



ASANSOL DURGAPUR DEVELOPMENT AUTHORITY

A Statutory Authority of the Government of West Bengal
(Under Urban Development & Municipal Affairs Department)

1st Administrative Building,
City Centre,
Durgapur – 713216

Vivekananda Sarani, Senraleigh Road,
Near Kalyanpur Housing More,
Asansol -713305

Memo No. ADDA-11013(99)/37/2024-DGP-PLNG(ADDA)-ADDA (Comp. No Date : 03.10.2024
1038822)DFA/840257

Notice Inviting Quotation

Asansol Durgapur Development Authority invites sealed quotations from reputed and resourceful agencies who have executed similar type of work of Geo-referencing and Attribute Joining of Mouza maps and Master Plan/ LUDCP in any Govt. /Semi Govt./ Undertaking/ Autonomous Body/ Statutory Body as per the requirement specified in the Table and as per Scope of Work and Terms & Condition mentioned below and to reach this Authority's Office at Durgapur by **22/10/2024** before **02.00 pm**. The submitted bid will be opened on **22/10/2024** at **04.00pm**.

The Tender should be submitted in sealed cover mentioning the name of the work of NIQ on top of the envelope.

The Technical Bid shall contain earnest money in the form of D.D. /Pay order drawn in favour of Asansol Durgapur development authority Payable at Durgapur and **Financial Bid** should contain lump-sum only price bid.

Credentials - Work Completion Certificate with work order.

Documents - Trade & Valid 15-digit Goods and Services Taxpayer Identification Number (GSTIN) under GST Act, 2017, PT Registration, Pan Card.

Name of The Work	Earnest Money (By D.D) in Rs.	Period of Completion	Defect liability period
"Geo-referencing and Attribute Joining of Mouza maps, Recorded/ Un-recorded data, Plans, Master plans, Air-funnel restrictive zones (in .shp file format) and Maps through GIS for ADDA and surrounding BAPL comprising Area at P.S.- Pandabeswar, Faridpur and Andai"	2000/-	1 Month	4 month



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Terms and Conditions:-

1. Estimated amount, Date of completion of project and detail communication address of Client must be indicated in the Credential Certificate which issued by the concerned Head of Department, or equivalent competent authority. At least one similar nature of work should be completed within West Bengal.
2. Contractors/ Consultants shall be based within West Bengal.
3. Contractor/ Consultant has to arrange all necessary machineries, tools, software required for the work or specified & directed by this Authority.
4. Work completed under this contract must be performed by a Geographical Information System (GIS) Professional duly signed and vetted along with seal of awardee.
5. Bidding Company should possess expertise of GIS field. GIS Expert should have 10 years experience or above in GIS in Government sector and minimum 5 years experience in Cadastral data Management system.

Desirable- GIS Expert shall possess 3 years experience of National level projects with knowledge in Geographical information system (GIS), Remote Sensing, ERDAS, ALOHA, Q-GIS etc.

6. Earnest Money of unsuccessful bidders will be refunded after issue of Work Order. Earnest Money of successful bidder will be converted into security deposit.
7. 1% of bill amount shall be deducted as security money from all type of bills as per Govt. rule and security money will be refundable after defect liability period. Defect liability period is 4 month from the date of completion of work.
8. Bidders should submit PAN CARD, GST Registration Certificate, Income Tax return for the Last Financial year and Completion / Work Order for carrying out similar work.
9. Payment will be made on successful completion of work and on submission of Bills in triplicate and submission of all documents. The Authority reserves the right to make necessary deduction as per prevailing norms of the Authority.

Work Detail-

A cadastral map (herein mouza map based on revenue survey) should show the boundaries of all land parcels on large scale generally in **1m : 3.96 km or 16":1 mile**. Mouza maps should overlay **graticule information along with** survey numbers and relative location of all land parcels and attribute information such as ownership, land use, size and value.

The main objective of this work is to convert the mouza maps within Air-funnel restrictive zones into digital format and updating them by minimizing temporal difference between mouza maps



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and high resolution satellite data. Updating the cadastral information is very essential so that transformations / changes of the ownership / division of properties, etc. can be recorded in an orderly manner for documentation and further use. Mouza maps, when overlaid on high resolution satellite data will help in the monitoring of changes at plot level.

The Mouza maps will geo-referenced by using panchromatic image.

