

पनवेल महानगरपालिका जाहीर निविदा दरपत्रक

आयुक्त, पनवेल महानगरपालिका हद्दीतील प्रभाग समिती -ब, प्रभाग क्र.०३ मधील भुखंड क्र.०१, सेक्टर-३५ H, खारघर येथे अंतराळ संग्रहालय (Space Museum) निर्माण करणे. या कामाचे अंदाजपत्रक बनविण्याकरीता दर मागविणे बाबत, या कामाचे अंदाजपत्रक बनविण्याकरीता खाली नमूद केलेल्या बाबींकरीता खालील नमूण्यात दर मागविण्यात येत आहे.

अ.क्र.	कामाचे नाव	मुदत
१	पनवेल महानगरपालिका हद्दीतील प्रभाग समिती -ब, प्रभाग क्र.०३ मधील भुखंड क्र.०१, सेक्टर-३५ H, खारघर येथे अंतराळ संग्रहालय (Space Museum) निर्माण करणे. या कामाचे अंदाजपत्रक बनविण्याकरीता दर मागविणे बाबत.	१५/०८/२०२६ ते २९/०८/२०२६ (७ दिवस)

Specification

Sr. No	Item	DESCRIPTION	Unit	Quantity	Rate
1	NDSR1	Structural Steel Hollow Sections: Connection design, supplying, fabricating, assembling, hoisting and erecting in position at all elevations, of steel structure including detailing consisting of circular hollow sections/ rectangular hollow sections (CHS/RHS/SHS) conforming to BS EN 10210-2, IS 1161/4923 of grade not less than YST 310 & 350 , flats, plates, bars to BS EN 10210, IS 2062 of grade YST 250 & 350 ISI marked from TATA/ JINDAL / SAIL / any other approved equivalent make, as per approved drawings including cutting, welding, bending/ profiling in coordination with related agencies etc. The prefabrication of members shall be by welding using SAW/MAW/MIG welding process. complete as per specifications and approved drawings.The pre-fabricated members shall be assembled at site using bolted connections. The cost of fasteners tob included in this item, quantity will not be measured. The item includes any side, end plates attached to the ends as part of pre- fabrication and fasteners with minimum 8.8g and maximum 10.9g. The item rate shall include supply of all material and labour including cutting, welding, transportation, assembly, bending, profiling coordination with related agencies and erection complete as per drawings including all leads and lifts up to all heights, tools and plants and necessary scaffolding etc., required for all operations. The item shall be executed as per approved drawings, specifications and directions of the Engineer-in-Charge complete. Measurement of the steel structure shall be in accordance with IS 1200. Including ITP scope.	Metric Tonne	1590.00	
2	NDSR2	INTUMESCENT _Fire Retardant Paint for Structural Steel1. The fire proofing system for structural steelwork shall be a low VOC Water BasedIntumescent ISOLATEK WB3 Coating or Equal as a fire protective treatment.2. The Intumescent Coating Thickness shall be designed to provide min 2 hours of fire protection to Structural Steel Members consisting Main Portal Rafter, Columns, Beams when tested in accordance with BS 476 Part 20 / 21 or UL 263, ASTM E119 Standards.3. The Fire Protection System shall consist of base coat Primer (Note : Primer for main frame members will be provided by our PEB Vendor M/s Volta Green as per notes on his GA drawing No. E01. Two	Sqm	17855.00	

		coats of Zink Phosphate primer, 70 microns DFT for Primary, Make : Akzonoble / Jotun. Finish Code: SHOT BLASTING SA 2.5. Fire paint Vendor to confirm compatibility of this coating for application of INTUMESCENT Paint, quote your rate taking in consideration that Steel will come pre primed as			
3	NDSR3	Providing and applying paint on structural steel which is SA 2.5 copper slag Blasted.It Includes two coats of PU Paint of 70 Mic DFT of approved colour, including scaffolding if necessary,Tools and tacklets, cleaning and preparing the surface etc. Color: As per Approval.Make : Berger	Sqm	17855.00	
4	NDSR4	Insulated Gutter System : Design,supply and installation of Aluminium 2 mm thk Gutter in mill finish fabricated from Grade AA 1100 / AA1200 ALLOY with double side vulcanised rubber Expansion joints at every 8 mtr gutter length, Completely insulated using rockwool and bottom galvalume line sheet, aluminum sheet shall be welded at inert conditons to with stand dead laod of water , and allow free flow of water through rain water with necessary down take spout gaurded with S.S mesh to block the dust from blocking the rain pipes with diameter upto 150 mm at required intervals & other accessories like Cover plate, end caps and welding at joints. The Girth of gutter would be upto 1220 mm. The gutter will be Insualted with 50 mm thick Mineral wool 48 or 60kg/m3 denisty as applicable, 2mm thk. GI Sheet, Z girt, VCL.	Rmt	90.00	
5	NDSR5	FLASHING WORK- Supply & Installation of 0.9MM aluminium flashing having maximum girth of upto 578mm. (The material shall be same roofing sheet). Color: As per Approval. Make: Kalzip	Sqm	800.00	
6	NDSR6	Insulated Roofing System Design, Supply and fixing of KALZIP CURVED/STRAIGHT "SELF SUPPORTED" SECRET FIX STANDING ROOFING SYSTEM IN 0.9 mm THICK AA 3004 ALUMINIUM ALLOY. The general roofconstruction shall comprise from bottom to top: 1. Bottom Layer - LINER SHEET 28-35 / 0.5MM THK. PROFILE SHEET-150GSM & 550MPA 2 Top hats & Brackets - Bracket galvanised section and Sub girt hat section. 3. Third Layer - Vapour Control Layer – A single layer film reinforced polyester yarn of 180-200 microns thickness. 4 Fourth Layer - Insulation –One Layer of Rockwool insulation of 50mm thickness minimum 48 or 60 kg/m ³ density as applicable. 5. Fifth Layer - ST Clip – Aluminium clips with thermal barrier pads to be fixed to the Purlins with SS 304 screws only. 6. Sixth Layer - Top layer – Aluminium Kalzip 65/400 STRAIGHT/Curved profile sheeting manufactured from aluminium self-supported standing seam roof system from aluminium alloy AA 3004 (AlMn1Mg1) as specified in BS EN 1396: 2007 minimum material thickness of 0.9 mm with PVDF2 Finish on theexposed surface. The material properties shall be as follows:Ultimate tensile strength: minimum 200 N/mm ² , 0.2% Proof Stress: min 185 N/mm ² , Modulus of elasticity: 70,000 N/mm ² . Quantity shall be measured as per IS 1200 - Plan area shall be measured.	Sqm	3400.00	
7	NDSR7	FR Aluminum Composite Panel, 4 mm thickness : Designing, fabricating, supplying and installing in position of approved shade, FR Class B Grade Fire Rated Aluminum	Sqm	1800.00	

