NAGPUR METROPOLITAN REGION DEVELOPMENT AUTHORITY

Station road, Sadar Nagpur

Details of items (Quotation notice no SE (Project)/ /2018-19 Dt. / /

Sr. No	Description of item	QUANTY	Unit	Rate per unit
1	Providing & fixing tera felt APP (Atactic Poly-prolene) Gobain make underlay membrane of approximate 2mm thick below single fixed by sufficient rust free nails on existing concrete plain/ slopping roof including all materials, transportation, labour and scaffolding etc. complete as per instructions of engineer incharge/ Architect etc. complete.	655.00	Sqm	
2	Providing & fixing the Roofing Shingles of Saint- Gobain make composites of reinforced fiber glass and minerals stabilized, high grade asphalt. They are overlaid with high strength ceramic coated granules, below which is mineral stabilizer cum fibre retardant coating. The entire composition comes in the form of mats. A sheet of singles has thickness of 8mm to 9mm and size as per the requirement. The profile pattern & colour shall be as per approval drawing and it should be got approved before fixing from the Engineer in charge/Architect. The roofing should be 100% water proof and resistance of all impact forces wind & fire also unbreakable. These are maintance free contractor has to exercise given minimum 25 year warranty band on the Rs. 500 Stamp paper if any damage free repair should have been done by the contractor. The shingles should be laid on R.C.C plain slabs/ slopping. The roof subtract that it can be include steep slopes fixing of singles including starter of size 4' x 4" and fixed by sufficient rust free nails if required silicon shall be used on the existing concrete roof including transportation, scaffolding, lifting all material etc. as directed by Engineer in charge/ Architect etc. complete.	655.00	Sqm	

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3	Providing & fixing Ridge accessories colour match with the Roofing Shingles of Saint- Gobain make composites of reinforced fiber glass and minerals stabilized, high grade asphalt. They are overlaid with high strength ceramic coated granules, below which is mineral stabilizer cum fibre retardant coating. The entire composition comes in the form of mats. A sheet of singles has thickness of 8mm to 9mm and size as per the requirement. The profile pattern & colour shall be as per approval drawing and it should be got approved before fixing from the Engineer in charge/Architect. The roofing should be 100% water proof and resistance of all impact forces wind & fire also unbreakable. These are maintance free contractor has to exercise given minimum 25 year warranty band on the Rs. 500 Stamp paper if any damage free repair should have been done by the contractor. The shingles should be laid on R.C.C plain slabs/ slopping. The roof subtract that it can be include steep slopes fixing of singles and fixed by sufficient rust free nails if required silicon shall be used on the existing concrete roof including transportation, scaffolding, lifting all material etc. as directed by Engineer in charge/ Architect etc. complete.	152.00	RMT	
4	Providing supplying and fixing FRP Cast Iron Benches arihant make of size area 0.6 x 2 M and back height 0.4 M. The Supporting side legs are of cast iron having weight 12 to 15 Kg each leg and the sitting & back side supports solid strips (as shown in drewing in FRP of thickness minimum 1mm & width 50mm @ suported by MS flat at center & longitudinaly including screwing welding etc.These bench side supports should be fix in cement concret M-20 of block of size 0.45 x 0.75 X 0.3 in C.C block at site including hold fasts required to extend to legs of side support, transportation of all materials carring to block, painting etc as directed by engineer incharge/Architect etc. complete.	50	Nos.	
