

Name of Work	Construction of Various Category Quarters in Ahmedabad City (Addition, Alteration, Upgradation and Modernization of Campus, Landscapping and Beautification of Gardens and other Beautification work in Campus of Govt. Bunglow No. 4 to 30 at Dafnala, Shahibaug, Ahmedabad) (3rd attempt)			
INDEX OF SPECIFICATION				
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Item No.	Item Description	Page no. as per G.T.S booklet (Bid)	Item No. as per G.T.S booklet (Bid)	Remarks
1	2	3	4	5
1	Dismantling steel work including distempering and stacking the materials with all lead and lift.	150	20.43	
2	Demolition of Brick work and stone masonry including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift. (ii) In Cement Mortar.	148	20.11 (II)	
3	Removing and scraping of old deteriorated plaster of any thickness fromm wall / R.C.C member including stacking of serviceable material and disposal of unserviceable from site of work with all lead and lift	As per separate sheet attached		
4	Excavation for foundationupto 1.5m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil.	29	4.0.0(A)	
5	Excavation for foundation for depth from 1.5 m to 3.0 m including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead. (A) Loose or soft soil	32	4.001(A)	
6	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.	35	4.12	
7	Filling in plinth with sand under floors including watering ramming, consolidating and dressing complete	35	4.24	
8	Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete	35	4.004	
9	Plinth Treatment: Carring out plinth treatment to post construction / existing structure by spraying chemical solution for termite control treatment including labour and material consistment with I.S.I specification. Using Chlordene and Chiorpurfiles 20 EC. As Per 6131 _paret-II Consentration Weight one percent is recommended i.e one litre 20 EC chemical emulsion with 19 liter give 1 %concentration inclusive of one litre chemical emulsion appication at the rate of 5 Litre chemical / Sqm of surface is recommended as per I.S	As per separate sheet attached		
10	PCC (M-15) : Providing and laying controlled cement concrete Grade M.150 With complete including, necessary shuttring, laying vibrating and curing complete (A) Foundations, footings, Base of columns and Mass concrete	46 + 63	5.8.1 + 9.1(A)	
11	Foundation (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete.	47 + 63	5.8.3 + 9.1(A)	
12	Plinth Beam /GroundBeam (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Slabs, landing, shelves, Balconies, Lintels, Beams,Girders and Cantilever upto floor two level.	48 + 65	5.8.3 + 9.1(H) 1	
13	Column (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Columns, Pillars posts and struts, upto floor two level.	48 + 65	5.8.3 + 9.1(G) 1	
14	Grade Slab (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Slabs, landing, shelves, Balconies, Lintels, Beams,Girders and Cantilever upto floor two level.	48 + 65	5.8.3 + 9.1(I) 1	
15	Slab (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Slabs, landing, shelves, Balconies, Lintels, Beams,Girders and Cantilever upto floor two level.	48 + 65	5.8.3 + 9.1(B) 1	
16	Floor Beams (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttring, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Slabs, landing, shelves, Balconies, Lintels, Beams,Girders and Cantilever upto floor two level.	48 + 65	5.8.3 + 9.1(H) 1	

17	Lintel/Coping (M-25): Providing and laying controlled cement concrete Grade M.250 With complete including, necessary shuttering, laying vibrating and curing complete and excluding reinforcement for reinforced concrete work in (A) Slabs, landing, shelves, Balconies, Lintels, Beams,Girders and Cantilever upto floor two level.	48 + 65	5.8.3 + 9.1(H) 1	
18	Tre-mix : Box cutting the road 300mm surface to proper slope and camber for making a base with Providing, laying, spreading and compacting Sand filling 100 mm thick including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tones to proper grade and camber, watering and compacting to the required density. below 150mm thick 1:2:4 (1- Cement : 2- Coarse sand : 4- graded stone aggregates 20 mm nominal size)cement concrete and 200 MM Thick Ready Mixed M-350 grade concrete for reinforced cement concrete work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 10 kms having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, including the cost of centering shuttering finishing and cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash including (10 Dia 200c/c) FE 500D reinforcement with bending, binding and placing in position complete.	As per separate sheet attached		
19	TMT Bar(Fe 500 D) : Providing TMT Bar FE 500 D reinforcement for R.C.C. work including bending, binding and placing in position complete up to floor two level	45	5.4.11	Use TMT Bar Fe 500D Instead of HYSD Bar
