the activity shall be controlled from the office of Director Punjab Land Records, Kapurthala Road, Jalandhar.

8. **ACCEPTANCE TEST**

Since lot of field records shall be generated their indexing etc shall be a huge task. At the time of check in addition to verification of Co-ordinates of each control points indexing and maintenance of records also shall be the criteria for acceptance.

a) **IN HOUSE / PARIPASU EXAMINATION:**

The companies can be checked during observation and if found, company is not following set out procedures the company can be asked to repeat, if after first check the company does not adhere to the procedures The Special Secretary Revenue at his discretion can withdraw the allotted task.

b) **ACCEPTANCE AFTER GROUND TRUTHING:**

Thorough examination of the deliverables shall be carried out on ground. The corrections pointed out shall be carried out by the Contractor at his own cost.

TECHNICAL SPECIFICATIONS

- **Projection System**-All co-ordinates are to be based on the following parameters:

Projection : Transverse Mercator
with origin as 31° Latitude and 75° as longitude
Origin Value 40,00,000 as Northing and 60,00,000 as
Easting.
The Scale factor 0.99986

Spheroid : WGS 84
Datum : Mean Sea Level

- The Co-ordinates of 34 points of SOI shall be supplied at the time of processing. However the description shall be supplied to the vendor.
- Permissible limits
 - Loop Closing <= 3 cms for each triangle
 - Traverse should close within 1:5000 Accuracy

PROFORMA FOR

BANK GUARANTEE

In consideration of the Governor of Punjab represented by Government of Punjab, Department of Revenue, through Punjab Land Record Society(hereinafter called PLRS which expression shall include his successors and assigns), having agreed to exempt M/S with its offices at (hereinafter referred as the contractor which expression shall include his successors and assigns), from the demand, under the terms and conditions of an Agreement dated made between the PLRS and M/S hereinafter called the said agreement of Provision of Control points using GPS of security deposit for the due fulfillment by the said contractor of the terms and conditions maintained in the said Agreement, on production of a Bank Guarantee for Rs..... (in words only) , (Name of the Bank) (herein after referred to as the bank) at the request of the contractor do hereby undertake to pay to PLRS an amount not exceeding Rs..... (.....only), against any loss or damage caused to or suffered or would be caused to suffer by PLRS by reason of any breach by the said contractor of any of the terms or conditions contained in the said agreement.

We (Name of the bank)..... do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from PLRS stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by PLRS by reason of breach by the said contractor of any of the terms or conditions contained in the said Agreement or by the reason of the contractor's failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of PLRS in these counts

shall be final and bindings on the Bank. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (.....).

We (Name of the Bank) undertake to pay to PLRS any money so demanded not withstanding any dispute or disputes raised by the contractor if any suit or proceeding pending before any court or tribunal relating thereto, liability under this guarantee being absolute and unequivocal. The payment so made by us under this guarantee shall be valid discharge of our liability for payment hereunder and the contractor shall have no claim against us for making such payment.

We (Name of the Bank) further agree that guarantee herein contained shall remain in full force and effect during the period that should be taken for theof the said agreement and that it shall continue to be forcible till all the dues of PLRS under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till PLRS certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the contractor and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or beforehe (tenderer(s) shall be discharged from all liability under this guarantee thereafter.

We (Name of the Bank) further agree with PLRS that PLRS shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by PLRS against the said contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor for any forbearance, act or omission on the part of PLRS or any indulgence by PLRS to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor.

We (Name of the Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of PLRS in writing.

Dated the Day of

For

(Indicate the Name of the Bank).

AGREEMENT

An agreement made this day of

BETWEEN.....