The work shall contain as herein under:

1. **Scanning of Mouza Maps and other records**-The Mouza maps will scan at **200 dpi**. Shrinking, squeezing error may permissible only 10% in whole scanned work.
2. **The parcel matching (Spatial adjustment)** of each Mouza maps with respect to the high resolution ortho-rectified images. Ortho-rectified images have been processed to apply corrections for optical distortions from the sensor system, and apparent changes in the position of ground objects caused by the perspective of the sensor view angle and ground terrain.
3. Thus each individual Mouza sheet/map gets properly **referenced** and then, **Cadastral rasters** will **mosaic** and converted to vector format by on **screen digitization** as they are spatially contiguous.
4. During Spatial adjustment 2nd order polynomial will consider only. 40 to 45 GCPs will take for geo- referencing a Mouza map depending on its size and total RMS error is kept within 0.5 m i.e. within 1 pixel.
5. The edge-matching error will Resolved and created **a seamless join** by edge-matching. Edge-matching error gets accumulated to the adjacent plots of adjacent maps / sheets.
6. **Drawings shall be prepared each and every parcel of boundaries in polygon layer,**
7. **Digitized vector** data will overlay on **the satellite image.**
8. **Registering multiple Mouza maps** with the high resolution images similar to QuicBird, GeoEye-1 Sensor, World View-4 etc.
9. Registered Multiple Mouza Maps will export into the GRID format only. GRID will refer to the map projection or coordinate system they represent.
10. Save registering **Ground Control Points (GCP)** into **.txt** format. It is mandatory to submit Ground Control Points (GCP) during the final submission of Geographical Information system (GIS) data.
11. GCPs will used as reference data for continuous data of Registered multiple Mouza maps
12. The reference system consists of map projection coordinates will fall on **pixel-size (resolution)whole integers.**
13. **Map Coordinates of GCPs** for this project will associate with the **Center of a pixel** only.
14. GCPs for geo-referencing will collect through the help of primary and secondary sources.
The Primary source will consist of three modes, Ground control survey, Topographical



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maps and Ground control Points (GCP) taken By GPS (Ground Positioning system).The secondary source will be High Resolution Satellite imagery.

15. **Attribute Joining** (When performing an attribute join, the joined fields are dynamically added to the existing table. Field properties—such as aliases, visibility, and number formatting—are maintained when a join is added or removed) of Mouza maps, **Recorded** and **Unrecorded Data**. Attribute Joining of **Land Records Register** (Land record is a generic term which is used to refer to a number of records. These include Records of Rights (RoRs), register of the lands, tenancy, mutation register, disputed case register, and so on. Land record also includes land usages, LUMR (Land use Map and register) of this authority and LUDCP (Land use Development Control Plan of this authority, Master Plans, allotted and un-allotted plots.

Procedure of Submission of Reports:

1. The results shall be presented in the form of soft copy which include spatially adjusted mouza maps, Geo-referenced and attribute joining of all concern maps and drawings, GCPs of all spatially adjusted data, GCPs of Geo referenced data, A detailed Report of the Project, Mosaic of Mouza maps, Mosaic of records (drawings other than Mouza), Attribute join of Land Bank, Records and Register.
2. **Language And Unit:** The Project report shall be in **English** language. Dimensions in the drawings, technical data and weights furnished shall be in **SI units**.
3. Recording any other features, not specifically covered above but which are required to be taken to prepare work like survey etc., shall be done as directed by the **Chief Executive officer** from time to time.
4. **Editable format soft copies** on CD/DVD or PEN Drive of all drawings and documents shall be supplied by the bidder.
5. Recorded and Unrecorded Drawings and Mouza sheets will be Spatially Adjusted and geo-referenced.
6. Dynamic Maps shall be provided to change attributes at any time.
7. Separate Geo-database shall be provided for the AOI (Area of Interest) of **BAPL (Bengal Aerotropolis Private Limited)** and surrounding.
8. **All database and maps are to be provided in .pdf format file also.**
9. An initial training to the concerned officials of this Authority shall be provided to make them able to use GIS Maps, Converting Maps into PDF files, and Open maps on Google Earth pro, Map my India etc.
10. Contractor/ Consultant should provide **Resolution of Map 1:4000** for Geo Database Creation.



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11. First Draft Report shall be submitted within 5 days of Work Order received and Final draft in next 10 days for examination by this Authority.

Chief Executive Officer
Asansol Durgapur Development Authority

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Copy forwarded for information to the:

1. Assistant Executive Officer, ADDA, Durgapur & Asansol.
2. Finance Officer, ADDA.
3. Town Planner, ADDA, Durgapur for supervision of work.
4. System Manager, ADDA with a request to publish the notice in the website of ADDA
5. HA, ADDA, Durgapur /Asansol with a request for publishing in the Office Notice Board

Chief Executive Officer
Asansol Durgapur Development Authority



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ANNEXURE-1

(To be filled in by the Tenderer /Bidders & to be submitted with the technical bid)

Name of the Work/tender (with Ref. No. and Date)

1. Name of the contractor/ Agency/Bidder.....

2. Bid Value (Lump-sum amount in INR):-

3. Address:

- Head Office
- Branch Office
- Correspondence Address

4. Contact No:

- Mobile No.
- Telephone No.
- Fax No.
- E-mail Address

5. PAN No.

6. GSTIN. No.

Valid Up to.....

7. List of Credential Submitted in Technical part :-

- i.
- ii.
- iii.
- iv.

Name of the Contractor/ tenderer

Full Signature of the authorized signatory

Initial of contractor/Tenderer