

Ref. No.:	P-247/WO/Plumbing&RWH/M&L/.....T1/R0	Date: 02.09.2015
Project Name:	RVG Hostel	
Subject:	BOQ and contract rates (Material + Labour), for Plumbing & RWH works	

ANNEXURE "A"

Sr. No.	DESCRIPTION OF ITEMS	APPROVED MAKES	UNIT	QTY.	UNIT RATE	AMOUNT
A	MAIN BUILDING PLUMBING SYSTEM					
	Complete Plumbing Works as per MEP consultant approved drawings, as per scope of works mentioned in work-order and as per details mentioned below: A) Internal (Concealed) Water Supply System: Providing, Fixing & Testing CPVC SDR-11 pipes for Complete Internal Concealed Water Supply System (domestic & flushing both systems) for both Hot & Cold with all fittings like bends, tees, reducers, elbows, unions and other accessories etc. complete including concealing the pipes in the wall or under the floors. Also including making chases in the wall, fixing with G.I. fasteners and reinstating the wall surface etc. complete. Contractor's scope includes pressure testing as per IS code. B) External Water Supply System (UG-Tank to OH-Tank AND OH-Tank to All-down-takes, this includes any diversion reqd at any floor): Providing, Fixing & Testing uPVC ASTM-SCH-80 approved pipes for Complete External Water Supply System (including supply-piping from UG-Tank to OH-Tank, terrace looping and down-takes for domestic & flushing system) with all fittings like bends, tees, reducers, elbows, unions and other accessories etc. complete including necessary readymade GI moulded 2mm thick brackets & 2mm thick GI 'Z' patti brackets at 2m c/c with required "U" clips. <i>Incase building is more than 70m height, Providing, Fixing & Testing Class "C" GI pipes for supply-piping from UG-Tank to OH-Tank with all fittings like bends, tees, reducers, elbows, unions and other accessories etc. complete including necessary readymade GI moulded 2mm thick brackets & 2mm thick GI 'Z' patti brackets at 2m c/c with required "U" clips.</i> Contractor's scope also includes scaffolding, making holes in the walls or floors as required and testing of line after fixing in position as per IS code. (between Main & Stand-by Pumps) & NRVs to be fixed at Pump-delivery-lines (just outside the UG-Tank). Ball-Valves with 15mm dia PVC branch-pipe (in Pump-deliver-line) to be provided for supplying water to the Pumps, in-case any Pump is not getting operated due to air-pockets. PRVs (PRVs must be fixed along-with the Ball-valve in By-Pass-Line) & Ball-valves: Providing, fixing and testing heavy quality valves. C) Drainage/Sewage System above Ground-Level (Top-most-floor to 1st-Sewage-chamber-on-Gr_Floor, this excludes any diversion required at podium/basement/service floor): ii) From 1st Floor to Terrace-Floor Level: Providing, Fixing & Testing Rigid Calss 'B' PVC SWR drainage pipes (6 kg/cm2 grade) spigot and socket pipes for soil, waste & vent including all fittings like offsets, bends cowls, single or double junctions of different degrees, with or without access doors etc. including jointing material and jointing, fixing them on floors or vertically with necessary readymade GI moulded 2mm thick brackets & 2mm thick GI 'Z' patti brackets at 2m c/c, with required "U" clamps/clips, in all of the plumbing shafts with all other required accessories etc. and including all scaffolding, testing the pipes after laying, as specified etc. in complete. Vent pipes to be Class 'A' (4 kg/cm2 grade) PVC