..... (here in after called the contractor which expression shall include his legal representatives) of the one part and the Governor of Punjab (hereinafter called the Government) of the other part and WHEREBY the contractor agrees to supply to the Punjab Land Record Society(hereinafter called ...PLRS.....) the under mentioned articles at cost mentioned against them :-

| Name of Articles | Rate | Total Cost |
|------------------|------|------------|
|------------------|------|------------|

and on the terms and conditions hereinafter mentioned:-

- a) That all data shall be delivered free at by
- b) that all data supplied shall be new and of good quality and in exact accordance with the sample submitted.
- c) that the inspection of the data shall be carried out by the himself or by a Gazetted Officer deputed by him at the place mentioned in para (a) above and that the stores rejected must be removed by the contractor within a week from the date of rejection. All data not accepted shall lie at the risk of the contractor. If not removed within the period specified above the shall have the right to reject such data as he thinks fit at the risk of the contractor and on his account or if he prefers to charge him rent for the space occupied by same.
- d) that the time of delivery stated above shall be of the essence of the contract and should the contractor fail to deliver the whole/any part of the stores within the period specified in clause (a) and as per the sample the shall have the right to forfeit the deposit mentioned in clause (f) and to purchase the stores elsewhere which the contractor has failed to deliver as aforesaid at the expenses of the contractor and the contractor will be liable to pay such further sum as will be sufficient to meet the difference of cost between the rates tendered and those at which the purchases are actually made should they be higher. This is without prejudice to action being taken under clause h) thereof.

- e) that the shall have full power to reject the whole or any part of the data which to the true intent and meaning is not in exact accordance with the approved sample and that his decision shall be final.
- f) that the contractor will deposit a sum of Rs. as security for compliance with the terms and condition of this contract.
- g) that the contractor will be entirely responsible for the execution of this contract in all respect in accordance with the conditions of this contract and shall not assign or sub-let the same.
- h) If the contractor becomes insolvent or he or his Agent offers any bribe in connection with the contract or the contractor fails to observe or perform any condition of this contract, then notwithstanding any previous waiver of such default or action being taken under any other clause hereof the, may on behalf of the Government terminate the contract and forfeit the said deposit and recover from the contractor any loss suffered by the Government on account of the contract being terminated.
- i) If any dispute or difference shall arise including this contract the settlement of which is not hereinbefore provided for the same shall be referred to the arbitration of the Financial Commissioner Revenue of Punjab State and if he is unable or unwilling to act as arbitrator to the arbitration, of any person nominated by him in writing and the decision of such arbitrator shall be final and binding on the parties to this contract.

In Witness whereof the parties have hereunto set their hands the day and year first above written.

Signed by the said contractor

In the presence of:-

1st Witness

Address

2nd Witness

Address

Signed by the said for and on behalf of the

Governor of Punjab

In the Presence of:-

1st Witness

Address

2nd Witness

Addre

NO DEMAND CERTIFICATE BY THE TENDERER

I, (Full Name and Address of the Contractor)
..... do hereby acknowledge to have received
payment in full from
..... for all the services rendered by me in connection
with..... (The number and date of contract
agreement)

This is to certify that I have no further claim whatsoever against the Government in
connection with or arising out of the said contract which remains unadjusted.

Signature of the Contractor with date

(Defacing a revenue stamp)

