



DEENDAYAL PORT AUTHORITY

(Erstwhile Deendayal/Kandla Port Trust)

Ministry of Ports, Shipping & Waterways, Govt. of India

Mechanical Engineering Department



Office of the Executive Engineer (Electrical), Ground Floor, Nirman Building, New Kandla, Kutch, Gujarat, Pin Code 370210. Email Id: Deepak.hazra@deendayalport.gov.in

No.: EL/AC/2852

Date: 11/10/2024

EXPRESSION OF INTEREST [EOI]

“Special Repairs to Nirman Bhavan & Seva Sadan-III - electrification work thereof.”

(This EOI is issued to elicit Expression of Interest from the parties interested in the work and does not constitute any binding commitment from the Deendayal Port Authority to proceed with the work or invite any or all the parties in the subsequent bidding process. The Open Tenders will be issued subsequently.)

Executive Engineer (Electrical), DPA invites Expression of Interest for the work of “Special Repairs to Nirman Bhavan & Seva Sadan-III - electrification work thereof” from the reputed firms from those who have executed similar work in Government / Public Sector and other leading private organizations. The Expression of Interest (EOI) documents containing details of Scope of Work and Technical Specifications are enclosed herewith.

The interested firms are requested to submit their Expression of Interest (EOI) for the said work in BOQ format as enclosed at Annexure I. The EOI shall be submitted to the office of the undersigned on or before 17/10/2024. A soft copy of EOI is also acceptable through e-mail Id deepak.hazra@deendayalport.gov.in & nikunj.solanki@deendayalport.gov.in

-/sd

Executive Engineer (E)
Deendayal Port Authority

SCOPE OF WORK

The Specification is intended to cover the Electrification work for Special Repairs to Nirman Building, Seva Sadan-III. The works will be carried out simultaneously with Civil work, which includes electrical part i.e. Supply, Installation and Commissioning of Ceiling Fans, LED Lights fittings/ internal concealed/surface wiring, the scope of works also include removal of the existing wiring / switch board/light fittings & electrical allied item. The work shall be executed as per IER & to the satisfaction of the Engineer-in -Charge. For installation of equipment, the contractor shall arrange all types of tool & tackles.

TECHNICAL SPECIFICATION

Technical Specification No. 1:

The item includes providing & fixing concealed wiring for Modular light point from Modular switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS: 694/1990 of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared in construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared groove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. After laying of pipe the groove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling/ floor also in case of false ceiling the pipe shall be properly clamped over the ceiling. The work consists providing & fixing Modular, having Push/SP switch 6A x 250V with spark shield ISI mark and to meet specifications of IS & 3 plate Ceiling Rose/Angle Holder made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The works also include; wherever if it is necessary the existing point will be used for wiring. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 2:

The item includes providing & fixing surface wiring for light/tube point from switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS: 694/1990 of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid through heavy duty flat Casing Capping strip and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make as directed by Engineer-in-Charge. The PVC Casing Capping strip shall be fixed rigidly on wall/falls ceiling with suitable size heavy duty PVC saddle set with base, clamp & screw at the interval of 0.5 meter. After laying of casing capping pipe with existing surface of wall/fall ceiling/ floor also in case of false ceiling the pipe shall be properly clamped over the ceiling. The work consists providing & fixing of one Module Bell Push/SP switch 6A x 250V with spark shield ISI mark and to meet specifications of IS & 3 plate Ceiling Rose/Angle Holder made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The works also include; wherever if it is necessary the existing point will be used for wiring. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge

Technical Specification No. 3:

The item includes providing & fixing concealed wiring for Modular fan point from switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared groove in such case on the ceiling portion the pipe is to be

laid on the false ceiling by clamping properly. After laying of pipe the groove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, 2 module Step cut electronic fan regulator with rotary steps & 3 plate Ceiling Rose made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The works also include; wherever if it is necessary the existing point will be used for wiring. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 4:

