

TIDEL PARK COIMBATORE LTD

(A JV of TIDCO,ELCOT,TIDEL & STPI)

**INTERNATIONAL TECHNO COMMERCIAL TENDER
PART - II - BILL OF QUANTITIES****STREET AND LANDSCAPE LIGHTING WORKS AROUND
THE BUILDING COMPLEX OF INFORMATION TECHNOLOGY PARK
AT VILLANKURICHI (SEZ AREA), COIMBATORE****DUE DATE FOR SUBMISSION : ON OR BEFORE 26th MARCH 2010 AT 15.00 HOURS****TO BE SUBMITTED TO :**

The Chairman
TIDEL Park Coimbatore Ltd
(First Floor - TIDEL Park)
4, Rajiv Gandhi salai,
Taramani,Chennai - 600 113 - INDIA
Telephone No : +91 44 22540500/501
Fax No: +91 44 22541744

ARCHITECTS & ENGINEERS

M/s. C.R.Narayana Rao
Architects & Engineers
#5/10,Karpagambal Nagar,
Luz,Chennai-600 004 - INDIA
Tel No: 044-24991676 (4 lines)
Fax No: 044-24991318

OWNER'S ENGINEER

M/s.TATA CONSULTING ENGINEERS LTD
#73/1,Sheriff Centre,
St.Marks Road,
Bangalore -560001- INDIA
Tel No: 080-66226000
Fax No: 080-22274873

BID SUBMITTED BY:

M/s. _____
Address _____

FEBRUARY 2010

TIDEL PARK COIMBATORE LTD.		
(A JV OF TIDCO, ELCOT, TIDEL & STPI)		
BUILDING COMPLEX OF INFORMATION TECHNOLOGY PARK AT VILANKURICHI (SEZ AREA), COIMBATORE.		
SUMMARY FOR STREET AND LANDSCAPE LIGHTING WORKS.		
SI.No.	Description of works	Amount in Rs.
I	STREET AND LANDSCAPE LIGHTING WORKS	
II	Operating Contract for 5 Years Including One year Defects Liability Period (Considered for Evaluation Purpose)	
III	Comprehensive Maintenance Contract Fee for 4 Years after Defects Liability Period (Considered for Evaluation Purpose)	
	Total in INR	

Date:

Place:

Signature of the Bidder with seal

TIDEL PARK COIMBATORE LTD

(A JV OF TIDCO, ELCOT, TIDEL & STPI)

BUILDING COMPLEX OF INFORMATION TECHNOLOGY PARK AT VILANKURICH (SEZ AREA), COIMBATORE**NAME OF WORK: I . FOR PROVIDING EXTERNAL LIGHTING AND LANDSCAPE LIGHTING INSTALLATIONS AND TESTING AND COMMISSIONING**

