



PARADIP PORT TRUST
INVITATION OF BUDGETARY OFFER

FOR

ELECTRICAL INSTALLATION TO NEWLY CONSTRUCTED MULTI-PURPOSE
HALL AT PARADIP .

SUBMISSION OF BUDGETARY OFFER
ON OR BEFORE Dt.28/01/2018

EXECUTIVE ENGINEER (ELECT.)
PORT ELECTRICAL DIVISION – III
PARADIP PORT TRUST,
PARADIP, JAGATSINGHPUR,
ODISHA – 754142

Contact No.9861244414

Email Id: skbhoippt@gmail.com

REQUEST FOR BUDGETARY OFFER

(A) GENERAL INFORMATIONS:

Sl. No.	Item	Details
1.	Name of Work	Electrical installation to newly constructed multi-purpose hall at Paradip.
2.	Department / Organization	ELECTRICAL & MECHANICAL DEPARTMENT / PARADIP PORT TRUST
3.	Executive Division	Port Electrical Division.
4.	Officer Inviting the Offer	Executive Engineer
5.	Immediate Next Authority	Superintending Engineer
6.	Sanctioning Authority	Dy. Chairman, PPT
7.	Executing Authority	Executive Engineer

(B) OTHER INFORMATIONS:

Sl. No.	Item	Date	Time
1	Publication date	06/01/2018	13:15 Hrs.
2.a)	Document download start date	06/01/2018	13:15 Hrs.
b)	Document download end date	28/01/2018	17:00 Hrs.
3.a)	Start date for seeking Clarification on-line	06/01/2018	13:15 Hrs.
b)	Last date for seeking Clarification on-line	16/01/2018	17:00 Hrs.
4.	Date of uploading response to Clarifications sought	20/01/2018	17:00 Hrs.
5.	Offer Submission end date	28/01/2018	17:00 Hrs.
6.	Offer Validity period	120 days	
7.	Currency of Offer	Indian Rupee	
8.	Language of Offer	English	

Budgetary offer for the work : Electrical installation to newly constructed multipurpose hall at Paradip.

Scope of Work:

Paradip Port intends to take up the work “Electrical installation to newly constructed multipurpose hall at Paradip”. The Contractor has to carry out the total works including supply, installation and commissioning of Outdoor type feeder pillar, different types of LED Light fittings, supply & laying of cables, supply & fixing of ceiling fan, wall mounted fan and wiring to different installations as specified in the Bill of Quantity (BOQ). The scope of work is as follows.

- 1) The Contractor has to supply and install 400 Amp. outdoor type feeder pillar, 250 Amp. LT Panel Board and 125 Amp. Wall mounted Distribution Board as specified in the Bill of Quantity (BOQ). The Contractor shall arrange required materials such as bricks, cement, sand, bolt & nut for making foundation and fixing of Feeder Pillar/ Panel Board.
- 2) The Contractor shall supply and fix different LED fittings as specified in the Bill of Quantity and sample drawing attached as Annexure. 120 Watt highbay light fittings to be fixed at a height of 33ft (Approx.).
- 3) The Contractor shall supply 1.1 KV grade, 3½ X 95 Sq.mm and 3½ X 185 Sq.mm Aluminium conductor GI armoured XLPE Cable conforming to relevant IS standard.
- 4) The Contractor shall make Kuchha cable trench of size 300mm(width) X 750 mm(depth) by excavating the materials aside by and lay the cable inside the trench and refilling the same.
- 5) The Contractor shall execute road cutting and put 6” dia GI Pipe in that road for laying of cable across the road. The Contractor shall refill the cutting area and finishing it as per original condition after laying of cable.
- 6) The Contractor shall supply and install 40 mm dia, 3 meter long medium gauge perforated GI Pipe and execute the earthing by excavation of soil and refill the same with a uniform mixture of charcoal, salt and sweet earth and provide necessary earthing connection by using no.8 SWG Copper wire as per Indian Standard including earth pit in his own cost and arrangement.
- 7) The Contractor shall execute wiring to light points, fan points, call bell points, 6 Amp. / 16 Amp., 250 Volt, 3-pin wall socket points etc. with Bureau of Indian Standards (BIS) certified PVC insulated 1.5 sq.mm. size copper wire and No. 16 SWG copper Earth Continuity Conductor (ECC) drawn in BIS certified polythene / PVC conduit pipe by embedding it into the wall, i.e. concealed wiring to be carried out inside wall of the buildings. Wiring to each of the above points shall be complete with supply of BIS certified make, 250 Volt, 50 Hz rated flush type modular switch & modular socket and fixing them on a suitable GI board – having white Bakelite/ Engineering plastic front cover. Wiring to fan point shall have provision of fixing modular type fan regulator.
- 8) The Contractor shall execute wiring to 120 watt highbay light and 90 watt street lights with 2.5 Sq.mm copper wire, 06 Amp. Switches and each board should have suitable rating of MCB Control.
- 9) The Contractor shall execute wiring to sub-main, A.C Points, 4 way BDB Points from 125 Amp. Distribution box with BIS certified, PVC insulated, 06 sq.mm. sized, copper wire along with No. 16 SWG copper ECC drawn in BIS certified polythene pipe / PVC by embedding it into the wall.

