



AMRITSAR SMART CITY LIMITED

**NATIONAL COMPETITIVE BID (NCB)
BID REFERENCE NO.: 03/ASCL/2019-20**

Bid Document for: Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period

May, 2019

Project Estimated Cost: Rs.497.66 Lakh

CHIEF EXECUTIVE OFFICER

AMRITSAR SMART CITY LIMITED, SCO – 21, DIST. SHOPPING
COMPLEX RANJIT AVENUE, B – BLOCK, AMRITSAR – 143001,
PUNJAB

TEL: +91 1835015048

Email: ceoasclar@gmail.com



SECTION I – INVITATION FOR BID (IFB)

Notice inviting online Bids for: Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period

ASCL, Amritsar invites online unconditional bids through e-procurement portal <https://eproc.punjab.gov.in> from eligible and interested parties (the “Bidder” or “Bidders”).

Name & Address of ASCL	Chief Executive Officer Amritsar Smart City Limited, SCO – 21, II Floor, District Shopping Centre, Block – B, Ranjit Avenue, Amritsar - 143001, Punjab, INDIA
Subject Matter of Procurement	Notice inviting Online Bids for Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period
Period of online availability of Bid Documents (Start Date/ End Date)	Start Date: From: 31.05.2019 05:45 PM End Date: Till: 28.06.2019 03:00 PM
Period of Completion of Work	09 (nine) months
Date and time for Pre-bid Meeting	Date/ Time: 12.06.2019 at 11:00 AM Place: SCO – 21, II Floor, District Shopping Centre, Block – B, Ranjit Avenue, Amritsar, Punjab, 143001
Manner, Start Date for submission of Bids	Manner: Online on e-Procurement website http://eproc.punjab.gov.in Start Date: 31.05.2019 05:45 PM
End Date for submission of Bids	End Date: 28.06.2019 03:00 PM
Tender Document Fee	Rs.15,000/- + Processing Fee as per the eprocurement
Amount of Bid Security/Bid Security in INR	Rs.9.95 Lakh
Date and Time of opening of Technical Bid:	28.06.2019 03:30 PM
Date and Time of opening of Financial Bid	Will be intimated later to the Technically qualified bidders
Language	<ul style="list-style-type: none"> • This Bid Document has been issued in English language • Bids shall be submitted in English • All correspondence exchange shall be in English language
Bid Validity	120 days from the bid submission deadline
Preparation of Bids	The Bids shall comprise of the following: Technical Bid & Financial Bid as per Clause 6

Note:

- 1) The Bidding Documents can be downloaded from website: <https://eproc.punjab.gov.in>. The document downloaded from the aforesaid website should not be tempered, and if any such tempering is detected before or after the opening of Bids, the Bidder shall be debarred for a period of 6 (six) months.
- 2) Bidder (through its Authorized Representative) shall submit their offer (the “**Bid**” or “**Proposal**”) online in Electronic formats comprising of both Technical Bid and Financial Bid. Bid Document Fees, Tender Processing Fees and Bid Security should be deposited through Amritsar Smart City Limited, "Payment Gateway Service on E-Procurement platform".
- 3) Bidder for additional details such as estimated cost, important date, detailed information, qualification and eligibility criteria, visit website: <https://eproc.punjab.gov.in> for downloading tender document.
- 4) Any subsequent addendum/ corrigendum shall be published/ uploaded only on the website <http://eproc.punjab.gov.in> and will not be published in the newspapers. In case there is a holiday on the day of opening of Bids, activities assigned on that date shall be carried out on the next working day.
- 5) While electronically submitting the Bids, it should be ensured that the Bid Documents including Conditions of Contract are digitally signed by the Bidder.
- 6) For participating in the above e-tender, the Bidders shall have to get themselves registered with <https://eproc.punjab.gov.in> and get User ID, password, Class 3 Digital Signatures Certificate (DSC) is mandatory to participate in the e-tendering process. For any clarification/ difficulty/ regarding e-tendering process Bidders can contact helpdesk on the phone numbers mentioned on the website.
- 7) The documents shall be prepared and scanned in different files and uploaded during the online submission of Bid.
- 8) Amritsar Smart City Limited will not be responsible for delay in online submission due to any reason. For this, Bidders are advised to upload their complete Bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
- 9) Bid documents consisting of qualification information and eligibility criterion of Bidders, plans, specifications, drawings and the set of terms & conditions of the Contract to be complied with by the Contractor can be seen on website <https://eproc.punjab.gov.in> and scanned copies of the required documents and information as per this Tender Document should be attached in the Technical Bid as prescribed in this RFP.
- 10) Uploaded documents of valid successful Bidders will be verified with the original before signing the agreement, to be submitted prior to the date and time for Bid submission is specified herein.
- 11) The Tender Documents is not to be uploaded by the Bidder. The Bidder has to only agree/disagree with the conditions in the Tender Document. The Bidder who disagrees on the conditions of the Tender Document, cannot participate in the Tender.
- 12) Bid(s) once submitted online cannot be resubmitted or withdrawn.
- 13) Conditional Bids, Bids without payment of Bid Security and Bids not meeting the qualifying criteria on the date of receipt of Bids shall be summarily rejected.
- 14) All the prospective Bidders are encouraged to participate in the pre-bid meeting and it is advised that the work sites are visited and Bid Documents are studied thoroughly.
- 15) ASCL reserves the sole right to cancel the bid process and reject any or all of the Bids without

assigning any reason.

- 16) Procurement entity disclaims any factual/ or other errors in the Bid Document (the onus is solely on the individual bidders to verify such information) and the information provided therein are intended only to help the Bidders to prepare a logical Bid/proposal.

**Chief Executive Officer
Amritsar Smart City Limited
Amritsar, Punjab**

Table of Contents

1. Introduction & Brief Description of Bidding Process.....	07
2. Eligible Bidders & Minimum Eligibility Criteria.....	09
3. Content of Bid Documents.....	10
4. Clarification of Bid Documents and Pre-Bid Conference.....	10
5. Amendments to the Bid Documents.....	11
6. Technical and Financial Bids.....	11
7. Currencies of Bid and Payment.....	13
8. Bid Validity Period.....	13
9. Bid Security.....	13
10. Format and Signing of Bids.....	14
11. Documents Establishing Bidder's Eligibility and Qualifications.....	14
12. Submission Sealing and Marking of Bids.....	14
13. Deadline for Submission of Bids.....	14
14. Late Bid.....	15
15. Bid Opening.....	15
16. Evaluation of Technical Bid.....	15
17. Process to be confidential.....	16
18. Clarification of Financial Bids.....	16
19. Unbalanced Bids.....	17
20. Award Criteria.....	17
21. ASCL's Right to accept any Bid and to reject any or all Bids.....	17
22. Notification of Award.....	17
23. Performance Security.....	18
24. Non-receipt of Performance Security and Contract by ASCL.....	18
25. Corrupt or Fraudulent Practices.....	18
26. Section III – Minimum Eligibility Criteria.....	19
27. Section IV – Bidding Forms for Qualification Information.....	21
28. Form Tech 1: Bid Submission Form.....	22
29. Form Tech 2 : Bidder's Information.....	24
30. Form Tech 3: Power of Attorney (PoA) for Authorized Representative.....	25
31. Form Tech 4: Declaration for Blacklisting and Authorization.....	26
32. Form Tech 5: Declaration for Accepting Terms and Conditions of Bid Document.....	27
33. Form Tech 6: Past Experience of Carrying Similar Work.....	28
34. Form Tech 7: Declaration of Annual Turnover and Net Worth.....	29
35. Letter of Financial Bid.....	30

36. Section V – Scope of Work.....	32
37. Section VI – Technical Specifications.....	38
38. Section VII – Locations of Spaces where LED Electrical components and Grid Tied Solar Rooftop Photovoltaic power plant to be installed	51
39. Section VIII - Financial Bid/ Price Schedule.....	54
40. Section IX – Conditions of Contract.....	55
41. Section X – Contract Data.....	83
42. Section XI – Contract Forms.....	88

SECTION II – INSTRUCTIONS TO BIDDERS (ITB)

A. INTRODUCTION

1. Introduction & Brief Description of Bidding Process

1.1. Introduction

- 1.1.1. The Amritsar Smart City Limited (the “**Authority/ ASCL**”) is engaged in the implementation of the Smart City Mission projects in Amritsar and as part of this endeavor, the ASCL has decided to undertake to procurement and service requirement for ***“Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2 : Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”*** (the “**Project**” or “**Work**”) and has, therefore, decided to carry out the bidding process for selection of an entity as the bidder to whom the Project may be awarded.
- 1.1.2. Accordingly, Amritsar Smart City Limited (“ASCL”) invites online Bids for the aforesaid Project for selection of an agency (the “Successful Bidder”) who shall act as the Implementing Agency and shall be responsible for designing, engineering, procurement and installation of the electrical fittings and solar panels and their operation and maintenance for a period of 3 years under and in accordance with the provisions of an agreement/ contract (the “Contract”) to be entered into between the Implementing Agency and the Authority in the form provided by the Authority as part of the Bidding Documents pursuant hereto.
- 1.1.3. The sites for the Project are as follows:
- (i) Spaces under Elevated Loop at GT Road;
 - (ii) Spaces under Kichlu Flyover;
 - (iii) Spaces under Taranwala Flyover on GT Road.
- 1.1.4. The Successful Bidder/ Implementing Agency shall be inter alia responsible for the following works (including but not limited to):
- a) Provision of new lighting fixtures on the segments and piers of the flyover throughout as per approved design and drawings to enhance the stretch at night;
 - b) Installing of under bridge lighting comprising of colour changing LED flood lights, street lights LED luminaries, LED strip lights ground embedded in ground up lighter luminaries, etc.
 - c) Setting up of a Central Control & Monitoring System to monitor and control the street lights.
 - d) Provision of Grid tied Solar Rooftop Photovoltaic system on rooftop of BRTS stations for electricity generation; and
 - e) Operation and Maintenance for a period of 3 years post installation.
- For detailed scope of work of the selected agency please refer to **SECTION V –SCOPE OF WORK** of this RFP. The agency shall have to comply the terms, conditions and specification laid down in this RFP during the tenure of the assignment.
- 1.1.5. The Grid Tied Solar Rooftop Photovoltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, Junction boxes, Distribution boxes and switches. Grid type net metering system shall be installed on retrofitted BRTS station and BRTS station in front of Mall of Amritsar proposed at Elevated

loop on GT road and also at BRTS station on Mall road near Kichlu flyover to harness solar energy and to further compensate electricity bill of lights proposed on entire stretch.

- 1.1.6. Though it is proposed that the Grid Tied Solar Rooftop Photovoltaic (SPV) power plant shall compensate electricity bill of lights proposed on entire stretch however, in the event of any shortfall, the balance amount of charges towards electricity bill shall be borne by the Municipal Corporation Amritsar (MCA). Additionally, the MCA shall be responsible for providing 3 Phase electrical connection.
- 1.1.7. The estimated cost of the Project is Rs.4,97.6 Lakhs (Rupees Four Hundred Ninety Seven Lakh Sixty-Six Thousand only) as per the Bill of Quantities/ Price Schedule. The Bidders are required to quote a percentage below, at par or above the estimated cost of the Project and not item wise.
- 1.1.8. The selected agency shall be responsible to install, operate and maintain the LED Electrical components and Grid Tied Solar Rooftop Photovoltaic power plant as per the Scope of Work (Section V). The applicable Technical Specifications and features for both LED Electrical components and Grid Tied Solar Rooftop Photovoltaic power plant are given in Section VI.

1.2. Brief Description of Bidding Process

- 1.2.1. This Section i.e. Section II - "Instructions to Bidders" provide the relevant information as well as instructions to assist the prospective Bidders in preparation and submission of Bids. It also includes the mode and procedure to be adopted by the ASCL for receipt and opening as well as scrutiny and evaluation of Bids, declaration of the successful Bidder, issuance of Letter of Acceptance and subsequent execution of Contract.
- 1.2.2. ASCL has adopted online single stage two steps process involving Technical Bid and Financial Bid for selection of the Bidder for award of the Project (collectively referred to as the "Bidding Process"). The first step involves technical qualification and short listing of the qualified Bidders who become eligible for opening of their Financial Bids. The Bids shall be valid for a period of not less than 120 days from the date specified in clause 13 for submission of Bids.
- 1.2.3. A Bidder is required to deposit payment of Bid Document Fee, Tender Processing Fee and Bid Security online through Amritsar Smart City Limited, "Payment Gateway Service on E-Procurement platform". The Bids not accompanied by any of the aforesaid payments and Bid Security shall be summarily rejected.
- 1.2.4. Before formulating the Bid and submitting the same to ASCL, the Bidder should read and examine all the terms, conditions and instructions etc. contained in the Bid Documents. Failure to provide and/ or comply with the required information, instruction etc. incorporated in these Bid Documents may result in rejection of its Bid

1.3. Schedule of Bidding Process

ASCL shall endeavour to adhere to the following schedule:

EVENT DESCRIPTION	DATE
Period of online availability of Bid Documents (Start Date/ End Date)	Start Date: From: 31.05.2019 05:45 PM End Date: - Till: 28.06.2019 03:00 PM
Date and time for Pre-bid Meeting	Date/ Time 12.06.2019 11:00 AM Place: SCO – 21, II Floor, District Shopping Centre, Block – B, Ranjit Avenue, Amritsar, Punjab, 143001
Manner, Start Date for submission of Bids	Manner : Online on e-Procurement website http://eproc.punjab.gov.in

	Start Date: 31.05.2019 05:45 PM
End Date for submission of Bids (Bid Submission Date)	End Date: 28.06.2019 03:00 PM
Date and Time of opening of Technical Bids:	28.06.2019 03:30 PM
Date and Time of opening of Financial Bids:	To be intimated later
Letter of Acceptance (LOA)	To be intimated later
Validity of Bids	120 days from the end date of submission of Bids
Date of signing of Contract	Within twenty eight (28) days of LoA

2. Eligible Bidders & Minimum Eligibility Criteria

2.1. Eligible Bidder

- 2.1.1 Each intending Bidder should be a registered sole proprietorship Firm/ Company/ Partnership firm/ LLP having authority to participate in this RFP. No Consortium or Joint Venture (JV) shall be allowed or accepted in this RFP.
- 2.1.2 The Bidder or its sub-contractor (*where the Bidder itself does not possess experience in respect of execution of Solar Rooftop Photovoltaic power plant projects*) should be a firm/ company empanelled with PEDDA and/ or MNRE under Solar Rooftop Photovoltaic category.
- 2.1.3 A Bidder shall have the nationality of India. A Bidder shall be deemed to have nationality of India if the Bidder is a citizen or constituted or registered or incorporated, and operates in conformity with the provisions of the Laws of India. This criterion shall also apply to the determination of the nationality of proposed sub-contractors or suppliers for any part of the Contract including related services.
- 2.1.4 A Bidder should not have a conflict of interest in the procurement in question as stated in this Bidding document.
- 2.1.5 A Bidder debarred/ blacklisted by any State Government / Central Government / PSU / Government Authority in India/ ASCL, shall not be eligible to participate in any procurement process.
- 2.1.6 The Bidder (and its sub-contractor where engaged) must have a valid Labour License/ EPF, ESI registration and must be registered under the General Sales and Goods Tax (GST). It is also required to provide proof of Permanent Account Number)PAN(given by Income Tax Department and also provide a copy of the EPF registration certificate from Provident Commissioner.
- 2.1.7 In addition to the requirements set forth in Causes 2.1.1 to 2.1.6 above, a Bidder in order to be eligible for qualification, is essentially required to meet the Minimum Eligibility Criteria set forth in Section III.
- 2.1.8 It is clarified that as per the Minimum Eligibility Criteria set forth in Section III, the Bidder may either demonstrate experience in respect of both the components involved in the Project or may demonstrate experience in respect of any one component of the two major components of the Project i.e. either installation of LED lights or Solar Rooftop Photovoltaic panels. Where, the Successful Bidder has qualified on the basis of only one component, then for execution of work in respect of the other component, the Successful Bidder may engage a sub-contractor of repute possessing sufficient past experience of having executed assignments of such nature, with the prior approval of the ASCL.
- 2.1.9 Where the Successful Bidder is engaging a sub-contractor to execute any one of the two major components of the Project (i.e. installation of LED lights or Solar Rooftop Photovoltaic panels), the Successful Bidder within 7 (seven) days of issuance of LoA, shall demonstrate in

writing to the ASCL that the proposed sub-contractor possesses adequate and appropriate prior experience for executing work of the nature as envisaged under the Project by submitting its credentials (work orders, copies of contracts and completion certificates). The ASCL shall evaluate the credentials of the proposed sub-contractor and only when it finds that the proposed sub-contractor possesses adequate experience and knowhow in terms of the Scope of Work and Technical Specifications, ASCL shall give approval in writing for engaging of such sub-contractor by the Bidder.

2.2. Minimum Eligibility Criteria

- 2.2.1. In order to be eligible for qualification, the Bidder shall fulfil the Minimum Eligibility Criteria as set forth in Section III.

B. BID DOCUMENTS

3. Content of Bid Documents

3.1. In addition to Section I – “Invitation for Bid” (IFB), the Bid Documents includes:

1. Section II – Instructions to Bidders (ITB)
2. Section III – Qualification Criteria
3. Section IV – Bidding Form
4. Section V – Scope of Work (SOW)
5. Section VI – Technical Specifications
6. Section VII – Locations of Spaces where LED Electrical components and Grid Tied Solar Rooftop Photovoltaic power plant to be installed
7. Section VIII – Financial Bid/ Price Bid format (*to be filled online*)
8. Section IX – General Conditions of Contract (GCC) including Particular Conditions
9. Section X – Contract Data
10. Section XI – Contract Forms

- 3.2. The Bidding Document shall be uploaded on the e-procurement portal, <http://eproc.punjab.gov.in> along with the Notice Inviting Bids. The prospective Bidders may download the bidding document from the portal. The price of the Bidding Document and processing fee of e-bid shall have to be paid to ASCL in the amount and manner as specified herein and e-procurement portal.

- 3.3. ASCL is not responsible for the completeness of the Bidding Document and its addenda, if they were not downloaded correctly from the e-procurement portal or the State Public Procurement Portal.

- 3.4. The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Document. Failure to furnish all information or authentic documentation required by the Bidding Document may result in the rejection of the Bid.

4. Clarification of Bid Documents and Pre-Bid Conference

- 4.1. If any Bidder has any doubts on any issue of the Bid Documents or as to the meaning of any portion of the conditions or of the specifications, drawings etc., it shall, before submitting the Bid, refer the same to ASCL and get clarifications. A Bidder requiring any clarification of the Bidding Document shall contact ASCL in writing or e-mail at ASCL's address mentioned

below :

The Chief Executive Officer,
Amritsar Smart City Limited
SCO – 21, II Floor, District Shopping Centre,
Block – B, Ranjit Avenue,
Amritsar – 143001, Punjab.

- 4.2. ASCL will respond in writing or e-mail to any request for clarification, within seven days provided that such request is received no later than twenty-one (21) days prior to the deadline for submission of Bids. The clarification issued, including a description of the inquiry but without identifying its source shall be placed on the e Procurement Portal and should ASCL deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so through an addendum which shall form part of the Bidding Document.
- 4.3. The Bidder or his authorized representative is invited to attend the Pre- Bid Conference. The purpose of the Pre-Bid Conference will be to clarify issues and to answer questions on any matter related to this procurement that may be raised at that stage.
- 4.4. Non-attendance at the Pre-Bid Conference will not be a cause for disqualification of a Bidder.
- 4.5. The Bidder is advised to visit and inspect 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.
- 4.6. 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 prior to submission of its Bid; Bidder shall be solely responsible for his failure to do so.

5. Amendments to the Bid Documents

- 5.1. At any time prior to the deadline for submission of Bids, ASCL i.e. ASCL may, for any reason deemed fit, modify the Bid Documents by issuing an addenda which will form part of the Bidding Document.
- 5.2. Such an amendment will be uploaded on website: <http://eproc.punjab.gov.in>
- 5.3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, ASCL may, at its discretion, extend the deadline for the submission of the Bids, pursuant to Clause 13]Deadline for Submission of Bids[, under due publication on the e-procurement portal.

C. PREPARATION OF BIDS

6. Technical and Financial Bids

6.1. Language of Bid

The Bid submitted by the Bidder and all subsequent correspondence and documents relating to the Bid exchanged between the Bidder and ASCL, shall be written in the English language. However, the language of any printed literature furnished by the Bidder in connection with its Bid may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the Bid, the English translation shall prevail.

6.2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its Bid, and ASCL shall not be responsible or liable for those costs, regardless of the conduct or outcome

of the bidding process.

6.3. One Bid per Bidder

No Bidder shall be entitled to submit more than one Bid. If he does so, all Bids wherein the Bidder has participated shall stand rejected.

6.4. Site Visit

It is advisable that the Bidder at his own responsibility, expenses and risk, is encouraged to visit and examine the Site(s) of work and its/their surroundings and obtain all information (including that on the risks, contingencies and other circumstances which may affect or influence the bid) that may be necessary for preparing the Bid and entering into a contract.