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
I	EXTERNAL LIGHTINGS-Design, Supply, Erection and testing and commissioning of the following:							
	STREET LIGHT POLES WITH LIGHTING LUMINARIES:							
1	Design, Supply, Erection and testing and commissioning of the Street Light pole with required luminaire as sepcified below: Decorative column made out of GI tubular pole with 9.0 mtr ATG height(above ground level) and with base plate of 400 X 400 X 20 mm thickness. The sections are 2000mm X 194mmX4.5mm (L x D x T),1391mm X 140mm X3.5mm (L xD x T), 4800mm X101mm X 3 mm (L x D x T) interconnected through special welding process.The colomn will be having Cast embellishments connected to the pole with grub screws and are sealed to the pole with silicon Sealent. The colomn will be provided with the flush door at the bottom with proper strengthning to the cut of door opening, of which size will be 300 X 100 mm , and should be with triangular key opening system .							
	The inbuilt junction box should be provided with 8 way connector block suitable for terminating the cable of size upto 4C 25 Sq mm cable and will be with 16 Amps DP MCB with required internal wiring. The bracket , made of GI , suitable to mount Single luminaire menioned in the BOQ/drawing will be connected to the colomn with the grub screws. the system will be having finish of polyeurothene paint (UV resistant) done on epoxy primer.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	Luminaire with lamp : The Luminaire shall be decorative type meeting IP 66 with 250 W MH lamp , consisting of glass reinforced polyester body with an aluminum cover, acrylic upper cover, hardened glass protector and deep drawn chemically polished aluminum reflector.The fitting shall be opened by undoing a 1/4-turn screw and lifting the upper cover and shall be with integral control gear set. The luminaire should be having a replacement guarantee for a period of 5 years against any visible ingress of dust and moisture inside the optical compartment, caused due to manufacturing defect .							
	i) OPTION 1- The pole shall be Schreder Sepale column-The luminaires shall be as per CAT Ref: SEPALE/IB/250/1399/IP66(Sealsafe) of Schreder Make-	6	Nos.					
	ii) OPTION-2-GI Circular Pole with luminaire: GI Circular Pole (The arm length shall be 1.5 mt.material of the pole BSEN 10025, base plate made as per IS 2062 and galvanisation in line with BSEN ISO 1461)							
	The luminaires shall be shall be decorative type meeting IP 66 with 250 W MH lamp,Equivalent to Philips Cat. No.CRP 330.	6	Nos.					
	Note: 1. The street pole drawing shall be submitted and got approval from Client/Architect. The pole shall be painted shall be as directed by the engineer in-charge and as per standards.							
	NOTE:2 The Luminaire shall consists of all accessories like electronic choke, starter, lamps & lamp holers, control gears, ms angle supports, fixing brackets, anchor fastener, wire suspender, hooks, clamps, screws etc,. as required and also the internal wiring between the control switch and the luminaire.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	NOTE 3-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.							
2	i) Option-1:- Specification Same as above item no.1 but Light fitting shall be 150Watts MH Luminaire and lamps -Schreder make CAT Ref: SEPALE/IB/250/1399/IP66(Sealsafe)	41	Nos.					
	ii) Option -2:- Specification Same as above (item no.1 option-2) but Light fitting shall be 150Watts MH Luminaire and lamps - Philips make - Cat. Ref. No.CRP 330.	41	Nos.					
	NOTE-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.							
3	Street light pole as specified below (Octagonal shaped Pole) with 250W luminaire with lamp etc. Design, Supply, Erection and testing and commissioning of the Octagonal street lamp pole including tapered type SINGLE bracket of effectively 9.0 mtr mounting height of the luminaire above ground level having 3.0mm thickness made of GI with plate size 290mm x 290mm x 16mm with necessary arrangements. The lamp post shall be octagonal tapered type (Starting from approximately 200mm at bottom and tapering in the gradient of 75mm up to the top) suitable for fixing small bracket which can be fixed with single Luminaire , it shall be provided with the flash door opening with heavy duty One no of 16 Amps DP MCB, 8 way connector shall be provided in post for termination of cable. The pole shaft shall have octagonal cross section and shall be continuously tapered with single longitudinal welding. The base plate shall be fillet welded to the pole shall at two locations. (Inside and out side). i) OPTION 1-The luminaires shall be as per CAT Ref: SEPALE/IB/250/1399/IP66(Sealsafe) of Schreder Make-	6	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	NOTE-TPCL reserves the right to select any of the OPTION/type/make specified & in the recommended make list in the tender specification.							
	ii) Option - 2 : Design, Supply, Erection and testing and commissioning of the Street Light pole with required luminaire (Philips make)as sepcified below: Street light pole as specified below (Octagonal shaped Pole) with 250W luminaire with lamp etc as per mentioned below.:The Polygonal pole shall be designed as per ILE TR7 & BS5649 for structural design & as per IS875 (Part III), 1987 for dynamic loading. The pole shaft shall be made single piece MS structure continuously tapered having polygonal (8/12 sides) cross section and a single longitudinal welding. The welding will be done as per BS 5135 / IS 9595. No circumferential welding shall be allowed in the pole shaft. The MS shall conform to BSEN 100025/100027. The structure shall be single hot dip galvanized as per BS 729 / IS 2629. A suitably designed door shall be provided at 600mm height from the pole base for accommodating an inbuilt junction box. The door opening will be suitably reinforced for structural strength. The door shall be flushed with pole external surface and shall provide easy access for							
	electrical connections at a maintainable height. A Suitable base flange and a top flange will be welded and suitable reinforcements will be provided. Foundation accessories will be as per IS 1367. Octogonal pole.							
	The quoted rate shall also include supply and fixing of a junction/ looping box with 32 Amps, 4pole, heavy duty connector with a DP, 16 amps DP MCB for on / off controlling the lamp with required internal wiring, fixed at bottom of the column/pole. at about 600 mm from FFL. in a suitable weather proof enclosure meeting IP 55 either surface mounted /recessed. The Junction box shall also consists of a suitable weather proof door made of MS with required powder coat paint finish. The quoted rate shall also include required conduiting and wiring between junction box and luminaire.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	The luminaires shall be decorative type meeting IP 66 with 250 W MH lamp, Equivalent to Philips Cat. No.CRP 330.	6	Nos.					
	NOTE-TPCL reserves the right to select any of the OPTION / type/make specified & in the recommended make list in the tender specification.							
4	Same as above in Sl.no. 3 but with 150Watts Luminaire and lamps							
	i) Option-1:- Specification Same as above item no.3 but Light fitting shall be 150Watts MH Luminaire and lamps -Schreder make CAT Ref: SEPALE/IB/150/1399/IP66(Sealsafe)	41	Nos.					
	ii) Option -2:- Specification Same as above(item no.3 option -2) for the octoganal pole only but Light fitting shall be 150Watts MH Luminaire and lamps - Philips make - Cat. Ref. No.CRP 330.	41	Nos.					
	NOTE-TPCL reserves the right to select any of the OPTION/type/make specified & in the recommended make list in the tender specification.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.	
				SUPPLY	ERECTION	SUPPLY	ERECTION		
5	Gate Light Light Specification								
	<p>Gate lighting: Supply , Fixing, testing and commissioning of Decorative Post Top lantern fixed over compound/ gate column. The luminaire shall comprises base, made out of die cast aluminium. The enclosure (Protector) should be made of striated polycarbonate. Optical compartment tightness is IP66 & consists of combination of chemically polished reflectors good for indirect symmetric lighting. The lantern comes with non integral control gear & suitable for 70w CDMT lamp.The luminaire should be having a replacement guarantee for a period of 5 yrs. against any visible ingress of dust and moisture inside the optical compartment,caused due to manufacturing defect. The luminiare shall be mounted on a of required dia, approximately 48 mm dia., MS pole with powder coat paint finish. The pole lenght shall be about 1 Mtr. approximately fixed over the civil column. The quoted rate shall also include supply and fixing of a junction/ looping box with 32 Amps, 4pole, heavy duty connector with a DP, 6 amps MCB for on / off controlling the lamp with required internal wiring, fixed at bottom of the column.</p>	11	Nos.						
	<p>at about 600 mm from ffl. The Junction box shall also consists of a suitable weather proof door made of MS with required powder coat paint finish. The quoted rate shall also include required conduiting and wiring between junction box and luminaire. The whole arrangement shall be similar Keselec Schreder make CAT Ref No: Alura/CMBH/70/Symm. The quoted rate shall include necessary civil works. Required MS or GI pipe as erquired and required wiring between above mentioned Juntion box and the luminaire.NOTE-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.</p>								

