

BOQ for Plumbing, Sanitary Works					
Sr.No	Item Description	Quantity	Unit	Rate	Amount (Rs.)
<b>1</b>	<b>SANITARY FIXTURES</b>				
1a	Providing & Fixing star white colour vitreous china wall mounted wc with heavy duty soft close seat cover & concealed dual tank. Complete with all accessories including cutting & making good wall & floor wherever required. Model - CROMA - 2085, 550X367X355mm, 2385 seat cover	7	Each		
1b	Providing & Fixing star white colour vitreous china orissa pan w.c with 10 ltr capacity pvc slim tank. Complete with all accessories including cutting & making good wall & floor wherever required. model - 2071, 580X440X400mm, cistern 2602 ciena premium.	5	Each		
2	Providing & Fixing star white colour vitreous china wash basin half pedestal 32mm dia C.P waste, 32mm Dia C.P wall flange & rubber adopter for waste connection complete, including cutting & making good the walls wherever required.model - claus 1094, 545X455mm	37	Each		
3	Providing & Fixing star white colour vitreous china urinal with inbuilt auto flush system with s.s. bracket, pipe to wall with C.P flange complete including cutting & making good the walls & floors wherever required. Model - 5017A, 980X360X430mm.	14	Each		
4	Providing & Fixing in position best quality stainless steel sinks with 40mm C.P. brass waste chrome plated & s.s. waste pipe. complete in all respect including cutting & making good the walls & floors. in canteen. Model 24"X20"X8" 1.0mm thick mat finish.	2	Each		
5	Providing & Fixing chrome plated wall mounted sensor taps (Battery / Electric operated) over wash basin complete in all respect including cutting & making good the walls wherever required. Model - SNB51071	37	Each		
6	Providing & Fixing 15mm C.P brass bib tap for wc with C.P brass threaded flange complete, including cutting & making good the walls wherever required. Model - JAQUAR - 037KN	12	Each		
7	Providing & Fixing 15mm C.P. brass angle valve with C.P copper connecting pipe 375mm long & nuts, washer & C.P. brass flange complete, including cutting & making good the wall wherever required. JAQUAR CONTINENTAL 053 KN for wc cistern & basins.	49	Each		
8	Providing & Fixing concealed stop cocks for cold water supply. JAQUAR CONTINENTAL 083 for urinals before sensor.	14	set		
9	Providing & Fixing 15mm C.P. brass mixing fitting for sink with swinging spout complete, including cutting & making good the walls wherever required. Wall mixer with swivel spout. JAQUAR CONTINENTAL 319.	2	Each		
10	Providing & Fixing hand dryer automatic ABS body (Electric / Battery operated) with all accessories including cutting & making good the walls. Model - 6910A, 290X163X216mm	24	Each		
11	Providing & Fixing ABS body automatic liquid Soap Dispenser for all wash basins with liquid soap. Model - 6913A, 110X128X132mm	37	Each		

12	Providing & Fixing 6mm thick beveled edge mirror with teak wood beading (Mirror of approved quality & as per specifications) with 6mm thick asbestos plain sheet ground fixed with C.P. brass screws & washers & complete as per approval. Size 600X450mm	37	Each		
	<b>Total</b>				
<b>II SOIL, WASTE &amp; VENT PIPES, RAIN WATER PIPES &amp; FITTINGS</b>					
1	Providing & Fixing G.I floor drain consisting of 100X50mm G.I elbow (grating & G.I pipe to be paid separaptely), complete as per instructions.	25	Each		
2	Providing & Laying cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 stone aggregate 20mm & down guage) 75mm in bed & alround C.I. soil & waste pipe. 100mm, 75mm & 50mm dia pipes under floors including centering & shuttring wherever required.	300	mt.		
3	Providing & Fixing making khurras with average minimum thickness of 5cm cement concrete 1:2:4 (1Cement : 2 Coarse Sand : 4 Graded stone Aggregate) over PVC sheet 1mX1mX400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) & a coat of neat cement rounding the edges & making & finishing complete.				
(a)	For 100mm dia outlet with vertical C.I grating.	5	Each		
4	Providing & Fixing cpvc pipes IS : 4985 - 1981 of 6kg./cm2 including all fittings (plain or door) e.g. bends junctions, cowls, offsets, access pieces etc. jointing with solvent cement including cutting holes in walls, floors excavation, refilling & disposal of surplus earth wherever required & making good.				
(a)	110mm outer dia.	250	mt.		
(b)	160mm outer dia.	100	mt.		
5	Providing & Fixing 150mm dia C.I (through flow) made up C.I body with flange & aluminium ring & aluminium dome grating for rain water khurra at Terrace complete as per requirments. (NEER / GMGR or equivalent) (Sample to be approved).	10	Each		
6	Providing & Fixing 125mm dia round bronze C.p frame & grating with connecting stainless steel screws, complete as per requirments. (NEER / GMGR or equivalent) (Sample to be approved).	50	Each		
	<b>Total</b>				
<b>III WATER SUPPLY (INTERNAL &amp; EXTERNAL)</b>					
1	Excavation of trenches of required width for pipes, including excavation for sockets, & dressing of sides, ramming of bottoms, depth upto 1.5m including getting out the excavated soil, & then returning soil as required, in layers not exceeding 20cm depth including consolidating each deposited layer by ramming, watering etc. & disposing of surplus excavated soil as directed outside the site to the approved dumping ground.				
(a)	<b>in all kinds of soil except hard rock</b>				
(i)	Pipes not exceeding 80mm dia.	100	mt.		
(ii)	Pipes exceeding 80mm dia. But not exceeding 300mm dia in all types of soil.	100	mt.		