Numbering of Control Points

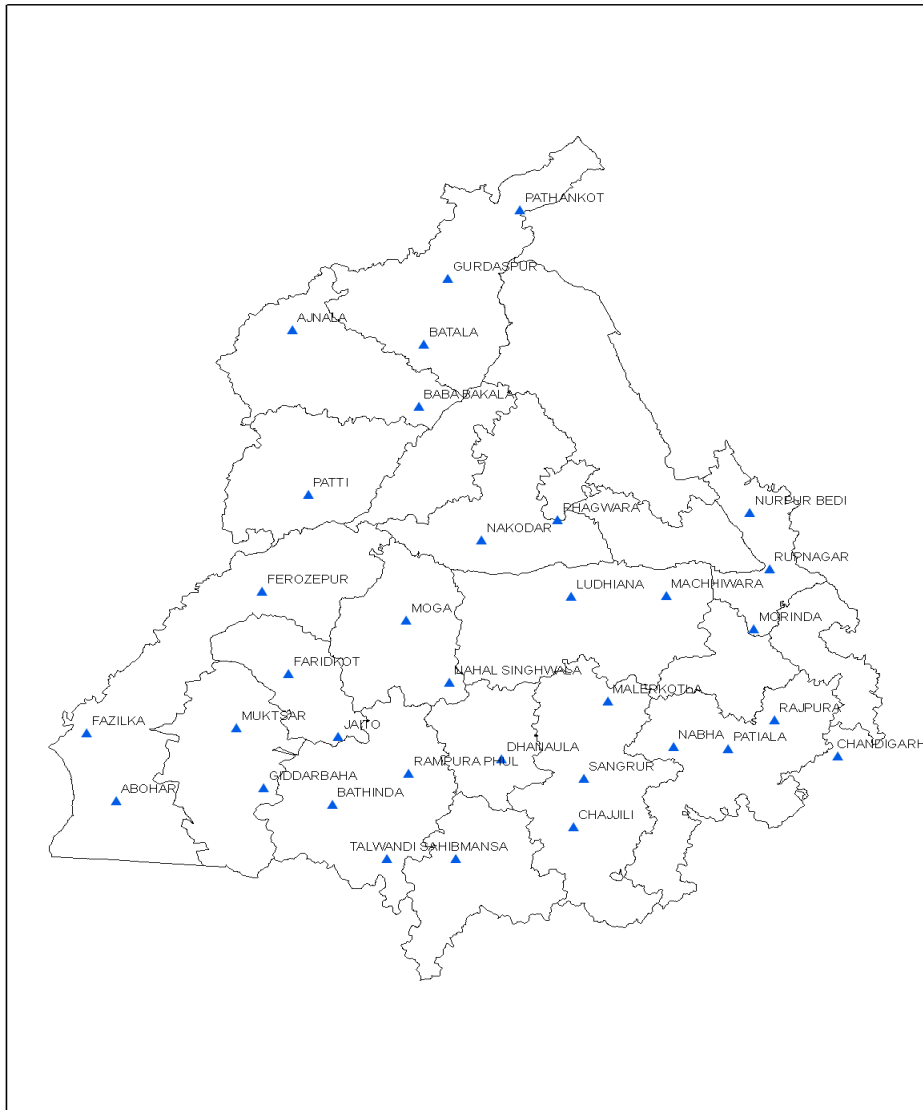
| | | | | | |
|-----------------------------------|----|---------|-------------------------------|----|---------|
| AMRITSAR (267 Sq km) | | | BARNALA (141 Sq km) | | |
| 3AMR01 | TO | 3AMR12 | 3BAR01 | TO | 3BAR10 |
| 4AMR01 | TO | 4AMR65 | 4BAR01 | TO | 4BAR40 |
| 5AMR001 | TO | 5AMR130 | 5BAR001 | TO | 5BAR099 |
| BATHINDA (337 Sq km) | | | FARIDKOT (147 Sq km) | | |
| 3BAT01 | TO | 3BAT15 | 3FAR01 | TO | 3FAR10 |
| 4BAT01 | TO | 4BAT75 | 4FAR01 | TO | 4FAR40 |
| 5BAT001 | TO | 5BAT150 | 5FAR001 | TO | 5FAR099 |
| FATEGARH SAHIB (114 Sq km) | | | FIROZPUR (525 Sq km) | | |
| 3FAT01 | TO | 3FAT08 | 3FIR01 | TO | 3FIR30 |
| 4FAT01 | TO | 4FAT35 | 4FIR01 | TO | 4FIR99 |
| 5FAT001 | TO | 5FAT085 | 5FIR001 | TO | 5FIR225 |
| GURDASPUR (356 Sq km) | | | HOSHIARPUR (336 Sq km) | | |
| 3GUR01 | TO | 3GUR15 | 3HOS01 | TO | 3HOS15 |
| 4GUR01 | TO | 4GUR75 | 4HOS01 | TO | 4HOS75 |
| 4GUR001 | TO | 5GUR160 | 5HOS001 | TO | 5HOS160 |
| JALANDHAR (263 Sq km) | | | KAPURTHALA (162 Sqkm) | | |
| 3JAL01 | TO | 3JAL12 | 3KAP01 | TO | 3KAP10 |
| 4JAL01 | TO | 4JAL60 | 4KAP01 | TO | 4KAP45 |
| 5JAL001 | TO | 5JAL120 | 5KAP001 | TO | 5KAP085 |
| LUDHIANA (370 Sq km) | | | MANSA (216 Sq km) | | |
| 3LUD01 | TO | 3LUD18 | 3MAN01 | TO | 3MAN10 |
| 4LUD01 | TO | 4LUD81 | 4MAN01 | TO | 3MAN50 |
| 5LUD001 | TO | 5LUD175 | 5MAN001 | TO | 5MAN115 |
| MOGA(223 Sq km) | | | MUKTSAR (263 Sq km) | | |
| 3MOG01 | TO | 3MOG10 | 3MUK01 | TO | 3MUK12 |
| 4MOG01 | TO | 4MOG50 | 4MUK01 | TO | 4MUK60 |
| 5MOG001 | TO | 5MOG120 | 5MUK001 | TO | 5MUK135 |
| NAWAN SHAHR(126 Sq km) | | | PATIALA(331 Sq km) | | |
| 3NAW01 | TO | 3NAW08 | 3PAT01 | TO | 3PAT14 |
| 4NAW01 | TO | 4NAW40 | 3PAT01 | TO | 3PAT80 |
| 5NAW001 | TO | 5NAW080 | 3PAT001 | TO | 3PAT150 |
| RUPNAGAR(137 Sq km) | | | SANGRUR(360) | | |