Other Commercial Conditions:

1. Payment Terms:

The payment will be made as follows:

- i) 90% payment will be released after successful completion of the work and acceptance thereof by the Engineer In-charge (EIC).
- ii) Balance 10% of the total contract value shall be retained by PPT towards Performance Security Deposit. The Performance Security Deposit shall be released after successful completion of the warranty period only. The Contractor may furnish a Bank Guarantee of equal value valid till 60 days after expiry of the warranty period in which case the balance 10% money will be released for payment.

2. Security Deposit:

A sum of 10% of accepted value of the tender shall be deposited by the successful bidder (Contractor) as Security Deposit (SD). This will be deposited initially 1% value of the contract as initial security deposit (ISD) in shape of a Bank Guarantee or Demand Draft (DD) / Banker's Cheque drawn in favour of FA&CAO, Paradip Port Trust (DD/ Banker's cheque shall be payable at Paradip) within 15 days of issue of Letter of Intent (LOI). After deducting the EMD and ISD from the stipulated security deposit, the balance amount will be recovered in instalment through deduction at the rate of 10% of the value of each running account bill subject to attaining the required amount by the last running bill. In case of exemption of EMD, the successful bidder has to deposit initially 3% of the contract value as ISD instead of 1% of contract value.

The Contractor may submit Bank Guarantee for the balance amount after deducting the EMD and ISD from the stipulated security deposit in which case there will be no deduction from the running bills towards security deposit.

EMD of the successful bidder may be refunded to the bidder after receiving an equivalent amount of Bank Guarantee only after issue of work order and signing of agreement.

The Contractor may also submit Bank Guarantee for a sum of 10% of accepted value of tender as Security Deposit (SD) within 15 days of issue of Letter of Intent (LOI) in which case (i) deposit of 1% ISD will not be required; (ii) there will be no deduction from the running bills towards security deposit; and (iii) EMD of the successful bidder will be refunded to the bidder after issue of work order and signing of agreement.

The security deposits shall be returned to the Contractor within 45 days of successful execution and acceptance of the work. The BG shall be valid till 45 days after the scheduled date of completion of the work.

3. Completion Period :

The Contractor shall complete the entire work "Electrical installation to newly constructed multipurpose hall at Paradip" in all respect within 60 (Sixty) Calendar days from the date of issue of work order.

4. Warranty:

The warranty period shall be valid up to 01 (one) year on the entire work inclusive of supply items with effective from the date of acceptance of work.

5. Liquidated Damage:

In case of delay in completing the work, liquidated damage shall be charged to the Contractor at the rate 0.1% of the contract price for a delay of one week or part thereof subject to a maximum of 5% of the contract price. Where the Liquidated Damage amount exceeds the maximum limit, Paradip Port Trust reserves the right to :- i) Terminate the contract and / or ii) Forfeit the Initial Security Deposit (ISD).

