

SCHEDULE - A

Name of Work :- Renovation to Streetlight & Related Misc. Work at E-type Bungalows Campus and D-Type Staff Quarters Campus, Mangalpura at Anand, Dist. Anand. (Under Anand Section)

Sr. No.	Item No.	Item	Qty.	Unit	Amount	Place
Nil	Nil	Nil	NIL	NIL	NIL	NIL

Signature of Contractor

Deputy Executive Engineer
Anand Electric Sub Division
Anand

SCHEDULE-B

Name of Work :-			Renovation to Streetlight & Related Misc. Work at E-type Bungalows Campus and D-Type Staff Quarters Campus, Mangalpura at Anand,Dist. Anand. (Under Anand Section)				
Sr. No	Qty		Item	Amount	Rate in words	Unit	Total
1	12	Pt.	Replacing old & u/s wiring by new Providing & Eecting Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (j) in existing pipe erected concealed in wall/ceiling complete Cat. III	410.06	Rupees Four Hundred Ten And Paise Six Only	Pt.	4920.72
2	3	Pt.	Replacing old & u/s wiring by new Providing & Eecting Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (j) in existing pipe erected concealed in wall/ceiling complete Cat. III	556.51	Rupees Five Hundred Fifty Six And Paise Fifty One Only	Pt.	1669.53
3	6	Pt.	Replacing old & u/s accessories by new Providing & Eecting Point wiring for on board Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling with following type accessories Cat. III	257.55	Rupees Two Hundred Fifty Seven And Paise Fifty Five Only	Pt.	1545.3
4	60	Mtr.	Replacing old & u/s mains 1.5 sq mm by Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm	82.82	Rupees Eighty Two And Paise Eighty Two Only	Mtr.	4969.2
5	20	Mtr.	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) with medium class Rigid PVC pipe and accessories (h) 4 wire 6 sq. mm	260.58	Rupees Two Hundred Sixty And Paise Fifty Eight Only	Mtr.	5211.6
6	150	Mtr.	Replacing Old & u/s by New 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.	46.46	Rupees Forty Six And Paise Forty Six Only	Mtr.	6969

Sr. No	Qty		Item	Amount	Rate in words	Unit	Total
7	23	Nos.	Replacing Old & u/s Conventional streetlight fittings (12 nos.) by New Providing 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 aluminium housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses 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 30 to 36 watts Cat-III	2201.8	Rupees Two Thousand Two Hundred One And Paise Eighty Only	Ea.	50641.4
8	23	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	270.68	Rupees Two Hundred Seventy And Paise Sixty Eight Only	Ea.	6225.64
9	2	Nos.	Replacing old & u/s ICTP switches by new Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (c)63 Amp. Cat.III (Old-1,New-1)	737.3	Rupees Seven Hundred Thirty Seven And Paise Thirty Only	Ea.	1474.6
10	4	Nos.	..Do...(b)40 Amp. Cat.III (Old-3,New-1)	668.62	Rupees Six Hundred Sixty Eight And Paise Sixty Two Only	Ea.	2674.48
11	3	Nos.	Replacing old & u/s ICDP switches by new 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 (B) 40 Amp. Cat.III (Old-1,New-3)	330.27	Rupees Three Hundred Thirty And Paise Twenty Seven Only	Ea.	990.81
12	2	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) (v) 16 way	1039.29	Rupees One Thousand Thirty Nine And Paise Twenty Nine Only	Ea.	2078.58
13	1	Nos.	..DO...(i)4 way	355.52	Rupees Three Hundred Fifty Five And Paise Fifty Two Only	Ea.	355.52
14	2	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 3 phase and neutral 415V,50Hz. 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	2637.11	Rupees Two Thousand Six Hundred Thirty Seven And Paise Eleven Only	Ea.	5274.22
15	15	Kg.	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	77.77	Rupees Seventy Seven And Paise Seventy Seven Only	Kg.	1166.55
16	22	Nos.	Providing and erecting Pipe type earthing having 150 cms.long and 2.5 cms. dia. galvanised iron pipe with coupling and buch buried in specially prepared earth pit complete with necessary 8 SWG earth wire.	368.65	Rupees Three Hundred Sixty Eight And Paise Sixty Five Only	Ea.	8110.3
17	24	Nos.	For using salt and charcoal / coke as required for pipe type earthing.	171.7	Rupees One Hundred Seventy One And Paise Seventy Only	Ea.	4120.8