6.5. Documents Comprising the Bid

6.5.1. The Bid to be submitted online by the Bidder shall comprise of the following, in two separate parts:

A. Part I: Technical Bid:

The Technical Bid shall contain the following documents, the scanned copies whereof shall be uploaded on the portal:

- i. Proof of Bid Document Fee paid online
- ii. Proof of Tender Document Fee paid online
- iii. Proof of Bid Security paid online
- iv. Form Tech 1 – Bid Submission Form
- v. Form Tech 2 – Bidder's Information
- vi. Form Tech 3 – Format for Power of Attorney
- vii. Form Tech 4 – Declaration for blacklisting/ debarring
- viii. Form Tech 5 – Declaration for accepting terms and conditions of Bid Document
- ix. Form Tech 6 – Past Experience of carrying similar work
- x. Form Tech 7 – Declaration of Annual Turnover & Net Worth
- xi. Copies of GST registration certificate and Permanent Account Number (PAN) given by the Income Tax Department
- xii. Copies of EPF & ESI registration certificate from Provident Commissioner (if applicable)
- xiii. Proof of empanelment with PEDDA or MNRE (*if applicable as per Clauses 2.1.8 & 2.1.9*)
- xiv. Copies of original documents defining the constitution or legal status, place of registration and principal place of business
- xv. Copies of original work orders/ purchase orders along with recommendation letters from clients towards proof of similar work experience.

All the documents/ information enclosed with the Technical Bid should be self-attested and certified by the Bidder. The Bidder shall be liable for forfeiture of his Bid Security, if any document/ information is found false/fake/untrue before acceptance of Bid. If it is found after

acceptance of the Bid, the bid sanctioning authority may at his discretion forfeit his performance security/ guarantee, security deposit, etc. and take any other suitable action.

B. Part II: Financial Bid:

- The Financial Bid/ Price Proposal shall be filled online on the portal as per the format uploaded therein and shall comprise of a combined single percentage above or below for all items specified in the Price Schedule, both in figures and words.
- The overall percentage rate would apply for all items of work.
- All duties, taxes and other levies payable by the Bidder under the contract, or for any other cause, shall be included in the rates and prices, and the total Bid Price submitted by the Bidder. Prices quoted by the Bidder shall be fixed during the Bidder's Performance of the Contract and not subject to variation on any account, unless otherwise specified in the Contract.
- 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.
- The Authorized Representative of the Bidder must sign the Bid duly stamped at appropriate places and initial all the remaining pages of the Bid.
- A Bidder, who does not fulfill any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
- Bid sent by e-mail/fax etc. shall be ignored.

7. Currencies of Bid and Payment

- 7.1. The price shall be quoted by the Bidder entirely in Indian Rupees. All payment shall be made in Indian Rupees.

8. Bid Validity Period

- 8.1. The Bid shall remain valid for acceptance for a period of 120 (one hundred and twenty) days after the date of Bid opening prescribed in the Bid Document. Any Bid valid for a shorter period shall be treated as unresponsive and rejected.
- 8.2. In exceptional cases, the Bidders may be requested by ASCL to extend the validity of their Bids up to a specified period. The Bidders, who agree to extend the Bid validity, are to extend the same without any change or modification of their original Bid and they are also to extend the validity period of the Bid Security accordingly. A Bidder, however, may not agree to extend its Bid validity without forfeiting its Bid Security.
- 8.3. In case the day up to which the Bids are to remain valid falls on or subsequently declared a holiday or closed day for ASCL, the Bid validity shall automatically be extended up to the next working day.
- 8.4. ASCL may extend the deadline for submission of Bids by issuing an amendment, in which case all rights and obligations of ASCL and the Bidders previously subject to the original deadline will then be subject to the new deadline.

9. Bid Security

- 9.1. The Bidder shall deposit along with its Bid, Bid Security for amount as shown in the IFB in Section I. The Bid Security shall be deposited online through the ASCL e-procurement

payment portal.

- 9.2. The Bid Security shall be valid for a period of forty five (45) days beyond the validity period of the Bid.
- 9.3. Bids not accompanied with Bid Security shall not be accepted and shall be rejected by the ASCL as non- responsive.
- 9.4. In case of the Unsuccessful Bidders, the Bid Security will be returned to them without any interest, after expiry of the Bid validity period, but not later than forty-five (45) days after conclusion of the resultant contract. The Successful Bidder's Bid Security will be returned without any interest, after receipt of Performance Security from that Bidder.
- 9.5. Bid Security of a Bidder may be forfeited –
 - (a) if the Bidder withdraws or amends its Bid or impairs or derogates from the Bid in any respect within the period of validity of its Bid without prejudice to other rights of ASCL; or
 - (b) In case of Successful Bidder, if the Bidder fails within the specified time limit to:
 - i) sign the Agreement; or
 - ii) furnish the required Performance Security.

10. Format and Signing of Bids

- 10.1. The Bidder shall submit the Bid online comprising of documents as specified in Clause 6.5.1. The Bid shall either be typed or written in indelible blue ink and the same shall be signed by the Authorized Representative of the Bidder who has been duly authorized to bind the Bidder to the Bid through a valid Power of Attorney as per the format prescribed herein.

All pages of the Bid shall be page numbered, bear the signature of the Authorized Representative with stamp of the Bidder and indexed. The Bid shall not contain any erasure or overwriting, except as necessary to correct any error made by the Bidder and, if there is any such correction; the person signing the Bid shall initial the same.

11. Documents Establishing Bidder's Eligibility and Qualifications

- 11.1. Pursuant to ITB Clause 6, the Bidder shall furnish, as part of its Bid, relevant details and documents establishing its qualifications to perform the contract if its Bid is accepted.

D. SUBMISSION OF BIDS

12. Submission Sealing and Marking of Bids

The Bidder shall place two separate digitally signed files marked "Technical Bid (Cover-I)" and "Financial Bid (Cover-II)".

The contents of Technical and Financial Bids will be as specified in Clause 6.5. All documents are to be signed digitally by the Bidders.

The Bidders must ensure that they upload their Bids not later than the closing time and date specified for submission of Bids.

13. Deadline for Submission of Bids

- 13.1. Complete Bids (including Technical and Financial) shall be received by ASCL online not later than the date and time indicated in the BDS. In the event of the specified date for the submission of Bids declared a holiday for the ASCL, the Bids will be received upto the

appointed time on the next working day.

- 13.2. ASCL may extend the deadline for submission of Bids by issuing an amendment in accordance with Clause 5, in which case all rights and obligations of ASCL and the Bidders previously subject to the original deadline will then be subject to the new deadline.

14. Late Bid

- 14.1. The electronic bidding system would not allow any late submission of Bids after due date and time as per server time. The Bidders are advised to upload their respective Bids well in advance so as to avoid last minute rush and jam.

E. OPENING OF BID

15. Bid Opening

- 15.1. ASCL shall open the Bids online and the same shall be evaluated by Tender Evaluation Committee (TEC) as nominated by ASCL for the said purpose. Total transparency shall be observed and ensured while opening the Bids therefore the Bids shall be opened in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Clause 1.3. In the event of the specified date of Bid opening being declared a holiday for ASCL, the Bids will be opened at the appointed time and location on the next working day. ASCL reserves the rights at all times to postpone or cancel a scheduled Bid opening.
- 15.2. Bid opening shall be conducted in 2 (Two) stages i.e. stage 1- Technical Bid; and Stage 2- Financial Bid.
- 15.3. During Bid opening, prior to the detailed evaluation of Bids, ASCL will determine the substantial responsiveness of each Bid to the Bidding Document. For purposes of these clauses, a substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents including Technical Specifications without material deviations. However minor deviation and/or minor irregularity and/or minor non-conformity in the Bid, ASCL may waive the same. If a Bid is not substantially responsive, it will be rejected by ASCL.
- 15.4. The Financial Proposals of only those Bidders will be opened who are qualified in Technical Evaluation.

F. EVALUATION OF BIDS

16. Evaluation of Technical Bid

- 16.1. The Part-I containing Technical Bid shall be opened first.
- (i) The Bids will be taken up for evaluation with respect to the Qualification Information and other information furnished in Part-I of the Bid.
 - ii) The Bidder will be asked in writing (usually within 10 (ten) days of opening of the Technical Bid) to clarify or modify his technical bid, if necessary, with respect to any rectifiable defects.
 - iii) The Bidders will respond in not more than 7 (seven) days of issue of the clarification letter.
 - iv) On receipt of these clarifications, the Tender Evaluation Committee (TEC)/ Procurement Entity will proceed to evaluate the Technical Bids.
 - v) During the detailed evaluation of Technical Bids, the TEC will determine whether

each Technical Bid (a) meets the Minimum Eligibility Criteria as prescribed in Section III of this Bid Document; (b) contains all the information and documents as specified in the Bid Document and such documents have been properly signed (including digital signature) and stamped by the Bidder before submission; (c) is accompanied by Power of Attorney as per the format prescribed herein in favor of the Authorized Representative of the Bidder; (d) is accompanied by the required Document Fee, Tender Processing Fee and Bid Security in the amount, mode and manner as specified in this Bid Document; and (d) is substantially and unconditionally responsive to all the requirements of the Bid Documents. Bids of the Bidders, who do not meet the aforesaid requirements will be treated as non – eligible and will not be considered further.

- vi) Bidders who meet the requirements set forth in sub-clause (v) above shall be declared as technically qualified Bidders who will become eligible for opening of their Financial Bid in the next round. The TEC/ ASCL shall prepare and finalize the list of such technically qualified Bidders.
 - vii) Evaluation of the Technical Bids with respect to qualification information and other information furnished in Part-I of the Bid in pursuance to Clause 6.5, shall be taken up and completed within 21 (twenty one) working days of the date of Bid opening, and a list will be drawn up of the responsive bids whose Financial Bids are eligible for consideration.
 - viii) ASCL shall inform, by e-mail, the Bidders, whose Technical Bids are found responsive i.e. Technically Qualified Bidders, date, time and place of online opening of Part-II i.e. Financial Bid. In the event of the specified date being declared a holiday for ASCL, the Bids will be opened at the appointed time and location on the next working day. The Bidders or their representative may attend the opening of Financial Bids.
- 16.2. **Opening & evaluation of Financial Bids:** The Financial Bid of all the Technically Qualified Bidders shall be opened and downloaded. At the time of opening of “Financial Bid”, the names of the Bidders who were found responsive will be announced and the Bids of only these Bidders will be opened. The responsive Bidders’ names, the Bid prices, the total amount of each Bid, and such other details as ASCL may consider appropriate, will be announced by ASCL at the time of opening.
- 16.3. The Bidder whose Financial Bid is found responsive and has quoted the least rate, shall be declared as the Successful Bidder.

17. Process to be confidential

- 17.1. Information relating to the examination, clarification, evaluation and comparison of Bids and recommendation for the award of the contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Procurement Entity/ TEC processing the Bids, or award decisions may result in the rejection of Bids.

18. CLARIFICATION OF FINANCIAL BIDS

- 18.1. To assist in the examination, evaluation and comparison of Bids, ASCL may, at his discretion, ask any Bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by e-mail.
- 18.2. Any effort by the Bidder to influence the Procurement Entity in the TEC’s Bid evaluation, Bid comparison or contract award decisions may result in the rejection of the Bidder’s Bid.

19. UNBALANCED BIDS

- 19.1. If the Bid of the Successful Bidder is seriously unbalanced by more than or less than 25% in relation to the Procurement Entity's estimate of the cost of work to be performed under the contract, the Procurement Entity may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Procurement Entity may require that the amount of the performance security set forth in Clause 30 be increased at the expense of the successful Bidder to a level sufficient to protect the Procurement Entity against financial loss in the event of default of the successful Bidder under the Contract.

G. AWARD OF CONTRACT

20. AWARD CRITERIA

Subject to requirements as mentioned in this Bid Document, the competent authority will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bid Documents and who has quoted the lowest rate for executing the Project in comparison to other Bidders.

21. ASCL's Right to accept any Bid and to reject any or all Bids

ASCL reserves the right to accept in part or in full any Bid or reject any or more Bid(s) without assigning any reason or to cancel the Bidding process and reject all Bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected Bidder or Bidders.

22. Notification of Award

- 22.1. Before expiry of the Bid validity period, ASCL will notify the Successful Bidder in writing by e-mail/ courier that its Bid for works, also briefly indicating therein the essential details like description of the works, completion period, bid price has been accepted.
- 22.2. After the notification of award, Authority will issue Letter of Acceptance (LOA) in duplicate as per the format provided in Section XI (Contract Forms). Accordingly, a contract shall be signed between Successful Bidder and ASCL. As an acceptance of the LOA, the Bidder shall sign and return back a duplicate copy of the LOA to ASCL within 7 (seven) days of receipt of LoA. In the event, the Successful Bidder fails to give acceptance of the LoA within the aforesaid time period then unless the time period is extended by the ASCL, the LoA issued shall be cancelled and the Bid Security of the Successful Bidder forfeited.
- 22.3. The Successful Bidder must furnish to ASCL, the required Performance Security within twenty-eight (28) days from the date of dispatch of this notification, failing which the Bid Security will be forfeited and the award will be cancelled. Relevant details about the Performance Security have been provided in GCC under Section IX.
- 22.4. The Notification of Award will constitute the formation of the Contract subject only to the furnishing of a performance security in accordance with Clause 23.
- 22.5. The Contract as per the format will incorporate all relevant correspondence between ASCL and the Successful Bidder. It will be signed within twenty-eight (28) days following the Notification of Award along with the Letter of Acceptance.
- 22.6. Upon the furnishing by the successful Bidder of the Performance Security, ASCL will promptly notify the other Bidders that their Bids have been unsuccessful.

23. Performance Security

- 23.1. Within 21 (twenty-one) days of receipt of the Letter of Acceptance, the Successful Bidder shall deliver to ASCL a Performance Security [to cover the amount of liquidated damages and/ or the compensation of the breach of contract] for an amount equivalent to 5% (five percent) of the Contract Price plus additional security for unbalanced Bids in form of unconditional and irrevocable Bank Guarantee.
- 23.2. The Performance Security Bank Guarantee shall be issued in form of a Bank Guarantee issued by a Scheduled Commercial bank in India and acceptable to the ASCL and the same shall be valid for 60 (sixty) days from the date of expiry of the Operation and Maintenance Period.
- 23.3. Failure of the successful Bidder to comply with the requirements of Sub-clause 23.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

24. Non-receipt of Performance Security and Contract by ASCL

- 24.1. Failure of the Successful Bidder in providing Performance Security and / or returning copy of the Contract duly signed in terms of ITB Clauses 22 and 23 above shall make the Bidder liable for forfeiture of its Bid Security and, also, for further actions by ASCL against it as per the Clause 25 of GCC – Termination of default in Section VII and also other administrative actions as per merits of the case.

25. Corrupt or Fraudulent Practices

- 25.1. The ASCL will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a Contract with ASCL. For the purpose of this Clause -

“Corrupt Practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“Fraudulent Practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the ASCL, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish contract prices at artificial non-competitive levels and to deprive the ASCL of the benefits of free and open competition.

SECTION III – MINIMUM ELIGIBILITY CRITERIA/ QUALIFICATION CRITERIA

S.No.	Criterion	Documentary Evidence Required
1.	Bidder should be a sole proprietorship Firm/ Company/ Partnership firm/ LLP registered in India from the last 7 (seven) years as on the Bid submission Date.	Enclose copy of Certificate of Incorporation/ Registration issued by relevant authority in India.
3.	The Bidder must have a valid Labour License/ EPF, ESI registration. (if applicable)	Copies of license/ registration enclosed with Bid.
4.	The Bidder should have a valid GST number or should have registered under GST.	Enclose copy of GST Registration certificate
5.	<p>Bidder must have in the last 7 (seven) years ending last day of month previous to the one in which bids are invited satisfactorily completed:</p> <p>One single similar work costing not less than Rs.398.08 lakh.</p> <p style="text-align: center;">OR</p> <p>Two similar works costing not less than Rs.248.8 lakh each.</p> <p style="text-align: center;">OR</p> <p>Three similar works costing not less than Rs.199.04 lakh each.</p> <p>The term "Similar Works" means:</p> <p>(i) Execution of External Electrical Works for a highway/ road/ street/ flyover/ bridge/ public/private building(s) in India;</p> <p style="text-align: center;">and/ or</p> <p>(ii) Installation of Solar Rooftop Photovoltaic (SPV) power plants in India.</p> <p><i>Where the Bidder possesses experience of having executed both external electrical works and solar panel power plants work, then such Bidder should essentially be empanelled with PEDA or MNRE. Where the Bidder only possesses experience of external electrical works then, for execution of Solar Rooftop Photovoltaic work, such Bidder (if awarded the Project) shall engage a sub-contractor who possesses relevant experience in Solar Rooftop Photovoltaic works. In such a case, the sub-contractor should essentially be empanelled with PEDA or MNRE. Where the Bidder only possesses experience of Solar Rooftop Photovoltaic works then, for execution of electrical works, such Bidder (if awarded the Project) shall engage a sub-contractor who possesses relevant experience in electrical works.</i></p>	<ol style="list-style-type: none"> Details to be provided as per Form Tech 6. The requisite complete certificate/ performance certificate received from the client shall be furnished with Bid.

6.	<p>Bidder must have:</p> <ul style="list-style-type: none"> i. Positive Net Worth in the Financial Year preceding Bid Submission Date ii. Achieved minimum Annual turnover in any one of the last 3 financial years immediately preceding the current Financial Year of at least Rs.199.04 Lakhs (Rupees One Hundred Ninety-Nine Lakhs Four Thousand) iii. liquid assets and/or availability of credit facilities of amount not less than Rs.124.4 Lakhs 	<p>Details to be provided as per Form Tech 7 of the Bidding Document;</p> <p>Copies of balance sheets and statement(s) featuring turnover during the aforesaid periods should be submitted duly signed by the Bidder and the Chartered Accountant concerned, as applicable.</p> <p>Credit lines/letter of credit/certificates from Banks for meeting the funds requirement etc.</p>
7.	<p><i>The Bidder should not have been debarred / blacklisted by any State Government / Central Government / PSU/ ASCL/ Government authority in India for any reason and the same subsists as on Bid Submission Date.</i></p>	<p>Enclose blacklisting/ debarring declaration (<i>Refer Form Tech 3</i>).</p>
8.	<p>Bid Capacity</p> <p>The bid capacity of the bidder shall not be less than estimated cost of the Project.</p> <p>The formula for calculating Bid capacity is: (2xAxN)-B</p> <p>A= Maximum value of Civil/ Electrical Works executed in any one Financial Year during the last five financial years (updated to present price level)</p> <p>N= Prescribed completion period of the work for which bids are invited in years.</p> <p>B= Value at present price level (2018-19) of existing commitments and ongoing works to be completed during N period i.e., the period of completion of works for which bids are invited.</p> <p>Note: <i>The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.</i></p>	<p>Certificate of CA to be enclosed clearly stating and certifying that the Bid capacity is calculated as per the formula provided.</p> <p>Bidder must also provide documents relied upon for arriving at the values used for calculation.</p>

Note: Bidders who meet all the requirements set forth above and provide the qualification documents as specified, shall be considered further in the Bidding Process.

SECTION IV – BIDDING FORMS FOR QUALIFICATION INFORMATION

Scanned copies of Bidding Forms or Qualification document towards meeting the Minimum Eligibility Criteria as detailed below, complete in all respects, should be submitted online as per the stipulations of Clause 6 of ITB :

1. Form Tech 1 – Bid Submission Form
2. Form Tech 2 – Bidder's Information
3. Form Tech 3 – Format for Power of Attorney
4. Form Tech 4 – Declaration for blacklisting/ debarring
5. Form Tech 5 – Declaration for accepting terms and conditions of Bid Document
6. Form Tech 6 – Past Experience of carrying similar work
7. Form Tech 7 – Declaration of Annual Turnover & Net Worth

Notes :

1. If necessary, additional sheets can be added to the schedules. Such attachments should be clearly marked as follows:
"Attachment 1 to Form (1), Attachment 2 to Form (2)" etc.
2. While submitting the Qualification Information duly filled in, Bidder shall enclose latest copies of brochures of their firms and technical documentation if any giving additional information and proper reference to the brochures.
3. Each page of Qualification Information shall be duly signed by the Authorized Representative of the Bidder.
4. The enclosed Forms should be filled in completely and all questions should be answered. If any particular query is not relevant, it should be replied as "not applicable".
5. Financial data, Project/Work costs, value of works, etc. should be given in Indian Rupees only except for Works carried out abroad for which figures may be furnished in United States Dollars (USD).
6. If the bid is made by a firm in partnership, it shall be signed by all the partners of the firm along with their full names and current addresses, or by a partner holding the power of attorney for the firm for signing the Bid. In such a case a certified copy of the power of attorney should accompany the Bid and should be submitted in original in the office of Procuring Entity before the last date of submission of bids. A certified copy of the partnership deed, current address of the firm and the full names and current addresses of all the partners of the firm shall also accompany the Bid.
7. If the bid is made by a limited company or a corporation, it shall be signed by a duly authorized person holding the proper/legal and valid authorization for signing the application, in which case a certified copy of the proper/legal and valid authorization should accompany the application. Such limited company or corporation will be required to furnish satisfactory evidence of its existence like copy of Certificate of Incorporation in the Bid documents.
8. The information furnished must be sufficient for the satisfaction of the ASCL to show that the Bidder is capable in all respects to successfully complete the envisaged work.
9. Bidding Forms to be supported with scanned copies of all the documents as mentioned in Clause 6.5.1 which are required to be annexed as part of Technical Bid.

Form Tech 1: BID SUBMISSION FORM

To,

Date:

Chief Executive Officer,
Amritsar Smart City Limited,
Amritsar.

Subject: Bid for: “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Ref: Your Bid Document No. 03/ASCL/2019-20 dated 31.05.2019

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Document, including Addenda No.

.....

