

Tender for appointment of Agency for SITC, DLP and O&M for Heritage Lighting Works at Adalaj Stepwell, Dist. Ahmedabad, Gujarat.

SCHEDULE - B

Sr. No.	Item Description	Qty.	Unit	Unit Rate	Total Amount
1	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor integrated into 75*75mm stone profile 30 degree distribution (±10% allowed) 22W/RMT LED flexible clear encapsulated striplight with anti glare louvers and custom stone mounting profile, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC supply with appropriate low voltage (24V DC/ 12V DC) transformer, Minimum Delivered lumen output is 1330lm/m , Minimum luminaire efficacy 60lm/W, Minimum luminaire CBCP ≥4350cd, Lamp life ≥50,000 hrs L70 B10, SDCM≤ 3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK07 Protection Remote DALI-2 Dimmable driver</p> <p>Flexible grazer optic encapsulated linear LED light line; to be mounted in the curved aluminium profile with matching finish as the ceiling. Transparent polyurethane encapsulation offering a premium water proof sealing, UV resistance, chemical stability against urban gazes and protection against abrasion. Light source should be assembled using state of the art automated Reel to Reel (R2R) production process with LED packages that helps optimal heat dissipation (junction to installation surface) is achieved. exceptional colour consistency and light quality over the rated lifetime. Consistent light intensity all along the strip length is obtained with active current regulation operated by dedicated integrated circuits (ICs) on each step. Protected against electrostatic discharge +/- 4,000 V and polarity miss wiring. Installation accessories like mounting profile/clips & end caps made out from aluminium or manufacturers standard end cap which comes with standard luminaire. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Low-glare Luminaire.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories. 1) All IP rated driver and power supply box, gel connectors, Surge protection devices (SPD), secondary cable and conduit from junction box to the Luminaire shall be provided by the lighting contractor.</p> <p>Luminaire dimensions L: Varies in running meter, W: 15mm (without mounting profile), H: 15mm(without mounting profile), F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav Entry Stairs</p>	88	RMT	21252	1870176
2	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor integrated into 75*75mm stone profile 30 degree distribution (±10% allowed) 22W/RMT LED flexible clear encapsulated striplight with anti glare louvers and custom stone mounting profile, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC supply with appropriate low voltage (24V DC/ 12V DC) transformer, Minimum Delivered lumen output is 1330lm/m , Minimum luminaire efficacy 60lm/W, Minimum luminaire CBCP ≥4350cd, Lamp life ≥50,000 hrs L70 B10, SDCM≤ 3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK07 Protection, Remote DALI-2 Dimmable driver</p> <p>Flexible grazer optic encapsulated linear LED light line; to be mounted in the curved aluminium profile with matching finish as the ceiling. Transparent polyurethane encapsulation offering a premium water proof sealing, UV resistance, chemical stability against urban gazes and protection against abrasion. Light source should be assembled using state of the art automated Reel to Reel (R2R) production process with LED packages that helps optimal heat dissipation (junction to installation surface) is achieved. exceptional colour consistency and light quality over the rated lifetime. Consistent light intensity all along the strip length is obtained with active current regulation operated by dedicated integrated circuits (ICs) on each step. Protected against electrostatic discharge +/- 4,000 V and polarity miss wiring. Installation accessories like mounting profile/clips & end caps made out from aluminium or manufacturers standard end cap which comes with standard luminaire. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Low-glare Luminaire.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories. 1) All IP rated driver and power supply box, gel connectors, Surge protection devices (SPD), secondary cable and conduit from junction box to the Luminaire shall be provided by the lighting contractor.</p> <p>Luminaire dimensions L: Varies in running meter, W: 15mm (without mounting profile), H: 15mm(without mounting profile), F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Entry Courtyard Beam</p>	29	RMT	21252	616308

3	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor integrated into 75*75mm stone profile 60 degree distribution ($\pm 10\%$ allowed) 22W/RMT LED flexible clear encapsulated striplight with anti glare louvers and custom stone mounting profile, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC supply with appropriate low voltage (24V DC/ 12V DC) transformer, Minimum Delivered lumen output is 1330lm/m , Minimum luminaire efficacy 60lm/W, Lamp life $\geq 50,000$ hrs L70 B10, SDCM≤ 3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK07 Protection Remote DALI-2 Dimmable driver</p> <p>Flexible grazer optic encapsulated linear LED light line; to be mounted in the curved aluminium profile with matching finish as the ceiling. Transparent polyurethane encapsulation offering a premium water proof sealing, UV