

**PROPOSED INTERIORS OF BIO-INCUBATOR AT IITM RESEARCH PARK PHASE-2 AT
TARAMANI, CHENNAI.**

**BILL OF QUANTITIES FOR PROVIDING SANITARY INSTALLATION, WATER SUPPLY AND
WASTE WATER SYSTEM (INTERNAL)**

S U M M A R Y

S.No.	Description	Amount
PART - A :	SANITARY FIXTURES & CP FITTINGS (SUPPLY)	-
	SANITARY FIXTURES & CP FITTINGS (FIXING)	-
PART - B :	WASTE WATER PIPES (INTERNAL)	0
PART - C :	WATER SUPPLY (INTERNAL)	-
PART-D	AUTO CLAVE WORKS	-
	TOTAL	-
	VAT	
	SERVICE TAX	
	GRAND TOTAL	0

PROPOSED INTERIORS OF BIO-INCUBATOR AT IITM RESEARCH PARK PHASE-2 AT TARAMANI, CHENNAI.							
BILL OF QUANTITIES FOR PROVIDING SANITARY INSTALLATION							
S.No	Description of works	Quantity	Unit	Supply		Fixing	
				Rate	Amount	Rate	Amount
	PART - A : SANITARY FIXTURES & CP FITTINGS						
1	Approved make Single bowl Stainless Steel Sink with drain board with Waste coupling, providing bracket made of 32 x 32mm size and 4mm thick MS angle, applying 3 coats of anticorrosive paint, grouting the bracket in masonry using Cement concrete 1:2:4 mix, fixing the sink and drain board to perfect level to match with cooking platform in Pantry, cutting grooves in masonry, restoring the damaged portions to their original condition etc. complete.	16	Each				
2	Approved make White glazed Lab Sink with waste coupling, fixing to match the height worktable, providing suitable brackets to support, making holes in masonry restoring the damaged portions to their original condition, testing etc. complete.	QRO	Each				
3	Following Chromium Plated fittings of approved make						
a	Sink cock with swinging casted spout.	16	Each				
b	Elbow tap for Lab sink.	QRO	Each				
c	Angular Stopcock with Wall flange.	QRO	Each				
	TOTAL C/O TO SUMMARY						

PROPOSED INTERIORS OF BIO-INCUBATOR AT IITM RESEARCH PARK PHASE-2 AT TARAMANI, CHENNAI.

BILL OF QUANTITIES FOR PROVIDING INTERNAL WATER SUPPLY AND WASTE WATER SYSTEMS

S.No	Description of works	Quantity	Unit	Rate	Amount
	PART - B : WASTE WATER PIPES: (Internal)				
	Quoted rate shall include labour charges and (a) cost of specified material in the item description for the requirement, Cutting the pipes to required length, Fixing pipe with pipe specials as specified by the manufacturer with required fixing materials, Cutting groove on walls / floor to conceal the pipe work, Restoring damaged portion with required materials , Providing and removing necessary scaffolding, Two coats of bitumen painting, Conducting testing, Storing the materials, lead and lifting charges to all locations and at all floors with in the site, Providing MS angle supports for pipes laid in false ceiling using G.I.hangers fixed to R.C.C slab including providing and fixing necessary anchor fastners and clamps and as directed by the engineer in-charge etc. complete				
1	Supplying and fixing Reliance / equal approved make HDPE pipes for Waste Water Supply plumbing pipes PE-100 - 0913 PN - 16 - Coil / Straight type suitable for pipe fittings (Butt welded pipe fittings, flanged fittings, SS fittings, electro fusion etc) Pipe sizes are mentioned in OD. - (Pumping main pipe from Tank to connect Existing PHE service)				
a	40mm (32mm ID) dia pipe	QRO	RM		
b	50mm (40mm ID) dia pipe	QRO	RM		
c	63mm (50mm ID) dia pipe	125	RM		
d	75mm (63mm ID) dia pipe	60	RM		
e	90mm (75mm ID) dia pipe	QRO	RM		
2	Supplying and fixing Reliance / equal approved make HDPE Pipes of R-PE-100-0913 - PE 100 PN - 6 as per the specified size with HPDE Pipe specials like bends, Tee, Y-junction with or without door, Vent cowl as per the specified pipe size, providing and fixing cleaning / rodding eye with endcap wherever required, etc., complete. (Waste water pipe from sink to collection tank)				
a	63mm (50mm ID) dia pipe	65	RM		
2	Supplying and fixing approved make Spun Cast Iron Pipes (IS 3989) and pipe special with drip seal joints cutting the pipes, laying to slopes where required fixing to perfect alignment ,testing for joints and the materials, cutting grooves to conceal the pipes, making holes in all surfaces, restoring the damaged portions with required materials, etc. complete.				
a	Using 40mm dia pipe.	QRO	RM		
b	Using 50mm dia pipe.	QRO	RM		