(b) We offer to execute in conformity with the Bidding Document the following Works:

“Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

- (c) I/We offer to execute the works described above and remedy any defects therein during the Defects Liability Period and Operation and Maintenance Period in conformity with the Conditions of Contract, Scope of Work, Technical Specifications, drawings, Bill of Quantities and Addenda for the sum (s) as quoted by me/ us in our Financial Bid.
- (d) Our Bid shall be valid for a period of **120 (one twenty)** days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) If our Bid is accepted, we commit to obtain a Performance Security in the amount of 5% (five percent) percent of the Contract Price for the due performance of the Contract;
- (f) Our firm, including the subcontractor or suppliers for any part of the Contract, have/ shall have from India;
- (g) We are not participating, as Bidder, in more than one Bid in this bidding process, other than alternative offers, if permitted, in the Bidding Document;
- (h) Our firm/ company/ partner/ director has not been blacklisted/ debarred by State Government / Central Government / PSU/ ASCL/ Government authority in India;
- (i) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed;
- (j) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive;
- (k) We agree to permit Government of Punjab or ASCL or their representatives to inspect our accounts and records and other documents relating to the bid submission and to have them

audited by auditors appointed by ASCL;

- (l) We have not paid, or will pay any commissions or gratuities with respect to the bidding process and for execution of the Contract, if awarded
- (i) We declare that we have complied with and shall continue to comply with the provisions of the Code of Integrity including Conflict of Interest as specified for Bidders in this Bidding Document during this procurement process and execution of the Works as per the Contract;
- (j) Unless and until a formal agreement is prepared and executed this Bid together with your written acceptance thereof, shall constitute a binding contract between us.

Name/ address of the Authorized Representative of the Bidder: - _____

Designation: _____

Signed _____

Duly authorised to sign the Bid for and on behalf of: _____

Stamp of the Bidder

Date: _____

Tel: _____ Fax: _____

E-mail: _____

Form Tech 2: BIDDER'S INFORMATION

1	Name of the Bidder	
2	The Bidder is: a Proprietary firm a firm in Partnership a Limited Company or Corporation	
3	Year of registration/ establishment	
4	Address of registered office	
5	Address of place of business	
6	Telephone No./ Fax No.	
7	Email Address	
8	Contact Person with Designation, Contact number & Email Id.	
9	Number of years of proven experience of providing similar services	
10	PAN No.	
11	GST Registration No.	
12	EPF/ ESI Registration details	
13.	Empanelment details with PEDDA or MNRE (<i>if applicable in terms of Clauses 2.1.8 & 2.1.9</i>)	

Yours faithfully

(Signature of the Bidder)

Name:

Designation:

Seal:

Date:

Business Address:

Form Tech 3:**POWER OF ATTORNEY (PoA) FOR AUTHORIZED REPRESENTATIVE**

I/ We, M/s..... authorize the following Representative to sign and submit the Bid, negotiate terms and conditions for the contract, to sign the contract, to deal with the ASCL, to issue and receive correspondence related to all matters of the tender pertaining to “**Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2 : Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period**”. We / M/s (THE “**Bidder**”) undertake the responsibility due to any act of the representative appointed hereby.

For Partnership Firm

Sl. no.	Name of the All Partner	Signature of Partner with Seal
	Name and Designation of the person Authorized	
	Attested Signature of the Authorized Representative	

For Limited Firm/ Company

Name and Designation of the person Authorized	
Name of the Firm	
Address	
Telephone No. & Fax No.	
Authority By which the Powers is delegated	
Attested Signature of the Authorized Representative	
Name and Designation of person attesting the signatures (<i>Proof of the authority of the attesting person to be attached with the PoA</i>)	

Form Tech 4:
DECLARATION FOR BLACKLISTING/ DEBARING

To,

Date:

The Chief Executive Officer,
Amritsar Smart City Limited,
Amritsar.

Subject: Bid Document 03/ASCL/2019-20 dated 31.05.2019: for “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Sir/ Madam,

I/ We have carefully gone through the Terms & Conditions mentioned in the referred Bid Document. I/ We hereby declare that my company / firm/ partner/ director is not currently debarred/ blacklisted by any State Government / Central Government / PSU / Government Authority in India/ ASCL as on the Bid Submission Date.

Or

I declare the following

S. No.	Blacklisted / debarred by State Government / Central Government / PSU	Reason	Date on which blacklisting/ debarment notification was issued

(NOTE: In case the company/ firm/ partner/ director was blacklisted previously, please provide the details regarding the Period for which the company / firm/ partner/ director was blacklisted/ debarred and the reason/s for the same)

Yours faithfully

(Signature of the Bidder)

Name:

Designation:

Seal:

Date:

Business Address:

Form Tech 5: DECLARATION FOR ACCEPTING TERMS AND CONDITIONS OF BID DOCUMENT

To,

Date:

The Chief Executive Officer,
Amritsar Smart City Limited,
Amritsar.

Subject: Bid Document 03/ASCL/2019-20 dated 31.05.2019 for “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Sir/ Madam,

I have carefully gone through the Terms & Conditions mentioned in the above referred Bid Document. I declare that all the provisions of this Bid Document are acceptable to my company/ firm who has submitted its Bid as the Bidder for this Project. I further certify that I am an Authorized Representative of my company/ firm i.e. the Bidder and am therefore, competent to make this declaration. I further undertake on behalf of my company/ firm that we shall abide by the Bid including the Financial Bid submitted by my company/ firm.

Yours faithfully,

(Signature of the Bidder)

Name:

Designation:

Seal:

Date:

Business Address:

Form Tech 6: PAST EXPERIENCE OF CARRYING SIMILAR WORK

To,

Date:

The Chief Executive Officer,
Amritsar Smart City Limited,
Amritsar.

Subject: Bid Document 03/ASCL/2019-20 dated 31.05.2019 for “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Sir/ Madam,

Brief particulars of similar works in last 7 (seven) years preceding Bid Submission date. The purchase order/work order/ performance certificate copy of the cited experience is also enclosed with the form.

Sr. No.	Items	Description
1.	Name of Government Department/ Private Institution/ Agency/ Organization or PSUs (the Client)	
2.	Address of the Client	
3.	Purchase Order/ Work Order/ Purchase Certificate Date	
4.	Amount	
5.	Make of lights Installed	
6.	Other Activities performed	
7.	Details of Client Contact person for reference check	Name: Address: Phone No./ Mobile No.: Email Id:
8.	Start Date (Month/ Year)	
9.	Completion Date (Month/ Year)	
10.	Period of Operation	

Note: Self attested copies of original work orders/ purchase orders/ performance certificates along with recommendation letters from clients towards proof of past similar work experience to be enclosed.

Yours faithfully,

(Signature of the Bidder/ Authorized Representative)

Name:

Designation:

Seal/ Stamp:

Date:

Business Address:

Form Tech 7: DECLARATION OF ANNUAL TURNOVER AND NET WORTH

To,

Date:

The Chief Executive Officer,
Amritsar Smart City Limited,
Amritsar.

Subject: Bid Document 03/ASCL/2019-20 dated 31.05.2019 for “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Sir/ Madam,

I hereby declare that, our firm's Annual Turnover and Net Worth is as follows. The Statutory Auditor's certificate is attached for your reference.

FINANCIAL YEAR	ANNUAL TURNOVER (IN INR)
F. Y. [2016-17]	
F. Y. [2017-18]	
F. Y. [2018-19]	

RELEVANT FINANCIAL YEAR	NETWORTH
FY 2018-19	

Note:

1. Net Worth should be in positive
2. In case of turnovers in foreign currency, the figures are to be given in relevant currency and figures in INR may be worked out as per SBI Foreign Currency selling rates prevalent on 01.04.2019.

Yours faithfully,

(Signature of the Bidder)

Name:

Designation:

Seal:

Date:

Business Address:

Letter of Financial Bid

To

The Chief Executive Officer
Amritsar Smart City Limited
Amritsar

Project: Bid Document 03/ASCL/2019-20 dated 31.05.2019 for “Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”

Subject: Letter of Bid – Financial Part

1. I/We hereby bid for the 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. This percentage shall be applied to all the item rates mentioned in the Bill of Quantities.
2. I/We undertake if our Bid is accepted to commence the works as soon as is reasonably possible after the receipt of the Engineer’s notice to commence, and to complete the whole of the works comprised of the works comprised in the contract within the time stated in the document.
3. I/We agree to abide by this Bid for the period of 120 days from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Unless and until a formal agreement is prepared and executed this Bid together with your written acceptance thereof, shall constitute a binding contract between us.
5. I/We understand that you are not bound to accept the lowest or any tender you may receive.

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 (including GST), and other levies payable by the bidder shall

be included in the percentage quoted by the bidder.

Dated this _____ day of _____ 2019

Signature _____ in the capacity of _____

duly authorized to sign bids for and on behalf of _____

(in block capitals or typed)

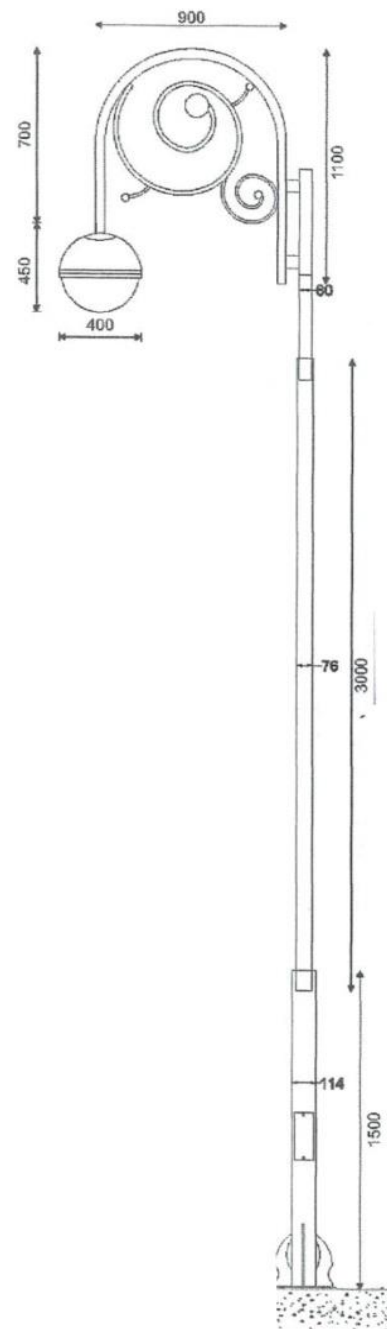
Address _____

SECTION V –SCOPE OF WORK

- i. Design, supply, installation, testing and commissioning of new lighting fixtures on the segments and piers of the flyover throughout as per requirement to beautify the stretch at night.
- ii. Design, supply, installation, testing and commissioning of the electrical system for lighting and panel for irrigation purposes to the required areas.
- iii. Design, supply, installation, testing and commissioning of complete On Grid Solar system on rooftop of BRTS stations for electricity generation.
- iv. 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period.

Illustrative types of LED lights and pole with bracket used for under bridge area to impart aesthetic vision as described below:

- LED wall washing RGB flood light luminaires with dedicated optics for architectural lighting. Luminaire has a choice of architectural floodlighting optics with beam angles of 10°/25°/40°/60°/25X60°. Wattage not exceeding 65-75W, with system lumen output of minimum 2700 lumen with all LED ON and operating voltage of 100- 277V AC. Fixture should have Die-cast aluminium, powder-coated finish of RAL7040 with Clear tempered glass lens and should have 54 no. of LED,s. Luminaire lifetime of 70,000 hours at 50 degree Centigrade @L70 and IP 66 & IK7 protection against weather. Fixture should have Height 364 mm±1% including surface mount base width 188 mm±1% , length 390 mm ±1% with constant locking hinges for simple position control from various angles without special tools. The light fixture should be programmable using 8 bit control DMX512 protocol with Operating Temperature Range from -35°C to 50°C. LED make should be as per specifications. Cost of DMX Controller, adress writer, message amplifier, water proof driver for amlifier, IP67 connector included wherever required, weather proof cable, lenses, and external power and data supply [if any], wiring. Bidder can quote his own design and quantities confirming to requirement and specifcarions
- Street light luminaries 35W LED IP 56 (lamp type 24x1.5W) suitable for post top (**Error! Reference source not found.**) with inbuilt driver, 230V AC supply complete in all respect.
- Design, Supply, Testing, Installation & Commissioning for the complete facade Lighting as per the scope of work with the following light fixtures:
 - * LED colour: RGB
 - * System wattage of luminaire: 24W
 - * Beam angle: Eliptical



- * Power supply: DC 24V
- * Operating temperature range: -30°C to +50°C
- * Form Factor: Linear Wall Washer luminaire used for architectural lighting
- * Body: Extrusion aluminium alloy housing with heat resistant tempered glass cover
- * Surface Finish: Double powder coating, outdoor grade, anti-UV
- * Mounting: Luminaire should have appropriate mounting bracket for required aiming
- * Protection Class: IP 65
- * LED make: as approved
- * Life: 50000 burning hrs for L70LED Strip Lights shall be supplied with outdoor type weather proof DMX cables with junction boxes at regular intervals. DMX cables should have DMX controller, address writer, massager amplifier, IP67 connector etc. All accessories as required to complete the job.

Other lights as per the bill of quantities attached. The quality of lights shall be as desired by Engineer in charge. The warranties of all types of lights shall be 5 years. Other associated system and accessories shall have warranty of atleast one year.

Brief O&M and installation guidelines: 1. Preparing log book and maintaining data for preventive maintenance schedule in coordination with Engineer Incharge.

2. The Successful Bidder has to be proactive in monitoring lighting system regularly and performing preventive maintenance and not relying solely on Complaint Management System. Repairing the system as and when required to keep the system on. The Successful Bidder must take adequate care, by using black cotton tape or better quality tape for connection of wires, to avoid short circuiting of connections especially during monsoon season between luminaire wire and overhead network of DISCOM. No extra charge will be payable to the Bidder for this work.

3. The Successful Bidder will provide surge protection arrangement to protect the luminaries from switching surges which are expected/prevalent in Light supply networks. In case of voltage surges due to lightning, it is expected that lights, in the affected circuit, will fail in a group and not in an isolated manner. Hence, any such failure of lights in a group on account of Lightning surges, may be reported to the MCA, along with circumstantial evidence preferably within 48 hours of such occurrence, for the purpose of damage claim. The responsibility for submission of supporting documentation rests with the Successful Bidder.

4. Earthing provisions of IS-3043, may be referred to in general and to Clause no. 21.3, 21.4 and 32.5 of the said IS Specifications in particular. The Successful Bidder shall carry out earth resistance measurement of neutral conductor of supply network during the initial commissioning phase and subsequently on yearly basis or as may be felt necessary for reliable operation of the Light Luminaries. Wherever, in CCMS provision of additional earth electrode is felt necessary to meet the provision of IS: 3043, the same shall be taken up with MCA for mutual agreement. No claim for failure of Luminaries will be entertained on account of earthing issues.

5. The Successful Bidder has to intimate MCA about any cases of power theft or unauthorized connection of load during festivals from the street lighting network on priority basis. MCA will be responsible for taking all the corrective measures required and not penalize the Successful Bidder for such theft.

6. At the expiry of the Contract Period, all rights and titles to, and interests in, all improvements and equipment constructed or systems installed are vested in MCA, free and clear of all and any liens and encumbrances created or caused by the Successful Bidder. The Successful Bidder shall surrender possession of the LED luminaries and CCMS panels, along with CCMS bill of material, to MCA with 98% (ninety eight percent) of them in working condition.

7. The Successful Bidder has to store inventory minimum 1% (one percent) of total light points in the city of LED luminaries for maintenance requirements.

8. The Successful Bidder will open an office with basic infrastructure where the Bidder will make available a person with amenities like computer, printer, phone, complaint register, etc. during working shift timings. These complaint handling centers will be connected to MCA's existing Complaint Management System and such centers should become fully operational within 30 (thirty) days of allocation of such space by MCA.

9. All complaints lodged in the system have to be resolved within 48 (forty-eight) hours of lodging of complaint. For example, if the complaint is lodged on 16th May at 10 PM then the complaint has to be resolved by 18th May 10 PM. In certain cases, Successful Bidder has to resolve the complaints immediately as per the instruction of EIC.

10. The Successful Bidder shall ensure the availability of sufficient ladder vehicle, Hydraulic Vehicle (suitable to reach upto 10m height) and other relevant vehicle & equipment for O&M. The vehicle used for O&M should have valid registration documents.

11. The Successful Bidder will be penalized for non-achievement of following O&M performance parameters:

Performance parameter	Particulars	Penalty for non-achievement
Complaint resolution	The complaints need to be solved within 48 hours of lodging of complaint	Rs. 100/lamp/day
Addressing phase failure issue	The phase failure should be resolved within same day	Rs. 500/ phase/ day
		Rs. 500/visit If MCA staff is engaged for resolving phase issue
Hours of operation of street lights	As per normal operating hours	Increased bill amount + 100% as a penalty on this increased bill if average hours of operation per annum are more than 11 hours/ day without the approval of MCA.

The Bidder will organize half-day training program at MCA office wherein the Bidder will train the employees of MCA on any day within 1 (one) month of the date of commissioning and on any day within last quarter of end of contract period on the operation, maintenance and repair of the equipment and systems installed by the Bidder.

The Successful Bidder should address the queries or issues raised by employees of MCA O&M practices from time to time.

The Successful Bidder shall assign an overall in charge for coordination and monitoring of day to day activities of entire city network. Additionally, the Successful Bidder should deploy the team as proposed, in their Technical Bid, from their organization who are regular employees

and provide the contact details of the same, who shall be accountable for delivering on the said commitments during the Contract Period, coordinate for daily O&M exercise and update MCA as per agreed format. In case, the assigned personnel leaves the organization or is reassigned, the Successful Bidder has to intimate the same in writing to MCA and advice names of the new officers assigned for the role.

Insurance: The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage, delivery, completion of installation and commissioning. For delivery of goods at site, the insurance shall be obtained by the Successful Bidder, for an amount not less than the Price of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War risks and strikes.

Safety: During the period of installation and O&M, the Successful Bidder should ensure implementation of measures to ensure Safety of working personnel, as per all applicable laws in general and with special focus on the following

Working at heights

Working on/in the vicinity of power supply lines

Suitable work instructions/procedures shall be prepared for each type of work location (Height or type of pole / supply network configuration) and the working personnel shall be trained at regular intervals by a competent person possessing valid certificate w.r.t Safety issues.

All the working personnel shall be provided with appropriate Personnel Protection Equipment such as Safety harness for working at heights, safety helmets, Earthing rods, etc. The Successful Bidder shall arrange to carryout safety audit at regular intervals by a competent person possessing valid certificate w.r.t safety issues and suitable remedial measures shall be taken based on the findings/recommendation of the safety audit.

Note: The 3-phase meter installed at the feeder panel shall be as per the specifications of PSPCL which are provided at Annexure (PSPCL 3-phase meter specifications).

O&M period shall commence from the date of issue of satisfactory Installation, Testing and Commissioning certificate of all LED lights from Engineer-in-charge (i.e. only after complete installation in particular zone). The payment for O&M will begin after date of issue of satisfactory Installation, Testing and Commissioning certificate of all LED lights.

System Documents, User Documents

The Successful Bidder will provide all project related documents. This documentation should be submitted as the Project undergoes at various stages of implementation. Indicative list of documents include: Project Commencement Documentation: Project Plan in giving out micro level activities with milestones & deadlines.

Equipment Manuals: Original Manuals from OEMs.

Installation Manual: For all the application systems.

Training Material: Training Material will include the presentations used for trainings and also the required relevant documents for the topics being covered. Training registers should be submitted for same.

User Manuals: For all the application software modules, required for operationalization of the system.

System Manual: For all the application software modules, covering detail information required for its administration.

Standard Operational Procedure (SOP) Manual: The Successful Bidder shall be responsible for preparing SOP Manual relating to Operation and Maintenance of each and every service as mentioned in the RFP. The draft process (SOP) document shall be formally signed off by MCA before completion of Final Acceptance Test. This SOP manual will be finalized by the Bidder within 2 (two) months of operationalization, in consultation with the MCA and formally signed off by the MCA.

Note: The Successful Bidder will ensure upkeep & update all documentation and manuals during the contract period. The ownership of all documents, supplied by the Bidder, will be with MCA. Documents shall be submitted in two copies each in printed (duly hard bound) & in softcopy formats.

Helpdesk Setup

The Successful Bidder will set up a 24X7 centralized Helpdesk for the Project for the entire Contract Period. The Helpdesk will handle user queries and issues relating to implemented solution.

The Helpdesk is required to ensure that users can log calls and complaints for any technical issues they face while accessing the system. The following is included in the scope of work of the Bidder: The Helpdesk to have Interactive Voice Response (IVR) system for first level of call segregation; Accordingly Standard Operating Procedures (SOPs) shall be created by the Successful Bidder.

In addition to the telephone call, the Successful Bidder shall also provide other channels for call logging like email and web interface.

Following is also part of scope of work of the Successful Bidder: (a) Development of training material for MCA employees (b) training to be imparted to MCA (c) provision of Call center application (d) Development of standard operating procedures with call prioritization guidelines, problem security codes and escalation procedures etc. in consultation with MCA (e) Helpdesk related infrastructure. Language Capabilities : Hindi, English and Punjabi.

The service window for Help Desk is 365X24X7 (Monday to Sunday);

The call statistics will be analyzed every quarter after Go-Live and the number of Customer Care Executives may be ramped up or down accordingly on a week's notice.

The Bidder shall deploy Helpdesk application accessible to all users through the Smart City portal for logging issues and the Bidder to provision for inbound calls.