resistance, chemical stability against urban gazes and protection against abrasion. Light source should be assembled using state of the art automated Reel to Reel (R2R) production process with LED packages that helps optimal heat dissipation (junction to installation surface) is achieved. exceptional colour consistency and light quality over the rated lifetime. Consistent light intensity all along the strip length is obtained with active current regulation operated by dedicated integrated circuits (ICs) on each step. Protected against electrostatic discharge $\pm 4,000$ V and polarity miss wiring. Installation accessories like mounting profile/clips & end caps made out from aluminium or manufacturers standard end cap which comes with standard luminaire. Luminaire should be operatable flicker free. Protected against electrostatic discharge $\pm 4,000$ V and polarity miswiring. Low-glare Luminaire.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>$\pm 5\%$ variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dmmable power supply and control unit, all mounting and installation accessories. 1) All IP rated driver and power supply box, gel connectors, Surge protection devices (SPD), secondary cable and conduit from junction box to the Luminaire shall be provided by the lighting contractor.</p> <p>Luminaire dimensions L: Varies in running meter, W: 15mm (without mounting profile), H: 15mm(without mounting profile), F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Plinth wall</p>	240	RMT	21252	5100480
4	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor integrated into 500*200mm stone block 25 degree distribution 28W LED linear grazer with recessing box and baffles , 2700K (1000mm module)</p> <p>Luminaire to have 220-240V AC supply with appropriate low voltage (24V DC/ 12V DC) transformer, Minimum Delivered lumen output is 2530lm, Minimum Efficacy 86lm/W , Minimum luminaire CBCP ≥ 5770cd, Lamp life $\geq 50,000$ hrs L70 B10, SDCM≤ 3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above, Minimum IK09. Integral DALI-2 Dimmable driver</p> <p>Linear surface mounted LED luminaire with small form factor. Single emission lines for outdoor application. The device body is made of Luminaire made of aluminium alloy, aluminium and stainless steel Cover frame made of stainless steel. The power supply driver is remote and should b provided. The power supply cable is included and features a 1 m length. The device features protection class III and can be wall lights, ceiling or floor-mounted. Installation accessories like adjustable brackets made out from SS304 with 4 different lengths, also have anti glare shield made out from aluminium 6060. Luminaire should be operatable flicker free. Protected against electrostatic discharge $\pm 4,000$ V and polarity miswiring. Deep recessed LED. Low-glare Luminaire.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>$\pm 5\%$ variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions L: 1000mm, W :75mm H:138mm, F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav Entrance Wall blocks</p>	32	NOS.	36490	1167680

5	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 30*60 degree distribution (±10% allowed) 28W LED linear grazer with baffles, adjustable mounting bracket and cowl, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC supply with appropriate low voltage (24V DC/ 12V DC) transformer, Minimum Delivered lumen output is 2350lm, Minimum Efficacy 84lm/W , Minimum luminaire CBCP ≥2000cd, Lamp life ≥50,000 hrs L70 B10, SDCM≤ 3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above, Minimum IK07. Integral DALI-2 Dimmable driver</p> <p>Linear surface mounted LED luminaire with small form factor. Single emission lines for outdoor application. The device body is made of aluminium 6060 and features a anodised aluminium finish, processed by means of 20 µm anodizing. The power supply driver is remote and should b provided. The power supply cable is included and features a 1 m length. The device features protection class III and can be wall lights, ceiling or floor-mounted. Installation accessories like adjustable brackets made out from SS304 with 4 different lengths, also have anti glare shield made out from aluminium 6060. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions L:1000mm, W: 75mm, H: 115mm, F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav Entrance Courtyard</p>	18	NOS.	36490	656820
6	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 27 degree distribution (±10% allowed) 21W LED adjustable deep recessed spotlight with honey-comb louvers and barn doors, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 2000lm, Minimum luminaire efficacy 95lm/W, Minimum luminaire CBCP ≥4000cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 134mm H: 155mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Courtyards walls</p>	33	NOS.	60359	1991847
7	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 45 degree distribution (±10% allowed) 21W LED adjustable deep recessed spotlight with honey-comb louvers , CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 2150lm, Minimum luminaire efficacy 90lm/W, Minimum luminaire CBCP ≥2000cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 134mm H: 155mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav walls</p>	16	NOS.	46071.4	737142.4