5	Providing & fixing of BUTTERFLY VALVE 80 mm Dia with necessary fittings to be installed in the tank sump. The Butterfly Valve shall be sutiable for PN16 bar rating. The body shall be of Cast Iron to GG 250 with Epoxy Coated for better resistance to corrosion, with ISO 5211 top connection. The Disc should be of heavy duty Ductile Iron grade GG 400 with Polyamide Coated to prevent corrosion , floating design to allow self centering. The Shaft shall be of SS 420. Single piece, Spline design shaft mounted between Antifriction bearing to reduce the torque & blowout proof design. The valve liner shall be of High grade Elastomer EPDM with replaceable feature & Tongue & Groove design to allow perfect tightness. Flow Control Leverwith temper proof	10	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
	fearture. The valve shall be fitted between two flanges o either side of pipe flanges. The valve edge rubber shal be projected outside such that they are wedged with the pipe flanges to prevent leakages. 80 mm Dia (Make: Zoloto/ Kitz/ Castle)			
6	Providing & fixing of BUTTERFLY VALVE 50 mm Dia with necessary fittings to be installed in the tank sump. The Butterfly Valve shall be sutiable for PN16 bar rating. The body shall be of Cast Iron to GG 250 with Epoxy Coated for better resistance to corrosion, with ISO 5211 top connection. The Disc should be of heavy duty Ductile Iron grade GG 400 with Polyamide Coated to prevent corrosion , floating design to allow self centering. The Shaft shall be of SS 420. Single piece, Spline design shaft mounted between Antifriction bearing to reduce the torque & blowout proof design. The valve liner shall be of High grade Elastomer EPDM with replaceable feature & Tongue & Groove design to allow perfect tightness. Flow Control Leverwith temper proof fearture. The valve shall be fitted between two flanges o either side of pipe flanges. The valve edge rubber shall be projected outside such that they are wedged with the pipe flanges to prevent leakages. 50 mm Dia (Make: Zoloto/ Kitz/ Castle)	5	Nos.	
7	Providing & fixing of y strainer 80mm Dia with necessary fittings to be installed in the tank sump.Y Type Strainer flanged ends . The body shall be of high grade cast iron GG 250 with internal & external epoxy coated with Stainless Steel. Filter element upto 1600 microns, with a drain plug, PN 16 Rating upto size 150mm & PN 10 for size 200mm & above. Strainer shall be installed on full size of pipe run , in accordance with the manufacturer's installation instructions. Y type Strainer flanged ends for water filter. The body shall be of Brass. The filter element shall be of Stainless Steel with Mesh :500 Microns Pressure PFA 25 bar. Cap delivered with plug (nylon66) 1/4" G.(Make: Zoloto/ Kitz/ Castle) Dia : 80mm Dia	10	Nos.	
8	Providing & fixing of y strainer 50mm Dia with necessary fittings to be installed in the tank sump.Y Type Strainer flanged ends. The body shall be of high grade cast iron GG 250 with internal & external epoxy coated with Stainless Steel. Filter element upto 1600 microns, with a drain plug, PN 16 Rating upto size 150mm & PN 10 for size 200mm & above. Strainer shall be installed on full size of pipe run , in accordance with the manufacturer's installation instructions. Y type Strainer flanged ends for water filter. The body shall be	5	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
	of Brass. The filter element shall be of Stainless Steel with Mesh :500 Microns Pressure PFA 25 bar. Cap delivered with plug (nylon66) 1/4" G. (Make: Zoloto/ Kitz/ Castle) Dia : 50mm Dia			
9	Providing & fixing C.I. wafer type check valve of PN 1.6 rating, including rubber gasket, flanges, union, nuts, bolts, washers & painting complete as required. (Make:KBL / Kitz/ Castle) Dia: 80mm Dia	8	Nos.	
10	Providing & fixing C.I. wafer type check valve of PN 1.6 rating, including rubber gasket, flanges, union, nuts, bolts, washers & painting complete as required. (Make:KBL / Kitz/ Castle) Dia: 50mm Dia	5	Nos.	
11	Providing ,fixing commissioning of Float Control Valve to regulate water flow in OH tank. The valve shall be complete with upstream isolation valve(Nickel plated brass),drain cock (brass), downstream isolation valve,strainer.The main specification shall be as follows, 1) Main valve:- Cast Iron 2)Mechanical Float: Brass / PVC plastic 3)Needle Valve: Brass Dia 50 mm	5	Nos.	