Capacity Building

The Successful Bidder need to provide training and capacity building to MCA employees and other stakeholders as directed by ASCL/ MCA. The following is a broad level scope.

The Bidder will prepare all the requisite audio/visual training aids that are required for successful completion of the training for all stakeholders. These include the following for all the stakeholders: Training manuals for MCA employees / stakeholder departments; Computer based training modules; Presentations; User manuals; Operational and maintenance manuals for Smart Components implemented; and Regular updates to the training aids prepared under this project.

The Successful Bidder will maintain a copy of all the training material on the portal and access will be provided to relevant stakeholders depending on their need and role. The access to training on the portal would be finalized with MCA. The Successful Bidder has to ensure the following points:

For each training session, the Successful Bidder has to provide the relevant training material copies to all the attendees.

The contents developed shall be the property of MCA with all rights.

The Successful Bidder has to ensure that the training sessions held are effective and that the attendees would be able to carry on with their work efficiently. For this purpose, it is necessary that the effectiveness of training sessions is measured. The Bidder will prepare a comprehensive feedback form that will capture necessary parameters on measuring effectiveness of the training sessions. This form will be discussed and finalized with MCA.

After each training session, feedback will be sought from each of the attendees on either printed feedback forms or through a link available on the web portal. One member of the stakeholder group would be involved in the feedback process and he/she has to vet the feedback process. The feedback received would be reported to ASCL/ MCA for each training session.

Hand-over of the system at the end of contractual period

The Bidder will supply to the MCA the following before the expiry of the contract:

Information relating to the current services rendered and data relating to the performance of the services; Entire documentation relating to various components of the Project, any other data and confidential information related to the Project.

All other information (including but not limited to documents, records and agreements) relating to the products & services related to the Project to enable MCA and its nominated agencies, or its replacing the Bidder to carry out due diligence in order to transition the provision of the Project Services to MCA or its nominated agencies, or its replacing the Bidder (as the case may be).

SECTION VI – TECHNICAL SPECIFICATIONS

Standard LED Lights specifications

The LED Lighting system consists of following parts:

- LED
- Luminaire
- Driver
- Controller
- Leader cable
- Address writer
- Amplifiers

The typical specifications are as follows:

Table: Typical specifications for LED Lighting

S. No.	Typical specifications of LED Flood Lights		Supporting document
(a)	High bright white power LEDs shall be used in the luminaries and the wattage of these LEDs shall be< 2W		LED Technical Data sheet
(b)	Life span of LEDs used in the Luminaire shall be more than 50,000 hours at 70% light output		LM-80/IS16105, L70 Report test report including technical data sheet of LED Chip
(c)	LED chip make –Nichia, Philips, Lumiled, Cree, Osram, Seoul		
(d)	LED chip efficacy shall be more than 35 Lumens/watt at Tj 25° C in case of RGB lights		LED Technical Data Sheet
(e)	Junction Temperature (Tj) should be <105°C		Manufacturer self-certify
	The power consumption of the luminaire should be less than 70W with at least 2700Lumens		LM-79 report
(f)	Color temperature of the luminaire shall be RGB, with the beam angle options of 10, 25, 40, 60 and elliptical beams.		NABL Accredited LM-79 report of LED's to be submitted by the bidder
(g)	Power factor	> 0.97	LM-79 report
(h)	Lumen depreciation for rated life <10%		LM 80 Report to be submitted and Manufacturer has to self-certify
(i)	The luminaire light output (lumen) shall be constant. The voltage variations / fluctuations in the specified voltage range shall not impinge upon the lumen it produces. Maximum +/-2% is allowed throughout in the input operating voltage range		LM-79 report
(j)	Operating voltage: 140 V to 270V universal electronic driver with internal surge protection of 4 KV (Applicability IS		NABL accredited lab report

	15885, Driver Safety 16104-1/2)		
(k)	Over-voltage cut off limit > 295 V		NABL accredited lab report
(l)	Total Harmonic Distortion: < 10% THD - Test Method IEC:610003-2		NABL accredited lab report
(m)	Maximum intensity of the fixture should be at least 30,000candela at 8meters distance within 90degree of beam axis of all four quadrants at 25degree Celsius		NABL accredited lab report
(n)	LED Drive current	>=450 mA	LM-79 report
(o)	LED driver efficiency	> 85%	LM-79 report
(p)	Heat dissipation / heat sink: Well-designed thermal management system with defined heat sink		NABL accredited lab report
(q)	The luminaire housing shall be made up of corrosion free High Pressure Aluminum die cast thus conforming the luminaire to minimum IP-66 for all wattages and safety as per IEC 60598/IS 10322. (Only single housing fixtures allowed).		NABL accredited lab report
(r)	The luminaire shall be equipped with distortion free, clear, heat resistant, toughened, UV stabilized glass / Poly-carbonate cover in the front fixed to the die cast Aluminium frame which shall be fixed to the housing by means of Corrosion resistant or Brass screws for areas not inside IP66 rated chamber. Zinc plated steel or equivalent screws can be applied inside sealed chambers.		NABL accredited lab report
(s)	Frequency	50Hz +/- 3%	
(t)	Operating temperature	Range: -10C to +50C	NABL accredited lab report
(u)	Protection S	IP66 for all type of lamps to be installed Surge protection 4 kV, IEC61000-4-5	NABL accredited lab report
(v)	Working humidity	10% to 90% RH	

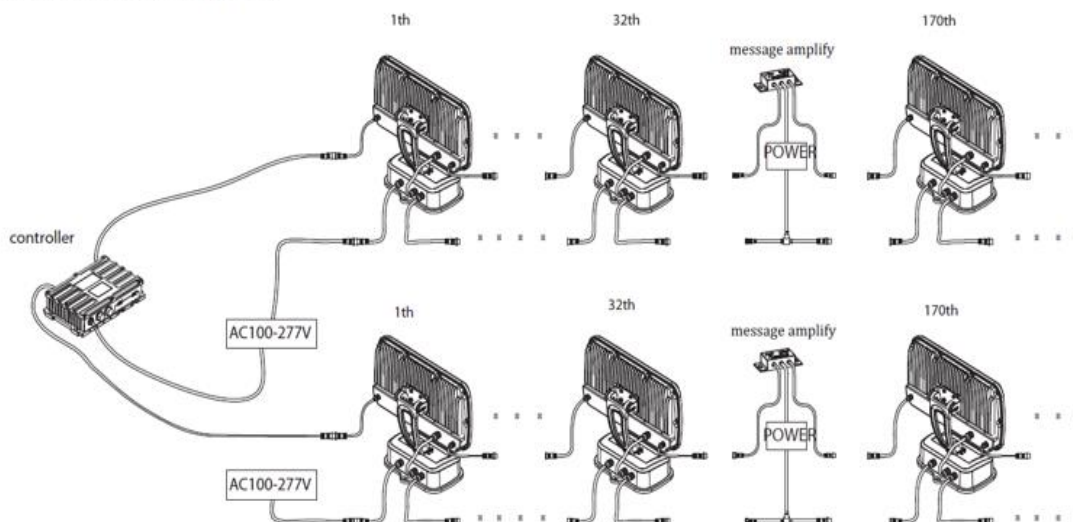
(w)	Conformation standards of luminaire (Test reports of luminaire)	The luminaire should conform to IEC 60598/ IS:10322. The luminaire should be tested as per IEC 60598-2- 3:2002/ IS:10322 Part 5 Sec-3 standards and following test reports should be submitted: Thermal Test, Ingress Protection Test, Electrical / Insulation Resistance Test, Endurance Test, Humidity Test, Photometry Test (LM79 report), Vibration Test	From NABL Certified TPL Test report TEST REPORT as per IS:10322 part 5 Sec-3 /IEC:60598-2-3
(x)	Finish	Aesthetically designed housing with corrosion resistant polyester powder coating	Self-Declaration
(y)	Luminaire configuration / technical requirement	Side entry type. Shall consist of separate optical and control gear compartments. It should be easily replaceable in the field condition.	Self-Declaration
(z)	Compliance	RoHS/CE/ERTL/ERDI	Confirmation
(aa)	Surge Protection	External Surge protection of minimum 10 kV/ 10 kA to be separately installed with the each	As per ANSI C 136.2-2014

A DMX 512 controlled RGB LED luminaire controllable for producing dynamic lighting effect.

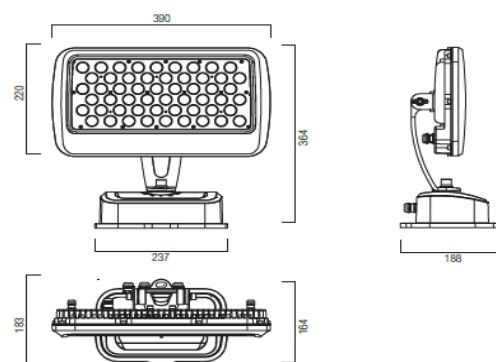
RGB LED lights are strategic assets for façade lighting. DMX-512 is the most predominant theatrical lighting control protocol used in many theatrical and architectural lighting control devices worldwide. DMX-512 has been in use since 1990. DMX-512 is so common that most dimmers produced today are manufactured DMX-512 compatible. DMX-512 can simultaneously control up to 512 channels of lighting control - this group of 512 channels is generally referred to as a DMX "universe". DMX512-A is the current standard and is maintained by ESTA (Entertainment Services and Technology Association). Digital cable is run in a daisy-chain to each DMX device. Each device is addressed to specific DMX channels.

Installation Diagram

RGB Schematic Diagram



TECHNICAL DRAWING



DMX CONTROLLER

Front View:



Back View:



- ① Power Supply Switch
- ② Display
- ③ Power Supply Indicator
- ④ Busy Indicator
- ⑤ Network Interface
- ⑥ Infrared Indicator
- ⑦ Output Port
- ⑧ Power Supply Socket

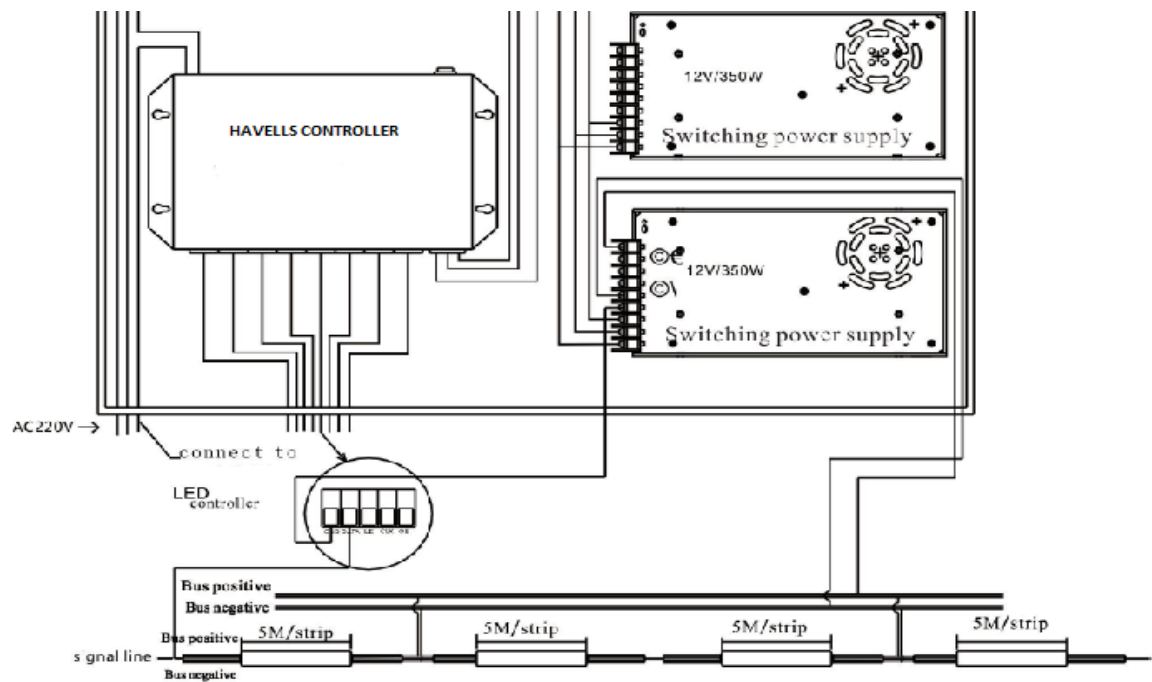
Total light points controller
Total channel
Optimized

170X8
8 channels
170 light fixtures on 8 channels



- MENU Setup menu
- TEST Self-checking
- OK Confirm and save
- cancel Quit the setting
- Play & pause
- Plus
- Minus
- Last section
- next section
- Digital key

WIRING DIAGRAM FOR DEMONSTRATION PURPOSE ONLY



NOTE: The DMX controlling system mentioned above or in BoQ are indicative only. Bidder can provide his own controlling system provided that should meet standard requirements of the project. The system should be such that it could be controlled/programmed including change of lighting colour as desired, monitored in terms of energy and other electrical parameters and status of lights locally or by remotely present Integrated Command Controlled Centre (ICCC). Necessary software and integration with ICCC shall be done by the bidder. In absence of ICCC, bidder shall maintain data on cloud. Whole responsibility of maintenance of cloud shall lie with the bidder.

Central Control & Monitoring System (CCMS) specifications

Streetlight networks are strategic assets for cities. Streetlights illuminate the roads we drive on, the pedestrian paths we walk along and the public areas where we gather. It provides us with safe roads, safer public areas and enhanced security in our homes, businesses and city centres.

Advantages of using CCMS to monitor and control the street lights

The key advantages of using a CCMS include:

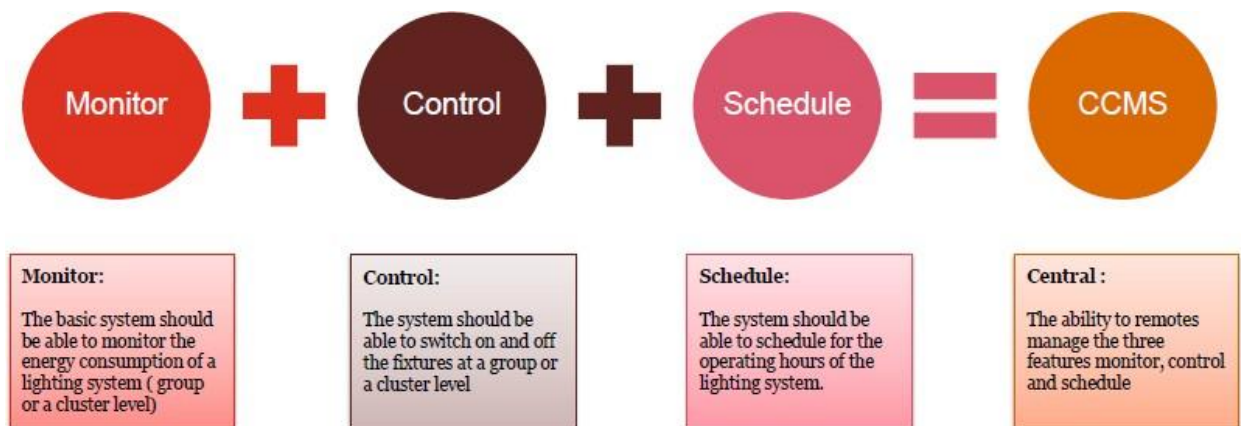
- **Reduced power consumption:** Power consumption gets reduced due to improved control of street lights.
- **Enhanced maintenance operation:** CCMS results in automatic identification of failures, real-time control of any individual lamp, increase lamp lifetime, reduce onsite maintenance costs; remove night patrols, automatic generation of alarms and notification to operations managers and crews to optimize their maintenance schedules.
- **Enhancing the quality of lighting on the streets:** The streets are lit to the right level but only at the right time e.g. when traffic/pedestrian loads are less dense on the streets, the street lights should dim to a lower level but owing to security constraints in Amritsar non dimmable type LEDs are being used.
- **Open platform for monitoring:** CCMS are deployed using an open platform technology allowing the end user to decide on how they would prefer to monitor the

street lights.

- Increase security and safety in the streets and on the roads.
- Exchange valuable data with various Network Maintenance Tools, Demand/ Response systems and Geographical Information Systems.
- A CCMS system must be able to carry out three basic tasks of monitoring, controlling and scheduling.



Basic functions of a CCMS



The components of an intermediate CCMS system include:

Controller and Metering unit

- Schedule the timing of lights (pre-programmed based on astronomical clock or on field or through central control).
- ON / OFF Switch (on field or centrally).
- Capture the energy usage and other parameters at pre-determined interval and store data for 30 days.
- Ability to connect with a communication device.
- Ability to download data in field.
- System protection against surges.

Enclosure

- Even both controller and communication are utilized it should be a single compact unit.
- Should be tested for tropical conditions & be made of fire resistant FRS material.

Communication Module

- Ability to communicate securely with via cellular networks (GSM / GPRS).
- Two-way communicator.
- Ability to send data regarding energy usage, ON/OFF status etc. from controller.
- Ability to give commands from a central level for switching ON/OFF, scheduling etc.

Software

- A web-based / mobile based software package with a detailed information dashboard.
- This software shall be hosted in the Amritsar Smart City Integrated Control Command Centre (ICCC). In absence of same, data shall be maintained in cloud.
- The Virtual machine requirements for hosting the software shall be provided by the vendor and he shall be allocated Virtual Machine with required configuration to host the CCMS at ICCC.
- The vendor shall be responsible for integration of the streetlight CCMS with the ICCC Software for integrated city dashboard, monitoring, control and alert management.
- CCMS shall have ability to show the status of each controller on the dashboard.
- CCMS shall have ability to schedule and switch ON/OFF controllers remotely through the dashboard.
- CCMS shall have ability to incorporate logics to determine fault detection and power thefts.

The key technical specifications of a CCMS include:

CCMS technical specifications

S. No	Features	Description
1	Operational Features	<p>The CCMS unit should be capable of switching ON and OFF the lights of a particular switching point and/or networked switching points from Central Control Station instantaneously or automatically throughout the year on basis of sunrise and sunset time depending on the geographical location of the switching point.</p> <p>The CCMS unit should be a GPRS and/or GSM (with IMEI number) proven technology based remote streetlight monitoring system with capacity for self- protection from short-circuit, over voltage and anti-theft alert.</p> <p>The CCMS unit should have a battery backup of at least 12 hours.</p> <p>The CCMS shall have optically isolated communication port to fetch data (this is required for safe data transfer and to protect unauthorized access).</p> <p>The rating of the CCMS units should be at least twice that of the lighting load.</p>

S. No	Features	Description
2	Energy measurement and communication features	<ul style="list-style-type: none"> The CCMS unit Should be able to capture (record) and provide following parameters at variable time-intervals (Individual switching-point wise and/or networked switching points): <ul style="list-style-type: none"> Voltages Current Power Factor Active Power (kW) Apparent Power (kVA) Metering kWh cumulative Metering kVAh cumulative Number of hours of a group of LED luminaries connected with each switch controller was glowing Number of hours the power supply was unavailable Special emergency on/off facility with wireless control. Benchmarking capacity so as to generate alert SMS for: <ul style="list-style-type: none"> Phase-wise currents on crossing threshold values* Phase-wise voltages on crossing threshold values* MCB trips Theft alerts Group failure of lights No output supply Alert SMS shall be forwarded to 5 (five) phone numbers. CCMS should have provision for incorporating monitoring and control of smart solutions like environmental meters, wifi hotspots, etc. Class 1.0 accuracy Energy Meter with ISI marking/IS-13779 is to be used for power measurement. Type testing report from NABL Accredited Lab to be provided. It is to be calibrated annually. <p>* Please refer the technical specifications for designing the threshold values for voltage and current.</p>

S. No	Features	Description
3	Web based - Application	<p>Central Control and Monitoring System functionalities</p> <ul style="list-style-type: none"> • CCMS shall have a web-server to receive and record all data with time stamping from the streetlight controllers. • It should be able to communicate with any individual switching points or collectively amongst networked switching points for control and monitoring. • It should be able to record LED luminaries glowing and non-glowing hours of a particular switching point. • It should be able to display the power failure details of a particular switching point and the relevant luminaries. • It should register all fault conditions like excess voltage/current drawn, no-power supply, etc. through the instantaneous alert messages sent by the CCMS unit. • The central CCMS unit is capable of handling minimum 5000 number switching point units. • CCMS shall have server preferably dedicated server set-up or cloud-based arrangement to ensure 100% guarantee of the data transmission and real time data storage for last 2 (two) years (24 (twenty-four) Months) and archived data for the contract period. • Data authenticity and validation has to be ensured. • Reports to be submitted in a common CVS format. • Cyber security, safe database management, data retrieval and trouble-free operation of software and allied systems (24*7) to be ensured. • CCMS system should have a self-healing mechanism and in case of failure, Contractor to ensure resumption of service within 24 hours. Till resumption of full services, the default settings of the CCMS should ensure timely ON/ OFF operation of the street lights. • System to report Jamming/ hacking attempts and maintain status-quo in case of Jamming/ hacking attempts i.e. if lights are ON, they should remain ON till the default OFF time recorded in the system. In case lights are OFF at the time of Jamming attempt/ hacking, lights should remain OFF till default ON time recorded in the system.

Note:

The Successful Bidder will manage (warranty, operation, maintenance, web-based portal, communication charges) the installed CCMS units for the contract period.

The feature proposed for CCMS is indicative.

However, the Successful Bidder is free to offer their lighting control technology which should encompass all key features as above.

On Grid solar system

The proposed projects shall be commissioned as per the technical specifications given below. At present there is no subsidy available. Competent Authority's decision will be final and binding.