		composite panel cladding either straight or curved in plan, comprising Aluminum Composite Panel which should consist of 3 mm thickness of mineral core (70% inorganic and 30% organic compound) sandwiched between two Aluminum coil of alloy AL 3105/AL 5005 – H16/H24 of 0.50 mm thickness making an overall thickness of 4mm. The weight of ACP should be above 7.5 kg/m ² . The top surface shall be finished with PVDF/FEVE based coating (thickness 26 microns + or - 2 microns) providing 15-year warranty and service coating on the reverse side shall be with PE (Thickness 5-7 microns) base and coating shall be confirm to AAMA 2605 standard done on a color coating line located in India. The Aluminum composite Panel should confirm as per standard EN - 13501 -1 Class B s1-d0 certification along with NFPA-285 certification for fire propagation, and also with certification for ASTM E-84 reaction to fire from an International third-party testing lab. The manufacturer must have a valid FPC Certificate (Factory Production Control) on reaction to fire as per class B			
8	NDSR8	Deck Sheet 1 mm thk : Providing and fixing galvanized steel deck sheet of approved thickness confirming to IS 277:1992 used as permanent shuttering including edge trim covered with concrete. This metal deck will be supported on structural steel beam with shear studs. (Structural steel like Beam, column, joists etc. & concrete of different grade as per design will be paid separately). Make of deck sheet shall be JSW tr60+ or equivalent	Sqm	510.00	
9	NDSR9	Providing and Applying 2 component clear epoxy resin, low VOC, self levelling or roller applied formulation of 2mm over existing or new flooring system.	Sqm	2044.10	
10	NDSR10	Providing and laying 70 mm thick cement concrete flooring with concrete hardener topping, under layer 68 mm thick cement concrete M-25 grade and top layer 4-5mm thick high abrasion resistant hardener having abrasion class of AR1 as per BS 8204 at dosage rate of 12-14 Kg/Sqm in slurry form or as per manufacture's specifications. This includes cost of cement slurry. complete.	Sqm	2044.10	
11	NDSR11	MEDIA FAÇADE - Supplying and installing a media facade screen of less than or equal to 3mm weighing about 04 kgs.Unit Size (mm) - 240x580x60 to cover a total surface area of approximately 200 sq.m. with a transparency level of 88% when switched off. Maximum power consumption of 450W per sq.m. and 3500 nits of brightness. Refresh rate of equal to or more than 1920 Hz. Operating temperature of -20 degree celcius to 40 degree celcius. Driving Mode - Static. Processing System - Colorlight / Nova. Color Finish - Transparent. DMX Addressible. Lifespan: 50,000 hours minimum. Warranty 3-5 Years. (Dwg Ref. Code - MF)	Sq.Mt	201.50	
12	NDSR12	LED PIXEL FLEX LIGHT - Supplying a slim 24vDC powered flexible tube that is omni-bendable on both the horizontal and vertical axes. Its high flexibility is perfect for any curved surface or freeform installation, as well as straight highlighting applications for low-profile, high impact illumination. Power Consumption (Typ.) 18W/m / 5.5W/ft High Intensity SMT RGB 3-in-1 + White LEDs. RGB+W (White CCT: 4000K). LED Pitch - 12.7 mm / 0.5" (6 sets of LED per pixel). Pixel Pitch - 76 mm / 3" per pixel. 3-Step SDCM for White LED. CRI>90. Luminous Flux 457 lm/m (137 lm/ft) RGBW full on, Efficacy 25 lm/W (RGBW full on). Beam Angle 115 degree. Dimensions (W x H) - 23mm	R.mtr.	795	