	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 24 degree distribution (±10% allowed) 49W LED adjustable deep recessed spotlight with honey-comb louvers, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 5200lm, Minimum luminaire efficacy 105lm/W, Minimum luminaire CBCP ≥18500cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 190mm H: 205mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav walls, Well</p>	29	NOS.	82429	2390441
8	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 33 degree distribution (±10% allowed) 49W LED adjustable deep recessed spotlight with honey-comb louvers, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 4900lm, Minimum luminaire efficacy 95lm/W, Minimum luminaire CBCP ≥9300cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 190mm H: 205mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav Walls</p>	12	NOS.	82429	989148
10	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ceiling 55 degree distribution (±10% allowed) 49W LED adjustable deep recessed spotlight with honey-comb louvers, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 4600lm, Minimum luminaire efficacy 90lm/W, Minimum luminaire CBCP ≥3700cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 190mm H: 205mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Vav Walls</p>	12	NOS.	82429	989148

11	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ground 26 degree distribution ($\pm 10\%$ allowed) 14W LED deep recessed uplight with honey-comb louvers and cowl, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered Lumen output is 1500lm, Minimum luminaire efficacy 100lm/W, CBCP $\geq 4500\text{cd}$, lamp life L70/B10 $> 50,000\text{hrs}$, SDCM ≤ 3, CRI ≥ 80, THD $< 10\%$, Power factor 0.9 or above. IK08 certified, Integral DALI-2 Dimmable driver</p> <p>Rigid surface ground uplighter luminaire, housing made of High-pressure Die Cast Aluminium alloy body and components; a corrosion resistant aluminium housing Luminaire primarily coated with epoxy resin and top coated with UV stabilized polyester powder and cured. Impact resistant safety tempered glass cover. High performance metallized reflector. Temperature and weather resistant, silicone gasket. Cable entry should be protected by cable gland. Luminaire should be operatable flicker free. Protected against electrostatic discharge $\pm 4,000\text{ V}$ and polarity miswiring. To be mounted on PCC base in softscape.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>$\pm 5\%$ variation in the dimensions will be allowed after mock-up. Contractor to supply luminaire with LED, control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 165mm, H: 152mm, F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Columns</p>	215	NOS.	48780	10487700
12	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ground 27 degree distribution ($\pm 10\%$ allowed) 11W LED adjustable deep recessed spotlight with honey-comb louvers and snoot, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 1050lm, Minimum luminaire efficacy 95lm/W, Minimum luminaire CBCP $\geq 2000\text{cd}$, Lamp life $\geq 50,000\text{ hrs}$ L70 B10, SDCM ≤ 3, CRI ≥ 80, THD $< 10\%$, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated $\pm 180^\circ$, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge $\pm 4,000\text{ V}$ and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>$\pm 5\%$ variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 134mm H: 155mm F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Jharookha</p>	30	NOS.	41466	1243980
13	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor surface ground 180 degree emission 7W LED round pathway light, CCT: 2700K (as required), (To be mounted on PCC base in softscape)</p> <p>Luminaire to have 220 - 240V AC load type, Minimum Delivered lumen output is 180lm, Minimum luminaire efficacy 25lm/W, lamp life L70/B10 $\geq 50,000\text{hrs}$, SDCM ≤ 3, CRI ≥ 80, THD $< 10\%$, Power factor 0.9 or above. IK10 Protection, Remote DALI-2 Dimmable driver</p> <p>Round low height bollard surface mounted LED luminaire with a 180° symmetrical optic. The drive-over luminaire body is made of aluminium alloy and stainless steel Designed for walk-over function. Unbreakable anti UV polycarbonate diffusers. Power supply cable supplied with the fitting. For the various requirements at the installation site, a connection housing or anchorage unit to be provided. Luminaire should be operatable flicker free. Protected against electrostatic discharge $\pm 4,000\text{ V}$ and polarity miswiring.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>$\pm 5\%$ variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 270mm, H: 55mm, F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: All Pathways</p>	52	NOS.	41373	2151396

