

# **TENDER**

**(Tender Ref. No.: JIL-YEW/NIT/2023/08 Dated 25.11.2023)**

## **VOLUME - II : ( BOQ)**

**For**

**Balance Civil & Plumbing including Repairing works at Staff  
Accommodation Room, Motel, Public Toilet and Septic Tank at Facilities  
KM 100 RHS, KM 107 LHS & KM 151 RHS along Yamuna Expressway**

**(Last Date for Submission of Bids: 6th of December 2023)**

**Issued By**

**Jaypee Infratech Limited  
Sector 128, Noida – 201304  
Uttar Pradesh, India**



**PREAMBLE TO BILL OF QUANTITIES**

1. This Bill of Quantities ("BOQ") shall be read in conjunction with all Volumes of the tender documents such as NIT, GCC and all other documents as mentioned in the tender documents.
2. Rates shall include the cost of all labour, materials, tools, plants and machinery, equipment, tower cranes/hoists, all form of works, steel scaffoldings, transportation and wastages etc. and testing of materials with Contractor's testing appliances (as required), all other taxes, duties, levies, royalties, any other statutory obligations, Electricity, water, Contractor's overheads & profit etc. Only GST shall be paid extra, as applicable.
3. The items of work set out herein which are further detailed in the work order, shall be carried out as per the approved drawings, specifications and directions of the Engineer-in-charge of Jaypee Infratech Limited (hereinafter called as JIL).
4. The Contractor shall be deemed to have studied the drawings, specifications and details of work to be completed within the time schedule and to have acquainted itself with the conditions prevailing at Site. The quoted rates shall be applicable for all works in any shape/size/section and design etc.
5. The quantities shown against various items, as provided by JIL, are estimated and provisional and are given to provide a common basis for bidding. Any increase or decrease in the quantities shall not form the basis for alteration of the rates quoted and accepted. The basis of payment will be actual quantities of work ordered and carried out.
6. In cases where the specifications given in the Description of the item of work in BOQ are found wanting, the CPWD Specifications-2019 (with up-to-date correction slips), MoRTH & IRC Specifications, shall be followed; and where not specified, specifications of the latest edition of relevant IS codes shall be applicable. In case of any ambiguity in interpretation, JIL's decision shall be final and binding.
7. The rates and the prices shall hold good for all heights/ depths leads, lifts and levels, working in all conditions including in/under water, liquid mud, foul conditions etc. unless otherwise specifically stated against an item in the BOQ.
8. Rates include all costs for disposal of rubbish or malba etc. (generated / accumulated by the Contractor during the execution of this work) outside the site premises, removal of labour hutment, any temporary structure etc., demobilization from site/any premises provided by JIL. Nothing extra shall be payable on any such account.
9. General directions and descriptions of work are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
10. All materials samples to be submitted and got approved from JIL before execution of work.
11. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of Work.
12. The method of measurement of completed work for payment shall be in accordance with the Technical Specifications & IS Codes.

**Balance Civil & Plumbing including Repairing works at Staff Accommodation Room, Motel, Public Toilet and Septic Tank at Facilities KM 100 RHS, KM 107 LHS & KM 151 RHS along Yamuna Expressway**

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
1	Earth work excavation in foundations, Trenches, Pits Columns Footing etc. ( in all types of soils, Strata up to 1.50m Depth from general ground level) including disposal of excess earth as directed within site up to a lead of 80 mtrs.	Cum	296		
2	Back filling with available excavated earth free from vegetation in plinth in layers not exceeding 20cm. Profusely watering ramming manually leveling etc. as directed complete in all respect.	Cum	300		
3	Providing and laying machine mixed plain cement concrete in volumetric proportions of 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) in foundation etc. All levels including side shuttering etc. As required complete in all respect.	Cum	37		
4	Providing and laying burn bats of 40mm normal size under floors including side shuttering, ramming and leveling etc. complete as directed.	Cum	65		
5	Providing and laying RCC 1:1:2(1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size), or M-25 in all structural elements as per drawing and direction by Engineer.	Cum	19		
6	Providing centering, shuttering and removal of steel/plywood framework for footing, lintel column, beam etc.	Sqm	210		
7	Providing & laying Brick work in foundation up-to plinth using approved first class bricks in Cement Mortar 1:6 (1cement :6 coarse sand) including curing etc.for completion of work as per instruction of EIC.	Cum	10		
8	Providing & laying Brick work 230mm thick in super structure, using approved first class bricks in Cement Mortar 1:6 (1cement :6 coarse sand) including curing etc. for completion of work as per instruction of EIC.	Cum	27		
9	Providing and laying 115mm thick half brick in partition walls above plinth level and up to 3rd floor level using first class bricks in cement mortar 1:4 (1 Cement :4 Coarse sand) and including providing and placing 2 nos. 6 mm dia bars at every third course, scaffolding, racking of joints, curing etc complete.	Sqm	65		
10	Providing,strengthening, cutting, fabricating & placing steel reinforcement as per design and details for RCC (Precast and cast in situ) etc. in all elements including binding the reinforcement with 18 gauge annealed wire for binding the reinforcement of all dia. the rates are inclusive of providing, making & placing of cover block in cement mortar 1:1 under reinforcement as directed including spacers, chairs etc. to keep the bars in position at all levels and height including intercartage of reinforcement bars within area. Reinforcement steel bars Grade -Fe500D, Make- JSW/TATA/SAIL	Kg	931		
11	Providing,Fabrication & Erection of MS Structure with M.S.Pole,pipe,angle,channel and gusset plate including/coat of primer etc.as per drawing with proper alignment and level.Complete as directed.Make- JSW/TATA/SAIL/APOLLO	Kg	4 100		

