

INDORE MUNICIPAL CORPORATION , INDORE

APPENDIX 2.10

TENDER DOCUMENT

FOR PERCENTAGE RATE ONLY IN WORKS DEPARTMENT AND OTHER DEPARTMENT

NIT Number and Date 41C.E/EandM

Agreement Number and Date : _____

Name of Work :

Name of the Contractor : _____

Probable Amount of Contract

(Rs. In Figure) : /-

Contract Amount

(Rs. In Figure) : _____

(Rs. In Words) : _____

Stipulated Period of Completion : months

Tender Document

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Section – 1

INDORE MUNICIPAL CORPORATION, INDORE

Electrical DEPARTMENT
Phone 0731-4973334
DETAILED NOTICE INVITING TENDERS
E-mail : imcvidhyutvibhag@gmail.com

TENDER NOTICE

N I T No. 41 C.E/E&M

Date:-31/01/2019

Percentage rate online tenders are invited for following works. Tender forms may be purchased online by the contractors registered in appropriate class in centralized registration of M.P. P.W.D.

S. No.	Name of work	Estimated Cost of Work (Rs. in Cr)	Earnest money deposit (Rs.)	Cost of Tender form (Rs.)	Appli-cable S.O.R.	Completion Period
1.	“Supply & Installation of Energy Efficient LED Street Lighting with Smart Controls in Various Wards in Indore	1,87,59,770=00	1,87,600	12,500	MP UADD SOR-10.05.12	3Month

Note:-Earnest money deposit in the form of DD/FDR in favour of Commissioner, Municipal Corporation, Indore

- **CONTRACTOR SHOULD HAVE TO SUBMIT EPF NO. WITH TENDER**
- **CONTRACTOR SHOULD HAVE TO SUBMIT AFFIDAVITE. WITH TENDER**
- **CONTRACTOR SHOULD HAVE TO SUBMIT GST REGISTRATION WITH TENDER**
- **CONTRACTOR SHOULD HAVE TO SUBMIT A' Class Electrical Contractors License Issued by Electrical Safety Dept.**

Important Dates for Tender processing is as under:-

- 1- Last date for Purchase of Tender document :---12/02/2019 **before 05.30 P.M.**
- 2- Last date for Submission of Tender document :--12/02/2019 **before 05.30 P.M.**
- 3- Last date for Submission of Hard Copy of Technical bid and earnest money :--13/02/2019 **before 05.30 P.M.**
- 4- Earnest Money and Technical bid will be opened online on :- 15/0/2019, **at 10.30 A.M.**
- 5- If the office happens to be closed on the date of submission of Hard Copy and opening of the bids as specified, the bids will be opened on the next working day at the same time and venue .
- 6- **Hard copy accepted only by speed post.**

Tender document and other details shall be available on:-

Website - <http://mptenders.gov.in>

Toll Free no---18002588684

city Engineer
Electrical department
Indore Municipal Corporation, Indore

Notice Inviting e-Tenders INDORE MUNICIPAL CORPORATION , INDORE

NIT No. . 41C.E/E& M

-

Date:- 31/01/2019

Online percentage rate bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S.No.	Name of the work	Probable amount of contract (Rs. In Lacs)	Earnest Money Deposit (EMD) (In Rs)	Cost of Bid Document (In Rupees)	Category of Contractor	Time of Completion
1.	"Supply & Installation of Energy Efficient LED Street Lighting with Smart Controls in Various Wards in Indore"	1,87,59,770=00	1,87,600	12,500	MP UADD SOR- 10.05.12	3Month

- All details relating to the Bid Document(s) can be viewed and downloaded free of cost from the website mentioned in NIT.
- Bid document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/internet banking.
- At the time of submission of the Bid the eligible bidder shall be required to:
 - pay the cost of Bid Document;
 - deposit the Earnest Money;
 - Submit a check list; and
 - Submit an affidavit.

Details can be seen in the Bid Data Sheet

4. ELIGIBILITY FOR BIDDERS:

- At the time of submission of the Bid the bidder should have valid registration with the Government of Madhya Pradesh, PWD in appropriate class. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with appropriate authority.
- The bidder would be required to have valid registration with MPPWD in appropriate class at the time of signing of the Contract.
- Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.

5. Pre-qualification – Prequalification conditions, wherever applicable, are given in the Bid Data Sheet.

6. Special Eligibility - Special Eligibility Conditions, if any, are given in the Bid Data Sheet.

7. The Bid Document can be Purchased only Online up to 12/02/2019 **(05:30 PM)** and submission up to 13/02/2019 **(05:30 PM)** Other key dates may be seen in Bid data sheet.

8. Amendment to NIT, if any, would be published on website only, and not in Newspaper.

**City Engineer
Indore Municipal Corporation, Indore**

SECTION 2

INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

A. GENERAL

1. INTRODUCTION & SCOPE OF WORK

1.1 INTRODUCTION:

Indore municipal corporation intends to replace existing conventional street and install new lights on existing blank poles on various roads in Various wards under Indore municipal Corporation with intelligent LED type system having smart controls. Since LED is a semiconducting component it can be quiet magnificently controlled by electronics to give desired light output in most efficient way. Because of this quality of LEDs substantial energy saving can be achieved by replacing the conventional lighting with LED lighting. LED modules have very long life running as high as 15 years, hence by installing LED based lights there is good scope of reducing maintenance cost.

The salient features of the system are:

- i) Energy efficient LED based lighting.
- ii) as per existing panel system .
- iii) Feeder Panels will house gateways which will communicate in wireless (GPRS) mode to CCMS.
- iv) Centralised Control and Management Software (CCMS) Features: Lighting fixture automatic ON/OFF, fault alert, energy management, billing, theft prevention, monitoring, maintenance scheduling, lifecycle management, automatic complaint management, mobile alerts.

1.2 SCOPE:

Various wards under Indore Municipal Corporation Indoreas directed by Engineer incharge will be covered in scope of work. In these areas street lighting, shall be in scope. The all wards of Indore city included in the scope of work are ward nos. Out of the conventional street light fixtures poles installed in these wards and blank poles (poles without street light fixture), approximately However, IMC may add any additional ward/s fully or partially in scope of work or may delete any ward fully or partially from scope of work as per site conditions or as directed by authorities upon as per the direction of engineer incharge. Correspondingly quantity of fixtures in scope of work may be increased or decreased as per the site conditions or as per the directions of engineer in charge upon approval of competent authority.

The contractor's scope shall be to replace the existing conventional street lighting with the intelligent LED street lighting fixtures with smart controls, required software, hardware, replace the switching panels, replace the cables in IMC owned tubular poles or MPPKVCL's LT poles if necessary and as directed by Engineer In Charge. If there are blank poles (not having street light fixture at present) and if street light is required due to illumination requirements, then the contractor shall install LED street light fixture on that pole as per RFP specifications. The contractor will install all necessary software complete to be commissioned as per the specifications of this RFP. All necessary repairs and finishing required during the installation work shall be in contractor's scope. In order to achieve proper illumination at all roads, contractor shall install new fixture, new bracket suitable to the illumination design, clamps, pole to fixture cable, and all related accessories if required on all poles. the arm poles at junctions & streets shall also be in the scope of replacement with LED type fixture.. The contractor shall paint, replace damaged cables pole boxes etc wherever necessary. Thereafter contractor has to operate and maintain the entire installation for the period of 5 years after the installation on his own cost. The installation of new or replacement of faulty bare or insulated conductor on the poles owned by Discom MPPKVCL shall be as per the instructions by Engineer Incharge. If during survey it is found that any street light is connected to phase line then the contractor shall first connect it to

the street light circuit using proper piercing connector and cable then LED fixture shall be installed. Similarly if on any circuit separate street light conductor does not exist, then contractor shall install separate cable for street light circuit and then install and connect the LED fixture on this street light circuit.

The quantities mentioned in the scope and item schedule can be increased by upto 50% as per site requirements and as per direction from IMC authorities upon approval by the competent authority of IMC. If as per site conditions or due to increase in scope of work IMC may enhance the project completion time upon approval by competent authority.

3. PROCEDURE FOR PARTICIPATION IN E-TENDERING

The procedure for participation in e-tendering is given in the Bid Data Sheet.

4. ONE BID PER BIDDER

- 4.1 The bidder can be an individual entity or a joint venture (if permitted as per Bid Data sheet). In case the J.V. is permitted, the requirement of joint venture shall be as per the Bid Data Sheet.
- 4.2 No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified.

5. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of his bid, and no claim whatsoever for the same shall lie on the ULB.

6. Site Visit and examination of works

The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the work. All costs shall have to be borne by the bidder.

B. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS

The Bid Document comprises of the following documents:

- 1. NIT with all amendments.
 - 2. Instructions to Bidders,
 - 3. Conditions of Contract:
 - i. Part I General Conditions of Contract and Contract Data; and
 - ii. Part II Special Conditions of Contract.
 - 4. Specifications
 - 5. Drawings,
 - 6. Priced Bill of Quantities
 - 7. Technical and Financial Bid
 - 8. Letter of Acceptance
 - 9. Agreement and
 - 10. Any other document(s), as specified.
8. The bidder is expected to examine carefully all instructions, conditions of contract, the contract data, forms, terms and specifications, bill of quantities, forms and drawings in the Bid Document. Bidder shall be solely responsible for his failure to do so.

9. Pre-Bid Meeting (where applicable)

Wherever the **Bid Data Sheet** provides for pre-bid meeting:

- 9.1 Details of venue, date and time would be mentioned in the **Bid Data Sheet**. Any change in the schedule of pre-bid meeting would be communicated on the website only, and intimation to bidders would not be given separately.
- 9.2 Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. The Employer may, at his option, give such clarifications as are felt necessary.
- 9.3 Minutes of the pre-bid meeting including the gist of the questions raised and the responses given together with any response prepared after the meeting will be hosted on the website.
- 9.4 Pursuant to the pre-bid meeting if the Employer deems it necessary to amend the Bid Document, it shall be done by issuing amendment to the online NIT.

10. Amendment of Bid Documents

- 10.1 Before the deadline for submission of bids, the Employer may amend or modify the Bid Documents by publication of the same on the website.
- 10.2 All amendments shall form part of the Bid Document.
- 10.3 The Employer may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

C. PREPARATION OF BID

11. The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and submit Bid Seals (Hashes) of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice Inviting e-Tenders after signing of the same by the Digital Signature of their authorized representative.

12. DOCUMENTS COMPRISING THE BID

The bid submitted online by the bidder shall be in the following parts:

Part 1 – This shall be known as **Envelope A** and would apply for all bids. **Envelope A** shall contain the following as per details given in the **Bid Data Sheet**:

- i) Registration number or proof of application for registration and organizational details in format given in the Bid Data sheet.
- ii) Payment of the cost of Bid Document;
- iii) Earnest Money; and
- iv) Scanned copy of EPF Registration
- v) An affidavit duly notarized.

Part 2 – This shall be known as **Envelope B** and required to be submitted only in works where pre-qualification conditions and/or special eligibility conditions are stipulated in the **Bid Data Sheet**. Online **Envelope B** shall contain a **self-certified sheet** duly supported by documents to demonstrate fulfillment of pre-qualification conditions.

Part 3 – This shall be known as **Envelope C** and would apply to all bids. **Envelope C** shall contain financial offer in the **format** prescribed enclosed with the **Bid Data Sheet**.

13. LANGUAGE

The bid as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer shall be in English or Hindi. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case, for the purposes of interpretation of the bid, such translation shall govern.

14. TECHNICAL PROPOSAL

- 14.1 Only, in case of bids with pre-qualification conditions defined in the Bid data sheet, the Technical Proposal shall comprise of formats and requirements given in the **Bid Data Sheet**.

14.2 All the documents / information enclosed with the technical proposals should be self attested and certified by the Bidder. The Bidder shall be liable for forfeiture of his earnest money deposit, if any document / information are found false/fake/untrue before acceptance of Bid. If it is found after acceptance of the Bid, the sanctioning authority may at his discretion forfeit his performance security/guarantee, security deposit, enlistment deposit and take any other suitable action.

15. FINANCIAL BID

- i. The bidder shall have to quote rates in format referred in Bid Data sheet, in overall percentage, and not item wise. If the bid is in absolute amount, overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply for all items of work.
- ii. Percentage shall be quoted in figures as well as in words. If any difference in figures and words found, lower of the two shall be taken as valid and correct.
- iii. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies; and the Employer shall not be liable for the same.
- iv. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. PERIOD OF VALIDITY OF BIDS

The bids shall remain valid for a period specified in **Bid Data Sheet** after the date of “close for bidding” as prescribed by the Employer. The validity of the bid can be extended by mutual consent in writing.

17. EARNEST MONEY DEPOSIT (EMD)

- 17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), of the amount specified in the **Bid Data Sheet**.
- 17.2 The EMD shall be in the form of Demand Draft/Fixed Deposit Receipt of a scheduled commercial bank, issued in favour of the name given in the **Bid Data Sheet**. The Fixed Deposit Receipt shall be valid for six months or more after the last date of receipt of bids. However, other forms of EMD may be allowed by the employer by mentioning it in the Bid Data sheet.
- 17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive.
- 17.4 EMD of bidders whose bids are not accepted will be returned within ten working days of the decision on the bid.
- 17.5 EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the Bank Guarantee of required value for Performance Security.
- 17.6 Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.

D. SUBMISSION OF BID

18. The bidder is required to submit online bid duly signed digitally, and Envelop 'A' in physical form also at the place prescribed in the **Bid Data Sheet after the date of electronic opening of technical bid. (as per guideline of MPUADD no. 3974 dated 19/04/2017.)**

E. OPENING AND EVALUATION OF BID

19. PROCEDURE

- 19.1 Envelope 'A' shall be opened first online at the time and date notified and it's contents shall be checked. In cases where Envelop 'A' does not contain all requisite documents, such bid shall be treated as non-responsive, and Envelop B and/or C of such bid shall not be opened.
- 19.2 Wherever Envelop 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelop 'B'. Envelop 'C' (Financial Bid) of bidders who are not qualified in Technical Bid (Envelop 'B') shall not be opened.
- 19.3 Envelope 'C' (Financial Bid) of the qualified bidders shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelop 'C'.

- 19.4 After opening Envelop 'C' all responsive bids shall be compared to determine the lowest evaluated bid.
- 19.5 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.
- 19.6 The Employer reserves the right of accepting the bid for the whole work or for a distinct part of it.
- 19.7 "Contents of envelop "A" and "B" are required to be submitted in physical form after the date of electronic opening of Technical Bid at the place and date specified in the Bid Data Sheet .If the contents of documents submitted online in Envelop "A" differ with contents of physical form submitted by the contractor after electronic opening of technical bid or the contractor fails to submit Envelop "A" in physical form as specified in the BID Data Sheet, the bid shall be liable for rejection as non –responsive". **(as per guideline of MPUADD no. 3974 dated 19/04/2017.)**
- 19.8 During Bid evaluation, the employer or its representative may, at its discretion, ask the bidder for a clarification of its Bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the Bid shall be sought, offered or permitted. **(as per guideline of MPUADD no. 3974 dated 19/04/2017.)**

20. Confidentiality

- 20.1 Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.
- 20.2 Any attempt by a bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of its bid.

