

## Specification Index

Sport Authority of Gujarat		
Name Of Work- Construction of Nagarpalika Library at Patdi, Dist. Surendranagar		
Specification Index		
Sr. No.	Description of Item	Specification Detail
1	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	As Attached Separate Sheet
2	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed.(A) Depth upto 3.0 M. and lead upto 100m for 10 Cum	The Relevant specification of item No.- 4.00(b) Page No. 25 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter. Including Dewatering
3	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed.(B) Depth from 3.0 to 6.0 M. and lead upto 100m for 10 Cum	The Relevant specification of item No.- 4.001(c) Page No. 25 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter. Including Dewatering
4	Excavation for foundation for depth from 3.0 m to 5.0 m including sorting out and stacking of useful materials and disposing of the excavated stuff upto 50 Meter lead.(C) Hard Murrum	The Relevant specification of item No.- 4.002(c) Page No. 25 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
5	Filling in plinth and foundation with sand under floors including watering ramming, consolidating and dressing complete	The Relevant specification of item No.- 4.24 Page No.- 28 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
6	Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete. (more than 10 ton)	The Relevant specification of item No.- 4.004 Page No.- 27 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
7	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each disposed layer by ramming and watering.	The Relevant specification of item No.- 4.12 Page No.- 27 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
8	Carring out plinth treatment to post construction / existing structure by spraying chemical solution for termite control treatment including labour and material consistent with I.S.I specification. Using Chlordane and Chiorpurfiles 20 EC. As Per 6131_paret-II Concentration Weight one percent is recommended i.e one liter 20 EC chemical emulsion with 19 liter give 1 % concentration inclusive of one liter chemical emulsion application at the rate of 5 Liter chemical/ Sqm of surface is recommended as per I.S.	The Relevant specification of item No.- 22.00.9 Page No. 139 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
9	Providing and laying cement concrete 1:2:4 (1- Cement : 2- Coarse sand : 4- graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	The Relevant specification of item No.- 5.3.2(a) Page No.- 30 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
10	Providing and laying cement concrete 1:3:6 (1- Cement : 3- Coarse sand : 6- crushed stone aggregates 20 mm nominal size) and curing complete including cost of formwork in (A) Wall Caps / Copping	The Relevant specification of item No.- 5.3.14(a) Page No.- 38 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.

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11	GRADE SLAB (M200) : Providing and laying controlled cement concrete M.200 Concrete with all lead, including all transportation, pumping, pouring, curing of concrete etc complete including the cost of formwork but excluding the cost of reinforcement for reinforced concrete work in M200 Grade Slab	The Relevant specification of item No.- 5.001 Page No.- 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
12	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in Foundations footings, base of columns and Raft etc., for any type of cross section area complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(A) For form work and 5.8.3 (A) for M:25 Grade R.C.C. work Incl. Form Work at Footing and foundation Page No.- 54 & 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
13	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in column up to plinth lvl. etc., for any type of cross section area complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(A) For form work and 5.8.3 (A) for M:25 Grade R.C.C. work Incl. Form Work at Footing and foundation Page No.- 54 & 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
14	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in TIE, GROUND, & PLINTH BEAMS for any type of cross sectional area. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(H-I) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work at Plinth Beam and Brackets Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
15	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (F) Wall (Vertical and horizontal fins), & (F1) Wall cap & coping up to G.F. level., etc. Complete, as per detailed & directed by Architect / Consultant & and directed by EIC.	The Relevant specification of item No.- 5.8.3, 5.4.13 & 5.4.1 for the R.C.C. Work in vertical Wall, Cap, Coping, Slabs, Vertical and horizontal fins up to floor two level. In Required Grade of Concrete, Incl. following Relevant Specification of Chapter 9 for form work. Page No.- 41 to 55 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
16	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (F) Wall (Vertical and horizontal fins), & (F1) Wall cap & coping For First Floor level., etc. Complete, as per detailed & directed by Architect / Consultant & and directed by EIC.	The Relevant specification of item No.- 5.8.3, 5.4.13 & 5.4.1 for the R.C.C. Work in vertical Wall, Cap, Coping, Slabs, Vertical and horizontal fins up to floor two level. In Required Grade of Concrete, Incl. following Relevant Specification of Chapter 9 for form work. Page No.- 41 to 55 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
17	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (F) Wall (Vertical and horizontal fins) & (F1) Wall cap & coping For Second Floor level., etc. Complete, as per detailed & directed by Architect / Consultant & and directed by EIC.	The Relevant specification of item No.- 5.8.3, 5.4.13 & 5.4.1 for the R.C.C. Work in vertical Wall, Cap, Coping, Slabs, Vertical and horizontal fins up to floor two level. In Required Grade of Concrete, Incl. following Relevant Specification of Chapter 9 for form work. Page No.- 41 to 55 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.

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18	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (D) For Columns for any type of cross sectional area for G.F. Lvl. etc., for any type of cross section area complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(A) For form work and 5.8.3 (D) for M:25 Grade R.C.C. work Incl. Form Work at Ground floor level, Page No.- 54 & 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
19	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (D) For Columns for any type of cross sectional area Work at First floor etc., for any type of cross section area complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(A) For form work and 5.8.3 (D) for M:25 Grade R.C.C. work Incl. Form Work at First floor level, Page No.- 54 & 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
20	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in (D) For Columns for any type of cross sectional area Work at Second floor etc., for any type of cross section area complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(A) For form work and 5.8.3 (D) for M:25 Grade R.C.C. work Incl. Form Work at First floor level, Page No.- 54 & 40 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
21	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in LINTLE-BEAM, LINTEL & SILL & COPING for all cross sectional area at G.F. Lvl. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work For Lintels and Chajja at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter. For GF Level
22	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in LINTLE-BEAM, LINTEL & SILL & COPING for all cross sectional area at F.F. Lvl. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work For Lintels and Chajja at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter. For FF Level
23	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in LINTLE-BEAM, LINTEL & SILL & COPING for all cross sectional area at S.F. Lvl. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work For Lintels and Chajja at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter. For FF Level
24	Providing and laying Controlled cement concrete M:25 and Curing Complete for reinforced concrete Chhajjas up to all floor two level including finishing the exposed surfaces with cement mortar 1:3 (1-cement, 3 Fine sand) to give a smooth and even surface centering and formwork and curing complete excluding cost of reinforcement. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work For Lintels and Chajja at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.

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25	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in SLAB BEAMS for Ground floor & Super structure, & for any type of cross sectional area. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab Beam at All level as per design mix in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
26	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in SLAB BEAMS at First Floor & for any type of cross sectional area. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab Beam at All level as per design mix in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
27	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in SLAB BEAMS at Second Floor to Terrace Floor & for any type of cross sectional area. etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab Beam at All level as per design mix in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
28	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in Staircase with steps / Kadi Tappa, waist slab and landing at any height and level as directed etc., complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (E) for M:25 Grade R.C.C. work Incl. Form Work For Lintels and Chajja at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
29	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work at Plinth to Ground FLOOR SLAB for all thickness/cross section etc. complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
30	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work at FIRST FLOOR SLAB for all thickness/cross section etc. as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.

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Sr. No.	Description of Item	Specification Detail
31	Providing and laying controlled cement concrete M:25 and curing complete including cost of necessary, form work, compacting with vibrator curing centering & shuttering in true line and level etc, but excluding the cost of reinforcement for RCC work in SECOND FLOOR SLAB for all thickness/cross section etc. complete as directed by E. I. C.	The Relevant specification of item No.- 9.1(G) For form work and 5.8.3 (C) for M:25 Grade R.C.C. work Incl. Form Work Slab at All level as per design in M20 Page No.- 39, 40, 56 & 57 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
32	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto ground floor level	The Relevant specification of item No.- 5.4.11 (05041C)[ but consider CRS.Type Fe-500D grade Bars & Steel instead of TMT. Bars & steel whenever requirement of site.] Page No.- 37 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Kilogram.
33	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto First floor level	The Relevant specification of item No.- 5.4.11 (05041C)[ but consider CRS.Type Fe-500D grade Bars & Steel instead of TMT. Bars & steel whenever requirement of site.] Page No.- 37 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Kilogram.
34	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete for Second floor to terrace floor Lvl.	The Relevant specification of item No.- 5.4.11 (05041C)[ but consider CRS.Type Fe-500D grade Bars & Steel instead of TMT. Bars & steel whenever requirement of site at Second floor to terrace floor.] Page No.- 37 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Kilogram.
35	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. in foundation and plinth in Cement Mortar 1:6. (1- Cement : 6 -fine sand)(B) Conventional	The Relevant specification of item No.- 6.13(a) Page No.- 51 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
36	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. at Ground floor Lvl. in cement Mortar 1:6 (1-Cement :6- finesand) (B) Conventional For Ground Floor etc. Complete.	The Relevant specification of item No.- 6.13(a) & 6.19 (a) Page No.- 50 TO 53 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
37	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. at First floor Lvl. in cement Mortar 1:6 (1-Cement :6- finesand) (B) Conventional For First Floor etc. Complete.	The Relevant specification of item No.- 6.13(a) & 6.19 (a) Page No.- 50 TO 53 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.
38	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. at Second floor to terrace floor Lvl. in cement Mortar 1:6 (1-Cement :6-finesand) (B) Conventional For above First Floor to Terrace Floor etc. Complete, as per detailed & directed by EIC.	The Relevant specification of item No.- 6.13(a) & 6.19 (a) Page No.- 50 TO 53 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Cubic Meter.

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39	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 -coarse sand ) (B) Conventional half brick masonry at Ground Floor level.(B) Conventional	The Relevant specification of item No.- 6.30(i)(b) (Read 1:4 instead of 1:5), 6.30(i)(a) Page No.- 54 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
40	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 -coarse sand ) (B) Conventional half brick masonry at First to Terrace Floor Lvl.(B) Conventional	The Relevant specification of item No.- 6.30(i)(b) (Read 1:4 instead of 1:5), 6.30(i)(a) Page No.- 54 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
41	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 -coarse sand ) (B) Conventional half brick masonry at Terrace Floor Lvl.(B) Conventional	The Relevant specification of item No.- 6.30(i)(b) (Read 1:4 instead of 1:5), 6.30(i)(a) Page No.- 54 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
42	Providing & Fixing chicken mesh jali at R.C.C. masonry joints at any height with all labour & material, etc. Complete, as per detailed & directed by EIC.	As Attached Separate Sheet
43	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering for Ground floor level and finished even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand)	The Relevant specification of item No.- 17.58 (II) (except 15mm thick single single coat on fair side of brick/concrete walls for interior plastering up to floor two level and finished even and smooth mala finish plaster instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
44	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering for First floor level and finished even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand)	The Relevant specification of item No.- 17.58 (II) (except 15mm thick single single coat on fair side of brick/concrete walls for interior plastering up to floor two level and finished even and smooth mala finish plaster instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
45	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering at Second Floor to Terrace floor level and finished even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand)	The Relevant specification of item No.- 17.58 (II) (except 15mm thick single single coat on fair side of brick/concrete walls for interior plastering up to floor two level and finished even and smooth mala finish plaster instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
46	Providing 10mm thick cement plaster in single coat on brick/concrete Ceiling for interior plastering for Ground Floor level and finished even and smooth in (ii) Cement mortar 1:4 (1- cement :4-sand)	The Relevant specification of item No.- 17.58 (II) (But Use single coat 10mm 1:4 Mala plaster on fair side of brick/concrete walls/ceiling for interior plastering up to floor two level instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.

