

**EXPRESSION OF INTEREST (EOI)
FOR ESTABLISHING AND OPERATING
ELECTRONICS TEST AND CALIBRATION
LABORATORY & COMMON
MANUFACTURING FACILITY AT
ELECTRONICS MANUFACTURING CLUSTER
(EMC), BADWAI, BHOPAL AND EMC PURVA,
JABALPUR in PPP MODE**

**Madhya Pradesh State Electronics Development Corporation
(MPSEDC)**

State IT Centre, 47-A Arera Hills, Bhopal

Ph: 07552518601;

URL: www.mpsedc.com

Email: cgm@mpsedc.com

Date: 26 September, 2018

EOI Notice

"Expression Of Interest"

Madhya Pradesh State Electronics Development Corporation (MPSEDC), on behalf of BHOPAL & JABALPUR ELECTRONICS MANUFACTURING PARKS LIMITED (BEMPL& JEMPL) invites discussion for finalization of draft inputs for RFP for establishing and operating Electronics Test and Calibration Laboratory & common manufacturing facility at Electronics Manufacturing Cluster (EMC), Badwai, Bhopal and EMC Purva, Jabalpur in PPP mode to support Electronics Industries.

Industry players who meet the criteria laid down in the detailed Eoi notice are requested to go through the contents of draft downloadable from www.mpsedc.com

The discussions will be held on **16th October 2018** starting at 11:30 am. The views can be submitted latest by **10th October 2018 till 4 pm.**

(Chief General Manager)
MPSEDC
Ph # 0755-2518601

Contents

1. Background of the Eol.....	4
2. General.....	5
2.1. Information Provided	5
2.2. Disclaimer	5
2.3. Costs Borne by Respondents	5
2.4. No Legal Relationship.....	5
2.5. Recipient Obligation to Inform Itself.....	5
3. Introduction	6
4. About BEMPL &JEMPL	6
5. Objectives.....	6
6. Scope for BEMPL.....	6
7. Scope for JEMPL	6
8. Scope for Agency	7
9. Eligibility Criteria.....	7
10. General Instructions.....	8
11. Submission of Responses	8
Annexure -1 – Bidder Profile.....	10
Annexure – 2 – Project Detail Sheet.....	11
Annexure – 3 List of Approved Equipment for EMC at Badwai, Bhopal.....	12
Annexure 4 - List of Approved Equipment for EMC at Purva, Jabalpur.....	16

1. Background of the EoI

Madhya Pradesh State Electronics Development Corporation intends to establish testing and calibration labs under the Electronics Test and Calibration Labs at Jabalpur and Bhopal for providing testing and calibration facility to the electronic Industry. Detail of approved Lab-equipment at each location is listed in Annexure-3 and Annexure -4.

Further the State Govt. has received Gol grant for establishment and operations of proposed Labs and common manufacturing facilities for which civil work, interior and furnishing is ready and equipment need to be installed.

Government of Madhya Pradesh has ambitious plan to run all these laboratory and common manufacturing facilities in PPP mode and invites "Expression of Interest" from similar agencies for the same.

EoI must detail on agency's experience in this field and must suggest alternative modalities of proposed PPP mode.

All the EoI's will form a basis of consultative workshop after which final RFP will be invited.

2. General

2.1. Information Provided

The Expression of Interest (EOI) document contains statements derived from information that is believed to be true and reliable at the date obtained but does not purport to provide all of the information that may be necessary or desirable to enable an intending contracting party to determine whether or not to enter into a contract or arrangement with BEMPL in relation to the provision of services. Neither MPSEDC nor any of its directors, officers, employees, agents, representative, contractors, or advisers gives any representation or warranty (whether oral or written), express or implied as to the accuracy, updating or completeness of any writings, information or statement given or made in this EOI document.