| | | | | | |
|-----------------------|----|---------|------------------------|----|---------|
| 3RUP01 | TO | 3RUP08 | 3SAN01 | TO | 3SAN18 |
| 4RUP01 | TO | 4RUP45 | 4SAN01 | TO | 4SAN70 |
| 5RUP001 | TO | 5RUP080 | 5SAN01 | TO | 5SAN175 |
| SAS Nagar(109) | | | TARN TARAN(240) | | |
| 3SAS01 | TO | 3SAS08 | | | |
| 4SAS01 | TO | 4SAS40 | 3TAR01 | TO | 3TAR14 |
| | | | 4TAR01 | TO | 4TAR70 |
| 5SAS001 | TO | 5SAS080 | 5TAR001 | TO | 5TAR125 |

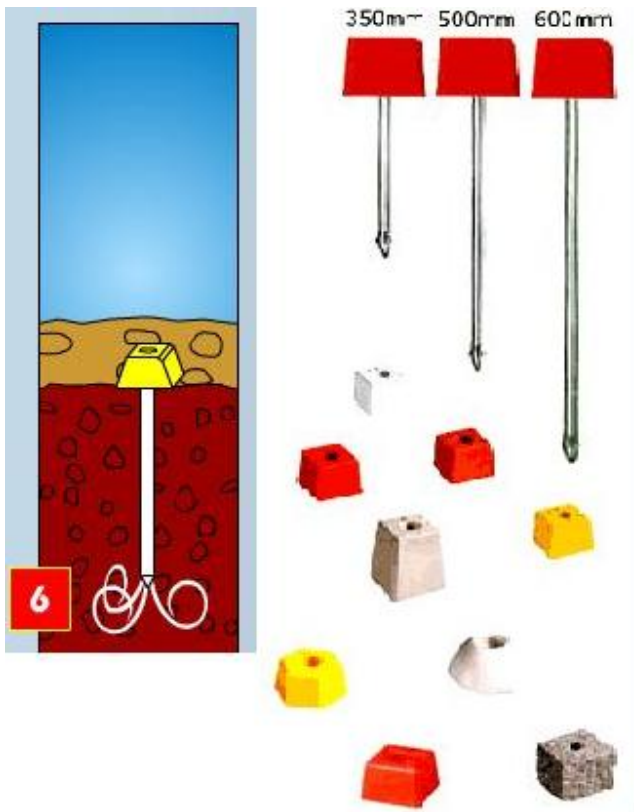
Ist Digit--Control Phase Next three digit--- District Name

