

Survey, Design, Supply, Installation, Testing, Commissioning, Operation and Maintenance for minimum (Seven years) of LED Lighting system for ACA Stadium, Barsapara, Guwahati -18

PRE-BID MEETING HELD ON 01-11-2022 AT ACA OFFICE

LIST OF CLARIFICATIONS

Pursuant to the decisions taken in the Pre-Bid Meeting held on 01/11/2022 with the prospective bidders, the following modifications/amendments are incorporated in the original bid document and the present one shall supersede the original tender bid documents and amendments issued thereafter.

SCOPE OF WORKS:

A) Dismantling Works:

- 1) Dismantling of existing Metal Halide 2kw floodlights from top of head frame and proper storage in ACA stores. Qty 432 Nos.
- 2) Dismantling of existing Metal Halide 2kw Control Gear components from existing racks in each high mast control room and proper storage in ACA stores. Qty 432 Sets.
- 3) Dismantling of existing 3 core x 4sqmm Cu Cable between control gear rack and floodlights on head frame and proper storage in ACA stores. Please note that bidders are permitted to check and reuse these cables if found suitable for their offer LED floodlights. Qty – 4 Lots

B) Supply of New Items at ACA Stadium

- 1) Supply of new LED Floodlights of minimum wattage 1200W and retrofit on existing crossarms of each high mast as per approved design. High power LEDs of CREE / OSRAM / NICHIA / LUMILED only are permitted to be used in the floodlights. Please note that total quantity included in the price must be arrived at by dividing 690 kw by the wattage of the LED floodlight offered. 1% spares shall be included in the price quoted. (Example 1500W LED floodlight quantity shall be $690 / 1.5 = 460$ Nos. + 1% spare = 5 Nos.)
- 2) Supply of new drivers suitable for the LED Floodlights offered and retrofit in existing racks located in each high mast control room as per approved design. Drivers shall be capable of operating the LED floodlight with a cable length of 80M minimum. 5% spares shall be included in the quoted price. Qty = same as floodings above + 5% spares

- 3) Supply of new cables of suitable size and type for connecting between the drivers and floodlights at each high mast. Qty 4 Lots (In case bidder is proposing to check and reuse the existing cables then they must clearly state the same in their technical bid. However, the bidder shall be fully responsible for the same and it shall not affect the 7 years free warranty terms.
- 4) Supply and retro-fit of Aviation Obstruction Light – LED type with auto ON-OFF provision. Qty 8 Nos.
- 5) Any other items that the bidder requires to complete the LED system offered by them. All items such as nuts, bolts, clamps, additions made on the cross-arms shall be in the bidder's scope of supply and included in their quoted price. These shall be made of GI or stainless steel. Qty 1 Lot

C) Modification Works

- 1) Modification of existing cross-arms on head frame of the high masts to suit the mounting of the offered LED floodlights. Qty – 4 Lots
- 2) Modification of existing wiring inside the racks to suit the driver of LED floodlights offered. Qty – 4 Lots

D) Design Works

- 1) Structural safety analysis of the existing High Mast with proposed new LED floodlights. In any case the total loading on the mast shall not exceed the loads indicated in the structural design of the mast. (High mast GA drawing and design calculations are enclosed.
- 2) Each bidder shall clearly state the details of the LED Floodlights and Drivers offered. The details shall be filled up as per Section V of tender. The bidder shall clearly state the Weight & WPA of the floodlight offered. The bidder must also state the type, size, outer diameter and weight of cables that will be used to connect the driver to the floodlight.
- 3) Each bidder shall submit their Lighting Design in the bid taking into consideration the maximum loading permitted on the existing high mast.
- 4) The Lighting Design shall meet the following parameters and shall be based on the GA drawing of the high mast as well as the layout drawing of the stadium showing each mast location as well as play area. Canopy height shall be taken as 30 meters. Main cameras located at N / S / E / W are also shown.