2.2. Disclaimer

Subject to any law to the contrary, and to the maximum extent permitted by law, MPSEDC and its officers, employees, contractors, agents, and advisers disclaim all liability from any loss or damage (whether foreseeable or not) suffered by any person acting on or refraining from acting because of any information, including forecasts, statements, estimates, or projections contained in this EOI document or conduct ancillary to it whether or not the loss or damage arises in connection with any negligence, omission, default, lack of care or misrepresentation on the part of MPSEDC or any of its officers, employees, contractors, agents, or advisers.

2.3. Costs Borne by Respondents

All costs and expenses incurred by Recipients / Respondents in any way associated with the development, preparation and submission of responses, including but not limited to attendance at meetings, discussions, demonstrations, etc. and providing any additional information required by BEMPL, will be borne entirely and exclusively by the Recipient / Respondent.

2.4. No Legal Relationship

No binding legal relationship will exist between any of the Recipients / Respondents and BEMPL until execution of a contractual agreement.

2.5. Recipient Obligation to Inform Itself

The Recipient must conduct its own investigation and analysis regarding any information contained in the EOI document and the meaning and impact of that information.

3. Introduction

MPSEDC on behalf of BEMPL invites Expression of Interest (EOI) from qualified and experienced firms for establishing and operating Electronics Test and Calibration Laboratory and common manufacturing facility at Electronics Manufacturing Cluster (EMC), Badwai, Bhopal and EMC Purva, Jabalpur in PPP mode.

4. About BEMPL & JEMPL

BEMPL and JEMPL are two Special Purpose Vehicles (SPVs) incorporated with an objective to undertake all activities to construct, promote, manage, operate and maintain infrastructure projects in Electronic sector and other sectors and to develop integrated Electronic Parks and other social infrastructure and associated services of any description in public private sector partnership mode or any other format, as may be necessary. The SPVs enter into all types of contracts with government and private entities for meeting these objectives.

More details of BEMPL and JEMPL can be found at <http://MPSEDC.com/>

The offices of BEMPL and JEMPL are located at State IT Centre, 47-A, Arera Hills, Bhopal.

5. Objectives

BEMPL is seeking to establish and run operation on BOOT model through companies /agencies/laboratories/institutions for common manufacturing facilities, which will include Electronics equipment, workshop machinery and CAD/CAM house as per approval granted from Govt. of India scheme to support upcoming and existing Electronics Manufacturing Industries in cluster.

Expression of interest is therefore invited from the National/International reputed companies /agencies/laboratories/institutions, which are involved similar type of activities.

6. Scope for BEMPL

- i. Bhopal Electronics Manufacturing Parks Limited will provide built-up area for operation of lab and common manufacturing facility which includes the following: -
 - a) 1368 square metres of air-conditioned, full-furnished area towards Test and calibration lab
- ii. Facilitate the linkages with local ESDM industry, Government Organisations and other stakeholders

7. Scope for JEMPL

- i. Jabalpur Electronics Manufacturing Parks Limited will provide for operation of lab and common manufacturing facility which includes the following: -

- a) 699 square metres of air-conditioned, full-furnished area towards Test and calibration lab
- ii. Facilitate the linkages with local ESDM industry, Government Organisations and other stakeholders

8. Scope for Agency

1. To procure and establish equipment for testing and calibration lab, workshop machinery, CAD/CAM equipment as per list approved by GOI for the scheme
2. To operate these laboratories on revenue sharing basis with BEMPL / JEMPL, as applicable
3. Agencies can augment other facilities related to Electronics Industries support, as per their need, from their own funds
4. Co-branding and promotion of the manufacturing support facility, test and calibration lab as a joint initiative with BEMPL / JEMPL, as applicable
5. Provide input to BEMPL / JEMPL, as applicable, for refurbishment of existing building to make it a good quality manufacturing support facility & testing lab
6. To obtain NABL/BIS certifications and other (eg. ISO) certification etc.
7. Deployment of skill resources and supporting staff

