

**NAME OF WORK : Annual Rate for the Financial Year 2025-26 for Routine Maintenance Of Street Lights with Providing, Supplying & Erecting Street Light Material at Vaghodiya Nagarpalika, Dist.Baroda**

**Schedule-B**

Sr. No.	Description	Qty.	Unit	Rate
1	Supplying & erecting Galvanized iron pipe post "B" class 88.9 mm O.D 6 mtr. Long duly painted with two coats of aluminium paint complete with metallic base- plate of 300 mm x 300 mm x 4mm thick for using as a compound light pole with approx. weight 47 Kg.	1.00	Nos.	4397.00
	Supplying & erecting Steel tubular pole (Swaged) confirming to IS - 2713 (Part-II) 1980. Manufacturing process of steel tubular pole should be as per IS specification. Basic steel tube should be ISI Marked. Pole should be painted by one coat of Zinc comet Primer and two coat of Aluminium /approved paint to be erected on / in existing Foundation. The length of poles are as below.			
	(A) 7.5 mtr. Long Swaged Steel tubular pole			
	(i) pole as per IS code 410-SP-4 with 300 X 300 X 4 mm base plate. (Approximate Pole weight 67 Kg) For burial erection	1.00	Ea.	7175.00
	(ii) Add Extra for M.S. Base plate 300 X 300 X 16 mm for pole, Suitable for mounting on surface of foundation with foundation bolts, with required stiffeners welded with pole.	1.00	Ea.	973.00
	(iii) Add Extra for PU base primer and PU Paint on pole.	1.00	Ea	383.00
	(B) 8.5 mtr. Long Swaged Steel tubular pole			
	(i) Pole as per IS code 410-SP-16 with 300 X 300 X 4 mm base plate. (Approximate weight 75 Kg) For burial erection	1.00	Ea.	8068.00
	(ii) Add Extra for M.S. Base plate 300 X 300 X 16 mm for pole, mounting on surface of foundation on foundation bolt. with required stiffeners.	1.00	Ea.	973.00
	(iii) Add Extra for PU base primer and PU Paint on pole.	1.00	Ea	439.00
	(C) 9.0 mtr. Long Swaged Steel tubular pole			
	(i) Pole as per IS code 410-SP-25 with 300 X 300 X 4 mm base plate. (Approximate weight 78 Kg) For burial erection	1.00	Ea.	8380.00
	(ii) Add Extra for M.S. Base plate 300 X 300 X 16 mm for pole, mounting on surface of foundation on foundation bolt. with required stiffeners.	1.00	Ea.	973.00
	(iii) Add Extra for PU base primer and PU Paint on pole.	1.00	Ea	477.00

2	Providing and erecting street light pole bracket comprising main B Class MS pipe of 4.2 cm/require outside dia. complete with suitable B Class M.S. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms.			
	[A] Single Arm Bracket 1.0 Mtr	1.00	Nos.	556.00
	[B] Double Arm Bracket 1.5 Mtr	1.00	Nos.	907.00
	[C] Triple Arm Bracket 1.5 Mtr	1.00	Nos.	1204.00
3	Supplying & erecting approved make SMC press moulded composite FRP. loop-in, loop-out approx. 2mm thick box complete with Bakelite connector strip 5way(3P+N+E), DIN rail for mounting mob & hinged doors as per requirement having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps& earth bolt of following size of box.	1.00	Nos.	472.00
	(c) 150mm x 125mm x 100mm [deep]			
4	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.			
	CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL / Bridgelux (USA) make LED used for luminaire. (Each fittings required LM-79 & LM-80 certificates)			
	(i) above 36 to 48 watts	1.00	Nos.	3312.00
	(ii) above 48 to 60 Watts	1.00	Nos.	4948.00
	(iii) Above 60 to 90 watts	1.00	Nos.	5917.00