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Sr. No.	Description of Item	Specification Detail
47	Providing 10mm thick cement plaster in single coat on brick/concrete Ceiling for interior plastering for First Floor level and finished even and smooth in (ii) Cement mortar 1:4 (1 – cement :4–sand)	The Relevant specification of item No.- 17.58 (II) (But Use single coat 10mm 1:4 Mala plaster on fair side of brick/concrete walls/ceiling for interior plastering up to floor two level instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
48	Providing 10mm thick cement plaster in single coat on brick/concrete Ceiling for interior plastering at Second Floor to terrace floor Lvl. and finished even and smooth in (ii) Cement mortar 1:4 (1 – cement :4–sand)	The Relevant specification of item No.- 17.58 (II) (But Use single coat 10mm 1:4 Mala plaster on fair side of brick/concrete walls/ceiling for interior plastering up to floor two level instead of 10mm finished even and smooth finish plaster) Page No.- 106 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
49	Providing and applying Texturer finish on RCC elements to give expose finish of approved shade and brand. Job includes proper gridding of RCC joints before applying texture, complete with scaffolding directed as per Architect and EIC	Completely as per the Description of the item. & Directed by the Architect Consultant & EIC. # The rate shall be for a unit of Square Meter.
50	Providing 20mm thick double coat external cement plaster on brick/ concrete work for plastering comprising of base coat of 12mm thick cement plaster in cement mortar (1 Cement:4 coarse sand) in rough finishing and 8mm thick top coat of cement mortar 1:2 (1 Cement: 2 Coarse sand) finished rough / with Trowel including scaffolding curing etc. complete.	The Relevant specification of item No.- 17.95 Page No.- 107 TO 108 shall be followed except base coat shall of 12mm thick rough finish (1:4) instead of (1:3) and top coat of 8mm thick (1:2) rough mala finish instead of (1:1) sand finish from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
51	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand ), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15 mm cement plaster 1:1/ 2:2(1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in-charge (payment for providing grooves shall be made separately)	Completely as per the Description of the item. & Directed by the Architect Consultant & EIC. # The rate shall be for a unit of Square Meter.
52	Add for plaster groove in plastered surface or moulding to R.C.C. projections.	As Attached Separate Sheet

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Sr. No.	Description of Item	Specification Detail
53	Providing & Laying Green Polished Kota Stone for flooring over 25mm (average) thick base of CM 1 : 6 (1 cement : 6 sand) Laid over & jointed with neat grey cement slurry including filing the joint with white / colour cement, complete in true line & level / slope, cleaning & rubbing, & for wall cladding, risers of steps, Dado & pillars laid on 10mm thick cement mortar 1:3 (1-cement :3-coarse sand) & jointed with grey cement slurry, groove and molding as directed etc. complete as per detailed by architect & directed by Engineer-In-Charge.	The Relevant specification of item No.- 14.43(a), 14.44(a) & 14.46(A) ( accept Green Kota stone at flooring / steps / risers/ dado shall be used as Architect Concept Incl. Spacer, Grouting, High gloss- rubbing polishing, moulding, chiselling, Surface Texture, etc. in all respected manners) Page No.- 86 to 88 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. And Specification 75 For Item No.- 58 shall be followed from this 'Tender Specification Book',"
54	Providing & Laying Green Polished Kota Stone for flooring over 25mm (average) thick base of CM 1 : 6 (1 cement : 6 sand) Laid over & jointed with neat grey cement slurry including filing the joint with white / colour cement, complete in true line & level / slope, cleaning & rubbing, & for wall cladding, risers of steps, Dado & pillars laid on 10mm thick cement mortar 1:3 (1-cement :3-coarse sand) & jointed with grey cement slurry, groove and molding as directed etc. complete as per detailed by architect & directed by Engineer-In-Charge.	The Relevant specification of item No.- 14.43(a), 14.44(a) & 14.46(A) ( accept Green Kota stone at flooring / steps / Skirting / risers/ dado shall be used as Architect Concept Incl. Spacer, Grouting, High gloss- rubbing polishing, moulding, chiselling, Surface Texture, etc. in all respected manners) Page No.- 86 to 88 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. And Specification 75 For Item No.- 58 shall be followed from this 'Tender Specification Book',"
55	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 ( 1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finised with flush pointing & cleaning the surface etc. complete for antiskit.	The Relevant specification of item No.- 14.29 & 14.32 (Read colour OR printed, Vitrified tiles of 8mm. Thick, & alkali acid resistant tiles of approved quality, style, finish, & size, ISI marked, Premium Range as per Architect Concept tiles shall be use instead of 6mm. Thick glazed tiles) Page No.- 85 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. , Water shall be confirm to M – 2 & Cement mortar shall be confirm to M – 11 as per specification booklet of tender.
56	Providing and laying Vitrified glazed tiles 8 to 10 mm thick 24" x 24" or as specified in skirting risers of steps and dedo on 10mm thick. cement plaster 1:3 (1-cement: 3-coarse sand) and jointed with white cement slurry as per the detailed by Architect & direction of Engineer-in-Charge.	The Relevant specification of item No.- 14.29 & 14.32 (Read colour OR printed 6mm. Thick glazed tiles) Page No.- 85 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. , Water shall be confirm to M – 2 & Cement mortar shall be confirm to M – 11 as per specification booklet of tender.
57	Providing and laying Ceramic tiles 6mm thick in flooring, treads of steps and landing laid on a bed of 12mm thick Water proof cement plaster with mortar 1:3 (1-cement : 3-coarse sand ) & Water Proofing Chemical Agent and cement vata (10cm. x 10 cm. size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete finishing with flush pointing in white cement. (For UG tank flooring)	The Relevant specification of item No.- 14.29 & 14.32 (Read colour OR printed 6mm. Thick glazed tiles) Page No.- 85 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. , Water shall be confirm to M – 2 & Cement mortar shall be confirm to M – 11 as per specification booklet of tender.
58	Providing and laying Ceramic tiles 6mm thick in skirting, risers of steps and dedo on 10mm thick Water proof cement plaster with mortar 1:3 (1-cement : 3-coarse sand ) & Water Proofing Chemical Agent and finishing with flush pointing in white cement. (For UG Tank walls)	The Relevant specification of item No.- 14.29 & 14.32 (Read colour OR printed 6mm. Thick glazed tiles) Page No.- 85 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. , Water shall be confirm to M – 2 & Cement mortar shall be confirm to M – 11 as per specification booklet of tender.



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Sr. No.	Description of Item	Specification Detail
59	Providing and fixing 18 mm thick gang saw cut, mirror [Hi-Gloss] polished at all exposed Surface, Pre-moulded and pre-polished, machine cut Granite of any colour and shade, & finish, as per detailed by architect / Consultant for flooring, dado skirting, cladding, steps and risers, kitchen platforms, vanity counters, window sills, fascias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand). And In dado/skirting on In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including Spacer tape 6.4 mm thick x 4 TO 6 mm as per detailed groove, rubbing, curing, moulding and polishing to edges to give high gloss finish as per concept etc. complete at all levels.	The Relevant specification of item No.- 14.36(a), shall be followed But accept Approved quality, colour & style granite stone, instead of marble stone with all types of moulding & polishing, groove work, texture & polishing work in all respected manners Page No.- 98 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II. , Water shall be confirm to M - 2 & Cement mortar shall be confirm to M - 11 as per specification booklet of tender. # The rate shall be for a unit of Square Meter.
60	Providing and laying Rough Kota stone slab flooring over 20mm (Average) thick base of cement mortar 1:6 (1 - cement : 6- coarse sand) or L.M. 1.1.5 laid over and jointed with grey cement slurry including rubbing and polishing etc. complete. (B) 30mm thick.	The Relevant specification of item No.- 14.43(B) except instead of Polish kota stone use Rough Kota Stone shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
61	Providing and fixing sandwich type platform including supplying and fixing granite stone 18 mm thick mirror polished stones in top and side position and vertical strip at front over 25 mm thick polished kota stone platform fixing in top and sides and intermediates supports fixing with cement mortar and adhesive and finishing including making recess for Kitchen/ Laboratory sink etc. complete as approved and directed by Consultant / EIC.	As Attached Separate Sheet
62	Providing and laying broken chine mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall,clearing with water and oxalic acid etc. as directed.	The Relevant specification of item No.- 14.19(B) except instead of terrazo mosaic use broken mosaic pieces in CM 1:3 with waterproofing compound ,shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
63	Providing and laying cement concrete flooring 1:2:4 (1 - cement:2-coarsesand: 4-graded stone aggregate 20mm nominal size) laid in one layer and finished with a floating coat of neat cement. (B) 50mm thick.	The Relevant specification of item No.- 14.71(B) for 1:2:4 Concrete flooring,shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.

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Sr. No.	Description of Item	Specification Detail
64	Providing wood work in frames of Size 12.5 x 10 Cm. for doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length Incl. Providing and fixing 35 mm thick (or as specified) ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood, with 1mm. thk, ISI marked designed laminate in any finish on both faces of shutters., slit openings with bidding Patti & 6mm thk designed acid wash glass,. Stainless Steel butt hinges [125x65x2.5mm. ISI281712] with necessary screws, using branded S.S. matt /glossy / platinum finished accessories, Colour / polishing all bidding parts, and also incl. with all Material, labour, tools, tolerance, scaffolding etc. complete as per concept /direction and approved by Architect, and directed by Engineer-In-Charge.	The Relevant specification of item No.- 10.1(A) & 10.12.(A)(ii) for wood work, 19.87 For polish work But accept Melamine P.U. Auto Spray Polish & Paint shall confirm to I.S code Incl. use sealer, filler and tint, thinner and as per manufacturer's instruction. all material shall be of approved brand quality and shad and finish as per Architect's instruction with relevant IS Code., Premium Quality Bright Brass accessories, Hardware, & adhesive as per ISI - Specification and design. size, style, finish as approved by Architect, Page No.- shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II & C.P.W.D. Specification, Section- 9.0 WOOD WORK AND P.V.C. WORK Page 300 to 392 with Relevant IS code 2202 (Pt I & II), 2209 shall be followed. # The rate shall be for a unit of Square Meter.
65	Providing & Fixing Walnut anodized Aluminum Hi-Profile sections (JINDAL-DOMAL Series OR Equivalent), hi-performance Sliding/ Openable window/door with Required thick toughened designer glass of Saint Gobain or equivalent, is used for Aluminum Hi-Profile Section with necessary accessories and with additional shutter with Stainless Steel Mosquito net. [In Opening Position always one of Mosquito net shutter should be in Close Position], captive bead, extremely difficult to remove once glazed, high performance weather stripping, internal wedge gasket, Bottom, side and top section including necessary filling up the gaps at junctions, with required EPDM rubber/ etc. and ISI ebco make,"Lx. Premium" Required Finish door fixture Accessories As per Architect Concept, High security interlocking bead, Sheet membrane flashing , 2" over jamb flashing, New Blocking with new backer rod and sealant, channel glide with runner, slide fold hinge when ever need of sufficient capacity, with warranty, all types of material, labour, transportation, tools tolerance and matching required level with Flooring etc. complete as per Architect concept and as per detailed by Architect / consultant & Directed by EIC.	As Attached Separate Sheet
66	Providing and fixing standard extruded of aluminium section of size 63mm x 38.10mm x 1.2mm @ Wt. 0.643 Kg/mt with colour anodized aluminium frame for ventilation with 5 mm thick frosted glass as details etc complete for Ventilation	As per above
67	Providing and fixing hydraulic door closer of approved size and make as directed engineer in charge. all lift, level and leads.	As per the Description of the item & approval by the Architect consultant & EIC. # The rate shall be for a unit of each nos.

