

Name of work :- A & A to Street Light on State Highway & Major District Road (MDR) of Jamnagar District.

SCHEDULE - B

Sr. No.	Qty	Unit	Item of work	Net Rate	Per	Amount
1	64.00	Mtrs	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (b) 25 mm (Make:Nihir, Polycab, Precision, BLP)	33.33	Mtr	2133.12
2	38.00	Mtrs	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required.(e) One wire 6.00 sq. mm	56.56	Mtr	2149.28
3	1512.00	Mtrs	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed.(e) 1.50 Sq.mm 3 core round PVC sheathed (Make:Nihir, Polycab, Precision, BLP)	46.46	Mtr	70247.52
4	189.00	Nos.	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Street Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (iii) Above 60 to 90 watts. cat-III (Make:Jaquar,phillips,Bajaj,Crompton,Havells)	5976.17	Ea	1129496.13
5	1.00	Nos	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V,having normal current rating up to 25 A to 100A. with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III Note:-1 Add Rs. 10% extra for housing/Encloser of MCCB for Item No 3-4-1 to 3-4-12 (The Enclosures should be used of same company of MCCBs to be used) (Make:Schneider, Siemens, L & K, ABB)	6790.43	Ea	6790.43
6	189.00	Nos.	providing and erecting Miniature circuit breaker single pole 0.5A to 2A system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark. Cat-iii (Make:Schneider, Siemens, L & K, ABB)	270.68	Ea	51158.52
7	17.00	Nos.	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat.III (Make:Schneider, Siemens, L & K, ABB)	638.32	Ea	10851.44
8A	17.00	Nos.	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (a) single door (IP-30)(i)4 way (Make:Schneider, Siemens, L & K, ABB)	355.52	Ea	6043.84
8B	17.00	Nos.	(A) single phase incoming and horizontal single phase outgoing (a) single door (IP-30)(ii)6 way (Make:Schneider, Siemens, L & K, ABB)	582.77	Ea	9907.09
9	51.00	Nos.	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (i) 25 Amps.DP cat-III (Make:Schneider, Siemens, L & K, ABB)	1969.50	Ea	100444.50

Sr. No.	Qty	Unit	Item of work	Net Rate	Per	Amount
10	8.50	Kgs	Providing and erecting Annealed bare Copper wire 8 to 16 SWG..	794.87	Kg	6756.40
11	17.00	Nos.	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.(Make:Vasudha, Saraa, National, Electro Earth)	4591.46	Ea	78054.82
12A	6283.00	Mtrs.	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (B) 4 core 6 Sq. Mm (Make:Polycab, RR Kabel, Finolex,KEI,Havells,Adcab)	126.25	Mtr.	793228.75
12B	804.00	Mtrs.	(C) 4 core 10 Sq. Mm (Make:Polycab, RR Kabel, Finolex,KEI,Havells,Adcab)	140.39	Mtr.	112873.56
13	4305.00	Mtrs.	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	55.55	Mtr.	239142.75
14	4881.00	Mtrs.	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	62.62	Mtr.	305648.22
15A	35.00	Nos	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.(B) 2 to 4 core 6 Sq. mm	38.38	Ea	1343.30
15B	3.00	Nos	(C) 2 to 4 core 10 Sq. mm	38.38	Ea	115.14
16	12.00	Nos	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (B) 10 Sq.mm	13.13	Ea	157.56
17	188.00	Nos.	Supply of approved make FRP Pole having following specifications: FRP Light Pole made by CNC filament winding machine using thermoset resin polyester/epoxy resin system) having minimum 62% glass content. The pole should be in one piece and tapered round in shape, having smooth finish and should be totally free from corrosion as well as non conductive & shock proof Pole should be provided with FRP Anchor Base and it should be heavy duty, or MS Material duly painted with Epoxy paint.Pole should be flame retardant as per IS 6746. Resin used shall be UV resistance and pigmented. A highly weather resistant polyurethane coating shall be applied to the pole after applying suitable primer system that ensures proper adhesion of the paint. Minimum coating thickness shall be 80 to 100 micron. Deflection of the pole shall not exceed more than 10% of the length of pole for the given load" Pole should be generally made as per the dimensional data, performance criteria and some interchangeability features of poles as per standard ANSI C 136.20 latest version or ASTM D 4923/01 including cable termination box with necessary accessories . The size of pole and type of installation with foundation as per manufacturer details and site requirement are as below .(1) Suitable for base plate mounting single arm Bracket.[J] Overall length of 7 Mtr.Average Thickness: 7.5mm. Top/ Bottom OD Dia A/F 89/183 mm ± 2mm approx. approx. Weight of Pole 40 kg approx. (Without Base) Anchor Base (Size 300X300 & 18mm th.) (Make:R&B approved make)	16143.84	Ea	3035041.92

Sr. No.	Qty	Unit	Item of work	Net Rate	Per	Amount
18	188.00	Nos.	Providing FRP arm bracket of having 2 sets of suitable SS304 hardware for fixing the brackets & spread of 1.2 Mtr(Suitable for 89 to 114 mm pole top dia) (A) Single arm bracket	2551.26	Ea	479636.88
19	17.00	Nos.	Supplying & erecting IP 55 grade following size section pillar fabricated from joint less M.S. Sheet with angle iron legs made from jointless M.S. Angle with cable clamps to be buried in ground to have appropriate erection to work uniform until erected with cement concrete foundation and 45 cm high bricks work finishing with plaster etc. hinged double door internally supported on both side, with internal and outside looking arrangement with lock and keys in duplicate 35 x 35 x 5 mm M.S. Angle of Two Nos. one is welded and other with nut and bolt for erecting Bakelite sheet. Painting the Section Pillar inside and out side with three tank powder coated paint. section pillar roof should be without joint with water leakage proof & tested as per IP 55 test & followed by IS 2147 of 1962. (B) 75 X 60 X 45 cm section pillar fabricated from 16 Gauge MS Sheet with angle iron legs 45 cm long made from 35 X 35 X 5 mm thick MS angle.	3595.60	Ea	61125.20
20	7.65	sq.mtr	Supplying and erecting HYLAM sheet on existing angle iron frame.for following thickness.(C) 6mm	1156.45	sq.mtr	8846.84
21	17.00	Nos.	Supplying and erecting approved make Segment time switch suitable for 230V+10%16A. floating contacts with 24 hour dial having 15/30 min. segments with early manual override switching for on & off without influencing the program sequence with quartz time switch With power reserve, housed in fire proof thermoplastic enclosure & transparent cover terminal covers erected as required wire necessary connection erected as directed.	2226.04	Ea	37842.68
22	17.00	Nos.	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III (D) 4 pole 440V 40 Amp.	2782.55	Ea	47303.35
Total Amount Put To Tender Rs.						6596339.24

Note : This Estimate has been prepared on the new SOR which is exclusive of GST hence GST additional will be paid to the agency as per existing guidelines.

Note: Dismental amount of Rs. 32555.66 is to be deducated from bill amount.

Deputy Executive Engineer
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