F. AWARD OF CONTRACT

21. Award of Contract

The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' that his bid has been accepted.

22. Performance Security

- 22.1 Prior to signing of the Contract the bidder to whom LOA has been issued shall have to furnish performance security of the amount, form and duration, etc. as specified in the **Bid Data Sheet**.
- 22.2 Additional performance security, if applicable, is mentioned in the **Bid Data Sheet**.

23. Signing of Contract Agreement

- 23.1 The successful bidder shall have to furnish Performance security and sign the contract agreement within 15 days of issue of LOA.
- 23.2 The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the Employer to the contractor for commencement of work.
- 23.3 In the event of failure of the successful bidder to submit Performance Security and additional performance security if any or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking action against the bidder.

24. CORRUPT PRACTICES

The Employer requires that bidders observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the Employer:

- i. may reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract; and
- ii. may debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

For the purposes of this provision, the terms set forth above are defined as follows:

- a. "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
- b. "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- c. "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- d. "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

Bid Data Sheet

General

S.No.	Particulars	Data
1	Office inviting Tender	INDORE MUNICIPAL CORPORATION , INDORE
2	NIT No	41C.E/E&M
3	Date of NIT	31/01/19
4	Bid document download available from date & time	Up to 29/06/18 before 5:30 PM
5	Website link	http://www.mptenders.gov.in

For Section 1 - NIT

Clause reference	Particulars	Data
1	Portal fees	Rs. ____
2	E.P.F	
3	Cost of bid document (in the form of Demand Draft)	Rs. 12 ,500/-
	Cost of bid document payable to	Commissioner IMC
	Cost of bid document in favour of	Commissioner IMC
4	Affidavit	Annexure B
5	Pre-qualifications required	NO
	If Yes, details	Annexure C
6	Special Eligibility	NO
	If Yes, details	Annexure D (Not applicable)
7	Key Dates	Annexure A

For Section 2 - ITB

Clause reference	Particulars	Data
1	Name of work	"Supply & Installation of Energy Efficient LED Street Lighting with Smart Controls in Various Wards in Indore"
2	Specifications	Annexure E
3	Procedure for participation in e-tendering	Annexure F
4	Whether Joint-venture is allowed	NO
	If yes, requirement for Joint venture	Annexure G
9	Pre bid meeting to held	Not Applicable
	If Yes, Date, Time & Place	
12	Envelope –A containing : i. Registration number or proof of application for registration and organizational details as per Annexure 'H' ii. Cost of Bid Document iii. EMD iv. E.P.F. registration copy. v. An affidavit duly notarized as per Annexure –B	Office of the Executive Engineer (electricaldepartment),IMC Shivaji Market, Behind M G Road, Police station, Indore

	vi. Should reach in physical form	
14	Envelope-B Technical Proposal	A class Electrical license Average turn over , experience certificate according to the mentioned norms of documents.
15	Envelope-C Financial Bid	Annexure – J
	Materials to be issued by the department	Nil
16	Period of Validity of Bid	180 Days
17	Earnest Money Deposit	1,87,600=00
	Forms of Earnest Money Deposit	i. FDR ii. Demand draft of scheduled commercial bank
	EMD valid for a period of	180 days
	FDR (Fixed Deposit Receipt) must be drawn in favour of	Commissioner I.M.C., Indore
21	Letter of Acceptance (LoA)	Annexure L
22	Amount of Performance Security	10% of contract amount
	Additional Performance Security, if any	If bidder quotes the rates which are below workable rates, he will have to deposit additional performance security deposit as per guideline mentioned in MP PWD department order no. F-53/2/11/ yo/ 19-1352 Bhopal, Dt: 11-03-2011 Or as per IMC norms
	Performance security in the format	Annexure K
	Performance security in favour of	Commissioner I.M.C., Indore
	Performance security valid up to	Valid contract period plus 12 months

Key Dates

S.No	Works Department Stage	Bidder's Stage	Start		Expiry		Envelopes
			Date	Time	Date	Time	
1		Purchase of Tender-Online	02/02/2019	5:30PM	12/02/2019	5:30 PM	
2		Bid Submission-Online	02/02/2019	5:31PM	13/02/2019	5:30 PM	
3	Mandatory submission Open (Envelope -A)		15/02/2019	10:30AM			Envelope A
4	Technical proposal open (PQ Envelope-B)		15/02/2019	10:35AM			Envelope B
5	Financial Bid Open (Envelope C)		15/02/2019	10:40AM			Envelope C

Original term deposit receipt of earnest money deposit, demand draft for the cost of bid document and affidavit shall be submitted by the bidder so as to reach the office as prescribed in Bid Data Sheet, at least one calendar day before specified start time and date in key dates for opening of technical proposal as per key dates in Bid Data Sheet.

|| AFFIDAVIT ||

(To be contained in Envelope A)

(On Non Judicial Stamp of Rs. 100)

I/we _____ who is/ are _____ (status in the firm/ company) and competent for submission of the affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and state that:

I/we are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. _____ for _____ (name of work) dated _____ issued by the _____ (name of the ULB).

I/we are fully responsible for the correctness of following self certified information/ documents and certificates:

1. That the self certified information given in the bid document is fully true and authentic.
2. That:
 - a. Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.
 - b. Information regarding financial qualification and annual turn-over is correct.
 - c. Information regarding various physical qualifications is correct.
3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name _____ Post _____ Present Posting _____

Signature with Seal of the Deponent (bidder)

I/ We, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 3 are correct to the best of my knowledge and belief.

Verified today _____ (dated) at _____ (place).

Signature with Seal of the Deponent (bidder)

Note: Affidavit duly notarized in original shall reach at least one working day before opening of the bid, by 15.00 hrs.

PRE-QUALIFICATIONS CRITERIA**1. ELIGIBILITY CRITERIA FOR BIDDER**

In order to evaluate specific experience & capability of the bidder related to the assignment, the minimum requirement of pre-qualification shall be as under:

- i. The bidder should be either a manufacturer of LED type street lights or installation, operation & maintenance agency of street light or System Integrator of ICT systems for Smart Controls of LED street lighting system.
OR
Combination of any two of above agencies if bid is done by Joint Venture (J.V.). Maximum **two agencies** can form a J.V.
- ii. The bidder must submit in the technical bid undertaking to IMC mentioning that “If I (Contractor/bidder) get the order, before manufacturing and supply, I (Contractor/bidder) will submit to IMC sample of street light fixture from any of the approved makes mentioned in the tender along with its test reports from third party NABL accredited laboratory and authorization letter from the manufacturer. The authorization letter shall confirm compliance of technical specifications in this tender by the fixture offered by them (manufacturer) and commitment of delivery as per IMC schedule.”
- iii. In case of bidding company or firm with partners, following additional information needs to be attached:-
 - a. Government Registration Certificate.
 - b. Registered Partnership Deed / Agreement.
 - c. MOA of the firm, if it is a company.
- iv. Successful bidder should have A-Class electrical license issued by M.P. Licensing Board. The license must be submitted at the time of agreement.
- v. The workmen of bidding firm who will work on the Street lights should have the appropriate license of M.P. Licensing Board and to be produced on demand (if required).
- vi. The bidder should have to deposited **Rs 1,87,600** as earnest money receipt transferred on online tender purchasing and transferring EMD amount along with the Tender which will be return at the time of agreement.
- vii. Bidder should submit copy of registration of PAN, EPF, ESIC, & GST no. and any other required and mandatory document copy necessary for execution of work latest at the time of agreement.
- viii. The bidder should submit the attested/Notarized copy of all registration required.
- ix. Information as per Annexure 1 to Annexure 6.
- x. Any other relevant information deemed necessary to enable assessment of the firm’s capability. This may include information about the partner Organizations / affiliates, specifically the memorandum of understanding for taking up joint activities for implementing energy efficiency projects.
- xi. The bidder must submit the proof in support of all eligibility criteria mentioned above along with the technical bid.**
- xii. IMC is publishing NIT & RFPs for 3 Packages (Package-1, Package-2 & Package-3) for “Supply & Installation of Energy Efficient LED Street Lighting with Smart Controls in Various Wards in Indore.**

Annexure E(whatever is applicable)

(See clause 2 of Section 2-ITB & Clause 10 of GCC)

TECHNICAL SPECIFICATIONS:

1.1 Intelligent Lighting

- The road illumination involves providing cohesive lighting scheme for a diverse urban landscape whilst maintaining a responsible approach to minimizing the level of lighting pollution, and, maintaining lighting levels enough for functional purposes. Well-designed public lighting solutions provide the essential safety to enjoy the cityscape and also deter crime and vandalism.
- The standard referred in the document shall be applied for the road lighting design, namely guidance of the factors of “average lighting level” and “uniformities” to be maintained according to the classification of the roads. contractor is required to provide the lighting system along with Effective Asset Management System for Road Lighting in Indore.
- **1.1.2 Principles of Design:** Design of Lighting as well as Lights Management System should be such as to provide excellent Illumination on roads while keeping the energy efficiency in mind. The LED luminaire should have an output of minimum 110 lumens per watt. While designing the lighting system undermentioned guidelines shall be followed.

No Light Pollution

Free Public movement

Hazard-free lighting for motorist as well as pedestrians

Economic viability - Long Life solution / Low Maintenance

Experiential and attractive lighting

Green solution with respect to environment.

Lighting control management system is required to convey the approximate number of fixtures ON/OFF status for the street lighting fixtures in a particular lighting circuit. Circuit wise group control shall be applicable. However in the case of group control also predictive number of faulty lights in each circuit should be indicated by the software application. System should have capability to schedule the operations of luminaires and accordingly provide ON/OFF control. No dimming of illumination is required in the lighting fixtures. Circuit wise electrical parameters like wattage, voltage, p.f, Kwhetc should be transmitted to the command & control centre through wireless mode from the switching point.

Light Management System: Lighting Control System should be deployed to manage the entire Street Lighting System under the scope of the project. Foolproof communication is to be provided between luminaire and central server Web based System should exercise complete control over the streetlights and should be able to monitor their functions / operations such as Scheduling and Monitoring.

Primary requirement of the system is that it should be Simple, Open and Secure. System Infrastructure should be simple providing seamless end to end solution without any complexity, with simple plug and play type of solution for installation not emphasizing of any special expert knowledge. System should be Open and can be easily integrated with other major system. It should use Open standard network technologies. Lighting data should be secure from any leak. Solution should be scalable and adaptable to future requirements.

A centralized control solution shall be easy to implement that requires less equipment and easier installation and essentially provide following facilities:

Automatic (with a timer),

Remote and Manual Switching Options Remote Energy Measurement

Near real-time monitoring

Alarms and Report generation.

Emergency override – locally and remotely.

Web based User Interface with Integrated Visual maps.

Data security and secured system access.

Prevent unauthorized physical access to the street light control box.

The streetlight automation system shall control and monitor streetlight electrical cabinets remotely via wireless communications as the primary communications network to the server. The system shall be easily scalable to include streetlights from a small area to a citywide system rollout on the same platform. ON/OFF programming shall be enabled remotely and can be changed at any time. The ON/OFF times shall be optimized for the different daylight hours every day for energy optimization. That is, it would be optimized to follow the sunrise and sunset times every day.

Electrical cabinet monitoring configurations shall be enabled remotely and can be changed at any time. Electrical meter readings shall be available On Demand and also in configured time intervals. Graphical view of the electrical consumption readings shall be available online for monitoring of the hourly electricity consumption

Power supply voltage, current, wattage of group of lighting fixtures in a circuit shall be available ON-Demand. All alarm/fault detection events shall be logged and available for report-out printing for analysis.

In order to ensure the best performance over their life cycle these advanced tools i.e. LED luminaires, should conform to the various National / International standards for safety & performance. Luminaires shall conform to Performance Requirements as defined in IS 16107 Part 2/Sec 1. Manufacturer should provide test reports as per LM 79 & LM80. Luminaires should conform to the IS standards for Safety & Performance and test certificates as per IS 16107 should be provided by the manufacturer.

1.1.3 INSPECTION & TESTING:

The contractor shall give the inspection notice before or at least 10 days prior to the last date of supply of any batch of material. The material will be dispatched by the supplier after inspection by the representatives of IMC if required by engineer incharge.

The manufacturer is required to dispatch the material within 10 days from the date of acceptance of material.

IMC representatives will visit the manufacturer's work and witness the tests as per specifications on each type of lighting fixtures as per the samples selected by IMC representatives. The sample of the material may also be sent to the government approved NABL laboratory at the cost of contractor for any kind of specific test required by IMC. Supplier shall submit the schedule with date, time & venue of the inspection to IMC in writing for the inspection of material. IMC is authorized to get the material tested from the approved laboratory at the contractor's cost for any kind of specific test if required. The contractor needs to make arrangements for Factory Inspection at his own cost for Luminaires, Brackets. INSPECTION WILL BE CARRIED OUT AT MANUFACTURER'S PREMISES ONLY.

1.2 Luminaire Specifications: (whatever is applicable)

The luminaire should throw the perfect amount of uniform light with exactly the desired intensity, and offer best pole spacing, along with better light control. The Luminaire shall employ individual optical lens for each of the LED to ensure better uniformity of light distribution.

The following types of LED luminaires as replacements for conventional fittings are proposed:

Type of existing fitting (Street Light)	Wattage of existing fitting *	Wattage of LED fitting	Initial Lumen Output
HPSV/HPMV	70W	35-40W	3850-4400
	150W	70-90W	7700-9900
	250W	120-150W	13200-16500
	400W	180-250W	19800-27500
Metal Halide	70W	35-45W	3850-4950
	150W	70-80W	7700-8800
	250W	120-150W	13200-16500
	400W	180-250W	19800-27500
FTL	1x40/36/28W	25-30W	2750-3300
	2 x 40 W	40-70W	4400-7700
CFL	1x85W	40-70W	4400-7700
T-5	4x24 W	70-90 W	7700-9900
T-5	2x24 W	35-60W	3850-6600

NOTE: Above mentioned figures are indicative of minimum requirement but average lux level (as per these specifications) on the road is the prime requirement. The LED fixture wattage range for each type of road mentioned in table under point no. 1.3 of this RFP is mandatory to be installed by contractor.

* At nominal input voltage of 220V AC

1.2.1 ELECTRONIC COMPONENTS:

The electronic components used shall be as follows:

IC (Integrated Circuit) shall be of industrial grade.