The item includes providing & fixing surface wiring for Modular fan point from switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 1.5 sq. mm. for phase & neutral wire and 1.0 Sq.mm continuous stranded copper conductor wire for earth to be laid to be laid through heavy duty flat Casing Capping strip and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make as directed by Engineer-in-Charge. The PVC Casing Capping strip shall be fixed rigidly on wall/falls ceiling with suitable size heavy duty PVC saddle set with base, clamp & screw at the interval of 0.5 meter. After laying of casing capping pipe with existing surface of wall/falls ceiling/ floor also in case of false ceiling the pipe shall be properly clamped over the ceiling. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, 2 module Step cut electronic fan regulator with rotary steps & 3 plate Ceiling Rose made from polycarbonate on suitable size of PVC box with cover. The PVC unbreakable concealed box for required modules shall be embedded properly in the wall and the switches shall be fixed on Modular Plates for required Modules on the embedded box. The works also include; wherever if it is necessary the existing point will be used for wiring. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 5:

The item includes providing & fixing concealed wiring for Modular plug point for computers (With 2 module, 4 nos. 2 in 1 socket 6A x 250V & 4 nos. 1 module SP switch 6A x 250V with spark shield) with Flame Retardant, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 2.5 sq. mm. for phase & neutral wire and 1.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of size 20 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared groove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. After laying of pipe the groove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of 2 modules, 4nos. 2 in 1 socket 6A x 250V & 4 nos. 1 module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS on suitable size of PVC unbreakable concealed box with 12 modules modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall / wooden table and the switches & Sockets shall be fixed on 12-module modular plate and modular plated shall be fixed on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No.6:

The item includes providing & fixing surface wiring for single phase sub-circuit from the main switch /meter /DBs / MCBs to the switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 4 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid to be laid through heavy duty flat Casing Capping strip and other accessories such as Tee, junction box, inspection bends, elbow etc. of

approved make as directed by Engineer-in-Charge. The PVC Casing Capping strip shall be fixed rigidly on wall/falls ceiling with suitable size heavy duty PVC saddle set with base, clamp & screw at the interval of 0.5 meter. After laying of casing capping pipe with existing surface of wall/fall ceiling/floor also in case of false ceiling the pipe shall be properly clamped over the ceiling. Complete work consists of necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 7:

The item includes providing & fixing concealed wiring for single phase sub-circuit from the main switch /meter /DBs / MCBs to the switchboard with FRLS, 1100 Voltage grade, single core stranded copper conductor wire of size 4 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe of suitable size of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared by contractor on wall/ceiling as case may be & the conduit pipe shall be laid through prepared groove. After laying of pipe the groove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. Complete work consists of necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 8:

This includes providing & fixing concealed wiring for A.C point with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS: of size 4.0 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe with IS: of size 25 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared groove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. The work consists providing & fixing of 2 module 25A x 250V socket with ISI mark and to meet specifications of IS & 2 module SP switch 25A x 250V with spark shield with ISI mark and to meet specifications of IS, on suitable size of PVC unbreakable concealed box with 4 modules modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall and the fuse, switch & Socket shall be fixed on 4-module modular plate and modular plate shall be fixed on the embedded box. The above switch is to be fitted on the outside of the room to control the lighting ckt of individual switchboard from outside, the work also consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 9:

The item includes providing & fixing full Modular point switch board with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 1.5 sq. mm. for phase, neutral & earth. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, and Modular 2 in 1 socket 6A x 250V with shutter made from polycarbonate on modular plate. The complete work consists necessary wiring connections and earth linking with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 10:

The item includes providing & fixing half Modular point in supplied switch board with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 1.5 sq. mm. for phase, neutral & earth. The work consists providing & fixing of one module SP switch 6A x 250V with spark shield with ISI mark and to meet specifications of IS, and 2 Module Modular 2 in 1 socket 6A x 250V with shutter made from polycarbonate on existing modular plate (by considering 3 extra modules for half point in point wiring for light/fan/tube). The complete work consists necessary wiring connections and earth linking with all materials

and labour as directed by Engineer-in-charge.