14	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ground 26 degree distribution (±10% allowed) 14W LED deep recessed uplight with honey-comb louvers and cowl, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered Lumen output is 1500lm, Minimum luminaire efficacy 100lm/W, CBCP ≥4500cd, lamp life L70/B10 >50,000hrs, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. IK08 certified, Integral DALI-2 Dimmable driver</p> <p>Rigid surface ground uplighter luminaire, housing made of High-pressure Die Cast Aluminium alloy body and components; a corrosion resistant aluminium housing Luminaire primarily coated with epoxy resin and top coated with UV stabilized polyester powder and cured. Impact resistant safety tempered glass cover. High performance metallized reflector. Temperature and weather resistant, silicone gasket. Cable entry should be protected by cable gland. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. To be mounted on PCC base in softscape.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>+/- 5% variation in the dimensions will be allowed after mock-up. Contractor to supply luminaire with LED, control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 165mm, H: 152mm, F: To be matched with the adjoining surface of the stone. RAL colour to be approved by Lighting designer</p> <p>Location: Smaller Trees on the lawn</p>	12	NOS.	22893	274716
15	<p>Supply, Installation, Testing and Commissioning of IP65 Outdoor surface ground/ Recessed into stone block Asymmetric distribution 33W LED Low height floodlight, CCT: 2700K (as required), (To be mounted on PCC base in softscape)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered Lumen output is 4085lm, Minimum luminaire efficacy 125lm/W, CBCP ≥3200cd, lamp life L70/B10 >50,000hrs, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. IK08 certified, Integral DALI-2 Dimmable driver</p> <p>Luminaire made of aluminium alloy, aluminium and stainless steel with fluoropolymer technology, Reflector made of pure anodised aluminium, luminaire with mounting plate for bolting onto a foundation or an anchorage unit, A basic isolation exists between power cable and control line, temporary thermal regulation to protect, temperature-sensitive components without switching off the luminaire, with dust-tight and protection against temporary immersion. Finish to be provided as per selection by the Lighting designer, Architect and Engineer in-charge as per mock-up. Finish to match with adjoining mounting surface finish colour. Finish to be provided as per selection by the lighting designer as per mock-up. Finish to match with adjoining mounting surface finish colour. Reflector bezel/trim's colour and finish to be provided as per selection by Lighting designer at the time of mock-up. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions:L: 265mm W: 255mm H:75mm, F: Dark grey, RAL Colour to be approved by Lighting Designer</p> <p>Location: Larger Trees</p>	60	NOS.	181128	10867680
16	<p>Supply, Installation, Testing and Commissioning of IP67 Outdoor tree top 24 degree distribution (±10% allowed) 36W LED adjustable deep recessed spotlight with Anti-glare louvers and Tree belt, CCT: 2700K (as required)</p> <p>Luminaire to have 220-240V AC load type, Minimum Delivered lumen output is 3550lm, Minimum luminaire efficacy 95m/W, Minimum luminaire CBCP ≥12500cd, Lamp life ≥50,000 hrs L70 B10, SDCM ≤3, CRI ≥ 80, THD < 10%, Power factor 0.9 or above. Minimum IK10 certified., Class II safety protection, Integral DALI-2 Dimmable driver</p> <p>Luminaire's housing made of corrosion-resistant die-cast aluminium, polyester powder coated by high-quality and UV-stabilized coating process, all exterior parts are stainless steel, tempered safety glass, anti-reflective coating from 1 side, dark screenprint, silicon gasket, closure with 3 stainless steel screws, for installation on poles, tiltable base made of powder coated aluminium, 2 drilled holes, adjustable head joint ensures precise direction of luminaire head, wide pivoting range from 20° to 195°, can be rotated + / - 180°, shielding made of safety glass. The power supply and control unit should be integral. Luminaire should be operatable flicker free. Protected against electrostatic discharge +/- 4,000 V and polarity miswiring. Deep recessed LED. Low-glare Luminaire. Luminaire to have mounting base only. Luminaire with Yolk is not acceptable.</p> <p>Final selection CCT, finish colour and optics is to be done after sampling and mock-up, as per Lighting Designer. Lighting Designer should have a freedom to change the design within the given budget.</p> <p>±5% variation in the dimensions will be allowed after mock-up. Contractor to Supply Luminaire with LED, Dimmable power supply and control unit, all mounting and installation accessories.</p> <p>Luminaire dimensions: Dia: 190mm H: 205mm, F: Dark grey, RAL Colour to be approved by Lighting Designer</p> <p>Location: Trees on the Periphery and Bigger trees of lawn</p>	136	NOS.	72565	9868840

17	<p>Supply, Installation, Testing and Commissioning of IP20 Facade lighting automation system with Splitter and Benden DMX Cable as required.</p> <p>Load type 100 V – 240 V, 50-60 Hz 0.4A, 8x 512 DMX Chanel Output, (5 pin XLR), 1x 512 DMX Chanel Input (5 pin XLR), RJ45, 10/100 MBit/s, Auto MDI-X, NEUTRIK etherCON (compatible with 1 GBit/s), USB 2.0, type B port, Professional Software Key with 65536 DMX Channels, 128 Universes, 21845 DMX RGB Voxels (example), 1048576 DVI RGB Voxels (example) KNX or similar or similar Control of a maximum of 64 DALI devices in a max. of 16 groups. Incorporation of the groups into up to 16 light-scenes possible. Central switching function. Manual control of the groups independent of the bus. Feedback of DALI error status or short-circuit and supply voltage failure message. Soft-On or Soft-Off function. Timer functions (ON-delay, OFF-delay, staircase lighting function, also with pre-warning function). KNX or similar or similar For switching and dimming of lighting circuits in combination with electronic ballasts or other dimmable 1-10 V devices. 