Sr. No	Qty		Item	Amount	Rate in words	Unit	Total
18	2	Nos.	Providing and erecting Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For panel)	823.15	Rupees Eight Hundred Twenty Three And Paise Fifteen Only	Ea.	1646.3
19	2	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.	4591.46	Rupees Four Thousand Five Hundred Ninety One And Paise Forty Six Only	Ea.	9182.92
20	675	Mtr.	Replacing Old & u/s cable by new by new 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	126.25	Rupees One Hundred Twenty Six And Paise Twenty Five Only	Mtr.	85218.75
21	30	Mtr.	...Do....(C) 4 core 10 Sq. Mm	140.39	Rupees One Hundred Forty And Paise Thirty Nine Only	Mtr.	4211.7
22	365	Mtr.	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	Rupees Fifty Five And Paise Fifty Five Only	Mtr.	20275.75
23	95	Mtr.	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.	74.74	Rupees Seventy Four And Paise Seventy Four Only	Mtr.	7100.3
24	95	Mtr.	(B) If additional machinery like hammer driller or JCB use [Add]	357.54	Rupees Three Hundred Fifty Seven And Paise Fifty Four Only	Mtr.	33966.3
25	295	Mtr.	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	Rupees Sixty Two And Paise Sixty Two Only	Mtr.	18472.9
26	165	Mtr.	Providing & laying approved make ISI marked Rigid PVC pipe having 6Kg / cm2 (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 6 mtr. (A) 40 mm inner Dia. (1.68 Kg / 6 RMT)	52.52	Rupees Fifty Two And Paise Fifty Two Only	Mtr.	8665.8
27	200	Nos.	Providing and erecting 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. (A) 6 Sq.mm	6.06	Rupees Six And Paise Six Only	Ea.	1212
28	8	Nos.	...Do....(B) 10 Sq.mm	13.13	Rupees Thirteen And Paise Thirteen Only	Ea.	105.04

Sr. No	Qty		Item	Amount	Rate in words	Unit	Total
29	4	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	Rupees Thirty Eight And Paise Thirty Eight Only	Ea.	153.52
30	2	Nos.	...Do...(C) 2 to 4 core 10 Sq. mm	38.38	Rupees Thirty Eight And Paise Thirty Eight Only	Ea.	76.76
31	50	Kg.	Providing , erecting , fabricating the M.S. structure for base supporting iron legs timer panel as per requirement on site incorporating proper size of M.S. angles,square,round, flats, bars, channels, sections complete with cutting, welding, grinding & finishing duly painted with one coat of red oxide with erection on site as per direction of engineer in charge with necessary grouting, cementing, plastering & finishing complete.	77.77	Rupees Seventy Seven And Paise Seventy Seven Only	Kg.	3888.5
32	22	Nos.	Replacing old & u/s and rusted poles (12 poles) by new Supplying and erecting approved make Octagonal pole made from HR sheet steel. The pole should be made as per IS. and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral Junction box consist of terminal plate of min 6mm Hylam sheet, standard profile 35mmX7.5mm Din-Rail for MCB Mounting, stud type terminal and arrangement for cable termination to be erected With Suitable foundation (Included) as per details given by manufacturer considering site requirement.(B) 4 Mtr. Long 70 mm Top X 130 mm bottom dia, 3 mm thickness with 200mmX200mmX12mm base plate, 4-M16 Bolts and 450mm long with necessary G.I. J Bolts .Approx weight 37 kg	5556.01	Rupees Five Thousand Five Hundred Fifty Six And Paise One Only	Ea.	122232.22
33	21	Nos.	Replacing old & u/s and rusted single arm brackets (12 nos.) by new Supplying and erecting Street light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I. sleeve tubing of approx. 45cms.length and suitable for 76.5mm/80mm/require size of pole top having nuts and bolts for fixing the brackets and having spread of 0.5 mtr. Length with 110 deg.with vertical plane and 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 0.5 Mtr	491.87	Rupees Four Hundred Ninety One And Paise Eighty Seven Only	Ea.	10329.27
34	1	Nos.	..DO...[B] Double Arm Bracket 0.5 Mtr	622.16	Rupees Six Hundred Twenty Two And Paise Sixteen Only	Ea.	622.16
35	3	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 (ii) 40Amps. DP Cat. III	2235.13	Rupees Two Thousand Two Hundred Thirty Five And Paise Thirteen Only	Ea.	6705.39
36	3	Nos.	Replacing old & u/s c.fan by new Providing and erecting Approved make Ceiling fan with double ball bearing ISI mark with condenser A.C. 230V.50 c/s.1200 mm. sweep complete, canopy erected on existing hook or clamp with earthing. [Make shall be approved by Engineer in charge] (old-1,new-2)	1596.81	Rupees One Thousand Five Hundred Ninety Six And Paise Eighty One Only	Ea.	4790.43
37	3	Mtr.	Replacing old & u/s downrod by new Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with proper insulation without leakage and earthing.	108.07	Rupees One Hundred Eight And Paise Seven Only	Mtr.	324.21