Technical Specification No. 11:

The item includes providing & fixing concealed wiring for Modular Power point with FRLS, 1100 Voltage grade, single core stranded copper conductor wire with IS of size 4.0 sq. mm. for phase & neutral wire and 2.5 Sq.mm continuous stranded copper conductor wire for earth to be laid through PVC Round Pipe with IS of size 25 mm Diameter of Medium Mechanical Strength (MMS) type and other accessories such as Tee, junction box, inspection bends, elbow etc. of approved make. The proper size of groove shall be prepared in old construction by contractor on wall/ floor and the conduit pipe shall be laid through prepared groove in such case on the ceiling portion the pipe is to be laid on the false ceiling by clamping properly. After laying of pipe the groove shall be closed with mixture of cement & sand and to match with existing surface of wall/ceiling. The work consists providing & fixing of 2 module 16A x 250V socket with shutter with ISI mark and to meet specifications of IS, 1 module SP switch 16A x 250V with spark shield with ISI mark and to meet specifications of IS & 1 module 10/16A fuse unit on suitable size of PVC unbreakable concealed box with 4 modules modular plate. The PVC unbreakable concealed box shall be embedded properly in the wall and the fuse, switch & Socket shall be fixed on 4-module modular plate and modular plate shall be fixed on the embedded box. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge.

Technical Specification No. 12:

This item includes supply at site 10 Way double door TPN Distribution Board with IP42 degree of protection. The DB shall be made from special grade of CRCA sheet and powder coated. The DB shall be fitted with Bus bar, DIN Rail and neutral link. The rates shall be excluding the cost of MCBs.

Technical Specification No. 13:

This item includes fixing & commissioning of supplied 10 Way double door TPN Distribution Board on wall/ structure as directed. The DB shall be fixed rigidly on wall through suitable size of nut bolts/anchor fasteners/cemented wooden gutties as directed. This includes necessary wiring, connections & earth linking with all material, labour tools & tackles as directed by Engineer-In-charge.

Technical Specification No. 14:

This includes supply of DIN Rail mounted 'B' Series 125 Amps. X 240 Volts 50 Hz. Four Pole MCCB with 10kA Breaking Capacity. The terminals of MCCB shall be serrated type. The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

Technical Specification No. 15:

This includes supply of 125 Amp., 4 Pole RCCB as per following technical specifications.

- 1) Poles description: 4P
- 2) [In] rated current: 125 Amp.
- 3) Network type: AC
- 4) Earth-leakage sensitivity: 40 Mili amps.
- 5) Earth-leakage protection time delay: Instantaneous
- 6) Earth-leakage protection class: Type AC
- 7) Network frequency: 50 Hz
- 8) Rated operational voltage: 380...415 V AC, 50 Hz
- 9) Residual current tripping technology: Voltage independent
- 10) Rated breaking and making capacity: Idm 1500 A, Im 1500 A
- 11) Rated conditional short-circuit current: 10 kA
- 12) Rated insulation voltage: 500 V
- 13) Rated impulse withstand voltage: 6 kV

- 14) Surge current: 250 A
- 15) Contact position indicator: Yes
- 16) Control type: Toggle
- 17) Mounting mode: Clip-on
- 18) Mounting support: DIN Rail

Environment

Standards: EN/IEC 61008-1

Product certifications: ISI SNI

IP degree of protection: IP20 conforming to IEC 60529

Electromagnetic compatibility: 8/20 μ s impulse withstand, 250 A conforming to EN/IEC 61008-1.

Technical Specification No. 16:

This includes supply of DIN Rail mounted 'B' Series 6-32 Amps. X 240 Volts 50 Hz. Single Pole MCB with 10kA Breaking Capacity. The terminals of MCB shall be serrated type. The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

Technical Specification No. 18:

This includes fixing & commissioning of supplied MCCB/RCCB/SP/ MCB in DB. The MCB shall be fixed on DIN Rail provided in existing DB. This includes necessary wiring, connections, distribution & earth linking of DB with all material, labour tools & tackles as directed by Engineer-In-charge.

Technical Specification No. 19:

This includes supply of Round Sleek LED Down Light having Robust Design with Pressure Die-Cast Alu. Housing, ensuring long life as per following technical specification.