9. Eligibility Criteria

1. The participating agency should be a registered entity under the Indian Companies Act, 1956 since last 3 (three) years. Incorporation certificate should be furnished as documentary proof.
2. The participating agency should have a minimum of 3 years' experience in the field of test and calibration lab and/or common manufacturing facilities for electronic industry similar work
3. The participating agency should have a minimum average annual turnover of Rs. 1 Crore for the last 3 years (2017-18, 2016-17 & 2015-16). As documentary proof, Audited Balance Sheet & Profit & Loss A/c is to be submitted.
4. The participating agency should have experience in successful operation of at least one laboratory in the last three financial years and/or electronic industry. As documentary proof, copy of work order/ PO along with completion certificate should be enclosed with proposal
5. The participating agency should not have been black listed by any State Government, Central Government or any other Public Sector undertaking or a Corporation as on the date of EOI. An undertaking to this effect should be submitted by the agency on its letterhead.

10. General Instructions

1. This is not a Request for proposal (RFP) and commercial bids SHOULD NOT be submitted with EOI.
2. MPSEDC reserves the right to examine / verify the supportive documents / reports furnished by the bidders.
3. MPSEDC would constitute an evaluation committee having authorized representatives of BMPL/JMPL that will evaluate the responses in detail in order to determine whether they are substantially responsive to the requirements set forth in the EOI. The decision taken by the committee in this regard shall be final and binding on all the participating agencies of EOI.
4. MPSEDC reserves the right to call only short listed agencies for a presentation / discussion of their proposal on the date, time as decided by MPSEDC. The decision taken by the MPSEDC in this regard shall be final and binding on all the participants of EOI.
5. The agency presentation shall be held at State IT Centre, 47-A, Arera Hills, Bhopal.
6. If any information or document provided in the response to this EOI is found to be misleading subsequently, the agency will be disqualified.
7. MPSEDC may reject any or all the responses received / cancel the entire process at any stage without assigning any reason whatsoever.
8. BEMPL / JEMPL shall have absolute discretion to issue Request of Proposal to eligible agencies shortlisted under EOI or go for open tender. The decision taken by BEMPL / JEMPL in this regard shall be final and binding on all the participating agencies
9. The information exchanged between the bidders and MPSEDC as part of this EOI shall be confidential and shall not be disclosed without the prior written consent of MPSEDC.
10. Notwithstanding anything contained herein above, in case of any dispute, claim and legal action arising out of this EOI, the parties shall be subject to the jurisdiction of courts at Bhopal, Madhya Pradesh State, India only.

11. Submission of Responses

1. Agencies qualifying as per the criteria mentioned above and who are interested in providing the services detailed above may submit their response to this EOI as per formats given in annexure along with relevant documentary evidence latest by **Wednesday, 10th October 2018 till 4 PM**. Any response not containing information for all the parts of Annexure may be rejected.
2. The response should be submitted in a sealed cover duly superscripted" Expression of Interest – Establishing and Operating Electronics Test and Calibration Laboratory

at Electronics Manufacturing Cluster, IT Park Badwai, Bhopal and EMC, Purva, Jabalpur in PPP mode” at the following address:

**Chief General Manager
MPSEDC
State IT Centre, 47-A Arera Hills,
Bhopal**

3. The agencies qualifying the eligibility criteria shall present their proposals during discussions scheduled on **Tuesday 16th October 2018** starting at **11:30 am**. The agencies are encouraged to organize their presentation covering elaborations on the following points: -
 - a. **Previous similar experience**
 - i. All similar projects completed & on-going with project start / end dates and details as per Annexure 1 ad Annexure 2
 - ii. Model of implementation
 - iii. Specific experience and applicable learnings
 - iv. Any other relevant information
 - b. **Proposed model for implementation of current scope**
 - i. Current organizational strengths to support envisaged implementation
 - ii. Implementation plan
 - iii. Support desired from BEMPL / JEMPL
 - iv. Any other relevant information