3/4 Channel required. "Soft-ON", "Soft-OFF" and time dimmer are configurable. Time-delayed switch-off when brightness value drops below the switch-off brightness is possible. Multi-phase connection is possible. 1-10V output and one switch output (relay contact) per channel. Slide switches for manual control of the relays (also without bus voltage). No additional power supply required. KNX or similar or similar For operating switching, dimming, blinds and recall/save light scene functions individually. 8 Button operation. Can be used to send temperature, priority, value, percentage, HVAC operation mode value. Scene functions can be saved by pressing 5 seconds if fold is programmed as recall/save light scene. Setting of desired behaviour via long and short key depression is possible. With LED status indication. The PIR sensor on the product has a moving lens (mechanical adjustment) and a shade ring allow users to easily customize the coverage area and detection range. RGB Led can be used to indicate movements or/and one of the measurements value. Mixed light measurement suitable for fluorescent (FUPUESL), halogen/incandescent lamps and LEDs. KNX or similar or similar programming button of the product is under the front cover for easy access. Product can be flush mounted installed in ceilings with clamps. Ceiling installation is also possible with surface-mounted box. 8 independent channels can be used for presence or/and brightness dependent control for lighting, HVAC control etc. Test mode for checking function and detection area. Communication port protocol Modbus, IP (Internet Protocol), BACnet, KNX or similar or similar [Us] rated supply voltage 24 V DC, power consumption in W ,2 W LED indicator LED (green) CPU load: LED (green/red) KNX or similar or similar powered/reset: physical interface 1 RJ45, 1 RS485, 1 RS232, 1 TP-UART2, port Ethernet, 10BASE-T/100BASE-TX integrated connection type 1 USB 2.0 port control type RESET push-button connections - terminals KNX or similar or similar bus: bus terminal 2 cable(s) 0.8 mm² Power supply: clamp terminal 1.5 mm² Serial: clamp terminal 1.5 mm² mounting support DIN rail. 640mA Power Supply. For supplying KNX or similar or similar devices with bus voltage. One non-choked and one choked output each. The non-choked output can be used for the supply of another line or for function devices (smart sensor etc.) which require an auxiliary voltage. Nominal voltage can be subdivided to outputs (choked or nonchoked) as desired. With reset switch for bus lines. With short circuit protection. With overvoltage protection. 640mA Power Supply. For supplying KNX or similar or similar devices with bus voltage. One non-choked and one choked output each. The non-choked output can be used for the supply of another line or for function devices (smart sensor etc.) which require an auxiliary voltage. Nominal voltage can be subdivided to outputs (choked or nonchoked) as desired. With reset switch for bus lines. With short circuit protection. With overvoltage protection. Automation distribution panel with required protection devices. As per actual requirement.</p> <p>Façade & event thematic lighting Control System required for Weekday, Prayer time and Festival : Based on the detailed written specific LIGHTING Programming Brief for Weekday, Prayer and festival given by the Lighting Consultant, the Visualisation of Effects of the dimmable Lighting Control system must be imagined/visualized and depicted by the Lighting Contractor in the form of two to three basic animated movie files to communicate the Creative Intent to satisfy the given brief. a. For Prayer & Festivals days : The Number of required pre-programmed SCENES to be provided by the Lighting Contractor must NOT BE LESS Than 3 individual scenes and NOT MORE THAN 6 (six) preprogrammed scenes. Each scene / low resolution moving light moving image low resolution video content shall be of minimum 5min each. Minimum 3 scenes/ low resolution moving light moving image low resolution videos b. For Weekdays & regular days : The Number of required pre-programmed SCENES to be provided by the Lighting Contractor must NOT BE LESS Than 2 individual scenes and NOT MORE THAN 3 (six) preprogrammed scenes. Each scene / low resolution moving light moving image low resolution video content shall be of minimum 5min each. Minimum 3 scenes/ low resolution moving light moving image low resolution videos.</p>	1	NOS.	1044280	1044280
18	Structural steel work (Confirming to IS 4923-1997) riveted, bolted or welded in builtup for all type sections, in framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as per the structural designs and directions of Engineer in charge at any height.	20781	KG	126.68	2632537.08
19	Providing and fixing Dhrangadhra stone 50 mm thick or as specified by the Consultant including cutting in required sizes, placing, shifting, etc as directed by the Consultant or Engineer-in-Charge for ease in maintenance.	357	SQM	1631.15	582320.55
20	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	1200	RMT	36	43200
21	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes.				