The resistors shall be preferably made of metal film of adequate rating.

- The conformal coating used on PCBs should be cleared and transparent and should not affect colour code of electronic components or the product code of the company.
- Heavy components shall be properly fixed. The solder connection should be with good finish.
- The infrastructure for Quality Assurance facilities as called for in the Specification shall be available for the manufacturing of this product. The compliance shall be indicated clearly in the tender itself.

1.2.2 CONSTRUCTION:

- Extruded aluminium and pressure die cast aluminium (sand/gravity casting not to be considered). Aluminium grade LM 6063 or LM 6 as applicable or above high conductivity heat sink material. Heat sink must be made of extruded Al or pressure die cast Al only. Efforts shall be made to keep the overall outer dimensions and weight as minimum as possible.
- All light fittings shall be provided with toughened glass of sufficient strength under the LED chamber to protect the LED and luminaires.
-
- Suitable number of LED Lamps shall be used in the luminaires.
-
- Suitable lenses with street light distribution shall be provided to modify the illumination angle. The lenses should be mechanically fitted not pasted.
- The connecting wires used inside the luminaires, shall be low smoke halogen free, fire retardant e-beam/PTFE cable and fuse protection shall be provided in input side.
- The control gear shall be designed in such a way that the junction temperature of LED should not be more than the threshold T_j mentioned for type of LED in LM-80 REPORT
- The luminaires shall be such that the glare from individual LED is restricted and shall not cause inconvenience to the public.
- If the material used in the (luminaires) shall be halogen free and fire retardant conforming to UL 94.
-
- The fixture should be impact resistant with suitable protection by cover for driver and LEDs.
- The fixture should have designed for IP66 ingress protection or above.
-
- The fixture shall be built in such a way that it can withstand wind speed of 150 Km/Hr.

1.2.3 HIGH POWER AND HIGH LUMEN EFFICIENT LEDS SUITABLE FOR FOLLOWING FEATURES SHALL BE USED:

- LED Chips of Cree/ Osram/ Lumileds/ Nichia make shall be used for the purpose. The manufacturer shall submit the proof of procurement of LEDs from above OMMs at the time of supply.
- The efficiency of the LED lamps at 110°C junction temperature shall be more than 80%
- LED junction temperature should not cross more than 90 °C for longevity of luminaries
- Solder point temp should not cross 75°C
- The working life of the lamp at junction temperature of 90°C for 350mA current shall be more than 50,000 hours of accumulative operation and shall be suitable for continuous operation of 24 hours per day these shall be supported with the suitable section of the LM80 report from the manufacturer of LED.
- Colour temperature of the proposed white colour LED shall be 5000K-6000K.
- The output of LED type lighting fixture shall be more than 110 lumen (+5%) per watt at 350mA to 750 m Amp operating current. However if manufacturer offers better efficiency than this it will be appreciated but no payment will be given by IMC for this.
- The colour rendering index (CRI) shall be minimum 70 with cool white light output.

1.3 ILLUMINATION LEVELS REQUIRED:

The Maintenance factor to be considered in design should be 0.8. Lux measurement with the help of lux meter shall be done at distance as shown in table below. Value obtained shall not be less than the lux specified in the table. For measurement of average illumination on any road 9 point method will be used.

S.N.	Width of Road	LED St. Light Wattage	Pole Ht	Approx Pole spacing	Desired Avg. lux level	Desired Uniformity factor
1	3-4 Mtrs	30 to 45 W	7-7.5 mtrs MPPKVVCL poles	25-30 mtrs	10	0.45
2	5-6 mtrs	60 to 70 W	7-7.5 mtrs MPPKVVCL poles	30 mtrs	12	0.45
3	7-9 Mtrs	80 to 100 W	7 -7.5 mtrs MPPKVVCL poles	30 mtrs	18	0.45

Note: if 9 to 10 mtrs high Tubular arm poles are installed on road which is of width less than 7 mtrs, then fixture wattage shall be installed as per the lux level requirement of that road.

1.4 DESIGN FOR LED STREET LIGHT FIXTURES:

The fitting shall be so designed that the illumination level shall be evenly distributed and shall be free from glare. Illumination level of different types of luminaires shall be as per below table.

ABSTRACT OF KEY SPECIFICATIONS:

S.N o.	Specifications	40W to 45W	70W and Above
i)	Dimming of light output facility	Not required	Not required
ii)	Circuit wise approximate ON/OFF qty, exact wattage, current, voltage, power factor required.	Required	Required
iii)	Voltage range or rating : [130 -270 volt AC] on single phase.	100-270V	100-270V
iv)	LED fixture Output (lumen/W)	>110 (+5%)	>110 (+5%)
v)	Frequency range (+/-5)	50 Hz	50Hz
vi)	Power Factor	>/=0.95	>/=0.95
vii)	Colour Temperature	5000K-6000K	5000k-6000k

viii)	CRI (Colour Rendering Index)	≥ 70	≥ 70
ix)	LED Life Expectancy	50,000 hrs with 70% Lumens	50,000 hrs with 70% Lumens
x)	Protection level	IP66 Minimum	IP66 Minimum
xi)	Total Harmonic Distortion	$< 20\%$	$< 20\%$
xii)	IK rating	$\geq \text{IK } 05$	$\geq \text{IK } 05$
Xiii)	Surge Protection	Internal 3KV & external 10 KV	Internal 3KV & external 10 KV

1.5 CONFORMANCE STANDARDS:

Product Certification should be obtained from UL or CPRI or any other third party NABL certified lab before installation by contractor. The following test reports should be provided:

LM-79	Luminaire efficacy (Photometry data)
LM-80	LED chip data
IP 66	Luminaire Ingress Protection
EN 60929	Performance
IEC 60598-2, sec-3	Test Report of LED streets light luminaire
IEC 61000-3-2	Limits for Harmonic current emission –THD $< 20\%$

- The driver card shall cut off at 270V and shall resume normal working when nominal voltage is applied again. This is to ensure protection of luminaires from neutral faults and error in connection at sites.

- The LEDs should be driven at the suitable current and within the permissible limits specified by the LED chip/lamp manufacturer.
- The fixture shall be designed so as to have lumen maintenance of at least 70% at the end of 50,000 hours.
- The luminaire should be operable with auto adjustable 100-270V supply Voltage using the same driver.
- Power Factor of the electronic driver should be at least > 0.95 with THD $< 15\%$.
- Driver used in the luminaire shall be SELV (Safety Extra Low Voltage) type. Driver Output Voltage Should be $< 60V$ DC for human safety.
- **Driver Shall be Potted Type** for increased life.
- The driver should be of IP 66 ingress protection.
- The Streetlight luminaire should be provided with the integrated lens plate on each LEDs & the lens to be fitted mechanically on to MCPCB so as ensure proper optics over lifetime of the product, as individually glued lenses will fall off the LEDs due to heat, over a period of time.

1.6 LIST OF DOCUMENTS TO BE ENCLOSED:

All the luminaires should comply with SP 72 (Part 4) specifications for luminaires and the contractor (successful bidder) shall provide following information for proposed luminaires. Relevant LED and Luminaire data sheets and Type test certificates indicating compliance to the technical specifications / standards.

Technical catalogue of products.

Make of LED used.

Relevant manufacturing certificates including LM79 and LM 80.

IEC 60598 report Part-2, section-3- Report of LED street light luminaire.

Manufacturers Type Test Certificate of Luminaires from Government Authorised NABL Test Laboratories / R&D Labs to be provided.

1.7 SWITCHING PANEL, SMART MONITORING & CONTROLS (whatever is applicable according to the site conditions)

A standalone mounted unit / frame to be placed at feeder level containing Gateway, Cluster Energy Meter, Relay Controller Unit along with MCB and Change Over/Bypass arrangement.

Enclosure should be made of MS Galvanized powder coated or SMC material with IP 65 and shall have proper lock arrangement. The panel should be totally rust proof. The panel should have proper space for installation, operation and maintenance of items installed in it. The minimum size of panel should be 450 mm width x 450 mm height. The prominently visible logo of IMC should be permanently inscribed on the panel.

It shall be protected by an MCB at its AC mains input.

Lamp load connection shall be through an output MCB.

Separate Chamber for Input/output MCB and Change over Circuit for maintenance and manual operation. Door open detection provision, even in case of power failure.

i) Should be capable of circuit wise control of street light fixtures upto 15 KVA street lighting load distributed in three/ single phase as per site requirement. The wattage of each street light will be 30 to 100 watts. The system should be designed that on each switching panel not more than 125-150 LED fixtures to be operated. On each switching panel there should be at least two outgoing lighting circuits each having 60 to 75 LED fixtures approximately.

It should be complete with all required switching and protecting devices, contactors, timers, relays, sensors, controller, remote wireless communication devices, wiring, pipe earthing, surge protection device, required software, web server, hosting, etc. The contactor, wires, MCBs etc should be rated for 15KVA load in single / two phases as per site conditions.

The feeder pillar should perform at least following tasks through remote PC/mobile based web application user friendly interface: Circuit wise remote ON/OFF switching of street lights. Monitoring of quantity and electrical parameters of circuit wise full or partially /ON/OFF of street lights in each phase.

All switchgear shall be tested at site as per the manufacturer's recommendations and shall include the minimum following tests:

Visual inspection for dimensional check-up, completeness of the equipment as per the manufacturer's documents, furnishing the list of missing components, if any, tightness of all the terminals/equipment, etc.

Measuring I.R. value. High voltage test.

Testing of protective relays with primary and secondary injection test, wherever applicable.

Simulation test for all the interlocks, annunciations and for the correct operations of the switchgear.

Testing of oil for dielectric strength, wherever applicable.

Any other tests as recommended by Site Engineers/ Site –in-Charge.

All the switchgears shall be cleaned with vacuum cleaners before commissioning. Plugging/ Sealing of all the unused cut outs for the cable glands in the equipment. All panels shall be double earthed with two separate earthing pits.

1.8 SPECIFICATIONS FOR SMART COMMUNICATION AND CONTROL:

S.No.	Item	Description
I.	Gateway	<p>The Gateway shall bidirectional communication with Lighting Management Server Software over reliable GPRS/ GSM Communication backbone with efficient protocol.</p> <p>Gateway shall capability to communicate/control/configure intelligent relay controller unit through RS232 or RS 485 protocol.</p> <p>It shall have ability to On/Off luminaire circuits as per predefined schedule by Central Management Software as below:</p> <ol style="list-style-type: none"> Astronomical sunset/dusk and sunrise/dawn Defined energy policy. Schedule On/ Off . <p>It shall able to measure electrical parameters with Class 1.0 accuracy. Measurable parameters as below at every circuit:</p> <ol style="list-style-type: none"> Voltage Current Frequency Power factor Active Power Apparent Power Cumulative KWh Cumulative KVAh <p>It shall support fault/alarm detection of at luminary circuit and should send the notification to lighting management server software or Gateway.</p> <p>Faults/ Alarm like Over Voltage, Under Voltage, Over Current and Lamp Fail.</p> <p>It should consume less than 2W in stand- by-mode.</p> <p>Gateway should support collection and reporting of the cluster metering data at every 10 to 15 minutes Interval to Central Management Software. The interval of reporting shall be configurable.</p> <p>Gateway shall have power failure detection feature.</p> <p>Gateway shall have 4-6 hours battery backup.</p>

		<p>Operating Voltage (170-260VAC at 50 HZ)</p> <p>The Gateway shall have an inbuilt RTC with separate battery backup. It should be able to store the schedule locally for switching ON and OFF the lights connected to it as per schedule configured. It should also support real time ON / OFF of luminary circuits.</p> <p>Maximum Power Consumption is less than 3 Watts.</p> <p>Gateway shall capable to communicate with Cluster energy meter over RS232 / RS 485 to read group metering data and group control of connected lamps.</p> <p>Gateway enclosed in Feeder Control Panel with Cluster energy meter.</p> <p>Gateway should capability to form transparent data link with Cluster Energy to Central Monitoring Software.</p> <p>Gateway shall capable to manage automatic wireless connectivity with Central management software.</p> <p>Gateway must be controlled, configurable and managed remotely.</p> <p><i>Note: If GPRS or other technology for which third party rental / data charges have to be paid, is used. Then successful bidder shall have to give an undertaking in the agreement that all such rental or data charges will be borne by him for entire contract period without any extra cost to IMC.</i></p>
II.	Cluster Meter along with Relay Controller Unit (At Feeder Control Panel Unit)	<p>There shall be a metering unit that shall support threephases or single phase energy measurement along with Intelligent relay controller unit for connected lamps at downside a feeder. It shall be a wired connectivity with Gateway on RS232/RS485 protocol.</p> <p>The metering unit should support following measurements for the cluster (circuit)</p> <ol style="list-style-type: none"> Voltage Current Active Power Apparent Power Cumulative KWh Cumulative KVAh Power Failure On/ OFF events Power Factor Frequency Relay On/Off events <p>Record Following Events occurrence and restoration</p> <ol style="list-style-type: none"> Over Voltage in each Phase Under Voltage in each Phase Over Current / Over Load in each phase Panel Open <p>Threshold value can be configured from Central Management Software</p> <p>Relay controller unit shall capable to switch ON/OFF lamps after getting command from central control station instantaneously</p> <p style="text-align: center;">OR</p> <p>Automatically throughout the year on basis of astronomical clock</p> <p style="text-align: center;">OR</p> <p>As per Pre Defined scheduler</p> <p>Manual ON/Off facility shall be available for maintenance purpose through change-over or bypass circuit</p> <p>Cluster Energy Meter shall measure consumption of cluster irrespective</p>

		<p>of maintenance or actual lighting cycle.</p> <p>Energy meter shall local communication port to read metering data through Hand Held Unit.</p> <p>Energy Meter shall be Class 1.0 as per IS 13779</p>
IV.	Central Management Software (CMS)	<p>A standalone web based application for user to control and monitor whole solution backbone with cloud server on a static IP.</p> <p>The lighting management server software shall be made such that it can support more than 40,000 street lights.</p> <p>The CMS shall be based on an open Web Application Server. Its user interface shall be 100% Web-based and accessible from any computer on the network through a Microsoft Internet Explorer, SAFARI or Chrome web browser.</p> <p>The resolution of the lighting application shall be such that it can be accessed from a computer / laptop / mobile / tablet.</p> <p>The CMS should have an intuitive user interface, easy to use and navigate.</p> <p>It should support a dashboard which can give a quick view of an area / feeder / luminary. It should typically support</p> <ul style="list-style-type: none"> - Electrical parameters of the feeder / metering unit voltage, current, KWH. - Status of lights downside the feeder / metering unit – alerts / notification icons. - Button to do an “On demand” ON / OFF of group of lights below the feeder / metering unit. <p>It should be able to communicate with any group of fixtures collectively amongst networked switching points for control and monitoring.</p> <p>It should be able to display the power failure details of a particular switching point or feeder level phase wise.</p> <p>It should register all fault conditions like excess voltage/current drawn, lamps failure, no-power supply, etc through the instantaneous alert messages (SMS) sent to configured phone numbers.</p> <p>Reports such as energy saving report, lamps failure report, actual hours of operation, uptime (%), etc. should be generated on a daily basis from the data/readings received from the Feeder Control Panels.</p> <p>Provision for GIS mapping covering all switching points and the details of each switch point and pole numbers shall be viewable in the web application software through a Google-map interface or web based digital map.</p> <p>The system monitors and records all the following from the Feeder Control Panel.</p> <p>At Cluster/ Switching/ Feeder level</p> <ul style="list-style-type: none"> • Voltages each phase • Current each phase • PF each phase • Metering KWH cumulative • Metering KVAH • Approx. Number of operational lights in a circuit. • Approx. Number of non-operational lights in a circuit.