20	Brickwork: Brick work using common burnt clay building bricks having crushing strength not less than 35kg. / Sq.Cm. in foundation and plinth and in Superstructure upto floor two level in Cement Mortar 1:5. (1- Cement : 5-fine sand) (B) Conventional	51	6.12.(B)	
21	Half Brick Masonry Work: (i) Half brick masonry in common burnt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4-coarse sand ) in foundation and plinth & in superstructure upto floor two level. (B)Conventional	54	6.30.1(B)	
22	Fiberglass Mesh : Providing and Fixing Fiberglass Mesh with alkali resistant coating having mass per unit area 145 gram/M2, Mesh size 3.9 x 4.0 mm +_ 10% with all labour and accessories of fixing etc. complete as per instruction given by engineer in charge/Architect.	As per separate sheet attached		
23	Providing 15mm thick waterproofing cement plaster in single coat on Rough And Similar smooth Finished Plaster side of single or half brick walls for interior and Exterior plastering upto floor two level and finished even and smooth in (ii) Cement mortar 1:3 (1-cement :3-sand) .	120 + 121	17.6 + 17.7 + 17.69	Use 15 mm thickness instead of 20 mm thickness
24	20mm thick waterproofing cement plaster Similar smooth Finished & sand faced cement plaster on walls up to height 10 metres above ground level consisting of 12 mm thick backing coat of C.M.1:3 (1-cement : 3 sand) and 8 mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete	122 + 121	17.95 + 17.7 + 17.69	
25	Putty & Primer : Applying two coats of putty & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	As per separate sheet attached		
26	Apex Ultima weatherproof exterior paint: Providing and applying Apex Ultima weatherproof exterior emulsion paint on external wall surfaces in two coats, over properly prepared surfaces including thorough cleaning, brushing, and removal of all dust, dirt, grease, and loose powdered materials, to achieve a uniform shade and durable finish, complete as per manufacturer's specifications and directions.	As per separate sheet attached		
27	Providing and applying Luxture Texture finish on wall surfaces using approved textured materials such as acrylic-based compounds or equivalent, including surface preparation, base coat, texture application with required tools and techniques, scaffoldings & support system and final finish as per approved sample. Work to be completed as per manufacturer's specifications and direction of Engineer-in-Charge.	As per separate sheet attached		
28	Waterproofing treatment on Terrace: Providing and applying Fibre reinforced Elestomeric liquid Water proofing membrane with resilient Acrylic polymers having Sun Reflectivity Index (SRI) of 105 on Top of concrete roof in top of concrete in three coats @ 10.76 litre/10 sq.m. One coat of self-priming of Elestomeric water proofing liquid (delution with water in the ratio of 3:1) and two coats of undiluted elestomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scraping and properly cleaning the surface to remove loose particles with wire brushes , complete in all respect as per the direction of Engineer-in-charge.	As per separate sheet attached		

29	China Mosaic Flooring : 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 top lain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them up to 15 cm along the wall, clearing with water and oxalic acid etc. as directed.	As per separate sheet attached		
30	Providing and fixing PUF Insulated continuous sandwich panels for roofs of total thickness not less than 30 mm made out from continue line method.Panel shall have 0.5 mm thick pre coated GI sheet on both side of Polyurethane foam with external face being corrugated in shape for GI and PU foam both material.The crest height of the panel shall be of 35mm minimum wiht 250mm c/c pitch. The Precoated sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1995 and shall have zinc coating of 120 gsm as per IS:277 , 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 micron.The PPGI Sheet shall have protective guard film of minimum 25 microns to avoid scratches wihile trasportation.The roof panels are laid over a frame work of trusses, columns and purlins fixed using 90mm self drilling bolt with rubber washer including all types of flashings. PU Foam must be self-extinguishing, fire retardant type having minimum density of 40 Kg/Cu.mt.( +,- 2 Kgs) including 0.25mm craft paper edging,self tapping screws of required length and nos.etc complete as per structural design and direction of Engineer-in-charge.	As per separate sheet attached		