	(2) 25 mm	5000	RMT	23	115000
22	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.				
	(g) One wire 16.00 sq. mm	60	RMT	157	9420
	(a) One wire 1.00 sq. mm	60	RMT	12	720
23	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	9	NOS.	6112	55008
24	Providing and erecting Approved make Earth fault Relay suitable to mount with inter connection suitable to following size of moulded case circuit breaker having CT ratio & MCCB rating as following along with shunt trip 220V AC. with all internal connections & complete erected in existing M.S. housing..				
	(1) 15 A -100 A , CT Ratio 1/100	3	NOS.	5475	16425
25	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.				

25	(A) Suitable for 100 Amp. Capacity	9	RMT	2290	20610
26	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	5	NOS.	315	1575
27	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	50	NOS.	130	6500
28	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				
	(a) 6 to 32 Amp. Cat.III	6	NOS.	695	4170
	(A) 6 to 32 Amp.	4	NOS.	350	1400
29	Providing and erecting metallic vitrified danger notice board as per language suggested by engineer incharge for MEDIUM VOLTAGE installation to be erected as per IS-2551.	3	NOS.	80	240
30	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T. , OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	50	KG	90	4500
31	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.				
	(c) For Electrical Installation covering Transformer Neutrals, Lightning arrester Earthing, A.C.Plant & Sensitive Computer System(like Automation, SCADA) i.e independent Earthing in normal soil. Length of Pipe : 3.00 mtrs Back filling Compound :2 nos Bags of 25 Kg.	4	NOS.	10088	40352
	Providing , erecting , fabricating the M.S. structure 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.	120	KG	90	10800
32	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated outdoor type double door cubical panel board necessary IP-54 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S.sheet for internal partitions with necessary accesories , supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket,heavy duty end terminal connection,danger notice board,necessary ventilation,earthing strip complete. The Panel shall be painted with epoxy powder coating. (The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size.(C) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory as per IEC 61439 for beneficial use.				
	(i) with 350mm depth	6	SQM	20975	125850
33	Supplying & erecting XLPE(IS:7098)(I)-88 ISI unarmoured copper cable 1.1 KV grade to be erected as directed of following size.				
	(E) 3 core 2.5 Sq. mm	2624	RMT	136	356864
	(F) 3 core 4 Sq. mm	8362	RMT	187	1563694
	(A) 2 core 2.5 Sq. mm	3000	RMT	115	345000
34	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand 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) 3 1/2 core 35 Sq. mm (16 Sq. mm 1/2 core)	500	RMT	252	126000
35	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.	1150	RMT	54	62100
36	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.	750	RMT	72	54000

37	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	1000	RMT	72	72000
	(B)63mm outer dia	700	RMT	85	59500
38	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.				
	(A) 2 to 4 core 2.5 / 4 Sq. mm	250	NOS.	37	9250
39	Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.				
	(B) 3 & 1/2 core 35/50 Sq. mm	10	NOS.	87	870
40	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.				
	(D) 35/50 Sq.mm.	30	NOS.	23	690
	(C) 16/25 Sq.mm.	10	NOS.	17	170
41	Solder less crimping type Copper 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) 1.5/2.5 to 6 Sq.mm	3060	NOS.	9	27540
42	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.				
	(H) 300mm x 200mm x 135mm [deep]	150	NOS.	1420	213000
	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.	2	NOS.	3700	7400
43	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III				
	(D) 4 pole 440V 40 Amp.	3	NOS.	3250	9750
44	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.	2	NOS.	1490	2980
45	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.	2	NOS.	1820	3640
46	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	5	NOS.	320	1600
47	Supplying and erecting approved make suitable panel indicator LED type lamp, lens cover, complete erected with necessary connections.	7	NOS.	50	350

48	Supplying & erecting carbon dioxide (CO2) fire extinguisher user of following capacity with necessary clamps made from 50 x 6 mm M.S. Flat with nut & bolts grouted in wall complete.				