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
12	Providing and fixing Track deck sheets (Galvanized sheet) with curved ridge and aluminium screw cum washer, U bolts of desired sample and color as approved by client. Make- ESSAR/APOLLO	Sqm	140		
13	Providing and laying 12 to 15mm thick plaster in cement mortar 1:6 (1 cement : 6 sand - with 50% fine sand and 50% coarse sand) including necessary scaffolding, curing etc.	Sqm	2 401		
14	Providing and fixing of 6mm thick Hi-Lux calcium silicate board false ceiling with GI frame work of Channels and ' T ' grid with CSB jointing compound to give seamless finish or tile of same material of size 595x595 mm laid into GI grid 600x600 mm with 24mm wide pre-coated leach and light cutting complete as per drawing. Make- Gyprock/Boral/IGL	Sqm	416		
15	Providing and applying three coat of Plastic emulsion complete in all respect including cement primer and as per instruction of site in-charge for all heights. Make- ASIAN/BERGER/NEROLAC	Sqm	307		
16	Providing and applying two or three coat Apex paint (Asian make or as equivalent) including preparation of surface scaffolding etc complete for all heights as per instruction of site incharge.	Sqm	4 466		
17	Providing and applying two coat birla putty or equivalent approved rubbing, repairing including preparation of surface scaffolding etc. complete for all heights as per instruction of site incharge.	Sqm	470		
18	Providing and applying three coat of Enamel paint complete in all respect including primer, putty on wooden surface, MS surface CGI sheeting etc and as per instruction of site incharge for all heights. Make- ASIAN/BERGER/NEROLAC	Sqm	1 635		
19	Providing and laying of approved make and size (600x600)mm in floor tiles in Cement Mortar 1:4 (1cement :4 coarse sand) complete as per instruction of Engineer Incharge. Make- KAJARIA/SOMANY	Sqm	225		
20	Providing and laying of approved make and size (200x300)mm in wall tiles in Cement Mortar 1:4 (1cement :4 coarse sand) complete as per instruction of Engineer Incharge. Make- KAJARIA/SOMANY	Sqm	255		
21	Providing and laying DPC 50mm thick with cement concrete 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) over brick wall including side shuttering and edges finished smooth with approved waterproofing compound as directed by the Engineer.	Sqm	4		
22	Providing and fixing Press steel door frame (single rebated)16 SWG, filled with C C 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) complete as per requirement of site and directed by Engineer - in-charge.	Rmtr	130		
23	Supply,fixing testing commissioning vitreous china wash basin(550x400)mm dia Hindware with stainless steel waste assembly,Ssbottle trap with extension piece wall flange and rubber for waste collection complete including CI/SS brackets duty painted cutting making good for wall/floor as per requirement and specification(make Jaquar/Hindware/Cera)	Nos.	19		