Annexure -1 – Bidder Profile

S/N	Particulars	Response
1	Company Name	
2	Date of incorporation	
3	Company Head Office Address	
4	Registered office address	
5	Contact person Name	
6	Address	
7	Telephone no.	
8	Mobile No.	
9	Fax No.	
10	e-mail ID	
11	Number of year experience in implementation of works of similar nature	
12	Whether company has been blacklisted for service deficiency in last 3 years. If yes, details thereof.	
13	Turnover for Financial Years 2015-16	
14	Turnover for Financial Years 2016-17	
15	Turnover for Financial Years 2017-18	
16	Turnover in last 3 financial years from activities similar to current scope of work	
17	Relevant accreditations earned / obtained, if any	
18	Number COMPLETED projects in last 5 years, entailing establishment of electronic test and calibration facilities	
19	Number of ONGOING projects, entailing operating of electronic test and calibration facilities	
20	Total number of skilled man months invested in ALL projects (Completed + Ongoing)	

Annexure – 2 – Project Detail Sheet

Submit following details separately for each of the implementation site (one duly filled format for each client).

S/N	Particulars	Response
1	Name of the project	
2	Implementation model – whether BOT / BOOT / Privately run	
3	In case of BOT/ BOOT – Name and address of the Public Sector Authority for which project is/is being implemented	
4	Status of Project – whether being built / under operations / transferred to Public Sector Authority(for BOT/BOOT)	
5	Project Start date with duration for built	
6	Period of operations	
7	Whether any of the listed equipment (as per Annexure 3 & Annexure 4) are set up at the facility? If yes, provide list of equipment	
8	Whether equipment, other than the listed equipment (as per Annexure 3 & Annexure 4) are set up at the facility? If yes, provide list of equipment	
9	Services provided / Products manufactured	
10	Number of full time skilled resources deployed at the facility	

Annexure – 3 List of Approved Equipment for EMC at Badwai, Bhopal

1. Plant and Machinery of Tool Room, CAD/CAM Design House

S.No.	Item Description	Quantity
PLANT AND MACHINERY		
1	Software - Power Electronic Converter Simulation Software (PSIM), Circuit Analysis & PCB Design/Analysis Software (PADS Standard Plus), Test Automation Software (LabVIEW), Autodesk Product Design Manufacturing Collector (AutoCAD 2018)	1
2	25 Ton Hand Operated Mechanical Press	1
3	Rotary Compressor 7kG/27 CFM with 200 liter Air Receiver N5-7-200SD (Ingersoll Rand make)	1
4	32mm, 50mm 45 Deg, 90 Deg cutter, solid carbide end mill, drill bits, inserts etc.	1
5	Surface Plate 400X400mm	1
6	Manual Precision Tool/Cutter/Surface Grinder Clamping Area 910X140, (HMT make)	1
7	Electric Hand Drill Machine	1
8	Manual high speed precision lathe 1000 mm, height of centre 220mm (HMT make)	1
9	Micro Meter 0.75mm	1
10	Manual Precision Milling/Drilling/ Boring Machine Table size 1070X230 (HMT make)	1
11	Pedestal Grinding Machine 10"	1
12	Electronic Weighing machine 100kg	1
13	Electronic Welding machine 200A	1
14	HP Design Jet T2530 36inch PS MF Printer	1
15	General purpose PCs - HP All in one 22-b231in, 4GB RAM, 1TB HD	1
16	CAD work stations - HP I5, 16GB RAM, 2TB HD, 24" screen	1
17	A3 Printer - Cannon Image Class LBP841Cdn	1
18	3D Scanner - EinScan-SP, Scan Rate <45, Scan Vol 1.2X1.2X1.2M	1
19	A4 size black & white printer Cannon Image Class MF232W	1
TOOL ROOM		
1	Sheet cutting machine 2500mm X 2mm sheet size	1
2	Sheet bending machine 2500mm X 2mm sheet size 40Ton capacity	1