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Sr. No.	Description of Item	Specification Detail
68	Providing & Fixing M.S. grills of required pattern to wooden frames of windows, RCC or as specified in drawings etc. with M.S. flats at required spacing & frame around, square or round bars with round headed bolts & nuts or by screws (A) Plain Grill, as per detailed & directed by EIC.	The Relevant specification of item No.- 10.100(a) & 10.100(b) [The grill shall be fabricated to the designs and patterns shown in the drawings and the weight shall be as directed, and the joints shall be riveted or welded as shown in the plan or as directed. The grill so formed shall be fixed into the frames of the windows etc., before they are erected in position. The outside strip frame of the grill shall be housed to its full thickness into the recess cut into the frame of the windows etc. The grill shall be fixed to the frame with Number. of bolts and nuts of screws viz. bolt nut/screw per 30 cm. of the length of outer strip subject to a minimum of 2 Nos. on each side of the frame or as indicated in the drawings or as directed. The bolts and nuts or screws shall be counter sunk and shall be fixed with the top of their heads flush with the face of frame strips.] Page No.- 75&76 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Kilogram.
69	Providing, supplying, fixing, fabricating, erecting, aligning the structural steel like pivot ,tubular 'T', 'I' section, angle, plate, beam, channel section, Bar , hollow box or Z purloins, Round or Square Pipes, of approved make, for built up purloins, roof trusses, columns, side runners, tie beams, sag rods, base plates gusset plates, cap plates, bearing bracing, gantry girders, rails, require support, pipes, including all welded or bolted steel structures of various types with approved I.S.I. mark electrodes, bolts, anchor bolts including cost of thread, Anchor plate cleats etc. in RCC or masonry work, including cutting, bending, welding ,fixing, supplying , Fabricating Decorative festived section or any structured member required to complete the job for Bridge, Trusses, Canopy, doors, Frame, Railing, Entrance gate, pergola, Decorative hanging light , New window, parking shed or space frame or any other required specified area as shown on drawing and detailed specification or as per design incl. three coats of approved brand primer and two coats of paints, necessary scaffolding, tools tolerance etc. complete as directed by Engineer In Charge. (payment will be made for weight of metal used in the work)	As Attached Separate Sheet
70	Finishing wall with Weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials.etc complete.	The Relevant specification of item No.- 19.59(B) & 19.62(C) [ read exterior paint as (1) Approved quality & make (Indocem, Asian ) Anti-Fungus Anti-Moss Acrylic / Polymer based Exterior Paint The water shall conform to M-1. Cement water proofing paint shall conform to I.S. 5410-1969, Acrylic Distemper modifier based on poly- acrylic Ester latex of std make.] (2) Primer & Acrylic birla putty. Page No.- 123 to 125 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter
71	Applying two coats of Birla or Asian acrylic lappy ( putty) & two coats of primer at Wall painting (two coats) with plastic emulsion paint of approved brand & manufacture on undecorated wall surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings & other foreign matter & sand papered smooth, as per detailed & directed by EIC.	The Relevant specification of item No.- 18.57 Page No.- 121 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.

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Sr. No.	Description of Item	Specification Detail
72	Applying two coats of Birla or Asian acrylic lappy ( putty) & two coats of primer at Ceiling painting (Two coats) with plastic emulsion paint of approved brand and manufacture on undecorated Ceiling surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth, as per detailed & directed by EIC.	The Relevant specification of item No.- 18.6 Page No.- 121 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
73	Painting two coats (including priming coat) on new steel and other metal surface with enamel paint, brushing, interior to give an even shade including cleaning the surface an even shade including clean the surface of all dirt, dust and other foreign matter.	The Relevant specification of item No.- 19.7+19.12 Page No.- 139 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter.
74	Providing and fixing roof panel shall be made out of 0.5 mm thick pre coated GI sheet . The Precoated sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1995 and shall have zinc coating of minimum 120 gsm as per IS:277:1992 , 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 micron. The PPGI Sheet shall have plastic protective guard film of minimum 25 microns to avoid scratches during transportation. The ridge shall be fixed to the steel members by pop rivet or self drilling/self stitching fastners @ maximum 450 mm c/c along length of capping/flushing etc complete .	The Relevant specification of item No.- 15.1 [ Except Pre coated G.I. roofing sheet and Polycarbonate sheet for sky light structures as per Architect concept, shall be use instead of G.I. roofing sheet & ridge.] Page No.- 104 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II
75	SS RAILING : Providing and fixing stainless steel (Grade 304) railing Horizontal top pipe of 50mm dia., verticle Sq pipe 32X32 mm 900 mm c/c and 16 mm Dia. 3 Nos. Horizontal Pipe equval Spacing Hollow Pipes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts, Plates and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in charge, (for payment purpose only weight of stainless steel members shall be considered including fixing accessories such as nuts, bolts, fasteners etc.). as per Drawing and Approve by Engineer In Charge	As Attached Separate Sheet
76	SS RAILING (HAND RAIL) : Providing & Fixing Stainless steel 304 grade pipe railing Horizontal 50 mm dia. 1 Nos. and Supprt pipe from wall 16mm Dia. at every max 0.90mtr C/C including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts, Plates and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., fixed on Concrete or brick work . Rate including of all materials.labour, fixing & polishing etc. comp. as per Drawing and Approve by Engineer In Charge	AS per above

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Sr. No.	Description of Item	Specification Detail
77	Providing and fixing retro Reflective Hi Intensity Micro Prismatic Grade Board using 2mm Aluminum / 4mm ACP, angle iron 75 x 75 x 6mm. Descaling and degreasing the board as per requirement using epoxy reflective process by screen painting as directed etc. complete including transporting and fixing in C.C. 1:2:4 with necessary excavation curing etc. complete as per I.R.C. 67-2012 design. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B)Class B Type-4(MDR/ODR) retro reflective sheeting	As per latest MOST Specification
78	Water proofing-Providing and applying primer + 2 coats of Single component, high solids, cold applied liquid polyurethane elastomer waterproof membrane over uniform surface of slab. Apply 2 coats at dosage of 1.5 kgs per sq.m to achieve the required minimum DFT of 1.5mm. It should have following properties :- 1. Total Solids %                      95 ± 5% 2. Specific Gravity                      1.30 ± 0.1 3. Elongation %                          ≥ 700% 4. Dosage                                  1.2 – 1.5 kg/m <sup>2</sup> in two coats 5. Tack Free Time                        24 – 48 hrs 6. Tensile Strength N/mm <sup>2</sup> ≥ 2.2 7. Low Temperature Crack Bridging    No crack 8. DFT    1.2 – 1.5 mm on smooth, non- absorbent surface 9. Shore Hardness                        40 ± 5 10. Conformance Conforms to            ASTM C 836	As Attached Separate Sheet
79	Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC SP 63-2018 etc. Complete	The relevant Specification of item No 16.57 shall be followed from additional specification CPWD Vol II. The rate shall be for a unit of Square Meter.
80	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length, 30cm height and 15cm thick of M200 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1 cement:3 fine sand) etc complete.	The relevant Specification of item No 16.58 shall be followed from additional specification CPWD Vol II except Measurement shall be done in Running meter instead of cubic meter.

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Sr. No.	Description of Item	Specification Detail
81	TRIMIX CEMENT CONCRETE ROAD WITH EXPANSTION JOINTS.: M20 Cement Concrete laid in required slope at concrete floor as directed and specified using necessary steel form work with M.S. Channels including forming construction & contraction joints 4 mm to 6mm wide by cutting the floor up to ¼ th depth of thickness of the concrete depth using mechanical saw and sealing the joint with poly sulphide sealant up to full depth of cutting including providing & fixing M.S. dowels bars with bitumen painted of full length as shown in drawing as to form the bays not exceeding 6.0 m X 4.5 m etc. complete as per directed by Architect or Engineer-In-Charge. For all level and leads.(a) For RCC Road Note: Rates are Incl. cost of Cement Concrete Pavement shall be 150mm. Thk. or as detailed and rolling 2 times as per mentioned above and also all tools tolerance, shuttering, channel, etc. complete as per detailed & Directed by Architect & EIC.	The Relevant specification of item No.- 14.71(B) for except consider M20 concrete instead of 1:2:4 Concrete flooring, shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Square Meter. with TRIMIX floater
82	Providing & Laying & jointing in true line level 110mm dia U.P.V.C. SWR type B pipe conforming to IS 13592-1992 with one end plain & other end socket with rubbering & Fixing conforming to ISI 14735-1999 of approved make for drain system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using PVC clamps of the size 160mm dia x 210mm length x 196mm high at every 2000mm centre to centre or shall be concealed in wall as directed necessary fittings such as bends, shoes, etc. incl. testing of pipe & joint & jointed with adhesive solvent, cement incl. cost of all material etc. complete as per detailed, directed & approved by the consultant / EIC.	The Relevant specification of item No.- 23.8 But Approved Quality described above, Required Dia. Pipe should be use instead of 50 mm Dia. If uPVC pipe is not available then use SWR pipe, As per '- do - Item No 24.1(B) Page No.- 144 to 156 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
83	Monobloc pump 3 phase 400/440 volt, 50 Hz AC Supply & 2800 RPM as per IS 9079 at departmental stores with following MOC: Casing: CI-FG260, Impeller: Bronze & Shaft: SS:410, 7.5Hp 24 m head	As Attached Separate Sheet
84	Control panel- DOL / Star Delta starter suitable for local & remote pump control application consisting of MPCB, overload relay and contactors as per Type II coordination including digital voltmeter, analogue ammeter with selector switch, run hour meter, required protective relays & control accessories.	As Attached Separate Sheet
85	Providing laying and jointing in true line and level 75mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	The Relevant specification of item No.- 23.8 + 23.20 [But with Accept aPVC Pipes of described dia, & shall conform to Type A pipes of IS 13592.] shall be used instead of G.I and PVC pipe.] Page No.- 142 to 144 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.