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
6	i) Post Top Lantern POST:OPTION-1							
	Design, Supply, Erection and testing and commissioning of the Post top Lantern including Pole and required luminaire as specified below: The Pole shall be Equivalent to Schreder make "Jasper" model Pole:Jasper column of made up of 3.5 mtr GI tubular pole with base plate of sections 300 X 300 X 15 mm thickness.The column shall also be provided with flush door at the bottom with proper strengthening to the cut out of the door opening. The inbuilt junction box should be provided with 8 way connector block suitable for terminating the cable of size upto 4C 25 Sq mm and with 16 Amps DP MCB with necessary internal wiring. The Karpet bracket of made of cast iron , suitable to mount two luminaire(Jasper) will be connected to the column with the grub screws. the system will be having finish of polyurethane paint (UV resistant) done on epoxy primer.							
	The Luminarie shall be Equivalent to Schreder make - Jasper model							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	The Luminaire is made up of a base and cover made from a synthetic material which is highly resistant to harsh climatic conditions, and a ribbed opaline polycarbonate protector. The protector is closed off by a cover, the interior of which is covered with an anodised aluminium reflector and is suitable for 35 W CDMT lamps. For the impact-resistance PMMA version, the protector offers a high degree of resistance to impacts, while retaining total transparency for many years. The luminaire is opened without tools by rotating the protector by 1/4 turn and then lifting it up which provides access to the lamp. By loosening two screws access is gained to the electrical control gear, which is fixed under the cone supporting the lamp. When this series of steps is carried out, the power supply shuts off automatically. The mounting piece with the pre-wired electrical connection is mounted on the pole or bracket. Then the luminaire simply needs to be aligned with the mounting piece and clicked in to place. Mounting is ensured by means of a clip-based system. The fixing arrangement of the luminaire to the							
	post top lantern shall consist of an arrangement that automatically connects the power supply to the luminaire without any step of work involved. The quoted rate shall also include supply & installation of necessary internal wiring.							
	Note: Each of the post top lantern shall consist of 2 nos. of above mentioned luminaire with required lamps.							
	NOTE-TPCL reserves the right to select any of the OPTION / type/make specified & in the recommended make list in the tender specification..							
		44	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
6	ii) Post Top Lantern POST: OPTION 2							
	Design, Supply, Erection and testing and commissioning of the Post top Lantern including Pole and required luminaire as specified below: 3.5 Mts height circular GI pole with double arm. The arm length is 0.7 mts. The dia of the arm shall be 60/76 mm for luminaire mounting. The pole dia. shall be 76 mm. with required base plate made as per IS Standards.							
	The Decorative Post Top Lantern (IP65) suitable for 2x 70W CDMT lamp, similar to Philips make as mentioned below.: Urbanlighting luminaire with louver (LO) and clear bowl (TB). Housing and Louvres made of High Pressure Die cast aluminium . Available in Dark Grey Housing. Suitable for Post top entry pole dia 60/76 mm. Post Top Lantern- similar to Philips cat.no.:Metronomis Torino CDS530/CDMT70 Light fitting :							
	The quoted rate shall also include supply and fixing of a junction/ looping box with 32 Amps, 4pole, heavy duty connector with a DP, 16 amps DP MCB for on / off controlling the lamp with required internal wiring, fixed at bottom of the column/pole. at about 600 mm from FFL. in a suitable weather proof enclosure meeting IP 55 either surface mounted /recessed. The Junction box shall also consists of a suitable weather proof door made of MS with required powder coat paint finish. The quoted rate shall also include required conduiting and wiring between junction box and luminaire.							
	NOTE-TPCL reserves the right to select any of the OPTION / type/make specified & in the recommended make list in the tender specification.	44	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
7	BUSH UP LIGHT:-EQUIVALENT TO PHILIPS CAT. NO. DGP 652 NON-INTEGRAL FITTING WITH 1X12V, 50WATTS DICHRONIC HALOGEN LAMP							
	Aesthetically designed floor mounting type/tree mounting type mini deco flood light for bush uplight. The miniature non- integral flood light luminaire with pressure die-cast aluminium housing Dust-tight and jet proof to IP65 with transformer box with required inetrnal wiring. The transformer shall be located externally in an enclosure meeting IP 55 or in a room. The wiring to the luminaire shall only by 12V DC source. The rate shall include necessary supporting accessories like corner bracket with necessary pedestal arrangments etc complete as required at site. NOTE-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.	38	Nos.					
8	<u>i) Bollard 26W CFL :OPTION-1</u>							
	Equivalent to Keselec Schreder make of Catelogue/ model no. Atlantis Bollard (IP 55) – height 1000mm – Extruded aluminium body, base and cover in cast aluminium, glass protector, spun aluminium internal louvers, painted white, removable control gear plate and suitable for 26W CFL Lamps. CAT No. ATL CFLB/26W/1000mm with required internal wiring.(TPCL reserves the right to select any of the type/make specified & in the recommended make of equipments).	52	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
8	ii) Bollard Specification 18W CFL:OPTION-2							
	Aesthetically designed PLL 18 Watt bollard made of die cast aluminum housing , powder coated with textured grey and excellent corrosion resistant. Lamp compartment made of injection moulded fibre , with built in high purity aluminum louvers for lamp shielding and function as reflectors. Suitable for mounting on the base provided with Bollard. Dust-tight and jet proof to IP65. The top cover consists of a metallic lid to reduce upward light spill and provided with slits at the top sides for enhanced aesthetic appeal during night. Eqvt to HCS 370/PLL 18W with required inetrnal wiring.	52	Nos.					
	NOTE-TPCL reserves the right to select any of the OPTION / type/make specified & in the recommended make list in the tender specification.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
9	Under Water Luminaire							
	Equivalent to Schreder make of model Acqueo cat.ref.no.:RGB/34W/under water LED. The luminaire shall consists of 28 Nos. leds,LEDs, each of 1.2 W. The luminaire shall be immerced at a maximum depth up to 3 metres The luminaire shall meet IP 68. The model shall be of RGB type Out of 28 LEDs 8Nos., shall be of green, red and blue colour each. Amber or white shall be 4 nos. The body of the floodlight is composed of two anodisedaluminium parts. The upper part houses the optical compartment, and the lower part acts as a heat dissipater. The optical compartment is sealed with tempered glassThe floodlight is attached by a mounting bracket made of aluminium that enables the inclination and position to be adjusted with each floodlight.Colour: anodised aluminium with required internal wiring. The transformer shall be located externally in an enclosure meeting IP 55. The wiring to the luminaire shall only by small power DC source like 12 V.The quoted rate shall be include the DMX power supply and erquired connection box mentioned above.	3	nos.					
	NOTE-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	<u>FAÇADE LIGHTING:</u>							
10	i) FAÇADE LIGHTING: Equivalent to Keselec Schreder make : RT3/IB/400/Symm-OPTION-1							
	Facade Lighting: Supply , Fixing, testing and commissioning of Schreder Make of model RT3-Floodlight luminaire (IP 65) - an extruded, anodised aluminium alloy body with a sealed toughened glass protector and enclosed with two cast aluminium side covers. The fixture comprises a pre-anodised aluminium reflector, integral control gears mounted on a removable gear tray fitted with a safety plug and socket system, an aluminium mounting bracket and with 400W MH lamp.The whole arrangement shall be similar Keselec Schreder make CAT Ref No: RT3/IB/400/Symm.The quoted rate shall include necessary civil works with required internal wiring.							
	The luminaire shall be mounted on suitable size GI tubular pole with base plate of sections 300 X 300 X 15 mm thickness.The column (pole)shall also be provided with flush door at the bottom with proper strengthening to the cutout of the door opening. The height of the pole shall be approximately between 1 & 2 Mtr. as required at site from the FFL. The pole shall consist of an inbuilt junction box located at the area where the above mentioned flush door. The inbuilt junction box should be provided with 8 way connector block suitable for terminating the cable of size upto 4C 25 Sq mm cable and with 16 Amps DP, MCB. The pole shall be having finish of polyurethane paint (UV resistant) done on epoxy primer.							
	The above flood lighting luminaire with 1 to 2 mtr. pole shall be fixed on RCC pedestal of size - 300mm x 300mm x 300 mm mounted on the terrace floor of utility building.							
	The quoted rate shall include the above mentioned civil works and required foundation bolts and nuts for fixing the pole to the pedestal.	7	Nos.					
	ii) Option -2:- Specification Same as above(item no.10 option -1) for the pole only but Light fitting shall be Philips Cat.No.: MVF617 WB 1 x MASTER HPI-T Plus 400 W(Alternative light fitting for RT3flood lighting)	7	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	NOTE-TPCL reserves the right to select any of the type/make specified & in the recommended make list in the tender specification.							
11	Option- i) Same as above (as per item no. 10 i)for the Pole but with 4 Mtr. Height pole fixed on suitable size pedestal.							
	The 4 Mtr. pole shall have about 139mm dia. for a length of 1000mm at bottom of the pole and the remaining 3 Mtr. shall be of smaller dia. not less than 76 mm dia. The column joint between the two different dia. Shall have suitable cast embellishments connected to the pole with grub screws.							
	This luminaire shall be located at GL at the garden or compound side as shown in the drawing.	46	Nos.					
	ii) Option -2:- Specification Same as above option -1 for the 4 Mtr. pole only but Light fitting shall be Philips Cat.No.: MVF617 WB 1 x MASTER HPI-T Plus 400 W	46	Nos.					