	<ul style="list-style-type: none"> • Failure of Relay • Status of the incoming supply (power failure) • High /low voltage • Overload on the phases <p>The system monitors and records all the following from the Control panel</p> <ul style="list-style-type: none"> • Voltage • Current • PF • Metering KWH cumulative • Metering KVAH • Burning Hours <p>Cyber security, safe database management, data retrieval and troublefree operation of software and allied systems (24*7) to be ensured.</p> <p>The CMS should support alerts for faulty lights, over voltage, under voltage, over current, power outage.</p> <p>The CMS should support configurability for thresholds for over voltage, over current, under voltage connected.</p> <p>The server software should be able to configure the ON / OFF schedule for a switch point phase wise or group of switch points based on Sun rise / Sunset and shall also support configurability of the time as desired.</p> <p>It should have a mechanism to detect faulty lights downside a feeder / metering unit.</p> <p>The software shall support configuration of maximum five mobile numbers per feeder point for SMS notification of alerts / alarms. In case of faulty lights, the SMS sent should also send the Feeder Number with location.</p> <p>It should support user role creation with different access permissions for User / Supervisor / Manager / administrator.</p> <p>The CMS should support summary screen to get a tabular and or graphical overview of the complete installation status with percentage / count of healthy / faulty in a given area, under a feeder and also of the complete city.</p> <p>The CMS should be able to identify the exact location of the group of lights on which the fault has occurred with relevant GPS co-ordinates.</p> <p>Report: Load Profile and Load Survey at feeder level phase wise or switching point from Feeder Control Panel. The CMS should support export of the report data in a CSV or PDF format for further analysis.</p> <p>It should have required antivirus, malware and protection against hacking attacks.</p> <p>The CMS shall capable to generate or designed Energy Profile Policy for energy saving.</p> <p>Note all communications should be based on open protocol allowed in India. The CMS should be able to communicate in real time and hooked up with central command and control centre for Indore Smart City Development Ltd. Indore using non proprietary standard and open protocol. It should have asset management feature, fault management feature, product life cycle management feature, GIS mapping etc.</p> <p>CMS Software should have facility to log the event for maintenance in case of failure and there should have mechanism for close the event by</p>
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		authorised person.
V.	Android / IOS based Mobile Application	<p>The standalone application to give status of On-Off of group (circuit) of lights at feeder level through mobile application.</p> <p>Read following updated status on App</p> <ol style="list-style-type: none"> Feeder ON/ OFF Approx. Lighting Fixtures which are ON in circuit. Approx. Lighting Fixtures which are OFF in circuit. <p>To operate application: User shall have internet connectivity.</p>
VI	Server/Cloud / Monitor Requirement	<ol style="list-style-type: none"> The server/Cloud platform shall be of dedicated server with 64 bit multicore processor. Servers should have minimum of 32 GB RAM with bandwidth of at least 1 Gbps. Servers should have minimum 500GB Disk space with RAID configuration. Actual number of processor cores, RAM and disk space to be considered based on application and database requirements. Servers need to be considered in HA mode for Application continuity and no single point of failure. Bidders have to consider total number of servers accordingly. There should be a separate SAN storage with dual controllers and minimum 5TB usable disk space. Bidder has to consider any other active component redundancy configuration like RAID, etc to provide no single point of failure architecture Contractor has to provide backup system that includes backup server hardware and software for at least 5TB storage. Contractor has to provide redundant online UPS with 30 minutes power back up for main components like Servers, storage, firewalls, etc. Server/Cloud platform provider shall have regular maintenance of the server and immediately address in case of server down. Platform should have ready API for integration with City Command Control Centre Platform. The Application should have facility to identify all kind of alerts defined in functional requirement on real time within 1-2 mins or earliest decided by authority. 45 to 50 inch size LED colour monitor of HD quality picture will have to be provided by the contractor for street light monitoring.
VII	Integration with Integrated Command and Control Centre of Indore Smart	<p>The contractor has to integrate the application software platform with Integrated Command and Control Centre of Indore Smart City (ICCC) so as to achieve all smart monitoring and controls from ICCC also.</p>

Note: IMC / IMC shall provide space / room for establishing control room for command and control of Smart Controls mentioned above. However contractor has to employ his manpower to operate this control room during the period of contract. Contractor will train IMC/IMC staff in O&M of Smart Controls during and before project completion.

Anything not covered in the above specifications, will be governed by: --

1. **MPUADD Specifications:** (The soft copy of the specifications is available at departmental website <http://www.mpurban.gov.in/StandardSchedule.asp>)

MPPKVVCO.LTD SPECIFICATIONS FOR ELECTRICAL WORKS: *The Provisions of General/ Special Conditions of Contract, those specified elsewhere in the bid document, as well as execution drawings and notes, or other specifications issued in writing by the employer shall form part of the technical specifications of this work.*

APPROVED MAKES:

1. LED Street lighting fixtures..... Philips / Keselecr / Bajaj / Wipro / Havells / surya or Any other national or multinational & internationally reputed brand with good presence in India and having average turnover of Rs. 200 crores from the sales of LED type street lighting fixtures in last three financial years (proof of this should be submitted to IMC), upon prior approval by IMC Engineer Incharge /Consulting Engineer.
(Models of these makes which conforms to the technical specifications of this tender upon prior submission of sample for approval of IMC Engineer Incharge/Consulting Engineer.)
2. Wire / CablesPolycab / Finolex / Havells / RR / Ravin.
3. Switchgear, timer, contactor etc..... L&T/ ABB/Siemens / Schnieder MG / Legrand
4. Smart control hardware: reputed make with five years warranty.

Procedure for participation in e-Tendering

1. Registration of Bidders on e-Tendering System

All the PWD registered bidders are already registered on the new e-procurement portal <https://www.mpeproc.gov.in>. The user id will be the contractor ID provided to them from MP Online. The password for the new portal has been sent to the bidders registered email ID. For more details may contact mptenders.gov.in Helpdesk phone numbers are available on website.

2. Digital Certificate:

The bids submitted online should be signed electronically with a class III Digital Certificate to establish the identity of the bidder submitting the bid online. The bidders may obtain class III Certificate issued by an approved certifying Authority authorized by the controller of certifying Authorities, government of India. A class III digital Certificate is issued upon receipt of the required proofs along with an application. Only upon the receipt of the required documents, a digital certificate can be issued. For details please visit cca.gov.in.

Note:

- i. It may take upto 7 working days for issuance of class III digital certificate; hence the bidders are advised to obtain the certificate at the earliest. Those bidders who already have valid class III digital certificate need not obtain another Digital Certificate for the same.

The bidders may obtain more information and the APPLICATION FORM REQUIRED TO BE SUBMITTED FOR THE ISSUANCE OF DIGITAL CERTIFICATE FROM cca.gov.in.

- ii Bids can be submitted till bid submission end date. Bidder will require digital signature while bid submission. The digital certificate issued to the authorized user of a partnership firm/Private limited company/Public Limited Company and user for online bidding will be considered as equivalent to a no-objection certificate/power of attorney to that user.

In case of Partnership firm, majority of the partners have to authorize a specific individual through authority letter signed by majority of partners of the firm.

In case of Private Limited company, Public Limited company, the Managing Director has to authorize a specific individual through Authority Letter. Unless the certificate is revoked, it will be assumed to represent adequate authority of the specific individual to bid on behalf of the organization for online bids as per Information Technology Act 2000. This Authorized User will be required to obtain a digital certificate. The Digital Signature executed through the use of the responsibility of Management/Partners of the concerned firm to inform the Certifying Authority, if the authorized user changes, and apply for a fresh Digital Certificate for the new Authorized user.

3. Set Up of Bidder's Computer System:

In order for a bidder to operate on the e-tendering System, the Computer system of the bidder is required to be set up for Operating System, Internet Connectivity, Utilities, Fonts, etc. The details are available at <https://www.mptenders.gov.in>.

4. Key Dates:

The bidders are strictly advised to follow the time schedule (Key dates) of the bid of their side for tasks and responsibilities to participate in the bid, as all the stages of each bid are locked before the start time and date and after the end time and date for the relevant stage if the bid as set by the Department.

5. Preparation and Submission of Bids

The bidders have to prepare their online, encrypt their bid data in the Bid forms and submit Bid of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the notice inviting e- Tenders after signing of the same by the Digital Signature of their authorized representatives.

6. Purchase of Bid Document

For purchasing of the bid document bidders have to pay Service Charge online ONLY which is Rs. [as per Bid Data Sheet]. Cost of Bid document is separately mentioned in the detailed NIT. The Bid Document shall be available for purchase to concerned eligible bidders immediately after online release of the bids and upto scheduled time and date as set in the key dates. The payment for the cost of bid document shall be made online through Debit/Credit card. Net banking or NeFT Challan through the payment gateway provided on the portal.

7. Withdrawal, Substitution and Modification of Bids

Bidder can withdraw and modify the bid submission end date.

ANNEXURE-G

(See clause 4 of Section 2-ITB)

ANNEXURE-H

(See clause 12 of Section 2

ITB & clause 4 of GCC)

ORGANIZATIONAL DETAILS
(To be enclosed with technical proposal)

S.No.	Particulars	Details
1.	Registration No. issued by centralized registration system of Govt. of MP or proof of application for registration	(If applicable, scanned copy of proof of application for registration to be uploaded)
2.	Valid registration of Bidder in appropriate class through centralized registration of Govt. of MP	Registration no..... date..... (Scanned copy of Registration to be uploaded)
3.	Name of Organization/ Individual	
4.	Entity of Organization Individual/ Proprietary Firm/ Partnership Firm (Registered under Partnership Act)/ Limited Company (Registered under the Companies Act-1956)/ Corporation	
5.	Address of Communication	
6.	Telephone Number with STD Code	
7.	Fax Number with STD Code	
8.	Mobile Number	
9.	E-mail Address for all communications	
	Details of Authorized Representative	
10.	Name	
11.	Designation	
12.	Postal Address	
13.	Telephone Number with STD Code	
14.	Fax Number with STD Code	
15.	Mobile Number	
16.	E-mail Address	

Note: *In case of partnership firm and limited company certified copy of partnership deed/ Articles of Association and Memorandum of Association alongwith registration certificate of the company shall have to be enclosed.*

Signature of Bidder with Seal
Date: _____

Annexure I

(See clause 14 of Section 2 of ITB)

Envelope B, Technical Proposal

Technical Proposal shall comprise the following documents:

S.N.	Particulars to be submitted	Format
1.	Financial and Physical Experience	(Format: I-1)
2.	Annual Turnover	(Format: I-2)
3.	List of technical personnel for the key positions	(Format: I-3)
4.	List of Key equipment/ machine/s quality control labs	(Format: I-4)
5.	List of Key equipment/ Machines for Construction Work.	(Format: I-5)

Note:

1. Technical Proposal should be uploaded duly page numbered and indexed.
2. Technical Proposal should be uploaded otherwise will not be considered

Annexure I (Format: I - 2)

(See clause 14 of Section 2 of ITB)

ANNUAL TURN OVER

Average annual financial turnover for the works to be provided in the following format for the last 3 financial years;

Financial Information			
Financial Year	2015-16	2016-17	2017-18
Annual Turnover (in INR Crore)			
AVERAGE ANNUAL TURNOVER			
Note: <ol style="list-style-type: none">i. Annual turnover of construction works should be certified by chartered accountant.ii. Audited balance sheet including all related notes and income statements for the above financial years to be enclosed.iii. TDS Certificates related to experience as per RFP conditions.			

OFFICE OF THE MUNICIPAL CORPORATION, INDORE

SECTION I

DETAILED TENDER INFORMATION

1. GENERAL

Indore Municipal Corporation, Indore (herein after referred as IMC) has planned installation of about 30000 conventional street lighting fixtures dismantled from the Indore city in the outer and rural areas of Indore.

Online post qualification tenders are invited from reliable, resourceful and experienced firms / companies / individual tenderer having financial capability and sufficient technical credential in any Government / Semi Government / Undertakings / Autonomous / Statutory bodies or Local bodies for installation, operation and maintenance of conventional street lighting fixtures.

Tender Work will be done as per the information, terms & conditions and scope of work given in Tender Document.

2 BRIEF DESCRIPTION OF WORK

The contract work consists of installation, testing and commissioning of conventional street lighting fixtures in outer and rural areas of Indore. These are those fixtures which have been dismantled from the main Indore city and replaced with LED type fixtures by PPP concessionaire.

Contractor shall have to operate and maintain complete street lighting in working condition by his own expenses till the period of 1 year after completion of installation work. The contractor shall be fully responsible, if any part of street lighting materials like lighting fixtures, panels, cables etc faulty/damaged / theft/not worked by what so ever reason and will have to repair / replace the same under this contract. The spares like lamp, control gear etc required for maintaining the street light fixtures shall be issued to the contractor by IMC. The cost of wire from fixture to pole connection box shall be in contractor's scope. The new switching panels where ever required shall be supplied and installed by the contractor.

3 ELIGIBILITY CRITERIA& PREQUALIFICATION DOCUMENTS

3.1 In order to evaluate specific experience & capability of the bidder related to the assignment, the minimum requirement of pre-qualification shall be as under:

- i. In case of company or firm with partners, following additional information needs to be attached :-
 - a. Government Registration Certificate
 - b. Registered Partnership Deed / Agreement.
 - c. Constituted attorney of the firm, if it is a company.
- ii. Successful Tenderer should have A-Class license issued by M.P. Licensing Board. The license must be submitted at the time of agreement.
- iii. Employees working on the Street lights should have the appropriate license of M.P. Licensing Board and to be produced on demand (if required).
- iv. Tenderer should have three year experience of operation and maintenance of Flood Lighting, street/central lights and relevant field.
- v. Tenderer should have average annual turnover of at least Rs.2 crore during last 3 financial years.
- vi. Tenderer should have deposited **Rs.1,87,600/-** as earnest money in the form of FDR/Demand Draft in the favour of Commissioner, Municipal Corporation, Indore along with the Tender which will be return at the time of agreement.
- vii. Tenderer should have registered in MP Govt in C class work capacity.
- viii. Tenderer should have registration of EPF, GST, ESIC, Group Insurance as requirement of PWD department as per Government norms.
- ix. Tenderer should submit the attested/Notarized copy of all registration required.
- x. Joint venture shall not be allowed.
- xi. Information as per Annexure 1 to Annexure 5.
- xii. Any other relevant information deemed necessary to enable assessment of the firm's capability. This may include information about the partner Organizations / affiliates, specifically the memorandum of understanding for taking up joint activities for implementing energy efficiency projects.