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Sr. No.	Description of Item	Specification Detail
86	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	The Relevant specification of item No.- 23.8 + 23.20 [But with Accept aPVC Pipes of described dia, & shall conform to Type A pipes of IS 13592.] shall be used instead of G.I and PVC pipe.] Page No.- 142 to 144 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
87	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	The Relevant specification of item No.- 23.8 + 23.20 [But with Accept uPVC Pipes of described dia, & shall conform to Type A pipes of IS 13592.] shall be used instead of G.I and PVC pipe.] Page No.- 143 to 144 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
88	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	The Relevant specification of item No.- 23.8 + 23.20 [But with Accept uPVC Pipes of described dia, & shall conform to Type A pipes of IS 13592.] shall be used instead of G.I and PVC pipe.] Page No.- 145 to 144 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
89	Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	The Relevant specification of item No.- 23.8 + 23.20 [But with Accept uPVC Pipes of described dia, & shall conform to Type A pipes of IS 13592.] shall be used instead of G.I and PVC pipe.] Page No.- 146 to 144 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
90	Providing & Fixing gun metal check or no return full way wheel valve etc. complete as per the instruction of EIC. (C) 25 mm. Dia	The Relevant specification of item No.- 23.99 Page No.- 152 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
91	Providing & Fixing gun metal check or no return full way wheel valve etc. complete as per the instruction of EIC. (E) 40 mm. Dia	The Relevant specification of item No.- 23.99 Page No.- 152 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
92	Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.	The Relevant specification of item No.- 23.92.(C)(I)[ but accept (B) Brass chromium plated screw down bib tap Page No.- 153 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
93	Providing and fixing brass screw down stop tap.(B) 20mm dia.	The Relevant specification of item No.- 23.96 [a] Page No.- 151 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
94	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	As Attached Separate Sheet

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Sr. No.	Description of Item	Specification Detail
95	Providing & Fixing PVC SWR Nahni trap IS 14735 for drain-100mm diameter with 150 mm X 150mm S.S.jali for floor or nahni trap of the following nominal diameter of self cleansing design with C.I screed down or hinged grating including the cost of cutting & making good the walls, as per detailed, directed & approved by the EIC.	The Relevant specification of item No.- 23.87.[But Accept PVC (Spun) Nahni trap Instead of Cast Iron & accept Describe above jali of approved quality instead of C.I. Screwed down or hinged grating.] Page No.- 146 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
96	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps. (A) 100mm x 100mm size P type.	The Relevant specification of item No.- 24.19(I) Page No. 156 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
97	Constructing brick masonry chamber for underground C.I. Inspection chamber & bends with bricks having crushing strength not less than 35Kg. Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions, total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) & Wt. of frame 15Kg. ) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls & bed concrete for (i) Inside dimensions 455mmx 610mm & 450mm deep for single pipe line. etc. complete as per detailed, directed & approved by the consultant / EIC.	The Relevant specification of item No.- 24.44(1) Page No.- 183 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
98	Constructing brick masonry manhole with R.c.c. top slab in 1:2:4 mix ( 1 cement : 2 coarse sand :4 grade stone aggregate 20mm size ) foundation concrete 1:3:6 mix ( 1 cement : 3 coarse sand :6 brick bats 40 mm size ) inside plaster 15mm thick with CM 1:5 ( 1 cement : 5 Coarse sand ) finished with a floating coat of neat cement & making channels in cement 1:2:4 mix ( 1 cement : 2 coarse sand :4 stone aggregate 20mm nominal size ) finished smooth complete including curing & testing... ( I ) inside 900mm x 1200 mm & 1.5 m deep including R.c.c. cover with frame size 560 mm diameter ( A ) with 230mm thick walls of brick masonry using brick having crushing strength not less then 35 kg/sqcm in CM 1 : 5 ( 1 cement : 5 coarse sand ), (2) B type depth 1.50 Meter for 150mm diameter sewer.. etc. complete as per detailed, directed & approved by the consultant / EIC.	The Relevant specification of item No.- 27.27 Page No.- 157 to 159 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
99	Providing Septic Tank of 10.00 mt x 4.00 mt x2.00 mt size for Sewerage including excavation with any strata up to four meter depth,PCC in Bottom Slab 1:3:6,Brick Work in cement mortar 1:5, RCC M200 Slab on Top And bottom, required filling for Tank including making Required line for water inlet, precast RCC M.200 Frame & cover etc.as directed by engineer in charge. etc complete, septic tank as per detailed drawing.	The Relevant specification of item No.- 24.00.2 (B) Page No.- 157 to 159 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II



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Sr. No.	Description of Item	Specification Detail
100	Providing & Laying & jointing in true line level U.P.V.C. SWR type B pipe conforming to IS 13592-1992 with one end plain & other end socket with rubbering & Fixing conforming to ISI 14735-1999 of approved make for drain system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using PVC clamps of the size 160mm dia x 210mm length x 196mm high at every 2000mm centre to centre or shall be concealed in wall as directed necessary fittings such as bends, shoes, etc. incl. testing of pipe & joint & jointed with adhesive solvent, cement incl. cost of all material etc. complete as per detailed, directed & approved by the consultant / EIC. (A) 160mm dia. etc. complete as per detailed, directed & approved by the consultant / EIC.	The Relevant specification of item No.- 23.8 But Approved Quality described above, Required Dia. Pipe should be use instead of 50 mm Dia. If uPVC pipe is not available then use SWR pipe, As per 'do - Item No 24.1(B) Page No.- 144 to 156 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Running Meter.
101	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(D) 300mm	The Relevant specification of item No.- 24.1 (A) Page No.- 175 except NP2 RCC pipe of 300mm dia shall be use instead of 100mm dia stone waver pipe . shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II
102	Providing sock pit of 2.5 Mtr. Internal dia. and 5 mtr Depth internal clear dimention including the cost of excavation, P.C.C. 1:4:8 and filling brickbats with dry masonry work, Honeycomb masonary work, M:20 RCC. SLab incl. form work including FE-500 Reinforcemnt, M.S.cover, C.I. Pipe & cowl vent, vatas in C.M. 1:3 with finishing curing etc. complete as directed.. etc. complete as per detailed, directed & approved by the consultant / EIC.	The Relevant specification of item No.- 24001B Page No. 157 to 159 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book. ., The relevant Specification from CPWD. Specification book Chapter -19 For Drainage, Page No- 859-904 shall be followed in all respected manners # The rate shall be for a unit of Number.
103	Providing & Fixing white colour, Vitreous china, under / Over Counter wash basin with single hole for pillar type with CI or MS brackets painted white including cutting holes, ranking bolts for Fixing & marking good the same, including Fixing C.P. Brass waste coupling 32mm dia & Bottal trap & 15mm dia pillar tap, Bottle Trap, as approved, capstan head C.P. screwed down high pressure with screw shank & back nuts & rubber plugs, 15mm dia brass stop cock (50/75mm p.v.c. Drain connection pipe, Water Connection Pipe of required Size, & testing the same for leak proof, etc. with all material & labours to complete this job in all respected manners, etc. complete as per detailed & approved by the consultant & directed by EIC.	The Relevant specification of item No.- 23.127, 23.135 (a), 23.134 But Accept white color, Vitreous china Clair washbasin (CERA MAKE (model No 9002.) including p or s trap whenever required, trap-padestal & fittings make JAGUAR) of size 400mm x 400mm with single hole for pillar type with CI or MS brackets painted white including cutting holes, ranking bolts for fixing and marking good the same, including fixing C.P. Brass waste coupling 32mm dia & 32mm dia rigid p.v.c. waste pipe & 15mm dia pillar tap ( Jaguar make model no.011) capstan head C.P. screwed down high pressure with screw shank and back nuts & rubber plugs, 15mm dia brass stop cock (Jaguar make model no. 053 15mm p.v.c. connection pipe and testing the same for leak proof etc. complete As per detailed by Architect / Consultant & Directed by EIC. Page No.- 148 154 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.

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Sr. No.	Description of Item	Specification Detail
104	Providing and fixing wash down water closet (European type, Wall hung W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1 – Cement : 1 – Fine Sand) with plastic seat and cover for wash down water closer with C.P. brass hinges, C.P. brass toilet paper holder, Jet Spray, Metropole flush valve Incl. Connection and rubber buffers. (A) Vitreous China., etc. complete as per detailed & approved by the consultant & directed by EIC.	The Relevant specification of item No.- 23.111 (A) (i) + 23.113 (A) + 23.116 + 23.120 Page No.- 146 – 148 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
105	Providing and fixing water closet squatting Pan including trap and foot rest (Indian type W.C. Pan) size 580mm (Earthwork, bed concrete to be measured and paid for separately) (A) Vitreous China. (I) Long pattern = White colour	The Relevant specification of item No.- 23.111 (A) (i) + 23.113 (A) + 23.116 + 23.120 Page No.- 146 - 148 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
106	Providing and fixing Urinal or approved quality including connecting the Urinal with waste pipe, tap etc. complete. (A) White earthenware flat back or corner type size 430mm x 260mm x 350mm.	The Relevant specification of item No.- 23.122 (a) [ But accept Approved Brand, Quality, Style, Finish & Coloured Flat Back Urinal For Gents Toilet & 15mm stop tap Jaguar modal no. 053 of approved brand of Cera including all types of Accessories etc. complete] Page No.- 152 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
107	Providing & Fixing C.P. brass towel rail Approved Make complete with C.P. Brass brackets fixed to wooden plugs with C.P. Brass screws,, etc. complete as per detailed, directed & approved by the consultant / EIC. (B) 600mm x 20 mm size, etc. with all material & labours to complete this job in all respected manners, etc. complete as per detailed & approved by the consultant & directed by EIC.	The Relevant specification of item No.- 23.144 Page No.- 150 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
108	Providing & Fixing 600mm x 450mm beveled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet & Fixing to wooden plugs with C.P. brass screws & washers, etc. with all material & labours to complete this job in all respected manners, etc. complete as per detailed & approved by the consultant & directed by EIC.	The Relevant specification of item No.- 23.143 Page No.- 150 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
109	Providing & Fixing handicap toilet set with Wall-mounted European Closet & wash basin & all handicap requirement with dual flush tank, seat & lead (heavy duty) including C.I. Brackets, C.P. brass hinges, M.S. / C.I. painted brackets, Waste Coupling, 32mm size bottle trap etc. all Internal fittings complete with grab rails, swin type grab bar etc. rubber buffers, C.P nuts, bolts etc making holes in walls & floors, & finishing for ready to use. The rate includes all necessary connection charges as per product detail to the satisfaction of Architect / engr. in-charge where required & the final handing over etc. complete as per specifications, drawings & as directed by the Engineer-in-charge. The scope includes Providing and fixing all the necessary fittings of approved brand and as per directed by Architect/EIC.	As Attached Separate Sheet # The rate shall be for a unit of Number of Complete Set

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Sr. No.	Description of Item	Specification Detail
110	Providing & Fixing pillar tap, screw down high pressure with screws, shanks & back nuts. (i) 15mm dia.	The Relevant specification of item No.- 23.95 [a] Page No.- 151 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
111	Providing & Fixing brass screw down stop tap. (A) 15mm dia.	The Relevant specification of item No.- 23.96 [a] Page No.- 151 shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II # The rate shall be for a unit of Number.
112	Providing and fixing Kitchen / Laboratory sink with C.I. or M.S. brackets, painted white including cutting holes in walls and making good the same but excluding fittings.	As Attached Separate Sheet
113	Providing and Fixing Pipe Hanger on Ceilling for Dutile type Ceilling Piping Work as Per Directed By Engineer In Charge	The Relevant specification of item No.- 12.14 shall be followed from 'CPWD Specification Vol. I & II # The rate shall be for a unit of Number.
114	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	The Relevant specification of item No.- 18.21 shall be followed from 'CPWD Specification Vol. I & II # The rate shall be for a unit of Number.
115	Point wiring in Copper (Modular) Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in/ on surface on wall/ceiling complete with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete Cat. III	As attached separte electrical specification
116	Point wiring for secondary light point with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling, complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC box covered with 3 mm thick PC(Polycarbonet) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed. Note:- Maximum up to 6 mtrs length, excess will be considered as Mains for Secondary Point. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete Cat. III	As attached separte electrical specification