12	Design, supply and laying of following size XLPE/ PVC sheathed armoured cable in ground including excavation of ground at 2 feet below existing ground level, back filling providing brick sand cushioning etc and make the surface as good as normal ground level.(TPCL reserves the right to select any of the type/make specified & in the recommended make of equipments).							
a	3.5 C x 120 Sqmm XLPE insulated aluminium armoured cable.	1000	Mtr.					
b	3.5 C x 95 Sqmm XLPE insulated aluminium armoured cable.	qro	Mtr.					
c	4 C x 25 Sqmm PVC Cu ar. cable.	qro	Mtr.					
d	4 C x 16 Sqmm PVC Cu. ar cable.	qro	Mtr.					
e	4 C x 10 Sqmm PVC Cu ar. cable.	2330	Mtr.					
f	4 C x 6 Sqmm PVC Cu ar. cable.	2300	Mtr.					
g	3 C x 6 Sqmm PVC Cu ar. cable.	qro	Mtr.					
h	3 C x 4 Sqmm PVC Cu ar. cable.	175	Mtr.					
i	3 C x 2.5 Sqmm PVC Cu ar. cable.	qro	Mtr.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
13	End termination for the following cables with suitable glands and crimping sockets.							
a	3.5 C x 120 Sqmm XLPE insulated aluminium armoured cable.	4	Nos.					
b	3.5 C x 95 Sqmm XLPE insulated aluminium armoured cable.	qro	Nos.					
c	4 C x 25 Sqmm PVC Cu. cable.	qro	Nos.					
d	4 C x 16 Sqmm PVC Cu. cable.	qro	Nos.					
e	4 C x 10 Sqmm PVC Cu ar. cable.	150	Nos.					
f	4 C x 6 Sqmm PVC copper cable.	368	Nos.					
g	3 C x 6 Sqmm PVC copper cable.	qro	Nos.					
h	3 C x 4 Sqmm PVC Cu ar. cable.	20	Mtr.					
i	3 C x 2.5 Sqmm PVC Cu ar. cable.	qro	Mtr.					
14a)	Supply, laying of 40 mm dia. GI pipe in ground	10	Mtr.					
b)	Supply, laying of 50 mm dia GI pipe. in ground	10	Mtr.					
15)	Design, supply, erection of 600 x 600 x 6 mm GI plate burried in ground in a depth of 3.0 M from ground level with alternate layer of charcoal and slat including supply and fixing of 38 mm dia. perforated GI pipe funneling for watering purpose including construction masonry through RCC cover. The cover shall be heavy duty to suit heavy vehicle movements.	5	each					
16	Design, supply and laying of 8 gauge bare copper wire for equipment and DB earthing.	100	Mtr.					
17	Design, supply and laying of 10 gauge bare copper wire for equipment and DB earthing.	2200	Mtr.					
18	Design, supply and laying of 14 gauge bare copper wire for equipment and DB earthing.	400	Mtr.					
19a)	LT Panel & Distribution Boards: (TPCL reserves the right to select any of the type/make specified & in the recommended make of equipments).							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	Supply, fixing, testing and commissioning of the double door type Outdoor Street Lighting Switch Board(IP 55) comprising of the following : Outdoor Street Lighting Switch Board -1							
	Incoming							
	250 A TPN, 25 kA MCCB 1 No. as incomer.							
	Outgoing							
	125 A TPN 25 kA MCCB 1 No. as outgoings							
	100 A TPN 25 kA MCCB 2 No. as outgoings							
	32 A TPN 25 kA MCCB with 40A 4P ELCB 30 mA -14 Nos. as outgoings.							
	With necessary copper busbar interconnection providing CTs, voltmeter, ammeter, Digital Energy meter for current, volt, power factor, kWhr, shunt trip, selector switches, phase indication lamp, fuse and switch control, providing external indication for ON/OFF/Trip status (thru Aux and Trip alarm contact) for the Incomer.							
	Every outgoing feeder shall have a contactor equal to the amps rating of the MCCB and selector switch which shall have 3 modes in such a way that the outgoing feeder can be made to operate either in Auto mode or Manual mode or in IBMS mode.							
	The panel shall also have 4 Nos. of Time Switch as mentioned below which shall be coupled to one or more no. of outgoing feeders through the contactors specified above. The spec for the Time Switch is as follows.: Time switch 24 hours/7 days similar to L & T make model no. FM /1 digi , contactors in all outgoings, contact multiplier relay, Auto/manual/bms Selector switch, On off Push button for manual operation and control etc.,.							
	250 Amps TPN copper busbars :- All the neutral busbars shall have the SAME capacity of phase busbars.	1	No.					
b)	Same as above but Indoor type Switch board	qro	No.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
20a)	Supply, fixing, testing and commissioning of the double door type Outdoor Street Lighting Switch Board(IP 55) comprising of the following : Outdoor Street Lighting Switch Board -2							
	Incoming							
	125 A TPN 25 kAMCCB 1 No. as incomer.							
	Outgoing							
	63 A TPN 25 kA MCCB -2 Nos. as outgoing.							
	32 A TPN 25 kA MCCB with 40A 4P ELCB 30 mA -6 Nos. as outgoing.							
	With necessary copper busbar interconnection providing CTs, voltmeter, ammeter, Digital Energy meter for current, volt, power factor, kWhr, shunt trip, selector switches, phase indication lamp, fuse and switch control, providing external indication for ON/OFF/Trip status (thru Aux and Trip alarm contact) for the Incomer.							
Every outgoing feeder shall have a contactor equal to the amps rating of the MCCB and selector switch which shall have 3 modes in such a way that the outgoing feeder can be made to operate either in Auto mode or Manual mode or in IBMS mode.								
The panel shall also have 3 Nos. of Time Switch as mentioned below which shall be coupled to one or more no. of outgoing feeders through the contactors specified above. The spec for the Time Switch is as follows.: Time switch 24 hours/7 days similar to L & T make model no. FM /1 digi , contactors in all outgoing, contact multiplier relay, Auto/manual/bms Selector switch, On off Push button for manual operation and control etc.,.								
125 Amps TPN copper busbars :- All the neutral busbars shall have the SAME capacity of phase busbars.	1	No.						
d) Same as above but Indoor type Switch board	qro	No.						
21a)	Supply, fixing, testing and commissioning of the double door type Outdoor Street Lighting Switch Board(IP 55) comprising of the following : Outdoor Street Lighting Switch Board -3							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	Incoming							
	100 A TPN 25 kA MCCB 1 No. as incomer.							
	Outgoing							
	32 A TPN 25 kA MCCB with 40A 4P ELCB 30 mA -5 Nos. as outgoing.							
	With necessary copper busbar interconnection providing CTs, voltmeter, ammeter, Digital Energy meter for current, volt, power factor, kWhr, shunt trip, selector switches, phase indication lamp, fuse and switch control, providing external indication for ON/OFF/Trip status (thru Aux and Trip alarm contact) for the Incomer.							
	Every outgoing feeder shall have a contactor equal to the amps rating of the MCCB and selector switch which shall have 3 modes in such a way that the outgoing feeder can be made to operate either in Auto mode or Manual mode or in IBMS mode.							
	The panel shall also have 2 Nos. of Time Switch as mentioned below which shall be coupled to one or more no. of outgoing feeders through the contactors specified above. The spec for the Time Switch is as follows.: Time switch 24 hours/7 days similar to L & T make model no. FM /1 digi , contactors in all outgoing, contact multiplier relay, Auto/manual/bms Selector switch, On off Push button for manual operation and control etc.,.							
	100 Amps TPN copper busbars :- All the neutral busbars shall have the SAME capacity of phase busbars.	qro	No.					
b)	Same as above but Indoor type Switch board	qro	No.					
22a)	Supply, fixing, testing and commissioning of the double door type compartmental outdoor type MCB DB comprising of the following :Street light DB							
	63 A TPN MCCB – 1 No. as incomer.							
	40 A DP MCB with 30 mA ELCB – 3 Nos. as outgoing.							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
	Each 40 A DP RCCB outgoing consist of 6 Nos of 10A SP MCB 10KA in a separate compartment with necessary phase segregation as required by the Electrical Inspectorate.	qro	Nos.					
b)	Supply, fixing, testing and commissioning of the double door type compartmental MCB DB comprising of the following :							
	40 A DP MCB 10KA - 1 No. as incomer.							
	6/10ASPMCB 10KA - 4 Nos. as outgoing.							
	With necessary tinned Aluminium busbars, interconnections, separate earth, separate neutral for each outgoing. The board shall be powder coated type fixed with concealed system in wall.							
	The rate shall include necessary connected civil works link chipping, rough plastering etc.	4	Nos.					
23	Supply, installation, testing and commissioning of the following MCCBs in a suitable size sheet steel enclosures meeting IP 20 fixed on the wall including all interconnections and accessories as required and as per standards including, MS frame fixed on the wall with minor civil works.							
a	63A DP 16KA MCCB	2	Nos.					
b	32A DP 16KA MCCB	qro	Nos.					
c	16A DP 16KA MCCB	6	Nos.					
24	Supply, fixing, testing and commissioning of the following size MCB's in a suitable size sheet steel enclosures meeting IP 20 fixed on the wall including all interconnections and accessories as required and as per standards including, MS frame fixed on the wall with minor civil works.							
a)	6/10/16/20A SP MCB	qro	Nos.					
b)	32A TPN MCB	qro	Nos.					
c)	32A DP MCB	qro	Nos.					
d)	63A TPN MCB	qro	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
25	Supply and laying of following size PVC/MS conduits including necessary bends,elbow,etc,as required at site. (for general purpose)							
	The rate shall includes minor civil works such as cutting, chipping, plastering and to make good finished surface to match with the original surface.							
a	19mm dia MSconduit.	50	Mtr.					
b	25mm dia MS Conduit	50	Mtr.					
c	32mm dia MS Conduit	30	Mtr.					
d	50mm dia MS Conduit	20	Mtr.					
26	Supply and laying of following size PVC/Metallic flexible hose on ceiling etc. including necessary coupler etc for various purposes as required at site and as per standards.							
	The rate shall inclusive of necessary supports, fixing screws, etc complete.							
a	19mm dia. PVC Flexible Hose.	400	Mtr.					
b	25mm dia. PVC Flexible Hose.	5	Mtr.					
d	19mm dia. Metallic Flexible Hose.	5	Mtr.					
e	25mm dia. MetallicFlexible Hose.	5	Mtr.					
27	Wiring using 2 Runs of 2.5 Sqmm with 1R-2.5 PVC insulated copper multistrand wire for earthing in existing conduits.	100	Mtr.					
	UPS for Emergency lighting(optional)							
28	Supply, fixing, testing and commissioning of the 10kVA On line UPS 3phase input 3 phase output with 15 min back up using maintenance free battery as per relevant IS standards including all necessary accessories to suit the site requirements.(TPCL reserves the right to select any of the type/make specified & in the recommended make of Equipments). Recommended Make: GE consul/ Socomec/Numeric/Compact systems. Formal approval should taken from TPCL before procurement.	2	Nos.					