	[A] For 4.5 Kg Capacity	3	NOS.	7700	23100
49	Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material : Anodized Aluminum alloy Frame With Twin Wall Profile, Front Cover : High Transmission Low-Iron Tempered Glass (AR Coated), High efficiency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 19.5%-22%, Normal operating temperature 45°C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than -0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production:- More than 4.5 Unit /kw /day (Actual)(1Year Avg) With 10 year Product warranty and 25 year Linear Power Warranty includes all mechanical and electrical parameters of the Solar panel. Modules must be complied to the DCR(Domestic content requirements). The Ration of AC to DC is 5:6 for the Installation capacity which are given in AC KW. Solar Inverter: MPPT Range: 80-1000 V , Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Temperture Range: -25~60°C, Integrated protection of Inverter are Anti-islanding Protection, Input Reverse Polarity Protection, Insulation Resistor Detection, Ground fault protection, Residual Current Monitoring Unit, Output Over Current Protection, Output Short Circuit Protection, Output Over Voltage Protection, PV array string fault Protection. Protection Degree: IP65, User Interface LCD & APP, Datalogger & Communication: GPRS / Wi-Fi. Integrated, Input Reverse Polarity Protection Integrated, Insulation Resistor Detection Integrated, Residual Current Monitoring Unit Integrated, Output Over Current Protection Integrated, Output Short Circuit Protection Integrated, Output Over Voltage Protection Integrated, Protection Degree: IP65, User Interface LCD & APP,Datalogger & Communication: GPRS / Wi-Fi, Module Mounting Structure: The mounting (Rectangular pipe / square pipe / circular pipe) with requisite cross bars, nuts and bolts, etc. shall be Hot deep galvanized with minimum 80micron coating. The Rectangular / square /circular hollow pipe section used for the structure should have a minimum thickness of 2.0 mm. other than above, the material thickness should be minimum 2.5 mm. A certificate of a structural engineer certifying the strength and stability of the mounting structure to withstand the weight and wind speed of 150 km/hour throughout the life span of 25 years of the system, shall be submitted by the vendors. Hot Dipped Galvanized steel coils. suitable arrangement for base plate for foundation , solar panel mounting, the structure should be suitable for carry the load of solar panel,wiring, sprinkler system etc. with necessary foundation work/wall mount, j bolt, anchor fastner etc. the nut bolt used for installtion of stucture should be (SS 304) quality.The ground clearance of the bottom most edge of solar panel shall not be less than 300 mm to 1200 mm or as per site's technical/feasibility requirement. a. Column –The minimum section (thickness) should be 60MM*40MM b. Rafter - The minimum section (thickness) should be 60MM*40MM c. Purlin - The minimum section (thickness) should be 40MM * 40MM Balane of System with necessary Swichgears (Suitabel size and protection of ACDB & DCDB), inter connecting wiring, earthing system as per the CEIG drawing approval, lightninging arrester system as per the CEIG drawing approval, all liasoning work with various gov. dipartment like state nodal agency,DISCOM & CEIG is included in agency scope (Excluding All charges namely GEDA Application fees, Solar connectivity Charges, Meter connectivity Charges, Meter testing Charges and system stability/strenthning charges.)				