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Sr. No.	Description of Item	Specification Detail
117	<p>Point wiring for FAN with 2-1.5 sq.mm &amp; earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling complete with 6A Modular type switch and hum free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed</p> <p>(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete Cat-III</p>	As attached seperate electrical specification
118	<p>Point wiring for Individual Plug with &amp; earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch &amp; 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.</p> <p>[I] For 6A Plug with 2-1.5 sq.mm Cu. Wire</p> <p>(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete Cat-III</p>	As attached seperate electrical specification
119	<p>Point wiring for Individual Plug with &amp; earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch &amp; 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.</p> <p>[II] For 16A Plug with 2-2.5 sq.mm Cu. Wire</p> <p>(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete (FRLS) CAT III</p>	As attached seperate electrical specification
120	<p>Point wiring for Individual Plug with &amp; earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch &amp; 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.</p> <p>[III] For 16A Plug with 2-4 sq.mm Cu. Wire</p> <p>(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete (FRLS) CAT III</p>	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
121	Point wiring for Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic box, single mounting base frame covered with textured / metallic front plate modules erected on / in wall / ceiling with following type accessories. Single mounting base-frame & Textured / Metallic front plates. Cat-III	As attached separate electrical specification
122	Point wiring for Two Way Controlled Light Point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of .ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling ,complete with 6A Modular type switches and following type of accessories erected on PVC / Metallic box, single mounting base frame covered with textured / metallic front plate modules erected on / in wall / ceiling as per pipe erected. with necessary batten/angle holder or ceiling rose or H.D.Connector as directed. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete Cat-III	As attached separate electrical specification
123	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate , modules erected with necessary connection. As desired by Engineer In charge (7) Blank Plate Single Cat-III	As attached separate electrical specification
124	Decorative call bell Ting-tong box type 250 volts complete erected	As attached separate electrical specification
125	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. (8) Computer RJ-45 socket cat - III	As attached separate electrical specification
126	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	As attached separate electrical specification
127	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 d) 40 mm	As attached separate electrical specification
128	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes. (2) 25 mm	As attached separate electrical specification

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Sr. No.	Description of Item	Specification Detail
129	(A) Supplying and laying UPVC cable trunking system comprising unplasticised polyvinyl, chloride rigid material with ignition free & flame proof confirming BS .All necessary accessories and measuring of following sizes. (1) 75 mm x 50 mm trunking	As attached seperate electrical specification
130	(A) Supplying and laying UPVC cable trunking system comprising unplasticised polyvinyl, chloride rigid material with ignition free & flame proof confirming BS .All necessary accessories and measuring of following sizes. (3) 50 mm x 50 mm trunking	As attached seperate electrical specification
131	Mains & Wires Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (general wiring + in street light) (a) with medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	As attached seperate electrical specification
132	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (general wiring + in street light) (a) with medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm (FRLS)	As attached seperate electrical specification
133	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (FRLS) (a) with medium class Rigid PVC pipe and accessories (a) 2 wire 4 sq. mm	As attached seperate electrical specification
134	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 (C) 3 1/2 core 50 Sq. mm ( 25 Sq.1/2 mm core)	As attached seperate electrical specification
135	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. (B) 3 core 4 Sq. mm	As attached seperate electrical specification
136	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand / Solid Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. (B) 4 core 4 Sq. mm	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
137	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand / Solid Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. (C) 4 core 6 Sq. mm	As attached separate electrical specification
138	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. (A) 4 core 10 Sq. mm	As attached separate electrical specification
139	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed.(e) 1.50 Sq.mm 3 core round PVC sheathed	As attached separate electrical specification
140	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	As attached separate electrical specification
141	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (B) 2 to 4 core 6 Sq. mm	As attached separate electrical specification
142	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. (C) 2 to 4 core 10 Sq. mm	As attached separate electrical specification
143	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	As attached separate electrical specification
144	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. (C) 16/25 Sq.mm.	As attached separate electrical specification
145	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.	As attached separate electrical specification
146	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	As attached separate electrical specification
147	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. (B) 10 Sq.mm	As attached separate electrical specification

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Sr. No.	Description of Item	Specification Detail
148	Making trench in soft soil of suitable width of 90 cms deep for laying cable or locating the fault all over the run and backfilling the same and making the surface as normal ground.	As attached seperate electrical specification
149	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 for laying of cable. below ground / road surface for enclosing cable and back filling the same to make ground as per original. (A)50 mm dia	As attached seperate electrical specification
150	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 for laying of cable. below ground / road surface for enclosing cable and back filling the same to make ground as per original. (C)90 mm dia	As attached seperate electrical specification
151	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	As attached seperate electrical specification
152	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark – Cat III	As attached seperate electrical specification
153	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 (b)40 Amp. Cat.III	As attached seperate electrical specification
154	Providing & erecting 415 V MCB three 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	As attached seperate electrical specification
155	Providing & erecting 415 V MCB three Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat.III	As attached seperate electrical specification



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Sr. No.	Description of Item	Specification Detail
156	Providing and erecting Sheet Steel powder coated MCB distribution board – flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43) (iii)8 way	As attached seperate electrical specification
157	Providing and erecting Sheet Steel powder coated MCB distribution board – flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (ii)6 way	As attached seperate electrical specification
158	Providing and erecting Sheet Steel powder coated Vertical MCB distribution board (VTPN) – flush / surface mounted double door (IP54) fitted with insulated copper busbar, isolated neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986,IP-54 suitable for 63/100 AMP TPN MCCB + RCCB as incomer and three phase outgoing as per following .(The DBs should be used of same company of MCB to be used) (D)12 way outgoing	As attached seperate electrical specification
159	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (i) 25 Amps.DP Cat. III	As attached seperate electrical specification
160	Supplying & erecting approved make IP 55 grade Company fabricated Timer Panel of following capacity for switch On-Off street lights on time scheduling basis made from 16G CRCA sheet duly epoxy power painted inside and outside with hinged doors and locking arrangement consisting of suitable size of 4 Pole MCB and 4 pole contactor (cat-III)with analog time switch, auto manual switch of same make and suitable input and output Bakelite terminals and with door earthing approved by Engineer in charge.(A) 32 Amp	As attached seperate electrical specification
161	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (ii) 40Amps. DP Cat. III	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
162	<p>Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. &amp; corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD &lt; 15%, CCT 3000 K to 6500K, Luminaire efficacy &gt; 85 lumens/watt, LED LED driver efficiency &gt; 85 %</p> <p>( fitting required LM-79 &amp; LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (iii) 18-20 Watts, Surge - 2KV,IP-20, conventional 4 feet Cat-III</p>	As attached seperate electrical specification
163	<p>Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. &amp; corrosion resistance with diffuser housed in aluminium casted body with company mark/name 160V to 270V,Power Factor more than 0.95, THD &lt; 15 %, CCT 3000 K to 6500K, Luminaire efficacy &gt; 85 lumens/watt , LED driver efficiency &gt; 85 %</p> <p>( fitting required LM-79 &amp; LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete.IP20 (i) 9 watts,Surge-2 KV Cat-III</p>	As attached seperate electrical specification

## Specification Index

Sr. No.	Description of Item	Specification Detail
164	<p>Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. &amp; corrosion resistance with diffuser housed in aluminium casted body with company mark/name</p> <p>160V to 270V, Power Factor more than 0.95, THD &lt; 15 %, CCT 3000 K to 6500K,</p> <p>Luminaire efficacy &gt; 85 lumens/watt ,</p> <p>LED driver efficiency &gt; 85 %</p> <p>( fitting required LM-79 &amp; LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete. IP20 (ii) 11 watts, Surge-2 KV Cat-III</p>	As attached separate electrical specification
165	<p>Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. &amp; corrosion resistance with diffuser housed in aluminium casted body with company mark/name</p> <p>160V to 270V, Power Factor more than 0.95, THD &lt; 15 %, CCT 3000 K to 6500K,</p> <p>Luminaire efficacy &gt; 85 lumens/watt ,</p> <p>LED driver efficiency &gt; 85 %</p> <p>( fitting required LM-79 &amp; LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete. IP20 (iv) 24 watts, Surge-2 KV Cat-III</p>	As attached separate electrical specification

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Sr. No.	Description of Item	Specification Detail
166	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminium housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses with company mark/name engraved or embossed 160 to 270 V, Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K, Uniformity ratio > 0.45, Luminaire efficacy > 100 lumens/watt . LED driver efficiency > 85 %.( fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Street Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (iii) 36 watts Cat-III	As attached separate electrical specification
167	Providing and erecting PVC body surface or pendent mounting LED Bulk type 9 watt Lighting Fitting with electronic driver. And lumen output from luminaire 720lm , input voltage range 90-300VAC , 50Hz cool white(3000 to 6500k), inbuilt driver, -20degC to +60degC working temperature, AL frame with Beam Angle 120deg	As attached separate electrical specification
168	Supplying & erecting Galvanized M.S pipe post "B" class 88.9 mm O.D 4 mtr. Long duly painted with two coats of aluminium paint complete with metallic base plate of 300 mm x 300 mm x 4mm thick for using as a compound light pole with approx. weight 32 Kg.	As attached separate electrical specification
169	Providing and erecting street light pole bracket comprising main B Class MS pipe of 4.2 cm/require outside dia. complete with suitable B Class M.S. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. [A] Single Arm bracket 1 Mtr	As attached separate electrical specification
170	Providing & erecting approved make street light / wall mounting junction box compression moulded from SMC (thermoset plastic) vertical sliding cover having locking with square head stud loop in / loop out in built terminal suitable for four core cable, waterproof of I.P. 54 protected with clamp or bolt nut & earth bolt of following size. (B) 250mm x 194mm x 99 mm	As attached separate electrical specification

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Sr. No.	Description of Item	Specification Detail
171	Providing 1:2:4 cement concrete foundation & 70 % PCC from bottom including excavation for the pole of size 45 x 45 x 100 cm. Deep in below ground level with plinth of 45 cm x 45 cm (or 45 cm dia x 45 cm) high upper ground level with necessary curing and finishing in approved manner. ( for 4 & 6 mtr pole)	As attached seperate electrical specification
172	Providing & erecting Approved make Power Saving 50 Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C. 50 Hz 1200 mm sweep complete having 3 blades with aluminium blades with , canopy & 30 cm. down rod erected with earthing.(Make shall be approved by Engineer in charge) including Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with proper insulation without leakage and earthing.	As attached seperate electrical specification
173	Supplying & erecting fan hook box of 10 mm M.S. round bar bounded to the RCC bars up to 50mm length each side and pierced through a 16 Gauge M.S. box / Heavy Duty PVC box complete erected concealed in Ceiling with necessary finishing.	As attached seperate electrical specification
174	Providing 2.5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	As attached seperate electrical specification
175	Supplying & erecting approved make low noise decorative exhaust fan having square frame ABS body with inbuilt lowers & square frame. 250mm with 1350 RPM Cat.II	As attached seperate electrical specification
176	Providing and erecting required size HOT dipped Galvanised iron strip for earthing of H.T. , OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	As attached seperate electrical specification
177	Providing and erecting required size Copper strip for earthing of H.T. OCB / ACB/ Transformer, LT panel board, Motors etc. using copper clamp.	As attached seperate electrical specification
178	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.Using for DB earthing wire 8 to 16 SWG.	As attached seperate electrical specification