3.2 Following persons/firms are incapable for participating tender:-

- i. Person who is less than 21 years of age or not mentally fit.

- ii. Person/company/contractor, who himself or as a guarantor, is defaulter of any amount payable to the corporation.
- iii. Person/agency whose contract and conduct was not found satisfactory in the view of Corporation during any previous contracts.
- iv. Person/Company, who is black listed by the corporation or any other organization.
- v. Person/Company, about which the corporation or committee believed that he is a bad performer.
- vi. Person, who stands an accused for the serious offences and convicted by any criminal Court under the bylaws of Municipal Corporation or Indian Penal Code or any Indian Law.

4 SUBMISSION OF BID:

4.1 Methodology

Tenders will be submitted online in prescribed format. The last date for the submission of completed bid is on **as per NIT**. Original Earnest Money receipt and Pre-qualification bid is also required to be submitted physically before due date. Only online submitted documents/bids will be considered for evaluation of technical and financial bid. Bidder can submit documents online in scan form, PDF or JPEG. Hard copies shall be scrutinised only for cross verification of documents submitted online.

4.2 Contents of Bids:

(I) Earnest Money

Tenderers should have deposited Rs.198000/- as FDR/Draft with the Technical Bid as earnest money payable in favour of The Commissioner, Municipal Corporation, Indore. The scan copy and details of the earnest money will also be submitted online with technical Bid.

(II) Financial bid

Financial offer should be given online in prescribed form on **percentage rate basis** and financial bid will be open of those firms only which qualifies in TECHNICAL bid. **If any bidder submit his financial offer physically than his bid shall liable to be rejected.**

4.3 Instructions to Tenderers

- i. The agency interested in performing the work has to qualify the pre-qualification bid.
- ii. Pre-qualification (Technical) bids will be opened on as per NIT.
- iii. Financial Bid of only those Tenderers will be opened who qualify the pre-qualification round.
- iv. The bids received after the last date and time prescribed in the tender document shall be rejected.
- v. The Tenderer is advised to carefully examine all instructions and abide to the terms & conditions specified in the Tender Document for filling up the tender form. Failure to furnish all the information required in the Tender Document, or submission of a bid

not substantial responsive to the Tender Document in every respect might result in rejection of the tender.

- vi. Conditional tenders will not be accepted.
- vii. The Commissioner, Indore Municipal Corporation, Indore reserves the right to reject any or all tender / offers without assigning any reason thereof.

NOTE: Even though the applicant satisfy the eligibility criteria, they are likely to be disqualified if they:

- Make untrue or false representation in the forms, statements and attachments furnished in response to above clause and or having
- Records of poor performance such abandoning of works, not properly completing the contracts or financial failure etc.

5 VALIDITY OF BID

Bid shall remain valid at least for 180 days from the dead line of submission of Tenders. In the event of the Tenderer withdrawing the offer before the aforesaid date.

6 PERFORMANCE SECURITY DEPOSIT

Performance security will be 10% of the contract value. The successful bidder shall bound to submit Performance Security in the form of FDR from a scheduled bank or a bank guarantee of 5% of contract value at the time of agreement & rest 5% will be deducted from bills. This Performance Security shall be released after satisfactory completion of the work at the end of contract period. If bidder quotes the rates which are below workable rates, he will have to deposit additional performance security deposit as per guideline mentioned in MP PWD department order no. F-53/2/11/ yo/ 19-1352 Bhopal, Dt: 11-03-2011.

7 IMPORTANT INSTRUCTIONS

- 7.2 The tenderer/bidder should have familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
- 7.3 The particulars of the proposed work given are provisional and must be considered only as advance information to assist the Tenderer. The tenderers are suggested to collect all relevant data regarding the place of work/site, its local environment, actual prevailing working conditions, availability of required materials and labour and all other information/data required for submission of tender. If required, the tenderer/s must pre-visit the site

before submitting his tender. IMC shall not entertain any request of contractor for clarifications related to such local conditions and shall bear no responsibility in this regard.

7.4 Tenders received without the Earnest Money Deposit will be summarily rejected. The earnest money of all the tenderer shall be refunded if it is decided to reject all the tenders on the same day. Otherwise the earnest money of all the Tenderes shall be retained till any tender is accepted and agreement executed. However, irrespective of the decision on the tenders the earnest money of all the tenderers shall be refundable on expiry of the validity period specified in the NIT unless otherwise mutually agreed.

7.4 If the successful Tenderer fails to execute the agreement within notified period from date of issuing of Letter of acceptance the earnest money shall be stand forfeited.

7.5 All documents correspondences relating to the tender shall be in English/Hindi.

SECTION II

SCOPE OF WORK

The scope of work is as follows:-

1. Installation, testing and commissioning of conventional street lighting fixtures in outer and rural areas of Indore as per directions of Engineer Incharge. These are those fixtures which have been dismantled from the main Indore city and replaced with LED type fixtures by PPP concessionaire.
2. Contractor shall have to operate and maintain complete street lighting in working condition by his own expenses till the period of 1 year after completion of installation work.
3. The street light fixture in working condition shall be issued to the contractor by IMC. IMC shall mark serial no. and ward no. where it is to be installed on every fixture before issuing it to the contractor for installation.
4. The cost of wire from fixture to pole connection box shall be in contractor's scope. The new switching panels where ever required shall be supplied and installed by the contractor. New bracket or cable shall be installed by contractor as per site requirement upon approval by engineer in charge.
5. The contractor shall be fully responsible, if any part of street lighting materials like lighting fixtures, panels, cables etc faulty/damaged / theft/not worked by what so ever reason and will have to repair / replace the same under this contract, however if the material which is provided IMC required to be replaced during maintenance period same shall be issued to the contractor for replacement if required. The contractor shall have to deposit the faulty material in IMC

stores. However, if the material supplied by the contractor needs any replacement during the maintenance period, same shall be replaced by the contractor on this own cost.No extra labour cost shall be given to contractor during maintenance period.

6. It will be the whole responsibility of successful tenderer to maintain the installed street lights and to keep them in working condition by providing and replacing the required materials within specified time-frame as and when necessary.
7. The Contractor shall be fully and solely responsible for any direct or indirect damage or loss and/or for loss due to any theft, accident, fire, hazards occurred during the work.
8. In case of damaged fixture due to accident will have to immediately repaired if repairable otherwise to be removed by contractor and will file FIR for the same. The contractor has to install the replacement fixture issued by IMC with accessories in place of accidentally damaged items which are beyond repair during the 1 year maintenance period.

SECTION III

SPECIAL CONDITIONS OF CONTRACT

1 Tender Period

Total tender period is of **1.5 years** from date of work order but contractor must complete installation and commissioning work within **six months** of award of work. The contractor shall be responsible for management operation of tender work awarded to him for a period of **one** year from the date of work order. During the performance and maintenance period of one years, if any damage / failure occurs due to any reason whatsoever the contractor will have to repair / replace/ maintain/ install whatever needed as per site conditions at his own cost. The contractor shall hand over the project in working condition i.e. 100% lights on after completion of contract period with all accessories / material in complete. In case any material which was issued to the contractor needs replacement during maintenance period same will be issued by IMC to the contractor for replacement.

2 Time of attendance of Complaint, O&M repairs & replacement.

1.1 Maintenance team should be deployed in appropriate manner with consultation and approval of Engineer-in charge prior to commencement of work.

1.2 The contractor shall rectified the complaint received from Bhopal Call Centre (CM helpline), Local Call Centre , IMC control room, Complaint Letter, mail, any other source or by Engineer in charge within the specified time, i.e. within 72 hours on receipt of the complaint. In case of panel / series of lights, complaint should rectify within 24

hours from delivering of complaints. He should devise a system of communication acceptable to the Employer and ensure continuous liaison.

3. Responsibilities of Contractor

- 3.1 Maintenance work will also include replacement of damage fittings, periodical cleaning of luminaries and proper alignment of fittings, cover etc.
- 3.2 Contractor shall have to operate and maintain complete street lighting in working condition by his own expenses. The contractor shall be fully responsible, if any part or materials / fittings / cables or panel material found damaged / theft /accidental / collision / braked /not worked by what so ever reason and will have to repair / replace the same.No extra payment shall be made for repairing, replacing or maintenance work. IMC shall provide the replacement of only that material which was supplied by IMC. I contractor fails to perform the repair/ replacement activity IMC will be free to carryout the work on risk and cost basis.
- 3.3 Special attention during VIP arrival/ Festival / Function / windy or rainy season should be given to rectify defective lights or loose contacts in wiring & fittings / fixtures.
- 3.4 It is the duty of the Contractor to position the lamp arms, proper covering of mast box and fittings whenever it is dislocated due to winds or rains or due to other reasons. Lamp glass should be cleaned periodically as directed by engineer in charge to remove accumulated dust, if any.
- 3.5 It is responsibility of contractor to install equipments to manage and secure devices for under/over voltages.

4 Responsibility for Regular Inspection

The contractor shall be responsible for regular inspection and proper daily maintenance of street lights in the areas assigned to him including preventive maintenance and routine maintenance works.

8 Third Party Inspection & Audit

IMC shall appoint third party inspection and audit agency which will have following responsibilities:

- a. To verifywhether the type, wattage, make and serial number of dismantled street light fixtureentered in the record physically matches with the storedfixture.
- b. To verify whether the type, wattage, make and serial number of the street light fixture issued to the contractor physically matches with ward number, road for which it was issued.

- c. To verify whether the serial no. of the pole and corresponding serial no., type, make and wattage of street light fixture installed by contractor as mentioned in IMC record physically matches at site.
- d. To verify ward wise quantity of each type, type and wattage
- e. To verify that all fixtures installed by the contractor are in working condition and are providing proper illumination levels.
- f. To verify the energy consumption at each switching point after installation of all street light fixtures.
- g. To verify that earthing, cabling, connections etc are technically proper.

9 Joint Inspection

The joint inspection job includes periodical inspection by staff of contractor, along with Engineer incharge/ Consulting engineer / Third Party Inspection and Audit Agency's Engineers and IMC staff, in such a way that every light is inspected with regular interval, whether it is burning or not.

10 Maintenance of Quality Standards in Materials

The contractor shall use approved quality spares and materials only and as per given specification in tender and directed by engineer in charge.

11 Compliance to Acts & Rules of other Departments

All the works shall be done in accordance with Indian Electricity Act and Rules and also as per MPSEB regulations as amended from time to time.

12 Risk

- a. All risks of loss or damage of physical property and of personal injury and death which arises during and in consequences of the performance of the contract, will be at the responsibility of the contractor. The IMC shall not be held responsible for any unforeseen incidents, mishaps, accident to the employees appointed and engaged during the period of contract and they shall be covered by an adequate insurance by contractor.
- b. In rainy season / accidents, it is fully responsibility of contractor / firm to control the leakage current and hazards. If any accident occurs, then its responsibility of contractor. It is fully responsibility of contractor to ensure earthing of pole, prevent cable fault or any other issue to prevent mishap. IMC will not be responsible for any accident or physical loss.
- c. IMC will not be responsible for any accident or physical / non-physical loss of contractors person or IIIrd person.

13 Staff and employees of the Contractor

Contractor shall be fully responsible to provide Accommodation, Equipments, stationary etc. to his employees.(if required)

14 Insurance

- a. All the employees should be insured as per labour act by the contractor. He should insure for both accident relief as also for group insurance. Necessary work man's compensation policy and insurance cover during the entire period of contract shall be taken up by the contractor at his own risk & cost.

- b. Contractor must provide all necessary / current rules or policies for his labour as per government norms like EPF / ESI or other.

15 Safety Measures

The contractor / agency shall to maintain all the safety precautions and measures as per rules and regulations of I.E. Act / M.P. Licensing Board, M.P. Govt. and Central Govt. The contractor / agency will be fully responsible for the insurance of his own working staff and labours. I.M.C. will not be responsible for any accidents or loss during execution/maintains of work.

16 Technical control on the work

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge/ Consulting engineer for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

17 Pricebid

- i. The rates to be quoted by agency will include all taxes, loading, unloading, insurance, trimming of trees etc. i.e. all in contract with materials, labours and technician. No extra payment will be made by I.M.C. Necessary tax deduction at source (i.e. income tax etc.) shall be deducted from the bills as per the rules. However GST shall be paid extra as applicable.

18 Liquidity Damages

- The street lights which are out of order shall have to be repaired within 72 hrs. of receipt of complaint by repairing / replacing of parts / sets, If work is not done within time frame then repetitive counting will take place.
- If complaints are not rectified to full satisfaction of Engineer-in-charge within 10 days, then IMC reserves right to get the work done by any outside agency on risk and cost basis and amount paid for such works will be recovered from the running bills or amount deposited by contractor against Performance Security.

19 Dispute Redressal Mechanism

In case of Dispute or difference arising between the contractor and IMC relating to any matter arising out of or connected with this agreement, such disputes or difference shall be presented before Technical Committee. Technical Committee will settled the dispute in accordance with the Arbitration and Reconciliation Act, 1996.

20 Handover of the work

On expiry / termination of the contract, the contractor shall be required to handover the complete Street Lighting systems to the Indore Municipal Corporation in healthy working condition, otherwise the cost of making working condition shall be recovered by the Indore Municipal Corporation from contractor' final bill and performance deposit.

21 Disclaimer

IMC and/or its officers, employees 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 statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of IMC and/or any of its officers, employees.

22 Jurisdiction

All legal proceedings in connection with this contract shall be subject to the territorial jurisdiction of local civil courts at Indore only.

SECTION IV

TECHNICAL SPECIFICATIONS

All works shall be carried out as per the UADD specifications and as per BIS standards.

APPROVED MAKES:

1. Wire / CablesPolycab / Finolex / Havells / RR / Ravin / KEI
2. Switchgear, timer, contactor etc..... L&T/ ABB/Siemens / Schnieder MG / Legrand

Annexure J

(See clause 14 of Section 2 of ITB)

**FINANCIAL BID
(TO BE CONTAINED IN ENVELOPE C)**

NAME OF WORK: _____
(Name of the work as appearing in the bid for the work)

I/We do hereby BID to execution of the above work within the time specified at the rate (In figures) _____ (In words) _____ percent below / above or at par based on the Bill of Quantities and item wise rates given therein in all respects and in accordance with the specifications, designs, drawings and instructions in writing in all respects in accordance with such conditions so far as applicable.