pipes. Vent pipes quantities & costing must be considered, in quoted " <i>per toilet</i> " rates, from ground-floor chambers to terrace-floor as per MEP drawings. D) CP-Fittings & Sanitaryware: Only fixing of CP-Fittings, Sanitarywares & Jali/Drain-covers-for-nahani-trap is in scope of contractor. CP-Fittings, Sanitarywares & Jali/Drain-covers will be provided by client free of cost to contractor. E) Rain-Water-Drainage System (Terrace-floor to 1st-RWH-chamber-on-Gr_Floor, this includes any diversion reqd on podium/service floor): Providing, Fixing & Testing complete Rain-Water-Drainage system (from terraces/pocket-terraces etc. to ground-level), with Calss 'A' PVC pipes (4 kg/cm2 grade), bends, tees, reducers, elbows, unions and other accessories etc. complete including necessary readymade GI moulded 2mm thick brackets & 2mm thick GI 'Z' patti brackets at 2m c/c with required "U" clips. Rates/cost for Only underground/ground-level RWD/RWH works to be quoted separate, as mentioned below in item no. C.2 . But other RWD/RWH works in building must also be included in quoted " <i>per toilet</i> " rates, including laying RWD/RWH pipes at any diversion level. F) Bore-well Water Supply: Providing, Fixing & Testing uPVC ASTM-SCH-80 approved pipes for complete Water-supply work from open-well/borewell to UG Flushing Tank with all required accessories.	CPVC Pipes & Accessories: ASTRAL/Supreme/Prince make FlowGuard SDR-11				
A.1		uPVC Pipes & Accessories: ASTRAL/Supreme/Prince, GI Pipes & Accessories: TATA/Jindal (Hissar), CI Gate Valves: Audco/Leader/Honeywell, Ball-Valves & Air-Release-Valves: Brass made Leader/Zolto/Honeywell, PRV: Audco/Varie/Honeywell, NRV: Audco/Leader/Honeywell, 'Y' Strainer: Leader/Zolto/Honeywell				
		CI Spigot and Socket Pipes: NECO/BIC, Class 'A' & 'B' PVC Pipes & Accessories: ASTRAL/Supreme/Prince				
		Free supply by client				
		Class 'A' PVC Pipes & Accessories: ASTRAL/Supreme/Prince, RCC Pipes: KK-Spun-Pipes or equivalent make.				
		uPVC Pipes & Accessories: ASTRAL/Supreme/Prince				
A.1.5	For WC only		No's	80		₹ 0
A.1.6	For Bath & Wash Basin only		No's	80		₹ 0
A.2	Rebate: Only for "not fixing" of CP - Sanitaryware fittings inside Toilet/Kitchen area. Rest complete work as per item no A.1					
A.2.5	For WC only		No's	QRO		----
A.2.6	For Bath & Wash Basin only		No's	QRO		----
A.3	Rebate: Only for "not providing & fixing" internal conceal work inside Toilet/Kitchen area. Rest complete work as per item no A.1. <i>Note: This rebate does not included item no. A.2. Item no. A.2 will be accounted/added separate, over and above rebate of this item.</i>					
A.3.5	For WC only		No's	QRO		----
A.3.6	For Bath only		No's	QRO		----
A.3.7	For Gents-urinals only		No's	QRO		----
A.3.8	For Kitchen only		No's	QRO		----
A.3.9	For Pantry only		No's	QRO		----
Total of "MAIN BUILDING PLUMBING SYSTEM" (A):						₹ 0
B	Misc DRAINAGE SYSTEMS AT SERVICE-AREAS (i.e. Drainage System for the Diversion-of-Main-Building-Drain AND Drainage of Flower-beds OR Basements/Podiums/Service-Floors etc.)					
Total of "PLUMBING SYSTEM AT UPPER-FLOOR SERVICE-AREAS" (B):						₹ 0
C	Misc PLUMBING SYSTEMS AT GROUND-FLOOR-LEVEL					
Total of "PLUMBING SYSTEM AT GROUND-FLOOR-LEVEL" (C):						₹ 0
D	MISCELLANEOUS ITEMS					
D.1	CONNECTION OF FLUSHING-WATER INTO THE DOMESTIC-DOWN-TAKES (at Terrace level, ONLY for common-toilet):					