DEFINITION:-

A Grid Tied Solar Rooftop Photovoltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, Junction boxes, Distribution boxes and switches. PV Array is mounted on a suitable structure. Grid tied SPV system should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable. Solar PV system shall consist of following equipments/components: Solar PV modules consisting of required number of Crystalline PV cells, Grid interactive Power Conditioning Unit with Remote Monitoring System Mounting structures Junction Boxes, Earthing and lightening protections, IR/UV protected PVC Cables, pipes and accessories

I. SOLAR PHOTOVOLTAIC MODULES:-

- The PV modules used should be made in India.
- The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-1 - requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.
- For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701.
- The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 250 Wp and above wattage. Module capacity less than minimum 250 watts shall not be accepted.
- Adequate protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- PV modules must be tested and approved by one of the IEC authorized test centres.
- The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power. PEDDA/owners shall allow only minor changes at the time of execution.
- Other general requirement for the PV modules and subsystems shall be the following:
 - i. The rated output power of any supplied module shall have tolerance within +/-3%.
 - ii. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per

cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.

- iii. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.

II. SOLAR PV MODULES INSCRIPTIONS:-

Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each modules. This should be inside the laminate only:

- Name of the manufacture of the PV module
- Name of the manufacture of Solar Cells.
- Month & year of the manufacture (separate for solar cells and modules)
- Country of origin (separately for solar cells and module)
- I-V curve for the module Wattage, I_m , V_m and FF for the module
- Unique Serial No and Model No of the module
- Date and year of obtaining IEC PV module qualification certificate.
- Name of the test lab issuing IEC certificate.
- Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

III. WARRANTIES:

Material Warranty:

- The project developer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Bidder"):
 - i. Defects and/or failures due to manufacturing
 - ii. Defects and/or failures due to quality of materials
 - iii. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the project developer will repair or replace the solar module(s) at the Municipal Corporation, Amritsar's sole option.

Performance Warranty:

The predicted electrical degradation of power generated shall not be exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

IV. ARRAY STRUCTURE:

- Hot dip galvanized MS mounting structures shall be used for mounting the modules/ panels/ arrays. Minimum thickness of galvanization should be at least 120 microns.
- Each structure should have angle of inclination as per the site conditions to take maximum insolation. However, to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.
- The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (wind speed of 150 km/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to PEDA. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- **Aluminum structures also can be used which can withstand the wind speed of respective wind zone.** Necessary protection towards rusting need to be provided either by coating or anodization.
- The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.
- Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- The total load of the structure (when installed with PV modules) on the roof should be less than 60 kg/m².
- The minimum clearance of the structure from the roof level should be 300mm.

Rest of the conditions shall be as per PEDA guidelines (Punjab Energy Development Authority).

SECTION VII – LOCATIONS WHERE PROJECT TO BE EXECUTED

I. Spaces below Elevated loop of BRTS on GT Road (3.4 km + 0.8 km)

Existing Conditions:

The flyover passing through the centre of the city and being one of the main connectors of the city remains dark and gloomy during the night. As it has no provision of additional lighting except street lights along the road. This condition promotes illegal and suspicious activities leading to unsafe and insecure conditions at night.

Proposal:

Lighting is one of the major components of the proposal as its illumination transforms the existing dark condition into the bright, well – lit and aesthetically appealing space. Appropriate illumination is proposed as per the standards – BIS 1944 under classification of road, these types of spaces are classified as A1 & A2, i.e. main roads with considerable mixed traffic and the comfort of drivers. Accordingly, LED street light luminous efficiency >135 L/W is ideal for this setting. But for aesthetic ambience, strip lighting and Flood lighting of required luminous efficiency have been provided. LED Lighting is proposed along the entire stretch of flyover. It is a sign of safe and secure environment and is least polluted. It produces more illumination in less wattage and hence is sustainable and economical.

There are various types of lighting proposed such as LED flood light on the ground at intervals, RGB strip lighting in continuation along the edge of the segment, ornamental street lights, ground and embedded LED lights. The colour of these lights is in synchronization with the landscape/plantation theme. The continuous lighting along the segment will illuminate the entire stretch of the flyover while the flood light at intervals will illuminate the dark and gloomy spaces.

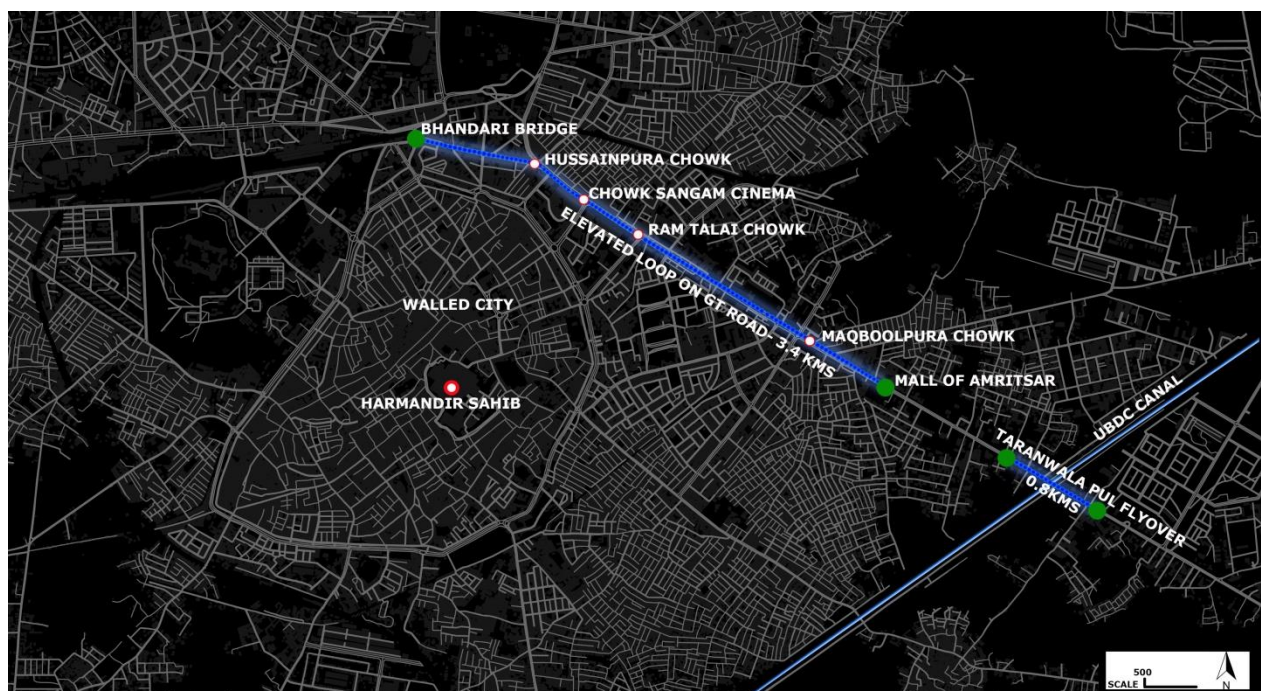


Figure: Proposed illumination of entire stretch flyover.

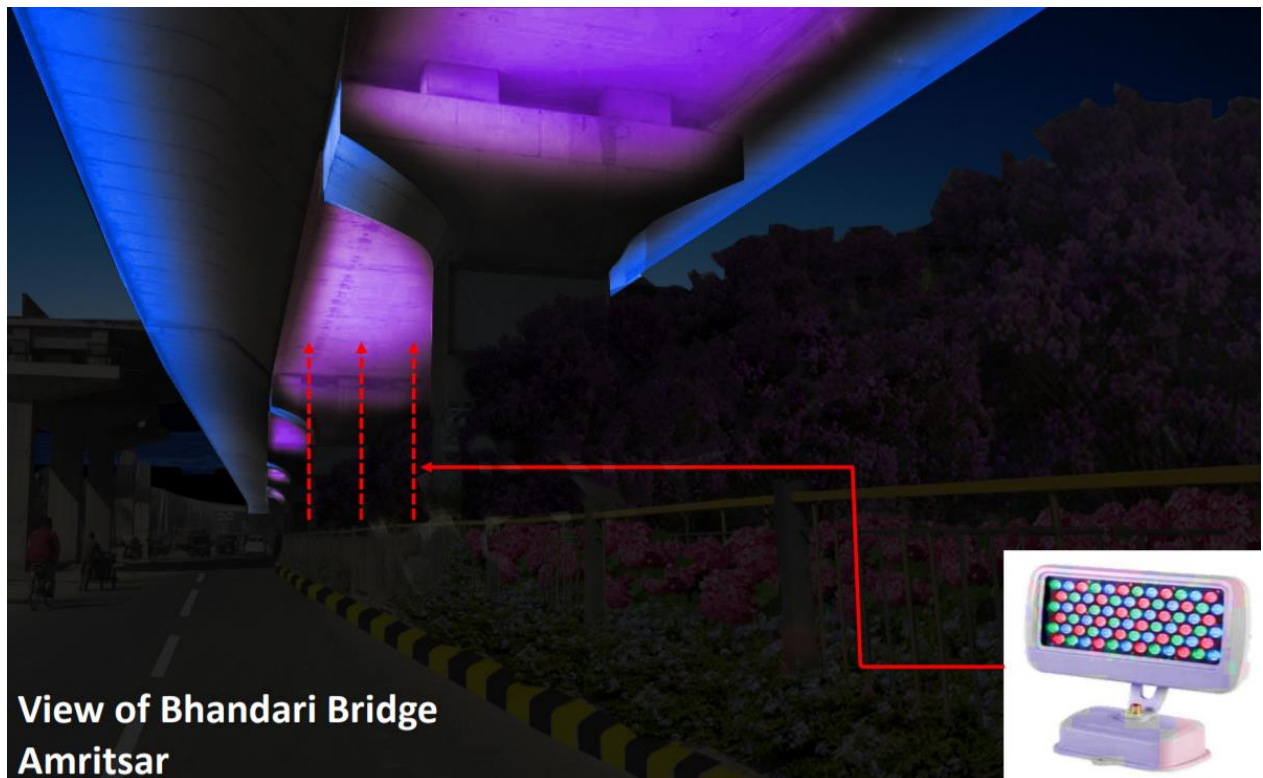


Figure: Night view with lighting of elevated section of flyover post LED lighting

II. Spaces below Kichlu flyover on Court Road (0.60 km)

Existing Conditions:

The flyover being one of the main connectors of the city to the Airport remains dark and gloomy during the night with very less illumination below flyover area. The lighting at present is very less which may promote illegal and suspicious activities leading to unsafe and insecure conditions at night.

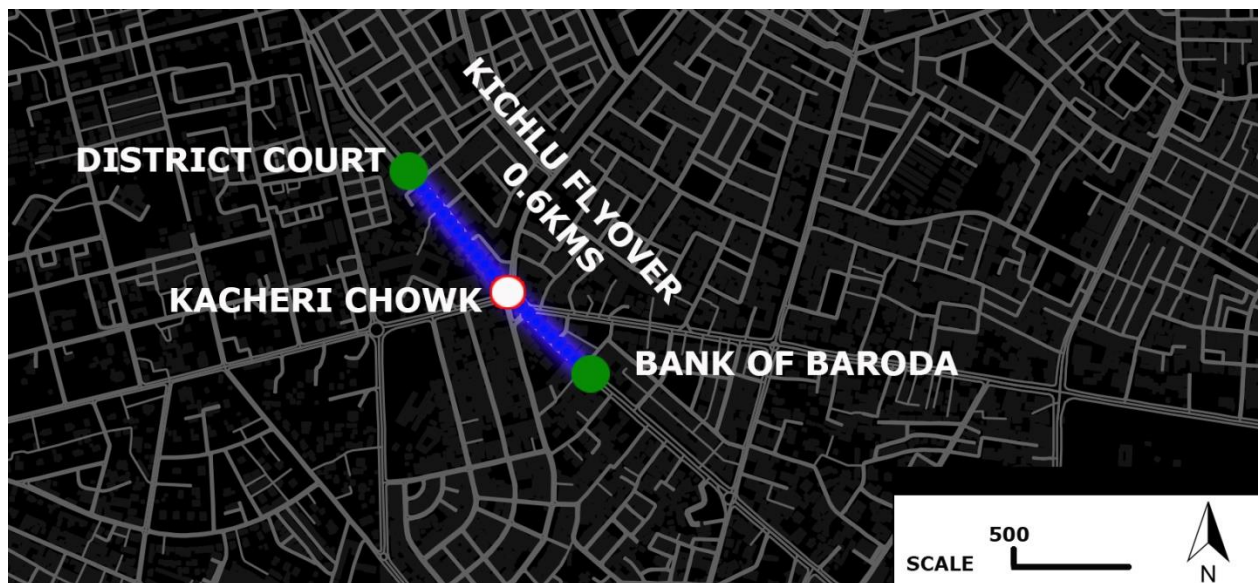


Figure: Proposed illumination of Kichlu flyover.

Proposal:

The proposal includes lighting as one of major components and hence illumination in spaces below flyovers transforms the existing dark space into the bright, well – lit and aesthetically appealing space. According to standards and comfort of drivers while driving, LED type of lighting with luminous efficiency as specified have been provided. LED Lighting is proposed along the entire stretch of flyover. Street light luminaires will light whole public space making it more safe and secure. Ground embedded uplighters are proposed to highlight landscape elements which will further add character to the space. LED lights produce more illumination in less wattage and hence are sustainable and economical.

There are different types of lights proposed as per requirement of space – LED flood light, ground embedded uplighters, Post top lights and RGB strip lighting in continuation along the edge of the segment. The colour of these lights is in synchronization with the landscape/plantation theme. The continuous lighting along the segment will illuminate the entire stretch of the flyover.

III. Solar Panel Locations: Solar panels shall be located on 06 (six) BRTS bus stops on elevated road as per the sites mentioned above. Some site is available on Govt. Building near Kichlu Flyover.

SECTION VIII - FINANCIAL BID/ PRICE SCHEDULE

(TO BE FILLED ONLINE ONLY; This is only a template and exact format may vary)

SL. NO	Particulars of work	Qty	Rate	Amount (Rs.)	Bidders Quoted Percentage <i>(above/ below/at par)</i>
1	Development and Beautification of Spaces below Flyovers at Amritsar (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period	1		4,97,65,809/-	
	Total (Round off)				

Total Amount = Rs.....

Total Amount = (in words)

Note:

1. If there is a discrepancy between the unit price and total price, the unit PRICE shall prevail.
2. This format is to be filled online only. Any hard copy submission of the Financial Bid shall lead to rejection of the Bid.

Signature of Authorized Representative _____

Name & Designation _____

Name of Bidder : _____

Business Address _____

Date: _____

Seal of the Bidder _____

SECTION IX – CONDITIONS OF CONTRACT

A. GENERAL CONDITIONS OF CONTRACT (GCC)

1. DEFINITIONS

- 1.1. Terms which are defined in the **Contract Data** may not necessarily have been defined in the conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

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

Central Control & Monitoring System (CCMS) means the computerised system set up by the Implementing Agency as a part of the Project to monitor and control the street lights.

Certificate of Installation Completion means the certificate to be issued by the Engineer-in-charge to the Implementing Agency in respect of the Completed Works.

Compensation Events are those defined in Clause 41 hereunder.

The **Completed Work** means the procurement, installation, improvement and commissioning of External Electrical & Solar works on the Project Sites including setting up of a Central Control & Monitoring System, completed in all respects as per laid down in Scope of Work, Technical Specifications, Drawings & Conditions of the Contract to the entire satisfaction of Engineer-in-charge.

The **Completion Date** is the date of completion of the Completed Works as certified by the Engineer-in-charge in accordance with Sub-Clause 51.1.

Communication between parties are the written and signed letters, notices, reminders, memorandum and instructions recorded in the instruction book or books kept at site.

The **Contract** is the contract between the Employer and the Implementing Agency to execute, complete, operate and maintain the Project/ Works during 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period. It also consists of the documents listed in Clause 2 below.

The **Contract Data** defines the documents and other information which comprise the Contract. The Engineer-in-charge will clarify queries on the **Contract Data**.

“**Contract Period**” means works execution Period of 09 (Nine) months followed by 1 (one) year of Defect Liability Period and Operation followed by Operation and Maintenance Period of 2 (two) years. This Contract Period will begin from the date of signing of the Contract and will end with successful taking over of the Project Site by Municipal Corporation, Amritsar. It will also include any time extensions given by the Procuring Entity.

The **Implementing Agency** means the Successful Bidder with whom the Employer has executed the Contract for implementation of the Project.

The **Implementing Agency's Bid** is the completed Bidding Documents submitted by the Implementing Agency to the Employer and includes Technical and Financial Bids.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract. Contract Price, Contract Value

and Contract Amount are used synonymously.

Days are calendar days; **Months** are calendar months.

A **Defect** is any part of the Project/Works not completed in accordance with the Contract or any part or component of the Electrical & Solar works developing fault after installation or during operation.

The **Defects Liability Period** is the period named in the **Contract Data** and calculated from the Completion Date.

Drawings means the Drawings of the Works, as included in the Contract and any additional and modified drawings issued by)or on behalf of(the Employer or by the Implementing Agency (subject to approval of Employer) in accordance with the Contract.

The **Employer** means the Amritsar Smart City Limited who will employ the Implementing Agency to carry out the Project. The Employer may delegate any or all functions to a person or body nominated by him for specified functions.

The **Engineer-in-charge** is the person/ consultancy firm/ PIU named in the **Contract Data** (or any other competent person appointed and notified to the Implementing Agency to act in replacement of the Engineer-in-charge) who is responsible for supervising the Works/ Project, administering the Contract, certifying payments due to the Implementing Agency, issuing and valuing Variations to the Contract, awarding extensions of time, and valuing the Compensation Events and getting the contract executed on behalf of the Employer.

Equipment is the Implementing Agency's (or its sub-contractor's) machinery, equipment, tools, solar panels, lighting fixtures, LED flood lights, street lights LED luminaries, LED strip lights, consumables and vehicles both for the Electrical & Solar components brought to the Site to implement the Project/ Works.

The **Government** or the **State Government** shall mean the Government for the State of Punjab.

GCC mean the General Conditions of Contract contained in this section.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Implementing Agency shall complete the installation works (*including successful trial run*) of the LED Project/ Works. The Intended Completion Date is specified in the **Contract Data**. The Intended Completion Date may be revised only by the Engineer-in-charge by issuing an extension of time.

Materials are all supplies, resources, things, items, objects, including consumables, used by the Implementing Agency for incorporation in the Project/Works.

MCA means the Municipal Corporation Amritsar.

Operation and Maintenance or O&M means operation and maintenance (routine or major) of the Project/ Works and includes all matters connected with or incidental to such operation and maintenance, provision of services and facilities in accordance with the terms hereof.

Operation & Maintenance Period means the period starting from the date of issuance of Certificate of Installation Completion and ending upon issuance of Project Completion Certificate.

Plant is any integral part of Project/ Works which have a mechanical, electrical, electronic or chemical or biological function.

Project means the **Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period.**

Project Completion Date means the date when the Operation & Maintenance Period ends as evidenced by the issuance of Project Completion Certificate by the Engineer-in-charge/ Employer.

Project Completion Certificate means the certificate issued by the Engineer-in-charge/ Employer upon successful completion of the Project including Operation & Maintenance Period in accordance with the Conditions of Contract.

Project Sites is the area specified as such in the **Contract Data**.

Routine Maintenance is the maintenance of the installed Electrical & Solar works as specified in the **Contract Data**.

Services means services ancillary to the installation to the Electrical & Solar works, such as transportation, insurance, installation, commissioning, operation and maintenance of the works covered under the Contract;

Start Date is given in the **Contract Data**. It is the date when the Implementing Agency shall commence execution of the Project/ Works. It does not necessarily coincide with any of the Site Possession Dates.

Sub-contractor is a person or corporate body who has been approved by the Employer for entering into a contractual arrangement with the Implementing Agency to carry out a part of the work under the Contract.

Technical Specifications means the specification of the Project/ Works specified in Section VI of the Bid Documents and includes any modification or addition made or approved by the Engineer-in-charge during the course of execution of the Project.

Temporary Works are works designed, constructed, installed and removed by the Implementing Agency which are needed for development of the Works.

Tender Evaluation Committee [TEC] is the committee constituted by the Employer for receiving, opening, processing and evaluating the bids.

A **Variation** is an instruction given by the Engineer-in-charge, which varies the Project/Works. The **Project/Works**, as defined in the **Contract Data**, are what the Contract requires the Implementing Agency to construct, install, maintain and turn over to the Employer through the Engineer-in-charge, as defined in the **Contract Data**. This term shall be used synonymously with the term “Works” hereinafter or anywhere in the Contract.

2. INTERPRETATION

- 2.1. In interpreting these Conditions of Contract, singular also means plural, male also means female

or neuter and the other way around. Headings have no significance. The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions. In this Contract, except where the context requires otherwise:

- a) Works have their normal meaning under the language of the Contract unless specifically defined. The Engineer-in-charge will provide instructions clarifying queries about the Conditions of the Contract;
 - b) words indicating the singular also include the plural and words indicating the plural also include the singular;
 - 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;
 - e) The word “tender” is synonymous with “bid” and “renderer” with “bidder” and the words “tender document” with “bidding document”.
- 2.2. The damages payable by the Implementing Agency, as set forth in the Conditions of Contract, whether liquidated or not or on *per diem* basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “**Damages**”).
- 2.3. The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.
- 2.4. Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act 1897 shall not apply.
- 2.5. The Implementing Agency may complete the work in sections as per the approved work program and in such case, references in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date shall apply to such section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works.)
- 2.6. The documents forming the Contract shall be interpreted in the following order of priority:
- a) Contract
 - b) Letter of Acceptance
 - c) Contract Data including Scope of Work & Technical Specifications
 - d) Conditions of Contract including Conditions of Particular Application
 - e) Specifications
 - f) Drawings
 - f) Bill of Quantities
 - g) Implementing Agency’s Bid and
 - h) any other document listed in the **Contract Data** as forming part of the Contract
- If there are varying or conflicting provisions in the documents forming part of the contract, the authority competent to approve the tender shall be the final deciding authority with regard to the intention of the document.