- 1) Lumen: 1500 Lm
- 2) System Power: 13 to 15 Watt
- 3) CCT: 6500 K
- 4) CRI >80
- 5) Efficacy of >110 lm/w
- 6) Surge Protection: 2.5 kV
- 7) Input Voltage Range: 130-320 V AC
- 8) Beam Angle 120°
- 9) Optical Cover/Lens Type: Polycarbonate
- 10) Material: Housing: Pressure Die Cast Aluminium
Diffuser: Polycarbonate
Clip: Steel Clip (Spring)
- 11) Driver: Yes, Included
- 12) Power Factor (Min): 0.95
- 13) Ingress Protection Code: IP 20
- 14) Mech. Impact Protection Code: IK02
- 15) Warrantee: 2 Year

Technical Specification No. 20:

This includes fixing & commissioning of supplied Round Sleek LED Down Light Luminaries on existing false ceiling by making & providing necessary cut out of fitting dimensions and required supporting material, facilitate mounting in false ceilings as directed. The fitting shall be fixed rigidly nearby fitting through suitable size of screws/nut bolts/anchor fasteners and connections with 3 core flexible copper cable from nearest source of supply/ceiling rose & necessary connections with all material and labour and as directed by Engineer-In-charge.

Technical Specification No. 21:

This item includes supply at site 1200 mm sweep Ceiling Fan fitted with heavy duty grease filled double ball bearing that ensures noiseless performance and long lasting smoother life of fan suitable for single phase 230 Volts A.C., 50Hz. The fan should be 5 star ISI mark. The Fan blades shall be aerodynamically balanced to ensure maximum air delivery at lower power consumption & the blades shall be made of 'heavy gauge' aluminum sheet so as to retain the blade's angle over a longer period. The Fan motor shall be made of superior grade copper wire and impregnated in special varnish for long life operation. The motor shall be totally enclosed and low-loss-silicon steel stampings ensure minimum power consumption with high optimum output. The Fan shall be coated with a special anticorrosive enamel paint that makes them rust free and ensures a classic appearance and longer life. The supplied fan shall confirm to IS specifications. The fan shall be supplied along with all accessories such as down rod 600 mm length, PVC Bobbin, Stainless Steel Nut Bolt with cotter pin, capacitor etc. of approved make and as per IS specification as directed by Engineer in Charge. The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

Technical Specification No. 22:

This includes fixing & commissioning of supplied ceiling fan with all accessories in existing hook including necessary wiring and connection from nearest point / Ceiling rose through PVC flexible copper conductor wire and earth linking etc. The rotary step cut electronic regulator shall be fixed and screwed rigidly on switch board including wiring and connection etc. with all material and labour as directed by Engineer-in-charge.

Technical Specification No. 23:

This includes supply of 30-32 watt LED recessed mounted Robust Design with Pressure Die-Cast Alu. Housing, ensuring long life as per following technical specification.

- 1) Lumen: 1500 Lm
- 2) System Power: 30 to 32 Watt
- 3) CCT: 6500 K
- 4) CRI >80
- 5) Efficacy of >110 lm/w
- 6) Surge Protection: 4kV
- 7) Input Voltage Range: 130-320 V AC
- 8) Beam Angle 120°
- 9) Optical Cover/Lens Type: Polycarbonate
- 10) Material: Housing: Pressure Die Cast Aluminium
Diffuser: Polycarbonate
Clip: Steel Clip (Spring)
Recessed mounting box square.
- 11) Driver: Yes, Included
- 12) Power Factor (Min): 0.95
- 13) Ingress Protection Code: IP 20.
- 14) Mech. Impact Protection Code: IK02

15) Warrantee: 2 Year

Technical Specification No. 24:

This includes preparation of earth station with chemical treated back filled compound 50 mm dia. Pipe in Pipe GI Type 3 Mtr Depth, Maintenance free including all accessories & Masonry work Enclosure with cover plate.

A cement concrete (ratio 1:4:8) chamber of at least 30 Cm. x 30 Cm. shall be provided just below the surface of ground over the funnel for watering and having RCC/CI cover of suitable size as directed. This also includes removal of extra-excavated earth from the site. The work shall be carried out to entire satisfaction of Engineer-in-charge. This work includes all labour and material as directed by Engineer-in-Charge. The works also include earthing value marking & painting on earth strips & earthing station by suitable paints (Green Color on Strips) and also mentioned the earth value on earth pits.

Technical Specification No. 25:

The works include providing & fixing the 8 SWG GI wire, from earth station to equipment / Main DB or as per site requirement by providing & fixing suitable Dia Medium duty PVC conduit pipe in concealed/surface manner. The complete work consists necessary wiring connections and earth linking at both the ends with all materials and labour as directed by Engineer-in-charge

Technical Specification No. 26:

Removing of old existing electrical Tube Light / Fan /Bell/computer points & its allied electrical items & wiring from room/offices/lobby at Nirman & Seva Sadan III, wherever necessary or as per instruction of EIC same is to be deposited at Store, Kandla as per directed by EIC, the work includes with Tools & tackles, Man & Material etc. The works carried out as per instruction of EIC.