Next two digit ----Control point No

Survey of India Control Points



Annexure-VIII



Engraved identity disk

Control Points at 30 to 35 Km

Annexure IX



SALE COPY NO.-----

PUNJAB LAND RECORDS
(DEPARTMENT OF REVENUE)

PART B

SCHEDULE OF TENDER DOCUMENT

FOR

OBSERVATION AND PROCESSING OF CONTROL POINTS

(To be detached by the Tenderer and Submitted duly completed)

(Separate tender for each city)

TENDER NO - 68

Name of the Tenderer (s) :-----

Firm's Reference No. :-----

Date of submission :-----

Additional No. of pages (if any):-----

CHECK LIST

| CONTENTS | | | | Page |
|-----------------|---|---|-------------------------------------|------|
| Proforma | 1 | - | Cover letter | 36 |
| Proforma | 2 | - | Questionnaire for Technical Bid | 37 |
| Proforma | 3 | - | Pricing schedule for Commercial Bid | 39 |
| Proforma | 4 | - | Particulars of the Bidder | 41 |
| Proforma | 5 | - | Warranty | 42 |
| Proforma | 6 | - | Data Security | 43 |

Date:

Dated: -----

Performa 2

TECHNICAL BID

QUESTIONNAIRE

(Attach separate sheets for any item where space is inadequate)

Tenderer must give the comprehensive answer to each of the following questions:

1. Name of the firm and particulars (Indicate registration No., Business license No., location of firm, ISO Certificate copy(If available), and date established etc. Enclose copies of the said documents.)
2. Full address of the firm including Fax and E-mail address.
3. Bidders responses must clearly address each technical requirement detailed in Scope of Services and include a detailed description of specific capabilities to be used to meet each requirement
4. Number of technical employees, category and average technical qualification and their present employment. (Enclose brief resume of the key managerial staff)
5. Please identify three clients for whom you have carried out same type of work. Please give their complete address and specify the services provided to each of them.
6. Previous experience in Provision of Control point
7. Computer equipments being used by the firm at present.
 - (a) Hardware
 - (b) Software
 - (c) Instruments held

} Give details.

Total Stations (Give make and how many numbers held)
GPS Dual frequency(Give make and how many held)
GPS Single frequency (Give make and how many held)
8. Subcontracting of Job is not allowed.
9. Potential impact of current work load on the proposed project. Cite specifically all major projects undertaken involving significant commitments of equipment and staff in last three years
10. Expected minimum number of Control points of Phase I, Phase II, Phase III or Phase IV to be surveyed by the firm per week.

11. Number of employees proposed to be employed for the job (Technical & Supervisory/Team leader)
12. Hardware configuration with number of workstations (include Plotter with their resolution /accuracy) proposed to be used for the job (**Refer Para 7[®] of Part 'A'** of Tender Document).
13. Complete Software proposed to be used for the job (giving version, release etc.) (**Refer Para 7[®] of Part 'A'** of Tender Document).
14. In case specified Hardware & Software are not available, how the job is proposed to be done?
15. Time required in taking up the job after firm order.
16. Whether willing to work in two shifts for processing, if yes, give timings preferred.
17. **Time assessment,**
Based on your technical plan of operations, and previous project experience, explain when and where you will require support from PLRS personnel. Provide an indication of the number and duration of consultation and you will require support from PLRS personnel. Provide an indication of the number and duration of consultation.
18. Prepare a detailed time schedule that describes the tasks included within the technical plan of operations.
19. The financial turnover of the firm..(Please enclose IT returns of last three years)

Signature of Tenderer(s)