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
29a)	Supply fixing testing and commissioning of the 12 WAY IN - 12 WAY OUT, 63 Amps Terminal Block to connect minimum 16Sq.mm copper cable to interconnect in between relay to outgoing cable for external street lighting as required and to suit the site requirements.	qro	nos.					
30b)	Supply fixing testing and commissioning of the ready made loop in loop out junction box including 4WAY IN - 4 WAY OUT,10 Amps Terminal Block to connect upto 16Sq.mm copper cable to interconnect in between incoming from SB to light fitting and to outgoing cable for external street lighting as required and to suit the site requirements. (TPCL reserves the right to select any of the type/make specified & in the recommended make of equipments).	5	nos.					
31	Supply, laying of following size RCC hume pipes including excavation, back filling, ramping the soil, making the surface to match the original surface .							
a	100 mm dia	100	Mtr.					
b	200 mm dia	10	Mtr.					
c	300 mm dia	100	Mtr.					
d	Supply and fixing of LT cable route indicator made out of MS flat and angle iron.	100	Nos.					
	LIGHTING CONTROL SYSTEMS:(OPTIONAL)							
	Note: Alternative item for the FOLLOWING ITEMS sl.no.35 instead of providing (Supply, fixing, testing and commissioning of the)Time switch-1 No., contactors in all outgoing, contact multiplier relay, Auto/manual/bms Selector switch, On off Push button for manual operation and control etc., mentioned in the switch board.							
32	Supply fixing testing commissioning of the following for the external lighting control systems similar to the Clipsal make or equivalent including interconnections, CAT 5 Cables with all necessary accessories as required at site and as per standards.(TPCL reserves the right to select any of the type/make specified & in the recommended make of equipments).							