**Signature & Seal
of Contractor**

**Executive Engineer (E)
Deendayal Port Authority**

Schedule-B

Name of Work: Special Repairs to Nirman Bhavan & Seva Sadan-III - electrification work thereof.

Sr. No.	Description	Qty	Unit	Rate	Amount
1	Providing and Fixing of the concealed wiring at the office rooms by cutting / jurry on wall by providing modular switches light/tube point with PVC insulated single core standard 1.5 Sq.mm. copper conductor wire as per the Technical Specification No.1	550	Nos.		
2	Providing and Fixing of the surface wiring for outdoor lobby area by providing modular switches light/tube point with PVC insulated single core standard 1.5 Sq.mm. copper conductor wire as per the Technical Specification No.2.	95	Nos.		
3	Providing and Fixing concealed wiring at the office rooms by cutting / jurry on wall by providing modular Fan point with PVC insulated single core standard 1.5 Sq.mm. copper conductor wire twin module step cut electronic fan regulator as case may be as per the Technical Specification No. 3	180	Nos.		
4	Providing and Fixing of the surface wiring at outside the office ,lobby area by providing modular Fan point with PVC insulated single core standard 1.5 Sq.mm. copper conductor wire & twin module step cut electronic fan regulator as case may be as per the Technical Specification No. 4.	45	Nos.		
5	Providing and fixing of the concealed wiring inside the office rooms by cutting /jurry on wall for 3 x 5/6A X250 Volt modular plug point with 3nos. SP switches for computer as per the Technical Specification No. 5	185	Nos.		
6	Providing & fixing of the following surface wiring for single phase sub-circuit from the main switch /meter/DBs /MCBs to the switch board with 2 x 4 Sq.mm. copper conductor to be used as phase & neutral and copper wire as earthing as per the Technical Specification no. 6	500	mtr.		
7	Providing & fixing of the following concealed wiring for single phase sub-circuit from the main switch /meter/DBs /MCBs to the switch board with 2 x 4 Sq.mm. copper conductor to be used as phase & neutral and copper wire as earthing as per the Technical Specification no. 7	300	mtr.		
8	Providing and fixing concealed wiring for 32 A, Modular A.C point as per Technical Specification no. 8	35	Nos.		
9	Providing and fixing of the concealed wiring for 3 x 5 Pin 6A X250 Volt Modular full plug point as per Technical Specification No. 9	132	Nos.		
10	Providing and fixing concealed wiring for 3 x 5/6A X250 Volt Modular Half point as per the Technical Specification No. 10	107	Nos.		

11	Providing and fixing of the concealed wiring for 15/16A X250 Volt Modular power point as per the Technical Specification No. 11	25	Nos.		
12	Supply of 10 Way TPN Double Door Distribution Board as per the Technical specification No:- 12	22	Nos.		
13	Installation of 10 Way TPN Double Door Distribution Board as per the Technical specification No:- 13	22	Nos.		
14	Supply of 4 Pole, 125 Amp. MCCB as per the Technical Specification No. 14	22	Nos.		
15	Supply of 3 phase, 125 Amp. RCCB as per the Technical Specification No. 15	22	Nos.		
16	Supply of 6-32 A SP MCB with 10kA Breaking Capacity in 'B' Series as per Technical Specification No. 16	150	Nos.		
17	Fixing of MCCBs, MCBs, SPs & RCCBs in Distribution Box.as per the Technical Specification no. 17	194	Nos.		
18	Supply of 13-15 Watt Sleek LED Down Light as per the Technical Specification No:- 18	550	Nos.		
19	Fixing of 13-15 Watt Sleek LED Down Light as per the Technical Specification No:- 19	550	Nos.		
20	Supply of 1200 mm Sweep ceiling fan as per the technical specification no. 20	55	Nos.		
21	Installation of 1200 mm Sweep ceiling fan as per the technical specification no. 21	55	Nos.		
22	Supply of , 30-32 Watt recessed mounted LED Light as per the Technical Specification No:22	95	Nos.		
23	Fixing of , 30-32 Watt recessed mounted LED Light as per the Technical Specification No:23	95	Nos.		
24	Preparation earthing station, chemical treated back filled compound earthing system with Pipe-In-Pipe 50 mm Dia GI type 3 Mtr Depth , Maintenance free as per the Technical Specification No. 24	12	Nos.		
25	Providing & connecting 8 SWG GI earthing wire for earth station to equipment as per the Technical specification No:-25	2000	mtr		
26	Removing of existing electrical Tube Light / Fan /Bell/computer points & its allied electrical items , wirings from room/offices/lobby at Nirman & Seva Sadan III, as per the Technical Specification No:- 26	500	Nos.		
Total Amount in INR					