		W x 23mm H / 0.9" W x 0.9" H. Length : Min. 540mm / 21.2" (7PXL); Max. 4959mm / 195.2" (65PXL). Minimum Bend Radius - 300mm / 12" - Omni-bend in any direction. Operating Temperature -30°C to +55°C / -22°F to +131°F. Environment IP67 Outdoor Rated; suitable for coastal environments. Humidity 85%, non-condensing. DMX Addressable. Housing - UV resistant silicone. Lifespan: 50,000 hours minimum. Warranty 3-5 Years. (Dwg Ref. Code - LL1)			
13	NDSR13	LED LINEAR GRAZER LIGHT - Supplying a 24vDC line powered exterior luminaire used to distinguish facades, walls, and architectural landmarks with a powerful, even color wash effect. Linear Go's high-value design features efficient electrical and optical systems, making it ideal for budget-conscious projects. Power Consumption (Typ.) 48W/m LED. Lumen Maintenance L70 50000hrs at 25°C. Light Source White LED - 4000k. LED Pitch - 37.5mm (32 LEDs per meter). Luminous Flux (15W per 300mm / ft) - White 4000K: 5100 lm (30°). Efficacy White 4000K: 85 lm/W (full on 30°). Beam Angle - 30 degree. Adjustment Options -70° to +70°. Dimensions (L x W x H) - 1200mm x 61mm x 123mm (47.2" x 2.4" x 4.8") inclusive of glare shield. Operating Temperature -30°C to +50°C (-22°F to +122°F). Outdoor, IP66, IK07, Coastal Environment (ASTM B117-16). Humidity 85%, non-condensing. Aluminum Housing with Glass Lens. Housing Finish - Gray (RAL7005). Control DMX 512 through Manual Addressing. Chipset MR DMX05. Lifespan: 50,000 hours minimum. Warranty 3-5 Years. (Dwg Ref. Code - LL2)	R.mtr.	205	
14	NDSR14	LED RGBW FLOOD LIGHT - Supplying a 240vAC LED Floodlight of 75W (2.5W when on idle mode). Color Mixing - RGB + CTC (1000k to 12500k in 50 Steps). Intensity 0-100%. 9x RGBW LEDs from Osram. Lifespan - 100000 hours (to >70% luminous output). Beam Angle - Wide (30 degree). CRI >70. Luminous Flux (at full range) - 3700 lm. Efficacy at max output - 49lm/W. Surge Protection of 4KV. Operating Temperature -30°C to +45°C. DMX compatible. IP66 & IK08. Anodized and electrostatic powder-coated Cast Aluminum housing. Color finish - Traffic grey RAL 7042. Dimensions (L x W x H) - 152mm x 201mm x 303mm. Warranty 3-5 Years. (Dwg Ref. Code - FL).	Nos.	16	
15	NDSR15	LED ADJUSTABLE DOWNLIGHT - Supplying a ceiling recessed adjustable 42W LED Downlight. LED Make - Bridgelux / Cree. CRI >90, CCT - 4000K. Luminous Flux - 3990 lm. Efficacy - 90 lm/w. Beam Angle - 32 degree. SDCM <3. Dimensions - $\phi 150 \times H116$ mm. Housing finish - Dark Grey RAL 9007. IP65. Metal with Plastic reflector. DALI compatible. Warranty 3-5 Years. (Dwg Ref. Code - DL1).	Nos.	194	
16	NDSR16	LED GOBO PROJECTOR (TYPE 01) - Supplying a 240vAC 160W LED Gobo Projector with motorized controls (runs at 10W when on idle mode). Color Wheel - 5 dichroic colors (red, green, blue, yellow, CTO) + open. Electronic Dimming 0-100%. Motorized Focus and Zoom - Beam Angles 15 degree to 45 degree. Lifespan - minimum 30,000 hours (to >70% luminous output). CRI >70. Luminous Flux (at full range) - 5200 lm. LED Refresh Rate - 2400Hz. Surge Protection of 4KV. Operating Temperature -30°C to +45°C. DMX compatible. IP66 & IK08. Hard Anodized Cast Aluminum housing. Color finish - Traffic grey RAL 7042. Gobos Specification - 19mm diameter borosilicate glass (1.1mm to 3mm thick) with	Nos	3	

		heatresistant coatings or Aluminum 1060 (0.5mm thick) gobos. Maximum image diameter - 15 mm. Dimensions (L x W x H) - 342mm x 272mm x 335mm. Warranty 3-5 Years. (Dwg Ref. Code - GP1).			
17	NDSR17	LED GOBO PROJECTOR (TYPE 02) - Supplying a 240vAC 200W LED Gobo Projector with motorized controls (runs at 10W when on idle mode). Color Wheel - 8 colors (red, magenta, yellow, green, dark blue, CTO, cyan, orange). Electronic Dimming 0-100%. Motorized Focus. Beam Angle 22 degree. CCT 8300k LED from Prolight Opto. Lifespan - 20 000 hours (to >70% luminous output). CRI 72. Luminous Flux (at full range) - 6100 lm. LED Refresh Rate - 2400Hz. Surge Protection of 4KV. Operating Temperature -30°C to +45°C. DMX compatible. IP66 & IK08. Hard Anodized Metallic Grey Lacquered Cast Aluminum housing. Color finish - Traffic grey RAL 7042. Gobos Specification - 19mm diameter borosilicate glass (1.1mm to 3mm thick) with heatresistant coatings or Aluminum 1060 (0.5mm thick) gobos. Maximum image diameter - 15 mm. Dimensions (L x W x H) - 415mm x 293mm x 444mm. Warranty 3-5 Years. (Dwg Ref. Code - GP2).	Nos.	24	