Sl. No.	Description of Item	Quantity	Unit	Unit Rate in Rs.		Amount in Rs.		TOTAL IN Rs.
				SUPPLY	ERECTION	SUPPLY	ERECTION	
i	CBUS TECHNOLOGY INPUT UNITS - Monochrome Touch Screens-5050CTL 2 W E							
ii	Light Level Sensors							
	Input Units Light Level Sensors SIMILAR TO CLIPSAL CAT. NO. E5031PE	qro	Nos.					
iii	On - off relay							
	Output Units 12 Channel 10A Relay Range - SIMILAR TO CLIPSAL CAT. NO. L5512RVF	qro	Nos.					
iv	System Units - PC Interface -							
	System Units - PC Interface - SIMILAR TO CLIPSAL CAT. NO.DESCRPTION- 5500PC PC Interface, RS232, C-Bus	qro	No.					
v	CBUS PASCAL AUTOMATION CONTROLLER- 5500PACA	qro	No.					
vi	Design, supply and laying of the CAT-5 CABLE inside the suitable size MS conduit with all necessary accessories such as bend, coupling etc., to suit the site requirments.	qro	Mtr.					
	Total carried out to summary Rs.							
Note:	MCCB MCCB shall be provided with an external indication for its status ON/OFF/Trip (thru Aux and Trip alarm contact)							
	Station :							
	Date :			Signature of Tenderer(s)				