NOTE:

1. GST percentage to be mentioned extra against each item.
2. Any query in this regard may be raised to the following email id prior to dt.16/01/2018 (up to 17:00 hrs.) which will be clarified by dt.20/01/2018 by uploading in the website for facilitating submission of a competitive budgetary offer.
3. Budgetary offers shall be submitted to the following address (through email or by Registered Post):
Executive Engineer (Elect),
Port Electrical Division – III,
Paradip Port Trust.
PO:- Paradip,
Dist:- Jagatsighpur
Odisha – 754142
Contact No. 9861244414
Email Id: skbhoipt@gmail.com

BILL OF QUANTITY (BOQ)

Name of the work: Electrical Installation to newly Constructed multi-purpose Hall at Paradip.

Sl. No.	Description	Unit.	Qty.	Rate	Amount.
<u>(A) SUPPLY PART:</u>					
1	Supply of hot dip galvanised outdoor type feeder pillar having 400A, 4 Pole MCCB with bus-bar arrangement and 4 nos. 125Amp. MCCB as out going.	Nos.	1		
2	Supply of LT Panel board having 1 No. 250A. 4 Pole MCCB as in comer with bus bar arrangement & indicator etc and 02 nos. 125 Amp. MCCB as outgoing.	Nos.	2		
3	Supply of wall mounted distribution board having 1 No. 125A. 4 Pole MCCB as in commer, and 4 Nos. 32A. DP MCB as outgoing with bus bar & indicator.	Nos.	4		
4	Supply of 4 way BDB having 4 Nos. 20A. SP MCB.	Nos.	16		
5	Supply of 1.1 KV, 3.5 × 185 Sq.mm Aluminium Conductor GI armoured XLPE cable.	Mtr.	550		
6	Supply of 1.1 KV, 3.5 × 95 Sq.mm Aluminium conductor GI armoured XLPE cable.	Mtr.	250		
7	Supply of 1400mm sweep ceiling fan.	Nos.	40		
8	Supply of 400mm sweep wall mounted fan	Nos.	12		
9	Supply of 300mm sweep exhaust fan	Nos.	20		
10	Supply of Call bell.	Nos.	04		
11	Supply of 4' X 40W Batten twin LED fittings with lamps (Indicative sample drawing attached as Annexure-A)	Nos.	35		
12	Supply of 4' X 20 W wall mounted batten LED fittings with lamp(Indicative sample drawing attached as Annexure-B)	Nos.	35		
13	Supply of surface 42 W LED Panel of size 595 mm x 595 x 70 mm suitable for mounting in the ceiling.(Indicative sample drawing attached as Annexure-C)	Nos.	44		
14	Supply 120 Watt highbay LED Light complete with fittings (Indicative sample drawing attached as Annexure-D)	Nos.	30		
15	Supply of 90W LED street light fittings.	Nos.	10		