Sr. No	Qty		Item	Amount	Rate in words	Unit	Total
38	2	Nos.	Providing & erecting approved make IP 55 grade Company fabricated Timer Panel of following capacity for switch On-Off street lights on time scheduling basis made from 16G CRCA sheet duly epoxy power painted inside and outside with hinged doors and locking arrangement consisting of suitable size of 4 Pole MCB and 4 pole contactor (cat-III) with analog time switch, auto manual switch of same make and suitable input and output Bakelite terminals and with door earthing approved by Engineer in charge.(A) 32 Amp	12399.77	Rupees Twelve Thousand Three Hundred Ninety Nine And Paise Seventy Seven Only	Ea.	24799.54
39	12	Nos.	Replacing old & u/s conventional tubelight by new Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%, CCT 3000 K to 6500K, Luminaire efficacy > 85 lumens/watt, LED driver efficiency > 85 % (fitting 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) Tube Light with integral driver (iv) 22-24 Watts, Surge - 2KV, IP-20, conventional 4 feet Cat-III (Old-4, new-8)	373.7	Rupees Three Hundred Seventy Three And Paise Seventy Only	Ea.	4484.4
Total Rs :-							476862.41
Rupees Four Lakh(s) Seventy Six Thousand Eight Hundred Sixty Two And Paise Forty One Only							

Signature of Contractor

Deputy Executive Engineer
Anand Electric Sub Division
Anand

List of Dismental Material

Name of Work :- Renovation to Streetlight & Related Misc. Work at E-type Bungalows Campus and D-Type Staff Quarters Campus, Mangalpura at Anand, Dist. Anand. (Under Anand Section)

Sr.No	Qty	Item	Rate	Rate in Words	Per	Amount
1	15	Cost Of Old and u/s Lt pt & Fan pt	14.00	Rupees Fourteen Only	Ea	210.00
2	6	Cost Of Old and u/s 5A socket	1.25	Rupees One And Paise Twenty Five Only	Ea	7.50
3	6	Cost Of Old and u/s 5A switch	1.25	Rupees One And Paise Twenty Five Only	Ea	7.50
4	30	Cost Of Old and u/s mains 1.5	6.16	Rupees Six And Paise Sixteen Only	Ea	184.80
5	85	Cost Of Old and u/s and faulty round wire	4.84	Rupees Four And Paise Eighty Four Only	Ea	411.40
6	12	Cost of Old and u/s streetlight fittings	82.08	Rupees Eighty Two And Paise Eight Only	Ea	984.96
7	1	Cost of Old and u/s ICDP 32A	25.45	Rupees Twenty Five And Paise Forty Five Only	Ea	25.45
8	1	Cost of Old and u/s ICTP 63A	97.90	Rupees Ninety Seven And Paise Ninety Only	Ea	97.90
9	1	Cost of Old and u/s ICTP 32A	40.70	Rupees Forty And Paise Seventy Only	Ea	40.70
10	2	Cost of Old and u/s ICTP 16A	28.85	Rupees Twenty Eight And Paise Eighty Five Only	Ea	57.70
11	350	Cost Of Old and u/s and faulty Cable	4.55	Rupees Four And Paise Fifty Five Only	Ea	1592.50
12	12	Cost Of Old and u/s Rusted Street light Poles	423.40	Rupees Four Hundred Twenty Three And Paise Forty Only	Ea	5080.80
13	12	Cost Of Old and u/s Rusted brackets	40.30	Rupees Forty And Paise Thirty Only	Ea	483.60
14	1	Cost of Old and u/s C.fan with downrod	153.00	Rupees One Hundred Fifty Three Only	Ea	153.00
15	4	Cost Of Old and u/s Conventional tubelight	18.00	Rupees Eighteen Only	Ea	72.00
Total Rs.						9409.81
Rupees Nine Thousand Four Hundred Nine And Paise Eighty One Only						

Signature of Contractor

**Deputy Executive Engineer
Anand Electric Sub Division
Anand**

Make List		
Name of Work:		Renovation to Streetlight & Related Misc. Work at E-type Bungalows Campus and D-Type Staff Quarters Campus, Mangalpura at Anand, Dist. Anand. (Under Anand Section)
Sr No.	Item Details	Approval Make List
1	Pole	Ambica, Bajaj, Transrail, Welltech, Wipro, Impression
2	LED Fixtures (Outdoor)	Wipro, Philips, Crompton, Bajaj, Jaquar, Havells,
3	Switchgear	Schneider, Havells, ABB, C&S, Indoasian, L&K
4	XLPE Armoured Cable	Avocab, KEI, Havells, Finolex
5	Ceiling Fan ISI Mark	Crompton, Havells, Usha, Orient, Bajaj
6	Copper wires 1.5 sq mm 3 core round PVC sheathed & Mains	Avocab, KEI, Havells, Finolex, Polycab
7	LED Tube Light	Wipro, Helonix, Crompton, Bajaj, Jaquar, Havells,

Note: 1) All Make should match description of respective item shown in Schedule-B
2) Rest of item except above should be as per tender Specification.
3) Sample should be approved before execution of any item.
4) Any Other Make mentioned than above must be approved by Concern Executive Engineer before Execution of Work.

Deputy Executive Engineer
Anand Elect. Sub-Dn
R & B Dept, Anand