3	Belt Grinder 4"	1
4	T-stot Surface plate 2 mtrX 2Mtr	1
5	Steel Work bench 3'X5' with 2thk steel top	1
6	Hydraulic Power saw Cutting capacity 175mm	1
7	Magnetic Drill Machine 32mm	1
8	Laser Measuring machine 0-200 meter, Accuracy \pm 1mm	1
9	Mobile 3 ton crane	1
10	Tooling for above machines (Drill bits, taps, cutters, grinding wheels, carbide tools, Grease Gun, Oi can, Emery paper, Cotton rags, Coolant, Welding electrode etc)	1
11	Hand Tools for assembly (Electrical Drill machine, Electrical angle grinder, Screw driver, Pliers, spanners, Torque spanners, Bench vice, Pipe vice, Files, Ball pin Hammer, Chisel etc)	1
12	Mechanical measuring tools (Measuring tape, Scale, Micrometer, Vernier Calliper, height gauge, level, surface finish tester, Magnifying glass, Weighing machine etc)	1
13	Effluent Treatment Plant 1kld ETP make Ecological Composites	1
CAD CENTER		
1	Server HP Xion 64GB RAM 4TB HD	1
2	3D Printer Aepon400 300X350X400	1
3	Wifi / Ethernet	-
ENVIRENMENT TEST CHAMBER		
1	Vibration Table 800X800mm/ 3000kgf/ 90g peak/ DC 3000khz	1
2	Salt mist/spray chamber 1X1X1Mtr with cyclic corrosion	1
3	Dust chamber 1X1X1Mtr as per IP5X, IPX5	1
4	Rain Ingress Chamber 1X1X1Mtr as per IPX1,2,3,4	1
PCB INSPECTION AND PROTOTYPING		
1	Prototyping Machine (Milling), Single, Double Side, 370X280X55mm, multiple tool changing station	1
2	PCB Inspection Optical Trinocular Microscope, Optical Zoom 60X, resolution 1920X1080	1

2. EMI Testing Equipment

S.No.	Item Description	Quantity
TESTING EQUIPMENT		
1	Tektronix make 4 GHz Vector Signal Generator Model No: TSG4104A MOO	1
2	Tektronix Make Real Time Spectrum Analyzer With Pre Amplifier Option (Model: RSA 5106B50)	1
3	Tektronix Make Mixed Domain Oscilloscope (Model No: MDO4024C with SA3)	1
4	Conducted	1
5	Radiated Immunity IEC61000-4-3	1
6	Power Amplifier	1
7	Components	1
8	Transient Limiter	1
9	Near Field Probe	1
10	Open TEM Cell	1

11	Tripole antenna with CDNE & antenna calibrator	1
12	Biconical Antenna	1
13	Log Periodic	1
14	Antenna Tripod	1
15	LISN for 15 A	1
16	LISN for 50 A, 3-Phase System	1
17	Shielded Room Approx. Size (3 x 3 x 3.5 meter)	1
CONVENTIONAL ANALOG AND DIGITAL CIRCUIT TESTING LAB		
1	5kV Insulation tester	1
2	10 kV HV Tester	1
3	Contact type Digital Temp. Meter	1
4	Thermal Imager Flir E6	1
5	5V/ 5A + ±24 V/1A Linear DC Power supply GW-Instek	3
6	0-30V X 2/5A DC Linear DC Power supply GW-Instek	2
7	Variable 0-80V/10A DC Power supply GW-Instek	1
8	Variable 0-120V/5A DC Power supply GW-Instek	1
9	Programmable 0-300V/3A DC Power supply GW-Instek	1
10	Variable 0-2.5kV/300mA DC Power supply Volt Amp	1
11	Variable 30V/10A DC Power Supply	1
12	4 1/2 Digit Hand held DMM Keysight	5
13	100 MHz 2 Channel Oscilloscope Keysight	3
14	1 GHz 4 channel oscilloscope Keysight	1
15	100 MHz Function Generator Tektronics	1
16	230/24V 50W Soldering Iron (Weller)	3
17	Soldering/Disordering + SMD work station Weller	1
18	Portable Vibration Meter Extech	1
29	Working tools PCB assembly	3
20	Working tools for Mechanical Assembly	3
POWER ELECTRONICS TESTING LAB		
1	16 Isolated channel Digital Storage Scope order Yokogawa	1
1.1	20Mhz input 2 channel module Yokogawa	2
1.2	3Mhz input 2 channel module Yokogawa	6
1.3	Logic input module Yokogawa	1
1.4	Logic probe 8bit X 2 Yokogawa	1
1.5	10:1 Isolated Probe set of 10 Yokogawa	1
2	3 phase Low voltage + Low power factor AC/DC power analyser with built-in harmonics flicker/voltage fluctuation measurement	1
3	Multifunction ventilation testing meter for measuring air velocity, air temperature, pressure for measuring air ventilation/cooling of industrial/domestic equipments TSI,USA make	1
4	LCR Meter Accuracy 0.1 % (2 MHz)	1
5	10A Digital Micro ohm Ohm meter Megger	1
6	3 phase Variable Voltage Variable frequency power supply 0-450V/500VA	1
7	DC Electronic Load 500V/30A Chroma	1
8	Solar Array Simulator DC Power Supply 600V/8.5A 5kW Chroma	1
9	1 phase 230/270V 15A AC Variac make AEP	3
10	3 phase 415/450V 15A Variac make AEP	3
11	Earth Resistance meter Megger	1