31	MS work : Providing, fabricating, assembling, hoisting/ erecting and fixing in position at all heights/ all levels/ all floors/ all shapes & sizes with all leads & lifts using MS Rolled Steel Sections, Hollow sections, Tubular Sections, MS Plates, Chequered Plates, MS Pipes, Perforated Sheet, Flats, Bright Bars, Angles, MS Sheet, Girder, Beam, cattle trap. deep threaded MS bolts, threaded J bolts, insert plate, support plate etc as per drawing. all confirming to latest relevant IS codes for the work of steel structures like staircases, railings, handrail, jali, gates, grills, bracings, platforms, brackets, monkey ladder, cattle trap, windows, pipe rack, rungs, false ceiling frame work, Roof canopy, fencing posts, M.S. Screen & fencing jali frame work etc. including straightening, cutting, bending, bolting and welding the members all as per structural drawings and as per detailed specifications (for materials & workmanship) including necessary scaffolding/ staging,applying a priming coat of red lead paint And Epoxy coated section etc. complete in the situations described hereinafter and comprising of : 1) Profile Cutting of components to required length/ width and shape/ profile; 2) Smooth grinding/ machining of edges/ faces/ all welding joints;	80	11.4 (A)	
32	Painting two coats (excluding priming coat) on new steel andothermetal surfacewith enamel paint, brushing, interior togiveanevenshade including cleaning the surface an even shade including cleanicn the surface of all dirt, dust and other foreign matter.	138	19.7	
33	CONCRETE KERBING (half better): Providing and fixing pre-cast concrete kerbstone of gray cement based vacuumed wet press concrete block of precision finish, as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1 cement: 3fine sand) etc complete. Selection as per the architect and EIC. (a) VYARA_HB-B_half better Vacuumed wet press or equivalent .Placement is as per drawing for the location,shape and design and pattern. Supply of K-HB GREY SL VWP 600*450*150MM with minimum average 2.5MPa bending strength at 28 days.	As per separate sheet attached		
34	CONCRETE KERBING (radius): Providing and fixing pre-cast concrete kerbstone of gray cement based Vacuumed wet press concrete block of precision finish of size range as per the selection from the range given to accommodate , as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1cement: 3fine sand) etc complete. Selection of thickness from the range given is as per the architect and EIC. Placement is as per drawing for the location, shape and design and pattern. Supply of K-HB RA 3, 4.5, 6 (EX) GREY or red or Vyara equivalent. VWP 780*300*150MM	As per separate sheet attached		
35	DRAIN CHANNEL WITH COVER : U shape Drain channel size - 300*300 mm with High-Performance Self-Compacting Concrete (SCC) of minimum strength / M-50 cube strength with drain testing for load capacity of Min 200 kN and Heavy duty Lid (Cover) For 300 mm similer Grade of concrete as above with Hole Design as per architect's selection and as per direction of Engineer-in-charge. Make as per tender or Equivalent.	As per separate sheet attached		
36	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter the collar sand but tends prepared for collar joints including testing of joints complete.(E) 450mm	177	24.22	
37	Constructing Brickmasonry road gully chamber 500mmx 450mmx 600mm including 500mmx 450mm C.I. horizontal grating wih frame complete.	182	24.4	
38	Paver Block : Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pnumatic compressed/ vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidlines of IRC : SP 63-2018 etc. Complete	As per separate sheet attached		

39	<p>FLAG STONE FLOORING : Providing and laying flag stone flooring over 25-35mm thick base of cement mortar 1:5 (1-Cement : 5-coarse sand) including pointing with cement mortar 1:2 (1-cement : 2-stone dust) etc. complete.</p> <p>(a) VYARA_Flagstone shot blasted &amp; coated finish (Rev 02) or equivalent Size, design, laying pattern and colour as per architect selection. .</p> <p>(b) Finish : Premier shield protection (coated)</p> <p>(C) Size :DL WP 300*450*60MM/ 300*600*60MM/ 300*300*60MM in SBPS finish with minimum average 3.5MPa bending strength at 28 days.</p>	As per separate sheet attached
40	<p>COBBLE STONE FLOORING : Providing and laying cobble stone flooring over 25-35mm thick base of cement mortar 1:5 (1-Cement : 5-coarse sand) including pointing with cement mortar 1:2 (1-cement : 2-stone dust) etc. complete Size, design, laying pattern and colour as per architect selection.</p> <p>(a) VYARA_Cobble square 60mm shot blasted &amp; coated finish (Rev 02) or equivalent.</p> <p>(b) Finish : Premier shield prtection (coated)</p> <p>(c) Size : Supply of COBBLE SQ.-R RED DL CP , vyara or equivalent 60MM in SBPS finish with minimum average 200 KG/cm<sup>2</sup> compressive strength at 28 days.</p>	As per separate sheet attached