Sl. No.	Description	Unit.	Qty.	Rate	Amount.
16	Supply of 40 Watt twin LED Suspended light fitting complete with lamps with extended stainless steel wire rope / GI Pipe down rod of size 600mm length.	Nos.	30		
17.	Supply of medium gauge 6" dia GI Pipe.	Mtr.	60		
TOTAL (A):					
(B) EXECUTION PART:					
18	Wiring to LED Light Point (LED batten/panel/suspended LED lights)	Nos.	144		
19	Wiring to Fan Point (Ceiling/wall mounted/exhaust)	Nos.	72		
20	Wiring to 6A Socket Point	Nos.	65		
21	Wiring to 16A Socket Point	Nos.	20		
22	Wiring to A.C Point	Nos.	20		
23	Wiring to 120Watt highbay LED light point.	Nos.	30		
24	Wiring to Street Light LED Point	Nos.	10		
25	Wiring to 4 way BDB Point and fixing of the same.	Nos.	16		
26	Wiring to call bell point.	Nos.	4		
27	Laying of 1.1 KV, 3 ½ × 95 Sq.mm and 3½ × 185 Sq.mm Aluminium armoured XLPE cable by making Kutcha cable trench.	Mtr.	800		
28	Road cutting , pipe laying and finishing as per scope of work.	Mtr.	60		
29	Execution of Earthing as per IE Rule.	Nos.	6		
30	Installation of 400 Amp. feeder pillar with brick foundation and cable connection	No.	1		
31	Fixing of 250 Amp. LT Panel board with brick foundation and cable connection.	Nos.	2		
32	Fixing of 125 Amp. Distribution board on wall and cable connection.	Nos.	4		
33	Fixing of Light Fittings (LED batten/panel/ Suspended LED Lights).	Nos.	144		
34	Fixing of Ceiling fan	Nos.	40		
35	Fixing of Exhaust fan	Nos.	20		
36	Fixing of call bell.	Nos.	4		
37	Fixing of wall mounted fan.	Nos.	12		
38	Fixing of 120 watt highbay LED light fittings at a height of 33 ft. approx.	Nos.	30		

39	Fixing of LED Street light fittings on the roof of building with supply of bend pipe.	Nos.	10		
					TOTAL (B):
					GRAND TOTAL (A + B):

Note: GST Percentage to be mentioned extra against each item.

General purpose industrial compact batten suitable for single or twin LED Tubelight with integral LED driver, available in single / double side connection options.

REGAL BATTEN LED

PRODUCT SPECIFICATIONS

Housing & Cover

Housing & cover made up of CRCA sheet steel. Cover is fixed to the housing by means of 2 nos. bolt with engineering plastic head.

Finish

Epoxy powder coated white after phosphochromate treatment.

Light source

Complete internal wiring suitable for retrofit LED tubelight with single / double side connections.

* LED Tube Light Data Sheet (Supply connection on opposite side)
LED Tube Light Data Sheet (Supply connection on one side)

Lamp holders

Push fit type white polycarbonate housing and ABS rotor with corrosion resistant brass contacts.

Optics

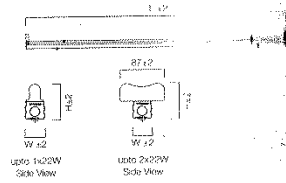
White powder coated CRCA sheet used as Reflector.

Mounting

On ceiling: wall with screws at a distance of 900 mm, suspend by 2 nos. Ø19 mm conduit pipe at a distance of 600 mm or with chains at a distance of 700 mm.

ANNEXURE - A

TECHNICAL DRAWING



System Power	Length (L)	Width (W)	Height (H)
40W	1224	38	38

All dimensions are in mm
Tolerance: ± 2 mm

Basic all purpose surface and wall mounted LED batten with polycarbonate housing & integrated electronic driver.

LUMILINE

PRODUCT SPECIFICATIONS

Features & Benefits

- Delivers excellent illumination & comfort in high ceiling areas
- Long life & photobiologically safe LEDs
- High performance electronic driver ensures zero maintenance
- No harmful UV & IR radiations
- Environment-friendly as it does not contain Mercury
- Instant light with low running temperatures
- Operating temperature: -10°C to +45°C
- Operating voltage range: 140-270V
- Average life $L_{50B_{50}}$: 35000 hours

Housing & cover

Made of ultra slim co-extruded polycarbonate channel with housing part in white finish & diffuser part in reeded opal finish.

Light source

High efficiency long life LED with lumen efficacy of 130 lm/W with viewing angle of 120°.

End caps

White finish ABS end caps with decorative circular coloured polycarbonate cap snap fitted on the end cap to enhance the aesthetic of the fixture. These end caps are snap-fitted to the fixture.

Electronic Driver

Integral electronic driver (SMPS based constant current output) with lower THD, Output short circuit protection/Open circuit protection, Surge Voltage Protection and other Safety tests as per IS15885 Part 2/ Sec 13.

Mounting

Can be fixed directly into the wall/ ceiling by means of mounting SS clips provided with the fixture.