TIDEL PARK COIMBATORE LIMITED,		
STREET AND LANDSCAPE LIGHTING WORKS		
Bill of Quantities		
II. Operating Contract for 5 Years Including One year Defects Liability Period (Considered for Evaluation Purpose)		
S.No	Description of Work	Lumpsum Fee in Rs.
	Operation	
	Operation of the system supplied, installed, Commissioned by the successful tenderer for 5 years including Defects Liability Period (DLP). This will include the Operation of the system such as Switching On-Off the system for effective functioning, ensuring that system does not remain out of service for a period more than 8 hours in case of major breakdowns and one hour in the case of minor breakdowns due to any unforeseen break down. The Successful tenderer shall provide the all Spares / Consumables / Water / Electricity power / Fuel / Oil etc.,	
	The manpower proposed to be deployed is One Electrician has to be provided on 24X7 days basis for 5 years towards Operation & Maintenance works.	
	Charges for operation for a period of 5 years from the date of handing over of installations to the Client shall be quoted.	
	Quote Lumpsum price for the following period.	
	a. First year after Handing over the Installation – Quote Lumpsum Fee for one year.	
	b. Second Year after Handing over the Installation – Quote Lumpsum Fee for one year.	
	c. Third Year after Handing over the Installation – Quote Lumpsum Fee for one year.	
	d. Fourth Year after Handing over the Installation – Quote Lumpsum Fee for one year.	
	e. Fifth Year after Handing over the Installation – Quote Lumpsum Fee for one year.	
	Total C/o to Summary – Amount in Rs. :	
Note:-	The escalation for Maintenance cost for any consecutive year should not exceed 5% value of the Maintenance Lumpsum rate quoted by the tenderer.	
Station :		
Date :		Signature of Tenderer(s)

