



cmpdi
A Mini Ratna Company

सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीच्यूट लिमिटेड
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)
गोन्दवाना प्लेस, काँके रोड, राँची - 834 031, झारखंड (भारत)

Central Mine Planning & Design Institute Limited
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)
Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand (INDIA)

संख्या: सी.एम.पी.डी.आई./जियोम/Drone Survey_UP/ 518

दिनांक 08.06.2022

सेवा में,
M/s Aarav Unmanned Systems Pvt. Ltd.
#35 First Floor Jairam Nagar, Jakkur
Main Road, Jakkur Bangalore 560064

Contact: +91-9899855849 / +91 - 080 - 42112997
Email: piyushrana@aus.co.in

विषय : Letter of Acceptance (LoA) for Drone/UAV based Survey for generation of DTMs of Sand Mining Lease Areas in various Districts of Uttar Pradesh

सन्दर्भ: Your Offer Ref. No. AUS-CMPDI_21052022_R1 received through Email Dtd. 25.05.2022.

महोदय,

This has reference to LoA issued vide letter No.CMPDI/Geom/21/Drone Survey_UP/517 dated 07.06.2022. The present LoA supersedes the earlier LoA dated 07.06.2022, as mentioned above. CMPDI is pleased to give its intent for award of the work for Drone/UAV based Survey for generation of DTMs of Sand Mining Lease Areas in various Districts of Uttar Pradesh to M/s Aarav Unmanned System Pvt. Ltd on negotiated price of **Rs.54,900.00 per site (excluding 18% GST)**. The total value of the project shall depend upon actual number of sites surveyed.

1. Scope of work:

Drone/UAV based Survey for generation of DTMs of Sand Mining Lease areas in various Districts of Uttar Pradesh.

- DGPS Survey:** Dual Frequency Survey Grade DGPS System shall be used for establishing Ground Control Points.
- UAV/Drone Survey:** Survey grade Drone shall be used for carrying out the field survey of Sand Mine Lease Areas supplied by CMPDI.
- Deployment of Manpower at CMPDI:** Minimum 2 nos. manpower shall be deployed for the duration of the project for a minimum duration of 45 days at CMPDI(HQ), Ranchi to provide support for data processing, data handling, Quality Control etc.

- Summary of Outputs:** The following Data and Output acquired/ generated by Drone Survey of Sand Mine Lease areas in various Districts of Uttar Pradesh is detailed in the Table - 1 given below:

Page-1 of 4

[Signature]
8/6/22



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वेब साईट / Website Address : www.cmpdi.co.in

Corporate Identity Number (CIN): U14292JH1975GOI001223

Table - 1

Sl. No.	Details of Work / Data Acquisition	Format for Output	Other Technical Parameters
1.	GCPs Location/ Pillar Values	.CSV Format	Accuracy Range: 1-2 cms.
2.	Orthophoto Mosaic of Lease Areas	Geotiff or any Industry Standard Format	Accuracy Range: 10 cms. in (X, Y) Resolution: < 5Cms/Pixel or better
3.	Point Cloud Data acquired during Drone Survey in various districts of UP.	.las or any Industry Standard Format	
4.	DTM of Sand Mining Lease areas through Unmanned Aerial Vehicle (UAV)/ Drone Survey.	Softcopy of the DTM in Geotiff/ Industry Standard Format	0.3 m or better
5.	Report on Drone/ UAV Survey done for the sand mining leases.	MS-Word/ pdf	Two hard copies of the report
6.	Raw Data and files generated during Drone Survey		In Hard Disk.

3. Terms and Conditions

- M/s Aarav Unmanned System Pvt. Ltd. (AUS) shall deploy sufficient no. of teams in parallel for data collection during Drone /UAV based field survey which shall be completed by 30.06.2022.
- The data submission of the acquired and generated data shall be by 31.07.2022.
- M/s Aarav Unmanned System Pvt. Ltd. (AUS) shall deploy minimum 2 nos. of support manpower at CMPDI(HQ) to provide support for data processing, data handling, Quality Control etc. for a minimum duration of 45 days at CMPDI(HQ), Ranchi. Expenses on logistics, accommodation etc. will be borne by AUS.
- The final billing shall be based on the actual no. of sites covered under Drone / UAV survey. If the site area is greater than 1.5 Sq. Kms, the same will be considered as two sites.
- 'Estimated Cost of Contract' and 'Cost of Contract':** The **Estimated cost of the contract** for the aforesaid work will be Rs.2,42,93,250.00 (Rupees Two Crore, Forty Two Lakhs, Ninety Three Thousand, Two Hundred and Fifty Five Only) including 18% GST based on the offered rate of **Rs.54,900.00 per site plus 18 % GST** (*The Estimated Cost of Contract has been calculated based on estimated 375 number sites and the offered cost of survey per site*). The final payable amount shall depend on the actual number of sites surveyed. After completion of the field survey, the **Cost of Contract** will be calculated based on actual number of sites surveyed.
- Mobilisation Advance:** As per terms of offer from M/s Aarav Unmanned System, 25% of the estimated cost of contract i.e. Rs.60,73,313.00 (Rupees Sixty Lakhs, Seventy Three Thousand, Three Hundred & Thirteen Only) will be released as Mobilisation Advance only after submission of Performance Bank Guarantee (PBG) [proforma of PBG enclosed as **Annexure-1**] of Rs.66,80,644.00 (Rupees Sixty Six Lakhs, Eighty Thousand, Six Hundred & Forty Four Only) by M/s Aarav Unmanned System Pvt. Ltd. (AUS).