41	<p>GRANITE STONE FLOORING (Canvas finish) : Providing and laying rough stone flooring over 75mm thick or Require for leveling base of cement mortar 1:3 (1-Cement : 3-coarse sand) laid and jointed with grey cement slurry including cutting, dressing, leveling, jointing, pointing, curing, finishing, rubbing and polishing complete including Labor Charges Quarter round edge for granite.</p> <p>(a) Indian granite stone, as per selection</p> <p>(b) thickness: 18mm,</p> <p>(c) Finish:Lepatora</p> <p>(d) The rate of the stone should NO'St be less than Rs. 125/sq.ft. Size, design, laying pattern and colour as per architect selection.</p>	As per separate sheet attached
42	<p>GRANITE STONE FLOORING (Mirror Finish) : Providing and laying rough stone flooring over 75mm thick or Require for leveling base of cement mortar 1:3 (1-Cement : 3-coarse sand) laid and jointed with grey cement slurry including cutting, dressing, leveling, jointing, pointing, curing, finishing, rubbing and polishing complete including Labor Charges Quarter round edge for granite Size, design, laying pattern and colour as per architect selection..</p> <p>(a) Indian granite stone, as per selection</p> <p>(b) thickness:18mm,</p> <p>(c) Finish:Mirror polish</p> <p>(d) The rate of the stone should NO'St be less than Rs. 125/sq.ft.</p>	As per separate sheet attached
43	<p>GRANITE STONE FLOORING (leather,river ) : Providing and laying rough stone flooring over 75mm thick or Require for leveling base of cement mortar 1:3 (1-Cement : 3-coarse sand) laid and jointed with grey cement slurry including cutting, dressing, leveling, jointing, pointing, curing, finishing, rubbing and polishing complete including Labor Charges Quarter round edge for granite.</p> <p>(a) Indian granite stone, as per selection</p> <p>(b) thickness:18mm,</p> <p>(c) Finish:leather, river or mirror as per selection</p> <p>(d) The rate of the stone should NO'St be less than Rs. 125/sq.ft. Size, design, laying pattern and colour as per architect selection.</p>	As per separate sheet attached
44	<p>EXPOSE BENCH : Fabrication and manufacturing of solid precast concrete bench or other elements with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for bench or other elements, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds (Pallet system, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, column moulds, staircase moulds, Facade mould, etc.), mixing, transporting and placing of concrete, vibrating, curing, finishing, making necessary cutout/ holes of required sizes for services, yard handling &amp; stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of Engineer-in-Charge (Cost of reinforcement, Mechanical, Electrical and Plumbing inserts will be paid separately). Concrete grade M-35 (Cement content 370 KGs) size of bench should be consider 1800x500x450mm.Design of the Bench as per the drawing.</p>	As per separate sheet attached

45	<p>Signage :Manufacturing, supply, arrangement and keeping in good condition until project completion SS/Wooden/MDF signage using SS 304 grade/Plywood/MDF material brush finish 1.5mm thick sheet with letter, numbers, graphic, symbol etc made by acid etching process with duco paint/ powder coating as per drawings and instruction of the architect. All required CNC cutting/ laser cutting shall be carried out as per drawing. The plate shall be fixed on brick/ RCC wall/ ply/ cement board/ furniture/ door with the necessary fixing hardware like SS stud, fastner, self adhesive double side tape etc. complete for all floors and all height. The rate shall be inclusive of all material, laour, hardware scaffolding etc. All product Make approved as per tender and architect selection or equivalent.</p>	As per separate sheet attached
46	<p>ENTRY SIGNAGE : Providing and fixing of Stainless Steel letters (Grade 304), as per approved architectural drawings and Engineer-in-Charge's directions. The work includes:</p> <p>a. Material: Fabricated letters from SS Grade 304 sheet, thickness:1.5 mm, with a brushed/polished/golden PVD coated finish.</p> <p>b. Fabrication: Letters to be 150 mm minimum height for main text, with raising/depth:25 mm.</p> <p>c. Fixing: Securely fixed to the existing surface using concealed stainless steel studs and a suitable sealant/epoxy adhesive, ensuring no fixings are visible from the front.</p> <p>d. Inclusions: All necessary shop drawings, cutting, bending, transportation to site, installation, testing.</p>	As per separate sheet attached