TIDEL PARK COIMBATORE LIMITED,		
STREET AND LANDSCAPE LIGHTING WORKS		
Bill of Quantities		
III. Comprehensive Maintenance Contract Fee for 4 Years after Defects Liability Period (Considered for Evaluation Purpose)		
S.No.	Description of Work	Lumpsum Fee in Rs.
	Maintenance :	
	Maintenance of the system supplied, installed, Commissioned by the successful tenderer for 4 years beyond the Defects Liability Period (DLP). This will include start up / commissioning routine servicing, regular maintenance, preventive maintenance of equipments and components and break down repairs as and when occurred, ensuring that system does not remain out of service for a period more than 8 hours in case of major breakdowns and one hour in the case of minor breakdowns due to any unforeseen break down. The Successful tenderer shall provide the all Spares / Consumables / Water / Electricity power / Fuel / Oil etc.,	
	The successful tenderer shall keep the essential spares at Tidel Coimbatore site during the Defects Liability Period to avoid the delay in attending faults / maintenance. After the DLP, any such replacement required for maintenance the cost will be paid by the Contractor for replacement.	
	Furnish separately the manpower proposed to be deployed.	
	a. First year after DLP – Quote Lumpsum Fee for one year.	
	b. Second Year after DLP – Quote Lumpsum Fee for one year.	
	c. Third Year after DLP – Quote Lumpsum Fee for one year.	
	d. Fourth Year after DLP – Quote Lumpsum Fee for one year.	
	Total C/o to Summary - Amount in Rs.	
Note:-		
The escalation for Maintenance cost for any consecutive year should not exceed 5% value of the Maintenance Lumpsum rate quoted by the tenderer.		
Station :		
Date :		Signature of Tenderer(s)

LIST OF TENDER DRAWINGS
STREET AND LANDSCAPE LIGHTING WORKS

Sl.No.	Description	DWG. No.	Rev.
1	LANDSCAPE LIGHTING PLAN (Street Light, Façade Light and Landscape Lighting)	TPCBE-Elec-GNR-2009-109730	R0
2	Landscape Lighting -Single Line Diagram	TPCBE-Elec-MJM-2009-109737	R0