I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work. I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/ kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions affecting accommodation and movement of labour etc. required for the satisfactory execution of contract.

Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or in default thereof to forfeit and pay to the Commissioner, Indore Smart City Development Ltd. or his successors in office the sums of money mentioned in the said conditions.

Note:

- i. *Only one rate of percentage above or below or at par based on the Bill of Quantities and item wise rates given therein shall be quoted.*
- ii. *Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found lower of the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance security and sign the agreement his earnest money deposit shall be forfeited.*
- iii. *In case the percentage "above" or "below" is not given by a bidder, his bid shall be treated as non-responsive.*
- iv. *All duties, taxes, and other levies payable by the bidder shall be included in the percentage quoted by the bidder.*

**Signature of Bidder
Name of Bidder**

The above bid is hereby accepted by me on behalf of the Commissioner, Indore Smart City Development Ltd. dated the _____ day of _____ 20__

Signature of Officer by whom accepted

Annexure K

(See clause 15 of Section 2 of ITB)

MATERIALS TO BE ISSUED BY THE DEPARTMENT

S.No	Name of material	Rate (Issue rate)	Unit	Remarks

DELETED

Annexure L

(See clause 21 of Section 2 of ITB)

No. _____

Dated: _____

LETTER OF ACCEPTANCE (LOA)

M/s. _____

(Name and address of the contractor)

Subject: _____
(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the (Name of ULB), at your bided offer as per scope of work given therein. You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:

a. The performance security/ performance guarantee of Rs. _____ (in figures) Rupees _____ (in words only). The performance security shall be in the shape of term deposit receipt/ bank guarantee of any nationalized / schedule commercial bank.

b. Sign the contract agreement.

Please note that the time allowed for carrying out the work as entered in the bid is _____ months including/ excluding rainy season, shall be reckoned from the date of signing the contract agreement.

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required. Therefore, after signing of the agreement, you are directed to contact Engineer-in-charge for taking the possession of site and necessary instructions to start the work.

Yours faithfully,

EXECUTIVE ENGINEER

Annexure M

(See clause 22 of Section 2 of ITB)

PERFORMANCE SECURITY

To

_____ [Name of Employer]

_____ [Address of Employer]

WHEREAS _____ [name and Address of Contractor] (Hereinafter called "the Contractor") has undertaken, in pursuance of Letter of Acceptance No. _____ Dated _____ to execute _____ [Name of Contract and brief description of works] (herein after called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of _____ [amount of Guarantee]* _____ (in words), such sum being payable in the types and proportions of currencies in which the contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid till issue of physical completion certificate.

Signature, Name and Seal of the Guarantor _____

Name of Bank _____

Address _____

Phone No., Fax No., E-mail Address, of Signing

Authority _____

Date _____

** An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.*

SECTION 3
Conditions of Contract

Part I General Conditions of Contract [GCC]
Table of Clauses of GCC

Clause No.	Particulars	Clause No.	Particulars
	A. General	21	Payments for Variations and / or Extra Quantities
1	Definitions		
2	Interpretations and Documents	22	No compensation for alterations in or restriction of work to be carried out.
3	Language and Law	23	No Interest payable
4	Communications	24	Recovery from Contractors
5	Subcontracting	25	Tax
6	Personnel	26	Check Measurements
7	Force Majeure	27	Termination by Engineer in charge
8	Contractor's Risks	28	Payment upon Termination
9	Liability For Accidents To Person	29	Performance Security
10	Contractor to Construct the Works	30	Security Deposit
11	Discoveries	31	Price Adjustment
12	Dispute Resolution System	32	Mobilization and Construction Machinery Advance
	B. Time Control	33	Secured Advance
13	Programme	34	Payment certificates
14	Extension of Time		E. Finishing the Contract
15	Compensation for Delay	35	Completion Certificate
16	Contractor's Quoted percentage	36	Final Account
	C. Quality Control		F. Other Conditions of Contract
17	Tests	37	Currencies
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A. General

1. DEFINITIONS

1.1 “Bill of Quantities” means the priced and completed Bill of Quantities forming part of the Bid.

1.2 “Chief Executive Officer” means the executive officer as defined under the relevant section of the article of association;

1.3 “Completion” means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of agreement.

1.4 “Contract” means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.

1.5 “Contract Data Sheet” means the documents and other information which comprise of the Contract.

1.6 “Contractor” means a person or legal entity whose bid to carry out the work has been accepted by the Employer.

1.7 “Contractor's bid” means the completed bid document submitted by the Contractor to the Employer.

1.8 “Contract amount” means the amount of contract worked out on the basis of accepted bid.

1.9 “Completion of work” means completion of the entire contracted work. Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.

1.10 “Day” means the calendar day.

1.11 “Defect” means any part of the work not completed in accordance with the specifications included in the contract.

1.12 “Drawings” means drawings including calculations and other information provided or approved by the Engineer-in-Charge.

1.13 “Department” means Indore Smart City Development Ltd. as the case may be.

1.14 “Employer” means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer/Government/Department wherever used denote the Employer.

1.15 “Engineer” means the person named in contract data sheet.

1.16 “Engineer in charge” means the person named in the contract data.

1.17 “Equipment” means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work.

1.18 “Executive Director” means the executive director of the Board as appointed under the provision of the article of association;

1.19 “Government” means Government of Madhya Pradesh.

1.20 “In Writing” means communicated in written form and delivered against receipt.

1.21 “Material” means all supplies including consumables used by the Contractor for incorporation in the work.

1.22 “Stipulated date of completion” means the date on which the Contractor is required to complete the work. The stipulated date is specified in the Contract Data.

1.23 “Specification” means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.

1.24 “Start Date” means the date 14 days after the signing of agreement for the work. However, the employer may extend this time limit by another 14 days, as and when required.

1.25 “Sub-Contractor” means a person or corporate body who has a Contract (duly authorized by the employer) with the Contractor to carry out a part of the construction work under the Contract.

1.26 “Temporary Work” means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.

1.27 “Tender/ Bid, Tenderer/ Bidder” are the synonyms and carry the same meaning where ever used.

1.28 “Variation” means any change in the work which is instructed or approved as variation under this contract.

1.29 “Work” the expression **“work” or “works”** where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations: In the contract, except where the context requires otherwise:

- a. words indicating one gender include all genders;
- b. words indicating the singular also include the plural and vice versa.
- c. provisions including the word **“agree”, “agreed” or “agreement”** require the agreement to be recorded in writing;
- d. **“written” or “in writing”** means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

2.2 Documents Forming Part of Contract:

1. NIT with all amendments.
2. Instructions to Bidders
3. Conditions of Contract:
 - i. Part I General Conditions of Contract and Contract Data; with all Annexures
 - ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings
6. Bill of Quantities
7. Technical and Financial Bid
8. Agreement
9. Any other document (s), as specified.

3. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Communications

All certificates, notice or instruction to be given to the Contractor by Employer/Engineer shall be sent on the address or contact details given by the Contractor in [Annexure H of ITB]. The address and contract details for communication with the Employer/Engineer shall be as per the details given in Contract Data Sheet. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge

6. Personnel

- 6.1 The Contractor shall employ for the work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data sheet, if applicable. If the Contractor fails to deploy required number of technical staff, recovery as specified in the Contract Data will be made from the Contractor.
- 6.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.

7. Force Majeure

7.1 The term "Force Majeure" means an exceptional event or circumstance:

- a. Which is beyond a party's control,
- b. Which such party could not reasonably have provided against before entering into the contract,
- c. Which, having arisen, such party could not reasonably have avoided or overcome, and
- d. Which is not substantially attributed to the other Party

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- i. War, hostilities (whether war be declared or not), invasion, act of foreign enemies),
 - ii. Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
 - iii. Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
 - iv. Munitions of war, explosive materials, ionizing radiation or contamination by radio activity, except as may be attributed to the Contractor's use of such munitions, explosives, radiation or radio activity, and
 - v. Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity,
- 7.2 In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.
- 7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of Price adjustment clause.
- 7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.

8. Contractor's Risks

- 8.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.
- 8.2 All risks and consequences arising from the inaccuracies or falseness of the documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that designs/drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

The contractor shall be deemed to have indemnified and saved harmless the Government and/or the employer, against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act, or any other statute in force at the time of dealing with the question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim there under.

10. Contractor to Construct the Works

- 10.1 The Contractor shall construct, install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data
- 10.2 In the case of any class of work for which there is no such specification as is mentioned in contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.
- 10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, Machinery, tools implement and generally of all means used for the fulfillment of this contract whether such means may or may not approved of or recommended by the Engineer.

11. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

12. Dispute Resolution System

- 12.1 No dispute can be raised except before the Competent Authority as defined in Contract data in writing giving full description and grounds of Dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2 No issue of dispute can be raised after 45 days of its occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such disputes.
- 12.3 The Competent Authority shall decide the matter within 45 days.
- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract data. The Appellate Authority shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh MadhyasthamAdhikaranAdhiniyam, 1983.
- 12.6 The contractor shall have to continue execution of the works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. Programme

- 13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works for the construction of works.
- 13.2 The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme

- 13.3 An update of the Programme shall be a Programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations

14. Extension of Time

- 14.1 If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-charge shall forward the aforesaid application to the competent authority as prescribed.
- 14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause- 15 of this agreement.
- 14.3 In case of the work already in progress, the contractor shall proceed with the execution of the works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

15. Compensation for delay

- 15.1 The time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.
- 15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.
- 15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.
- 15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data
- 15.5 In the event of delay in execution of the works as per the timelines mentioned in the contract data the Engineer-in-charge shall retain from the bills of the Contractor Amount equal to the liquidated damages leviable until the contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.
- 15.6 If the contractor is given extension of time after liquidated damages have been paid, the engineer in charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.
- 15.7 In the event the contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against liquidated damages levied.

16. Contractor's quoted percentage

The contractor's quoted percentage rate referred to in the "Bid for works" will be deducted/ added from/to the net amount of the bill after deducting the cost of material supplied by the department.

C. Quality Control

17. Tests

17.1 The Contractor shall be responsible for:

- a. Carrying out the tests prescribed in specifications, and

- b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- 17.2 The contractor shall have to establish field laboratory within the time specified and having such equipment as are specified in the Contract Data.
- 17.3 Failure of the contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.
- 17.4 Ten percent of the mandatory tests prescribed under the specifications shall be got carried out through Laboratories accredited by National Accreditation Board of Laboratories (NABL) by the Engineer in Charge and the cost of the such testing shall be deducted from the payments due to Contractor.

18. Correction of Defects noticed during the Defect Liability Period

- 18.1 The defect liability period of work in the contract shall be the Contract Data
- 18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.
- 18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of having the Defects corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

D. Cost Control

19. Variations - Change in original Specifications, Designs, Drawings etc.

- 19.1 The Engineer in charge shall have power to make any alterations, omissions or additions to or substitutions for the original specifications, drawings, designs and instructions, that may appear to him to be necessary during the progress of the work and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Employer, and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the contractor on the same conditions in all respects on which he agree to do the main work.
- 19.2 The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer in charge shall be conclusive as to such proportion.

20. Extra items

- 20.1 All such items which are not in the priced BOQ shall be treated as extra items.

21. Payments

THE BIDDER WILL GET THE PAYMENT AS FOLLOWS:

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Running bills shall be submitted after installation, testing and commissioning of group of at least 1000 nos. street lights and related items like switching panels, CCMS, Gateway, software, mobile alerts, at a time and thereafter final running bill of balance works may be submitted.

Note: -

- 1. All payments shall be released by way of e-transfer through RTGS/NEFT in India directly at their Bank account by IMC.**
- 22. No compensation for alterations in or restriction of work to be carried out.**
- 22.1 If at any time after the commencement of the work, the Government, for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out, the Engineer

in charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.

22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.

22.3 The Engineer in charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

23. No Interest Payable

No interest shall be payable to the Contractor on any payment due or awarded by any authority.

24. Recovery from Contractors

Whenever any claim against the Contractor for the payment arises under the contract, the Department shall be entitled to recover such sum by:

- a) Appropriating, in part or whole of the Performance Security and additional Performance Security, if any; and/or Security deposit and/or any sums payable under the contract to the contractor.
- b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor under any other contractor of the department, including the securities which become due for release.
- c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land revenue Code.

25. Tax

25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales tax and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities. But the rates shall be excluding excise duty exemption on pipes as per Norms. **GST shall be paid extra as applicable.**

25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor. Any Changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. Check Measurements

26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.

26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.

26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer in Charge

27.1 If the contractor fails to carry out any obligation under the Contract, the Engineer in charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

27.2 The Engineer in charge shall be entitled to terminate the contract if the Contractor

- a. Abandons the works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the contract;

- b. the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
 - c. without reasonable excuse fails to comply with the notice to correct a particular defect within a reasonable period of time;
 - d. the Contractor does not maintain a valid instrument of financial Security, as prescribed;
 - e. the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is recoverable;
 - f. If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data.
 - g. if the Contractor, in judgment of the engineer in charge has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
 - h. Any other fundamental breaches as specified in the Contract Data.
- 27.3 In any of these events or circumstances, the engineer in charge may, upon giving 14 days' notice to the contractor, terminate the contract and expel the Contractor from the site. However, in the case of sub paragraph (b) or (g) of clause 27.2, the Engineer in charge may terminate the contract immediately.
- 27.4 Notwithstanding the above, the Engineer in charge may terminate the contract for convenience by giving notice to the contractor.

28. Payment upon Termination

- 28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for value of the work accepted on final measurements, less advance payments and penalty as indicated in the Contract Data. The amount so arrived at shall be determined by the Engineer-in-charge and shall be final and binding on both the parties.
- 28.2 Payment on termination under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the contractor's personnel employed solely on the works, and the contractor's costs of protecting and securing the works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.
- 28.3 If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered as per clause 24 above.

29. Performance Security

The Contractor shall have to submit performance security and additional performance security, if any, as specified in Bid data sheet at the time of signing of the contract. The contractor shall have to ensure that such performance security and Additional performance security, if any, remains valid for the period as specified in the Contract data.

30. Security Deposit

- 30.1 Security deposit shall be deducted from each running bill at the rate as specified in the contract data. The total amount of security deposit so deducted shall not exceed the percentage of contract price specified in the Contract data.
- 30.3 The Security deposit shall be refunded on completion of defect liability period.

31. Price Adjustment

31.1 Applicability

1. Price adjustment shall be applicable only provided for in the contract data.

2. The price adjustment clause shall apply the works executed from the date of signing of the agreement until the end of the intended completion date or extensions granted for reasons attributed to the Employer by Engineer. The contractor shall not be entitled any benefit arising from the price adjustment clause for extension in the contract period reasons attributed to the contractor. In the Force Majeure event price escalation clause shall apply.