12	Providing, supplying, erecting & installation of the Florentine Gazebo of Hexagonal type (Bajaj Make) having with of 11 feet & Height 10.75 feet from top of plinth to crown as per the approved design & drawing. This gazebo is Italian Motif and is lighter in scale, depicting on elegance of period. Gazebo should be handcrafted as per design & carving by highly skilled craftsmen a complex composite of fibre glass and compatible component's resulting in an extremely durable safe and attractive structure. These should be UV stabilized weather resistant, light weight and maintance free. The Gazebo Should made for the criteria / specifications 1) Made of marine quality Composite. 2) U.V. stabilized class-I fire retarded polyester composite with glass fiber reinforcement 750 GSM. 3) Inner Frame work made of mild steel hot-dip galvanized, post fabrication. 4) All hardware is of stainless steel. 5) Individually hand-crafted. 6) Light in weight 7) Weather proof. 8) Maintenance free. 9) Easy installation. 10) Low installation cost. 11) Extremely durable with design life of minimum 20 years.11) Retain their colour & appearance for years to come. 12) Self-coloured textured surface finish with scratch resistant, aliphatic grade U.V. stabilized PU paint. With minimum standing life of 10 years. Typical GLASS FIBER Properties required are as below 1) Flexural strength, psi=16,000 to 32,000 2) Flexural modulus, psi 0.8 to 1.4 x106	4	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
	3) Tensile strength, psi 9,000 to 18,000 4) Tensile modulus, psi 0.8 to 1.4 x106 5) Elongation 1.0% to 2.5% 6) Compressive strength, psi 15,000 to 25,000 7) Impact strength izod, lb./in. of notch 4 to 12 8) Specific gravity 1.0 to 1.8 9) Density, lbs./ft.3 80 to 110 10) Continuous heat resistance 150 to 350 11) Thermal Coefficient of Expansion, in/in/Fx 10- 12 to 20 12) Barcol hardness 40 to 60 13) Flexural strength, psi @ 77 degrees F 28,000 14) Flexural strength, psi @ 77 degrees F 28,000 15) Tensile strength, psi @ 77 degrees F 16,800 16) Elongation 2.2% 17) Barcol hardness 45 to 50 18) Glass content 30% 19) Specific gravity 1.62 20) ASTM E-84 (tunnel test) 21) UL Subject 94 V. The Gazebo should be installed on the plinth which already prepared as per drawing including all transportation, Labour material, scaffolding, lifting etc. complete as directed by Engineer incharge/Architect.			
13	Providing, supplying and installation of Food Waste Converter composting machine OWC-30 for 100kg per day at working destination of 2.5 HP (Main Motor & Chopper Motor), Brim Capacity: 30 Lit., Waste Batch size: 10 Kg., Batch Duration: 15 Min., MOC: All contact parts of SS-304., MOC of Outer Cover: MS Powder Coated, Trolley: One No. of MS Powder Coated including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer incharge/ Architect complete.	1	Nos.	
14	Providing, supplying and installation of Food Waste Converter composting machine OWC-60 for 200kg per day at working destination of 4 HP (Main Motor & Chopper Motor), Brim Capacity: 60 Lit., Waste Batch size: 25 Kg., Batch Duration: 15 Min., MOC: All contact parts of SS-304., MOC of Outer Cover: MS Powder Coated, Trolley: One No. of MS Powder Coated including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer incharge/ Architect complete.	1	Nos.	
15	Providing, supplying and installation of Garbage Bin (MGB 120 Ltrs. Capacity Waste Handling Container /Bin) with Injection Moulded High Density Polyethylene (HDPE) material, UV Stabilize extremely Durable and Resistance to Heat & Chemicals, Ease of Transport & Handling, Low noise level, Environmental Friendly, Suitable for Comb type lifting Devices for easy emptying into Garbage Compactors, As per EN standards, Two nos.200 mm Solid Rubber Tyre wheels, fitted on rust resistance shaft. The lid shall have two bow type	5	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
	handles for easy opening, Standard Color Green, Grey, Red, Yellow, and Blue. Suitable for Handling & Transporting Garbage both Dry & Wet including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer incharge/ Architect complete.			
16	Providing, supplying and installation 1100 Liter Capacity Four Wheel material high density polyethylene (HDPE) environment friendly, long service life, suitable for recycling, frost- resistant, resistant to chemicals and high resistance to UV radiation. Nom. volume (L) 1100 lit. Dead weight approx. (kg) 50, useful load (kg) overall height 1354mm, width 1373mm, depth 1073mm, upper edge comb 1206mm, Wheel base width 750mm, wheel base depth 880mm, wheel diameter 200mm including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer in charge/ Architect complete.	1	Nos.	
17	Providing, supplying and installation Dino Litter Pole Dustbins material high density polyethylene (HDPE) environment friendly, long service life, suitable for recycling, frost- resistant, resistant to chemicals and high resistance to UV radiation. Weight: 4 kg, Capacity: 50 Litres, Can be mounted on lamp posts, mast or on walls, Options: Receptacle I using refuse bags, Cigarette plate as option, Self - adjusts when inserting the bin including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer in charge/ Architect complete.	3	Nos.	