5	" B " class Galvanised iron pipe having smooth finished bore of the pipe on both ends erected nuts and bolts along the pole / wall shaping the pipe as per site requirement. Pipe dia as following.			
	(c) 40 mm dia.	1.00	Rmt.	247.00
6	Providing 1:2:4 cement concrete foundation & 70 % PCC from bottom including excavation for the pole of size 45 x 45 x 100 cm. Deep in below ground level with plinth of 45 cm x 45 cm (or 45 cm dia x 45 cm) high upper ground level with necessary curing and finishing in approved manner. ( for 4 & 6 mtr pole)	1.00	Nos.	801.00
7	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 (c) 4 core 10 Sq. mm	1.00	Rmt.	137.00
8	Supplying and erecting Flexible PVC insulated multistrand multicore 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	1.00	Rmt.	44.00
9	Providing & laying approved ISI mark Rigid PVC pipe having 6Kg/cm <sup>2</sup> (Class -3) to be erected at road crossing on or floor as directed for laying of cable the pipes as following size of dia & weight per 6mtr. (B) 50 mm dia (2.5Kg/6RMT)	1.00	Rmt.	69.00
10	Making trench in soft soil of suitable width of 90 cms deep for laying cable or locating the fault all over the run and backfilling the same and making the surface as normal ground.	1.00	Rmt.	46.00
11	Making trench in Hard Murrum / Tar Road of suitable width of 90 cm or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	1.00	Rmt.	62.00
12	Making trench in Hard Murrum / Tar Road of suitable width of 90 cm or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground. (B) If additional machinery like hammer driller or JCB use [Add]	1.00	Rmt.	295.00
13	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armored cable complete with without tails, insulating tape etc for following size of cables.(e) 2 to 4 core 16 Sq. MM	1.00	Nos.	47.00
14	Solder less crimping type Aluminum 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. (C) 16/25 Sq.mm.	1.00	Nos.	15.00

15	Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	1.00	Nos.	111.00
16	Pipe type earthling having 150 cms.long and 2.5 cms. dia. galvanized iron pipe with coupling and bunch buried in specially prepared earth pit complete with necessary 8 SWG earth wire.	1.00	Nos.	365.00
17	For using salt and charcoal / coke as required for pipe type earthling.	1.00	Nos.	170.00
18	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthling Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanizing, Inner pipe dia of 25 mm having 200-250 Micron galvanizing, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications.(a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr.Back filling compound - 1 Nos Bag of 15 Kg.	1.00	Nos.	4546.00
19	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 & complete erected in existing 16 G.M.S. housing.ICS=100% of ICU only. Cat III	1.00	Nos.	6112.00
20	Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 6 KA and suitable for operation on 3 phase and neutral 415V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed.(ii) 40Amps. FP Cat.III	1.00	Nos.	2213.00
21	Supplying & erecting approved make Digital time switch having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory programme, suitable to operate on 240V + 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	1.00	Nos.	3137.00
22	Supplying and erecting Ammeter / Voltmeter selector switch for 3 phase AC Supply 500 V on existing panel board with necessary connections.	1.00	Nos.	314.00

<b>23</b>	Supplying and erecting approved make panel mounting type Digital Ammeter having 3 digits LED display, external CT operated, calibrated for 0 to 1000 Amps suitable to operate on 500 Volt AC , erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1.00	Nos.	1543.00
<b>24</b>	Supplying and erecting approved make panel mounting type Digital Voltmeter having 3 digits LED display, 0 to 750 AC Volts range erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1.00	Nos.	1263.00
<b>25</b>	Supplying and erecting approved make suitable panel indicator LED type lamp, lens cover, complete erected with necessary connections.	1.00	Nos.	43.00
<b>26</b>	Providing & erecting L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio 15 VA burden erected in existing CRCA box duly secured with insulating materials connected to the meter	1.00	Nos.	272.00
<b>27</b>	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	1.00	Nos.	111.00
<b>28</b>	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity (A) 6 to 32 Amp. Cat.III	1.00	Nos.	297.00
<b>29</b>	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	1.00	Rmt.	1942.00
<b>30</b>	Supplying and erecting LED Solar street lights with High power White LEDs wattage of 1Watt 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 company mark/name engraved or embossed with 36 hours battery backup & MPPT 24V,7.5 A charge controller with 12 hours automatic switch on/off with wind speed resistance 44 m/s as per IEC 61215			

	(A) 12W, IP-65, PV Module – 60W and 4 mtr poles complete erected	1.00	Nos.	15933.00
	(B) 15W, IP-65, PV Module – 80W and 4 mtr poles complete erected	1.00	Nos.	17899.00
	(C) 21W, IP-65, PV Module – 100W and 5 mtr poles complete erected	1.00	Nos.	21153.00
	(D) 28W, IP-65, PV Module –100W and 6 mtr poles complete erected	1.00	Nos.	25382.00
	(E) 36W,3000 lumens, IP-65, PV Module – 2x100W and 6 mtr poles complete erected	1.00	Nos.	35797.00