47	<p>MAP SIGNAGE : with pole - SS Plate Size : 2' x 3' or equivalent - Grade 304, Brush Finish, 2mm Thickness with Smoothen Corner edges, Acid etching with duco colour, Logo cutting in waterjet CNC machine, Supported at 45 degree Pole 2' long Double pole, 50mm square MS pipe with Zinc coating &amp; Paint, 1.5' deep Foundation with concrete work &amp; Transportation.</p>	As per separate sheet attached
48	<p>SCULPTURE &amp; FOUNTAIN &amp; DECORATIVE ITEMS : Indian natural stone sculpture in abstract form, made of Indian sandstone, marble or granite using various tool and tackle to give aesthetically appealing surface textures, polishing, form and effects as per design and specifications given by the architect or EIC. The item to include all materials, workmanship, trasportation &amp; handling, lifting and placing on site along with any anchorage, supports as required.(Out to out volumetric dimensions to be considered)</p>	As per separate sheet attached
49	<p>GRC CLADDING : Providing &amp; fixing architectural moldings profiles and other decorative elements made out of GRC (Glass Fibre reinforced Cement) in required shape, size &amp; thickness all as per manufacturers specifications, such as all decorative articles should be made by using high power spray machine, using AR Glass fiber with minimum ZrO2 16% including necessary scaffoldings for all heights, as per approved drawings and reference images. GRC elements thickness shall be 25-30 mm. fixing edges will be GRC Elements shall be fixed on RCC Structure/Brick Work/ Primary Steel Structure (MS (18 kg/Smt) with protective coat of Red oxide/Zinc Primer Shall be Used). Hilti make GI Screw Fastners or equivalent, GI Thread Rods and MS cleats shall be used for fixing of GRC elements on RCC/MS Primary fabricated structure. Joints shall be filled with PU sealants/ base material of GRC as and where required. The quote rate shall be inclusive of all design, &amp; shop drawing and sample mock of all elements approval from Architect &amp; consultant. The quote rate shall include all Taxes, duties, statutory obligations and safety code compliance as per client.Rate shall be inclusive of all required fabrication work for fixing only primary strcture shall be provided as base structre only as per requirement. Mode and method of measurement shall be in accordance with IS: 1200.a ) GRC Columns:as per specification work (Elevation area- At any height) (Elevation area)</p>	As per separate sheet attached
50	<p>BAMBOO PANELING : Manufacturing, supply , arrangement and keeping in good condition until project completion of Bamboo strips panelled ceiling as required to be fitted with the help of MS framing at all heights/all levels in Fancing work with Borex treatment on bamboo &amp; PU polish at regular intervals for Look . Make as per design and drawing with necessary arrangement like fix on MS frame 45*45*3mm Angle similar etc. with the help of fixtures such as bonding agents such as fevicol, screws and framing with of any diameter, fixing with the help of gripper or relavant technique etc. complete of design provided by the architect and should be installed as per the directions provided by the engineer-in-charge. Make as per tender or Equivalent.</p>	As per separate sheet attached
51	<p>Removing Paver Block - Removing existing interlocking cement concrete paver blocks of any size and thickness from paved areas, including lifting, dismantling, stacking of serviceable pavers separately for reuse at designated location, disposal of unserviceable material, and clearing the site complete.The item includes careful removal without damaging adjoining pavements, kerbs, or services, cleaning of paver blocks, and transportation within site limits as directed by the Engineer-in-Charge.Rate shall include all labour, tools, equipment, handling, loading, unloading, and incidentals, complete.</p>	As per separate sheet attached

52	<p>GRASS PAVER : Providing and laying precast concrete grass pavers of specified dimensions 600mm x 400mm x 75mm, with open grid design to allow for grass growth, including leveling, joint filling with suitable material, and compaction, complete as per manufacturer's specifications and as directed by the Engineer</p> <p>(a) VYARA_Ecological paver_grid paver</p> <p>(b) Finish : Shotblasted with premiership protection (coated)</p> <p>(c) HB Internal (Radius 3,6,10 mtr) 780x255x125mm</p>	As per separate sheet attached
53	<p>Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficient on cement road shall be min 130 mcd/m<sup>2</sup>/lux and Asphalt road shall be min 100 mcd/m<sup>2</sup>/lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015. Warranty for the Retro reflectivity should be two years.</p>	As per separate sheet attached