INTERIOR LIGHTING FITTINGS

18.0	NDSR18	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Fixed round recess COB down light with System watt of 10W Max, > 1050.Lm system, > 105 Lm/w System Efficacy. Ceiling cut out of 75 MM diameter. The main body is made of die-cast aluminium with a radiant surface that guarantees optimum heat dissipation. Metallised, thermoplastic, high-definition reflector - wide flood optic of 40 Deg. LED use here should be of CCT 3000 K, CRI > 90 with Rf 92 & Rg 99 and R9 Value > 80, MacAdam Step < 2, LED Life time > 50,000h - L90 - B10. LEDs are set a long way back to minimize glare and guarantee a high level of visual comfort with UGR<10 L<1500 cd/mq @65". Fixture should have Class III; IP20; IP23 (On the visible part of the product once installed) Performance. LED Driver should be DALI compatible and having Super depth dimming technology (T-PWM) feature and it should have DIP switch for multiple optional currents quick selection with Current range of 100 – 400 mAmp, suitable for Dimming range: 0~100%, LED start at 0.01% possible, Flicker-free Ripple < 1 % with No video flicker, PF > 0.95, Driver Efficiency > 82, Working temp -30 Deg C to +50 Deg C, tc : 75 Deg C, Humidity 10 – 95 % RH, driver should have Protection against Over-heat Protection: Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers. Over Load Protection: Shut down the output when current load ≥102%, auto recovers Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers. Driver should complies Safety Standards like IEC/EN61347-1, IEC/EN61347-2-13, EMC Emission EN55015, EN61000-3-2 Class C, IEC61000-3-3, EMC Immunity EN61000-4-2,3,4,5,6,8,11 EN61547, Strobe Test Standard IEEE 1789. Driver life should be Up to 50000-hour life time.	Nos	2.0	
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		Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.			
19.0	NDSR19	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Fixed round mini-recessed luminaire - LED - spot light with System watt of 2W Max, > 100 Lm system, > 50 Lm/w System Efficacy. Ceiling cut out of 25 MM diameter. The recessed body is made of machined aluminium and the inside of the ring of thermoplastic available in a range of painted and metallised finishes. PMMA - spot (14") high resolution optic lens. LED use here should be of CCT 3000 K, CRI > 90 with Rf 92 & Rg 102 and R9 Value > 80, MacAdam Step < 2, LED Life time > 50,000h - L80 - B10 (Ta 25°C). The LED is set back to minimize direct glare. Fixture should have Class III; IP20; IP43 (On the visible part of the product once installed) Performance. LED Driver should be DALI compatible and having Super depth dimming technology (T-PWM) feature and it should have DIP switch for multiple optional currents quick selection with Current range of 350 – 700 mAmp, suitable for Dimming range: 0~100%, LED start at 0.01% possible, Flicker-free Ripple < 1 % with No video flicker, PF > 0.95, Driver Efficiency > 80, Working temp -30 Deg C to +50 Deg C, tc : 75 Deg C, Humidity 10 – 95 % RH, driver should have Protection against Over-heat Protection: Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers. Over Load Protection: Shut down the output when current load ≥102%, auto recovers Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers. Driver should complies Safety Standards like IEC/EN61347-1, IEC/EN61347-2-13, EMC Emission EN55015, EN61000-3-2 Class C, IEC61000-3-3, EMC Immunity EN61000-4-2,3,4,5,6,8,11 EN61547, Strobe Test Standard IEEE 1789. Driver life should be Up to 50000-hour life time. Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.	Nos	8.0	
20.0	NDSR20	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Decorative Pendant-mounted luminaire Round Dia Ø114 - General Light with System watt of 11W Max, > 1337 Lm system, > 121 Lm/w System Efficacy. The light emission unit is made of PMMA and consists of a transparent black prismatic reflector combined with a flux enhancer and diffuser screen - an internal polycarbonate cover defines the optical assembly visually. The lighting body is made of machined aluminium with a uniform or combined paint finish. The practical bayonet coupling system allows the two sections to be separated in order to perform all the preliminary pendant	Nos	10.0	20.0

		operations. The upper part of the lighting body is designed to adjust the length, wiring and locking of the pendant/power cables supplied with the accessory base that is indispensable for completing the product. Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning of Power base with pendant cables - surface-mounted version - for body Ø114 LED use here should be of CCT 3000 K, CRI > 90 with Rf 92 & Rg 99, MacAdam Step < 2. Fixture should have Class III; IP40 Performance. LED Driver should be DALI compatible with Over-heat Protection / Over Load Protection Short Circuit Protection Shut down automatically if short circuit occurs, auto recovers. Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.			
21.0	NDSR21	Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning of 24VDC LED Tape light with Max deliver power of 10 W/Mt, System Lumen of >400 Lm/m, Connector of 2 Wire tails as standard for Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning, LED Color temperature should be static blue / Red only. (Colour will be select by architect as per application) LED Binning of <5 Step MacAdam ellipse, CRI > 70Ra, IP20, tap width of 10 MM, Cut interval of 100 MM. Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning of LED Strip Al Channel Equivalent Make: iGuzzini, IBL, Eurolite.	Mtr	80.0	
22.0	NDSR22	Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning of Miniaturised adjustable spotlight for surface installation. Max system wattage of 2W, System lumen > 110. The body is made of painted die-cast aluminium, equipped with a passive dissipation system for optimal thermal management. Fixture should have Class III; IP20 Performance. Product Diameter (mm) 22 MM , Length 49 MM. Suitable beam angle of M - Medium 14° The swivel joints allow the spotlight to be rotated by 360° and tilted by 90°. The set back position of the optic unit guarantees a high level of visual comfort with a thermoplastic high-definition lens. Light colour quality CRI 92 - Rf (Colour Fidelity Index) 93 - Rg (Gamut Index) 101 , Colour temperature 3000 K , MacAdam Step 2 , Lifetime LED > 50,000h - L85 - B10 (Ta 25°C). LED Driver should be DALI compatible and having Super depth dimming technology (T-PWM) feature and it should have DIP switch for multiple optional currents quick selection with Current range of 350 – 700 mAmp, suitable for Dimming range: 0~100%, LED start at 0.01% possible , Flicker-free Ripple < 1 % with No video flicker,	Nos	13.0	