S.No	Description of works	Quantity	Unit	Rate	Amount
c	Using 65mm dia pipe.	QRO	RM		
d	Using 75mm dia pipe.	QRO	RM		
3	Laying cement concrete in 1:3:6 mix using 20mm size stone jelly including plaster with CM 1:5 mix for 15mm thick, providing and removing temporary formwork for sides, curing etc. complete.	QRO	Cu.M		
4	Supplying and fixing CI Floor Traps with water seal made out of 100mm dia CI Pipe with single or multiple inlets of size 40mm to 100mm dia plugging the bottom to water tightness, height to suit as per the site condition including using boss tee, fixing in position, laying cement concrete to 75mm around in 1:3:6 mix using brick jelly to full depth trap supplying and fixing hinged Stainless Steel grating of suitable size and shape, cockroach trap with frame over trap / sump at 4mm below floor level testing to water tightness, including overall finish inlet and outlet etc. complete.	QRO	Each		

S.No	Description of works	Quantity	Unit	Rate	Amount
5	Supplying and fixing CI 'P' – Trap with 100mm dia Outlet, 50mm deep water seal, embedding in cement concrete of 1:3:6 mix with 20mm size stone jelly, forming boss tee above trap up to make up the level of floor level cutting concrete or making holes, Supplying & fixing cockroach trap, restoring the damaged portion to their original condition including providing and fixing cockroach trap, Stainless steel grating and frame, etc. complete.	QRO	Each		
6	Providing and fixing 100mm dia Cleanout Plug on CI Pipe, installing to match the floor level height to suit as per site condition, providing necessary fixing materials like plugs, doors, brass threaded ends etc. complete.	QRO	Each		
	TOTAL C/O TO SUMMARY				
	PART - C : WATER SUPPLY: (Internal)				
	Quoted rate shall include labour charges and (a) cost of specified material in the item description, cutting the pipes to required length, making threads around with teflon joints, fixing pipe with pipe specials as specified by the manufacturer with required fixing materials, cutting groove on walls to conceal the pipe work, restoring damaged portion with required materials like sand cement & jelly, conducting hydraulic test to a pressure of 7 Kg / Sq.cm, storing the materials, lead and lifting charges to all locations and at all floors with in the site, Providing and removing necessary scaffolding, Two coats of bitumen painting, Hot bitumen wrapping if pipe laid below FFL / concealed, Asbestos roping / Providing MS angle supports for pipes laid in false ceiling using G.I.hangers fixed to R.C.C slab including providing and fixing necessary anchor fastners and clamps and as directed by the engineer in-charge etc. complete .(All water supply pipe sizes are mentioned in ID)				
1	Supplying & fixing Astral flow guard / equal approved make SDR - 13.5 - CPVC Pipe with CPVC brass threaded fittings. (For Cold water supply system) Domestic				
a	Using 15mm dia (ID) pipe with pipe specials.	QRO	RM		
b	Using 20mm dia (ID) pipe with pipe specials.	70	RM		
c	Using 25mm dia (ID) pipe with pipe specials.	QRO	RM		
d	Using 32mm dia (ID) pipe with pipe specials.	80	RM		
e	Using 40mm dia (ID) pipe with pipe specials.	15	RM		
f	Using 50mm dia (ID) pipe with pipe specials.	50	RM		
g	Using 65mm dia (ID) pipe with pipe specials.	QRO	RM		
2	Supplying & fixing GI Heavy duty pipe with pipe specials with threaded fittings				
a	25mm dia ID pipe with pipe specials	QRO	RM		

S.No	Description of works	Quantity	Unit	Rate	Amount
b	32mm dia ID pipe with pipe specials	QRO	RM		
c	40mm dia ID pipe with pipe specials	QRO	RM		
3	Supplying and fixing Lehry / equal approved make brass Ball Valve , fixing to pipe work with required fixing materials, testing etc. complete.				
a	Using 20mm dia Ball Valve.	16	Each		
b	Using 25mm dia Ball Valve.	QRO	Each		
c	Using 32mm dia Ball Valve.	1	Each		
d	Using 40mm dia Ball Valve.	1	Each		
e	Using 50mm dia Ball Valve.	14	Each		
4	Supplying & fixing Aquamet / equal approved make Water Meter , including fixing in position with pipe work etc. complete.				
a	32mm dia	QRO	Each		
b	50mm dia	1	Each		
5	Supplying and fixing Lehry / equal approved make Non return valve , fixing to threaded ends of pipe work using required fixing materials, testing etc. complete.				
a	Using 40mm dia	QRO	Each		
b	Using 50mm dia	11	Each		
6	Supplying & fixing Lehry / equal approved make Pressure Reducing valve with pressure guage, fixing to threaded ends of pipe work using required fixing materials, setting to required pressure, testing for leak proof, etc., complete.				
a	50mm dia	1	Each		
7	Supplying and fixing KSB / Grundfos / equal approved make submersible type Waste water transfer pumpset with control panel, auto coupling & chain interconnecting both the pumps, automatic control float, pumpset capable of discharging 1.5 Lps against a total head of 10M, testing, commissioning, maintain the system for one year etc. complete. (To pump Waste water from collection tank to Existing Downtake pipe in PHE Shaft (5 Working + 1 Spare)	6	Each		
	TOTAL C/O TO SUMMARY				