3. LANGUAGE AND LAW

- 3.1. The language of the Contract and the law governing the contract are stated in the **Contract Data**.

4. ENGINEER-IN-CHARGE'S DECISIONS

- 4.1. Except where otherwise specifically stated, the Engineer-in-charge shall decide contractual matters between the Employer and the Implementing Agency in the role representing the Employer. Any clarifications on the **Contract Data** shall be given by the Engineer-in-charge.

5. DELEGATION

- 5.1. The Employer may delegate any of his duties and responsibilities to other person after notifying the Implementing Agency and may cancel any delegation after notifying the Implementing Agency.

6. COMMUNICATIONS

- 6.1. Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered under Registered post or Speed post or Facsimile (fax) or other electronic means. 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. The notice sent by Facsimile (fax) or other electronic means shall be effective on confirmation of the transmission.

7. SUB-CONTRACTING

- 7.1. The Implementing Agency may engage a sub-contractor to execute any one of the two major components of the Project (i.e. installation of LED lights or Solar Rooftop Photovoltaic panels) approved by the Employer in writing in accordance with the provisions of ITB clauses 2.1.8 & 2.1.9. Sub-contracting does not alter the Contract's obligations and responsibilities under the contract.

8. OTHER IMPLEMENTING AGENCIES

- 8.1. The Implementing Agency shall cooperate and share the Project Site with other contractors, public authorities, utilities and the Engineer-in-charge between the dates given in the Schedule of other contractors. It is understood by the Implementing Agency that the Project herein is an extension of the Development & Beautifications of spaces under the flyovers and elevated loop on GT road Amritsar, involving civil and horticulture works in Phase -1, so the Implementing Agency is essentially required to co-ordinate its work program (and if required to modify its work program and/ or work requirements with the approval of the Engineer-in-Charge) with that of the contractor executing the Phase-1 development and beautification works.

9. PERSONNEL

- 9.1. The Implementing Agency shall employ the key personnel named in the Schedule of Key Personnel as referred to in the **Contract Data** and such other skilled/ semi-skilled personnel to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-charge. The Engineer-in-charge will approve any proposed replacement of key personnel only if their qualifications, abilities and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 9.2. If the Engineer-in-charge asks the Implementing Agency to remove a person who is a member

of Implementing Agency's staff or his work force or Sub Implementing Agency's staff or his work force stating the reasons, the Implementing Agency shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. LABOUR & COMPLIANCE WITH LABOUR REGULATIONS

- 10.1. The Implementing Agency shall unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.
- 10.2. The Implementing Agency shall, if required by the Engineer-in-charge, deliver to the Engineer-in-charge a return in detail, in such form and at such intervals as the Engineer-in-charge may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Implementing Agency on the site and such other information as the Engineer-in-charge may require.
- 10.3. During continuance of the Contract, the Implementing Agency and his sub-Implementing Agency 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. The Implementing Agency 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/bye laws/ Acts/ Rules/ regulations including amendments, on the part of the Implementing Agency, the Engineer-in-charge/Employer shall have the right to deduct this amount from any money due to the Implementing Agency, including his amount of performance security. The Employer/ Engineer-in-charge shall also have right to recover from the Implementing Agency any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Implementing Agency and the Sub-Implementing Agency in no case shall be treated as the employees of the Employer at any point of time.

11. EMPLOYER'S AND IMPLEMENTING AGENCY'S RISKS

- 11.1. The Employer carries the risk which this Contract states are Employer's risks, and the Implementing Agency carries the risks which this Contract states are Implementing Agency's risks.
- 11.2. **EMPLOYER'S RISKS**

The Employer is responsible for the excepted risks which are : (a) in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Implementing Agency's employees) and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Implementing Agency's design.

- 11.3. **IMPLEMENTING AGENCY'S RISKS**

All risks of loss of or damage of physical property and of personal injury and death which

arise during and in consequence of the performance of the Contract other than the excepted risks referred to in Clause 11.2, are the responsibility of the Implementing Agency.

12. LIMITATION OF LIABILITY

- 12.1. Neither party shall be liable to the other party in respect of any loss on any account whatsoever in relation to the Work, towards any loss of estimated profit, loss of any other thing or for any direct or indirect/ consequential loss or damage, which might be suffered or has been suffered by the other party in connection with any event arising out of the Contract except for those, which have been specifically provided for in the Contract Agreement.

13. INSURANCE

- 13.1. The Implementing Agency shall provide, in the joint names of the Engineer-in-charge and the Implementing Agency, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the **Contract Data** for the following events which are due to the Implementing Agency's risk:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract: and
- (d) personal injury or death.

- 13.2. Policies and certificates for insurance shall be delivered by the Implementing Agency to the Engineer-in-charge for the Engineer-in-charge's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

- 13.3. If the Implementing Agency does not provide any of the policies and certificates required, the Employer may affect the insurance which the Implementing Agency should have provided and recover the premiums the Employer has paid from payments otherwise due to the Implementing Agency or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4. Alterations to the terms of insurance shall not be made without the approval of the Engineer-in-charge.

- 13.5. Both parties shall comply with any conditions of the insurance policies.

14. WORKS TO BE COMPLETED BY THE INTENDED COMPLETION DATE

- 14.1. The Implementing Agency (and its sub-contractor in terms of Clause 7 if engaged) may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Implementing Agency, as updated with the approval of the Engineer-in-charge, and complete them by the Intended Completion Date.

15. SCOPE OF WORK

- 15.1. The broad scope of work of the Implementing Agency includes Supply, Installation, Commissioning, Operation and Maintenance of:
- a) new lighting fixtures on the segments and piers of the flyover throughout as per approved design and drawings to enhance the stretch at night;

- b) under bridge lighting comprising of colour changing LED flood lights, street lights LED luminaries, LED strip lights ground embedded in ground up lighter luminaries, etc.
 - c) Central Control & Monitoring System to monitor and control the street lights; and
 - d) Grid tied Solar Rooftop Photovoltaic system on rooftop of BRTS stations for electricity generation.
- 15.2. The Implementing Agency shall achieve completion of installation of both Electrical & Solar components as per the Project milestones set forth in these General Conditions of Contract.
- 15.3. While carrying out the Scope of Work under the Contract, the Implementing Agency shall comply and abide with Technical Specifications as mentioned in Section VI, all applicable laws, orders of Courts of Record, any policy, rules and regulations of Government of India or State Government of Punjab. The Implementing Agency shall make his own arrangement for the disposal of the spoils from the Works to such place where the same shall not cause nuisance and should be acceptable to the authorities concerned.

16. SITE INVESTIGATION

- 16.1 To the extent which was practicable)taking account of cost and time(, the Implementing Agency shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Bid for Works. To the same extent, the Implementing Agency shall be deemed to have inspected and examined the Project Sites, its surroundings, the above data and other available information, and to have been satisfied before submitting the Bid as to all relevant matters, including)without limitation(:
- the form and nature of the Site, including sub-surface conditions,
 - the hydrological and climatic conditions,
 - the extent and nature of the work and goods necessary for the execution and completion of the Works and the remedying of any Defects,
 - the Laws, procedures and labour practices of India, particularly Punjab, and
 - the Implementing Agency's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

17. IMPLEMENTING AGENCY TO INSTALL THE WORKS

- 17.1. The Implementing Agency shall install the Electrical & Solar components of the Project as per the Scope of Work & Technical Specifications specified under Particular Conditions of Contract (Section V & VI of the Bidding Documents) and the approved Drawings.

18. DEFECTS LIABILITY PERIOD AND OPERATIONS & MAINTENANCE

- 18.1. Operation & Maintenance Period shall be of 03 (three) years including 01 (one) year of Defect Liability Period, after total completion of Works as certified by the Engineer-in-charge. It shall commence from the date of issuance of Certificate of Installation Completion.
- 18.2. During the aforesaid period of 3 year of Operation and Maintenance, the Implementing Agency shall be solely responsible for undertaking operation, maintenance including undertaking minor/ major repairs that may be required from time to time and remedying/ repairing, restoring to the original condition any apparent, virtual or observed defects, deficiencies in the Works, or its performance as per the Scope of Work & Technical

Specifications (Sections V & VI), to the satisfaction of the Engineer-in-charge. If the Implementing Agency fails to repair & restore the defect(s)/ deficiency(ies) after a notice issued by the Engineer-in-Charge, the Employer will be free to get it remedied at the risk and cost of the Implementing Agency besides taking any other action including levy of Liquidated Damages at the rate of 0.07% of the Contract Price for each day of delay, as per the Contract, if the Implementing Agency does not get it remedied within the period specified in such notice.

19. APPROVAL BY THE ENGINEER-IN-CHARGE

- 19.1. The Implementing Agency shall submit specifications and drawings complete in all respects supported by requisite documents showing the proposed works including Temporary Works to the Engineer-in-charge, who is to approve them if they comply with the Technical Specifications and Drawings.
- 19.2. The Engineer-in-charge's approval shall not alter the Implementing Agency's responsibility for design of the Works.
- 19.3. The Implementing Agency shall obtain approval of third parties to the design of the Works where required.
- 19.4. All Drawings prepared by the Implementing Agency for the execution of the temporary or permanent Works in line with the Designs/ Drawings provided by the Employer at the bidding stage, are subject to prior approval by the Engineer-in-charge before their use. In case of dispute, if any, decision of the Chief Engineer-in-charge will be final and binding.

20. SAFETY

- 20.1. The Implementing Agency shall be responsible for maintaining the safety of all activities on the site, including smooth flow of traffic at his own cost.

21. DISCOVERIES

- 21.1. Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the Employer. The Implementing Agency is to notify the Engineer-in-charge of such discoveries and carry out the Engineer-in-charge's instructions for dealing with them.

22. POSSESSION OF THE PROJECT SITE

- 22.1. The Employer shall facilitate in handing over possession of the specific sites/ locations mentioned in the Contract Data, to the Implementing Agency from the MCA, as per the work program of the Implementing Agency approved by Engineer-in-charge. If possession of a part of the site required as per the work program is not given by the date when it is actually required for carrying out the Work, the Employer is deemed to have delayed the start of the relevant activities for that part of the site and this will be a Compensation Event for the purpose of time extension only.

23. ACCESS & INSPECTION

- 23.1. The Employer, Engineer-in-charge or any other person authorized by the Engineer-in-charge or Employer shall at all times have access to the Site and/ or to any place where work in connection with the Contract is being carried out or is intended to be carried out.

- 23.2. All the work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his senior/ subordinate and the Implementing Agency shall at all times during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his senior/subordinate to visit the works shall have been given to the Implementing Agency, either himself to be present to receive orders and instructions or have a responsible agent, duly accredited in writing, present for that purpose. Orders given to the Implementing Agency's agent shall be considered to have the same force as if they had been given to the Implementing Agency himself.

24. INSTRUCTIONS

- 24.1. The Implementing Agency shall carry out all the instructions of the Engineer-in-charge pertaining to Works which comply with the applicable laws where the site is located.

25. DISPUTES RESOLUTION MECHANISM

- i) If any dispute or differences of any kind what-so-ever arise between the Procuring Entity, its authorized representatives and the Implementing Agency in connection with or arising out of this Contract or the execution of Work, these shall be resolved as under.
- ii) Whether before its commencement or during the progress of Project/ Works or after the termination, abandonment or breach of the Contract, the dispute shall in the first instance supported with complete documents and further documents, if any, required by him, be referred for settlement to the Engineer-in-Charge of the Work and he shall, within a period of sixty (60) days after being requested in writing by the Implementing Agency to do so, convey his decision to the Implementing Agency. Such decision in respect of every matter so referred shall, subject to arbitration as hereinafter provided, be final and binding upon the Implementing Agency. In case the Work is already in process, the Implementing Agency shall continue with the execution of the Work as aforesaid with all due diligence, whether any of the parties requires arbitration as hereinafter provided or not.
- iii) If the Engineer-in-Charge has conveyed his decision to the Implementing Agency and no claim for arbitration has been filed by the Implementing Agency within a period of sixty (60) days from the receipt of the letter communicating the decision, the said decision shall be final and binding upon the Implementing Agency and will not be a subject matter of arbitration at all.
- iv) If the Engineer-in-Charge fails to convey his decision within a period of sixty (60) days from the date on which the said request was made by the Implementing Agency, he may refer the dispute for arbitration as hereinafter provided.
- v) All disputes or differences in respect of which the decision is not final and conclusive shall, at the request of either party made in communication sent through registered A.D. post, be referred for arbitration to the sole Arbitrator appointed by CEO, PMIDC.
- vi) The reference to the Arbitrator shall be made by the claimant party within one hundred twenty (120) days from the date of dispute of claim arises during the execution of Work. If the claim pertains to rates or recoveries introduced in the final bill, the reference to the Arbitrator shall be made within six (6) calendar months from the date of payment of the final bill to the Implementing Agency or from the date a registered notice is sent to the Implementing Agency to the effect that his final bill is ready by the Engineer-in-charge (whose decision in this respect shall be final and binding) whichever is earlier.

- viii) The provisions of the Arbitration and Reconciliation Act, 1996 or any other statutory law there under or modification thereof and for the time being in force shall apply to the arbitration proceedings under this clause.
- ix) The Arbitrator shall give a reasoned award for each claim/counter claim.
- x) The independent claims of the party other than one seeking arbitration as also the counter claims of any party shall be entertained by the arbitrator.
- xi) The venue of arbitration shall be **Amritsar**, Punjab. The work under the contract shall continue during the arbitration proceedings.
- xii) The stamp fee due on the award shall be payable by the party as desired by the Arbitral Tribunal and in the event of such party's default, the stamp fee shall be recoverable from another sum due to such party under this or any other contract.
- xiii) Neither party shall be entitled to bring a claim for arbitration, if it is not filed as per the time period already specified or within six (6) months of the following:
 - a) of the date of completion of the Work as certified by the Engineer-in-charge or
 - b) of the date of abandonment of the Work or breach of Contract under any of its clauses, or
 - c) of its non-commencement or non-resumption of Work within ten (10) days of written notice for commencement or resumption as applicable, or
 - d) of the cancellation, termination or withdrawal of the work from the Implementing Agency in whole or in part and/or revision for closure of the Contract, or
 - e) of receiving an intimation from the Engineer-in-charge that the final payment due or to be recovered from the Implementing Agency had been determined, for the purpose of payment/adjustment whichever is the latest. If the matter is not referred to arbitration within the period prescribed above, all the rights and claims of either party under the contract shall be deemed to have been forfeited and absolutely barred by the time for arbitration and even for civil litigation.
- xv) No question relating to this Contract shall be brought before any civil court without first invoking and completing the arbitration proceedings, if the issue is covered by the scope of arbitration under the Contract. The pending arbitration proceedings shall not disentitle the Engineer-in-charge to terminate the Contract and to make alternate arrangement for completion of the Works.
- xvi) Arbitrator shall be deemed to have entered into the reference on the day, notice is issued to the parties fixing the first date of hearing. The Arbitrator may, from time to time, with the consent of the parties enlarge the initial time for making and publishing the award. However the Arbitrator shall make all out efforts to decide each claim within a period of six (6) months from the date of initiation.
- xvii) The expiry to the contractual time limit, whether originally fixed or extended, shall not invalidate the provisions of this clause.

B. TIME CONTROL

26. PROGRAMME

- 26.1. Within the time stated in the **Contract Data**, the Implementing Agency shall submit to the Engineer-in-charge for approval a program showing the general methods, arrangements, order and timing for all the activities in the Works along with monthly cash flow forecast. Provided however, such work program shall be in line with the Project timelines stipulated by the Employer in the **Contract Data**.
- 26.2. An update of the Program shall be a Program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 26.3. The Implementing Agency shall submit to the Engineer-in-charge, for approval, an updated Program at intervals no longer than the period stated in the **Contract Data**. If the Implementing Agency does not submit an updated Program within this period, the Engineer-in-charge 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 program has been submitted.
- 26.4. The Engineer-in-charge's approval of the Program shall not alter the Implementing Agency's obligations. The Implementing Agency may revise the program and submit it to the Engineer-in-charge again at any time. A revised program is to show the effect of variations if any and compensation events.
- 26.5. **The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the Project for its execution.** The Implementing Agency 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 the field laboratory, if any setup by the Implementing Agency.

27. EXTENSION OF THE INTENDED COMPLETION DATE

- 27.1. If the Implementing Agency shall desire an extension of the time for completion of the Work on the ground of his having been unavoidably hindered in its execution or due to any other ground, he shall apply in writing to the Engineer-in-charge (with corresponding time extension in Performance Security) within thirty (30) days of the date of hindrance (but before the expiry of time limit) on account of which he desires such extent in as aforesaid and the Employer if in his opinion (which shall be final) reasonable grounds be shown therefore and also taking into account the recommendations of the Engineer-in-charge, authorize such extension of time as may in his opinion be necessary or proper. If the Implementing Agency fails to apply for extension as aforesaid and the Work is not completed within the time limit, the Contract shall be determined absolutely after action under relevant clauses.

28. DELAYS ORDERED BY THE ENGINEER-IN-CHARGE

- 28.1. The Engineer-in-charge may instruct the Implementing Agency to delay the start or progress of any activity within the Works. However, any delay of totaling beyond thirty (30) days shall require prior written approval of the Employer.

29. MANAGEMENT MEETINGS

- 29.1. The Engineer-in-charge may require the Implementing Agency to attend a management meeting. The business of a management meeting shall be to review the plans for

remaining work and to deal with matters raised in accordance with the early warning procedure.

- 29.2. The Engineer-in-charge shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer-in-charge either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

30. EARLY WARNING

- 30.1. The Implementing Agency is to notify the Engineer-in-charge at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of Work, increase the Contract Price or delay the execution of Works. The Engineer-in-charge may require the Implementing Agency to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Implementing Agency as soon as reasonably possible.
- 30.2. The Implementing Agency shall cooperate with the Engineer-in-charge in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the Work and in carrying out any resulting instruction of the Engineer-in-charge.

C. QUALITY CONTROL

31. INSPECTION, TESTING/ TRIAL RUN AND QUALITY CONTROL

- 31.1. The Implementing Agency shall intimate at least 7 (seven) days in advance about the readiness of the Electric & Solar components to commensurate with the work program, for getting material inspected. The Employer/ Engineer-in-charge at its discretion may waive the inspection or conduct inspection along with other inspecting officer(s)/ experts of MCA/ PEDDA to test/ examine and inspect the Electric & Solar components. Such inspection and acceptance shall not however relieve the Implementing Agency from its sole and entire responsibility for procuring the Electric & Solar components conforming to the requirements of the Technical Specifications nor shall it prejudice to any claim because of defective or unsatisfactory Electric & Solar components. The expenses for inspection and testing shall be borne by the Implementing Agency which apart from other things will include expenses for travelling, lodging, etc of the inspecting officials.
- 31.2. The Engineer-in-charge along with other authorized officials of PEDDA, MCA or PSPCL will be free to conduct surprise, random or in situ checks any time during the execution and after the completion of the Work but not later than the Operation & Maintenance Period, so as to have cross check in quality of works carried out and compliance to specifications and standards at all stages of the Work.
- 31.3. Nothing in this clause shall reduce the overall responsibility of the Implementing Agency regarding quality and he shall remain liable for any defect in the execution of the Project/Works at all stages during the currency of the Contract Period.
- 31.4. Upon completion of installation/ part installation of Electrical and/ or Solar components of the Project at one or more of the locations comprised in the Project Site, and before commissioning of such completed section of the installed works, the Implementing Agency shall inform the Engineer-in-charge about the readiness of the completed section to be put to test/ trial run. The Engineer-in-charge on the date and time accompanied with other concerned

and authorized officials/ experts from PEDDA, MCA or PSPCL (as may be required) shall inspect the works in the completed section of the Project Site and the Implementing agency shall in the presence of such officials/ experts also conduct trial run of the installed electrical and/ or solar components. The Engineer-in-charge shall prepare the report of such inspection and trial run mentioning in detail the defect(s)/ deficiencies/ faults/ slippages found and remedial steps required to be taken by the Implementing Agency to rectify the same and the time period within which such remedial/ rectification works are to be accomplished by the Implementing Agency. The Engineer-in-charge shall provide a copy of the same with the Implementing Agency and submit another copy to the Employer. The Implementing Agency shall forthwith take action on the Report by rectifying and repairing the defect(s)/ deficiencies so reported within the time allowed. Once all the defect(s)/ deficiencies are attended to, the Implementing Agency shall again notify the Engineer-in-charge for inspection and the procedure set forth in this clause 31.4 shall apply in *mutatis mutandis* to such second round of inspection.

- 31.5 In the event, the Implementing Agency fails to attend to the deficiencies pointed out in the report of the Engineer-in-charge within the specified time period (or within such extended time period as mutually agreed), the consequences as stipulated under Clause 34 shall apply.