## Specification Index

Sr. No.	Description of Item	Specification Detail
179	<p>Supplying &amp; erecting in earthpit of minimum bore dia. 225mm size approved make Safe 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 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm 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 resistance mentioned in test Certificate) &amp; having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- &lt; 1 volt at no load &amp; dry form, Sulphur content:- &lt;2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [B] For Electrical installation up to 11 KV located in other than normal soil i.e. Soft Rock, Marshy Soil etc.</p> <p>-Length of Pipe : 2 mtr</p> <p>-Back filling Compound :1 no. Bag of 25 Kg.</p>	As attached separate electrical specification

## Specification Index

Sr. No.	Description of Item	Specification Detail
180	<p>Supplying &amp; erecting in earthpit of minimum bore dia. 225mm size approved make Safe 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 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm 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 resistance mentioned in test Certificate) &amp; having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- &lt; 1 volt at no load &amp; dry form, Sulphur content:- &lt;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 &amp; Sensitive Computer System(like Automation, SCADA)i.e. independent Earthing located in other than normal soil i.e. Soft Rock, Marshy Soil etc..</p> <p>-Length of Pipe : 3 Mtrs.</p> <p>-Back filling Compound :2 nos Bags of 25 Kg.</p>	As attached separate electrical specification
181	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction. [C] CAT - 6	As attached separate electrical specification
182	Supplying and erecting approved make online Un-interruptible Power Supply system comprising flat cum-boost charger with IGBT base rectifier & Inverter & sealed maintenance free SMF batteries. The charger having operating capacity for input 160-270V AC & inverter having output 230V,50 Hz Ac 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 power backup.with MS painted batteries stand, 10% Overload capacity for momentary load. (C) 3 KVA with 1Hr Backup	As attached separate electrical specification

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Sr. No.	Description of Item	Specification Detail
183	Providing and erecting water cooler having storage capacity 80Ltr. & cooling capacity 40 Ltr.per hour @ an ambient temp of 45 ° C. The outlet temp. of the water should drop by 15 ° C within a hour, The water cooler should be comprising of hermetically sealed compressor, fan motor, condensing unit, water tank surrounded by evaporating coil, thermostats, relay etc. complete with necessary inlet & outlet connection. The body of water cooler will be made from Stainless Steel. ◦	As attached seperate electrical specification
184	Supplying & erecting 5 stage single reverse osmosis water purification system with M.S. powder coated frame, prefilter housing with 'O' ring presediment filter GAC filter, carbon filter suitable buster DC pump capacity 80 psi, mention with 40 psi inline type post carbon filter auto low & high pressure switches with following size of storage tank & LPH capacity & erected as directed [C] 50 Ltr / Hr with 150 psi 2 nos booster pump	As attached seperate electrical specification
185	Providing Water proof straight Joint in PVC insulated flat flexible copper cable by using insulating material, water proofing material, & making the joint complete. (A) Up to 10Sq. mm	As attached seperate electrical specification
186	SITC OF DOME TYPE CAMERA – 4MP IPCP-UNC-DA41L3C-D-Q CPPLUS MAKE AS PER SPECIFICATIONS : 1/2.9" 4MP PS CMOS Image Sensor (0.8758 centimeters) Max. 4MP (2688 × 1520)@1-25/30fps/ (2560 × 1440)@1-25/30 Instastream, H.265, H.264, H.264H, H.264B, MJPEG Support Triple stream WDR (120dB), Day/Night(ICR), 3D NR, AWB, AGC, BLC, HLC, Digital watermarking3.6mm fixed Lens Support Built-in Mic IR Range of 30 Mtr., IP67, PoE complete with rj45 connector crimping, PVC back box	As attached seperate electrical specification
187	SITC OF BULLET TYPE CAMERA – 4MP IPCP-UNC-TC41L5C-VMD-LQ CPPLUS MAKE AS PER SPECIFICATIONS : 1/2.7" 4MP PS CMOS Image Sensor (0.9407 Centimeters) Max. 4MP (2688 × 1520)@1-25/30fps/ (2560 × 1440)@1-25/30 Instastream, H.265, H.264, H.264H, H.264B, MJPEG Support Triple stream WDR (120dB), Day/Night(ICR), 3D NR, AWB, AGC, BLC, HLC, Digital watermarking3.6mm fixed Lens Support Built-in Mic IR Range of 50 Mtr., IP67, PoE complete with rj45 connector crimping, PVC back box	As attached seperate electrical specification



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Sr. No.	Description of Item	Specification Detail
188	SITC OF 32 CHANNEL NVR – CP-UNR-4K4322-V4 – 2 SATA – CP PLUS MAKE – 32 Ch. 4K Network Video Recorder AS PER SPECIFICATIONS : Up to 32 channel IP camera input Max. decoding capability: 8 × 1080p@30 fps, 2 × 8 MP@30 fps Smart Instastream/H.265/H.264 / MJPEG Max. 160/128/60 Mbps incoming/recording/outgoing bandwidth Support 2 SATA HDDs up to 20TB, 2 (1 front USB 2.0 port, 1 rear USB 2.0 port) HDMI / VGA simultaneous video output Support Multi-brand network cameras ONVIF Version 2.4 conformance Mobile Software: iCMOB, gCMOB CMS Software: KVMS, KVMS Pro Lite	As attached seperate electrical specification
189	Supply Installation Testing & Commissioning of 4TB Surveillance Harddisk	As attached seperate electrical specification
190	SITC OF 16PORT POE NETWORK SWITCH – SG1218MPE TPLINK AS PER SPECIFICATIONS : 16× PoE+ gigabit RJ45 ports, 2× combo gigabit SFP slots.	As attached seperate electrical specification
191	SITC of Dual Band Wireless Cable Router, Wi-Fi Speed Up to 867 Mbps/5 GHz + 300 Mbps/2.4 GHz, Supports Parental Control, Guest Wi-Fi, VPN – TP-Link Archer C50 AC1200 or equivalent	As attached seperate electrical specification
192	SITC OF 43" LED monitor / TV – NEXTVIEW MODEL NO. Nv2fh43s9	As attached seperate electrical specification
193	SITC OF 15U NETWORK RACK – Power Strip with necessary sockets, mounting trays, exhaust fan complete with accessories – 600 X 600MM approx. size -- Elirix make	As attached seperate electrical specification
194	Supplying & erecting Philips / Ahuja / CKS make PA Ceiling speaker input Power:8 Watt RMS Power Taps:8/4/2W on 100 V Freq.Responce:60–15,000Hz, SPL (1w/1m):92db,Dim./Wt: ø 227 X H77mm/0.78kg, Model no.CS-6081T	As attached seperate electrical specification
195	Supplying & erecting Philips/ Ahuja / CKS make Amplifier having following specification: Power Output :250W (RMS) (300W Max.), inputs : 6 Misc. & 2 Aux., frequency Response :50–1500HZ I3db, Tone, Controls :Cut & Boost type, LED Meter : 5 LED Arrays, The amplifier suitable to operate 240V A.C.& 24volt D.C. (Battery) with automatic changeover from AC to Battery operation, duly protected by wrong Battery Polarity connections.	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
196	<p>Supplying &amp; erecting Mixing Console having channels, Audio mixer with. Echo facility for live performance, Auditorium &amp; stadiums, having following features &amp; facilities. (a)input Channels :- Each channel has separate 6.25mm size balanced phone jack for mike &amp; line for balanced &amp; unbalanced signals (b)Individual gain control for sating optimum level for minimum noise (c)BASS, MID &amp; TREBLE ' controls Separately for each input channel (d)ECHO control for each channel (e)PAN control for echo channel for left or right output (f) AUX Control : To control , level of the channel in final mix to AUX sound output (g)Channel ON/OFF switch (h)ECHO Section :- ECHO, reverb &amp; Chorus effect can be added to all input channel by different setting of Delay, Reverb &amp; Level control (i)Tape section (j)Aux. send &amp; return For sending Pre-feeder output of channel for monitoring or adding a special effect unit (k)Mono / Stereo output controls (m) Head phone output for monitoring purpose.</p> <p>Technical specification:            (a)Power Requirement -AC220-240V 50 Hz DC 24 Volts            (b)MIC Output Impedance/gain -2 K Ohms/ 62 dB (c)Line Output Balance/42 dB --- 20 K ohms (d) Impedance / Gain :- 10Kohms unbalance / 42 dB (e)frequency Response - 30 Hz- 20 KHz L / R Line Output ( + 0, -1 dB ) (f)Equalization Bass/ - + / - 12 dB at 100Hz Mid / Treble 2 KHz / 10 KHz (g) Outputs, Line Output Line Output Low : -10 dB / -2 dBm , Line Output High : 0 dBm / +17 dBm (775 mv / 5.5 V ) (h) S/N ratio Line Output Level : &gt; 70 dB (0 dB, 0.775V)            The Console shall be mounted on standard Rack,            The channel of following numbers. (A) 14 Channel Audio Mixer with ECHO</p>	As attached seperate electrical specification
197	<p>Supplying and erecting Philips / Ahuja / CKS make Weather &amp; Dust resistant sound column with Aluminium case &amp; Aluminium mesh grille with foam layer under grill, rotary-switch for selecting power taps / impedance having frequency response 150-20000 Hz with following specifications (b) With 2 speakers having power handling capacity of 23W(MAX) &amp; 15 W (RMS), each speaker have impedance of respectively 670 ohms/ 15W, 1 K.ohms/ 10W, 2K.ohms / 5W &amp; 4 K. ohms / 2.5W</p>	As attached seperate electrical specification
198	<p>Supplying and erecting Boss/ Philips / Ahuja / CKS make Weather &amp; Dust resistant ceiling/ wall mounted sound speaker with decorative case &amp; mesh grille with foam layer under grill, rotary- switch for selecting power taps / impedance having frequency response 150-20000 Hz with following specifications (b) With 2 speakers having power handling capacity of 23W(MAX) &amp; 15 W (RMS), each speaker have impedance of respectively 670 ohms/ 15W, 1 K.ohms/ 10W, 2K.ohms / 5W &amp; 4 K. ohms / 2.5W</p>	As attached seperate electrical specification
199	<p>Gooseneck Condenser Microphone with Base Ahuja Model No. GM-605, GMB-6C or equivalent in Bosch /Shure etc.</p>	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
200	SPEAKER WIRE	As attached seperate electrical specification
201	Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing, drain PVC pipes suitable for ( cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting. (1)For ISEER Range (KWH/KWH)(3.1 to 3.99) (C) for 1.7 to 2 ton capacity – Premium Cat.	As attached seperate electrical specification
202	Liaisoning work for additional load for requirement, electrical power connection charges and inspector approval for power(to be paid to concern electrical power supplier company)	As attached seperate electrical specification
203	Conventional type Smoke detector having following specifications : Dual LED's for 360 visibility. Advanced detection and communication protocol. Easy installation and maintenance. Sleek low –profile housing design.Regular 100mm Base. EN-54 Standard. Operating Voltage : 10 ~ 28V DC. O O Operating Temperature : 0 C to 37.8 C. Relative Humidity : 10% to 90% Reset Voltage : less than 1V. Stand by Current : 85 Micro Amps. Start Up Time : 30 Seconds. Cycle time : 28 – 35 Seconds. Alarm Current : 60 mA (Max.). Remote Output : 15mA maximum open collector. Smoke Sensitivity : 0.10 to 0.16 dB/m. Thermal Rating : 57 C(135 F). complete with Junction box RAVEL make cat no. RE326 2SL	As attached seperate electrical specification
204	Conventional type Fire Alarm Panel having Following specifications : CE Approved. 16 X 2 Dot Matrix LCD Display. Standby battery backup with built in charging. Switch Mode Power Supply. Tactile eypad for easy panel operation. System ON indication. Low Battery visual warning with audible ton. Fire / Fault status in unambiguous colored LED indication. 2 programmable relays for fire,supervisory and fault. All zones accept smoke detectors and any normally open contact device. Any Zone can be configured as alarm or supervisory. Zone wise isolation and one man walk test facility. Programmable Aux Outputs. Lamp test & Drill test facility. 100 All Events log with RTC. Date / Time / Password configuration. Programmable auto silence facility. Zone wise sounder / contact optional). TCP-IP / GSM facility (optional). 120 / 230VAC + 10% -15%, 60 / 50 Hz, 50W Operating Temperature 0 – 49° C / 32 – 120° F. Storage Temperature 0 – 60° C Relative Humidity 93 ± 2% RH (non-condensing) at 32 ± 2° C / 90 ± 3° F Charging voltage Charging current 28 V ± 5% 350mA (max) – RAVEL Make cat no. RE-102R	As attached seperate electrical specification