D.1.1	COMMON-TOILETS CONNECTIONS: Connection of Flushing-water into the Domestic-Supply-Down-Takes @ terrace-loop level (only for the common-toilets of all flats) using 50mm dia uPVC main-pipe & 25mm dia uPVC branch-pipes, using above mentioned material qualities and as per PMC instructions. A ball-valve must be provided @ terrace-level for each-connection from flushing-loop, for control of flushing-water-flow into the domestic-down-takes.	uPVC Pipes & Accessories: ASTRAL/Supreme/Prince, Ball-Valves: Brass made Leader/Zolto/Honeywell	No. of Toilet Connections (Lumpsum Piping qty.)	1		₹ 0
D.2	WATER-SUPPLY & DRAINAGE WORKS IN SOME-COMMON-AREAS:					
D.2.1	REFUSE-AREA WORKS: Drinking-water (using 15mm dia CPVC pipe) & Drainage facilities must be provided in every Refuse-area (one point only), using above mentioned material qualities, as per PMC instructions. Taps will be provided by client free of cost but it must be fixed by contractor at his own cost. Points to be provided as per architect's decision.		No. of Points (Lumpsum Piping qty.)	1		₹ 0
D.2.2	TERRACE-AREA WORKS: Drinking-water (using 15mm dia CPVC pipe) & Drainage facilities must be provided in building Terrace-area (one point only), using above mentioned material qualities, as per PMC instructions. Taps will be provided by client free of cost but it must be fixed by contractor at his own cost. Points to be provided as per architect's decision.	CPVC/uPVC Pipes & Accessories: ASTRAL/Supreme make FlowGuard SDR-11, NRV: Audco/Leader/Honeywell	No. of Points (Lumpsum Piping qty.)	1		₹ 0
D.2.8	SOLAR-HOT-WATER SUPPLY TO COMMON-TOILETS (in all flats): Solar-Hot-Water supply lines (using 32mm dia uPVC Pipe, Ball-valve & PRVs), from Storage-tank at Terrace-floor to Common-toilet-in-each-flat, as per PMC instructions. <i>Note: This water supply connection is not to be provided for other-toilets/WC in the flats. Not for even kitchen. Supply & fixing of Solar-hot-water system & it's storage tank is not in scope of plumbing contractor.</i>		No. of Toilets	80		₹ 0
D.9	CORE-CUTTING WORKS. <i>Note: Core-cutting for plumbing-works thru beams/slabs is in scope of contractor. Hence, for plumbing-works purpose, if any core-cutting is required to be done, such core-cutting works will be paid as per rates mentioned below. Core-cutting must be strictly done ONLY AFTER written permission from client's/PMC's project engineer. Contractor to note that while doing core-cutting in any RCC-member if core-cutting is required thru the "Plaster" done onto the RCC-member, "depth of the Plaster" will not be accounted for "Core-cutting-depth". ONLY the Core-cutting done thru RCC-member will be accounted as "Core-cutting depth".</i>					
D.9.1	300mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.2	250mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.3	200mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.4	150mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.5	100mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.6	80mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.9.7	50mm dia core cutting with diamond-bit machine.		Per Inch Depth	QRO		----
D.10	CORE-FILLING WORKS. <i>Note: Core-filling (after passing pipes) is in scope of contractor. Hence, if any core-filling works is required to be done, such core-filling work will be paid as per rates mentioned below.</i>					
D.10.1	Grouting of core from 200mm dia to 300mm dia, with Fosroc/BASF make non-shrinkage grouts, if required.		No's	QRO		----
D.10.2	Grouting of core from 50mm dia to 150mm dia, with Fosroc/BASF make non-shrinkage grout, if required.		No's	QRO		----
D.11	UN-LOADING, LIFTING & SHIFTING OF CLIENT SUPPLIED MATERIALS:					
D.11.1	Cost of unloading, lifting & shifting of client's free supplied material (to store-room OR his desired locations). <i>Note: Mathadi charges (if reqd to be paid) to be paid directly by client, at his own cost. Lift (for lifting of material) to be provided by client free of cost to contractor. Such lift will be available only upto 3 floor below the terrace level. For last 3 floors, contractor has to lift & shift his materials and client supplied all materials, at his own cost.</i>		Lumpsum	-		
Total of "MISCELLANEOUS ITEMS" (D):						₹ 0
E	Liaisoning with Govt. Departments					
	Liaisoning work and preparation of necessary drawings and documents for various Plumbing & RWH permissions from relevant Govt. departments. <i>NOTE : All Govt. deposits & Fee would be paid by Client directly to municipal corporation, at his own cost. But Contractor's quoted such price must include his own service-charges & all out-of-pocket expenses needed for obtaining below mentioned permission.</i>					
E.1	Drainage Completion Certificate (DCC)		No's	QRO		----
E.2	Drainage connection NOC from AE maintenance BMC ward office		No's	QRO		----
E.3	Terrace Loop & D/N take approval from EE WW WS		No's	QRO		----
E.4	Revised HE NOC from BMC		No's	QRO		----
E.5	RWH completion certificate		No's	QRO		----
E.6	SWD completion certificate		No's	QRO		----
E.7	Waste Removal NOC		No's	QRO		----
E.8	PCO NOC		No's	QRO		----
E.9	Vermiculture-Bin completion certificate		No's	QRO		----
E.10	Getting certified the building from HE & EE WW P&R BMC and HE remark from ward-office		No's	QRO		----
E.11	Assessment NOC, Building proposal NOC, Road opening permission and getting water connection certified by AE WW H/E ward and getting water connection for building		No's	QRO		----
E.12	Obtaining 270-A certificate from water department		No's	QRO		----
Total of "Liaisoning with Govt. Departments" (E):						₹ 0
Total Estimated Contract Value (A to E):						₹ 0
Negotiated / Not-negotiated						

Note (for contractor, while quoting his price):-

- 1) Taxes will be extra.
- 2) Cement, sand, bricks, aggregates etc. all materials to be brought by contractor at his own cost, wherever required in his scope of works.
- 3) All measurements will be considered of exactly executed dimensions. It will not be rounded to nearest 3"/6"/9"/12".
- 4) Supply of all Pumps, Cables & their Starter-panels is not in scope of contractor but installation of these to be done by contractor at his own cost.
- 5) Colour of Manhole-covers (for UG-tank & Chambers) to be as per architect's choice, at contractor's own cost.