12	AC/DC Clamp on Meter 2000A Yokogawa	1
13	AC/DC Clamp on Meter 300A Yokogawa	1
IoT TESTING LAB		
1	Single Phase Power analyser 20 μ A to 20A, 0-600V, 1MHz bandwidth, up to 5MW standby power measurement	1
2	7.5 Digit graphical Sampling Multi-meter	1
3	DC Power supply & Battery Simulator 0-20V, 6A source & 1A sink, measure up to 100nA	1
4	Precision Data Acquisition system 16 Channel, 6.5 digit measurement	1
5	IoT developer test kits for development & Testing Bluetooth, Wireless systems	1
LED LIGHT TESTING LAB		
1	LUX Meter Testo	1
2	LED Driver Tester	1
3	LED Light torsion torque meter	1
4	Spectro-radio-photometer & integration Sphere Test system for LED Light/Luminaries/Street Light testing as per IS16016 & IS10232	1
5	Temperature Scanner	1

3. Safety Testing

S.No.	Item Description	Quantity
1	Tightening Torque measurement (Torque screw driver/spanner)	1
2	Sound level meter, 20-80 KHz, 30-130db, make Testo	1

Annexure 4 - List of Approved Equipment for EMC at Purva, Jabalpur

1. Safety Testing (Electrical)

S.No.	Item Description	Quantity
1	SPS Electronic - PROTEC GmbH, Germany Make, "ALL-IN-ONE" Electrical Safety Tester.	1
2	Creepage & Clearance test	1
3	Tightening Torque measurement (Torque screw driver/ spanner)	1
4	Audible Noise measurement	1

2. Electronic Testing

S.No.	Item Description	Quantity
1	5kV Insulation tester	1
2	10 kV HV Tester	1
3	Contact type digital temp. meter	1
4	Thermal Imager	1
5	5V/ 5A + ± 24 V/1A DC Power supply	3
6	0-30V X 2/ 5A DC Linear DC Power supply	2
7	Variable 0-80V/10A DC Power supply	1
8	Variable 0-120V/5A DC Power supply	1
9	Variable 0-300V/3A DC Power supply	1
10	Variable 0-2.5kV/300mA DC Power supply	1
11	Variable 30V/10A DC Power supply	1
12	DC Electronic Load 600V/140A/2kW Chroma	1
13	4 1/2 Digit hand held DMM	5
14	100 MHz 2 channel Oscilloscope	3
15	230/24V 50W Soldering Iron (Weller)	3
16	Soldering/Desoldering + SMD work station	1
17	4 channel 350MHz Digital Oscilloscope with 4 differential probes (Techtronic's make)	1
18	3 phase Low voltage + Low Power Factor AC/DC Power Analyser with built-in harmonics & flicker/voltage fluctuation measurement	1
19	Multifunction Ventilation Testing Meter for measuring Air Velocity, Air Temperature, Pressure for measuring air ventilation/ cooling	1
20	LCR Meter Accuracy 0.1 % (2 MHz)	1
21	10 A Digital Micro ohm meter Megger	1
22	7.5 Digit Graphical Sampling Multi-meter	1
23	DC Power Supply & Battery Simulator 0-20V, 6A source & 1A sink, measure up 100nA	1
24	Precision Data Acquisition System 16 Channel, 6.5 digit measurement	1
25	1 phase 230/270V 15A AC Variac make AEP	3
26	3 phase 415/450V 15A AC Variac make AEP	3