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Sr. No.	Description of Item	Specification Detail
205	SITC of Hooter / Sounder as per following specifications : Operating Voltage : 24V DC Operating Current : 40mA Sound Level : 85dB@1m Operating Temperature : 0 – 49° C / 32–120° F. Sounder Type : Piezo Electric Type Tone Type : Fire Engine Siren Material : ABS Plastic Colour : Red Dimensions : 96 H mm X 76 L mm X 28 D mm Back Box : 95 H mm X 75 L mm X 58 D mm Mounting Type : Surface / Flush Mount complete with Back Box – RAVEL make cat no. RE24CS	As attached seperate electrical specification
206	SITC of Manual Call Point as per following Specifications : Operating Voltage : 24VDC Operating Current : 30mA Colour : Green / Yellow / Red Material : Plastic IP Rating : IP-50 Size : 86 X 86 X 50 mm – RAVEL make Cat no. RE716 MR	As attached seperate electrical specification
207	Supplying, Installation, Testing and commissioning of Jockey Pump 10.8M3/hour @70M Head.Horizontal Centrifugal End Suction. with M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc. for motor and details pump specificaion follow as per specification as mentioned in tender volume..	As attached seperate electrical specification
208	Supplying, installation, testing and commissioning of electric driven Monoblock Fire pump 960LPM at 70 m head 2900 RPM pump. suitable for automatic operation and consisting of following: complete in all respect as required. With Suitable HP, SQ cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with class 'F' insulation, conforming to IS: 325.	As attached seperate fire specification
209	Diesel Operated pump 70m head, 2900 RMP with day tank & battery set complete with 100 ltr diesel	As attached seperate fire specification
210	Control Panel for the operation of Jockey pump, Fire pump Electric and Fire pump Diesel with automation	As attached seperate fire specification
211	Providing, fixing, testing & commissioning of Pressure Switches for automation of fire pumps. Pressure switches shall be double pole single throw type suitable for 3 phase supply with diaphragm. Aluminum Enclosure with IP 66 protection follow as per specification as mentioned in tender volume..	As attached seperate fire specification
212	Supplying, Installation, Testing and commissioning of C.I.Butterfly valve conforming to I.S:13095 class PN 16 rating with Fittings, Flanges, Nutbolts, Washers, Gaskets etc. follow as per specification as mentioned in tender volume.. of size: 150mm dia.	As attached seperate fire specification

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Sr. No.	Description of Item	Specification Detail
213	Supplying, Installation, Testing and commissioning of C.I.Butterfly valve conforming to I.S:13095 class PN 16 rating with Fittings, Flanges, Nutbolts, Washers, Gaskets etc. follow as per specification as mentioned in tender volume.. of size: 100mm dia.	As attached seperate fire specification
214	Supplying, Installation, Testing and commissioning of C.I.Ball type Foot valve conforming to I.S:13095 class PN 16 rating with Fittings, Flanges, Nutbolts, Washers, Gaskets etc. follow as per specification as mentioned in tender volume.. of size: 150mm dia.	As attached seperate fire specification
215	Providing, fixing, testing and commissioning of C.I. Dual plate type Non-Return Valve class PN 16 rating with fittings, flanges, nutbolts, washers, gaskets etc.of sizes: 150mm dia	As attached seperate fire specification
216	Providing, fixing, testing and commissioning of Above Ground MS. ERW Black C Class Heavyduty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. and providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers etc. with painting of one coat of primer and 2 or more coats of synthetic enamel paint of approved make / shade complete as per specification. 150mm dia	As attached seperate fire specification
217	Providing, fixing, testing and commissioning of Above Ground MS. ERW Black C Class Heavyduty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. and providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers etc. with painting of one coat of primer and 2 or more coats of synthetic enamel paint of approved make / shade complete as per specification. 100mm dia.	As attached seperate fire specification
218	Providing, fixing, testing and commissioning of Under Ground M.S. ERW Black C Class Heavyduty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) with IWL/pypecoat, 4mm thickness wrapping and coating and providing all fittings like flanges, tees, elbow, fasteners with all follow as per specification as mentioned in tender volume.. 150mm dia	As attached seperate fire specification
219	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 25 mm dia.	As attached seperate fire specification

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Sr. No.	Description of Item	Specification Detail
220	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 32 mm dia.	As attached seperate fire specification
221	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 40 mm dia.	
222	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 50 mm dia	
223	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 65 mm dia	

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Sr. No.	Description of Item	Specification Detail
224	Supplying,fixing,testing & commissioning of Above ground M.S. "C" Class (Heavy grade) ERW Pipe confirming to IS:1239 complete with all fittings (butt welded) such as elbow, socket, tees, unions, flanges with hot deep galvanized nut & bolt , reducer, clamps & plug etc.with welding,threading,jointing. And Excluding cutting holes in wall /slab and making good of the same. The pipe & fittings shall have One coat of primer and two coats of fire red / PO red 80 mm dia.	
225	Providing fixing testing and commissioning of GUN METAL 15 mm size quartzoid bulb type sprinklers, set to operate at 57 degree Centigrade. Pendent type type with required accessories complete. (GUN METAL)	
226	Supplying , installation, Testing & commsioning of Flexible Drop 1000mm	
227	Providing, fixing, testing and commissioning of RRL Fire delivery hose 63 mm Dia in 15 mtrs length with ISI MARKS is 636 type 'A' Fitted with Stainless Steel male & female coupling ISI Mark IS :903 duly binned with copper wire winding follow as per specification as mentioned in tender volume..	
228	Supply installation ,Testing & commissioning of single headed oblique pattern ISI hydrant landing valve with 80 mm dia flanged inlet & 63 mm dia instantaneous type female outlet complete with PVC cap and chain, twist release type lugs WITH all accessories as per SI Standard Conforming to IS-5290. (SS 304- Body SS-304 Coupling)	As attached seperate fire specification
229	Providing, fixing, testing and commissioning of weatherproof standard fire Hose Cabinet wall mounting type 18 Gauge. (750 x 600 x 250) having Double Opening with M.S. fabricated stand, necessary lock & key arrangement follow as per specification as mentioned in tender volume..	As attached seperate fire specification
230	Supply installation ,Testing & commissioning of SS Fire Brigade connection consisting of 2WAY. 63 mm instantaneous type male coupling with 125 mm Dia. flanged outlet complete for fire water tank.	As attached seperate fire specification
231	Supply installation ,Testing & commissioning of SS Fire Brigade connection consisting of 4WAY. 63 mm instantaneous type male coupling with 125 mm Dia. flanged outlet complete for fire water tank.	As attached seperate fire specification
232	Providing, fixing, testing and commissioning of Wall mounting Fix type First aid Fire Hose Reel with 30 Mtrs Rubber Hose 25mm Dia IS : 444 Type II fitted wit SS Shutt off Nozzle follow as per specification as mentioned in tender volume..	As attached seperate fire specification

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Sr. No.	Description of Item	Specification Detail
233	Supply installation , testing & commissioning of ISI Standard SS-304 branch pipe with nozzle of 20mm nominal bore outlet as per IS:903 suitable to fit with standard instantaneous type 63mm dia coupling (SS-304)	As attached seperate fire specification
234	Supply installation testing & Commissioning of 25 MM dia Air Release valve complete in all respects. (GUN METAL)	As attached seperate fire specification
235	Supply installation testing & Commissioning of Pressure guage 4" dial 0 to 16 kg/cm2 with syphon and cock complete in all respects (SS-304).	As attached seperate fire specification
236	Supply installation testing & Commissioning of 25 MM dia Ball Valve (SS-304) complete with SS Ball with single handed lever complete in all respects.	As attached seperate fire specification
237	Providing & Installation of ABC Stored Pressure Type Fire Extinguisher 6 Kgs. capacity bearing ISI Mark for Fighting ABC Class of Fire. The Extinguisher will be Manufactured Strictly as per BIS: 15683:2006 bearing ISI. Mark follow as per specification as mentioned in tender volume..	As attached seperate fire specification
238	Providing & fixing of Co2 type Fire Extinguisher 4.5Kgs. Capacity, made from the brand new seamless cylinder, as per IS: 7285 and CCE approval, fitted with a Discharge hose and horn and wheel type valve with initial Charge as per IS: 15683:2006 specification, bearing ISI Mark follow as per specification as mentioned in tender volume..	
239	Providing & fixing Modular type ABC Dry Powder Fire extinguishers 5 litre capacity Fire Extinguishers. The Extinguisher will be Manufactured Strictly as per BIS: 15683:2006 bearing ISI. Mark follow as per specification as mentioned in tender volume..	
240	Providing, fixing, testing and commissioning of On -Off Switch follow as per specification as mentioned in tender volume..	
241	Providing, fixing, testing and commissioning of below Auto Glow Signages follow as per specification as mentioned in tender volume.. Emergency Exit 4" X 12"	
242	APPROVAL FIRE SYSTEM FROM LOCAL FIRE AUTHORITY Getting of Fire Fighting System Approval from local fire authority with all other charges and documentations for getting No Objection Certificate.(as per GMB Approved rate)	