	(C) Grid Tied Solar Power System: 11 - 25 kW (3 - phase)	15.00	Per KW	42035	630525
50	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	1050	RMT	32	33600
51	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes. (2) 25 mm	315	RMT	20	6300
52	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [C] CAT - 6	1500	RMT	45	67500
53	Supplying & erecting M.S. Box having 16 Gauge painted with red oxide or Heavy duty PVC box erected flushed on wall or concealed in wall with necessary plastering & finishing as directed of following size. (a) 100 mm x 100 mm x 75 mm(d)	20	NOS.	45	900
54	Providing & Erecting Netwrok rack with following capacity with Necessary cooling fan,Cable manager,6A PDU,equipment rack with necessary mounting accessories. (C) 12 U	1	NOS.	18180	18180

55	SITC of SCREEN SIZE 80 cm diagonal (32" INCH), RESOLUTION HD (1366*768), USB INPUT (2.0 SUPPORT) 2*Side(USB2.0), HDMI INPUT 3*Side(HDMI 1.4), USB DEVICE SUPPORT USB Supported HDD, HOTEL MODE Yes, Basic, BLUETOOTH Yes (Ver. 4), WIFI TYPE(STANDARD) 802.11a/b/g/n 2.4G 2T2R, Built-in, WIFI BAND TYPE 2.4GHz, OS & VERSION INFO Android 'P' - 9.0, MEMORY FLASH 8GB EMMC, RAM 1.5GB , DDR3 2133 Mhz. (Including Five year free maintenance with guarantee)	1	NOS.	60067	60067
56	Supplying and erecting approved make online Un-interruptible Power Supply system with IGBT Based rectifier and Inverter & sealed maintenance free batteries. Single phase Input and Single Phase output with Inbuilt Isolation transformer with 0.8 load power factor with battery, over under voltage output with over load & short circuit protection equipment. The system housed in CRC sheet duly powder coated paint with following capacity & with Following size of batteries for 30 Min Backup (Minimum 2016 VAh) 2 KVA UPS with 28 AH, 6 Nos. Battery Certification : BIS (Including Five year free maintenance with guarantee)	1	NOS.	106338	106338
57	Supply, Installation, Testing and Comissioning of 4MP Varifocal Lens Bullet Camera, H.265 4MP IR Bullet N/W Camera, Manual Varifocal 2.8-12mm, 50M, Micro SD, DC12V/PoE, IP67/IK10, Basic IVA, 4MP resolution (2560 × 1440), True day/night, Digital WDR, 3D DNR, HLC & BLC, Triple streams, Smart codec by ROI, Cyber Security, Basic intelligent video analytics, NDAA Compliance, UL, CE, FCC Certified (Including Five year free maintenance with guarantee)	20	NOS.	13521	270420
58	Supply, Installation, Testing and Comissioning of 32 Channel Network Video Recorder (NVR), Dual OS design, HDD Hot Swap with RAID support, N+1 hot spare configuration, Support 16CH@2MP, H.265/H.264 Video Compression, HDMI, VGA output, upto 8 SATA interface each with max 10 TB support and 1 eSATA, 16-ch synchronous playback at up to 1080p resolution, Gigabit Ethernet network interfaces, bandwidth 320 mbps, CE FCC, BIS, Operating Temp -10 deg to 50 deg C, USB and serial Interface, RAID supported (Including Five year free maintenance with guarantee)	1	NOS.	265386	265386
59	SITC of O. F.Cable 06F Outdoor - Armoured Unitube SM - HDPE Sheath (Including Five year free maintenance with guarantee)	75	RMT	89	6675
60	SITC of PATCH CORD LC-LC SM DUPLEX LENGTH- 3m (Including Five year free maintenance with guarantee)	4	NOS.	3397	13588
61	SITC of Face Plate - Single (Keystone Jack,square) (Including Five year free maintenance with guarantee)	10	NOS.	161	1610
62	SITC of Face Plate - Dual (Keystone Jack,square) (Including Five year free maintenance with guarantee)	10	NOS.	179	1790
63	SITC of Jack Cat 6 Keystone UTP (Including Five year free maintenance with guarantee)	40	NOS.	286	11440
64	SITC of Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded (Including Five year free maintenance with guarantee)	1	NOS.	7866	7866
65	SITC of CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Snag less (Including Five year free maintenance with guarantee)	20	NOS.	279	5580
66	SITC of CAT6 UTP 24AWG PATCH CORD:2M,Plug 30U' Snag less (Including Five year free maintenance with guarantee)	10	NOS.	358	3580
67	SITC of 24 x 10/100/1000BASE-T PoE ports 4 x Gigabit RJ45/SFP Combo ports Advanced L2 switching and security features L2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 193 W PoE budget (Including Five year free maintenance with guarantee)	1	NOS.	57206	57206
68	SITC of Maximum distance of up to 10 km Hot-pluggable Single-mode fiber 1000BASE-LX (IEEE 802.3z standard) Duplex LC connector MSA, RoHS-compliant (Including Five year free maintenance with guarantee)	2	NOS.	8581	17162
TOTAL AMOUNT					60643621.03
SAY					60643621
Note: G.S.T should be extra as actual					
Note: The above cost is inclusive of five (05) years of Operations and Maintenance and DLP					

Estimated Amount as put to Tender Rs. 6,06,43,621/- + G.S.T.	
I/We am/are willing to carry out the work at _____ % above/below percent (Should be written in figures and words) of the estimated rate mentioned above. Amount of my /our tender works out as under.	
Estimated amount put to tender Estimated amount put to tender Deduct.....% below Add % Above Net Net In words In words	
The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-Charge for which no extra payment shall be made. The labour cess will be deducted as per prevailing rules i.e. 1% of the work done. GST and Income tax TDS will be deducted at a source while making payments of bills	