		PF > 0.95, Driver Efficiency > 82, Working temp -30 Deg C to +50 Deg C , tc : 75 Deg C , Humidity 10 – 95 % RH , driver should have Protection against Over-heat Protection: Intelligently adjusting or turning off the output current if the PCB temperature $\geq 110^{\circ}\text{C}$, auto recovers. Over Load Protection: Shut down the output when current load $\geq 102\%$, auto recovers Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers. Driver should complies Safety Standards like IEC/EN61347-1, IEC/EN61347-2-13, EMC Emission EN55015, EN61000-3-2 Class C, IEC61000-3-3, EMC Immunity EN61000-4-2,3,4,5,6,8,11 EN61547 , Strobe Test Standard IEEE 1789. Driver life should be Up to 50000-hour life time. Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.			
23.0	NDSR23	Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of 2.0 Mtr track made from extruded aluminium. Surface/ Suspended/ Recessed mounted (shall be as per final rcp & consultant/ client approval). 6 wires are housed in the track. 4 for three-phase operation, 2 for DALI operation. The wires are enclosed in rigid extruded profiles made of insulating material with high dielectric strength. Length - 2 metre. 3 phase wires with a common neutral form 3 distinct circuits allowing for 3 separate switching circuits. Maximum applicable load is 16A (3500VA) FELV when the track is connected to mono-phase mains; 2X1A for DALI contacts. Connection to a three-phase mains power Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation,Testing & Commissioning allows for an overall load of 16A (10500VA), DALI 2X1A (100VA) FELV. Mounting accessories as included as per site requirement. Color availability should be whether Black or white as per the site requirement.	Mtr	102.0	
24.0	NDSR24	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of DALI Power connection unit, made from thermoplastic material, with left earth contact. General (mm) 95	Nos	22.0	
25.0	NDSR25	Supply, Installation,Testing & Commissioning ,Installation, Testing & Commissioning ,Installation, Testing & Commissioning of Concealed coupling with wiring dim. x=115, made from thermoplastic material	Nos	80.0	
26.0	NDSR26	Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of L-joint for earth lead dim. x=90/a=74 , made from thermoplastic material, with internal earth contact.	Nos	6.0	
27.0	NDSR27	Supply,Installation,Testing & Commissioning,Installation ,Testing & Commissioning,Installation,Testing & Commissioning of end cap made from thermoplastic material	Nos	19.0	

28.0	NDSR28	Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of Power Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning cable in self-extinguishing silicon material equipped with base for ceiling installation with power Supply,Installation,Testing & Commissioning,Installation,Testing & Commissioning,Installation,Testing & Commissioning terminal board. L=2200	Nos	22.0	
29.0	NDSR29	Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of galvanised steel Suspension cable - with milli metrical adjustment L=2000 , Ø 1.5 mm.	Nos	347.0	
30.0	NDSR30	Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of Track Mounted Fixture with adapter adjustable LED spot light having Max System wattage of 12.9W, System lumen > 757. Product housing is made up of die-cast aluminium body with thermoplastic rear cap and front ring (Mass-Balance). The product can be rotated by 360° around the vertical axis with a mechanical lock and tilted by 90° relative to the horizontal plane. The fixture should have an option of White or black finish as per site requirement. Spotlight with Push & Go system designed to facilitate and safely accelerate the connection between product and optic accessory. Opti beam lens made of PMMA. The Fixture should have an option of Medium, Flood and Wide Flood optics. as per approval. Option of installing a range of accessories including an Elliptical Lens, MEDIUM AND FLOOD, Honeycomb louvre, Ceiling base. The DALI electronic power Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning , Installation,Testing & Commissioning is integrated into the projector body and can be easily replaced using Push-Pull technology, without the use of tools. The diameter of the fixture should not be more than Dia < 73 mm. Fixture should have Class III; IP20; Supply,Installation,Testing & Commissioning,Installation, Testing & Commissioning,Installation,Testing & Commissioning of Honeycomb louvre installable on optical assembly to guarantee further visual comfort Colour temperature 3000 K, Light colour quality CRI 97 - Rf (Colour Fidelity Index) 94 - Rg (Gamut Index) 101, R9 Value > 80, MacAdam Step < 2, Lifetime LED > 50,000h - L90 - B10 (Ta 25°C). Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.	Nos	26.0	
31.0	NDSR31	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Track Mounted Fixture with adapter adjustable LED spot light having Max System wattage of 17.2W, System lumen > 1094. Product housing is made up of die-cast aluminium body with thermoplastic rear cap and front ring (Mass-Balance). The product can be rotated by 360° around the vertical axis with a mechanical lock and tilted by 90° relative to the horizontal plane.	Nos	126.0	

		The fixture should have an option of White or black finish as per site requirement. Spotlight with Push & Go system designed to facilitate and safely accelerate the connection between product and optic accessory. Opti beam lens made of PMMA. The Fixture should have an option of Medium, Flood and Wide Flood optics. as per approval. Option of installing a range of accessories including an Elliptical Lens, MEDIUM AND FLOOD, Honeycomb louvre, Ceiling base. The DALI electronic power Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning is integrated into the projector body and can be easily replaced using Push-Pull technology, without the use of tools. The diameter of the fixture should not be more than Dia < 73 mm. Fixture should have Class III; IP20; Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Honeycomb louvre installable on optical assembly to guarantee further visual comfort Colour temperature 3000 K, Light colour quality CRI 97 - Rf (Colour Fidelity Index) 94 - Rg (Gamut Index) 101, R9 Value > 80, MacAdam Step < 2, Lifetime LED > 50,000h - L90 - B10 (Ta 25°C). Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.			
32.0	NDSR32	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Track Mounted Fixture with adapter adjustable LED spot light having Max System wattage of 17.2W, System lumen > 1193. Product housing is made up of die-cast aluminium body with thermoplastic rear cap and front ring (Mass-Balance). The product can be rotated by 360° around the vertical axis with a mechanical lock and tilted by 90° relative to the horizontal plane. The fixture should have an option of White or black finish as per site requirement. Spotlight with Push & Go system designed to facilitate and safely accelerate the connection between product and optic accessory. Opti beam lens made of PMMA. The Fixture should have an option of Medium, Flood and Wide Flood optics. as per approval. Option of installing a range of accessories including an Elliptical Lens, MEDIUM AND FLOOD, Honeycomb louvre, Ceiling base. The DALI electronic power Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning is integrated into the projector body and can be easily replaced using Push-Pull technology, without the use of tools. The diameter of the fixture should not be more than Dia < 73 mm. Fixture should have Class III; IP20; Honeycomb louvre installable on optical assembly to guarantee further visual comfort Colour temperature 3000 K, Light colour quality CRI 97 - Rf (Colour Fidelity Index) 94 - Rg (Gamut Index) 101, R9 Value > 80, MacAdam Step < 2, Lifetime LED > 50,000h - L90 - B10 (Ta 25°C).	Nos	19.0	

		Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.			
33.0	NDSR33	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of track mounted Adjustable spotlight with adapter having Max System wattage of 15W, System lumen > 1020. DALI ballast integrated in the body. Product complete with super pure anodized aluminium reflector to guarantee wall washer light distribution for vertical downlight wall illumination. Die-cast aluminium optical assembly. Rotates 360° about the vertical axis and tilts 90° relative to the horizontal plane. Product should have option of installing an accessory asymmetric screen. Fixture should have Class I; IP20; Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Asymmetrical screen for wall washing effects and preventing the dispersion of stray light. Colour temperature 3000 K, Light colour quality CRI 90 - Rf (Colour Fidelity Index) 91 - Rg (Gamut Index) 102, R9 Value > 80, MacAdam Step < 3, Lifetime LED > 50,000h - L90 - B10 (Ta 25°C). Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.	Nos	5.0	
34.0	NDSR34	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of 1.0 Mtr track made from extruded aluminium. 48V (16A) low voltage track for ceiling, wall and pendant installations. (shall be as per final RCP & consultant/ client approval). The integrated circuit, designed to interact with the DC/DC driver included in the adapters or products, allows the lighting elements inserted in the track to be programmed individually. Color availability should be whether Black or white as per the site requirement. Size of 1000x11x19.	Nos	25.0	
35.0	NDSR35	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of 500 MM length track made from extruded aluminium. 48V (16A) low voltage track for ceiling, wall and pendant installations. (shall be as per final RCP & consultant/ client approval). The integrated circuit, designed to interact with the DC/DC driver included in the adapters or products, allows the lighting elements inserted in the track to be programmed individually. Color availability should be whether Black or white as per the site requirement. Size of 500x11x19.	Nos	11.0	
36.0	NDSR36	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Power Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning cap for low voltage track. Size of 89x21x21 MM + AC/DC power unit for low voltage track. Power 75W. DALI - Powerline.	Nos	18.0	

37.0	NDSR37	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Miniaturised adjustable spotlight with adapter for installation on a 48V low voltage track. Max system wattage of 3.4W, System lumen > 127. Spotlight body made up of die-cast zamak with a passive dissipation system. The swivel joints allow the spotlight to be rotated by 360° and tilted by 90°. The fixture should have an option of White or black finish as per site requirement. Fixture should have Class III; IP20 Performance. Product Diameter (mm) 19 MM, Length 35 MM. The set back position of the optic unit guarantees a high level of visual comfort with a thermoplastic high-definition lens. Suitable beam angle of M - Medium 24°. The Fixture should have an option of Medium, Flood and Wide Flood optics, as per approval. Light colour quality CRI 90 - Rf (Colour Fidelity Index) 93 - Rg (Gamut Index) 101, Colour temperature 3000 K, MacAdam Step 2, Lifetime LED 1 > 50,000h - L85 - B10 (Ta 25°C). Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.	Nos	52.0	
38.0	NDSR38	Decorative Hanging light, 12 W/Mtr, IP20, 3000K. (R60-4 Mtr)	Nos	3.0	
39.0	NDSR39	Decorative Hanging light, 12 W/Mtr, IP20, 3000K. (R74-5Mtr)	Nos	1.0	
40.0	NDSR40	Decorative Hanging light, 12 W/Mtr, IP20, 3000K. (R78-5Mtr)	Nos	3.0	
41.0	NDSR41	Decorative Hanging light, 12 W/Mtr, IP20, 3000K. (R63-4.5 Mtr)	Nos	1.0	
42.0	NDSR42	Supply, Installation, Testing & Commissioning, Installation, Testing & Commissioning, Installation, Testing & Commissioning of Track mounted miniaturised adjustable profiler projector framer light with system wattage of 9.8W, System lumen of 33.5. Fixture body is made up of die-cast aluminium and thermoplastic. Opti Beam reflector with telecentric optics system consisting of four anti-reflection-treated glass lenses. Black anodised aluminium locknut for manual focusing. an external pin allows to lock aiming. optical assembly is fixed to the technical body with a rapid and practical magnetic system. This solution allows it to be rotated by 360°. The innovative optical system, combined with the option of manual adjustment and four shaping flaps, allows precise, well-defined wall lighting with no halo effects or soft edges. projector is designed to obtain a square, rectangular or variously irregular beam by manoeuvring the flaps also possible to add gobos for circular shapes. Light colour quality CRI 90 - Rf (Colour Fidelity Index) 92 - Rg (Gamut Index) 99, Colour temperature 2700 K/3000 K, MacAdam Step 2, LED Life Time > 50,000h - L90 - B10. Product should have BIS Certification / LM79 Test report / LM 80 Report / TM30 Report. Also, Product should have valid Lab tested Photometric data like LDT file / IES file for lighting calculation in dialux / relux software.	Nos	4.0	