31.2 Procedure

1. Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with following and procedures and as per formula given in the contract data.
 2. The price adjustable shall be determined from the formula given in the contract data.
 3. Following expression and meaning are assigned to done during each quarter:
$$R = \text{Total value of work during the quarter} - \text{amount of secured advance granted, if any, during the secured advance recovered, if any during 3 the quarter, less value of department, if any during the quarter.}$$
Weightages of various components they shall be as per the Contract Data.
- 31.3 To the extent that full compensation any rise or fall in costs to the contractor is not covered by the provisions of this or clauses in the contract, the unit rates and prices included in the contract shall be deemed amounts to cover the contingency of such other rise or fall in costs.
- 31.4 The index relevant to any quarter, for which such compensation is paid, shall be the arithmetical average of the indices relevant of the calendar month.
- 31.5 For the purpose of clarity it is pointed out that the adjustment may be either positive or negative, i.e. if the price adjustment is in favor the same shall be recovered from the sums payable to the Contractor.

32. Mobilization and Construction Machinery

- 32.1 Payment of advances shall be applicable if provided in Contract Data.
- 32.2 If applicable, the Engineer bearing advance payment to the contractor of the against provision by the contractor of an unconditional Bank in nationalized/Scheduled banks, in the name as stated in the in the advance payment. The Guarantee shall remain effective been repaid, but the amount of the guarantee shall be progressively repaid by the contractor.
- 32.3 The rate of interest shall be as per Contract data.
- 32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of new construction machinery.
- 32.5 The advance shall be recovered as stated in the Contract data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.

33. Secured Advance

- 33.1 Payment of secured advance shall be applicable if provided in Contract data.
- 33.2 If applicable, the Engineer in Charge shall make interest bearing advance payment to the contractor of the amounts stated in the Contract Data, against provision by the contractor of an unconditional Bank Guarantee in a form and by nationalized/ scheduled banks, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the contractor.
- 33.3 The rate of interest chargeable shall be as per Contract Data.

- 33.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.
- 33.5 The advance payment shall be recovered as stated in the Contract Data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.

34. Payment Certificates

The payment to the contractor will be as per payment terms as mentioned in clause 21 above:

- a. The contractor shall submit to the engineer monthly statement of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
- b. The engineer shall check the Contractor's monthly statement and certify the amount to be paid to the contractor.
- c. The value of work executed shall be determined, based on the measurements approved by the Engineer/ Engineer in charge.
- d. The value of work executed shall comprise the value of the quantities of the items in the Bill of quantities completed.
- e. The value of work executed shall also include the valuation of variations and compensation events.
- f. All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- g. The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- h. Payment of intermediate certificate shall be regarded as payments by way of advance against the final payment and not as payments for work actually done and completed.
- i. Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.
- j. The payment of final bill shall be governed by the provisions of clause 36 of GCC.

E. Finishing the Contract

35. Completion Certificate

- 35.1 A completion certificate in the prescribed format in Contract data shall be issued by the Engineer in charge after physical completion of the work.
- 35.2 After final payment to the contractor, a final completion certificate in the prescribed format in the contract data shall be issued by the Engineer in charge.

36. Final Account

- 36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to

the competent authority as defined in the Contract data, who shall decide on the amount payable to the contractor after hearing the Contractor and the Engineer in Charge.

- 36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 32.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

- 38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. COMPLIANCE WITH LABOUR REGULATIONS

During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in the Contract data. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/ byelaws/ Acts/ Rules/ regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/ Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

40. Audit and Technical examination

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers, abstract etc. To be made after payment of the final bill and if as a result of such audit and technical examination nay sum is found to have been overpaid in respect of any work done by the contractor under the contract or nay work claimed by him to have been done under the contract and found not to, have been executed, the contractor shall be liable to refund the amount of overpayment and it shall be lawful for government to recover the same from him in the manner prescribed in clause 24 above and if it is found that the contractor was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by government to the Contractor.

41. Death or permanent invalidity of contractor

During continuance of the contract, the contractor and his sub- contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications, and bye laws of the state or central government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the

state or the major labour laws that are applicable to construction industry are given in the contract data. The contractor shall keep the employer indemnified in case any action is taken against the employer by the competent authority on account of contravention of any of the provisions of any Act or rules made their under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules regulations including amendments, if any, on the part of the contractor, the engineer/employer shall have the right to deduct from any money due to the contractor including his amount of performance of security. The employer/engineer shall also have right to recover from the contractor any sum required or estimated to be required for making good the loss or damage suffered by the employer. The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the employer at any point of time.

42. Jurisdiction

This contract has been entered into the State of Madhya Pradesh and its validity and legal effect shall be subjected to the exclusive jurisdiction of the courts in Indore or of the courts at the place where this agreement is entered into. No other jurisdiction shall be applicable.

[End of GCC]

CONTRACT DATA SHEET

Clause Reference	Particulars	Data
1.14	Employer	Indore Municipal corporaion.
1.15	Engineer	Engineer as notified by employer
1.16	Engineer in Charge	City Engineer (Electrical), IMC
1.22	Stipulated period of completion	6Months
3	Language & Law of Contract	English and Indian Contract Act 1872
4	Address & contact details of the Contractor	As per Annexure H
	Address & contact details of the Employer/Engineer-phone, Fax, e-mail.	-
5	Subcontracting permitted for contract value	Not Permitted
6	Technical Personnel to be provided by the contractor	As per Annexure I (Format I-3)
	Penalty, if required Technical personal not employed	As per Annexure I (Format I-3)
10	Specifications	As per Annexure E
	Drawings	As per Annexure N
12	Competent authority for deciding dispute under Dispute resolution system	Additional commisioner IMC, Indore
	Appellate Authority for deciding dispute under Dispute resolution system	commisioner IMC, Indore
13	Period of submission of updated construction program	-
14	Competent authority for granting time permission	Executive Director, IMC, Indore
15	Milestones laid down for the contract	Yes
	If yes, details of milestone	As per Annexure O
	Liquidated damages	As per Annexure P
17	List of equipment for lab	As per Annexure Q
	Time to establish
	Penalty for not establishing lab	Rs. per month of delay
18	Defects Liability Period for Work	5years after physical completion of the work.
21	Competent authority for determining the rate	Executive Director, IMC, Indore
27	Any other condition for breach of contract	-
28	Penalty	Penalty shall be recovered from a. Security deposit as per clause 30 of General Conditions of Contract; and b. Liquidated damages imposed as per clause 15 from Performance Security (Guarantee) including Additional Performance Security (Guarantee), if any, as per clause 29 of General Conditions of Contract, whichever is higher.
29	Performance guarantee (Security) shall be valid up to	Till completion of physical period as per Clause 35.1.
30	Security deposit to be deducted from each	

	running bill	
	Maximum limit of deduction of Security Deposit	
31	Price adjustment formula and procedure to calculate	As per Annexure R
31.1 (1)	Price adjustment shall be applicable	Not Applicable
31.2 (4)	Weightages of Component in the work	
32	32.1 Mobilization Advance applicable	No
	32.2 If yes, unconditional Bank Guarantee	As per Annexure S
	32.3 If Yes Rate of Interest	10% annual simple interest
	32.4 If Yes, Type and Amount that can be paid	Mobilization Advance – Not more than 5% of Contract Amount
	32.5 If Yes, Recovery of Payment	<p>Recovery of Mobilization advance shall commence when 10% of the contract amount is executed and recovery of total advance shall be done on pro-rata basis and shall be completed by the time work equivalent to 80% of the Contract Amount is executed.</p> <p>In addition to the recovery of principal amount, recovery of interest shall be carried out as calculated on the outstanding amount of principal at the close of each month. The interest shall be accrued from the day of payment of advance and the recovery of interest shall commence when 10% of the contract amount is executed and recovery of total advance shall be done on pro-rata basis and shall be completed by the time work equivalent to 80% of the Contract Amount is executed.</p>
33	33.1 Secured Advance Payable	No Secured Advance Payable
	33.2 If Yes, Unconditional Bank Guarantee	In the format prescribed in Annexure T.
	33.2 If Yes, Amount of Secured Advance	75% of value of material as determined by Engineer in Charge.
	33.3 If Yes, Conditions for Secured Advance	
	33.4 If Yes, Recovery of Secured Advance	-
35	Completion Certificate – after physical completion of work	As per Annexure U
	Final Completion Certificate – after final payment on completion of the work.	As per Annexure V
39	Salient features of some of the major labour laws that are applicable	As per Annexure W

COMPENSATION FOR DELAY

If the contractor fails to achieve the milestones, and the delay in execution of work is attributable to the contractor, the Employer shall retain an amount from the sums payable and due to the contractor as per following scale –

- i. Slippage up to 25% in financial target during the milestone under consideration – 2.5% of the work remained unexecuted in the related time span.
- ii. Slippage exceeding 25% but up to 50% in financial target during the milestone under consideration – 5% of the work remained unexecuted in the related time span.
- iii. Slippage exceeding 50% but up to 75% in financial target during the milestone under construction – 7.5% of the work remained unexecuted in the related time span.
- iv. Slippage exceeding 75% in financial target during the milestone under consideration – 10% of the work remained unexecuted in the related time span.

Note: For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to maximum of 10% of contract price.

The decision of **Executive engineer** shall be final and binding upon both the parties.

Physical Completion Certificate

Name of Work:

Agreement No. _____ Date _____

Amount of Contract Rs _____

Name of Agency: _____

Used MB No.: _____

Last measurement recorded

a. Page No. & MB No.: _____

b. Date: _____

Certified that the above mentioned work was physically completed on..... (Date) and taken over on..... (Date) and that I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Executive Engineer

Final Completion Certificate

Name of Work:

Agreement No. _____ Date: _____

Name of Agency: _____

Used MB No. _____

Last Measurement recorded

b. Page No. & MB No. _____

c. Date _____

Certified that the above mentioned work was physically completed on _____ (date)

And taken over on _____ (date).

Agreement amount Rs. _____

Final amount paid to contractor Rs. _____

Incumbency of officers for the work

I have satisfied myself to best of my ability that the work has been done properly.

Date of Issue

Executive Engineer

Salient Features of Some Major Labour Laws Applicable

- (a) Workmen Compensation Act 1923: - The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- (b) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days' (say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- (c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
 - i. Pension or family pension on retirement or death as the case may be. '
 - ii. Deposit linked insurance on the death in harness of the worker.
 - iii. Payment of P.F. accumulation on retirement/death etc.
- (d) Maternity Benefit Act 1951: - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (e) Contract Labour (Regulation & Abolition) Act 1970: - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is, required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.
- (f) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.
- (g) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (h) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus 'within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.
- (j) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- (k) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.
- (l) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- (m) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations o employment of

children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.

- (n) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- (o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government., The Employer of the establishment- is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the-work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- (p) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. it is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

Section 3
(Whichever is applicable according to the nature of work)
Conditions of Contract
Part-II Special Conditions of Contract [SCC]
Part II Special Conditions of Contract [SCC]

1. All works shall be carried out in strict accordance to the norms, procedure and specifications issued and enforced by BIS in Relevant Indian Standard specifications and code of Practices with up to date amendments and revisions, latest edition of National building code and National electric code. In addition, the installation shall comply in all respects with the requirements of Indian. Electricity Act 2003 and Indian Electricity Rule 1956 with up to date amendments and revisions and special requirements if any of the M.P. State Electricity Board or Chief Electrical Advisor to Government of Madhya Pradesh cum Chief Electrical Inspector and his subordinate office.
2. The contractor shall make his own arrangements for supply of water and electricity at his expense required for execution of work. The IMC shall neither make any such arrangements nor shall make any payments in this regard.
3. The contractor has to construct at his own cost his site office and store at site on a suitable place and location as permitted by IMC. The IMC shall not provide any place for storage of equipment required for work. No amount shall be paid to the contractor in this regard.
4. Proper upkeep and maintenance and safety of store and stocks of materials brought at site shall be the sole responsibility of the contractor. The materials got damaged due to negligence of its up keeping at site or due to mishandling shall have to be replaced by the contractor at his own cost. On discovery of such damages the IMC shall recover the amount paid through the running bills to the contractor and shall only be reimbursed after the replacement of the same. The IMC shall also not be responsible for theft of materials from site and the contractor has to replace all such materials at his own cost. No compensation whatsoever shall be payable to the contractor on above grounds.
5. The contractor shall not be entitled to any compensation for any loss suffered by him on account of delay in commencement or execution for work whatever the cause of delay may be including delay arising out of other materials, supply of materials, transportation for any matter related with MPPKVV Co. Ltd. & Electrical Safety Department or any other reasons whatsoever, the IMC shall not be liable for any claim in respect thereof.

The consultant appointed by IMC is authorized for following:

- a) To visit the site from time to time to inspect the quality of work.
 - b) To issue working drawings with specifications to the contractor.
 - c) Technically guide the contractor if required.
 - d) To accompany IMC officials for factory inspections of material if required.
6. Safety, security, operation and maintenance of the items installed by the contractor at site shall be responsibility of contractor at his cost and risk for the entire execution period and during seven years O&M period. The contractor shall have to get insured all material installed by him against any damage, accident or theft.
 7. The contractor shall be responsible for the safety of his labour and other engineers, staff deputed by him and any citizen at site at his cost and risk. The contractor shall have to get insured all of his

labour, engineers and other staff, third party against any accident, injury or death. IMC shall not be responsible for any accident, loss, injury or death of any contractor's or third party person whatsoever.

8. IMC has right to engage / award contract to any numbers of contractors for the similar works related to LED street lighting in Indore City as per the requirement.