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Sr. No.	Description of Item	Specification Detail
243	<p>Providing &amp; fixing laminate finish partition up to false ceiling ht (thickness of partition is 82 mm or as specified in drawing) having 12 mm thick marina plywood IS 710 grade both side on aluminum framing of gauge 16. Aluminum framing size for vertical &amp; horizontal support is 50 mm x 25 mm. Grid of aluminum framing is 600 mm x 600 mm. All exposed surfaces finished with 1 mm thick Laminate of approved shade complete with mat finish. Necessary framing to be erected above false ceiling. No extra cost to be paid for the same. Before installation, make hole/face plate for conduit pipes of electrical / networking cables with open able stud from partition Including all materials and labor etc. Make necessary grooves as per shown in drawing. Using of 12 mm thick clear glass with proper crystal edges &amp; with suggested frosted films on glass. All joints are covered with teakwood beading Patti finished with polish matching with laminate. Including door of same design if required Complete with all necessary hardware &amp; adhesives as per details given in drawing and as per instructions of Architect/consultant/Engineer In charge. Contractor has to provide all necessary cut outs (race ways.) for Electrical works &amp; no extra payment shall be made for it.</p>	<p>As per attached Separate Sheet.</p> <p>The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I &amp; II and CPWD Vol 1. unlesss otherwise specified.</p>

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Sr. No.	Description of Item	Specification Detail
244	<p>Providing and fixing eco-friendly light weight calcium silicate false ceiling tiles having Tegular edge &amp; 15 mm Thick Densified edges on the Tile Periphery for Extra Strength The Light weight calcium silicate ceiling tiles shall have , light reflection 85% noncombustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity 0.043° w/m KC. for the best thermal Insulation . The Light weight calcium Silicate tile shall be of approved texture Fine fissured/ Spintone/Cosmos having NRC value of 0.5 &amp; Globe having NRC value of 0.75 NRC or equivalent of size 595 X 595 mm to be laid on true horizontal level suspended inter locking metal grid of hot dipped galvanized steel sections (galvanizing @120 grams per sqm at joints to get required length and size of 24X38mm made from 0.30 mm thick (minimum) sheet, 1200mm centre to centre, and centre to centre to form a grid of 1200X600mm and secondary thick (Minimum) sheet to be interlocked at middle of the 1200X600mm panel to form grid of size 600X600mm resting on periphery walls/partitions on a perimeter wall angle pre-coated steel of size (24X24X3000mm made of 0.40mm thick (minimum) sheet with the help of rawl plugs at 450mm centre to centre with 25mm long dry wall screws @ 230mm interval and laying 15mm thick Densified edges light weight calcium silicate ceiling tiles of approved texture (Fine Fissured/Cosmos/Spintone) in the grid</p>	<p>The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I &amp; II and CPWD Vol 1. unless otherwise specified.</p>
245	<p>Providing &amp; fixing work station / table having ht of 750 mm Top, with MS Pipe Structure of Frame as per Architect/ Engineer Design or Selection with specified powder coating and Back and side Ply of table is also made up of 19mm Thick. Top of Table is 19mm thk ply with laminate Finish Per Requirement and All internal &amp; external Joints finished with teakwood beading Patti. Common or front Part of Table is Sectionalized with MS Perforated Sheet. All exposed and internal surfaces covered with Laminate Finish of approved shade &amp; Complete as per detail drawings &amp; as instructed by Architect/consultant/ Engineer In charge. Complete with all necessary hardware like nails, ss screws, table chain, Key board tray, TDS channel, adhesives etc. Contractor has to provide all necessary cut outs for Electrical works &amp; no extra payment shall be made for it.</p>	<p>As per attached Separate Sheet</p> <p>The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I &amp; II and CPWD Vol 1. unless otherwise specified.</p>

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Sr. No.	Description of Item	Specification Detail
246	<p>Providing &amp; fixing office table / staff table having ht of 750 mm Top, with 19mm thk plywood or MS pipe Structure as per Architect/ Engineer Design or Selection and Back and side Ply of table is also made up of 19mm Thick. Top of Table is 19mm thk ply with laminate Finish Per Requirement and All internal &amp; external Joints finished with teakwood beading Patti. Item includes fixing of drawers and keyboard tray and storage with shutters under table as per drawing. With grooves shown as per drawing. All exposed and internal surfaces covered with Laminate Finish of approved shade &amp; Complete as per detail drawings &amp; as instructed by Architect/consultant/ Engineer In charge. Complete with all necessary hardware like nails, ss screws, table chain, TDS channel, adhesives etc. Contractor has to provide all necessary cut outs for Electrical works &amp; no extra payment shall be made for it. All ply should follow IS 710</p>	<p>As per attached Separate Sheet</p> <p>The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I &amp; II and CPWD Vol 1. unless otherwise specified.</p>
247	<p>Open Storage Rack (Laminate FINISH)</p> <p>Providing &amp; fixing Any ht storage having depth of 350mm/450mm/600 mm, having skirting of 75 mm, including vertical supports &amp; horizontal shelves shown as per drawing made by 19 mm thick Marin ply, Open Front Side for Selves with using 12 mm thick Marin ply for framing. All complete with proper teakwood beading and Teakwood molding as per design. Back ply is 12 mm Marin ply. All exposed are covered with 1 mm thick Laminate &amp; internal surfaces are covered with 1 mm thick laminate. External &amp; internal joints covered with beading Patti complete with polish finish. With grooves shown as per drawing. All complete with proper hardware like, S.S. Screws, MS Nails, Magnets, cable manager SS 304 etc. All Details as per shown in detail drawings &amp; as per instructions of architect/consultant / in charge engineer</p>	<p>As per attached Separate Sheet</p> <p>The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I &amp; II and CPWD Vol 1. unless otherwise specified.</p>

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Sr. No.	Description of Item	Specification Detail
248	Storage with Shutter (Laminate FINISH) Providing & fixing Any Height storage having Any size of having depth of 350mm/450mm/600 mm, having skirting of 75 mm, with proper locks. includinf of vertical supports & horizontal shelves shown as per drawing made by 19 mm thick Marin ply, having shutters of 19 mm thick ply or Clear Glass with using 12 mm thick Marin ply for framing. All complete with proper teakwood beading. and Teakwood molding as per design. Back ply is 12 mm Marin ply. All exposed are covered with 1 mm thick Laminate & internal surfaces are covered with 1 mm thick laminate. External & internal joints covered with beading Patti complete with Polish finish. With grooves shown as per drawing All complete with proper hardware like locks, S.S. Screws, MS Nails, Magnets, table chains, cable manager SS 304 Handles of 250 mm and 100 mm dia etc. All Details as per shown in detail drawings & as per instructions of architect/consultant / in charge engineer	As per attached Separate Sheet  The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II and CPWD Vol 1. unless otherwise specified.
249	Notice Board / Pin Board Supplying of Notice Board of 3'x 3' (or as specified) with all Fixing Arrangement complete as per drawing and Directed by Engineer In Charge etc complete.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
250	Providing and fixing News paper stand size 650 x 820 x 1200 or required height made out of 18 mm wtr.prf. [MR Grade] ply with 1 mm. thk inner laminate for top including back panel with shelves for magazine and news paper as shown in drawing, all expose joints finish with teakwood beading patti with polish finish and provision of openable top for news paper storage complete as per detailed drawings and Engineer-In Charge and Architect	As per attached Separate Sheet  The Relevant specification of of all materials. shall be followed from 'General Technical Specifications For BUILDING WORKS' Book Vol. I & II and CPWD Vol 1. unless otherwise specified.
251	Supplying and providing reading chairs with PP arms with soft PU pads, Seat and back upholstered with cushioned and MS powder coated frame and cantilever legs. Overall dimension 590 L x 600 W x 915 H (Or as specified) complete as directed by architect and product as per given specification. Complete as per architectural design and concept and approved by Architect & Client.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
252	Supplying and providing High Back Mesh office Chair As per specification below: -Metal frame seat made of Mesh fabric upholstery (foam base) -Adjustable Head rest -Fixed Arm rest -Knee tilt mechanism -360 swivel motion/ 100mm stroke gas -Nylon Star base -Pushback mechanism & Comfy seating. -Complete as per architectural design and concept and approved by Architect & Client.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.

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Sr. No.	Description of Item	Specification Detail
253	Supplying and providing Mid Back Mesh office Chair As per specification below: –Metal frame seat made of Mesh fabric upholstery (foam base) –Center tilt mechanism –100mm class 4 gas lift –PP Fixed Arm rest –Nylon Star base/Twin wheel nylons casters –Complete as per architectural design and concept and approved by Architect & Client.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
254	Supplying and providing dust bin made of 100% virgin plastic with paddle. Capacity–10 to 15 Ltr.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
255	Supplying and providing dust bin made of 100% virgin plastic with paddle. Capacity–120 L	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
256	Blinds : Providing and fixing as per approved make manual roller blinds with Soltis fabric & spring drive system with steel ball chain/one touch with speed control action roller blind with end brackets with head ail, components, bottom bar.Color–Alu with manual operation and warranty etc as per manufacturer's specifications. Fabric to be as per approved sample. All the work complete as per the detailed drawing and instruction of Architect/EIC. Soltis–99–Color–Alu fabric: 39% Polyester/61% PVC with Aluminum Backing. Weight:290 g/sqm, Thickness:0.32 mm, Openness Factor:3%, Visible Light Transmission (N–N): 2%–4%, Solar reflection (white) 65%, Internal Solar Factor (gtot): 0.35 – 0.48, Tensile Strength (Warp/Weft):160/170daN/5cm,Tearing Strength(Warp/Weft):11/13daN, Fungi static Treatment: Degree 0, Excellent (EN ISO 846–A) Fire Retardancy:B–s2,d0/EN 13501–1. All complete as per approval of designer & instruction of Project Manager. (The mode of Measurement: The size of the blind will be measured from end to end bracket (Left to Right bracket) & height will be measured from top of the pelmet till the bottom of the bottom bar	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
257	Providing and fixing Goddess Saraswati idol (Material– Fibre) 5 ft tall, with proportionately base dimension as per approved design by client and complete as per instruction of engineer–in charge and consultant.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
258	Providing and fixing Wall art/Photoframes of size 2ftx2ft with wooden frame of size 2in x 1in consisting 6mm thick ply in back with digital vinyl printing and 5mm thick glass on top if required.	Specification as per given in the description and as per detailed drawing. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
259	Providing and fixing PCs with configuration of Core I5 12th Gen, 8Gb RAM DDR4, 256 GB SSD +1TB HDD, WIN.11 HOME MS OFFICE 2021 STUDENT, Full HD display of 21 to 23.8' with keyboard and mouse.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
260	Providing and fixing Automatic Duplex laser printer with 30 pages per minute print speed, 8 mb memory, Large 250 sheet paper tray with USB connectivity.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.

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Sr. No.	Description of Item	Specification Detail
261	Supplying and providing xerox machine– –20PPM Copy / Print /Color Scan / Duplex DADF /Single Tray	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.
262	Providing and fixing Directional and Informative Signages– Providing and fixing in position informational signage made of 3mm thick high grade cast acrylic sheet of approved brand and color, it shall featurecomputerized vinyl lettering. Work includes laser cutting of the acrylic sheet to the required size and shape and mount on wall with SS Spacer studs as per drawing and directed by Architect.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Sqm
263	Providing and Fixing Library Name in Gujarati Letter SS304 1mm thick letter 1.5" depth 10" Height with Duco color & fitting as per direction of Architect & EIC.	Specification as per given in the description. Contractor shall take approval from Architect and client before execution. Mode of measurement shall be in Number.