With Office Seal

Dated:-----

COMMERCIAL BID

TENDER DOCUMENT FOR OBSERVATION AND PROCESSING OF CONTROL POINTS

PRICING SCHEDULE

1. Name of the Bidder
2. Address
3. Phone No.
4. Fax No.
5. E-mail Address
6. Web site address if any
7. Rate quoted

| Sl.No. | Description of work | Rates (per point.) |
|--------|---------------------|-----------------------|
| 1 | Phase II Points | Per linear Km |
| 2 | Phase III Points | |
| 3 | Phase IV Points | |
| 4 | Phase V points | |

NOTE:

- (i) The Price bid of only successful tenderer shall be opened. After the completion of pilot and all the successful tenderer shall be paid at L1 rates.
- (ii) Output material as referred in Annexure I should be as per technical specifications given in Annexure II
- (iii) Only the finished product as per specifications will be accepted. No cost, full or part, will be borne by PLRS in case of rejection leading to repetition of any point
- (iv) The above cost figures will not be subject to escalation and the price shall remain valid for the period for which the work is allotted to a vendor.

Signature of the tenderer(s)
Name of the Firm with Seal

- Notes:**
- 1. Rates quoted should be in the above format, failing which the bid may be rejected.**
 - 2. Tenderers must quote the cost in Indian Rupees. Rate should be quoted for supply of all the deliverables confirming the required specifications.**
 - 3. Rate should be inclusive of all Sales Tax, Central Sales Tax, Service Tax etc.**
 - 4. If any other charges are applicable, it should be clearly specified.**

PARTICULARS OF BIDDER

1. Name of the Tenderer :
2. Address of the Tenderer :
3. Tenderer's proposal number and date :
4. Name & postal address of the officer/person :
to whom all reference shall be made
regarding this tender enquiry including
Fax/Telex/Telephone/E-mail.

Witness:

Signature

Name

Signature of the Tenderer(s)

Address

Name _____

Designation _____

Company _____

Date:

Date: _____

Name of the firm with Company Seal

WARRANTY

I/We warrant that the output supplied by us shall be in full conformity of the specification/output required by PLRS **as detailed in Annexure I & Annexure II of PART A**. This warranty shall remain enforced/valid during inspection/acceptance of the output and shall expire 6 months after the final acceptance of the output by PLRS for each map sheet.

I/We also warrant that I/We shall handover all the data/records within 15 days of formal acceptance to PLRS.

Signature of the witness

Signature of the Tenderer

Office Seal

DATA SECURITY

I/We hereby certify that the PLRS shall have absolute right on the digital data and output products produced by me/us. I/We shall be responsible for security/safe custody of data during field survey, feature collection/ Data processing. I/We also certify that the aerial photographs (hard copy), scanned aerial photographs and/or control point's coordinates and/or digital topographical data given to me/us or generated by me/us in full or part will not be taken out of the PLRS building premises/premises mutually agreed to on any media, and will not be produced by me/us in any form. I understand that violation of above clause shall attract Criminal Prosecution under Government copy right act 1957 and the Official Secrets Act 1923.

Signature of the witness with date

Signature of the tenderer with date

1.

Name of the firm with Seal

RESPONSE SHEET (Return this page along with the bid)

Please check boxes to verify inclusion in response:

- 1. Executive Summary**
- 2. Company Profile, Structure**
- 3. Employee resumes**
- 4. Experience**
- 5. References**
- 6. Response to Commercial Questions if any**
- 7. Response to Technical Specifications**
- 8. Proposed timeline (Production schedule)**
- 9. Technical Alternatives**
- 10. Commercial Bid (Proforma 3)**
- 11. Signature Page (Ensure each page is signed and do not miss the pages where signatures have been indicated)**
- 12. Registration of the Company**
- 13. Authorization for signatory**
- 14. IT Returns for last three years**
- 15. Receipt / Demand Draft for Rs.5000/- towards cost of tender document**
- 16. EMD**
- 17. Response Sheet (this page)**