Wicket Area – 28 x 22 meters (Grid 2m x 2m)

Horizontal Lux – 3000; Min/ Max 0.9; Min/Avg. 0.9

Vertical TV Lux (to all MCs N/S/E/W) – 2500; Min/ Max 0.9; Min/Avg. 0.9

In-Field Area – 30-yard circle (Grid 5m x 5m)

Horizontal Lux – 2500; Min/ Max 0.7; Min/Avg. 0.8

Vertical TV Lux (to all MCs N/S/E/W) – 2000; Min/ Max 0.7; Min/Avg. 0.8

Out-Field Area – 65-yard circle (Area between In-field and 65-yard circle) (Grid 10m x 10m)

Horizontal Lux – 2000; Min/ Max 0.4; Min/Avg. 0.6

Vertical TV Lux (to all MCs N/S/E/W) – 1500; Min/ Max 0.4; Min/Avg. 0.6

Boundary Area – 70-yard circle (Area between 65-yard circle and 70-yard circle) (Grid 10m x 10m)

Horizontal Lux – 1500; Min/ Max 0.4; Min/Avg. 0.6

Vertical TV Lux (to all MCs N/S/E/W) – 1000; Min/ Max 0.4; Min/Avg. 0.6

All above light levels are maintained values. Maintenance Factor = 0.9

Shadow rendering to be taken into account in the lighting design considering the location & height of the high mast; the location and height of the roof canopy; the play area as indicated in the drawing etc.

In case the above design parameters cannot be achieved based on the present site conditions then the bidder has to indicate the same and also offer suitable solution.

Once the order is placed and if the design parameters are not achieved then penalty shall be levied as per terms and conditions.

- E) Testing & Commissioning Works: The bidder shall carryout aiming and adjustments of all the lights. The bidder shall carryout full load trails of the system with the required power input from ACA for a 8 hour period on 2 consecutive days. The bidder shall carryout joint light level readings along with ACA representative and submit final report. Adjustment to be carried out by bidder to fine tune the aiming of the lights as required.
- F) Pre-Bid Site Survey Visit: Joint site survey visit was conducted on 1st Nov 2022 after the pre-bid meeting along with all bidder representatives who attended the meeting. The bidders were shown the High Mast, Internal Winch & man-rider system, control room, power panels and racks, cable routing trenches etc. Bidders were also shown the boundary area and roof canopy locations.

TERMS & CONDITIONS:

- 1) Completion Schedule: The entire scope of works shall be completed within 60 days of placement of Letter of Award to the successful bidder.
- 2) Warranty: The bidder shall confirm on-site free replacement 7 years warranty on all items that are in his scope of supply in case of any failure what-so-ever. The replacement shall be done within 3 weeks of receiving written notice from ACA regarding failure of components.
- 3) Annual Maintenance: The bidder shall carryout a bi-annual checks and cleaning of the complete system and submit report to ACA. The lights shall be operated to check for 100% performance.
- 4) Match Day Operations: The bidder shall depute trained technicians (4 Nos) and 1 supervisor during all televised International T20 / ODI matches and all IPL matches held at the stadium (approximate number of matches shall be 15 to 20 per year) during the 7 years warranty period.
- 5) Agreement: A contract agreement shall be signed between ACA and the successful bidder.
- 6) Price Basis: The bidders shall quote a total lumpsum price for the total scope of works inclusive of all applicable customs duty, freight, installation labour charges etc. only GST shall be indicated extra as per current applicable rates.
- 7) Price Break-up: Bidders shall also submit a detailed price break-up to facilitate stage / item wise payments. However, the total payments due shall not exceed the lumpsum value quoted by the bidder.
- 8) Terms of Payment:
 - 50% against supply of materials at site against physical verification.
 - 20% against installation works completed at site against physical verification.
 - 30% shall be paid after completion of testing, commissioning and certification of light levels and submission of a Performance Bank Guaranty of 10% contract value to ACA which shall be kept valid for the warranty period of 7 years. The format for the same shall be furnished to the successful bidder along with the order.
 - EMD of successful bidder shall be returned after completion of the works.
- 9) Penalty for Delay in completion: Penalty @ of 0.5% of contract value per week of delay shall be levied. The penalty shall not exceed a total of 5% of contract value.

- 10) Penalty for shortfall in lighting parameters: The penalty towards major shortfall in lighting parameters shall not exceed a total of 5% of contract value.
- 11) All other terms and conditions of the tender documents shall remain unchanged.