SOLAR PANEL WORKS					
43.0	NDSR43	Solar Module 600 Wp+ Topcon Bifacial (IEC61853-1, IEC 61853-2, DCR)	Nos.	770.0	
44.0	NDSR44	Solar Grid Tie String Inverter 100 KW 3-Phase (IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169, IS16221 (BIS)) Safety Standards- IEC62109 1/2, IES 61000 - 6-1/-2/-3/-4	Nos.	4.0	
45.0	NDSR45	Solar Module Mounting Structure (Panel fitting Clamps, End Clamps, Mid Clamps)	Set	1,500.0	
46.0	NDSR46	Solar DC Cable UV protected 1500V DC Flexible (CLASS 5) ATC Conductor, Cross Linked LSOH Insulated, and Extruded Cross Linked LSOH Outer Sheathed Solar Cable As per TUV. [Red/Blk Colour]-1 CORE X 4 SQ.MM. For String cabling and Earth Looping	Mtrs	2,500.0	
47.0	NDSR47	DCDB/Array Junction Box 10 in 10 out, 1000 V, DC 10 SPD Enclosure IP65	No.	4.0	
48.0	NDSR48	ACDB/AC Control Panel 4 in 1 out 650 A, 320 VAC SPD Enclosure IP65	No.	1.0	
49.0	NDSR49	1C x 4 sq mm Solar Cable, EBXL - XLPO Annealed Tinned Flexible Copper Conductor	Mtr	2000	
50.0	NDSR50	Cu Flexible FRLS Cable 1100V Flexible (CLASS 5) Bare Copper Conductor, PVC (TYPE D) Insulated & Extruded PVC (TYPE ST3) Outer Sheathed Industrial Cable Gen. As Per IS 694 [Flexible Cable] - 4C x 70 SQMM	Mtrs	50.0	
51.0	NDSR51	AL Armoured 1100 V Solid Round (CLASS 1) Aluminium Conductor, XLPE Insulated, Insulated Cores Laying For Laid Up, PVC TAPE I/SH, Single layer Galvanised Steel Flat Strip Armoured and Extruded ST2 PVC Outer Sheathed LV Power Cable Generally As Per IS 7098 Part-1 Cable - 3.5C x 350 SQMM	Mtrs	100.0	
52.0	NDSR52	Generation Meter 40/200 3 Phase	No.	1.0	
53.0	NDSR53	GI Strip 25 x 3 with Sleeves and Insulators for DC/AC/LA earthing	Mtrs.	800.0	
54.0	NDSR54	Earth Pit with Copper Bonded Rod 17mm/1000mm with Backfill chemical suitable for Chemical Earthing	Sets	4.0	
55.0	NDSR55	Lightning Arrester conventional with Accessories	Set	1.0	
56.0	NDSR56	BOS (MC4 Connectors, CableTray, Conduit, Cable Tie, Lugs, Glands)	Set	1.0	
57.0	NDSR57	Design & Project Management	Set	1.0	
58.0	NDSR58	Net Metering	Set	1.0	
59.0	NDSR59	Logistics Loading Unloading	Set	1.0	
60.0	NDSR60	Installation and Commissioning	KWp	461.7	
ELECTRICAL WORKS					
61.0	NDSR61	Supplying, installing, testing and commissioning SF 6 Insulated 11kV, 800A, 50kA/3sec, 4 way outdoor, extensible motorised SCADA compatible RMU, internal arc tested as per electric supply company specification consisting of 2 nos. feeder with 2 LBS and 2 nos. feeder with 2 VCB compliant to IEC 62271 100, 200 and 102, as per specification no. SW-HTS/RMU SCADA	Each	1	

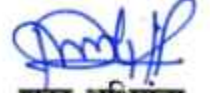
62.0	NDSR62	Supplying, erecting & terminating FRLS Control Cable, galvanised steel formed wire armoured (round) cable 1100 V, 6 core 1.5 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	M	40	
63.0	NDSR63	Supplying, erecting & terminating FRLS XLPE insulated, galvanised steel formed wire armoured (round) cable 1100 V, 3 core 1.5 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	M	694	
64.0	NDSR64	Supplying and erecting ON LOAD four pole automatic transfer switch, 415V, 800A, 50 Hz with enclosure, flexibility of neutral connection, line and load reversibility, changeover with phase barriers, source separator, terminal covers along with staggered termination for cable connection and ATS controller with provision of time delay protection of OV, UV, phase sequence changing, single phasing and event logging, connected with provided leads complete complying to IS/IEC 60947-3 Part-1/6.	Nos	1	
65.0	NDSR65	Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V 1600A having 50mm (Width) X 10 mm (Thickness), with 99.9 % aluminium purity as per E91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CP BB	m	3	
66.0	NDSR66	Providing & erecting 4 Pole MCCB, 415V, 150A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
67.0	NDSR67	Providing & erecting 4 Pole MCCB shall be microprocessor based with LSIG (overload, short circuit, instantaneous, earth fault) inbuilt protection and shall have door mounted display to ensure close door operation, 415 V, 150A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact. MCCB with phase barriers on both sides, insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
68.0	NDSR68	Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V 160A having 25mm (Width) X 5 mm (Thickness), with 99.9 % aluminium purity as per E91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CP BB	m	3	