54	<p>Cat Eye / Road Stud / RPM: Supplying Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with Micro prismatic lens (No Glass bead lens) capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 &amp; DO III Dt 11.06. 1997. The height, width and length shall not exceed 20 mm, 130 mm and 130 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The body of the marker should having finger grip for easy and accurate placement and application with epoxy / bituminous Adhesive as recommended by the manufacturer of the marker. The color of the marker should be as per the IRC 35- 2015 and as directed by Engineer-in-charge.</p>	As per separate sheet attached
55	<p>RCC GSRs AND/OR SUMPS</p> <p>Preparing structural design of 1 lacs liters (Partition wall for fire and water Supply ) RCC (all Part of Tank) Underground / Partially underground of required capacity as per relevant I.S. s and constructing the same , including excavation in all types of soil strata (Including Rock) and shoring strutting if required, for loose soil/ to protect from collapse due to nearby traffic load, casting 100 mm thick PCC leveling course in M-15 , refilling the pit with proper soil and disposing the surplus stuff within a lead of 50 meters. Including water proof cement plaster CM 1:2 with approved water proofing compound to inside water touching surface to container with all type of labour and material charges of lowering, laying, erecting/ hosting and jointing of pipe assembly to inlet, outlet, overflow, and washout and by pass arrangement as per hydraulic design. Providing and fixing accessories like GI Ladder, CI Manhole frame and cover, water level indicator, adequate CI cowl type ventilators or lantern type ventilator with stainless steel jali. B.B Chambers for valves. Providing and applying three coats of water proof cement paint/snowcap to the outside face of the structure. It also includes satisfactory water tightness Test as per relevant I .S. code and painting name of the scheme and capacity &amp; grade of the tank as per direction of engineer in charge in P.C.C. M15, RCC M30, and plaster in 15 mm.</p>	As per separate sheet attached

56	<p>Percolation Well -Boring dia.450mm and Sinking -100 rmt depth 20 cm. Diameter PVC pipe. Percolation well with casing pipes as per specifications with any approved system like Auger, Derrick etc. including installation of other equipments such as Pumps, Water Tanks, etc. complete and thereafter withdrawal and removal of the system etc. complete and clearing the site on completion.,</p> <p>(1.)Providing and Constructing of 25000 liter Collection tank of 3.0 dia with 3.0 meter liquid depth including excavation, 100 mm thick PCC in 1:4:8 at bottom of brick foundation, 350 mm thick brick masonry up to 3.0 meter and 450 mm thick brick masonry from 3.01 meter to PCC top in 1:6 cement mortar, 15 mm thick cement finish plaster on inside &amp; outside surface of the walls in 1:4 cement mortar, 125 mm thick RCC slab in 1:2:4 with 2 nos of 600 mm x 600 mm manhole cover with frame at the top of collection pit, filling of 600 mm thick over burnt brickbats at the bottom of well, 150 mm wide CI rungs in walls at 600 mm c/c distance, providing of 150 mm diameter PVC sleeves in between collection tank and filtration tank and back filling of trenches with proper compaction etc. as per detail given by the engineer in charge.(Civil works to be done by civil contractor as per the structural and plumbing drawings) .</p> <p>(2)Providing and Constructing of 20000 liter Filtration channel of 750 mm wide and 2 meter deep around the 3.0 m dia. collection tank including excavation, 100 mm thick PCC in 1:4:8 at bottom, 350 mm thick brick masonry in 1:6 cement mortar, 15 mm thick cement finish plaster on inside &amp; outside surface of the walls in 1:4 cement mortar, filling of 300 mm thick 20 to 40 mm size and 300 mm thick 10 to 20 mm size gravels, providing and fabrication of MS grills on top of filtration channel and back filling of trenches with proper compaction etc. as per detail given by the engineer in charge. Supplying, lowering, fitting, fixing and joining with Strainer, 15 cm. diameter M.S. Pipe of minimum 5.40 mm wall thickness (DIAMETER – ERW or equivalent make) with sockets, specials complete with cutting, threading and red lead paint, etc. complete up to the required depth.</p> <p>(3)Supplying, lowering, fitting, fixing and joining with 40 rmt Strainer, 20 cm. diameter PVC Pipe CM class of minimum 10 mm wall thickness with sockets, specials complete with cutting, threading etc. complete up to the required depth.</p> <p>(4)Supplying, fitting, fixing and lowering 20 cm. diameter strainer pipes 20 rmt having slot size 1.5</p>	<p>As per separate sheet attached</p>
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Deputy Executive Engineer  
Shahibaug (R&B) Sub Division  
Ahmedabad

Executive Engineer  
Ahmedabad City (R&B) Division  
Ahmedabad