32. IDENTIFYING DEFECTS

- 32.1. The Engineer-in-charge shall along authorized officials/ experts from PEDDA, MCA or PSPCL (as may be required) check the Implementing Agency's work and notify the Implementing Agency of any defects/ deviations from Technical Specifications and/ or Drawings and/ or requirements as per the Scope of Work, that are found. The notice of the Engineer-in-charge shall give the description of the defects/ deviations in sufficient detail, including the obligations as per the Contract. Such checking shall not affect the Implementing Agency's responsibilities. The Engineer-in-charge may also instruct the Implementing Agency to search for a Defect and to uncover and test any Work that the Engineer-in-charge considers may have a Defect.
- 32.2. If the Engineer-in-charge instructs the Implementing Agency to carry out a test not specified in the Technical Specification to check whether any Work has a defect and the test shows that it does, the Implementing Agency shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

33. CORRECTION OF DEFECTS

- 33.1. The Engineer-in-charge shall give notice to the Implementing Agency of any Defects at any time during the Contract Period. The Operation & Maintenance Period shall be extended for as long as Defects remain to be corrected.
- 33.2. Every time notice of a Defect is given, the Implementing Agency shall correct the notified Defect within the length of time specified by the Engineer-in-charge's notice.

34. UNCORRECTED DEFECTS

- 34.1. If the Implementing Agency has not corrected a Defect within the time specified in the Engineer-in-charge's notice, the Engineer-in-charge will assess the cost of having the Defect corrected, and recover twice of this amount from the payments due to the Implementing Agency and/ or from its Performance Security.

Note: *Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates, Engineer-in-charge will certify payments to Implementing Agency accordingly and the Implementing Agency shall be bound by the same.*

35. ISSUANCE OF CERTIFICATE OF INSTALLATION COMPLETION

- 35.1 Upon being satisfied that the installation works (both Electrical & Solar components) under the Project has been executed by the Implementing Agency in accordance with the Conditions of Contract, Scope of Work & Technical Specifications, Employer's requirements, Drawings, etc., and also upon the trial run having been conducted successfully, the Engineer-in-charge shall issue a Certificate of Development Completion signifying completion of construction of Works and commencement of Defects Liability Period and Operation & Maintenance Period. However no certificate shall be issued nor shall the work be considered to be complete until the Implementing Agency has cleared all scaffolding, surplus materials, garbage and all huts and sanitary arrangements set up for the labour at the site and cleaned off the dirt from the Project Sites.

D. COST CONTROL

36. BILL OF QUANTITIES

- 36.1. The Bill of Quantities shall contain items for the installation, testing and commissioning of the works to be done by the Implementing Agency.
- 36.2. The Bill of Quantities is used to calculate the Contract Price. The Implementing Agency is paid for the quantity of work done at the rate in the Bill of Quantities for each item.

37. CHANGE IN THE QUANTITIES

- 37.1. The Engineer-in-charge shall have power to make any variations, alterations omission, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work, and the Implementing Agency shall be bound to carry out the work in accordance with any instructions which may be given to him in writing, signed by the Engineer-in-charge. Such alterations/ additions/substitutions shall not invalidate the contract and shall be carried out by the Implementing Agency on the same conditions in all respect on which he agreed to do the main work. The time of completion of the work shall be extended in the proportion that the altered, additional or substituted works bears to the original contract work and the certificate of the Engineer-in-charge shall be conclusive as to such proportion.
- 37.2. If the final quantity of work done differs from the quantity in the Bill of Quantities for the particular item by more than 25% (twenty-five percent) provided the change exceeds 1% (one percent) of initial Contract Price, the Engineer-in-charge shall adjust the rate to allow for the change, duly considering:
- a) Justification for rate adjustment as furnished by the Implementing Agency.
 - b) Economies resulting from increase in quantities by way of reduced plant, equipment and overhead costs.
 - c) Entitlement of the Implementing Agency to compensation events where such events are caused by any additional work.
 - d) The revised rates will be applicable to the quantity that exceeds 25% (twenty five percent) limit and not on the entire quantity.
- 37.3. The Engineer-in-charge shall not adjust rates from changes in quantities if thereby the

Initial Contract Price is exceeded by more than 15% (fifteen percent), except with the prior approval of the Employer.

- 37.4. If requested by the Engineer-in-charge, the Implementing Agency shall provide the Engineer-in-charge with a detailed cost breakdown of any rate in the Bill of Quantities.

38. VARIATIONS

- 38.1. All variations shall be included in updated Programs produced by the Implementing Agency.

39. PAYMENT FOR VARIATIONS

- 39.1. The Implementing Agency shall provide the Engineer-in-charge with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Engineer-in-charge. The Engineer-in-charge shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Engineer-in-charge and before the Variation is ordered.
- 39.2. If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Engineer-in-charge, the quantity of work above the limit stated in Sub Clause 37.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Implementing Agency shall be in the form of new rates for the relevant items of work.
- 39.3. If the Implementing Agency's quotation is unreasonable, the Engineer-in-charge may order the Variation and make a change to the Contract Price which shall be based on Engineer-in-charge's own forecast of the effects of the Variation on the Implementing Agency's cost.
- 39.4. If the Engineer-in-charge decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 39.5. The Implementing Agency shall not be entitled to additional payment for costs which could have been avoided by giving early warning.

40. CASH FLOW FORECASTS

- 40.1. When the Program is updated, the Implementing Agency is to provide the Engineer-in-charge with an updated cash flow forecast.

41. PAYMENT CERTIFICATES

- 41.1. The Implementing Agency shall submit to the Engineer-in-charge monthly statements/bills of the estimated value of the Work completed less the cumulative amount certified previously, along with copies of the following documents:
- (i) measurements and quantities of items of work done since last bill; and
 - (ii) copies of instructions recorded in the instruction book containing the instructions and compliance made thereof, covering the work done since last bill.

The Implementing Agency shall submit all bills as per the format prescribed by the Engineer-in-charge.

- 41.2. The Engineer-in-charge shall check the Implementing Agency's monthly statements within thirty (30) days and certify the amount to be paid to the Implementing Agency after taking into account any deductions for advance payments, retention, other recoveries in terms of the contract and taxes at source, as applicable under the law, and the credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in clause 47. The Implementing Agency shall be required to sign the corrections made, if any, in token of acceptance of the same, before release of payment.
- 41.3. The value of work executed shall be determined by the Engineer-in-charge.
- 41.4. The value of work executed shall include the valuation of Variations and Compensation Events. The Implementing Agency shall be deemed to have waived off all claims not included in such bills/statements and will have no right to enforce any claim not so included, whatsoever be the circumstances.
- 41.5. The Engineer-in-charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in light of later information.

42. PAYMENTS

- 42.1. The Employer shall pay the Implementing Agency the amounts certified by the Engineer-in-charge as per the stages of payment set forth in the Contract Data.
- 42.2. Items of the Project/Works, for which no rate or price or percentage of lump sum rate has been entered in, will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 42.3. Any excess payment made to the Implementing Agency inadvertently or otherwise under this Contract or on any account whatsoever and any other sum found to be due to the Government by the Implementing Agency in respect of this Contract shall be recoverable from the performance security and/ or retention money of the Implementing Agency and/ or from any payments due to the Implementing Agency.
- 42.4. The Engineer-in-charge may refuse or suspend payments on account of a work when executed by a firm or by a Implementing Agency described in his Bid as a partnership firm, unless receipts are signed by all the partners, or one of the partners or an authorized representative of the Implementing Agency who produces a valid authority in writing enabling him to give effectual receipts on behalf of the firm.
- 42.5. All the intermediate payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed; and shall not preclude the requiring of bad, unsound, imperfect or unskilled work to be removed and taken away and reconstructed, re-laid or re-erected, or be considered as an admission of the performance of the contract or any part thereof in any respect of the occurring of any claim, nor shall it conclude, determine or effect in any way the powers of the Engineer-in-charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way, vary or affect the contract.

- 42.6. The receipt of the Accountant or Clerk for any money paid by the Implementing Agency to the Employer will not be considered as a receipt of payment to the Engineer-in-charge and the Implementing Agency shall be responsible for ensuring that he procures a receipt duly signed by the Engineer-in-charge.

43. COMPENSATION EVENTS

- 43.1. The following are Compensation Events unless they are caused by the Implementing Agency:
- a) The Employer does not facilitate access to a part of the Project Site as stipulated in Clause 22.
 - b) The Employer modifies the schedule of other contractors in a way which affects the work of the Implementing Agency under the Contract.
 - c) The Engineer-in-charge orders a delay or does not issue/ approve drawings, specifications and/ or instructions required for execution of Works on time.
 - d) The Engineer-in-charge gives an instruction for dealing with an unforeseen condition, caused by the Employer, or other reasons.
 - e) The effect on the Implementing Agency of any of the Employer's Risks.
 - f) The Engineer-in-charge unreasonably delays issuing of Certificate of Installation Completion.
 - g) Other Compensation Events as listed in the **Contract Data** or mentioned in the Contract.
- 43.2. If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/ or the Intended Completion Date will be extended. The Engineer-in-charge shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 43.3. As soon as information demonstrating the effect of each Compensation Event upon the Implementing Agency's forecast cost has been provided by the Implementing Agency, it is to be assessed by the Engineer-in-charge and the Contract Price shall be adjusted accordingly. If the Implementing Agency's forecast is deemed unreasonable, the Engineer-in-charge shall adjust the Contract Price based on Engineer-in-charge's own forecast. The Engineer-in-charge will assume that the Implementing Agency will react competently and promptly to the event.
- 43.4. The Implementing Agency shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Implementing Agency not having given early warning or not having cooperated with the Engineer-in-charge.

44. TAXES

- 44.1. The rates quoted by the Implementing Agency shall be deemed to be inclusive of all the taxes (including GST), levies, etc. including their variations as notified by the concerned authority from time to time during contract period and also of all the new taxes and levies that may be imposed by the competent authority that will be borne by the Contractor. The Engineer on behalf of the Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.
- 44.2. Nothing in the Contract shall relieve the Implementing Agency from its responsibility to pay any tax that may be levied in India on profits made or otherwise by it in respect of the

Contract.

- 44.3. The Implementing Agency shall comply with the proper bye-laws and legal orders of the local body or public authority under the jurisdiction of which the work is executed and pay all fees and charges for which he may be liable. Nothing extra shall be payable on this account.

45. CURRENCIES

- 45.1. All payments shall be made in Indian Rupees.

46. PRICE ADJUSTMENT

- 46.1. Contract price shall be adjusted for increase or decrease in rates of specified components only in accordance with the following principles and procedures and as per formula given in the **Contract Data**:

- (a) The price adjustment shall apply for the work done from the start date given in the **Contract Data** upto end of the initial intended completion date or extensions granted by the Engineer-in-charge. However, for the work done during the period for which extension has been granted by the Engineer-in-charge, the price adjustment shall be made using either the rates/prices prevailing at the time of intended date of completion, or the rates/prices as prevailing for the period under consideration, whichever is less.
- (b) The price adjustment shall be determined during each month from the formula given in the **Contract Data**. It will exclude value for works executed under variations for which rates will be worked separately based on the terms mutually agreed.

- 46.2. To the extent that full compensation for any rise or fall in costs to the Implementing Agency is not covered by the provisions of this or other clauses in the contract, the bid price shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

47. RETENTION MONEY (SECURITY DEPOSIT)

- 47.1. The Employer shall retain 5% (five percent) of the amount of each payment due to the Implementing Agency until Completion of whole of the Project/Works to cover the cost that may be involved in removal of defects, imperfections or taking remedial measures in the work executed.
- 47.2. 50% (fifty percent) of the total amount retained shall be repaid to the Implementing Agency upon issuance of Certificate of Installation Completion by the Engineer-in-charge.
- 47.3. The remaining amount of the retained money shall be repaid upon expiry of the O&M period, and after the Engineer-in-charge has satisfied itself that the Implementing Agency before the end of this Period has corrected all the defects pointed out to it.

48. LIQUIDATED DAMAGES

- 48.1. The Implementing Agency shall ensure due diligence to achieve progress of work not less than that indicated in the following milestones:

- | | | |
|-----|----------------------------------|-------|
| i) | On lapse of 25% contractual time | : 10% |
| ii) | On lapse of 50% contractual time | : 30% |

- iii) On lapse of 75% contractual time : 65%
- iv) On lapse of 100% (full) contractual time : 100%

In case of default, the Implementing Agency shall, notwithstanding issuance of a prior notice in this regard, pay prospectively as liquidated damages an amount equal to 1% of the total contract value for each week or part thereof of delay beyond the scheduled Completion Date or for every week of the period for which the work remains un-commenced after ten (10) days of the execution of the Contract; or the minimum progress of work stated above is not achieved, unless such default or slow progress is as a result of an event attributable to the Employer, MCA or Force Majeure.

- 48.2. In case of continued default or shortfall in progress, the Engineer-in-charge may go on enhancing the levy of liquidated damages, each time limited to 1% of the amount of contract per week of further default subject to maximum limit of 5% (five percent) of the Contract value.
- 48.3. The Employer on representation from Implementing Agency and after hearing both the Engineer-in-charge and Implementing Agency may reduce the amount of liquidated damages after passing speaking orders and his decision in writing shall be final and binding.
- 48.4. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer-in-charge shall correct any overpayment of liquidated damages by the Implementing Agency by adjusting the next payment certificate.

49. ADVANCE PAYMENT

- 49.1. The Engineer-in-charge on behalf of the Employer may make advance payment to the Implementing Agency of the amounts upto 5% (five percent) of the Contract amount (excluding operation and maintenance cost, if any) against provision by the Implementing Agency of an Unconditional Bank Guarantee in favour of the Employer, in a form and by a bank acceptable to the Employer in amounts and currencies equal to 110% (one hundred and ten percent) of the amount of 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 Implementing Agency. Interest @9% shall be charged on the advance payment.
- 49.2. The Implementing Agency is to use the advance payment only to pay for Equipment, purchase of Electrical & Solar components, Plant and Mobilization expenses required specifically for execution of the Works. The Implementing Agency shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Engineer-in-charge.
- 49.3. The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Implementing Agency, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, Price Adjustments, Compensation Events, or Liquidated Damages.

50. SECURED ADVANCE

- 50.1. The Implementing Agency, on signing an indenture in the form to be specified by the Engineer-in-charge, shall be entitled to be paid, during the execution of Work, upto 75% (seventy five percent) of the estimated value of any materials, which, in the opinion of the Engineer-in-charge, are non-perishable and which have been procured and adequately

stored against damage, but which have not been incorporated in the works at the time of making advance.

This secured advance shall be subject to the following:

- a) The materials are in accordance with the specification for Works;
- b) Such materials have been delivered to site, and are properly stored and protected against damage or deterioration to the satisfaction of the Engineer-in-charge. The Implementing Agency shall store the bulk material in measurable stacks;
- c) The Implementing Agency's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer-in-charge and such records shall be available for inspection by the Engineer-in-charge;
- d) The Implementing Agency has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer-in-charge for the purpose of valuation of the materials and providing evidence of ownership and payment thereof;
- e) Ownership of such materials shall be deemed to vest in the Employer for which the Implementing Agency has submitted an Indemnity Bond in an acceptable format; and
- f) The quantities of materials are not excessive and shall be used within a reasonable time as determined by the Engineer-in-charge.

51. SECURITIES

51.1 Performance Security

- (i) The Performance Security Bank Guarantee (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer and denominated in Indian Rupees. The Performance Security Bank Guarantee shall be in favour of the Employer and valid until sixty (60) days beyond the expiry of the Contract Period including the O&M Period. The additional security for unbalanced bids shall be valid until a date thirty (30) days from the issue of the Certificate of Performance Completion.
- (ii) The Performance Security Bank Guarantee shall be unconditional and irrevocable and issued by a scheduled Bank in India in the prescribed format. The Bank Guarantee shall be got verified from the issuing bank and confirmer, if any.
- (iii) The Implementing Agency shall be responsible to maintain the validity and enforceability of the Bank Guarantee at all times during the Contract Period including any extension thereof by way of time to time renewals which shall be done at least 20 (twenty) days prior to expiry of the previous period. In the event, the Implementing Agency fails to provide the renewed Bank Guarantee for the extended period within the aforesaid time period the Employer, the Employer may claim the full amount of the performance security. Upon such claim/ revocation, the Implementing Agency shall be liable to provide a fresh Bank Guarantee for the requisite amount.

51.2 Additional Performance Security

- (i) If the Bid, which results in the lowest evaluated bid price, is seriously imbalanced or

front loaded in the opinion of the Employer, by more than or less than 25% in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased (to a maximum of 20% of the bid value of such items) at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default by the successful Bidder under the Contract.

- (ii) Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer-in-charge determines an addition to the Contract Price as a result of a change in Cost, or as a result of a Variation of the Contract Price, the Implementing Agency shall at the Engineer-in-charge's request promptly increase the Performance security to a level of 10 percent of the increased Contract Price.
- (iii) The Performance Security (including additional security for unbalanced bids) shall be provided to the Engineer-in-charge on behalf of the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer and denominated in Indian Rupees.

51.3 The proceeds of the Performance Security shall be forfeited and shall be payable as compensation to the Employer on happening of any of the events mentioned below:

- i. when the Implementing Agency does not execute the agreement within the specified time; after issue of letter of acceptance/ placement of work order; or
- ii. when the Implementing Agency fails to commence the work within the time specified; or
- iii. when the Implementing Agency fails to complete the work satisfactorily within the time specified; or
- iv. when any terms and conditions of the contract is breached by the Implementing Agency; or
- v. failure by the Implementing Agency to pay the Employer any amount due, either as agreed by the Implementing Agency or determined under any of the Sub-Clauses of these Conditions, within 30 Days of the service of notice to this effect by Engineer-in-Charge.

51.4 The Employer shall return the Performance Security to the Implementing Agency as below after completion of all obligations under the Contract, more specifically, after the expiry of 60 (sixty) days from the end of the Contract Period provided there are no outstanding claims of the Employer against the Implementing Agency.

In the event of the Contract being determined or rescinded due to default of the Implementing Agency, the Performance Security shall stand forfeited in full and shall be absolutely at the disposal of the Employer.

52. COST OF REPAIRS

52.1. Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Operation & Maintenance Period shall be remedied by the Implementing Agency at Implementing Agency's cost for any loss or damage.

E. FINISHING THE CONTRACT

53. COMPLETION

- 53.1. The Implementing Agency shall request the Engineer-in-charge to issue a Project Completion Certificate of the Completed Works and the Engineer-in-charge along with other concerned experts and concerned Engineers from Municipal Corporation Amritsar, within thirty (30) days of the receipt of such request, shall inspect the Work. If there is no defect in the Work (usual wear and tear excepted), the Engineer-in-charge shall furnish the Implementing Agency with such a certificate of Project completion. In the event, some defects or shortcoming or non-compliance is noticed by the Engineer-in-charge, the Implementing Agency shall be liable to repair such defects and remove the deficiencies pointed out within the period specified. In the event, the Implementing Agency fails to do so the Employer may get the works rectified at the risk and cost of the Implementing Agency. Further, the Implementing Agency shall be liable to pay Damages @ 0.02% of the Contract Price for each day of delay until the work is done.

54. TAKING OVER

- 54.1. Atleast 20 (twenty) days prior to completion of the Operation and Maintenance Period, the Implementing Agency may apply by notice to the Engineer-in-charge for Taking-Over Certificate for taking over the Works by Municipal Corporation Amritsar. If the Works are divided into sections, the Implementing Agency may similarly apply for a Taking-Over Certificate for each section of the Project Site. The Engineer-in-charge shall, after receiving the Implementing Agency's application:
- i. Issue the Taking-Over Certificate to the Implementing Agency, provided there are no defects or deficiencies; or
 - ii. Reject the application, giving reasons and specifying the work required to be done by the Implementing Agency to enable the Taking-Over Certificate to be issued. The Implementing Agency shall then complete this work before issuing a further notice under this Sub-Clause.

55. FINAL ACCOUNT

- 55.1. The Implementing Agency shall supply to the Engineer-in-charge a detailed account of the total amount that the Implementing Agency considers payable under the Contract after the end of construction/ improvement works. The Engineer-in-charge shall issue the Certificate of Development Completion and certify any final payment that is due to the Implementing Agency within sixty (60) days of receiving the Implementing Agency's account if it is correct and complete. If it is not, the Engineer-in-charge shall issue within forty days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer-in-charge shall decide on the amount payable to the Implementing Agency and issue a payment certificate, within thirty (30) days of receiving the Implementing Agency's revised account.

56. MANUALS & REGISTERS

- 56.1. If "as built" Drawings and/ or operating and maintenance manuals are required, the Implementing Agency shall supply them by the dates stated in the **Contract Data**.
- 56.2. If the Implementing Agency does not supply the Drawings and/or manuals by the dates stated in the **Contract Data**, or they do not receive the Engineer-in-charge's approval, the Engineer-in-charge shall withhold the amount stated in the **Contract Data** from

payments due to the Implementing Agency.

56.3. The Implementing Agency shall also furnish, if so desired by the Engineer-in-charge, the following documents duly signed by him or his authorized representatives:

- i) Variation statement showing the altered items, if any against those provided in the original drawings.
- ii) Original site instruction book.
- iii) Original registers for various quality control tests as specified.
- iv) Register of consumption of all the materials.

57. TERMINATION

57.1. The Employer or the Implementing Agency may terminate the Contract if the other party causes a fundamental breach of the Contract. For this purpose, fourteen (14) days notice in writing shall be served by either party on the other party clearly mentioning the particular grounds of Breach of Contract with a copy to the Engineer-in-charge.