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
24	Supply,fixing testing commissioning vitreous china Urinal hindware with stainless steel waste assembly, SS bottle trap with extension piece wall flange and rubber for waste collection complete including CI/SS brackets duly painted cutting making good for wall/floor as per requirement and specification (make Jaquar/Hindware/Cera)	Nos.	11		
25	Providing and fixing of looking mirror (600x900)mm with bevelled edge complete as per drawing.	Nos.	32		
26	Supply, fixing testing commissioning vitreous china wall mounted EWC hindware of vitreous china, wall mount EWC Constellation with cistern bolts nut CI bracket sheet cover with hinges etc. complete including cutting and making good as per requirement and specification (make Jaquar/Hindware/Cera)	Nos.	12		
27	Supply fixing & commissioning of Hindware Cistern complete (make & cat no. 21001)	Nos.	9		
28	Providing and fixing CP Bib cock (Jaguar continental 037) complete	Nos.	9		
29	Providing and fixing testing commissioning of CP (Healthfotch) hand shower with 8mm dia, 1mtr Long flexible tube and wall hook complete in all respect (Jaguar Make and cat no. 573)	Nos.	37		
30	Supply, fixing testing commissioning of CP basin pillar cock complete in all respect etc. (make & cat no.27011B Jaguar)	Nos.	15		
31	Providing and fixing of 15mm CP Brass angle valve (Jaguar make) with 450mm long branded hoses with nuls and rubber washer with cp brass wall flange complete including cutting and making good the walls, wherever required.	Nos.	25		
32	Providing and fixing Two way bib cock (cat no. 27041 make jagaur).	Nos.	15		
33	Providing and fixing Soap dispenser with push lever of approved brand complete as per drawing or direction of EIC. Make- Jaquar/Hindware/Cera)	Nos.	28		
34	Providing and fixing C.P. Jali (5") as per approved sample etc. complete.Make- Jaquar/Hindware/Cera)	Nos.	60		
35	Providing and fixing PVC Pipe, having thermal stability for hot and cold water supply including all PVC pipe plain and brass threaded fitting i/c fixing the pipe with clamps at 1 mtr spacing. This includes joints of pipe and fitting with one step CPVC solvent cement and testing of joints complete in all respects.Make- Supreme/Prakash/Jindal/Appolo. Sizes as under:				
a)	PVC Pipe 3"	Rmtr	151		
b)	PVC Pipe 4"	Rmtr	113		
c)	PVC Pipe 6"	Rmtr	75		
d)	PVC Pipe 8"	Rmtr	23		

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
36	Providing & Construction of Brick masonry rectangular chamber as per drawing in cement mortar 1:4 (1cement & 4 coarse sand) including foundation concreting 1:4:8 (1cement :4 coarse sand:8 graded stone aggregate 40mm nominal size)in side plastering 12mm thick with cement mortar 1:3 (1cement :3 coarse sand) finish with floating coat need cement and making channels in cement concrete 1:2:4(1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finish with floating coat on including cost of centering and shuttering excavation, back filling & disposal of surplus earth including C.I. Cover (heavy duty) as per design complete. Brick shall be of First Class. Sizes as under:				
a)	Brick Chamber (300x300x300)mm	Nos.	11		
b)	Brick Chamber (600x600x750)mm	Nos.	13		
37	Providing and fixing C.P. Bottle trap complete in all respect (make Jaquar).	Set	50		
38	Providing and applying of two coats of black japan paint with polythene wrapping on cold water line. Size as under:				
a)	50mm pipe	Rmtr	178		
39	Supply fixing testing and commissioning of GI Pipe for cold and flushing supply pipes with pipe complete as per requirement of technical specification with solvent welded GI fitting i.e. Tees Elbos, Couplers Union Reducers brushing etc. including transition fitting connection between CPVC fitting and metal pipe i.e. Brass adapter (both male and female threaded) requirement of technical specification with only GI solvent cement conforming to ASTM F-493 with fabricated and subsequently hot dip galvanised clamp/structural steel support as required directed at site including cutting chasing and fixing the same with cement concrete. cement mortar as required including painting the exposed pipes with one coat of desired shade of enamel paint (INTERNAL & EXTERNAL WORK) all termination points for installation for faucets shall have brass termination fitting. installation shall be to the satisfaction of contractor or authorised representative. Make- JINDAL/APPOLO/TATA. Size as under:				
a)	50mm dia	Rmtr	208		
40	Providing fixing & testing heavy quality zoloto gate valve screwed Art no. 1035 complete in all respect. Sizes as under:				
a)	Gate valve 20mm	Nos.	14		
b)	Gate valve 25mm	Nos.	11		
c)	Gate valve 50mm	Nos.	7		
41	Providing and fixing CPVC pipe, having thermal stability for hot and cold water supply including including all CPVC Pipe plain and brass threded fitting i/c fixing the pipe clamps at 1mtr spacing. This includes joints of pipe and fitting with one step CPVC solvent cement testing of joints complete in all respects. Make- Supreme/Prakash/Jindal/Appolo. Sizes as under:				
a)	CPVC Pipe 20mm	Rmtr	100		
b)	CPVC Pipe 25mm	Rmtr	40		
c)	CPVC Pipe 32mm	Rmtr	20		