In Words :-

**Signature & Seal
of Contractor**

**Executive Engineer (E)
Deendayal Port Authority**

Approved Make List of Electrical Items		
Sr. No.	Description	Recommended Makes
1	HV VCB	Siemens/ Crompton Greaves/ ABB/ Schneider
2	HV Gas Insulated Breaker	Siemens/ Schneider/ ABB
3	Power Transformer	Voltamp/ Crompton Greaves/ Bharat Bijlee/ BHEL/ Siemens/ ABB/ Schneider/ T&R
4	Distribution Transformer	EMCO/ Kirloskar/ Patson/ Voltamp/ ABB/ Schneider/ T&R
5	Resin Cast Transformer	Voltamp/ Kirloskar/ EMCO
6	Dry Cast Transformer	Voltamp/ Kirloskar/ EMCO
7	HT XLPE Cable	Polycab/ Torrent/ RPG Asian/ Gloster/ Unistar
8	LT XLPE Cable	Polycab/ Torrent/ RPG Asian/ Rallison/ Primecab/ Havells/ Unistar/ Avocab/ Allcab/ Adcab
9	LT ACB	Siemens/ LK E&A/ Schneider Electric/ C&S
10	Protection Relay	Areva/ LK E&A/ Siemens/ ABB/ C&S
11	LT Panel	CPRI Approved
12	Changeover Switch	Siemens/ LK E&A/ ABB/ C&S/ Schneider Electric/ Legrand/ Indoasian
13	SFU for Main LT Distribution Panel	Siemens/ LK E&A/ ABB/ C&S
14	SFU for Distribution Panel & Feeder Pillar	Siemens/ LK E&A/ ABB/ C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells
15	MCCB for Main LT Distribution Panel	Siemens/ LK E&A/ ABB
16	MCCB for Distribution Panel & Feeder Pillar	Siemens/ LK E&A/ ABB/ C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells
17	MCB/ELCB/RCCB/RCCBO for Main LT Distribution Panel	Siemens/ Hager/ LK E&A/ ABB
18	MCB for Distribution Panel & Feeder Pillar	Siemens/ LK E&A/ ABB/ C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells/ Standard
19	Distribution Board	Standard/ Hensel/ Legrand/ Indoasian/ Havells
20	Multi-Function Digital Meter for Main LT Distribution Panel/ Digital kWh Meter	LK E&A/ Enercon/ Secure/ L&G/ Rishabh
21	Analog Volt/Ampere Meter for Distribution Panel & Feeder Pillar	Rishabh/ AE/ Enercon/ LK E&A
22	Selector Switch for Voltmeter/Ampere Meter	LK E&A/ Siemens/ C&S
23	Power Contactor & Overload Relay	LK E&A/ Siemens/ ABB
24	Quartz Time Clock Switch	LK E&A/ Indoasian/ Siemens
25	PVC Wire with Copper Conductor	RR Kabel/ KEI/ Polycab/ Milex/ Gujcab/