27	Earth Resistance meter Megger	1
28	AC/DC Clamp on Meter 2000A Yokogawa	1
29	AC/DC Clamp on Meter 300A Yokogawa	1
30	Portable Vibration Meter	1
31	PCB Inspection Optical Trinocular Microscope	1
32	PCB Prototyping Machine	1
33	Working tools PCB assembly	1
34	Working tools for mechanical assembly	1

3. Solar Testing Lab

S.No.	Item Description	Quantity
1	SPI Sun Simulator 5100 SLP Blue with 300 -1200 nm A+A+A+ spectrum complete with measuring instruments. The simulator is capable of testing the Solar Panels up to 1300 X 2100mm size.	1

4. TOOL ROOM

S.No.	Item Description	Quantity
MACHINES		
1	Manual high speed precision lathe (HMT make)	1
2	Sheet cutting machine 2500mm X 2mm sheet size	1
3	Sheet bending machine 2500mm X 2mm sheet size 40Ton Capacity	1
4	Belt Grinder 4"	1
5	Pedestal Grinding Machine 10"	1
6	Electronic Welding machine 200A	1
7	Surface Plate 400X400mm	1
8	T-slot Surface plate 2 mtrX 2Mtr	1
9	Steel Work Bench 3'X5' with 2thk steel top	1
10	25 Ton Hand Operated Mechanical Press	1
11	Hydraulic Power Saw Cutting Capacity 175mm	1
12	Magnetic Drill Machine 32mm	1
13	Laser Measuring Machine	1
14	Mobile 3 ton Crane	1
15	Rotary Compressor 7kG/27 CFM with 200Ltr Air Receiver N5-7-200SD (Ingersoll Rand Make)	1
16	Tooling for above machines (Drill bits, taps, cutters, grinding wheels, carbide tools, grease gun, Oi can, emery paper, cotton rags, coolant, welding electrode etc)	1
17	Hand Tools for assembly (Electrical Drill Machine, Electrical Angle Grinder, Screw Driver, Pliers, Spanners, Torque Spanners, Bench Vice, Pipe Vice, Files, Ball in Hammer, Chisel etc)	1
18	Mechanical Measuring Tools (Measuring Tape, Scale, Micrometer, Vernier Caliper, Height Gauge, Level, Surface Finish Tester, Magnifying Glass, Weighing Machine etc)	1
19	Effluent Treatment Plant 1kld ETP make Ecological Composites	1
20	Electronic Weighing Machine 100kg	1

CAD CENTER		
1	CAD work stations - HP I5, 16GB RAM, 2TB HD, 24" screen	2
2	General purpose PCs - HP All in one 22-b231in, 4GB RAM, 1TB HD	5
3	Software - AutoCAD, Orcad or Edwin, Lab view etc.	1
4	A0 size printer/plotter HP Design Jet T2530 36inch PS MF Printer	1
5	A4 size printer Cannon Image Class MF232W	5
6	A3 Printer Cannon Image Class LBP841Cdn	1
7	Wifi / Ethernet	-

END OF DOCUMENT