2	Providing & Fixing cpvc water pipes (I.S:4985-1981) of 10Kg / cm <sup>2</sup> including all fittings e.g bends, junctions, elbow, f-tee, m-tee, offsets, access pieces etc. jointing with solvent cement including cutting holes in walls, floors excavation, refilling & disposal of surplus earth wherever required & making good.				
(a)	20mm outer dia	200	mt.		
(b)	25mm outer dia	100	mt.		
(c)	32mm outer dia	50	mt.		
(d)	40mm outer dia	20	mt.		
(e)	50mm outer dia	10	mt.		
(f)	63mm outer dia	10	mt.		
(g)	75mm outer dia	10	mt.		
3	Providing & Fixing cpvc water pipes (I.S:4985-1981) of 6Kg / cm <sup>2</sup> including all fittings e.g bends, junctions, elbow, f-tee, m-tee, offsets, access pieces etc. jointing with solvent cement including cutting holes in walls, floors excavation, refilling & disposal of surplus earth wherever required & making good.				
(a)	40mm outer dia	20	mt.		
(b)	50mm outer dia	20	mt.		
(c)	63mm outer dia	20	mt.		
(d)	75mm outer dia	20	mt.		
4	Providing & Fixing PVC ball valve as per ISO:138 / IS-7834 for the operating temperature upto 60 Deg.C threaded or plain socket type for lawn sprinkler system.				
(a)	25mm outer dia	10	Each		
(b)	32mm outer dia	5	Each		
5	Constructing masonry chamber 30X30X50cms inside with 75mm glass designation brick work in cement mortar 1:5 (1 cement : 5 coarse sand) for valves upto 65mm dia. With C.I surface box 100X100X75mm (inside) with hinged cover fixed in 100mm thick reinforced cement concrete slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) necessary excavation, back filling & disposal of surplus earth as per instructions, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size) & inside plastering with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement complete as per standard design.	10	Each		
	<b>Total</b>				
<b>IV EXTERNAL SEWERAGE / DRAINAGE SYSTEM</b>					
1	Excavation of trenches of required width for pipes, including excavation for sockets, & dressing of sides, ramming of bottoms, depth upto 1.5m including getting out the excavated soil, & then returning soil as required, in layers not exceeding 20cm depth including consolidating each deposited layer by ramming, watering etc. & disposing of surplus excavated soil as directed outside the site to the approved dumping ground. Minimum width of the trench should be external dia plus 400mm.				