69.0	NDSR69	Providing & erecting 4 Pole MCCB, 415V,63A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	3	
70.0	NDSR70	Providing & erecting 4 Pole MCCB shall be microprocessor based with LSIG (overload, short circuit, instantaneous, earth fault) inbuilt protection and shall have door mounted display to ensure close door operation, 415 V, 40A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact. MCCB with phase barriers on both sides, insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
71.0	NDSR71	Supplying and erecting bus bar chamber triple pole with neutral with four copper bars, 500V, 40A having 10mm (Width) X 1.6 mm (Thickness), with 99.9 % Copper purity as per E91E Grade & Current Density 1.6 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CP-BB	m	3	
72.0	NDSR72	Supplying and erecting bus bar chamber triple pole with neutral with four aluminium bars, 500V 800A having 25mm (Width) X 5 mm (Thickness) , with 99.9 % aluminium purity as per E91E Grade & Current Density 0.8 A per sq. mm. compliance to IS 5082 and Enclosure fabricated with 16 SWG CRCA sheet and epoxy paint, with suitable number of ways and with SMC/DMC Insulators and accessories of suitable rating complete as per specification no. CP BB	m	5	
73.0	NDSR73	Providing & erecting 4 Pole MCCB, 415 V, 125A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact. MCCB with phase barriers on both sides, insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
74.0	NDSR74	Providing & erecting 3 Pole MCCB, 415V,32A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
75.0	NDSR75	Providing & erecting 3 Pole MCCB, 415V,25A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	

76.0	NDSR76	Providing & erecting 3 Pole MCCB, 415V,63A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Nos	1	
77.0	NDSR77	Providing & erecting 4 Pole MCCB, 415V, 125A, rated short-circuit breaking capacity 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-SWR/MCCB	Each	3	
78.0	NDSR78	Supplying, erecting & terminating FRLS XLPE insulated, galvanised steel formed wire armoured (round) cable 1100 V, 1 core 4 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	Mtr	100	
HVAC WORKS					
79.0	NDSR79	Supplying, installation, testing and commissioning of following capacity Air-Cooled , Scroll Chiller package complete with VFD (Variable Frequency Drive), hermetic/semi hermetic, multiple scroll type compressors each with step less capacity control of 25 % to 100 % of the rated capacity, with microprocessor based control panel, motor, starter panel (VFD), machine mounted, air-cooled condensers, factory fitted chiller insulation, water flow switch , vibration spring Isolators, victaulic couplings, integral refrigerant piping and wiring with single/ two circuits, automatic and safety controls mounted in central console panel and all mounted on a steel frame (complete as per specifications) i/c suitable foundation/mounting structure made of RCC/MS Structure i/c anticorrosive paint, anti vibration pad, power control cable and connection inter connection etc. as per design approved by engineer-in- charge. Motor shall be suitable for 415±10% 50 cycles. 3 phase AC supply. Refrigerant gas used shall be R-410A. The chiller shall be Building Management System (BMS) compatible. The system shall be in confirmation to IS : 16590 and CPWD Specification as amended upto date. BEE Star labeling and CPWD Specification as amended upto date and tested as per IS 16590. Chilled water Leaving Temp. (6.67°C) Chilled water Entering Temp. (12.2°C) Evaporator fouling factor = 0.018 m ² °C/kW Condenser air entering temp. : As per Site Dry Bulb Temperature Suitable for Seismic Zone and Altitude as per location/site. Microprocessor based controller.			
		100 TR BEE 4 Star Rated	Each	3.00	
		Cabinet fan			
80.0	NDSR80	2800 CFM (Exhaust)	Each	1.00	
81.0	NDSR81	2500 CFM (Fresh)	Each	1.00	
82.0	NDSR82	1650 CFM (Exhaust)	Each	1.00	

83.0	NDSR83	1400 CFM (Fresh)	Each	1.00	
84.0	NDSR84	1000 CFM (Toilet)	Each	1.00	
		DAMPERS			
		Fire dampers in supply air duct/main branch and return air path with inbuilt mechanism of spring return action			
85.0	NDSR85	Fire damper	SQM	5.00	
86.0	NDSR86	Actuator	SQM	5.00	
		Jet Fans			
87.0	NDSR87	For Basement	Nos	7.00	
88.0	NDSR88	Centrifugal Chilled Water Pumps			
		240 gpm, 82.5	Nos	6.00	
		Duty parameters (each pump)			
		Water flow rate – 3444 LPM			
		Head – 22 M			
		Motor rating – 7.5 KW			
89.0	NDSR89	Expansion tank			
		1 Cubic Mtr	Nos	1.00	
90.0	NDSR90	Air Separator			
		150 Dia	Nos	1.00	
91.0	NDSR91	Temperature Gauge			
		50mm, 80mm & 125mm Pipe Dia	Nos	54	
92.0	NDSR92	Pressure Gauge			
		50mm, 80mm & 125mm Pipe Dia	Nos	54	
93.0	NDSR93	PIBC			
		50mm & 80mm	Nos	5	
94.0	NDSR94	Coupling			
		80mm	Nos	10	
		50mm	Nos	8	
		25mm	Nos	36	
95.0	NDSR95	Propeller fan			
		100 CFM	Nos	3	

वर नमूद सुचित दर्शविलेल्या बाबींचे पुरवठा करणारे पुरवठादार/दुकानदार/उत्पादक/विक्रेते यांनी नमूद केलेल्या बाबींकरीता असलेले दर स्वतःच्या लेटरहेडवर महापालिकेच्या कार्यालयात अथवा ई-मेल द्वारे pmcbandhkamdept01@gmail.com /panvelcorporation@gmail.com यावर दिनांक २९/०८/२०२६ पर्यंत पाठवावे ही विनंती, सदर दर हे अंदाजपत्रक तयार करणेसाठी गृहित धरणेत येणार आहेत.



शहर अभियंता
पनवेल महानगरपालिका

जा.क्र पमपा/बांधकाम/७४२५ /प्र.क्र.०९/२५२३/२०२६,
दि.१४/०८/२०२६

प्रत माहितीस्तव - १. माहिती फलक करीता