



Jharkhand Renewable Energy Development Agency

(State Govt. Agency under Department of Energy, Jharkhand)

Work Order No.: S22/2025-26

Date: 13/11, 2025

To,

M/s OMRESEARCH & TESTING LABORATORY PRIVATE LIMITED
Address: Sukhdeo Nagar Ratu Road,
Ranchi 834005
Email: omlaboratories2019@gmail.com

Subject: Work Order for Soil testing and Geographical Survey of the identified 50-acre land parcel (GPS Coordinate: Latitude: 24.5280661, Longitude: 83.9204249) for development of infrastructure for 09 MWp of Ground Mounted Solar Power Plant Project proposed under JREDA NIB No: 10/JREDA/SPP/PAL/2025-26 "Design, Engineering, Procurement and Supply, Construction, Commissioning and Comprehensive Operation and Maintenance of 09 MW (AC) Grid Connected Ground Mounted Solar Power Plant, for a period of 25 years on Government Land" at Vill.: Parta, Block.: Haidarnagar, Dist.: Palamu.

Ref: JREDA Quotation No. 4159/2025 dated 01/11/2025

Sir, With reference to your sealed quotation dated 07/11/2025 and subsequent evaluation, we are pleased to issue this Work Order for carrying out **Soil testing and Geographical Survey** as per the scope and terms detailed below:

Scope of Work:

You are required to undertake the Soil testing and Geographical Survey of the identified 50-acre land parcel (GPS Coordinate: Latitude: 24.5280661, Longitude: 83.9204249) for development of infrastructure for 09 MWp of Ground Mounted Solar Power Plant Project proposed under JREDA NIB No: 10/JREDA/SPP/PAL/2025-26 "Design, Engineering, Procurement and Supply, Construction, Commissioning and Comprehensive Operation and Maintenance of 09 MW (AC) Grid Connected Ground Mounted Solar Power Plant, for a period of 25 years on Government Land" at Vill.: Parta, Block.: Haidarnagar, Dist.: Palamu.

1. Soil Testing and Geographical Survey:

Geotechnical investigation by drilling bore holes through Soil/Boulder Weathered Rock and collecting Undisturbed/Disturbed sample and conducting SPT at specified depth as per relevant IS code, conducting lab tests:

- a) NMC
- b) Atterberg limits
- c) Sieve and Hydrometer analysis
- d) Swelling index
- e) Shrinkage limit
- f) Testing of UD's for Triaxial UU Test/UC, Direct Shear Test
- g) Consolidation
 1. Permeability test
 2. Including Testing of Rock Samples for:
 - Unconfined Compression Test
 - Water Absorption Test
 - Unit Weight
 - Porosity
- h) The Geotechnical investigation report shall also include calculations for safe pile capacity under direct compression, lateral load and pull out. The report shall include recommendations about type of pile, its depth (up to 5M) and dia to be used.
- i) Grain Size Analysis
- j) If there is a river nearest to the land area, higher and lower water level will be shown in the drawing.
- k) The agricultural land area will be shown in the drawing.
- l) Plantation area will be shown in the drawing.
- m) Rock area will be shown in the drawing.
- n) Land Grading and Levelling assessment - ensure minimal earthwork for panel alignment.

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- o) Flood Risk and Drainage Pattern – identifies areas prone to flooding or erosion.
 - p) Seismic & Wind Load Analysis – evaluates structural safety under local conditions.
 - q) Accessibility & Infrastructure Survey – road, transmission lines, and proximity to grid connection.
 - r) Environmental Impact Assessment.
2. **Technical Report shall include:**
- a) Detailed results of soil test and geo-technical investigation.
 - b) Photographs of site and boreholes.
 - c) Laboratory test certificates.
 - d) Toposheet map, Kml file, Cad file to be provided
 - e) One set of Hard copy of each report

Payment Terms:

1. **Total Quoted Amount:** ₹ 2,40,720 (inclusive of all taxes and duties)
2. **Payment Terms:** 100% payment will be made post successful completion of work, submission of hard copy of report at JREDA office and acceptance of the report by JREDA.
3. No advance shall be provided.
4. The undersigned reserve the right to cancel/postpone the work without assigning any reason thereof.
5. All the other expenses (e.g. Fooding, lodging, traveling, team mobilization etc.) will be in bidder scope. No separate reimbursement will be provided for these expenses.

Deliverables:

1. Hard and soft copies of the survey report.
2. All data in editable formats (AutoCAD, Excel, PDF).
3. Timeline for completion: Within 30 days from the date of issue of this Work Order.



Yours sincerely,



Director,
JREDA, Ranchi