9. ROAD MAP FOR PROJECT IMPLEMENTATION BY SUCCESSFUL BIDDER:

- Submission of performance security by contractor.
- Signing of agreement.
- The contractor will at first do detailed survey of street lighting, area lighting and garden lighting of all wards / areas which are covered under this contract. The method of survey shall be as mentioned below:
 - For each road in a ward the contractor has to note no. of fixtures, type and wattage of each fixture, present illumination level by 9 point method, poles without street light fixture.
 - The contractor has to study the switching point locations and no. of circuits and length of individual circuits.
- Design:
 - The contractor shall design the illumination scheme with LED type fixtures, brackets , smart controls, software, panels and circuits offered by his company to achieve the lux levels and smart controls as per tender guidelines for each road in a ward and get it approved by Engineer Incharge / consultant.
- Installation:
 - Upon approval of survey, LED system design and LED system fixtures, panel & software sample approvals for a particular ward by Engineer Incharge / consultant, the contractor will start supply and installation work.
- Post Installation check:
 - Once installation in any ward is completed, the illumination levels on various roads shall be checked by Engineer Incharge / Consultant for each road and verify the same as per tender guidelines. The circuit, panel, software, command and control, working of web applications, sms messages, mobile apps shall be checked by Engineer Incharge / Consultant as per tender guidelines.
- The above mentioned process shall be completed for all mentioned lights in 03 months from the signing of agreement as per the schedule approved by engineer incharge and the milestones mentioned in this document. Upon non-achievement of the assigned milestone Engineer in charge shall be authority to impose a penalty of 0.5% of the value of the assigned work per week of delay subject to the maximum of 10% of the value of that work. If contractor fails to commence and execute the work as per directions of engineer incharge in spite of written notice in this regard, IMC may terminate the contract and may get the work executed by any other agency on the risk and cost of the contractor.
- Time frame:

Total time for supply, installation, testing and commissioning of mentioned **quantity** LED street lights shall be **03** months from the date of signing of agreement. Thereafter operation and maintenance period of 5 years will start. Hence total period of contract shall be 5 years and 03 months. However if the contractor completes the installation of all **mentioned quantity** street light fixtures before **03** months period, then O&M period shall start from the date of certification of completion of installation work by IMC. in case of such circumstances tenure period of work can be extended as ordered by engineer in charge.

However contractor should start O&M activity as soon it installs LED fixture on any road and will depute a dedicated maintenance gang for it, irrespective of completion of installation of any number of fixtures.

The period of various performance securities shall remain same as specified in RFP. This period will not be affected by the O&M period.

10.0 OPERATION AND MAINTENANCE:

Post installation and commissioning, the contractor shall be responsible for operation and maintenance of entire lighting system installed by him for the period of 5 years on his own risk and cost basis. The responsibilities of contractor shall be as mentioned below:

- To ensure timely automatic switching On/Off as per programme.
- To ensure that all lighting fixture and associated panels, controls, automation, software etc are in working condition all time.
- To ensure that if any lighting fixture or component develops any fault, it has to be rectified promptly to escape the penalties mentioned in the tender.
- To ensure that the illumination levels on each road are maintained as per design and get it checked periodically by Engineer Incharge / consultant.
- To carry out preventive maintenance of the system as required.
- To coordinate with MPPKVCL / power distribution company to ensure the smooth operations.
- To ensure the insurance of entire lighting system, Engineers, staff, labour, workmen all which are involved in the work on his own cost.
- To replace the damaged component in the lighting system if the same is damaged to accident or any other reason. The contractor has to replace the damaged component on his own cost.
- The contractor shall ensure to provide proper tools, tackles, hydraulic trolley vehicles, ladders, vehicles, instruments etc to ensure smooth running of lighting system and safety measures.
- The contractor shall employ sufficient workmen and supervisor staff to ensure smooth operation and maintenance. The contractor shall have to employ as least following quantum of man power for O&M activity:

1. Project supervisor for the project at least 3 years out of which at least 1 years should be in lighting field
2. Gangs consisting of driver/helper and trained technician02 nos.

The gangs will work in all days including Sundays, holidays & night hours as per the requirement of engineer incharge.

- According to the necessity of work The contractor should have to arrange at least one no. Vehicle mounted Hydraulic Trolley capable for working at least at the height of 9 meters on his own cost IMC will not pay any extra amount for the same and he should have sufficient vehicles for maintenance work. according to the necessity of
- The contractor shall have to promptly rectify faults in any circuit or branch of circuit or in street light conductor on IMC& MPPKVCL poles on his cost in coordination with IMC & MPPKVCL.
- The contractor shall provide proper marking on all poles and serial nos with colour code on all lighting fixtures.
- The contractor shall establish store, workshop and testing facility to ensure proper stock of spares and facilitate testing of all components of lighting system.
- The contractor shall be responsible for all compensation / liability due to any injury or death of any personnel while performing duties related to the work under this contract. IMC shall not be responsible in any such case and shall not be liable for any compensation in this regard.
- All workmen, staff and engineers of contractor shall ensure that all installation, operation and maintenance activities are carried out with full safety and by using all safety aids like helmets, gloves, earthing devices, testing gadgets. All electrical safety rules and regulations as per Indian

Electricity act, MP Government electric supply code and regulations, statutory inspection by electrical inspector etc must be followed by the contractor during the contract period.

- The contractor must ensure that electrical earthing shall be provided as per rules and IS codes in entire lighting system to ensure human and equipment safety.
- All workmen, staff and engineers of contractor should follow a proper dress code with identity card while on duty.
- The contractor shall provide mobile / wireless sets to all key persons to ensure proper operation and maintenance.
- The contractor shall establish and maintain complaint receiving centre cum control room and address all complaints related to lighting system and to monitor and manage entire smart controls of intelligent LED lighting system. IMC shall provide space for this control room. Till IMC provides such space contractor has to use his own space for running the control room activities. This will be equipped with all computer, hardware, software, display system, PA system. This command and control centre should be hooked up and integrated with the central command and control system of Indore Smart City Development Ltd. with open protocols.
- Fault Rectification: The contractor shall have to rectify the fault in the lighting system promptly within a specified time after receipt of complaint in any form like verbal by the concerned IMC authority, in written by concerned IMC authority, complaint received in call centre, complaint received from CM helpline, Mayor helpline, mobile messages etc or any complaint received through any other source and received through any other complaint redressal system implemented by IMC from time to time. The specified time line for fault rectification of various types of faults are as mentioned below:
 - i) Faulty lighting fixture: 48 hrs. If faulty fixture's complaint is received in mayor helpline, then it should be rectified in 24 hrs, if complaint in CM helpline or through any other future media it should be rectified within the limit defined under that complaint rectification mechanism.
 - ii) Faulty lighting control Panel: 24 hrs.
 - iii) Fault in smart controls: 24 hrs.
 - iv) Fault in software: 48 hrs.
 - v) Fault in cable, wire, circuit: 96 hrs.
 - vi) Non compliance of illumination levels on any road: 48 hrs.
- Full Coordination with IMC engineers, darogas and staff during work execution shall be in contractor's responsibility.

11. PENALTIES.

If the contractor fails to deliver the desired results in the installed lighting system as per the tender guidelines following penalties shall be applicable for non compliance:

- i) If any lighting fixture is not in "ON" condition when required as per programmed timing for more than 48 hrs (24 hrs if complaint is received in Mayor helpline. if complaint in CM helpline or through any other future media it should be rectified within the limit defined under that complaint rectification mechanism.) of receipt of complaint, penalty of Rs. 75/- per day per fixture shall be applicable on the contractor. The maximum penalty for any fixture shall be Rs. 5000/-
- If any lighting control panel is not in working condition for more than 24 hrs of receipt of complaint, penalty of Rs. 750/- per day per panel shall be applicable on the contractor. The maximum penalty for any panel shall be Rs. 50000/-
- /-
- If any cable, wire, circuit in lighting system is not in working condition for more than 96 hrs of receipt of complaint, penalty of Rs. 1000/- per day per cable, wire, circuit shall be applicable on

the contractor. However supply shall be restored by contractor by installing temporary arrangements. The maximum penalty for any cable, wire, circuit shall be Rs. 10000/-

- If contractor fails to rectify after expiry of the period as mentioned above, IMC shall have right to get the faulty item rectified or replaced on contractor's cost and risk basis.

13. LOAD REDISTRIBUTION if applicable

Before installation of new LED lighting fixtures the contractor will have to redistribute the load of lighting circuits for optimum control, less voltage drop, reduction in losses, balancing of load. For this new connections, permanent disconnections, load enhancement, load reductions etc from MPPKVVCL will have to be carried out. The contractor shall carry out all follow up and coordination with MPPKVVCL (Discom) on his own cost. The contractor shall submit report of load redistribution with single line diagrams to IMC.

15. RESTORATION OF EXISTING CABLES, WIRES AND PAINTING OF TUBULAR POLES.

The contractor shall replace all damaged cables, wires wherever required. The corroded / faded tubular poles will have to be repainted. MCB, pole connection box and earthing will have to be installed wherever required. But contractor shall replace the faulty conductor with new cable/conductor.

16. REPORTING

The contractor shall have to submit illumination level report every quarter (three months) as per IMC's format for each road to IMC duly certified by Engineer Incharge / Consultant.

The contractor shall have to submit energy consumption and analysis report, complaints compliance report, spares consumption and stock report every month as per IMC 's format duly certified by Engineer Incharge / Consultant.

Authorised third party calibration report for all metering instruments will have to be submitted to IMC every year duly certified by Engineer Incharge / Consultant.

The contractor shall submit daily maintenance and complaint attendance report to IMC online as per the format approved by IMC.

17. ENERGY METERING

The contractor shall be responsible to take LT connection for each street / public light switching panel from MPPKVVCL (Discom) on behalf of IMC in all cases where new connection is to be taken. IMC/ IMC shall pay charges to be made to Discom like connection charges, security deposit etc.

The contractor shall be responsible for load reduction or load enhancement of existing LT connections for street / public lighting, however charges for MPPKVCL (Discom) shall be paid by IMC/ IMC.

18. TENDER PERIOD

Total tender period is of **5 years and 03 months** from date of work order but contractor must complete supply, installation and commissioning work within 6 months of award of work. The contractor shall be responsible for management, operation & maintenance of tender work awarded to him for a period of **5 years** from the date of completion of installation work (**6 months** from signing of agreement). During the maintenance period of **five** years, if any damage / failure occurs due to any reason whatsoever the contractor will have to repair / replace/ maintain/ install whatever needed as per site conditions at his own cost & risk basis. The contractor shall hand over the project in working condition i.e. 100% lights on after completion of contract period with all accessories / material in complete.

19. DISMANTLED CONVENTIONAL FIXTURES AND OTHER ACCESSORIES:

The dismantled conventional street lighting fixtures, switching panels etc will be deposit in the IMC electrical store

20. OBLIGATIONS OF THE CONTRACTOR

The contractor shall at its own cost and expense:

- (i) Investigate, study, design, construct, operate and maintain the Project Assets/Project Facility in accordance with the provisions of this Agreement, Good Industry Practice and Applicable Laws.
- (ii) Obtain all Applicable Permits in conformity with the Applicable Laws and be in compliance thereof at all times during the contract Period;
- (iii) The contractor shall, before commencement of implementation of the Project:
 - o submit to the Engineer-in-Charge with due regard to Project Completion
 - o and Scheduled Project Completion Date, its construction time schedule;
 - o have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate to supervise the Project and to liaison with the Engineer-in-Charge

and to be responsible for all necessary exchange of information required pursuant to this Agreement;

- o undertake, do and perform all such acts, deeds and things as may be necessary or required to adhere to the Project Completion Schedule and to achieve Project Completion under and in accordance with this Agreement;
- o Submit to the Engineer-in-Charge, reports on the progress of implementation of the Project and any other data / information / details desired by him, at least once every month or more frequently as the situation may warrant.
- (iv) Ensure that services of water supply, sewerage, drainage, electricity, telephone etc. in the vicinity, encountered during the period of implementation/ operation/ maintenance are not damaged. In case any of the services are damaged for reasons attributable to the contractor, necessary repairs shall be immediately carried out by the contractor or IMC, at the contractor's cost.
- (v) Procure and maintain in full force and effect, as necessary, appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used in or incorporated into the Project;
- (vi) Ensure and procure that each Project Agreement contains provisions that would entitle IMC or a nominee of IMC to step into such Agreement at IMC's discretion, in place and substitution of the contractor in the event of Termination pursuant to the provisions of this Agreement;
- (vii) Provide access to the Project Site, to the authorised representatives of IMC, MPPKVCL and officers of any Government Agency having jurisdiction over the Project, including those concerned with safety, security or environmental protection, to inspect the Project and to investigate any matter within their authority and upon reasonable notice. contractor shall provide them reasonable assistance necessary to carry out their respective duties and functions.;
- (viii) Provide to the Engineer-in-Charge, reports on a regular basis during the Implementation Period and the Operations Period in accordance with the provisions of this Agreement; The contractor shall adhere to the provisions of Applicable Laws, by-laws and rules in connection with project implementation and revenue generation.
- (ix) Appoint, supervise, monitor and control the activities of workmen under their respective Project Agreements as may be necessary;
- (x) Make efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of the contractor's obligations under this Agreement;
- (xi) Develop, implement and administer a surveillance and safety program for the Project/Project Facility and the users thereof and the workmen personnel engaged in the provision of any services under any of the Project Agreements including correction of safety violations and

deficiencies, and taking of all other actions necessary to provide a safe environment in accordance with Applicable Laws and Good Industry Practice;

- (xii) Not place or create nor permit any contractor or other person claiming through or under the contractor to create or place any Encumbrance over all or any part of the Project Assets, or on any rights of the contractor therein, save and except as expressly set forth in this Agreement;
- (xiii) Be responsible for safety, soundness and durability of the Project Facility including all structures forming part thereof and their compliance with the Specifications and Standards;
- (xiii) Ensure that the Project Facility remains free from all encroachments and take all steps necessary to remove encroachments, if any;
- (xiv) Operate and maintain the Project at all times during the Operations Period in conformity with this Agreement including but not limited to the Specifications and Standards, the Maintenance Programme and Good Industry Practice;
- (xv) Maintain books of accounts and meet audit requirements as per the Applicable Laws;
- (xvi) Design, prepare, adopt and submit (to IMC, in soft and hard copy) all construction drawings and as built drawings along with standards, specifications, calculations, etc.
- (xvii) Ensure that Project Facility/ies created are not defaced by any kind of writings / posters;
- (xviii) Be responsible for making good immediately at its own cost, any loss due to theft or damage to the assets created at the project site, and shall continue to keep the project sites operational and available for public use, at all times, within the Contract Period;
- (xix) Bear all costs and charges for special or temporary sites required by it in connection with access to the Project Site. The contractor shall obtain at its cost such facilities on or outside the Project Site as may be required by it for the purposes of the Project and the performance of its obligations under this Agreement;
- (xx) Be responsible for making good the cuts if any made in the road, after laying the cable. While laying the new cable, if any cable laid by any other entity which already exists in the place where new cable is being laid is cut, then the contractor shall act within a window of eight hours for rectification during the laying phase and six hours during the maintenance phase. During this period, there will not be any penalty to the contractor;

Section – 4
Bill of Quantities

(attached separately)

SECTION 5
AGREEMENT FORM
AGREEMENT

This agreement, made on the day of _____ between (name and address of Employer) (hereinafter called "the Employer) and _____ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute _____ (name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. _____

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred' to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - i. Letter of Acceptance
 - ii. Contractor's Bid
 - iii. Condition of Contract: General and Special
 - iv. Contract Data
 - v. Bid Data
 - vi. Drawings
 - vii. Bill of Quantities and _
 - viii. Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of affixed in the presence of:

in the presence of:

Signed, Sealed and Delivered by the

Binding Signature of Employer

Binding Signature of Contractor