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8/6/22

Page-2 of 4



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g) **Period of completion:** The field work for above UAV/Drone survey should be completed by 30.06.2022. Submission of District-wise Data and reports by 31.07.2022.

h) **Permission / Exemption:** M/s Aarav Unmanned Systems Pvt. Ltd. is responsible for obtaining all the requisite permissions from all the concerned authorities, before operation of the UAV. You are requested to execute the work strictly as per the required permissions. CMPDI will facilitate in obtaining the permissions / exemptions as required.

i) **Responsibilities & Liabilities:** Any damage done to any person/ property while operation of UAV, shall be the responsibility of M/s Aarav Unmanned Systems Pvt. Ltd. 'The Company' i.e. CMPDI, shall not be in anyway bear any liability for damage of their UAV and accessories, if any.

j) **Quality Assurance:**

M/s Aarav Unmanned Systems Pvt. Ltd shall carry out and complete the work in all respect in accordance with the contract and shall ensure that the work conforms strictly to the instructions of the GM (Geomatics), CMPDI. GM (Geomatics), CMPDI may issue from time to time further detail instruction/directions in writing to the contractor. All such instruction/direction shall be consistent with the contract documents and should be reasonably inferable there from, along with clarification/explanations thereof, if necessary. Non fulfillment of any parameter/ condition as under table – 1 for any site, the site shall not be consider for payment.

k) **Payment Terms:**

1st installment

25% mobilization advance against PBG will be paid to M/s Aarav Unmanned Systems Pvt. Ltd. based on **the estimated cost of contract** (refer clause-e). This amount shall be paid against PBG equal to 110% of the mobilization advance submitted by M/s Aarav Unmanned Systems Pvt. Ltd.

2nd Installment

2nd installment shall be paid after completion of field survey. After completion of field survey, the total number of sites surveyed will be firm. The **cost of contract** (refer clause e) shall be calculated based on total number of site surveyed and offered rate per site including 18% GST.

25% of the cost of contract shall be paid as second installment.

Final Payment

Final payment will be made after successful completion of job and on the basis of final bill raised by M/s Aarav Unmanned Systems Pvt. Ltd. The final bill amount shall be calculated as follows,

Final payable amount = Cost of contract – (1st installment + 2nd installment)

The payment will be made within 21 days from the date of submission and acceptance of the soft and hard copies of desired outputs by GM (Geomatics) or his authorized representative. The bill should be submitted in triplicate to the General Manager (Geomatics), CMPDI HQ, Ranchi for arranging payment. You are requested to confirm the details of your bank A/c No., Name and Address of the Bank and Branch Code for making the payment as per Mandate Form attached as **Annexure-2**.

Signature
5/6/22



l) **Paying Authority:** GM(Finance), CMPDI(HQ), Ranchi

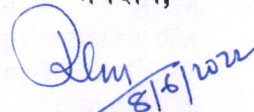
m) **Extension in Date of Completion:** Extension of date of completion time is possible due to any force majeure.

i) **Jurisdiction in case of dispute:**

Matter relating to any dispute or difference arising out against this work order will be dealt in the jurisdiction of Ranchi Court only.

It is requested that the PBG may be submitted at the earliest for release of the advance amount. You are further requested to acknowledge the LoA at the earliest.

Encl.: as above

भवदीय,

(Rajneesh Kumar)
General Manager (Geomatics)

सादर सूचनार्थः	
१	अध्यक्ष सह प्रबंध निदेशक, सी.एम.पी.डी.आई, रांची
२	निदेशक (तकनीकी/अनुसंधान, विकास एवं प्रौद्योगिकी) सी.एम.पी.डी.आई, रांची
३	मुख्य सतर्कता पदाधिकारी, सी.एम.पी.डी.आई, रांची
४	महाप्रबन्धक (वित्त), सी.एम.पी.डी.आई, रांची
५	महाप्रबन्धक (कार्मिक एवं प्रशासन), सी.एम.पी.डी.आई, रांची
६	महाप्रबन्धक (अनुबंध प्रबंधन सेल), सी.एम.पी.डी.आई, रांची
७	महाप्रबन्धक (आई सी टी), सी.एम.पी.डी.आई, रांची - वेबसाइट पर अपलोड करने हेतु
८	विभागाध्यक्ष (ई प्रॉक्यूरमेंट सेल), सी.एम.पी.डी.आई, रांची
९	क्षेत्रीय निदेशक, सी.एम.पी.डी.आई क्षेत्र- ६, सिंगरौली
१०	कम्पनी सचिव, सी.एम.पी.डी.आई, रांची।

Page-4 of 4



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