ANNE X TUPE - B

TECHNICAL DRAWING



L2
Front View



W2
Side View

SW	Length (mm)	Width (mm)	Height (mm)
9W	600	25	40
18W	1150	25	40
20W	1150	25	40

All dimensions are in mm
Tolerance: ± 2 mm

Aesthetically designed 2X2 LED flat panels for surface mounting which provides soft light and glare-free symmetrical illumination.

ANNEXTURE

PLUTO SURFACE LED PANEL 2X2



ANNEXTURE

PRODUCT SPECIFICATIONS

Features & Benefits

- Excellent efficiency & performance suitable for high ceiling areas
- Long life & photobiologically safe LEDs
- High performance Electronic Driver ensures zero maintenance
- No harmful UV & IR radiations
- Environment-friendly as it does not contain Mercury
- Instant light with low running temperatures
- Operating temperature: -10°C to +45°C
- Operating voltage range: 140-270V
- Average life $L_{50/B_{50}}$: 50000 hours

Housing & Finish

CRCA powder coated white after phosphochromate treatment.

Light source

High efficiency long life LED package in integral module with lumen efficacy of ≥ 140 lm/W and viewing angle of 120° to ensure better uniformity.

Optics

High transmittance polystyrene opal diffuser for glare-free symmetric light distribution.

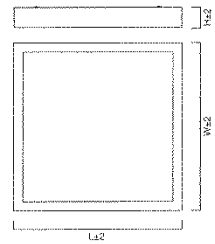
Electronic Driver

Powered by built-in isolated, SELV Output electronic LED driver (SMPS based constant current supply) with Output Short-circuit protection, Surge protection & other Safety tests as per IS:15885 Part 2/Sec 13.

Mounting

Provision for surface mounting through 4 holes (nos.) of $\varnothing 5$ mm provided at the back of the fixture.

TECHNICAL DRAWING



System Power	Length (L)	Width (W)	Height (H)
34W	595	595	70
42W	595	595	70

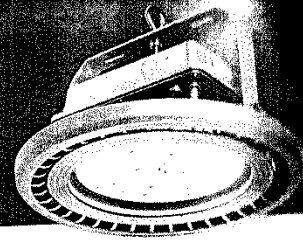
All dimensions are in mm
Tolerance: ± 2 mm

62

PLUTO

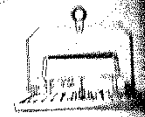
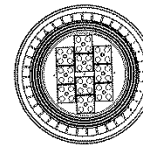
Energy saving, Environment friendly & robust Medumbay /Highway LED luminaires with high efficacy.

ENDURA BAYBRITE SAUCER



ANNEXURE - D

TECHNICAL DRAWING



PRODUCT SPECIFICATIONS

Features & Benefits

- Better lumens & longer lamp life
- High efficacy & lower power consumption
- Delivers high brightness & excellent illumination
- No harmful UV & IR radiations
- Environment-friendly as it does not contain Mercury
- Instant light with low running temperatures
- Operating temperature: -10°C to +45°C
- Operating voltage range: 140 -270V
- Average life L_{50} : 50000 hours

Housing

Aluminum alloy pressure die casted housing & control gear box for better heat dissipation and aesthetic appeal. PGB gland is used for cable entry and loop-in-loop-out.

Finish

The fixture is epoxy powder coated with colour moonshell grey finish.

Light source

High efficiency long life LEDs with lumen efficacy of ≥ 150 lm/W with view angle 120° to ensure better uniformity of light distribution.

Optics

High quality PC lens with optional beam angles 60° & 90° for uniform distribution.

Electronic driver

Integral, electronic driver with APFC, lower THD, Open Circuit Protection, Surge Voltage Protection & other safety tests as per IS 15885 Part-2/Sec 13.

Mounting

Suspended by means of heavy duty nickel plated, forged eye-bolt provided with the fixture.

System Power	Ø (Dia)	Height (H)
90W	380	230
120W	380	230

All dimensions are in mm.
Tolerance: ± 2 mm