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
42	Providing and fixing 35mm thick Flush door, shutter including hinges, tower bold, aldrops, handle etc. complete as per requirement of site and directed by Engineer in charge. Size- 2100mmx750mm, Make- Archid/Advance/Orion/Bhutan Tuff	Nos	46		
43	Providing and fixing of toilet system and Urinal partition.				
a)	Providing & fixing of Toilet cubical System (Stainless steel 304 grade medium hardware -size 1500x1800x 900 mm) complete in all respect as per the instruction of Client.	Nos.	10		
b)	Providing and fixing of Urinal partition with 12mm compact grade laminate board size 900mm x 400mm x300mm with S.S. Bracket complete in all as per instruction of client.	Nos.	11		
44	Providing & fixing 4mm thick clear glass including putty complete as per requirement of site and directed by Engineer in charge.	Sqm	33		
45	Manufacturing, supply & erection of single side Retro Reflective Sign Boards, having two colours, aluminium Composite panels (ACP) cladding on all sides. The ACP shall be 4mm thick of DURABUILD, ALUDECOR OR EUROBOND/similar make, having 0.30mm thick skin of aluminium with polyvinylidene fluoride (PVDF) coating on one side and the other one will be either mill finish or coated with polyester (as the manufacturer's specification). The front side of the board is to be fully covered with 3M/ Avery Dennison/ Orafol make fully cube polycarbonate micro prismatic retro reflective sheeting conforming to TYPE XI of ASTM D 4956-09 with coloured electrocut overlay sheeting 3M/ Avery Dennison/ Orafol make as per the approved design by the employer. Subject matter, logos and border will duly computerised cut of the same type XI.	Sqm	24		
46	Providing & fixing of paper holder complete in all respect as per the instruction of site in charge.	Nos.	37		
47	Hole cutting for GI/PVC/CI pipes in RCC slabs and brick wall & making good repair the same etc. complete in all respect. Sizes as under:				
a)	150mm	Nos.	10		
b)	200mm	Nos.	60		
48	Supply, fixing testing commissioning C.P. urinal flush valve with flange complete in all respect (cat no. 1077 Jaguar).	Nos.	26		
49	Providing & fixing UPVC Trap self cleaning design setting in cement concrete 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) mix in all respect. Supreme/Prakash/Jindal/Appolo. Sizes as under:				
a)	P- trap in 125x100mm	Nos.	20		
b)	Floor - trap in 100x100mm	Nos.	23		
c)	Floor - trap in 100x75mm	Nos.	21		
50	Providing and fixing testing commissioning vitreous china indian type water closet with 100mm sand cast iron "P" or S trap set in cement concrete 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) with 10 litre capacity high or low level PVC cistern with top button or front handle operation along with 32mm dia pvc flush pipe with lamp and rubber adapter joint with CP brass screws and washer complete, including cutting and making good the walls, wherever required. (make Jaquar/Hindware/Cera)	Nos	6		

Sl. No.	Item Description	Unit	Quantity	Rate (INR)	Amount (INR)
51	Providing and fixing of waste pipe for wash basin,urinol etc with required all fittings-approved make	Nos	6		
52	Providing and fixing of Disc Tap, Size- 1/2' ,(make Jaquar/Hindware/Cera)	Nos	7		
53	Providing and fixing testing commissioning viterous china indian type water closet with 100mm sand cost iron "P" or S trap set in cement concrete 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) with 10 litre capacity high or low level PVC cistern with top button or front handle operation along with 32mm dia pvc flush pipe with lamp and rubber adopter joint with CP brass screws and washer complete, including cutting and making good the walls, wherever required. (make Jaquar/Hindware/Cera)	Nos.	2		
54	Excavation tranches of required with for pipes cable etc. including excavation for sockets and bottom depth upto 1.5M kinds of soil for pipes cable etc exceeding 80mm dia but not exceeding 300mm dia.	Rmtr	594		
55	Providing & laying cement concrete 1:4:8(1cement: 4 coarse sand : 8 graded stone aggregate 20mm nominal size) in bed and around PVC Pipe including excavation, backfill, centering shuttering etc. complete as per direction of engineer in charge for internal and external line up to septic tank. Sizes as under:				
a)	80mm	Rmtr	284		
b)	160mm	Rmtr	19		
56	Providing and fixing UPVC Pipes of approved make of 6kg/cm2 conforming to IS:13592 increasing all fitting clamps & hinges bends junctions. Cowls,offsets etc and jointing with solvent cement including cutting holes in walls wherever required and making good the same complete as directed by the Engineer-in-charge. Make- Supreme/Prakash/Jindal/Appolo. Sizes as under:				
a)	160mm dia	Rmtr	90		
b)	75mm dia	Rmtr	6		
57	Providing and fixing CGI sheets with ridge and screw with washer I/U-bolts of desired sample as approved by client.Make- TATA/SAIL/JINDAL	Sqm	134		
58	Providing and fixing of fly mess (SS Jali) of door/window- complete in all respects.	Sqm	912		
59	Providing & applying of anti termite treatment on post constructed portion complete in all respects as per Instruction of site incharge for all heights.Make- Termiticide	Sqm	3 945		

**Total RS.**

**Total Amount excluding GST (in Words) -**

**Note:** Above quoted Rates are inclusive of all taxes, Labour Cess, other cess, octroi, royalty etc.  
**Only GST shall be paid extra as applicable.**