18	Providing, supplying and installation MGB 240 Ltrs. Capacity Waste Handling Container / Bin Injection Moulded High Density Polyethylene (HDPE) material. UV Stabilize extremely Durable and Resistance to Heat & Chemicals. Ease of Transport & Handling, Low noise level. Environmental Friendly. Suitable for Comb type lifting Devices for easy emptying into Garbage Compactors. As per EN standards. Two nos.200 mm Solid Rubber Tyre wheels, fitted on rust resistance shaft. The lid shall have two bow type handles for easy opening. Standard Color Grey, Green. Red, Yellow, Blue Suitable for Handling & Transporting Garbage both Dry & Wet including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer in charge/ Architect complete.	1	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
19	Providing And supplying at site FRP Dustbins of Various models E.G. Rabit / Penguin / monky etc As directed and Apporved of Hight 3Feet and area 1.5" x 2" having capacity of 9 C.ft as apporved by Architect / Engineer Incharge Etc Complete	8	Nos.	
20	Providing, supplying and installation Pet Bottle Shredder for Public Places i) Cutting Mechanism & Technology: Twin shaft. ii) Shred Chamber (mm): 120 x 120. iii) Shred size (mm): 6 - 12 x 50 - 100 iv) Shred Capacity: 200 - 300 Bottles / hour v) Voltage: 220 V vi) Power: 1 HP vii) Waste Volume: 180 litres viii)Over Heat Protection: Yes. ix) Motor Start / Off: Auto / Online x) Working Cycle: Continuous. xi) Noise Level: < 65 DB. xii) Cutting Speed: 10 meters / minute xiii)Safety Feature: Bin full sensor – Stops the machine when bin in full: Bin Open – Stops when bin door is open: Electronic Key lock to avoid unauthorized use. including free training and installation and minimum warranty of one year including transportation and labour etc. as directed by Engineer in charge/ Architect complete.	1	Nos.	
21	Providing and fixing rectangular / round valve box of hdpe / pe material 10 " with green top opening cover, testing etc. complete. (prior approval of sample and brand by 4. ex engineer is necessary before use.)	15	Nos.	
22	Providing and fixing rectangular / round valve box of hdpe / pe material 12 " with green top opening cover, testing etc. complete. (prior approval of sample and brand by ex engineer is necessary before use.)	20	Nos.	
23	Providing and fixing quick coupling valve 3l4"of brass including necessary Sockets, swivel hose pipe 3/4" - 30 meters length, swivel elbow, opener key, g i tees, flanges, union nut, testing etc. complete. (prior approval of sample and brand by ex. engineer is necessary before use)	10	Nos.	
24	Providing and fixing gate valve of brass 2 1/2" (65 mm) as specified dia. Including necessary sockets, flanges, nipples, union nut testing etc. complete. (prior approval of sample and brand by ex. engineer is necessary before use.)	10	Nos.	
25	Providing and fixing pop up sprinkler 32 mm dia. inlet having 13 to 18 meters radius including necessary swing joint, sockets, saddles, riser pipe, union nut, testing etc. complete. (prior approval of sample and brand by ex. engineer is necessary before use.)	32	Nos.	

Sr. No	Description of item	QUANTY	Unit	Rate per unit
26	Providing and fixing in position HDPE pipe (90 mm dia) of specified OD, grade pe -63, including necessary fittings such as bore nipples, tees, flanges reducers, clamps, plugs etc. including necessary excavation trench filling, necessary drilling holes in walls, slab etc. and making good the surface complete.(for 6 kglsq.cm pressure) (prior approval of sample and brand by ex. engineer is necessary before use)	300	Nos.	
27	Providing and fixing in position HDPE pipe (75 mm dia) of specified OD, grade pe -63, including necessary fittings such as bore nipples, tees, flanges reducers, clamps, plugs etc. including necessary excavation trench filling, necessary drilling holes in walls, slab etc. and making good the surface complete.(for 6 kglsq.cm pressure) (prior approval of sample and brand by ex. engineer is necessary before use)	745	Rmt	