57.2. Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) the Implementing Agency stops work for twenty eight (28) days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Engineer-in-charge;
- (b) the Employer or the Implementing Agency is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (c) the Engineer-in-charge gives Notice that failure to correct a particular defect is a fundamental breach of Contract and the Implementing Agency fails to correct it within a reasonable period of time determined by the Engineer-in-charge;
- (d) the Implementing Agency does not maintain a security which is required;
- (e) the Implementing Agency has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the **Contract Data**; and
- (f) the Implementing Agency, in the judgment of the Engineer-in-charge or the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- (g) the Implementing Agency, having been given a notice in writing by the Engineer-in-charge, fails to rectify, reconstruct or replace any defective work or continues the execution of work in an inefficient, improper, un workmanlike manner or not in accordance with sound engineering practices or without complying with the directions and requirements of the Engineer-in-charge/ Employer or the Implementing Agency continues to be in default of its Operation & Maintenance related obligations, within a period of ten (10) days of the issue of said notice.
- (h) the Implementing Agency being a company shall pass a resolution or a court shall make an order of the effect that the company shall be wound up or if a receiver or a manager on behalf of the credit or shall be appointed or if circumstances shall arise

which entitle the court of creditor to appoint a receiver or manager or to make a winding up order.

- (i) the Implementing Agency has not completed at least 30% (thirty percent) of the value of installation works required to be completed after half of the completion period has elapsed.
- (j) the Implementing Agency persistently neglects to carry out his obligations under the Contract and/ or commits default in complying with any of the terms and conditions of the Contract and does not remedy it or take effective steps to remedy it within fifteen Days after a notice in writing is given to him on that behalf by the Engineer-in-charge
- (k) the Implementing Agency commits any acts of defaults with respect to conditions of contract.

57.3. Notwithstanding the above, the Employer may terminate the Contract for convenience.

57.4. If the Contract is terminated, the Implementing Agency shall stop work immediately, make the Project Sites safe and secure and leave the Site as soon as reasonably possible.

57.5. After the termination of the Contract under this clause, the Employer shall be at liberty to get the balance work executed through some other contractual agency or through departmental means or to abandon the balance work altogether or to modify the design and scope of the work in any manner. The Implementing Agency shall have no claim against the Employer in this regard.

58. PAYMENT UPON TERMINATION

58.1. If the Contract is terminated because of a fundamental breach of Contract by the Implementing Agency, the Engineer-in-charge shall issue a certificate for the value of the work done less advance payments received upto the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less 5% (five percent) of the Contract value towards compensation for the breach of Contract. The total amount of liquidated damages and compensation for breach of Contract shall, however, be limited to 7.5% of the Contract value or the amount available with the Engineer-in-charge (in the shape of retention money, performance security and due amount of work done if any), whichever is less. The requisite amount for which the Implementing Agency may become liable shall be realized by encashing the Performance Security furnished by the Implementing Agency and/ or from other amounts due to the Implementing Agency in respect of this work.

58.2. If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer-in-charge shall issue a certificate for the value of the work done. This work value shall take into account the cost of balance material, equipment Electric & Solar components brought by the Implementing Agency and available at site, the reasonable cost of removal of Equipment, repatriation of the Implementing Agency's personnel employed solely on the Works, and the Implementing Agency's costs of protecting and securing the Works. The advance payment received upto to the date of the certificate, other recoveries due in terms of the contract and the taxes due to be deducted at source as per applicable law, shall be deducted from the work value.

58.3. No Compensation for Alteration in or Restriction in Works

If at any time after the commencement of the work the Government, for any reason

whatsoever, does not require the whole Project/Works or part thereof to be carried out, the Engineer-in-charge shall give notice in writing of the fact to the Implementing Agency, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage, which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of work not having been carried out, neither shall he have any claim for compensation by reasons of any alteration having been made in the original specifications, drawings, designs and instructions, which shall involve any curtailment of the work originally contemplated.

59. PROPERTY

- 59.1. All materials on the Site, Plant, Equipment and Works are deemed to be the property of the Employer, if the Contract is terminated as per Clause. 55.2 above because of Implementing Agency's default.

60. RELEASE FOR PERFORMANCE

- 60.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Implementing Agency the Engineer-in-charge shall certify that the Contract has been frustrated. The Implementing Agency shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

(ii) CONDITIONS OF PARTICULAR APPLICATION[COPA]

1. All the Works shall be carried out as per specifications, applicable laws, good engineering practices and instructions of Engineer-in-charge.
2. Any recovery imposed by Technical Audit cell or by higher authority will be deducted from Implementing Agency's running final bills during execution of works and Operation & Maintenance Period and/ or will be adjusted from performance security if final bill is processed during Operation & Maintenance Period.
3. All the Defects appeared during execution of work will have to be rectified as directed by Engineer-in-charge within shortest possible time. During Operation & Maintenance Period, the Implementing Agency will deploy sufficient staff as mentioned in the Contract document for proper maintenance of work. If Implementing Agency fails to attend the defects within reasonable time period, the same will be got rectified by the Employer and all expense so incurred will be adjusted from performance security of the Implementing Agency.
4. The Implementing Agency will adopt PERT to complete the project in time. A detailed program and weekly working program will have to be submitted by Implementing Agency regularly.
5. Role of Consultant Appointed by ASCL as per Smart City Guidelines: Notwithstanding any other provision under the Contract the Project Management Consultant)PMC(Appointed by ASCL as per the guidelines of Smart City shall be responsible for all activities as defined in Smart City guide lines including Quality & Safety.
6. The Implementing Agency is expected for innovative ideas and suggestion in design in such a way that there is no impact on the contract value and shall comply with the specification as mentioned in the tender. Implementing Agency shall take prior approval of Engineer-in-Charge before commencement of any work.
7. The Works shall not be considered to be completed for the purposes of taking-over until such operation and maintenance manuals have been submitted to the Employer's Representative for the entire system.
8. In case any operation connected with the works necessitates diversion, obstruction or closure of any road or any other right of way, the approval of the Engineer-in-charge or the Engineer's Representative and the respective competent authorities shall be obtained well in advance by the Implementing Agency. In case the Implementing Agency's operations obstruct access to adjacent properties, the Implementing Agency shall be responsible to provide reasonable temporary access to the affected parties. The Implementing Agency will also be responsible to ensure completion of his work with utmost effort in earliest possible period to ensure minimum inconvenience to the public at large. If in the opinion of the Engineer-in-Charge, the work has not been done in time and the passage way not restored satisfactorily in time, he may after giving a notice of seven days have the work done through any other agency. He will in these circumstances enter the work done as work done by the Implementing Agency in measurement book and pay for the same to the Implementing Agency and also recover the actual cost paid by him for the work plus 5% of the value of this work from the payments or any other money due to the Implementing Agency.
9. During the execution of work electricity supply will be in the scope of Implementing Agency. However during Defect Liability Period and O&M Period, cost on account of electricity consumed by the lights shall be borne by the Municipal Corporation Amritsar.

10. The Implementing Agency shall place order for the material and the equipment only after approval of the Engineer-in-charge. The Implementing Agency shall submit the detailed drawings to the Engineer-in-charge for approval. Provided however, the testing, approval for dispatching shall not absolve the Implementing Agency's obligations for satisfactory performance of the equipment/material.

SECTION X: CONTRACT DATA

Name of the Project/Work : **Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2 : Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period**

Contract Identification No. : 03/ASCL/2019-20

The Contract Data hereunder pertains to some specific, but in no way exhaustive, information on the Project/Works. The Bidders are required to study and account for this data in conjunction to various other Sections of the Document. GCC stands for 'General Conditions of Contract'.

CONDITIONS	REF. GCC CLAUSE	DATA			
Employer’s name and address	1.1	CHIEF EXECUTIVE OFFICER Amritsar Smart City Limited. II Floor, SCO-21, District Shopping Centre B-Block, Ranjit Avenue, Amritsar, Punjab, Tel: 0183-5015048 E-mail : : ceoasclsr@gmail.com			
Authorized representative of the Employer	1.1	To be named later on			
Engineer-in-charge’s name and address	1.1	To be named later on			
Defect Liability Period & Operation & Maintenance Period	1.1	<u>Defect Liability Period</u> : One year from the date of successful completion of execution phase and it will also include operation of the works. <u>Operation and Maintenance Period</u> : A period of 36 months from the date of issuance of Certificate of Construction Completion			
Start Date	1.1	The Works shall be commenced within a period of 7 Days from the date of signing of the Contract.			
Intended Date of Completion	1.1 & 14	The intended completion date for the whole construction works in 09 (Nine) months after start of work			
Additional document that also form part of contract	2.3 (i)	None			
The law which applies to the Contract	3.1	The Law of the Union of India and the language shall be English			
Amounts of Insurance & Deduction by Engineer-in-charge	13.1	Item	Amount to be Insured		Deductibles
		A.	Loss of or damage to the works,	10% of contract value	Deductibles for insurance

			Plants and materials		shall be as per latest tariff of General Insurance Company of India plus 20% of premium amount for items A, B, C & D
		B.	Loss of or damage to equipments	2.5% of contract value	
		C.	Loss of or damage to property (except the works, plant, Materials, and Equipment) in Connection with the contract:	1% of contract value	
		D.	Personal injury or death	Rs. 2 lacs per occurrences for maximum three occurrences	
Project Sites	22.1	(iv) Spaces under Bhandari Bridge Flyover; (v) Spaces under Kichlu Flyover; (vi) Spaces under Taranwala flyover on GT Road.			
The Period of Submission of the Program for approval of Engineer-in-charge	26	(a) twenty one (21) days from the issue of Letter of Acceptance (b) updated program shall be submitted at interval of 30 (thirty) days. (c) amount to be withheld for late submission of an updated program shall be Rs. 20,000/- (Rupees Twenty Thousand only)			
Stages of Payment	42	80% (Eighty percent) of the CAPEX amount incurred by the Contractor shall be payable during the implementation phase of 09 (nine) months and remaining CAPEX amount of 20% (Twenty percent) shall be payable quarterly during the Defect Liability Period and O&M period. The payments shall be made after making the requisite deductions as required to be made by the Employer on account of liquidated damages, retention money or otherwise in accordance with the Conditions of Contract. During the implementation period, payments will only be paid when the Contractor will raise the invoice after achieving a particular milestone. The Contractor shall			

		<p>ensure due diligence to achieve progress of work not less than that indicated in the following milestones of equivalent value of Contract price percentage :-</p> <p>i) On lapse of 25% contractual time : 10%</p> <p>ii) On lapse of 50% contractual time : 30%</p> <p>iii) On lapse of 75% contractual time : 65%</p> <p>iv) On lapse of 100% (full) contractual time : 100%</p> <p>OPEX amount shall be payable quarterly during the O&M Period of 03 (three) years which will commence after the execution phase satisfactory performance by the Contractor. Final payment will be made after successful handing over of all the sites/ sections to Municipal Corporation, Amritsar.</p>
The currency of the Contract	45	Indian Rupees
The formula (e) for adjustment of prices	46	No Price Adjustment is applicable on this Contract
Secured Advance	50	Not applicable
Taking Over	54	<p>Taking Over after the expiry of Operation & Maintenance Period</p> <p>54.1 Two months prior to the expiry of the Contract period, the Employer/ Municipal Corporation Amritsar (MCA) will inspect and notify the Implementing Agency, the maintenance that is required of the Electrical & Solar components/ equipments at the Project Sites for taking over in an acceptable physical conditions)physical conditions in reference to the initial physical condition at the start of O&M period, after accounting reasonable wear and tear during operation(and in fully operational condition.</p> <p>Notwithstanding to the notification done by Employer/ MCA as above, the Implementing Agency shall repair, maintain and operate the Project as per the terms and conditions of this contract, till 12.00 Noon up to the date of expiry of the Contract Period.</p> <p>54.2 The Implementing Agency shall be liable to repair all defects of the Electrical & Solar components/ equipment occurred or noticed prior to the 12.00 Noon, up to the date of expiry of contract, even if the facilities are taken over by the Employer/ MCA subsequently, due to expiry of contract period, as per Clause 54.1 above. However, the MCA has to notify</p>

		<p>all such defects/liabilities of Implementing Agency within 30 days of taking over of facilities.</p> <p>54.3 On expiry of contract, the Implementing Agency shall hand over all spares, tools and for which he has been paid.</p> <p>54.4 After expiry of the Contract, the Implementing Agency shall provide two copies of the updated O&M manual. The components of communication system used during O&M period in operating condition.</p> <p>54.5 If the Implementing Agency does not comply with any of the provisions of Clause 54, or any other requirement in pursuance of good industry practices, the Engineer –In-charge shall estimate the cost of liabilities due to violation of any of the provisions of this Contract. Such estimates made by Engineer-In-Charge shall be final and binding for the Implementing Agency. However, in a reasonable endeavor, such estimates shall be communicated to the Implementing Agency, within 15 days of expiry of the Contract. The Implementing Agency shall be given an opportunity to rectify the damages through his staff/agents, or for supply of required material provided such rectification of defects on maintenance do not require any shut down of the system, within 30 days of such notification of estimates by Employer/ MCA.</p> <p>54.6 After the date of expiry of contract and recoveries of all dues payable by the Implementing Agency, the Engineer-In-Charge shall issue a "Certificate of Taking over."</p> <p>Till the date of expiry of Contract Period, the Implementing Agency shall do all routine and periodic/ break-down maintenance as required in the O&M manual in force at the time of expiry of contract.</p>
<p>(i) "as built" Drawings</p> <p>(ii) schedule of submission of operating and Maintenance manual:</p>	56.1	<p>(i) On completion of work, Contractor shall submit one complete set of original tracings developed in Auto CAD, soft copy in CD in PDF as well as editable form and two prints of "Completion/As Built" Drawings (in scale as directed) to the Engineer-in-charge/ Employer. These Drawings shall be accurate and correct in all respects and shall be shown to and approved by the Engineer-in-charge. The date by which "as-built" Drawings (in scale as directed) are required is within 28 (twenty-eight) days of</p>

		issue of certificate of completion of whole works. (ii) The Implementing Agency shall submit an Operating and Maintenance Manual at least 3 months prior to the completion of Contract Period for review of the Procuring Entity/ MCA. Updated Manual must be submitted as per clause 54.
The amount to be withheld for failing to supply “as built” drawings, if any, by the date required	56.2	Rs. 1,00,000/- (Rupees One Lakh)
The event which shall also mean fundamental breach of contract:	57.2	Maximum amount of Damages leviable under this Contract is 7.5% of the Contract Price

SECTION XI – CONTRACT FORMS

- 1. Format of Letter of Acceptance**
- 2. Format of Contract Agreement**
- 3. Format of Performance Security Bank Guarantee**

LETTER OF ACCEPTANCE

[on letterhead paper of the Procuring Entity]

No.

Dated

To: *[name and address of the Successful Bidder]*

Subject: Notification of Award for Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period

This is to notify you that your Bid dated ... **[date]** ... for *Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2: Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period vide Bid Reference No.03/ASCL/2019-20 dated 31.05.2019* for the Accepted Contract Amount of the equivalent of
.. **[. amount in numbers and words and name of currency]**, as corrected and modified in negotiations and in accordance with the Instructions to Bidders has been accepted by the Chief Executive Officer, Amritsar Smart City Limited. The date of commencement and completion of the Works shall be:

.....

You are requested to furnish the Performance Security in the form of an unconditional and irrevocable bank guarantee as per the format given in the Contract Forms for the same for an amount equivalent to Rupees within 21 (twenty one) days of notification of the award valid up to 60 (sixty) days after the date of expiry of Operation & Maintenance Period and sign the Contract, failing which action as stated in Instructions to Bidders shall be taken.

Authorized Representative :

Name and Title of Signatory: Chief Executive Officer, ASCL, Amritsar.

Designation:

CONTRACT AGREEMENT [●]

(on non-judicial stamp paper of appropriate value)

Contract No. _____

dated _____

THIS CONTRACT AGREEMENT made this.....day of2019,

BETWEEN

The Chief Executive officer, Amritsar Smart City Limited, SCO-21, Second Floor, B-Block, District Shopping Complex, Ranjit Avenue, Amritsar, Punjab-143001)hereinafter the “**Procuring Entity**”(, of the one part

AND

M/s having its registered/ head office at represented by Mr./ Ms..... holding the designation of (hereinafter the “**Implementing Agency**”(, of the other part:

WHEREAS the *Procuring Entity* desires that the Project known as **“Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2 : Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period”** should be executed by the Implementing Agency, and has accepted a Bid by the Implementing Agency for the execution and completion of the works comprised in the Project; operation, maintenance and remedying of any defects therein during the Defects Liability Period and Operation & Maintenance Period for 3 (three) years in conformity with the provisions of the contract in all respect and for which the Implementing Agency has submitted Performance Security for Rupees ----- in the form of unconditional and irrevocable Bank Guarantee in favour of Amritsar Smart City Limited.

The Procuring Entity and the Implementing Agency agree as follows:

1. In this Contract Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Contract Agreement. This Contract Agreement shall prevail over all other Contract documents.
3. In addition to this Contract Agreement, the following documents etc, shall also be deemed to form and be read and construed as integral part of this contract:
 - a) Contract
 - b) Letter of Acceptance
 - c) Contract Data including Scope of Work & Technical Specifications

- d) Conditions of Contract including Conditions of Particular Application
 - e) Drawings
 - f) Bill of Quantities
 - g) Implementing Agency's Bid.
4. In consideration of the payments to be made by the Procuring Entity to the Implementing Agency as indicated in this Agreement, the Implementing Agency hereby covenants with the Procuring Entity to execute the Project and to remedy defects therein in conformity in all respects with the provisions of the Contract including Conditions of Contract.
5. The Procuring Entity hereby covenants to pay the Implementing Agency in consideration of the execution and completion of the Works and the remedying of defects therein, the 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.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year indicated above.

Signature, name, seal and address of Procuring Entity's authorized official	Signature, name, seal and address of Implementing Agency's authorized official
--	---

Date: _____

Place: _____

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

This Deed of Guarantee executed at _____ by _____ (Name of the Bank) having its Head/ Registered office at _____ (hereinafter referred to as “the **Guarantor**”) which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;

In favour of Chief Executive Officer, Amritsar Smart City Limited having its office at SCO 21, 2nd Floor, Distt. Shopping Complex, B-Block, Ranjit Avenue, Amritsar, Punjab (hereinafter called Procuring Entity which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns);

Whereas M/s _____ (hereinafter referred to as the "Implementing Agency"), a company/ firm formed under _____ (specify the applicable law) and having its registered office at _____ has been, consequent to conduct and completion of a competitive bidding process in accordance with Bid Reference No. 03/ASCL/2019-20 dated 31.05.2019 issued by Procuring Entity, for **Development and Beautification of Spaces below Flyovers at Amritsar under Amritsar Smart City (Phase-2 : Electrical) with 03 (three) years of Operation & Maintenance including 01 (one) year of Defect Liability Period** more specifically defined in the aforementioned Document including statement of work and the Agreement executed between the Procuring Entity and Implementing Agency. The Letter of Acceptance and the Contract requires the Implementing Agency to furnish an unconditional and irrevocable Bank Guarantee for an amount of Rs. _____ /- (Rupees only) by way of security for guaranteeing the due and faithful compliance of its obligations under the Agreement.

Whereas, the Implementing Agency approached the Guarantor and the Guarantor has agreed to provide a Guarantee being these presents:

Now this Deed witnessed that in consideration of the premises, we, _____ Bank hereby guarantee as follows:

1. The Implementing Agency shall implement the Project, in accordance with the terms and subject to the conditions of the Agreement, and fulfill its obligations there under
2. We, the Guarantor, shall, without demur, pay Procuring Entity an amount not exceeding INR (Rupees _____ only) within 7 (seven) days of receipt of a written demand from Procuring Entity, stating that the Implementing Agency has failed to fulfill its obligations as stated in Clause 1 above.
3. The above payment shall be made by us without any reference to the Implementing Agency or any other person and irrespective of whether the claim of the Procuring Entity is disputed by the Implementing Agency or not.
4. The Guarantee shall come into effect from _____ (Start Date) and shall continue to be in full force and effect till the earlier of its expiry at 1700 hours Indian Standard Time on (Expiry Date) (both dates inclusive) or till the receipt of a claim, from the Procuring Entity under this Guarantee, which is one month after the expiry of performance guarantee, whichever is earlier. Any demand received by the Guarantor from Procuring Entity prior to the Expiry Date shall survive the expiry of this Guarantee till such time that all the moneys payable under this Guarantee by the Guarantor are paid.
5. In order to give effect to this Guarantee, Procuring Entity shall be entitled to treat the Guarantor as the principal debtor and the obligations of the Guarantor shall not be affected by any variations in the terms and conditions of the Agreement or other documents by

Procuring Entity or by the extension of time of performance granted to the Implementing Agency or any postponement for any time of the power exercisable by Procuring Entity against the Implementing Agency or forbear or enforce any of the terms and conditions of the Agreement and we shall not be relieved from our obligations under this Guarantee on account of any such variation, extension, forbearance or omission on the part of Procuring Entity or any indulgence by Procuring Entity to the Implementing Agency to give such matter or thing, whatsoever, which under the law relating to sureties would but for this provision have effect of so relieving us.

6. This Guarantee shall be irrevocable and shall remain in full force and effect until all our obligations under this guarantee are duly discharged.
7. The Guarantor has power to issue this guarantee and the undersigned is duly authorized to execute this Guarantee pursuant to the power granted under _____.

In witness, whereof the Guarantor has set its hands hereunto on the day, month and year first here-in above written.

Signed and Delivered by _____ Bank by the hand of _____ its _____ and authorized office.

Authorized Representative _____ Bank