		Standard/ Finolex/ Anchor
26	Flush type Switch, Socket, Holder, Ceiling Rose & Electronic Regulator	Anchor/ MK/ Northwest/ Vinay/ Panama/ Havells
27	Bells/ Call Bells	Anchor/ Legend/ MK/ Northwest
28	Modular Switch, Socket, Plate & Box	Anchor/ MK/ Northwest/ Legrand/ Havells/ Indoasian/ Siemens
29	PVC Conduit/ Oval Conduit & Casing Capping and Accessories	Precision/ Vulcan/ Finolex/ Garware/ Restoplast/ Swastik/ BPI
30	Lamp & Fluorescent Lamps	Philips/ Bajaj/ Wipro/ Crompton/ Osram/ Surya Roshni/ GE
31	HPMV & Metal Halide Lamps	Philips/ Bajaj/ Wipro/ Crompton/ Osram/ Surya Roshni/ GE
32	Ignitor for HPSV & Metal Halide Lamps	Philips/ Bajaj/ Wipro/ Crompton/ Osram/ Surya Roshni/ GE
33	Luminaries	Philips/ Bajaj/ Wipro/ Crompton/ Osram/ Surya Roshni/ GE
33	LED Luminaries	Philips/ Bajaj/ Wipro/ Crompton/ Surya/ Pyrotech/ Syska/ Nessa having Surge Protection $\geq 10kV$ for Fittings & Internal Surge Protection for Driver of $\geq 4kV$, LED Chip of only OSRAM/ CREE/ Philips Lumileds/ Citizen/ Nicia, with LM79 & LM80 Certification
34	Ceiling Fan	Bajaj/ Orient/ Usha/ Crompton/ Almonard/ GEC
35	Wall mounting Fan	Bajaj/ Orient/ Usha/ Crompton/ Almonard/ GEC
36	Exhaust Fan	Bajaj/ Orient/ Usha/ Crompton/ Almonard/ GEC
37	Heavy duty Industrial Wall mounting Fan	Bajaj/ Orient/ Usha/ Crompton/ Almonard/ GEC
38	Water Cooler	Voltas/ Usha/ Blue Star
39	Air Conditioner	Voltas/ Carrier/ Blue Star/ Usha/ Hitachi/ LG/ Samsung/ Onida
40	Refrigerator	Voltas/ Carrier/ Blue Star/ Usha/ Hitachi/ LG/ Samsung/ Whirlpool
41	Voltage Stabilizer	Veeline/ Capri
42	Inverter	Sukam/ Microtek
43	Engine for D.G. Set	Cummins/ Greaves/ Kirloskar/ Caterpillar/ Ashok Leyland/ Volvo
44	Alternator for D.G. Set	Stamford/ Crompton Greaves/ Jyoti/ Kirloskar Electric
45	Electric Motor	Alstom/ Crompton Greaves/ Siemens/ Kirloskar/ ABB
46	Water Pump	Swastik/ KSB
47	Water Geyser	Bajaj/ Usha/ Crompton Greaves/ Spherehot/

		Racold
48	Lug & Cable Glands	Dowells/ Jainson/ Braco

SPECIAL CONDITION FOR ELECTRICAL PART

1. Valid Electrical Contractor License:

The Contractor must have valid Electrical Contractor's license for carrying out Electrical work of the nature involved in this tender obtained from Chief Electrical Inspector, Government of Gujarat. The Contractor shall submit certificate and copy of the license in lieu of the same for consideration.

2. Approval by the Engineer-in-Charge or his nominee:

The Contractor shall submit the makes of material, equipment, specifications and drawings for proposed Work to the Engineer-in-Charge or his nominee, who is to approve them subject to compliance with the Technical specifications and drawings. The Engineer-in-Charge or his nominee's approval shall not alter the Contractor's responsibility for the work. All drawings prepared by the contractor for the work if any, are subject to prior approval by the Engineer in Charge or his nominee before procurement/execution.

3. The guarantee period shall be for a period of one year from the date of handing over of entire electrical work, however for LED Light fittings warranty shall be inforce for a period of two years from the date of handover the project.

4. Payment Terms:

All payments shall be made in Indian rupees unless specifically mentioned.

- (1) 70% payment (subject to deductions as per tender conditions) will be released after receipt of material at site in good condition, after obtaining insurance cover as per tender condition and after TPIA inspection & acceptance of material by DPA.
- (2) 20% of item rate (subject to deductions as per tender conditions) after completion of erection, installation, testing and commissioning etc. and 90% of item rate for item covers only laying/fixing/removal etc and after TPIA inspection & acceptance of work by DPA.
- (3) 10% (subject to deductions as per tender conditions) will be released after successful completion of whole work and TPIA inspection & handing over to DPA.

Executive Engineer (E)

Deendayal Port Authority