	(in all kinds of soil except hard rock)				
(i)	Pipes exceeding 80mm dia but not exceeding 300mm dia in all types of soil.	100	mt.		
(ii)	Pipes exceeding 300mm dia.	20	mt.		
2	Providing & fixing square mouth 'P' type S.W gully trap grade 'A' of size 150X100mm complete with C.I grating, brick masonry chamber & water light C.I cover with frame of 300X300mm size (inside) the weight of cover to be not less than 4.50 Kg & frame to be not less than 2.70 Kg as per standard design & detail.	10	Each		
3	Constructing brick masonry circular manehole 0.90m internal dia at bottom 0.56m dia at top with 75 class designation F.P.S brick in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement external rough cement plaster 12mm thick 1:6 (1 cement : 6 coarse sand) foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) & making necessary channel in cement concrete 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20mm nomina size) finished with floating coat of neat cement including excavation, refilling in 20cm layer with ramming & watering & disposal of surplus earth all complete as per standard design & detail.				
(a)	1.0m deep with S.F.R.C cover & frame (heavy duty HD-20 grade designation) 560mm internal dia conforming to IS:12592, total weight of cover & frame to be not less than 182Kg, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including centering & shuttering all complete. (Foot Rests shall be paid separately)	5	Each		
4	Construction of brick masonry collection chamber with 75 class designation bricks in cement mortar 1:5 (1 cement: 5 coarse sand) with precast, removable, Rcc top slab of 100mm thickness of 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 20mm nominal size) & 200mm thick foundation concrete 1:4:8 mix, inside & outside plastering 12mm thick with cement mortar 1:3 (1 cement:3 coarse sand) finished with a floating coat of neat cement inside & rough plaster on outside & making channels in cement mortar 1:2:4 mix, neatly finished complete as per instruction of Engineer-in-charge including excavation, refilling & disposal of surplus earth for chamber of the following sizes:				
(a)	750x750x750mm	10	Each		
(b)	600x600x600mm	5	Each		
5	Providing & Fixing C.I vertical grating of approved quality of size 350x350 complete.	5	Each		
6	Construction brick masonry catch basin with 75 class designation bricks in cement mortar 1:5 (1 cement:5 coarse sand), 200m thick foundation concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) inside & outside plaster in cement mortar 1:3 (1 cement : 3 coarse sand). inside finished with floating coat of neat cement, making haunches & channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) neatly finished, complete as per standard design including excavation, refilling & disposal of surplus earth.				

(a)	Size 600x600x600mm inside with M.S grating fabricated from 16x16mm square bars @ 20mm clear spacing hinged to 40x40x6mm angle iron frame including two coats of enamel painting of approved shade over a primary coat.	5	Each		
(b)	Size 750x750x750mm inside with M.S grating fabricated from 16x16mm square bars @ 20mm clear spacing hinged to 40x40x6mm angle iron frame including two coats of enamel painting of approved shade over a primary coat.	5	Each		
(c)	Size 900x900x900mm inside with M.S grating fabricated from 16x16mm square bars @ 20mm clear spacing hinged to 40x40x6mm angle iron frame including two coats of enamel painting of approved shade over a primary coat.	5	Each		
7	Providing & Fixing 100mm thick SFRC precast concrete grating with 2mm thick M.S flats around (M.S with anticorrosive bitumen paint or Galvanised complete) & having 35mm holes at regular intervals as per standard design / approval for catch basins of the following sizes.				
(a)	700x700mm	10	Each		
(b)	850x850mm	10	Each		
(c)	1000x1000mm	2	Each		
8	Constructing oil & grease trpe 1800x900x850mm deep (inside) or adjustable as per site condition with the single brick thick wall with 75 class designation brick masonry in cement mortar 1:4 (1 cement : 4 coarse sand) with 75 class designation brick masonry in cement mortar 1:4 (1 cement : 4 coarse sand) fixing inlet & outlet pipes 12mm thick plastering inside & exposed surfaces in cement mortar 1:3 (1 cement : 3 coarse sand) on positions below the ground. Half brick thick wall with 75 class designation brick masonry in cement mortar 1:4 (1 cement :4 coarse sand) with both surfaces in cement mortar 1:3 (1 cement : 3 coarse sand) on positions below the ground with 150x150mm opening at bottom with 2 nos. of M.S plate cover of 8m thickness of 465x610mm (or as per site) with U. hook arrangement, 200mm bed concrete 1:8:10 (1 cement : 8 coarse sand : 10 graded stone aggregate 40mm nominal size) & 50mm floating in cement concrete 1:2:4 with a floating coat of neat cement with a provision of M.S perforated plate of 600x300mm to be used as skimmer including earth work for excavation refilling.	2	Each		
	<b>Total</b>				
<b>V</b>	<b><u>MISCELLANEOUS</u></b>				
1	Providing & Fixing C.I. air valves including the cost of all pipes & fittings as per design & site conditions complete in all respects, but including the cost of M.S cover & its painting of approved shade. Single acting type of 25mm dia.	2	Each		
2	Providing & Fixing gunmetal float valve of approved superior quality with low or high pressure plastic ball.				
(a)	25mm dia	2	Each		
(b)	32mm dia	2	Each		
(c)	40mm dia	2	Each		

3	Providing & fixing M.S structural work fabricated from standard sections e.g. M.S. rounds, angles, channels, plates including cutting to size, welding, drilling with concrete drilling bits & fixing dash fasteners in RCC structural members including cutting & making good the walls, ceilings & floors (for pipe supports, clamps, etc.)	200	Kg.		
4	Providing & Fixing PVC Sintex O.H water storage tanks of the approved quality, & of the following capacity including making solid supported base as per instructions & doing all connections as required to make the work complete in all respects. (Supports to be paid extra).				
(a)	For 1000 lit. capacity	10	Each		
	Total				
	Grand Total				